About

Compiled each quarter using local and national health intelligence, the Patient Safety Review is aligned to the aims of the *Quality Improvement Strategy* and is designed to augment the monthly Patient Safety and Mortality Scorecard surveillance. Using relevant benchmarking and extended timeframes where appropriate, both sets of monitoring seek to identify vulnerabilities against which corrective action can be taken and highlight organizational learning. The overall aim is to promote discussion of quality and patient safety.

Learning from deaths and serious incidents is available in complementary quarterly reports.
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1. Harm free care: building a positive patient safety culture

Patient safety incidents aggregate overview

The Trust’s median reporting rate (April 2017 to September 2017) continues above average amongst the 135 non-specialist acute trust cohort (Source: National Reporting and Learning System [NRLS]). Organizations that report more incidents usually have a more effective safety culture on the basis that in order to learn it is necessary to understand where the problems are occurring. The 2017 NHS National Staff Survey indicates that the percentage of staff witnessing potentially harmful errors, near misses or incidents is in the lowest (best performing) 20% of acute trusts in England as is the fairness and effectiveness of incident reporting procedures. See table 1 for more detail on what staff say about errors and incidents.

The percentage of staff receiving Staff and Patient Safety training for the quarter stands at: 88.3%.

Of the incidents reported in the latest NRLS release, 97.8% were categorized as low or no harm (97.8% for the cohort). It is important that staff report safety risk promptly so that action can be taken to prevent harm to others. Deterioration in the time taken in closing incident investigations previously highlighted by the Care Quality Commission [CQC] as an issue remains in view. The median time is currently 60 days (previously 51 days – source NRLS). The median for the cohort is 21 days. The Trust median time is monitored monthly at the Quality & Safety Team meeting and the risk assessment viewed and challenged. In addition there is dedicated resource allocated to facilitate the improvement. Exception reports issued to the clinical groups are having an effect in alerting the areas requiring improvement and this is being actioned.

See Table 1 for more detail on what staff say about errors and incidents.
The Trust reported 34\textsuperscript{1} serious incidents between April 2017 and March 2018, eight of which were notified in the last quarter:\textsuperscript{2}

1. Diagnostic incident and failure to act on test results [Ward 13]
3. Treatment delay – surgery/diagnostics
4. Fall [Ward 10 fracture neck of femur]
5. Obstetrics – emergency C. section [hypoxic encephalopathy]
6. Information governance breach [Community Paediatrics]
7. Medication incident – Ward 9 insulin prescription
8. Never Event – wrong site procedure

This year the Trust has reported two Never Events: [1] a retained foreign object and, [2] a wrong site procedure. These are preventable patient safety incidents that should not occur. National Safety Standards for Invasive Procedures enable organizations to review current local processes for invasive procedures and ensure that they comply with the new national standards. Local learning from the analysis of the retained foreign object has been incorporated into local safety standards to prevent future recurrence. In respect of the second event, staff have been reminded of the importance of using the designated World Health Organization [WHO] Surgical Safety Checklist [radiological interventions] and to mark procedure sites.

Where cases are rare and infrequent it can be helpful to monitor the number of days since the last observation date. Figure 1 indicates that three of the five Never Events notified by the Trust have been reported in the last 15 months. Since the introduction Never Events reporting in 2009 there have been a number of revisions to the core list. All the Trust’s Never Events meet the current notification criteria.

Safety reporting research and development - suspected unexpected serious adverse reactions [SUSAR] year to date: zero.

\textsuperscript{1} One of which was subsequently de-logged – ED missed fracture.
\textsuperscript{2} QTR1 eleven notifications; QTR2 nine notifications [ED missed fracture formally de-logged]; QTR3 six notifications [W9 medication TTO formally de-logged]; & QTR4 eight notifications to STEIS.

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Key organizational learning and themes highlighted during this quarter:

Please note that investigation of the serious incidents reported in the quarter is not yet complete; findings are included in the next iteration of this report. The following relates to learning from previous quarters:

- A corporate risk assessment is being drafted to reflect the risk from running dual paper and electronic pathways side by side. To manage, reduce and mitigate the hazard the risk management procedure has been reviewed to prompt consideration.
- The pulmonary embolism medication related event indicates issues around dual processes, nursing handover, shortfalls in the ward round where VTE assessment and prophylaxis were not discussed. Prophylaxis is now prescribed as part of the patient’s ‘sign out’ process in theatre.
- Two serious incidents concerned patients with mental health/ complex needs. One case identified issues around assessment of risk, awareness of process and consistency of approach between providers. A delay in Mental Health Act assessment has highlighted the Treat as One recommendation for out of area patients.
- Within Maternity Services an incident highlights cardiotocography (CTG) monitoring. The 2017 MBRACE – UK report recommends improvements in
training for fetal monitoring and situational awareness for staff caring for women in labour.

- Escalation of capacity and demand issues was identified as key during the investigation of a cardio-respiratory (echocardiogram) event. Where risk is identified it must be escalated in accordance with the Trust’s assessment process.
- 2017/18 Duty of Candour breaches: one case [12 hour trolley breach April 2017; subsequently resolved].

**Clinical quality negligence claims**

There were seven clinical quality negligence claims settled this quarter. Two of these were settled with no damages – liability not admitted:

1. Surgery – management of foot drop; and

Damages were paid in the following:

3. Surgery – management shoulder injury;
4. Surgery – complications of varicose vein procedure;
5. Surgery – interpretation of CT angiography scan;
6. Surgery – delay cancer diagnosis and treatment; and,
7. Integrated Medical Care - limb trapped in wheelchair.

Key organizational learning:

- For the above cases, a request to the Triumvirates and key clinicians has been made that all relevant learning is identified and shared within relevant forums.
- NHS Resolution considers claims are often pursued in search of an explanation or acknowledgement, potentially because of a failure earlier in the process, such as lack of candour.
  - Of the 34 letters of claim received year to date, over half arose from serious incidents, complaints or PALS issues.
  - Of the 20 claims settled year to date, half arose from serious incidents, complaints or PALS issues and/or inquest matters.

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**NHS Resolution (formerly NHSLA)**

In 2017, the NHS Resolution annual report showed that, although childbirth litigation claims represented only 10% of claims, they accounted for 50% of total claims in terms of value; an increase from 43% the previous year. Concerns have been raised about cases in which children suffer brain damage at birth and have to live the rest of their lives with complex care needs. NHS Resolution requires trusts to report all maternity incidents that have led to severe brain injury.

- Maternity qualifying incidents under NHS Resolution’s Early Notification Scheme 2017/18: one case

**Regulation 28**

The Coroner has the legal power and duty to issue a report following an inquest if it appears there is a risk of other deaths occurring in similar circumstances. A ‘report under regulation 28’ is sent to a provider to take action to reduce risk and published on the judiciary website. The Trust received no such notification this quarter.

Key learning highlighted this quarter:

Following collaboration with NHS Resolution, Getting it Right First Time [GIRFT] reviewed litigation across Trust surgical specialties with the aim of promoting discussion between clinicians, managers and the claims department to improve handling and learning from claims. In response the T&O specialty has discussed a proposed annual review of claims to extract learning and has sought the advice of the Patient Safety Manager Legal Services. GIRFT suggest that each clinical negligence claim is reviewed in conjunction with learning from complaints, serious incidents and inquests.

Other learning from inquests:

Following recommendations from the Secretary of Health, a planned change to Coroner’s jurisdiction to allow independent investigation of stillbirths at 37 weeks is proposed. Providers will be expected to review and implement action plans to improve future care.
2. Highest burden of harm

Falls, pressure ulcers, medication errors and staffing are the Trust’s most reported incidents. There is clinical consensus that the first three of these may largely be preventable through appropriate patient care whilst research suggests possible links between staffing levels and skill mix, with patient safety.

2.1 Harm associated with falls

Of the 206 falls reported this quarter, 147 resulted in no harm [71%], 55 were categorised as low harm and four incidents resulted in moderate harm [Wards 5, 6, 7 and 10]. Figure 2 illustrates the number of patients (inpatient and outpatient) affected by a fall as well as the overall number of reported falls. Of those patients who fell in the last quarter, 44 fell twice and 24 patients three times.

Figure 3 illustrates those falls resulting in significant injury and/or fracture. Based on a rolling 12 months an average of 228 falls were reported at QTR4 compared to 238 in the previous and equivalent period. In the last fiscal year 21\(^4\) falls (inpatient and outpatient) resulted in fracture of which ten were fracture neck of femur. In the same period there were 20 falls resulting in significant harm.\(^5\) The locations with the highest frequency of occurrence for these events were Ward 6 and Ward 10.

A rolling average diminishes variation (caused, for example by case mix and seasonal variation) and allows a more effective evaluation of trend. The broken red line in figure 3 shows the combined number of reported falls resulting in fracture and/or significant injury for the 12 months preceding the month on the ‘x’ axis. In general the reported number of such events appears stable; fluctuation due to case mix is to be expected.

Inpatient falls with harm per 1000 occupied bed days [≥ moderate harm] for 2017/18 is 0.17; for the previous equivalent period the rate was 0.18.

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\(^4\) In August 2017 a BTHNHSFT patient fell and sustained a fracture on the SGH site. This event is not included in the data above.

\(^5\) Laceration or head injury as per Trust’s Slips, Trips and Falls Policy – Children & Adults.
Figure 4 illustrates the top ten locations reporting the highest number of fall incidents [no adjustment for overall activity /case load is made].

Key organizational learning highlighted this quarter:

- Following findings from the participation in the RCP 2017 National Falls Audit, notably around continence care plans, assessment tool of delirium, dementia and depression – the 3Ds – has been rolled out in conjunction with a Continence Care Plan.
- Rapid Response Visit identifies any immediate learning for those falls resulting in significant harm. Senior corporate nursing leads provide support to clinical teams by attending those areas where a patient has fallen in such circumstances prior to a more formal investigative process.

2.2 Harm associated with pressure ulcers

In 2017/18 of all reported pressure ulcer incidents [C1-4], 16% developed in hospital and 6% under our community care; 74% of such incidents developed prior to admission to hospital and 4% preceded community care. Figures for our services compare favourably with the previous fiscal year.

Figures 5 and 6 show the C1-4 pressure ulcers across Trust services, the underlying patient numbers and the long term trend [no adjustment for overall activity /case load is made]. Over the last two years on average 62 hospital-acquired pressure ulcers [C1 to C4] are reported each quarter, affecting 52 patients. Across Community Services an average of 24 pressures ulcers [C1 to C4] are reported each quarter, affecting 21 patients.

![Figure 4: All areas which have reported more than five falls 2017/18 (Count)](image)

![Figure 5: Count of C1-4 hospital-acquired pressure ulcers](image)
Category 3 and 4 pressure ulcers are subject to root cause analysis. The process determines whether a pressure ulcer is preventable (avoidable) or inevitable in development (unavoidable). Review of investigation outcomes for 2017/18 highlights the following [please note figures are not complete]:

- Of the Community Service acquired C3 and C4 pressure ulcers investigations undertaken to date four C3 events and one C4 event were found to be avoidable.
- Of hospital acquired C3 and C4 pressure ulcers investigations undertaken to date 12 C3 events were found to be avoidable.

**MUST Score**

Malnutrition can affect wound healing, including pressure ulcers. Work to include dieticians and the wider multi-disciplinary team within training remains a priority. The Malnutrition Universal Screening Tool [MUST] clinical audit undertaken by the Nutrition Nurse records an average 79% compliance across services for 2017/18 [QTR1 76%; QTR2 83% and QTR4 76%]. The monthly nursing KPIs MUST compliance average for this period is 92%.

Key organizational learning highlighted this quarter:

- The Community Service and Ward 6 pressure ulcer clusters identified key learning around “React to Red”, categorisation, escalation, inconsistency in the use of paper and electronic records and a lack of wound care planning. “React to Red” training is embedded within the Trust with formal and bespoke training sessions available, including identification and categorisation. “React to Red” Champions are available to support staff to complete ward based competency documents.

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6 Definition: three or more C3 and/or C4 pressure ulcer acquired within the same clinical area within a three month timeframe. A cluster or any C3 or C4 pressure ulcer which is the result of an omission of care is notified as a serious incident.
Community Teams have introduced safety huddles at handover, including discussion around pressure area care alongside other issues concerning patients seen that day.

2.2.1 Management of complex wounds

Improving the care and treatment of wounds encompasses more than pressure ulcers which is why in 2017/18 key quality improvement work focuses on improving wound care for all patients (inpatient and outpatient). Research evidence indicates that 30% of chronic wounds (failure to heal ≥ 4 weeks) do not receive a full assessment based on best practice guidelines. Failure to complete a comprehensive assessment can contribute to ineffective treatment which delays the rate of wound healing. Community Services aim to increase the number of full wound assessments for chronic wounds:

- In QTR2 2017/18 a baseline clinical audit highlighted that from a district caseload of 48 patients meeting the chronic wound criteria, three had a full and complete assessment undertaken [6.3%]. A trajectory for improvement was agreed with commissioners: namely, that by March 2017, 35% of wounds that have failed to heal within four weeks have a comprehensive wound assessment. The audit was repeated in QTR4 2017/18: of the 36 patients meeting the chronic wound criteria, 14 had a full wound assessment indicating compliance of 38.9%.

- In QTR2 a clinical audit of 17 patient case notes registered within the Airedale, Wharfedale and Craven locality was also conducted to evaluate the quality of care and treatment. Areas of good practice are: documentation of the location of wound and wound type, MUST and Maelor scores and pain severity and frequency. Areas highlighted as requiring greater consideration are: the effect of medication on wound healing, the impact on quality of life, including social isolation, and, greater attention to potential systemic infection. The areas of shortfall form the basis for on-going quality improvement initiatives and monitoring.

To improve the delivery of holistic skin and wound assessment within the acute setting, the following work has been undertaken:

- Revision of the Wound Care Plan to form a Skin Assessment and Wound Care Plan.
- Establishment of a joint wound care Formulary aligned with Community Services and Bradford District Care Foundation NHS Trust.
- Implementation of a Skin Tear Pathway to support accurate assessment and appropriate treatment.

2.3 Harm associated with medication

According to the latest NRLS breakdown of incidents 8.6% of all Trust reported incidents are medication related. This compares to 10.7% for the 135 acute non-specialist organisations comparator group.

Figure 8 charts the overall medication incidents reported over the last three years against a median for the time period of 124. This quarter of the 120 incidents reported: 107 resulted in no harm; 12 resulted in low harm and two incidents resulted in moderate harm (cessation of medication Ward 6 and Ward 2 clordiazepoxide related).

2017/18 reconciliation of incidents indicates that there have been three medication related events resulting in moderate harm, two of which were in the last quarter and are as described above. The third concerned the CCU/noradrenaline. For one event a patient death is noted [cardiac failure W14].

![Figure 8: Count of medication incidents reported each quarter](image-url)

The top three process errors are: [1] medication administration errors, [2]
prescribing/process errors, and, [3] dispensing/supply errors. Figures 9 and 10 illustrate the errors across services over the last three years.

The majority of the errors reported within Community Services concern events that occurred in another clinical area or within Primary Care. Of the 44 incidents reported in 2017/18, 36% are attributed to Community Service teams.

**2017 CQC Children and Young People Survey:** parents and carers were asked if they received enough information about their child’s newly prescribed medicines. The Trust scored 9.9 out of a possible top score of ten [59 respondents]. The result was categorised as “better” when compared to the other 132 participating sites.

**2016 CQC Inpatient Survey:** results show the Trust is performing “about the same” as most of the 147 participating providers for the following:

- Purpose of medicines;
- Medication side effects;
- Taking medication;
- Information about medicine; and,
- Danger signals.

Key organization learning from serious incidents where medication is a factor [including contributory] within the last year, including complaints:

- Omission of apixaban on discharge letter. Death was unrelated to medication error; downgraded form medication error [recommended that downgraded from serious incident – no harm]. Learning is to be shared regarding supplementary discharge letters as the process is complex.
- Chlorazepoxide. A root cause investigation has been undertaken and report from the Assurance Panel is awaited.
- Ward 9 medication incident – insulin prescription was reported in QTR4 2017/18. Level of harm is low. A root cause investigation is planned.
- A root cause investigation was undertaken in relation to incorrect preparation of chemotherapy for a patient. Learning included better segregation of different strengths of the same injection and provision of further training for staff working in the pharmacy aseptic unit. Level of harm was low.
- Learning from incidents involving delay of medicines for Parkinson’s disease
  - Nurses use timers as a prompt for timing of doses of medicines for Parkinson’s disease.
  - A recent change to SystmOne EPMA functionality has enabled development of an icon for time critical medicines on the electronic
medication chart. This is currently being piloted for medicines for Parkinson’s disease.

A SystmOne [S1] EPMA report has identified the reasons recorded for omitted doses of medicines. Whilst most of the reasons are clinically justifiable, it is of concern that approximately 2% of doses are recorded as not administered – drug unavailable. Further drill down into this is needed, particularly for medicines where timeliness of administration is critical as omission carries a potential risk to patient safety. TPP have recently made some changes to further highlight due medications when on the ward EPMA home screen. The impact of this is being monitored over time. No themes in time of day or type of medicine omitted have been identified.

Other key organization learning arising from medication incidents within the last year:

- In response to reports of incidents where levofloxacin caused harm an article was published in the April 2018 edition of Quality and Safety Matters to raise awareness of cautions when prescribing quinolone antibiotics including the risk of tendon rupture and tendonitis.

Key organization learning from complaints where medication was a contributory factor year to date:

- None advised.

Learning from medicines management audit programme:

Audit of the safe handling of Controlled Drugs (CD) in Q3 2017/18 identified that further improvement is needed in documenting receipt of CDs on ward areas. Receipt of each CD medicine must be signed for in the ward CD order book and documented accurately including the quantity in words [in the ward CD record book]. Learning from this audit has been shared in April 2018 edition of Quality and Safety Matters newsletter.

2.4 Staffing incidents

Staffing incidents can highlight issues around bank/locum cover, skill mix, and/or the depletion of staff (e.g. moved to other clinical areas), all of which can have an impact on patient safety. Infrastructure (staffing, facilities, and environment) accounted for 12.8% of all incidents reported to the NRLS over the latest available six month period compared to 6.5% for all acute non-specialist organizations.

Figure 11 illustrates an increase in staffing reported incidents over the last three years.

- The 2017/18 top five locations reporting staffing issues are: Ward 2 [accounting for 28% of all staffing incidents], Ward 4 and Ward 17 [10% respectively], ED [7.9%] and W10 [4.8%].

![Figure 11: Count of staffing incidents across Trust services](image)

Maternity: midwife to birth ratio and one to one care in labour are within expected parameters to February 2018. There has been three divers since April 2017 [Source: ANHSFT Performance Team].

Through 2017/18 the diagnostic six week standard has not been met due to a number of breaches for Ultrasound with the service experiencing capacity issues. Sustaining a low wait time remains a key factor in providing high-quality and responsive care.

Key organizational learning highlighted this quarter:

The main focus in the nursing teams is the development of new roles, such as the nursing associate on Wards 2, 4 and 5 [where there are significant nurse vacancies]. Other developments include the enhancement of existing roles, such
as the healthcare support workers taking on appropriate additional duties [once trained]. Skill review of the ward teams is a continual process and takes into consideration the specific needs of the cohort of patients. An example of this is Ward 5 and the length of time it takes to undertake the task of a medication round. In response, a new role has been implemented in partnership with Pharmacy whereby a ward based pharmacist will support the patients taking their medicines as part of the medication round.

2.5 Other trending incidents

In addition to the most frequently reported clinical incidents, those incidents trending outside of expected levels are closely monitored.

Medical devices

Medical device equipment incidents relate to broken, malfunctioning and missing items such as telemetry equipment and syringe drivers. Such incidents can also concern how equipment is used. In the latest NRLS release 3.1% of all Trust incidents concerned medical device/equipment which compares to the 3.1% for all acute non-specialist organizations.

Figure 12 shows the overall number of medical device incidents reported over the last three years against a median of 48 such incidents a quarter.

Of the 69 incidents reported this quarter, almost 60% concern equipment failure/malfunction and equipment not available incident categories. All events were either no harm [86%] or low harm [14%].

The majority of incidents are reported by Theatres [21 in QTR4]. There were eight bed rail incidents reported this quarter, a theme previously highlighted in this report. Three incidents concern the lack of bariatric equipment. There were two instances where no telemetry box was available. There was one instance of high/low beds not available. The nursing team is working with Estates to ensure that the maintenance of the beds is up to date to ensure they are available as required.

Key organizational learning highlighted this quarter:

Mobility Services has undertaken a cluster review of patient falls from wheelchairs. This has been accompanied by an increase in reporting: incident reporting has shown that 21 wheelchairs have been found to have defects and still to be use. In response changes to protocols have been implemented. The service is working with Care Team Leaders and care homes to report faults in a timely manner.

The e-QUIP Asset Management system is being successfully utilised on the Critical Care Unit as a repository for recording medical device maintenance training and compliance. It is being rolled out to ED, Ward 2 and Community nursing services. It is then envisaged that remaining areas will be incorporated. Once the system is fully in use it will identify areas that need support and provide greater assurance of a fully trained and competent workforce in relation to medical devices.

Radiation incidents referred to the CQC (includes referrals to the Health and Safety Executive) year to date: zero.

Other trending incidents for the quarter:

- Documentation [59 events] including: incorrect/omitted data paper and/or electronic [S1 and ICE]; IT data issues for example entering patient details or accessing discharge letters; misfiled healthcare records; and missing/incorrect discharge letters.
• Delay in treatment [42 events]: general themes include delays Bradford Mental Health Team input, failure to follow policy, meagre documentation, lack of equipment and poor communication.
• Patient communication both within and outside of teams [59 events across all services]. Themes identified: communication, notably with Bradford Mental Health Team, equipment, discharge and delays in transport, telecommunication, and appointment/discharge letters.

2.6 Patient Safety Alerts

Through the analysis of safety incidents and safety information from other sources – including, royal colleges and coroner letters – NHS England develops advice and issues alerts on potential and identified risks to safety. Whilst the Trust is fully compliant with all patient safety alerts on the CAS system, the following have outstanding internal actions:

• Supporting the introduction of National Safety Standards for Invasive Procedures - implementation schedule is in place for Theatres, Endoscopy and Outpatients.
• Fenwal to Fresenius Kabi blood bag conversion [issue: availability of fluid bags with appropriate connectors].
• Resources to support safe transition from the luer connector to Mrfit for intrathcal and epidural procedures and delivery of regional blocks.
3. Harm associated with infection

The Trust aims for a sustained reduction in the incidence of avoidable harm from MRSA bacteraemia, *C. difficile* and *E. coli* bacteraemia.

- There were six *C. difficile* cases reported in 2017/18; one was found to be avoidable with a further case awaiting confirmation of investigation outcome.
- The latest Trust apportioned *C. difficile* [CDI] rate per 100,000 bed days in patients aged 2 and above for the Trust as compared to the England average is shown in figure 13. Performance is below the national average for 2016/17 year and shows positive variance on the previous year.
- Since 2010 there have been ten MRSA bacteraemia cases. Where cases are rare and infrequent it can be helpful to monitor the number of days since the last observation date as illustrated in figure 14. The last event was notified in June 2016.
- According to Public Health England [PHE] surveillance, there has been a sustained year on year increase in the number of *E. coli* bacteraemia cases with the overall rate across the UK increasing by 45% between 2009 and 2016. In the four years up to March 2016 the rate for Airedale patients increased from 99.5 cases per 100,000 bed days to 116.9 cases. Most *E. coli* bacteraemia cases are community onset.
  - In the last year there were 17 hospital acquired *E. coli* bacteraemia cases compared to 23 in 2016/17. Five cases occurred on Ward 14.
  - In March 2018 NHS Improvement commended the Trust for its reduction in *E. coli* cases recording a 29.2% positive variance between 2016 and 2017; the Trust is one of 59 providers who have achieved a ≥ 10% reduction in cases.

**Hand hygiene:** the Trust demonstrates consistent hand hygiene percentage compliance since April 2017 with an average monthly rate of 98%. The percentage of staff receiving infection level 1 and 2 training for the quarter stands at: 85.0% and 79.4%.

**Flu vaccination uptake** by clinical staff has improved from a baseline of 60.3% in 2016 to 74.5% in the latest available period (Sep 17 to Feb 18). Whilst slightly below the previous return, compliance compares favorably against a national average of 67.3% (Sep 16 to Feb 17).
Patient-Led Assessment of the Care Environment (PLACE) 2017: the annual assessment provides a snapshot of how an organization is performing against a range of areas which impact on the patient experience of care, including cleanliness. The percentage site score for cleanliness was 97.2% against the national average site level score of 98.4%.

2016 CQC NHS Inpatient Survey:
- In response to the following question, “In your opinion, how clean was the hospital room or ward that you were in?” the Trust scored 88 out of a possible top score of 100. A higher score indicates better performance. The Trust is performing “about the same” as the other 147 participating trusts.
- Patients recorded a significant improvement in the cleanliness of toilets and bathrooms when compared to the preceding equivalent period.

2016 CQC Emergency Department Survey: in response to the following question, “In your opinion, how clean was the ED?” the Trust scored 9.4 out of a possible top score of ten [358 respondents]. This result was categorised as “better than expected” amongst the 137 participating sites.

2017 CQC Children and Young People Survey: parents and carers were asked whether the room or ward their child stayed on was clean. The Trust scored 8.6 out of a possible top score of ten [171 respondents]. The result was categorised as “about the same” as the other 132 participating sites.

2017 CQC Maternity Survey: women were asked how clean the hospital room or ward was during their hospital stay. The Trust scored 8.8 out of a possible score of ten [100 respondents]. Performance was “about the same” as the other 103 participating sites and previous 2015 results.

The following measures have been identified within the CQUIN scheme (Antimicrobial Resistance and Sepsis) with the aim of reducing the impact of serious infections. Local 2017/18 results against the CQUIN target are summarized below:
- Total antibiotic usage (for both in-patients and out-patients) per 1,000 admissions – target met
- Total usage (for both in-patients and out-patients) of meropenem per 1,000 admissions – target not met

An international shortage in piperacillin-tazobactam since April 2016 has led to an increase in overall antibiotics and meropenem usage as a consequence of using alternative antibiotics. Alternative antibiotics have been agreed by the Consultant Microbiologist and Senior Clinical Pharmacist for antimicrobials based upon best evidence and clinical judgement for efficacy and safety. As a result, some infections required treatment with meropenem, leading to an increase in usage which unavoidably resulted in failing the meropenem target. For some infections, multiple antibiotics were required in place of piperacillin-tazobactam which further led to the Trust being unable to meet the all antibiotic target. A report has been sent to commissioners and the Drugs and Therapeutics Committee with further details of work undertaken and reasons for failure to meet two out of three parts of this CQUIN.

Key learning identified in the last year:
- Focus on gram negative bacteraemias and work around urinary tract infections – Standard Operating Procedure for Urinary Catheter Care and Maintenance and the Urinary Catheter Monitoring Bundle were ratified at Nursing and Midwifery Governance Group.

Key organizational learning highlighted this quarter:
- Carbapenemase producing Enterobacteriaceae (CPE) screening reinforced with key areas. An increase in reporting and screening has been observed.
- Fit test training commenced for FFP3 masks which are required when nursing patients with flu/TB.
- In response to analysis of Safety Thermometer data on urinary catheters and new urinary tract infections over the previous 18 months spot audits on Ward 16 and Ward 5 were undertaken by the Infection Prevention Team; no areas of concern found.
4. NHS Safety Thermometer

The NHS Safety Thermometer has been removed as an official NHS Statistic. Due to inconsistencies in data collection, it has been acknowledged that national aggregated results are unreliable. If used as a local improvement tool, with a good understanding of local collection practices, such concerns are not relevant.

The tool records the presence or absence of four harms: pressure ulcers, falls, urinary tract infections (UTIs) in patients with a catheter and new venous thromboembolism (VTE). Patients are assessed once a month in their care settings by frontline healthcare professionals; the monthly sample is around 475 patients.

This summary charts opposite [figures 15 and 16] show the new harms that developed under our care over the last 13 months using a mean average and based on the CQC Insight Tool methodology. Where sample sizes are small some variability in returns can be expected.

Key learning identified in the last year:

In the period March 2017 to March 2018 three patients per 100 sampled developed a new harm; pressure ulcers accounted for the highest burden of harm with a rate of 1.64 reported per 100 patients.

- Ward 16 has the highest rate of new pressure ulcers: 4.46 per 100 patients sampled. Ward 10 has the second highest rate within this category: 4.42 per 100 patients sampled.
- Ward 16 has the highest rate of falls: 2.68 per 100 patients sampled. Ward 9 has the second highest rate within this category: 1.42 per 100 patients sampled.
- Ward 16 has the highest rate of catheter and new UTI: 1.79 per 100 patients sampled. Ward 5 has the second highest rate within this category: 1.78 per 100 patients sampled.
- Ward 18 the highest rate of new VTE: 1.18 per 100 patients sampled.
- Overall Ward 16 has the highest rate of new harms. Ward 10 has the second highest rate.

The above should be evaluated in the context of denominator size and case mix. Analysis has been shared with the operational lead for critical appraisal of clinical significance. [N.B. Key organizational learning from the four harms is described in the body of this report.]

Figure 15: Percentage of patients with new pressure ulcer and fall with harm all settings

Figure 16: Percentage of patients with Catheter + UTI and new VTE all settings
5. Mortality

5.1 Weekday and weekend mortality

Weekday and weekend admission mortality is illustrated in figures 17 and 18. A cyclical winter peak in deaths (blue bar) and deaths as a percentage of spells (red line) is evident in the weekday chart and to a lesser extent the weekend chart. A particular elevation is noted in December 2016. The weekday percentage of deaths to spells is generally below that of the HES acute peer (all acute providers). The lower number of admissions and deaths at weekend is evident in the fluctuations in the weekend chart. The Trust rates appear to oscillate around the peer rate. No adjustment for case-mix is made in the local data.

In April 2018 NHS Digital published an experimental statistical comparison of the likelihood of mortality within 30 days of admission for patients admitted at the weekend to the likelihood of mortality for those admitted midweek (Tuesday to Thursday) within the same provider for the period October 2016 to September 2017.

Nationally key findings are that patients admitted at the weekend have an increased likelihood of mortality within 30 days of admission compared to those who are admitted midweek. Findings for the Trust are:

- The likelihood of mortality within 30 days of admission at the weekend reflects national findings for all patient admissions. However, for emergency admissions no increased probability is observed. Results should be evaluated with caution as no adjustment for differences in severity of the condition between patients admitted at the weekend and midweek is made.
- Unlike national findings, comparison of those patients admitted Monday and Friday to patients admitted midweek does not indicate any statistically significant difference [increased likelihood] in mortality for all admissions and emergency admissions only.

By NHS Digital’s admission, the indicators require careful interpretation and should be used in conjunction with other indicators and information from other sources that together form a holistic view of provider outcomes. The analysis does not identify whether or not a death is avoidable. The latest HSMR emergency weekday and emergency weekend values are within the expected range.
5.2 Variable Life Adjusted Display (VLAD) Charts

NHS Digital Health generate VLAD charts for some of the individual SHMI diagnosis groups to provide information on variation within a diagnosis group over time. Triggers are generated when a run of patient outcomes trend outside of the expected level. In the latest refresh there were more deaths than expected for the following diagnoses: septicaemia and fracture of neck of femur (#NOF). See figures 19 and 20. Alerts should not be interpreted as indicating good or poor performance, only that further investigation is warranted.

**Interpreting a VLAD Chart:**

- The x-axis is the sequence of provider spells plotted over time (ordered by discharge date). Each point on the chart represents an individual provider spell.
- For each spell, the observed outcome (0 for survived and 1 for died) is subtracted from the risk of death occurring in hospital or within 30 days of discharge and this is plotted cumulatively (solid line).
- The month corresponding to the discharge date of the case number labelled on the x-axis is shown at the top of the dotted vertical lines. Note this is not necessarily the first day in the month.
- A downward trend indicates a run of more deaths than expected. An upward trend indicates a run of fewer deaths than expected.

Key organization learning from mortality review this quarter:

- The RCP National Hip Fracture Database (NHFD) Extended Report 2017 stated that for 2016 Airedale General Hospital had a crude mortality that was higher than in previous years and averaged 10.3%. After case mix adjustment the figure was 12.5%. See Appendix for latest results from the National Hip Fracture Database (NHFD) overall findings to February 2018.
- For more detail on septicaemia see 6.1 Management of sepsis.
- Learning from the Mortality Review Group is available in the quarterly Learning from Deaths Report. Planned and ongoing themed reviews include Haematology and Oncology Services, Critical Care and acute kidney injury.
6. Harm associated with deterioration

According to the NRLS in 2015 around 7% of patient safety incidents reported as resulting in death or severe harm related to failure to recognize or act on deterioration. Research has shown that 26% of preventable deaths concern failures in clinical monitoring, failure to set up systems, respond to deterioration and act on test results (NHS Improvement [NHSI]).

The Royal College of Physicians recommend that clinical assessment of all adults is standardized across providers with the routine recording of a minimum clinical data set of physiological parameters — National Early Warning Score (NEWS). The Trust’s nursing key performance indicators (KPIs) monitor monthly compliance with NEWS based on the take five audit standards. Since April 2017 a NEWS score with observations undertaken is recorded in 95% of those case notes sampled on general wards.

According to NHSI those organizations and teams that place NEWS within a whole system of care produce better outcomes for patients.

6.1 Management of sepsis

Affecting all age groups, sepsis is recognized as a significant cause of mortality and morbidity and is a key national and local priority. A range of actions are recommended for rapid implementation when a patient presents with sepsis.

Figure 21 shows the percentage of Emergency Department [ED] patients (denoted by the blue bar) and inpatients (denoted by the green line) presenting with the symptoms associated with sepsis that are screened in accordance with local protocol. Returns are based on an on-going review of a random sample of 150 ED adult and child patients and a further 150 adult inpatients (IP). Retrospective ED case note review commenced in April 2015 and IP in April 2017. National findings indicate that the rate of screening for sepsis for ED admissions has increased from 52% to 89% since 2015 and from 62% to 75% for in-patients since 2015.

Where clinical coding indicates sepsis, the audit evaluates compliance with the administration of intravenous antibiotics (IVAB) within one hour. At national level prompt antibiotic treatment – within an hour of recognition of sepsis – has increased from 49 per cent to 70 per cent in ED and from 60 per cent to 80 per cent for in-patients since 2015.

The ongoing CQUIN measures inpatient screening rates and ED IVAB administration; results are provided below.

Other key learning:

Comparing ourselves to other trusts on the Royal College of Emergency Medicine’s 2016/17 Severe Sepsis and Septic Shock Audit, our performance was worse in four metrics and similar in four metrics. In this context similar means that performance was within the middle 50 per cent of results. The provision of regular training and updates in sepsis management continues to encourage staff to “Think sepsis”. Acute Medical Unit and ED nursing staff have sepsis included in training days. A process of having Sepsis Champions on a number of medical wards has commenced.

The priority in the coming year is part 2b of the CQUIN: administration of antibiotics within one hour. A number of initiatives to help achieve this are in

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1 Between April 2017 and March 2018 Maternity Services are on average 87% compliant with calculation and observation for the Modified Early Obstetric Warning Score [MEOWS]. Since April 2017 the staff average for completing the Paediatric Advanced Warning Scores (PAWS) with each observation is 88%.
development, including Sepsis Trolleys in key areas and an education and training programme in intravenous administration.

The Information Technology Team is working to develop electronic triage in SystmOne for ED with sepsis screening built in (triggered based on observations). The aim is to prompt earlier summoning of a clinician to assess the need for IV antibiotics within an hour.

6.2 Venous thromboembolism (VTE)

VTE causes appreciable death and long-term morbidity. Emerging evidence suggests that a proportion of cases of VTE acquired in healthcare settings are preventable through more effective risk assessment and chemical and mechanical prophylaxis. In order to achieve a sustainable VTE process, a clinical lead for VTE has been identified. An online root cause analysis tool has been developed in place of the proposed (and previously described) SystmOne clinical audit solution. This is being piloted and is to be reviewed at the VTE Steering Group.

Figure 2 shows local VTE risk assessment compliance. The median is 95.7% over the reporting period. This is the central point at which half the observations are expected to be above and below. In terms of non-random signal, six consecutive points below the median commencing October 2015 to December 2016 are noted. This is a shift in performance with the QTR4 2016/17 return failing to meet the 95% national target. Following remedial actions within Surgical Services, the target has been in 2017/18.

Key organisation learning from VTE:

- The completion of risk assessments has improved due to the re-configuration of SystmOne to display a reminder – Assess for VTE Risk - for those inpatients without an assessment in the last 24 hours. This has been supported by highlighting the requirements and benefits in a special edition VTE Quality and Safety Matters.
- The new VTE follow-up clinic commenced during April 2018 for patients with a confirmed event and it is anticipated evaluation will be undertaken during Q3 2018/19 in relation to efficacy.

6.3 Cardiac arrest

According to the National Confidential Enquiry into Patient Outcome and Death (NCEPOD), improved assessment on hospital admission and recognition and response when acutely ill patients deteriorate can prevent cardiac arrest and subsequent resuscitation attempts in a third of cases. National recommendations include improvements in decision-making around what care is likely to benefit acutely unwell patients, including do not attempt cardiopulmonary resuscitation (DNACPR) decisions where appropriate.

Figure 23 shows the number of confirmed cardiac/respiratory arrests across services.

Care of the patient is reviewed 24 hours prior to the arrest to ascertain whether deterioration has been identified and acted on. Eleven cases were reviewed in the last quarter. Any issues concerning DNACPR are also considered (twelve cases since January 2017).
Figure 23: Count of cardiac/respiratory arrests across services

Key organization learning from arrests:

- NEWS and fluid balance recording is variable and not always consistent with protocols/patient condition.
- Availability of ICU/HDU beds and anaesthetic personnel has resulted in delays in treatment.
- Legibility of notes has been highlighted ranging from handwriting, including printed signatures, to some “stamps” (e.g. Endoscopy) being illegible due to insufficient ink being on the pad.

It is essential to identify patients for whom CPR is inappropriate. It is also important to recognize those patients who would not want CPR to be attempted in the event of cardiopulmonary arrest and who competently refuse this treatment option. The aim of the monthly DNACPR audit is to provide assurance that the Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) Policy is being correctly adhered to throughout the Trust.

Key learning identified from the DNACPR Audit:

- DNACPR forms are not completely filled in, printed out, or signed by practitioners.
- Identifying patients with a DNACPR in an emergency to avoid CPR remains challenging. This is particularly apparent where a patient has moved through care settings.
- Forms should travel with the patient and be reviewed on change of care setting.
- Some patients have been identified as being unsuitable for CPR but DNACPR documentation has not been completed prior to arrest. In some cases it was judged that there had been sufficient time between the initial suggestion and arrest for this to have been undertaken to avoid futile resuscitation attempts.

6.4 Acute Kidney Injury

As a significant source of harm – between five and 15% of all admitted hospital patients are affected - the early detection and effective management of Acute Kidney Injury [AKI] is a key priority for the Trust in 2017/18. AKI is not a physical injury to the kidney, but is a sudden reduction in kidney function and usually occurs without symptoms, making it difficult to identify.

The primary aim of NHS England’s acute kidney programme “Think kidneys” is to reduce the risk of acute kidney injury. To do so, establishing local and national data collection and audit is paramount. A standardised data flow via the implementation of a nationally agreed algorithm for laboratory information management systems for the early detection of AKI has been established. Our Pathology Service is one of the 72 per cent of laboratories across England reporting AKI warning stage test results to the UK Renal Registry.

Following the introduction of an AKI bundle in September 2017 [AKI 8 change package] and an underpinning education programme to coincide with the junior doctor changeover, a pilot commenced on the Acute Admissions Unit in October 2017. Six months of baseline data of inpatients developing AKI within 24 hours of hospital admission has been collated to support assessment of the initiative. Differentiating patients with a hospital acquired AKI form patients that had an AKI on arrival to hospital is more complex than first appreciated, in part as the hospital code “hospital acquired” is seldom used. To augment understanding, new adverse event categories related to key national recommendations have
been created: delay in AKI assessment, prescribing and administration of treatment, senior review and ongoing treatment. A mortality case note review is planned for 2018/19.

Subsequent modifications to the AKI8 tool have been made with further adjustments planned to ensure effective utilisation. Compliance with the bundle appears to be generally improving. A special Acute Kidney Injury Quality and Safety newsletter was produced in February 2018 to highlight key information and learning.

7. Written complaints

Patient complaints offer insight into safety-related problems which may not be identified by traditional systems of healthcare monitoring (e.g. incident reporting systems, clinical audit and case review). Whilst it is acknowledged that a high complaint rate can be indicative of a proactive culture where organizations seek feedback via a complaints process, it is difficult to judge this from the published data, and therefore the view is taken that a high complaint rate is less desirable.

As the figure below illustrates, the last four years has seen a year on year decrease in the number of formal complaints; numbers in the last year are the lowest for the plotted five years.

Across England hospital and community services in 2016/17 - latest available intelligence - there was an increase in complaints of 1.4%; across Yorkshire and Humber there was an increase of 8.6%.

Figure 25 shows the rate of new complaints per 10,000 finished consultant episodes [FCE] over the latest available quarters compared to all acute trusts [based on NHS Digital experimental statistics]. On average the Trust has 9.6 complaints per 10,000 FCE compared to 39.8 for all acute providers.

In the 2016 NHS Inpatient Survey the score for providing information explaining how to complain about the care received was 3.0 out of a possible 10 (the higher score the better). The Trust is performing “about the same” for that particular question as most other providers that took part in the survey.

Figure 26 shows the frequency of complaint categories [K041] based on the last three years. A Pareto chart orders the categories from the largest to the smallest (denoted by the blue bars) in order to identify the recurrent themes from the overall volume. A cumulative percentage (denoted by the red line) helps to judge the added contribution of each category, the objective being to...
support improvement effort where the largest gain can be made.

KO41 categorisation highlights issues around clinical treatment, delay in treatment and communication to patients.

**Aggregate overview for 2017/18**

Since April 2017 there have been 59 complaints\(^6\), 11 of which were in the last quarter. Staff have reported – via the Ulysses incident system – 105 potential/written patient complaints over the last year.

- Figure 28 illustrates the distribution of complaints across the service groups for the last two years. Whilst the majority of complaints originate across Medical and Surgical Services it is noteworthy that Medical Services has recorded a third less complaints over the last year.
- 29 complaints (49%) concern clinical treatment.
- The next highest complaint category (eight complaints) concerns a delay in clinical assessment/diagnosis. One of these complaints was risk rated red\(^7\) and relates to Ward 18.
- A further three complaints were risk rated red over this period – Radiology/cancer diagnosis; post-operative complications; and, end of life care.
- Five complaints concern delay in treatment; no commonality of location is noted.
- Four complaints concerned patients with a dementia diagnosis. Review indicates that in two cases the complaints were directly related to the patient’s specific needs.
- The locations with the highest number of complaints are: ED [eight complaints], Ward 13 [six complaints], Wards 4 and 14 [three complaints respectively]. No formal complaints were made about Ward 4 in the previous fiscal year.
- General Surgery and Paediatrics are the specialties with the highest number of complaints. No formal complaints were attributed to Paediatrics in the previous fiscal year.
- 13 (22%) complaints originated as PALS contacts [compared to eight in the previous fiscal year].
- 41% of the complaints concern those aged 65 and over [24 complaints]. Two complaints [4%] originate from a BAME group.
- Two complaints have been referred to the PHSO for investigation: [1] maternity care [originating from 2016]; and, [2] community based concerns.
- There are currently three breaches of the 40 day procedural standard for the management and investigation of complaints, a substantial drop from the nine at the end of the previous quarter. The agreement of the terms of reference, availability of complainant, clinical staff, and other organisations/agencies are factors that can delay investigation.

Key recommendations made by the PHSO during this quarter:

Whilst there have been no complaint cases fully upheld by the PHSO in the last year, one complaint regarding a delay in a patient being referred to a dietician during an inpatient stay was partially upheld with the recommendation that the Trust apologise to the complainant for the distress caused by the missed opportunity. Compensation was declined.

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\(^6\) QTR1, 16 formal notifications; QTR2, 24 formal notifications; QTR3, eight formal notifications; & QTR4 11 formal notifications

\(^7\) Risk rated red: immediate escalation to the executive team for further advice.
7.1 Patient Advice and Liaison Service (PALS)

The organization receives a significant amount of feedback about its care and services from the issues raised from contacts with the Patient Advice and Liaison Service (PALS). Themes raised in the last year are consistent with formal complaints with the top five issues as follows: [1] care and treatment; [2] communication; [3] environment; [4] attitude and behaviors, and, [5] waiting times. Review of attitude and behaviors show that around 39% concern nursing/midwifery staff, 32% doctors and almost 16% medical secretaries and receptionists [other staff groups 13%].

Oversight of contacts shows that 15% of these are requests for information and 27% concerns and 58% compliments. Figure 28 shows all compliments over the last five years submitted either directly to a service or the PALS’ office. In recent years, returns are below the median value.

A decrease in PALS contacts for Estates and Facilities are observed in the last quarter following an upward shift previously highlighted in this report [see figure 29]. However, an elevation of this area – environment - within the top five PALS themes is observed over the last year [now ranked third].

An increase in Women’s and Children’s Services contacts since April 2017 is attributed to specific services moving from other service groups, in particular, Outpatients and Appointments which generate a noticeable number of contacts. At the same time contacts for Surgical Services have fallen.

Aggregate overview for 2017/18:

Recurrent themes are:

- Estates: car parking and process for fines.
- Attitude and behaviour of staff, predominantly medical and nursing staff.
- Poor communication, particularly around discharge.

Since April 2017 three issues regarding end of life have been raised and relayed to the Trust’s lead. No issues were reported in the two quarters.
Figure 29: Count of PALS contacts Estates and Facilities

Key organizational learning:

- ED clinical handbook updated regarding treatment of animal bites following a concern raised by a patient.
- Following feedback from an Ophthalmology patient, Outpatient staff proactively check if patients have arrived for clinic.
- Theatre planning meetings ensure a check of involvement of specialist teams takes place to avoid short notice operation cancellations.
8. Appendix: national clinical audit benchmarking

The National Hip Fracture Database (NHFD) is a national clinical audit based at the Royal College of Physicians. Data on all aspects of hip fracture care is collected and fed back to staff to allow tracking of performance and facilitation of quality improvement.