

The potential unferred backlog and its impact on recovery planning in HDUHB

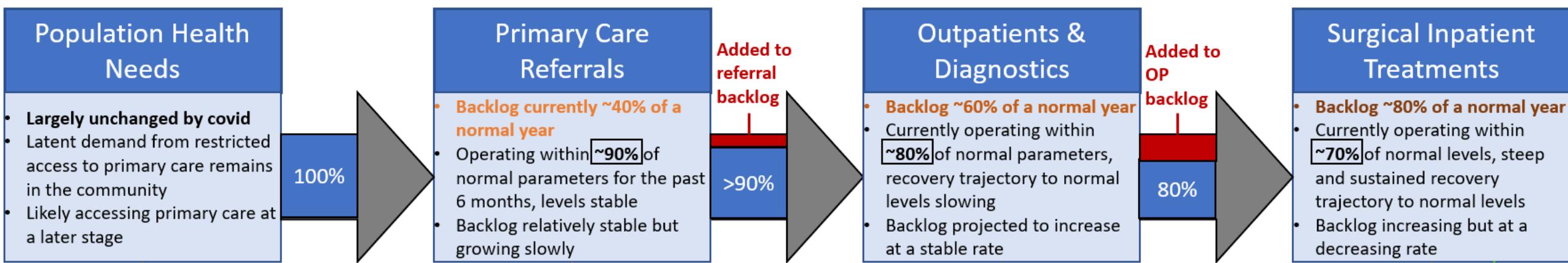
February 2022

Recovery from the impact of COVID

- ④ The start of the COVID pandemic in March 2020 caused the landscape of healthcare provision to change rapidly in multiple different ways
- ④ In particular, the delivery of planned care has remained an ongoing challenge
- ④ The planned care pathway crosses multiple providers within the healthcare system
- ④ All stages of this pathway have experienced periods of reduced capacity and activity since March 2020
- ④ To recover, planned care services need to consider:
 - ④ The cumulative difference to normal in their activity since March 2020
 - ④ How much of this has materialised on current waiting lists
 - ④ What proportion of the activity not yet on a waiting list is likely to return
 - ④ The timeline for when this activity may return
 - ④ How to reconfigure services to enable them to meet the scale of the recovery challenge

The Problem for Elective Pathway Recovery

- ④ Elective pathways are complicated and difficult to measure with standard approaches
- ④ The image below represents a simplified health system level elective pathway where each stage has been impacted by and is recovering from COVID differently
- ④ Small differences in the system dynamics are magnified in the one part of the system which isn't naturally constrained, waiting lists
- ④ The sustained differences in the number of patients being added to and removed from waiting list at different stages in the pathway combined with the significant demand backlogs accumulated since March 2020 will have a long lasting and significant impact on patient wait times if it is not carefully managed

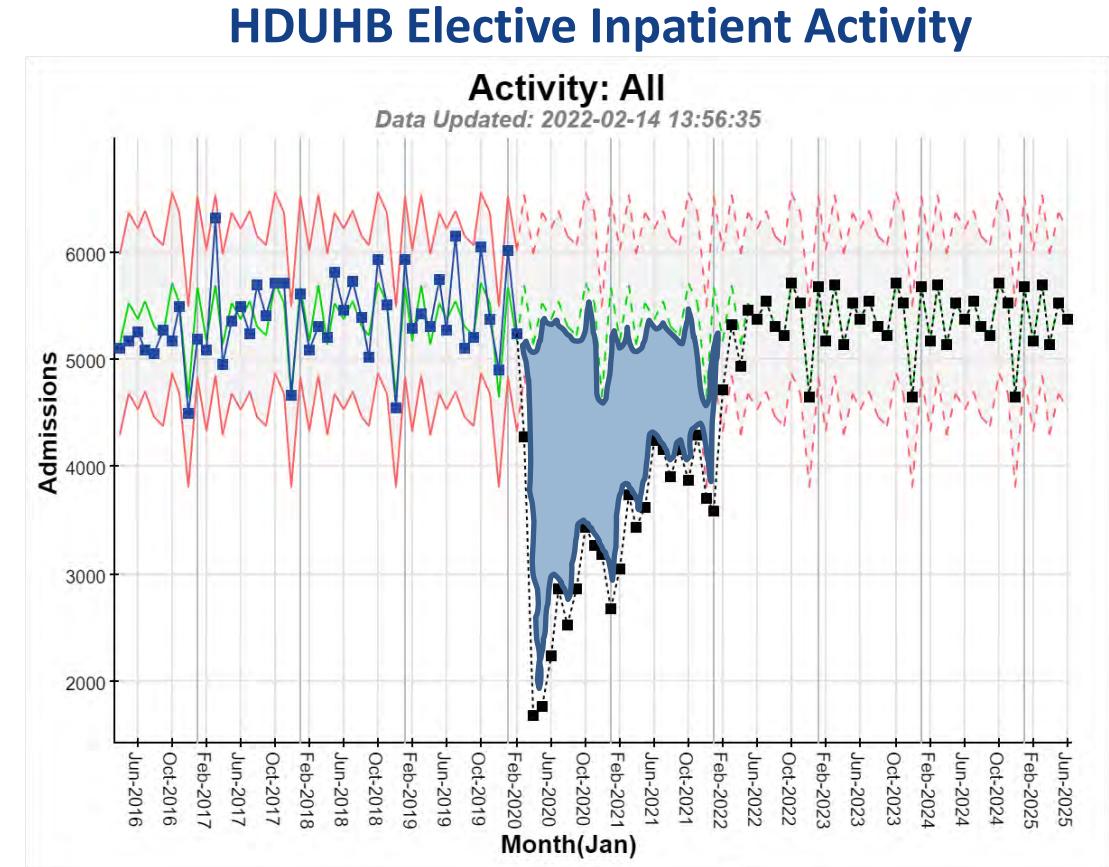


NB: These figures are illustrative and not a calculated value from HDUHB data

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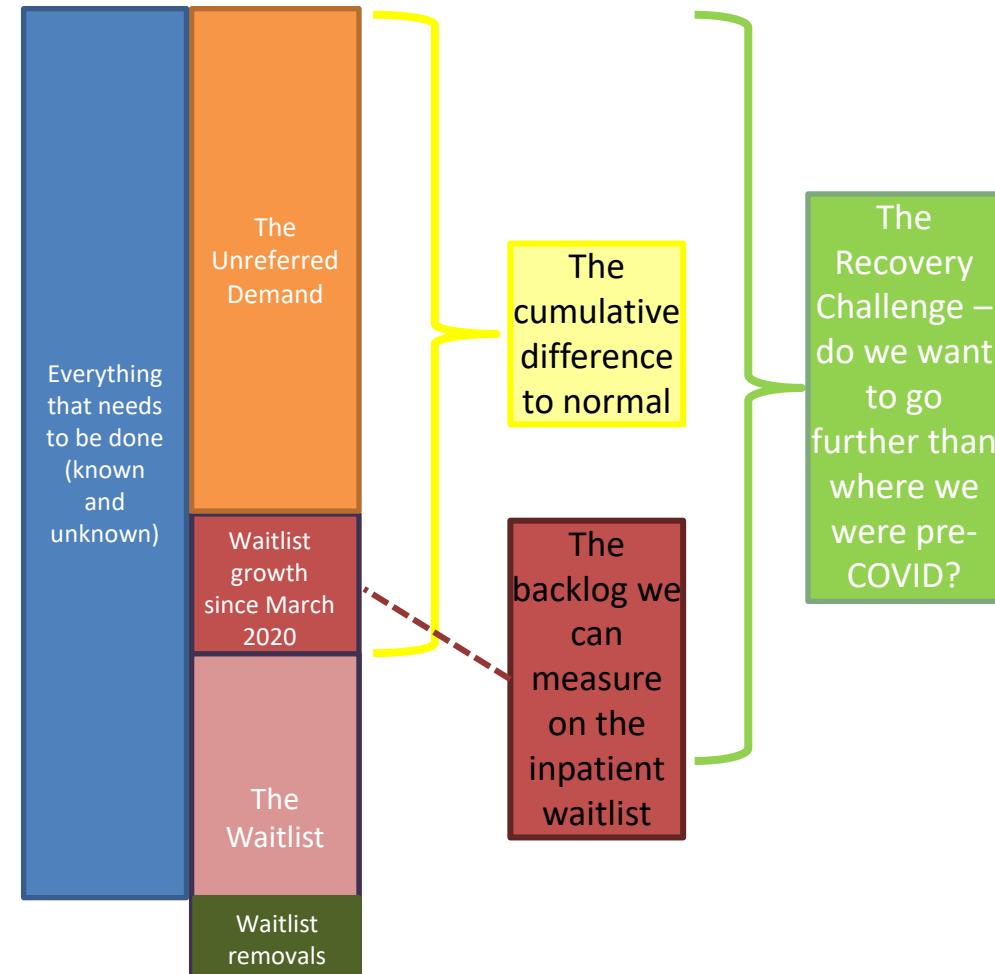
The Backlog – The Cumulative Difference to Normal

- ④ Using time-series analysis it is possible to identify normal patterns in healthcare activity
- ④ Each step in the planned care pathway has a normal pattern of activity over time
- ④ From March 2020 onwards, planned care activity significantly reduced compared to the previous normal
- ④ The cumulative difference to normal is the volume of activity that did not happen compared to the usual expected normal
- ④ The cumulative difference is the potential worst case scenario of the backlog
- ④ This continues to accumulate as long as any process is not operating at pre-COVID levels



Waitlists vs the Cumulative Difference to Normal

- ④ The growth in the numbers of people on waiting lists since March 2020 does not reflect the cumulative difference to normal in activity over the same time period
- ④ The waitlist volume accounts for patients who have started an elective pathway journey
- ④ Due to constraints in all stages of the elective pathway, fewer patients have been able to start this journey
- ④ The potential backlog for elective care includes people who have not yet had the opportunity to be added to a waitlist
- ④ Therefore the scale of recovery is larger than is currently visible

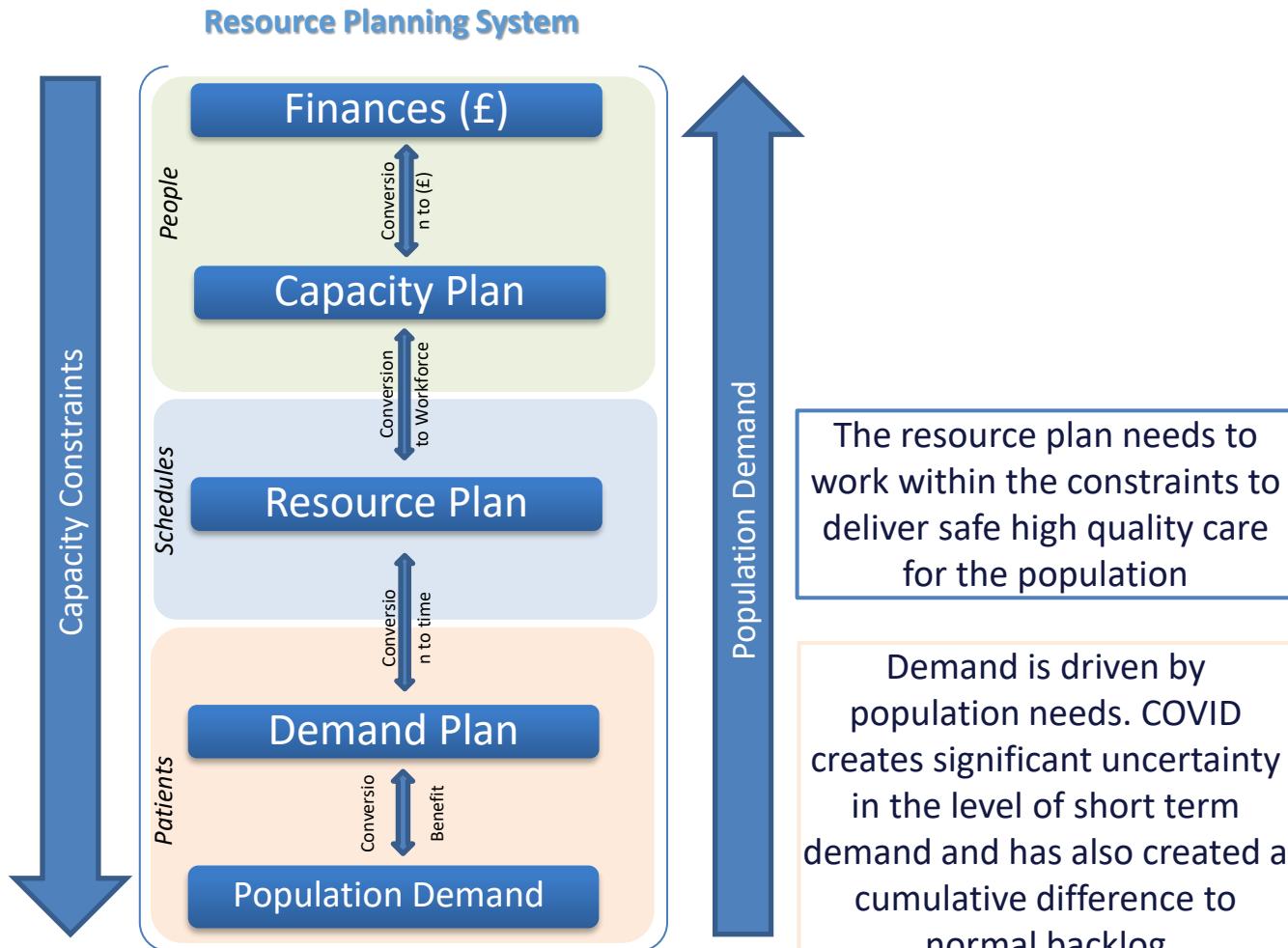


Assessing the Scale of the Recovery Challenge

- ④ As part of recovery planning, elective services in HDUHB have been considering the cumulative difference to normal for inpatient activity
- ④ Each specialty considers:
 - ④ The volume of the cumulative difference to normal
 - ④ How this compares to the current inpatient waitlist and referral rate
 - ④ Whether the likely population requirement for their service has changed since March 2020
 - ④ If it is possible to know when people may begin to present
- ④ Assuming that all activity within the cumulative difference to normal will emerge is the worst case scenario
- ④ Once the potential scale of the recovery challenge is agreed, it is possible to model a path to recovery

The Recovery Planning Process

A resource plan is constrained by available capacity in terms of theatres, beds and workforce, all of which are constrained by physical and financial resources

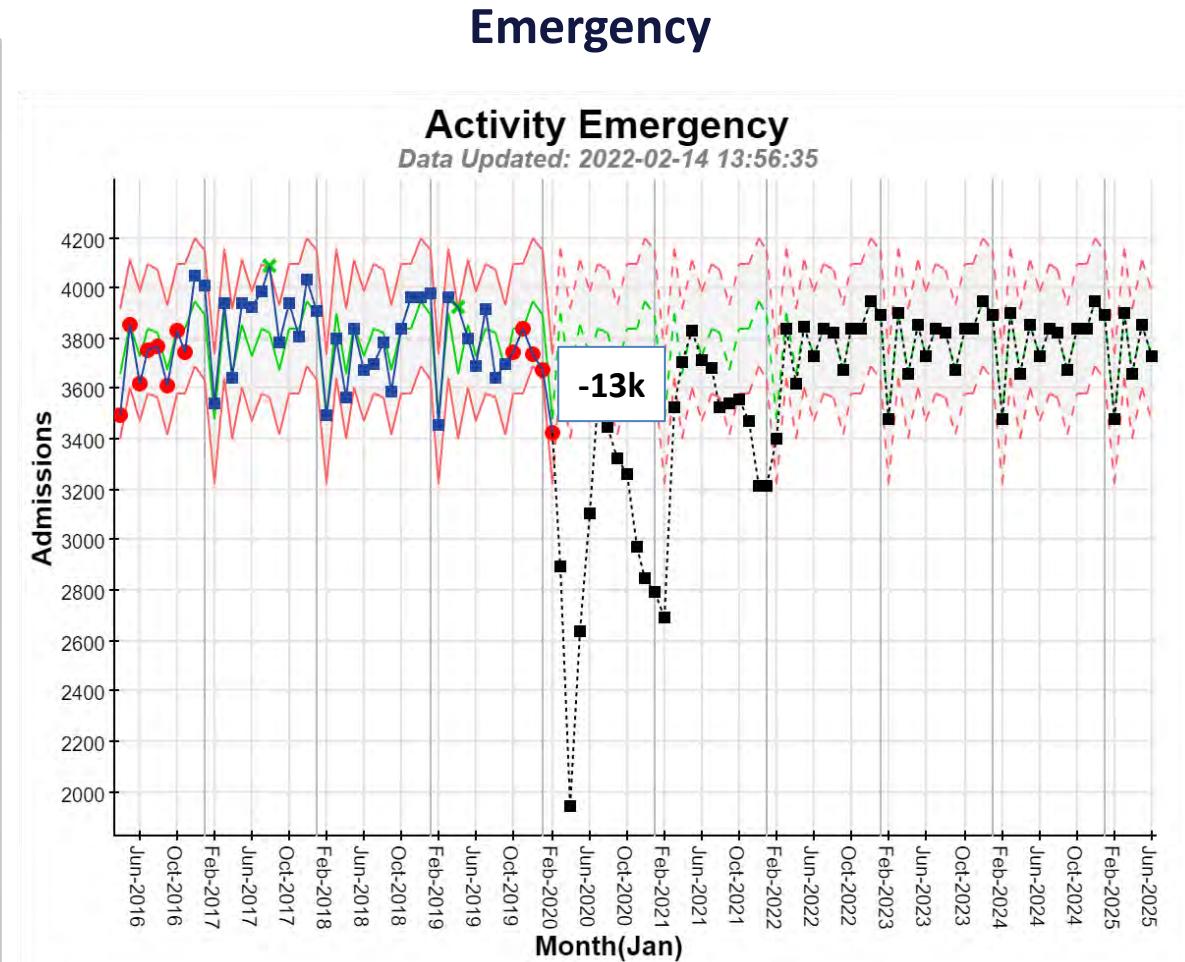
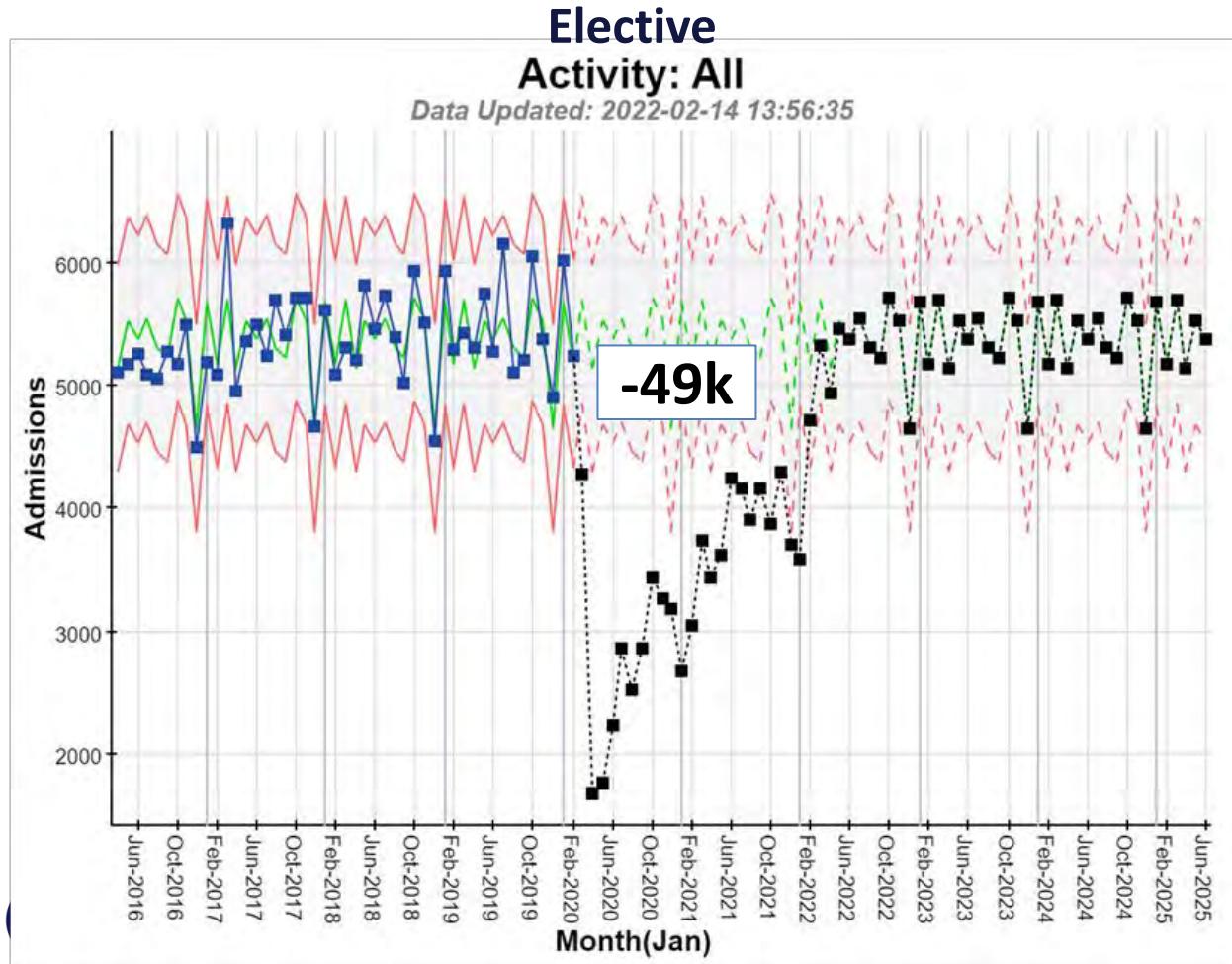


The Inpatient Elective Recovery Planning Process

- ◎ Use the Lightfoot sfn platform to calculate the cumulative difference to normal and the overlap between this and the waitlist to identify the potential unferred demand
- ◎ Work with each specialty to consider their recovery trajectory based on current activity levels
- ◎ Consider the options for service redesign
- ◎ Model potential scenarios for increasing activity and the resulting impact on the recovery trajectory
- ◎ Identify the implications on theatre time and bed capacity
- ◎ Discuss specialty plans at a Health Board level to identify interdependencies, risks and opportunities
- ◎ Re-apply the chosen scenario to sfn to track activity against the plan and make adjustments as required

HDUHB Cumulative Difference to Normal – Inpatient Activity (Jan '22)

Between March 2020 and January 2022 there are 49k missing elective episodes and 13k missing emergency episodes when activity is compared to the pre-covid prediction. With an average of 6.5k elective admissions per month pre-covid, this amounts to 7.5 months additional work.

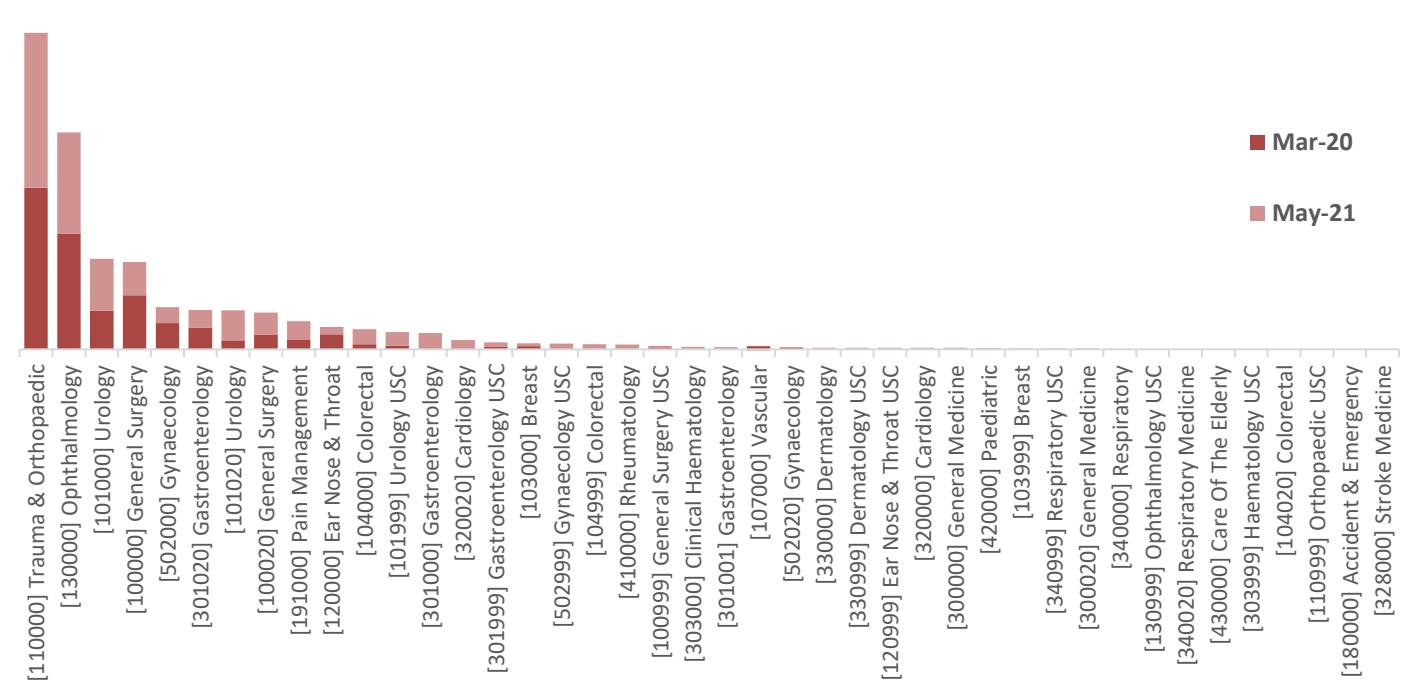


Waiting list Backlog (Nov '21)



Between March 2020 and May 2021, the inpatient WL has increased by 8k or 10.4k if extrapolated to September 2021. Of the 47k elective backlog between the same time period, this means that 36.6k (77%) of unmet demand is still unaccounted for on the inpatient waitlist.

Inpatient waitlist by specialty



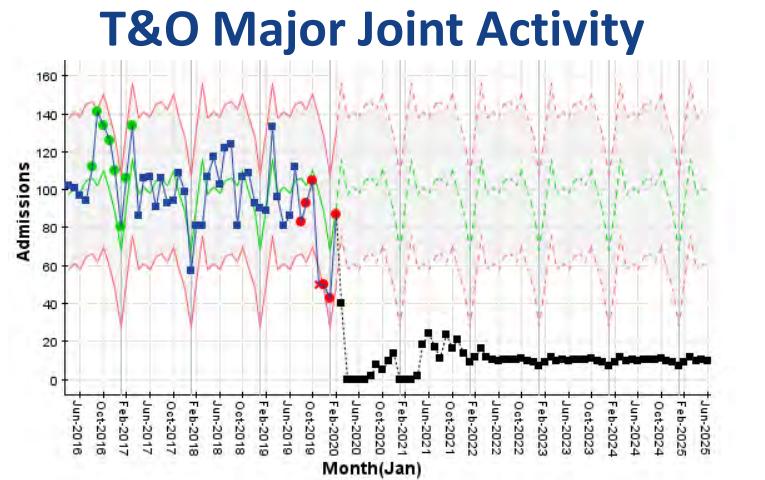
The 4 largest specialties – T&O (+96%), Ophthalmology (+87%), Urology (+134%) & General surgery (+61%) have generally doubled their WL positions between Mar 2020 & May 2021

T&O Inpatient Elective Recovery Planning

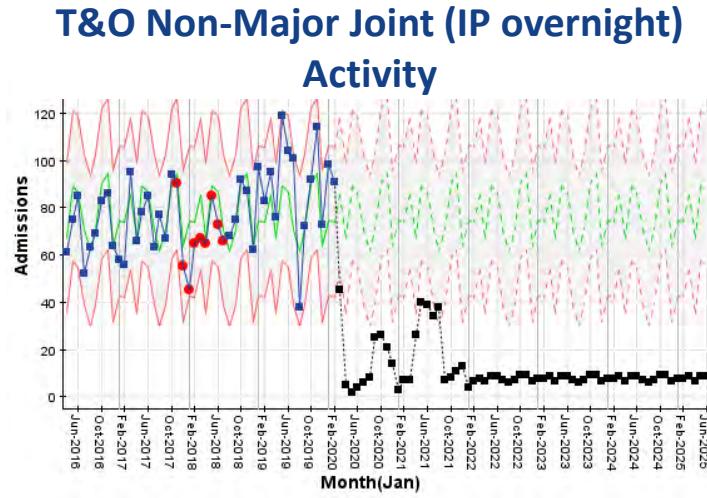
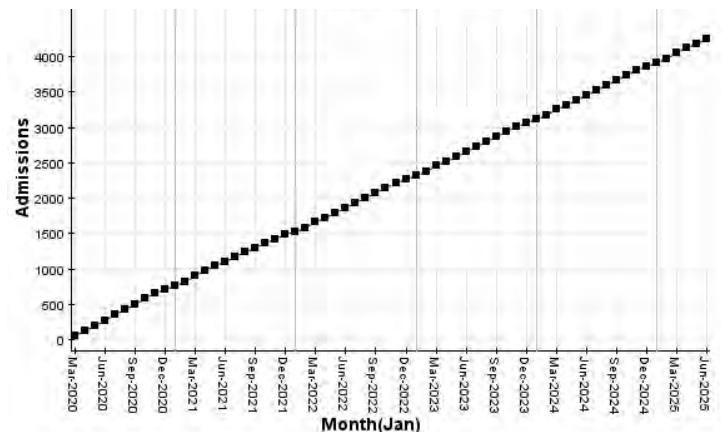
- ◎ Series of 3 meetings with T&O to refine the sfn recovery planning platform to reflect:
 - ◎ Proportion of unferred backlog assumed to materialise
 - ◎ Activity increases achievable due to efficiencies or reconfiguration
 - ◎ Service plans for different categories of procedure – major joints, other inpatient and day case/ 23:59
- ◎ To model the potential efficiencies achievable using a dedicated major joint elective inpatient service, data from a similar service in CDHB was applied to the HDUHB model
- ◎ It is assumed that 100% of the T&O backlog will return over time as the health need of the population has not changed as a result of the last 18 months
- ◎ Requirements to achieve the plan:
 - ◎ Increase to 38 theatre sessions per week across IP and daycare work
 - ◎ Dedicated inpatient elective service
 - ◎ Dedicated T&O inpatient ward
 - ◎ Adherence to best practice and adoption of efficient ways of working
 - ◎ Sufficient consultant workforce

Example: T&O Major Joint and Non-Major Joint Inpatient Overnight– Do Nothing Scenario

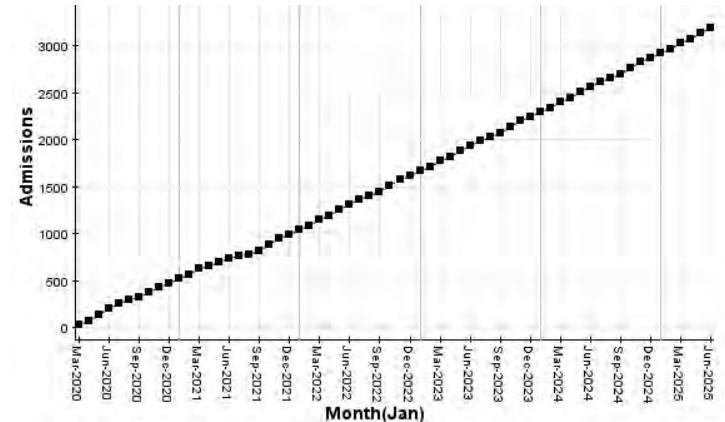
- ◎ If T&O major and non-major joint (overnight) activity continues at the current level (90% below the pre-COVID normal), the cumulative difference to normal continues to increase
- ◎ This creates an ever increasing backlog of activity that is likely to return



T&O major joint activity cumulative difference to normal since March 2020

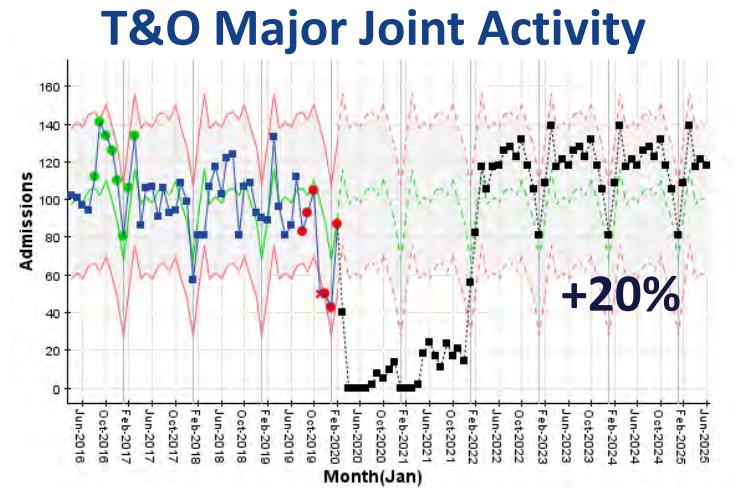


T&O non-major joint IP overnight activity cumulative difference to normal since March 2020

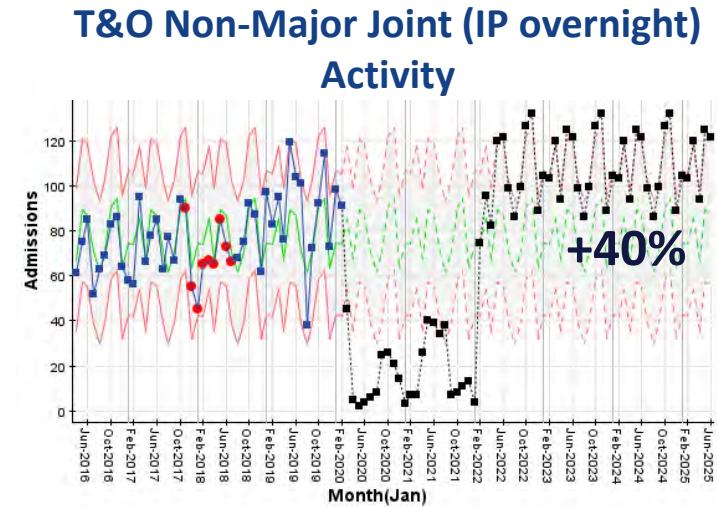
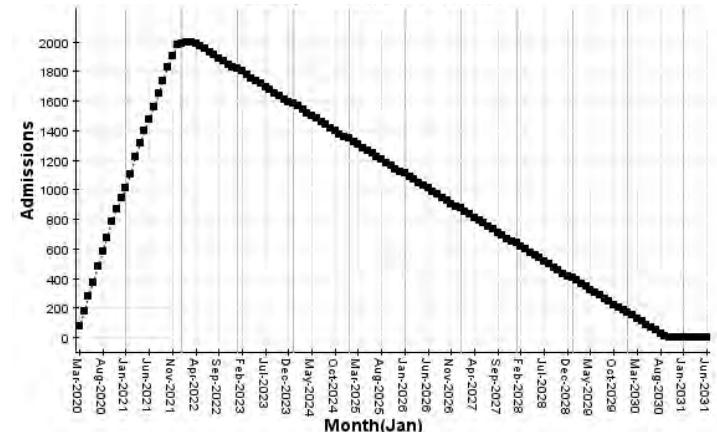


Example: T&O Major Joint and Non-Major Joint Inpatient Overnight– The Proposed Activity Increase

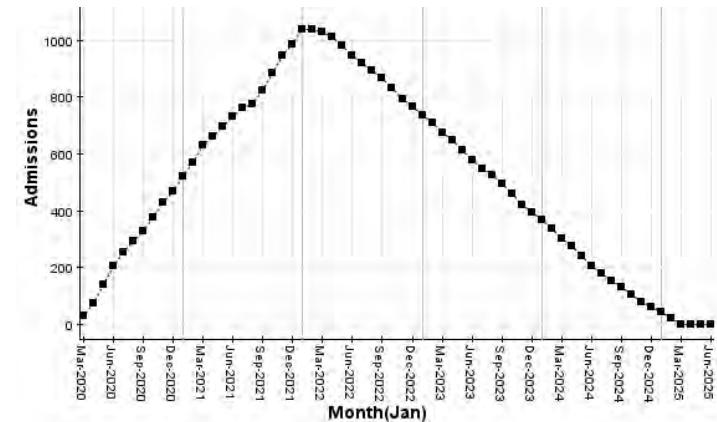
- ◎ Running a more efficient dedicated elective T&O centre enables an increase in major joint procedures and non-major joint procedures that require an inpatient overnight admission
- ◎ The increase in activity for each procedure group can be balanced to ensure that both start to recover rather than accumulate an ongoing backlog
- ◎ The activity increase proposed results in recovery to the pre-COVID waitlist position in between 3 and 8 years
- ◎ Any less activity would extend the recovery timeline



T&O major joint activity cumulative difference to normal since March 2020



T&O non-major joint IP overnight activity cumulative difference to normal since March 2020

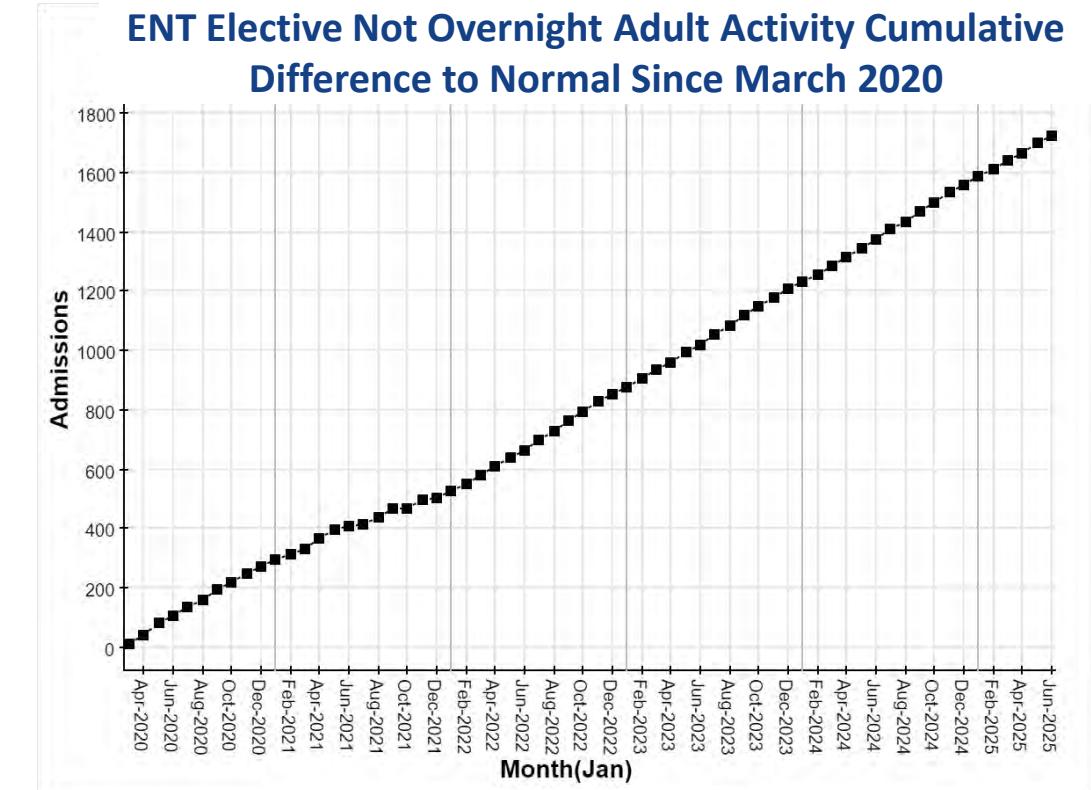
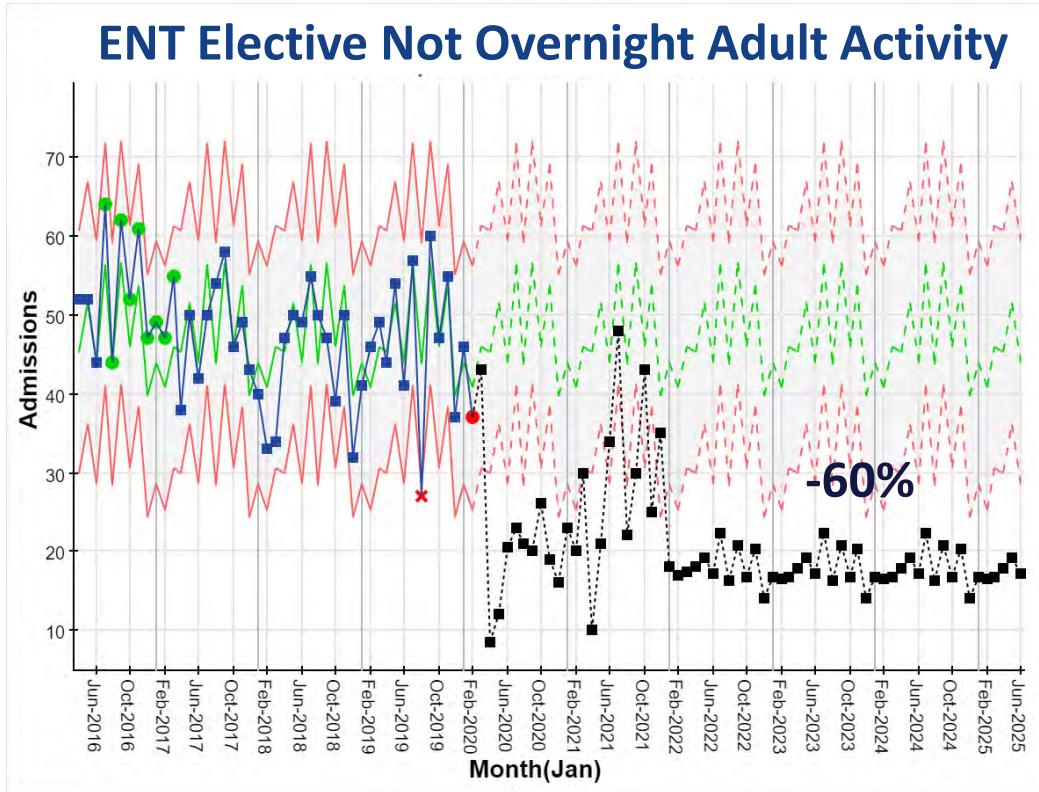


ENT Inpatient Elective Recovery Planning

- ◎ Series of 3 meetings with ENT to refine the recovery planning platform to reflect:
 - ◎ Proportion of unreferral backlog assumed to materialise
 - ◎ Difference in activity pre-COVID, during COVID and now
 - ◎ Potential activity increases achievable due to efficiencies or reconfiguration
 - ◎ Service plans for different categories of procedure – adult and paediatric, overnight and not-overnight
- ◎ Identification of the potential to increase day case throughput as a result of proactive identification of non-overnight adult patients and the creation of a 23:59 bay on the ENT ward to support their care
- ◎ Proposed increase in activity of 40% across the case mix due to the nature of the theatre lists and the proposal to increase from 10 to 14 sessions per week
- ◎ The service is planning for 100% of the ENT backlog to return over time as the health need of the population has not changed as a result of the last 18 months
- ◎ Requirements to achieve the plan:
 - ◎ Dedicated ENT ward with 6 trolleys to support adult non-overnight up to 23:59 and 6 inpatient elective beds
 - ◎ 14 theatre sessions per week

Example: ENT Inpatient Elective Recovery Planning – Do Nothing Scenario

- ⌚ If ENT adult non-overnight activity continues at the current level (60% below the pre-COVID normal) the cumulative difference to normal continues to increase
- ⌚ This creates an ever increasing backlog of activity that is likely to return



Example: ENT Inpatient Elective Recovery Planning – The Proposed Activity Increase

- ⌚ If all of the unreferral daycare demand returns, to recover back to the pre-COVID waitlist position by April 2025 would require an increase in activity by 40% above the pre-COVID normal
- ⌚ Any less activity would extend the recovery timeline
- ⌚ Recovery is defined as a return to the pre-COVID waitlist level

