



Nottingham  
University Hospitals  
NHS Trust



## High Intensity Service Users (HISU)

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Partnership Working to Improve the Experience



# Context

- Nottingham University Hospitals NHS Trust (NUH) is a large, dynamic Acute Care Trust, situated in the heart of Nottingham
- The Emergency Department (ED) is among the top twenty busiest departments in the UK. NUH ED attendances range at 180-190,000 per year
- High Intensity Service User (HISU) expansion is a core objective in the NHS England Winter Plan (2022), NHS Priorities and Operational plan (2023); and features in the Integrated Care Boards (ICB) Design Framework (2021) aiming to improve patient outcomes and reduce health inequalities
- In NUH, HISU patients make up 0.3% of all patients attending ED, but are responsible for 3.2% of ED attendances
- Monthly data reports have identified between 30 - 50 patients meeting this criteria per month.



# HISU Service Expansion Project

The HISU Service Expansion Project used the Model for Improvement QI methodology:

**What are we trying to accomplish?** To reduce health inequalities, improve patient outcomes and staff experience, reduce stigma associated with high intensity use, reduce ED crowding and make financial savings by reducing the following:

- Individual attendances from HISU to the NUH Emergency Department by 20%
- Number of 999 conveyances by 10%
- Non-elective admissions in patients identified as HISU by 5%.

**How will we know that a change is an improvement?** We will see a reduction in: individual HISU patients attending ED, 999 conveyances to NUH & non-elective admissions.

**What change can we make that will result in improvement?** To work on a 1:1 basis with HISU patients to identify the factors/needs leading to an ED attendance. To work collaboratively with local and regional internal and external partners to support engagement with services. Utilising an MDT approach and use of care plans where appropriate.

“The model for improvement provides a framework for developing, testing and implementing changes leading to improvement. It is based in scientific method and moderates the impulse to take immediate action with the wisdom of careful study. Using PDSA cycles enables you to test out changes on a small scale, building on the learning from these test cycles in a structured way before wholesale implementation.” *NHSE*



# HISU Project Findings

**PDSA 1: Mixed contact and proactive information gathering for Cohort 2. Prioritising at risk, unsupported individuals.**

**PDSA 2: Business case for permanent HISU posts, with additional Mental Health nurse and social worker roles.**

**PDSA 1: Patient attendances mainly OOH, combination of complex/highest frequency attenders.**  
**PDSA 2: Review impact of community visiting after 10 patients.**



**PDSA 1: Identify and contact 1<sup>st</sup> cohort of patients.**

**PDSA 2: Identify patients to visit in community. Community visiting Standard Operating Procedure (SOP) and risk assessment completed and approved.**

**PDSA 1: Patients seen in ED, opportunistically at time of presentation. Retrospectively gather information to inform future input.**

**PDSA 2: Initiate community visiting in April 2023.**

## BENEFITS:

### Evaluation:

- 55% reduction in ED attends
- 71% reduction in inpatient admits
- 63% reduction in bed days consumed
- 56% reduction in ambulance conveyances.

## WHAT HAS WORKED WELL?

- Patient engagement
- Engagement of internal and external stakeholders
- ED staff engagement including senior management
- ICT processes
- Established network with other HISU leads across region/country.

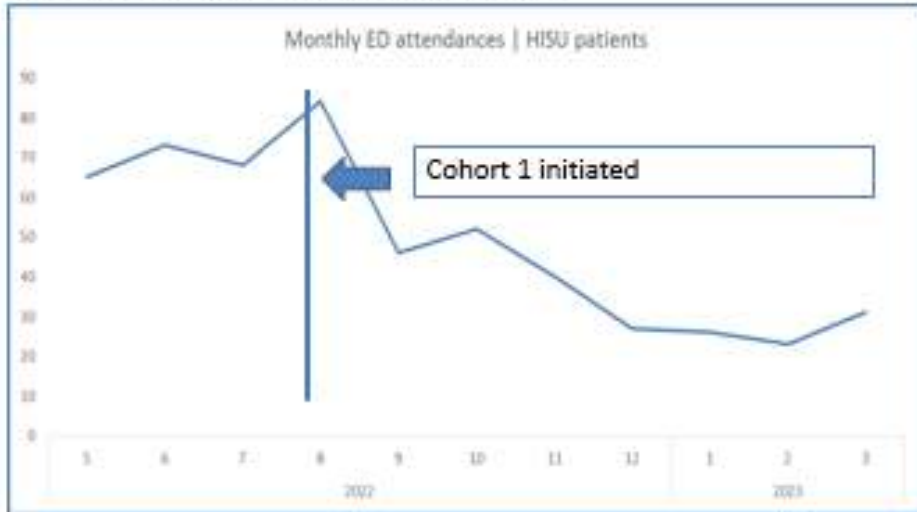
## NEXT STEPS:

- Repeat ED staff survey
- Ongoing review of cohort evaluation datasets
- Staff education on service, patient stigma and severe multiple disadvantage (SMD)
- Secure permanent funding for service
- Expand service to meet caseload demand.



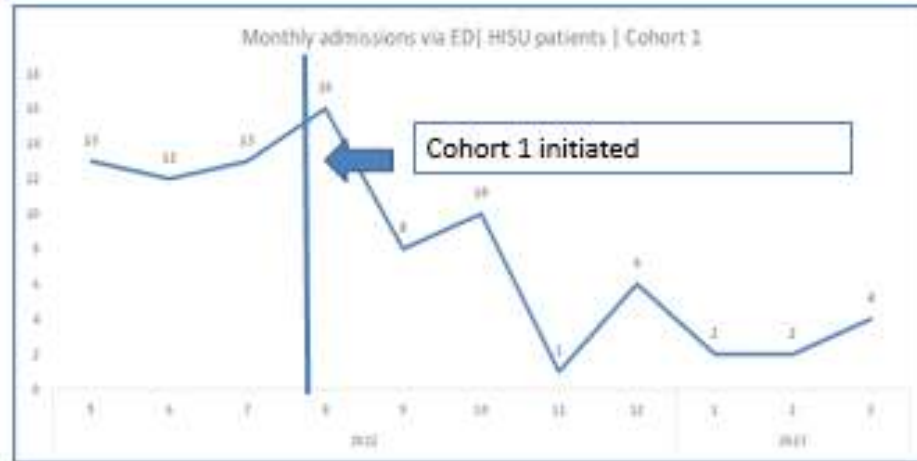
# Data and Feedback

## Cohort 1 Evaluation (22 patients included):



- Pre intervention ED attends:  
Avg = 73/month
- Post intervention:  
Avg = 33/month  
↓ 55%

“Working collaboratively has helped maintain a person centred non judgemental way of supporting people who have not felt supported or understood by services before...The contribution you have made to this has been invaluable and has helped reduce harm, maintain engagement and manage ED attendance” Nottingham Homeless Mental Health Team



- Pre intervention IP admits:  
Avg = 14/month
- Post intervention:  
Avg = 3/month  
↓ 71%

“When you are around to come and speak with the patients with the clinician – it shows a joined up approach but also the care plans now being easily accessible and up to date means any time of day of presentation we can have a clear understanding of these, often difficult to manage, group of patients”  
ED ACP

- Pre intervention EMAS conveyances:  
Avg = 45/month
- Post intervention:  
Avg = 20/month  
↓ 56%

“Its made a big difference to the attendance and care pathway... This has impact on bed hours and the staff on B3 and hopefully the staff in ED as there is a clear plan on how to proceed... More importantly, the patients get the right treatment rather than harmed by over investigation”  
Acute Med Consultant



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**Thank you**