QUALITY ACCOUNT
2021/22

NHS
The Clatterbridge Cancer Centre
NHS Foundation Trust

Contents

Part 1:
Statement on quality from the Chief Executive

Chief Executive's Statement on Quality

Development of the Quality Account

Our 2021/22 Quality Account has been developed with our staff, stakeholders and partner organisations, including clinicians, senior managers and our Commissioners. It has been approved by the Trust Board.

Development of the Quality Account

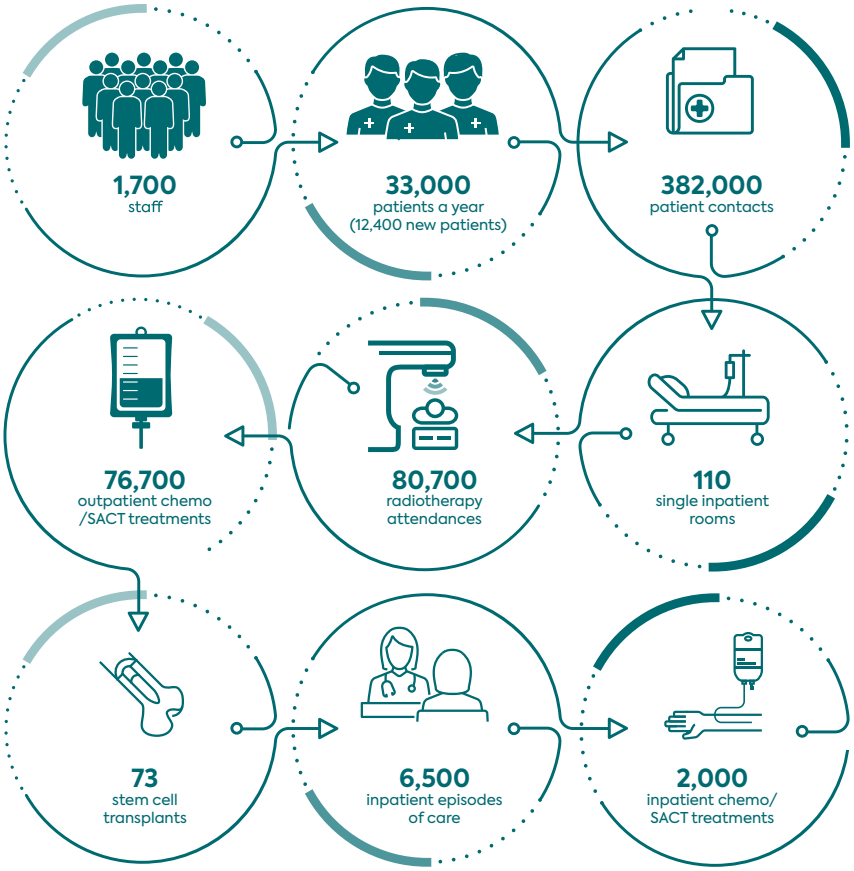
On behalf of the Trust Board and staff working at The Clatterbridge Cancer Centre (CCC) NHS Foundation Trust, I am delighted to provide an update report on our Quality Account for the year 2021/22.

The Clatterbridge Cancer Centre (CCC) is one of three specialist cancer centres in the UK. We have a unique multi-site care model – we provide radiotherapy at our three main hub sites, systemic anti-cancer therapy at seven sites and outpatient care at 17 centres. We serve a population of 2.4 million across Cheshire and Merseyside.

With almost 1,700 specialist staff we are one of the largest NHS providers of non-surgical cancer treatment and we are consistently rated as one of the best performing hospitals in the Care Quality Commission's national inpatient survey.

Never an organisation to stand still, CCC's vision is to not only maintain this excellence but to work with our academic and healthcare partners across the region to ensure that the care, treatment and outcomes of our patients continuously improve in the future.

Figures for 2021/22



This Annual Report contains many examples of our pursuit of innovation and progression towards being a world-class cancer centre.

Some of our key achievements have been:

- We achieved full integration of Haemato-oncology service provision in early 2022 in collaboration with Liverpool University Hospitals NHS Foundation Trust (LUHFT).
- Our Radiology team at CCC-Wirral achieved the Quality Standards for Imaging (QSI) Accreditation following an inspection in January 2022; this builds on the accreditation initially awarded in December 2020. It is externally assessed by the United Kingdom Accreditation Service (UKAS).
- In October 2021 our CCC-Liverpool site was successfully accredited by BSI as part of the ISO – 9001 (Quality Management) accreditation already held by Radiation Services across other Trust sites (CCC-Wirral and CCC-Aintree).
- We have consistently maintained Trustwide mandatory training compliance over 90%.
- Clatterbridge in the Community (CiC), which provides treatment in patients' homes and workplaces, expanded and focused growth in four key areas:
  - Immunotherapy (IO)
  - Haemato-oncology
  - Continued treatment and expansion of HER2-directed therapies (specifically pertuzumab/trastuzumab)
  - Compassionate use programme
- We have opened 45 research trials and studies to recruitment (53 given permission to open at CCC).
- We have recruited 1,113 new participants into research studies.
- 100% of clinical trials have been unpaused as part of COVID-19 recovery, which has exceeded the national recovery targets.

The last two years have been like no other and I would like to take this opportunity to say thank you to everyone in The Clatterbridge Cancer Centre for your continued support, your commitment and your dedication in our goal to provide the very best care for our patients.

To the best of my knowledge, the information in the document is accurate.

Liz Bishop
Chief Executive

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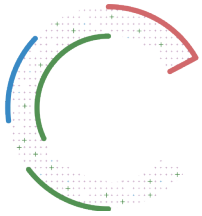
Part 2:
Priorities for improving our quality of service

2.1 Priorities for improvement

In the Quality Account for 2020/21 we provided progress reports for all key quality priorities in our previous Clinical Quality Strategy 2019 – 2021. The development of the next iteration of the Quality Strategy was deferred, and the existing priorities carried over for 12 months. This decision was made to ensure we could focus on development of our new Trust Five Year Strategic Plan, which was approved and launched in May 2021.

Our strategic priorities

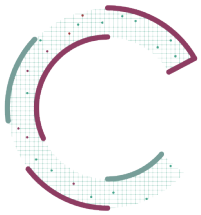


BE **OUTSTANDING**

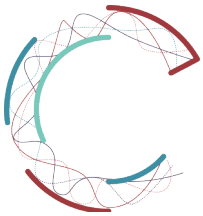
BE **COLLABORATIVE**

BE **RESEARCH LEADERS**

BE **A GREAT PLACE TO WORK**



BE **DIGITAL**



BE **INNOVATIVE**

The 2022 – 2025 Clinical Quality Strategy is currently under development and, following Trustwide engagement, will be approved and launched later this year.

However, our goals will always be to reduce avoidable harm, achieve the best clinical outcomes and provide the best patient experience. Therefore we have continued to move forward and improve on our previous objectives and this report will detail our achievements throughout the year.

2.2 Statements of assurance from the Board

The required statements of assurance are included in the relevant sections of this report.

2.3 **Performance against core indicators**

Staff FFT: % of staff who would recommend the Trust as a provider of care to their family or friends

During 2021/22 the Trust launched Culture & Staff Engagement Groups and this is now an embedded part of our culture. Each division has its own group and will review the National Staff Survey results for their area, gaining a good understanding of their teams' needs and experiences. This insight helps to improve staff experience through local improvement plans.

Last year the Staff Friends and Family Test was replaced with a national Quarterly Pulse Survey which runs in Q1, Q2 and Q4; it doesn't run in Q3 when the National NHS Staff Survey takes place. The Pulse survey was launched in July 2021 and ran again in January and April 2022. The Pulse check comprises nine questions that make up the Staff Engagement section of the annual survey and provides organisations with the opportunity to understand any areas of concern and make rapid improvements in a timely manner rather than waiting for the annual staff survey results to be available.

Table 1

NQPS Scores	Data Period	CCC	Peer Median	National Median
Employee engagement score	Q4 2021/22	7.0	6.6	6.4
Advocacy score	Q4 2021/22	7.4	6.6	6.5
Involvement score	Q4 2021/22	6.8	6.5	6.4
Motivation score	Q4 2021/22	6.8	6.7	6.6

Table 1 shows the Q4 results for 2021/22. The Q1 results for 2022/23 are not yet available.

CCC performed well compared with other NHS organisations, achieving scores that were higher than the median for our peer trusts and nationally. We will continue to review the quality of our staff experiences throughout 2022/23 by undertaking a Trustwide programme of listening events to understand the feedback in more detail. The listening events will also provide an opportunity for staff to be involved in the identification and implementation of changes and improvements.

Table 2. VTE:
The percentage of patients who were admitted to hospital and risk assessed for venous thromboembolism.

Period	Trust Performance	National Average	National Range (lowest)	National Range (Highest)
Q4 2021/22	95.64%	Not yet available	Not yet available	Not yet available
Q3 2021/22	96.69%	Not yet available	Not yet available	Not yet available
Q2 2021/22	95.92%	Not yet available	Not yet available	Not yet available
Q1 2021/22	94.28%	Not yet available	Not yet available	Not yet available
Q4 2020/21	95.51%	Not yet available	Not yet available	Not yet available
Q3 2020/21	95.21%	Not yet available	Not yet available	Not yet available
Q2 2020/21	97.26%	Not yet available	Not yet available	Not yet available
Q1 2020/21	97.79%	Not yet available	Not yet available	Not yet available
Q4 2019/20	95.90%	Not yet available	Not yet available	Not yet available
Q3 2019/20	94.77%	95.25%	71.58%	100%
Q2 2019/20	99.00%	95.40%	71.72%	100%
Q1 2019/20	96.83%	95.56%	69.76%	100%

Data source: NHS Digital Comparator group: Acute Specialist organisations (pre 2020/21). For 2019/20, 2020/21 and 2021/22 the source is CCC, due to absence of nationally produced data following COVID-19 related suspension of data submissions for all quarters after Q3 2019/20.

Overall, during 2020/21 the Trust was 96% compliant with timely completion of VTE risk assessments.

During 2021/22, 25 VTEs were identified of which 17 were classed as attributable to the Trust (CCC), either occurring during an inpatient stay or where the patient had had a previous inpatient stay within 90 days, as per NICE guideline definition. This compares to 14 VTEs identified during 2020/21, of which 10 were classed as CCC attributable. All VTEs are discussed at the Harm Free Care Collaborative meeting to determine the level of harm, any lapses in care or lessons learnt. All VTE incidents were reported as low harm in 2021/22.

During 2021/22, one incident was determined as having a potential lapse in care as VTE prophylaxis was put on hold due to decreasing platelet levels. As a result of this incident the Trust now has a Consultant Lead for VTE who has developed an electronic ward round template and refreshed the VTE Policy.

Patient safety incidents resulting in severe harm or death

There were a total of 4,371 incidents reported during 2021/22; this is equivalent to 182.1 incidents reported for every 1,000 bed days. There were no 'never events' reported.
There was 1 incident reported as causing severe harm or death:

- An Escherichia coli blood stream infection was identified in September 2021; the death certificate states sepsis of unknown origin on part 1a. A full and comprehensive investigation was completed with a number of learning points identified and a robust action plan was developed.

In August 2021 a new Patient Safety Group was established in the Trust to utilise the National Patient Safety Strategy as a framework to provide assurance to the Trust Board on the delivery of optimal, safe standards of care and ensure that adequate and appropriate safe structures, processes and controls are in place across a wide range of quality metrics.

In December 2021 a new Executive Review Group (ERG) was established. This group meets on a weekly basis to triage the Severity Grade 3+ incidents, new complaints and claims which have occurred or been received within the Trust during the previous week and identify those which trigger significant organisational concerns due to the severity of the clinical, financial or reputational impact.

The panel receive the outcome of any requested investigations to receive assurance that a comprehensive and transparent investigation has been undertaken. The review provides an opportunity for the members to challenge the outcome of the investigation seeking further detail, to ask for further information / clarification and to agree to the action plan. It is a vehicle for identifying areas for improvement and shared learning.

During 2022/23 the Trust will continue to:

- Monitor incident reporting levels via the NRLS (National Reporting and Learning System)
- Review and implement the NHS England and NHS Improvement Patient Safety Strategy Syllabus
- Improve organisational shared learning
- Improve the incident reporting and incident management process through a programme of training

Organisations that report more incidents usually have a better and a more effective safety culture. We will therefore continue to encourage staff to report all incidents and near misses as we see this as indicative of a proactive risk management and patient safety culture.

Part 3: Progress on our Quality Priorities

During 2021/22 the Trust was developing and refining our Five Year Strategic Plan. This section of the report provides detail on our continued progress with our previous quality priorities and outlines plans for 2022/23 against a number of key quality priorities in the following five domains:

- Patient safety
- Responsive
- Caring
- Clinically effective
- Well led

Patient safety

S1	Develop and implement Infection Prevention and Control E.coli bundle to reduce the number of CCC-associated infections
S2	Deliver sustained and effective training in escalation and management of incidents and risk
S3	Support a culture of safeguarding awareness, reporting & practice measured against internal and multi-agency action plans
S4	Reduce avoidable harm so 95% of all inpatients receive VTE risk assessment and 100% receive prescribed prophylaxis
S5	Ensure timely and efficient Sepsis/News2 patient management
S6	Strengthen safer staffing through digital monitoring systems
S7	Strengthen safety culture through standardisation of safety huddle agenda
S8	Invest in research and innovation to deliver excellent patient care in the future

S1. IPC: Develop and implement Infection Prevention & Control E.coli bundle to reduce the number of CCC-associated infections

Background

The Clatterbridge Cancer Centre was part of the cancer care E.coli collaborative, alongside The Royal Marsden, The Christie, Barts and Imperial College Healthcare. Established in 2018, the aim of the collaborative was to gain a greater understanding of the aetiology of E.coli infections in cancer patients, benchmark performance, share best practice, and identify any themes particular to our patient group. The group identified that E.coli infections were more common in cancer patients, particularly in males and in younger patients with the most likely sources of infection being:

- Urinary tract
- Gastrointestinal tract
- Hepatobiliary
- Unknown

Key achievements

The ongoing COVID-19 pandemic proved challenging for the collaborative, with meetings frequencies reduced. However, at CCC work has continued including:

- Infection Prevention & Control (IPC) team attendance at Nutrition and Hydration Steering Group
- Further development of the post-infection review process to gain a better understanding of E.coli aetiology at CCC
- Development of an updated Urinary Catheter Care pathway to mitigate the risks posed by indwelling devices
- Roll out of an ANTT (aseptic non-touch technique) training programme to support staff in the delivery of safe, evidence-based care
- Post-infection review identified that, of the 13 E.coli infections attributed to CCC, all were unavoidable

Aims and next steps

- Development of a three-year IPC strategy to include a sustained reduction in gram negative blood stream infections
- Continued collaboration with other cancer care specialists with a focus on shared learning and developing a greater understanding of all infections in cancer patients, identification of risk, and a standardised approach to addressing the issues raised with this work

S2. Training: Deliver sustained & effective training in escalation & management of incidents and risk

Background

During the COVID-19 pandemic a lot of pre-arranged external training provision had to be postponed or cancelled. Despite this the Trust continued to provide ongoing in-house training for staff to ensure all changes in policy and/or process were communicated effectively.

Key achievements

- At the start of 2021/22 a review of the Trust risk register was completed which saw all records being reported as either a 'risk' or an 'issue', with training provided to all relevant staff on how to make the distinction. This work was completed in June 2021
- A new Associate Director of Governance and Patient Safety joined the organisation in July 2021
- In September 2021 the new Incidents module within the Datix Cloud IQ system went live and staff training for the new module was provided by the Risk Management Facilitator, with ad hoc sessions being provided as required
- In October 2021 the new Enterprise Risk Manager module was launched in the Datix Cloud IQ system. This system is significantly different to the risk register module in Datix Web and training was provided to staff was along with a step-by-step guidance document
- The existing Incident Reporting Policy was refreshed and approved in November 2021
- A new Reporting and Management of Serious Incident Policy was written and approved in November 2021
- Training for the new process set out in the Serious Incident Policy was completed in November and December 2021
- A new weekly Executive Review Group was set up and commenced in December 2021 – the panel is made up of the Chief Nurse, Deputy Director of Nursing, Medical Director, Deputy Medical Director, Associate Director of Clinical Governance and Patient Safety, Head of Risk and Compliance, and the Legal and Governance Manager. The focus of the panel is to review all incidents, claims/inquests, complaints and PALS concerns received on a weekly basis to ensure Trust oversight of any patient/staff harms, system failures requiring investigation or to identify emerging risks. The panel also review all level 1 or 2 investigation reports to ensure robust reviews have been completed with appropriate actions in place
- In February 2022 the Trust hosted a three-day training programme with AqUA - 'Applying Human Factors to Incident Investigation'. This training is in line with the requirements for the NHS Patient Safety Strategy and there are now 13 staff trained to be able to carry out incident investigation

Aims and next steps

- Training for incident reporting and management will be developed and delivered during the first half of 2022/23
- In 2022/23 a more robust system of risk management will be introduced. Initially daily training sessions will be provided for all relevant staff, which will drop to monthly formal sessions in June 2022

Implementation of the Patient Safety Incident Response Framework

The Patient Safety Incident Response Framework was published in July 2019 with a Patient Safety Strategy launched to implement and drive:

- A patient safety culture
- A patient safety system

Since the strategy was launched work has been undertaken to develop the national patient safety syllabus into training modules. The first three training modules have been published for staff to commence training.

Training modules and their implementation at CCC

The three training modules which have been developed and launched by e-learning for Health in partnership with the Academy of Royal Colleges, NHS England and NHS Improvement and Health Education England are:

- 000 Patient Safety Level 1 – Essentials for Patient Safety. This should be completed by all levels of staff; it includes patient safety basics and the importance of patient safety in everyone's role, which will support our development of a safety culture. CCC hope to launch this training within Q1 of 2022/23
- 000 Patient Safety level 1 – Essentials of Patient Safety Boards and Senior Leadership teams. Although this is also level 1, it is about the roles and responsibilities of managers in patient safety, legal and financial aspects, and supporting staff. It is therefore recommended that this module, as well as the above module, are undertaken by all Band 7 staff and above (including non-executive directors) as well as some role-specific staff groups, such as all safeguarding staff and all governance staff. This training is due to be launched in Q2 of 2022/23
- 000 Patient Safety Level 2 – Access to Practice. A decision as to the staff group best placed to complete this module is yet to be made and it is likely this module will not be progressed until autumn 2022

S3. Safeguarding: Support a culture of safeguarding awareness, reporting & practice measured against internal & multi-agency action plans

Background

The Trust's Safeguarding team and strategic safeguarding lead have continued to enable us to have robust systems and processes that meet the requirements of Working Together to Safeguard Children 2018 and the Care Act 2014.

Strategic leadership continues to enable robust relationships both internally across all CCC sites and externally with safeguarding partners and commissioners.

Key achievements

- Continued with safeguarding as business as usual during COVID-19 pandemic
- Maintained the mandatory and contractual compliance rate of 90% for levels 1 and 2 for children and adults safeguarding training
- Maintained mandatory and contractual compliance rate of 90% for basic prevention awareness (level 1&2) training and 85% for WRAP (level 3&4) training
- Achievement of mandatory compliance rate of 90% for learning disability awareness and dementia awareness training
- Introduction of role-specific e-learning module on domestic abuse / violence in February 2021 and achieved compliance of 90% and over in September 2021
- Introduction of role-specific e-learning module on children in care level 1 in November 2021
- Delivery of safeguarding supervision for key members of staff/teams
- The submission of the quarterly evidence against key performance indicators outlined in the NHS England and NHS Improvement Specialised Commissioners and Liverpool CCG Safeguarding Commissioning Standards has been maintained in 2021/22
- Achieving assurance from Liverpool CCG Safeguarding service with the Trust Safeguarding KPI
- Revision of the Trust Domestic Abuse & Harmful Practices Policy to reflect the introduction of the Domestic Abuse Act 2021
- Digitalisation of 'best interest meeting' template on Meditech
- Working in partnership with the Digital team and staff to digitalise the self-discharge process
- Implementation of Trust Standard Operating Procedure for Suicidal Ideation
- Signposting the Trust Mental Health First Aiders to aid and support patients and staff with mental health concerns

Aims and next steps

To ensure the Trust is compliant with statutory, regulatory and contractual safeguarding requirements, the Trust Safeguarding team will:

- Continue to achieve all the safeguarding contracting standards and Key Performance Indicators (KPI) and maintain the improvement
- Provide stability of safeguarding vision, leadership and direction at all levels across all CCC sites
- Be responsive to new legislation and guidance i.e. Liberty Protection Safeguards (LPS) national consultation on the LPS process from 17th March until 7th July 2022
- Maintain 90% compliance with all levels of safeguarding training
- Continue to utilise themes and trends from safeguarding incidences to inform and improve practice and pathway development
- Continue to plan for national changes from MCA/DoLS process to Liberty Protection Safeguards (LPS) process, ensuring the CCC pathway is in line with national guidance and legislative changes
- Introduce role-specific training on children in care level 2 to targeted staff who require it i.e. Trust Safeguarding team and Teenage and Young Adult (TYA) team
- Continue to improve the quality of reporting of safeguarding concerns and incidences

S4. VTE: Reduce avoidable harm so 95% of all inpatients receive VTE risk assessment and 100% receive prescribed prophylaxis

Background

Patients admitted to hospital are often at risk of developing venous thrombosis (VTE). A number of improvement measures have been implemented by the clinical teams at CCC to prevent and reduce this risk; screening is one of the key elements.

Key achievements

Overall for the year 2021/22 the Trust was 96% compliant for VTE assessment completed against the target of 95%.

CCC has taken the following actions to improve this score, and so the quality of its services, by:

- Appointing a VTE medical lead
- Developing a VTE group to review Trust polices and national guidance
- Ongoing clinical audit including management of the whole VTE pathway
- Daily review of compliance with all clinical risk assessments
- VTE is a standard agenda item in the monthly Harms Free Collaborative meeting

Aims and next steps

CCC will sustain the 95% target of admitted patients having a documented VTE risk assessment and will continue to identify lessons learnt from any Hospital Associated Thrombosis (HATs) to improve patient care and treatment.

S5. **Sepsis: Ensure timely and efficient Sepsis/News2 patient management**

Background

Sepsis is a major cause of death from infection. At CCC, we continue to be committed to ensuring early identification and treatment of patients with sepsis.

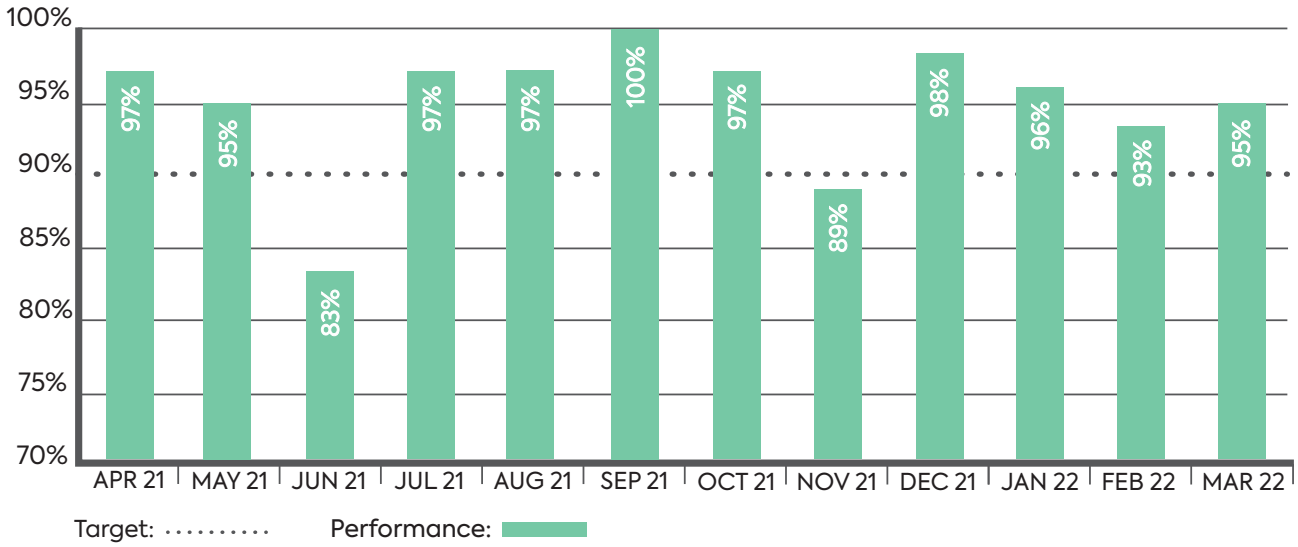
Key achievements

During 2021/22 the Trust achieved 95% compliance with the provision of IV antibiotics within one hour to patients suspected to be septic; the target was not achieved in two months of the year. There was no harm to any patients as a result of the delays and the following actions have been taken to improve:

- Continued to build on the digital developments regarding sepsis screening and antibiotic recording, continually streamlining processes for ward staff
- Continue to deliver ward-based training, coordinated by the Acute Care Team (ACT)
- Undertaken preparatory work to enable this to be included in the Trust's new online inpatient dashboard in Q1 2022/23; this is an online tool supporting real-time inpatient management

Chart 1 shows our compliance with the target in 2021/22.

Sepsis IV antibiotics within 1 hour



Aims and next steps

Our aim is to launch a sepsis awareness campaign in Q1 2022/23; this will educate clinical staff on the revisions made to the electronic patient system and ensure that the digital improvements reduce the need for manual processes and improve patient safety to achieve 100% compliance in patient with suspected sepsis receiving antibiotics within one hour.

S6. Safer staffing: Strengthen safer staffing through digital monitoring systems

Background

SafeCare is a digital application that matches nursing staffing levels to patient acuity in real time, allowing informed decision-making in staffing levels across the inpatient wards at CCC.

The guidance for safer staffing is determined by the National Quality Board (NQB). The NQB standards require trusts to provide assurance that organisational practices, skills development and evidence-based tools are in place.

The SafeCare Module was purchased as part of the Allocate Optima Package in 2019 with the aim of using patient numbers and acuity status, allowing ward managers and senior managers to make evidence-based decisions on staffing using real-time information.

Currently staffing ratios and patient acuity is recorded on a daily spreadsheet and disseminated twice daily across the Trust to key stakeholders by the Patient Flow team.

Key achievements

- Safer staffing ratios for inpatient areas reviewed and amended as part of Divisional workforce plan review
- Twice-daily safe staffing huddle in place with ward managers and matrons to ensure daily safe staffing ratios are available on the inpatient wards
- Deficiencies in staffing ratios mitigated by redeployment of staff to wards/areas of greatest need
- Implementation of e-roster completed
- Biannual safer staffing audit completed which provided assurance regarding establishment numbers
- Implementation of a visible digital solution (sunburst interactive dashboard) for recording and display of real-time staffing and patient acuity.
- Training/standardisation patient acuity measurement workshop provided to relevant ward staff on utilisation of Shelford Safer Nursing Care Tool (SNCT) by NHS England and NHS Improvement (national safer staffing team)

Aims and next steps

- Development of a task and finish group to progress integration of safer staffing through digital monitoring systems
- Complete interface of Health Roster with NHSP shifts (delayed due to COVID-19)
- Development of digital safe staffing/patient safety dashboards

S7. Safety culture: Strengthen safety culture through standardisation of safety huddle agenda

Background

A safety huddle is a short meeting, 15 minutes or less, that is typically used once at the start of each workday. In inpatient areas, the huddle takes place at the start of each major shift. In outpatient / day case areas, safety huddles occur once per day to discuss scheduled patients as a team.

Key achievements

Daily safety huddles are embedded as part of business as usual across all divisions/ hubs across CCC as a mechanism of empowering and engaging frontline staff in problem identification, building a culture of collaboration and quality.

There is also a twice-daily safe staffing huddle in place with ward managers and matrons to ensure daily safe staffing ratios are available on the inpatient wards.

Aims and next steps

Our aim is to continue to develop the daily safety huddle process as a way of empowering staff to increase awareness around important safety challenges and foster a culture of learning.

S8. Investing in Research & Innovation: Invest in research and innovation to deliver excellent patient care in the future

Please refer to Section 5 for updates on Research & Innovation in 2021/22.

Responsive

R1	Deliver patient care closer to home through new clinical model so that 90% of patients travel less than 45 minutes to access treatment
R2	Implement new Directorate complaints handling model
R3	Triangulate incidents, complaints and PALS to promote learning and improvements (working closely with the PEIG)
R4	Strengthen care and experience of patients with additional needs
R5	Deliver national learning disability standards
R6	Share learning from PALS, complaints, deaths and serious incidents across the patient pathway, working in partnership with the Cancer Alliance
R7	Expand the volunteer service to support the opening of the new hospital in Liverpool
R8	Safe return of CCC-Wirral volunteers post-COVID

R1. **Care closer to home: Deliver patient care closer to home through new clinical model so that 90% of patients travel less than 45 minutes to access**

Background

Our home-treatment service – 'Clatterbridge in the Community (CiC)' – is an extension to the existing delivery model used at CCC. CiC strives to improve cancer patients' experience of care by offering independence and choice over treatment settings, reducing time spent travelling and waiting in clinics. The service delivers treatment to patients in their homes or workplaces across a large geographical area of Cheshire, Merseyside, Lancashire and North Wales.

Clatterbridge in the Community has grown since 2015, when it first delivered Herceptin injections for breast cancer patients. The service now covers eight different tumour groups and 17 approved treatments and has treated nearly 1,800 patients to date. The CiC service has seen an increase of patient referrals year on year and 2021 saw an increase of 64% in referrals from the previous year.

Key benefits of CiC:

- Increases capacity within the hospital settings
- Cost savings to NHS
- Improved patient experience
- Compassionate use programme
- Reduction in hospital visits for immunosuppressed patients

Key achievements

In 2021/2022 CiC expanded and focused growth in four key areas:

- Immunotherapy (IO) – CiC has increased the number of eligible immunotherapy treatments by 80% in the last year and has had approval from more site reference groups to deliver treatment to their patient groups
- Haemato-oncology – We have worked closely with our Haemato-oncology (HO) partners and have undertaken dual training and now have our first HO treatment approved for CiC use
- Continued treatment and expansion of HER2 directed therapies (specifically pertuzumab/ trastuzumab) – PHESGO was the new subcutaneous version of IV Pertuzumab and IV Trastuzumab and was immediately approved for CiC use. Currently 75% of all CCC patients that are prescribed this treatment are within the CiC service
- Compassionate use programme – The compassionate use programme continues to supports those patients who are unable to attend clinic for various reasons and includes a phlebotomy service. This programme currently makes up around 25-28% of our patient cohort and was a vital support to our patients during the COVID-19 pandemic.

CiC opened a second hub in Aintree in February 2022 which makes the service more cost-effective with travel and time. Creating a dual hub service allows more patients to be seen and treated by the CiC service.

Ten new hybrid cars were chosen to replace the existing fleet of cars. These hybrid cars will support our Green Plan within CCC over the next four years.

Aims and next steps

- Further patient recruitment into the CiC service to help release capacity at clinics
- Expand the CiC service to include more Site Reference Groups and new treatments
- Standardise the referral process for Immunotherapy treatments to allow faster access to the CiC service
- Continue to support vulnerable patients at home

R2. **Improving complaints management**

Background

Following a deep dive review into the complaints management process that was completed at the end of 2020/21, a number of recommendations were made to support the divisional teams to achieve the local targets of 25 working days to respond to a 'routine' complaint, and 60 working days to respond to a 'complex' complaint. In 2021/22 there were a total of 41 complaints received by the Trust; the number of formal complaints/count of WTE staff (ratio) is 0.0021.

Key achievements

- The Complaints and PALS Policy was reviewed and refreshed in June 2021, with a new, more robust process implemented and clear timescales set out for each stage of the process
- Roles and responsibilities of staff dealing with complaints were clarified with a standard operating procedure developed and shared
- Compliance with the locally agreed KPIs of responding to routine complaints within 25 working days, and complex complaints within 60 working days has been variable throughout the year for multiple reasons
- In any cases where the KPIs were not met, the complainants were regularly contacted and made aware of the reasons for the delay
- A Mersey Internal Audit Agency (MIAA) review in March 2022 gave the Trust Moderate Assurance of the complaints management process

Aims and next steps

- A comprehensive action plan has been developed as a result of the MIAA audit report, which includes repeated compliance audits
- Overall Trust responsibility for the management of complaints will move into the Patient Experience Team during 2022/23
- An audit of the complainant's experience of the Trust complaints process will be developed and produced throughout 2022/23

R3. **Learning from complaints: Triangulate incidents, complaints and PALS to promote learning and improvements (working closely with the PEIG)**

Background

A full review of the CCC complaints process was completed and recommendations and actions embedded within the new divisional structure to triangulate incidents, complaints and PALS for shared learning and patient experience improvement.

Key achievements

- Full review of the complaints policy and process was completed
- New Patient Safety Group (PSG) was developed and commenced in August 2021. The PSG provides oversight and scrutiny of the following:
    - Lessons learnt arising from Serious Incident reports (SIRI) and review of action plans following sign-off at Divisional level and ERG
    - StEIS reports & recommendations
    - Transfusion Oversight Group – learning from SHOT incidents & reports. (SHOT means 'serious hazards of transfusion')
    - Oversight of patient safety alerts – national patient safety alerts, CAS alerts (including MHRA), and relevant actions. (CAS is the Central Alerting System)
    - Learning from phase 3 mortality reviews
    - Lessons learnt arising from complaints following completion of complaint report and development of action plan
    - Trends analysis from divisional and organisational incidents and actions planned
    - Implementation of 'lessons learnt' monitoring
    - Review of external safety reports and associated actions
    - Oversight of Patient Safety Training compliance
    - Assurance as to the appropriate management of all incidents, actions and their closure
- The PSG membership spans all divisions. Representatives attend from each division

Aims and next steps

- The divisional Quality and Safety meeting agendas will be standardised across the clinical divisions with a new section added for shared learning which will be populated following the PSG
- The Trust's governance structure is currently under review and a new committee structure is due to commence in April 2022. With the new meetings structure there will be a review of the meeting agendas and reports required, along with a structured work plan
- A quarterly aggregated patient safety report will be developed and reported at the new Risk and Quality Governance Committee that is due to commence in April 2022
- The aggregated report will also be presented at and shared with the Patient Experience and Inclusion Group (PEIG) as a standing agenda item
- The Shared Learning Newsletter will be reintroduced and will continue to include lessons learned from incidents, complaints, PALS, claims and mortality reviews

R4. **Improving patient experience: Strengthen care and experience of patients with additional needs**

Background

To ensure compliance with statutory regulations, the Trust has oversight of patients with additional needs (i.e. patients with a learning disability and/or autism, dementia and mental health conditions) ensuring their individual needs are met.

A 'special indicator' tab has been developed and is available in Meditech (patient electronic record) to ensure all staff record and are aware of each patient's additional need.

Key achievements

- Mandating and achievement of over 90% compliance for learning disability awareness training for all patient-facing staff. Compliance was 97.47% in Q4 of 2021/22
- Completion of the Oliver McGowan Foundation training for all Trust Dementia/ Learning Disability and Autism champions
- Development of a photobook for patients with learning disability / autism and dementia to help desensitise their anxiety when coming into the Trust
- Additional Needs Policy in place

R5. **Supporting the delivery of national standards: Deliver national learning disability standards**

Background

In June 2018, NHS Improvement (NHSI) developed the new Learning Disability Improvement Standards for NHS trusts. They are intended to help the NHS measure the quality of service provided to people with learning disabilities, autism or both.

The Clatterbridge Cancer Centre (CCC) has participated since 2019 in the NHSI Learning Disability Improvement Standards project. Our annual data submission provides evidence of our compliance with the standards including the views of staff and patients with a learning disability. An outcome report is produced by NHS Improvement providing a baseline for the quality of care delivered to Trust patients with a learning disability and/or autism. This report facilitates a yearly work plan which is implemented and monitored through the Trust Safeguarding Committee.

There has been great progress and achievements in the last 12 months associated with the measures within the Learning Disability Improvement Standards.

Key achievements

- Routine offer to use health passport or autism passport for patients with learning disability and/or autism to assist with reasonable adjustments
- Flags in Meditech to identify patients with learning disability and/or autism
- Film detailing the radiotherapy journey of a person with learning disability and/or autism
- Engagement with Cheshire & Merseyside Confirm and Challenge Group
- Trust Safeguarding Team provide advice and support to staff caring for patients with learning disability and/or autism and may liaise with community teams including Learning Disability Facilitator

Aims and next steps

During the next 12 months the Trust will continue to work in partnership to:

- Provide a more robust process for patients and carers/family with learning disability and or autism to give feedback on their patient experience
- Ensure that the Datix reporting system within the Trust has the ability to identify patients with a learning disability and/or autism within their incident reports, and complaints
- Plan development of a further co-production film following a patient journey through chemotherapy. (This film was delayed by the COVID-19 pandemic)
- Collaborate in the implementation of the Learning Disability Standards Framework
- Continue to work in co-production with patients, families and self-advocates via Confirm & Challenge Group and to develop the work plan and evaluation process for delivery of National Learning Disability Standards
- Review and revise the Trust Learning Disability / Autism Strategy to reflect current guidance

R6. **Shared learning: Share learning from PALS, complaints, deaths and serious incidents across the patient pathway, working in partnership with the Cancer Alliance**

Background

Whilst the learning achieved as a result of investigations from PALS, complaints, deaths and serious incidents is shared within the teams at CCC, there is currently no process in place to widen the learning across the region so trusts can share lessons learnt and improvement plans with each other.

Throughout 2021/22 CCC planned to work in partnership with the Cheshire & Merseyside Cancer Alliance to improve collaboration between organisations and to develop a robust process to ensure each organisation can learn from the experiences of other trusts.

This work has been significantly delayed due to the COVID-19 pandemic and will be re-prioritised in 2022/23.

Aims and next steps

- Evidence of shared learning from other organisations included in CCC quality reporting to the sub-committees and committees of the Board
- Process developed and agreed for how learning will be shared across the Cancer Alliance

The Trust aims to have a process developed and agreed by Q4 of 2022/23, with evidence of inter-organisation learning being reported through CCC by the end of Q1 of 2023/24.

R7. **Developing CCC's volunteer programme: Expanding the volunteer service to support the opening of CCC-Liverpool (CCC-L) and the introduction of the family volunteering service at CCC-L**

Background

Volunteers play an important role in delivering services to the NHS and this is particularly so at CCC, where volunteers have added significant value to the activities of healthcare staff, patients and the public.

We recognise the huge role that volunteers have in supporting patients by enriching the patient experience and bringing our communities together.

Following the opening of our new hospital in the centre of Liverpool, and in response to the COVID-19 pandemic, the Trust has undertaken a robust volunteer recruitment campaign and development of the service across all sites.

Key achievements

- Recruitment of over 104 new volunteers at the start of the COVID-19 pandemic, 12 returning volunteers at CCC-Wirral, and an additional 12 via the recruitment process
- An ongoing volunteer recruitment programme, supported by the Workforce & Organisational Development team, with online links advertised via the Trust website's job vacancy page and the national NHS Jobs and Trac sites
- To support the recruitment process, the induction process has been strengthened
- Access to the e-Learning For Healthcare Volunteer core skills training framework was implemented. All new volunteers now complete 13 modules prior to commencement in post. Passport compliance is 100%
- The Family Volunteer service is now in operation, being trialled on Wards 2 and 3 at CCC-Liverpool. This role gives patients the opportunity to have a regular visitor whether it be for a chat or arranging a telephone call home to speak to family and friends. The Family Volunteers attend monthly update/feedback sessions to ensure they are fully supported within this crucial and much needed role. These sessions are run in partnership with the Palliative Care team
- Support given to other departments to support an outstanding patient experience on a daily basis, including Reception, the Daycase Unit on Level 1 and Chemotherapy on Level 6, assisting the dissemination of snacks and drinks

Aims and next steps

- Continue to develop the CCC-Liverpool volunteer workforce
- To ensure that mandatory training is fully compliant prior to commencement at CCC and ensure that the completion rate remains at 100%
- Continue to develop the Family Volunteer Service and expand the recruitment of family volunteers to support the service needs
- To arrange and facilitate a volunteering thank-you event to coincide with the National Volunteering week in June 2022

R8. Developing CCC's volunteer programme: Safe return of CCC-Wirral volunteers post-COVID

Background

CCC has an excellent reputation of recruiting and supporting a large volunteer workforce at CCC-Wirral (CCC-W). However, at the start of the COVID-19 pandemic, many of our CCC-W volunteers had to shield, which resulted in a reduced number of volunteers on the Wirral site.

Key achievements

- There is now a team of volunteers situated solely in CCC-Wirral
- Mandatory training for the volunteers is at 100% compliance
- Regular weekly meetings are held with the Volunteer Manager to provide support

Aims and next steps

- CCC-Wirral volunteering service will continue

Caring environment

C1	Continue to achieve top quartile results for patient experience
C2	Deliver outcomes identified in dementia strategy to improve dementia care and patient experience
C3	Deliver Patient and Public Involvement Strategy 2019-21 to improve our methods of engagement
C4	Establish a Patient Experience and Involvement Group ensuring we listen and respond to what our service users are telling us that matters to them
C5	Implement the End of Life Strategy to deliver greater choice and support for individuals nearing the end of life
C6	Implement GDE quality digital work streams to include electronic patient information
C7	Implement person-centred care audits and 'always events' in 2021/22

C1. Continue to achieve top quartile results for patient experience

Background

The Clatterbridge Cancer Centre was rated one of England's top six hospitals in the national Adult Inpatient Survey. We were one of just six hospitals nationally, and the only hospital in Cheshire and Merseyside, to achieve the 'Much better than expected' ranking. The Care Quality Commission (CQC) uses the results from the survey in the regulation, monitoring and inspection of NHS acute trusts in England.

The National Cancer Patient Experience Survey (NCPES) is designed: to monitor national progress on cancer care; to provide information to drive local quality improvements; to assist commissioners and providers of cancer care; and to inform the work of the various charities and stakeholder groups supporting cancer patients.

Key achievements

- The Clatterbridge Cancer Centre (CCC) continues to support and take part in both national patient experience surveys, including on a voluntary basis for 2020/21 despite the COVID-19 pandemic
- Our overall score for the NCPES 2020 was 8.8/10, maintaining the same score from 2018
- We also scored above the national average score for all seven questions included in phase 1 of the cancer dashboard developed by Public Health England and NHS England
- There are 15 areas in which CCC's score is significantly higher than both the national upper expected range and national score
- In response to both the 2020 Adult Inpatient Survey (results released Q2 2021) and the National Cancer Patient Experience Survey (NCPES – results released Q3 2021), we have identified opportunities to improve patient experience. Robust action plans have been developed with the operational Divisions to improve the Trust's current position
- The 2020 Adult Inpatient Survey action plan progress was monitored by the Patient Experience & Inclusion Group (PEIG) and is near completion

Aims and next steps

The NCPES 2020 action plan will be delivered by Q3 2022.

C2. Deliver outcomes identified in dementia strategy to improve dementia care and patient experience

Background

The Trust Dementia Strategy was ratified in April 2019 and it set out a three-year strategic plan (2019-2022). It is currently undergoing a review and revision at this time as it has reached the end of the three-year period.

The review process has recognised the following key achievements of the vision outlined in the strategy which were underpinned by the national framework.

Key achievements to date

- The Dementia/Learning Disability and Autism Collaborative Group continued to focus and achieve on the actions within the strategy, utilising the Champions across all three sites
- Members of the Dementia / Learning Disability and Autism Collaborative Group have completed training from the Oliver McGowan Foundation for NHS staff
- Dementia awareness training compliance achieved the target of 90% for all patient-facing staff and continues to be maintained at 98.13% in Q4 2021/22
- A digital photobook was developed and approved by the members of the Service Users Reference Forum (SURF) as part of work required for the King's Fund Dementia Environment Tool. It is used as a desensitisation tool for all patients with additional needs to reduce their anxiety when visiting the Trust
- The Safeguarding Team continues to meet virtually with the Liverpool Dementia Action Alliance (DAA) to be updated about dementia-friendly projects and local facilities available in Merseyside and to take part virtually in the monthly SURF meetings to liaise with patients, carers and families about the work being completed in CCC
- The Trust has developed a Carers Policy to meet the criteria of the NICE guidance on carers in line with 'John's Campaign'
- The Trust has developed Delirium Guidelines to meet CCC requirements in relation to dementia
- Audits were completed on the use of the Risk Assessment and Reasonable Adjustment Care Plan in Meditech and audit findings were presented to the Trust Safeguarding Committee
- Dementia-friendly signage was installed at CCC-Liverpool. Plans are in place to install this signage at CCC-Wirral site as part of the redevelopment
- Continued engagement with the Dementia Action Alliance (DAA) and adoption of the Dementia Friendly Hospital Charter

Aims and next steps

The key areas of work to be undertaken in the next 12 months will be:

- The Safeguarding team will review and revise the current Dementia Strategy in 2022 and build on the work achieved in the previous three years.
- An action plan will be developed following the revision of the Trust Dementia Strategy to provide focus for the actions to be achieved

- Our Restraint Guidelines will be reviewed and revised in July 2022 as part of the three-yearly review policy schedule
- The Helping Hands inpatient process on the TV will be re-commenced – this is a digital system that allows patients to request snacks, newspapers and so on via the hospital volunteers
- Review and revise, if required, the Trust Dementia Strategy, once the Government publishes its stand-alone Dementia Strategy in 2022

C3. Deliver Patient and Public Involvement Strategy 2019-21 to improve our methods of engagement

Background

Excellent patient experience is indicative of excellent care. Central to the Trust's Patient and Public Involvement and Engagement Strategy (PPI&ES) 2019 – 2021 is the commitment to create a culture where patients really are at the heart of everything we do and that a patient-centred way of working is embedded across the organisation.

The PPI&ES 2019-2021 was ratified by the Trust Board in January 2019. The strategy contains eight pledges to improve the experience of our patients, their carers and their families. The Patient Experience & Inclusion Group (PEIG) receive monthly updates from the pledge leads on progress against each of the eight pledges.

Key achievements

- All eight pledges within the Patient and Public Involvement and Engagement Strategy 2019 – 2021 have been delivered
- Six workshops facilitated by the National Patient Experience Lead at NHS England and Improvement were conducted in Q4 2021/22 with patients, families, carers and staff as part of the Patient Experience Improvement Framework (PEIF) trust diagnostic.

We continue to listen and respond to service users via a variety of methods including:

- Friends and Family Test text reminder, which was launched in October 2020 with national reporting resuming in January 2021
- Patient experience rounds asking what matters to our patients the most
- Capturing experience in real time using the recently launched Perfect Ward Person Centred audit tool
- Feedback to matrons, ward managers and key clinical staff to address patient concerns promptly
- Monthly Patient Experience walkround with non-executive director (NED) and governor representation

Aims and next steps

- Produce the new 2022-2025 Patient Experience, Engagement, Inclusion and Involvement (PEEII) 'commitment' with patient and carer voice representatives and staff by Quarter four 2021/22
- NHS England and NHS Improvement Patient Experience Improvement Framework gap analysis and action plan presented to Trust Board

C4. Establish a Patient Experience and Involvement Group ensuring we listen and respond to what our service users are telling us that matters to them

Background

The Patient Experience and Public Involvement and Engagement Strategy (PPI&ES) 2019-2021 was ratified by the Trust Board in January 2019. The strategy contained eight pledges (all now delivered) to improve the experience of our patients, their carers and families. Pledge one was the improvement of the utilisation of our representatives/members and widening their responsibilities.

Key achievements

- We have done this by establishing regular meetings and an agenda that listens and responds to what matters to our patients, families and carers, steered by the Patient Experience & Inclusion Group (PEIG) and a sub-working group, the Patient Participation Group (PPG). We have widened the range of responsibilities for patients, families and carers to enable more involvement in Trust initiatives
- PEIG and PPG members who choose to engage receive appropriate support, reimbursement and recognition for their time as Patient Partner Voice (PPV) representatives, in line with NHS England guidance. PEIG now has seven patient and carer voice representatives, governors and a range of staff from across the Trust who regularly attend PEIG meetings. PEIG routinely reviews patient experience improvement pledges, actions and progress to ensure any areas of poor patient experience are addressed

Aims and next steps

- Review the PEIG Terms of Reference in 2022 and refresh the group membership, moving those meetings to a quarterly basis. Create an operational sub-group, the Patient Experience & Inclusion Operational Group (PEIOG)
- Identify patient, carer and family members to join PEIOG
- To achieve continued strengthening of the patient and carer voice and experience and enhanced co-production of service improvements, with the support of key operational staff and medical colleagues

C5. Implement the End of Life Strategy to deliver greater choice and support for individuals nearing the end of life

Our Specialist Palliative Care Team's Annual Report for 2021/22 provides full details:

https://www.clatterbridgecc.nhs.uk/application/files/9316/5634/1395/Specialist_palliative_care_team_annual_report_2021-22.pdf

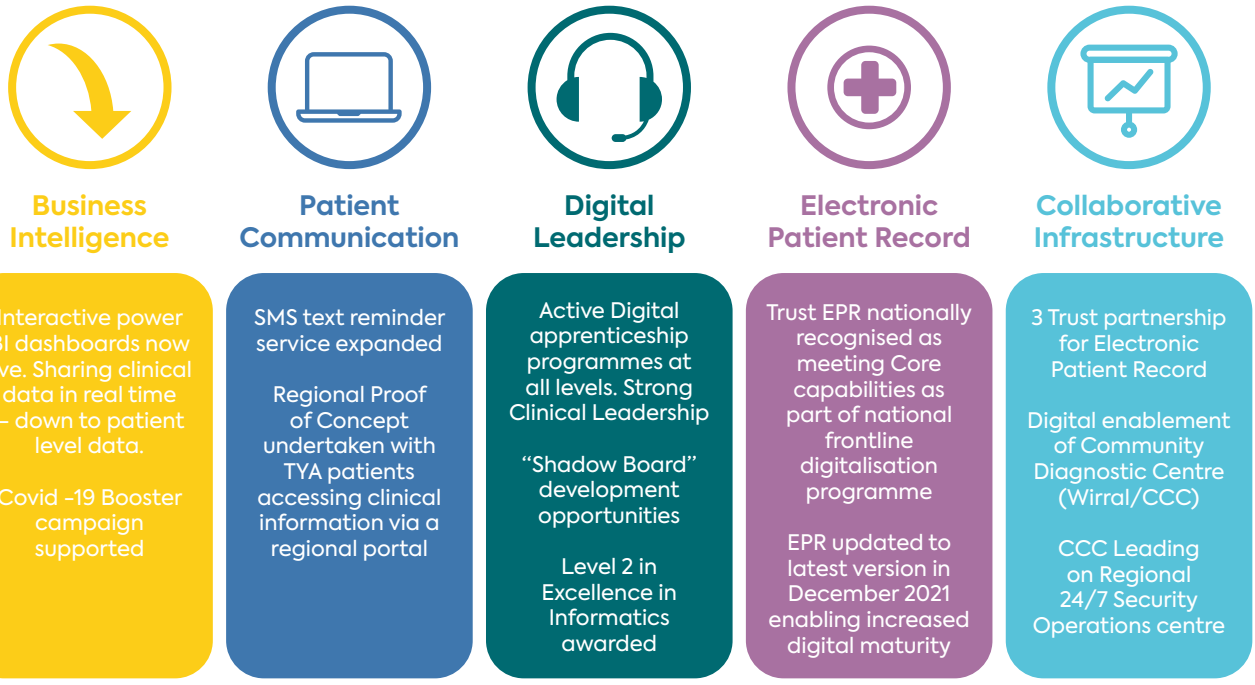
C6. Implement GDE quality digital work streams to include electronic patient information

Background

'Be Digital' is a key strategic priority within the Trust's Five Year Strategic Plan, strengthening the ambition to deliver digitally-transformed services and empower patients and staff.

During 2021/22 the Digital team have continued to lead a transformative technology approach to continue to support the organisation. The team have continued to embed new technologies that were established during COVID-19.

Key achievements



Digital Apprentice – Aaron Key awarded Apprentice of Year 2021

by the North West Informatics Skills Development Network (ISDN)

- The Trust recognises the importance of digital leadership. The Chief Information Officer (CIO) is a member of Trust Board. For digital clinical leadership, the CIO is supported by the Chief Clinical Information Officer (CCIO), Deputy Chief Clinical information Officer, Chief Nursing Information Officer (CNIO) and Chief Medicines Information Officer (CMIO).
- In July 2021, CCC was presented with its Digital Leader status by the Frontline Digitisation team at NHSX.
    - The Digital Leadership team continue to seek continuous professional development. The department achieved level 2 accreditation in Excellence in Informatics in September 2021. This was awarded by the North West Skills Development Network. The team were recognised for sustained performance, demonstrating a culture that is both innovative and consistently supportive of the development of the informatics capability within the organisation
    - During 2021/22, the Chief Technology Officer participated in the Trust's Shadow Board programme
    - In September 2021, Business Intelligence Apprentice Aaron Key was awarded Apprentice of the Year 2021 by the North West Skills Development Network (ISDN)
- Clinical data is now available to staff through live and interactive dashboards, available in real time for cancer waiting times, activity reporting, consultant workload, inpatients, outpatients and bed status with drillable data layers down to individual bed status
- The Business Intelligence team have continued to support the COVID-19 vaccination booster campaign and national reporting of COVID-19 data throughout 2021/22
- The Trust has worked with our patients to test out communication methods. Information about fourth COVID vaccinations has been sent via SMS text reminder service rather than letter, speeding up communication and increasing take-up, whilst supporting sustainability and reducing cost
- A portal allowing patients to access their own clinical letters has been successfully co-designed and tested with Teenage and Young Adults in a regional proof of concept and as part of patient access to their own information
- The Trust continues to grow its collaborative infrastructure, creating a three-trust partnership for its Meditech infrastructure environment
- CCC is Cyber Essentials (CE) accredited and working towards CE plus and IS27001. We are working closely with the Integrated Care System to lead on a Cheshire and Merseyside-wide security operations centre which will be available 24/7
- The Digital team have supported the digital enablement of the new Community Diagnostic Centre at CCC-Wirral which is an effective collaboration for patients between CCC and Wirral University Teaching Hospital
- We have an internationally recognised digital maturity level which has been externally accredited. CCC continues to move through the next two levels to continue to increase its digital maturity
- The Trust has successfully upgraded its electronic patient record (EPR) to the latest software version in December 2021
- Nationally, as part of the frontline digitalisation programme, the Trust has been recognised as having an electronic patient record (EPR) that is classified as level 3, an EPR that "already meets the national core capabilities standards requirements". This is the highest rating

C7. Implement person-centred care audits and 'always events' in 2021/22

Background

Whilst the Trust has made significant steps to embed these vital initiatives, progress has been hampered by COVID-19.

Key achievements to date

A number of person-centred audits including Perfect Ward, Patient Experience Ward Rounds and Partners in Care have been undertaken at CCC; however, due to COVID-19 pandemic restrictions, the majority of the planned audits were postponed during 2021/22.

- CCC engaged with the national 'Always Event' quality improvement initiative in 2021
- The first Always Event was completed with the launch of CCC Family Volunteers / Chatter Buddies on the inpatient wards in April 2021. This initiative supported both patients and families during isolation/visitor restrictions due to the COVID-19 pandemic, acting as a communication conduit and a pleasant distraction from day-to-day treatment delivery.

Aims and next steps

- A robust person-centred audit schedule has been planned for 2022/2023
- The second Always Event is underway to improve how the Outpatients department communicates with patients, with a focus on strengthened information to support reduction in patient anxiety caused by ad hoc delays. The project will be complete with the installation of information screens

Clinical effectiveness

CE1	Consistently meet national cancer waiting times standards
CE2	Reduce unplanned admissions and readmissions

CE3	Maintain regulatory compliance
CE4	Improve clinical outcomes through the establishment of SRG KPIs, monitored via new digitised SRG dashboards
CE5	Achieve 90% compliance with NICE guidelines
CE6	Aim to reduce avoidable deaths to zero by disseminating lessons learnt through quarterly newsletter
CE7	Improve clinical audit monitoring via clinical audit subcommittee
CE8	Achieve 90% or better statutory and role-essential training and role-based competency compliance across the Trust
CE9	Strengthen management of MCA and DoLS through increase in staff training LPS
CE10	Implement stratified follow-up of patients to optimise clinical input and appropriate follow up to meet CQUIN requirements

CE1. **Consistently meet national cancer waiting times standards**

Background

The NHS Constitution outlines what patients can expect and their rights when they are referred on a cancer diagnosis and treatment pathway. Cancer waiting times (CWT) measure performance against these national NHS Constitution Standards, as well as a number of other metrics. These measures are used by local and national organisations to monitor the timely delivery of services to patients.

Key achievements

Performance has generally been very good; however, the changing nature of the pandemic has created unprecedented challenges. Our activity levels and referral patterns are strongly linked to primary and secondary care activity, which has been variable throughout the year. We experienced the usual seasonal reduction in performance linked to patients choosing to delay treatment until after holiday periods. In February and March 2021, however, there was an unusual dip in performance for a variety of reasons. These included patients choosing to delay treatment, patients being medically unfit to begin cancer treatment, COVID-19 related staff absences and delays to molecular tests at laboratories outside the Trust.

Aims and next steps

The Trust has collaborated with the laboratories and other organisations to resolve the issue of molecular test delays, with a series of temporary and longer-term solutions now agreed.

Following a national review of NHS Cancer Standards, the standards are likely to be amended during 2022/23. NHS England have proposed that the Two Week Wait standard, which aims for people with suspected cancer to see a specialist within 14 days of being urgently referred by their GP or a cancer screening programme, is replaced by the (already reported) 28 Day Faster Diagnosis Standard. There are also changes proposed to the 31 and 62 day standards, with the currently reported three elements of each being merged into a single standard for each. The Trust is preparing for these changes, with monitoring of the proposed standards already in place.

CE2. **Reduce unplanned admissions and readmissions**

Background

Reducing unplanned admissions improves the quality of life for people with long term and acute conditions and their families/carers, as well as reducing pressures across hospital systems. The Trust has been working on an improvement programme together with other organisations to support admission avoidance and signposting to the most appropriate care and services. Same day emergency care (SDEC) is the provision of same-day care for emergency patients who would otherwise be admitted to hospital. Under this care model, patients presenting at hospital with relevant conditions can be rapidly assessed, diagnosed and treated without being admitted to a ward and, if clinically safe to do so, will go home the same day their care is provided.

Key achievements

- The Clinical Decisions Unit (CDU) at Clatterbridge Cancer Centre – Liverpool has expanded its footprint and increased the number of patients to whom it provides SDEC support
- In addition to this, there have been a number of implementations to support patients in the ambulatory SDEC setting. This includes the establishment of three ambulatory clinics provided by the enhanced supportive care team, the immunotherapy team and the dietetics/speech and language team
- The referral process for patients via the Hotline to CDU has been optimised to allow patients to be seen in CDU same day
- The streaming process through CDU has led to the identification of patients who fulfil the criteria for rapid review and management in an SDEC format, leading to better patient experience and increased capacity
- The Trust was successful in securing funding from Cheshire & Merseyside Cancer Alliance to develop the centralised Hotline and the interface into regional SDEC / community response unit provision
- There is now a robust process whereby incidental pulmonary embolisms can be managed via CDU seven days a week, 23 hours a day to reduce Emergency Department (ED) attendance

- We have successfully introduced the Clinical Utilisation Review (CUR) system across the inpatient bed base. The CUR system is an evidence-based assessment of whether patients are receiving the right level of care in the right setting at the right time, based on their individual clinical need
- A weekend ambulatory process has been implemented to allow patients to be treated for SACT toxicity (side-effects from cancer drugs) as outpatients, reducing ED attendance and admission

Aims and next steps

- Further development of streaming and the establishment of a CDU ambulatory clinic with bookable slots will allow additional optimisation of SDEC care within CCC
- Over the next 12 months the Hotline will refer patients into local SDEC services via an approved criteria and pathway to reduce ED attendance and promotion of SDEC care
- We will also be working with the community response units for same day emergency care delivered at home in patients where this is appropriate
- CCC will be adopting the low-risk neutropenic sepsis pathway to promote same day review and reduce the need for admission
- There will be further development of streaming and the establishment of a CDU ambulatory clinic as well as working in collaboration with Liverpool University Hospitals (Royal Liverpool site) to provide in-reach support to AMU / Medical Ambulatory Care Unit. (AMU is acute medical unit)

CE3. **Maintain regulatory compliance**

Background

As a specialist healthcare organisation, CCC must be compliant with a number of regulatory standards to provide assurance of high levels of care as well as patient and staff safety.

Whilst compliance with the regulatory standards has been recorded, reported and stored within separate divisions and departments, we needed a robust process to ensure all regulatory inspections and visits were documented in a central repository with a robust, corporately owned policy and procedure to ensure accurate information and reporting to the Trust Board.

Key achievements

- The External Visits Policy was reviewed, refreshed and approved in January 2021
- A Trustwide Register of External Visits was developed
- The Register of External Visits was added as a standing agenda item for all sub-committees and committees of the Board
- The Radiology team have maintained their accreditation to the Quality Standards for Imaging (QSI) Accreditation for the CCC-Wirral site, which was initially achieved in December 2020 and maintained following further inspection in January 2022. It is externally assessed by the United Kingdom Accreditation Service (UKAS)

- In October 2021 the CCC- Liverpool site was successfully accredited by BSI as part of the ISO – 9001 (Quality Management) accreditation already held by Radiation Services across other Trust sites (CCC- Wirral and CCC- Aintree)
- Health Education England Quality Intervention Visits occurred in July and Oct 2021 – no patient safety issues were identified and there was positive feedback in relation to nursing students' placement experience

Aims and next steps

- Now the register is in place and there is a process for reporting, the External Visits policy will be reviewed again to ensure it is robust and the roles and responsibilities of staff are clear and concise
- With the development of a new governance structure in April 2022, the reporting arrangements for the external visits register will be confirmed and monitored
- The Radiology team is progressing towards achieving accreditation for the CCC- Liverpool service during 2022/23. The accreditation is supported by the Care Quality Commission and NHS England

CE4. **Improve clinical outcomes through the establishment of SRG KPIs, monitored via new digitised SRG dashboards**

Clinical data is now available to staff through live and interactive dashboards, available in real time for cancer waiting times, activity reporting and to support key projects such as consultant results acknowledgement and pharmacy prescribing and production. Site reference group (SRG) dashboards have been created in recent years for a number of tumour groups. The dashboard rollout plan includes the development of new digitised SRG dashboards which will offer increased and real time access and greater functionality.

Following the recent restructure of Trust services into Divisions and Clinical Business Units, KPIs will now be mapped to this structure and down to SRG level and reported via appropriate forums. This will provide additional clarity around clinical outcomes, enabling SRGs to more effectively drive targeted improvements.

CE5. **Achieve 90% compliance with NICE guidelines**

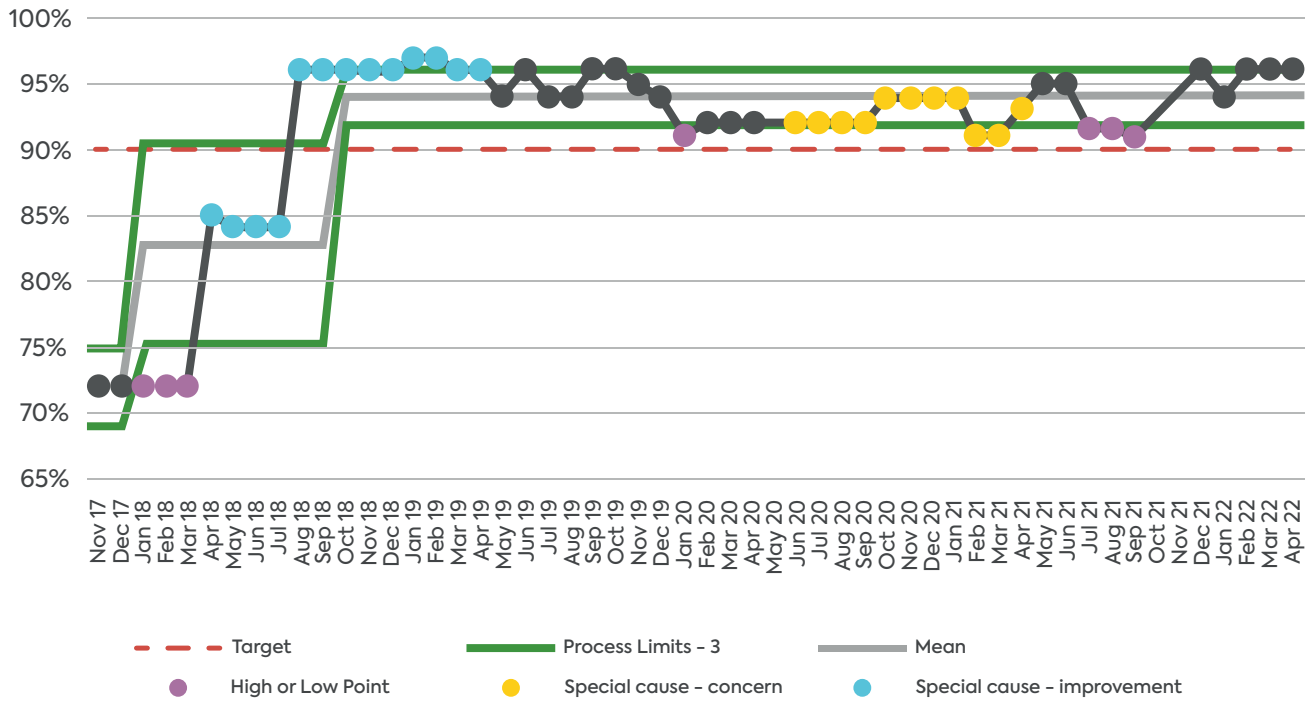
Background

The Trust is committed to compliance with clinical guidance and advice and acting upon applicable recommendations from the National Institute for Health and Clinical Excellence (NICE), providing the best possible care to our patients. The Trust internal target has been set at 90% compliance to applicable standards.

Key achievements

The SPC chart below demonstrates that NICE compliance has been steadily above the Trust target of 90% since October 2018. NICE compliance currently sits at 96% as of 12th April 2022 (CCC are compliant to 5107/5333 applicable individual statements issued by NICE via guidelines and advice).

Overall Trust NICE compliance as at 12th April 2022 (SPC Chart)



Aims and next steps

To continue to maintain performance above 90%.

CE6. **Aim to reduce avoidable deaths to zero**

Background

The Trust Mortality Process aims to promote improvements in care and celebrate best practice in order to underpin the Trust's strategic goal to prioritise patient safety, improve patient care and prevent avoidable deaths. Lessons learnt from mortality cases are distributed via the shared learning newsletter and the Trust Mortality Surveillance Group Dashboard on a quarterly basis. All lessons learnt are then collated into an annual mortality report. The Trust scores all inpatient deaths utilising the RCP avoidability scoring mechanism which outlines avoidability as follows, whereby scores 1-3 are deemed avoidable:

1: Definitely avoidable
2: Strong evidence of avoidability
3: Probably avoidable
4: Possibly avoidable but not very likely
5: Slight evidence of avoidability
6: Definitely not avoidable

Key achievements

To date CCC has reported zero deaths as defined by a score between 1 and 3.

Aims and next steps:

- The Mortality Surveillance Group continues to devise a mortality reduction strategy with a view to maintaining zero avoidable deaths.

Please see Appendix 1 for further mortality information.

CE7. **Improve clinical audit monitoring via Clinical Audit Sub-Committee**

Background

The Trust has a centralised Clinical Audit Sub-Committee which meets monthly to:

- Oversee the progress of all approved projects against the Trust audit schedule
- Oversee the progress of action plans to drive improvement in patient care until completion
- Ensure the areas of concern are escalated to relevant committees, groups and individuals
- Ensure the design and methodology of projects are at a high standard and have relevant stakeholder engagement

Key achievements

- During the COVID-19 pandemic, the Clinical Audit Sub-Committee continued to meet monthly via Microsoft Teams
- There were 54 projects completed during the last year, of which 12 provided assurance, 22 improved knowledge and provided assurance, and 14 resulted in an action plan to improve patient care
- All 54 completed projects were reported to local committees/groups across the Trust and monthly quality & safety governance data packs (100%)
- There was an increase of 60% of projects completing compared to 2021/22

Aims and next steps:

To continue to increase the ratio of quality improvement projects against assurance projects in order to drive continuous improvement. We aim to do this by increasing promotion of quality improvement cycles through an audit newsletter, along with re-launching clinical audit through continuous education via audit events, site reference groups and new clinical audit training module.

Please see Appendix 2 for further audit information.

CE8. Achieve 90% or better statutory and role-essential training and role-based competency compliance across the Trust

Background

The Trust is committed to the provision of the highest standards of safe and effective patient care, which requires us to ensure that our staff are competent, capable and safe through the provision of mandatory training.

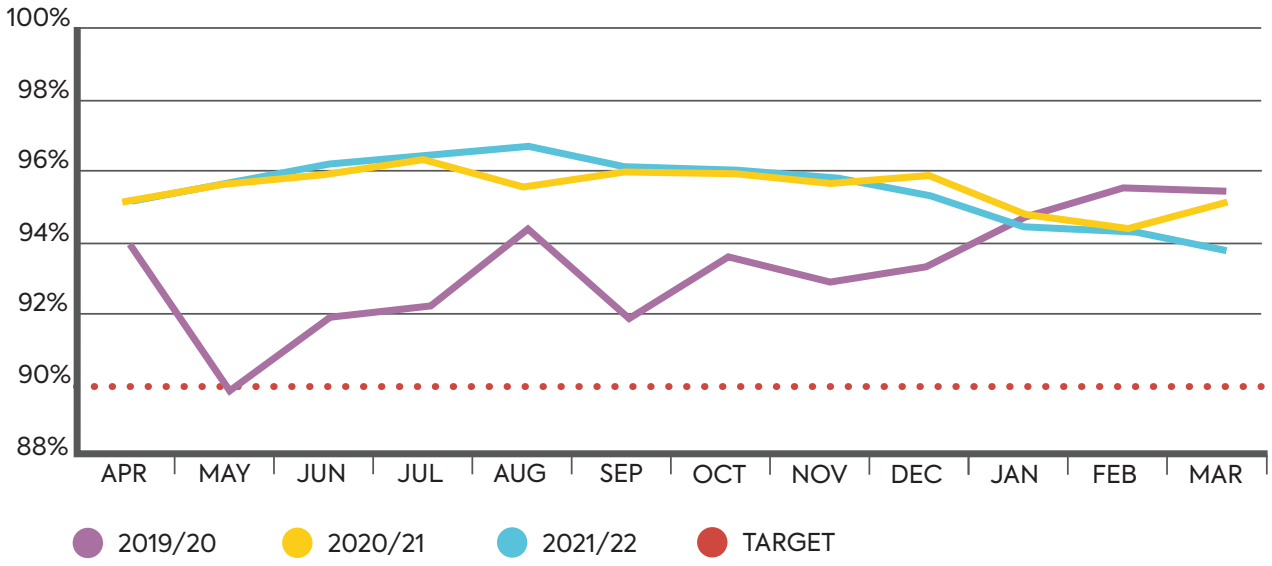
Mandatory training is defined as training which is required by law and enables employees to carry out their duties safely and effectively, as well as to develop and maintain their skills and knowledge to the required standards. Role-essential training is compulsory training that is determined essential by the Trust for safe and effective delivery of services.

The Trust has a KPI of 90% for mandatory training and role-essential training and compliance against this target is monitored via the Trust's committee structure.

Key achievements

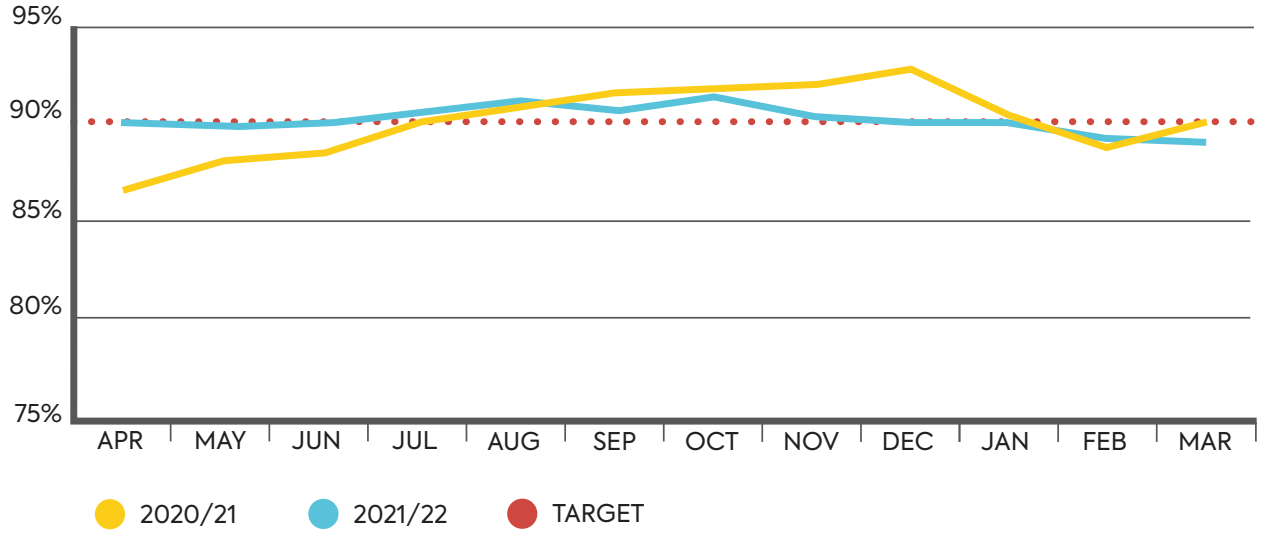
We continue to make ongoing improvements and developments to the provision of mandatory training and, despite the clinical pressures from the pandemic, achieved our target of 90% for the duration of 2021/22.

Mandatory training compliance 2019 – 2022



In 2020, we introduced role-essential training and aligned competency requirements by staff group into our learning management system to enable more effective monitoring and reporting. Since its introduction, a number of enhancements to the monitoring and reporting of role-essential training have been implemented.

Trust role-essential training compliance 2020 – 2022



The Trust continues to utilise e-learning as a method to support flexibility and access to both mandatory and role-essential training and in 2021 developed a number of new in-house e-learning programmes to supplement national packages.

In 2021 we introduced ClinicalSkill.net, an online clinical training platform, to further enhance and support clinical training.

We have developed our reporting capabilities for mandatory training and now provide managers with detailed monthly compliance reports and dashboards. The Trust now also includes compliance with role-essential training on its divisional dashboards.

Aims and next steps

CCC will continue to ensure it meets its requirements for mandatory training and role-essential training compliance and will continue to monitor compliance through the Trust's committee structures. Key areas of focus for 2022/23 include:

- Achievement of the Trust KPI for both mandatory and role-essential training
- Review of role-essential training requirements and clinical competencies
- Increased practical clinical skills provision
- Development of monthly role-essential management reports

CE9. Management of the transition from Deprivation of Liberty Safeguards (DoLS) to Liberty Protection Safeguards (LPS)

Background

The Mental Capacity (Amendment) Act 2019 received Royal Assent on 16th May 2019. The purpose of the Act is to abolish the Deprivation of Liberty Safeguards (DoLS) and to replace them with a completely new system, the Liberty Protection Safeguards (LPS). This system will apply to England and Wales only. The main points of the LPS are:

- One scheme will apply in all settings (e.g. care homes, nursing homes, hospitals, supported living, people's own homes, day services, sheltered housing, extra care, Shared Lives etc)
- The LPS will apply to anyone aged 16+
- There will be no statutory definition of 'deprivation of liberty' under LPS
- The role of 'Supervisory Body', which authorises deprivations of liberty, will be abolished. It will be replaced by the 'Responsible Body'. There will be different Responsible Bodies in different settings. For some cases the Responsible Body will be the NHS trust; in other cases the role will be filled by the Clinical Commissioning Group (or Local Health Board in Wales); and in other cases still it will be the local authority

- There will only be three assessments: the 'Capacity' assessment, the 'Medical' assessment and the 'Necessary and Proportionate' assessment
- There will be a brand new role of Approved Mental Capacity Professional to deal with more complex cases
- There will be an expansion of the role of the Independent Mental Capacity Advocate

The LPS Code of Practice from the Department of Health and Social Care has been delayed due to the COVID-19 pandemic and there is currently no new implementation date.

Key achievements

- The Named Nurse for Safeguarding is attending the Cheshire and Merseyside LPS Forum on a monthly basis to share learning and business cases. This provides a great networking opportunity
- The Trust is working in partnership with Liverpool Safeguarding Adult Board who commission the IMCA and advocacy service to meet local demand
- The Trust is working in partnership with Liverpool Safeguarding Adult Board who commission AMCP
- There is a plan in place to submit necessary documentation through the Trust's Education Governance Committee
- The Trust has already digitalised DoLS assessment and mental capacity assessment on Meditech. There is a referrals system in place for the Trust Psychiatrist
- The Trust has not experienced an increase in numbers of DoLS assessments
- The Trust is working with NHS Digital in view of possible new data fields required for LPS

Aims and next steps

Upon receipt of the new LPS guidance and implementation plan, the Trust will:

- Establish a time-limited task and finish group to develop and agree a localised Trustwide implementation plan and transition process between DoLS and LPS
- Identify who will be the 'hospital manager' role who will authorise LPS
- Clarify who will undertake the mental capacity assessor role who completes assessments within the Trust
- Identify who will be the LPS reviewer
- Undertaking a local training needs analysis so that staff have access to the free NHS accredited MCA / LPS training
- Request for funding submitted for a Band 7 LPS Lead in 2022/23 budget

Oversight of this implementation will be monitored by Safeguarding Committee and assurance provided to Patient Safety Committee.

CE10. **Implement stratified follow-up of patients to optimise clinical input and appropriate follow-up to meet CQUIN requirements – Patient Initiated Follow Up (PIFU)**

Background

By 2028, 55,000 more people will survive cancer for five years or more each year; and at this date, 75% of people will be diagnosed at an early stage (stage 1 or 2). In just five years, the number of people diagnosed with cancer has grown by an extra 400,000, with 2.5 million people living with cancer in the UK. The NHS will struggle to support the expected increase in people living with cancer in the UK without the development of a personalised supported self-management pathway.

My Medical Record (MMR) is a dual registration digital system with patient portal views. There are mutual benefits of sharing of ideas, best practice and two-way feedback. Patients are able to be stratified, based on the agreed cancer tumour specific follow-up requirements.

There are significant benefits to patients, including regular calls from the CCC Cancer Support Worker and efficient handling of errors and issues with a dedicated point of contact. The initiative allows for improved utilisation of outpatient capacity with increased numbers of appointments available for new patients, which supports the achievement of Cancer Waiting Times standards.

Key achievements

In 2019 the Trust, in collaboration with the Cheshire & Merseyside Cancer Alliance (CMCA), agreed to support a Commissioning for Quality Innovation (CQUIN) to stratify patients within Breast, one of the common cancer tumour Site Reference Groups (SRG). The CQUIN has been extended to include prostate cancer patients and up to 1,500 patients within Liverpool, Wirral and Warrington have now been stratified with associated patient and NHS benefits. The CQUIN has now been completed but CCC have continued to embed PIFU as a standard within some SRGs.

The COVID-19 pandemic has further raised the profile of this initiative, with changes to the way the NHS manages outpatient activity identified as vital to reducing the backlog created by the pandemic. NHS England and NHS Improvement's 2022/23 priorities and operational planning guidance was published in December 2021 and sets out targets for NHS trusts to reduce follow-up outpatient appointments and increase the use of PIFU pathways. The Trust has provided forecasts for both areas of activity.

Aims and next steps

CCC has instigated an outpatient transformation project, which will provide Trustwide oversight of all development work within outpatient services. This includes the management of outpatient processes and expansion of patient initiated follow-up pathways (PIFU) to reduce attendances in the best interests of patients.

Well Led

WL1	Deliver on Trust's quality focused strategic priorities
WL2	Embed new corporate governance and risk committee structure
WL3	Increase national profile and collaborative working as a system leader against regional & national quality priorities/indicators
WL4	Carry out monthly human factors focused quality and safety leadership walk rounds 2021/22
WL5	Strengthen Nurse and AHP leadership
WL6	Patient and staff experience narrative delivered at Trust Board

WL1. **Deliver on Trust's quality focused strategic priorities**

Having delivered our last five-year strategic plan, opening CCC-Liverpool and embedding our unique networked model of care, our attention for the next five years will be on maximising the benefits of these developments for patient outcomes and experience. To this end we have developed a new statement of our mission for the next five years as part of our new Five Year Strategic Plan for 2021-2025. We will drive improved outcomes and experience through our unique network of specialist cancer care across Cheshire and Merseyside. Our new six strategic priorities are:

- Be outstanding
- Be collaborative
- Be a great place to work
- Be research leaders
- Be digital
- Be innovative

We are already making good progress against the commitments that we have made against this strategic priority and we will continue to drive our delivery against the new strategic plan.

Going into 2022/23 a new Quality Strategy will be developed in line with the Trust's priorities.

WL2. **Embed new corporate governance and risk committee structure**

Background

A systematic review of the governance and risk committee structure was carried out following the restructure of four directorates into three divisions: Acute Care, Networked Services and Radiation Services.

Key achievements

A full register of external regulatory visits/inspections has been developed and is shared at all sub-committees and committees of the Board

- The divisional clinical governance managers are now managed by the Corporate Governance team to ensure standardisation of processes across the Trust
- The terms of reference and meeting agendas for all local and corporate meetings were reviewed and refreshed

Aims and next steps

- The divisional quality and safety meeting agendas will be reviewed and standardised across the three clinical divisions
- The risk reporting templates used will be reviewed and refreshed in Q1 of 2022/23
- A full review of the Trust governance structure was underway at the end of 2021/22 and is due to be implemented in Q1 of 2022/23. This will include a refresh of the risk management and reporting process across the Trust

WL3. **Increase national profile and collaborative working as a system leader against regional & national quality priorities/indicators**

Background

During the development of the Teenage and Young Adult (TYA) Cancer Service Specification, NHS England proposed that TYA cancer networks would become operational delivery networks with the responsibility for driving improvements within the network and across partner organisations. In late 2021, The Clatterbridge Cancer Centre partnered with The Christie to create the North West TYA Operational Delivery Network (ODN). The aim of the ODN is to deliver TYA services that are developed around the TYA service specification. The partnership of two specialist cancer trusts will allow TYA services to grow with greater strength and improve services with a work programme aligned to a national standard and expectation.

Key achievements

- Commencing in October 2021, the TYA ODN has established a core membership with key TYA clinical leadership from both CCC and The Christie. There is further engagement from the wider network of Cheshire, Merseyside, Manchester, Lancashire and Cumbria
- Recruitment of a TYA ODN Programme Manager, who commenced in February 2022 to lead the direction of the group and agreed workstreams
- Further key recruits include a project support officer and the identification of commissioner support and executive chair
- A successful launch event in April 2022 to an audience of over 60 delegates attending to hear about the purpose and direction of the TYA ODN

Aims and next steps

In 2022 NHS England will formally publish the TYA Service Specification for Principal Treatment Centres (PTC) and for Designated Hospitals.

The TYA ODN group have agreed provisional workstreams in relation to three priorities:

- The regional rollout of access to genomic testing for all TYA patients who are eligible
- Increasing the availability and access to clinical research trials for the TYA age group
- Reviewing network pathways to ensure an equity of TYA service provision

In 2022 NHS England will formally publish the TYA Service Specification for Principal Treatment Centres (PTC) and for Designated Hospitals.

Establishing clear relationships with other TYA providers and support functions including the GM pathway board and the CMCA TYA Clinical Quality Group

WL4. **Carry out monthly human factors focused quality and safety leadership walkrounds**

Due to COVID-19 restrictions all walkround visits to clinical and non-clinical areas were paused during 2021/22.

As restrictions lift in 2022/23 these visits will recommence.

WL5. **Strengthen Nurse and AHP leadership**

Background

The national critical shortage of registered nurses and AHPs is a worrying theme in healthcare. In response to this situation, more organisations are turning to a shared governance model. This model enables shared decision-making based on the principles of partnership, equity and ownership that empowers all members of the healthcare workforce to have a voice in decision-making that directly influences safe patient care and experience.

Key achievements

- New Chief Nurse joined the organisation in October 2021 who plans to develop and implement a joint nursing and AHP strategy
- CCC were successful in gaining funding for a senior AHP to join a project with Health Education England (HEE), developing the CCC AHP Workforce Supply Strategy
- Developing the AHP support workforce
- Working with HEE to increase capacity for students and support within the workplace
- Recruitment and retention initiatives for AHPs
- Return to practice for AHPs, including development of a new policy
- Developing apprenticeships

Aims and next steps

- Trustwide listening and engagement events to ensure the strategy is co-designed by our nursing and AHP current and future leaders
- Draft strategy to be agreed and submitted to the Workforce Transformation Committee for approval
- Once approved, the strategy will be shared and implemented across the Trust

WL6. **Patient and staff experience narrative delivered at Trust Board**

Background

The Patient Experience and Public Involvement and Engagement Strategy (PPI&ES) 2019-2021 was ratified by the Trust Board in January 2019. The strategy (now delivered) contains eight pledges to improve the experience of our patients, their carers and families. Pledge two was the introduction of 'In your shoes' initiative, identifying areas where shadowing can be undertaken across the Trust, helping to create a 'map' of a patient and family's journey through their own lived experience at CCC. It helps to highlight any concerns real time, encourages valuable feedback and overall improves patient experience.

Key achievements to date

- In 2020 the 'In your shoes' initiative was expanded to include patient and professional narratives presented at Trust Board level, with a robust monthly schedule hearing the voice of the patients, families and carers, their experiences of care, and of the staff caring for them.
- Action plans are monitored at Divisional Quality and Safety Meetings for progress and assurance provided to PEIG
- Head of Patient Experience also supported staff narratives shared at Trust Board

Aims and next steps

- Continue to deliver patient and professional narratives consistently to encompass all Divisions and services across the next 12 months and beyond
- Ensure lessons are learnt from the impact of the COVID-19 pandemic and utilise digital storytelling as much as possible to share these experiences
- Develop a library on the Trust website of digital patient stories
- Recommence the monthly patient experience 'rounds' with the Head of Patient Experience and Inclusion, governors and Board members across all CCC sites

Part 4:
Trust Assurance

4.1 Review of services

The Trust has a robust performance management framework in place, utilising the performance review process and organisational governance structure to monitor performance and drive improvement.

A monthly Integrated Performance Report is presented to Committees of the Board and the Board of Directors. Improvements to this document began in 2021/22, ready to implement for 2022/23. These include introducing SPC charts, providing more effective alerting to potential areas of concern and, secondly, translating the document into an online dashboard, enabling desktop access to more detailed, real-time data.

Divisions and corporate services have regular performance reviews, with review frequency increased in line with the escalation process, which is enacted when performance levels reduce and/or more support is required. These reviews monitor and triangulate all key aspects of performance against current risks.

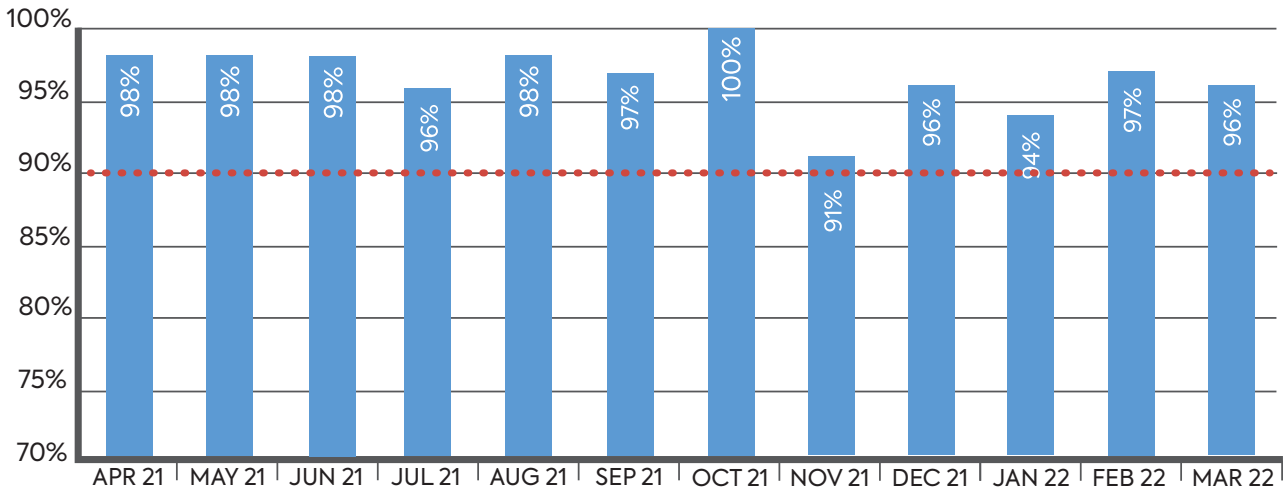
4.2 Priority clinical standards for seven-day hospital services

Background: It is important to ensure timely access to clinical expertise and diagnostic testing whenever patients may need them. In 2016 NHS England recommended and outlined the requirement for all acute hospitals to have four priority standards in place to maintain patient safety, high quality, and consistent levels of service and care seven days a week. There are 10 defined standards for seven-day services, of which NHS England and NHS Improvement (NHSE/I) classify four as key standards.

Standard 2. Time to first consultant review:

- The Consultant of the Week rota is now well embedded and has enabled the Trust to meet the 14-hour target of 90% consistently. (Chart 2)

Chart 2 14 hour target compliance



Standard 5. Access to diagnostic tests:

- The Trust provides 24/7 CT and MRI services
- The Trust has access to a 24/7 day diagnostic service. There is an SLA in place with Liverpool University Hospitals (LUHFT) for speciality diagnostic services

Standard 6. Access to consultant-directed interventions:

- There is an SLA in place with LUHFT for 24/7 access to specialist care and interventions via consultant & emergency referrals

Standard 8. Ongoing review by consultant twice daily if high dependency patients, daily for others:

- There is a daily ward consultant ward round (7 days weekly) and designated care to SPRs, including resident on call to provide 24-hour cover
- There is daily Critical Care attendance at handover and consultant-led review of unwell patients as high dependency / critical care services, beds and consultant provision are provided by LUHFT

Aims and next steps

- In order to provide levels of assurance in relation to the standards, an annual audit of all the 10 standards will be undertaken in November 2022 in line with the newly updated framework.

4.3 Performance against additional quality indicators relevant to CCC

All data and metrics are monitored through the Trust Board Integrated Performance Report (IPR) and through performance and quality review processes. The monthly IPRs are published as part of our Board papers and are available on our website. The Month 12 report (see the April 2022 Board papers) contains data for the full year 2021/22. The Board, in consultation with stakeholders, has determined a number of metrics against which it can measure performance in relation to the quality of care it provides as demonstrated within the Trust IPR.

We have chosen metrics which are relevant to our specialty i.e. non-surgical oncology, driven by directives such as the NHS System Oversight Framework and which are identified as important to the public.

The following table presents compliance against a number of key quality indicators, which are routinely monitored by the Trust.

Table 6. Performance against additional quality indicators relevant to CCC

Indicator	2021/22	2020/21	2019/20
18 weeks from point of referral to treatment (patients on an incomplete pathway)	99% (92%)	98% (92%)	99% (92%)
28 Day Faster Diagnosis Standard (formally monitored from Oct 2021)	75% (75%)	N/A	N/A
62 day wait for first treatment from urgent GP referral for suspected cancer	85% (85%)	91% (85%)	88.1% (85%) KPI definition changed in 2019/20
62 day wait for first treatment from NHS Cancer Screening Service referral	85.7% (90%)	97% (90%)	87.2% (90%) KPI definition changed in 2019/20 Target achieved in Q3 and Q4.
Maximum 6 week wait for diagnostic procedures	100%	100%	100%
'Never Events'	0	0	0
Clostridium difficile (attributable)	14 (annual 11)	5 (annual 4)	11 (annual 4)

Indicator	2021/22	2020/21	2019/20
C Diff cases per 1,000 bed days	0.58	0.24	0.47
MRSA bacteraemia cases per 10,000 days	0.42	0	0.43
Attributable category 2 or above pressure ulcers per 1,000 bed days	2.04	1.99	2.90
Patient Friends and Family Test: recommend the Trust for care and treatment	96%	94%	88%

All indicators: Data source: CCC. Targets are shown in brackets

Cancer waiting times performance has generally been very good. However, the changing nature of the pandemic has created unprecedented challenges. Our activity levels and referral patterns are strongly correlated to primary and secondary care activity, which has been variable throughout the year. Patient numbers are relatively low for 62 Day Screening, which makes the target difficult to achieve, with a single breach often leading to non-compliance for a month.

In 2021/22, there was the usual seasonal reduction in performance linked to patients choosing to delay treatment until after holiday periods. In addition, there were a number of varied elements which contributed to non-compliance, including patients choosing to delay treatment, patients being medically unfit to begin cancer treatment, COVID-19 related staff absences and delays to molecular tests at laboratories beyond the Trust's control.

The Trust reported a total of 14 cases of Hospital Onset-Hospital Acquired (HOHA) Clostridioides difficile throughout 2021/22. This exceeded the ambitious target of no more than 11 cases. Only 1 case identified any learning, however; there was a delay in sending a sample to the lab and this has been shared with all ward teams across the Trust.

The Trust identified 1 patient with an attributed MRSA blood stream infection in 2021/22. Post-infection review identified that this was an unavoidable infection.

The Trust has not reported any hospital acquired category 3 or category 4 pressure ulcers during 2021/22. All category 2 pressure ulcers were reported through the Datix system and a full review undertaken for discussion at the monthly Harm Free Care collaborative meeting.

A robust Tissue Viability service (TVS) has been implemented at CCC. The TV Nurse Lead continued to make a significant impact regarding visible support and advice for nursing and medical staff, as well as patients and their families. There was a continued focus on education for clinical staff, with TV Nurse support and involvement in the ANTT training programme and creation of a Wound Formulary to guide staff in the correct selection of dressings.

4.4. Mortality data and learning from deaths

The Trust's Council of Governors have selected the mortality indicator – 30 days post-radical chemotherapy, expanded to include the Haemato-oncology service in 2019/20 – to deliver a comprehensive Trustwide mortality review. As a specialist trust, CCC is not eligible to utilise SHMI or HSMR as a mortality review tool.

We continue to regularly evaluate, modify and improve the quality of our comprehensive mortality review processes. The Mortality Surveillance Group (MSG) maintains an effective strategic lead in the monitoring and promotion of mortality reduction, having oversight of all Trust-related deaths via the CCC mortality dashboard. The MSG takes the lead in reviewing all high-risk mortality areas and reviews hard and soft intelligence in this regard, as well as internal and external clinical audit feedback. In-depth statistical analysis of chemotherapy and radiotherapy related deaths continues, providing a platform for the interrogation of individual consultant performance, and continuous monitoring of chemotherapy regimens, toxicities and variations in clinical practice.

Trustwide feedback and dissemination of learning from deaths from Mortality Review Meetings is in place via mortality 'lesson learnt' dashboards, professional specific meetings and division/group meetings. Structured Judgment Review methodology has been successfully introduced, with all consultants expected to engage in such reviews, to highlight areas of good practice as well as identify any suboptimal care provision and avoidable deaths. All Trust deaths in care are subject to one or more of five levels of scrutiny, to include a documented specialist Site Reference Group (SRG) Review or Specialist Committee Review response to a mortality alert investigation process. The Trust continues to share this learning widely with external healthcare providers to include other hospital trusts, GPs and coroners.

The adoption of national mortality guidance and policy has seen closer liaison with national and regional partners and external agencies, to include CDOP (Child Death Overview Panel) and LeDER (NHSE Learning Disabilities Mortality Review Programme). There has also been a focused emphasis on the early involvement of families, and continued open and honest communication with families and carers in the event of Serious Untoward Incident investigations. In line with statutory guidance in relation to the management of child (0-18yrs) deaths, CCC now has an identified key worker for any families affected by the death of a child. The Trust is committed to improving mortality review and review of serious incidents as a driver for improved quality and patient safety.

Our Mortality Review Meetings have resulted in a number of changes to clinical care such as changes to clinical practice, documentation and education and training.

Mortality performance and progress is monitored at the Mortality Surveillance Group and reported to the Board via the Quality Committee.

Trust mortality data summary

	2021/22	2020/21	2019/20	2018/19	2017/18	2016/17
30 day mortality rate (Solid Tumour radical chemotherapy)	0.5%	0.8%	0.8%	0.7%	0.67%	0.6%
30 day mortality rate (Solid Tumour palliative chemotherapy)	5.4%	6.0%	5.6%	7.4%	6.1%	5.7%
30 day mortality rate (Haemato-oncology)	3.7%	2.3%	3.2%	5.2%	4.1% (July 2017-March 2018)	
30 day mortality rate (radiotherapy)*	2.7%	3.1%	3.7%	3.9%	3.5%	4.3%
SHMI: Unfortunately as a specialist trust we are not included in the Summary Hospital Mortality Indicator (SHMI) so this data is unavailable.						

Mortality rate:

- Data definition: unadjusted mortality rate as a percentage of all cases treated in that category.
- Data source: CCC
- *Radiotherapy intent is not recorded against appointment in Meditech. A different data source will need to be explored (i.e. Aria system) for mortality reporting in future.

Further supplementary information in relation to Learning from Deaths can be found in Appendix 1.

4.5. Participation in clinical audits and national confidential enquiries

During 2021/22, 16 national clinical audits and 1 national confidential enquiry were relevant to the health services provided by CCC.

The national clinical audits and national confidential enquiries that CCC participated in, and for which data collection was completed during 2021/22, are listed below:

Audits: Cases submitted

National Clinical Audit and NCEPOD eligible studies	Cases Submitted
Cancer Outcomes and Services Dataset (COSD)	12/12 (100%) files uploaded successfully
National Systemic Cancer Therapy Dataset (SACT)	12/12 (100%) files uploaded successfully
National Lung Cancer Audit (LUCADA)	12/12 (100%) files uploaded successfully
National Bowel Cancer Audit	555/670 (83%) oncology treatment records uploaded. The remaining 17% not uploaded due to not being registered by the acute trust or the acute trust had not uploaded tumour records for treatment to append to
National Oesophago-Gastric Cancer Audit	215/274 (78%) oncology treatment records treatment uploaded. The remaining 22% not uploaded due to not being registered by the acute trust
National Prostate Cancer audit (NPCA)	12/12 (100%) files uploaded successfully
National Audit of Breast Cancer in Older patients	12/12 (100%) files uploaded successfully
Quality of Life Questionnaire for SRS	155 patient questionnaires collected (up from 88 collected during 2020/21)
Society for Acute Medicine Benchmarking Audit 2021 (SAMBA)	Not mandated – Data collected and submitted

100 day mortality post allogeneic stem cell transplantation	Data has been uploaded to Quality Surveillance Information System (SSQD). Performance has been monitored by the Mortality Surveillance Group Quarterly
BSBMT long-term outcomes audit with UK benchmarking	Data has been uploaded to Quality Surveillance Information System (SSQD). Performance has been monitored by the Mortality Surveillance Group Quarterly
NHSE dashboard: outcomes audit with UK benchmarking	Data has been uploaded to Quality Surveillance Information System (SSQD). Performance has been monitored by the Mortality Surveillance Group Quarterly
Use of Pembrolizumab in head and neck cancer during COVID	28 records identified for submission.
PRIMROSE – A prospective multi-centre observational cohort study to assess the presentation, management and outcomes of patients with CNS disease secondary to breast cancer	Data has been submitted
National Audit of Care at the End of Life (NACEL) – Round 3	Data has been submitted
National audit of Patient Blood Management against NICE Guideline NG24	Data has been submitted
NCEPOD Transition from child to adult services study	Organisational questionnaire and 5/5 clinician questionnaires sent and 3/3 case note extracts sent

The reports of seven national clinical audits were reviewed by the provider in 2020/21 and CCC intends to take the following actions to improve the quality of healthcare provided.

Audits: Actions

National Clinical Audit and NCEPOD eligible studies	Actions to improve quality of care
NBOCAP (Bowel Cancer)	The annual report and recommendations were reviewed by the SRG Chair. There were seven recommendations from the national report, of which one was applicable to CCC: **Recommendation 1:** All trusts/hospitals/MDTs should review the individual local outcomes provided by NBOCA and agree on three targeted quality improvement initiatives for 2022. These should focus on areas where the national metrics are not being met. **Action:** The Quality Manager for Audit & Statistics is liaising with the SRG Chair to select which three targeted quality improvement initiatives to focus on for 2022/23 CCC will continue to support the audit and submit treatment data for 2022/23
NOGCA (Oesophago-Gastric Cancer)	The annual report and recommendations were reviewed by the SRG Chair. There were nine recommendations from the national report, of which four were applicable to CCC: **Recommendation 1:** Review the oesophago-gastric cancer care pathway and identify ways to improve the time patients take from referral through to diagnosis and treatment, to support implementation of the OG cancer timed diagnostic pathway. **Action:** Cancer waiting times is actively monitored by the Trust dedicated team **Recommendation 2:** Explore the reasons for the regional variation in the adoption of the FLOT chemotherapy regimen among patients undergoing curative surgery. Action: No action required: CCC is above the national average of those treating with FLOT

NOGCA (Oesophago-Gastric Cancer)	**Recommendation 3:** Explore variation in the use of triplet versus doublet regimens for palliative chemotherapy, and the reasons why patients receiving palliative chemotherapy were unable to complete their treatment. Where appropriate, develop plans to address the issues identified. **Action:** CCC record reason for treatment stopping as a part of national systemic anti-cancer therapy dataset and this is quality checked monthly. This data can be shared and monitored by the SRG and used to inform clinical audits. The Quality Manager for Audit & Statistics is working with an Upper GI consultant to investigate reasons for stopping treatment in this cohort. **Recommendation 4:** Investigate the reasons for low use of evidence-based regimens for palliative radiotherapy and the preference for alternative regimens in some regions **Action:** CCC to investigate the 21 patients treated with non-protocol radiotherapy fractionation and liaise with the national team CCC will continue to support the audit and submit treatment data for 2022/23
NCLA (Lung Cancer)	The annual report demonstrated the Trust's 1-year survival after diagnosis for Cheshire & Merseyside Cancer Alliance is in line with national standard at 44.58%. The annual report and recommendations were reviewed by the SRG Chair. There were four recommendations from the national report, of which one was applicable to CCC: **Recommendation 1:** Cancer alliances with lower than expected curative-intent treatment rates for stage I/II PS 0–2 NSCLC should review their processes for selection of patients for such treatment, in order that a rate of at least 85% is achieved **Action:** Quality Management for Audit & Statistics is running reports on curative intent treatment rate percentages for stage I/II PS 0-2 NSCLC patients diagnosed during 2019 & 2020 and will liaise with the Lung SRG Chair if an action plan is required.

NCLA (Lung Cancer)	CCC will continue to support the audit and submit treatment data via the COSD submissions for 2022/23
NPCA (Prostate Cancer)	The annual report demonstrated that of patients who received radiotherapy treatment from the Trust, 5% (adjusted rate) patients had gastrointestinal complication, which is lower than the national average of 10.9%. The annual report and recommendations have been shared with the SRG Chair for review, after which an action plan will be devised for those recommendations applicable for CCC if required. CCC will continue to support the audit and submit treatment data via the COSD submissions for 2022/23
The National Audit of Breast Cancer in Older Patients	The annual report and recommendations were reviewed by the SRG Chair. There were six recommendations from the national report, of which two were applicable to CCC: **Recommendation 1:** Recording of routine data items: Investigate consistency between recording of recurrence in breast units and the low percentages of recurrence found in national datasets, by reviewing the process of capturing these data within a breast unit, and ensuring these data are uploaded to cancer registration. **Action:** No action required. CCC actively provide breast recurrence data into monthly COSD submission **Recommendation 2:** Outcomes for patients with breast cancer: Breast cancer oncology teams should review chemotherapy associated morbidity in their units, with the aim of reducing unplanned chemotherapy-related admission rates. **Action:** The annual report demonstrated that the national average of unplanned admission after adjuvant chemotherapy is 29%. Cheshire & Merseyside Cancer Alliance is demonstrated assurance at only 14%.

The National Audit of Breast Cancer in Older Patients	However the national report excluded CCC admissions. Therefore CCC will collate a local unplanned admission dataset to add to the published data to complete the regional dataset. CCC will continue to support the audit and submit treatment data via the COSD submissions for 2022/23
RCR National audit of adjuvant breast radiotherapy	The national audit found that, despite established consensus statements and NICE guidelines, there persists variation in breast radiotherapy practice in the UK. The results of practice-changing trials showing the benefit of cardiac-sparing radiotherapy techniques, partial breast radiotherapy and internal mammary nodal radiotherapy have not been fully implemented. This audit highlights areas for targeted quality improvement and future consensus statements. Quality Manager for Audit & Statistics to review the 2021/22 Postoperative radiotherapy for breast cancer: UK Consensus Statements.

*SRG – Site Reference Group

4.6. **CQUINS**

The Trust had no CQUINs in 2021/22 as CQUINS were paused nationally during the COVID-19 pandemic.

4.7. **Patient Led Assessments of the Care Environment (PLACE)**

No assessment was completed in 2021/22 due to COVID-19 restrictions.

4.8. Data quality

The Clatterbridge Cancer Centre NHS Foundation Trust submitted records during 2021/22 to the Secondary Uses Service for inclusion in the Hospital Episode Statistics which are included in the latest published data. The percentage of records in the published data:

- Which included the patient's valid NHS Number was: 99.9% for admitted patient care and 99.9% for outpatient care. The Trust does not provide accident and emergency care
- Which included the patient's valid General Practitioner Registration Code was: 99.4% for admitted patient care and 98.8% for outpatient care. The Trust does not provide accident and emergency care

The above figures are in line with the SUS data quality dashboard methodology:

- Where there is an NHS number this is classed as valid
- The General Practitioner Registration Code figures include the default not known/not applicable codes as valid
- The General Practitioner Registration Code figures class any GP Practice that was closed prior to the beginning of the financial year as invalid

Self-assessment against the NHS Digital Data Protection and Security Toolkit for 2021/22 is due for completion by the end of June 2022.

CCC was subject to the Payment by Results clinical coding audit during 2021/22 by the Audit Commission and gained substantial assurance. An action plan for the recommendations from this audit has been completed. The Clinical Coding Team now code the Trust Haemato-oncology patients that have transferred from Liverpool University Hospitals NHS Foundation Trust.

Data quality improvement plans 2021/22

Good quality information that is accurate, valid, reliable, timely, relevant and complete is vital to enable the Trust and our staff to evidence that high quality, safe and effective care is delivered.

Good quality information also supports the Trust to manage service planning, performance management and commissioning processes.

The Trust has a Data Quality Policy in place which outlines expected standards around data recording. The Trust has an active Data Management Group which is chaired by the Director of Finance and meets monthly with a clear focus on Data Quality and Business Intelligence. The Trust has made significant progress in 2021/22 in the Business Intelligence provision. There are now multiple Power BI dashboards available in the Trust to support access to accurate and timely information. A number of these dashboards are designed to support timely and accurate entering of data.

The importance of Data Quality is highlighted in Electronic Patient Record (EPR) system training along with the importance of good record keeping.

4.9. Workforce

Staff Survey 2021

The Trust is committed to listening to the views of staff and recognising their achievements on a regular basis. We believe that motivated and engaged staff deliver better outcomes for our patients and our ongoing aspiration is to improve levels of staff engagement on a year-on-year basis, as measured by the NHS National Staff Survey.

In line with the commitment in the 2020/21 People Plan, the 2021 survey has been redeveloped to align with the People Promise. From 2021 the survey will track progress towards the seven elements of the People Promise. With this aim in mind, the questionnaire has been through an extensive redevelopment process to ensure the questions are fully aligned with the People Promise. Existing questions have been mapped to the elements of the People Promise: new questions have been developed to address any gaps; some questions have been removed following national engagement.

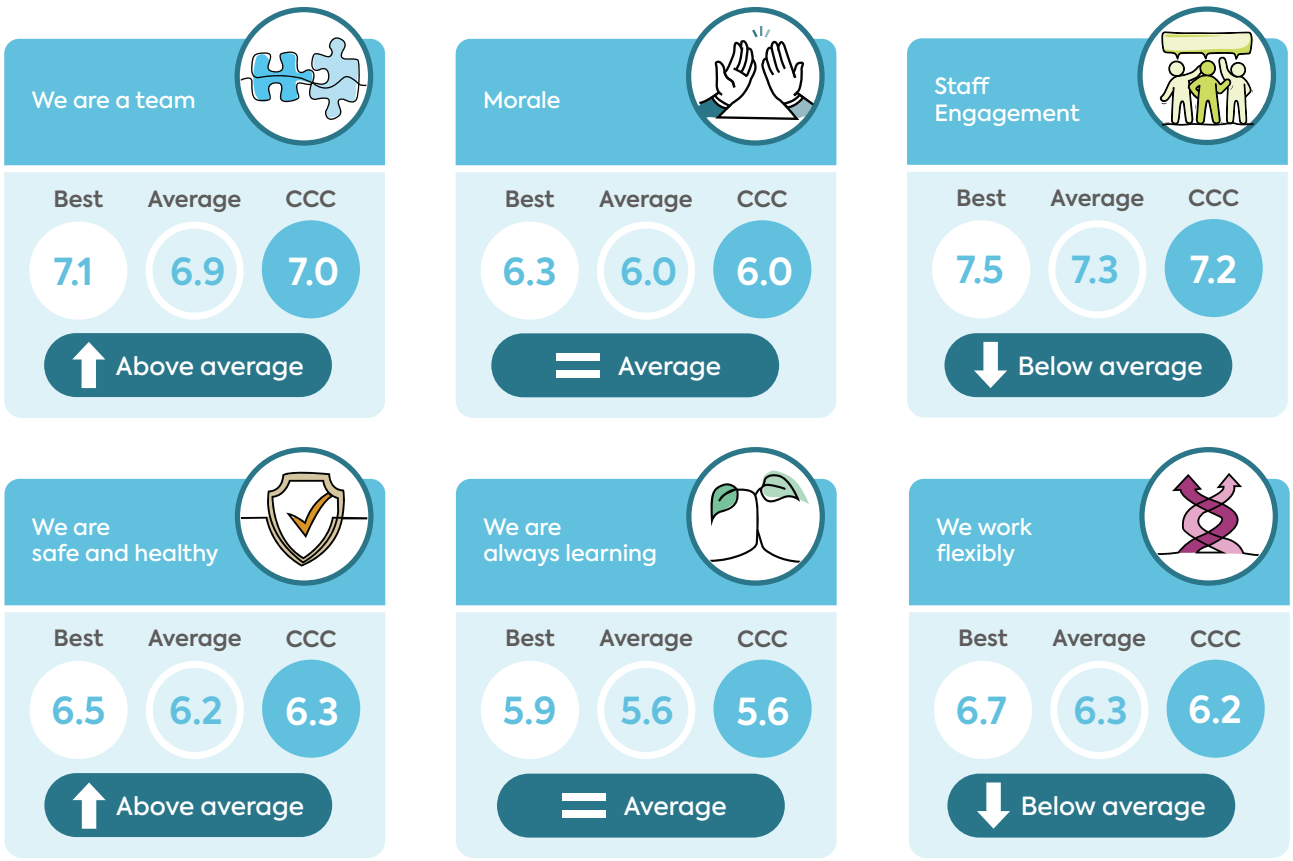
These changes mean that we are unable to make comparisons to previous years at a theme level, with the exception of staff engagement and morale which remain unchanged.

The 2021 NHS National Staff Survey took place during September – November 2021.

The response rate to the survey was 62% (976), which was an increase from 2020 when the response rate was 58% (862). The response rate was above average of 54% for Specialist Acute Trusts.

The survey results are categorised under seven primary People Promise themes and the staff engagement and morale themes. They are scored on a scale of 0-10 where a higher score indicates a better result.

2021 staff survey results



Figures show CCC compared with other specialist acute trusts

Each theme also has sub-themes which operate under the same scoring system.

Against the themes CCC scored:

- Best for Reward and Recognition
- Above Average for Compassionate and Inclusive, Having a Voice that Counts, Safe and Healthy, and Team Work
- Average for Morale and Always Learning
- Below Average for Staff Engagement and Working Flexibly

We remain committed to continuing to work with staff to ensure it achieves the strategic objective of being a great place to work by building on the priorities outlined in our new People Commitment.

The results of the staff survey were communicated to the Trust as a whole and were reported through the committee structures.

Divisional listening events took place for local results to be disseminated and discussed with staff and for the co-creation of divisional improvement plans. These plans are monitored and reviewed via the divisional culture and engagement groups, divisional performance reviews and People Committee.

Key areas for focus in 2022/23 include:

- Continuing to engage with teams to focus on how we can make the Trust an even better place to work and receive care
- Further enhancing opportunities for staff development and further refining the Trust's appraisal system
- Continued focus on further improving staff wellbeing, staff engagement and morale

4.10. **Clinical education**

The Trust is committed to the provision of high-quality education and training for all staff, ensuring a highly-skilled workforce fit for the future. In 2021/22 we have continued to work closely with our key education partners across Cheshire and Merseyside and nationally to support all learners (internal and external) to develop and grow their potential, ensuring delivery of highly-skilled patient care, and enhancing our reputation as a lead provider of cancer education.

Clinical Education delivery during the pandemic has continued to provide both challenge and opportunity. We have adapted and responded, embracing technology and enhanced, interactive teaching styles utilising online platforms as well as blended learning approaches. In providing access to responsive teaching and assessing environments, we have continued to work at pace to ensure the quality and accessibility of learner support, both in practice placements, continuous professional development opportunities and academic modules.

Through renewed governance arrangements in 2021/22, oversight and assurance of all Trust education and training provision has continued via the Education Governance Committee, reporting into the Quality Committee of the Board. Education and training is a key focus in the Trust's Five Year Strategic Plan 2021 – 2025.

Key achievements

Educational Key Performance Indicators – all successfully met, including all regulatory and contractual obligations. Delivery against the Clinical Education Strategy 2019-22 implementation plan has met all milestones during 2021/22

Course Delivery – Between April 2021 and March 2022, the Clinical Education Department Senior Lecturing Team used a virtual/blended approach to course development & delivery and successfully delivered 23 new and redeveloped academic modules, short courses, and workshops to a total of 243 learners (134 internal, 109 external). Despite the pandemic, 76% of places offered were filled, with 100% positive evaluation feedback.

New academic pathway launch – A new joint CCC/University of Liverpool (UoL) Masters in Cancer Care was successfully launched in September 2021. CCC Masters in Cancer Care academic modules have also been added into the UoL MSc Advanced Practice in Healthcare, and MSc Advanced Clinical Practitioner (degree apprenticeship). The UoL School of Medicine & Palliative Care have made an approach regarding future collaborations with the Trust's Clinical Education Department.

Learner support – Through our expert Practice Education Facilitators and Clinical Educators, we have continued to support both Allied Healthcare Professionals (AHP) and Clinical Scientist learners, as well as Return to Practice Nurse learners and expanded student Nurse and AHP placement capacity. Feedback from our nursing students via a Health Education England (HEE) Quality visit in July 2021 was highly positive. Deployment of a coaching model is utilised to support all Trust learners. In 2021/22 the Trust welcomed its first cohort of international nurses who were supported to successfully undertake their UK professional examinations. In addition, a new two-year Preceptorship offer has been launched and aligned to the North West Framework. Successful achievement of the Care Certificate national qualification has also continued to be supported for all Trust health care support workers.

Medical mock exam success – Fellow of the Royal College of Radiologists (2) mock exam was successfully delivered online for both regional, national and international doctors for the first time in September 2021, with all places filled.

HEE Funding – secured to train nine new qualified non-medical prescribers in the Trust in 2021/22. HEE Continuous Professional Development funding has also supported delivery of numerous education and training opportunities for nurses, nurse associates and allied health professionals in 2021/22. HEE funding was also secured to support regional clinical nurse specialist and Systemic Anti-Cancer Therapy (SACT) training, with further recovery funds granted for education and training, and a large investment grant of £296,182.09 was approved for the purchase of Trust workforce upskilling in clinical skills with new educational and simulation equipment now in place.

New library service level agreement – was successfully negotiated with Liverpool University Hospitals and commenced on 1st August 2021, providing staff and learners with access to a new, comprehensive support service and a wider library catalogue.

Social worker students – New collaborations have been successfully developed with higher education institutes (Liverpool John Moores University, Liverpool Hope and Edge Hill University) to provide Trust placements to social worker learners for the first time.

Nursing and paramedic students – We have developed a new collaboration with Edge Hill University to support Nursing and Paramedic learner placements for their dual qualification course for the first time.

Resuscitation training – Intraosseous drill training was introduced to support advanced resuscitation skills and training. A new combined Resuscitation and Deteriorating Patient Committee has been launched to provide oversight and assurance of continued optimal, safe patient care.

Trainee nursing associates – Five staff learners were supported to study to undertake this new role and are now qualified as Registered Nursing Associates.

Advanced Communication Skills Training Courses 2021/22 – Successful partnership working, delivery & outcomes from a new fully online blended and interactive learning approach to delivery of Advanced Communication Skills Training (ACST).

Development of a regional ACST Facilitator pool initiated – Supporting future sustainability of ACST Courses across Cheshire and Merseyside. Two local facilitators are near completion of their programme.

Aims & next steps

- Working collaboratively with key education partners both regionally and nationally, we will continue to support all staff and learners to maximise their potential through high-quality, evaluated education provision, which responds to the wider NHS national priorities and engages with new advances and innovations in cancer care
- We will continue to optimise patient-focused education development, supporting new ways of working and encouraging career ambition
- We will also develop a new multi-professional education strategy, supporting the professional development, recruitment and retention of a highly-skilled workforce fit for the future
- We will also continue our partnership working both regionally and nationally, supporting and enhancing our reputation as a lead provider of cancer education

4.11. Raising concerns

The Trust Board is committed to listening to our staff, learning lessons and improving patient care and supporting an open and honest culture where staff feel comfortable and safe to speak up.

There are a number of ways in which staff here at CCC can raise concerns they have around patient safety.

The Trust has a Freedom to Speak Up: Raising Concerns in the Workplace Policy which supports staff who wish to raise a concern around patient safety. This was reviewed and refreshed during 2020/21.

We encourage staff to raise concerns through their line management structure but we recognise that staff will not always want to use this route. We have a Lead Freedom to Speak Up Guardian in the Trust who is supported by three Local Guardians whose contact details are widely publicised, and an Executive Lead who supports the process.

In addition, we have during the last year enlisted the support of a number of 'Speaking Up Champions' from a variety of disciplines to encourage staff to speak up if they have any concerns.

During 2021/22, 1 contact was made via the Freedom to Speak Up Guardians, which reached resolution for the individual concerned.

Activity is reported on an anonymous basis to the Quality Committee and Trust Board.

In addition the Trust now has 26 qualified Mental Health First Aiders situated across the Trust whose contact details are readily available on the intranet.

Part 5:
Research and Innovation

This year, the R&I Directorate endeavoured to build a recovery from the challenges of the COVID-19 pandemic. However, the year was not without challenge with support given to aiding Pharmacy in delivery of novel drug trials. Nonetheless, the focus of R&I turned to embedding into CCC-Liverpool with the benefits that gave us in developing novel research activity, both in terms of early phase trials and in CCC-led research.

CCC welcomed the joining of the Haemato-oncology team from Aintree University Hospital, thereby linking a fully integrated service for our blood cancer patients and expanding our research into our northern hub. We also continued to expand the diversification of the research portfolio in terms of translational, real world trials and qualitative studies bringing a different dimension to the portfolio. The appointment of a new Innovation Manager and Clinical Lead for Innovation bring another key element to the activity of R&I.

These appointments and the refresh of the Bright Ideas initiative are already making a difference to our patients and we look forward to reporting on the benefits of the Innovation Strategy for the Trust that is being developed. The new Clinical Director of Research was appointed and the implementation of the Trust Research Strategy is beginning to be realised and notably the CCC Biobank has been re-opened. Therefore there has been a real step change in the opportunity afforded for our patients to access novel research and therapies.

Key achievements:

- Opened 45 research trials and studies to recruitment (53 given permission to open at CCC)
- 1,113 new participants into research studies
- 789 non-commercial/portfolio patients recruited, exceeding the national target and securing £20k
- Significantly increased the number of clinician-led studies for which CCC acts as Sponsor with 11 trials and studies open and 6 in set-up and 1 reported
- 100% of clinical trials unpaused as part of COVID-19 recovery, which has exceeded the national recovery targets
- Key partner in the successful £5.3m NIHR Liverpool Clinical Research Facility bid which is a partnership between CCC, Liverpool University Hospitals and Liverpool Heart and Chest Hospital
- Biobank renewal of research ethics secured for a further five years, maximum life cycle given
- 'Significant Assurance' achieved for a MIAA audit which reviewed R&I's financial and governance arrangements. This shows the systems and procedures that are in place are working well
- Appointment of an Innovation Manager and Clinical Lead for Innovation to R&I

Early Phase Trials and Clinical Research Facility

This year focused on the further development of capacity to support early phase trials from First in Human, through Phase I to Phase II. This capacity is a realised benefit of the opening of CCC-Liverpool as, without the new hospital, the Trust could not support such research. In last year's report, we described the implementation of an Early Phase Trials Unit. We are delighted that we now have four bespoke inpatient rooms on Ward 4 to support such novel trials, offering our patients the opportunity to access state-of-the art cutting edge therapies in cancer immunology.

This is an excellent example of novel research embedding in the Trust and has received support from the ward staff. To date we have supported such novel trials as:

- Transgene: A randomised phase I trial in patients with newly diagnosed locoregionally advanced, HPV-negative, squamous cell carcinoma of the head and neck (SCCHN) evaluating a mutanome-directed immunotherapy initiated a completion of primary treatment at time of recurrence

- MOAT: A multicentre, open-label, non-randomized, phase Ib, neoadjuvant study of intravenous dosing of NG-641, an oncolytic adenoviral vector expressing a fibroblast activation protein-directed bi-specific T-cell activator antibody fragment (FAP-TAc) and an immune enhancer module (CXCL9/CXCL10/interferon alpha2), as monotherapy or in combination with pembrolizumab in patients with surgically resectable squamous cell carcinoma of the head and neck. CCC was the first UK site to open MOAT and also recruited the first UK patient onto the study

- Immunocore 103: A Phase 1/2 First In Human Study Of The Safety And Efficacy Of Imc-C103c As A Single Agent And In Combination With Atezolizumab In Hla-A*0201 Positive Patients With Advanced Mage-A4-Postive Cancer

There are a number of such trials in the pipeline and the facility is already well used. CCC was also a key partner in the successful NIHR Liverpool Clinical Research Facility (CRF) bid. The NIHR awarded £5.3 million to the Liverpool CRF which is a partnership between CCC, Liverpool University Hospitals and Liverpool Heart and Chest Hospital to address the needs of the local population. This means we now have national recognition for this research and a platform for collaboration over the forthcoming years.

Clinical trials portfolio

The portfolio of clinical trials and research available to participants continues to evolve. In particular, we support not only those trials open at CCC; we are also the regional centre for radiotherapy research supporting adjuvant and neo-adjuvant trials in collaboration with surgeons across the region. We have once again worked to diversify the portfolio for patient access where 29 of the research studies opened this year were real world / observational / translational. The R&I team supporting those trials was also expanded and are led by a dedication Research Practitioner. As we have come to expect, CCC achieved some notable 'firsts' and achievements again:

- CCC was the first site to open in the UK for the Brioche Trial. This study considers patients with recurrent glioblastoma

- The Proact team recruited their first patient into this study. It is the first cancer/cardiac impact study that CCC has participated in

- CCC is the highest recruiter for the Flaura 2 study

- CCC was the highest recruiter for the IMPACTOR study

- Rhovac is a vaccine study for patients with early prostate cancer. This is a new type of study for the Urology Portfolio

- A CCC patient was one of the first in the UK to have a new ovarian cancer treatment after genomics testing
- We supported a national Radiotherapy data study which will hopefully provide a better insight into the impact of COVID-19 on patient outcomes, treatment policy and prioritisation in radiotherapy and on the UK Radiotherapy service. In total CCC has collected data for 1,964 patients
- CCC was the highest recruiter for SCOPE 2
- iLive project: Live well, die well. This is a research programme to support living until the end. This is the first Palliative Care Trial where CCC is a participating site
- MK3476-867 – SBRT with or without Pembrolizumab in Participants with Non-Small Cell Lung Cancer: CCC is the lead recruiter in the UK
- CCC was the highest recruiter in Europe for the Checkmate-73L study. This is a Phase 3, Randomized, Open Label Study to Compare Nivolumab plus Concurrent Chemoradiotherapy (CCRT) followed by Nivolumab plus Ipilimumab or Nivolumab plus CCRT Followed by Nivolumab vs CCRT followed by Durvalumab in Previously Untreated, Locally Advanced Non-Small Cell Lung Cancer (LA NSCLC)
- CCC was the highest recruiter in the UK for the Keynote 867 study. This is a Phase 3, Randomized, Placebo-Controlled Clinical Study to Evaluate the Safety and Efficacy of Stereotactic Body Radiotherapy (SBRT) with or without Pembrolizumab (MK-3475) in Participants with Unresected Stage I or II Non-Small Cell Lung Cancer (NSCLC)
- CCC is the top recruiting site for the Finding My Way study. This study is determining the efficacy of an online CBT therapy intervention

The R&I team had success in securing additional funding to aid trial recovery following the pandemic:

- Successfully secured £87k from the Clinical Research Network North West Coast (CRN NWC): Managed Recovery Funding Call November 2021. The funding call was set up to help aid the recovery of trials from the impact of the pandemic
- Successfully secured £65k form the North West Coast Managed Recover Funding Call 2021/22 – this was awarded to CCC to aid the recovery of five commercial studies, which were open during 2020/21 and affected by the pandemic

CCC-led trials and studies

Once again, we have expanded the portfolio of research for which CCC acts as Sponsor. This is a key area for R&I to support and encourage CCC-led research for patient benefit. Eleven research studies are open, with 6 in set-up and 1 reported. This is also a diverse portfolio, increasing research reach throughout the Trust and encouraging CCC staff to develop studies for our patient benefit. The portfolio has breadth and includes CTIMP, radiotherapy, translational, real world and COVID-19 research, which is important in understanding the impact of this virus on cancer patients.

Most notably:

- TACE 3 Trial: A two-arm multi-stage (TAMS) seamless phase II/III randomised trial of nivolumab in combination with TACE/TAE for patients with intermediate stage HCC went international, securing regulatory approvals to open in France. This is the first time a CCC-led trial has opened internationally

- UNCOVER: Understanding the impact of SARS-CoV-2 infection in patients with blood cancer opened

- CCP CANCER Clinical Characterisation Protocol for Severe Emerging Infections in the UK – a prospective companion study for patients with Cancer and COVID-19 opened

- Burdett: Exploring the impact of the COVID-19 pandemic on the psychological well-being of nurses working in the cancer setting across Cheshire and Mersey opened. This is important to understand the effect of COVID-19 on the health and wellbeing of nurses across this region

CCC also had success in obtaining research grant awards:

- Dr Hale has been awarded a £10,000 grant from the Pancreatic Society of Great Britain and Ireland to look at microbiome changes in pancreatic cancer

- Dr Warren of the University of Liverpool (UoL) has been awarded a prestigious Fellowship after receiving seed funding by the CCC Research Development Fund 2019. UoL will undertake the research into radiotherapy side-effect reduction for lung cancer patients. The research will test how accurately MRI can describe tumour position and movement and therefore, by improving its accuracy, reduce the side-effects of the radiation

- Dr Coyle received £99,926 (with Prof Probert at the University of Liverpool) from the University of Liverpool Enterprise Investment fund for his 'Proof of concept funding for predicting dying' study

CCC Biobank

The CCC Biobank renewed its research ethics for another five years (maximum allowed term) and reopened following the pause due to the pandemic. The renewal allowed the Biobank to expand the nature and type of biological samples collected. This, in tandem with the appointment of the new Biobank and Trials Laboratory Manager, gives a huge opportunity for the Biobank in CCC-Liverpool to fulfil its role as the central cancer biobank to support high-quality research into the mechanisms of cancer, biomarker discovery and therapeutic benefit and collaborate with researchers across the region and nationally.

Summary

The last year has been spent in recovery from the pandemic and re-centering the R&I focus to supporting the best in cancer research, both as a participating site and as a Sponsor of CCC clinician-led research. The year has not been without challenge, but once again, there are notable successes to report, with not only a fully-diversified portfolio but also the step-change into fully supporting early phase research with the CCC CRF in Ward 4. We have remained nationally and internationally competitive in recruitment to trials and remain committed to offering our patients the best in novel agents and therapies within the research portfolio.

Statement of Trust Directors' responsibilities for the Quality Report

The Directors are required under the Health Act 2009 and the National Health Service (Quality Accounts) Regulations to prepare quality accounts for each financial year.

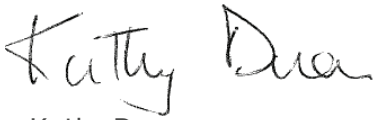
NHS Improvement has issued guidance to NHS Foundation Trust Boards on the form and content of annual Quality Report (which incorporate the above legal requirements) and on the arrangements that NHS Foundation Trust Boards should put in place to support the data quality for the preparation of the Quality Report.

In preparing the Quality Report, directors are required to take steps to satisfy themselves that:

- the content of the Quality Report is not inconsistent with internal and external sources of information including:
    - o Board minutes and papers for the period April 2021 to March 2022
    - o papers relating to quality reported to the Board over the period April 2021 to March 2022
    - o feedback from specialist commissioners dated April 2021 to March 2022
    - o feedback from governors
    - o the Trust's complaints report published under regulation 18 of the Local Authority Social Services and NHS Complaints Regulations 2009, (Our complaints report for 2020/21 was published in the Patient Experience Annual Report, October 2021. The complaints report for 2021/22 has yet to be published)
    - o the National Inpatient Survey 2020 (published October 2021) and the National Cancer Patient Experience Survey 2020 (published November 2021)
    - o the National Staff Survey dated March 2022
- the Quality Report presents a balanced picture of the NHS Foundation Trust's performance over the period covered
- the performance information reported in the Quality Report is reliable and accurate
- there are proper internal controls over the collection and reporting of the measures of performance included in the Quality Report, and these controls are subject to review to confirm that they are working effectively in practice
- the data underpinning the measures of performance reported in the Quality Report is robust and reliable, conforms to specified data quality standards and prescribed definitions, and is subject to appropriate scrutiny and review
- the Quality Report has been prepared in accordance with NHS Improvement's Annual Reporting Manual and supporting guidance (which incorporates the Quality Accounts regulations) as well as the standards to support data quality for the preparation of the Quality Report. The Directors confirm to the best of their knowledge and belief they have complied with the above requirements in preparing the Quality Report.

By order of the Board
Approval of the Quality Report

Liz Bishop
Chief Executive



Kathy Doran
Chair

NHS Liverpool Clinical Commissioning Group
NHS Knowsley Clinical Commissioning Group
NHS Sefton Clinical Commissioning Group
NHS Southport and Formby Clinical Commissioning Group
NHS Halton and Warrington Clinical Commissioning Group
NHS St Helens Clinical Commissioning Group
NHS England and Improvement Specialised Commissioning

Quality Account Statement 2021-22
Clatterbridge Cancer Centre NHS Foundation Trust

NHS Liverpool, Sefton, Southport & Formby, Knowsley, Halton and Warrington and St Helens CCG's along with NHSE/I Specialist Commissioning welcome the opportunity to jointly comment on the Clatterbridge Cancer Centre NHS Foundation Trust Draft Quality Account for 2021-22. It is acknowledged that the submission to Commissioners was draft and that some parts of the document may require updating. Commissioners look forward to receiving the Trust's final version of the Quality Account.

The Trust has continued in 2021/22 to manage the challenges posed due to the ongoing COVID-19 pandemic. We would like to take this opportunity to thank the Trust and its staff for the work it has undertaken through the different waves of the pandemic to adapt and deliver care and for their support in providing mutual aid to support the wider system and by supporting the COVID vaccination program.

Commissioners have worked closely with the Trust throughout 2021/22 to gain assurances that the services delivered were safe, effective, and personalised to service users. The Commissioners share the fundamental aims of the Trust and supports their strategy to deliver high quality, harm free care.

The Trust's presentation of its Quality Account was an honest, open, and positive demonstration of the improvements made to date and an acknowledgement of areas that need to be developed further. The account reflects good progress on most indicators.

This Account details the Trust's commitment to improving the quality of the services it provides, with commissioners supporting the key priorities for the improvement of quality during 2021/22 which were:

- Develop and implement Infection Prevention and control E. coli bundle to reduce the number of CCC associated infections
- Deliver sustained and effective training in escalation and management of incidents and risk
- Support a culture of safeguarding awareness, reporting & practice measured against internal and multi-agency action plans
- Reduce avoidable harm so 95% of all inpatients receive VTE risk assessment and 100% receive prescribed prophylaxis
- Ensure timely and efficient Sepsis/News2 patient management

- Strengthen safer staffing through digital monitoring systems
- Strengthen safety culture through standardisation of safety huddle agenda
- Invest in research and innovation to deliver excellent patient care in the future

In the Quality Account for 2020/21, the Trust provided progress reports for all key quality priorities detailed in the previous Clinical Quality Strategy 2019 – 2021. The development of the next iteration of the Quality Strategy was deferred by the Trust, and the existing priorities carried over for 12 months. This decision was made to ensure the Trust could prioritise and focus on the engagement, development and launch its new Trust Five Year Strategy, which was approved and launched in May 2021. The Trust 2022 – 2025 Clinical Quality Strategy is currently under development, with ongoing Trust wide engagement and will be launched later this year.

The Trust goals continue be to reduce avoidable harm, achieve the best clinical outcomes and provide the best patient experience, therefore have continued to move forward, and improve on the previous year's objectives for 2022/23.

The report was honest, reflective, and clearly demonstrates progress and ambition within the Trust. It identifies where the organisation has done well, where further improvement is required and what actions are needed to achieve these goals, in line with the Trust Quality Strategy. Through this Quality Account and on-going quality assurance process the Trust clearly demonstrates their commitment and ambition to improving the quality of care and services delivered to become a world class cancer provider.

The Trust places significant emphasis on its innovation and safety agenda; demonstrating commitment to continuous evidence-based quality improvement, research, audit, and promotion of a fair and just culture. This is reflected in the work being undertaken with the launch of a new Patient Safety Group to improve shared learning and a new Executive Review Group (ERG) was established to review and grade all incidents, compliant and claims. It was also very positive to hear about the innovation and service development; including acute oncology; and diagnostic service improvement.

The work that the Trust has undertaken to improve outcomes on the following work streams are of particular note.

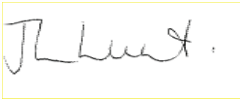
- Achieved full integration of Haemato-oncology service provision in early 2022 in collaboration with Liverpool University Hospitals Foundation Trust (LUHFT).
- In October 2021 CCC Liverpool site was successfully accredited by BSI as part of the ISO – 9001 (Quality Management) accreditation already held by Radiation Services across other Trust sites (CCC – Wirral and CCC – Aintree).
- CiC expanded and focused growth in 4 key areas:
    - Immunotherapy (IO)
    - Haemato-oncology
    - Continued treatment and expansion of HER2 directed therapies (specifically pertuzumab/trastuzumab)

- Compassionate use program
- CCC opened 45 research trials and studies to recruitment (53 given permission to open at CCC).100% of clinical trials un-paused as part of COVID-19 recovery which has exceeded the national recovery targets.
- CCC have consistently maintained Trust wide mandatory training compliance over 90%
- CCC consistently score above average for all aspects of the National Staff Survey

Commissioners acknowledge the significant work undertaken by the Trust in relation to improving quality and safety standards and the continued focus to strive for excellence. In supporting staff development, keeping patient needs central, in particular the priority on the development and implementation of an Infection Prevention and control E.coli bundle to reduce the number of CCC associated infection and the introduction of a sustained and effective training on the escalation and management of incidents and risk

Commissioners are aspiring through strategic objectives and five year plans to develop an NHS that delivers great outcomes, now and for future generations. This means reflecting the government's objectives for the NHS set out in their mandate to us, adding our own stretching ambitions for improving health and delivering better services to go even further to tailor care to the local health economy. Providing high quality care and achieving excellent outcomes for our patients is the central focus of our work and is paramount to our success.

It is felt that the priorities for improvement identified for the coming year are challenging and reflective of the current issues across the health economy. We therefore commend the Trust in taking account of new opportunities to further improve the delivery of excellent, compassionate, and safe care for every patient, every time.



Jane Lunt
Chief Nurse
NHS Liverpool CCG

Signed on behalf of the Chief Nurses for NHS Liverpool, South Sefton, Southport & Formby and Knowsley Halton and Warrington and St Helens CCG's

The Clatterbridge Cancer Centre (CCC) NHS Foundation Trust, Quality Account 2021/2022

Comments from Healthwatch Liverpool

Healthwatch Liverpool welcomes the opportunity to comment on The Clatterbridge Cancer Centre's Quality Accounts for 2021-2022. We congratulate the Trust on another year of positive achievements in challenging times, including being one of best performing Trusts according to the National Inpatient Survey, and the National Cancer Patient Survey.

Whilst there are always improvements that can be made (e.g. improving early identification and treatment of sepsis; a reduction in C. diff cases, and an increase in cancer treatment within 62 days of screening, notwithstanding the low patient numbers involved), this Quality Account document sets out many examples of excellent work.

It is encouraging, for instance, to see such good work being undertaken on infection prevention and control (IPC), particularly given the extra vulnerability of the Trust's patients. The clear commitment to working with partners on earlier diagnosis and treatment is also to be commended.

The full integration of the haematology service with the Royal Liverpool Hospital is a notable achievement and, from a Healthwatch perspective, it's particularly pleasing that the eight pledges in the Patient and Public Involvement and Engagement Strategy (2019 – 2021) have been met.

The very positive feedback from the 2021 staff survey is heartening. Regarding the latter, we will be interested to see whether the slightly less positive markers, such as the 'staff morale' and 'always learning' elements and, in particular, 'staff engagement' and 'working flexibly', improve over the next 12 months.

A commitment to patient safety and positive patient experience, including safeguarding, is clear, not only within the Executive Review Group but throughout the Trust. It is also good to see that the mental health support needs of patients and staff are highlighted as being important to the Trust.

It's encouraging to see so much work taking place around learning disability, autism, and dementia and it would be interesting to know more about how other aspects of Equality, Diversity and Inclusion (EDI) are also being addressed.

The home treatment service, 'Clatterbridge in the Community', has developed markedly since the start of the pandemic and appears to be working well to support vulnerable patients whilst being cost effective and increasingly eco-friendly. This is an excellent development.

Work on digital services, including the digital patient stories library, has also been impressive but we would like to see more information about digital inclusion/exclusion and how this is being addressed. It's also good to see a focus on clear and timely communication with patients, and the success of the Chatter Buddies programme.

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In relation to waiting times for treatment, we note the impact of the pandemic on the wider health and social care sector, and the reduced access across the board to e.g. referral, diagnosis and treatment of patients. However, the Trust has adapted very well to the ongoing challenge of the pandemic, through staff flexibility, redeployment of staff as required to meet safer staffing levels, innovative ways of working and ongoing in-house training.

We congratulate the Trust on 96% compliance against the 90% NICE guidelines target on patient outcomes, and on maintaining Trust-wide mandatory training compliance at over 90%.

We support the Trust's reprioritisation of shared learning across Cheshire and Merseyside in partnership with Cheshire and Merseyside Cancer Alliance. We are also pleased to see the emphasis on sharing learning from PALS and Complaints across the patient pathway, to improve patient experience and outcomes. We continue to support placing patient experience/feedback at the heart of service design and development, and we welcome the planned relocation of complaints management within the Patient Experience Team, and the Trust's ongoing commitment to deliver the National Cancer Patient Experience Survey (NCPES) Action Plan 2020 by quarter three of 2022.

We hope to continue our involvement with the Patient Experience and Inclusion Group (PEIG) and the Patient Participation Group (PPG) in the coming year, and to arrange some on-site visits when possible.

Healthwatch Liverpool was pleased to work closely with CCC on our online 'Meet Liverpool's Cancer Professionals' seminar in November 2021, and we hope to conduct similar events in the future. We also look forward to working with the Trust's new Patient Experience Lead, and to reading the 2022-2025 Clinical Quality Strategy in due course.

Appendices

Appendix 1: Learning from Deaths

Appendix 2: Local audits / quality improvement projects

Appendix 1:
Learning from Deaths

Inpatient deaths

During 2021/22, 132 patients died as an inpatient at The Clatterbridge Cancer Centre. The number of deaths in each quarter of the year is shown below.

Inpatient deaths by quarter 2021/22

2021/22	Inpatient Deaths
Q1	29
Q2	31
Q3	34
Q4	38
Total	132

Our mortality review process includes up to three stages:

- Phase I – Consultant case record review of own case
- Phase II – Multidisciplinary case selection panel
- Phase III – Trust-wide formal multi-disciplinary mortality & learning from deaths review meetings

As of 31st May 2022, with regards to the 132 inpatient deaths that occurred during the year:

- 80 (61%) case reviews had completed phase I
- 76 (94%) of these were further investigated at phase II
- 11 of those were further selected for discussion at phase III, the Trust's formal Mortality Review Meeting

52 of the 132 cases still require phase I review and will be completed during 2022/23.
56 of the 132 cases still require phase II review and will be completed during 2022/23.
4 cases require phase III review: 3 are booked to be discussed during Q2 2022/23 and 1 date is yet to be confirmed.

Out of the 7 cases discussed at the formal phase III mortality review meeting in 2021/22, the number of deaths in each quarter for which a case record review or an investigation was carried out was:

- 2 in the first quarter 2021/22
- 4 in the second quarter 2021/22
- 1 in the third quarter 2021/22
- 0 in the fourth quarter 2021/22

Out of the 80 Structured Judgement Reviews (SJR) completed:

- 68 were scored 6 (definitely not avoidable) and were not selected for discussion
- 1 was scored 6 and not selected for discussion; however, a SACT (systemic anti-cancer therapy) or Radiotherapy review is needed before a final decision on whether a phase III discussion is required

Of the remaining 11 cases, 7 have been discussed at phase III and final avoidability scores were agreed as follows:

- 0 were scored 1: Definitely avoidable
- 0 were scored 2: Strong evidence of avoidability
- 0 were scored 3: Probably avoidable
- 0 were scored 4: Deemed to have had a possibly avoidable but not very likely
- 0 was scored 5: Deemed to have had a slight evidence of avoidability
- 7 were scored 6: Definitely not avoidable

The remaining 4 cases need a phase III discussion in order for a final avoidability score to be agreed: 3 are scheduled for discussion in Q2 2022/23; a date is yet to be confirmed for the fourth.

Estimated death more likely than not to have been due to problems in care provided

	Q1	Q2	Q3	Q4	Total
Score 1: Definitely avoidable – score 1	0	0	0	0	0
Score 2: Strong evidence of avoidability	0	0	0	0	0
Score 3: Probably avoidable (more than 30:30)	0	0	0	0	0
Score 4: Possibly avoidable but not very likely (less than 50:50)	0	0	0	0	0
Score 5: Slight evidence of avoidability	0	0	0	0	0
Score 6: Definitely not avoidable	18	27*	20**	15***	80
Total Number of Structured Judgement Reviews	18	27	20	15	80
% patient deaths judged more likely to have been due to problems in care provided	0%	0%	0%	0%	-

*x1 scored 6 in Q2 which is a provisional score which will be agreed at phase III meeting
**x2 scored 6 in Q3 but awaiting SACT or Radiotherapy review, and x1 score 6 is a provisional score which will be agreed at phase III meeting
***x2 scored 6 in Q4 which is a provisional score which will be agreed at phase III meeting

Outpatient deaths

In addition to reviewing all inpatient deaths, The Clatterbridge Cancer Centre is also committed to reviewing outpatient deaths for patients within our care who meet the mortality review criteria – deaths within 30 days of chemotherapy or radiotherapy treatment, and within 90 days of radical radiotherapy treatment. Radiotherapy for spinal cord compression and bone metastases cases do not require review where the dose and fractionation given was as per Trust protocol or for patients receiving one fraction of eight gray.

There were 524 outpatient deaths between April 2021 and March 2022. The number of deaths in each quarter of the year is shown below.

Outpatient deaths by quarter 2021/22

2021/22	Outpatient Deaths
Q1	126
Q2	120
Q3	133
Q4	145
Total	524

Of those deaths, 453 cases required a review following the above aforementioned criteria.

As of 31st May 2022:

- 304 (67%) case reviews had completed phase I
- 222 (73%) of these were further investigated at phase II
- 21 (9%) of those were further selected for discussion at phase III, the Trust's formal Mortality Review Meeting – 16 (76%) of these were discussed during 2021/22.

Table 12 – Outpatients reviewed 2021/22

2021/22	Outpatient Deaths
Phase I	304
Phase II	222
Phase III	21

149 cases still require phase I review and will be completed during 2022/23.
82 cases are at phase II review stage and will be completed during 2022/23.
5 cases are waiting for phase III review: 4 are due to be discussed in Q1 2022/22; 1 date is yet to be confirmed.

Out of the 16 cases discussed at the formal mortality review meeting, the number of deaths in each quarter for which a case record review or an investigation was carried out was:

- 4 in the first quarter
- 5 in the second quarter
- 6 in the third quarter
- 1 in the fourth quarter

Summary of learning from case record reviews and investigations conducted in relation to deaths (inpatient and outpatient deaths), along with description of actions taken in the reporting period

Background	Action	Lesson Learnt
It was noted that a consent form for second line chemotherapy could not be located in Evolve	Further investigation was undertaken into the location of the form, which was later located in the wrong section of Evolve. Confirmation of the correct process and location of consent forms was disseminated	All paper documents should be scanned into the consent form section in Evolve. This has been communicated to the scanning bureau team via their line manager
Treatment was continued despite evidence of progression on CT from Nov 2019 and April 2020. The group advised as two scans had shown signs of progression on SACT and that the treatment should have been stopped, or at least the decision to treat peer reviewed to double-check the clinical rationale	Upper GI/HPB SRG reviewed this case at the request of the MRM and were asked to consider mechanisms to prevent treatment being continued despite evidence of disease progression	A peer review group has been set up which meets fortnightly to discuss chemotherapy options for complex Oesophegeal and HPB patients, which will peer review further treatment decisions in this patient group

Background	Action	Lesson Learnt
Patient was seen early November "breathless and fatigued" when recovering from COVID. A decision was made to proceed with cycle three at 80% dose. The patient subsequently died on day 20 of cycle three of 'acute myocardial insufficiency'. A CT undertaken midway through cycle three had shown some disease progression and residual COVID changes in the lungs. It was felt that this could have indicated that the patient's death may have been related to the prior COVID infection from which he had not fully recovered	Upper GI/HPB SRG reviewed this case at the request of the MRM and were asked to consider mechanisms to prevent treating too early in patients recovering from COVID-19	This patient's chemotherapy should have been delayed and further review before consideration of treatment. A peer review group has been set up which meets fortnightly to discuss chemotherapy options for complex Oesophegeal and HPB patients, which will peer review further treatment decisions in this patient group
Borderline metastatic lung cancer patient with multiple co-morbidities. Treating consultant and the patient discussed at length the pros and cons of supportive care vs high-risk immunotherapy. The patient opted for the latter and unfortunately died 10 days after cycle 1	Feedback the results of the Pembrolizumab audit to the MSG once available	A local audit established that Pembrolizumab in our patient group is overall well tolerated. Over the first three months, grade 3-4 toxicity is rare and correlates with poor prognosis when it starts within the first 3 weeks. Fast responses are also rare. Most problems within the first three months tend to be cancer-related, due to progression. Our toxicity incidence is consistent with that seen in the published prospective studies, but our mortality is better, probably thanks to our protocols and Immuno-Oncology team support

Background	Action	Lesson Learnt
A consultant raised that some trusts have the option of "I've discussed the option of no treatment" on consent forms and asked if CCC could we discuss having this on our consent forms with PWR	Copy of case was forwarded to PWR with consideration of inclusion of "discussed no treatment" in consent forms going forwards to evidence base conversations more robustly	The consent forms used at CCC already have a section for highlighting that the option of no treatment has been discussed. This has been cascaded to consultants
Cyclizine and Metoclopramide are mutually antagonistic, yet they are frequently prescribed together	Pharmacy to provide a digital warning on Meditech to prevent co-prescription if attempted.	Pharmacy have linked these two drugs in the Meditech EPR system and this can now create a message to the prescriber to state why they are prescribing the medication together and will request a reason for doing so. This will mandate the prescriber to pause and reconsider the prescription.
During an infusion of a third cycle of Paclitaxel, a patient reported lower back pain. Treatment was stopped immediately and the patient received timely treatment for an infusion-related allergic reaction as per the CCC hypersensitivity guidelines. A MET call was logged but unfortunately, the patient then suffered a cardiac arrest from which the patient died. Cause of death was cited as 1a Anaphylactic drug reaction, 1b Paclitaxel Chemotherapy and 1c Metastatic Breast Adenocarcinoma	Local audit of hypersensivity reactions with paclitaxel undertaken.	Rates of reaction for CCC patients were reported to be 0.6% for mild to moderate hypersensitivity (compared to 10-30% in literature), 0.5% for severe hypersensitivity (compared to 1% in literature) and 0.07% for anaphylactic reactions (compared to 0.1% in literature). Assurance given that CCC hypersensitivity reaction rates are below other published rates

Background	Action	Lesson Learnt
A patient had nausea and vomiting throughout their admission but no palliative care medical review was undertaken	Palliative care team to review this case in terms of escalation process within specialist palliative care team (SPCT)	Cases where symptoms are difficult to manage despite initial interventions should be raised for medical SPCT review and this has been disseminated to the team. The weekly MDT also includes detailed review of symptoms to ensure patients needing medial review are picked up.
A patient had nausea and vomiting throughout their admission but no palliative care medical review was undertaken	Palliative care team to review this case in terms of escalation process within specialist palliative care team (SPCT)	Cases where symptoms are difficult to manage despite initial interventions should be raised for medical SPCT review and this has been disseminated to the team. The weekly MDT also includes detailed review of symptoms to ensure patients needing medial review are picked up.
A patient with a stomach adenocarcinoma died of neutropenic sepsis after cycle 1 of his 4th line chemotherapy. No prophylactic GCSF was given; however chemotherapy was dose reduced by 20%	An update was circulated to consultants about the protocol for use of prophylaxis of GCSF in palliative treatments with high risk of neutropenia.	GCSF prophylaxis can be offered for palliative chemotherapy regimens with moderate/high risk of febrile neutropenia at the discretion of the consultant

Background	Action	Lesson Learnt
A patient who was treated with Carboplatin had an 8kg weight loss reported during chemotherapy along with a deteriorating kidney function. The question was raised if the correct dose of Carboplatin was given	a) Investigation by pharmacy revealed that the correct dose of chemotherapy was given but that different laboratories supporting CCC patients use different Wright formulae The head and neck team are auditing this to determine if this alters chemotherapy prescription dosing b) The medicines safety pharmacist and associate medical director investigated if the appropriate formula was used for the laboratory in this case. It was found that neither formula would have affected the dosage prescription with dose banding in place for this case	All SRGs informed of the variation in laboratory protocol. Whilst this does not appear to alter chemotherapy-dosing banding, SRGs are advised to ask for eGFR clearance for patients when borderline
A patient had failed to attend several appointments due to ongoing illness. The patient was contacted by treating nurses, the care navigator and finally the police. There was no next of kin and the patient was socially isolated	This case received a formal investigation as well as mortality review. A new system has been set up for triage to be contacted when a patient cancels an appointment in order to undertake a UKONS assessment and provide the most appropriate safety netting and follow up advice	Patients who call up to cancel appointments should receive a UKONS assessment from the triage team. This change in the care pathway has been communicated to all stakeholders

Background	Action	Lesson Learnt
The reason for this case being discussed at MRM is due to it being an inpatient child death that we have a requirement to discuss and feedback to the Child Death Overview Panel (CDOP). This was a tragic case of an aggressive cancer that responded poorly to treatment The treating team were asked whether they had the opportunity to debrief after these deaths. The team replied that there was not a formal process but it is done informally. The CCC palliative care team replied that support locally can be provided and that there is national peer support available	MRM asked the treating team to consider the use of the CCC local debriefing tool. There is a new family support practitioner in post at CCC who now delivers ward debriefs as needed. The Trust debrief tool 'AFFECTS' is also available to all colleagues via the intranet and on the wards	Teams in need of debrief following complex deaths can access team support from the psychological medicine team, palliative care team and family support practitioner.
A patient with symptom issues and a changing prognosis spanning an 8-month period was reviewed by a physician associate (PA) 5 times and no letters were communicated to the GP. They were also reviewed by the medical team during this period and on three occasions letters were also not issued	HBP team to reviewed frequency of letters from consultation. Email distributed to all SRG members stating it is imperative that appropriate communication is provided to the GP and extended healthcare team	If SRG teams would like their PAs to write letters, then the clinical team should oversee and supervise this or a member of the team dictate on their behalf. Regular communication with primary care about changes in patients' clinical condition is essential

Background	Action	Lesson Learnt
This patient developed a COVID infection either during her last week of admission in CCC-L or in transit back to the Isle of Man (IOM). Due to the IOM 14-day COVID isolation rule, no family or healthcare professionals were allowed to visit the patient at home prior to her emergency admission to Nobles hospital where she passed away	a) Treating consultant reviewed the discharge policy for patients from IOM who needs safety net care of support outside CCC b) Treating consultant liaised with nursing manager to cascade lessons learnt of this case. Policy amended to account for patients being discharged to IOM. The patient flow team now undertake a day after discharge telephone call with all level 2 discharges. A Level 2 discharge is anything the patient flow team have been involved in	All discharges to the Isle of Man in which the patient flow team have been involved require a check the day after discharge to ensure local support is in place and the patient is receiving the right support
Dabrafenib + Trametinib was commenced in a frail melanoma patient with a PS 4. The patient's PS measured 4 as he was on strict bed rest and was in a lot of pain. At the time of the decision to treat it was felt this was appropriate as this regime has a high response rate with a likelihood of improving the patient's symptoms quickly (70-80%)	Melanoma team undertook an audit of this regimen in terms of survival compared to published literature. All palliative deaths occurred because of progressive malignancy that either illustrated primary resistance (n=1) or secondary resistance (n=7). In the case of adjuvant deaths 1 case was related to treatment toxicity and appropriate steps were taken and 1 case was unrelated to malignancy or toxicity	Given the indication for Dabrafenib and Trametinib treatment and the activity of metastatic disease on secondary progression following response as experienced by the majority of patients in this cohort, the deaths observed do not raise concerns following evaluation Learning points from this review are the need for clear documentation as to the events pertaining to patients on the Isle of Man (IOM), the need for annotation within the patient's records as to the cause of death certificated as well as the date of death and ongoing awareness of the toxicities of D&T treatment to ensure all patients have their treatment discontinued if showing evidence of toxicity (as did happen in the case of the patient within this cohort)

Background	Action	Lesson Learnt
Patient started to progress while receiving Rucaparib treatment so treatment was stopped. A side-effect of Rucaparib treatment is myelosuppression and reduced platelet counts. However, the patient's platelet counts did not improve with discontinuation of treatment so it was felt these were secondary to marrow infiltration and disease progression. The option of best supportive care or platinum based chemotherapy (BRCA positive) were discussed with the decision being made to go ahead with dose reduced Carboplatin under close supervision. 10 days post cycle 1 the patient had a large PR bleed and despite blood transfusion support he experienced a further episode of bleeding and died 3 days later	The Urology SRG now hold a weekly peer review MDT discussion in cases where risks and benefits are finely balanced to peer review treatment decisions and ensure patients are treated as safely as possible	Clinical decisions where risks and benefits are finely balanced with associated risks to treatment should be peer reviewed and this peer discussion documented within Meditech
There have been 2 cases of Capecitabine doses taken wrongly by patients, despite advice being given	Actions undertaken by the Medicines Safety Advisory Committee: a) Correct dosage now properly explained to the patient and Capecitabine diary is given b) Capecitabine stopped for remainder of the cycle and bloods reviewed by on-call registrar c) Reassurance and education given around how and when to take Capecitabine	Patients require additional information and support when taking Capecitabine in order to take this medication correctly. This additional support is now provided

Background	Action	Lesson Learnt
A patient had an Ascitic Drain left in-situ for 5 days	An action was made to review the Ascitic drain policy and ensure that it covered siting and duration to be left in-situ. The ascitic drain policy states clearly to remove the drain by 24 hours to minimise risk of infection	Ascitic drains should be removed within 24 hours of insertion unless there is a clinical reason in which cause it should be clearly documented. CET have shared this information with all SRGs
Post cycle two a patient attended CDU. On review it was documented the patient had a slightly swollen leg but this was not deemed relevant. Patient was not admitted to CCC; therefore, no VTE assessment was undertaken, as VTE was not expected as a diagnosis. Patient was discharged with a plan for outpatient review and investigations the following week Later the cause of death was originally deemed as lung cancer; however, the treating consultant felt strongly that CCC needed to look into this and learn from this case, as this was the first SCLC chemo IO patient. Treating consultant asked for a PM to be undertaken	Post mortem report obtained. The PM confirmed that the cause of death as 1a) Pulmonary embolism 1b) Deep vein thrombosis 2) Ischaemic heart disease and coronary artery atherosclerosis The Immunotherapy team amended the pneumonitis protocol (serendipity) to consider pneumonitis and PE as differentials	It is important to share these rare and complex clinical cases to increase education amongst junior colleagues and encourage professional curiosity. It is also important to continuously amend protocols to reflect rare real-world toxicities. The lead registrar and nurse consultant agreed that this case had been a subtle presentation and that it was beneficial to share with their teams for educational reasons
An inpatient received a combination of different formulations of insulin used at differing doses with their blood sugars fluctuating from high 20s to 2. There was no clear documented advice sought from the diabetic specialist team. MET calls were needed to manage hypoglycaemic episodes	CCC have adopted LUHFT diabetic protocols to standardise best practice and have established clear referral processes for diabetic advice from LUHFT	Inpatient management of diabetes should follow LUHFT guidelines and referral pathway is in place to obtain advice when needed

Background	Action	Lesson Learnt
An inpatient with renal cell carcinoma required a MRI Scan at the Liverpool University Hospitals NHS Foundation Trust (LUHFT) to rule out metastatic spinal cord compression (MSCC) urgently over a weekend. Once transferred patient sadly deteriorated and died from a retroperitoneal haematoma despite appropriate management. The receiving team did not feel they had sufficient handover that the patient had been medically unstable prior to transfer adversely affected patient care although did not on balance contribute to the outcome	Incident investigation launched in collaboration with LUHFT to review the referral and communication process of acutely unwell patients, including out of hours	Patients requiring urgent scans at CCC should be able to access these at CCC – these are now available 24/7 at CCC-Liverpool. In the event of needing to transfer patients to LUHFT, transfers should be accompanied by digital transfer template which has been co-designed between the 2 trusts
DNACPR was appropriately put in place on admission for a patient but without the required communication and without documentation to support this. This was felt to be due to lack of documentation by junior medical colleagues documenting a consultant's ward round rather than the conversation not occurring	Requirements for specific discussion points and documentation requirements are present in the resuscitation document on Meditech. This has been fed back to consultants and has been included in junior doctor induction. A further training day has been set up to educate MDT colleagues on best practice in complex discussions and legal requirements of documentation.	It is essential that DNACPR decisions are discussed with patients who have mental capacity unless it is clearly documented that those patients would be harmed by such discussions. Discussions should also include relatives and carers if the patient gives consent

Background	Action	Lesson Learnt
A patient attended CDU unwell with suspected IO pneumonitis where it was noted that they had a swollen leg. This was documented and felt not to be significant as part of the overall clinical picture. The patient later died and a post-mortem examination revealed the cause of death to be 1a) Pulmonary embolism 1b) Deep vein thrombosis 2) Ischaemic heart disease and coronary artery atherosclerosis	The Immunotherapy team have amended the pneumonitis protocol (serendipity) to consider pneumonitis and PE as differentials. Ward manager included this case in morning safety huddles and feedback was also provided to the ANP/ Medical team	DVT/ PE is an important differential to consider in patients presenting with clinical features of IO pneumonitis and now consideration of this differential forms part of the diagnostic protocol

Appendix 2:
Local Audits/Quality Improvement Projects

Further information about local audits and quality improvement projects 2021/22

The reports of 54 local clinical audits were reviewed by the provider in 2021/22 (compared to 34 in 2020/21). Of these:

- 12 provided assurance (compared to 9 in 2020/21)
- 22 improved knowledge (compared to 0 in 2020/21)
- 14 made improvements through action plans to improve the quality of healthcare provided (compared to 10 in 2020/21)
- 6 provided assurance and improved knowledge (compared to 0 in 2020/21)

The tables on the following pages provide further information about the outcomes of each audit/project.

Improvement Made Projects (14)

Improvements Made / Learning	Improvement Demonstrated (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
1. **Physician Associate Service Review** The aim of this service review was to assess satisfaction from clinical staff regarding the new role of Physician Associates (PA) in oncology on a clinical decision unit and outpatients department. A secondary aim involved patient satisfaction with interactions with the new role on the clinical decisions unit and the outpatients department. An action plan was completed whereby the audit lead reviewed the findings with the clinical lead to review safety and complaint concerns and none were found. The audit lead as a result of the audit engaged with the junior doctor teaching schedule throughout 2020-21, supported the PA's to undertake any trust training when available and to attend Registrar training afternoons or grand rounds to maintain skill set and up to date knowledge. The audit lead undertook a masters in oncology to further knowledge and all PA's agreed to continue reflections via the RCP Diary (royal college of physicians).			✓	✓	✓
1. Advance Care Planning (ACP) Implementation at CCC The intention of the audit was to establish if patients who were dying and those important to them had discussed their wishes and preferences with health care professionals at CCC and whether the outcomes of these discussions were documented. Responses from staff survey and casenote review to the audit indicated a clear need for education in understanding ACP and the implications for supporting best practice in end of life care. There was also a significant lack of confidence in how to set up a lasting power of attorney, and assisting patients to completing an advanced decision to refuse treatment (both having legal implications). ¾ of staff had minimal or no previous experience of ACP. The audit lead developed and delivered a comprehensive action plan covering writing an advanced care planning strategy to identify appropriate patients suitable for ACP discussions and delivering a robust education and training programme to staff.		✓		✓	✓
2. Lonsurf® (trifluridine/tipiracil) for the treatment of metastatic colorectal cancer: assessing the impact of dose related toxicities and progression free survival. The rationale behind undertaking this audit was to compare how Trust data differs against published evidence in relation to median progression free survival when receiving Lonsurf. The project also looked specifically into what type of ≥3/4 toxicities commonly necessitated a dose reduction, and whether supportive therapies were required. Overall, this audit met the aims and objectives set out at commencement. The data gained by the Trust correspondingly reflected that identified in prior clinical trials, therefore confirming the validity of the original published data in day-to-day scenarios.	✓		✓		

Improvements Made / Learning	Improvement Demonstrated (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
3. Missed medication audit The intention of this project was to determine the frequency of regular medications being missed when patients develop dysphagia and to identify any trends leading to medications being missed. It was agreed as a result of this audit that significant improvements needed to be made and the following actions were undertaken as part of an action plan: - The Trust had different polices for different aspects of Dysphagia care. This in turn led to confusion when looking for guidance. A single unified policy addressing all of the factors in this case was developed. - System changes were conducted to allow identification of critical medicines on Meditech and an escalation process was developed for when critical medications could not be administered. - Clinical decisions unit and ward nurses received updated training to be fully compliant with assessing swallow and insertion of uncomplicated NG. - Further training was delivered to junior doctors at induction as to how to conduct a ward round and ward pharmacists received updated job role information to include the review of medications missed on the ward.	✓		✓		✓
4. Tivozanib as first line treatment in patients with advanced or metastatic renal cell cancer Purpose of the audit was to assess the merit of Tivozanib as a in the first line setting of management of renal cell carcinoma. The audit concluded that there was similar progression free survival and overall survival to the TIVO-1 trial. There was also reassuring performance in favourable and intermediate groups, more poor risk as categorised by the IMDC score patients in the CCC population, much lower rate of G3+ AEs – particularly in hypertension, dysphonia. There was a similar discontinuation rate to the trial and Tivozanib was well tolerated in those who did not tolerate other TKIs.	✓		✓		
5. Clinical Decision Unit (CDU) transformation project This was a service review of the Hotline service. An action plan was completed which involved extending the opening hours of the CDU in CCC-L to include weekends.			✓	✓	
6. CODE Re-Audit This project aimed to explore the perspectives of bereaved relatives on the quality of care and support provided to patients and those important to them during the last hours and days of life at CCC. Areas of Good Practice highlighted the comfort/privacy of the patient care areas, the cleanliness of the wards, the management of pain/respiratory secretions, and the communication with those important to the patient and communication about hydration. There were also excellent examples of going above and beyond for patients i.e. arranging renewal of wedding vows and addressing the spiritual and emotional needs of patients in the last two days of their life. Recommendations were made and an action plan was instigated which involved - Immediate delivery of education on non-specialist spiritual and psychological care as part of mandatory training for all nurses and medical staff. - Immediate delivery of key elements of communication skills and having supportive conversations as part of mandatory training for nurses - Immediate sign off for Ward Managers to assign all Band 6 nurses to attend an advanced communication skills course. Further recommendations were made to introduce the Amber Care Bundle and Advanced Care Planning. This involved investment into a new post at CCC and actions relating to the introduction of these provisions were completed in April 2021.		✓		✓	

Improvements Made / Learning	Improvement Demonstrated (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
7. Baseline evaluation services provided by the Clinical Audit Team The audit team conducted a project to assess current support provision and customer experience through a questionnaire about the Clinical Audit Team with a view to look at the future provision and potential improvements. An action plan was developed which highlighted a need to promote the audit team role to staff via digital means i.e. screen saver, shared learning newsletters and an improved extranet page. The audit team attend all site reference group meetings, DTC and DPSG and continuously raise the profile of quality improvement through these means. In addition, the audit team coordinate the Trusts mortality review meeting, ensuring that potential harms and high risk regimens are audited. The team also work closely with the clinical governance team to capture audit and learning relating to incidents. The clinical effectiveness team have their own section on the new Intranet which publicises what they do. The clinical audit training presentation has been updated with a plan to implement a training module.					✓
8. National Audit of Care at the End of Life (NACEL) - Round 2 The aim of this audit was to improve the quality of care of people at the end of their life. On reviewing the findings, the Consultant in Palliative Medicine devised an action plan which addressed the following. • End of life care and communication record education was delivered in bitesize and mandatory training. • Education for nurses and doctors about spiritual care was added to CCC mandatory training. • Documentation around patients nutritional requirements, including support required to eat and drink was included in the end of life care and communication record. • 'Recognising dying' was delivered in bitesize and mandatory training • Advanced communication skills is now mandatory as part of the competency framework for band 6 nurses and above. Training is monitored annually at appraisal • An AMBER Care Bundle/Advanced Care Planning facilitator was appointed • Assessment of cultural needs and what this includes was delivered in bitesize and mandatory training • The Trust developed and distributed comfort packs to support families and carers • Assessment of practical needs and what that includes was included in the end of life care and communication record •The importance of psychological support was reiterated in mandatory/bitesize education and also in debrief sessions • The Palliative Care KPIs which represent essential aspects of the 5 priorities of care were included in the formal governance reporting structure of the Integrated Care Directorate and fed monthly into quality and safety data packs. The KPI's were reported at Palliative and Supportive SRG and collated at year end for the palliative care service annual report. • A Non-Executive director was identified and appointed sit on the mortality surveillance group and oversee compliance with the national agenda on learning from deaths. • The GSF notification process for sharing information across settings when a patient is felt to be approaching end of life was implemented		✓		✓	

Improvements Made / Learning	Improvement Demonstrated (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
9. CODE Re-Audit The aim of the CODE evaluation was to explore the perspectives of bereaved relatives on the quality of care and support provided to patients and those important to them during the last hours and days of life at CCC. Results demonstrated many examples of excellent care alongside areas requiring improvement. Areas of good practice and reassuring improvements highlighted were: - Availability of assistance for patients' personal care - Improved confidence in nurses and doctors caring for patients who had more time to sit and talk to patients and those important to them to address their concerns - Management of agitation at the end of life - Communication with those important to the patient in language which was easy to understand - Communication around the identification that the patient was dying - Treating patients with dignity and respect, and their loved ones with compassion at and after the patient's death Key areas for improvement highlighted: - Involving loved ones in discussions about the patient's care including conversations about artificial hydration - Assessing and addressing the spiritual needs of the patients and those important to them - Communication with relatives not only that their loved one is dying but what to expect as that occurs		✓		✓	
10. Admissions for NG feeding at CCC The aim of the project was to develop an evidenced based pathway to support nutritional management of patients during radiotherapy and any resource implications of the pathway once developed The following actions were undertaken as part of an action plan: - Developed a pathway for dietetic/nutritional review once patients accepted for radical radiotherapy with bilateral neck treatments or chemo-radiotherapy - Developed an outpatient proactive NG service at CCC for those that choose NG vs PEG and those who may need feeding but do not meet criteria - Proactively and formally monitored requirements for adaption of XRT, weight loss and rehabilitation of swallow for both services	✓			✓	✓
11. Dementia & Memory Issues Audit The audit aimed to establish a baseline number of radiotherapy patients who had memory issues or a dementia diagnosis without any prior documentation on clinical systems across a 3 month period. The audit identified 12 patients who had a confirmed dementia diagnosis whom had alerts missing in clinical systems. An action plan was devised which consisted of: - Organising a communications message to all staff reminding them of the process for adding special indicators for patients and ensuring all info from referral letters are present on clinical systems using indicators when necessary - Audit lead liaised with team leaders in administrative services to ensure processes were followed and training needs were identified - Process was communicated to all Radiographers by the audit lead - Audit lead discussed the plan to introduce additional questions at pre-treatment stage for radiotherapy, to act as a safety net to catch any patients with dementia diagnosis and add alert on both clinical systems	✓		✓	✓	✓

Improvements Made / Learning	Improvement Demonstrated (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
12. Project title: Management of blood glucose levels in COVID patients on Dexamethasone The aim of the project was to discover how well these guidelines were being adhered to and to ensure enhanced awareness of the effect of having Covid-19 and starting Dexamethasone can have on a patient's blood sugar regulation. The results suggested a lack of awareness of the guidelines around blood sugar monitoring in COVID patients. In order to improve this situation, posters of the guidelines were put up in the doctors' office on Ward 2, 3 and the Clinical Decisions Unit. A copy of the guidelines were also placed in the 'Red End' of the ward where the COVID patients are based. Additionally, the junior doctors on the ward were emailed to remind them of the guidelines.			✓		✓
13. Molecular analysis results tracking improvement project Anti-EGFR treatments (Panitumumab/Cetuximab) are CDF funded for 1st line treatment in metastatic colorectal cancer. Treatment will be based on genomic testing (RAS testing mainly and BRAF as well), these tests are requested through the MDT and results are not always available when patients start treatment, they need Follow up. An incident was identified whereby a patient whose RAS wild type results were overlooked and therefore they missed drug funding. The audit was undertaken to identify any potential harms. Patients from 31st March 2021 required a check to ensure RAS/BRAF results were received/acted on whilst a trust wide pathway was instigated. The Clinical Effectiveness Team (CET) agreed to monitor patient records with "RAS pending" and chase results if not available within 2 weeks of request. The audit lead has now launched a new genomics request form on Meditech with a pathway agreed at the Breast SRG, stating results must be reported within 12 weeks. A routine report of RAS pending patients is now sent monthly.	✓		✓		✓
14. What Is The Compliance With Current Daily Routine Bloods On Haemato-Oncology Patients? The aim of the audit was to review the compliance of daily routine bloods on ward 4. No standards were present for comparison, so the audit took the form of a quality improvement project. The audit lead anticipated initial compliance of 100%. Results demonstrated that 96% of Routine Daily Blood samples were reported in August 2021, the 4% of unreported samples were due to avoidable errors. 28 samples were unreported – 11 samples were re-sent due to this. • Unlabelled Samples – Posters were placed around the Trust to remind of the correct labelling of bottles and reminders were provided to staff to double check the blood folder and pods. • Contamination, clotted or insufficient samples - Informative Poster was placed on the Wards and phlebotomy areas to remind staff of the correct draw, bottle inversion and ANTT adherence. • Re-audit due to commence May 2022.	✓		✓		✓

Provided Assurance Projects (12)

Provided Assurance	Assurance gained (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
1. Review of carboplatin dosing in neo-adjuvant breast cancer regimen The aim of the audit was to compare the dose given to the dose calculated using two different formulas for 4 cycles and to review any delays during these cycles To conclude in an overwhelming number of cases (~95%), physicians use Wright (W) over Cockcroft and Gault (CcG) to calculate eGFR for Carboplatin doses. Furthermore, when comparing the use of CcG and W, the doses calculated via each method tend to follow the same trend, with the average dose being given at 700mg. This is good news for practice at CCC as these findings suggest there is a reduced threat of inconsistences between dosing methods.			✓		✓
2. Toxicity of 6 weekly immune therapy with Pembrolizumab The intention of the audit was to establish the incidence of common toxicities of immunotherapy and compare to expected rates in literature. The audit demonstrated that the 6 weekly regimen is a well-tolerated schedule for Pembrolizumab and will endeavour to improve patient care, reduction in hospital visits and costs.				✓	✓
3. Retrospective review of the safety and effectiveness of palliative chemo immunotherapy for extensive stage small cell lung cancer The extensive stage small cell lung cancer patient group often present with a poorer baseline function and performance status. It was necessary to gather real-world data regarding the tolerability and length of treatment in non-clinical trial patients to more accurately comment on how much treatment these patients receive and the tolerability. The overall survival demonstrated in this real-world dataset was broadly comparable to that seen in the pivotal clinical trial for this regimen. The safety data was reassuring with low rates of grade 3 toxicities and treatment discontinuation. This was attributable to clinicians having a low threshold for dose reductions and prompt recognition and treatment of IRAEs.	✓		✓		
4. Determining a need for a clinical app for patients receiving immunotherapy The aim of this project was to understand the current burden of work on IO services including the on treatment review and toxicity service and to also determine the baseline needs of patients using a questionnaire. The app demonstrated utility, ease of use and increased understanding. 100% of users felt they understood more about immunotherapy using the app, over 80% would recommend it to others and over 75% felt it fitted around their daily activities. The app did not suit all uses, as some patients preferred a telephone call		✓		✓	
5. Trastuzumab Emtansine Use in Merseyside and Cheshire This audit was to ascertain the duration of treatment, response rate, LVEF monitoring and incidence of drop in LVEF, grade of haematological toxicity, Progression Free Survival and Overall Survival in this regimen. The majority of patients are treated for metastatic disease and on average are treated for a year's duration. The data demonstrated survival and toxicity data in the real world setting which was comparable with the EMILIA trial data. The information about subsequent lines of treatment demonstrates that those who receive Herceptin post progression on Kadcyla do not appear to have a better survival compared to those who do not.	✓				
6. Audit to evaluate the impact of the Immuno-oncology Toxicity Service at CCC The purpose of the audit was to evaluate the benefits of the Immuno-Oncology Toxicity Service at CCC. The audit found that the service reduced admission rates for patients experiencing IO toxicity = 40%, Reduced the number of patients experiencing Grade 3/4 (severe/life threatening) toxicity = 30% and reduced the length of stay for patients experiencing toxicity (total bed days saved = 135).	✓		✓	✓	

Provided Assurance	Assurance gained (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
7. Improving assessment of frailty in patients assessed on the clinical decision unit at Clatterbridge Cancer Centre by introducing usage of the Rockwood frailty score on CDU The aims of the audit were to introduce a system which allows CCC to assess frailty in all patients assessed on CDU in the form of the Rockwood frailty score. Documentation of the Rockwood frailty score is optimised as much as it can be, CCC need to make documenting on CDU assessment proformas standard practice for all patients on CDU so that all staff are prompted to complete a frailty score on patients. Now that CCC are documenting frailty score, the next project would involve collating numbers of frail patients, how this effects the likelihood of admission and what more CCC can do for patients we identify as frail. All this work is ongoing, as well as work to assess a patient's frailty at the time of initial oncology clinic assessment (in a different way as Rockwood score is not validated for this purpose)	✓		✓		
8. Side effect profiles of a Darolutamide therapy in the real world setting in the northwest The aim of the project was to monitor the side effects of patients on treatment for Darolutamide. The project found that the CCC real-world cohort was generally comparable to the ARAMIS trial but with a worse baseline performance status. Overall frequency of any grade toxicity was lower in the CCC population (59% vs 83%), but this may reflect the short follow up period and reporting differences in trials vs clinical practice. Fatigue remains the most common toxicity and no new serious toxicity was detected. A key proposed advantage of Darolutamide over other androgen receptor antagonists was the absence of some key toxicity including seizure, falls and fractures, none of these events were detected in the CCC cohort.	✓	✓	✓	✓	
9. Audit of Daratumumab use in relapsed refractory myeloma This audit was undertaken to provide baseline data on the number of patients receiving Daratumumab at each line of therapy, their duration of response and time to progression. The audit provided assurance that CCC meet NICE guidance. The use of sub-cutaneous Daratimimab also reduced chair time comparing to IV Daratumumab.		✓	✓	✓	
10. Audit of NICE TA 673 Niraparib for maintenance treatment of advanced ovarian, fallopian tube and peritoneal cancer after response to first-line platinum-based chemotherapy The purpose of the audit was to monitor compliance with NICE TA673. The audit identified that CCC is compliant with TA673 Niraparib. 11 patient were eligible for Niraparib and all patients had evidence of CDF approval, advanced/high grade disease and evidence of a response to first line platinum-based chemotherapy in line with the criteria outlined in the NICE technology appraisal.			✓		
11. Dabrafinib and Trametinib (D&T) High Mortality Review The aim of this project was to identify the total number of patients treated with Dabrafenib and Trametinib combination therapy in the 2020 calendar year and determine patients who died within 30&60 days of administration, whether there were any adjuvant deaths associated with BRAF inhibition within 90 days and also whether any of these patients died following cycle 1 of treatment. The audit also aimed to determine whether any treatment was discontinued prior to death or if any of the patients died of malignant disease or a process related to their SACT. This audit reiterated the need for clear documentation as to the events pertaining to patients on the isle of man (IOM) and ongoing awareness of the toxicities of D&T treatment to ensure all patients have their treatment discontinued if showing evidence of toxicity (as did happen in the case of the patient within this cohort).			✓		

Provided Assurance	Assurance gained (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
12. Changing therapies in Chronic Lymphocytic Leukaemia (CLL) - does there remain a role for upfront chemotherapy? Prior to the Covid pandemic CCC would frequently give upfront chemotherapy for treatment of CLL. The purpose of the audit was to determine the choice of therapy given for CLL both before and during the pandemic and associated outcomes for a chemotherapy based treatment vs targeted therapies. The number of patients receiving chemotherapy regimens as first line treatment for CLL significantly reduced from 85.7% to 17.6% in our centre. FCR remains a preferred treatment in some cases, such as young patients with no TP53 mutation and mutated immunoglobulin heavy-chain variable region gene. Some centres may have chosen to avoid FCR during the COVID pandemic, we have demonstrated that it can be safely used in selected patients, albeit in small numbers. The availability of acalabrutinib and **VO** upfront has provided more choice for patients that previously may have only had chlorambucil based therapy as a suitable option. Whilst patient numbers were small in this audit, the high use of non-chemotherapy-based regimens in the cohort during the pandemic creates a platform for further work and follow up of outcomes for these patients. This will allow CCC to delineate the risks and benefits of the use of chemotherapy regimens as first line treatment for CLL patients.	✓		✓		

Knowledge Improvement Projects (22)

Improved Knowledge	Knowledge gained (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
1. Older Persons Project The aim of the audit was to develop a succinct user-friendly electronic tool to screen patients to detect those at risk of having additional psychological, social, physical, nutritional and medical needs and to understand the impact on the workforce. The audit highlighted that doctor's underestimated comorbidity and patients overestimated. Further work is ongoing under the banner of frailty.		✓		✓	
2. QUIP Formal assessment of alcohol dependence in the outpatient setting in head and neck cancer patients All patients diagnosed with head and neck cancer were asked to answer the audit C questionnaire to assess alcohol intake. Although this audit had a small sample size, 87.7% of those diagnosed with oropharyngeal ca were HPV positive which supported the evidence that HPV+ is a leading cause of oropharyngeal cancer. Intervention for alcohol dependence can be assessed on a case by case basis, those that score 5 or more in the audit C questionnaire should be asked to fill out the follow up questionnaire. If medical input is required, it should be discussed with the patients' consultant and the day team if admission is required for IV pabrinex. Alcohol dependence continues to be monitored utilising the new risky behaviours assessments.	✓	✓			
3. Breast clip identification method evaluation The intention of this audit was to determine if the new method of outlining clips had an effect on the number of times the clips had to be repositioned after fraction 1 of radiotherapy treatment. The audit lead further evaluated the delineation methods currently used at CCC, and the use of contours alone for online IGRT. All recommendations were reviewed by the audit lead and were no longer considered necessary as the experience gained in the use of clips negated the problems which prompted the audit.				✓	✓
4. Pilot implementation of telemedicine clinic for the follow up of early breast cancer patients undergoing ovarian function suppression A review of the benefits and problems of implementing a telemedicine clinic for patients who fall within the NICE recommendation for consideration of ovarian function suppression (OFS). On analysing the results of the project, the audit lead stated that the pilot project had successfully demonstrated that video consultations should be offered as a follow up modality for early breast cancer patients undergoing OFS. However, before the project can become a formal service there is still a sizeable amount of work to carry out. Doing the clinics highlighted the need to develop endocrine side effect management pathways to ensure consistent evidence based care is being delivered. Workforce planning will also be needed to ensure nurse led OFS video clinics will be appropriately staffed. It was also felt to be of value to scope if there are any specialist training programs available for those caring for individuals experiencing menopausal symptoms secondary to endocrine therapies.		✓		✓	✓
5. Low Grade Glioma The aim of this audit was to present and review our experience in the management of low-grade gliomas. The audit concluded that management of low-grade gliomas remains challenging. The extent of resection impacts prognosis but not all patients have gliomas amenable to surgery. The impact of chemo-radiotherapy could not be assessed in this cohort.	✓				

Improved Knowledge	Knowledge gained (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
6. Audit of breast post radiotherapy follow up appointments The intention of the audit was to determine how many breast patients post follow-up appointments were not attended during the audit period, to find the range in time between last radiotherapy fraction and follow-up appointment and determine which healthcare professional conducted the follow up appointment. From the results, a significant number of patients did not attend for post radiotherapy follow-up. This can be detrimental as ongoing care by peripheral hospitals varies significantly. It is not clear from the audit why patients fail to attend; however this could be due to lack of notification of appointment or patient choice. It is anticipated that the recent move to telephone/video clinics due to COVID19 will reduce the number of missed appointments. It was determined that this audit should be repeated with data acquired during COVID to assess the impact on clinic attendance.				✓	✓
7. Enhanced Supportive Care Case (ESC) Control Study The aim of this project was to evaluate the impact of ESC for patients with primary pancreatic or biliary (HPB) malignancy in terms of survival and healthcare economics. For the 101 patients with HPB cancer who attended ESC, 97 unplanned admissions in the last year of life were avoided and the average length of stay reduction totalled 534 days. The financial impact of this using commissioner reference costs is a saving of £668,576.30. Patients with HPB cancer accessing ESC appear to have equal survival to matched controls. They however receive 31% less chemotherapy.	✓	✓		✓	✓
8. Palliative Care In-Reach Service CDU- Health Care Professional Questionnaire The SPCT strives to improve quality of care delivered to patients who have palliative care needs within CDU Department through early identification which may prevent admission or reduced length of stay if the patient requires admission. Twenty questionnaires were handed out within the department over a two week period with 90% response rate. The results from this survey has provided a snapshot of the quality care that is being delivered on CDU for patients with palliative care needs. It is only through maintaining an on-going focus on feedback from healthcare professionals within the Unit that the team can remain in touch with understanding how healthcare professionals want to feel supported. The comments provided are very encouraging and reflect high quality team work that is delivered despite increasing demand on the service from the inpatient setting.				✓	✓
9. Retrospective review of the clinical outcomes of lung cancer patients who received a radiotherapy intervention for brain metastases The audit was a retrospective review of the Neuro MDT referral pathway for patients presenting with brain metastases (both synchronous diagnoses and asynchronous diagnoses). The audit demonstrated that those who get a neuro-MDT directed treatment or SACT do best, the outcomes are broadly comparable to existing literature. It is difficult to comment on differences between SRS/surgery/SACT due to low numbers, difficult to comment on each treatment compared in the sync vs async setting due to low number and lower than expected oncogenes in this cohort – 2 ALK, 2 EGFR.	✓		✓		
10. Retrospective review of the safety and effectiveness of Nindatenib Docetaxel for the palliative treatment of lung cancer The aim of the audit was to evaluate the time to progression, overall survival, and subsequent treatments including chemotherapy and safety data following Nindatenib and Docetaxel. The audit determined that the poor overall survival in this real-world dataset raises important questions regarding the applicability of the trial data, patient selection and the benefit of this treatment regime. The favourable survival difference for those 65 years or older needs further exploration.	✓		✓		

Improved Knowledge	Knowledge gained (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
11. Retrospective review of weight gain in postmenopausal women receiving Palbociclib as part of their first line treatment for advanced breast cancer The aim of the project was to identify the variation in weight during adjuvant breast cancer treatment over a two year period in post-menopausal patients. No patients BMI should increase to >25kg/m2 during adjuvant breast cancer treatment (if their BMI was >25 kg/m2 prior to treatment this should not increase further). Further investigations are warranted to assess the effective treatment and prophylaxis mechanisms needed to successfully target weight gain during breast cancer treatment in overweight/obese patients with Palbociclib	✓	✓			
12. Developing a teaching program for Physician's Associates at Clatterbridge Cancer Centre The aim was to provide a teaching program for Physician Associates (PAs) which would satisfy the curriculum and competencies as defined by the Royal College of Physicians and also provide more specific oncology education relevant to their clinical roles. The teaching program for Physician Associates addressed an unmet need for PAs education.					✓
13. Ascitic Drain Consent and Management Teaching led to an improvement in Junior Doctors' confidence at obtaining consent and documenting abdominal paracetesis procedures. They were also more familiar with complications and how long the drains should remain in situ for. Unfortunately improvements were not seen in awareness of pre-procedure checks, or Junior Doctors' confidence performing the procedure. As the procedure is mostly performed in Interventional Radiology (IR), limited clinical exposure to the practical procedure also contributes to these findings. The questionnaire was limited by poor teaching attendance and low questionnaire response rates. This can be attributed to shift patterns affecting teaching attendance, and the Junior Doctor cohort being predominantly GP trainees. GPs are not required to be signed off as competent at abdominal paracentesis for their training, so are less engaged in learning a procedure which isn't relevant to their long term practice. Since August 2020, CCC has introduced a new IR service, facilitating ascitic drain insertion under direct ultrasound scan guidance. Our data analysing the quality of consent and documentation following introduction of the Meditech proforma, is confounded by the switch to IR guided ascitic drains occurring in the same time period. This systematic change in the procedure for abdominal paracentesis limits our assessment of the Meditech proforma, which was only used once in the period reviewed. 79% of ascitic drains are now inserted by IR, with documentation largely completed in PACS. It was recommended that continuing to include ascitic drain teaching at induction was important, as a small number of procedures are still performed by Junior Doctors on the ward, and Junior Doctors will continue to manage patients on the wards following IR insertion.			✓		✓
14. A retrospective audit assessing the management of patients with osteoradionecrosis (ORN) under the care of the OMFS department at Aintree University Hospital The audit found that ORN was more common in males (n= 64/92), spontaneously occurred in 55.4% and was most prevalent in the mandible. Seventy-five patients were prescribed medication, including PENTOCLO in only one case (1.3%) and quadruple therapy in 40 (53.3%). Over half of the cohort had a form of surgery (n= 48/92) with twenty-six free flap reconstructions. The complication rate of surgery was high at 45.8%. The findings highlighted the variation in treatments offered by individual consultants. Understanding the impact on quality of life and overall patient journey from diagnosis to treatment will not only improve current management but also aid the design of future research trials and overall service provision.	✓	✓			

Improved Knowledge	Knowledge gained (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
15. Use of Taxanes in adjuvant/neo-adjuvant setting in early breast cancer in Clatterbridge Cancer Centre. The aim of this project was to investigate whether CCC Breast Oncologists were complying with the Breast SRG agreement to the protocols agreed and amended at the away day in October 2017. The protocol changes involved a switch to Paclitaxel-based regimens for patients with ER positive cancers for pts ≥60 and for all patients with triple negative pathology. This re-audit proved that Paclitaxel has become a more popular option since the Breast SRG recommendation in 2017, as more than the half of the patients on this study commenced on Paclitaxel (56.7%) in comparison to the 22.3% of the patients in 2016. Despite this, there were still cases where Docetaxel was used as first line in triple negative patients and ER positive patients aged 60 years of age or more; in fact we identified 2 patients from the above subgroups older than 70 (eldest was 74) who received Docetaxel instead of a Paclitaxel regimen. Clearly decisions regarding treatment strategy are considered individually and based on patients' performance status and comorbidities. However, it is vital that clinicians acknowledge that the tolerance of Docetaxel is not as good as the tolerance to Paclitaxel, particularly in older patients. This has been demonstrated in the present study where we have demonstrated that the <40 age group patients receiving both Docetaxel and Paclitaxel had the lowest discontinuation rates compared to older age groups. Also, whereas 16.9% of patients on Docetaxel overall required admission, only 6.7% of patients did on Paclitaxel. It may be that it took some time for clinicians to implement the agreed changes to the protocol. This is supported by the difference in the first 3 months of 2018 vs the last 3 months (Table 9, Appendices). 76.5% of patients who were ≥60 and ER positive or triple negative who commenced treatment between January and March 2018 inclusive received Paclitaxel as their initial Taxane compared to 82.7% who started treatment between October and December 2018. We have also audited compliance with the agreed protocols for Anthracycline use. It was agreed that the Anthracycline of choice going forward would be Epirubicin. However, we note that 23% of all patients receiving an anthracycline in their regimen were given Doxorubicin rather than Epirubicin, but no specific reason for this was given. The protocols were also amended to recommend offering all patients with triple negative cancer dose-dense Anthracycline regimen. Disappointingly, only half (51%) of such patients started treatment with a dose-dense Anthracycline. However, of those who were given a dose-dense regimen the rate of hospital admission was similar to those who received 3-weekly regimen. In addition, of those who started 2-weekly Anthracycline only 12.5% required change to 3-weekly. Clinicians should be encouraged to expand the use of dose-dense regimens – perhaps to include patients with HER 2 positive disease and non-high risk ER positive HER 2 negative patients.	✓	✓	✓	✓	✓
16. Dental Assessment Prior to Radiotherapy for Head and Neck Cancer The aim of the project was to compare the delivery of pre-radiotherapy dental assessment at the Regional Oncology Centre against national guidelines in regard to Orthopantomogram (OPG) assessments and timing of extractions. Three-quarters of patients received a pre-RT assessment but there is scope for improvement. OPGs should be part of initial HNC staging and referral to Regional Oncology Centre dental services should be made as part of the pre-RT workup.	✓		✓		✓

Improved Knowledge	Knowledge gained (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
17. Diabetes Prescribing and Management Inpatient Audit The aim of this audit was to measure the proportion of diabetic patients who were correctly prescribed their diabetic medication, monitored, and managed correctly when an inpatient. The audit found that the prescribing and management of diabetic patients' medication and BG monitoring fell below that found in the NaDIA 2019 and hence also below the national average. This is due to many factors including a different patient population, having limited access to specialist diabetic support and training, and the lack of interface between electronic prescribing and non-remote blood glucose monitoring. prior to the audit taking place a number of improvements to the service were already in motion and being driven outside of the audit. Changes required for improvement and introduced included the following: - Introduce a robust system to identify patients with diabetes on admission to hospital. Ensure there is an electronic list of omitted medication that can be viewed for each ward by the ward team. - Education and training improved around prescribing diabetic medication and the implementation of 'druggles' in which the ward team comes together to discuss common prescribing errors and to celebrate difficult tasks done well - Ensuring that the self-medication policy was being utilised and that it was embedded in the admission process. - Ensuring that all insulin, including VRIII prescriptions were fully electronic.	✓		✓	✓	✓
18. Patient experience of radiographer review and post radiotherapy patient pathway The aim of the audit was to gain feedback on patients experience of the radiographer-led clinic. The audit found that telephone consultation may have affected rates of satisfaction with appointments, referrals and signposting. Disaffection was expressed regarding Follow Up involving a lack of face-to-face and no 'aftercare'. In Oncology, where patient well-being is affected, a return to face-to-face appointments should be considered. 'Aftercare' needs some improvement and service redesign could enable this.				✓	
19. Assessment of frailty in Aintree lung clinic Most of the lung cancer treatment guidelines are based on studies with patients younger than 70 years old and relatively fit. However, Liverpool has nationally the second highest number of co-morbidities in lung cancer patients. This makes decision making around treatment choice and quality of life challenging. Currently, WHO PS ≤ 2 is used as a 'cut-off' to assess fitness for treatment for (potentially toxic) treatment(s) in lung cancer patients. However, the WHO-PS does not capture frailty or underlying vulnerability (or hidden co-morbidities) in our patients. Geriatric assessment can detect multiple health issues which are not reflected in the WHO-PS. Impairments in geriatric domains have predictive value for mortality and appear to be associated with treatment completion. The audit concluded that WHO-PS fails to identify severely frail patients according to G8 frailty score. At least 7/10 patients had severe comorbidities and would require comprehensive geriatric assessment according to international recommendations from European Society of Medical Oncology and International Society of Geriatric Oncology. Improving the assessment and management of frailty will enable us to optimise and individualise treatment decisions further.	✓	✓		✓	

Improved Knowledge	Knowledge gained (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
20. Retrospective review of weight gain during adjuvant breast cancer treatment with Goserelin The aim of the project was to identify any variation in weight during adjuvant breast cancer treatment over a 2 year period in post-menopausal patients. No patients BMI should increase to >25kg/m2 during adjuvant breast cancer treatment (if their BMI was >25 kg/m2 prior to treatment this should not increase further) Multiple factors such as the patients categoric BMI at the baseline, patient's comorbidities, their adjuvant therapy they received, and their age have all in the past impacted the patient's weight and caused a significant decrease or increase. This investigation analysed whether the patient's age and categoric BMI significantly affected their weight throughout 36 cycles of adjuvant Goserelin treatment. Although no statistical or clinical significance was established from the two sample t test, there undeniably was patients who had a significant gain or loss during treatment and therefore further investigations are required in order to find the key factor which is the correlation to weight gain or loss during adjuvant Goserelin treatment for breast cancer patients.	✓		✓	✓	
21. Review of non-medical prescriber (NMP) activity at CCC The aim of this study was to explore the prescribing experiences of NMPs within a tertiary cancer trust and identify what influences that affect prescribing activities. Stakeholders have positive views on the impact of NMPs on patients and the wider health service. The number of barriers identified was surprisingly low and affected early months of practise. The perspectives of NMPs are interesting and further research exploring those perspectives within oncology clinics across the country will be required in the future. Non-medical prescribing is continuously expanding within the UK and further afield. There are growing numbers of oncology nurses and pharmacists who play a key role in helping patients navigate complex treatment protocols and manage side effects and symptoms. It is evident that both pharmacist and nurse NMPs have a variety of job roles in oncology clinics such as reviewing patients, managing side effects, discussing scan and blood results, issuing prescriptions and clinically screening prescriptions. There are many factors that may influence NMPs prescribing, such as confidence, competence, formularies, and educational factors. NMPs perceptions of their role are positive and discussed how prescribing increases job satisfaction, enhances patient care, and enables the NMPs to utilise their skills.					✓

Improved Knowledge	Knowledge gained (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
22. Are we adequately screening our Myeloma clinic patients for MGRS (Monoclonal Gammopathy of renal significance)? Monoclonal Gammopathy of renal significance (MGRS) is a new entity that was introduced in 2012 and redefined in 2017 by the International Kidney and Monoclonal Gammopathy Research Group (IKMG). This project will be assessing our monoclonal gammopathy of unknown significance (MGUS), light chain deposition disease and AL Amyloid patients from 2015-2020. Our primary outcome will look at whether Urine Albumin/Creatinine Ratio (ACRs) were performed at initial presentation and if so were they acted upon appropriately. Secondary outcomes will include whether renal function and urinalysis were performed at presentation and whether acted upon appropriately. Baseline assessment of use of Urine ACR in our Myeloma Clinic from 2015-2020 with a view of aiming for 100% of patients attending the Myeloma Clinic to have Urine ACR at initial presentation. This audit has shown an increased recognition for the importance of ACR measurement with increased compliance year on year. A likely hypothesis for the reduced measurements in 2020 is the need for remote clinic appointments during the Coronavirus 2019 (Covid-19) pandemic. Following IKMG guidelines 14.0% (n=44) of patients would be advised to have a renal biopsy due to their ACR measurement of >30.0 mg/mmol. Further evaluation of this patient cohort is required to audit compliance with other parameters suggested by the IKMG. A diagnostic pathway to be used at the earliest opportunity for MGUS patients may then be developed.			✓		✓

Provided Assurance & Improved Knowledge Projects (6)

Provided Assurance & Improved Knowledge	Assurance & Knowledge gained (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
1. To determine the clinical outcomes for node positive bladder cancers treated at CCC (non-patient identifiable data will be collated with those of Christies to give outcome data for the North West England) Optimum management of patients with clinically node positive non-metastatic (cN+M0) bladder cancer is a topic of debate with significant variation in practice worldwide. In the UK, fit patients are offered – after platinum-based chemotherapy - either radical cystectomy (RC) or radical radiotherapy (RadRT) – a bladder preserving treatment. There is a paucity of evidence to guide clinician and patient decision making on choice of treatment. A multi-centre UK retrospective analysis was undertaken to assess clinical outcomes for cN+M0 bladder cancer. This multi-centre retrospective analysis of survival outcomes gives real-world data on a large cohort of patients with cN+M0 bladder cancer. Overall survival unfortunately remains poor in this cohort but was significantly longer both in patients who received radical intent treatments and further improved if neoadjuvant chemotherapy was given. There was no difference in overall survival between patients receiving RC and RadRT. A limitation of our data is the risk of confounders when comparing retrospective cohorts. Given expected toxicities from radiotherapy are generally less than radical surgery, our findings support the wider adoption of radRT as a definitive treatment of cN+M0 bladder cancer.	✓		✓		

Provided Assurance & Improved Knowledge	Assurance & Knowledge gained (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
2. Comparison of Sepsis Screens in an oncology population The aim of this audit was to evaluate the efficacy of the CCC modified sepsis screen in the setting of an acute specialist hospital trust and to identify the most specific screening method to use in the CCC population while maintaining sensitivity. The audit concluded that the CCC sepsis screen is more specific than UK sepsis Trust screen.	✓		✓		
3. Coronavirus in cancer The aim of the audit was to track cases and outcomes of cancer patients affected by the COVID-19 infection. The audit found that mortality from COVID-19 in cancer patients appears to be principally driven by age, gender, and comorbidities. We are not able to identify evidence that cancer patients on cytotoxic chemotherapy or other anticancer treatment are at an increased risk of mortality from COVID-19 disease compared with those not on active treatment	✓				
4. Improving quality of radiotherapy information provided to Dental team for H&N patients The audit team created a database to allow for the collection of radiotherapy dose distributions for various Head and Neck clinical scenarios with corresponding doses to sextants in order to plan preventative dental treatment for patients undergoing head and neck radiotherapy. Overall the maxilla receives a low-medium dose (increased in oral cavity compared to nasopharngeal tumours). The ipsilateral posterior mandible receives high dose and the contralateral a medium dose. With oral cavity tumours the entire mandible receives high doses. IMRT delivers statistically significant lower doses to dental structures. Limiting the dose to glands, teeth and tooth-bearing structures lowers the risk of ORN, xerostomia and the severity of mucositis, which improves post-radiotherapy quality of life. Using templates to simplify why treatment is recommended we can ensure informed, valid consent is gained.	✓		✓		
5. A service evaluation of 2D planar vs 3D volumetric on-treatment verification for radiotherapy to the upper gastrointestinal tract; which one provides better setup accuracy? The audit was to retrospectively analyse CBCT images saved in ARIA to determine if there were any significant differences between 2D planar bony anatomy and 3D volumetric soft tissue matching in upper GI on-treatment verification. A secondary aim was to identify whether these differences had a dosimetric impact on treatment plan objectives and therefore warranted daily 3D volumetric imaging with soft tissue matching. Reflecting on the audit, it can be concluded that there are differences between 2D planar bony anatomy and 3D volumetric soft tissue matching in upper GI on-treatment verification however, although these may be deemed significant for a small minority of patients, the differences do not have enough of a negative impact to warrant an increase in frequency of CBCT imaging with soft tissue matching. Therefore, there is minimal justification from the present study to rationalise the increase in concomitant dose that would come with daily CBCT imaging for this patient group and kV planar imaging is sufficient to achieve adequate target volume coverage in the absence of volumetric assessment. The findings of the present study re-inforce confidence towards the current radical upper GI imaging protocol at the Trust and can be used as an additional research contribution within an increasing body of evidence for the development and implementation of a national standard.			✓		

Provided Assurance & Improved Knowledge	Assurance & Knowledge gained (Theme):				
	Patient Outcomes	Quality of Life	Patient Safety	Patient Experience	Staff Experience
6. Review of patient population (over 10 year period) with sequential primaries of prostate+ rectum (and rectum then prostate) treated with Radiotherapy assessing severity of bowel toxicities The objective of the audit was a review of the patient population (over 10 year period) with sequential primaries of prostate and rectum (and rectum then prostate) treated with radiotherapy, assessing the severity of bowel toxicities (G3/G4) and fistula development post treatment to inform (and adapt if necessary) current practice. The audit found that the vast majority of cases in both groups treated with different combinations of pelvic treatments – EBRT/Brachy/Surgery did not have any 3/4 bowel toxicities or fistula formation and we can thus reiterate the relative safety of these potential multiple pelvic treatments (Surgery/Radiotherapy) within the confines of the known risks patients are consented for during prostate/rectal radiotherapy alone. There were only 2 cases seen of fistula formation across both groups. Both of these cases were multi-factorial and cannot solely be attributed to Radiotherapy alone. Of the 2 G3/4 Bowel toxicities in the 2 groups, 1 was clearly multi-factorial and mainly down to surgical complications/tumour recurrence. The other difficult to tell if symptoms were down to disease recurrence/progression or multiple treatments of rectum with radiotherapy or element of both.		✓	✓	✓	

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