Harrogate and District NHS Foundation Trust

The meeting of the Board of Directors held in public will take place on Wednesday 28 November 2018
Boardroom, Harrogate District Hospital, HG2 7SX

AGENDA			
Item No.	**Item**	**Lead**	**Paper No.**
	9.00am – 9.20am		
Patient Story			
	9.20am – 10.30am		
1.0	**Welcome and Apologies for Absence** *To receive any apologies for absence:*	Mrs A Schofield, Chairman	-
2.0	**Declarations of Interest and Register of Interests** *To declare any interests relevant to the agenda and to receive any changes to the register of interests*	Mrs A Schofield, Chairman	2.0
3.0	**Minutes of the Board of Directors meeting held on 26 September 2018** *To review and approve the minutes*	Mrs A Schofield, Chairman	3.0
4.0	**Review Action Log and Matters Arising** *To provide updates on progress of actions*	Mrs A Schofield, Chairman	4.0
Overview by the Chairman		Mrs A Schofield, Chairman	-
5.0	**Report by the Chief Executive incl IBR**	Dr R Tolcher, Chief Executive	5.0
	To deliver high quality health care		
6.0	6.0 Summary from Quality Committees 3 October and 7 November 2018 (written and oral) 6.1 Infection Prevention and Control – quarterly report 6.2 Consideration of IBR metrics relating to quality	Ms L Robson, Chairman of the Quality Committee Mrs Jill Foster, Chief Nurse	6.0 6.1
	To work with partners to deliver integrated care		
7.0	7.0 WYAAT Report 7.1 Scan4Safety Business Case 7.2 Consideration of IBR metrics relating to integrated care	Dr R Tolcher, Chief Executive Mr R Harrison, Chief Operating Officer	7.1

You matter most

10.30am – 10.40am			
Break			
10.40am – 12.30pm			
	To ensure clinical and financial sustainability		
8.0	8.0 Summary from Resources Committee (written and oral) 8.1 Review of Strategic Key Performance Indicators 8.2 Workforce and Organisational Development Strategy Update incl Staff Friends and Family Test Q2 8.3 Summary of relevant workforce metrics (cost, WTE plan vs actual etc) 8.4 Consideration of IBR and other metrics related to financial performance and contracts	Mrs M Taylor, Chairman of Resources Committee Mr Jonathan Coulter, Director of Finance Ms A Wilkinson, Director of Workforce and Organisational Development Mr J Coulter, Director of Finance	8.0 8.1 8.2
	Governance		
9.0	9.0 Terms of Reference – Quality Committee *For approval* 9.1 Business Case for VMware *For consideration and approval*	Ms L Robson, Chairman of the Quality Committee Mr R Harrison, Chief Operating Officer	9.0 9.1
10.0	**Any other relevant business** *By permission of the Chairman*	Mrs A Schofield, Chairman	-
	Board Evaluation	Mrs A Schofield, Chairman	-
Confidential Motion – the Chairman to move: *Members of the public and representatives of the press to be excluded from the remainder of the meeting due to the confidential nature of business to be transacted, publicly on which would be prejudicial to the public interest.*			

Harrogate and District NHS Foundation Trust

BOARD OF DIRECTORS – REGISTERED DECLARED INTERESTS

This is the current register of the Board of Directors of Harrogate and District Foundation Trust and their declared interests.

The register is maintained by the Company Secretary and was last updated in November 2018.

Name	Position	Interests Declared
Mr Andrew Alldred	Clinical Director LTUC	None
Ms Sarah Armstrong	Non-Executive Director	Company director for the flat management company, set up to manage the property where I live Chief Executive for the Ewing Foundation
Mr Jonathan Coulter	Deputy Chief Executive/ Finance Director	Director of Harrogate Healthcare Facilities Management Limited (a wholly owned subsidiary company of Harrogate and District NHS Foundation Trust)
Mrs Jill Foster	Chief Nurse	None
Mr Robert Harrison	Chief Operating Officer	1. Appointed Voluntary Member of the Strategy and Resources Committee of the Methodist Church 2. Charity Trustee of Acomb Methodist Church, York
Dr Kat Johnson	Clinical Director PSC	None
Dr Natalie Lyth	Clinical Director CCCC	None
Ms Laura Robson	Non-Executive Director	None
Mrs Angela Schofield	Chairman	1. Volunteer with Supporting Older People (charity). 2. Chair of NHS Northern Region Talent Board
Dr David Scullion	Medical Director	1. Member of the Yorkshire Radiology Group
Mr Richard Stiff	Non-Executive Director	1. Director of (and 50% owner) Richard Stiff Consulting Limited 2. Director of NCER CIC 3. Director and Trustee of TCV (The Conservation Volunteers) 4. Governor of Selby College
Mrs Maureen Taylor	Non-Executive Director	None

You matter most

Mr Christopher Thompson	Non-Executive Director	1. Director of Harrogate Healthcare Facilities Management Limited (a wholly owned subsidiary company of Harrogate and District NHS Foundation Trust) 2. Director – Neville Holt Opera 3. Member – Council of the University of York 4. Chair – Audit Yorkshire Consortium
Dr Ros Tolcher	Chief Executive	1. Specialist Adviser to the Care Quality Commission 2. Member of NHS Employers Policy Board (Vice Chair). 3. Harrogate Ambassador on behalf of Harrogate Convention Centre
Mrs Lesley Webster	Non-Executive Director	None
Ms Angela Wilkinson	Director of Workforce and Organisational Development	None
Deputy Directors		
Dr David Earl	Deputy Medical Director	1. Private anaesthetic work at BMI Duchy hospital
Dr Claire Hall	Deputy Medical Director	1. Trustee, St Michael's Hospice Harrogate
Mrs Joanne Harrison	Deputy Director of Workforce and Organisational Development	None
Mr Jordan McKie	Deputy Director of Finance	1. Familial relationship with NMU Ltd, a company providing services to the NHS
Mrs Alison Mayfield	Deputy Chief Nurse	None
Mr Paul Nicholas	Deputy Director of Performance and Informatics	None

NHS
Harrogate and District
NHS Foundation Trust

Report Status: Open

BOARD OF DIRECTORS MEETING

Minutes of the Board of Directors' meeting held in public on
Wednesday 26 September 2018 at 9.00am in the Boardroom at Harrogate District Hospital

Present:
Mr Jonathan Coulter, Deputy Chief Executive/Finance Director
Mrs Jill Foster, Chief Nurse
Mrs Joanne Harrison, Interim Director of Workforce and Organisational Development
Mr Robert Harrison, Chief Operating Officer
Ms Laura Robson, Non-Executive Director
Mrs Angela Schofield, Chairman
Dr David Scullion, Medical Director
Mr Richard Stiff, Non-Executive Director
Mrs Maureen Taylor, Non-Executive Director
Mr Chris Thompson, Non-Executive Director/Vice Chairman
Dr Ros Tolcher, Chief Executive
Mr Ian Ward, Non-Executive Director
Mrs Lesley Webster, Non-Executive Director

In attendance:
Mr Andrew Alldred, Clinical Director for Long Term and Unscheduled Care
Dr David Earl, Deputy Medical Director
Mr Andrew Forsyth, Interim Company Secretary
Dr Claire Hall, Deputy Medical Director
Mrs Melanie Jackson (Patient Experience Team – patient story only)
Dr Kat Johnson, Clinical Director, Planned and Surgical Care
Dr Natalie Lyth, Clinical Director for Children's and County Wide Community Services
Mrs W (patient story only)
Dr Sylvia Wood, Deputy Director of Governance (item 6 only)

Patient Story

Mrs Schofield welcomed Mrs W and Mrs Jackson to the meeting.

Mrs W described herself as an 87-year old widow living on her own. She is severely deaf and is not allowed to drive. Following an appointment at the hospital she needed to order a taxi to return home but is unable to use a direct telephone line. She asked at the Reception desk if a taxi could be ordered and was told that this was not allowed, following the issue of an internal memorandum which instructed staff not to order taxis for patients or visitors. The number of a taxi company was dialled and she was given the handset, which she could not use. Questions and answers were shouted at her and she was made to feel difficult and stupid. Mrs W explained that she expected more understanding from the staff.

Following her visit Mrs W wrote to the Chief Executive and the Patient Experience Team explaining that she was deaf and that she was unable to use the telephone. She received three responses, each apologising and giving no excuses for the way in which she had been treated. One response detailed how the matter would be taken forward, including rectifying misunderstanding of the instruction by staff and staff training. She had been listened to positively, and with responses which she found encouraging, and she was impressed with how her complaint had been handled. Mrs W read from the responses she had received.

Mrs Schofield thanked Mrs W for attending and sharing her story, emphasising that not all disabilities were visible. Dr Tolcher said that Mrs W had clearly shown a measure of courage in going back to the desk and persisting with her request. Hers was not a trivial problem and she should have been treated with more respect.

Mr Alldred said that, from personal experience, perceptions change but he was pleased to hear that there had been a positive response. It was important to raise such issues and staff needed to think about how to deal with patients and visitors with disabilities and use discretion. Ms Robson said that the proof would be the next time when Mrs W found herself in a similar situation – this would complete the circle.

Mrs Schofield said that it was helpful to staff to receive feedback like that of Mrs W so that they could be challenged to see how they would use their discretion and whether support or training was needed. In Dr Scullion's view it was a question of using rules with discretion, alongside common sense. An important lesson had been learnt.

Moving to a more general question, Mrs Schofield asked how Mrs W found Harrogate District Hospital overall. Mrs W said that she was very impressed; it was always easier to grumble than to thank. Dr Tolcher said that staff always try hard but are ready to improve based on feedback.

Mrs Schofield thanked Mrs W for telling her story to the Board. In her case the valuable feedback she gave had made a difference. Mrs W and Mrs Jackson left the meeting.

Mrs Foster said that training was available for staff around recognising and accommodating disabilities; flagging information on patient record systems was also appropriate and completed. For example, the challenge to some patients of moving an ophthalmology clinic to the Briary Wing had been identified by the Reception team and appropriate changes had been made. Mr Harrison added that the need for British Sign Language interpretation had also been identified and was being examined.

1.0 Welcome and Apologies for Absence

1.1 Mrs Schofield noted there were no apologies for absence.

1.2 It was confirmed a quorum was present at the meeting.

1.3 Mrs Schofield welcomed observers to the meeting; Mr Robert Cowens (Public Governor), Mrs Rosemary Marsh (Public Governor) and Mr Paul Widdowfield (Communications & Marketing Manager).

2.0 Declarations of Interest and Board Register of Interests

2.1 No declarations of interest were received. All Directors confirmed that they had no direct or indirect interest in any item on the agenda which they were required to disclose to the meeting.

2.2 It was noted Mr Coulter and Mr Thompson were Directors of Harrogate Healthcare Facilities Management (HHFM). No agenda items were planned which would present a conflict of interest. It was however agreed that Mr Coulter and Mr Thompson could participate fully in any items which included reference to HHFM.

3.0 Minutes of the meetings of the Board of Directors on 25 July 2018

The draft minutes of the meeting held on 25 July 2018 were approved with the following amendments:

- Minute 10.8 should read; '*Dr Tolcher confirmed the Trust had received a Provider Information Return from the Care Quality Commission (CQC)……..'*
- Minute 11.8 should read; '*Mrs Schofield thanked Dr Child…….'*

APPROVED:
The Board of Directors approved the minutes of the meeting held on 25 July 2018 as an accurate record of proceedings subject to two amendments.

4.0 Review of Action Log and Matters Arising

4.1 Completed actions were noted.

4.2 Action 81: Mr Harrison confirmed that there would be additional metrics to add and that the Directorates were developing proposals where data was available. Changes would be brought into the Integrated Board Report (IBR) from January 2019 onwards. The action was closed.

4.3 Action 107: It was agreed that this action could be closed.

4.4 Action 112: Mr Harrison reported that there had been 115 room cleans where the use of Hydrogen Peroxide would have been difficult. The rental period for the HPV machines had expired and it was decided that there were sufficient systems already in place. The microbiology team had not provided a strong clinical case for a further rental period. Mr Alldred said that they had proved less valuable than expected and provided some benefit but not much. Mrs Schofield said that this seemed right if they were in a cupboard and not used. Mr Harrison said that the Trust had reverted to standard cleaning processes when the *Clostridium difficile* rates reduced. The action was closed.

4.5 Action 113: This information was now included in the narrative in the IBR. It would be re-examined during the forthcoming review of the IBR, This action was closed.

4.6 There were no other matters arising.

APPROVED:
The Board of Directors noted completed actions, received an update on outstanding actions and agreed to close actions 81, 107, 112 and 113.

Overview by the Chairman

Mrs Schofield noted a number of items:

- The Board was using the Diligent system for the first time. A representative from the company was available for any Board members who experienced difficulties. She was pleased that the Board was using fewer paper copies.
- This was in some ways a new beginning for the Board, following the NHS Improvement (NHSI) diagnostic work which had resulted in reorganising the Board agenda around the Strategic Objectives, and cross referencing the Board Assurance Framework (BAF) and the IBR. This would refocus Board business; in time the IBR would be restructured to link with the CQC domains.
- The Finance Committee (renamed the Resources Committee and including the Director of Workforce and Organisational Development) would now meet monthly and give detailed scrutiny to the financial position and the financial strategy. There would be a summary from the Chairman of the most recent meeting at each Board meeting to provide assurance.
- The Board will now meet in formal session on alternate months. Workshops will be held in the intervening months, starting with a 'hot topics' session which would include contract performance, the position of the Cost Improvement Programme (CIP) and governance arrangements.
- Following approval of the HHFM Business Plan at the July meeting of the Board, it was proposed that the trading name of the company would be Harrogate Integrated Facilities.
- The Council of Governors, at its meeting on 1 August, had approved the appointment of Ms Sarah Armstrong as a Non-Executive Director from 1 October 2018. Ms Armstrong was latterly the Chief Executive of York CVS and had now taken up the post of Chief Executive of the Ewing Foundation, which focused on children with hearing difficulties.
- Ms Armstrong would replace Mr Ward, who had been a Non-Executive Director for six year. Mrs Schofield said that he had been a highly effective Non-Executive Director, with wide experience and expertise which he had used to great effect, and strong principles. He had maintained an unwavering focus on the needs of the patient and constantly reminded the Board of the Trust's values.

5.0 Report by the Chief Executive (excluding finance matters)

5.1 The report and IBR had been circulated in advance of the meeting and was taken as read.

5.2 Dr Tolcher said that her report reflected high levels of performance but that, whilst the quality of care provided remained high, the Trust performance in July and August had been both operationally and financially challenging. There were pressures on both local systems, in the Aligned Incentive Contract (AIC) and at the wider level of the West Yorkshire and Harrogate Integrated Care System (ICS).

5.3 The number of falls and pressure ulcers had reduced, although they remained higher than at the same time in previous years, through enhanced good nursing at ward level. The Patient Safety Thermometer remained above 95% and mortality had fallen. The Trust had received £605,000 of capital funding for urgent and emergency care and preparation for the first phase build of a Joint Assessment Unit (JAU) had begun; it would be completed and operational by Christmas. This would work on the principle of 'see, treat

and discharge', where possible, to avoid admitting some patients.

5.4 Dr Tolcher noted that the performance of the Emergency Department on four-hour waits was currently at 94%, below the 95% target. This meant that Provider Sustainability Funding (PSF) was at risk. There had, however, been no detriment to patient safety or clinical outcomes from being below the target. In the case of Referral to Treatment Time (RTT) the Trust performance stood at 91% and was likely to remain around this level or deteriorate, below the target, until year-end. The symptomatic breast standard was marginally below the target (one or two days), which was important to patients, but she was pleased to report that the 62-day target for cancer had been achieved.

5.5 Mrs Schofield asked for some details about the JAU. Mr Harrison said that this was a two-phase scheme. The Ambulatory Care Centre was currently located in CATT ward and needed more space in which to enhance the number of patients on a daily pathway. The Surgical Assessment Unit had patients on similar pathways but was physically separate from the Ambulatory Care Centre. Bringing the two together would streamline processes and improve patient flow. The old Endoscopy unit space was being converted to accommodate ambulatory care out of CATT ward in phase 1 and work would begin on 1 October. Phase 2 was in the Trust capital plan and the JAU would be completed in summer 2019, and co-locate surgery, urology, gynaecology and medicine. The space in CATT ward would be decorated and then it would be decided how best to use it, possibly for more side-rooms or improved staff facilities. Dr Scullion asked about the layout of the JAU and suggested there should be more private side rooms. Mr Harrison replied that some would be cubicle style and some available for GP use.

5.6 Moving to the BAF, Dr Tolcher said that the Board would wish to note that the likelihood score for BAF 1 had reduced to 3; it was a risk around care quality and it was clear that the mitigating actions which were in place (including high fill rates for staff) had resulted in low harms. The financial risks linked with this risk, however, remained. In the case of BAF 9, the likelihood had been increased to 4, because the most likely scenario does not deliver the operational plan at year-end. Overall there was one risk with a score of 16 and three risks with a score of 12 – three of these concerned the financial position. This was echoed in the Corporate Risk Register. Mr Coulter said that there were more and more examples of having to manage cash pressures around infrastructure issues.

5.7 Mr Thompson asked about the position in Ophthalmology and work taking place to address systems issues. Mr Harrison said that this was work on historical issues and grading of patients for follow-up. No high risk patients had been identified who were waiting for appointments. Safety net arrangements were now in place, with electronic reporting on outcomes. The introduction of topical lists, the treatment of cataracts using topical anaesthetics, was improving the position.

5.8 Moving to the issue of accessing patient records from South Tyneside, Dr Lyth responded to Mr Thompson's question to confirm that the process was working and urgent records were coming through. Some records for less urgent cases could not be located – the position would be reviewed after three months if it had not improved. Mrs Foster said that there was no evidence of harm to any patient but all cases were being reviewed.

5.9 Mrs Schofield enquired about the NHSI Nurse Staffing Review and Mrs Foster said that the provisional draft report had been received on 26 September for comment; no immediate concerns had been expressed. The report will recommend that the skill mix is

benchmarked. Moving to the Supported Discharge Service (SDS), Mrs Schofield asked for a progress report. Mr Alldred said the aim was to have a full team by the end of November; an impact was already being seen as it ramped up and moved to a more proactive stance. Mr Harrison noted that NYCC recognised patients on the SDS as inpatients. He said that there was good partnership working with the 'hospital at home' approach; there was no duplication of paperwork because a notice of assessment was in place. There was no increase in length of stay through the virtual ward; KPIs were being developed to monitor the new system at the point of transition.

5.10 Mr Ward asked whether there were any concerns over the Friends and Family Test results in the community, which was rated as Red. Mr Harrison said that this was viewed over a 12-month average and this had been relatively static. A new metric had increased in the previous month but if the trend continued then action would be considered.

APPROVED:
The Board of Directors noted progress on risks recorded in the BAF and Corporate Risk Register and confirmed that progress reflected the current risk appetite

6.0 Freedom to Speak Up Guardian Report

6.1 Mrs Schofield welcomed Dr Wood to the meeting. Her report had been circulated in advance of the meeting and was taken as read.

6.2 Dr Wood said that the NHSI guidance, and that from the national Freedom to Speak Up Guardian, was that Boards of Directors should receive a report from the Trust Freedom to Speak Up Guardian. She emphasised the national initiatives which she had covered in her report and said that more approaches from staff were taking place, although staff remained anxious about speaking up. Some feedback received by the Guardian indicated that this was justified.

6.3 Dr Wood reported that good progress had been made since her last report including a greater awareness of the role of the Guardian. A group of volunteers was being sought to act as Fairness Champions across the Trust. Her key work now was to develop the vision and strategy to support speaking up.

6.4 Dr Tolcher said that Dr Wood's report was timely, especially as it was coming to the Board at the same time as the Workforce Race Equality Standard (WRES) report. Both reports were concerned with creating and maintaining a fair and just culture in the Trust. The Freedom to Speak Up Guardians had been established following the lack of care shown at Mid-Staffs. The background for the Trust was the national Staff Survey where the Trust results for the relevant categories were better than average but, in her opinion, still pretty poor – a small number were worse than the national average. Dr Tolcher said that she had hosted three focus groups so far, in both the hospital and in the community; she had received lots of feedback and good engagement. Dr Tolcher saw bullying and harassment as like a weakening virus – and the Trust was in the diagnostic phase at present. The challenge was how to change the systems and processes to reduce the levels; this was the treatment, but the long-term goal was prevention. She hoped that greater visibility would increase awareness and stimulate more approaches.

6.5 Mrs Schofield added that the Schwartz Rounds were an additional way of speaking up whilst Ms Robson had it confirmed that HHFM staff were also included in the focus groups. Mr Thompson felt that it was difficult to judge how much bullying and harassment

behaviour took place and that it was important for staff to be happy to come forward – Mr Coulter echoed this and said that in the early stages 'more is better'. Mrs Webster said that the numbers would find a natural level but if the underlying culture was not right then how would we know when an 'acceptable' level had been reached? Mrs Harrison replied that asked in seeking such assurance the Trust would be identifying the themes and trends in the responses and dealing with them proactively.

6.6 Dr Tolcher said that the Trust was prepared for the staff survey results to grow worse with the opening up of channels for staff, and especially BAME staff, to speak up. In Mrs Schofield's view this was all about leadership. She thanked Dr Wood for her report and her work as Freedom to Speak Up Guardian, and also for her work to date on the CQC Inspection. Dr Wood reminded the Board members that October was 'Speaking Up Month' and that every effort would be made to encourage concerned staff to speak up.

APPROVED:
The Board of Directors received and noted the contents of the report of the Freedom to Speak Up Guardian.

7.0 Patient and Public Participation Strategy

7.1 The report had been circulated in advance of the meeting and was taken as read.

7.2 Mrs Foster said that the report comprised a framework for this strategy, largely developed by Mrs Roberts, Company Secretary, before her departure. The pledge was to define how patients were looked after at all points in their patient journey. She said that the next steps, once the framework was approved, were to consult widely with stakeholders and return to the Board in January with a developed strategy. The aim was to empower staff to ensure that patients were kept informed and able to give informed decisions. Mrs Webster said that in her view this related to activity around patient care and respect and was an important document.

7.3 The Board had been asked to consider whether the strategy should also include promotion of patient-focussed care at an individual patient level and members agreed with Dr Tolcher that this should be left in the framework and taken forward. Mrs Schofield agreed and said it was about assurance over practices now in place, and managing their coherent and consistent application. She considered the framework helpful in taking the principles forward. The Board agreed the proposal to continue with the development of the strategy.

APPROVED:
The Board of Directors:
- **Noted the framework for the development of the Patient and Public Participation Strategy included within the report**
- **Approved the development of the framework for the Patient and Public Participation Strategy**
- **Agreed that the Patient and Public Participation Strategy should also include the opportunity to promote patient-focussed care at an individual level**
- **Endorsed the work to date and agreed with the next steps**

8.0 Workforce Race Equality Standard Report

8.1 The report had been circulated in advance of the meeting and was taken as read.

8.2 Mrs Harrison noted that there were nine metrics in the Standard and the Trust has shown deterioration in a number of the key ones. The Standard was important in improving the culture of the Trust and there was a need to value diversity. Managers were key 'culture carriers' and it was important to support managers effectively, including heling them to avoid unconscious bias. There had been a small number of returns form BAME staff in the NHS Staff Survey and she suggested this was not properly reflective of the views of the whole workforce; this year the whole staff was being covered by the Survey and this would generate valuable information.

8.3 Mr Thompson asked about the context in which the report had been written. Mrs Harrison responded by noting the lack of diversity at Board level, that Bands 2 – 5 include significant numbers of BAME staff but that this representation was lacking in more specialist roles. This could be as the result of a lack of access to training, for example, which the Trust would need to manage. She would put details of the absolute numbers of BAME staff in the Reading Room. Dr Scullion asked if there was a BAME Group, to which Mrs Harrison replied confirming that there had previously been one but that it had been disbanded – the Workforce Equality and Diversity Group had largely taken up the remit. Dr Scullion added that it should perhaps be the policy to include a BAME interviewer on panels where there were BAME candidates.

8.4 Dr Lyth said that this was important work and wondered whether the proportion of BAME staff in the Trust reflected the general population across Yorkshire and Humber, or even just Harrogate. Mrs Harrison confirmed that there was detailed analysis underway and that this was work in progress.

8.5 In summary, Mrs Schofield said that it was clear the Trust was not where it wanted to be and the matter was one on which the Board needed to focus. Mrs Harrison confirmed that the action plan was being managed by the Workforce Equality and Diversity Group, which reported to the Workforce and Organisational Development Steering Group. Mrs Foster added that the Patient Experience Group also focused on the action plan.

APPROVED:
The Board of Directors received and approved the Workforce Race Equality Standard Report.

9.0 HEE Education and Training Self-Assessment

9.1 The report had been circulated in advance of the meeting and was taken as read.

9.2 Mrs Harrison highlighted that this was the first such self-assessment, covering the whole organisation, and demonstrated the considerable co-ordination of effort which was in place. Information had been drawn from multiple sources. It was positive in all six domains but also showed that there had been an impact of training in hard to fill areas. It required approval by the Board by the end of September. Mrs Schofield asked how it helped and Dr Scullion said it demonstrated why doctors in training choose to come to Harrogate – it was a good report.

9.3 Mrs Taylor asked what HEE was liely to do with the report and Mrs Harrison said that this was not clear at that point – Mr Coulter suggested that it gave assurance that the public funding granted to HEE was being spent appropriately. The Board approved the report.

APPROVED:
The Board of Directors received and approved the contents of the report.

10.0 Flu Vaccination Campaign

10.1 Mrs Harrison confirmed that October would be 'flu month' with a clear focus on achieving a 75% vaccination rate by the end of the month and 100% by the end of November. The campaign would also continue into January and February. Mrs Foster was the Board Flu Champion and the Trust Flu Group had used the checklist from NHSI to develop the campaign.

10.2 In answer to a question from Dr Johnson, Mrs Harrison confirmed that the 100%5 target applied to medical and clinical staff only. Mrs Taylor noted that in 2017 the total vaccination rate had been around 60% and wondered whether staff absences had risen as a result. Dr Scullion confirmed that a number of patients may have caught flu from staff and that this affected their medical outcomes.

10.3 Mr Ward commented that the Trust figures for 2017 were 8% below the average and he thought the Trust should adopt best practice from elsewhere. Mrs Harrison said that the Trust was part of the flu network and had invested in improving uptake rates. Mrs Schofield said that in her previous organisation there had been a relentless focus of vaccination of staff.

10.4 Dr Tolcher was clear that the Directorates, and the Clinical Directors, should own the programme around the blitz in October; Dr Lyth said that she was confident rates would be high in the hospital but that it was more challenging in the community, despite the creation of a group of peer vaccinators and the use of alternative providers; Mrs Harrison confirmed that arrangements were in place to transport the vaccine around the community.

10.5 Dr Johnson considered that there were two issues – the process had improved, with training for peer vaccinators improved on 2017. However, 40% of staff were not vaccinated in 2017 and this year's target was challenging. It was not possible to make vaccination mandatory but she believed that everyone should understand that it was a duty, although she had encountered fixed views to the contrary. In Dr Scullion's view there were some staff who were not vaccinated due to inertia and disinformation – he thought that there were very few genuine cases where it was not medically advised. He also noted the GMC duty for doctors to take reasonable measures to protect patients.

10.6 Mr Alldred's view was that there were two groups – enthusiasts and those who believe that they cannot be told to be vaccinated. Mr Ward suggested varying the message, rather like the 'don't drink and drive' campaigns. Mrs Taylor thought that 100% of healthcare workers with patient contact should be vaccinated, whilst Mr Stiff was concerned that the communications around the campaign allowed for too much flexibility.

10.7 Dr Tolcher informed that Board that capital funding was available for same day testing of patients, which would give certainty to both patients and staff. Part of the challenge was to raise awareness – for example, in 2017 nine patients had contracted flu after their admission.

10.8 Mrs Schofield urged Board members to be vaccinated during October.

11.0 Report by the Chairman of the Quality Committee and IBR Metrics on Quality

11.1 The report had been circulated in advance of the meeting and was taken as read.

11.2 Mrs Webster said that the Committee had examined the continuing work to improve the Intranet, and specifically the detailed work on policies and procedures which was underway.

11.3 Mrs Schofield said that it was useful to have the update of the most recent meeting of the Quality Committee, as well as the minutes of the previous meeting, in keeping the Board up to date with its work.

11.4 In response to a question from Mrs Schofield, Mr Thompson confirmed that whilst the Audit Committee was also tracking progress on the work on policies and procedures on the Intranet, he was satisfied that there was no duplication.

11.5 Moving to the IBR metrics around quality, Mrs Schofield said that these reports were different from those previously included in the Director reports, for example the nurse staffing report but that key information continued to be available.

11.6 Ms Robson noted that there was no decreasing trend around falls and pressure ulcers and asked whether this was normal variability. Mrs Foster said that the numbers were 30% down from 2014/15 despite a significant increase in activity. Falls with fractures were at the lowest level since 2016.

11.7 Mrs Webster asked why the number of *C.difficile* cases were rated Green when there had been nine and Dr Tolcher confirmed that there had been only one lapse in care and this was below the threshold. Dr Scullion added that there was nothing to trace that case back to a particular source.

11.8 Dr Tolcher asked whether the 11% thrombolysis carried out in one hour would have had an impact on the other patients; in Dr Scullion's view this was very unlikely. Mr Harrison said that the national average was between 50 and 60% and the Trust was thus significantly below the national average; this was typical of small units and underpinned the reasons for moving to volume areas. SNAP was struggling to deliver and work was in hand to improve this, including streamlining to improve processes. The Trust was simply not undertaking sufficient activity in this specialty, typically only 30-35 procedures annually. There was now an agreed way forward and NYCC was supportive of the direction of travel.

11.9 Turning to the number of complaints, Ms Robson was concerned about potential fractures not being diagnosed in the Emergency Department, and the attitude of staff. In response Dr Scullion said that all X-ray films were turned around within 24 hours and sometimes even trained radiologists could not find fractures; sometimes patients needed to be X-rayed on second presentation before the fracture was identified. Mrs Foster added that there were complaints about outpatient areas as well as the wards and many concerned the appointments process, communication and sympathy from staff.

APPROVED:
The Board of Directors noted items included within the report.

12.0 West Yorkshire and Harrogate Integrated Care System Memorandum of Understanding

12.1 The Memorandum of Understanding (MOU) had been circulated in advance of the meeting and was taken as read.

12.2 Mrs Schofield welcomed the opportunity for the Board to receive and agree the MOU.

12.3 Dr Tolcher noted that the Board had seen the MOU at various stages of its development and it was now presented in a final form. It created conditions for working at Place-level and, although not a legal document as such formalised the commitment to working with partners set out in the Trust's Strategic Objectives. There were some 'trade off' for mutual benefit but there was always more to gain than lose through partnership and collaboration. WYAAT already had and MOU and a Committee in Common, which were separate from this. There were many partners in the Integrated Care System (ICS) and WYAAT was one voice.

12.4 The Trust retained all the normal regulatory responsibilities under the MOU. For the first year the Local Authorities had been invited to nominate a Chair of the Partnership Board, which would meet four times, and the Vice Chair would come from the providers. System-level decisions would need 75% support and there would be one vote per organisation.

12.5 In response to his question, Mr Thompson was reassured by Dr Tolcher that, to the best of her knowledge, NYCC remained absolutely committed to the ICS.

12.6 Mrs Schofield noted that the Board had seen the MOU before and had discussed it in detail. The Board approved the MOU.

APPROVED:
The Board of Directors approved the Memorandum of Understanding with the West Yorkshire and Harrogate Integrated Care System

13.0 Reports from the Chairman of the Finance Committee

13.1 Two reports had been circulated in advance of the meeting and were taken as read.

13.2 Mrs Taylor said that at the September meeting (month 4) the Trust had reported a surplus in July, with overspending continuing in ward and theatre staff – an NHSI nursing staff review had been completed. The cash position was a concern. The Committee had been updated on the position with the Carbon Energy Fund and the Aligned Incentive Contract. On 24 September the committee had reviewed month 5 in detail, linking it with the risks reflected in the Board Assurance Framework. Drugs expenditure was an emerging pressure and there were pressures on the cash balances especially in connection with the capital programme. She would cover in the private session the details of the Aligned Incentive Contract, which was not delivering as expected. The Trust was achieving the external plan but was £3.8m behind the internal plan, although the CIP was moving forward well. The middle case scenario would be that the Trust would not break even at year-end. Details of the recovery plan would be discussed at the October meeting of the Committee. There would be an update on the Model Hospital as it applied to the

Trust and how it would be taken forward.

13.3 Mr Ward asked about the likelihood of recovering the adverse variance on drugs. Mr Coulter replied that concerns had been raised in August around the high cost drugs when the reserve had been overdrawn. There were costs that the Trust was not able to recover and there had been an extra spend of £1m in the year to date. Mr Alldred added that new cancer drugs from the Cancer Drug Fund and NHS England had increased costs. Usage was correct in his view; five new drugs were driving expenditure. Mr Coulter said that investigations would be completed over the next two weeks and the claim from NHS England would be reconciled.

13.4 Turning to the Aligned Incentive Contract Mr Coulter said that he had written to HaRD CCG to inform them that the cost of providing care over the year will exceed the contract value of £94m. The cash situation was putting pressure on capital and there was equipment that would need to be replaced which therefore heightened risk to services, such as that in the cardiac cath lab. There were 67 costs centres across the Trust which were overspent. Between £10,000 and £100,000 and were under review.

13.5 Mrs Webster was concerned about the breakdown of the cardiac cath lab equipment and that patients were not being seen. Dr Tolcher said that this was risk which had crystallised and the contingency – assistance from other Trusts – had been activated. Mr Harrison said that this was short-term mitigation with Airedale, James Cook and Leeds all assisting. Equipment had been lent for pacemaker work. The Trust had been planning for replacement – this had been a known risk. The manufacturer was supporting the Trust and the staff were carrying on providing other services. The breakdown would affect up to 70 patients a month.

13.6 Mrs Webster asked whether there was increased risk to patients caused by delays in their treatment. Mr Harrison said that other providers were treating them as clinically urgent and maintaining the six-week standard. The loss of activity would entail around £50,000 less income per month although there was some offset through staffing.

APPROVED:
The Board of Directors received and noted the reports.

14.0 Terms of Reference – Resources Committee

14.1 Mrs Taylor informed the Board that, following the NHSI work earlier in the year the Finance Committee was now the Resources Committee and she presented the draft Terms of Reference for approval. The other significant change was the addition of the Director of Workforce and Organisational Development to those attending the Committee.

14.2 Mrs Webster asked where Post-Project Evaluation would be undertaken and Mr Thompson confiormed this would be the responsibility of the Audit Committee. This would include debriefs of the PPE group. Mr Coulter added that the Resources Committee would examine elements of projects regularly.

14.3 There were no further comments and the Terms of Reference were approved.

APPROVED:
The Board of Directors received and approved the Terms of Reference of the Resources Committee.

15.0 Transformation and Improvement Strategy bi-annual report

15.1 The report had been circulated in advance of the meeting and was taken as read.

15.2 Mrs Harrison said that there had been a system wide change to the delivery of the Aligned Incentive Contract and the Transformation Board had been replaced, with an Oversight Group reporting to the Senior Management Team. There would be a biannual report to the Board.

15.3 Mr Thompson said that on a recent Patient Safety Visit to podiatry services concerns had been expressed about IT support – was Systm 1 working? Dr Lyth said there had been no concerns raised over IT issues, as far she knew, for 12 months. Mr Harrison said that IT services had improved at some sites but there were still issues about access for community staff. The IT team was working on a business case for improvements to it.

APPROVED:
The Board of Directors received and noted the report.

16.0 Operational Plan

16.1 Mr Coulter informed the Board that internal processes were in place and that national guidance on the Operational Plan process for next year was awaited. He would need to schedule strategy days to update the Board as the process developed.

16.2 Mrs Webster asked whether the falling sickness rates included the HHFM staff and Mrs Harrison confirmed this was so. She said this was a positive seasonal trend.

17.0 Medical Revalidation Annual Statement of Compliance

17.1 Dr Scullion presented the annual statement for the approval of the Board and signature by the Chairman and Chief Executive.

APPROVED:
The Board of Directors noted and approved the Annual Statement of Compliance for signature.

18.0 Non-Executive Director responsibilities

18.1 The report had been circulated in advance of the meeting and was taken as read.

18.2 Mrs Schofield said that the change of responsibilities was a the result of the loss of Mr Ward. She had taken the opportunity to reorganise the changes in the Non-Executive Directors to reorganise their responsibilities. She proposed that Mrs Webster would take up the role of Senior Independent Director from Mr Ward, including the role of Freedom to Speak Up Guardian.

APPROVED:
The Board of Directors noted and approved the appointment of Mrs Webster as Senior Independent Director and the reorganisation of responsibilities.

19.0 Council of Governors' Meeting Minutes – 2 May 2018

The Board of Directors noted the minutes of the Council of Governors' on 2 May 2018.

20.0 Summary from Audit Committee

20.1 The report had been circulated in advance of the meeting and was taken as read.

20.2 Mr Thompson noted that there were three Internal Audits reports in draft with Limited Assurance, including the one concerning Post Project Evaluation. He assured the Board that the Senior Management Team took a rigorous interest in the Internal Audit reports. The other two reports were on rota management and Strategic Reporting.

20.3 There had been no changes to the Corporate Risk Register or the Board Assurance Framework beyond those of which the Board was already aware.

20.4 The appointment of external auditors for the Trust had last taken place in November 2016 and KPMG had been appointed for three years with the possibility of an extension of a further two years. The performance of the auditors was considered annually by the Audit Committee and the reappointment of KPMG would be recommended to the Council of Governors.

APPROVED:
The Board of Directors noted the report.

21.0 Reflection on the Board Assurance Framework

21.1 The Board reviewed the BAF as a result of the discussions which had taken place at the meeting.

21.2 Mrs Webster said that she was uncomfortable about the situation with the cardiac cath lab; it was a bad situation. Mr Harrison said that the BAF reflected the risk to infrastructure in BAF 16; it was a thematic risk around critical equipment and the contingencies in place. Mrs Schofield suggested that a 'deep dive' into BAF 16 might be necessary at a future Board workshop – there could be other issues to highlight. However, whilst this could provide greater detail and information it would not change the risk.

22.0 Any other relevant business not included on the agenda

Mrs Schofield reminded Directors about the need to have a flu vaccination.

She thought that the visits in Northallerton after the Board workshop had been helpful and valuable and Dr Lyth said that the teams had valued the feedback they had received.

Dr Tolcher drew attention to the Trust value about respecting and valuing staff and informed the Board that Mr Coulter had received a long service award for 25 years' service to the NHS.

Mr Ward said that he had thoroughly enjoyed his six years as a Non-Executive Director. He had always planned to leave at this time. He believed the Trust was a very good business, with high quality people, which was shown by survey after survey. He was amazed how passionate staff were. He also noted the high quality of the Chairman, Chief

Executive and fellow Directors and said that the Trust must stay independent, as it scores highly on quality throughout. In his time as a Non-Executive Director the Trust had always broken eve or better. His experience had been around financial services so this had provided him the wider experience. He was currently part of a Remuneration Committee for a FTSE 250 company – his time at the Trust had been excellent work but not as well rewarded.

Mrs Schofield thanked Mr Ward for his thoughts and his work as a Non-Executive Director.

There was no further relevant business to be raised.

23.0 Board Evaluation

Mr Ward thought that the meeting had gone well. He suggested a change to the organisation of the IBR and the timing of the break. Although there had been no report from the Medical Director he felt that the issues had been covered.

Dr Tolcher said that the Executive Directors had been less prominent at this meeting and the meeting had concentrated on strategic and pressing matters. Less time was spent on finance issues as the new Committee would concentrate on properly examining and articulating the financial position of the Trust.

Mr Coulter said that this was why there had been detailed financial narrative in the IBR and Mrs Taylor said that the Board should only be invited to go over the three or four most important areas in any detail.

Dr Scullion said that he thought more questions had come out of the discussions.

Mr Ward wondered whether the new format worked for the Clinical Directors. Mrs Schofield said that there was a greater focus for the Clinical Directors on Board business and not what is interesting; the Clinical Directors would contribute to the agenda items rather than having their own items.

Dr Johnson said that she made her detailed reports to the Senior Management Team meeting.

Mr Harrison suggested that the revision to the IBR would aid triangulation and that whilst it would be developed over the next few meetings, the basic principles would remain. Mrs Schofield said that restructuring the IBR around the Strategic Objectives over time, as was now the case with the Board agenda, would be helpful.

Mr Coulter said that the public accountability test would have to be met with any new format. Mr Harrison agreed that the IBR was in transition.

Mrs Foster thought that the contribution of Dr Wood had been good and had stimulated a good discussion. Mrs Schofield commended Mrs Harrison in her first Board meeting as Interim Director of Workforce and Organisational Development.

24.0 Confidential Motion

The Chairman moved ‘that members of the public and representatives of the press be

excluded from the remainder of the meeting having regard to the confidential nature of the business to be transacted, publicity on which would be prejudicial to the public interest'.

The Board agreed the motion unanimously. The meeting closed at 12.30pm.

NHS
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HDFT Board of Directors Actions Schedule
Action Log
November 2018

This document logs items for action from Board of Directors meetings which remain outstanding. Board members will be asked to confirm completion of actions or give a progress update at the following Board meeting when they do not appear on a future agenda.

Ref	Meeting Date	Item Description	Director/Manager Responsible	Completion date	Detail of progress
81	January 2018	Further consideration to include additional measures within the integrated board report regarding patient experience in adult and children community services.	Mr Harrison, Chief Operating Officer / Mr Alldred, Clinical Director LTUC / Dr Lyth, Clinical Director CCWC	January 2019	
102	June 2018 (minute 5.5)	Mrs Roberts and Mrs Webster to agree an appropriate resolution, and amend the Quality Committee terms of reference accordingly.	Mrs Webster, Non Executive Director & Mr Forsyth, Interim Company Secretary	November 2018	
106	June 2018 (minute 8.4)	Mr Harrison to consider whether previous year trends could be added to a number of measures within the Integrated Board Report.	Mr Harrison, Chief Operating Officer	November 2018	
111	July 2018 (minute 7.7)	Update the Scheme of Reservation and Delegation following review of Quality Committee Terms of Reference, when approved	Mr Forsyth, Interim Company Secretary	November 2018	To be completed when ToRs approved
112	September 2018	Patient Public Participation Strategy – consult widely with stakeholders and take principles in framework forward to develop strategy	Mrs Jill Foster, Chief Nurse	January 2019	
113	September 2018	Ensure Board members aware of flu vaccination opportunities in October	Mr Andrew Forsyth, Interim Company Secretary	November 2018	Complete
114	September 2018	Discuss national planning guidance at Board workshop/strategy days	Mr Andrew Forsyth, Interim Company Secretary	December 2018	To be scheduled
115	September 2018	Revise Board membership as appropriate, including Mrs Webster as Senior Independent Director	Mr Andrew Forsyth, Interim Company Secretary	November 2018	Complete

Harrogate and District NHS Foundation Trust

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Date of Meeting:	28h November 2018	**Agenda item:**	5.0
Report to:	Board of Directors		
Title:	Report from the Chief Executive		
Sponsoring Director:	Dr Ros Tolcher, Chief Executive		
Author(s):	Dr Ros Tolcher, Chief Executive and Andrew Forsyth, Interim Company Secretary		
Report Purpose:	**Decision** [ ] **Discussion/ Consultation** [✓] **Assurance** [✓] **Information** [✓]		
Executive Summary:	• The Trust achieved its planned surplus for M7 and the year to date deficit is in line with the NHSI plan. • All cancer pathway targets were met in October and the A&E 4 hour standard was met in September and October. • RTT remains at approx. 91% and is forecast to remain below the standard in Q3 and Q4.		
Related Trust Objectives			
To deliver high quality care [✓] **To work with partners to deliver integrated care:** [✓] **To ensure clinical and financial sustainability:** [✓]			
Key implications			
Risk Assessment:	Strategic and operational risks are noted in section 7. Risks associated with this report are reflected in the Board Assurance Framework: BAF 14: risk to deliver of integrated models of care; BAF 15: misalignment of partner strategic plans; and BAF 9; failure to deliver the operational plan.		
Legal / regulatory:	There are no legal/regulatory implications highlighted within the report.		
Resource:	There are no resource implications highlighted within the report.		
Impact Assessment	Not applicable.		
Conflicts of Interest:	None identified.		
Reference documents:	• NHS Improvement: Single Oversight Framework: https://improvement.nhs.uk/uploads/documents/Single_Oversight_Framework___update_Nov_2017_v2.pdf		
Assurance:	Not applicable.		
Action Required by the Board of Directors:			

- The Board is asked to **note** progress on risks recorded in the BAF and Corporate Risk Register and **confirm** that progress reflects the current risk appetite.
- To **note** the recommendations of the NYCC Director of Public Health and **reaffirm** a commitment to embedding public health into services wherever possible.

This report should be read alongside the Trust's Integrated Board Report which contains further information on key quality, operational and finance metrics.

QUALITY, PATIENT EXPERIENCE AND OPERATIONAL PERFORMANCE

1.1 Operational Performance

Performance on the A&E 4 hour standard was above 95% in September and October. The year to date performance on this standard has now improved to 94.8% and work continues to further improve this position. All cancer access standards were met in October, including the symptomatic breast standard which achieved 100%. Performance against the 18 week referral to treatment standard remains in line with the prior month's forecast and currently stands at 90.9%. Referral demand continues to exceed capacity and this position could only be improved with significant additional investment.

A small increase in the number of falls was reported in October but the trend in respect of falls remains encouraging with a 6% reduction in numbers compared to the same period last year. Reported pressure ulcers (all grades) have fallen by 5% against a 15% reduction target.

In October, 2.5% of bed days were lost due to delayed transfers of care, an increase on last month but remaining below the local standard of 3.5%. As part of the discharge work stream, three teams involved in discharge planning have now been co-located into a Discharge Hub within the hospital.

1.2 Care Quality Commission (CQC) Inspection

Unannounced inspections of a number of clinical services took place over three days earlier this month. Verbal and written feedback was positive, noting in particular a very positive culture and staff at every level who take pride in what they do. There were lots of examples of compassionate care and staff going above and beyond, particularly in surgical services. A small number of matters to address were identified, the majority of which were resolved on the day of the inspection. The final stage of the CQC inspection is the Well Led Review due to take place on 4-6 December 2018.

1.3 Stroke Services

The Joint Committee of the WYH Clinical Commissioning Group met on 6 November and received a paper regarding stroke services across the West Yorkshire and Harrogate Integrated Care System (WYH ICS). The paper summarised the journey so far and the next steps needed to meet the WYH ICS ambition. This includes a pathway which gives people the same care and attention regardless of where they live in West Yorkshire and Harrogate.

The Committee supported the recommendations in this paper, including the recommendation to have four hyper-acute stroke units as the service delivery model for sustainable high quality care in WYH. The committee also agreed local plans to take people with suspected stroke in Harrogate to either Leeds or York Hospitals for hyper-acute care, with repatriation to Harrogate for post-acute and rehabilitation thereafter.

1.4 Freedom to Speak Up (FTSU) self-assessment

Further to work undertaken at the Board of Directors strategy day in October, a final version of the FTSU self-assessment has been completed and submitted to NHS Improvement.

2.0 FINANCIAL AND EFFICIENCY

2.1 Financial performance

The Trust reported a £1.2m surplus in October (month 7) as planned. The year to date deficit position of £2.5m is also in line with the plan agreed with NHSI. The financial position remains however, very challenging, with adverse variance of £4m reported against the internal plan. In order to achieve the control total agreed with NHSI we will need to achieve similar in month surpluses for the remainder of the year.

Overspending on additional ward based staff continues to improve and income (with the exception of private patient income) performed well in month.

Although improved in month, the cash position remains concerning and this is contributing to low levels of compliance with the Better Payment Practice Code.

The Trust reported a use of resources rating of 3 in October, in line with the annual plan submitted to NHS Improvement. Further details are contained in the Finance Director's report.

3.0 PARTNERSHIPS AND INTEGRATION

3.1 West Yorkshire and Harrogate Integrated Care System (WYH ICS) and West Yorkshire Association of Acute Trusts (WYAAT)

Further to the sign off of the MoU and supporting governance arrangements, Cllr Tim Swift, leader of Calderdale Council and Chair of Calderdale Health and Wellbeing Board has been appointed as Chair of the WYH ICS Partnership Board for the first two years. A deputy chair from the NHS organisations within the Partnership will now be identified. The creation of the Partnership Board is consistent with the development of the Memorandum of Understanding (MoU) agreed at the HDFT Board meeting in September. The Partnership Board will ensure that the work discussed there meets the ambitions set out in the WHY ICS 'Next Steps to Better Health and Care for Everyone' whilst informing the development of the Long Term Plan.

In addition the newly created Systems Oversight and Assurance Group (SOAG) met for the first time on 15 October. A system dashboard collating operational performance at Trust and system level is being developed.

At its meeting on 20 November, the WYAAT Committee in Common received a report from the Programme Director which included comparative performance data for each of the six Trusts for September 2018. Whilst this Integrated Operational Report is compiled by NHS England and is confidential, it was agreed that the Programme Director should seek a mechanism whereby some of the data could be made both more current and more widely available. This may help to identify areas where greater collaboration across WYAAT would be of benefit to individual Trusts.

3.2 Harrogate System

Additional funds have been allocated to councils to support adult social care and alleviate winter pressures. North Yorkshire County Council will receive £2.42m intended to support

reductions in delayed transfers of care (DTOC), reducing extended length of stays and improve weekend discharges across the county. A&E Delivery Boards are required to agree investments.

Good progress in being made in the development of an outline business case for the future delivery of integrated community services is being prepared by providers in response to the commissioners paper 'our community, our care'. The final business case will be presented to the Board in Q4.

3.3 Director of Public Health Annual Report 2018

North Yorkshire County Council's Director of Public Health has published his Annual Report for 2018. It includes the following three recommendations:

a. Reduce health inequalities
b. Improve public mental health
c. Embed a public health approach

HDFT has previously committed to Making Every Contact Count and embedding public health in to our services wherever possible. The Board of Directors is asked to note these recommendations and to reaffirm its commitment to supporting public health measures within services wherever possible.

3.4 Children's Safeguarding working together update, County Durham

The Department for Education released an updated version of 'Working Together to Safeguard Children' earlier this year. New multi - agency safeguarding arrangements are being developed by partner agencies in response to this. An updated version of Keeping Children Safe in Education has already been published, and came into effect from 3rd September 2018.

From 29th June 2018, local authority areas must begin their transition from the current LSCBs (Local Safeguarding Children Boards) to child death review partner arrangements. The transition must be completed by 29th September 2019. For the area covered by Durham County Council a new safeguarding children partnership structure has been proposed central to which is the Durham safeguarding children partnership executive group. The Trust is represented on this group by Suzanne Lamb. The Serious Case review procedures are being revised to incorporate the new requirements and will be complete before the new arrangements are in place.

All the other LAs are undertaking similar reviews and are at various stages of agreeing and implementing new arrangements. The Trust executive lead for safeguarding is Jill Foster, Chief Nurse.

4.0 SENIOR MANAGEMENT TEAM (SMT) MEETING

The SMT met on 24 October and 21 November 2018. The following key areas are for noting:

October meeting

- Considered a paper from PSC on theatre optimisation in respect of elective caesarean sections. Agreed to explore opportunities to create additional capacity within the department.

- Reviewed drivers of in-month financial performance contributing to an adverse year end forecast. Discussion work being done to secure the performance element of PSF.
- Discussed waiting list growth and steps to sustain or improve RTT which is tracking below the 92% standard. Noted risk that HaRD waiting list will grow significantly before year end despite activity already being above indicative values. A 5-6% reduction in referrals is required to bring demand back down to contracted values.
- Discussed potential reasons why HaRD CCG has the second highest use nationally of the cancer 2ww referral route and the impact of this on resource utilisation.
- Noted improvements in consultant job planning rates (71%, on track for 100% by December); flu vaccination uptake and £80k run rate improvement as a result of improved sickness absence management in hotspots.
- Agreed the Annual Improvement Programme for 2019/20
- Noted receipt of a draft HTA (Human Tissue Authority) report which includes three major findings including mortuary capacity in respect of obese deceased patients.
- Agreed the following policies:
    - Social media
    - Overseas visitors
    - Quality and Equality impact assessments for CIP and organisational change
    - Patient Access policy
- Discussed the preferred option for a new email system emerging from the WYAAT IT work stream and the operational implications of implementation.

November meeting

- Noted 5% reduction in pressure ulcers (all grades) and 6% reduction in falls YTD
- Agreed actions to increase 'flu vaccine uptake rates
- Received a report from the Director of Medical Education following the 2018 GMC survey; noted areas of improvement and areas for action.

5.0 COMMUNICATIONS RECEIVED AND ACTED UPON

5.1 NHS Long Term Plan

When the Prime Minister announced a £20.5bn 5-year funding deal for the NHS in the summer, she challenged the NHS to develop a 10-year plan which should deliver financial sustainability through improving productivity and efficiency, eliminating provider deficits, reducing unwarranted variation, better demand management and better capital investment.

Despite some slightly differing priorities between the Prime Minister, the new Secretary of State, the Chief Executive of NHS England and the Chief Executive of NHS Improvement, development of the plan has been accelerating over the last few months and implementation will start next month with the publication of the draft long term plan, a national workforce strategy, a five-year delivery plan and, probably, the long-awaited social care green paper.

Following this the routine planning for a shorter timeframe (one year) will continue and there will be further national engagement on the long-term plan. It is clear that the Integrated Care Systems (ICS) and Sustainability and Transformation Partnerships (STP) will lead local engagement on the implications of the long-term plan. By summer 2019 the ICS/STPs should have submitted five-year costed plans signed off by all local system partners.

The emerging Long Term Plan for the NHS will be a key document shaping the Trust's revised Strategic Plan being currently developed.

6.0 BOARD ASSURANCE AND CORPORATE RISK

6.1 Board Assurance Framework (BAF)

No new risks have been added to the BAF this month. Six risks (no change from September 2018) are currently assessed as having achieved their target risk score. The BAF was reviewed by the Executive Directors on 14 November; adjustments were made to reflect mitigating actions which were complete and were now key controls. Additional mitigating actions were added where appropriate. The strategic risks are as summarized as follows:

Ref	Description	Risk score	Progress score	Target risk score reached
BAF 1	Risk of a lack of medical, nursing and clinical staff	*Amber 9 ↔*	*Unchanged at 1*	
BAF 2	Risk of a high level of frailty in the local population	*Amber 8 ↔*	*Unchanged at 1*	✓
BAF 3	Risk of a failure to learn from feedback and Incidents	*Amber 9 ↔*	*Unchanged at 2*	
BAF 5	Risk of maintaining service sustainability	*Amber 9 ↔*	*Unchanged at 1*	
BAF 9	Risk of a failure to deliver the Operational Plan	*Red 16 ↔*	*Unchanged at 2*	
BAF 10	Risk of breaching the terms of the Trust's Licence to operate	*Yellow 5 ↔*	*Unchanged at 1*	✓
BAF 12	Risk of external funding constraints	*Red 12 ↔*	*Unchanged at 1*	✓
BAF 13	Risk standards of care and the organisation's reputation for quality fall because quality does not have a sufficient priority in the Trust	*Yellow 4 ↔*	*Unchanged at 1*	✓
BAF 14	Risk of delivery of integrated models of care	*Amber 8 ↔*	*Unchanged at 1*	✓
BAF 15	Risk of misalignment of strategic plans	*Amber 8 ↔*	*Unchanged at 1*	✓
BAF 16	Risk that the Trust's critical infrastructure (including estates, diagnostic capacity, bed capacity and IT) is not fit for purpose	*Red 12 ↔*	*Improved to 2*	
BAF 17	Risk to senior leadership capacity	*Red 12 ↔*	*Unchanged at 1*	

6.2 Corporate Risk Register (CRR)

The CRR was reviewed at the monthly meeting of the Corporate Risk Review Group on 9 November 2018. The Corporate Risk Register now contains 11 risks. One new risk, around podiatry capacity, was added and one target date is to be reviewed.

Corporate Risk Register Summary

Ref	Description	Current risk score	Risk movement	Current progress score	Target date for risk reduction	Notes
CR2	Risk to the quality of service delivery in Medicine due to gaps in rotas; reduction in trainee numbers; agency cap rate; quality control of locums.	12	↔	2	*Mar-19*	
CR5	Risk to service delivery due gaps in registered nurses establishment	12	↔	2	*Oct-20*	

CR13	Risk to patient care, experience and quality due to a lack of capacity to support patients following discharge	12	↔	*2*	*Mar-19*	
CR14	Risk of financial deficit and impact on service delivery due to failure to deliver the Trust annual plan by having excess expenditure or a shortfall in income.	16	↔	*2*	*Mar-19*	
CR18	Risk to provision of service and not achieving national standards in cardiology due to potential for lab equipment breaking down	12	↔	*1*	*Mar-19*	
CR24	Risk to patient safety, quality, experience, reputation, staff wellbeing due to reduced capacity in the Community Care teams (CCTs).	12	↔	*3*	*Mar-19*	
CR26	Risk of inadequate antenatal care and patients being lost to follow up - due to inconsistent process for monitoring attendance at routine antenatal appointments in community	12	↔	*3*	*Nov-18*	*Target date to be reviewed*
CR27	Risk to service delivery due to failure to have sufficient cash to support the capital programme including replacement of equipment due to delay in payment from commissioners or shortfall in delivering the financial plan	16	↔	*4*	*Apr-19*	
CR31	Financial risk and risk of poor patient experience associated with the failure to meet the 4 hour standard	12	↔	*2*	*Dec-18*	
CR32	Financial risk from major sporting events due to cost of contingency arrangements and loss of income	12	↔	*3*	*Sep-19*	
CR33	Risk of detrimental outcome due to extended times between treatments for existing podiatry patients due to staff shortages Harrogate & Scarborough locality teams. Plus financial risk associated with loss of income	12	New	*TBC*	*TBC*	*Target date to be agreed and progress score to be reviewed*

Dr Ros Tolcher
Chief Executive
November 2018

Harrogate and District NHS Foundation Trust

5

Date of Meeting:	28th November 2018	**Agenda item:**	6.3, 7.2, 8.4
Report to:	Board of Directors		
Title:	Integrated Board Report		
Sponsoring Director:	Dr Ros Tolcher, Chief Executive		
Author(s):	Ms Rachel McDonald, Head of Performance & Analysis		

Report Purpose:

Decision		Discussion/ Consultation	✓	Assurance	✓	Information	✓

Executive Summary:

The Trust is required to report its operational performance to NHS Improvement and to routinely submit performance data to NHS England and Harrogate and Rural District CCG. The Board of Directors are asked to note that:

- The Trust reported a surplus of £1,183k in October. While this looks a positive position, it reflects the improvement expected in the second part of the year. This change is driven by income in particular.
- The number of patients recommending the Trust as a place to receive care in the Friends & Family Test reduced in October.
- The number of inpatient falls increased in October, as did the number of falls causing fractures.
- Staff appraisal rates increased in October and are now at 82%, the highest percentage reported this year.
- HDFT's performance against the A&E 4-hour standard remained above 95% in October. The year to date performance total now stands at 94.8%.
- The Trust's 18 weeks performance remained below the 92% standard in October with performance at 90.9%.
- Provisional data indicates that all cancer waiting times standards were achieved for October with a significantly improved position on the 2 week wait standard for breast symptomatic patients.
- Delayed transfers of care remain low and were at 2.5% in October, below the 3.5% contract threshold.

Related Trust Objectives

To deliver high quality care	✓	To work with partners to deliver integrated care:	✓	To ensure clinical and financial sustainability:	✓

Key implications

Risk Assessment:	Risks associated with the content of the report are reflected in the Board Assurance Framework via: BAF 4: risk of a lack of interoperable systems across New Care Models partners; BAF 9: risk of a failure to deliver the operational plan; BAF 10: risk of a breach of the terms of the NHS Provider licence; BAF 16: risk to delivery of integrated care models.
Legal / regulatory:	None identified.
Resource:	Not applicable.
Impact Assessment:	Not applicable.
Conflicts of Interest:	None identified.
Reference documents	None.
Assurance:	Report reviewed monthly at Senior Management Team in Operational Delivery Group.

Action Required by the Board of Directors:

The Board of Directors are asked to receive and note the content of the report.

You matter most

Integrated board report - October 2018

Key points this month

1. The Trust reported a surplus of £1,183k in October. While this looks a positive position, it reflects the improvement expected in the second part of the year. This change is driven by income in particular.

2. The number of patients recommending the Trust as a place to receive care in the Friends & Family Test reduced in October.

3. The number of inpatient falls increased in October, as did the number of falls causing fractures.

4. Staff appraisal rates increased in October and are now at 82%, the highest percentage reported this year.

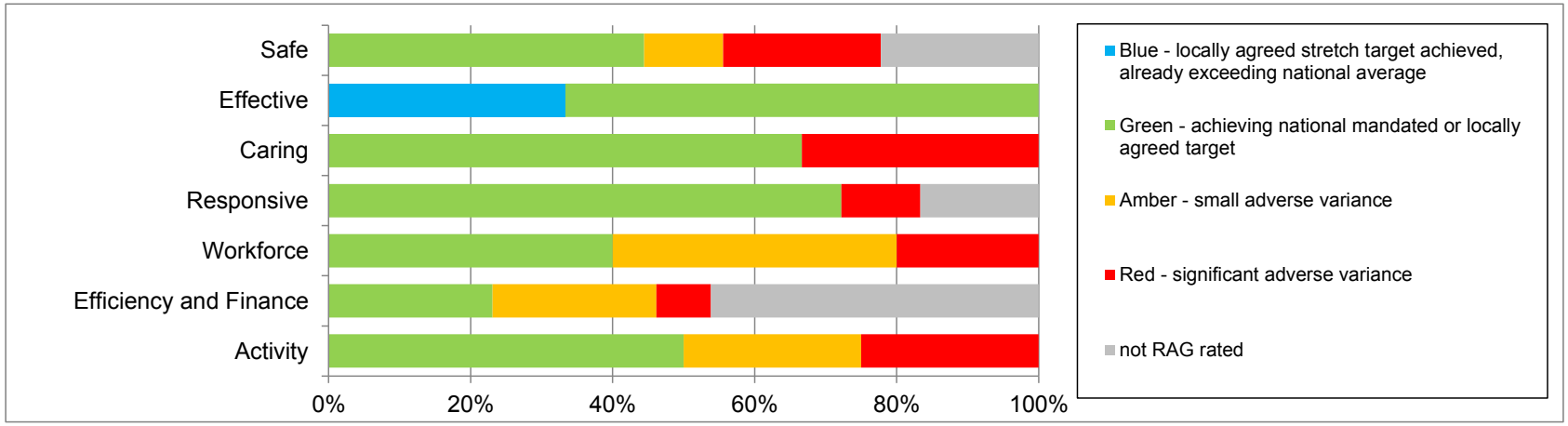
5. HDFT's performance against the A&E 4-hour standard remained above 95% in October. The year to date performance total now stands at 94.8%.

6. The Trust's 18 weeks performance remained below the 92% standard in October with performance at 90.9%.

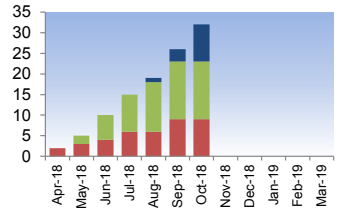
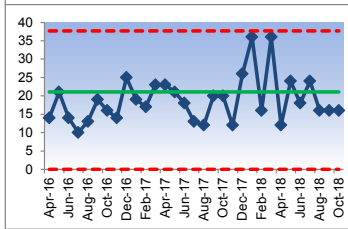
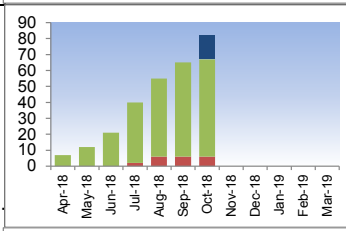
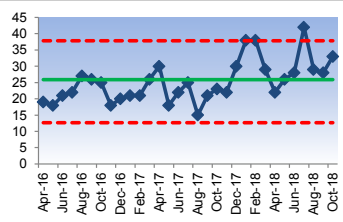
7. Provisional data indicates that all cancer waiting times standards were achieved for October with a significantly improved position on the 2 week wait standard for breast symptomatic patients.

8. Delayed transfers of care remain low and were at 2.5% in October, below the 3.5% contract threshold.

Summary of indicators - current month



Safe - October 2018

Indicator name / data quality assessment	Trend chart	Interpretation
Pressure ulcers hospital acquired DQ		There were 6 hospital acquired unstageable or category 3 pressure ulcers reported in October, bringing the year to date total to 32. This compares to an average of 5 per month reported in 2017/18. For the 32 cases reported in 2018/19 to date, 9 have been assessed as avoidable, 14 as unavoidable and 9 are still under root cause analysis (RCA). No category 4 hospital acquired pressure ulcers have been reported in 2018/19 to date.
DQ		The number of hospital acquired category 2-4 (or unstageable) pressure ulcers reported in October was 16, no change on last month and below the average per month reported in 2017/18.
Pressure ulcers community acquired DQ		There were 17 community acquired unstageable or category 3 pressure ulcers reported in October, compared to 10 last month. The average per month reported in 2017/18 was 12. For the 82 cases reported in 2018/19 to date, 6 has been assessed as avoidable, 61 as unavoidable and 15 are still under root cause analysis (RCA).
DQ		The number of community acquired category 2-4 (or unstageable) pressure ulcers reported in September was 33, an increase on last month and remaining above the average per month reported in 2017/18.

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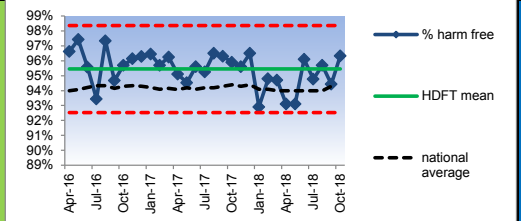
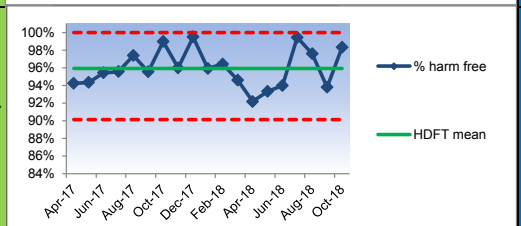
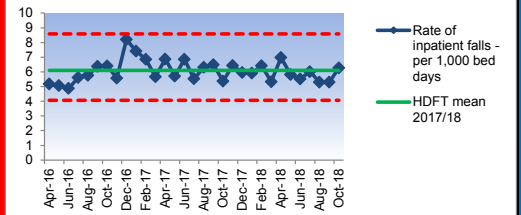
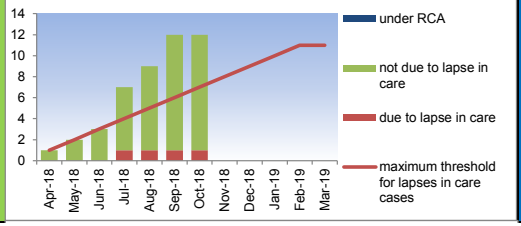
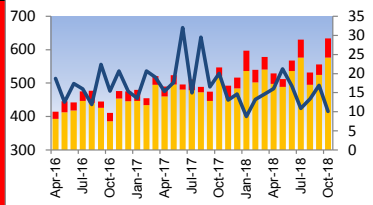
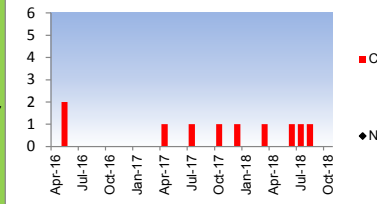
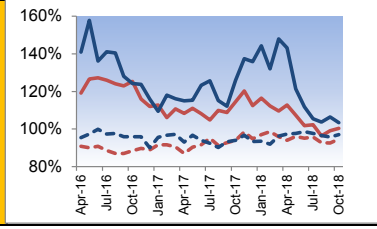
Safe - October 2018

Indicator name / data quality assessment	Trend chart	Interpretation
Safety Thermometer - harm free care DQ		The harm free percentage for October was 96.3%, above 95% and a significant improvement on last month. All 4 types of harms reported in the survey reduced this month with the most significant reductions in falls (down from 10 to 1) and the number of urinary tract infections reported in patients with a catheter (down from 4 to 1).
Safety thermometer - harm free care - Community Care Teams DQ		The harm free percentage for October was 98.3%, a significant improvement on last month. There were only 3 harms reported by the community teams this month which were all new pressure ulcers.
Falls DQ		The rate of inpatient falls was 6.27 per 1,000 bed days in October, an increase on last month and above the average HDFT rate for 2017/18. There were 5 falls resulting in a fracture in October (0 last month). This is the highest number of fractures reported in a single month this year. The falls occurred across 4 different wards.
Infection control DQ		There were no cases of hospital apportioned C. difficile reported in October, with the year to date total remaining at 12 cases. All 12 cases have had root cause analysis completed and shared with HARD CCG. The outcome for 11 out of 12 was that no lapse of care had occurred. 1 case has been deemed to be due to a lapse in care in relation to antibiotics. No hospital apportioned MRSA cases have been reported in 2018/19 to date.

Safe - October 2018

Indicator name / data quality assessment	Trend chart	Interpretation
Incidents - all DQ		The latest published national data (for the period Oct 17 - Mar 18) shows that Acute Trusts reported an average ratio of 47 no harm/low harm incidents for each incident classified as moderate harm, severe harm or death (a high ratio is better). HDFT's published ratio was 17, a reduction on the last publication and remaining in the bottom 25% of Trusts nationally. HDFT's latest local data for the period Apr 18 - Sep 18 gives a ratio of 15, a further deterioration on this position. The focus going forward is to improve our incident reporting rate particularly encouraging staff to report no harm/ near miss incidents. Options to improve the Datix system to simplify the incident reporting process are being explored.
Incidents - SIRIs and never events DQ		There were no comprehensive SIRIs reported in October. No Never Events were reported in 2017/18 or in 2018/19 to date.
Safer staffing levels DQ		Overall staffing compared to planned was at 98% in October. Care Support Worker staffing levels have reduced which may reflect a decrease in the need for 1-1 care. Whilst safer staffing levels for registered nurses remains below 100%, the staffing level achieved still enables the delivery of safe care. Achieving safe staffing levels remains challenging and requires the increasing use of temporary staff through the nurse bank and agencies.

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Safe - October 2018

Indicator name / data quality assessment	Trend chart	Interpretation

Narrative

Hyper Acute Stroke Services

The Trust is in ongoing discussions with Leeds and York about the move of Hyper Acute Stroke. It has been agreed that we will work toward this change happening from the first week in April 2019. Discussions are currently taking place with Wakefield CCG as the lead commissioner for stroke in relation to the allocation of tariff with the proposal that tariff is paid 50/50 for hyper acute patients admitted to York or Leeds who are then repatriated to Harrogate for their ongoing care.

Summary of National Hip Fracture Database (NHFD) report 2018

The NHFD released our 2018 report on 15th November 2018, reporting on data from 2017. 2018 data is available in real-time but benchmarked data for 2018 is not yet available.

Good news

- Achieved 82.3% Best Practice Tariff (10th in UK), 63% in 2016
- 80.9% admitted to Orthopaedic ward within 4 hours (3rd in UK)
- 98.3% peri-operative medical assessment
- 99.1% early physiotherapy assessment
- 100% nutritional risk assessment
- 98% delirium assessment
- 99.6%/100% falls/bone health assessment
- 84.5% surgery within 36 hours
- 91.6% of patients with general anaesthetic also received nerve block
- Remain in top quartile for treating eligible patients with total hip replacement

Work to do

- Surgery supervised by consultant Aneasthetists & consultant surgeon in only 27% of cases
- Length of stay increasing
- Unable to collect follow-up data
- Pressure ulcer rates increasing (2018 data)
- Mortality rising (2018 data)

New key performance indicators have been proposed, the detail of which is currently under consideration by the Orthogeriatric Team.

Safer staffing

A summary of the October safer staffing results is presented below.

Safe - October 2018

Indicator name / data quality assessment	Trend chart	Interpretation

	Oct-2018						
	Day		Night		Care hours per patient day (CHPPD)		
Ward name	Average fill rate - registered nurses/ midwives	Average fill rate - care staff	Average fill rate - registered nurses/ midwives	Average fill rate - care staff	Registered nurses/ midwives	Care Support Workers	Overall
AMU	98.0%	97.7%	98.4%	106.5%	4.27	2.66	6.93
Byland	87.7%	107.3%	89.7%	119.4%	2.58	3.57	6.16
CATT	89.6%	109.4%	85.9%	111.3%	4.63	3.22	7.85
Farndale	92.2%	86.6%	100.0%	101.6%	3.39	3.94	7.33
Granby	96.5%	113.7%	100.0%	106.5%	3.71	3.60	7.31
Harlow	105.6%	98.4%	100.0%	-	6.85	1.88	8.73
ITU/HDU	103.5%	-	100.0%	-	23.96	0.51	24.47
Jervaulx	94.6%	103.9%	98.6%	112.9%	2.83	3.68	6.51
Lascelles	96.4%	96.8%	100.0%	100.0%	4.45	4.05	8.50
Littondale	98.2%	120.6%	100.0%	106.5%	4.42	2.64	7.06
Maternity Wards	89.2%	66.5%	95.2%	75.0%	13.99	3.17	17.16
Nidderdale	108.6%	100.5%	103.5%	94.9%	3.70	2.26	5.96
Oakdale	90.9%	97.3%	93.5%	111.3%	4.21	2.60	6.81
Special Care Baby Unit	91.0%	46.7%	96.8%	#DIV/0!	10.58	1.39	11.97
Trinity	98.0%	94.8%	100.0%	100.0%	3.76	4.12	7.88
Wensleydale	85.2%	119.4%	100.0%	100.0%	3.75	2.85	6.60
Woodlands	91.9%	103.2%	96.8%	71.0%	8.75	2.35	11.10
Trust total	**94.6%**	**100.4%**	**97.0%**	**103.4%**	**4.91**	**3.02**	**7.94**

Further information to support the September safer staffing data

On the wards CATT, Oakdale and Jervaulx, where the Registered Nurse (RN) fill rate was less than 100% against planned; this reflects current band 5 Registered Nurse vacancies and is reflective of the local and national position in particular regarding the difficulties in recruiting Registered Nurses. The Trust is engaged in an extensive recruitment plan in response to this.

In addition, planned staffing levels on Jervaulx, Farndale and Nidderdale were adjusted in October to reflect the closure of beds in these areas in response to activity levels.

The planned staffing levels on the Delivery Suite and Pannal ward (maternity wards) have been combined to reflect the close working relationship of these two areas and the movement of staff between the wards in response to fluctuating occupancy and activity levels. Some of the Registered Midwife and care staff gaps were due to sickness in October; however a professional assessment was made on a shift by shift basis to ensure that nurse staffing numbers matched the activity.

In some wards, the actual care staff hours show additional hours used for enhanced care for those patients who require intensive support. In October this is reflected on the wards Byland, Granby, Jervaulx and Oakdale.

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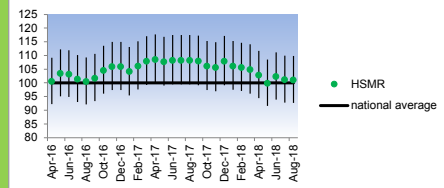
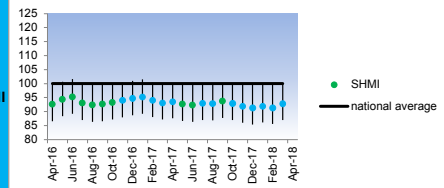
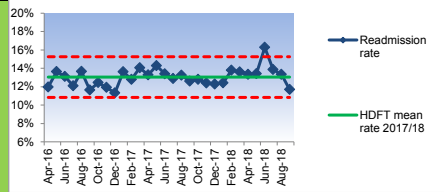
Effective - October 2018

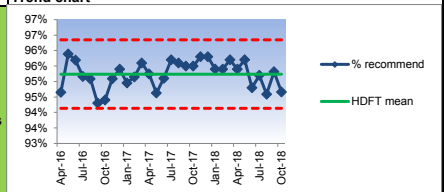
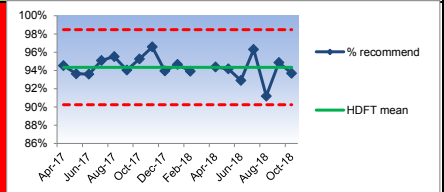
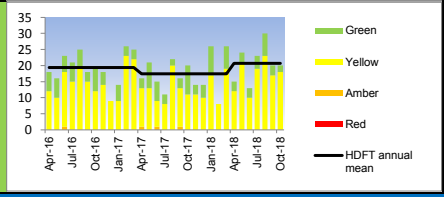
Indicator name / data quality assessment	Trend chart	Interpretation
Mortality - HSMR (DQ)		HDFT's HSMR for the rolling 12 months ending August 2018 was 101.0, no significant change on last month and remaining within expected levels. At specialty level, just 1 specialty has a higher than expected standardised mortality rate (Geriatric Medicine).
Mortality - SHMI (DQ)		*There is no update of this data this month.* HDFT's SHMI for the rolling 12 months ending March 2018 was 92.8. This remains below expected levels. At specialty level, 3 specialties (Geriatric Medicine, Respiratory Medicine and one small volume surgical specialty) have a standardised mortality rate above expected levels.
Readmissions (DQ)		The number of emergency readmissions in September (after PbR exclusions are applied) was 215. This equates to 11.7% when expressed as a percentage of all emergency admissions. This is a significant reduction on recent months and below the HDFT average for 2017/18.

Narrative

The Trust received a visit from the regional Healthcare Safety Investigation Branch (HSIB). This is a new independent body tasked with undertaking external investigations into stillbirth, perinatal and maternal deaths. Investigations will be undertaken according to the "Every Baby Counts" criteria. The process went live from April 2018, and will replace Trust's own SI process. Our go live date is 3rd December 2018. The meeting was well attended and numerous questions asked. The process is in an early stage and both local and national learning sparse so far, but it is expected that HSIB will be in a position to promote and disseminate learning at a wider level. Families will be at the centre of the investigation process. The process is heavily focused on systems failures rather than individual blame and will be steeped in human factors methodology. We welcome this approach and wait with interest on lessons learned from current investigations.

Much debate has taken place around implementation of the ReSPECT process of advanced care planning. A number of hurdles have arisen, not least debate over the merits and deficiencies of current systems, engagement of colleagues in primary care and the advantages of an electronic rather than a paper based system.
The Medical Director has reached the conclusion that implementation of the ReSPECT process in its current form is likely to be unsuccessful. Senior subject matter experts in the Trust have been tasked with designing a system that meets the needs of patients, avoids unnecessary resuscitation attempts and provides the very best end of life care experience for patients and families. This will involve elements of the ReSPECT process, though not all. Further meetings are planned in the New Year to assess progress and Board will be updated as necessary.

Caring - October 2018

Indicator name / data quality assessment	Trend chart	Interpretation
Friends & Family Test (FFT) - Patients DQ		94.7% of patients surveyed in October would recommend our services, a decrease on last month but remaining above the latest published national average (93.2%). Around 5,200 patients responded to the survey this month.
Friends & Family Test (FFT) - Adult community services DQ		93.7% of patients surveyed in October would recommend our services, a decrease on last month and remaining below the national average performance for community services (95.3%). 450 patients from adult community services responded to the survey this month. The reduction in score this month is due to more patients responding to say that they were “neither likely or unlikely” to recommend the service, rather than an increase in the numbers saying they would be unlikely to recommend. Only 2 of these patients left detailed verbal comments – these comments related to a delayed appointment and a patient who had their appointment cancelled and rearranged by the Trust. Of the services included, the GPOOH service reported the lowest proportion of patients recommending the service.
Complaints DQ		20 complaints were received in October, no change on last month and below the average for 2018/19. No complaints were classified as amber or red this month. The complaints received this month are in relation to a number of different HDFT services. Of note this month, there are a number of complaints about about delay or failure to diagnose.

Narrative

Results from this year's Patient-Led Assessments of the Care Environment (PLACE) were published recently. The assessment covers the non-clinical aspects of the patient environment, how it supports patients' privacy and dignity, and its suitability for patients with specific needs e.g. disability or dementia.

HDFT scored below the national average for the privacy, dignity and wellbeing domain, although all sites saw an increase on last year's results. Previous assessments have identified that a significant number of issues related to the physical infrastructure of buildings at HDFT with some recurring themes including a lack of lockable storage space for use by patients, sufficient space at reception desks so that conversation between staff and patients are not overheard and a separate treatment room on the ward for minor procedures/wound dressing.

For dementia, all HDFT premises fell below the national average but all showed improvement on 2017. A number of observations from previous assessments continue to arise including:
- the ability to cover or remove mirrors;
- having clear easily readable signage showing the hospital name and ward/department names and location of toilets;
- toilet doors to be a single distinctive colour so as to distinguish them from other doors in the same area;
- toilet seats, flush handles and rails in a colour that contrasts with the toilet/bathroom walls and floor;
- exit doors clearly marked but doors to 'staff-only' areas disguised.

A detailed action plan has been prepared and its implementation will be monitored by the Providing a Safe Environment Steering Group.

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Responsive - October 2018

NHS Improvement Single Oversight Framework

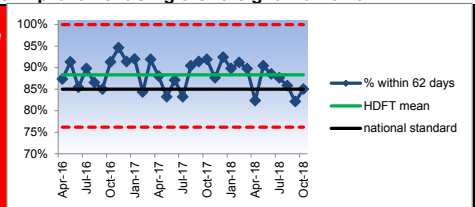
NHS Improvement Single Oversight Framework

DQ

Standard	Q1	Q2	Q3 to date	Q4	YTD
RTT incomplete pathways	90.8%	90.9%	90.9%		90.9%
A&E 4-hour standard	94.8%	94.0%	95.5%		94.8%
Cancer - 62 days	87.3%	85.3%	85.0%		86.1%
Diagnostic waits	98.4%	99.0%	99.4%		98.8%
Dementia screening - Step 1	95.6%	93.0%	90.8%		93.7%
Dementia screening - Step 2	95.7%	100.0%	93.8%		97.0%
Dementia screening - Step 3	97.4%	100.0%	91.7%		97.3%

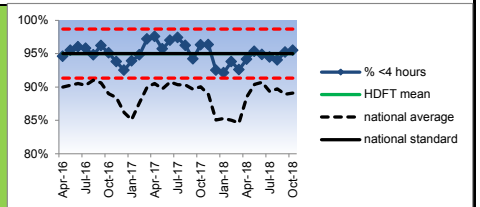
RTT Incomplete pathways performance

DQ



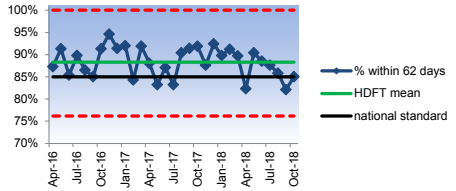
A&E 4 hour standard

DQ



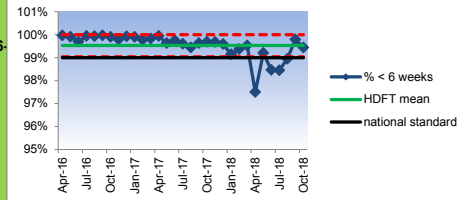
Cancer - 62 day wait for first treatment from urgent GP referral to treatment

DQ



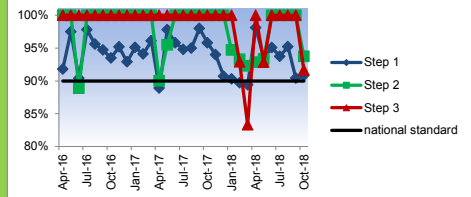
Diagnostic waiting times - 6-week standard

DQ



Dementia screening

DQ



Narrative

In Quarter 3 to date, HDFT's performance is below the required level for 1 of the operational performance metrics - the18 weeks standard. Performance was at 90.9% in October with the same two specialties (Trauma & Orthopaedics and Ophthalmology) remaining below the standard. The total RTT waiting list size reduced again in October but remains above the position reported at the end of 2017/18.

For the A&E 4-hour standard, HDFT's Trust level performance for September was 95.5%, an improvement on last month and above the required 95% standard. This includes data for the Emergency Department at Harrogate and Ripon MIU. The year to date performance total now stands at 94.8%. For the Trust to qualify for STF funding, the year to date performance at the end of Quarter 3 must be at 95% or above.

For diagnostic waiting times, the Trust reported 21 breaches of the standard in October across a number of services, including radiology, endoscopy, cardiology and audiology. However performance is above the required standard at 99.4%.

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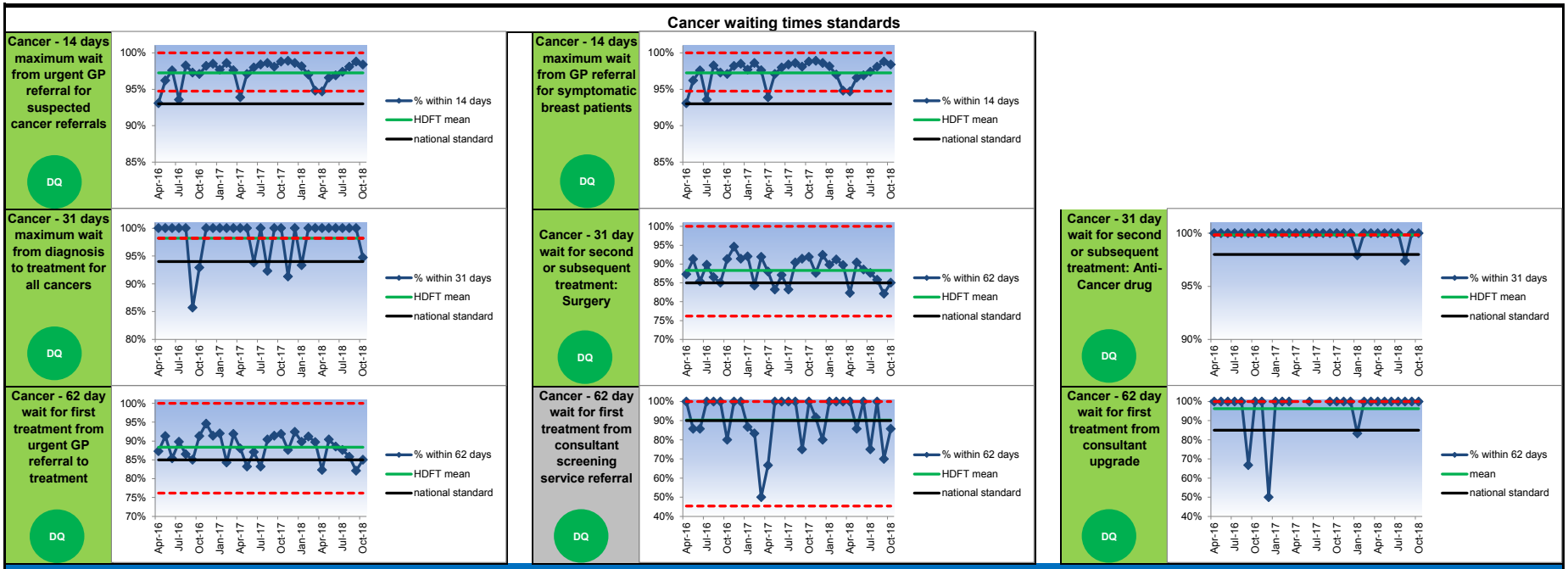
Responsive - October 2018

Cancer waiting times standards



Narrative

Provisional data suggests that all cancer waiting times standards were achieved in October.

For breast symptomatic patients, provisional performance for October is at 100%, a significant improvement on recent months.

For the 31 day standard for subsequent surgical treatments, provisional performance for October is at 94.7%, above the operational standard but a deterioration on recent months. However this equates to just 1 breach.

For the main 62 day standard , provisional performance for October is 85.0%, in line with the required 85% standard. Of the 11 tumour sites, 4 had performance below 85% in October - breast (2.5 breaches), gynaecological (1.0), lung (1.5) and urological (2.5). 7 patients waited over 104 days in October. There were a number of different reasons for the delays including complex diagnostic pathways, treatment being delayed for medical reasons and a lack of elective capacity.

For the 62 day screening standard, provisional performance for October is at 85.7%, below the 90% standard. However with 3.5 reportable pathways, performance for Quarter to date is currently below the de minimis level for reporting performance.

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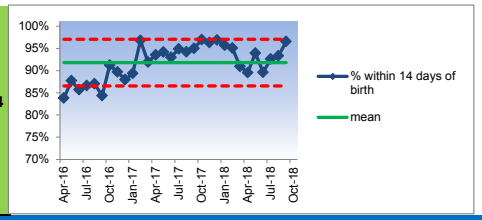
Responsive - October 2018

Children's Services metrics

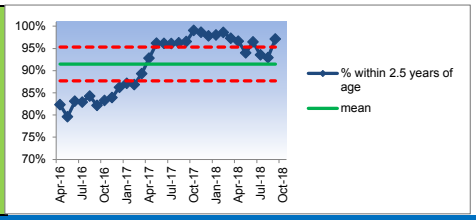
Children's Services - 10-14 day new birth visit

DQ



Children's Services - 2.5 year review

DQ



Narrative

The charts present a combined performance position for all Children's Services contracts. The data is reported a month in arrears so that the validated position can be shared. Data for Gateshead and Sunderland is now included from July 2018 onwards.

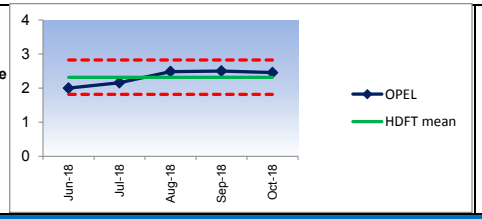
In September, the validated performance position for new birth visits is that 97% of babies were recorded on Systmone as having had a new birth visit within 14 days of birth. Performance in September in the different localities varies from 88% in Gateshead to 100% in North Yorkshire.

In September, the validated performance position for 2.5 year reviews is that 97% of children were recorded on Systmone as having had a 2.5 year review. Performance in September in the different localities varies from 95% in North Yorkshire to 99% in Stockton.

Adult Community Services metrics

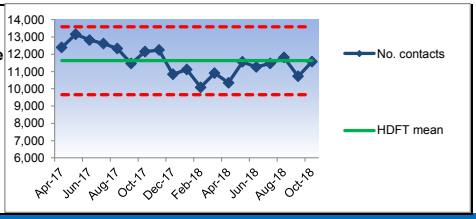
OPEL level - Community Care Teams

DQ



Community Care Teams - patient contacts

DQ



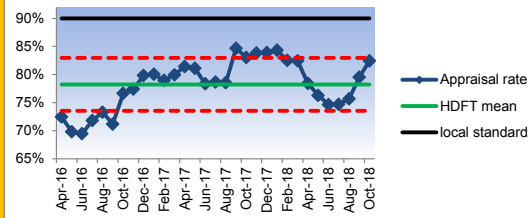
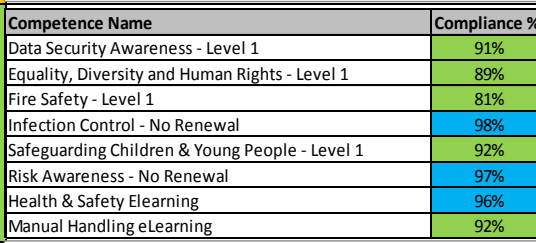
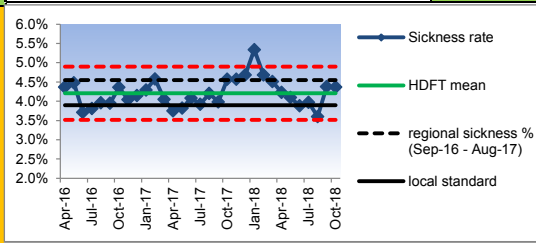
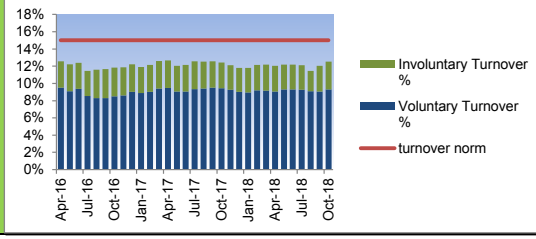
Narrative

During October, the average community OPEL level reported was 2.5, no change on last month.

Following the work to review the caseload in Adult Community Services and the introduction of the clinical triage process for new referrals, patient contacts have stabilised within the funded establishment. The development and transition to single integrated Health and Social Care locality teams continues to progress and it is anticipated that the final plans will be ready by January 2019 to bring to Board to enable Phase 1 to progress from April 2019.

Harrogate and District NHS Foundation Trust

Workforce - October 2018

Indicator name / data quality assessment	Trend chart	Interpretation
Staff appraisal rates DQ		Staff appraisal rates have continued to increase in October to 82%. This is the highest level of compliance all year and with a final focus in November we could achieve our 90% target.
Mandatory training rates DQ		The data shown is for the end of October and excludes the Harrogate Healthcare Facilities Management (HHFM) staff who transferred into the new organisation on the 1st March 2018 and excludes Stockton, Gateshead and Sunderland staff who Tupe transferred in to the Trust during 2018/19. The overall training rate for mandatory elements for substantive staff is 92%, no change on last month.
Sickness rates DQ		Sickness absence rates have remained above the Trusts target at 4.37% in October, although 0.2% lower than this time last year. Return to work completion rates are at 58% across the Trust as recorded in Rosterpro. A focus on their completion rate will support the Trust to manage attendance as we move into the winter period.
Staff turnover rate DQ		Labour turnover remains static at 12%. The recruitment and retention group continue to meet on a monthly basis.

Competence Name	Compliance %
Data Security Awareness - Level 1	91%
Equality, Diversity and Human Rights - Level 1	89%
Fire Safety - Level 1	81%
Infection Control - No Renewal	98%
Safeguarding Children & Young People - Level 1	92%
Risk Awareness - No Renewal	97%
Health & Safety Elearning	96%
Manual Handling eLearning	92%

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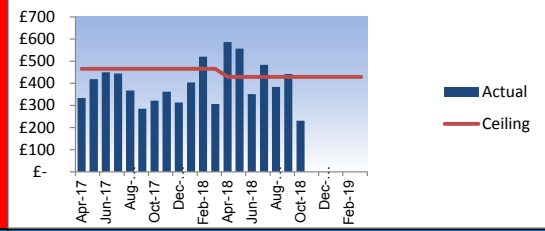
Workforce - October 2018

Indicator name / data quality assessment	Trend chart	Interpretation
Agency spend in relation to pay spend DQ		Agency expenditure increased to £3m to date, which is slightly adverse to the agency ceiling position. Agency expenditure is now 3.58% of overall pay spend.

Narrative

Sickness Absence

The overall sickness absence rate across the Trust for October 2018 was 4.37%, which is line with September's absence rate of 4.38%.

Directorate	Sept sickness rate %	Oct Sickness Rate %	% Change	STS/LTS split
CCWCC	3.88	4.47	0.59	1.94% STS 2.53% LTS
Corporate	2.76	1.85	-0.91	1.57% STS 0.28% LTS
P&S	4.86	4.84	-0.02	2.93% STS 1.92% LTS
LTUC	4.95	4.74	-0.21	2.25% STS 2.49% LTS

Return to work (RTW) Completion Rates across Directorates for October

Research has shown the return to work meeting as being one of the most effective interventions in facilitating reliable employee attendance. Ongoing discussions will be held with management to highlight the importance of effective return to work discussions and accurate recording to reach our overall aim of 90% RTW completion.

RTW completion rates by directorate for October as recorded in Rosterpro are:

CCWCC	38.6%
Corporate	75.0%
LTUC	60.7%
P&SC	68.8%

Workforce - October 2018

Indicator name / data quality assessment	Trend chart	Interpretation

Flu Campaign

As at mid-November we have vaccinated 2,109 staff out of a total workforce of 4,738 since the commencement of the flu campaign on 1st October 2018, equating to 45%.

To encourage uptake, the flu campaign continues to focus on weekly communications about the uptake level and how staff can access the flu vaccination, with a particular focus on Peer Vaccinators. In addition, we will be requesting staff to inform Occupational Health (OH) of their intention or action relating to flu vaccination. A letter from Jill Foster and David Scullion will be circulated alongside a notification form for staff to complete. Data from this will be reviewed at the end of November with further communications to staff.

The individual directorate compliance rates and the breakdown of clinical staff groups are provided in the tables below.

Directorate	Headcount	Vaccinated	Percentage
Children's & County Wide	1538	505	33%
Corporate	417	221	53%
Long Term and Unscheduled Care	1431	750	52%
Planned and Surgical	1042	516	50%
Total HDFT	**4428**	**1992**	**45%**
HIF	310	117	38%
Total Inc. HIF	**4738**	**2109**	**45%**

Staff Group	Headcount	Vaccinated	Percentage
All Doctors	478	246	51%
Qualified Nurse	1712	747	44%
Qualified Other	542	253	47%
Support to Clinical	914	389	43%
Total	**3646**	**1635**	**45%**

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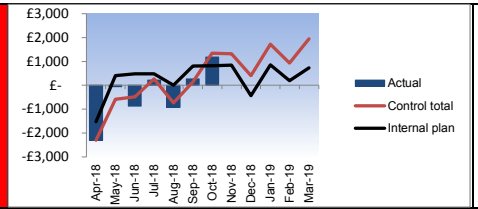
Efficiency and Finance - October 2018

Finance

Surplus / deficit and variance to plan

DQ



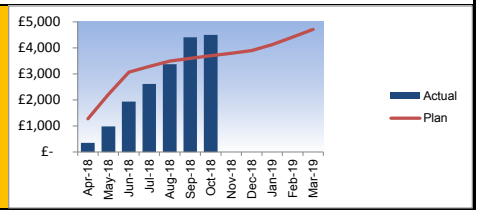
NHS Improvement Single Oversight Framework - Use of Resource Metric

DQ

Element	Plan	Actual
Capital Service Cover	4	4
Liquidity	1	1
I&E Margin	4	4
I&E Variance From Plan	1	1
Agency	2	2
Financial Sustainability Risk Rating	3	3

Capital spend

DQ



Narrative

The Trust reported a surplus of £1,183k in October. While this looks a positive position, it reflects the improvement expected in the second part of the year. This change is driven by income in particular.

The Trust continues to report a UoR rating of 3. While this is at the current plan, this remains a challenging position as a result of I&E performance.

While resource for capital remains a risk, expenditure is exceeding planned levels.

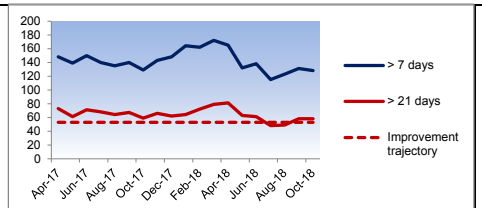
Further details of the financial performance are contained within the Finance Director's report.

Efficiency and Finance - October 2018

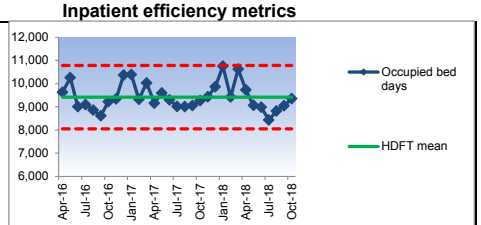
Harrogate and District NHS Foundation Trust

Inpatient efficiency metrics

Long stay patients

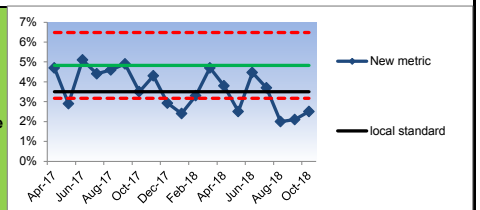


Occupied bed days

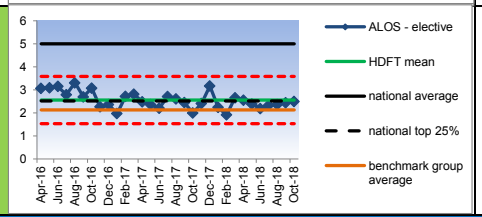


Delayed transfers of care

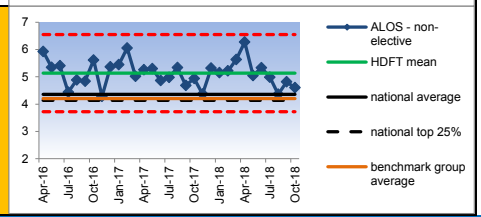
DQ



Length of stay - elective

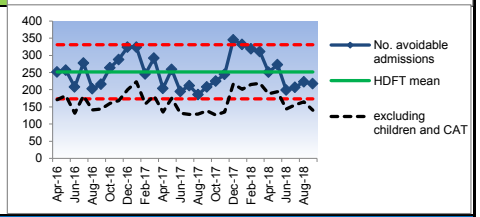


Length of stay - non-elective



Avoidable admissions

DQ



Narrative

The number of long stay patients at HDFT remained static in October. NHS Improvement has set improvement trajectories for Trusts to reduce the number of super-stranded patients by around 25% by December 2018. HDFT's trajectory has been set at 53, which equates to a 27% improvement on the 2017/18 baseline position. A methodology document has also been published recently - the Information Team are reviewing this to ensure that we are reporting on the correct cohort of patients and can replicate the data published by NHS Improvement for our Trust. Any amendments will be reflected in the metric presented here once this work concludes.

A new metric has been added to this section looking at occupied bed days. In October, there were 9,300 occupied bed days, an increase on last month.

HDFT's average elective length of stay for October was 2.5 days, no significant change on last month. HDFT remains in the top 25% of Trusts nationally in the most recently available benchmarking data. HDFT's average non-elective length of stay for October was 4.6 days, a decrease on last month. The Trust remains in the middle 50% of Trusts nationally when compared to the most recently available benchmarking data.

Provisional data indicates that there were 218 avoidable admissions in September, a decrease on last month and remaining in line with the usual seasonal trend of less avoidable admissions during the summer months. Adult avoidable admissions (excluding CAT attendances) showed a similar trend this month.

In October, 2.5% of bed days were lost due to delayed transfers of care, an increase on last month but remaining below the local standard of 3.5%. As part of the discharge work stream, thee teams involved in discharge planning have now been co-located into a Discharge Hub within the hospital. The intention is that this will support the early identification of patients who will require support on discharge and ensure early involvement of the Hub to support planning and early discharge to the most appropriate setting.

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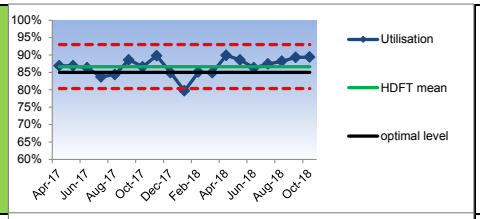
Efficiency and Finance - October 2018

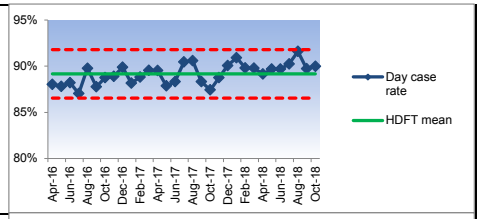
Productivity metrics

Theatre utilisation



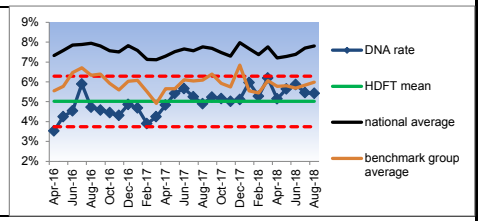
Day case rate

DQ



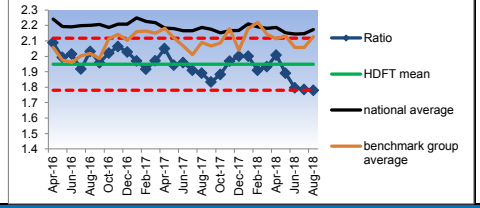
Outpatient DNA rate

DQ



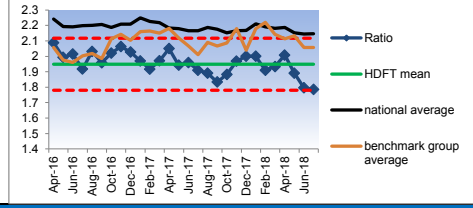
Outpatient new to follow up ratio

DQ



Outpatient new to follow up ratio

DQ



Narrative

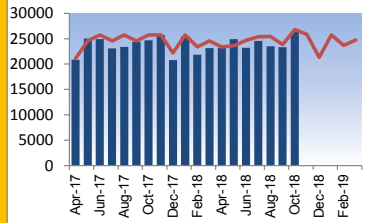
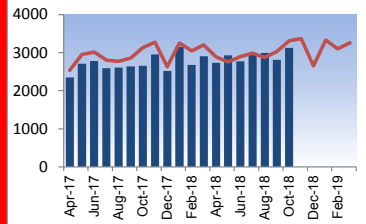
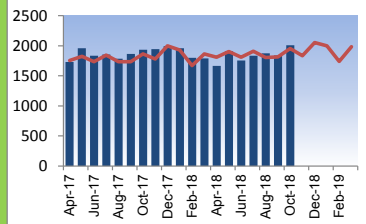
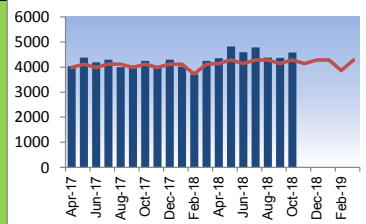
Elective theatre utilisation was at 89.4% in October, remaining above the 85% optimal level. This utilisation only reflects the elective lists that took place as planned and does not factor in planned elective lists that were cancelled. A list cancellation metric is being incorporated into the new theatres dashboard and will be considered for inclusion in this report.

HDFT's DNA rate decreased to 5.4% in August. This is remains below the level reported by the benchmarked group of trusts and below the national average.

The clinical teams continue to implement opportunities to reduce follow up activity through the use of appropriate alternatives. This work is being managed through the Planned Care Board which oversees work in relation to the Aligned Incentive Contract. HDFT's new to follow up ratio was 1.78 in August, a further reduction on last month and remaining well below both the national and benchmark group average. There remains a focus on ensuring patients continue to be seen within expected timeframes for follow up where appropriate and for capacity released to either enable reduction in cost or realignment to support alternative activity.

The day case rate was 90.0% in October, an increase on last month and remaining above the average day case rate for 2017/18 (89.3%).

Activity - October 2018

Indicator name / data quality assessment	Trend chart	Interpretation
Outpatient activity against plan DQ		Outpatient activity was 1.9% below plan in October, a further improvement on last month but remaining 2.4% below plan year to date.
Elective activity against plan DQ		Elective activity was 5.5% below plan in October and 1.8% below plan year to date.
Non-elective activity against plan DQ		Non-elective activity was 2.7% above plan in October but is 0.9% below plan year to date.
A&E activity against plan DQ		A&E attendances were 6.9% above plan in October. The year to date position remains 7.9% above plan.

Harrogate and District NHS Foundation Trust

Activity - October 2018

Indicator name / data quality assessment	Trend chart	Interpretation

Narrative

Overall activity continues to be close to plan across all points of delivery, with the exception of A&E attendances which are significantly above plan. There is an underperformance in relation to day case episodes which relates mainly to the later than planned opening of the new Endoscopy Unit, a detailed paper was presented to the Resources Committee in order to set out the actions being taken to recover this position.

The main risk is the continued excess activity being delivered for HaRD CCG, which is being driven by referral rates being 2.3% higher than last year, with some higher cost specialities such as T&O higher still at 9.3%. This is affecting the capacity available for other CCGs and is driving costs for Planned Care within the Aligned Incentive Contract significantly above the indicated envelope. Discussions therefore continue with the CCG, NHSI and NHSE about the financial impact and our system response to the requirement to manage the waiting list size down to the level it was at the start of the year.

Harrogate and District NHS Foundation Trust

Data Quality - Exception Report

Domain	Indicator	Data quality rating	Further information
Safe	Pressure ulcers - community acquired - grades 2, 3 or 4	**Amber** 	The observed increase in reported cases over the last two years may be partly due to improvements in incident reporting during the period.
Caring	Friends & Family Test (FFT) - Adult Community Services	**Amber** 	The number of patients surveyed represents a small proportion of the community based contacts that we deliver in a year.
Efficiency and Finance	Theatre utilisation	**Amber** 	This metric has been aligned with the new theatre utilisation dashboard from December 2017. Further metrics from the new dashboard are being considered for inclusion in this report from April 2018. The utilisation calculation excludes cancelled sessions - operating lists that are planned not to go ahead due to annual leave, study leave or maintenance etc. There are some known data quality issues with the utilisation data but it is anticipated that increased visibility of the data via the new dashboard will help to resolve these in the coming months.
Responsive	OPEL level - Community Care Teams	**Amber** 	This indicator is in development.
Activity	Community Care Teams - patient contacts	**Amber** 	During 2017/18, there were a number of restructures of the teams within these services and a reduction to baseline contracted establishment as the Vanguard work came to an end. This will have impacted upon the activity levels recorded over this period. Therefore caution should be exercised when reviewing the trend over time.

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Indicator traffic light criteria

Domain	Indicator	Description	Traffic light criteria	Rationale/source of traffic light criteria
Safe	Pressure ulcers - hospital acquired	The chart shows the number of category 2, category 3, category 4 or unstageable hospital acquired pressure ulcers in 2018/19. The Trust has set a local trajectory for 2018/19 to reduce the number of avoidable category 3, category 4 or unstageable pressure ulcers. The data includes hospital teams only.	tbc	tbc
Safe	Pressure ulcers - community acquired	The chart shows the number of category 2, category 3, category 4 or unstageable community acquired pressure ulcers in 2018/19. This metric includes all pressure ulcers identified by community teams including pressure ulcers already present at the first point of contact. The Trust has set a local trajectory for 2018/19 to reduce the number of avoidable category 3, category 4 or unstageable pressure ulcers. The data includes community teams only.	tbc	tbc
Safe	Safety thermometer - harm free care	Measures the percentage of patients receiving harm free care (defined as the absence of pressure ulcers, harm from a fall, urine infection in patients with a catheter and new VTE) in the Safety Thermometer audits conducted once a month. The data includes hospital and community teams. A high score is good. Whilst there is no nationally defined target for this measure, a score of 95% or above is considered best practice.	Blue if latest month >=97%, Green if >=95% but <97%, red if latest month <95%	National best practice guidance suggests that 95% is the standard that Trusts should achieve. In addition, HDFT have set a local stretch target of 97%.
Safe	Safety thermometer - harm free care - community care teams	As above but including data for community teams only.		
Safe	Falls	The number of inpatient falls expressed as a rate per 1,000 bed days. The data includes falls causing harm and those not causing harm. A low rate is good.	Blue if YTD position is a reduction of >=50% of HDFT average for 2017/18, Green if YTD position is a reduction of between 20% and 50% of HDFT average for 2017/18, Amber if YTD position is a reduction of up to 20% of HDFT average for 2017/18, Red if YTD position is on or above HDFT average for 2017/18.	Locally agreed improvement trajectory based on comparison with HDFT performance last year.
Safe	Infection control	HDFT's C. difficile trajectory for 2018/19 is 11 cases, a reduction of 1 on last year's trajectory. Cases where a lapse in care has been deemed to have occurred would count towards this. Hospital apportioned MRSA cases will be reported on an exception basis. HDFT has a trajectory of 0 MRSA cases for 2018/19. The last reported case of hospital acquired MRSA at HDFT was in Oct-12.	Green if below trajectory YTD, Amber if above trajectory YTD, Red if above trajectory at end year or more than 10% above trajectory in year.	NHS England, NHS Improvement and contractual requirement
Safe	Incidents - all	The number of incidents reported within the Trust each month. It includes all categories of incidents, including those that were categorised as "no harm". The data includes hospital and community services. A large number of reported incidents but with a low proportion classified as causing significant harm is indicative of a good incident reporting culture	Blue if latest month ratio places HDFT in the top 10% of acute trusts nationally, Green if in top 25%, Amber if within the middle 50%, Red if in bottom 25%	Comparison of HDFT performance against most recently published national average ratio of low to high incidents.
Safe	Incidents - comprehensive SIRIs and never events	The number of Serious Incidents Requiring Investigation (SIRIs) and Never Events reported within the Trust each month. The data includes hospital and community services. Only comprehensive SIRIs are included in this indicator, as concise SIRIs are reported within the presure ulcer / falls indicators above.	Green if none reported in current month; Red if 1 or more never event or comprehensive reported in the current month.	
Safe	Safer staffing levels	Trusts are required to publish information about staffing levels for registered nurses/midwives (RN) and care support workers (CSW) for each inpatient ward. The chart shows the overall fill rate at HDFT for RN and CSW for day and night shifts. The fill rate is calculated by comparing planned staffing with actual levels achieved. A ward level breakdown of this data is provided in the narrative section and published on the Trust website.	Green if latest month overall staffing >=100%, amber if between 95% and 100%, red if below 95%.	The Trusts aims for 100% staffing overall.
Effective	Mortality - HSMR	The Hospital Standardised Mortality Ratio (HSMR) looks at the mortality rates for 56 common diagnosis groups that account for around 80% of in-hospital deaths and standardises against various criteria including age, sex and comorbidities. The measure also makes an adjustment for palliative care. A low figure is good.	Blue = better than expected (95% confidence interval), Green = as expected, Amber = worse than expected (95% confidence interval), Red = worse than expected (99% confidence interval).	Comparison with national average performance.
Effective	Mortality - SHMI	The Summary Hospital Mortality Index (SHMI) looks at the mortality rates for all diagnoses and standardises against various criteria including age, sex and comorbidities. The measure does not make an adjustment for palliative care. A low figure is good.		
Effective	Readmissions	% of patients readmitted to hospital as an emergency within 30 days of discharge (PbR exclusions applied). To ensure that we are not discharging patients inappropriately early and to assess our overall surgical success rates, we monitor the numbers of patients readmitted. A low number is good performance. This data is reported a month behind so that any recent readmissions are captured in the data.	Blue if latest month rate < LCL, Green if latest month rate < HDFT average for 2017/18, Amber if latest month rate > HDFT average for 2017/18 but below UCL, red if latest month rate > UCL.	Locally agreed improvement trajectory based on comparison with HDFT performance last year.
Caring	Friends & Family Test (FFT) - Patients	The Patient Friends and Family Test (FFT) gives patients and service users the opportunity to give feedback. They are asked whether they would recommend the service to friends and family if they required similar care or treatment. This indicator covers a number of hospital and community services including inpatients, day cases, outpatients, maternity services, the emergency department, some therapy services, district nursing, community podiatry and GP OOH. A high percentage is good.	Green if latest month >= latest published national average, Red if < latest published national average.	Comparison with national average performance.
Caring	Friends & Family Test (FFT) - Adult Community Services	The Patient Friends and Family Test (FFT) gives patients and service users the opportunity to give feedback. They are asked whether they would recommend the service to friends and family if they required similar care or treatment. This indicator covers a number of adult community services including specialist nursing teams, community care teams, community podiatry and GP OOH. A high percentage is good.		

Domain	Indicator	Description	Traffic light criteria	Rationale/source of traffic light criteria
Caring	Complaints	The number of complaints received by the Trust, shown by month of receipt of complaint. The criteria define the severity/grading of the complaint with green and yellow signifying less serious issues, amber signifying potentially significant issues and red for complaints related to serious adverse incidents. The data includes complaints relating to both hospital and community services.	Blue if no. complaints in latest month is below LCL, Green if below HDFT average for 2017/18, Amber if on or above HDFT average for 2017/18, Red if above UCL. In addition, Red if a new red rated complaint received in latest month.	Locally agreed improvement trajectory based on comparison with HDFT performance last year.
Responsive	NHS Improvement governance rating	NHS Improvement use a variety of information to assess a Trust's governance risk rating, including CQC information, access and outcomes metrics, third party reports and quality governance metrics. The table to the right shows how the Trust is performing against the national performance standards in the "operational performance metrics" section. From 1st April 2018, dementia screening perfromance forms part of this assessment.	As per defined governance rating	
Responsive	RTT Incomplete pathways performance	Percentage of incomplete pathways waiting less than 18 weeks. The national standard is that 92% of incomplete pathways should be waiting less than 18 weeks. A high percentage is good.	Green if latest month >=92%, Red if latest month <92%.	NHS England
Responsive	A&E 4 hour standard	Percentage of patients spending less than 4 hours in Accident & Emergency (A&E). The operational standard is 95%. The data includes all A&E Departments, including Minor Injury Units (MIUs). A high percentage is good.	Blue if latest month >=97%, Green if >=95% but <97%, amber if >= 90% but <95%, red if <90%.	NHS England, NHS Improvement and contractual requirement of 95% and a locally agreed stretch target of 97%.
Responsive		Percentage of patients waiting 6 weeks or less for a diagnostic test. The operational standard is 99%. A high percentage is good.	Green if latest month >=93%, Red if latest month <93%.	NHS England, NHS Improvement and contractual requirement
Responsive		The proportion of emergency admissions aged 75 or over who are screened for dementia within 72 hours of admission (Step 1). Of those screened positive, the proportion who went on to have an assessment and onward referral as required (Step 2 and 3). The operational standard is 90% for all 3 steps. A high percentage is good.		
Responsive	Cancer - 14 days maximum wait from urgent GP referral for all urgent suspect cancer referrals	Percentage of urgent GP referrals for suspected cancer seen within 14 days. The operational standard is 93%. A high percentage is good.		
Responsive	Cancer - 14 days maximum wait from GP referral for symptomatic breast patients	Percentage of GP referrals for breast symptomatic patients seen within 14 days. The operational standard is 93%. A high percentage is good.	Green if latest month >=93%, Red if latest month <93%.	NHS England, NHS Improvement and contractual requirement
Responsive	Cancer - 31 days maximum wait from diagnosis to treatment for all cancers	Percentage of cancer patients starting first treatment within 31 days of diagnosis. The operational standard is 96%. A high percentage is good.	Green if latest month >=96%, Red if latest month <96%.	NHS England, NHS Improvement and contractual requirement
Responsive	Cancer - 31 day wait for second or subsequent treatment: Surgery	Percentage of cancer patients starting subsequent surgical treatment within 31 days. The operational standard is 94%. A high percentage is good.	Green if latest month >=94%, Red if latest month <94%.	NHS England, NHS Improvement and contractual requirement
Responsive	Cancer - 31 day wait for second or subsequent treatment: Anti-Cancer drug	Percentage of cancer patients starting subsequent drug treatment within 31 days. The operational standard is 98%. A high percentage is good.	Green if latest month >=96%, Red if latest month <96%.	NHS England, NHS Improvement and contractual requirement
Responsive	Cancer - 62 day wait for first treatment from urgent GP referral to treatment	Percentage of cancer patients starting first treatment within 62 days of urgent GP referral. The operational standard is 85%. A high percentage is good.	Green if latest month >=85%, Red if latest month <85%.	NHS England, NHS Improvement and contractual requirement
Responsive	Cancer - 62 day wait for first treatment from consultant screening service referral	Percentage of cancer patients starting first treatment within 62 days of referral from a consultant screening service. The operational standard is 90%. A high percentage is good.	Green if latest month >=90%, Red if latest month <90%.	NHS England, NHS Improvement and contractual requirement
Responsive	Cancer - 62 day wait for first treatment from consultant upgrade	Percentage of cancer patients starting first treatment within 62 days of consultant upgrade. The operational standard is 85%. A high percentage is good.	Green if latest month >=85%, Red if latest month <85%.	NHS England, NHS Improvement and contractual requirement
Responsive	Children's Services - 10-14 day new birth visit	The percentage of babies who had a new birth visit by the Health Visiting team within 14 days of birth. A high percentage is good. Data shown is for North Yorkshire, Darlington, Co. Durham, Middlesbrough, Stockton, Gateshead and Sunderland. A high percentage is good.	Green if latest month >=90%, Amber if between 75% and 90%, Red if <75%.	Contractual requirement
Responsive	Children's Services - 2.5 year review	The percentage of children who had a 2.5 year review. A high percentage is good. Data shown is for North Yorkshire, Darlington, Co. Durham, Middlesbrough, Stockton, Gateshead and Sunderland. A high percentage is good.	Green if latest month >=90%, Amber if between 75% and 90%, Red if <75%.	Contractual requirement
Responsive	OPEL level - Community Care Teams	The OPEL (Operational Pressures Escalation Level) is a measure of operational pressure being experienced by the community care teams. A value of 1 to 4 is agreed each day, with 1 denoted the lowest level of operational pressure and 4 denoting the highest. The chart will show the average level reported by adult community services during the month.	tbc	Locally agreed metric
Responsive	Community Care Teams - patient contacts	The number of face to face patient contacts for the community care teams.	tbc	Locally agreed metric
Workforce	Staff appraisal rate	Latest position on no. staff who had an appraisal within the last 12 months. The Trusts aims to have 90% of staff appraised. A high percentage is good.	Annual rolling total - 90% green. Amber between 70% and 90%, red<70%.	Locally agreed target level based on historic local and NHS performance
Workforce	Mandatory training rate	Latest position on the % substantive staff trained for each mandatory training requirement	Blue if latest month >=95%; Green if latest month 75%-95% overall, amber if between 50% and 75%, red if below 50%.	Locally agreed target level - no national comparative information available until February 2016
Workforce	Staff sickness rate	Staff sickness rate - includes short and long term sickness. The Trust has set a threshold of 3.9%. A low percentage is good.	Green if <3.9% , amber if between 3.9% and regional average, Red if > regional average.	HDFT Employment Policy requirement. Rates compared at a regional level also
Workforce	Staff turnover	The staff turnover rate excluding trainee doctors, bank staff and staff on fixed term contracts. The turnover figures include both voluntary and involuntary turnover. Voluntary turnover is when an employee chooses to leave the Trust and involuntary turnover is when the employee unwillingly leaves the Trust. Data from the Times Top 100 Employers indicated a turnover rate norm of 15%, i.e. the level at which organisations should be concerned.	Green if remaining static or decreasing, amber if increasing but below 15%, red if above 15%.	Based on evidence from Times Top 100 Employers

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Domain	Indicator	Description	Traffic light criteria	Rationale/source of traffic light criteria
Workforce	Agency spend in relation to pay spend	Expenditure in relation to Agency staff on a monthly basis as a percentage of total pay bill. The Trust aims to have less than 3% of the total pay bill on agency staff.	Green if <1% of pay bill, amber if between 1% and 3% of pay bill, red if >3% of pay bill.	Locally agreed targets.
Efficiency and Finance	Avoidable admissions	The number of avoidable emergency admissions to HDFT as per the national definition. The admissions included are those where the primary diagnosis of the patient does not normally require a hospital admission. Conditions include pneumonia and urinary tract infections in adults and respiratory conditions in children.	tbc	tbc
Efficiency and Finance	Length of stay - elective	Average length of stay in days for elective (waiting list) patients. The data excludes day case patients. A shorter length of stay is preferable. When a patient is admitted to hospital, it is in the best interests of that patient to remain in hospital for as short a time as clinically appropriate – patients who recover quickly will need to stay in hospital for a shorter time. As well as being best practice clinically, it is also more cost effective if a patient has a shorter length of stay.	Blue if latest month score places HDFT in the top 10% of acute trusts nationally, Green if in top 25%, Amber if within the middle 50%, Red if in bottom 25%.	Comparison with performance of other acute trusts.
Efficiency and Finance	Length of stay - non-elective	Average length of stay in days for non-elective (emergency) patients. A shorter length of stay is preferable. When a patient is admitted to hospital, it is in the best interests of that patient to remain in hospital for as short a time as clinically appropriate – patients who recover quickly will need to stay in hospital for a shorter time. As well as being best practice clinically, it is also more cost effective if a patient has a shorter length of stay.		
Efficiency and Finance	Theatre utilisation	The percentage of time utilised during elective theatre sessions (i.e. those planned in advance for waiting list patients). The utilisation calculation excludes cancelled sessions - operating lists that are planned not to go ahead due to annual leave, study leave or maintenance etc. A higher utilisation rate is good as it demonstrates effective use of resources. A utilisation rate of around 85% is often viewed as optimal.	Green = >=85%, Amber = between 75% and 85%, Red = <75%	A utilisation rate of around 85% is often viewed as optimal.
Efficiency and Finance	Delayed transfers of care	The proportion of bed days lost due to being occupied by patients who are medically fit for discharge but are still in hospital. A low rate is preferable. The maximum threshold shown on the chart (3.5%) has been agreed with HARD CCG.	Red if latest month >3.5%, Green <=3.5%	Contractual requirement
Efficiency and Finance	Outpatient DNA rate	Percentage of new outpatient attendances where the patient does not attend their appointment, without notifying the trust in advance. A low percentage is good. Patient DNAs will usually result in an unused clinic slot.		
Efficiency and Finance	Outpatient new to follow up ratio	The number of follow-up appointments per new appointment. A lower ratio is preferable. A high ratio could indicate that unnecessary follow ups are taking place.		
Efficiency and Finance	Day case rate	The proportion of elective (waiting list) procedures carried out as a day case procedure, i.e. the patient did not stay overnight. A higher day case rate is preferable.	Blue if latest month score places HDFT in the top 10% of acute trusts nationally, Green if in top 25%, Amber if within the middle 50%, Red if in bottom 25%.	Comparison with performance of other acute trusts.
Efficiency and Finance	Stranded patients	This indicator shows the average number of patients that were in the hospital with a length of stay of over 7 days (previously defined as stranded patients by NHS Improvement) or over 21 days (previously super-stranded patients). The data excludes children, as per the NHS Improvement definition. A low number is good.	tbc	as defined by NHS Improvement
Efficiency and Finance	Surplus / deficit and variance to plan	Monthly Surplus/Deficit (£'000s). In some months, a deficit is planned for. This indicator reports positive or adverse variance against the planned position for the month.	Green if on plan, amber <1% behind plan, red >1% behind plan	Locally agreed targets.
Efficiency and Finance	NHS Improvement Financial Performance Assessment	From 1st October 2016, NHS Improvement introduced the Single Oversight Framework. As part of this this, Use of Resource Metric was introduced to replace the previous Financial Sustainability Risk Rating. This is the product of five elements which are rated between 1 (best) to 4.	Green if rating =4 or 3 and in line with our planned rating, amber if rating = 3, 2 or 1 and not in line with our planned rating.	as defined by NHS Improvement
Efficiency and Finance	Capital spend	Cumulative Capital Expenditure by month (£'000s)	Green if on plan or <10% below, amber if between 10% and 25% below plan, red if >25% below plan	Locally agreed targets.
Activity	Outpatient activity against plan (new and follow up)	The position against plan for outpatient activity. The data includes all outpatient attendances - new and follow-up, consultant and non-consultant led.		Locally agreed targets.
Activity	Elective activity against plan	The position against plan for elective activity. The data includes inpatient and day case elective admissions.		Locally agreed targets.
Activity	Non-elective activity against plan	The position against plan for non-elective activity (emergency admissions).		Locally agreed targets.
Activity	Emergency Department attendances against plan	The position against plan for A&E attendances at Harrogate Emergency Department. The data excludes planned follow-up attendances at A&E.	Green if on or above plan in month, amber if below plan by < 3%, red if below plan by > 3%.	Locally agreed targets.

Data quality assessment

Green	No known issues of data quality - High confidence in data
Amber	On-going minor data quality issue identified - improvements being made/ no major quality issues
Red	major data quality issue with no improvement as yet/ data confidence low/ figures not reportable

Harrogate and District NHS Foundation Trust

Board Committee report to the Board of Directors

Committee Name:	Quality Committee (QC)
Committee Chair:	Laura Robson NED
Date of last meeting:	3rd October 2018
Date of Board meeting for which this report is prepared	28th November 2018

Summary of live issues and matters to be raised at Board meeting:

Hot Spots: The quality committee has been kept informed of the failure and subsequent repair of the Cardiac Cath Lab and the impact on patients. The committee was assured that steps had been put in place to ensure patients had received prompt and appropriate care and treatment from other organisations.

Board Request for QC to seek assurance: No current active requests

Reports Received:
The October quality committee received the following reports:

- **Quality Priority Improving the clinical model of care in acute settings**. This quality priority has 4 components and one of these – The Hospital at night - is recognised as a two year project that required significant clinical commitment. The model was in place in other organisations and their experience was being used to assist the Trust. The date for implementation was August 2019. It was confirmed that there are no immediate quality concerns.
- **Promoting safer births, with a specific focus on still births**
  Progress was noted although there were a number of challenges regarding data collection for smoking in pregnancy and screening for fetal growth assessment.

Other Items
A workshop to review the effectiveness of the Committee took place. The outcomes were to be collated and considered further at the November meeting. In summary there was agreement that:
-the Committee should follow the Board in being structured around the BAF, particularly the quality risks.
-More opportunity should be provided to consider improvement activity, celebrate success as well as identifying Hotspots and interact more with clinical teams.
-Reduce the length of papers with improved executive summaries. Ensure that the purpose of the paper is clear and any risks are identified on the front

sheet. Link the papers to CQC key lines of enquiry. - Reduce the size of the agenda by creating a section for information only to be discussed if an issue is identified. Further work is required to agree annual objectives for the committee, review the forward plan, update the report template and restructure the agenda.
Are there any significant risks for noting by Board? (list if appropriate)
No significant risks identified
Matters for decision
None.
Action Required by Board of Directors: To note.

Harrogate and District NHS Foundation Trust

Board Committee report to the Board of Directors

Committee Name:	Quality Committee (QC)
Committee Chair:	Laura Robson NED
Date of last meeting:	7th November 2018
Date of Board meeting for which this report is prepared	28th November 2018

Summary of live issues and matters to be raised at Board meeting:

Hot Spots:
No immediate quality concerns identified.

Board Request for QC to seek assurance: No current active requests

Reports Received:
The November quality committee received the following reports:

- An update on Quality Improvement projects. It was agreed that the Quality Committee will receive short presentations on specific quality improvement projects at each meeting. This will encourage celebrating successes and more interaction with Trust staff.
- **Quality Priority Improving the clinical model of care in acute settings**. This report was an update from the October report to provide improved assurance with measurable targets.
- **Maternity assurance statement**. This paper provided the key findings from the Yorkshire and Humber maternity dashboard to provide assurance regarding maternity outcomes for HDFT.
- **Patient experience report quarter 1.** Positive comments regarding patient experience were noted. Performance responding to complaints within agreed timescales remains a concern, only 37% against a target of 95%. Delivering actions to the agreed deadline is also at 55% against a target of 100%

Other Items
Consideration of the outcomes from the workshop will be in the detailed minutes.

Are there any significant risks for noting by Board? (list if appropriate)

No significant risks identified

Matters for decision

No decisions required

Action Required by Board of Directors:
To note.

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INFECTION PREVENTION AND CONTROL REPORT for SMT **November 2018**

2018/2019

Month	CDI		MSSA BSI		MRSA BSI		*E. coli* BSI		Klebsiella BSI		*P. aeruginosa* BSI		*Confirmed 'flu*	
	HAI	CAI	HAI	CAI	HAI	CAI	HAI	CAI	HAI	CAI	HAI	CAI	Total	ITU/HDU
April	1	0	1	6	0	0	1	12	0	2	0	0		
May	1	3	0	2	0	0	1	14	0	1	0	0		
June	1	0	1	2	0	0	1	12	1	1	0	2		
July	4	0	0	3	0	0	1	9	0	0	1	0		
August	2	1	0	2	0	1	1	14	1	4	0	1		
September	3	0	0	0	0	1	1	10	2	2	0	1	0	0
October	0	(2)	0	5	0	0	1	9	1	6	0	1	0	0
November	(0)	(1)	(0)	(0)	(0)	(0)	0	(1)	0	0	0	0	(2)	(0)
Running total	**12**	**6**	**2**	**20**	**0**	**2**	**7**	**81**	**5**	**16**	**1**	**5**	**(2)**	**(0)**

Table 1- Reportable infections, as of 15/11/2018

C. difficile

At the time of writing (15th November) there have been no new *C. difficile* cases since 26th September. We currently stand at 12 Trust apportioned cases, of which only one (case 5) was deemed to be a lapse in care. The lapse involved a patient being prescribed two doses of cefuroxime by an on-call FY1 doctor that weren't really necessary and weren't in line with Trust policy. It was spotted first thing the next morning by the duty consultant and put right. It is very difficult to say whether or not she would still have had a *C. difficile* infection if she hadn't had those extra doses.

Case No.	Date of birth	Age	Date of admission	Date of positive Cd sample	Ribotype	Ward where identified	RCA conclusion
1	male	91	31/03/2018	05/04/2018	078	Jervaulx	Unavoidable, no lapses in care
2	female	76	09/04/2018	17/05/2018	054	AMU	***Inconclusive.** Didn't have enough information. genuine case ? no lapses in care
3	female	85	25/05/2018	03/06/2018	078	Jervaulx	Incidental finding. Unavoidable, no identified lapses in care
4	male	90	28/06/2018	15/07/2018	No growth	Byland	Unavoidable; incidental finding
5	female	98	12/07/2018	19/07/2018	005	AMU	**? avoidable. Possible lapse in care**
6	male	80	27/06/2018	17/07/2018	078	Farndale	Unavoidable, no contributory lapses in care
7	male	23	12/07/2018	20/07/2018	174	AMU	Unavoidable, no contributory lapses in care
8*	female	98	12/07/2018	18/08/2018	005	Trinity	Unavoidable. No lapses in care
9	male	79	20/08/2018	31/08/2018	015	ITU/HDU	RCA 11/9: unavoidable, No lapses in care
10	female	48	06/07/2018	04/09/2018	005	Lascelles	Unavoidable. No lapses
11	male	94	11/08/2018	11/09/2018	056	Byland/ Trinity	Unavoidable. No lapses in care in either location.
12	female	75	22/09/2018	26/09/2018	026	ITU/HDU	Unavoidable. No issues identified.

Table 2 Trust apportioned *C. difficile* cases (CDI) April 1st 2018 to current

Change to the *C. difficile* RCA process

We have reviewed the RCA process, particularly in regards to *C. difficile,* where a lapse in care (eg in antibiotic prescribing) seems likely, or has been proven. Reflecting on the recent cases, and also having looked at the RCA documentation from case 21 in 2016/2017 for which the Trust is now being sued, it had become clear that the RCA process which essentially focused on filling in a massive spreadsheet for the CCG to go through with a fine tooth comb, was not really enabling us to ask the right questions.

From now on, cases will be reviewed by the IPCT and duty consultant microbiologist, and those which are felt to be incidental findings will not have an RCA, unless it is felt that we had something specific to learn from them.

Where it is felt there might be a lapse in care, the relevant consultant would be contacted and asked to go through the case, provide a summary, and answers to specific questions raised. That might well be sufficient- in case 5 above, the likely lapse in care concerned poor antibiotic prescribing by an on-call FY1, which was picked up and rectified straight away by the duty consultant the following morning. The consultant clinician was not able to make the RCA on the 8th August, which had been arranged very hastily, but later provided a written summary and answers/comments to the questions raised. This is very similar to the approach taken with GPs for community cases.

A full RCA would be held only for those cases where we felt there was a major lapse in care, and from which the team/Trust have lessons to learn. This would have to happen within a reasonable time frame- certainly no longer than a month after the event, with **all** the relevant people, including junior doctors, in the room.

The consultant would be asked to prepare a summary in advance, and to have thought about the issues surrounding the possible lapse in care and what was going to change as a result. S/he would then be asked to present the findings to CORM. I anticipate this would probably only be required once or twice a year.

This approach has been discussed with SMT, the Improving Fundamental Care Group, and on November 13th with the Quality and Governance Committee of HarD CCG, who said they were happy for us to adopt this approach, which is similar to that now being used in other Trusts in the region.

Changes to *C. difficile* classification

From April 1st, 2019, PHE will change the way CDI cases are classified. The number of days from admission during which a new case will be deemed to be community, rather than hospital-associated will reduce from three to two.

We will be required to report any hospital admissions within the previous twelve weeks. Cases will then be classified as:

1. Hospital onset, hospital associated (**HOHA**) – cases diagnosed over gtwo days from admission
2. Community Onset, hospital associated (**COHA**)- case diagnosed within first two days of admission (or in the community) but patient has been admitted within the last four weeks
3. Community Onset, Indeterminate association (**COIA**) case diagnosed within two days of admission or in the community, but has been an inpatient within the last twelve weeks, although not in the last four
4. Community onset, community association (**COCA**) case diagnosed in the community, no hospital admission in the last twelve weeks.

Gram-negative bacteraemias

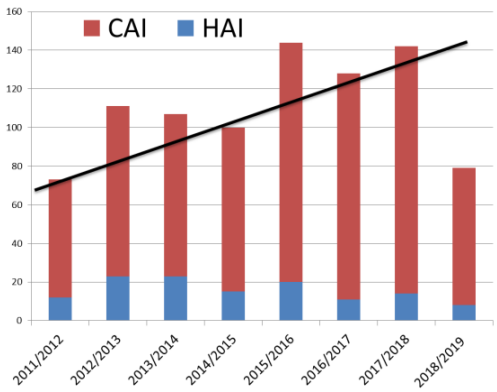
There has been a lot of concern nationally as to why the numbers of Gram-negative bacteraemias (bloodstream infections, BSI) (ie *E. coli*, Klebsiella sp. and *Pseudomonas aeruginosa*) seem to have been increasing year on year. *E. coli* BSI reporting became mandatory in 2011, Klebsiella and *Pseudomonas aeruginosa* only in 2016. At HDFT as well as nationally, *E. coli* form the greatest number of the reportable Gram-negatives (see Table 1 above). Around 90% are community onset.

Nationally, there is a target to reduce the numbers by 50% by 2020/2021 with a 10% annual reduction across the whole healthcare economy. Various enhanced surveillance reports have been published, which all say much the same thing:

- The major burden of Gram-negative bacteraemias arises in the community, not in hospital.
- The majority are thought to be urinary tract related.
- The majority are thought to be non-avoidable

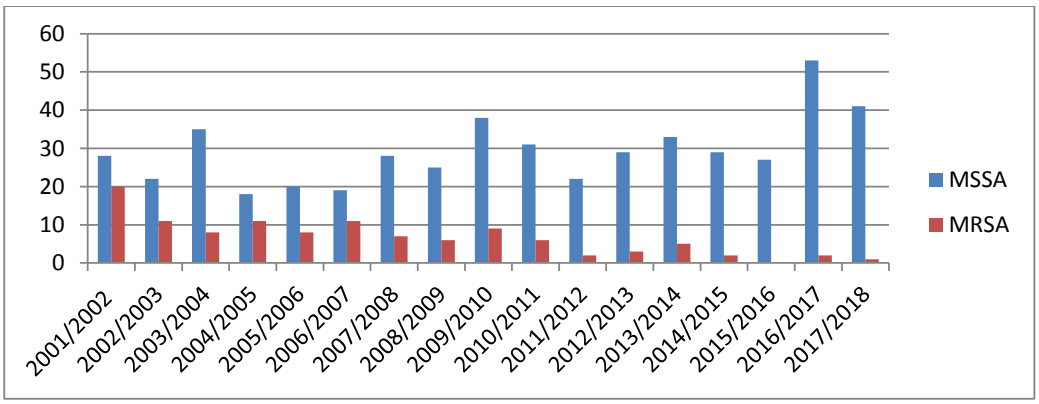
At HDFT, the number of *E. coli* bacteraemias has been continuing to rise year on year. No common themes stand out particularly.

***Figure 1 E. coli* BSI reported from HDFT, April 2011-September 2018**



Back in 2001, the Department of Health announced target reductions in MRSA bacteraemia (MRSA BSI)which at the time was the cause of much hostile comment in the media. The vast majority of cases were hospital-acquired, and many were associated with IV line infections. By 2010/2011, the numbers of MRSA BSI had fallen substantially. This was probably due a number of factors, including a major educational drive around IV line care, and a reduction on prescribing of the cephalosporins and quinolones, both of which the prevalent strains of MRSA were resistant to.

Figure 2 Total MSSA & MRSA BSI (ie ignoring Trust or CCG attribution) reported from HDFT April 2011-March 2018

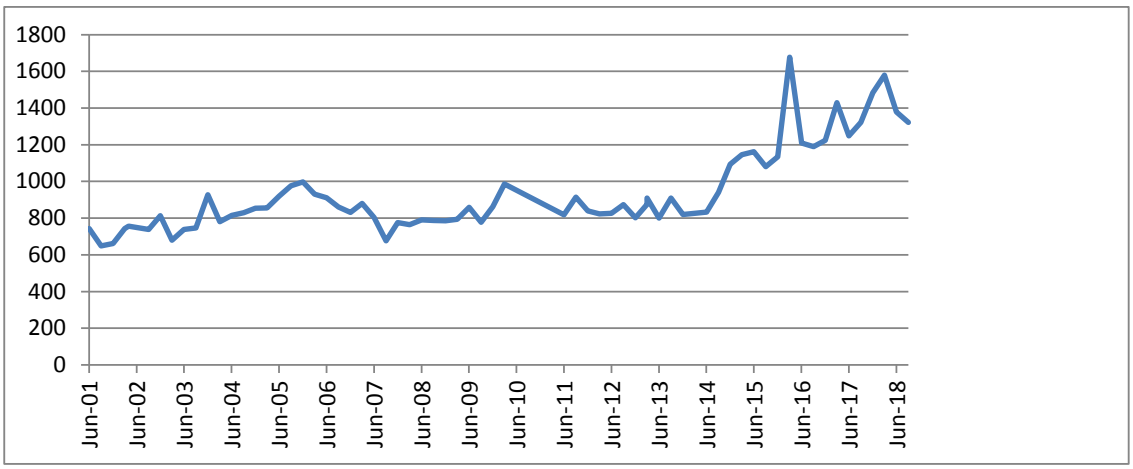


There has been much speculation as to why we achieved such impressive reductions in MRSA BSI and *C. difficile*, but don't appear to be making an impact at all on Gram-negatives, which continue to increase in number.

I suggest that looking at the overall numbers of *E. coli* BSI in particular is very misleading.

Right from the outset of mandatory reporting back in 2001, the mandatory reporting dataset required by PHE (and now NHSI) to be entered onto the national DCS website has included quarterly figures of the total number of blood cultures and the total number of positive blood culture sets received by the reporting laboratory. Despite being required, these data are never, or rarely referred to.

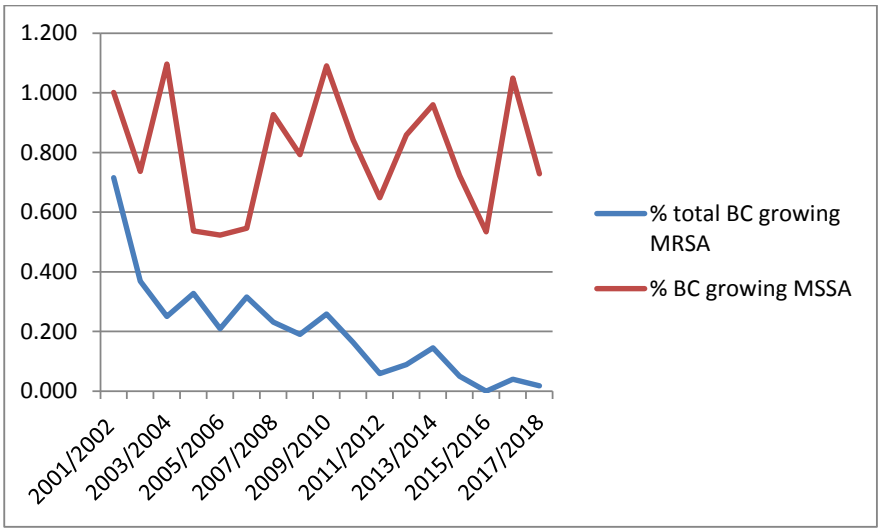
Figure 3 Quarterly Mandatory Reporting (QMR) of the total number of blood cultures received, April 2001-September 2018.



The increase in the number of blood cultures received is clearly visible from the summer of 2014 onwards. We receive nearly double the number of blood cultures per annum now than we did in 2001.

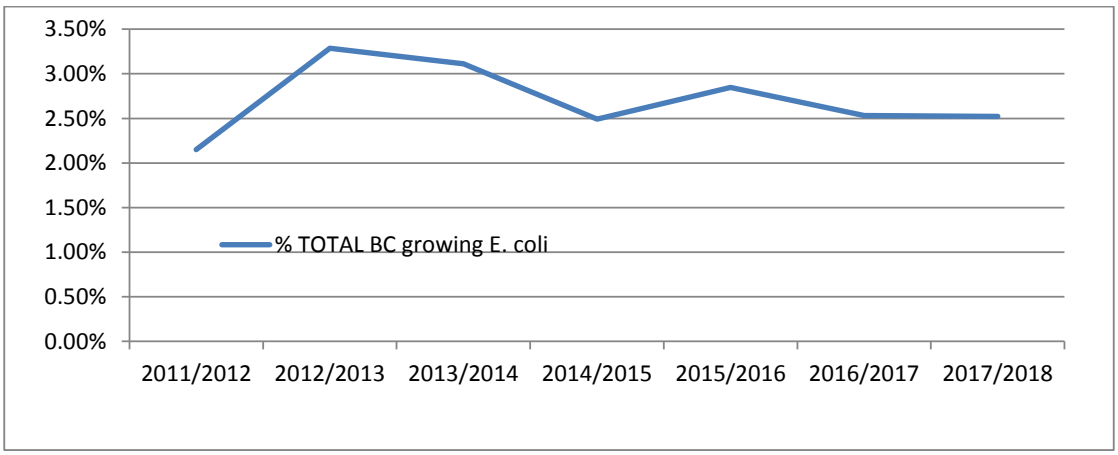
The percentage of total blood-cultures which grew MRSA fell as the number of MRSA dwindled. This effect can be seen clearly. It is still not completely clear why the measures brought into place to control hospital MRSA didn't result in an equal reduction in MSSA, although when reporting of MRSA BSI began seventeen years ago, most cases were unquestionably hospital acquired. Today, 90% MSSA bacteraemias are community onset (see Table 1).

Figure 4, percentage of total blood cultures growing MRSA and MSSA, 2001/2002- 2017/2018



In contrast, despite the apparent doubling in numbers since mandatory reporting began in 2011, the percentage of total blood cultures growing *E. coli* has not increased in recent years.

Figure 5, percentage of total blood-cultures growing *E. coli,* 2011/2012-2017/2018



I suggest that the apparent increase in *E. coli* bacteraemias is just a reflection of the increase in blood cultures taken as a result of the various sepsis awareness campaigns. The rise in the number of E. coli bacteraemias in 2015 coincides with the rise in the number of blood-cultures received (see figs 1 & 3). It is now drummed into front line staff that they must consider sepsis and take blood cultures on anyone who might fulfil the clinical criteria for it. We are just much better and diagnosing patients with sepsis than we used to be.

The overwhelming majority of these infections are community onset. We are working closely with the CCG to try and reduce the number of Gram-negative infections, and are fortunate to have a very proactive community Infection Prevention and control Team.

The initiative focuses on reducing the number of UTIs in the community; a very important part of this is improving levels of hydration, particularly amongst the elderly. That is not an easy thing to do. Gram-negative bacteraemias are important to target, and not least because of the increasing prevalence of bacteraemias caused by multiply-resistant organisms.

Respiratory Viruses

The season has now kicked off properly, with patients being admitted for respiratory viruses. At the time of writing (15/11/18) We have had two patients so far with confirmed 'flu, both 'flu A.

Table 3, respiratory viruses as of 14/11/18

WARD	Flu A	Flu B	RSV	parainfluenza	rhinovirus
ITU/HDU			1	1	1
Woodlands	0	0	2	1	
CATT	1		1	1	
AMU			1		
Oakdale			1		
A&E	1*				

*Sample sent to LGI, patient had been discharged from CATT by the time the result was available.

We are intending to use a rapid, in-house molecular test again this year, although haven't settled on which one to use. There were problems with the one we used last year not being on the NHS formulary. We are currently evaluating a similar one.

Respiratory infections are a major cause of admissions in the winter months, and place a huge burden on the hospital. I propose to produce regular reports of laboratory confirmed respiratory viruses, by ward, as the season progresses. Currently only confirmed 'flu cases admitted to ITU/HDU are reportable nationally.

Dr Jenny Child, DIPC, 15th November 2018

Harrogate and District NHS Foundation Trust

Date of Meeting:	28 November 2018	**Agenda item:**	7.1
Report to:	Board of Directors		
Title:	Scan for Safety Business Case		
Sponsoring Director:	Mr Robert Harrison, Chief Operating Officer		
Author(s):	WYAAT Scan For Safety project team		
Report Purpose:	**Decision** √ **Discussion/ Consultation** ✓ **Assurance** ✓ **Information** ✓		
Executive Summary:	• The Trust is required to approve the Business Case for the Scan for Safety. • NHS Improvement has allocated £14.9m to deploy Scan4Safety across WYAAT. To release the funding, NHS Improvement requires a business case to be approved by each Trust Boards and submitted to it to confirm and expand on the original application. • This Business Case is being presented to the Trust Board for authority to submit it to NHS Improvement. • The Business Case does not commit the Trust to any expenditure. • Board members are recommended to read the executive summary to the business case. • The full business case is also provided for additional information should it be required. • Submission of this Business Case to NHS Improvement to gain confirmation of the allocation of capital funding and its drawdown. • Initiation of the regional programme to deliver the benefits associated with Scan4Safety through the implementation of GS1 & PEPPOL standards • The Board of Directors should note that once the regional programme has been initiated, further Business Cases will be produced based on actual costs for the systems required. These business cases will set out the costs, both capital and revenue, and the benefits which will fall to each trust. • Only at this point will the Trusts be committing to expenditure.		

Related Trust Objectives

To deliver high quality care	✓	**To work with partners to deliver integrated care:**	✓	**To ensure clinical and financial sustainability:**	✓

Key implications	
Risk Assessment:	.
Legal / regulatory:	None identified.
Resource:	Not applicable.
Impact Assessment:	Not applicable.
Conflicts of Interest:	None identified.
Reference documents	None.
Assurance:	Not applicable.

Action Required by the Board of Directors:

The Board of Directors are asked to receive and **approve:**
Submission of this Business Case to NHS Improvement to gain confirmation of the allocation of capital funding and its drawdown. .

7.1

You matter most

7.1

Business Case for the West Yorkshire Association of Acute Trusts' (WYAAT) Deployment of Scan4Safety

(*Adoption of GS1 & PEPPOL Standards*)

30 October 2018

V1.4 - CONFIDENTIAL

A. Executive Summary

The purpose of this business case is to explain the deployment of Scan4Safety across the West Yorkshire Association of Acute Trusts (WYAAT) in order for the Trust Boards to support the submission of this case to NHS Improvement, to garner confirmation of the allocated funding and its drawdown.

NHS Improvement has made available **£14.952m** to accelerate the adoption of Scan4Safety across WYAAT, and this business case details the deployment of the programme to the end of **March 2022**.

Scan4Safety is a National programme born out of the Department of Health & Social Care (DHSC) eProcurement Strategy to deliver the adoption of GS1[1] identification standards and PEPPOL[2] transaction messaging standards throughout the NHS.

Due to the success of the National Scan4Safety programme delivering key benefits within the first two years, **NHS Improvement committed to spend across the West Yorkshire Association of Acute Trusts (WYAAT) to promote GS1 & PEPPOL adoption** and **implementation** of Scan4Safety across the region. The Trusts engaged with the programme are:

- Airedale NHS Foundation Trust (ANHSFT)
- Bradford Teaching Hospitals NHS Foundation Trust (BTHFT)
- Calderdale and Huddersfield NHS Foundation Trust (CHFT)
- Harrogate and Rural District NHS Foundation Trust (HDFT)
- Leeds Teaching Hospitals NHS Trust (LTHT)
- Mid Yorkshire Hospitals NHS Trust (MYHT)

The Request of the Board

This document is being put to the Board seeking approval for the following:

- Submission of this business case to NHS Improvement to gain confirmation of the allocation of capital funding and its drawdown

The Board should note that, at this stage, there is no commitment by any trust to any costs or benefits. Once the regional procurement has been completed a further business case will be produced based on actual costs for the systems from the preferred bidder and further analysis of the benefits. This business case will set out the costs, both capital and revenue, and the benefits which will fall to each trust. It will seek approval from the WYAAT CIC and Trust Boards to sign a contract with the preferred bidder and implement the systems across WYAAT. Only at this point will the trusts be committing to expenditure.

[1] GS1 (Global Standards 1) are an international not-for-profit association with 112 Member Organisations in over 115 countries. The GS1 vision is to provide a common language for companies when it comes to identifying people, locations, items and documents, capturing information at the point of interaction and sharing data throughout the procurement process from supplier to point of care/point of use

[2] PEPPOL (Pan European Public Procurement On Line) is a common messaging standard to automate machine-to-machine purchase orders and invoice transactions between customers and suppliers through PEPPOL 'access points'

Objectives

The Scan4Safety programme is aligned with the WYAAT strategic goals to be the best for patient safety, quality and experience.

The purpose of this transformation programme is to:

- Implement the core standards for identification of Place, Product & Patient (see box)
- Deploy a regional shared supply chain solution to allow for the operational improvement in product usage
- Digitise product recalls through the collaborative use of data and the development of a regional data warehouse
- Deploy the capability to capture product usage and clinical variation at the patient's bedside
- Ultimately, improve the care of all patients; reduce clinical variation and make more robust and proactive operation decisions across the Trusts and ICS.

WYAAT Scan4Safety Vision

"The digital innovation of the region through the implementation of standards"

*GS1 and PEPPOL adoption involves the implementation of international standards of identification across three **'core enablers'**:*

- Patient - Standardised Patient Identification Data Structure
- Place - Standardised Location Numbering Published Nationally for deliver to and invoice locations
- Product - Catalogue Management using standardised product identifiers

*The delivery of 3 **'primary use cases'** that rely on the core enablers will provide an initial wave of benefits to WYAAT:*

- *Full region wide inventory management including the scanning of appropriate products to patients at the point of care*
- *Procurement-to-Pay process standardisation and the adoption of machine-to-machine messaging*
- *Product recall process standardisation*

7.1

1. The Strategic Case

The Trusts are well positioned to adopt GS1 and PEPPOL messaging standards.

- Many of the organisational support and systems fundamentals are established
- A significant opportunity to leverage parallel and complimentary programmes
- A change in culture is being embedded throughout the organisations through the adoption of standards which define how the Trusts will work together to deliver the best outcomes for patients
- The transformation strategy being pursued recognises the importance of embedding sustainable change which goes beyond in year savings; the Executives see GS1 and PEPPOL adoption as a way of embedding benefits beyond 2022.

The West Yorkshire Association of Acute Trusts (WYAAT) is an innovative collaboration, which brings together the NHS trusts who deliver acute hospital services across West Yorkshire and Harrogate. It is about local hospitals working in partnership with one another to give patients access to the very best facilities and staff.

Carter Report

In July 2014 Lord Carter was appointed chair of the NHS Procurement and Efficiency Board with a mandate to help the NHS cut waste, drive efficiencies and save money which can be routed to frontline patient care. In the final Carter report published 5th February 2016 (*Source: https://www.gov.uk/government/publications/productivity-in-nhs-hospitals*), it was recognised that a key barrier in delivering this mission is a lack of consistent and comparable metrics to understand operating efficiency performance across hospitals. The report identified significant and unwarranted variation in costs and practice which if addressed, could save the NHS £5bn, with key points being specifically addressed by Scan4Safety, as set out below;

- Trusts to aim to work in collaboration both with national procurement strategies and other trusts to explore common systems adoption e.g. efficient electronic catalogues using retail system standards, enhancing current purchase to pay systems, adopting (**GS1**) and Pan European Public Procurement Online (**PEPPOL**) standards.

2. The Economic Case

An accelerated deployment of GS1 core enablers, primary use cases and PEPPOL electronic messaging standards (see box above), supported by funding from NHS Improvement, will deliver adoption within 36 months capitalising on the existing materials management capability, the regional care record programme and well developed e-procurement capabilities. This option is highly recommended by this business case with a deployment schedule as follows:

- **Mobilisation:** March 2019 – April 2019
- **Phase 1:** May 2019 – January 2020
- **Phase 2:** February 2020 – October 2020
- **Phase 3:** November 2020 – July 2021
- **Phase 4:** August 2021 – March 2022

The economic case compared two options and it is recommended that option two, NHS Improvement funded, is the preferred way forward due to key factors:

Quantitative Summary

Total Investment Required	**£14,952k**
One Time Benefits	£9,141k
Annual Incremental Operating Cost	£250k
Annual Non-Pay Benefit	£10,069k by 2027
Annual Pay Benefit	£2,388k by 2027
Net Recurrent (Cost) / Benefit	£12,400k by 2027
End State GS1 Maturity (Average Phase across six enablers / use cases)	4

Qualitative Summary

Reputation	*Significant*
Hub of Learning	*Significant*
Workforce satisfaction	*Significant*
Patient satisfaction	*Significant*
Overall assessment	***Significant***

3. The Financial Case

It is anticipated that the adoption of GS1 and PEPPOL will deliver up to £12,457k of cash releasing benefits across WYAAT. This figure is limited to the direct benefits calculated for the deployment of the four phases, and does not factor in the additional benefits GS1 will provide (outside of the primary use cases and core enablers) such as through patient level costing, workforce productivity, stock standardisation and upstream supply chain efficiencies.

Incremental costs and benefits	Project year
	Financial year
(1) COSTS	Sum of Cashflows
Capital Costs (including optimism bias)	13,669,477
Revenue Costs	5,415,465
Transitional & non-recurrent revenue costs	-
INCREMENTAL COSTS TOTAL	**19,084,942**
(2) BENEFITS	
Capital Costs (including optimism bias)	-
Revenue Costs	-
Transitional & non-recurrent revenue costs	-
Cash Releasing Benefits	75,622,030
Non-cash Releasing Benefits	-
INCREMENTAL BENEFITS TOTAL	**75,622,030**
Value for Money Ratio	**4.0**

Figure 1: Summary Financial Position

A cost model has been defined based on the detailed activity plan per enabler / primary use case by phase:

	Mobilisation & Phase 1 (% for Phase) / £0,000s	Phase 2 / £0,000s	Phase 3 / £0,000s	Phase 4 / £0,000s	Total / £0,000s
Point of Care Data Capture	856 (25%)	2,168 (51%)	2,168 (42%)	514 (24%)	**5,706** (38%)
Electronic Health Record & Pharmacy Integration	1,217 (35%)	685 (16%)	1,141 (22%)	761 (36%)	**3,804** (25%)
Data Centre Implementation	325 (9%)	824 (19%)	824 (16%)	195 (9%)	**2,168** (15%)
Supply Chain Delivery	939 (27%)	528 (12%)	880 (17%)	587 (28%)	**2,934** (20%)
Contingency	109 (3%)	61 (1%)	102 (2%)	68 (3%)	**341** (2%)
Total	**3,446**	**4,266**	**5,115**	**2,124**	**14,952**
% by Total	(23%)	(29%)	(34%)	(14%)	(100%)

Figure 2: Investment by Phase

7.1

Benefits of Adoption

Full adoption of the core enablers and primary use cases will drive significant benefits by reducing clinical risk, therefore improving patient safety and reducing mortality, making supply chains and transactional processes more efficient as well as enabling significant inventory reduction and reduction of wastage and obsolescence of consumables, devices, implants and medicines throughout the Trust.

Specifically, GS1 and PEPPOL adoption at The **West Yorkshire Association of Acute Trusts** will deliver one time benefits across WYAAT of £9,100k and recurrent benefits of £12,457k in the most likely scenario, derived from pay and non-pay efficiencies, as well as a considerable release of clinical time to patient care and significant opportunity to manage down risks.

Quantifiable Benefits

- **140,000 – 209,000 hours per annum released to clinical care (equivalent to 100 FTE B5 Nurses)** by making requisition and product recall processes more efficient and effective; reducing time searching for products through improved materials management and eliminating time reviewing patient notes in cases where clinicians are required to check or justify certain actions. Furthermore, a particular challenge for the larger trusts within WYAAT given the scale of the organisations is the ability to quickly locate patients throughout the Trusts, which GS1 will make far more efficient.
- **Significant patient safety benefits and reduction in clinical risk** through assured and reliable traceability of products, patients and locations. Once fully implemented and in steady state we expect our NHS Litigation Authority will reduce by as much as £300,000 from 2022 as well as potentially reducing mortality within the Trusts through improved patient and products traceability throughout the organisation.
- **Drive maximum non-pay efficiencies of up to £10.1m annually** through elimination of stock wastage, obsolescence and duplication in areas that do not yet have inventory management practices, as well as a reduction in adverse drug effects and a downward trend over time of NHS Litigation authority contribution as GS1 drives improved traceability at the point of care and more robust supporting data.
- **Enable pay efficiencies of up to £2.4m annually** through elimination of certain manual processes related to requisition processing and accounts payable across all Trust purchase to pay activity.
- **Deliver a one-time benefit of £9.1m** through reduction in excess inventory to reach 21 days inventory cover from a calculated blended level of c. 80 days inventory cover.

Wider Direct Financial Benefits

- The adoption of the core enablers and primary use cases will also enable the Trusts to generate further savings through an improved ability to consider patient level costing, workforce productivity, stock standardisation and upstream supply chain efficiencies.
- The West Yorkshire Association of Acute Trusts will be recognised for their use of eProcurement data / analytics; for example, the Scorpio price-benchmarking tool was developed by Leeds Teaching Hospitals Trust and ultimately helped to form the basis for the

Purchase Price Index and Benchmarking (PPIB) Tool. With the more granular and robust data available as a result of GS1, it is anticipated further benefits will be enabled by the Trusts.

4. The Commercial Case

The commercial case outlines the key considerations to set up and establish the programme and ensure any commercial requirements are outlined. It is anticipated that the Trusts in WYAAT can work together with the vendors / suppliers to harmonise all changes required and minimise the cost to the NHS.

WYAAT have a number of commercial relationships with systems hosts, which need to be managed and tracked during implementation. The GS1 identifiers must be able to feed through specific in-Trust systems that will require some interface development. These required interfaces between the systems have been used to drive the cost model in the financial case, with key suppliers highlighted below:

- WYAAT Regional Supply Chain Solution – provision made in case; full tender required.
- Oracle upgrade – provision made in case, but full details to be confirmed with NEP.
- JAC development – provision made in case, but full details to be confirmed with JAC.
- Emis/Ascribe GS1 compliance expected February 2019 (earliest)
- Medchart ePMA - not currently GS1 compliant
- ICE eDischarge - not currently GS1 compliant
- SystmOne, TPP expected to be GS1/ISB1077 compliant by 2019

Personnel Implications

Dedicated programme management with defined work stream leads will be required to manage the programme to the proposed timescales. These roles will then be supported by subject matter advisors (SMA) within their Trusts as required.

Procurement

The Trusts will need to procure the appropriate infrastructure and resources through compliant OJEU routes. It is anticipated that a regional supply chain solution is required, and there is a need for hardware and professional services support to achieve the required capabilities within the agreed timeframes; both of which would be above OJEU thresholds given the scale required.

All procurement will need to be in line with individual Trust standing financial instructions.

5. The Management Case

In order to adopt GS1 and PEPPOL messaging standards the Trusts need to undergo a transformation which will touch the majority of the Trusts in some way, either building on existing practices to ensure they are embedded and standardised or deploying currently unused standards/ processes to meet the requirements of GS1 adoption:

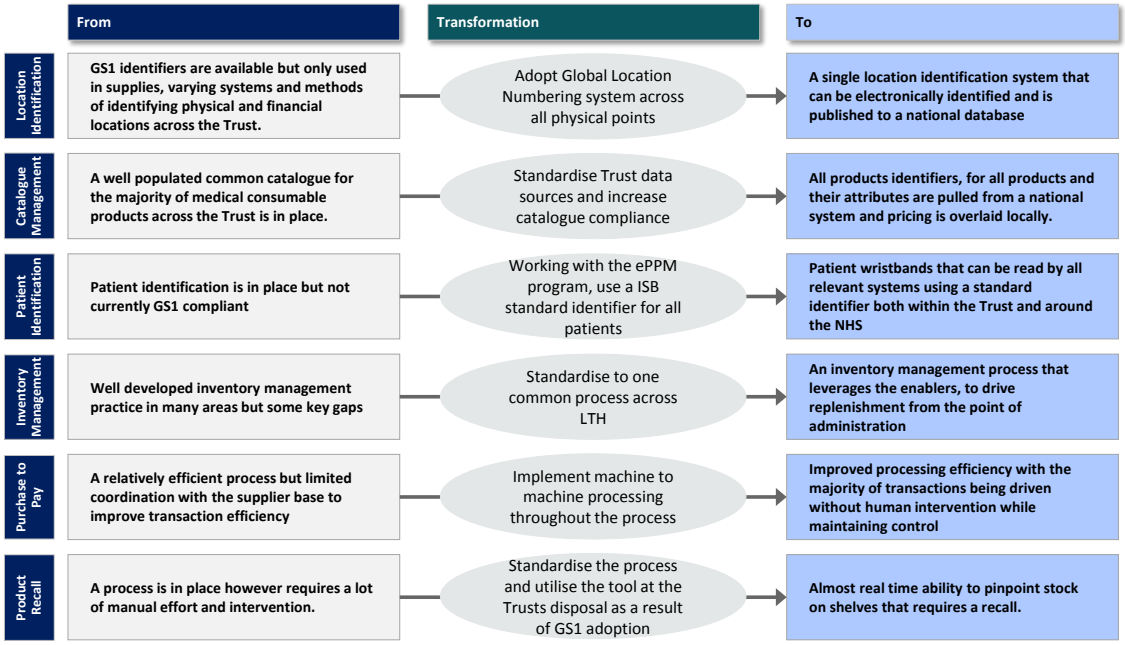


Figure 3: GS1 & PEPPOL Adoption Journey

To learn from the Scan4Safety demonstrator sites, the trusts in WYAAT will adopt the four phase approach for deployment using NHS Improvement funding, as summarised below:

	Phase 1 (May 19 - Jan 20)	Phase 2 (Feb20 - Oct20)	Phase 3 (Nov 20 - Jul 21)	Phase 4 (Aug 21 - Mar 22)
Core Enablers	• Organisation level location identifier in place, 50% of locations allocated a GS1 identifier • Catalogue management system in place, gap analysis carried out • 50% of in-patients have GS1 wristband on admission, hardware provider chosen	• GS1 location identifiers are appropriately administered, 100% locations have an assigned identifier • 50% of products purchased through catalogue system and appropriate Trust systems can handle GS1 identifiers • 100% in-patients have GS1 wristband on admission and point of care scanners are in place	• 50% of Trust room locations have physical GS1 barcode affixed, registry is published • 90% of products purchased through catalogue system and system is integrated with National data pool • Point of care scanning for patient identification in place for 100% of Trust	• All systems using GS1 location identifiers and 100% of rooms have GS1 barcodes affixed • All data is taken from the national data pool, and 30% of services are catalogued • Sustainable management place is put in place
Primary Use Cases	• Planning for inventory management rollout completed, technology reviewed • Organisational review of policies and processes complete for purchase to pay • Organisational review of policies and processes complete for product recall	• Inventory management processes implementation commenced, web requisitions fall by 50% • Updated P2P policies and processes agreed for purchase to pay • Updated P2P policies and processes agreed for product recall	• Web requisitions reduced by 75% and 25% relevant products can be tracked by batch/serial number to patients • Updated P2P processes implemented and 30% of purchase orders / invoices electronically exchanged • Training of relevant staff in product recall processes completed and updated processes implemented	• Trust wide inventory less than 3 weeks cover, business case for single in-Trust logistics function agreed • 60% of purchase orders / invoices electronically exchanged • 100% of recalls are completed using new process

Figure 4: Four Phase Approach

The anticipated timeline for implementation is 36 months, based on a 2 month mobilisation and training phase. The release of funding from NHS Improvement would allow for a staged delivery approach to be taken, whereby a phase is concluded (and the associated costs, benefits and metrics captured) before starting the subsequent phase.

A high level deployment timeline for the region is shown below:

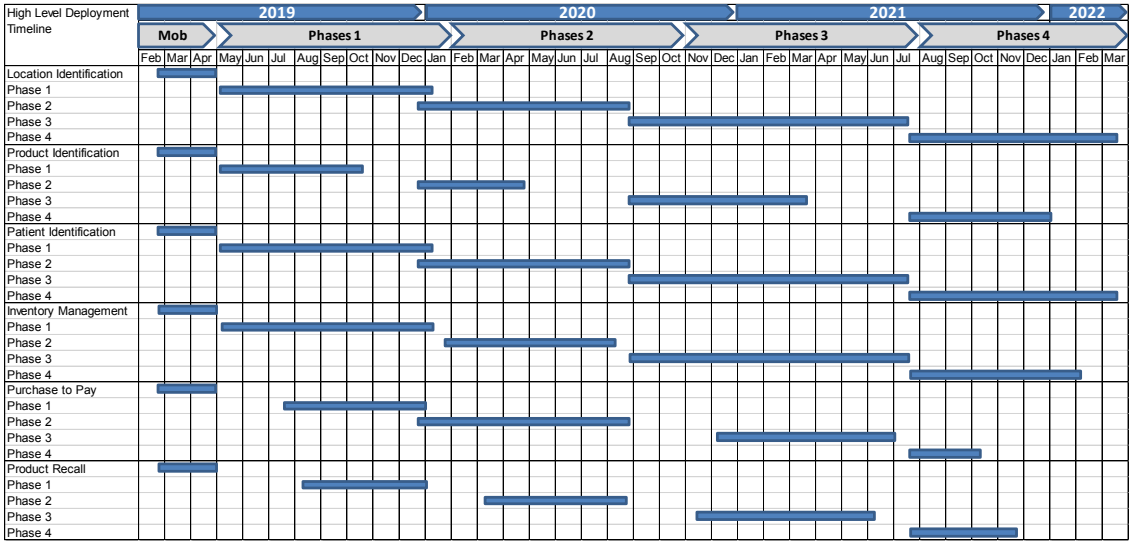


Figure 5: High Level Deployment Timeline

7.1

B. Purpose of the Document

Purpose

The purpose of this document is to develop the West Yorkshire Association of Acute Trusts (WYAAT) Business Case to be submitted to NHS Improvement in November 2018. The document will need to be approved by each of the Trusts' Boards prior to submission to NHS Improvement, with further approval required across the WYAAT groups; Strategy & Operations, Director of Finance, Medical Directors, Programme Executive and Committee in Common.

This business case will follow the format set out in the Green Book HMT 5 Case Model. The 5 cases will be in the following agreed format:

- **The Strategic Case (section 1)** sets out of the case for change, rationale for the proposal and current state assessment
- **The Economic Case (section 2)** assesses the options for change, the economic cost and benefits of the options and recommends a preferred option
- **The Financial Case (section 3)** assesses funding and affordability implications
- **The Commercial Case (section 4)** is concerned with the commercial feasibility of the preferred option
- **The Management Case (section 5)** provides the detailed delivery plan for implementing the preferred option

Scope

In 2014 the Department of Health mandated the adoption of GS1 and PEPPOL messaging standards throughout the healthcare sector and its accompanying supply chains in the NHS e-Procurement Strategy. The adoption of GS1 provides a unique set of bar-code standards that allow products and patients to be tracked and traced throughout the healthcare system.

Whilst the opportunities relating to the adoption of GS1 and PEPPOL standards set out in the NHS e-Procurement strategy are significant, the scope of the adoption covered by the proposed programme is limited to the core enablers and three primary use cases as follows:

Core Enablers:

- **Location Coding:** to simplify trade and internal processes using consistent location numbers across the Trust based on the GS1 Global Location Number (GLN).
- **Catalogue Management:** to ensure consistent product master data and pricing is used across the Trust and the NHS as a whole based on the GS1 Global Trade Item Number (GTIN).
- **Patient Identity:** to be able to positively identify a patient through automated, point of care reading of an in-patient's wristband in line with ISB1077 and using the GS1 Global Service Relationship Number (GSRN).

Primary Use Cases:

- **Inventory Management:** to have the relevant stock at appropriate levels available at point of use and to be able to electronically trace products and medicines to a discrete location or patient.
- **Purchase-to-Pay:** all purchase orders, advanced shipping notes and invoices to be exchanged between Trusts and suppliers via a PEPPOL compliant access point.
- **Product Recall:** to be able to trace products and medicines to a discrete location or patient using electronic means to allow safe and efficient recall.

Compliance with these core enablers and primary use cases will allow WYAAT to improve and automate Purchase-to-Pay processes, better understand and control inventory management and enable more efficient product recalls.

Adoption of the core enablers and primary use cases will be aligned with the Scan4Safety delivery approach.

Version Control

Version	Revision Date	Changes made by	Summary of changes	Authorised to continue by
0.1	24.09.2018	SM	First draft shared with WYAAT Leads	
0.2	08.10.2018	SM	Additional organisational context added for Trusts	
0.3	11.10.2018	SM	Updated in line with finance comments	
1.0	12.10.2018	SM	Updated to include latest VFM figures	
1.1	14.10.2018	SM	Investment updated in line with comments from WYAAT PMO	
1.2	15.10.2018	SM	Updated Executive Summary & aligned tables	Programme Board
1.3	16.10.2018	SM	Final comments from David Berridge (Scan4Safety Chair)	Programme Board
1.3	17.10.2018	n/a	Approved	Strategy & Operations Board
1.3	19.10.2018	n/a	Approved	Medical Directors Board
1.3	19.10.2018	n/a	Approved	Directors of Finance Board
1.4	30.10.2018	SM/MD	Updates to on-going costs & VFM tables	Programme Board
	06.11.2018			Programme Executive
	20.11.2018			Committee in Common

Contents

Figures

1. Strategic Case

The West Yorkshire Association of Acute Trusts (WYAAT) are well positioned for the adoption of GS1 / PEPPOL standards. There are four primary drivers for this:

- Many of the organisational **support and systems fundamentals are established** (Procurement and Supply chain, IT Strategy) however, there is still a significant opportunity to drive benefits within the Trusts through full adoption and standardisation.
- A significant opportunity to **leverage parallel and complimentary programmes** alongside the adoption of GS1 / PEPPOL; including involvement in the Carter Review, engagement with the Virginia Mason Institute and the development and extension of the Leeds Care record across Yorkshire and Humber through the Local Health and Care Record Exemplar (LHCRE).
- A **change in culture is being embedded throughout the organisations** through the adoption of standards which define how the Trusts will work together to deliver the best outcomes for patients.
- The transformation strategy being pursued recognises the importance of embedding sustainable change which goes beyond in year savings; the Executives see GS1 and PEPPOL adoption as a way of **embedding benefits beyond 2022**.

1.1 The West Yorkshire Association of Acute Trusts Overview

The West Yorkshire Association of Acute Trusts (WYAAT) is an innovative collaboration, which brings together the NHS trusts who deliver acute hospital services across West Yorkshire and Harrogate. It is about local hospitals working in partnership with one another to give patients access to the very best facilities and staff.

WYAAT forms part of the wider West Yorkshire & Harrogate Health Care Partnership Integrated Care System:

- Serving a population of 2.64m
- With a total allocation of £4.7bn across health by 2020/21
- And 113,000 health & social care staff

Including:

- 8 local authorities and 11 CCGs
- 6 mental health & community trusts
- 366 GP practices
- 650 care homes
- 319 domiciliary care providers
- 10 hospices
- 8 large independent sector providers
- And thousands of voluntary & community sector organisations

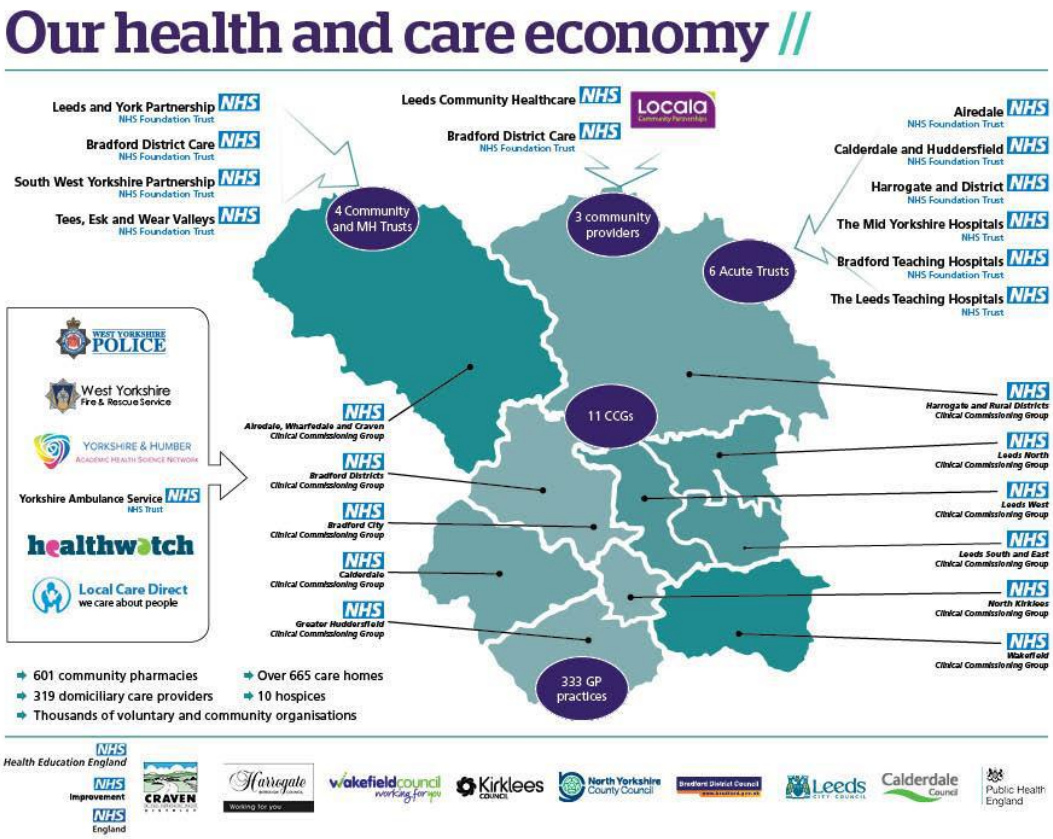


Figure 6: Our health & care economy

West Yorkshire Association of Acute Trust Aims

Our vision is to create a region-wide efficient and sustainable healthcare system that embraces the latest thinking and best practice so we consistently deliver the highest quality of care and the best possible outcomes for our patients. WYAAT is looking at how care could be provided across hospital sites in a single, high quality service provided by a team of expert medical staff so that patients receive the very best care - at their nearest hospital wherever possible and at a centre of excellence if required. This approach has been proven to save lives.

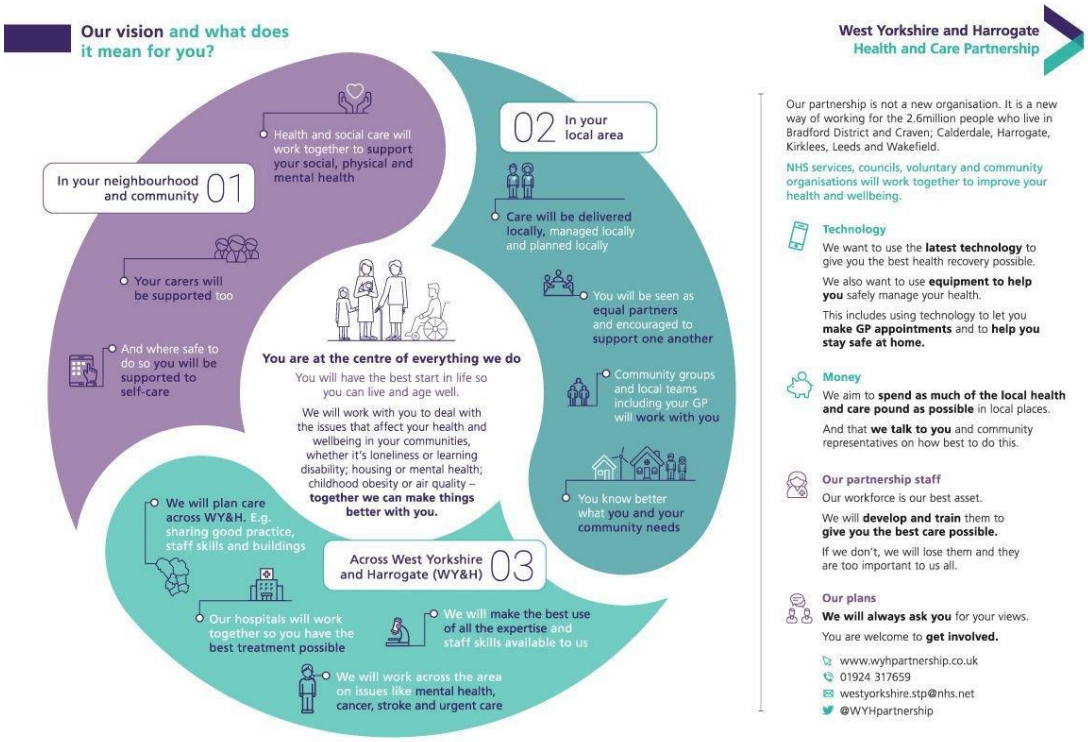


Figure 7: ICS Vision

The West Yorkshire Association of Acute Trusts membership is comprised of the below Trusts:

Airedale NHS Foundation Trust

Airedale NHS Foundation Trust is an award winning Acute and Community Services NHS healthcare organisation, providing high quality, personalised healthcare for the communities it serves.

The Trust employs over 2,000 people provide a full range of emergency, planned and specialist care services for a population of over 200,000 from a widespread area covering West Yorkshire, North Yorkshire and East Lancashire, including;

- Accident and Emergency
- High Dependency and Intensive Care
- Cancer Care
- Elective and Day Case Surgery
- Stroke and Rehabilitation
- Maternity and Paediatrics
- Care of The Elderly
- Community Services

The Trust delivers inpatient services across two hospital sites:

- **Airedale General Hospital** – Acute General Hospital
- **Castleberg Hospital** – 10 bedded intermediate care facility serving the South and North Craven area

The Bradford Teaching Hospitals NHS Foundation Trust

Bradford Teaching Hospitals Foundation NHS Trust (BTHFT) is a large acute hospital Trust which provides efficient and effective secondary and tertiary care including some sub regional services. It treats over 400,000 patients a year. The Trust provides care and treatment to the residents of Bradford and also to patients from Calderdale and Kirklees, Leeds, North Yorkshire, East Lancashire and even further afield. We serve a core population of around 500,000 people and provide specialist services for some 1.1 million. BTHFT is the second largest hospital Trust in West Yorkshire.

Our 5,500 staff work over several sites, including Bradford Royal Infirmary, which provides the majority of inpatient services, and St Luke's Hospital, which predominantly provides outpatient and rehabilitation services. We also manage local community hospitals at Westwood Park, Westbourne Green, Shipley and Eccleshill.

We have approximately 135,000 patients visiting out Accident and Emergency Department each year, we carry out over 30,000 operations, and over 6.000 babies are born in Bradford per year. We also have carry out 500,000 outpatient appointments per year. We have a state of the art Intensive Care Unit, part of a new £28m hospital wing. We also have a recently refurbished Neonatal Intensive Care Unit, the first NICU (level 3) in the UK to achieve 'Baby Friendly' accreditation from children's charity UNICEF and the World Health Organisation.

The Trust is home to the Bradford Institute for Health Research (BIHR) where researchers have led the development, validation and implementation of the award-winning Bradford Electronic Frailty Index (eFI) which helps calculate an elderly person's risk of disability, impairment, falls and complications of chronic diseases, as well as their diminishing independence and capability. This is now being used by 98% of all GPs across the country.

The Calderdale and Huddersfield NHS Foundation Trust

The Calderdale and Huddersfield NHS Foundation Trust offer a range of both general and specialist hospital services across its two hospital sites. The Trust has a turnover of £363m and employs over 6,000 people. It consists of the below two hospital sites:

- **Calderdale Royal Hospital** - General acute hospital services such as an A&E department, intensive care unit, Theatres, special care baby unit and outpatient services.
- **Huddersfield Royal Infirmary** - General acute hospital services such as an A&E department, intensive care unit, Theatres.

The Trust servers a joint population of 550,000 in the Calderdale and Huddersfield and the surrounding areas. We are continuing to modernise and invest in our health services to build on our strong reputation.

Harrogate and District NHS Foundation Trust

Harrogate and District NHS Foundation Trust is an Acute and Community service provider, with services provided across 187 sites across North Yorkshire and the North East, predominately from the across four main Hospital/ Acute sites.

Harrogate and District NHS Foundation Trust:

- offers a range of both general and specialist hospital services on the Harrogate District Hospital Site

- Is the largest provider of community children's services in the country, covering North Yorkshire, Durham, Darlington, Middlesbrough, Sunderland, Stockton-on-Tees and Gateshead
- Is the provider of GP OOH services at three locations – Harrogate, Catterick and Northallerton
- Is the provider of two Minor Injury Units; Selby War Memorial Hospital and Ripon Community Hospital
- Is the provider of Adult Community Services in North Yorkshire.; services include Podiatry, Adult Speech and Language Therapy, Chronic Pain and Fatigue, Cardiac Rehabilitation, Community Care Teams and Dental
- Is the provider of Childhood Vaccination and Immunisation services across North Yorkshire, York and Leeds

The Trust has a turnover circa £217m and employs around 4,500 people. It consists of the below Hospital/ Acute sites:

- **Harrogate District Hospital provides high quality DGH services** and includes a newly renovated maternity suite, Endoscopy suite and the Sir Robert Ogden Macmillan Centre
- **Ripon Community Hospital** – Provides Care of the Elderly and rehabilitation, Therapy Services, Women Services and a Minor Injuries Unit with on-site X-ray.
- **Lascelles Rehabilitation Unit** - A purpose-built 12 bedded unit which accepts patients that have a variety of neurological conditions such as head injuries, multiple sclerosis, Parkinson's, motor neurone disease and Guillain–Barré syndrome. It also supports patients who have suffered strokes.
- **Wharfedale Hospital** – Provision of endoscopy services in collaboration with LTHT.

The organisation has grown significantly over the last five years and we believe the adoption of GS1, alongside our other strategic programmes, would be a major contributor to improving efficiency and safety.

The Leeds Teaching Hospitals NHS Trust

The Leeds Teaching Hospitals NHS Trust is one of the largest NHS trusts in the country, offering a range of both general and specialist hospital services. From April 2013 the Trust moved from a Divisional structure to a clinically led one, putting doctors, nurses and managers in a decision-making triumvirate. This structure operates around 19 Clinical Service/Support Units (CSUs). The Trust has a turnover of £1,200m and employs over 17,000 people. It consists of six hospitals and one dental institute:

- **Leeds General Infirmary** - A specialist regional centre for a number of complex conditions, as well as providing many general acute hospital services such as an A&E department, intensive care, state of the art operating theatres and a high-tech high dependency unit.
- **St James's University Hospital -** Internationally famous as Europe's largest teaching hospital. It is home to services including acute and elderly medicine, A&E, a number of surgical specialties, as well as being a world-renowned centre for highly specialised organ transplantation.
- **Seacroft Hospital -** Reproductive Medicine Centre, outpatient clinics, x-ray services
- **Wharfedale Hospital -** Mix of clinically appropriate primary and secondary services

- **Chapel Allerton Hospital –** Orthopaedic centre, dermatology ward, rheumatology services
- **Leeds Children's Hospital –** wide range of speciality services for children
- **Leeds Dental Institute**

The Trust serves a population of 752,000 in Leeds and its surrounding areas and treats around 2 million patients a year. Activity levels at the Trust are growing year on year with forecasted growth in the next financial year and as with the majority of NHS Trusts, The Leeds Teaching Hospitals NHS Trust will need to continue to provide excellent patient care in a heavily resource constrained environment. We believe the adoption of GS1, alongside our other strategic programmes, can be a major contributor to a significant shift in ways of working.

The Mid Yorkshire NHS Trust

The Mid Yorkshire Trust offers a range of both general and specialist hospital services across 70 specialties across 29 clinical areas including day case areas, in 3 hospital sites. The Trust has an income of over £500m and employs over 8,000 people. It consists of the below three hospital sites:

- **Pinderfields General Hospital** - Pinderfields Hospital in Wakefield, is the main centre for people who are seriously ill. It is a designated Major Trauma Unit, where urgent and emergency surgery is carried out and has a helicopter landing site close to the Emergency Department. The hospital is also home to the Yorkshire Regional Spinal Injuries Centre (YRSIC), one of 12 specialist spinal injury centres in the United Kingdom; the 32 bed unit admits approximately 120 newly injured patients each year. In addition, there is a Regional Adult's Burns Centre and Regional Children's Burns Unit, which serve a population of approximately 3.5 million people across West, North and East Yorkshire and North Lincolnshire, serviced by 19 emergency departments and managing over 150 patients every year - often with major and life-threatening burns – as well as 1,800 outpatients.
- **Dewsbury and District Hospital -** Our Dewsbury site is where we carry out more of our planned surgery. The hospital has a busy outpatient clinic and a new multi-million pound midwife led birth unit, there is also a dedicated children's assessment unit. Dewsbury is also where rehabilitation for people with neurological conditions or who have suffered a stroke, takes place and we have a dedicated children's assessment service to reduce the time children spend in hospital.
- **Pontefract General Infirmary -** The smaller of our three hospitals, Pontefract has open access emergency care for less serious medical conditions. It also offers planned surgery, day surgery, a number of outpatient clinics and rehabilitation for people who need round the clock care but do not need to be in an acute hospital bed.

1.2 National Context

Five Year Forward

At a national level, the NHS is facing unprecedented challenges in view of rising patient demands, increased prevalence of chronic conditions and budget constraints. Over the past five years, secondary care Trusts have been challenged to deliver significant cost improvements. Their efforts have delivered efficiencies, but not to the scale required.

According to the NHS Five Year Forward View, the system must deliver at least 2% net savings year-on-year through 2020 to close an estimated gap of £22bn. Past efforts have come close to this mark, largely due to pay restraints, but overall actions have been unsustainable. Clearly, new sources and longer-term strategies must now be considered across the system.

Carter Report

In July 2014 Lord Carter was appointed chair of the NHS Procurement and Efficiency Board with a mandate to help the NHS cut waste, drive efficiencies and save money which can be routed to frontline patient care. In the final report published 5th February 2016 (*Source: https://www.gov.uk/government/publications/productivity-in-nhs-hospitals*), it was recognised that a key barrier in delivering this mission is a lack of consistent and comparable metrics to understand operating efficiency performance across hospitals. The report identified significant and unwarranted variation in costs and practice which if addressed, could save the NHS £5bn, with key points being specifically addressed by Scan4Safety;

- Procurement: Average price paid for hip prosthesis varies from £788 to £1590, and trusts buying the most are not paying the lowest price.
- Operating Theatres (Orthopaedics): Deep wound infection rates for primary hip & knee replacements currently range from 0.5% to 4%. If all hospitals achieved 1%, this would transform the lives of 6,000 patients and save the NHS £300m per year.
- Pharmacy: Stockholding varies from 11 to 36 days, and if everyone achieved 15 days, this would save £50m.
- Hospital estate: Total estates and facilities running costs per area (£/m2) – trusts are considered good if their metric is lower than £320, the current variation is between £105 and £970; If everyone achieved the median this would save £1bn per year.

Recommendation 5 of the report specifically states that Trusts should be working to prioritise the role of standards and eProcurement:

- All trusts to prioritise the role of procurement on ensuring effective system control and compliance, building supply chain capability in terms of both inventory management systems and people. Trusts to aim to work in collaboration both with national procurement strategies and other trusts to explore common systems adoption e.g. efficient electronic catalogues using retail system standards, enhancing current purchase to pay systems, adopting (**GS1**) and Pan European Public Procurement Online (**PEPPOL**) standards detailed in the eProcurement Strategy, and to align with NHSSC on category initiatives.

Product Recall Headlines

In late 2014, the National Information Board published the Personalised health and care strategy 2020 paper which described how the NHS could become a global leader in digital health and care services which would ensure patient safety and transparency. Following some recent high profile national events, such as the 2013 Metal-on-Metal Orthopaedic hip implant scandal and the PIP Breast Implant recall, traceability of products from source to patient is vital.

Never Events

The recently established Healthcare Safety Investigation Branch (HSIB) has already highlighted the need for better traceability via mobile applications, such as the recent report on implantation of wrong prosthesis during joint replacement surgery. (*Source: https://www.hsib.org.uk/investigations-cases/implantation-wrong-prostheses-during-joint-replacement-surgery/*) The introduction of GS1 standards and their use in healthcare systems will reduce these types of Never Events significantly.

Paper Light

The E-invoicing Directive, issued by the EU, mandates that by 2018 all public sector organisations must be able to receive e-invoices. In addition to this, in 2013 Jeremy Hunt announced the ambition that the NHS should be paperless by 2018, stating "*Only with world class information systems will the NHS deliver world class care*".

Long Term Goals

Around 60% of the NHS' costs are attributed to workforce. Enabling greater workforce productivity and efficiency could be a key component of addressing the £22bn funding gap. In addition, monitoring variance in clinical practice could lead to more standardised clinical practices, which are shown to provide the best patient outcomes. In the long-term, GS1 standards could be extended to enable more detailed workforce productivity and variance in clinical practice monitoring across Trusts. This could allow Trusts to understand clinical outputs at an individual resource level, identify inefficient processes that restrict time to care and provide opportunities to incentivise the workforce.

1.3 Local Context

Integrated Care System (ICS)

The local partnership to improve health and care covers the West Yorkshire and Harrogate area. The plan is intended to set out practical ways to improve NHS services and population health. to help meet a 'triple challenge' set out in the NHS Five Year Forward View – better health, transformed quality of care delivery, and sustainable finances. The vision for West Yorkshire and Harrogate's 2.6 million population "is for everyone to have the best possible outcomes for their health and well-being".

The ICS offers an initial view of how local and regional services can be improved, what this means for the health of people locally and how organisations will collaborate to balance the books. The plan outlined nine priorities – Prevention, Primary and community care, Mental Health, Stroke, Cancer, Urgent and Emergency Care, Specialised Commissioning, Hospitals working together, and Standardisation of Commissioning policies. These priorities are considering the best possible models to deliver services across the area. As diagnostics form the basis of clinical decision-making, radiology across West Yorkshire and Harrogate must be ready to provide services in new and dynamic ways to support new models being developed by the ICS.

Drive for Improved Access to Healthcare

Leeds, as the largest city in the region, is a growing and changing city, with a population of 751,485 according to the ONS. The birth rate is increasing and the number of elderly people is expected to double by 2033. Migration to the city is also increasing which is changing the demographics of the area; ONS estimates that 18.9% of the population are black or ethnic minorities.

The wider populous that the Trust serves also has a large degree of variation in terms of general health standards. In Leeds and Bradford, the life expectancy in the best and worst areas can vary by as much as ten years. There are large environmental and demographic differences in the area in which the WYAAT Trusts serve. For example, Leeds is predominantly an urban area whereas North Yorkshire is mainly rural, with Mid Yorkshire having specific requirements for treatment such as specialist respiratory services due to the high number of mines in the catchment area.

Commissioning Environment

Local CCGs have indicated that a key area of focus is to increase investment in mental health services and new models of care. For example, local CCGs are developing an approach to Multispecialty Community Providers (MCPs). They have made clear their intention to establish multispecialty managed care networks that integrate primary care and networked management teams across primary, community and mental health.

The implementation of GS1 standards aligns with the strategy to increase integration of primary, community and mental health care. The standards proposed will increase the quality and visibility of patient data, and over time it is envisaged they will be rolled out into the community giving full end to end visibility of patient pathways.

1.4 Organisational Context – Strategic Drivers

Airedale NHS Foundation Trust

Airedale NHS Foundation Trust's Strategy is set out in 9 key themes;

- Further Developing Our Partnerships
- Progress Towards An Integrated Care System
- Clinical Service Developments
- Right Care Transformation Programmes
- Continued Focus On The Patient Experience
- Our People Plan
- Delivering Our Digital Airedale Ambition For Patients
- Embedding Our Quality Improvement Framework
- Further Developing Our Estate

The adoption of GS1 and PEPPOL messaging standards align with the Trusts objectives.

Figure 8: Airedale 'Our Right Care vision'

The Trust's People Plan vision is all about having the right people providing Right Care today and tomorrow, for patients and the local population.

Embedded within this approach are several key principles including;

- visible, compassionate, inclusive leaders who inspire collaborative working, engage with and coach team members, and encourage innovation
- People working flexibly, safely and productively, supporting new ways of working to meet the needs of patients within a common set of values and behaviours
- Developing people so they are healthy, engaged, skilled and resilient; able to adopt new ways of working, including embracing the use of new technology in order to manage the changes and challenges ahead

Figure 9: Airedale 'Our People Plan'

The Bradford Teaching Hospitals NHS Foundation Trust

Our mission at Bradford Teaching Hospitals NHS Foundation Trust is ***"to provide the highest quality healthcare at all times".***

We are one of an elite group of hospitals around the country which delivers care, teaching and research. To do well in any one of these domains is an achievement. It is an even greater challenge to excel in all three, but that is our ambition over the next five years.

We intend to do so in a way that respects our workforce, gives them opportunities and backs their ideas and energy.

To this end, we have a vision for the Trust that describes our ambition and where we want to be as an organisation in five years' time.

Our vision is ***"to be an outstanding provider of healthcare, research and education, and a great place to work."***

Our values were developed in discussions with our people and sum up who we are as an organisation. They are:

- We care
- We value people
- We are one team

We all play a part in making these values come alive in our everyday work – whether we are working with patients or each other, **we are Bradford**.

The Calderdale and Huddersfield NHS Foundation Trust

"Together we will deliver outstanding compassionate care to the communities we serve."

That is the Trust's vision and the pledge that binds everyone who works here.

Backing this up are the Trust's values, the four pillars of behaviour that we expect all employees to follow. We have worked hard to spread the awareness of them so that all colleagues here understand their responsibilities. They are:

- Pillar 1 – We Put the Patient first
- Pillar 2 – We "go see"
- Pillar 3 – We work together to get results
- Pillar 4 – We do the must-dos

Harrogate and District NHS Foundation Trust

The vision of Harrogate & District NHS Foundation Trust continues to be to achieve Excellence Every Time for our patients and service users, with our Mission statement to be an exceptional provider of healthcare for the benefit of our communities, our staff and our partners. In order to achieve our Mission and Vision we have set out three key strategic objectives:

- To deliver high quality care
- To work with our partners to deliver integrated care
- To ensure clinical and financial sustainability

In order to deliver our Vision we recognise the need to work with our partners across the patch including:

- West Yorkshire and Harrogate Health and Care Partnership (HCP)
- West Yorkshire Association of Acute Trusts (WYAAT)
- Clinical Alliances with York Teaching Hospitals NHS Foundation Trust (YTHT) and Leeds Teaching Hospitals NHS Trust (LTHT)
- Harrogate PLACE
- Local Provider collaboration with other providers including Tess Esk and Wear Valley NHS Foundation Trust (TEWV) North Yorkshire County Council (NYCC), and the local GP Federation

The Mid Yorkshire NHS Trust

The Mid Yorkshires Hospitals NHS Trust provides hospital services from its three hospitals to a population of c530,000 and delivers a range of community services primarily to the c350,000 population of Wakefield. In addition the Trust provides specialist burns and spinal injuries services to a large regional population.

The Trust has a workforce of c8,000 people and generates income in excess of half a billion pounds annually. Income is primary derived from two main Clinical Commissioning Groups (CCGs) and NHS England for specialist services.

'Striving for Excellence' – Trust Strategy

In 2017 the Trust launched its refreshed core strategy 'Striving for Excellence'. The strategy details the Trust vision: ***'To provide excellent patient experience each and every time'***

A mission statement supports the vision: ***'To provide high quality healthcare services at home, in the community and in our hospitals to improve the quality of peoples lives'***

To deliver the Trusts vision and mission the strategy identifies six strategic goals:

1. Keep our patients safe at all times
2. Provide excellent patient experience and deliver expected outcomes
3. Be an excellent employer
4. Be a well led and governed Trust with sound finances
5. Have effective partnerships that support better patient care
6. Provide excellent Research, Development and Innovation opportunities

The diagram below presents the Trust Strategy within the 'Striving for Excellence' pyramid and includes the Trust values of Caring, Improving, Respect and High Standards.

Figure 10: The Mid Yorkshire NHS Trust Strategy

The Leeds Teaching Hospitals NHS Trust

In 2014, The Leeds Teaching Hospitals NHS Trust published its five-year strategy with the vision to be the best institution in the country for specialist and integrated care. To achieve this, the Trust has identified five key goals:

- **Patients:** Be the best for patient safety, quality and experience
- **People:** Be the best place to work
- **Research, Education and Innovation:** Ensure the Trust is a center of excellence for specialist services, research, education and innovation
- **Integrated Care:** Provide seamless and integrated care
- **Finance:** Operate as a financially sustainable Trust

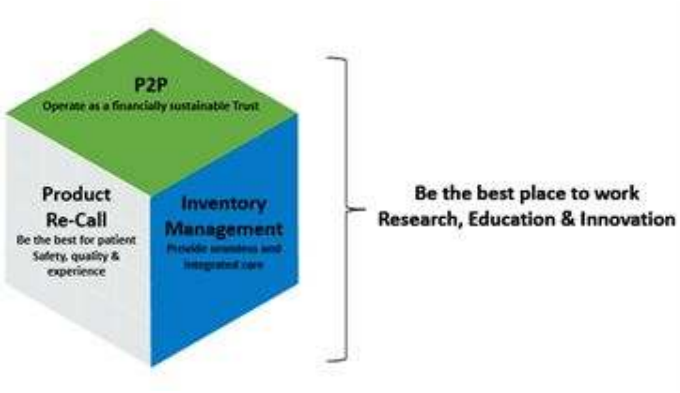


Figure 11: The Leeds Teaching Hospitals NHS Trust's Objectives Linked to Primary Use Cases

The adoption of GS1 and PEPPOL messaging standards align with the Trusts objectives.

The Leeds Way

As part of the five-year strategy, The Leeds Teaching Hospitals NHS Trust is embedding a change of culture within the hospital through five core values as part of "The Leeds Way", which defines what the Trust believes and how The Leeds Teaching Hospital NHS Trust will work to deliver the best outcomes for patients.

Figure 12: Our Values - The Leeds Way

The Leeds Way defines the approach to the new world of challenges across the Trust; empowerment and investment in staff giving them the autonomy and freedom to deliver safe, effective and personal healthcare for every patient, every time. The Leeds Teaching Hospital NHS Trust aims to

deliver leading edge innovation, achieve academic and educational excellence and expand the boundaries of healthcare collaborating with partner organisations. These values also reflect the need for financial sustainability, recognising the Trust must re-organise what it spends to ensure the highest quality services.

1.5 Organisational Context - External Benchmarks

The implementation of GS1 and PEPPOL standards will strengthen the Trusts' safety processes as it will greatly improve the speed in which affected patients can be identified in product recalls. It will also help to prevent certain incidents and provide greater integration of patient and product data. Current CQC ratings shown below are expected to be improved by the implementation of these standards.

Airedale NHS Foundation Trust

Airedale NHS Foundation NHS Trust was last inspected by the CQC in March 2017 where it was given an overall rating of Requires Improvement. Despite receiving scores of "Good" in effectiveness, caring and responsive, it was deemed to lack in the areas safe and well led.

The Bradford Teaching Hospitals NHS Foundation Trust

Bradford Teaching Hospitals NHS Foundation Trust was last inspected by the CQC in January and February 2018 where it was given an overall rating of "Requires Improvement". Despite receiving praise for a number of areas of outstanding practice, and scoring of "good" in Caring and Well Led, it was deemed to lack in the areas of Safe, Effective and Responsive.

The Calderdale and Huddersfield NHS Foundation Trust

The Calderdale & Huddersfield Foundation NHS Trust was last inspected by the CQC in May 2018 where it was given an overall rating of 'Good'.

Harrogate and District NHS Foundation Trust

The Harrogate and District NHS Foundation Trust was last inspected by the CQC in February 2016 where it was given an overall rating of 'good'. The Trust rating was 'outstanding' for caring, 'good' for well-led, effective and responsive care, and was found to 'require improvement' for safe care.

The Leeds Teaching Hospitals NHS Trust

The Leeds Teaching Hospitals NHS Trust was last inspected by the CQC in July 2016 where it was given an overall rating of 'good. The CQC Inspectors recognised that the Trust are investing more in clinical staff; and providing caring and effective services. CQC have begun a recent inspection of the Trust in August 2018 with the results to be published later in the year.

The Mid Yorkshire NHS Trust

The Mid Yorkshire NHS Trust was last inspected by the CQC on 30 October 2017 where it was given an overall rating of "requires improvement" in the report of 25 January 2018. The Trust improved from the previous inspection in 2015, particularly within community services. However, it remains rated as 'requires improvement' overall, with safe, effective, responsive, and well-led rated as 'requires improvement', and caring rated as 'good.

1.6 Organisational Context - Clinical Drivers

Clinical Efficiency

The WYAAT Trusts have outlined the following points aimed at increasing clinical efficiency in their five-year strategy documents:

- Work with clinical leads to identify how things can change and set out clear improvements in service quality and efficiency. When necessary, invest but with a clear expectation on return.
- Work with commissioners, health and social care providers, patients and staff to develop strategies for integrated services and pathways across Leeds, challenging traditional organisational boundaries and looking for the best way to deliver care for patients. The Trust's clinical staff will lead this work and where it is better for patients to be treated in a different way, the Trust will work with partners to make this happen in a responsible and safe way which does not disadvantage or inconvenience patients.
- Reduce urgent admissions for frail elderly patients and those with long term conditions by up to 20%. Access to urgent advice and care will be available digitally, on the telephone and at urgent care centers.

Patient Safety

One of the WYAAT Trusts' strategic goals is to be the best for patient safety, quality and experience. In order to achieve this, the Trusts have committed to:

- Delivering safe clinical care through investment in ward and department nurse staffing—matching the highest standards in the UK.
- Investing in becoming a truly 24 hours a day, seven days a week regional service, having senior medical cover and diagnostics available in all in-patient facilities. This will mean changing the way the Trusts work and how they organise their workforce and facilities.
- Matching and exceeding the commissioners' published expectations, the NHS Constitution targets and regulators-care standards.
- Ensuring the basics, like cleaning, privacy and dignity, the hospital environment and patient information, are of the highest possible standard.
- Improving the way it handle patients' complaints and concerns ensuring it responds quickly, compassionately and in a transparent way, valuing each complaint as an opportunity to improve.
- Work with local health and social care partners, like GPs and community services, and acute providers further afield who are recognised for excellence, such as top-rated Salford NHS Foundation Trust, to ensure the Trust is delivering coordinated services for patients and that it is sharing best practice and adopting the latest innovations.
- Improve the safety of its patients and improve their experience of Trust services by implementing electronic patient records to ensure essential clinical information is available in a timely way to appropriate staff providing care.
- Continue to engage with patients and local people to support us to shape services around their needs and deliver the best possible care that works for them.
- Ensure that we deliver care in a patient-centered way by being compassionate and approachable. Around a third of our staff have already signed up to Dr. Kate Granger's

fantastic national campaign 'hello my name is'—encouraging them to start every conversation with a patient by introducing themselves and what they do.

- Recognising that to be the best hospitals we have to be the best partners and work together as a region.
- Report openly on performance and achievements, being truly accountable to the people we serve.

1.7 Organisational Context – High Profile Agenda Items

There are several high profile projects underway across the Trusts which need to be considered in the GS1 / PEPPOL adoption.

Virginia Mason Institute Partnership Initiative

The Leeds Teaching Hospitals NHS Trust is one of 5 NHS Trusts partnering with the Virginia Mason institute in the United States as part of an initiative launched in July 2015 by the Health Secretary and the TDA. The program will involve Trust doctors and nurses benefiting from the experiences of the renowned Virginia Mason Institute to[3]:

- **Increase nursing time spent with Patients:** *"After creating and implementing the Virginia Mason Production System, nurses were able to spend more time with their patients. Virginia Mason estimated that on average nurses spent about 35 percent of their time in direct patient care. After transforming its systems this increased to 90 percent."*
- **Optimise Material and Information Availability: "***Their approach is centred on enabling doctors and nurses to monitor patients and quickly attend to their needs. For example, the most commonly used supplies for each department were moved to patient rooms so nurses reduced walking back and forth to get them. Steps walked per day fell from 10,000 to roughly 1,200. They also developed innovative electronic dashboards to remind clinicians to address specific issues, for example to undertake a quality review for every critical care patient."*

The programme is grounded in Lean principles, and therefore the adoption of GS1 during this 5 year partnership will be a powerful enabler to leverage the most out of both programmes. Furthermore, as part of mobilisation of both GS1 / PEPPOL adoption and the Virginia Mason program there are synergies in terms of Governance, Change Management and Training (all yet to be defined) that will elevate the opportunity set for each.

Furthermore, the Mid Yorkshire Trust's Quality Improvement System (MYQIS) is designed to continually improve quality, and eliminate waste using the approach developed by the Virginia Mason Health System based in turn on the Toyota Production System. This is driven by Rapid Process Improvement Workshops (RPIWs).

The ethos of the RPIW is that staff involved develop and find their own solutions to the problems being addressed, and are empowered, with the full support of the organisation, to implement change using improvement cycles., or Plan, Do, Study, Act (PDSA). It is central to the MYHT

[3] Content sourced from: http://www.ntda.nhs.uk/blog/2015/07/16/nhs-tda-launches-ground-breaking-programme-with-top-us-hospital-to-transform-care-for-nhs-patients/

approach to building quality improvement and capacity and capability. MYQIS is used to improve the quality and value of services by looking at existing ways of operating, removing waste from processes and maximising activities that add value. Processes are observed, analysed and are redesigned by operational staff using the best ideas and concepts to ensure high quality service delivery. The legacy of each RPIW will be staff whom have learned new skills and participated in driving and taking control of improvement, participants then take this learning back to their own areas and can drive improvement in their own environment.

There are complimentary aspects of both programmes, however clear structure and ownership of the programmes, their integration, dependencies and potential areas of overlap should be carefully considered within the Governance structures.

Electronic Patient Record: Airedale - SystmOne (TPP)

Development of the Integrated HealthCare Record (IHR) functionality within SystmOne is undertaken by an in house Clinical Systems team within the IT Services department and also by TPP where required.

Integration Team

The Trust has a single in house Integration developer who is part time. In addition, a support contract also exists with Restart Consulting to monitor and maintain the Trust's Integration Engine. Our developer consistently works to HL7 standards and provides the interface between SystmOne (IHR) and other downstream clinical systems.

EPR Current Alignment with GS1/ PEPPOL Standards

There is an alignment between the phasing of GS1 / PEPPOL adoption and SystmOne:

- Phasing of GS1 / PEPPOL deployment and IT requirements are achievable within the existing structure of the IHR programme
- Bedside scanning is to be delivered within SystmOne, and the adoption of GS1 / PEPPOL requirements will accelerate this and therefore enable earlier realisation of benefits than would otherwise have been achieved through SystmOne alone
- The infrastructure requirements are to be considered across the programs and provision is in the case to ensure the Trust are positioned to adopt the scanning technology and incremental data volumes

Electronic Patient Record: Bradford, Calderdale & Huddersfield - Cerner Millennium

Full electronic patient record including:

- Patient administration
- Requesting and resulting of Radiology and Pathology studies
- Prescribing
- Patient documentation, including letters and discharge summaries
- Patient portal
- Development Team controlled by Cerner
- Integration Team: In house integration team with onsite hosted TIE
- EPR Current Alignment with GS1/ PEPPOL Standards: Unknown

Electronic Patient Record: Harrogate - WebV

Harrogate & District Foundation Trust are working in collaboration with North Lincolnshire and Goole NHS Foundation Trust with their WebV EPR solution, which will enable a single system for the recording, viewing and sharing of clinical and non-clinical patient information. WebV provides a clinical portal, which receives patient information from the other clinical IT systems (currently iCS (PAS), ePRO, Patientrack, CRIS, PACS, ICE and ChemoCare with ePMA (MedChart), SystmOne and others to follow) and presents them as a single patient record viewable from anywhere within the Trust's secure network from an electronic computer device. It provides an effective and efficient way of recording and viewing patient information, but also uses patient data more effectively to reduce duplication, re-use data where possible and provide clinicians with decision support tools to improve patient care and safety.

There is both an in-house development team based at Harrogate Hospital and an external development team based at North Lincolnshire and Goole NHS FT.

The teams consistently work to HL7 standards and to FHIR standards where required.

No specific work has yet been done on GS1/PEPPOL standards, but phasing of GS1/PEPPOL deployment and IT requirements are achievable within the existing structure of the WebV development programme. Bedside scanning has been planned for WebV pathology requesting development, and the adoption of GS1/PEPPOL requirements will accelerate this and therefore enable earlier realisation of benefits than would otherwise have been achieved through WebV alone.

Electronic Patient Record : LHCRE/ Leeds/ Mid Yorkshire Trusts - PPM+

Yorkshire and Humber Care Record Local Health and Care Record Exemplar:

> A virtual system has been developed across the local NHS Trusts / Foundation Trusts (The Leeds Teaching Hospitals NHS Trust, Leeds Community Healthcare NHS Trust and Leeds and York Partnership NHS Foundation Trust) the relevant CCGs (Leeds North CCG, Leeds South and East CCG and Leeds West CCG) and 106 of 107 GP Practices.

The development of the Leeds Care Record is linked closely to the PPM+ solution at The Leeds Teaching Hospitals NHS Trust, a home grown electronic patient record solution integrating multiple data sources both externally (Leeds Care Record) and internally (PACS, Sunquest ICE). The next phase of development is to extend this across the Yorkshire and Humber area as part of the successful Local Health and Care Record Exemplar (LHCRE) bid.

Mid Yorkshire are working with Leeds Teaching Hospitals to introduce PPM+ to the trust.

There is an alignment between the phasing of GS1 / PEPPOL adoption and PPM+ and other systems in the region:

- Phasing of GS1 / PEPPOL deployment and IT requirements are achievable within the existing structure of clinical systems utilised across WYAAT Trusts
- Bedside scanning was included as part of the Leeds phases of demonstrator site PPM+ development, and the adoption of GS1 / PEPPOL requirements across the other trusts in WYAAT will accelerate this and therefore enable earlier realisation of benefits

- The infrastructure requirements have been considered across the programmes and provision is in the case to ensure the Trusts are positioned to adopt the scanning technology and incremental data volumes

e-Procurement Strategy

Leeds Teaching Hospitals NHS Trust's e-Procurement Strategy (2015-2020) ensures implementation of and compliance with the Department of Health NHS e-Procurement Strategy (May 2014) at a local level. Significant work has already been achieved by the Trust in catalogue management, GS1 standards implementation, inventory control and supply chain efficiencies. This learning will be expanded upon across WYAAT to further extend the regional strategy in line with national strategy.

To support this, the e-Procurement Database (a local module of the national Scorpio system) has been developed to better aid clinical, operational, financial and procurement decisions within the organisation. It combines data from all P2P and inventory tools within the Trust to allow cross-sectional analyses of many facets of organisational efficiency and effectiveness. It incorporates several key performance indicators to monitor progress against metrics that include, but are not limited to:

- Procurement Efficiency:
  - Electronic requisitioning %
  - Catalogue requisitioning %
  - Contract requisitioning %
  - PO Auto-creation %
- Transactional Standardisation:
  - GTIN usage %
  - GLN usage %
  - Transmissions via PEPPOL Access Points %
- Operational Effectiveness:
  - Spend Reconciliation
  - Supplier Pareto Analysis
  - Budget Management
  - Excluded Device Identification

In addition to this, the Trusts have been working with suppliers at a national level to help develop a GS1 / PEPPOL compliance dashboard. This is able to monitor GS1 compliance of transactions and provide dashboard / management reports. It is currently being expanded to incorporate all Trust spend, not just via supplies.

Example outputs of the tool can be seen in ***Appendix 8.0***.

1.8 Organisational Context – Procurement and Supply Chain Drivers

Based on a review of LTHT compared to national averages, assessing against the key capabilities and enablers of leading procurement functions across all sectors, LTHT was found to be well regarded in the organisation and has a good requisition to pay process in place:

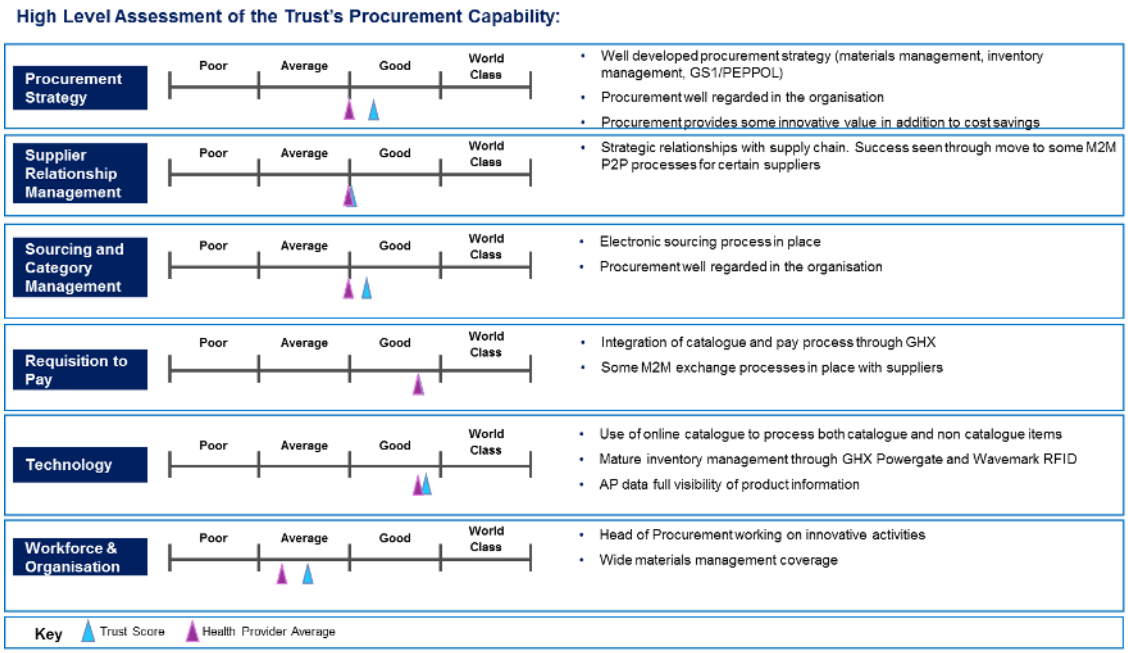


Figure 13: High Performance Procurement Assessment (all sectors)

The Leeds Teaching Hospitals NHS Trust has Trust wide materials management coverage, and mature inventory management using GHX PowerGate and Wavemark RFID. However these processes will need to be re-evaluated as part of the regional WYAAT work.

LTHT is seen to be leading the way in supply chain processes across WYAAT and so work will be required to establish the same capability across the region. The other five Trusts have varied materials management capability and limited maturity in inventory management.

The WYAAT programme will specifically address this on a regional basis, bringing all six Trusts to the same consistent standard, allowing for freely available sharing of data and products between sites. In turn, clinical efficiency will increase and unwarranted costs such as loan kits will reduce. The sharing of clinical variance regionally will allow for improved patient outcomes and operational efficiency across the ICS.

A new regional supply chain solution including access point, catalogue & inventory will be required. This will allow for clinical, supply chain and operational staff to have both a shared view of product utilisation whilst also reducing clinical variation through shared reporting on practices. The data created will allow for pathways to proactively plan to improve efficiency, reducing wastage and improving outcomes.

1.9 Stakeholder Engagement

WYAAT has established broad buy in for the adoption of GS1 and PEPPOL. Prior to submission to the Trust Boards, the business case has been reviewed by the WYAAT Boards.

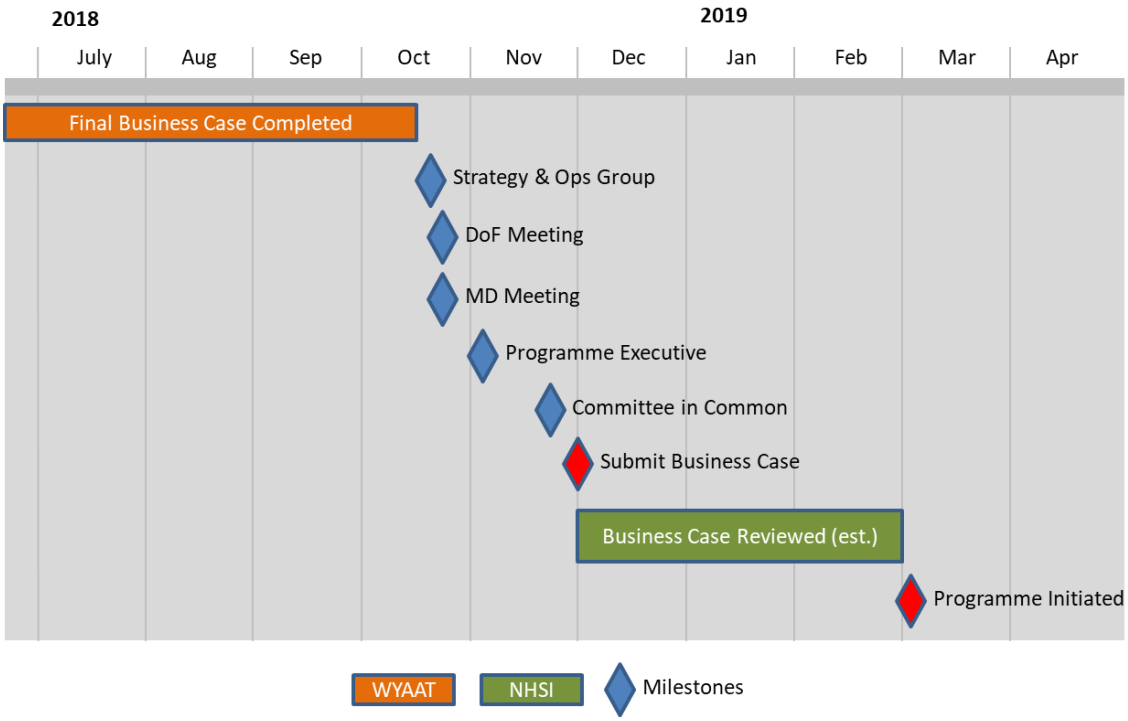


Figure 14: Business Case Approval timelines

WYAAT Directors of Finance Board, consisting of:

Name	Position
Andrew Copley	Director of Finance, Airedale
Matthew Horner	Director of Finance, Bradford
Gary Boothby	Director of Finance, Calderdale
Jonathan Coulter	Director of Finance, Harrogate
Simon Worthington	Director of Finance, Leeds
Jane Hazelgrave	Director of Finance, Mid Yorks

Figure 15: WYAAT Directors of Finance Board Members

WYAAT Medical Directors Board, consisting of:

Name	Position
Karl Mainprize	Executive Medical Director, Airedale
Dr Bryan Gill	Medical Director & Responsible Officer, Bradford
David Birkenhead	Executive Medical Director, Calderdale

David Scullion	Executive Medical Director, Harrogate
Yvette Oade	Chief Medical Officer, Leeds
Karen Stone	Executive Medical Director, Mid Yorks

Figure 16: WYAAT Medical Directors Board Members

WYAAT Strategy & Operations Board, consisting of:

Name	Position
Chair - John Holden	Director of Strategy and Integration (Bradford Teaching Hospitals NHS FT)
Sandra Shannon	Chief Operating Officer (Bradford Teaching Hospitals NHS FT)
Stacey Hunter	Director of Operations (Airedale NHS FT)
Matthew Graham	WYAAT Programme Director
Suzanne Hinchliffe	Chief Nurse / Deputy Chief Executive (Leeds Teaching Hospitals)
Simon Neville	Director of Strategy and Planning (Leeds Teaching Hospitals)
Helen Barker	Chief Operating Officer (Calderdale and Huddersfield NHS FT)
Anna Basford	Director of Partnerships and Transformation (Calderdale and Huddersfield NHS FT)
Matt England	Director of Planning and Partnerships (Mid Yorkshire Hospitals NHS Trust)
Trudie Davies	Director of Operations for Hospital Services (Mid Yorkshire Hospitals NHS Trust)
Robert Harrison	Chief Operating Officer (Harrogate and District NHS FT)
Jonathan Coulter	Finance Director and Deputy Chief Executive (Harrogate and District NHS FT)

Figure 17: WYAAT Strategy & Operations Board Members

WYAAT Committee in Common, consisting of:

Name	Position
Brendan Brown	Chief Executive, Airedale
Clive Kay	Chief Executive, Bradford
Owen Williams	Chief Executive, Calderdale
Ros Tolcher	Chief Executive, Harrogate
Julian Hartley	Chief Executive, Leeds
Martin Barkley	Chief Executive, Mid Yorks

Figure 18: WYAAT Committee in Common Members

WYAAT's desire to adopt GS1 and PEPPOL standards is not limited to the Procurement and Supplies department. Indeed, the Trusts have built a wide consensus across the organisations to ensure Trust wide support of GS1 / PEPPOL roll out.

Throughout the process of building this business case, the following key stakeholders have been identified at each Trust within WYAAT:

Airedale NHS Foundation Trust

Name	Position
Karl Mainprize	Medical Director
Rachael Stray	Associate Director of Operations
Amy Whitaker	Deputy Director of Finance
Andrew Leng	Interim IT Director
Oliver Golledge	Deputy Head of Procurement & Supplies
Linda Stewart	Lead Pharmacist Clinical Economy
Sherie Herpe	Matron, Theatres
Alan Sheward	Head of Digital Transformation
Angela McGarry	Matron for Patient Flow

Figure 19: Airedale Key Stakeholders

Bradford Teaching Hospitals NHS Trust

Name	Position
Matthew Horner	Director of Finance
Cindy Fedell	Director of Informatics
Julie Thrippleton	Deputy Head of Procurement
Collette Cunningham	Divisional General Manager – Medicine (Theaters)
David Smith	Director of Pharmacy
Dave Griffith	Informatics Programme Manager
Shahid Nazir	Strategic Head of Procurement
Nicole Jackson	Procurement Manager
Paul Austick	Supply Chain Manager
Sandra Shannon	Chief Operating Officer
Michael Quinlan	Deputy Director of Finance
Steve Blenkinsop	Associate Director of Estates & Facilities

Figure 20: Bradford Key Stakeholders

Calderdale and Huddersfield Foundation NHS Trust

Name	Position
Fiona Smith	Clinical Director of Pharmacy
Mandy Griffin	Managing Director Digital Health

Keith Redmond	Senior Portfolio Manager - THIS
Luke Whitley	Acting Up Chief Medical Engineer - Medical Physics
Margaret Metcalfe	Deputy Associate Director of Nursing - General Surgery
Maureen Overton	Associate Director of Digital Health & Cancer Services
Neil Staniforth	General Manager - Informatics
Neil Asling	Portfolio Manager - Information Management
Paula Crowther	Senior Finance Manager
Thomas Wareham	Systems Development Leader - Purchasing and Supplies
Stuart Baron	Associate Director of Finance
Matt Barker	Head of Procurement
Penny Daynes	EPR Lead Pharmacist

Figure 21: Calderdale Key Stakeholders

Harrogate and District NHS Foundation Trust

Name	Position
Robert Harrison	Chief Operating Officer Executive Sponsor
Andy Alldred	Clinical Director Long Term and Unscheduled Care / Director of Pharmacy Workstream Lead, Pharmacy
Paul Nicholas	Deputy Director of Performance and Informatics Workstream Lead, Informatics
David Earl	Consultant Anesthetist Clinical Lead for Scan for Safety/GS1
Beverley Curtis	Medical Devices Safety Officer Workstream Lead, Medical Physics
Jordan McKie	Deputy Director of Finance Finance Lead
Thomas Morrison	Senior Financial Accountant Workstream Lead, Purchase to Pay
David Sales	Deputy Sales Manager, Purchasing and Supplies Workstream Lead, Procurement/ Product
Phil Sturdy	Deputy Director of Estates, Harrogate Healthcare Facilities Management Workstream Lead, Place
Julie O'Brien	Safety Quality Service Delivery Manager (Day Surgery Unit)
Rhys Edwards	Safety, Quality and Service Delivery Manager, Main Theatres Theatres Lead Workstream Lead, Patient
Mikalie Lord	Programme Manager, PMO (Acting Implementation Lead)

Figure 22: Harrogate Key Stakeholders

Leeds Teaching Hospitals Trust

Name	Position
Julian Hartley	Chief Executive
Simon Worthington	Director of Finance
David Berridge	Medical Director, Operations
Liz Mellor	Medicines Governance Pharmacist
David Allwood	Procurement Lead Pharmacist
Richard Eyles	Pharmacy IT System Manager
Rob Armstrong	Theatres General Manager
Joan Ingram	Theatres CSU
Richard Corbridge	Chief Digital Information Officer
Chris Slater	Associate Director, Commercial & Procurement
Steve Barker	Supply Chain Manager
Stuart MacMillan	Scan4Safety Programme Lead

Figure 23: Leeds Key Stakeholders

Mid Yorkshire NHS Trust

Name	Position
Martin Barkley	Chief Executive
Jane Hazelgrave	Director of Finance
Heather Cook	Director of IT
Jason Matthews	Deputy Director of Finance
Catherine Craddock	Head of Procurement
Paul Curley	Deputy Medical Director
Trudie Davies	Chief Operating Officer
Mark Braden	Director of Estates & Facilities
David Melia	Director of Nursing
Lee Lane	Deputy Head of PMO
Jenny Stewart	Clinical Procurement Specialist
Kat Poole	Head of IT Programme Management
Vicky Hill	Head of Finance
Alex Zarneh	Head of Medical Physics
Julie Ellam	Associate Director of Pharmacy
Jackie Asquith	Theatre Team Leader

Angela Fairbank	Head of Sterile Services
Gemma Hinchcliffe	Matron
Rebecca Saville	Theatre Manager
Shaun Boffey	Associate Director of Contracts and Information Services
Jacqueline Thompson	Assistant Director of Nursing

Figure 24: Mid Yorks Key Stakeholders

1.10 GS1 / PEPPOL Current State Assessment

The current status regarding compliance with the core enablers and primary use cases are as below. Further details of the independent GS1 assessment can be found in ***Appendix 7.0***.

a) Core Enablers: Current status

Airedale NHS Foundation Trust

Enabler/ Identifier	Current System	System Description	Current Stage on 4 Phase Approach	Additional Information
Location Identification (GLN)	• Multiple systems	• To define a single GLN prefix	Phase 1	•
Catalogue Management/ Product Identification (GTIN)	• EDC (NHS SC) • EMIS Ascribe (Pharmacy)	• EDC used for supply chain ordering • EMIS provides catalogue and procurement services.	Phase 1	• Limited functionality in eDC – new system required
Patient Identification (GSRN)	• Dakota Printers (patient wristband printers)	• The trust has the capacity and capability to produce compliant patient wristbands although wristbands are currently not DCN 1077 compliant. Further work is required to consider a move towards A4 wristband printing	Complete	•

Bradford Teaching Hospitals NHS Trust

Enabler/ Identifier	Current System	System Description	Current Stage on 4 Phase Approach	Additional Information
Location Identification (GLN)	• MiCad	• Space management system	2	• Whilst 90% of doors/rooms within the Foundation Trust are identified this is not a GS1 compliant barcode.
Catalogue Management/	• GHX		0	• GS1 compliance currently unknown

Product Identification (GTIN)				
Patient Identification (GSRN)	• Cerner Millennium	• Electronic Patient Record System	2	• This system is believed to be capable of producing a GS1 compliant barcode. There are no current plans to implement this.

Calderdale and Huddersfield Foundation NHS Trust

Enabler/ Identifier	Current System	System Description	Current Stage on 4 Phase Approach	Additional Information
Location Identification (GLN)	•	•	0	•
Catalogue Management/ Product Identification (GTIN)	•	•	0	•
Patient Identification (GSRN)	• Cerner Millennium	• Electronic Patient Record System	0	• This system does not currently produce a GS1 compliant barcode. There are no current plans to implement this however the system is capable of doing so.

Harrogate and District NHS Foundation Trust

Enabler/ Identifier	Current System	System Description	Current Stage on 4 Phase Approach	Additional Information
Location Identification (GLN)	• Asbestos Management System	• Room numbers and barcodes are assigned to each room across the Trust.	Phase 0	• Awaiting confirmation as to whether the system is GS1 compliant.
Catalogue Management/ Product Identification (GTIN)	• Science warehouse(via NEP Oracle) • eDC/SOLO (NHS Supply Chain) • Elcom (NOE CPC) • Emis/Ascribe	• Catalogue solution provided by NEP as part of Oracle purchase to pay • eDC/SOLO used for NHS Supply Chain ordering including mat man • Elcom catalogues products on NOE CPC contracts that feeds into Science Wharehouse (note: many of these products transitioning	Phase 0	• The procurement team currently uses a central catalogue managed by Science Warehouse through NEP. Items listed on the catalogue are identified by the supplier item code; GTINs are used in some cases but not

		into future operating model arrangements & likely eventually to be transacted via NHS SC route) • Emis/Ascribe provides catalogue and procurement for medicines		mandatory. • Third party solution offered by Emis to manage interoperability going forward including GS1 and 2D bar code scanners
Patient Identification (GSRN)	• Silverlink PAS system	• The patient wristbands are printed from the Silverlink PAS system. The wrist band contains a linear barcode containing the patient's Trust Number not NHS number	Phase 0	• This generated patient wristband is not ISB 1077 compliant.

Leeds Teaching Hospitals NHS Trust

Enabler/ Identifier	Current System	System Description	Current Stage on 4 Phase Approach	Additional Information
Location Identification (GLN)	• Multiple systems	• A single organisational GLN prefix in place • GLNs have been allocated to all internal locations requiring a location code	Complete	
Catalogue Management/ Product Identification (GTIN)	• GHX Nexus • EDC (NHS SC) • JAC Pharmacy	• GHX Nexus is the Trust's catalogue management system • EDC used for supply chain ordering • JAC provides catalogue and procurement services	Complete with the exception of JAC Pharmacy	
Patient Identification (GSRN)	• PAS (DXC)	• The trust has the capacity and capability to produce compliant patient wristbands.	Complete	

Mid Yorkshire NHS Trust

Enabler/ Identifier	Current System	System Description	Current Stage on 4 Phase Approach	Additional Information
Location Identification (GLN)	Backtraq / Micad		0	Trust and PFI estate managed separately
Catalogue Management/ Product Identification (GTIN)	Nexus EDC JAC	Catalogue management EDC for Supply Chain JAC provides catalogue and procurement services. Inventory management of medicines included and recalls to batch number level included Automated storage and Medicines Dispensing systems interfaced with JAC	0	Majority of pharmacy orders are placed using powergate Robot stock management system uses barcodes
Patient Identification (GSRN)	N/A	The trust has capacity to produce compliant wristbands	0	

Figure 25: Current Status - Core Enablers

b) Primary Use Cases: current status

Airedale NHS Foundation Trust

Enabler/ Identifier	Current System	System Description	Current Stage on 4 Phase Approach	Additional Information
Purchase To Pay	• Oracle Cloud	• Purchase to pay system	Phase 1 Working towards PEPPOL	• Current Cloud issues through provider delaying roll out
Inventory Management	• None	• eDC Gold for materials management without Point of Care capability	Phase 1 partially implemented	
Product Recall	• eDC Gold	• Materials management system without Point of Care capability	Phase 1 partially implemented	• Limited roll out - Needs updating to be clinically led

Bradford Teaching Hospitals NHS Trust

Enabler/ Identifier	Current System	System Description	Current Stage on 4 Phase Approach	Additional Information
Purchase To Pay	• Oracle V12 (managed by Shared Business Services)	•	Phase 0	• GS1 compliance unknown • Majority of invoices received are hard copy received via the post • GTINs and G:Ns not currently used for invoicing purposes.
	• EMIS Ascribe	•	Phase 0	• 80% of Pharmacy orders are automatically placed via Medicator.
Inventory Management	• No overarching stock management system used within BTHFT	•	Phase 0	•
	• E-MAT Asset Management	• Used to manage 15,000 piece of kit across the Foundation Trust	Phase 0	• System does not currently produce a barcode of any type.
	• EMIS Ascribe	• Pharmacy management system includes management of Pharmacy	Phase 0	• GS1 compliance unknown • Product barcodes

Enabler/ Identifier	Current System	System Description	Current Stage on 4 Phase Approach	Additional Information
		stock levels		not used • In house manufactured pharmaceuticals labelled using EMIS but barcode not actively used. • Robot stock management system utilises barcodes (Not 2D barcode)
Product Recall	• GE Pacing Module	• Used to capture Cardiology implants used	Phase 0	• GS1 compliance unknown
	• Pharmacy - none	• Pharmacy recalls manual		
	• Other product recalls - none	• All other recalls believed to be manual.		

Calderdale and Huddersfield Foundation NHS Trust

Enabler/ Identifier	Current System	System Description	Current Stage on 4 Phase Approach	Additional Information
Purchase To Pay	• Oracle V12 (managed by Shared Business Services)	•	Phase 0	• GS1 compliance unknown • Majority of invoices received are hard copy received via the post • GTINs and G:Ns not currently used for invoicing purposes.
	• EMIS Ascribe	•	Phase 0	• some of Pharmacy orders are automatically placed via Powergate.
Inventory Management	• No overarching stock management system used within CHFT	•	Phase 0	•
	• EMIS Ascribe	• Pharmacy management system includes management of Pharmacy stock levels	Phase 0	• GS1 compliance unknown • Product barcodes not used • In house manufactured pharmaceuticals labelled using EMIS but barcode not used. • Stock loaded into robot
Product Recall		• All recalls believed to be manual.	Phase 0	

Harrogate and District NHS Foundation Trust

Enabler/ Identifier	Current System	System Description	Current Stage on 4 Phase Approach	Additional Information
Purchase To Pay	• Oracle cloud • Emis/Ascribe and Medecator (PEPPOL compliant)	• NEP transitioning to oracle 13 during 18/19 • Emis/Ascribe manages all medicine purchasing based on order algorithms, and EDI transmission via Medecator (PEPPOL compliant)	Phase 0	• 100% of medicine products purchased via Emis/Ascribe and Medecator. Awaiting confirmation on GS1 enablement
Inventory Management	• NHS Supply Chain Materials management • Bluespier stock module • Emis/Ascribe and Medecator (PEPPOL compliant) • Rowa Prolog and Automated Storage and Medicines Dispensing System • Medchart ePMA • ICE eDischarge	• Materials management top up service to clinical areas • Stock module bolted onto theatre management system. No current interface with oracle r12 • Emis/Ascribe manages all medicine purchasing (based on order algorithms and EDI transfer via Medecator (PEPPOL compliant)) and medicines inventory management including ward based supply • Automated storage and Medicines Dispensing system interfaced with Emis/Ascribe • Electronic prescribing and Medicines Administration System • Electronic Prescribing Discharge TTO and Letter generation	Phase 0	• No trust wide inventory system • 100% of medicine products purchased via Emis/Ascribe and Medecator. Awaiting confirmation on GS1 enablement. Requires upgrades to Rowa Prolog and Rowa interface incorporate 2D and GS1 bar code functionality • Medchart ePMA will require interface with Emis/Ascribe and GS1 compliance • ICE eDischarge will require interface with Medchart and GS1 compliance
Product Recall	• DATIX • SAMS – provided by CIRCO • Emis/Ascribe • Medchart ePMA	• Datix is an incident reporting tool • Product recall process in place; CAS Alerts and any alerts generated directly by manufacturers are broadcast via SAMS and collates an auditable response. • Local protocols for medicines recall	Phase 0	

Leeds Teaching Hospitals NHS Trust

Enabler/ Identifier	Current System	System Description	Current Stage on 4 Phase Approach	Additional Information
Purchase To Pay	• GHX Nexus • EDC (NHS SC) • JAC (Pharmacy)	• Catalogue Management	Complete with exception of JAC Pharmacy	
Inventory Management	• GHX Powergate • JAC (Pharmacy)	• Upgraded PowerGate now linking products to patients	Complete with exception of JAC Pharmacy	Further work required to capture products in the Electronic Health Record

Product Recall	• JAC (Pharmacy) • Datix	• Datix is incident reporting tool • Product recall processes in place	Complete with exception of JAC Pharmacy	

Mid Yorkshire NHS Trust

Enabler/ Identifier	Current System	System Description	Current Stage on 4 Phase Approach	Additional Information
Purchase To Pay	• Oracle	• Financial system	0	
Inventory Management	• JAC (pharmacy)		0	
Product Recall	• JAC (pharmacy) • Datix	• Datix is an incident reporting / risk management tool	0	

Figure 26: Current Status - Primary Use Cases

The Trusts (excluding Leeds Teaching Hospitals as a Scan4Safety demonstrator site) have been proactive in developing the core enablers and primary use cases, although in most areas they have not yet achieved stage 1 of the 4-phase approach.

1.11 Strategic Risks and Dependencies

At a high level, the key strategic risks and dependencies to successful adoption are:

- **IT and Systems Infrastructure:** A potential challenge raised by the WYAAT Informatics Leads is the incremental IT capacity required to adopt GS1 and PEPPOL adoption. The Electronic Health Records / Patient Administration Systems and the regional Care Record also drive incremental system infrastructure and bandwidth and therefore the incremental data storage requirements for GS1 / PEPPOL have been considered in this case.
- **Resource Availability:** A delivery team will need to be established which will rely on a reasonable level of recruitment to take place. A 2 month mobilisation phase has been built into the plan to facilitate the establishment of this team.
- **Organisational:** West Yorkshire Association of Acute Trusts is addressing a significant financial challenge alongside a number of major initiatives referenced above (The Carter Review, the Virginia Mason Institute engagement). While the Association sees the considerable opportunity from running these programs in parallel to GS1 / PEPPOL, both in terms of the programme synergies and enablement it will provide, the level of change within the organisation has not been underestimated and is appropriately considered in this case.
- **External Market:** The speed and level of adoption is explicitly linked to the development pace of the supplier market in becoming GS1 / PEPPOL compliant.
- **Other Programmes:** Other WYAAT or individual Trust programmes may have an impact upon delivery and will need to be managed accordingly.

People	Systems	External Market
Resource availability across the Trusts	Pre-requisite systems in place such as shared catalogues	Ability / speed of suppliers to become GS1 compliant
If resources are unavailable / not suitable, ability to source resources externally	Ability for interfaces to be developed between key systems	Suppliers enabled for PEPPOL messaging
Full commitment from programme teams	Suppliers enabled for PEPPOL messaging	

Figure 27: Key Strategic Risks

2. Economic Case

An accelerated deployment of GS1 core enablers, primary use cases and PEPPOL electronic messaging standards, supported by funding from NHS Improvement, will deliver adoption within 36 months capitalising on the existing materials management capability, the regional care record programme and well developed e-procurement capabilities. This option is highly recommended by this business case.

The economic case will compare two options and make a recommendation for the preferred way forward which best meets the requirements of Trust through an assessment of the benefits and risks of each option. The options considered are:

1. **Do Nothing (do the same)**
   The Trust continues with its current activities
2. **NHS Improvement Funded**
   Funding for the implementation of the core enablers and primary use cases would be funded by NHS Improvement

This business case acts as a standalone business case for WYAAT and is not dependent on a reduction in cost as a result of multiple demonstrator sites being able to leverage better costs (e.g. for interface, systems integration/development).

2.1 Scenario Summary

Option 1: Do Nothing

WYAAT would continue with existing programmes, which have some synergies to GS1 compliance. The existing projects, if delivered as currently planned would cover:

- Electronic Health Records – would achieve Phase 1 and part of 2, of Patient Identification phases:
  - Adoption of GS1 compliant wristbands for all in-patients
  - In-Trust EPR systems with the ability to store GS1 identifiers
  - It does not yet cover the scanning of products and locations at the point of care using the appropriate hardware, while this may come later there is currently no funding in place to do this.
- Materials and Inventory Management – regionally would not surpass Phase 0 of Inventory Management recognising the existing gaps across the Trusts that would need to align with common processes. Given the development of materials management and e-Procurement in Leeds, this development is considered business as usual and so would be delivered over the next 2-3 years, however it is not a formal programme of deployment across WYAAT:
  - Inventory Management would not be deployed regionally
  - Products would not be tracked to patients
- Materials Management Rollout – materials management already has high coverage, there is however a need to agree a standardise system strategy (EDC vs. PowerGate) which will develop compliance on a business as usual basis

- Standard process across all Trust sites unlikely
- Would not use GTINs and would operate using either NHS Supply Chain EDC

Estimated GS1 Maturity End State for Option One

Enabler/Use Case	Approx. End State GS1 Maturity	Comment
Patient Identification	1	Patients could receive GS1 wristbands as part of the electronic health record in some Trusts, but all of WYAAT would not be compliant. While point of care scanning is desirable, this is not currently funded.
Catalogue Management	0	Increased products proliferation on catalogue system in LTHT but not across WYAAT.
Location Identification	1	GLNs could be deployed but are currently not funded regionally. They would not be widely utilised in systems or for physical identification.
Inventory Management	0-1	Potential to streamline roll out of materials management processes but currently unfunded posts would be required. Inventory management solutions would not be deployed.
Purchase to Pay	0-1	Continued improvement of compliance with external integration may be implemented in time but without appropriate investment in systems, this would be difficult.
Product Recall	0-1	No improved traceability regionally with mainly manual paper processes in place.

Figure 28: Option One End State Against Core Enablers and Use Cases

(+) Key Advantages	(-) Key Disadvantages
• No investment incremental to existing approved programmes would be required	• WYAAT would not be fully GS1 / PEPPOL compliant and wouldn't derive the benefits of implementation • Opportunity loss in many respects of integration with other strategic programmes (Yorkshire Care Record, Carter Review, Virginia Mason Institute)

Figure 29: Option One Key Advantages and Disadvantages

Option 2: NHS Improvement funded implementation

The WYAAT Trusts would deliver the core enablers and primary use cases supported by the NHS Improvement funding, implementing to Phase 4 across 36 months as follows:

- **Mobilisation:** March 2019 – April 2019
- **Phase 1:** May 2019 – January 2020
- **Phase 2:** February 2020 – October 2020

- **Phase 3:** November 2020 – July 2021
- **Phase 4:** August 2021 – March 2022

An e-Procurement Programme Lead and a Clinical Programme Lead have been defined, with external Programme Delivery support and Inventory Design Support. Internal programme support roles across all impacted areas have been defined, and backfill requirements identified for the cross-Trust stakeholder representatives. Training and standards support from GS1 has also been provisioned for.

The accelerated scenario will deliver higher benefits. This is the lowest risk option and the Trusts would be able to drive the adoption agenda with key system providers rather than rely on a critical mass of users, as well as backfill strong internal teams with proven abilities to deliver major change programmes into key programme roles.

Programme manager, work stream support and internal programme support roles have been defined, and resource requirements identified for the cross-Trust stakeholder representatives. Training and standards support from GS1 has also been provisioned for as well as professional services support for specific activities such as design and programme guidance.

The programme team would formally report to a Steering Group that would be setup specifically for this programme as there isn't currently an appropriate Governance function that would incorporate the representation required for this initiative.

Estimated GS1 Maturity End State for Option Two

Phase 4 across all core enablers and primary use cases.

(+) Key Advantages	(-) Key Disadvantages
• WYAAT would have a well-developed eProcurement capability, established inventory management and will be able to link with the electronic health record projects for the adoption of GS1. • There is an opportunity to leverage the underlying systems and capability and driving the change through a formal program will allow WYAAT to adopt GS1 / PEPPOL .	• May have an impact on existing programmes, however this is deemed to be minimal

Figure 30: Option Two Key Advantages and Disadvantages

2.2 Quantitative Summary

	Do Nothing	NHS Improvement funded implementation
Programme Delivery Period	N/A	36 months
Total Investment Required	£0.0	£14,952k

One Time Benefits	£0.0	£9,141k
Annual Incremental Operating Cost	£0.0	£250k
Annual Non-Pay Benefit	£0.0	£10,069k by 2027
Annual Pay Benefit	£0.0	£2,388k by 2027
Net Recurrent (Cost) / Benefit	£0.0	£12,400k by 2027
End State GS1 Maturity (Average Phase across six enablers / use cases)	0-1	4

Figure 31: Quantitative Option Comparison

2.3 Qualitative Summary

Soft Benefits

	Do minimum	NHS Improvement Funded
Reputation	*Same*	*Significant*
Hub of Learning	*Same*	*Significant*
Workforce satisfaction	*Same*	*Significant*
Patient satisfaction	*Worse (expectations are increasing)*	*Significant*
Overall assessment	***Same***	***Significant***

Figure 32: Qualitative Option Comparison

- **Reputation –** ability to be able to demonstrate being a leader in innovation and modern models of care.
- **'Hub of Learning' –** best practices from all areas of the organisations such as clinical, IT, and procurement could be shared to drive meaningful change across the NHS.
- **Workforce satisfaction –** interviews with Trust staff have highlighted that the GS1 and PEPPOL capabilities would deliver significant improvements in staff satisfaction. This is due to better quality and confidence in information, more robust patient safety processes and reduction in manual interventions.
- **Patient satisfaction –** interviews with Trust staff have indicated that GS1 and PEPPOL capabilities would increase patient confidence in the safety of the service they are provided with. This is due to more robust safety measures in place and faster access to information. Furthermore, a particular challenge for the region given the scale of the organisations, is the ability to quickly locate patients throughout the Trusts which GS1 will make far more efficient.

Indirect Benefits

Indirect benefits are those benefits that are realised once GS1 and PEPPOL standards are in place, but are not a direct consequence of implementation.

Benefit	Do minimum	NHS Improvement Funded
Stock standardisation	*Same*	*Significant*
Strategic sourcing	*Same*	*Significant*
Workforce productivity	*Same*	*Significant*
Theatre utilization	*Same*	*Significant*
Upstream supplier chain efficiency	*Minimal*	*Significant*
Patient level costing	*Same*	*Significant*
Clinical practice analytics	*Same*	*Significant*
Demand Aggregation	*Minimal*	*Significant*
Overall assessment	***Same***	***Significant***

Figure 33: Indirect Benefits Options Comparison

- **Stock standardisation –** implementation of GS1 and PEPPOL standards will provide greater visibility of what products are used in each area of the Trusts. This will facilitate the standardisation of products e.g. gloves, extension lines, syringes which will release cash savings.
- **Strategic sourcing –** implementation of GS1 and PEPPOL standards could lead to better product price benchmarking against different Trusts. This would facilitate the Trusts' approach to strategic sourcing and identification of potential savings in a more efficient way, particularly across multiple supply routes.
- **Workforce productivity –** the use of barcodes could be extended to clinical staff/consultants to measure outputs and productivity.
- **Theatre utilisation –** a combination of barcoding patients and consultants in a GS1 and PEPPOL compliant manner could allow the Trust to analyse variation in clinical practice and identify optimal practices for theatre utilisation.
- **Upstream supply chain efficiency –** the adoption of GS1 and PEPPOL standards will also bring cost benefits to suppliers. The Trusts should be able to use this as a lever in negotiations for suppliers to pass on a proportion of their savings.
- **Patient level costing –** the capability of linking product to patient will allow the Trusts to analyse patient level costing. This will allow the Trusts to improve its budget forecasts, identify savings opportunities and improve their coding.
- **Clinical practice analytics –** linking patient to product could also lead to analysis in clinical practice between similar patients treated by different clinicians. This could lead to improved patient outcomes and use of lower cost products and ultimately improved Theatre and bed utilisation.
- **Demand aggregation –** the implementation of large scale catalogues should lead to better quality and standardised data across the NHS. This will allow Trusts to collaborate together when going out to market to renew contracts for products already bought across multiple Trusts. This would allow Trusts to commit to larger volumes and therefore all benefit from lower prices.

2.4 Risk

The table below compares the key risks associated with the two options relative to one another, and identifies critical mitigating actions required to minimise the impact of each risk.

Risk	Do minimum	NHSI Funded	Mitigation
Benefits are not realised at the speed required	High	Low	▪ Ensure appropriate governance and resources are in place to prompt timely delivery
Governance is not effective leading to a poor implementation	N/A	Low	▪ Ensure a Steering Group and Implementation Board is established
There is a risk that internal resources and/or support is not made available as required	N/A	Low	▪ Ensure that sufficient proportion of budget is allocated for resources/support
There is a risk that external suppliers do not make the necessary changes or adhere with the overall compliance timetables set out by the Department of Health & Social Care.	N/A	Medium	▪ Escalate to NHS Improvement early
There is a risk that the current systems used across the Trusts are unable to handle the required data elements or of handling the proposed interfaces leading to the need to develop or replace key systems.	N/A	Low	▪ Ensure conversations are had with key system providers before implementation begins to confirm required changes
Key personnel involved and engaged in the programme leave the Trusts leading to delays in programme delivery and reduction in expertise.	N/A	Low	▪ Develop robust contingencies and training plans to ensure relevant skills and expertise are developed and maintained
Region-wide inventory management standardisation is a significant undertaking given scales involved.	N/A	Medium	▪ Ensure plan has region-wide and cross-departmental buy-in and issues are resolved in a timely manner
Overall assessment	**High**	**Low**	

Figure 34: Risks and Mitigations Overview

2.5 Recommendation

It is recommended that **option two, NHS Improvement funded**, is the preferred way forward due to several factors:

- Ability to demonstrate implementation within a 3 year timeframe and the benefits being released to the wider NHS
- Ensure full adoption of the 4 phases
- Ability to finance a robust delivery team

- Ensure approval for the implementation of new materials management & inventory management teams

In summary, The West Yorkshire Association of Acute Trusts is well positioned to become GS1 compliant site due to the following factors:

- **Fundamental Systems are in place:** Many of the organisational support and systems fundamentals are established (Procurement and Supply chain, IT Strategy) however there is still a significant opportunity to drive benefits within the Trusts through full adoption and standardisation.
- **Timing is ideal given potential integration with complimentary programs:** A significant opportunity to leverage parallel and complimentary programs alongside the adoption of GS1 / PEPPOL, including involvement in the Carter Review, engagement with the Virginia Mason Institute and the development of the Leeds Care record extension across Yorkshire and Humber.
- **A change in culture is being embedded throughout the organisations:** through the adoption of standards which define how the Trusts will work together to deliver the best outcomes for patients.
- **The financial need to embed sustainable change has never been greater:** The transformation strategy being pursued recognises the importance of embedding sustainable change, which goes beyond in-year savings. The Board see GS1 and PEPPOL adoption as a way of embedding benefits beyond 2022.

3. Financial Case

A 3-year programme is planned, with an anticipated total investment of £14.952m that will deliver one off benefits of c.£9.1m and recurrent benefits of £89.8m over 10 years.

The timetable and profile of capital expenditure is set out below.

2018/19	2019/20	2020/21	2021/22	Total
£'000	£'000	£'000	£'000	£'000
1,000	5,000	5,000	3,952	14,952

Figure 35: Timetable & profile of capital expenditure

The expected benefits are set out below.

£,000	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24 onwards	Total
Gross Revenue Savings							£0
· Of which Pay	£0	£521,056	£1,313,433	£1,903,538	£2,131,106	£11,413,700	£17,282,833
· Of which Non pay	£0	£1,447,378	£5,885,665	£8,115,250	£8,986,591	£48,130,061	£72,564,944
· Of which Other – *please add rows and give more detailed split if appropriate*	£0	£9,141,335	£0	£0	£0	£0	£9,141,335
Additional Revenue costs (*please specify*)							£0
Additional Revenue lifecycle costs							£0
Additional Capital lifecycle costs							£0
Net Revenue savings	£0	£11,109,769	£7,199,097	£10,018,788	£11,117,696	£59,543,761	£98,989,111

Figure 36: Benefits Summary

3.1 Financial Case Summary

Financial Summary of costs and benefits

1. Costs and funding sources							
£,000	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24 onwards	Total
Capital requirement for this scheme (i.e. the bid from the fund for the scheme detailed within this template).							
Sources of funding:							
· Internal cash/ depreciation	£0	£0	£0	£0	£0	£0	£0
· Land/property disposals	£0	£0	£0	£0	£0	£0	£0
· DHSC borrowing	£0	£0	£0	£0	£0	£0	£0
· DHSC PDC	£1,000,000	£5,000,000	£5,000,000	£3,952,000	£0	£0	£14,952,000
· Private finance (e.g. LIFT)	£0	£0	£0	£0	£0	£0	£0
· Other	£0	£0	£0	£0	£0	£0	£0
Total capital requirement for this scheme	£1,000,000	£5,000,000	£5,000,000	£3,952,000	£0	£0	£14,952,000
Total bid requirement for this scheme (DH borrowing and PDC)	£1,000,000	£5,000,000	£5,000,000	£3,952,000	£0	£0	£14,952,000

3. Non recurrent revenue costs

£,000	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24 onwards	Total
Total Revenue Costs							£0
Breakdown							£0
· Staff Costs							£0
· Non Staff Costs (please detail if appropriate)							£0

4. Current income, activity and expenditure of service areas to which the scheme relates

(a) Do nothing scenario

£,000	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24 onwards	Total
Income from commissioners							£0
Expenditure							£0
· Of which pay	£0	£14,400	£14,688	£14,982	£15,281	£81,115	£140,467
· Of which non pay	£0	£193,440	£197,309	£201,255	£205,280	£1,089,651	£1,886,935
· Of which lifecycle maintenance							£0
· Of which capital charges (PDC and depreciation)							£0
TOTAL	£0	-£207,840	-£211,997	-£216,237	-£220,561	-£1,170,767	-£2,027,402
EL Activity							£0
NEL Activity							£0
OP Activity							£0
A&E Activity							£0
Other activity (please specify and add more rows if required)							£0

(b) If scheme approved

£,000	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24 onwards	Total
Income from commissioners							£0
Expenditure							£0
· Of which pay							£0
· Of which non pay	£250,000	£897,781	£912,691	£928,553	£945,625	£5,064,543	£8,999,192
· Of which lifecycle maintenance							£0
· Of which capital charges (PDC and depreciation)	£0	£133,250	£796,000	£1,441,250	£1,929,354	£8,861,790	£13,161,644
TOTAL	-£250,000	-£1,031,031	-£1,708,691	-£2,369,803	-£2,874,979	-£13,926,333	-£22,160,836
EL Activity							£0
NEL Activity							£0
OP Activity							£0
A&E Activity							£0
Other activity (please specify and add more rows if required)							£0

(c) Difference between (a) and (b)

£,000	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24 onwards	Total
Financial difference between (a) and (b) (ie net	-£250,000	-£823,191	-£1,496,69	-£2,153,56	-£2,654,41	-£12,755,566	-£20,133,4

7.1

savings from the scheme)			4	6	7		34
Activity difference between (a) and (b) (ie net demand management from scheme):							
EL Activity	0	0	0	0	0	0	0
NEL Activity	0	0	0	0	0	0	0
OP Activity	0	0	0	0	0	0	0
A&E Activity	0	0	0	0	0	0	0
Other activity (please specify and add more rows if required)	0	0	0	0	0	0	0

5. Detail of savings generated by the scheme

£,000	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24 onwards	**Total**
Gross Revenue Savings							£0
· Of which Pay	£0	£521,056	£1,313,433	£1,903,538	£2,131,106	£11,413,700	£17,282,833
· Of which Non pay	£0	£1,447,378	£5,885,665	£8,115,250	£8,986,591	£48,130,061	£72,564,944
· Of which Other – *please add rows and give more detailed split if appropriate*	£0	£9,141,335	£0	£0	£0	£0	£9,141,335
Additional Revenue costs (*please specify*)							£0
Additional Revenue lifecycle costs							£0
Additional Capital lifecycle costs							£0
Net Revenue savings	£0	£11,109,769	£7,199,097	£10,018,788	£11,117,696	£59,543,761	£98,989,111

Figure 37: Financial Summary

3.2 Investment Requirements

The West Yorkshire Association of Acute Trusts have a number of the elements in place to underpin the adoption of the core enablers and primary use cases. Additional investment in IT, Interface and Systems development and Hardware will be required, as well as short term implementation resources to run a complex programme and complete the necessary systems and data structure changes needed for adoption.

The investment requirements break down across the Phases as follows:

	Mobilisation & Phase 1 (% for Phase) / £0,000s	Phase 2 / £0,000s	Phase 3 / £0,000s	Phase 4 / £0,000s	Total / £0,000s
Point of Care Data Capture	856 (25%)	2,168 (51%)	2,168 (42%)	514 (24%)	**5,706** (38%)
Electronic Health Record & Pharmacy Integration	1,217 (35%)	685 (16%)	1,141 (22%)	761 (36%)	**3,804** (25%)
Data Centre Implementation	325 (9%)	824 (19%)	824 (16%)	195 (9%)	**2,168** (15%)
Supply Chain Delivery	939 (27%)	528 (12%)	880 (17%)	587 (28%)	**2,934** (20%)
Contingency	109 (3%)	61 (1%)	102 (2%)	68 (3%)	**341** (2%)
Total	**3,446**	**4,266**	**5,115**	**2,124**	**14,952**
% by Total	(23%)	(29%)	(34%)	(14%)	(100%)

Figure 38: Investment Requirements by Phase

Point of Care Data Capture

Element	Internal / External	Likely Case / £0,000s	Rationale
Point of Care Barcode Scanners	External	2,440	· Provision of devices for point of care scanning, average £600/device in ~4,000 locations
External provision	External	2,763	· Programme Design / Programme Management support to deliver Point of Care data capture across core workstreams: - Procurement and supplies - Pharmacy - Estates - IT - Nursing - Operations
Internal provision of System Updates & Integration	Internal	502	· Based on external backfill resource model calculated for enablement of : - Ordercomms - Bloodtrack - Tray traceability
Total		**5,706**	

Figure 39: IT, Interface and Systems Development Investment Summary

Electronic Health Record & Pharmacy Integration

Element	Internal / External	Likely Case / £0,000s	Rationale
Interface Developments	Assume £600 / day for blended internal / external development time	646	· Interface development to ensure consistent data sharing across regional supply chain solution and electronic health records. Includes both external supplier costs and internal development costs
Electronic Health Record & Pharmacy Process Mapping & Automation	External	502	· Digital support for core programme team to deliver interface requirements: - Electronic Health Record & Point of Care Design Lead - Clinical Process Design Support
Point of Care Integration	Internal	1,722	· Internal development time to integrate GS1 scanner functionality with Electronic Health Record Solutions
Pharmacy Development	External	359	· Development costs to upgrade the Pharmacy supply chain solutions, JAC & Ascribe to be GS1 compliant (additional benefit for the Falsified Medicines Directive, FMD)
System Updates	External	359	· Provision for additional system development costs such as NEP, Ordercomms, Bloodtrack. GS1 ready configuration is already planned for other key systems providers (Inventory, EHR) and local clinical systems will take Patient / Location feed from EHR.
PIM Integration	External	215	· Assume an initial integration to provisional PIM via Catalogue provider / Pharmacy provider, then the full PIM · Dependent on external commercial models which are not yet defined
Total		**3,804**	

Figure 40: Electronic Health Record & Pharmacy Investment Summary

Data Centre

Element	Internal / External	Likely Case / £0,000s	Rationale
Data Centre	External	598	· Required to ensure consistency of shared data across all Trusts for enhanced supply chain management and operational reporting
Data Centre Provision	Internal	1,570	· Based on provision of process mapping, development and implementation to facilitate regional data centre
Total		**2,168**	

Figure 41: Data Centre Investment Summary

Supply Chain Implementation

Element	Internal / External	Likely Case / £0,000s	Rationale
Product Racking & Storage - Complex	External	374	· Identified 100 locations with complex upgrade requirements, circa £3,800 per location
Product Racking & Storage - Medium	External	523	· Identified 300 locations with medium upgrade requirements, circa £1,700 per location
Supply Chain Solution	External	1,220	· Procurement of a regionally shared supply chain solution including access point, catalogue and inventory solution
Supply Chain Process Engineering & Implementation	Internal	816	· Based on external backfill resource model calculated for enablement of : - Catalogue Management - Inventory Management - Product Recall Efficiency
Total		**2,934**	

Figure 42: Supply Chain Investment Summary

Contingency

Element	Internal / External	Likely Case / £0,000s	Rationale
GS1 Support	External	126	· Provision for GS1 External support to define standards and support Steering Committee
IT Contingency	Internal	215	· Contingency built in for IT costs only for incremental development time
Total		**341**	

Figure 43: Contingency Investment Summary

3.3 Incremental Operating Costs

There are incremental operating costs that will need to be taken on by the Trusts; on-going systems licenses, maintenance charges and depreciation per Trust.

Non-Pay

Element	Internal / External	Likely Case	Rationale
PEPPOL Access Point	External	£100,000	· Assume an ongoing license provision for PEPPOL access · Dependent on external commercial models which are not yet defined
Inventory Annual Support	External	£150,000	· Assume an ongoing licence beyond the original implementation · Dependent on external commercial models which are not yet defined
Point of Care Data Capture	External	£244,000	· Assume on maintenance costs and depreciation of ~10%
Electronic Health Record & Pharmacy Integration	External	£330,000	· Assume on maintenance costs and depreciation of ~10%
Data Centre	External	£59,800	· Assume on maintenance costs and depreciation of ~10%
Total		**£883,900**	

Figure 44: Non-Pay Incremental Cost Summary

Pay

No incremental pay costs are expected in the long term as a result of GS1 / PEPPOL adoption. All staff deployed will either form part of the temporary programme team or be assimilated into the business as usual supplies functions.

3.4 Benefits

Breakdown of benefits are further detailed in ***Appendix 10***.

Element	Likely Case
One Time	£9,141,335
Non Pay	£72,564,944
Pay	£17,282,833

Figure 45: Benefits Summary over 10 year project

One Time

Element	Likely Case	Rationale
Inventory Reduction - Pharmacy	£3,927,194	Based on total days on hand reduction from 30 days to 21 days
Inventory Reduction – Wards/Clinics	£1,982,222	Based on total days on hand reduction from 80 days to 21 days
Inventory Reduction - Theatres	£3,231,919	Based on total days on hand reduction from 80 days to

		21 days
Total	**£9,141,335**	

Figure 46: One Time Benefits Summary

Non-Pay

Element	Likely Case	Rationale
Reduce Adverse Drug Events	£23,324,446	Range of reduction based on completing the core enablers. DHSC estimate 25% of the total reduction will result from completing the core enablers
Material Wastage and Obsolescence - Pharmacy	£11,133,752	End-to-end process in place, centralised inventory management and early separate plans for point of care IM in high value areas, therefore no incremental benefit assumed
Material Wastage and Obsolescence – Wards/Clinics	£5,619,680	Materials management in place across the Trusts, some spend to be incorporated but minimal incremental benefits assumed 2% benefits of areas currently materially managed through expansion of scope.
Material Wastage and Obsolescence - Theatres	£9,162,620	Two areas have high control inventory management, opportunity in remaining location
Adverse Drug Effects	£23,324,446	Based on analysis of Datix data, identifying only those incidents relating to medicines that would be impacted by GS1 (e.g. wrong drug). DHSC estimate a further 25% reduction will occur when core enablers + primary use cases have been fully implemented.
Total	**£72,564,944**	

Figure 47: Non-Pay Benefits Summary over 10 year project

Pay

Element	Likely Case	Rationale
Reduce data management costs	£6,246,807	Discrete processes that can be removed as a result of GS1 / PEPPOL adoption. Based on process map and time study.
Reduce recall processing costs	£4,268,652	
Automate purchase 2 pay processes	£6,767,374	
Total	**£17,282,833**	

Figure 48: Pay Benefits Summary over 10 year project

Soft – Time to Care Benefits

(These benefits are not included in overall financials but expressed as # hours released to care)

Element	Conservative Case (clinical hours)	Likely Case (clinical hours)	Best Case (clinical hours)	Rationale
Adverse Drug Effects	96,500	120,500	144,500	• Academic research estimates of cost of ADEs, assuming 70% of benefit manifests in soft benefits
Incident Reporting Time	43,000	53,500	64,500	• Using interview and process mapping calculation
Hours' Time to Care	**139,500**	**174,000**	**209,000**	

Figure 49: Soft Time to Care Benefits Summary

4. Commercial Case

A multidisciplinary team has been identified which takes in skills from across the six Trusts (clinical, pharmacy, estates, supplies and informatics) and should be led and managed by an Implementation Team comprised of a Programme Lead, supported by Trust specific programme managers and external advisors to fill specific programme roles as well as core subject matter experts within the Trust.

The commercial case outlines the key considerations to set up and establish the programme and ensure any commercial requirements are outlined.

4.1 Commercial Relationships

The Leeds Teaching Hospitals NHS Trust has well developed relationships with key commercial partners through their work as a Scan4Safety demonstrator site, that will be engaged in adopting GS1 / PEPPOL standards. Indeed, the Trust is a beta test site for many GHX systems releases and in particular are testing the next version releases with GS1 fields and functionality. We anticipate the WYAAT region will work with the following partners throughout the four phases of GS1 adoption:

- System vendors and supplier communication and translation of GTINS and GLN codes:
  - JAC
  - GHX
  - K2
  - NEP (Oracle)
  - Catering
  - SystmOne
  - Clinisys Labcentre (Pathology)
  - EDC Gold
  - EDC
  - EMIS (Pharmacy)
  - Equip (medical device register)
  - Theatreman
  - SSD Tracking System (HealthEdge)
  - eTrace
  - Omnicell
  - North east patches (NEP) Provide purchase to pay system including catalogue solution (science warehouse)
  - NHS Supply Chain (transitioning as part of the Future Operating Model (FOM) to new provider under NHS Business Services Authority) who supply and provide system/s for the majority of consumable items ordered
  - Backtraq, estates management
  - Becton Dickinson U.K. Limited (ROWA Automated Storage and Dispensing System)
  - Emis/Ascribe
  - Medecator

- Medchart ePMA
- ICE eDischarge
- Cerner - EPR
- MiCad – Location identification
- Shared Business Services (Oracle)
- EMIS – Pharmacy
- GaneData – Stock and asset management

- System vendors engagement for access point changes/updates:
  - JAC
  - GHX
  - NEP (Oracle)
  - EMIS (Pharmacy)
  - Nep science warehouse
  - Becton Dickinson U.K. Limited (ROWA Automated Storage and Dispensing System)
  - Emis/Ascribe
  - Medecator
  - Medchart ePMA
  - ICE eDischarge

It is anticipated that WYAAT sites can work together with the vendors/suppliers to harmonise changes required and minimise the cost to the NHS. To be clear, the case assumes standalone relationships.

4.2 Systems Overview

WYAAT Current Systems

The West Yorkshire Association of Acute Trusts have a number of commercial relationships with systems hosts, which need to be managed and tracked during implementation. The GS1 identifiers must be able to feed through specific in-Trust systems that require some interface development (see below).

Trust	PAS	EHR	Pharmacy	ePrescribing	Pathology	Pharmacy Cabinets	Pharmacy Robot	Estates
Systems	3	4	2	3	1	4	2	4
	Clinicom Camis Silverlink	Cerna PPM+ Web V SystmOne	Ascribe JAC	EMIS eMM MedChart TPP ePMA	Sunquest ICE	Omnicell Cardinal Mediwell Pyxis	BD Mach4 Arx	MICAD CAD Backtraq Maximo

Trust	Theatres	EBME	Finance	Catalogue	Inventory	CSSIC	RFID
Systems	3	3	1	2	4	2	2
	Galaxy Bluespier TheatreMan	eQUIP eMAT Avenys	Oracle eFinancials	Nexus Science Warehouse	EDC Bluespier Spacetrax PowerGate	Bbraun Scantrack Health Edge	Aero Scout Internal Development

Figure 50: WYAAT Systems Overview

	PAS	ePR	Pharmacy	ePrescribing	Pathology	Pharmacy Cabinets	Pharmacy Robot	Estates
Airedale		TPP system 1	Ascribe	TPP epma	Sunquest Ice	None	ARX	FSI Concept
Bradford	Cerner	Cerner	Ascribe			None	Robopharma	MICAD
CHFT	Cerner	Cerner	Ascribe	EMIS eMM		None	None	MICAD
Leeds	Clinicom	PPM+	JAC		Sunquest Ice	WaveMark	ARX	MICAD
Harrogate	Silverlight	WebV	Ascribe	MedChart		Omnicell	ARX	Backtraq/MICAD
Mid Yorks	Camis	None	JAC	None	Sunquest Ice	Omnicell	ARX	Backtraq/MICAD Maximo
	3	4	2	3	1	2	2	4

Trust	Theatres	EBME	Finance	Procurement Catalogue	Procurement Inventory	CSSD	RFID
Airedale	TheatreMan	eQuip	NEP/Oracle/eFinancials	NEP/Science Warehouse	None	Health Edge	
Bradford	Galaxy	eQuip	SBS/Oracle	GHX	None	B Braun	
CHFT	BlueSpier	eQuip	NEP/Oracle/eFinancials	NEP/Science Warehouse	Bluespier/ SpaceTrax	B Braun	
Leeds	BlueSpier			GHX Nexus	GHX Powergate	B Braun	
Harrogate	BlueSpier	Avenys	NEP/Oracle/eFinancials	NEP/Science Warehouse	None	Health Edge	
Mid Yorks	TheatreMan	eMat	Oracle/eFinancials	GHX	eFinancials	SSDMan	Aeroscout

Figure 51: Trust System Detail

The interfaces required between the systems have been used to drive the cost model in the financial case and the following pre-requisites have been assumed:

- Interfaces can primarily be built by the team in-house but may require some specialist assistance dependent on level of complexity. Some external specialist assistance has been built in dependent on level of anticipated interface complexity, and this has been factored into the costs in the financial case. Some of the trusts do not have in house development capability and are reliant on the system suppliers.
- Application Programming Interface (APIs) and interface connection points don't currently exist and will be factored into the cost
- The Software Vendor does the interface development on their product or a pre-existing ESB is available to build out the interface

The final set of interfaces to be developed will be driven by the full design phase as part of the implementation. In the current state, business cases may be required for new systems.

Furthermore, some supplier systems may require upgrades in order to be GS1/PEPPOL compliant (detailed as required in the financial case):

- WYAAT Regional Supply Chain Solution – provision made in case; full tender required.
- Oracle upgrade – provision made in case, but full details to be confirmed with NEP.
- JAC development – provision made in case, but full details to be confirmed with JAC.
- Trust due to implement new oracle 13 during 2018/19 in line with NEP timetable. NHS Supply chain ordering systems recently updated to allow for GTINS and GLNs however, this will be reviewed post April 2019 as part of future operating model arrangements.
- Becton Dickinson U.K. Limited (ROWA Automated Storage and Dispensing System). GS1 compliance expected 2019.

- Emis/Ascribe GS1 compliance expected February 2019 (earliest)
- Medecator – PEPPOL compliant. Need further clarification re GS1 compliance
- Medchart ePMA - not currently GS1 compliant
- ICE eDischarge - not currently GS1 compliant
- SystmOne, TPP expected to be GS1/ISB1077 compliant by 2019

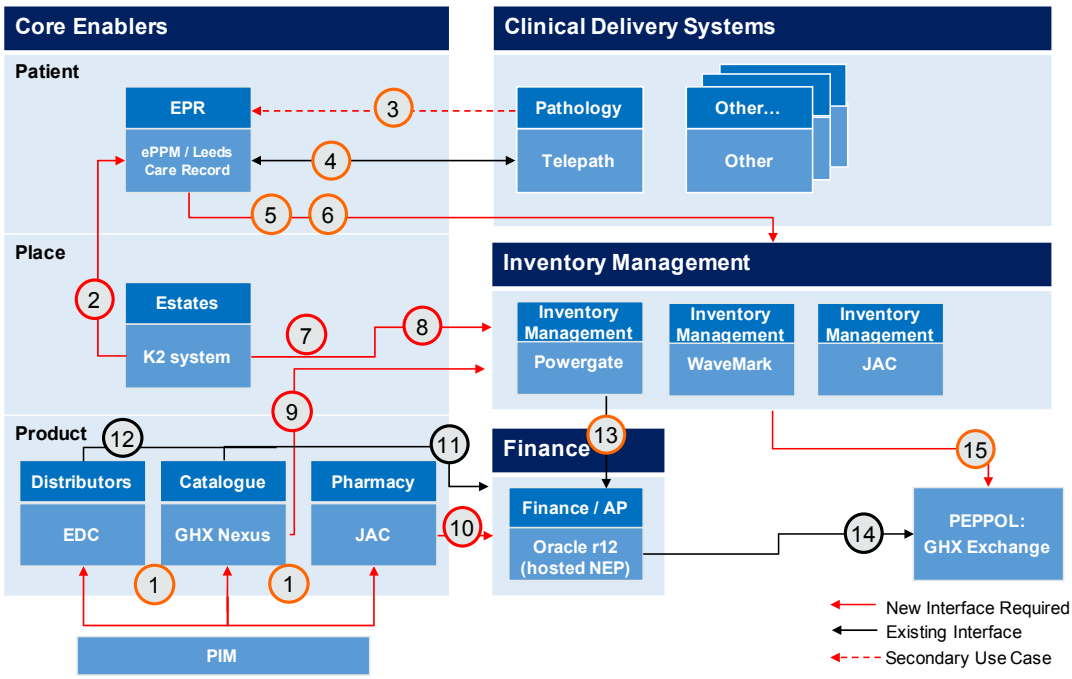


Figure 52: Leeds Teaching Hospital Systems Landscape Future State Example

An example to follow for the WYAAT trusts is that the PPM+ program at Leeds Teaching Hospital is an internally developed solution that required some configuration to interface with other systems and transmit GS1 identifiers. The requirements have been reviewed with the Trust IT teams and there is confidence in the ability to develop the solution, as required and appropriate provision for internal development has been included in the financial case.

The following integration points are required for both 1) internal Trust systems and 2) integration with external providers and central catalogues.

Ref	From	To	Interface	Complexity
1	PIM	GHX Nexus	Product Attributes	*Assume integration will be responsibility of GHX*
2	K2	Leeds Care Record	Location ID	Simple
3	Clinical Systems	Leeds Care Record	Not applicable in demonstrator phase	
4	Leeds Care Record	Clinical Systems	Patient ID	Medium
5	Leeds Care Record	PowerGate	Patient ID	Medium
6	Leeds Care Record	JAC	Patient ID	Medium
7	K2	PowerGate	Location ID	Simple
8	K2	JAC	Location ID	Medium
9	GHX Nexus	PowerGate	Product Attributes	
10	JAC	Oracle	AP File	
11	GHX Nexus	Oracle	Product Attributes	
12	EDC	Oracle	AP File	Simple
13	PowerGate	Oracle	Requisition	Simple
14	Oracle	PEPPOL Access Point	Order	*Assume integration will be responsibility of GHX*
15	JAC	PEPPOL Access Point	Order	*Assume integration will be responsibility of JAC*

Figure 53: System Interface Requirements Example from Leeds Teaching Hospitals Trust

4.3 Delivery Model

Dedicated programme management with defined work stream leads will be required to manage the programme to the proposed timescales. These will then be supported by subject matter advisors (SMA) within their Trust. Identified resources within the Trusts have been driven by understanding their suitability compared against the skills profile and resource requirements matrix below.

Role	Outline Responsibilities	Resource Requirements	Skills Profile			
			Project Management	Change Management	Technical Understanding	Process Understanding
Programme Lead	Oversee delivery, liaise with project leads	Experienced Programme Manager with successful experience of NHS programme delivery, strong stakeholder management skills and suitable IT system awareness (although not detailed technical knowledge)	HIGH	HIGH	LOW	MED
eSupply Chain Lead	Drive overall delivery, liaise with internal and external stakeholders	Resource with detailed knowledge of core P2P processes with successful experience of NHS project delivery. Will need to understand P2P systems and machine to machine message requirements to meet the GS1/ PEPPOL standards.	HIGH	MED	MED	HIGH
Clinical Programme Lead	Drive overall delivery, liaise with internal clinical stakeholders	Resource with detailed knowledge of clinical processes, with successful experience of NHS Programme delivery. Will need excellent change management skills, particularly in a clinical environment	HIGH	HIGH	LOW	MED
Project Manager Support	Support and provide experienced support to Programme Lead	Experienced project management with successful experience of NHS programme delivery, strong stakeholder management skills and suitable IT system awareness (although not detailed technical knowledge)	HIGH	HIGH	LOW	MED
Inventory & Supplies Lead	Lead delivery of operational elements	Resource with detailed knowledge of inventory management and NHS site logistics. Inventory management will be on the critical path and will need to stick to the planned timelines, and strong analytical skills will help with the level of data work required for GLNs and IM Implementation.	HIGH	HIGH	MED	MED
Clinical Process Design Support	Lead delivery of patient safety elements	Resource with good knowledge of clinical processes particularly around patient identification. Will need to be able to drive changes in practices among clinical teams.	MED	HIGH	MED	HIGH
IT Support	High involvement expected for integration of Patient ID and Catalogue processes	Will need to have a good overview of In Trust systems landscape and architecture, and build a knowledge of GS1 keys and standard, particularly the core enablers.	HIGH	LOW	HIGH	MED
E&F Support	Involved in location ID, drive process compliance for IM	Will need to work with the project teams to align location identifiers across the trust and support compliance to IM and P2P process standards for the Estates directorate.	MED	HIGH	LOW	MED
Pharmacy Support	High input required across all use cases	Pharmacy procurement or technical lead with detailed understanding of internal systems and how it links to other internal and external systems and sources	HIGH	HIGH	LOW	HIGH

Admin Support	Hands on support for physical location barcoding	Anticipate B2-4 to support with deployment of GLNs	**LOW**	**LOW**	**LOW**	**LOW**
Procurement Support	Primarily inventory management and P2P	Strong analytical skills and process understanding to develop catalogue skills.	**MED**	**LOW**	**MED**	**HIGH**
Nursing Support	Dedicated roles to lead change management for patient ID/ IM	Significant change will need to be affected with regards to point of care scanning across all use cases/ enablers. A nurse with a proven ability to deliver change programmes.	**LOW**	**HIGH**	**LOW**	**HIGH**
Supplies Support	Primarily inventory management and P2P	Will need to support design and implantation of compliant inventory management processes.	**MED**	**MED**	**LOW**	**HIGH**
Finance Support	Input to P2P process	Limited role to advise on P2P and also project benefits realisation	**LOW**	**LOW**	**LOW**	**MED**
Risk Support	Input to recall processes	Limited role to advise on patient ID and product recall with regards to risk management	**LOW**	**LOW**	**LOW**	**MED**

Figure 54: Delivery Team Roles, Responsibilities and Skill Mix

Recruitment and backfill arrangements will be required for some of the SMAs dependent on resource commitment and capability. For specific roles, external support will be required through the procurement of external advisors to manage the overall co-ordination and deliverables of the programme.

The trusts have identified initially the areas where internal support and external support will be required:

Role	Outline Responsibilities	Band	Avg Day/ Wk P1	Avg Day/ Wk P2	Avg Day/ Wk P3	Avg Day/ Wk P4	Avg Day/ Wk Total	Total Days Est	FT/ PT	Resource (Int - Support/ Int- Backfill/ Ext)	Proposed Name
Programme Lead	Oversee delivery, liaise with project leads	8-9	1.0	1.0	1.0	1.0	1.0		PT	Internal / External	TBC
eSupply Chain Lead	Drive overall delivery, liaise with internal and external stakeholders	8a	2.5	2.5	2.5	2.5	2.5		PT	Internal - Back fill	TBC
Clinical Programme Lead	Drive overall delivery, liaise with internal clinical stakeholders	8a	2.5	2.5	2.5	2.5	2.5		PT	Internal - Back fill	TBC
Programme Manager Support	Support and provide experienced support to Programme Lead	7	5.0	5.0	5.0	5.0	5.0		FT	Internal / External	TBC
Clinical Process Design Support	Lead delivery of patient safety elements	7	2.5	2.5	2.5	2.5	2.5		PT	Internal - Back fill	TBC

IT Support	High involvement expected for integration of Patient ID and Catalogue processes	7	10.0	10.0	10.0	10.0	10.0		FT	Internal - Back fill	TBC
E&F Support	Involved in location ID, drive process compliance for IM	7	1.0	2.0	3.0	2.0	3.0		PT	Internal - Support	TBC
Pharmacy Support	High input required across all use cases	7	1.0	2.0	3.0	4.0	2.5		PT	Internal - Back fill	TBC
Admin Support	Hands on support for physical location barcoding	7	0.0	0.0	10.0	10.0	5.0		FT	Bank	TBC
Procurement Support	Primarily inventory management and P2P	7	5.0	5.0	5.0	5.0	5.0		FT	Internal - Support	TBC
Nursing Support	Dedicated roles to lead change management for patient ID/ IM	7	3.0	6.0	8.0	10.0	6.75		FT	Internal - Backfilled	TBC
Finance Support	Input to P2P process	7	0.5	0.5	0.5	0.5	0.5		PT	Internal - Support	TBC
Risk Support	Input to recall processes	7	0.5	0.5	0.5	0.5	0.5		PT	Internal - Support	TBC

Figure 55: Delivery Team Make Up and Resourcing Strategy

4.4 Personnel Implications

The following HR processes will need to be followed when recruiting the programme team to either internal or external positions:

- AfC process for job matching
- Acting up processes for backfilled roles
- Notifications and discussions with Staff side – these will be initiated as part of pre-mobilisation phase
- Consultation process will need to be followed for changes in job descriptions

4.5 Procurement Timelines

The Trusts will need to procure the appropriate infrastructure and resources through compliant OJEU routes. It is anticipated that a regional supply chain solution is required, and there is a need for hardware and professional services support to achieve the required capabilities within the agreed timeframes; both of which would be above OJEU thresholds given the scale required.

As part of the programme plan for implementing GS1 and PEPPOL messaging standards, the Trusts will need to procure systems and professional services support to achieve the required capabilities within agreed time frames. There are several different frameworks available to the Trust to procure these goods and services such as G-Cloud or the South of England Procurement Services.

It is not envisaged that the Trusts will require a full tender process to procure these goods and services and that each of the Trusts will be able to call-off the relevant frameworks. In which case, it is anticipated that the following activities will be required to fulfil the procurement process in an OJEU compliant manner within 33 working days.

All procurement will need to be in line with Trust standing financial instructions.

Procurement timelines are incorporated into the wider Programme Plan but fall under two main groups:

- **Procurement Strategy - Systems:** The procurement of specialists systems and interfaces can be sought through frameworks via the Crown Commercial Services (such as through the inventory frameworks let by the South of England Procurement Services or G-Cloud). In any specification consideration should be given to how equipment could be utilised region wide (beyond the scope of this programme) to ensure cost effectiveness for the Trusts and any unnecessary further purchasing
- **Procurement Strategy - External Support:** Backfill of staff through agencies will need to follow an approved framework

The engagement of professional services support can be procured through frameworks via the Crown Commercial Services (such as the G-Cloud framework)

- **Procurement Strategy - Equipment:** Consideration should be given to the procurement of capital equipment to ensure cost effectiveness e.g. suitability of purchasing vs. leasing arrangements. In any specification, consideration should be given to how any equipment could be utilised region wide to ensure cost effectiveness for the Trusts and any unnecessary further purchasing.

5. Management Case

The West Yorkshire Association of Acute Trusts would support the shared learning objective through following defined gateway reviews at the end of each phase and creating case studies throughout the duration of the roll out.

5.1 Governance and Structure

Strong and visible governance is key to a successful implementation as this will provide clear guidance and ensure implementation supports the Association's strategic direction.

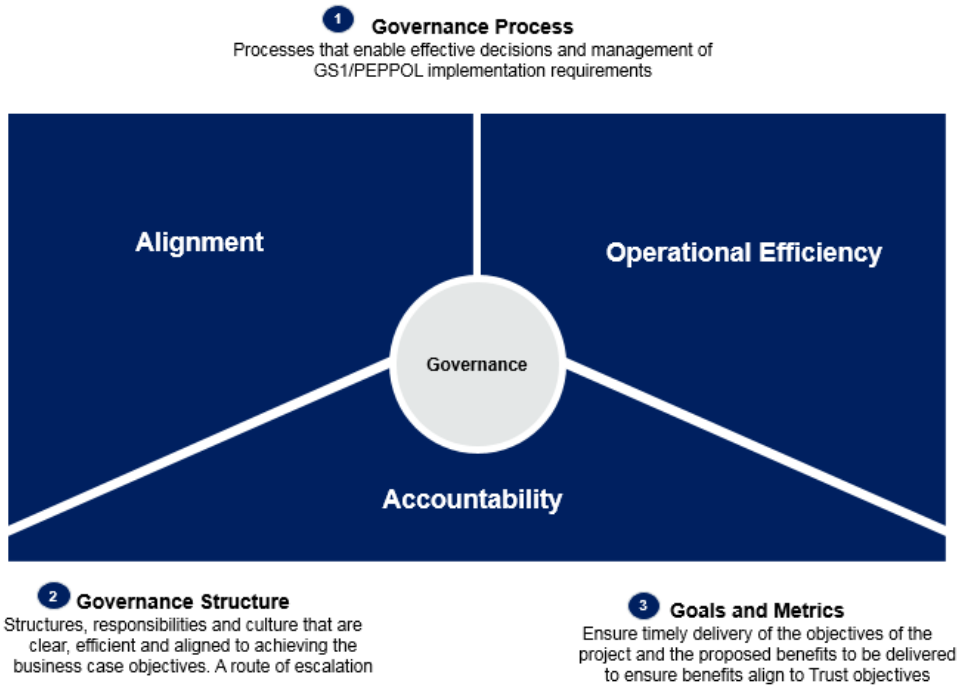


Figure 56: Governance Model Overview

In order to ensure the required governance structures are in place, the WYAAT will need to establish an appropriate, functional and robust Programme Board, which will enable timely, efficient and transparent decision making at an executive level.

In order to ensure the required governance structures are in place, the Trust will establish the programme under the governance of a Programme Board, which will have responsibility for the adoption of GS1 / PEPPOL adoption. We have reviewed other existing governance boards for suitability for this programme to avoid creating a separate group; however, they were not deemed suitable for this type of programme.

A Standards and Compliance advisory group will be established which will contain a small subset of programme team members, and be in direct contact with GS1 to ensure a standardised approach towards the development of region wide policies and procedures which are required for the

successful delivery of the core enablers and primary use cases, to ensure decisions taken that impact the long term use of the standards are appropriately considered.

Programme Board

Programme Governance will be via a WYAAT Programme Board that will report to the Finance and Performance Committees of each Trust, and the wider WYAAT Medical Directors, Directors of Finance, Strategy & Operations and Programme Executive Boards. In addition, each Trust will have an independent Programme Board to report into the regional programme. Further to this, small sub-groups will be responsible to ensure GS1 standards are met; this will involve consultation with GS1 at key points of the deployment if required. The key roles will comprise of:

- Chief Executive Senior Responsible Officer: Julian Hartley, LTHT Chief Exec
- Scan4Safety Programme Sponsor: David Berridge, Deputy Chief Medical Officer
- Scan4Safety Regional Programme Lead: Stuart MacMillan
- Karl Mainprize: Medical Director, Airedale NHS Foundation Trust
- Matthew Horner: Director of Finance, Bradford Teaching Hospitals NHS Foundation Trust
- Mandy Griffin: Chief Information Officer, Calderdale & Huddersfield NHS Foundation Trust
- Robert Harrison: Chief Operating Officer, Harrogate & District NHS Foundation Trust
- Simon Worthington: Director of Finance, Leeds Teaching Hospitals NHS Trust
- Jane Hazelgrave: Director of Finance, Mid Yorkshire Hospitals NHS Trust
- Chris Slater: Associate Director of Procurement, Leeds Teaching Hospitals NHS Trust
- Richard Eyles: Pharmacy Lead, Leeds Teaching Hospitals NHS Trust

A robust delivery team is to be structured for each Trust, based on blend of internal leads and functional leads, supported by external design and delivery support for specific roles to assure programme delivery in the timeframe required. People have been provisionally identified for some of the programme roles but cannot be named at this stage; the process of appointing to these secondment positions will continue between now and March 2019.

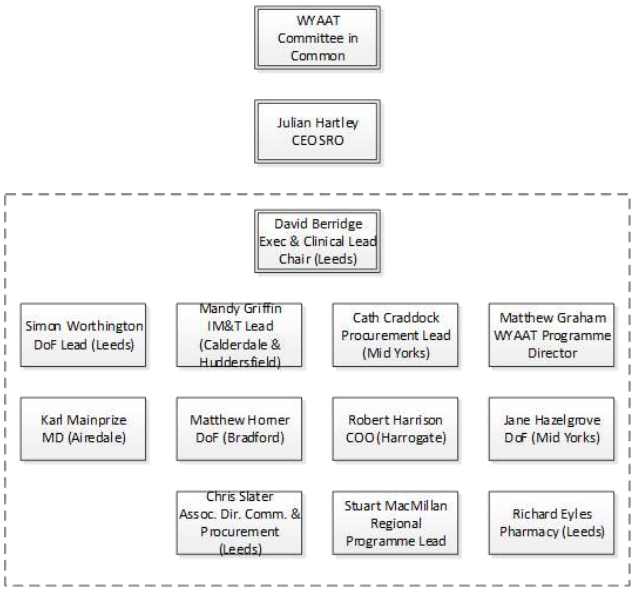


Figure 57: WYAAT Programme Board Governance Structure

The objectives of the Programme Board shall be as follows:

- To provide strategic direction to the Implementation Leads to ensure the long term viability of the programme
- Ensure Trust wide clinical and non-clinical objectives are closely aligned
- As an escalation route for queries and concerns from the larger delivery team
- To ensure all important decision making is in the best interests of The West Yorkshire Association of Acute Trusts (WYAAT)

The Programme Board should meet on a monthly basis.

Standards and Compliance Group

The Standards and Compliance Group will consist of a small number of programme team members, with representation from the Trusts and GS1 to validate and endorse to the Programme Board, key decisions on GS1 standards and adoption compliance that have long term implications.

Representatives of this group will include:

- Programme Leads
- Deputy Chief Medical Officer
- Informatics
- External – Representative from GS1

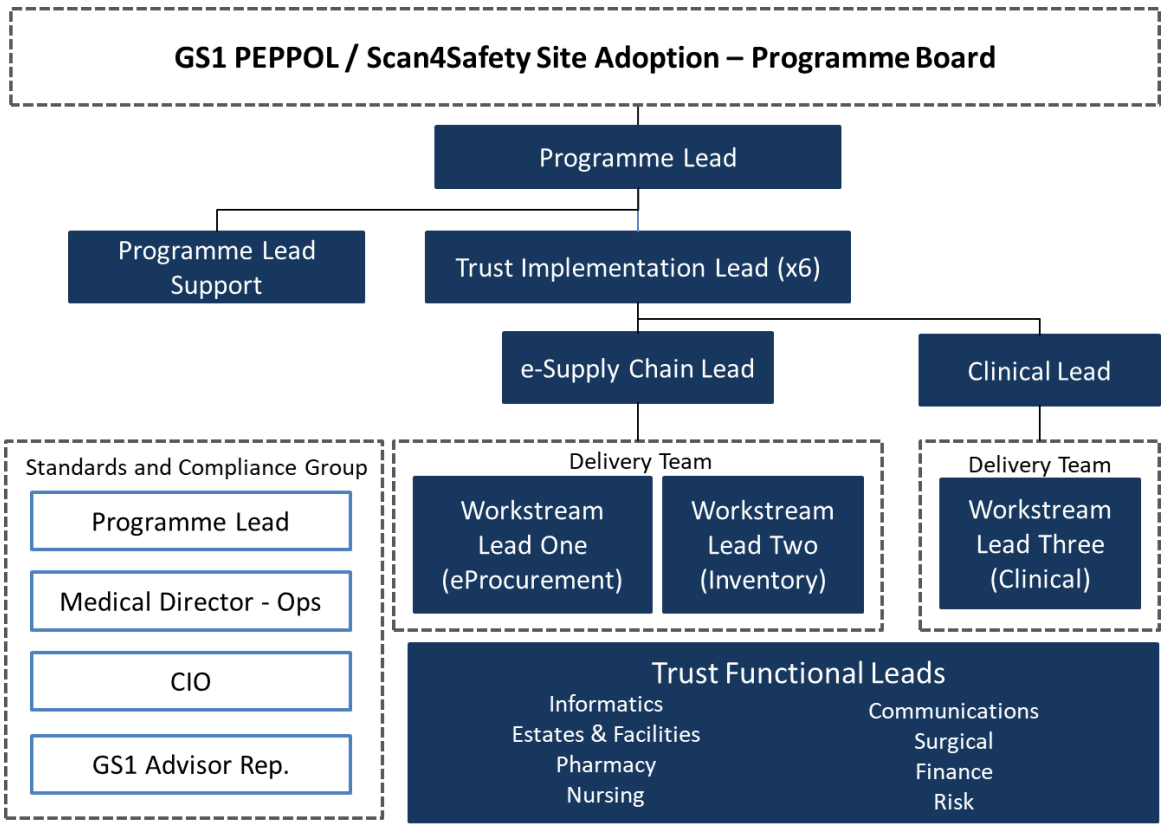


Figure 58: Standards and Compliance Model

The Standards and Compliance Committee should meet as and when key decisions need to be considered and put forward for endorsement.

A Standards and Compliance Lead should be appointed within the programme team, who will need to be trained in GS1 standards and liaise with GS1 as needed to validate WYAAT decisions where standards need to be implemented in a way that is suitable for the Trusts.

Implementation Team

Each Trust will require a dedicated implementation team, led by an individual reporting into the WYAAT Programme Lead. The main objectives of the Implementation Team are:

- To oversee delivery of the operational changes required for the full GS1 and PEPPOL adoption
- To provide a forum for discussion in relation to any programme risks and issues
- To ensure region wide buy in of standardisation of policies and procedures required to implement the enablers and use cases
- To be the vehicle for any programme decisions which require Programme Board approval

The independent Trust teams will be dictated by currently available resource and scale of the Trust, with an example team shown below.

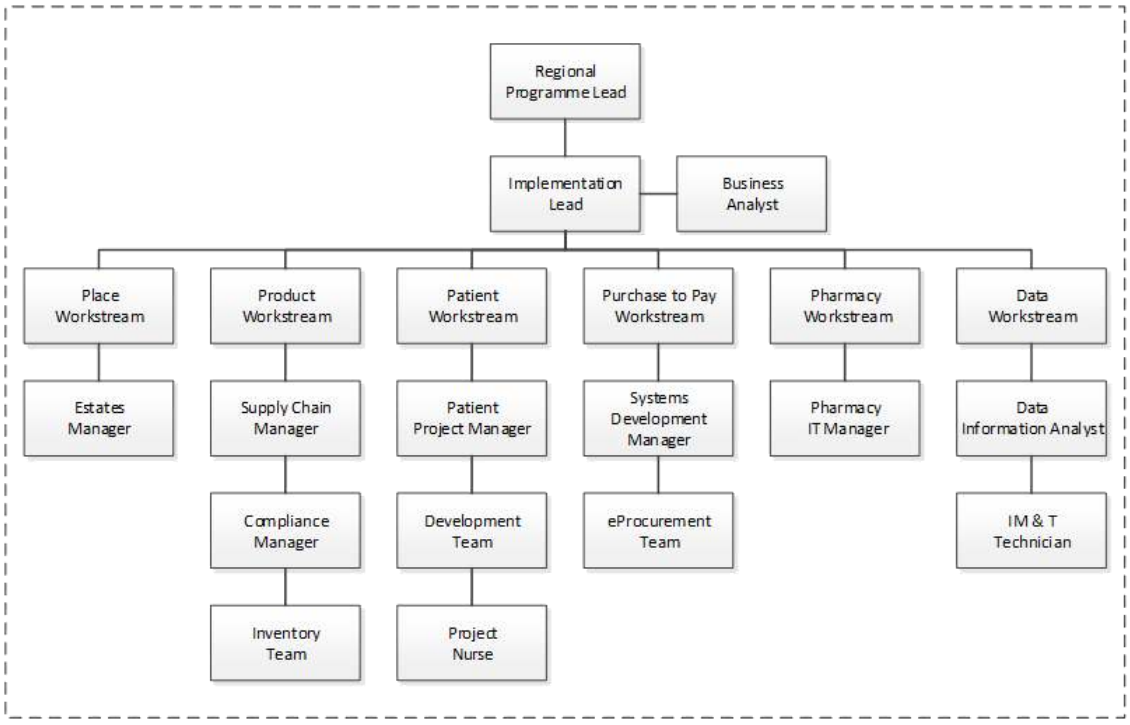


Figure 59: Example Implementation Team per Trust

5.2 Programme Plan

Following business case approval from NHS Improvement, implementation would be ready to commence March 2019. The implementation is divided into five phases (a mobilization phase and four subsequent phases in line with the 'Four Phase Approach').

A 2 month mobilization phase will focus on:

- Resource recruitment (both internal, external and transition planning)
- Establishing training requirements
- Internal Communications to all Trusts' staff
- Developing ICS wide communications plan
- Mobilising programme team and internal subject matter advisors
- Benefits tracking solution development

The following four phases will then focus on developing, implementing and embedding the core enablers and primary use cases. Key activities to complete each phase are identified in the programme plan which signifies the critical path to move sequentially from one phase to the next.

There are defined gateway reviews within the four phase approach, which are scheduled within the plan and will be reviewed by the Programme Board. These reviews will identify:

- A view of current programme status
- Assessment of risk
- Assessment of benefits delivered against plan
- Any appropriate escalation required to ensure programme success

Formal gateway decisions will be documented by the Programme Board. Full implementation of the Four Phases will be completed by March 2022 based on the following phase structure, which is outlined in more detail on the following page:

- **Mobilisation:** March 2019 – April 2019
- **Phase 1:** May 2019 – January 2020
- **Phase 2:** February 2020 – October 2020
- **Phase 3:** November 2020 – July 2021
- **Phase 4:** August 2021 – March 2022

Given the size of the Trusts and the distinct sites, for core enablers / use cases where a staged deployment is needed (primarily patient identification and inventory management), the rollout will be structured by individual Trust site.

A high level WYAAT wide timeline is shown below.

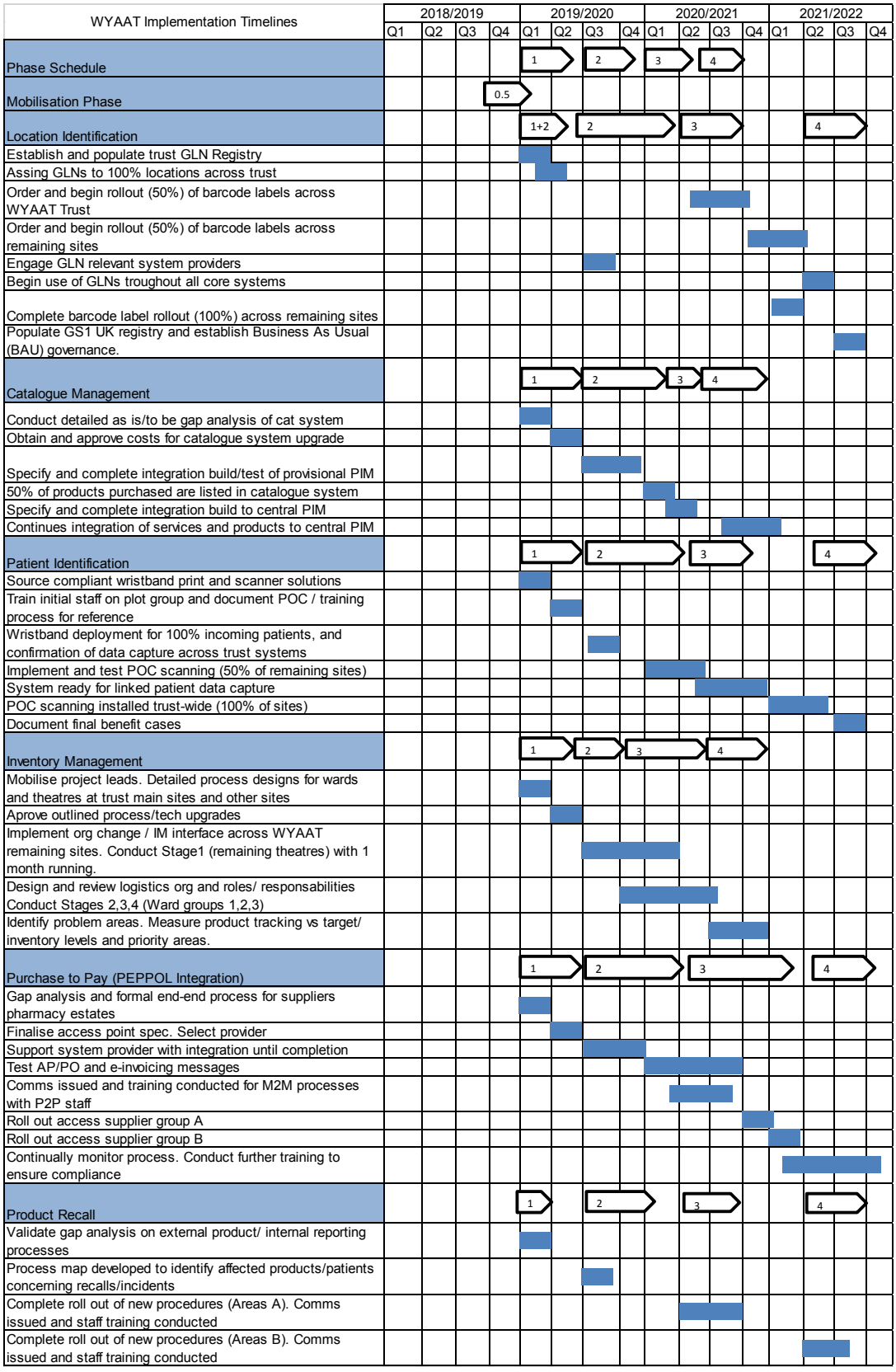


Figure 60: Core Enablers and Use Case Implementation Timelines

7.1

5.3 Impact on Current ICS & Trust Projects

There are a number of current projects which have been considered when developing the programme plan.

Activity Stream	Summary of Current Changes	Impact of Timescale	Impact of Resource
Virginia Mason	Early stages of programme, but anticipate changes around lean which the GS1 program can compliment.	Anticipate running across similar 3 year timeframes.	None at operational level, but some coordination required at a governance level.
100,000 Genomes Project	The Leeds Teaching Hospital NHS Trust is one of the lab sites for the 100,000 Genomes project. This programme will require GS1 identification standards to be incorporated within appropriate processes.	On-going	Some advisory support from GS1 programme team but no additional resource requirement.
Bradford Digital 2020 Programme	Aims to look at integration across Airedale and the programme will need to be aware of the GS1 agenda.	On-going	Scan4Safety programme team to provide advisory support to the Digital 2020 programme.
LHCRE	The Yorkshire region has been selected as a Local Health Care Record Exemplar which will require the use of GS1 standards to share data	Anticipate running across similar 3 year timeframes.	Some advisory support from GS1 programme team but no additional resource requirement.
Falsified Medicines Directive (FMD)	The FMD becomes legislation in February 2019	On-going	Requirements of FMD align with the Scan4Safety programme so mutually beneficial
Electronic Prescribing Implementation	WYAAT Trusts are at varying stages of implementing Electronic Prescribing solutions – Scan4Safety will complement these deliveries	Anticipate running across similar 3 year timeframes.	Potential impact upon staff resources which should be mitigated by funding for Scan4Safety programme
Electronic Health Record Implementation	WYAAT Trusts are at varying stages of implementing Electronic Prescribing solutions – Scan4Safety will complement these deliveries	Anticipate running across similar 3 year timeframes.	Potential impact upon staff resources which should be mitigated by funding for Scan4Safety programme
WebV Electronic Patient Record	Development of the EPR in Harrogate relies on internal development resources	On-going	Should be mitigated by funding
WYAAT Service Sustainability	Review of all services to identify high risk; reviewing clinical & operational work	On-going	Will be supplemented by Scan4Safety
WY Vascular Service	Establish a single WY Vascular Service across 5 Trusts, reconfiguring arterial centres from 3 to 2	On-going	Should be mitigated by funding and programme governance
Elective Surgery (Orthopaedics)	Reducing variation in hip & knee replacement procedures; increase capacity & improve patient experience	On-going	Scan4Safety will support this programme
HDFT HASU	Future service model for the WYH Stroke Programme for Harrogate stroke patients	On-going	Should be mitigated by funding and programme governance

Pharmacy	WYH+ supply chain solution: single warehouse, wholesaler, direct to ward deliveries	On-going	Scan4Safety & Pharmacy will work in conjunction with each other
Pathology	WYH Pathology Network; procurement of common Lab Information Management system	On-going	Scan4Safety will feed into this programme
Imaging	Common Enterprise Imaging System	On-going	Should be mitigated by funding and programme governance

Figure 61: Existing Projects Impact Analysis

5.4 Governance and Programme Management

As described in section 5.1, there will be a dedicated programme board which meets on a monthly basis and a standards and compliance committee which meets as needed.

A dedicated Delivery Team will also be created to support in the timely delivery of the core enablers and use case work streams. This would be led by a Regional Programme Lead with dedicated implementation leads identified in each Trust. In addition, work stream leads would be required across the core enablers and primary use cases. This would be supported by internal user groups / subject matter advisers.

High Level Deliverables anticipated:

Support	Outline Role	Key Deliverables
Programme Lead	Drive overall delivery, liaise with internal and external stakeholders	• Strategic communications • Gateway reviews and case studies per phase • Train the trainer sessions for P2P and product recall role out • Benefits tracking • Governance • Risk Management • Recruitment and Selection • Change Management activities lead
eSupply Chain Project Lead	Drive overall delivery, liaise with internal and external stakeholders	• Catalogue gap analysis • Catalogue service design • Procurement specifications and selection • Catalogue management interface (if technical) • Supply chain standardised process design
Clinical Project Lead	Drive overall delivery, liaise with internal clinical stakeholders	• Product re-call process design • Product re-call process training • POC scanning process • POC scanning design
Programme Manager Support	Support program lead with the programme delivery	• Provide rigorous programme management support to overall program lead

Inventory Design Lead	Lead delivery of operational elements, PMO	• Inventory Management process design • Inventory Management roll-out plan • Inventory Management pilot management
Clinical Design Lead	Lead delivery of patient safety elements, PMO	• Product re-call process design • Product re-call process training • POC scanning process • POC scanning design

Figure 62: Delivery Roles and Key Deliverables

The Delivery Team would report into the Programme Board and work directly with the Standards and Compliance Committee.

The diagram below outlines the key resources required along with the appropriate governance arrangements and position of the delivery team:

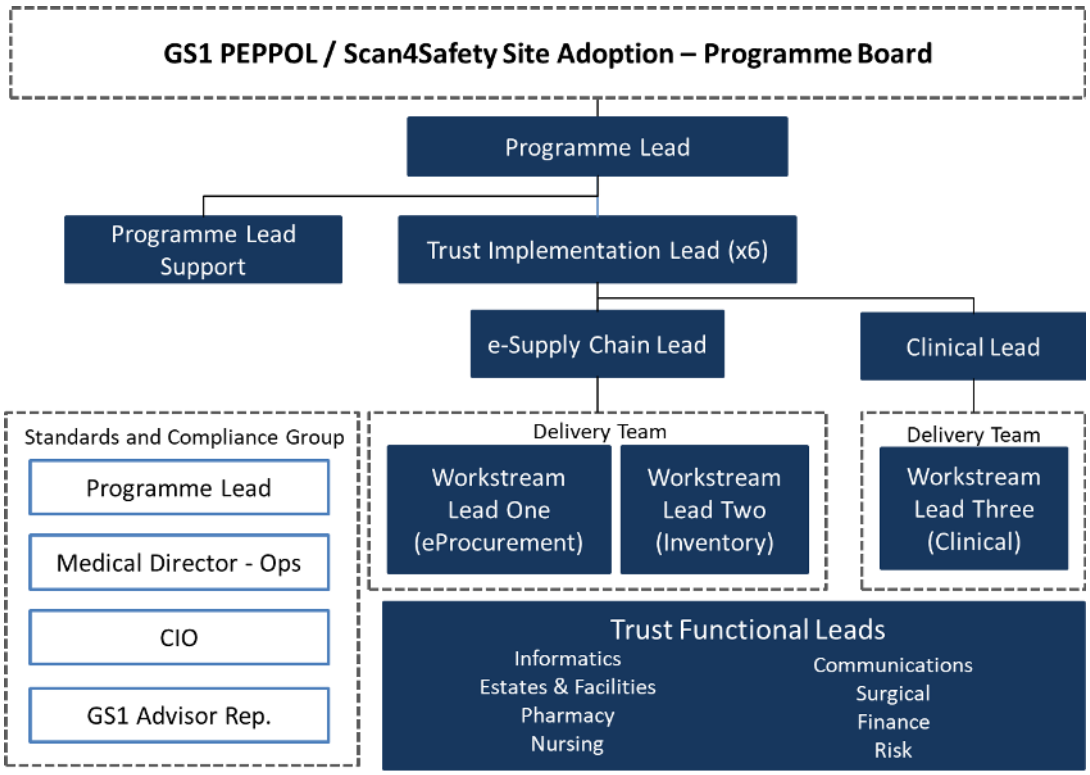


Figure 63: Delivery Team Structure

5.5 Change Management

A key role of the Delivery Team will be to support and deliver the change management activities required for the successful completion of the programme.

As resistance to change is a significant barrier in any organisation, investment in change management is key for the successful delivery of a programme, particularly one on the scale of GS1 / PEPPOL adoption.

The below diagram shows the pillars of change management which have been built into the implementation plan for GS1 / PEPPOL adoption.

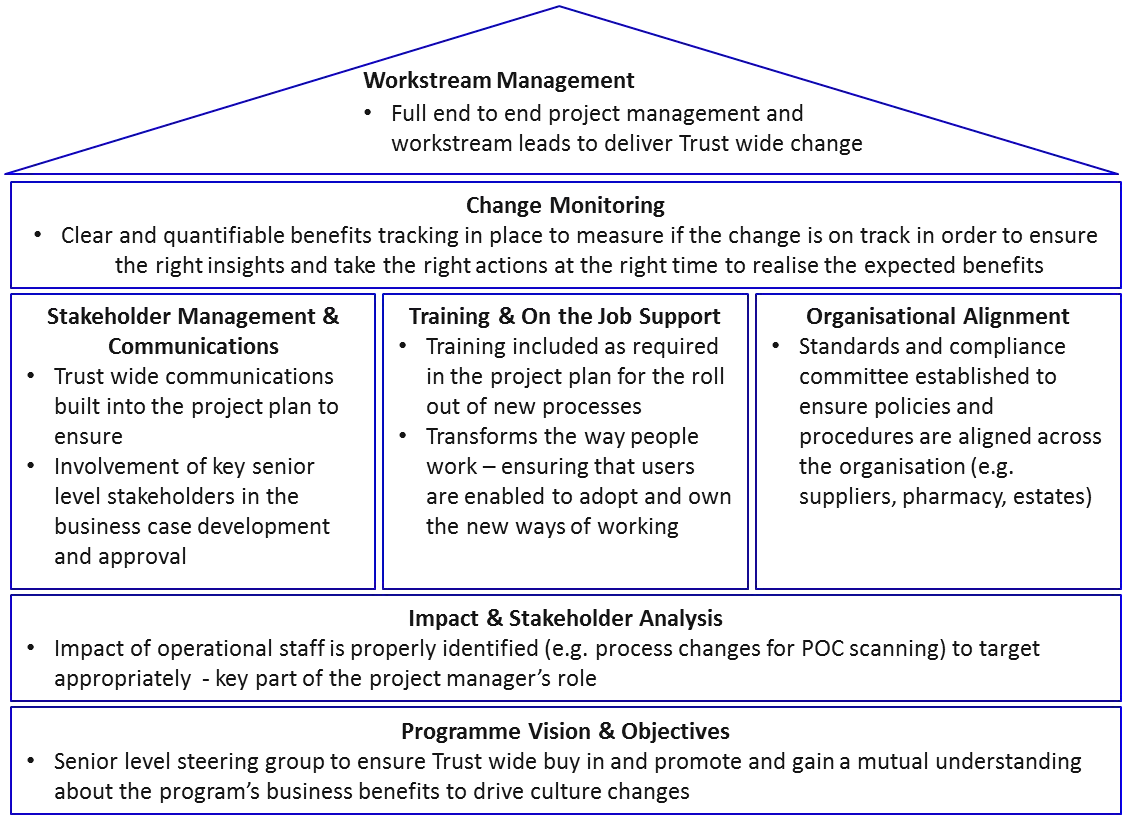


Figure 64: Change Management Strategy Model

The key individuals where change management programmes need to be directed at include:

Activity Stream	Key Changes to Ways of Working	
	Core Enablers	Use Cases
Procurement and Supplies Staff	• Catalogue management - *products/services to feed catalogue*	• New Inventory management process – *defined in phase 1 and roll out across phase 2 and 3* • New product recall process – *defined in phase 2 and training in phase 3*
Clinical Staff	• GS1 wristband issue – *label print out and issue* • POC scanning – *product to patients scanning* • E-requisition roll out – *all electronic, no paper processing*	• New product recall process – *defined in phase 2 and training in phase 3*
Pharmacy Staff	• POC scanning for patients – *medicine to patients scanning*	• New product recall process – *defined in phase 2 and training in phase 3* • M2M roll out – *defined in phase 1-2 and training in phase 3*
Finance Staff	• E-requisition roll out – *no paper processing*	• M2M roll out – *defined in phase 1-2 and training in phase 3*

Figure 65: Impact of Delivery on Trust Staff

WYAAT is in a strong position to ensure effective change management within the non-clinical and clinical community:

- **Clinical engagement/leadership:** The programme is supported from both the Nursing and Consultant body. The programme is being supported by the several key Clinical Directors across the region, including the Deputy Chief Medical Officer in Leeds and the Medical Director from Airedale whom both hold a place on the programme board.
- **Robust training programmes:** We have built upfront programme team training as a key component of the mobilisation phase to ensure the broad stakeholder group represented is fully up-skilled on core GS1 understanding to deliver the programme.

5.6 Benefits Tracking

In order to understand the benefits which are released throughout the delivery of the programme, the Programme Manager would be required to track a defined set of metrics. The metrics would firstly be baselined during the mobilisation phase and then tracked at an appropriate frequency against the target. Tracking benefits will ensure that:

- Potential benefits are clearly outlined
- Benefits are clearly understood across the full programme team

The benefits tracking will be allocated to the appropriate work stream lead from the PMO team. The 2 month mobilisation phase will be used to verify and update baseline metrics.

	Metrics	Calculation	Source	Recorded Level (1: Region, 2: Trust, 3: Dept.)	Freq.	Baseline	Target (by Phase)			
							1	2	3	4
Location Numbering	% Trust locations allocated a GLN	# GLN locations / Total Locations	Space Management System	1	W	0	50	100	100	100
	% Trust GLN locations on Registry	# GLN Locations on Registry / Total GLN Locations	National GLN Registry	1	M	0	-	50	100	100
	% Trust GLN locations have physical barcoded labelled	# GLN locations with physical barcode/ Total Locations	Manual implementation record. Annual audit.		M	0	-	-	50	100
Catalogue	% / £ Spend Catalogue	PO Spend / Total Spend	GS1 Transaction Compliance Dashboard	1	M	~60	-	-	-	-
	% / £ Products on Catalogue	Product Catalogued Spend / Total Products Spend	GS1 Transaction Compliance Dashboard	1	M	~60	-	50	90	90
	% / £ Services on Catalogue	Service Catalogued Spend / Total	GS1 Transaction Compliance	1	M	<10	-	-	-	30

		Services Spend	Dashboard							
	% data taken from PIM	# catalogue items taken PIM / Total catalogue Items	GS1 Transaction Compliance Dashboard	1	M	0	-	-	50	100
Patient ID	% Patients with GS1 Wristband	Barcoded Patients / Total Barcodes	EHR Extract	2	W	0	50	100	-	-
	% Patients scanned at point of care (for at least one product)	Scanned Products to a Patient / Total Products	Inventory System Extract	2	M	<10 (ortho trial)	-	50	100	-
Purchase to Pay	% Electronic Requisitions (M2M) – Supplies	# Electronic / Total # Req	GS1 Transaction Compliance Dashboard	1	M	0	-	-	30	60
	% Electronic Invoices (M2M) - Supplies	# Electronic Invoices / Total # Invoices	GS1 Transaction Compliance Dashboard	1	M	0	-	-	30	60
	% Electronic Requisitions (M2M) – Pharmacy	# Electronic / Total # Req	JAC Extract	1	M	0	-	-	30	60
	% Electronic Invoices (M2M) - Pharmacy	# Electronic Invoices / Total # Invoices	JAC Extract	1	M	0	-	-	30	60
	# Invoice Discrepancies - Supplies	# Invoice Discrepancies / Total # Invoices	Sample Survey	1	M	277	-	-	-	-
	# Invoice Discrepancies - Pharmacy	# Invoice Discrepancies / Total # Invoices	Sample Survey	1	M	150	-	-	-	-
Inventory	% electronic top up requisitions	# electronic top up requisitions / # requisitions	GS1 Transaction Compliance Dashboard	1	M			50	75	95.5
	% Patients scanned can be tracked to patient record	Scanned Products to a Patient / Total Products	GS1 Transaction Compliance Dashboard	2	Q		-	-	25	5
	Inventory Level	Taken from Stock Takes	Year End Stock Takes / Inventory Extract	3	Q		-	-	-	3 wks
Product Recall	% used products scanned to patients	# scanned Products to a Patient / Total Products	GS1 Transaction Compliance Dashboard	2	Q	0	-	-	-	-
	% Recalls auto identified	# Recalls auto identified / Total recalls	Product Recall Database	1	Q	0	-	-	50	100
	% stock scanned to	# stock scanned to	GS1 Transaction	3	Q	0	-	-	-	-

	location	location / total # stock	Compliance Dashboard							
	% stock with GTIN barcodes	# stock with GTIN barcodes / total # stock	GS1 Transaction Compliance Dashboard	2	Q	0%	-	-	-	-

Figure 66: Example Metrics to Track

Using the defined metrics in the table above, a benefits dashboard can then be created which will provide a comprehensive overview of the performance of the programme delivery.

A benefits dashboard needs to then be created to track the defined quantifiable metrics on an agreed basis. It can also be used to monitor non-financial metrics. An example benefits dashboard for the purchase to pay processes is given below:

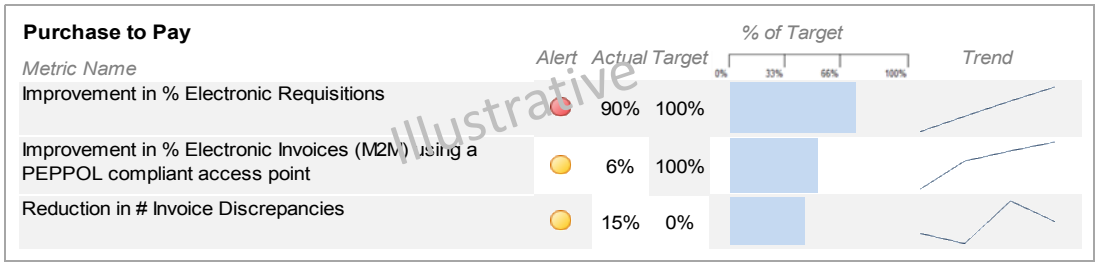


Figure 67: Example Benefits Dashboard

The benefits tracking methodology will need to monitor:

- **Change Enablement:** The number of staff required to complete training (e.g. point of care scanning roll out) needs to be actively monitored to ensure full and relevant coverage.
- **Standards Adoption:** The quantifiable aspects (GTINs, GLNs, GSRNs). The Leeds Teaching Hospitals NHS Trust have already designed a tool for monitoring of GS1 compliant spend, and this will be further developed as part of implementation across WYAAT.
- **Financial Position:** The on-going financial costs and benefits will be actively monitored by finance to understand impacts on divisional budgets.

5.7 Risk Mitigation

The successful delivery of the programme will require risks to be actively monitored. A risk register needs to be developed which is reviewed on a fortnightly basis throughout the programme life by the Delivery Team. The risk will be described and the impacts (time, cost, quality etc.) highlighted with a mitigating action defined.

Any risk which is deemed to have an impact to the delivery or financing of the programme needs to be escalated to the Programme Board.

Risk	Impact	Mitigation
Benefits are not realised at the speed required	Cost	• Ensure appropriate governance and resources are in place to prompt timely delivery
Governance is not effective leading to a poor implementation	Quality	• Ensure a Programme Board and Implementation Teams are established
There is a risk that internal resources and/or support is not made available as required	Time	• Ensure that sufficient proportion of budget is allocated for resources/support
There is a risk that external suppliers do not make the necessary changes or adhere with the overall timetable set out by Department of Health & Social Care for GTIN compliance	Time	• Escalate to NHS Improvement & the Department of Health & Social Care early
There is a risk that the current systems used across the Trust are unable to handle the required data elements or of handling the proposed interfaces leading to the need to develop or replace key systems	Cost / Time	• Ensure conversations are had with key system providers before implementation begins to confirm required changes
Key personnel involved and engaged in the programme leave the Trust leading to delays in programme delivery and reduction in expertise	Quality / Time	• Develop robust contingencies and training plans to ensure relevant skills and expertise are developed and maintained

Figure 68: Risks and Mitigations

5.8 National Site Evaluations

One of the responsibilities of being a GS1 Scan4Safety site will be to play a part in developing the GS1 implementation programme NHS-wide.

Throughout the implementation the West Yorkshire Association of Acute Trusts (WYAAT) will be in a position to:

- Develop case studies on ways of working
- Be willing to join the NHS-wide steering group for GS1
- Play a part in the education/training required for NHS sites who need advice on adoption

5.9 Post Programme Evaluation

Post programme evaluation will be completed by the Delivery Team at the end of the programme and a summary evaluation document completed.

This document will have two core purposes:

1. To act as a learning tool for Trusts adopting GS1 and PEPPOL standards
2. To add to the deployment of the secondary use cases implementations across The West Yorkshire Association of Acute Trusts in the future

The document will detail the implementation process, lessons learned, an evaluation of the costs, and benefits tracked and delivered throughout the programme, in addition to recommendations for future implementations.

5.10 Secondary Use Case Adoption

The West Yorkshire Association of Acute Trusts (WYAAT) would also look to expand the benefits opportunity from the implementation of GS1 core enablers and use cases. Furthermore, the West Yorkshire Association of Acute Trusts (WYAAT) will look to develop adoption of secondary use cases; the strategy for these will be reviewed on an on-going basis, with examples considered shown below.

Never Events

The use of GS1 standards and barcodes provides an opportunity to reduce some key never events and the lesser recorded 'near misses'. UK provisional data from the 1st April 2017 to 31 March 2018 listed 469 incidents recorded as Never Events (Source: https://improvement.nhs.uk/resources/never-events-data/).

Of these Never Events, Scan4Safety could realistically help to mitigate 115 of them;

Type of never event	Count
Wrong implant / prosthesis	65
Retained foreign object post procedure	18
Wrong site surgery	18
Patient connected to air flowmeter rather than oxygen	14
Total	**115**

Figure 69: Never Events

Through the use of point of care data capture, a Trust could reduce never events through multiple means;

- Pre-loading the system with the intended procedure to allow scanning of a product with immediate feedback on whether it matches the clinical intention
- Scanning of a product to feedback on wrong site or mismatched supplier products
- Enforcing patient scans to ensure care is delivered to the correct patient
- Enforcing patient scans to ensure electronic forms are updated correctly

Likewise for 'near misses'. Trusts regularly use paper based observation charts or the more advanced may have moved to eObs but even these systems don't prevent the recording of data against the wrong record. For example, a simple temperature spike against the wrong patient's record could prevent them from having an organ transplant. With Scan4Safety, the reinforced patient identity check through the scan of a wristband forces these observations to be recorded correctly.

The Healthcare Safety Investigation Branch has already identified three specific use cases for Scan4Safety with one specifically recommending the use of a mobile application to prevent the wrong prostheses being used through the use of scanning the product barcode;

- https://www.hsib.org.uk/investigations-cases/wrong-site-interventions/
- https://www.hsib.org.uk/investigations-cases/insertion-incorrect-intraocular-lens/

- https://www.hsib.org.uk/investigations-cases/implantation-wrong-prostheses-during-joint-replacement-surgery/

Real Time Patient Flow

Once the core enablers of place and patient are delivered within a Trust, an obvious use case is patient tracking and bed state management. On the 13th June 2018, Pauline Philip, National Director of Urgent & Emergency Care wrote to all Trust Boards requesting that they put additional effort into reducing long stays in hospital to reduce patient harm and bed occupancy, ***Appendix 9.0***. Currently Trusts struggle with this endeavour due to paper led systems for both where the patient currently is and where they're scheduled to be.

Through the introduction of scanning, you can not only reduce this paper, but also facilitate electronic dashboards that show in real time where a patient is. This in turn will allow for better scheduling into theatres and other specialities, whilst also allowing for quicker bed turnaround when a patient has left a ward.

Asset Management

It is common within trusts for Medical Equipment to be managed by a number of departments / areas. Equipment is provided to a ward upon specific requests by employees working within areas that manage the equipment, such as; medical equipment libraries, medical engineering, theatres, etc. The current process implemented in most Trusts for the management and tracking of equipment is manual and paper based. When equipment is requested, a paper log is completed detailing the area, equipment, patient ID and the time of the request. Often there is no paperwork completed upon return of the equipment.

Once equipment has been delivered onto a ward, it can be, and often is, moved by medical staff to other locations, with no update to the current log. It is common practice for staff members from the Medical Engineering team to visit all clinical areas in order to locate equipment and return it back to their appropriate location. Scan4Safety would allow for a significant reduction in time spent and footfall of medical staff locating equipment not in its original delivered location.

Identified benefits of implementing scanning to capture equipment usage:

	Cash releasing	cost avoidance	Releasable time saving	Release of Clinical time to patient care	Patient safety improvement	Patient experience improvement
1 - Electronic records			x	x	x	x
2 - Reduction of resource requirements		x	x	x		
3 - Full tracking of equipment once moved from original destination		x	x	x		x
4 - Up-to-date assets register		x	x	x	x	

5 - Full audit trail		x	x	x	x	
6 - Full tracking of equipment		x	x	x	x	
7 - Clinical staff focusing on patient care		x	x	x		
8 - Reduction of equipment spend	x		x	x		
9 - Reduction of lost equipment		x	x	x	x	x
10 - Full tracking of equipment	x	x	x		x	
11 - Full maintenance records		x				

Figure 70: Benefits of Asset Management

Artificial Intelligence & Reporting

The data that can be created by Scan4Safey is not only vast but is also the first example of truly clean data in the NHS through the use of standards to identify the core enablers of patient, product & place.

This data is a rich source of information that could be used to not only review events that have already taken place, but also prevent events from occurring at all.

Clinical research relies on specific user groups to engage but the data captured through Scan4Safety could be used to track one implant against another for example, giving real life indicators on which product lasted the longest, which patient had recurring issues, etc.

In addition, Scan4Safety has allowed Trusts to start looking at Artificial Intelligence to improve patient care in real time. Through the use of listening systems akin to Amazon's Alexa, clinicians are testing the ability to track procedure information and products used on a patient whilst in surgery, with this information being directly coded to the appropriate GS1 identifier. The clinical time saved and improved data accuracy would be huge.

National Registries & Regulatory Bodies

Scan4Safety allows for Trusts to work more closely with National registries such as the National Joint Registry (NJR) and the Breast & Cosmetic Implant Registry (BCIR) through the use of automated data returns.

Work could also take place with the Medicines & Healthcare products Regulatory Agency (MHRA) to improve both the facilitation of product recalls and capturing the outcome. Currently MHRA has no way of knowing whether a recall was carried out in a Trust but the direct sharing of Scan4Safety data would show exactly what products were removed from the Trust through the unique GTINs and serial numbers.

6. Appendices

Appendix 1.0: Phase Approach – Core Enablers

	Phase 1	Phase 2	Phase 3	Phase 4
Core Enabler 1: Global Location Number	A single organisational GLN prefix in place	A sustainable organisational structure is in place to administer GLNs	Inventory management systems using GLN identifiers	All in-trust systems using GLN identifiers
	Trust GLN registry in place	Trust GLN registry 50% populated	Trust GLN registry 100% populated	Trust GLN data is populated into GS1 UK GLN registry
	50% of trust locations allocated a GLN	100% of trust locations have been assigned GLNs	50% of trust locations (Level 5 rooms and spaces) have GS1 barcodes affixed	100% of trust locations (Level 5 rooms and spaces) have GS1 barcodes affixed
			Interim case study including costs and benefits produced	Final case study including costs and benefits produced
Core Enabler 2: Catalogue Management	A catalogue management system is in place	50% of products purchased are listed in the catalogue system	90% of products purchased are listed in the catalogue system	30% of services purchased are listed in the catalogue system
	A detailed as-is to be gap analysis has been carried out	Relevant trust systems have been modified to utilise GTINs, GLNs and associated attributes	Integration of PIM to relevant in-trust systems is in place	A sustainable organisational structure is in place to administrate trust master data
		Where appropriate data is sourced from 'provisional central PIM'	50% of available master data is taken from the national PIM	100% of available master data is taken from the national PIM
			Interim case study including costs and benefits produced	Final case study including costs and benefits produced
Core Enabler 3: Patient Identification	50% of appropriate in-patients have GS1 wristbands given on admission	100% of appropriate in- patients have GS1 wristbands given on admission		
	AIDC scanning technology & hardware provider agreed	Relevant in-trust system are ready to store, receive and transmit to point of care scanners, EPR etc	Scanned information is stored in relevant systems. EPR etc	A sustainable organisational structure is in place to administer trust systems and processes
	Detailed processes and training plans in place to roll out point of care scanning including patient identification	Point of care scanning for patient identification in place in 50% of the trust	Point of care scanning for patient identification in place in 100% of the trust	
			Interim case study including costs and benefits produced	Final case study including costs and benefits produced

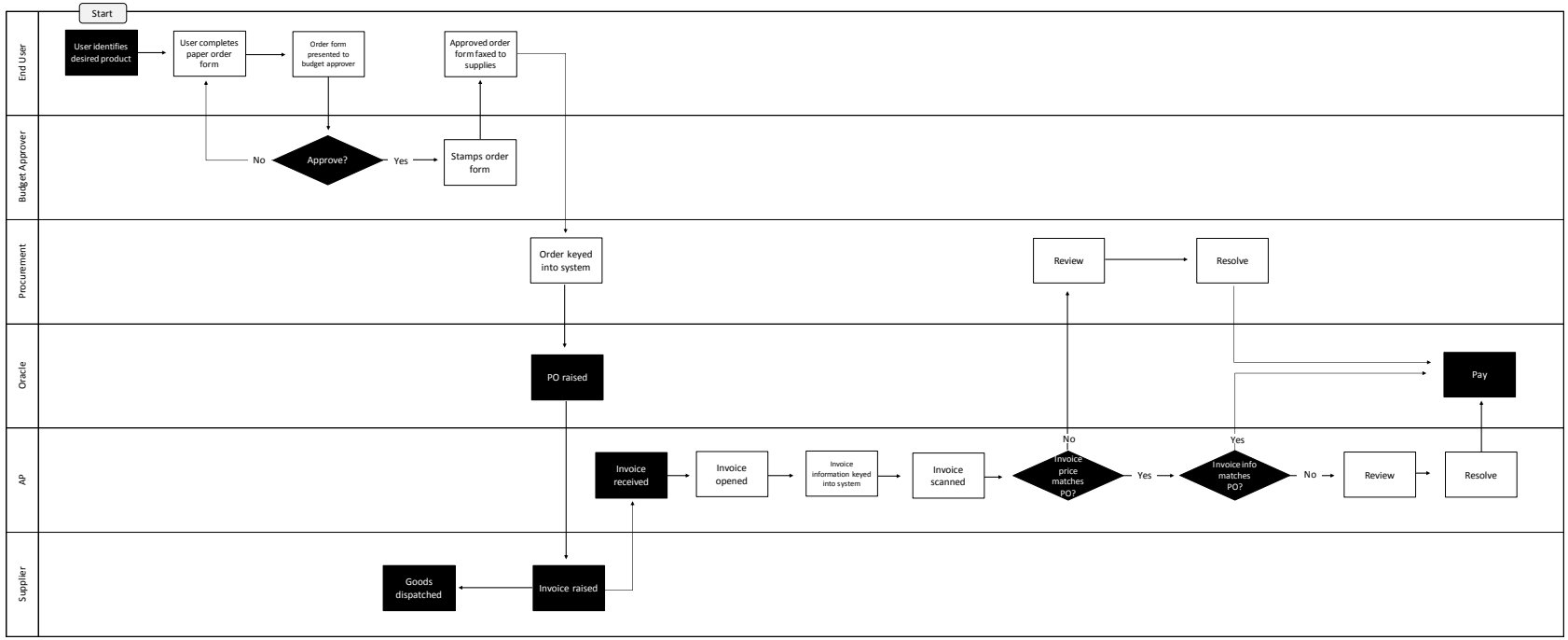
Appendix 2.0: Phase Approach – Use Cases

	Phase 1	Phase 2	Phase 3	Phase 4
Primary Use Case 1: Inventory Management	A detailed plan is in place to manage inventory across all trusts departments	A sustainable organisation is in place to manage inventory across all trust departments	Business case produced for the creation of a single in-trust logistics function	Business case for the creation of a single in-trust logistics function agreed by the trust board
		Implementation of inventory management processes commenced	Implementation of auto-replenishment of inventory using GLNs and GTINs commenced	Trust-wide inventory levels represent an average of less than 3 weeks cover
		Creation of web requisitions has reduced by 50%	Creation of web requisitions has reduced by 75%	Less than 0.5% of purchase orders are generated by web requisition
			25% of relevant products can be tracked by batch or serial number to the patient record	50% of relevant products can be tracked by batch or serial number to the patient record
	Review of existing technical solutions for inventory management undertaken	Investment case produced to upgrade technical solution set where needed	Full technical solution set available for deployment across the whole trust	Deployment of technical solution commenced
			Interim case study including costs and benefits produced	Final case study including costs and benefits produced
Primary Use Case 2: Purchase to Pay	Organisational review of policies and processes completed	Updated P2P policies and processes agreed	Training of relevant staff in new P2P processes completed	
		Technical development path identified and agreed	Technical solution set deployed in one department (eg supplies; pharmacy etc)	Technical solution set deployed in all departments (eg supplies; pharmacy etc)
		Plan for the trust to adopt machine to machine processing agreed	Updated P2P processes implemented	A sustainable organisational structure is in place to manage P2P processes
		Access point provider selected and live	30% of trusts purchase orders and invoices are exchanged via access points	60% of trusts purchase orders and invoices are exchanged via access points
			Purchase orders and invoices exchanged via the trusts access point carry GS1 GLN keys and, where available, GTIN keys	
			Interim case study including costs and benefits produced	Final case study including costs and benefits produced
Primary Use Case 3: Product Safety Recall	Organisational review of policies and procedures completed	Updated product recall policies and procedures agreed	Training of relevant staff in new product recall procedures completed	
		Technical development path identified and agreed	Technical solution set deployed in one department (eg supplies; pharmacy etc)	Technical solution set deployed in all departments (eg supplies; pharmacy etc)
			Updated product recall procedures implemented	A sustainable organisational structure is in place to manage product recall procedures
			50% of product recalls are being done using the new processes	100% of product recalls are being done using the new processes
			Interim case study including costs and benefits produced	Final case study including costs and benefits produced

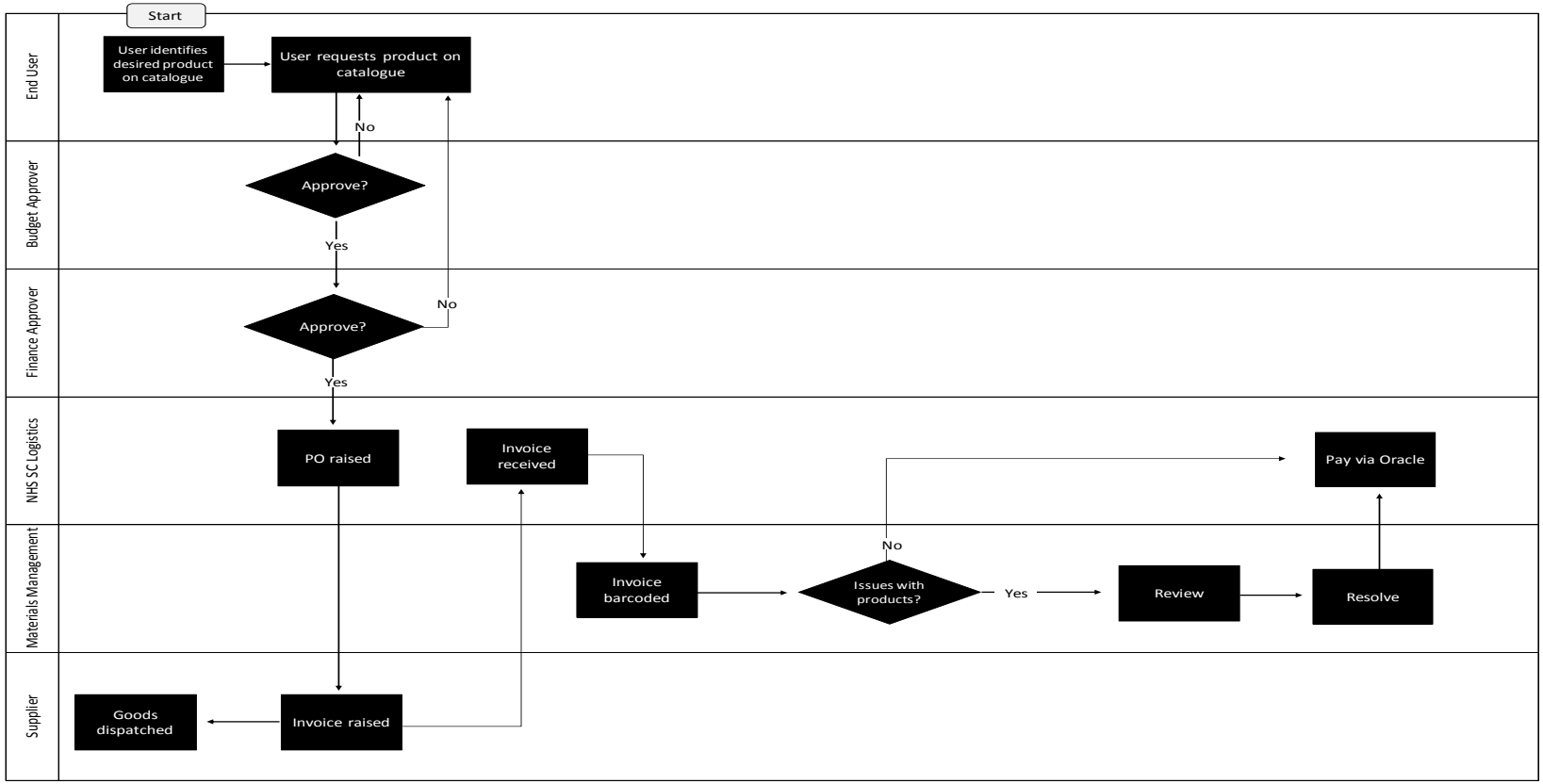
Appendix 3.0: P2P Process Maps

3.1 Catalogue Supplies

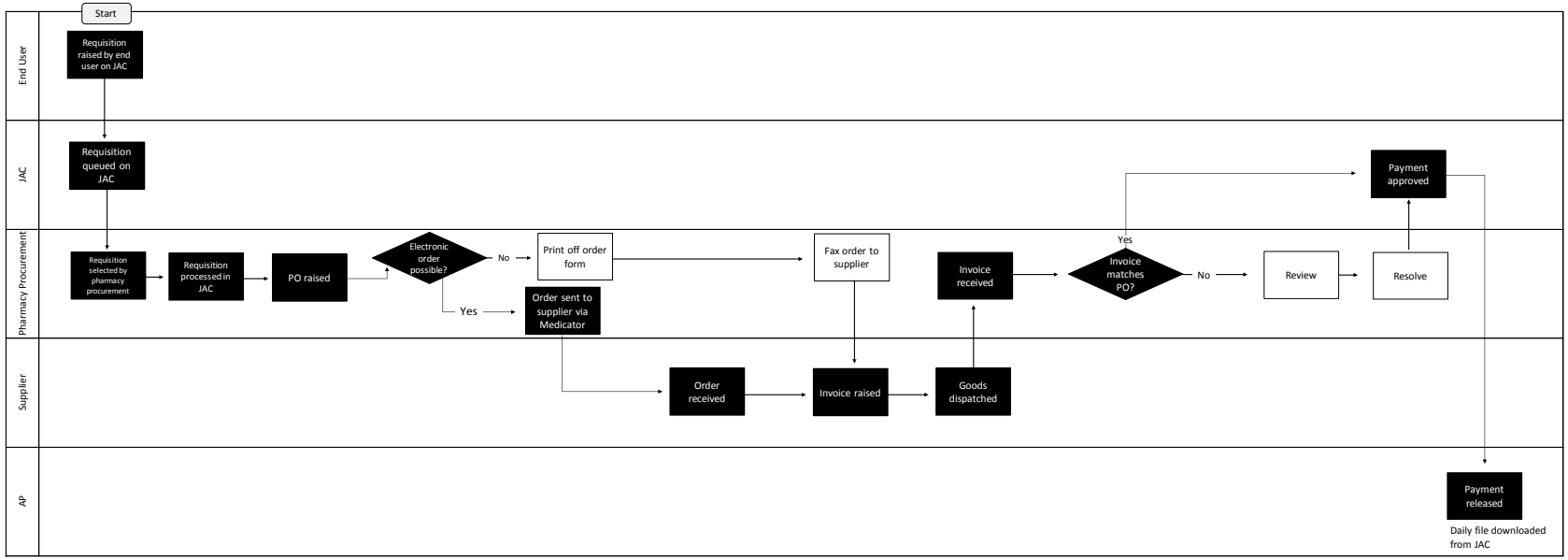
Based on average invoice volumes provided by Leeds Teaching Hospitals, Trust estimates on the volume of paper invoices processed, and interviews with finance and procurement staff regarding processing time. This knowledge will be used to provide estimates across WYAAT.



3.2 P2P Non Catalogue Process Map – Supplies

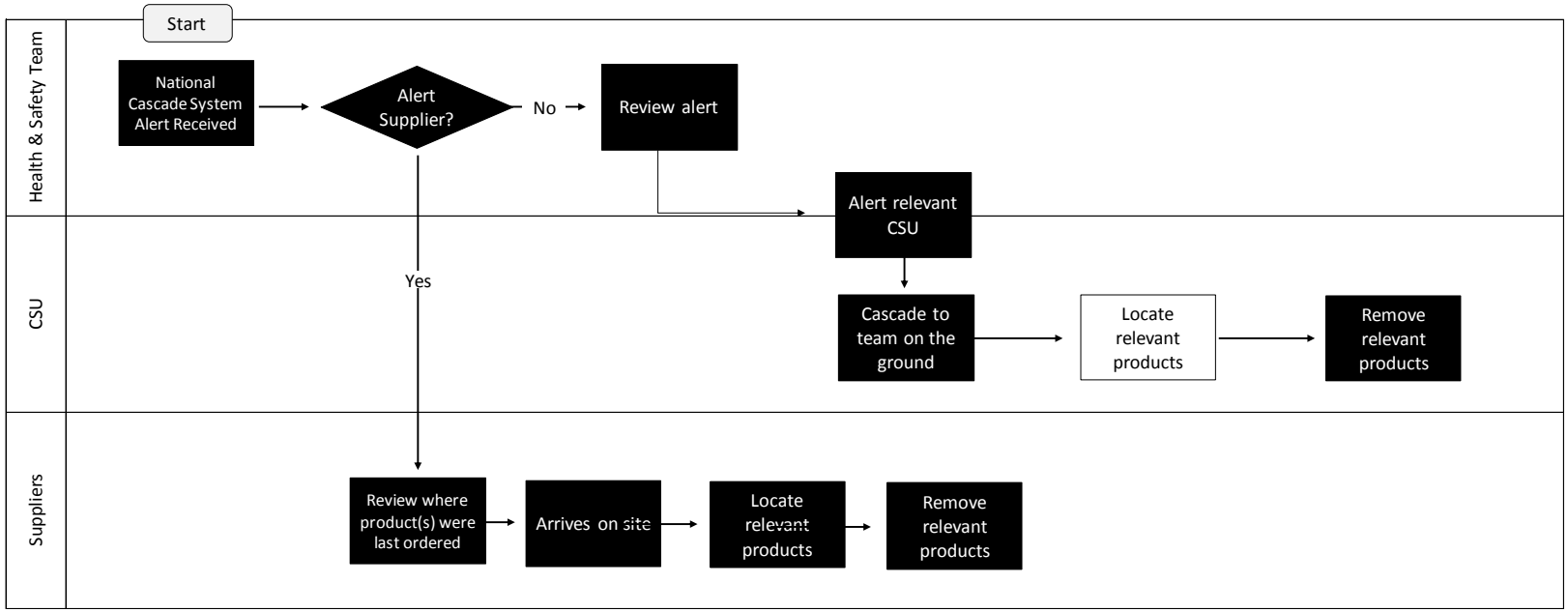


3.3 P2P Ordering Process – Pharmacy



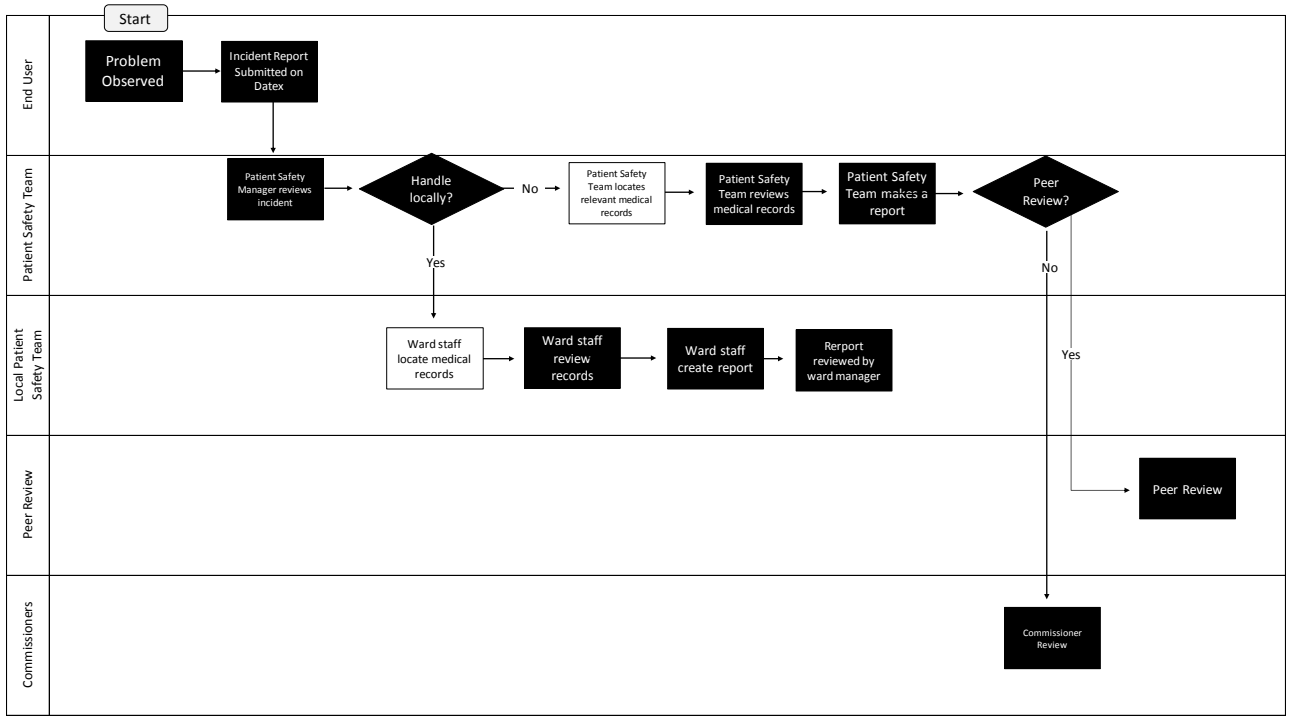
3.4 Product Recall Process

GS1 and PEPPOL standards can enable significant time savings in the location and identification of patients effected by product recalls.

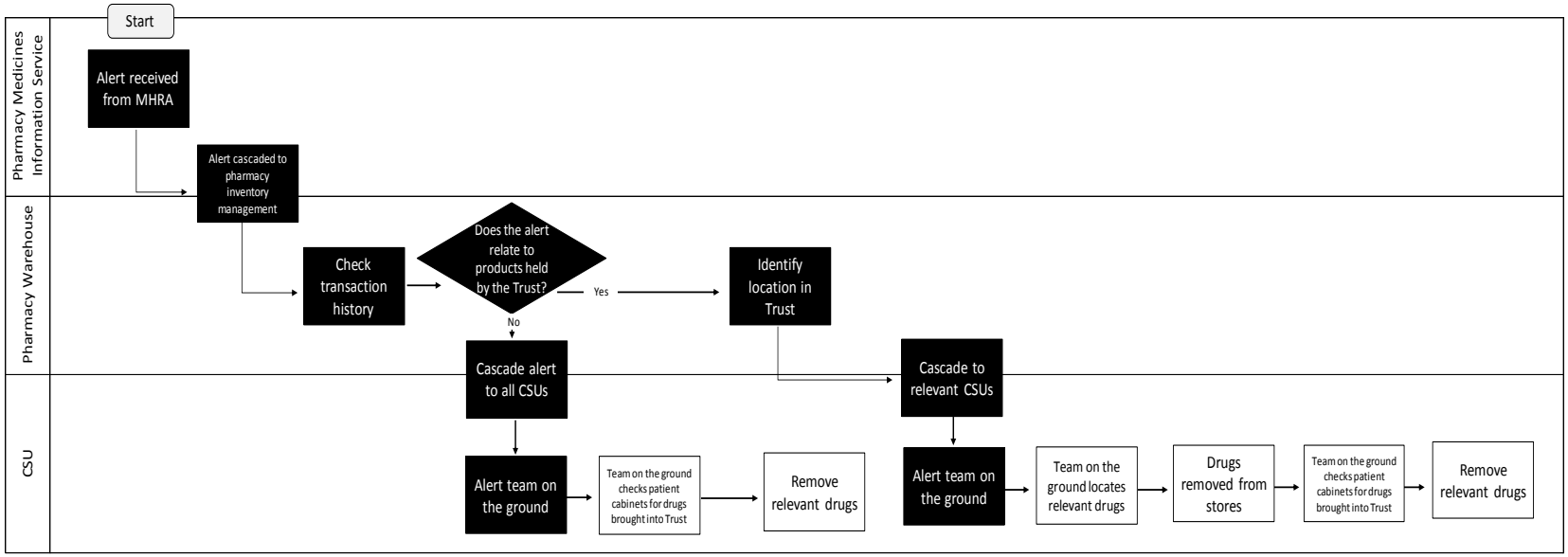


3.5 Incident Report

GS1 and PEPPOL standards can enable significant time savings in the location and identification of patients effected by incident reports.



3.5 Medicines Recall Process



Appendix 4.0: Business Case Development Methodology

This business case has been developed by taking a rigorous bottom up approach, engaging key stakeholders from across the organisations and using data as the driver to build the case for change. The rationale for taking this approach is to ensure that the overall benefit and costs are as robust as possible with validated assumptions used where data is unavailable. As the benefits and costs drive the implementation plan, it is important to ensure that all data points and processes are captured accurately so that the Trust has a robust and granular path to follow in the implementation phase.

4.1 Events

During the development of the business case, events were held by Leeds Teaching Hospitals NHS Trust to develop understanding across WYAAT of what would be delivered by the Scan4Safety Programme. These events provided an opportunity for each regional Trust to ask questions and delve deeper into the GS1 knowledge held by Leeds.

Once such event was hosted during the week commencing 17th September 2018 and was attended by nearly 300 representatives from WYAAT Trusts and arms-length bodies.

4.2 Interviews

The first step taken was to conduct a series of interviews with stakeholders across the Trust. During the development of this business case the following stakeholders were interviewed:

Name	Position
Rachael Stray	Associate Director of Operations, Airedale
Karl Mainprize	Medical Director, Airedale
Andrew Leng	Interim IT Director, Airedale
Oliver Golledge	Deputy Head of Procurement & Supplies, Airedale
Matthew Horner	Director of Finance, Bradford
Cindy Fedell	Director of Informatics, Bradford
Julie Thrippleton	Deputy Head of Procurement, Bradford
Collette Cunningham	Divisional General Manager – Medicine (Theaters) , Bradford
David Smith	Director of Pharmacy, Bradford
Dave Griffith	Informatics Programme Manager, Bradford

Name	Position
Paul Austick	Supply Chain Manager, Bradford
Sandra Shannon	Bradford
Michael Quinlan	Bradford
Steve Blenkinsop	Bradford
Fiona Smith	Clinical Director of Pharmacy, Calderdale
Mandy Griffin	Managing Director Digital Health, Calderdale
Keith Redmond	Senior Portfolio Manager - THIS, Calderdale
Luke Whitley	Acting Up Chief Medical Engineer - Medical Physics, Calderdale
Margaret Metcalfe	Deputy Associate Director of Nursing - General Surgery, Calderdale
Maureen Overton	Associate Director of Digital Health & Cancer Services,

Shahid Nazir	Strategic Head of Procurement, Bradford
Nicole Jackson	Procurement Manager, Bradford
Robert Harrison	Chief Operating Officer, Harrogate
Andy Alldred	Clinical Director Long Term and Unscheduled Care / Director of Pharmacy, Harrogate
Paul Nicholas	Deputy Director of Performance and Informatics, Harrogate
David Earl	Consultant Anesthetist, Harrogate
Beverley Curtis	Medical Devices Safety Officer, Harrogate
Jordan McKie	Deputy Director of Finance, Harrogate
Thomas Morrison	Senior Financial Accountant, Harrogate
David Sales	Deputy Sales Manager, Purchasing and Supplies, Harrogate
Phil Sturdy	Deputy Director of Estates, Harrogate Healthcare Facilities Management, Harrogate
Julie O'Brien	Sister, Day Surgery Unit, Harrogate
Rhys Edwards	Safety, Quality and Service Delivery Manager, Harrogate
Mikalie Lord	Programme Manager PMO, Harrogate
Joan Ingram	Theatres CSU, Leeds
Richard Corbridge	Chief Digital Information Officer, Leeds
Chris Slater	Associate Director, Commercial & Procurement, Leeds
Steve Barker	Supply Chain Manager, Leeds
Stuart MacMillan	Scan4Safety Programme Lead, Leeds
Catherine Craddock	Head of Procurement, Mid Yorks
Andrew Ward	Inventory Manager
George Anderson	Head of Contracts Clinical
Denise Sayles	Head of Contracts Non Clinical
Tony Ulyett	Stock Information Finance
Craig Richardson	Head of Facilities
Paul Curley	Deputy Medical Director, Mid Yorks

	Calderdale
Neil Staniforth	General Manager - Informatics, Calderdale
Neil Asling	Portfolio Manager - Information Management, Calderdale
Paula Crowther	Senior Finance Manager, Calderdale
Thomas Wareham	Systems Development Leader - Purchasing and Supplies, Calderdale
Stuart Baron	Calderdale
Matt Barker	Calderdale
Penny Daynes	Calderdale
Julian Hartley	Chief Executive, Leeds
Simon Worthington	Director of Finance, Leeds
David Berridge	Medical Director, Operations, Leeds
Liz Mellor	Medicines Governance Pharmacist, Leeds
David Allwood	Procurement Lead Pharmacist, Leeds
Richard Eyles	Pharmacy IT System Manager, Leeds
Rob Armstrong	Theatres General Manager, Leeds
Martin Barkley	Chief Executive, Mid Yorks
Jane Hazelgrave	Director of Finance, Mid Yorks
Heather Cook	Director of IT, Mid Yorks
Jason Matthews	Deputy Director of Finance, Mid Yorks
Lee Lane	Deputy Head of PMO, Mid Yorks
David Hay	Stock Information Finance
Nicola Moore	Stock Information Finance
Richard Corbridge	Chief Digital Information Officer, Leeds
Craig Brigg	Director of Quality Patient Safety, Leeds
Andrew Montgomery	Head of Estates, Leeds
Jenny Stewart	Clinical Procurement Specialist, Mid Yorks
Kat Poole	Head of IT Programme Management, Mid Yorks

Trudie Davies	Chief Operating Officer, Mid Yorks
Mark Braden	Director of Estates & Facilities, Mid Yorks
David Melia	Director of Nursing, Mid Yorks
Gemma Hinchcliffe	Matron, Mid Yorks
Rebecca Saville	Theatre Manager, Mid Yorks
Shaun Boffey	Associate Director of Contracts and Information Services, Mid Yorks

Vicky Hill	Head of Finance, Mid Yorks
Alex Zarneh	Head of Medical Physics, Mid Yorks
Julie Ellam	Associate Director of Pharmacy, Mid Yorks
Jackie Asquith	Theatre Team Leader, Mid Yorks
Angela Fairbank	Head of Sterile Services, Mid Yorks

These interviews were used to raise awareness of GS1 and PEPPOL, understand the Trust's objectives, current processes, and existing change projects and to request key data points for building the case for change.

4.3 Process Mapping

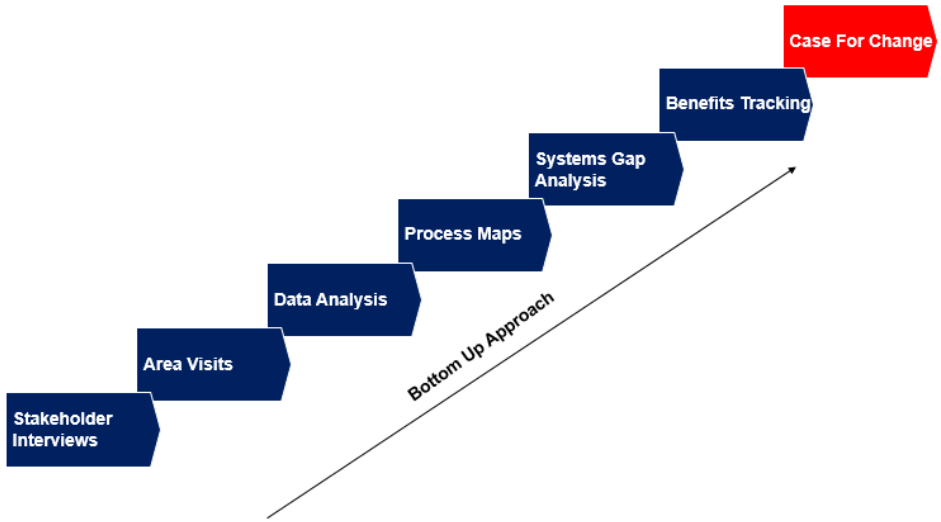
Clinical area time and motion studies and observations were conducted to walk through processes, understand current inventory management practices and to speak to clinicians on the ground. These activities provided the means to conduct the data, process and systems analysis required to build the case for change. Process mapping tools and time studies were also used to understanding purchasing, payroll and clinical risk processes in the organisation.

4.4 Data Analysis

Datasets were requested and analysed to understand inventory levels, expenditure profile, invoicing patterns, incident reporting and risk assessments to feed baseline and savings metrics.

4.5 Business Case Validation

This business case has been reviewed by both the WYAAT Trust Boards and independently.

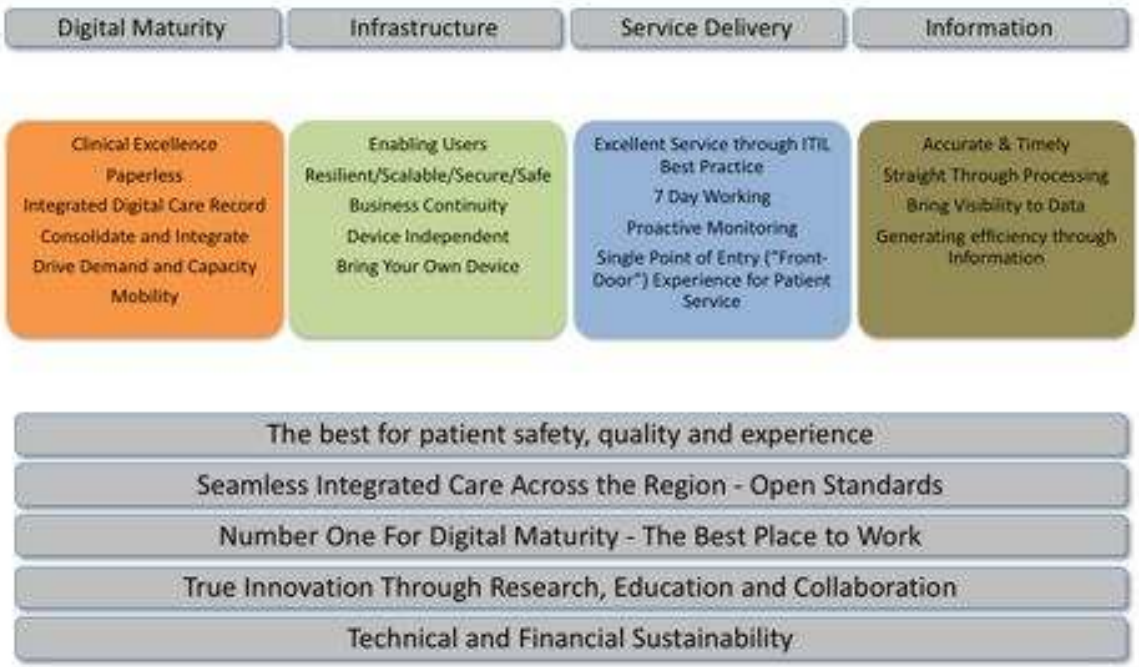


Business Case Development Methodology

Appendix 5.0: Full Programme Plan

WYAAT_Scan4Safety_GS1Adoption_Depl

Appendix 6.0: Overall Systems Strategy



Appendix 7.0: GS1 Compliance Reports

7.1 Airedale NHS Foundation Trust

Airedale NHS Foundation Trust Re

7.2 Bradford Teaching Hospitals NHS Foundation Trust

Bradford Teaching Hospital NHS Founc

7.3 Calderdale & Huddersfield NHS Foundation Trust

GS1 Readiness report - Calderdale a

7.4 Harrogate & District NHS Foundation Trust

Harrogate District Foundation Trust GS

7.5 Leeds Teaching Hospitals NHS Trust

LTHT decided to forego a recent report given the level of compliance with the Department of Health & Social Care milestones as a demonstrator site.

7.6 Mid Yorkshire NHS Trust

Mid Yorkshire Hospitals NHS Trust

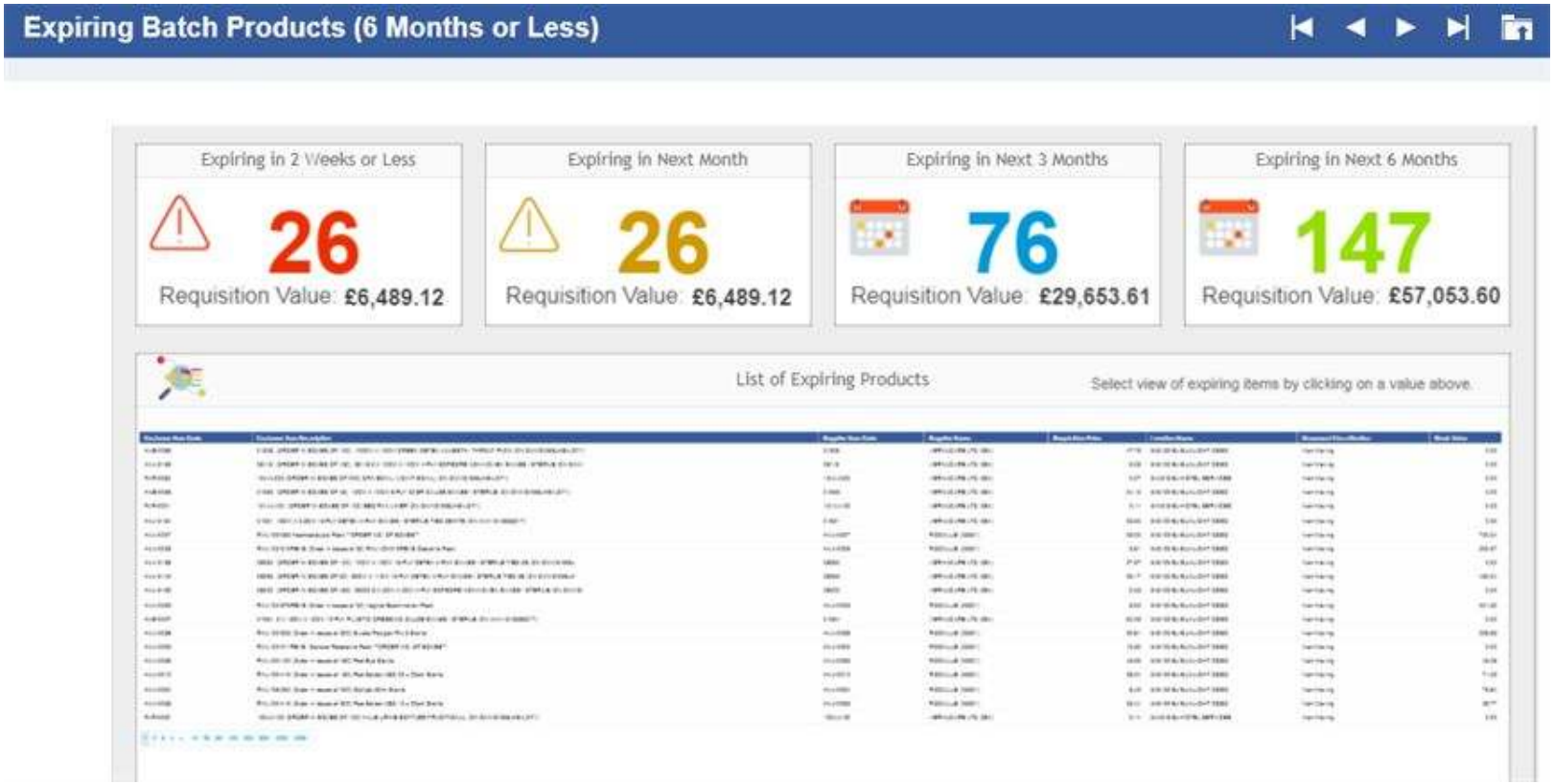
Appendix 8.0: Reporting

One of the significant lessons learned from the original Scan4Safety demonstrator sites is the requirement for real time reporting on the data captured at the point of care. Work should be undertaken regionally to create dashboards available in real time to clinicians, clinical unit general managers and supplies staff.

8.1 GTIN Compliance

8.2 Product Recall

8.3 Wastage Reporting



Appendix 9.0: Reducing Long Stays

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r-from-pauline-philip.p

Appendix 10.0: Benefits

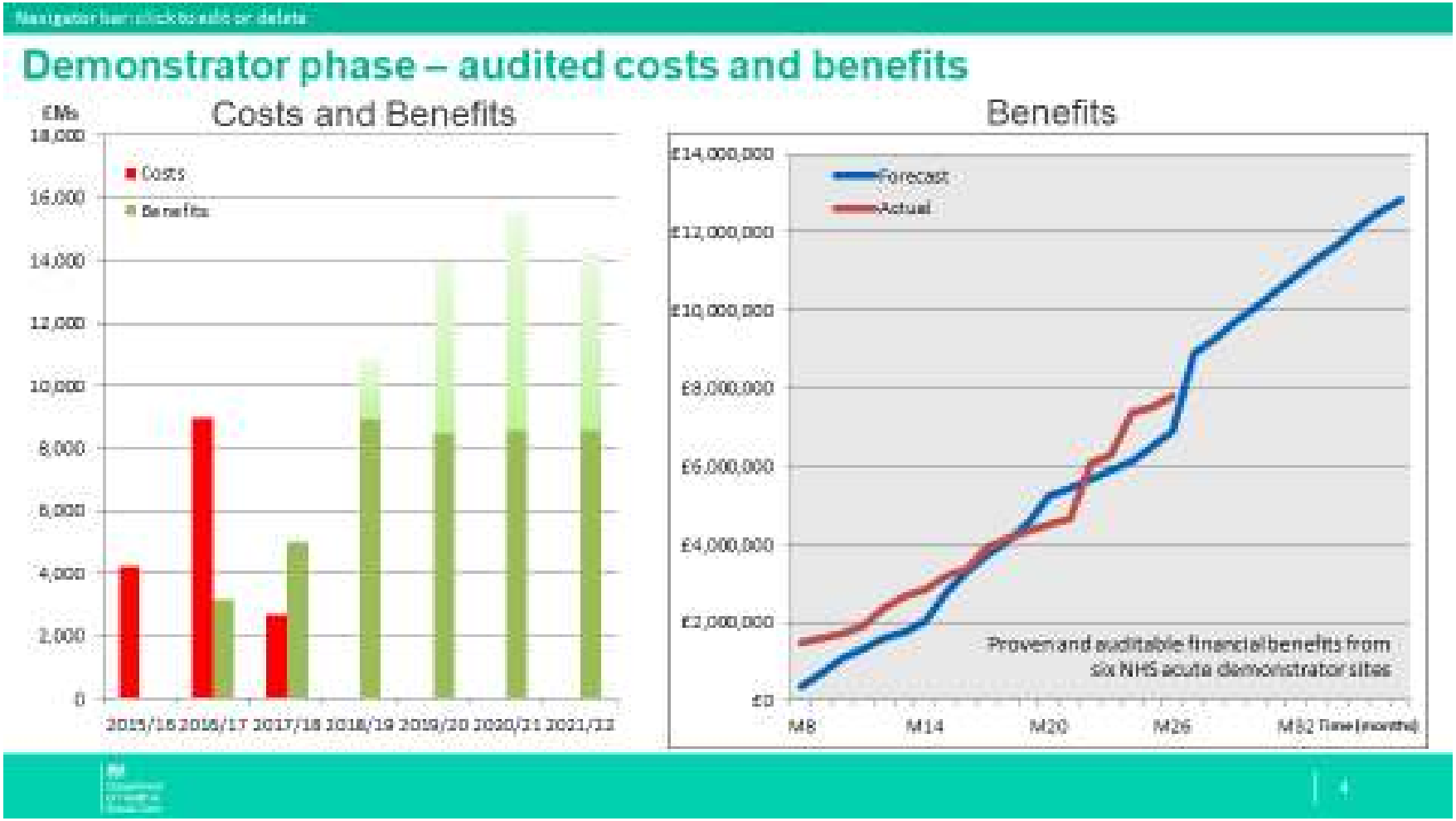
Benefits as calculated by the Department of Health & Social Care:

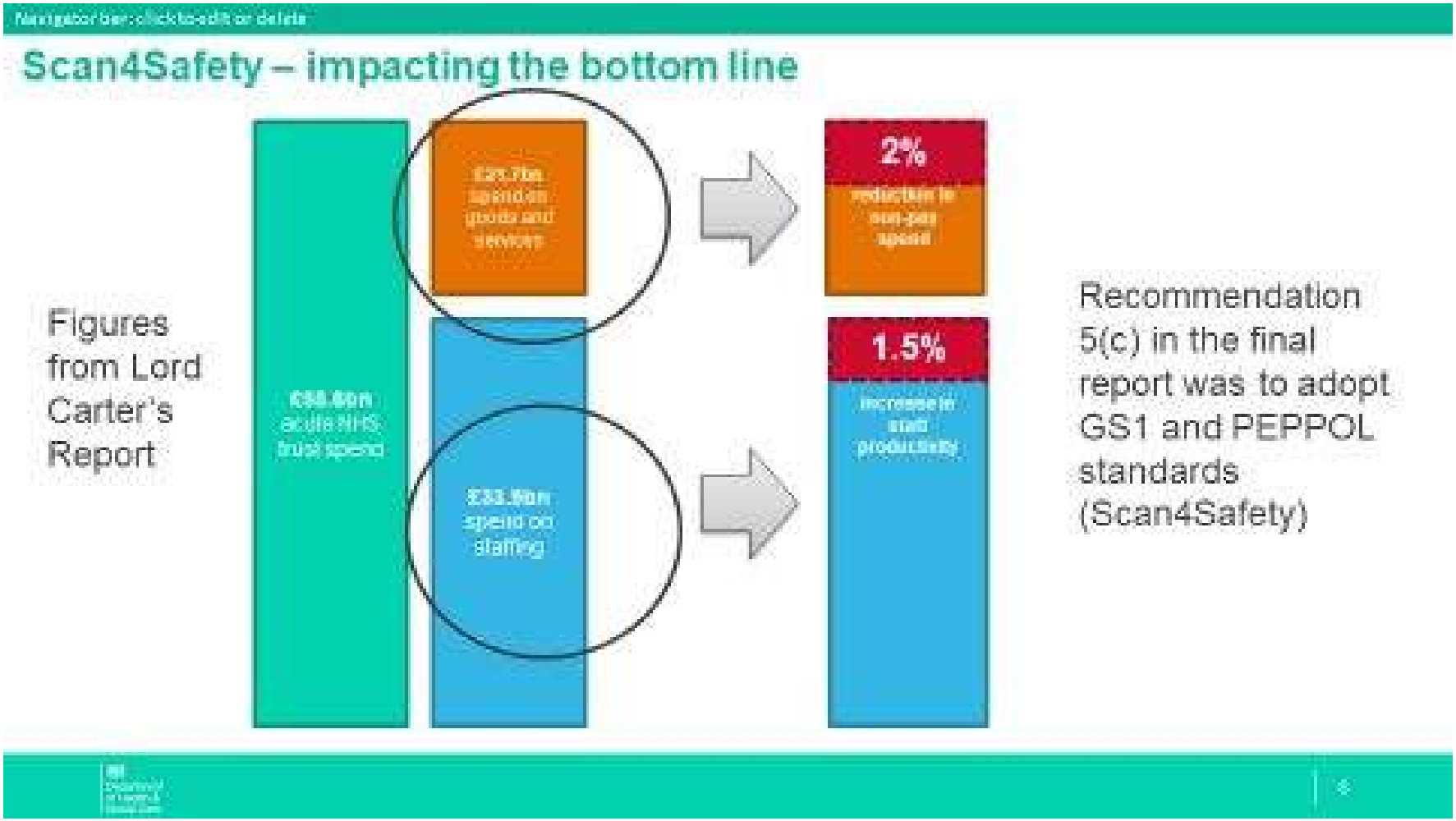
		Benefit	Context	Narrative	Effect	Independent Estimates	Trust Estimate / Actual	Benefit	Annual / One Off	Notes
Benefits: Core Enablers	1	Reduce Adverse Drug Events	Medication error rate in inpatient admissions used as baseline	Number of medication errors reported in trust annually	Determines baseline for reduction	8,000	6,750			This full benefit will only occur when medicines use cases have been implemented in addition to the core enablers and primary use cases
			ADE cost	Each ADE costs the trust circa £3,000-5,000 (McKinsey's Strength in Unity)		£3,000	£4,000			
			Range of reduction in ADEs (total)	McKinsey's Strength in Unity estimate 30-50% reduction		30%	40%	£10,800,000	Annual	
			Range of reduction based on completing the core enablers	DH estimate 25% of the total reduction will result from completing the core enablers		25%	25%	**£2,700,000**	Annual	
	2	Reduce trust data management cost	Data management headcount	McKinsey estimate 10 FTE's per Trust working to collect / correct data within all systems		40	60			These benefits will occur when core use case has been implemented
			Labour cost	Hospital staff all in labour cost		£60,000	£60,000			
			Activity reduction post program	20-30% labour cost reduction		20%	20%	**£720,000**	Annual	
Benefits: Primary Use Cases	3	Trust wide Inventory and top up management	Inventory levels held taken from annual accounts	Inventory held	Determines baseline for one off saving	Not applicable	£30,000,000			
			Trust turnover relevant to inventory held (medical, non medical and pharmacy)	Trust turnover	To calculate weeks cover figure	Not applicable	£50,000,000			

			Gives a simple ration of inventory held against spend expressed as weeks cover	Weeks cover	For information		148.57			
			Inventory held reduction	McKinsey estimate 30% reduction in stock cover when Inventory management is implemented. This accounts for all stock (expensed / consigned etc)	Determines baseline for one off saving	30%	30%	**£9,000,000**	One off	
			Reduction in obsolescence	McKinsey estimate 20% of inventory held as a value is lost through wastage and obsolescence annually		20%	20%			
				McKinsey estimate that full inventory and top up implementation will reduce this by 50%-57%		50%	50%	**£3,000,000**	Annual	
	4	**Reduce recall processing cost**	Number of recalls effected by the trust	Mckinsey's estimate 1000 per annum per Trust	Determines baseline for reduction	5,000	5,150			These benefits will only occur when core use case + full trust inventory management have been implemented
			Labour cost	Hospital staff all in labor cost: £60,000		£60,000	£60,000			
			In-trust recall activity	4-20 hours required to check stock for typical recall		4	4			
			Activity reduction	60-80% reduction in activity		60%	70%	**£492,000**	Annual	
	5	**Automate purchase 2 pay processes**	Paper invoice reduction	Number of non electronic invoices issued annually	Determines baseline for cost saving	75,000	90,000			These benefits will occur when core use case has been implemented
				Number of non electronic invoices received annually	Determines baseline for cost saving	50,000	54,600			
				Cost to send paper invoice (European Association of Corporate Treasurers)		£11.00	£11.00			

				Cost to receive paper invoice (European Association of Corporate Treasurers)		£14.00	£14.00			
			e-invoice cost reduction	Paper invoices cost 74% to 89% more to process than electronic invoices (Gartner study)		74%	80%	**£780,000**	Annual	
	6	**Reduce ADE's**	ADE reduction as a result of this use case being implemented	DH estimate of 25% of the total reduction will result from completing the primary use cases		25%	25%	**£2,700,000**	Annual	These benefits will only occur when core enablers + primary use cases have been fully implemented

Benefits from the original six demonstrator sites in line with expectations:




Navigator bar: click to edit or delete
Scan4Safety – impacting the bottom line
Figures from Lord Carter's Report
£xx.xbn spend on goods and services
£xx.xbn spend on staffing
2%
reduction in non-pay spend
1.5%
increase in staff productivity
Recommendation 5(c) in the final report was to adopt GS1 and PEPPOL standards (Scan4Safety)

Appendix 11.0: Acknowledgements

This business case has been developed in partnership between Airedale NHS Foundation Trust, Bradford Teaching Hospitals NHS Foundation Trust, Calderdale and Huddersfield NHS Foundation Trust, Harrogate and District NHS Foundation Trust, Leeds Teaching Hospitals NHS Trust and Mid Yorkshire Hospitals NHS Trust.

A special mention for key individuals who have been vital in the creation of this business case:

- Airedale NHS Foundation Trust
  - Rachael Stray, Assistant Director of Operations
- Bradford Teaching Hospitals NHS Trust:
  - Dave Griffith, Informatics Programme Manager
  - Peter Rideout, Project Manager
- Calderdale and Huddersfield Foundation NHS Trust:
  - Neil Staniforth, General Manager
- Harrogate and District NHS Foundation Trust:
  - Mikalie Lord, Programme Manager – PMO
- Leeds Teaching Hospital NHS Trust:
  - Chris Slater, Head of Supplies and Procurement
  - Stuart MacMillan, Scan4Safety Programme Lead
  - Andy Burch, Business Analyst
- Mid Yorkshire Hospitals NHS Trust:
  - Cath Craddock, Head of Supplies

7.1

Business Case for the West Yorkshire Association of Acute Trusts' (WYAAT) Deployment of Scan4Safety

(*Adoption of GS1 & PEPPOL Standards*)

30 October 2018

V1.4 - CONFIDENTIAL

A. Executive Summary

The purpose of this business case is to explain the deployment of Scan4Safety across the West Yorkshire Association of Acute Trusts (WYAAT) in order for the Trust Boards to support the submission of this case to NHS Improvement, to garner confirmation of the allocated funding and its drawdown.

NHS Improvement has made available **£14.952m** to accelerate the adoption of Scan4Safety across WYAAT, and this business case details the deployment of the programme to the end of **March 2022**.

Scan4Safety is a National programme born out of the Department of Health & Social Care (DHSC) eProcurement Strategy to deliver the adoption of GS1[1] identification standards and PEPPOL[2] transaction messaging standards throughout the NHS.

Due to the success of the National Scan4Safety programme delivering key benefits within the first two years, **NHS Improvement committed to spend across the West Yorkshire Association of Acute Trusts (WYAAT) to promote GS1 & PEPPOL adoption** and **implementation** of Scan4Safety across the region. The Trusts engaged with the programme are:

- Airedale NHS Foundation Trust (ANHSFT)
- Bradford Teaching Hospitals NHS Foundation Trust (BTHFT)
- Calderdale and Huddersfield NHS Foundation Trust (CHFT)
- Harrogate and Rural District NHS Foundation Trust (HDFT)
- Leeds Teaching Hospitals NHS Trust (LTHT)
- Mid Yorkshire Hospitals NHS Trust (MYHT)

The Request of the Board

This document is being put to the Board seeking approval for the following:

- Submission of this business case to NHS Improvement to gain confirmation of the allocation of capital funding and its drawdown

The Board should note that, at this stage, there is no commitment by any trust to any costs or benefits. Once the regional procurement has been completed a further business case will be produced based on actual costs for the systems from the preferred bidder and further analysis of the benefits. This business case will set out the costs, both capital and revenue, and the benefits which will fall to each trust. It will seek approval from the WYAAT CIC and Trust Boards to sign a contract with the preferred bidder and implement the systems across WYAAT. Only at this point will the trusts be committing to expenditure.

[1] GS1 (Global Standards 1) are an international not-for-profit association with 112 Member Organisations in over 115 countries. The GS1 vision is to provide a common language for companies when it comes to identifying people, locations, items and documents, capturing information at the point of interaction and sharing data throughout the procurement process from supplier to point of care/point of use

[2] PEPPOL (Pan European Public Procurement On Line) is a common messaging standard to automate machine-to-machine purchase orders and invoice transactions between customers and suppliers through PEPPOL 'access points'

Objectives

The Scan4Safety programme is aligned with the WYAAT strategic goals to be the best for patient safety, quality and experience.

The purpose of this transformation programme is to:

- Implement the core standards for identification of Place, Product & Patient (see box)
- Deploy a regional shared supply chain solution to allow for the operational improvement in product usage
- Digitise product recalls through the collaborative use of data and the development of a regional data warehouse
- Deploy the capability to capture product usage and clinical variation at the patient's bedside
- Ultimately, improve the care of all patients; reduce clinical variation and make more robust and proactive operation decisions across the Trusts and ICS.

WYAAT Scan4Safety Vision

"The digital innovation of the region through the implementation of standards"

*GS1 and PEPPOL adoption involves the implementation of international standards of identification across three **'core enablers'**:*

- Patient - Standardised Patient Identification Data Structure
- Place - Standardised Location Numbering Published Nationally for deliver to and invoice locations
- Product - Catalogue Management using standardised product identifiers

*The delivery of 3 **'primary use cases'** that rely on the core enablers will provide an initial wave of benefits to WYAAT:*

- *Full region wide inventory management including the scanning of appropriate products to patients at the point of care*
- *Procurement-to-Pay process standardisation and the adoption of machine-to-machine messaging*
- *Product recall process standardisation*

7.1

1. The Strategic Case

The Trusts are well positioned to adopt GS1 and PEPPOL messaging standards.

- Many of the organisational support and systems fundamentals are established
- A significant opportunity to leverage parallel and complimentary programmes
- A change in culture is being embedded throughout the organisations through the adoption of standards which define how the Trusts will work together to deliver the best outcomes for patients
- The transformation strategy being pursued recognises the importance of embedding sustainable change which goes beyond in year savings; the Executives see GS1 and PEPPOL adoption as a way of embedding benefits beyond 2022.

The West Yorkshire Association of Acute Trusts (WYAAT) is an innovative collaboration, which brings together the NHS trusts who deliver acute hospital services across West Yorkshire and Harrogate. It is about local hospitals working in partnership with one another to give patients access to the very best facilities and staff.

Carter Report

In July 2014 Lord Carter was appointed chair of the NHS Procurement and Efficiency Board with a mandate to help the NHS cut waste, drive efficiencies and save money which can be routed to frontline patient care. In the final Carter report published 5th February 2016 (*Source: https://www.gov.uk/government/publications/productivity-in-nhs-hospitals*), it was recognised that a key barrier in delivering this mission is a lack of consistent and comparable metrics to understand operating efficiency performance across hospitals. The report identified significant and unwarranted variation in costs and practice which if addressed, could save the NHS £5bn, with key points being specifically addressed by Scan4Safety, as set out below;

- Trusts to aim to work in collaboration both with national procurement strategies and other trusts to explore common systems adoption e.g. efficient electronic catalogues using retail system standards, enhancing current purchase to pay systems, adopting (**GS1**) and Pan European Public Procurement Online (**PEPPOL**) standards.

2. The Economic Case

An accelerated deployment of GS1 core enablers, primary use cases and PEPPOL electronic messaging standards (see box above), supported by funding from NHS Improvement, will deliver adoption within 36 months capitalising on the existing materials management capability, the regional care record programme and well developed e-procurement capabilities. This option is highly recommended by this business case with a deployment schedule as follows:

- **Mobilisation:** March 2019 – April 2019
- **Phase 1:** May 2019 – January 2020
- **Phase 2:** February 2020 – October 2020
- **Phase 3:** November 2020 – July 2021
- **Phase 4:** August 2021 – March 2022

The economic case compared two options and it is recommended that option two, NHS Improvement funded, is the preferred way forward due to key factors:

Quantitative Summary

Total Investment Required	**£14,952k**
One Time Benefits	£9,141k
Annual Incremental Operating Cost	£250k
Annual Non-Pay Benefit	£10,069k by 2027
Annual Pay Benefit	£2,388k by 2027
Net Recurrent (Cost) / Benefit	£12,400k by 2027
End State GS1 Maturity (Average Phase across six enablers / use cases)	4

Qualitative Summary

Reputation	*Significant*
Hub of Learning	*Significant*
Workforce satisfaction	*Significant*
Patient satisfaction	*Significant*
Overall assessment	***Significant***

3. The Financial Case

It is anticipated that the adoption of GS1 and PEPPOL will deliver up to £12,457k of cash releasing benefits across WYAAT. This figure is limited to the direct benefits calculated for the deployment of the four phases, and does not factor in the additional benefits GS1 will provide (outside of the primary use cases and core enablers) such as through patient level costing, workforce productivity, stock standardisation and upstream supply chain efficiencies.

Incremental costs and benefits	Project year Financial year Sum of Cashflows
(1) COSTS	
Capital Costs (including optimism bias)	13,669,477
Revenue Costs	5,415,465
Transitional & non-recurrent revenue costs	-
INCREMENTAL COSTS TOTAL	**19,084,942**
(2) BENEFITS	
Capital Costs (including optimism bias)	-
Revenue Costs	-
Transitional & non-recurrent revenue costs	-
Cash Releasing Benefits	75,622,030
Non-cash Releasing Benefits	-
INCREMENTAL BENEFITS TOTAL	**75,622,030**
Value for Money Ratio	**4.0**

Figure 1: Summary Financial Position

A cost model has been defined based on the detailed activity plan per enabler / primary use case by phase:

	Mobilisation & Phase 1 (% for Phase) / £0,000s	Phase 2 / £0,000s	Phase 3 / £0,000s	Phase 4 / £0,000s	Total / £0,000s
Point of Care Data Capture	856 (25%)	2,168 (51%)	2,168 (42%)	514 (24%)	**5,706** (38%)
Electronic Health Record & Pharmacy Integration	1,217 (35%)	685 (16%)	1,141 (22%)	761 (36%)	**3,804** (25%)
Data Centre Implementation	325 (9%)	824 (19%)	824 (16%)	195 (9%)	**2,168** (15%)
Supply Chain Delivery	939 (27%)	528 (12%)	880 (17%)	587 (28%)	**2,934** (20%)
Contingency	109 (3%)	61 (1%)	102 (2%)	68 (3%)	**341** (2%)
Total	**3,446**	**4,266**	**5,115**	**2,124**	**14,952**
% by Total	(23%)	(29%)	(34%)	(14%)	(100%)

Figure 2: Investment by Phase

7.1

Benefits of Adoption

Full adoption of the core enablers and primary use cases will drive significant benefits by reducing clinical risk, therefore improving patient safety and reducing mortality, making supply chains and transactional processes more efficient as well as enabling significant inventory reduction and reduction of wastage and obsolescence of consumables, devices, implants and medicines throughout the Trust.

Specifically, GS1 and PEPPOL adoption at The **West Yorkshire Association of Acute Trusts** will deliver one time benefits across WYAAT of £9,100k and recurrent benefits of £12,457k in the most likely scenario, derived from pay and non-pay efficiencies, as well as a considerable release of clinical time to patient care and significant opportunity to manage down risks.

Quantifiable Benefits

- **140,000 – 209,000 hours per annum released to clinical care (equivalent to 100 FTE B5 Nurses)** by making requisition and product recall processes more efficient and effective; reducing time searching for products through improved materials management and eliminating time reviewing patient notes in cases where clinicians are required to check or justify certain actions. Furthermore, a particular challenge for the larger trusts within WYAAT given the scale of the organisations is the ability to quickly locate patients throughout the Trusts, which GS1 will make far more efficient.
- **Significant patient safety benefits and reduction in clinical risk** through assured and reliable traceability of products, patients and locations. Once fully implemented and in steady state we expect our NHS Litigation Authority will reduce by as much as £300,000 from 2022 as well as potentially reducing mortality within the Trusts through improved patient and products traceability throughout the organisation.
- **Drive maximum non-pay efficiencies of up to £10.1m annually** through elimination of stock wastage, obsolescence and duplication in areas that do not yet have inventory management practices, as well as a reduction in adverse drug effects and a downward trend over time of NHS Litigation authority contribution as GS1 drives improved traceability at the point of care and more robust supporting data.
- **Enable pay efficiencies of up to £2.4m annually** through elimination of certain manual processes related to requisition processing and accounts payable across all Trust purchase to pay activity.
- **Deliver a one-time benefit of £9.1m** through reduction in excess inventory to reach 21 days inventory cover from a calculated blended level of c. 80 days inventory cover.

Wider Direct Financial Benefits

- The adoption of the core enablers and primary use cases will also enable the Trusts to generate further savings through an improved ability to consider patient level costing, workforce productivity, stock standardisation and upstream supply chain efficiencies.
- The West Yorkshire Association of Acute Trusts will be recognised for their use of eProcurement data / analytics; for example, the Scorpio price-benchmarking tool was developed by Leeds Teaching Hospitals Trust and ultimately helped to form the basis for the

Purchase Price Index and Benchmarking (PPIB) Tool. With the more granular and robust data available as a result of GS1, it is anticipated further benefits will be enabled by the Trusts.

4. The Commercial Case

The commercial case outlines the key considerations to set up and establish the programme and ensure any commercial requirements are outlined. It is anticipated that the Trusts in WYAAT can work together with the vendors / suppliers to harmonise all changes required and minimise the cost to the NHS.

WYAAT have a number of commercial relationships with systems hosts, which need to be managed and tracked during implementation. The GS1 identifiers must be able to feed through specific in-Trust systems that will require some interface development. These required interfaces between the systems have been used to drive the cost model in the financial case, with key suppliers highlighted below:

- WYAAT Regional Supply Chain Solution – provision made in case; full tender required.
- Oracle upgrade – provision made in case, but full details to be confirmed with NEP.
- JAC development – provision made in case, but full details to be confirmed with JAC.
- Emis/Ascribe GS1 compliance expected February 2019 (earliest)
- Medchart ePMA - not currently GS1 compliant
- ICE eDischarge - not currently GS1 compliant
- SystmOne, TPP expected to be GS1/ISB1077 compliant by 2019

Personnel Implications

Dedicated programme management with defined work stream leads will be required to manage the programme to the proposed timescales. These roles will then be supported by subject matter advisors (SMA) within their Trusts as required.

Procurement

The Trusts will need to procure the appropriate infrastructure and resources through compliant OJEU routes. It is anticipated that a regional supply chain solution is required, and there is a need for hardware and professional services support to achieve the required capabilities within the agreed timeframes; both of which would be above OJEU thresholds given the scale required.

All procurement will need to be in line with individual Trust standing financial instructions.

5. The Management Case

In order to adopt GS1 and PEPPOL messaging standards the Trusts need to undergo a transformation which will touch the majority of the Trusts in some way, either building on existing practices to ensure they are embedded and standardised or deploying currently unused standards/ processes to meet the requirements of GS1 adoption:

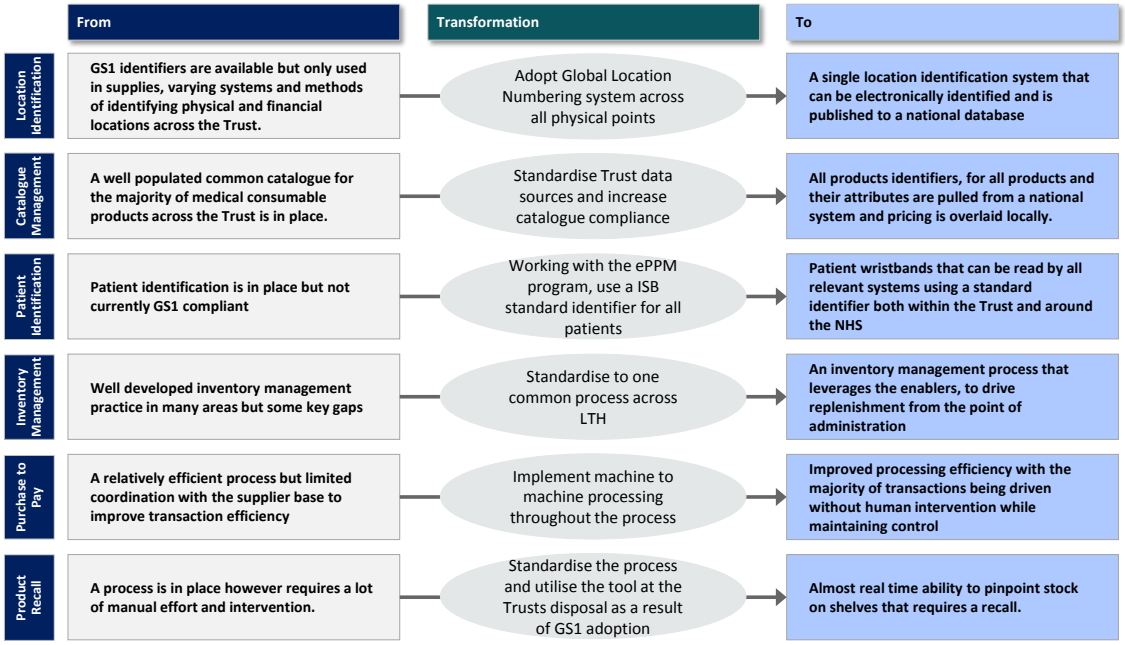


Figure 3: GS1 & PEPPOL Adoption Journey

To learn from the Scan4Safety demonstrator sites, the trusts in WYAAT will adopt the four phase approach for deployment using NHS Improvement funding, as summarised below:

	Phase 1 (May 19 - Jan 20)	Phase 2 (Feb20 - Oct20)	Phase 3 (Nov 20 - Jul 21)	Phase 4 (Aug 21 - Mar 22)
Core Enablers	• Organisation level location identifier in place, 50% of locations allocated a GS1 identifier • Catalogue management system in place, gap analysis carried out • 50% of in-patients have GS1 wristband on admission, hardware provider chosen	• GS1 location identifiers are appropriately administered, 100% locations have an assigned identifier • 50% of products purchased through catalogue system and appropriate Trust systems can handle GS1 identifiers • 100% in-patients have GS1 wristband on admission and point of care scanners are in place	• 50% of Trust room locations have physical GS1 barcode affixed, registry is published • 90% of products purchased through catalogue system and system is integrated with National data pool • Point of care scanning for patient identification in place for 100% of Trust	• All systems using GS1 location identifiers and 100% of rooms have GS1 barcodes affixed • All data is taken from the national data pool, and 30% of services are catalogued • Sustainable management place is put in place
Primary Use Cases	• Planning for inventory management rollout completed, technology reviewed • Organisational review of policies and processes complete for purchase to pay • Organisational review of policies and processes complete for product recall	• Inventory management processes implementation commenced, web requisitions fall by 50% • Updated P2P policies and processes agreed for purchase to pay • Updated P2P policies and processes agreed for product recall	• Web requisitions reduced by 75% and 25% relevant products can be tracked by batch/serial number to patients • Updated P2P processes implemented and 30% of purchase orders / invoices electronically exchanged • Training of relevant staff in product recall processes completed and updated processes implemented	• Trust wide inventory less than 3 weeks cover, business case for single in-Trust logistics function agreed • 60% of purchase orders / invoices electronically exchanged • 100% of recalls are completed using new process

Figure 4: Four Phase Approach

The anticipated timeline for implementation is 36 months, based on a 2 month mobilisation and training phase. The release of funding from NHS Improvement would allow for a staged delivery approach to be taken, whereby a phase is concluded (and the associated costs, benefits and metrics captured) before starting the subsequent phase.

A high level deployment timeline for the region is shown below:

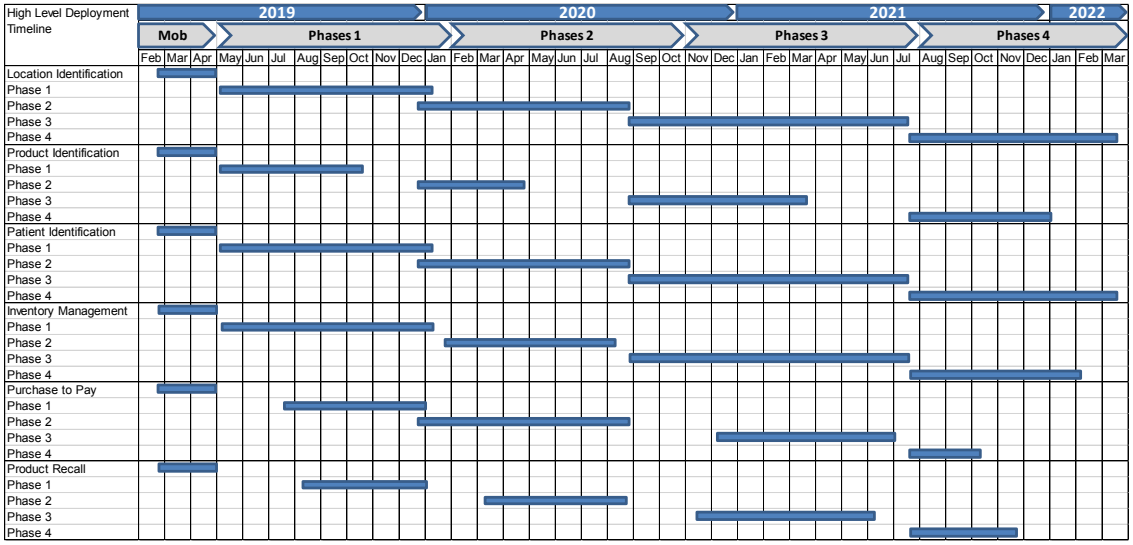


Figure 5: High Level Deployment Timeline

7.1

Harrogate and District NHS Foundation Trust

Board Committee report to the Board of Directors

Committee Name:	Resources Committee
Committee Chair:	Maureen Taylor, NED
Date of last meeting:	29th October 2018
Date of Board meeting for which this report is prepared	28th November 2018

Summary of live issues and matters to be raised at Board meeting:

1. The Committee received an update on the latest financial position for 2018/19. The Trust achieved a surplus position in September of £270k bringing the year to date deficit of £3.67m. This is within the external plan but significantly behind the plan set internally which was for a surplus of £660k.
2. In month spending pressures continue to be focus on ward and theatre staffing, CIP and waiting list initiative expenditure. Drugs expenditure is balanced in month but there remains a mismatch between income and expenditure.
3. It has been assumed that Provider Sustainability Funding for Q1and Q2 for both financial performance and A&E performance will be received. Discussions have taken place about the A&E performance element for Q1 & Q2, and to date this has not been agreed and is therefore at risk if the standard is not recovered over the next quarter or final quarter.
4. Plans in place to deliver CIP total £11.1m (104% of target) which after risk adjustment reduces to 93%. This is a more positive position than in recent months. There are still some high risk schemes that require further work to deliver the savings required.
5. Whilst acute commissioner income is largely on track, elective in-patient and day cases are slightly behind plan for September. However, comparing the 2018 first half year elective activity to 2017, there has been an increase in elective activity of 10%. Similarly, ED attendances for the same period are up by 4.5% compared to 2017 but 8% up compared to the 2018 plan.
6. Workforce information presented highlighted in particular the continued pressure in recruitment to theatres, with a subsequent cost pressure for agency expenditure. Ward staffing cost pressures continue leading to a monthly additional cost of around £50k.
7. Outturn forecasts were presented based on the best, medium and worse

case positions and these range from achieving a £4m surplus to a £12m deficit.

a) Information on the internal recovery plan was presented. The recovery plan aims to bring the run rate back on track and make up some lost ground from the first half year. Plans totalling £5.2m have been identified relating to the areas shown below, however further actions are required if we are to deliver our plan.
b) Ward spending
c) Theatre spend
d) Medical agency spend
e) Income Assurance under the Aligned Incentive Contract, and delivery of the plan for the second half of the year
f) CIP delivery
g) Drugs spend
h) Budget holder controls
i) Technical Items

8. The cash position continues to be a concern and is being managed on a daily basis. The cash position is impacting on the Trust's ability to invest in capital.
9. Mr Coulter gave a confidential update on progress with the Aligned Incentive Contract and a recent meeting with HaRD CCG, NHS Improvement and NHS England. There is still work to do with the CCG to ensure there is a joint understanding of the current position.
10. The Committee received reports on new proposals relating to the replacement of computer servers and a joint investment proposal with Yorkshire Cancer Research. Updates were also provided on the new Endoscopy unit and the Private Patients work-stream.

Are there any significant risks for noting by Board? (list if appropriate)

1) The financial deficit stands at £3.67m which is £4.3m behind our internal plan and work on the recovery plan is needed to improve this position.
2) The cash position of the Trust is a concern and collection of sums owed is paramount, alongside an improvement in the Income & Expenditure run-rate performance.

Matters for decision

Action Required by Board of Directors: To note the contents of the report.

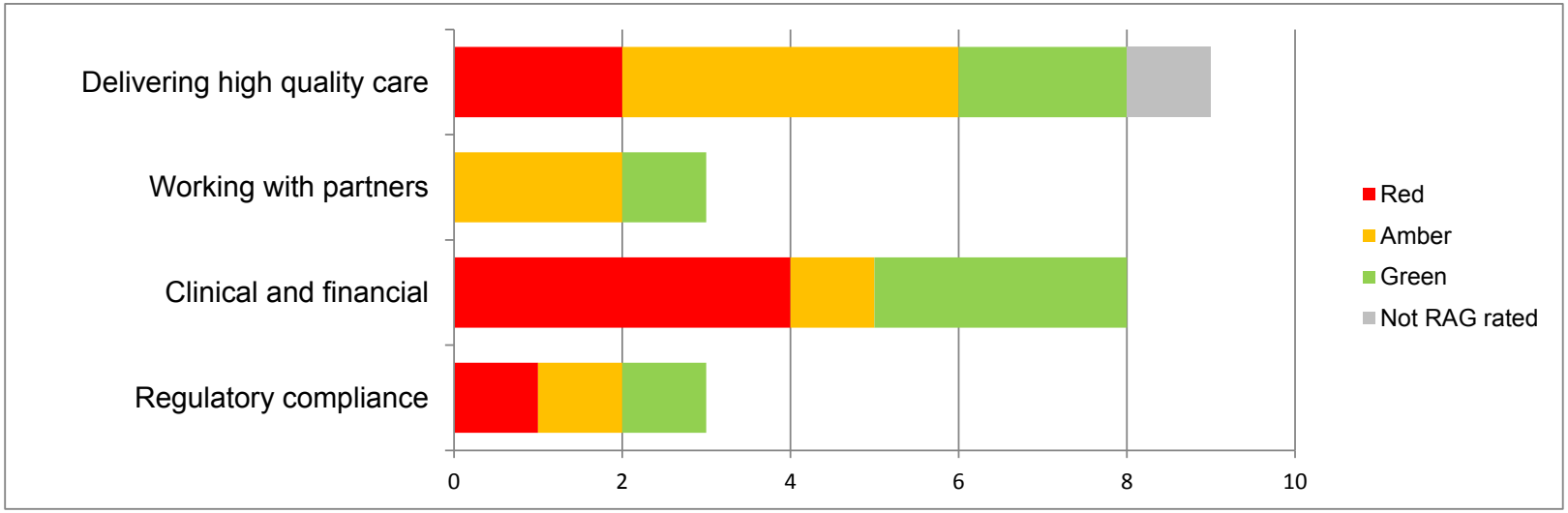
NHS
Harrogate and District
NHS Foundation Trust

Strategic Key Performance Indicators

September 2018

Key issues to note:

1. There is continued positive external validation of the Trust's performance, including the recently published cancer patient survey for 2017;
2. The Trust is on track to achieve its trajectory for 2018/19 for the patient FFT survey. However results in the staff survey were less positive than last year;
3. The Trust remains in the bottom 25% of Trusts nationally for our incident reporting ratio of high/low risk incidents;
4. The Trust's financial performance was behind plan in 2017/18 and is a significant challenge for the next 3 years;
5. The estimated catchment populations served by HDFT services for paediatrics and emergency surgery have decreased in 2018/19 to date. The catchment population for births remains unchanged from 2017/18.



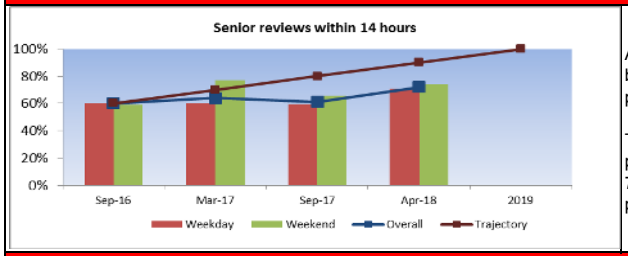
Board of Directors Strategic KPIs report - September 2018

NHS Harrogate and District NHS Foundation Trust

Delivering high quality care

Patient safety

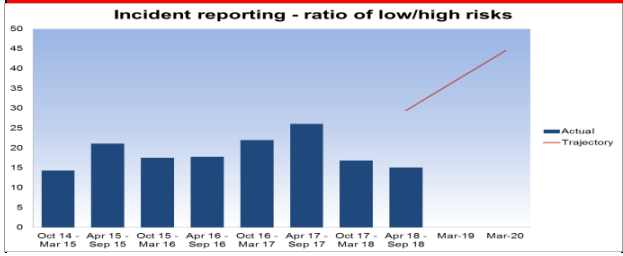
1. Emergency admissions receiving senior reviews within 14 hours of admission to hospital



All emergency admissions should receive a clinical assessment by a senior clinician as soon as possible, but at the latest within 14 hours of admission to hospital. Trusts should be achieving this for 100% of patients by 2019.

The latest results came from the last case note review undertaken in April 2018. The overall proportion of patients seen and assessed by a suitable senior clinician within 14 hours of emergency admission was 72% (broken down as 71% for weekdays and 74% for weekends). This is an improvement on previous positions but remains below both the national and North of England averages.

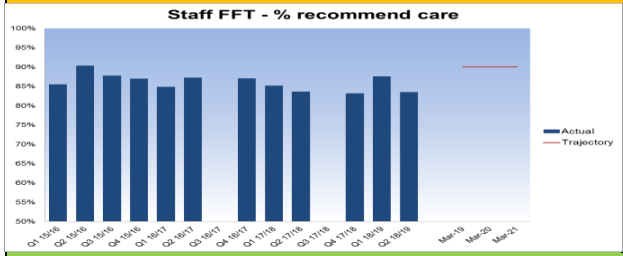
2. Reporting culture - Ratio of high/low risks.



A large number of reported incidents but with a low proportion classified as causing significant harm is indicative of a good incident reporting culture.
The latest published national data (for the period Oct-17 to Mar-18) shows that Acute Trusts reported an average ratio of 47 no harm/low harm incidents for each incident classified as moderate harm, severe harm or death (a high ratio is better). HDFT's local reporting ratio for the same period was 17, a deterioration on the last publication. The Trust remains in the bottom 25% nationally.
HDFT aspired to be in line with the national average by March 2018, within the top 25% of Acute Trusts by March 2019 and within the top 10% of Acute Trusts by March 2020. The March 2018 aspiration was not achieved.

Patient experience

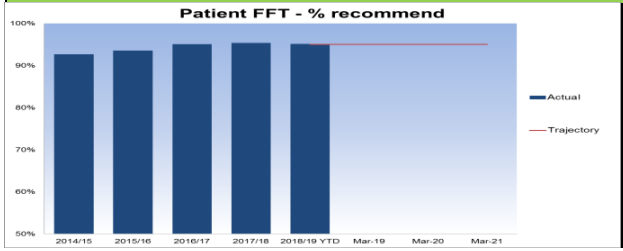
3. Friends & Family Test (FFT) - Staff - % recommend as a place to receive care



The Staff Friends and Family Test (FFT) gives staff the opportunity to give feedback on the organisation they work in. The chart shows the trend in the percentage of staff that would recommend HDFT as a place to receive care. A high percentage is good.

HDFT's score of 88% for Q1 2018/19 placed us in the top 25% of Trusts. HDFT's score for Q2 2018/19 reduced to 84%. Benchmarking data for Q2 is not yet available. HDFT's aim is to achieve and maintain 90% of staff recommending the Trust as a place to receive care from March 2019 onwards.

4. Friends & Family Test (FFT) - Patients - % recommend



The Patient Friends and Family Test (FFT) gives patients and service users the opportunity to give feedback. They are asked whether they would recommend the service to friends and family if they required similar care or treatment. This indicator covers a number of hospital and community services including inpatients, day cases, outpatients, maternity services, the emergency department, some therapy services, district nursing, community podiatry and GP OOH. A high percentage is good.

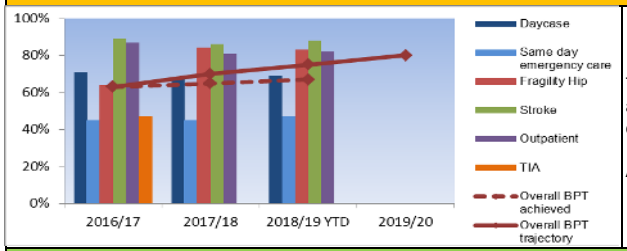
During 2018/19 to date, 95.1% of patients surveyed by HDFT would recommend our services. HDFT's aim is to maintain at least 95% of patients recommending the Trust as a place to receive care.

Board of Directors Strategic KPIs report - September 2018

Delivering high quality care

Patient outcomes

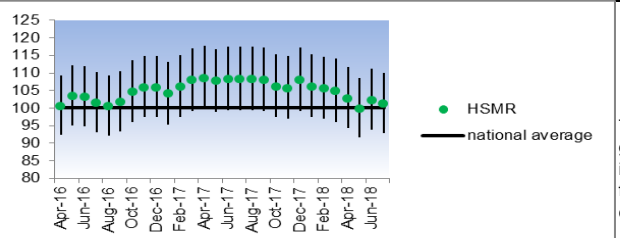
5. Proportion of Best Practice Tariff achieved



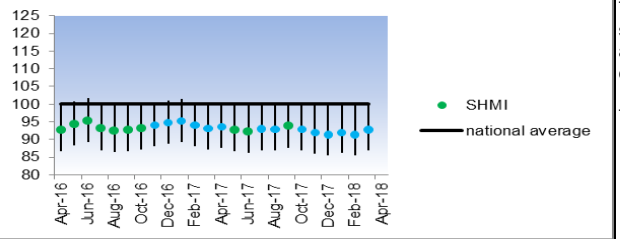
The chart opposite compares year to date (to Sep-18) achievement for both the overall and each key area of Best Practice Tariffs against the previous year. Overall achievement is 67% in 2018/19 to date, compared to 65% in 2017/18.

A trajectory of achieving 80% of total possible BPT income by March 2020 is proposed.

6. HSMR and SHMI indicator



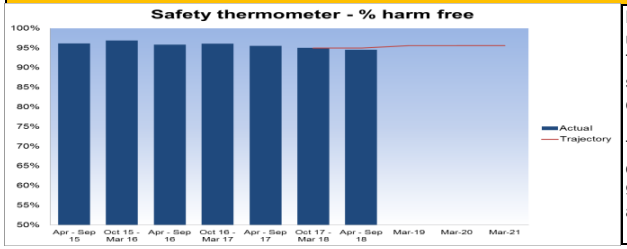
The Hospital Standardised Mortality Ratio (HSMR) looks at the mortality rates for 56 common diagnosis groups that account for around 80% of in-hospital deaths and standardises against various criteria including age, sex and comorbidities. The measure also makes an adjustment for palliative care. A low figure is good. HDFT's HSMR was 101.1 for the rolling 12 months ending July 2018, remaining within expected levels.



The Summary Hospital Mortality Index (SHMI) looks at the mortality rates for all diagnoses and standardises against various criteria including age, sex and comorbidities. The measure does not make an adjustment for palliative care. A low figure is good. HDFT's SHMI was 92.8 for the rolling 12 months ending March 2018, remaining below expected levels.

The Trust aims to maintain within expected levels for both metrics over the next 5 years.

7. Safety Thermometer



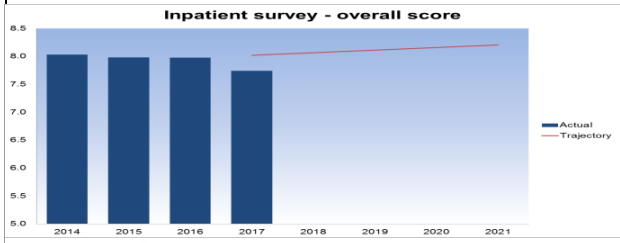
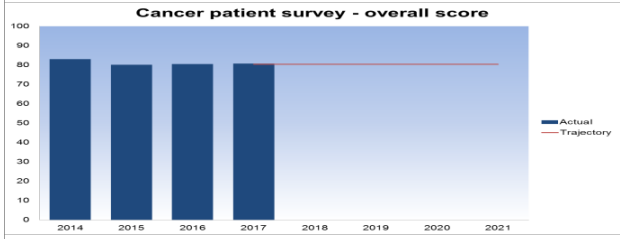
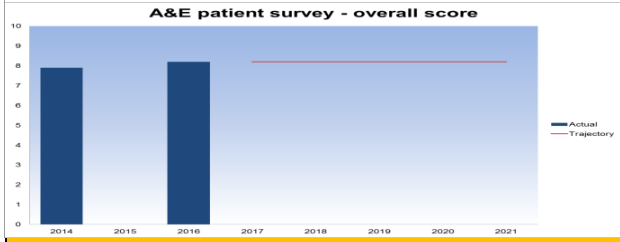
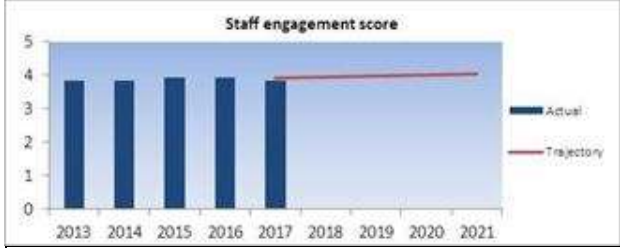
Measures the percentage of patients receiving harm free care (defined as the absence of pressure ulcers, harm from a fall, urine infection in patients with a catheter and new VTE) in the Safety Thermometer audits conducted once a month. The data includes hospital and community teams. A high score is good. Whilst there is no nationally defined target for this measure, a score of 95% or above is considered best practice.

The harm free percentage reported for HDFT for the period Apr-18 to Sep-18 was 94.8%, a deterioration on the previous 6 months. HDFT's aim is to continue to maintain 95% harm free care and to maintain 95.6% harm free consistently by March 2019, based on the average harm free % of outstanding CQC acute providers.

Board of Directors Strategic KPIs report - September 2018

NHS Harrogate and District NHS Foundation Trust

Delivering high quality care

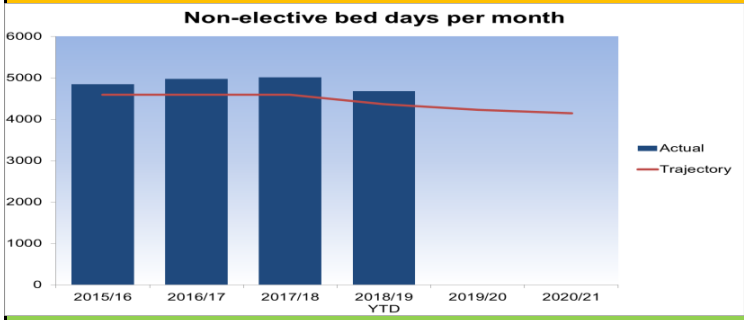
8, 9 & 10. Patient surveys	
	The national **adult inpatient survey** for 2017 was published earlier in 2018. HDFT's overall score of 7.7 placed us 57th out of 148 participating Trusts. The proposed trajectory is to achieve an overall score of 8.2 by 2021, in line with the highest overall score reported by an Acute (Non-Specialist) Trust in the 2016 survey.
	The national **cancer patient survey** 2017 was published earlier in 2018. HDFT came 4th out of the 145 Trusts who took part in the survey achieving an average score of 80.7. The trajectory is to maintain our 2016 score of 80.4. this has been achieved with the 2017 results.
	*There is no update of this metric since the previous report.* The national **A&E patient survey** 2016 was published in October 2017. The survey is conduceted every two years. In the latest survey, HDFT came joint 1st out of the 137 Trusts who took part in the survey achieving an average score of 8.2. The proposed trajectory is to maintain our score of 8.2.
11. Staff survey - overall engagement score	
	*There will be no further update on this data until Feb/Mar 2019.* The national staff survey is carried out annually. Results are presented in a variety of key areas including a measure of overall staff engagement. In 2017, HDFT scored 3.83 for staff engagement (with their work, their team and their Trust), below the trajectory of 3.92 which we had achieved in 2016. Possible scores range from 1 to 5, with 5 indicating that staff are highly engaged. The Trust scored "above average" when compared to other similar Trusts, which is the highest ranking possible. The trajectory is to achieve a score of 4.03 by 2021.

Board of Directors Strategic KPIs report - September 2018

NHS Harrogate and District NHS Foundation Trust

Working with Partners

12. Non-elective bed days



The charts shows the number of non-elective (emergency) bed days at HDFT for patients aged 18+, per month per 100,000 population. The chart only includes the local HARD CCG area. A lower figure is preferable. The trajectory was set in 2016/17 and based on allowing for demographic growth and reducing by the non-elective reductions identified in the Value Proposition. Average non-elective bed days increased in 2017/18 and are above this trajectory.

The Trust carried out an analysis to model the likely bed capacity needed over the next 5 years and this was shared with the board and external partmers in March 2018. This is informing our plannning and discussions with partners in the local health community.

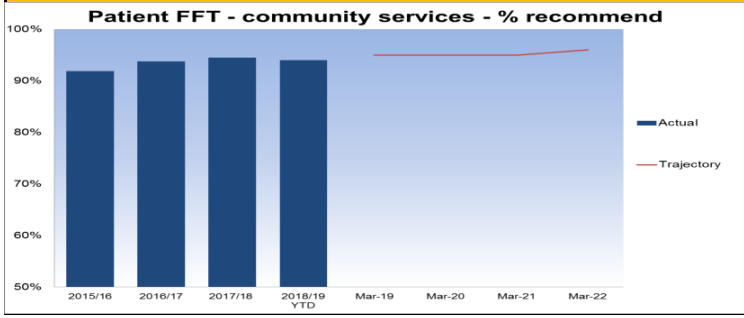
13. Delivery of IT strategy in line with agreed milestones

Description	KPI Target
The number of users who have been set up with an account on WebV	Over 500 users set up by Q4 2018/19 Over 1000 by Q4 2019/20
The percentage of patients who have checked into their outpatient appointments using the WebV check in kiosks	Over 50% of patients to have checked in to their outpatients appointment by Q4 2019/20;
The number of paper document templates that have been replaced with an electronic version in WebV	Over 100 by Q4 2019/20 Over 200 by Q4 2020/21
The number of systems that send information to WebV to view in the WebV Clinical Portal	10 by Q4 2018/19 15 by Q4 2019/20

The Strategy aims to provide a robust scalable IT infrastructure that delivers information where staff need it; robust governance arrangements; high quality information management; training and development of IT skills in staff; efficient project management and procurement; and collaborative working with other NHS organisations.

In August 2016, the Trust signed a memorandum of agreement for a two year proof of concept with North Lincolnshire and Goole Foundation Trust (NLG) to deploy the WebV EPR system. This supports the delivery of the Trust's strategy of an integrated electronic patient record system which will enable the organisation to be paperlite, provide clinicians with clinical decision tools and enable the sharing of information not just to HDFT staff but to the wider community. The strategy has recently been updated and the agreed KPIs noted here are the targets to be monitored going forward. We are on track to achieve the first two milestones for Q4 2018/19.

14. Patient satisfaction of new models of care - Adult Community Services Friends and Family Test



The Patient Friends and Family Test (FFT) gives patients and service users the opportunity to give feedback. They are asked whether they would recommend the service to friends and family if they required similar care or treatment. The data presented is for community services, including district nursing, community podiatry and GP OOH. A high percentage is good.

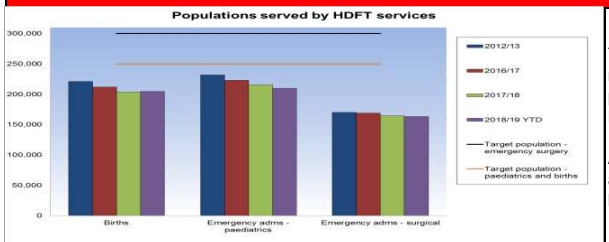
In 2018/19 to date, HDFT reported that 94.0% of patients surveyed would recommend our community services. This places us below the latest national average of 95%. The trajectory is to achieve 96% by March 2022. It should be noted that the number of patients surveyed represents a small proportion of the community based contacts that we deliver in a year.

Board of Directors Strategic KPIs report - September 2018

NHS Harrogate and District NHS Foundation Trust

Clinical and financial sustainability

15. Sufficient catcment population for key specialities of maternity, paediatrics and emergency surgery



The chart shows estimated catchment populations served by HDFT services in recent years for maternity, paediatrics and emergency surgery, along with target population sizes. A target catchment population of 300,000 for emergency surgery and 250,000 for paediatrics and maternity services by March 2021 is proposed.

As can be seen from the chart, the catchment populations for both emergency paediatric admissions and emergency surgery admissions have decreased in 2018/19 to date. The catchment population for births remains unchanged from 2017/18.

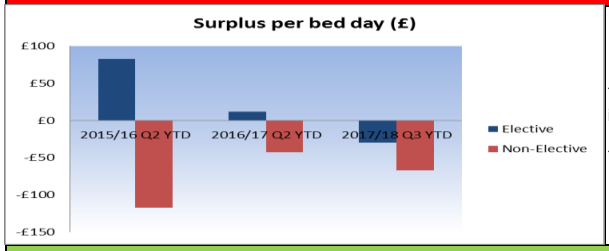
16. Increased share of HaRD CCGand Leeds CCG referrals

The chart shows the proportion of first outpatient attendances from each locality that are seen at HDFT. The data is sourced from the HED (Healthcare Evaluation Data) benchmarking system and only includes specialties for which HDFT run services.

HDFT's market share in 2018/19 to date is 88% in HARD CCG and 7% in Leeds CCG, a slight increase on the previous year.

The chart also shows the aspirational market shares for 2020/21. The Leeds trajectory has been rebased to now cover the whole of the Leeds geography, rather than just Leeds North CCG, following the merging of the three Leeds CCGs in April 2018.

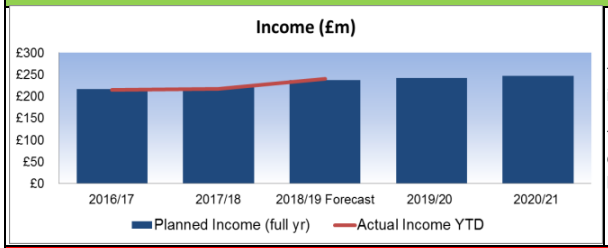
17. Surplus/deficit per occupied bed days



The chart outlines the surplus per occupied bed day for elective and non-elective activity, utilising information from the service line reporting system.

This KPI is currently under review to consider how we generate a meaningful indicator going forward.

18. Income



The chart opposite shows the income achievement in 2016/17, 2017/18 and a forecast for 2018/19, including PSF funding.

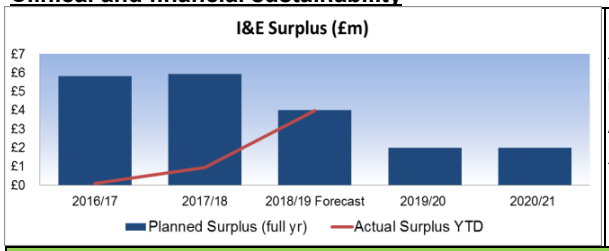
The trajectory is to increase income by £5m year on year for the next 5 years. The business development success in relation to the new children's services contracts and the improving private patient position mean that in 2018/19, we will be above trajectory.

19. I&E surplus/deficit

Board of Directors Strategic KPIs report - September 2018

NHS Harrogate and District NHS Foundation Trust

Clinical and financial sustainability

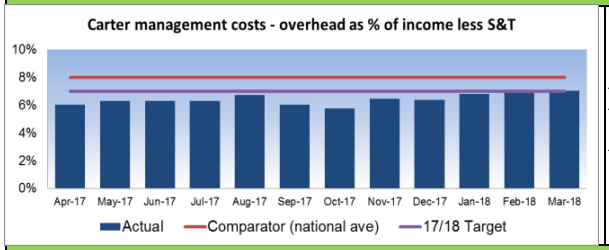


This chart shows the I&E Surplus achievement in 2016/17, 2017/18 and a forecast for 2018/19 including PSF funding.

Achievement of this metric is key to our sustainability and is a key priority for 2018/19.

The trajectory is to increase surplus by 1% per annum.

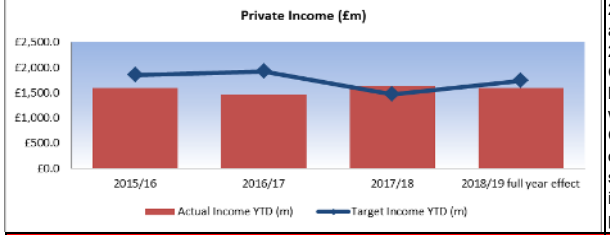
20. Carter management costs



This indicator highlights the Hospital Management Overheads. This chart shows that in 2017/18, the Trust operated its management costs below the target of 7%.

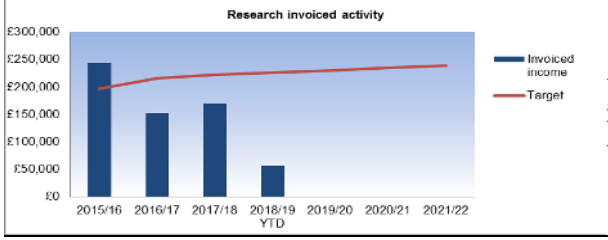
The trajectory is to achieve 6% by March 2018.

21. Private income



2017/18 delivered £1.6 million outturn for the year, £277k more than the original FOT of £1.36 million and £169k more than plan.
2018/19 target is to deliver £1.74 million with the development of new services including Endoscopy, CPX sports service and Urology scopes. The new dedicated Endosocpy, CIA and theatre capacity has been made available for private activity. Consultants are aligned the and marketing is now initiated with a Harrogate Harlow launch to GPs being held on the 16/10/2018.
Currently the Trust is £188k behind the plan for this year, and without filling the extra capacity carved out for the services detailed above we are FOT position of £1.6 million. Interest from additional services wishing to initiate private healthcare with Harrogate Harlow has now been received, these include: Breast clinics, Dermatology and Gynaecology services. We have also undertaken promotional healthcare work with Menwith Hill.

22. Research income



The Research and Development Strategy proposed a 2% year on year growth. This has not been achieved. This is due to the reduced number of available and appropriate trials to undertake within the Trust. All current commercial trials are above target. The research department have several initiatives to market and attract increased commercial activity within the Trust.

Board of Directors Strategic KPIs report - September 2018

NHS Harrogate and District NHS Foundation Trust

Regulatory Compliance

23. NHS Improvement Single Oversight Framework - Use of Resources Metric

Element	Plan	Actual
Capital Service Cover	4	4
Liquidity	1	1
I&E Margin	4	4
I&E Variance From Plan	1	1
Agency	2	2
Financial Sustainability Risk Rating	3	3

From 1st October 2016, NHS Improvement introduced the Single Oversight Framework. As part of this a "Use of Resource" metric was introduced to replace the previous Financial Sustainability Risk Rating. This is the product of five elements which are rated between 1 (best) to 4.

The Trust reported a UoR rating of 3 in September. While this is at the current plan, this remains a risk as the anticipated improvement in I&E would require the Trust to have a rating of 1 by March 2019.

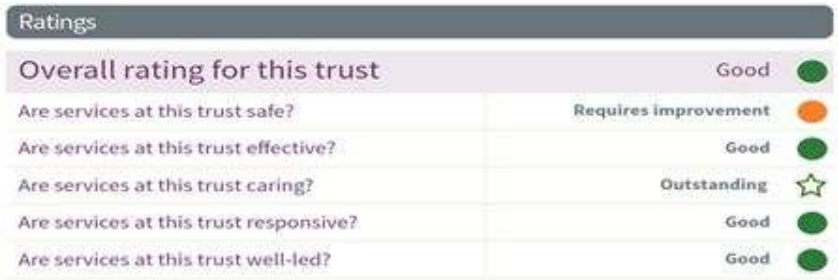
24. NHS Improvement Single Oversight Framework - Operational Performance Metrics

Standard	Q1	Q2	Q3	Q4	YTD
RTT incomplete pathways	90.8%	90.9%			90.9%
A&E 4-hour standard	94.8%	94.6%			94.7%
Cancer - 62 days	87.3%	85.3%			86.3%
Diagnostic waits	98.4%	99.0%			98.7%
Dementia screening - Step 1	95.6%	93.0%			94.3%
Dementia screening - Step 2	95.7%	100.0%			97.6%
Dementia screening - Step 3	97.4%	100.0%			98.4%

From October 2016, NHS Improvement will use a variety of information to assess a Trust's governance risk rating, including CQC information, access and outcomes metrics, third party reports and quality governance metrics. The table to the left shows how the Trust is performing against the national performance standards in the “operational performance metrics” section.

In Quarter 2, HDFT's performance was below the required level for 2 of the key operational performance metrics - the A&E 4-hour standard and the 18 weeks standard.

25. CQC Inspection Rating



There is no update of this metric since the previous report.
CQC monitor, inspect and regulate health and social care services to make sure they meet fundamental standards of quality and safety and publish their findings. HDFT was most recenty linspected by CQC in November 2018 and is still awaiting the results from this inspection. HDFT was previously inspected in February 2016. Overall, HDFT was given a "good" rating in the inspection report published by CQC in July 2016. A further breakdown of the rating is provided in the table to the left.

The Trust aims to maintain a rating of good or outstanding overall in the most recent inspection.

Strategic KPIs report - list of indicators - March 2018

NHS Harrogate and District NHS Foundation Trust

Andrea doing this

Section	Indicator	Rationale	Goal / ambition	Scope	BAF Indicator Link
Delivering high quality care - patient safety	1. Emergency admissions receiving senior reviews within 14 hours of admission to hospital	This indicator is one of the national 7-day working clinical standards. Delays to both consultant reviews and a lack of on-going senior involvement in patient care have been linked to poor outcomes in patients. Timely reviews are linked to better outcomes.	100% achievement by March 2019, in line with the nationally proposed improvement trajectory.	Acute Services	BAF #2
	2. Reporting culture - Ratio of high/low risks	A large number of reported incidents but with a low proportion classified as causing significant harm is indicative of a good incident reporting culture. HDFT currently performs worse than the national average on this metric.	The national average based on the 2016/17 benchmark report is a ratio of 37. HDFT aspires to achieve this level by March 2018, with a further improvement to a level equivalent to the top 25% of Acute Trusts by March 2020 (a ratio of 68).	Trust wide	BAF #3, BAF #13
Delivering high quality care - patient experience	3. Friends & Family Test (FFT) - Staff - % recommend as a place to receive care. A high rate of approval demonstrates a high level of confidence in care quality amongst staff	The Staff Friends and Family Test (FFT) gives staff the opportunity to give feedback on the organisation they work in. A high rate of approval reflects a high level of confidence in the quality of care being provided.	% recommend = 90% by March 2019 and then maintain this performance. Current national figures: average = 79%, upper decile = 92%, upper quartile = 87%, HDFT = 87%.	Trust wide	BAF #1, BAF #13
	4. Friends & Family Test (FFT) - Patients. A high level of approval is evidence of a positive experience of care from patient/service user perspective	The Patient Friends and Family Test (FFT) gives patients and service users the opportunity to give feedback. A high level of approval reflects a high level of satisfaction with care received.	% recommend = 95% by March 2018 and then maintain this performance. Current national average is: 94%, HDFT is 94.6%.	Trust wide	BAF #1, BAF #2, BAF #13
Delivering high quality care - patient outcomes	5. Proportion of Best Practice Tariff achieved	Best practice tariffs (BPTs) are designed to incentivise pathways which reduce unexplained variation in quality and promote best practice. Achievement of BPTs is a measurable proxy indicator aimed at assessing the proportion of care that the Trust is delivering in line with best practice.	Achievement of 80% of total possible BPT income by March 2020.	Acute Services	BAF #13
	6. HSMR and SHMI indicators.	The Hospital Standardised Mortality Ratio (HSMR) and Summary Hospital Mortality Index (SHMI) look at in-hospital mortality standardised against various criteria including age, sex and comorbidities. Mortality is a nationally recognised outcome indicator and sometimes seen as an overall indicators of care quality for acute care	Maintain within expected range.	Acute Services	BAF #1, BAF #2, BAF #13
	7. Safety Thermometer	Measures the percentage of patients receiving harm free care (defined as the absence of pressure ulcers, harm from a fall, urine infection in patients with a catheter and new VTE) in the Safety Thermometer audits conducted once a month. Whilst there is no nationally defined target for this measure, a score of 95% or above is considered best practice.	Maintain 95% harm free care and achieve 95.6% harm free by March 2019 - based on average harm free % of outstanding CQC acute providers. Review performance as a 6-month rolling average position.	Acute and adult community services	BAF #1, BAF #2, BAF #13
	8. Inpatient survey	National survey of inpatients conducted annually.	Achieve an overall score of 8.2 by 2021 (in line with the highest overall score reported by an Acute (Non-Specialist) Trust in the 2016 survey).	Acute Services	BAF #1, BAF #2, BAF #3, BAF #13
	9. Cancer patient survey	National survey of cancer patients conducted annually.	tbc	Acute Services	BAF #1, BAF #13
	10. A&E patient survey	National survey of patients attending A&E which is conducted every 2-3 years.	tbc	Acute Services	BAF #1, BAF #13

Strategic KPIs report - list of indicators - March 2018

NHS Harrogate and District NHS Foundation Trust

Andrea doing this

Section	Indicator	Rationale	Goal / ambition	Scope	BAF Indicator Link
	11. Staff survey	The national NHS staff survey is conducted annually. Results are presented in 32 key areas known as 'Key Findings' as well as a measure of overall Staff Engagement. High levels of staff engagement are positively associated with positive clinical outcomes.	Maintain overall engagement score (weighted) for 2017 and achieve overall engagement score (weighted) of 4.03 by 2021, in line with the highest score in 2016 for Combined Acute and Community Trusts.	Trust wide	BAF #1, BAF #3, BAF #13
Working with partners	12. Non-elective bed days	The indicator looks at the number of non-elective (emergency) bed days at HDFT for patients aged 18+, per month per 100,000 population. There is a shared local ambition to reduce reliance on bed based care where clinically appropriate. Preventing avoidable admissions and reducing acute LOS can only be achieved through partnership working and delivery of integrated care.	tbc	Trust wide	BAF #2, BAF #14
	13. Delivery of IT strategy in line with agreed milestones	The IT strategy aims to provide a robust scalable IT infrastructure that delivers information where staff need it; robust governance arrangements; high quality information management; training and development of IT skills in staff; efficient project management and procurement; and collaborative working with other NHS organisations. An element of the strategy is access to a shared record for all clinicians involved in a patient's care which is a critical success factor for delivering integrated care.	Paperlite by 2020. Delivery of implementation of WebV modules as set out in IT strategy.	Trust wide	BAF #16
	14. Patient satisfaction of new models of care - Adult Community Services Friends and Family Test	The Patient Friends and Family Test (FFT) gives patients and service users the opportunity to give feedback. This metric is used to monitor the impact of system-wide transformation programmes on the experience of patients using our adult community services.	Current national average is: 96%, HDFT is 93.6%. % recommend 95% by March 2019 and 96% by March 2022.	Community Services	BAF #1, BAF #13, BAF #14
Clinical and financial	15. Sufficient catchment population for key specialties of maternity, paediatrics and emergency surgery	To achieve clinical and financial sustainability, the Trust needs a catchment population which will generate sufficient activity/income to cover the baseline cost/fixed cost of providing the service. Growth beyond the fixed cost base delivers a growing margin and hence growing the catchment population becomes progressively more valuable.	A target catchment population of 300,000 for emergency surgery and 250,000 for paediatrics and maternity services by March 2021.	Acute Services	BAF #5, BAF #17
	16. Increased share of HaRD CCG, Leeds North CCG and Leeds West CCG referrals	This indicator assesses the Trust's progress against its strategic objective of continuing to expand secondary care services into Leeds.	HARD CCG - 90% applicable market share, Leeds North CCG - 25% market share, Leeds West CCG - 3% market share - by 2020/21.	Acute Services	BAF #5, BAF #15, BAF #17
	17. Surplus per occupied bed days	This reflects operational efficiency and productivity for in patient areas	3% improvement year on year.	Acute Services	BAF #2, BAF #5
	18. Income	A driver of financial sustainability	Increase of £5m per year next 5 years.	Trust wide	BAF #9, BAF #17
	19. I&E surplus	An indicator of current and future sustainability.	1% per annum	Trust wide	BAF #9, BAF #12, BAF #17
	20. Carter management costs	This indicator assesses the hospital management overheads in comparison to other organisations.	Achieve 6% by March 2018 and then maintain.	Trust wide	BAF #1, BAF #9, BAF #17
	21. Private income	Exploring opportunities to increase the income received from delivery of private patient care was identified as one element of maintaining clinical and financial sustainability. PPI generates a higher contribution than NHS tariff based income. Growth in private income as a % of overall revenue will strengthen bottom line indicators	tbc	Acute Services	BAF #9

Strategic KPIs report - list of indicators - March 2018

Harrogate and District NHS Foundation Trust

Andrea doing this

Section	Indicator	Rationale	Goal / ambition	Scope	BAF Indicator Link
	22. Research income	As set out in the Research & Development strategy, the Trust intends to maintain its current income from commercial research activity and NIHR income to support research staff to 2019. high levels of engagement in R&D are associated with positive clinical outcomes.	3% growth in 2017/18 and 2% growth year on year in subsequent years.	Trust wide	
Regulatory compliance	23. NHS Improvement Financial Risk Rating	As part of NHS Improvement's Single Oversight Framework, the Use of Resource Metric is used to assess an organisation's financial sustainability. This is the product of five elements which are rated between 1 (best) to 4.	To achieve a financial risk rating of 1.	Trust wide	BAF #10
	24. NHS Improvement Single Oversight Framework	NHS Improvement use a variety of information to assess a Trust's governance risk rating, including CQC information, access and outcomes metrics, third party reports and quality governance metrics. This metric reviews how the Trust is performing against the national performance standards in the “operational performance metrics” section.	To achieve a green rating overall each quarter.	Trust wide	BAF #10, BAF #12
	25. CQC Inspection Rating	CQC monitor, inspect and regulate health and social care services to make sure they meet fundamental standards of quality and safety and publish their findings. HDFT was last inspected by CQC in February 2016 and was given a "good" rating overall.	To maintain a rating of good or outstanding overall in the next inspection.	Trust wide	BAF #1,BAF #2, BAF#3, BAF #13, BAF #14

Harrogate and District NHS Foundation Trust

Date of Meeting:	28 November 2018	**Agenda item:**	8.2
Report to:	Board of Directors		
Title:	Workforce and Organisational Development Strategy Update		
Sponsoring Director:	Angela Wilkinson, Director of Workforce and Organisational Development		
Author(s):	Angela Wilkinson, with contributions from the Operational HR Team		

Report Purpose:

Decision		**Discussion/ Consultation**		**Assurance**	✓	**Information**	✓

Executive Summary:

- **Developing the best behaviours -** The Trust has been successful in recruiting and inducting the Fairness Champions, with each of the applicants quoting and demonstrating how they live the Trust values in the work they undertake and in their desire to ensure that this is shared and lived in an open and honest, fair culture.
- **Workforce Redesign and Reward -** The Trust is currently undertaking the annual business planning round which includes workforce planning, to ensure that we have the workforce to deliver our activity plans for 2019/20. As part of this work we will identify key risk areas and work with Directorate colleagues to deliver solutions to workforce planning.
- **Learning and Organisational Development –** Following a successful bid the maximum amount of £50,000 of funding to support 'In Place' Systems Leadership Development was awarded from the NHS Leadership Academy (Y&H). This provides funding to develop 60 clinical leaders across 'Our Place' and the first cohort of20 delegates commenced the RCN Clinical Leadership Programme in September 2018.
- **Health and Wellbeing –** Analysis of the Building Personal Resilience training course feedback has found a statistically significant increase in participants wellbeing and a reduction in work-related burnout between pre- and post-training.
- **Equality and Diversity -** During the last 12 months the Trust has undertaken a significant amount of work to understand the experiences of staff within the organisation, this has been through data intelligence and staff engagement. The recent publication of data, as part of the Workforce Race Equality Standard, demonstrates a deterioration from the previous submission.

Related Trust Objectives					
To deliver high quality care	✓	**To work with partners to deliver integrated care:**	✓	**To ensure clinical and financial sustainability:**	✓

Key implications	
Risk Assessment:	Any identified risks are included in the Directorate and Corporate Risk Registers and the Board Assurance Framework.
Legal / regulatory:	None identified.
Resource:	None identified.
Impact Assessment:	None identified
Conflicts of Interest:	None identified.
Reference documents:	Workforce Race Equality Standard 2018 Staff Friends and Family Test Q2 data
Assurance:	The metrics and action plan has been shared at the Workforce and Organisational Development Steering Group and Senior Management Team

Action Required by the Board of Directors:
It is recommended that the Board notes the items included within the report.

1. **INTRODUCTION**

The 5 year Workforce and OD strategy was introduced in 2015 and the Board are updated on progress against the strategy bi-annually.

This report summarises progress against the five strategic aims contained within the strategy.

2. **DEVELOPING THE BEST BEHAVIOURS - '***The Trust is seeking to embed values and behaviours into the whole of the employee relationship whilst encouraging an environment of personal responsibility supported by an open and learning culture, driven by technological solutions wherever it is possible to do so'.*

2.1 At the heart of everything

- **Values and behaviours** - are well embedded within the Trust, they are introduced to prospective employees through the recruitment process and are attached to adverts and there are values based questions available for recruitment campaigns.

- **Appraisal** - The appraisal toolkit features values based appraisal, where all staff are appraised regarding not only personal objective but their demonstration of the values in all that they do. The appraisal window ran from 1st April 2018 to 30th September 2018 and has been successful in that 84.74% of staff (1,755 appraisals out of a denominator of 2,071) had been recorded over the period. This is an improvement on the achievement in 2017 when we achieved 79.96% within the same time frame. It is truly a fantastic achievement that during this time so many of our staff have had an appraisal and have agreed and reviewed objectives for the coming year. Based on this success during 2019 the Trust will be adopting the appraisal window. As during 2018 there were a number of changes within Children's and County Wide Community Care and all the 0-19 services will be developing a plan in line with the window for 2019 to ensure that all staff on Agenda for Change are appraised during this window. The Values feature in the new e-induction programme and are strongly identified with by all staff.

- **Call to Action** - a series of roadshows were undertaken in 2018 incorporating the B&H advisors, FTSU, TU Colleagues, Health and Wellbeing service alongside the HR team, to raise awareness of the support mechanisms available to staff, encouraging staff that it is safe to raise concerns at all times and that they will be supported. The areas selected for the roadshow were identified from the results of the staff survey, directorate input, known complaints, areas of best and good practice for comparison. The second stage was to undertake a set of interviews with a sample from each of the same areas, these individuals were asked the same questions regarding the culture and support from the organisation, management and colleagues and if they had experienced or witnessed any bullying or harassment at work. The output report will be triangulated with the information supplied from the CE focus groups and the staff survey which is being held Trust wide and will provide rich detail.

- **Fairness Champions** - The success in recruiting and inducting the Fairness Champions is a huge success and each of the applicants quoted and demonstrated how they live the Trust values in the work they undertake and in

their desire to ensure that this is shared and lived in an open and honest, fair culture.

- **Quality of Care Champions and Quality of Care Team awards** – the successful continuation of these demonstrates that there are staff members across the Trust who continue to demonstrate the Trust values in every aspect of their work and going above and beyond in showing that they are living the values.

2.2 Embracing Technology

- **eRostering/ESR** - In addition to the use of eRostering in the Trust, the expansion of our use of ESR to include the use of business intelligence dashboards, there have been developments to review the use and benefits of both Manager Self Service and onboard/candidate tracking software which will be reviewed in 2019/2020.

2.3 Personal Responsibility

- **#Chattermatters** - All employees are expected to live the Trust values and demonstrate them in every aspect of their work, including not only personal responsibility for their work, mandatory training, safety of themselves and others , including strong links to the #ChatterMatters led by risk management, but also in the responsibility for the care they give patients and service users.

- **Pay Progression** - All staff are required to submit their application for pay progression based on set criteria, this is well embedded in the Trust for a number of years and the criteria HDFT already applied has been replicated in the pay deal awarded this year by the NHS as the basis for progression.

3. LEARNING AND ORGANISATIONAL DEVELOPMENT – *'The Trust aims to have a learning culture which delivers excellence n patient care and safety through having a workforce in which individuals teams and directorates are supported to maximise their potential'*

3.1 New Models of Care

- **Apprentice Nurse Associates** - Following a Calderdale Framework analysis to review the feasibility of introducing Band 4 roles working across in-patient wards, a business case was approved to support the recruitment of 12 Apprentice Nurse Associates. These roles were successfully recruited to and a 2 year apprenticeship programme secured with Bradford University. The apprentices commenced their programme in January 2018 and a further business case is currently under consideration to recruit a 2nd cohort.

- **Advanced Clinical practitioners** - In January 2018 our 2nd cohort of 4 Advanced Clinical Practitioners (ACPs) were successfully recruited and commenced their Masters level programme with Leeds University in Advanced Practice. 2 ACPs are based in the Clinical Assessment Team and 2 in the Emergency Department. They join our first cohort of 8 ACPs, and the continued development of this alternative workforce is key to securing safe and sustainable services for the future. Work is on-going to establish and embed the role in clinical rotas to maximise the financial and clinical benefits of the ACP role.

- **Harrogate Alliance & Rural Alliance Locality** - The bid also provides funding for an Organisational Development (OD) programme of work to support this . The OD programme is currently being scoped.

3.2 NHS Workforce of the Future

- **Practice Placements for Non-medical students** - High quality practice placements have been maintained to support the education of our non-medical students. Quarterly student forums are held to ensure that students have an opportunity to share positive aspects and any challenges they are facing on their placement. Our mentors are 100% compliant with Mentor Up-date training, and the Practice Placement Quality Assurance report is very positive. Health Education England (HEE) now undertakes multi-professional quality assurance visits and we have had good outcomes from these.

- **Links with Higher education** - As the Trust's footprint continues to grow, we are working successfully with 12 Higher Educational Institutions across Yorkshire and the North East of England.

3.3 Talent for Care – Get In, Get On, Go Further

- **Care Support workers training** - Newly employed Care Support Workers are required to undertake the 2 day Fundamentals of Care programme on joining the organisation. During the period 60 Care Support workers completed this. Both new starter and existing Care Support Workers are also required to complete the Care Certificate. Completion data from September 2017 to September 2018 was 67% for new starters and 68% for existing staff. Follow-up and support for those who have not yet completed their certificate is in place, and a team of work-based assessors are trained to assess work based competence.

- **Apprenticeships** - The apprenticeship levy is being utilised to support the talent for care agenda and enable the Trust to maximise the opportunity presented by the inception of the levy. To date 34 apprenticeships have been started, securing £354,450 of levy funding. These apprenticeships cover a wide number of roles, including finance, engineering, business administration and health care assistants. Further planned activity will see the start of a further 32 apprenticeships, securing a further £238,500 of levy funding.

3.4 Creating a Culture of Learning

- **Investors in People** - The Trust is is accredited at Bronze Level for the Investors in People Standard version 5. The 6th Generation of the standard was launched I April 2017, and our re-acreditation, which is due in January 2020 will be against the new standard. A mid-point review was held with our external assessor in September 2018, and an action plan is to be developed to support our transition to the new standard.

3.5 Leadership Development and Talent Management

- **Systems Leadership Development** - Following a successful bid the maximum amount of £50,000 of funding to support 'In Place' Systems Leadership Development was awarded from the NHS Leadership Academy (Y&H). This

provides funding to develop 60 clinical leaders across 'Our Place' and the first cohort of20 delegates commenced the RCN Clinical Leadership Programme in September 2018. The 2 further cohorts of 20 delegates will be run over 2019 and 2020.

3.6 Current Workforce Skills Development

- **Corporate Induction** - To ensure new starters are welcomed to HDFT and are able to integrate quickly into their new role, Corporate Induction programmes are run twice every month. Over the past 12 months 724 new starters have attended the Corporate Induction and Doctors in Training Induction programmes at Trust Headquarters in Harrogate.

- **Agile Induction** - To support new starters in community based 0-19 Children's Services an Agile Induction Programme is currently being phased into all community based Children's services, which can be carried out within their locality, removing the time and costs associated with travel to Harrogate.

- **Mandatory & Essential Skills Training (MEST)** - The programme of has been developed, maintained and monthly reporting provided throughout the period, with face to face training and eLearning. Help-desk support is provided on a face-to face, email and phone basis to the whole workforce of 4,300 members of staff. The development and administration of the Annual Training programme provided for the smooth running of 758 face to face training courses during the period.

  The integration of 350 TUPE transfer staff into our MEST programme has been effectively managed and the staff were supported with using eLearning by the provision of locality based face to face 'how to use' sessions. The creation of HHFM as a new subsidiary was also successfully managed.

  Trust compliance levels for Mandatory Training was 92% at the 1ST November (excluding newly TUPED departments and HHFM). Mandatory and Essential Skills Training compliance was 87% at 1st November (excluding newly TUPED departments, HHFM and recently launched competencies).

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4. **WORKFORCE REDESIGN AND REWARD -** *We will continually work towards the development of a workforce that is efficient, motivated and fit for purpose always delivering excellent care in an evolving health and social care environment working in partnership with others.*

4.1 Capacity and Capability

- **Clinical Workforce Strategy** - Progress continues in relation to the implementation of the Clinical Workforce Strategy an element of which focuses on the Trusts capability to meet changing patient needs through workforce transformation and the implementation of new roles. An up-date on the progress of this work was last reported to Board In June 2018 and a further up-date will come in January 2019.

- **Business Planning/Resourcing** - The Trust is currently undertaking the annual business planning round which includes workforce planning, to ensure that we have the workforce to deliver our activity plans for 2019/20. As part of this work we will identify key risk areas and work with Directorate colleagues to

deliver solutions to workforce planning. The delivery of the Global Learners Programme and the Associate Nurse roles continues to support the Trust to manage the shortage of Registered Nurses.

- **eRostering** - Aligned to this is also the development of the eRostering system across the Trust. A business case for the development of the eRostering system has been developed and is currently being progressed through the Trusts internal review process. This may include the procurement of a new system to support improvements in this area, subject to the availability of capital funding. The Trust is also considering the implementation of an eJob Planning programme to support medical staff. This is currently being explored.

- **Lifetime Allowance Pension Restructuring Payments** The implementation of this policy is also supporting the Trust to retain highly skilled Medical staff and senior leaders within the Trust who may otherwise have left the Trust. Six applications have been approved this year.

4.2 Personal responsibility

- We have continued to embed the implementation of the Pay Progression policy across the Trust, including across the newly acquired contracts in Stockton, Gateshead and Sunderland. This approach aligns with the Nation Agenda for Change Reform launched this year. Schedule 15 implementation for Medical and Dental also continues to be embedded across the Trust to support pay progression.

- The Quality Charter and Making a Difference awards continues to be well received across the Trust. We have seen significant progress in the number of Quality of Care Champions at all levels, as reported through the Improvement and Transformation team. This promotes the culture of staff and teams taking responsibility and ownership for quality improvement work within their departments.

4.3 Culture of transparency

- **Freedom to speak Up** - Progress continues to be made in relation to the embedding of the Freedom to Speak Up national recommendations. Sylvia Wood, FTSU Guardian has reported to the Board recently on the progress in this area and we have now recruited the first cohort of FTSU Champions, who received their induction on 15th November. The FTSU action plan has also been considered by Board in September and we continue to make progress in terms of promoting the role across the Trust.

- **Fair and just culture** - In addition to this the HR Team are supporting the Chief Executive with this programme. The Board are already aware of the listening events that have been taking place and across hospital and community sites. In addition as part of the Staff Friends and Family Test in Quarter 2 the Trust asked an addition question in relation to whether the Trust has a fair and just culture and whether staff were confident in reporting concerns. The results of this have been reported to SMT in September and the outcome will be incorporated into the diagnostic work that Ros is leading on.

5. **HEALTH AND WELLBEING** –*'a state of wellbeing in which every individual realises their own potential, can cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution'*

5.1 Addressing the needs of our workforce

- **Training** - In the last 6 months, the Trust has seen the launch of a further exercise class (boxercise) and the launch of the Building Personal Resilience training course which has proved very popular with staff across the organisation and is evaluating really well. Analysis of the first group of anonymous and confidential questionnaires by City, University of London found a statistically significant increase in participants' well-being from pre- to post-training and a statistically significant reduction in work-related burnout between pre- and post-training.

- **MSK** - The Trust has also agreed to a pilot of an MSK rapid access service for our staff and it's hoped that this can launch before the end of the calendar year.

- **2018/19 Flu campaign** – this is well underway, since 1 October 2018 with 45% of Trust staff being vaccinated by 9 November 2018; this will be a key focus in the coming weeks and months.

5.2 Communicate and Engage

- **Workforce engagement action plan** – this was developed for 2018/19 following the results of the 2017 National Staff Survey and also incorporates themes from the Staff Friends and Family Test results. This covers a range of key issues for our staff, including; bullying and harassment; incidents and reporting; health and wellbeing; quality and improvements and learning and development. This is monitored regularly, with an annual update submitted via the Workforce and OD Steering Group. We are currently working to close the outstanding actions in Q3 and 4 in readiness for the 2018 Staff Survey results to develop the action plan for 2019/20.

- **Health & Wellbeing activity group** – this continues to meet to discuss ideas for health & wellbeing related activities staff would like to see supported in the Trust. These include the following;

  - the introduction of exercise classes and a lunchtime running club in the Trust.

  - In the last 6 months a mental health steering group has been set up as a sub-group of the Health & Wellbeing group to discuss specific actions relating to mental health. The focus so far has been on developing our action plan in line with the Time to Change pledge which the Trust signed in October 2018 as part of a full wellbeing event showcasing to staff 5 ways to wellbeing; the group will now focus on the delivery of this action plan which covers a range of aspects including interventions, training for staff and managers and communications.

  - developed and launched the Trust's Staff health, wellbeing and benefits discounts page on the internet and set up a Facebook page to advertise all benefits and discounts our staff can access. With it being on the internet rather than intranet, our staff can now access this information at any time.

- In September 2018, as part of developing our financial wellbeing offer to staff, the Trust launched its partnership with Leeds Credit Union, a financial co-operative, to offer a range of different affordable financial services including loans and savings through individuals' salaries.

5.3 Staying Ahead of the game

- **Networking** - The Health & Wellbeing group has networks with a variety of external organisations, including NHS Employers, Time Change and Mindful Employer. We have also recently started to develop our network with colleagues at North Yorkshire County Council who are keen to support us developing our health & wellbeing agenda not only because it impacts on our staff who are significant number of North Yorkshire residents, but also because of our potential influence in the local community and shared knowledge and learning with other businesses to benefit the whole health economy.

5.4 Engaging with our local communities

- The Health & Wellbeing group has strengthened and widened its alliances with local employers as part of the health & benefits discounts and is regularly making contact with new businesses. An example is the purchasing of swim vouchers which the Trust was able to sell to staff at a discounted rate. Similarly, the exercise classes are run by local business men and women and the group continues to develop these networks.

6. EQUALITY AND DIVERSITY – *'to embrace diversity and equality of opportunities to deliver both a quality service and in demonstrating that it is organisationally well led'*

6.1 Local Engagement

- **Workforce Race Equality Standard** - Annually the Trust undertakes analysis of data required as part of the Workforce Race Equality Standard. The recent publication in September 2018 presents a worrying position in relation to the experience of BAME staff at the Trust. The position in relation to bullying and harassment is of particular concern and demonstrates a deterioration from the previous submission. Work is underway to understand this in more detail and links very closely to engagement work underway.

- **Unconscious Bias training**- The focus of the Workforce Equality Group for the coming months will be to explore the roll out of unconscious bias training across the organisation and to continue work undertaken to support engagements through a staff network. Progress with these initiatives will be reported to the Workforce and Organisational Development Steering Group.

6.2 A Representative Workforce

- **Gender Pay gap** - The Trust published the first Gender Pay Gap report in March 2018; this included an action plan which focused presented key workstreams to reduce the reported 25% gender pay gap and 23% bonus pay gap. A key area for future focus relates to encouraging more females applicants to senior medical positions and how a greater balance of Clinical Excellence Awards can be achieved.

- **Bullying and Harassment Call to Action** - In pursuit of engaging with underrepresented groups, as part of the Bullying and Harassment national call to action a series of interviews were undertaken with individuals in departments across the Trust. There was a conscious decision taken to include a higher proportion of BAME colleagues in this sample to ensure that their views were heard. In addition to this the Chief Executive has undertaken a series of listening events open to all but with the specific intention of engaging with BAME colleagues across the organisation. Intelligence gathered from all forms of engagement will be considered and will inform next steps.

7. **RECOMMENDATION**

The Board are requested to note progress against the strategy.

Angela Wilkinson
Director of Workforce and OD
21st November 2018

NHS
Harrogate and District
NHS Foundation Trust

Date of Meeting:	28 November 2018	**Agenda item:**	8.2 annex
Report to:	Board of Directors		
Title:	Staff Friends and Family Test Quarter 2		
Sponsoring Director:	Angela Wilkinson, Director of Workforce and Organisational Development		
Author(s):	Angela Wilkinson, Director of Workforce and Organisational Development		

Report Purpose:

Decision		Discussion/ Consultation		Assurance	✓	Information	✓

Executive Summary:

The Staff Friends and Family Test (SFFT) is a staff engagement activity that offers staff the opportunity to speak up and to provide them with the confidence to do so, to ensure that their views are heard and acted upon.

The HDFT SFFT for Q2 was open from 10 September to 30 September 2018, with 4445 staff being invited to partake and 644 choosing to engage in the process, which is 15% of those invited. Whilst this was a 1% decrease from Q1, it is 3% above the sector average of 12%.

An additional question was posed in Q2 to ascertain if staff would describe HDFT's culture as fair and just and if they felt able to raise concerns if needed. The results established that 80% of respondents described the culture as fair and just and 82% felt able to raise concerns if needed.

Related Trust Objectives

To deliver high quality care	✓	To work with partners to deliver integrated care:		To ensure clinical and financial sustainability:	

Key implications

Risk Assessment:	Staff Friends and Family Test feedback is one of the fundamental ways that HDFT engages with the workforce and the results and subsequent action plans can help mitigate risks on the corporate register specifically risk to quality care.
Legal / regulatory:	None identified.
Resource:	None identified.
Impact Assessment:	
Conflicts of Interest:	None identified.
Reference documents:	Staff Friends and Family Test result Q2
Assurance:	Benchmarking data is not yet available.

Action Required by the Board of Directors:

Asking the Board to cited on this for escalation.

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Staff Friends and Family Test Quarter 2

The Staff Friends and Family Test is a staff engagement activity that offers staff the opportunity to speak up and to provide them with the confidence to do so, to ensure that their views are heard and acted upon.

We adopted a multi-mode survey, using an open-URL and paper questionnaire methodology for Quarter 2 (Q2), which enabled staff who traditionally wouldn't have access to the electronic survey, such as ward based staff and some community colleagues, the opportunity to share their feedback.

The HDFT SFFT for Q2 was open from 10 to 30 September 2018, with 4,445 staff being invited to partake and 644 choosing to engage in the process, which is 15% of those invited. Whilst this was a 1% decrease from Q1, it is 3% above the sector average of 12%.

Respondents who would recommend HDFT to friends and family if they needed care or treatment?

Q2 results highlighted a 4.1% decrease in the number of respondents who were likely to recommend HDFT for treatment and a 1.2% increase in those who were unlikely to recommend.

Quarter	% who are likely to recommend care / treatment		% who are unlikely to recommend care / treatment	
	HDFT	National	HDFT	National
1	87.6%	81%	3.3%	6%
2	83.5%	TBA	4.5%	TBA
% Difference from Q1 to Q2	- 4.1%		+1.2%	

The Administrative and Clerical staff group were most likely to recommend treatment at HDFT and the Additional Clinical Services the least likely. Nursing and Midwifery staff group were the most unlikely to recommend HDFT as a place for treatment.

Staff Group	% who are likely to recommend care / treatment	% who are unlikely to recommend care / treatment
Administrative & Clerical	89.4% (+ 2.2% from Q1)	2.6% (-0.6% from Q1)
Additional Professional Scientific & Technical	87% (+2.4% from Q1)	0% (No change from Q1)
Medical & Dental	84.5% (-4.6% from Q1)	6.9% (-2.2% from Q1)
Allied Health Professional	83.9% (-4.2% from Q1)	3.6% (+3.6% from Q1)
Healthcare Scientists	81.8% (-12% from Q1)	0% (-6.3% from Q1)
Nursing & Midwifery	78.6% (-7.8% from Q1)	7.7% (+2.9 from Q1)
Additional Clinical Services	69.8% (-17% from Q1)	3.2% (-2.2% from Q1)

Additional Clinical Services experienced the most significant decrease, (17% difference from Q1), of those staff who would recommend HDFT as a place for treatment.

Themes
Recommend • High quality care • Personal experience of care at HDFT • Dedicated staff • Caring staff • Local hospital • Safety
Unlikely to recommend • Staffing levels • Inadequate equipment • Lack of continuity of care • Poor management standards

Respondents who would recommend HDFT to friends and family as a place to work?

Q2 results highlighted a 5.1% decrease in the number of respondents who were likely to recommend HDFT as a place to work and a 3% increase in those who were unlikely to recommend.

Quarter	% who are likely to recommend as a place to work	% who are unlikely to recommend as a place to work
1	70.1%	14.1%
2	65%	17.1%
% Difference from Q1 to Q2	- 5.1%	+3%

The Medical and Dental staff group were the most likely to recommend HDFT as a place to work and Additional Clinical Services the least likely.

Staff Group	% who are likely to recommend as a place to work	% who are unlikely to recommend as a place to work
Medical & Dental	75.9% (+8.6% from Q1)	13.8% (+1.1% from Q1)
Healthcare Scientists	70% (-17.5% from Q1)	10% (-2.5% from Q1)
Administrative & Clerical	67.8% (-5.7% from Q1)	15.5% (+3.9% from Q1)
Nursing & Midwifery	66.9% (-0.4% from Q1)	16.9% (+1.9% from Q1)
Allied Health Professional	57.1% (-8.4% from Q1)	17.9% (-2.8% from Q1)
Additional Professional Scientific & Technical	56.5% (-12.7% from Q1)	17.4% (+9.7% from Q1)
Additional Clinical Services	47.6% (-14.1% from Q1)	28.6% (+8.6% from Q1)

Themes
Recommend • Friendly/family atmosphere • Supportive colleagues/managers • Good employer • Strong values

Unlikely to recommend

- Poor/unsupportive management
- Staffing levels
- Increased workload
- Poor morale
- Work related stress

Additional Question

Further to feedback from the Q1 results, where several respondents highlighted a perception of bullying across some areas of the Trust, an additional question was posed in Q2 to ascertain if staff would describe HDFT's culture as fair and just and if they felt able to raise concerns if needed. The results established that 80% of respondents described the culture as fair and just and 82% felt able to raise concerns if needed. There were significantly fewer responses to this (521 in relation to fair and just culture and 554 in reference to feeling able to raise concerns), in comparison to the standard questions where there were 644 responses.

	I would describe HDFT's culture as fair and just	I feel able to raise concerns if I needed to
Strongly Agree	24%	30%
Agree	56%	52%
Neither agree nor disagree	13%	11%
Disagree	6%	6%
Don't know	1%	1%
Total responses	**521**	**554**

Staff who felt positively about HDFT's culture cited:

- Line managers being supportive if they had to raise concerns
- A culture that was inherently fair and just
- An awareness of processes being in place to escalate concerns (i.e. Whistleblowing Policy and the Freedom To Speak Up Guardian)
- Managers working hard to make staff feel valued and the commitment from the Trust to support staff who are feeling bullied.

Conversely, respondents who were in the 6% of respondents who didn't feel positively about HDFT's culture, highlighted concerns relating to:

- Culture of fairness and speaking up not being fully embedded across the Trust
- Some staff still feeling unfairly treated and unable to express their concerns for fear of repercussions by management
- Perception that senior managers were not receptive to concerns being escalated, that there was a failure to address concerns and that there remained a 'blame culture'
- Favouritism being shown to some staff over others by line managers

Actions

Q2 responses have been shared with the SMT and individual Directorate reports have been shared to facilitate the development of local action plans, as necessary. Feedback has been provided to staff via Team Brief as regards the results and what action is being taken by the

Trust in relation to Staffing levels, Health & Wellbeing initiatives and Freedom to Speak Up Guardian and Fairness Champions. The feedback will be incorporated into the 'call to action plan'.

There have been three promoting a 'Fair and Just culture' focus groups held, with another scheduled for Monday 3rd December in Scarborough. The work we have done so far has been all about understanding where and how bullying, harassment and abuse affects staff in HDFT and also learning from examples where problems have been dealt with well. Next steps are further listening events in community services, completing the diagnostic work (looking at themes from the listening events and conversations, themes from our Freedom to Speak Up Guardian and a review of learning from previous grievances) and agreeing what needs to change and how.

There has been a great response for volunteers to be Fairness Champions and the first ones are undertaking their induction in November 2018 and we aim to recruit more rolling cohorts to ensure the cultural changes are embedded within all areas. Fairness Champions are people who are committed to upholding the values of the Trust and willing to listen and talk to anyone with concerns and help them access the right support.

The feedback from the SFFT regarding a 'fair and just culture' and the information received by the Freedom to Speak Up Guardian will be used to develop an action plan. These results have been considered by Workforce and ODG Steering Group and escalated to SMT and now asking for the Board to be cited on this for escalation.

Harrogate and District NHS Foundation Trust

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Terms of Reference

Quality Committee

1. Accountable to Board of Directors

The Quality Committee is a committee of the Board of Directors. As such it will, on behalf of the board contribute to setting strategy as this relates to quality; oversee arrangements for quality governance and seek assurances on the delivery of high quality care and regulatory compliance.

2. Purpose of the Committee

The Quality Committee is the primary mechanism by which the Board gains assurance regarding the safety and quality of services. Its purpose is to do the following in relation to quality:

- Seek assurance on the systems and processes in place to deliver high quality care on behalf of the Board of Directors;
- Provide scrutiny of the outcomes of these systems and processes in relation to quality on behalf of the Board of Directors;
- Provide direction on behalf of the Board of Directors regarding the delivery of the Trusts quality improvement priorities and strategic objectives in respect of quality.
- Provide oversight and seek assurance on regulatory compliance.

The role of the Audit Committee is to take a view as to whether the arrangements for gaining assurance are effective.

3. Responsibilities

The key responsibilities of the group are to:

- Set annual objectives and a plan of work;
- Report effectiveness against objectives and terms of reference at year end;
- Show leadership in setting a culture of continuous improvement in delivering high quality care;
- Oversee preparation of the Quality Account prior to approval by the Board of Directors and submission to ~~Monitor;~~ NHSI;
- Review systems, processes and outcomes* in relation to:
    - Delivery of the Trusts objectives in relation to quality and annual quality improvement priorities;
    - Quality performance and outcome measures relating to fundamental care, including the impact of cost improvement plans;
    - Staff metrics that impact on quality i.e. staff vacancies, statutory and mandatory training, induction, appraisal and sickness;
    - CQC registration and compliance with fundamental standards in acute and community services;
    - Organisational learning as a result of incidents, SIRIs, complaints, concerns and claims;

Harrogate and District NHS Foundation Trust

- Organisational learning and improvement as a result of patient and staff feedback from national and local surveys including FFT, and patient safety visits;
- Organisational learning and improvement in compliance with best practice and quality standards as a result of audit, NICE publications, national inquiries and reviews relating to quality by DH arms length bodies, regulators and professional bodies, inspections and peer reviews etc.
- Research and development, quality improvement and innovation, including rapid process improvement workshops and delivery of CQUIN.

- Receive key reports for example:
  - Infection prevention and control annual report;
  - Local Supervising Authority audit report;
  - Maternity screening report;
  - Health and Safety annual report;
  - Patient experience including complaints, concerns and compliments annual report;
  - Staff survey as it relates to the quality of care.

*Where possible, the committee will consider assurance in relation to the four domains defined in Monitor's: Well-led framework for governance reviews: guidance for NHS foundation trusts:

- Strategy and planning;
- Capability and culture;
- Process and structures;
- Measurement.

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4. Membership

The ~~The core~~ membership comprises:

- ~~Non-Executive Director (Mrs Lesley Webster) (Chair)~~
- Non-Executive Director (Ms Laura Robson)(Chair)
- Non-Executive Director (Mr Richard Stiff)
- Non-Executive Director (Ms Sarah Armstrong)
- Chief Nurse
- Chief Operating Officer

At least one member of the Audit Committee will also be a member of the Quality committee to ensure appropriate triangulation.

In addition the following individuals will be in attendance at meetings of the Quality Committee:

- Deputy Medical Director – Clinical Audit
- Deputy Director Partnerships and Innovations
- Deputy Director of Governance
- Head of Risk Management
- Clinical Director Children's and County Wide Community Care Directorate
- Clinical Director Long Term and Unscheduled Care Directorate

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- Clinical Director Planned and Surgical Care Directorate
- Company Secretary

Ad hoc attendance will be by invitation of the Chair (including a governor).

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~~Title~~ ~~*List members by title and indicate Chair and Deputy Chair*~~	~~Deputy~~ ~~*Deputies are welcome to attend any meetings*~~	~~Attendance:~~ ~~*Indicate if required for part meetings*~~
~~Lesley Webster (NED) – Chair~~		
~~Laura Robson (NED)~~		
~~Neil McLean (NED)~~		
~~Chief Nurse~~	~~Deputy Chief Nurse~~	
~~Deputy Medical Director – Clinical Audit~~	~~Medical Director~~	
~~Chief Operating Officer~~	~~Deputy Director of Performance and Information~~	
~~Deputy Director Partnerships and Innovations~~	~~Deputy Director of Workforce and Organisational Development~~	
~~Deputy Director of Governance~~		
~~Head of Risk Management~~	~~Patient Safety Manager~~	
~~Clinical Director Children's and County Wide Community Care directorate~~	~~Head of Safeguarding Children~~	
~~Clinical Director Long Term and Unscheduled Care directorate~~	~~Deputy Clinical Director Long Term and Unscheduled Care directorate~~	
~~Clinical Director Planned and Surgical Care directorate~~	~~Deputy Clinical Director Planned and Surgical Care directorate~~	

~~Governors will be invited to attend. Attendance by other staff will be requested by the Chair.~~

~~At least one member of the Audit Committee will also be a member of the Quality committee to ensure appropriate triangulation.~~

5. Quorum

The meeting will be quorate when ~~4~~6 ~~core~~ members are in attendance to include a minimum of two NEDs. ~~(including the chair or nominate deputy).~~

6. Administrative support

The corporate directorate will provide administrative support to arrange meetings, prepare agendas, circulate papers and draft minutes including a register of attendance to be agreed with the chair of the meeting prior to circulation as described below. Papers will be made available a minimum of 5 days prior to scheduled meetings.

An action log will be maintained, and a log of items reviewed throughout each 12 month period.

7. Frequency of meetings
The meeting will be timetabled to take place monthly.

8. Communication
Minutes including a register of attendance will be maintained. The draft minutes will be approved by the chair of the meeting and then shared with the members of the committee and the Board of Directors. The draft minutes will be reviewed and the final record agreed at the next meeting and then uploaded to the intranet.

9. Reporting
The Quality Committee will present an annual report to the Board of Directors outlining its work against its duties set out in the terms of reference. The Quality Committee will make recommendations to the Board of Directors on any area within its remit where action or improvement is required. Member's attendance at Quality Committee meetings will be disclosed in the Trusts Annual Report.

10. Review
The terms of reference will be reviewed annually.

11. Date
~~November 2017~~~~July~~November 2018

Harrogate and District NHS Foundation Trust

Date of Meeting:	28 November 2018	**Agenda item:**	9.1
Report to:	Board of Directors		
Title:	IT Virtual Server estate replacement business case		
Sponsoring Director:	Robert Harrison, Chief Operating Officer		
Author(s):	Paul Nicholas, Deputy Director of Performance and Informatics Andy Moore, Head of IT Services Mick Nodder, IT Operational Manager		
Report Purpose:	**Decision** ✓ **Discussion/ Consultation** ✓ **Assurance** ✓ **Information**		
Executive Summary:	The Trust's Virtual Server (VMWare) estate, consisting of 180 virtual servers, is coming to its end of life and is starting to reach full capacity regarding storage capability. Replacement is required before full capacity is reached. The business case has been reviewed by the IT Steering Group and Resources Committee, with a recommendation to take to Trust Board for approval.		

Related Trust Objectives

To deliver high quality care	✓	**To work with partners to deliver integrated care:**	✓	**To ensure clinical and financial sustainability:**	✓

Key implications	
Risk Assessment:	Risks associated with the content of the report are reflected in the IT Services Risk Register.
Legal / regulatory:	None identified.
Resource:	Approval required.
Impact Assessment:	Not applicable.
Conflicts of Interest:	None identified.
Reference documents:	None.
Assurance:	Report reviewed at IT Steering Group and Resources Committee

Action Required by the Board of Directors:

The Board of Directors are asked to approve the preferred option (Option 2) in the business case:

1. The replacement of the virtual server estate;
2. The decision to purchase using Company 2;
3. Purchase the replacement through Insight, on a Framework Contract;
4. Finance the purchase as a lease option, through quarterly payments of £26,095 over a 5-year period, totalling £521,897.

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Corporate Directorate
Replacement of VMWare Servers
October 2018

1: DIRECTORATE INFORMATION TO BE COMPLETED:		
Version:	1.3	**Date: 26 October** 2018
Author(s):	Paul Nicholas, Deputy Director of Performance and Informatics Andy Moore, Head of IT Services Mick Nodder, IT Operational Manager	
Operational/Clinical Director Signature:	Robert Harrison	**Date: 26 October 2018**

2: ASSESSMENT AND APPROVALS PRO-FORMA TO BE COMPLETED:		
Assessed by Planning Department		**Date:**
Assessed by Finance Department		**Date:**
Approved by the Chief Operating Officer		**Date:**
Approved by the Director of Finance		**Date:**
Approved by Board of Directors (if applicable)		**Date:**
Approved Business Case Reference Number/Capital Scheme Number (to be allocated by Planning Department):		
Post Project Evaluation Date (to be allocated by Planning Department)		**Date:**

Please note that no resources will be allocated until the business case is fully approved as per completion of the tables above. The Planning Department will notify you accordingly.

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1.1. Executive summary

The Trust's Virtual Server (VMWare) estate, consisting of 180 virtual servers, is coming to its end of life and is starting to reach full capacity regarding storage capability. Replacement is required before full capacity is reached with the consequence of having to close down clinical systems.

1.2. Background information

The VMWare infrastructure consists of two main hardware components that are reliant on each other and interact constantly to run 180 virtual servers, providing almost all Trust core clinical and non-clinical systems across the organisation. The two components are:

1. The Physical Servers - that provide the processing power and memory to run the systems, as well as sending data back and forth to networked PCs;
2. The Storage Area Network (SAN) - where all clinical and other data is stored.

As the two components (servers and storage) work together, for technical reasons they ideally need to be purchased at the same time. This enables us to get the most out of the hardware in terms of compatibility and efficiency, providing benefits of the new technology such as faster connections and performance.

1.3. Current position

Storage (SAN)

At the moment we have around 3TB of fast disk left in reserve on the SAN, to put this into context we have used 68TB in the last 5 years , an average of around 13.5TB a year. On a daily basis the hospital systems accumulate more data which is then written to the SAN. As our data grows, the space in reserve shrinks to keep the system disks in step with requirements; otherwise the systems will shut down and cease to function. Once the space has been exhausted there will be non-left in reserve, and we will therefore eventually reach a point where we can no longer provide any new systems or keep current systems functioning that require more disk space.

The manufacturer's warranty for the SAN is now out of date and now under an annual support contract provided by an external company who cover the hardware for parts in case of failure. Parts of the SAN are now 6 years old and therefore there is an increased risk of failures that will affect the service.

Pathology has requested up to another 1TB of storage to store scanned Histology images, this is linked to a nationally funded digital imaging project and therefore beneficial to the Trust. We also have a significant amount of historical Ophthalmology OCT data that we are currently unable to load onto the SAN owing to the amount of storage required, we will have to hold back until we receive a decision on the SAN replacement.

PACS recent move to EI released around 1.5 TB of disk space; this helped the position for a short period.

Physical Servers

The physical servers where purchased around the same time as the SAN units, mostly now out of warranty and under a similar annual support contract with a third party. We had to purchase refurbished servers the last time we needed additional capacity as the model we need is now no longer available. The servers are running at an average of 85-90% memory capacity and are now at a point where they are becoming less efficient with the workload required to keep the systems functioning.

As systems grow and require more memory and CPU to read data from databases, the load on the servers slowly increase. Whilst we will be de-commissioning a small number of PACS servers when the new EI system goes live, the resources released will soon be absorbed by the growth of the VM server estate.

Remaining Capacity and Replacement Time

The data analysis on the current server estate identified that a number of servers were close to capacity as a result of the data throughput, with memory utilisation consistently above 90%. Disc space on the SAN is also close to 90% utilisation. The backup solution has around 10% disc space remaining with tape backups taking around one week to complete.

We therefore recommend investing in the replacement of infrastructure, before we reach full capacity resulting in the increased risk of having to shut systems down.

Following placing an order, it will take around 1 month for the hardware to be delivered and a further 3 months to install and complete the migration of data across onto the new SAN. This includes arranging downtime with each department and migrating each of the 180 systems over to the new infrastructure.

1.4. Options identification

The options for implementation are

- Option 1 – Do nothing
- Option 2 – Replace the virtual server estate

Options appraisal

Having undertaken a market evaluation, looking at both new and emerging technologies, we have concluded that the solution we currently have in place, i.e. Physical Servers and SAN arrays; offer the best value for money and performance. We therefore recommend staying with the current model.

Option 1 – Do Nothing

The current server infrastructure is becoming out of warranty and close to full capacity. Unless the estate is replaced, we will begin to reach full capacity and servers will begin to close down as a consequence.

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Option 1 Estimated Cost
No Additional Costs Identified.

Option 1 is not viable owing to the consequence of the virtual servers reaching maximum capacity and closing down.

Option 2 – Replace virtual server estate

To ensure value for money we have looked at three companies

a. Company 1 who through their size and relationship has framework contracts with HP that other suppliers struggle to match.
b. Company 2 who originally helped the Trust virtualise its server estate. Company 2 are a large supplier of DELL hardware running VMWARE. Since DELL's takeover of VMWARE and EMC, their range of servers now offer optimised VMWARE software which our server estate runs on.
c. Company 3 who proposed a Cisco solution. This was not what we had discussed with the company and their proposal came in at £1,000k. We felt on cost alone we could not take forward their proposal.

We have met several times with Companies 1 and 2, to discuss and refine requirements against the analysis both companies completed on our current estate, showing usage and projected future growth over the next 5 years.

Both companies proposed replacing our backup solution with a new larger server and tape drives. We are happy now that both companies have proposed acceptable solutions and have given their best prices, both as a capital and revenue purchase on finance.

Having evaluated both proposals we can confirm both are fit for purpose:

1. Company 1 - £575,823;
2. Company 2 - £486,571.

Option 2 - We recommend purchase using Company 2, which is £89,252 less than Company 1.

1.4.1. Financial analysis

Options		Annual
1 - Do Nothing	£0.00	£0.00
2 – Replace virtual server estate using Company 1	£575,823	
2 – Replace virtual server estate using Company 2	£486,571	

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1.5 Cost

Capital - one off purchase

	Cost Detail	WTE	£
Capital	Replace virtual server estate using Company 2	-	£486,571
Capital	Additional fibres and communication equipment to connect new infrastructure		£10,000

Lease - option over 5-years

	Cost Detail	WTE	£
Lease	Replace virtual server estate using Company 2 lease option over 5 years	-	£521,897
Capital	Additional fibres and communication equipment to connect new infrastructure		£10,000

1.5. Preferred option

We propose purchasing the Company 2 option through Insight on a Framework Contract. Both Companies 1 and 2 costs show the full hardware costs for 5-years. The only other costs we would incur are for the VMWARE licences, which we already pay for on our current server estate.

Company 2

a. **Capital Cost** Servers, SAN, Implementation Servers **£486,571** (inclusive of Vat)

b. **Finance over 5-years (lease)** - 20 Quarterly payments of **£26,095,** Total Repayment **£521,897 (inclusive of VAT).**

   Dell Indicative Finance Agreement costs – (admin Fee £150 to set up) - this is a lease option and provides the flexibility of spreading the cost over a five year period. The equipment will be removed at the end of the lease period and therefore will require replacement at 5 years, removing the option to sweat the asset slightly longer. Note, the equipment will be at end of life after 5 years.

The recommended option is to finance over 5-years as a lease option with 20 quarterly payments of £26,095 (total repayment £521,897).

1.6. Implementation (of the preferred option)

Andy Moore, Head of IT Services is the named person responsible for implementation and delivery of the project in accordance with the costs and timetable specified within the business case.

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1.7. Conclusion and recommendation

The conclusion and recommendation is that the Trust should replace the virtual server estate using Company 2, financed over 5 years as a lease option with quarterly payments.

Approval is sought to:

a. **Replace the virtual server estate;**
b. **Purchase using Company 2;**
c. **Purchase the replacement through Insight, on a Framework Contract;**
d. **Finance the purchase through quarterly payments, over a 5-year period as a lease option.**

1.8. Approval pro-forma

No funds/resources can be released and no developments can be commenced until the business case has been approved.

Upon completion of the business case and Directorate Information on the face sheet **please submit your completed business case to the Planning Department for assessment and approval. The Planning Department will advise you when the business case is approved and will let you have a signed copy for you to retain in your records.**

Please note to draw capital funds you will need to submit the appropriate CP form to the Planning Department also.

1.9. Post project evaluation

Post Project Evaluation (PPE) is a mandatory part of the business process and has to be undertaken in accordance with the Trust's Capital Investment Manual and the Standing Financial Instructions.

PPEs of service developments/business cases are undertaken via the Trust's "PPE Non Capital Form", an example of which can be found on the Trust's intranet site at http://nww.hdft.nhs.uk/corporate/planning-department/post-project-evaluations/.

This service development/business case will be assessed against the objectives set out within it, as well as ascertaining the strengths or weaknesses of the development, it will provide the opportunity to learn lessons for future developments, share best practices or rectify situations where appropriate.

The PPE will be requested 12 months after approval date and will be issued to the business case author for completion and return to the Planning Department, who will forward the evaluation to the PPE Group and Audit Committee for assurance.

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GLOSSARY OF ABBREVIATIONS

A

A&E	*Accident and Emergency*
AfC / A4C	*Agenda for Change*
AHPs	*Allied Health Professionals*
AIC	*Aligned Incentive Contract*
AMM	*Annual Members' Meeting*
AMU	*Acute Medical Unit*
AQP	*Any Qualified Provider*

B

BAF	*Board Assurance Framework*
BME	*Black and Minority Ethnic*
BoD	*Board of Directors*

C

CATT	*Clinical Assessment, Triage and Treatment Ward*
C.Diff	*Clostridium difficile*
CCCC	*Children's and County Wide Community Care Directorate*
CCG	*Clinical Commissioning Group*
CCTs	*Community Care Teams*
CCU	*Coronary Care Unit*
CE / CEO	*Chief Executive Officer*
CEA	*Clinical Excellence Awards*
CEPOD	*Confidential Enquiry into Perioperative Death*
CIP	*Cost Improvement Plan*
CLAS	*Children Looked After and Safeguarding Reviews*
CNST	*Clinical Negligence Scheme for Trusts*
CoG	*Council of Governors*
COO	*Chief Operating Officer*
CORM	*Complaints and Risk Management*
CQC	*Care Quality Commission*
CQUIN	*Commissioning for Quality and Innovation*
CRR	*Corporate Risk Register*
CSW	*Care Support Worker*
CT	*Computerised Tomography*
CT DR	*Core trainee doctor*

D

Datix	*National Software Programme for Risk Management*
DBS	*Disclosure and Barring Service*

DNA	*Did not attend*
DoH	*Department of Health*
DoLS	*Deprivation of Liberty Safeguards*
Dr Foster	*Provides health information and NHS performance data to the public*
DSU	*Day Surgery Unit*
DToC	*Delayed Transfer of Care*

E

E&D	*Equality and Diversity*
eNEWS	*National Early Warning Score*
ENT	*Ear, Nose and Throat*
EoLC	*End of Life Care*
ERCP	*Endoscopic Retrograde Cholangiopancreatography*
ESR	*Electronic Staff Record*
EU	*European Union*
EWTD	*European Working Time Directive*

F

FAQ	*Frequently Asked Questions*
FFT	*Friends and Family Test*
FC	*Finance Committee*
FNP	*Family Nurse Partnership*
FOI	*Freedom of Information*
FT	*NHS Foundation Trusts*
FTSU	*Freedom to Speak Up*
FY DR	*Foundation Year doctor*

G

GIRFT	Get it Right First Time
GPOOH	GP Out of Hours
GWG MD&C	Governor Working Group – Membership Development and Communications
GWG V&E	Governor Working Group – Volunteering and Education

H

H@N	*Hospital at Night*
HaRD CCG	*Harrogate and Rural District Clinical Commissioning Group*
HaRCVS	*Harrogate and Ripon Centres for Voluntary Service*
HBC	*Harrogate Borough Council*
HCP	*Health and Care Partnership*
HDFT	*Harrogate and District NHS Foundation Trust*
HDU	*High Dependency Unit*
HED	*Hospital Episodic Data*
HEE	*Health Education England*
HFMA	*Healthcare Financial Management Association*
HHFM	*Harrogate Healthcare Facilities Management Ltd*
HR	*Human Resources*
HSIB	*Healthcare Safety Investigation Branch*
HSE	*Health & Safety Executive*

HSMR	*Hospital Standardised Mortality Ratios*

I

ICU or ITU	*Intensive Care Unit or Intensive Therapy Unit*
IG	*Information Governance*
IBR	*Integrated Board Report*
IT or IM&T	*Information Technology or Information Management & Technology*

K

KPI	*Key Performance Indicator*
KSF	*Knowledge & Skills Framework*

L

L&D	*Learning & Development*
LAS DR	*Locally acquired for service doctor*
LAT DR	*Locally acquired for training doctor*
LCFS	*Local Counter Fraud Specialist*
LEPs	*Local Education Providers*
LMC	*Local Medical Council*
LNC	*Local Negotiating Committee*
LoS	*Length of Stay*
LPEG	*Learning from Patient Experience Group*
LSCB	*Local Safeguarding Children Board*
LTUC	*Long Term and Unscheduled Care Directorate*
LWAB	*Local Workforce Action Board*

M

MAC	*Medical Advisory Committee*
MAPPA	*Multi-agency Public Protection Arrangements*
MARAC	*Multi Agency Risk Assessment Conference*
MASH	*Multi Agency Safeguarding Hub*
MDT	*Multi-Disciplinary Team*
Mortality rate	*The ratio of total deaths to total population in relation to area and time.*
MOU	*Memorandum of Understanding*
MRI	*Magnetic Resonance Imaging*
MRSA	*Methicillin Resistant Staphylococcus Aureus*
MTI	*Medical Training Initiative*

N

NCEPOD	*NCEPOD (National Confidential Enquiry into Perioperative Death)*
NED	*Non-Executive Director*
NHSE	*National Health Service England*
NHSI	*NHS Improvement*
NHSR	*National Health Service Resolution*
NICE	*National Institute for Health & Clinical Excellence*
NMC	*Nursing and Midwifery Council*
NPSA	*National Patient Safety Agency*
NRLS	*The National Reporting and Learning System*

NVQ	*National Vocational Qualification*
NYCC	*North Yorkshire County Council*

O

OD	*Organisational Development*
ODG	*Operational Delivery Group*
ODP	*Operating Department Practitioner*
OPEL	*Operational Pressures Escalation Levels*
OSCE	*The Objective Structured Clinical Examination*

P

PACS	*Picture Archiving and Communications System – the digital storage of x-rays*
PbR	*Payment by Results*
PEAT	*Patient Environment Action Team*
PET	*Patient Experience Team*
PET SCAN	*Position emission tomography scanning system*
PHSO	*Parliamentary and Health Service Ombudsman*
PMO	*Project Management Office*
PPU	*Private Patient Unit*
PROM	*Patient Recorded Outcomes Measures*
PSC	*Planned and Surgical Care Directorate*
PST	*Patient Safety Thermometer*
PSV	*Patient Safety Visits*
PVG	*Patient Voice Group*

Q

QC	*Quality Committee*
QIA	*Quality Impact Assessment*
QIPP	*The Quality, Innovation, Productivity and Prevention Programme*
QPR	*Quarterly Performance Review*

R

RCA	*Route Cause Analysis*
RN	*Registered Nurse*
RTT	*Referral to Treatment. The current RTT Target is 18 weeks.*

S

SALT	*Speech and Language Therapy*
SAS DR	*Speciality and Associate specialist doctors*
SCBU	*Special Care Baby Unit*
SHMI	*Summary Hospital Mortality Indicator*
SHU	*Sheffield Hallum University*
SI	*Serious Incident*
SID	*Senior Independent Director*
SIRI	*Serious Incidents Requiring Investigation*
SLA	*Service Level Agreement*
SMR	*Standardised Mortality rate – see Mortality Rate*

SMT	*Senior Management Team*
SPF	*Social Partnership Forum*
SpR	*Specialist Registrar – medical staff grade below consultant*
ST DR	*Specialist trainee doctors*
STEIS	*Strategic Executive Information System*
STP	*Sustainability and Transformation Plan/Partnerships*

T

TARN	*Trauma Audit Research Network*
TOR	*Terms of Reference*
TU	*Trade Union*
TUPE	*Transfer of Undertakings (Protection of Employment) Regulations 2006*

V

VC	*Vice Chairman*
VSM	*Vey Senior Manager*
VTE	*Venous Throboembolism*

W

WTE	*Whole Time Equivalent*
WY&H HCP	*West Yorkshire and Harrogate Health Care Partnership*
WYAAT	*West Yorkshire Association of Acute Trusts*

Y

YTD	*Year to Date*

Further information can be found at:
NHS Providers – Jargon Buster –
http://nhsproviders.org/programmes/governwell/information-and-guidance/jargon-buster

Nov 2018