

Title: Winter update from Nottingham University Hospitals NHS Trust

Report for: Nottinghamshire County Council Health Scrutiny Committee

Date: 21 February 2023

Report prepared by: Lisa Kelly, Chief Operating Officer, Nottingham University Hospitals NHS Trust

1. Purpose of this report

This report provides a brief overview and update of winter planning, what has happened in terms of demand and the response to this by Nottingham University Hospitals NHS Trust (NUH).

2. Introduction

How did we prepare for winter?

NUH strives to deliver accessible, high quality services throughout the year. Winter is one of the nationally recognised pressure points where additional planning is required in order to maintain resilient services.

The aim of the NUH winter plan (appendix a) is to ensure NUH capacity, processes and systems are fit for purpose and resilient to meet the anticipated level of demand throughout winter and maintain and optimise patient safety. Our vision is to deliver a caring, safe and productive winter.

The NUH winter plan is underpinned by the following principles:

- Appropriate services are available for patients requiring care in the acute setting
- Patient safety is optimised and quality of care is maintained. Patients are not exposed to unnecessary clinical risk (including Covid-19, influenza and norovirus)
- The health and wellbeing of staff is maintained
- Any adverse impact on elective activity and associated patient experience, income and performance is minimised. Cancer and clinically urgent activity is preserved
- An agile approach is adopted with plans in place to respond to a potentially rapidly changing environment as a result of the Covid-19 pandemic and influenza
- Health and care partners across the Integrated Care System (ICS) will work together to offer appropriate services to our population in the right place at the right time

The winter plan was designed to:

- **Anticipate and assess** issues in maintaining resilient services
- **Prevent** the likelihood of occurrence and effects of any such issues
- **Prepare** by having appropriate mitigating actions, plans and management structures in place
- **Respond and recover** by enacting plans and contingencies as required

Key highlights from the winter plan included:

- There was uncertainty in winter 2022/23 as a result of the continued impact of the pandemic and learnings from the Southern Hemisphere relating to influenza. As a result, an agile approach was needed to respond to a potentially rapidly changing environment
- A nominal state bed model was developed based on elevated activity rates experienced in the first half of 2022/23 continuing with additional winter demand phased in
- The adult base ward bed modelling for the remaining months of 2022/23 showed a mitigated position against the nominal state and a peak bed deficit in Jan-23 of 18 beds against the 'challenging winter' scenario. It is important to note that residual, forecast bed position was based on the successful delivery of the mitigating actions to the intended level of impact
- Given the uncertainty and changes in non-elective demand, hospital length of stay and Covid-19 and influenza epidemiology; the modelling may not be as informative as in pre-Covid-19 years. We track the input parameters alongside the delivery status of our schemes. The delivery status of system schemes has been tracked within the ICS team
- The pressure from the modelled medically safe patient cohort provided significant scope for improvement. System plans were developed to significantly reduce the number of medically safe patients in hospital; it was of utmost importance that these schemes deliver
- Internal actions are in place to:
 - Reduce demand on our services;
 - Have the highest number of hospital beds open and enhance our bed configuration;
 - Enhance our processes and improve patient flow;
 - Make strategic enhancements in staffing.
- Escalation triggers for the Trust are monitored throughout the day (365 days a year), with corresponding actions cards in place to support de-escalation.
- 24/7 rotas are in place for site management Duty Matrons and clinical staff for all 24/7 services. On-call senior staff are in place throughout the year 24/7 (gold on-call and two silver on-call at all times).

The Nottingham and Nottinghamshire Integrated Care System has also produced a system winter plan (appendix b) providing an overview of how local organisations are working together to meet anticipated urgent and emergency care needs this winter. It

assimilates projections for healthcare demand, organisational actions to increase capacity and activity and shows the overall impact on the systems hospital beds.

3. Current situation

The bed model is based on two scenarios:

- **Scenario 1 (Nominal State):** This is based on elevated run rates experienced in the first half of 2022/23 continuing, with additional winter demand phased in the second half.
- **Scenario 2 (Challenging Winter):** This is based on an extremely challenging winter with additional demand pressures from cases of Covid-19 and Flu.

The demand over the winter period has seen the system as a whole move to track Scenario 2 in terms of Covid-19 and Flu admissions. In addition ED respiratory attendances surged significantly during the last fortnight of December across all age groups, but particularly in the 30-40-year olds who are not eligible for routine winter vaccinations. A corresponding increase in respiratory admissions during second half of December was observed, coupled with longer lengths of stay, caused NUH and the wider system to move into critical incident on 29 December, this is the second critical incident for NUH in December with a previous one being declared between 19 and 23 December for capacity and flow constraints.

Furthermore, Paediatrics ED attendances and admissions remained very high during this period; Covid-19 admissions peaked during the last two weeks of December and RCN industrial action took place on the 15 and 20 December, and EMAS industrial action took place on the 21 December some of which would have contributed to an increase in demand after the Christmas period.

4. Mitigations

A system critical incident was declared on 29 December. NUH came out of critical incident on the 6 January. In response to the increased demand, NUH repurposed three surgical wards to accommodate the high emergency admissions described above (79 beds) and further repurposed three bays to create 12 medical beds.

The impact of the above changes whilst essential for emergency flow have negatively affected planned care capacity. This was minimised through the festive period and also through admission via Barclay ward and the treatment centre. However, the continued use of the elective bed base to support non-elective surge has led to a significant loss of elective activity. Average elective admissions over the period from August to 28 November 2022 were 106, this dropped to 14 over the five days from 4-9 January 2023. Towards the end of January 2023 the number of patients in the NUH bed base who have tested positive for flu has started to reduce in a sustained way and the Trust is now in a position to re-establish our elective bed base and associated planned care activities and begin to increase our activity toward pre-winter volumes.

The total system planned mitigations for December 2022 were behind plan by 49 due to late funding approval. Funding for the additional UEC mitigations was confirmed by NHSE as part of the BCF funds on 21 November 2022 with local financial sign off on 16 December 2022. These large schemes are crucial as they are expected to save 50 acute beds (as assumed in the bed model).

NUH has also responded to the winter pressures experienced through:

- The introduction of NUH@Home, commencing on 1 November act as a bridge to allow early discharge whilst patients wait for either the start of a new package of care or a restart. By late January 15 patients have completed their NUH@H package, saving 82 bed days in total
- The establishment of the QMC Transfer Of Care Unit on ward A24 to support Medically Fit For Discharge (MFFD) patients with planned discharge dates, allowing specialist beds on base wards to be released
- Targeted increase in the use of the Discharge lounge, increasing numbers of patients through the unit
- In-reach of Gastroenterology into ED from April 2022 has yielded a 7% average avoidance of Gastroenterology specialty tags. It is anticipated that this will further improve from January 2023 due to the increase presence of Gastroenterology consultants on the QMC site due to winter investment
- Running a fourth emergency list twice a week from December 2022, early indications show a reduction in preoperative length of stay.

Further funding has been approved nationally to increase discharges during week commencing 9 January in addition to the BCF funds to create further system capacity. The system has thus bid for £1.67m to create additional p1/p2/p3 and interim bedded capacity together with wrap around assessment, therapy and nursing support which the system is currently in the process of mobilising.

The three taskforces (Acute Front Door, Acute Patient Flow and Discharge) within the Urgent and Emergency Care Programme have continued to deliver improvements. Highlights from December 2022 and January 2023 include:

- Successful embedding of “straight to specialty” process for patients arriving at ED with GP letters
- Increase in % of primary care patients streamed from ED between Nov and Dec (up from 15% to 18%)
- NUH Integrated Discharge Team (IDT) have appointed six new band four roles and have designed a new working model to be tested w/c 16 January
- There have been 316 patients admitted to a Virtual Ward between 1 December to 23 December
- Positive signs of reduction in EMAS conveyances, ED attends and NEL activity for Cohort 1 of High Intensity Service User patients
- Criteria for discharge now identified for emergency surgery pathways

- Virtual wards have been established for Paediatric Oncology, Surgical Triage Unit, Respiratory, Paediatric Jaundice, Maternity and Heart Failure cumulatively saving 67 beds since September 2022 to January 2023
- Introduction of PDSA trials of the reverse bed chain model to rapidly transfer patients from ED commenced on 16 January with plans to build upon the trials to inform the sustainability and viability long term of the reverse bed chain quality management operating model.

5. Conclusion

The NUH winter plan document presents a summary of planned activities based upon underlying demand and capacity assumptions. It is clear that the nominal state scenario underestimated the actual demand that was observed in the early months of winter and that the system began to track against the challenging winter scenario. NUH and system partners reacted to increase capacity and mitigate demand increases in response, which whilst effective for the emergency pathway also had a consequential negative impact on planned care capacity. Furthermore, unanticipated variables such as critical incidents, strike action and non-seasonal Strep A demand have increased pressure on NUH capacity that was not built into the initial winter plan.

Learning has been taken around how we forecast the impact of influenza and unforeseen variables such as Strep A and strike action. Further action is also needed around how we predict future demand trends, currently this is based on historical trends being representative of the future demand which therefore will miss these unforeseen variables. A forum will begin in March at NUH to better determine how we will plan for, respond to and manage future influenza and COVID surges.

Urgent and emergency services have experienced a combination of pressures impacting the whole system but most visibly at the front door. NUH and the system prepared extensively for winter, putting in place multiple mitigations and adding further when it was apparent winter demand pressure was higher than anticipated.

As described in the NHS England and The Department for Health and Social Care's Delivery Plan for Recovering Urgent and Emergency Care Services the NHS faced problems discharging patients to the most appropriate care settings, alongside the demands of flu and COVID peaking together, has seen hospital occupancy reach record levels. This means patient 'flow' through hospitals has been slower.

Building on this national guidance and NUH's recently published 'People First: Reflection on a 100 day journey and looking towards the next 1,000 days' identifies improving emergency care flow (and its consequent impact on all our waiting times), recruitment and retention, and leadership and culture are the top priorities for NUH. The next phase of our continuous improvement journey is to move away from a 'winter plan' and develop a longer-term urgent

and emergency care strategy that takes in to account all seasonal variations, due for completion in April 2023.

The NUH Trust Board recognise the significant input and contribution of our clinical divisions, corporate teams and system colleagues that continue to work tirelessly to plan service provision to provide the best care possible to our local population and patients using the resources available.

Appendices

Appendix A

Nottingham University Hospitals NHS Trust winter plan

Appendix B

Nottingham and Nottinghamshire ICB winter plan

Appendix C

Incidents declared since September 2022:

1. 27 September - 5 October: Capacity and flow – high medically safe numbers in the Trust, with pressure felt at the front door. Long wait times for beds out of ED. Difficulties to discharge into the community.
2. 11 October: ICT issues – Network connectivity lost across all NUH sites. Unknown fault initially, but systems restored after 3 hours 40 min.
3. 23 November: ICT issues – failure of a pathology IT system (WINPATH) plus wider ICT issues across the Trust. Caused by a planned upgrade that developed a fault in the system. WINPATH issues affect our ability to process bloods, which created a backlog of test and disrupted flow through the Trust, including discharge.
4. 19-23 December: Capacity and flow - Severe pressures in ED with lots of respiratory patients. High number of closed beds due to infection. The Trust concurrently managed RCN and EMAS strikes, and a supply issue affecting oxygen cylinders.
5. 29 December - 5 January: Capacity and flow – continuation of pre-Christmas pressures. Impact mostly felt in admission areas.