High Risk Unscheduled Return Visits **HRURV**

Quality improvement in the Emergency Department

Stepping Hill Hospital, 2020

Findings and quality improvement

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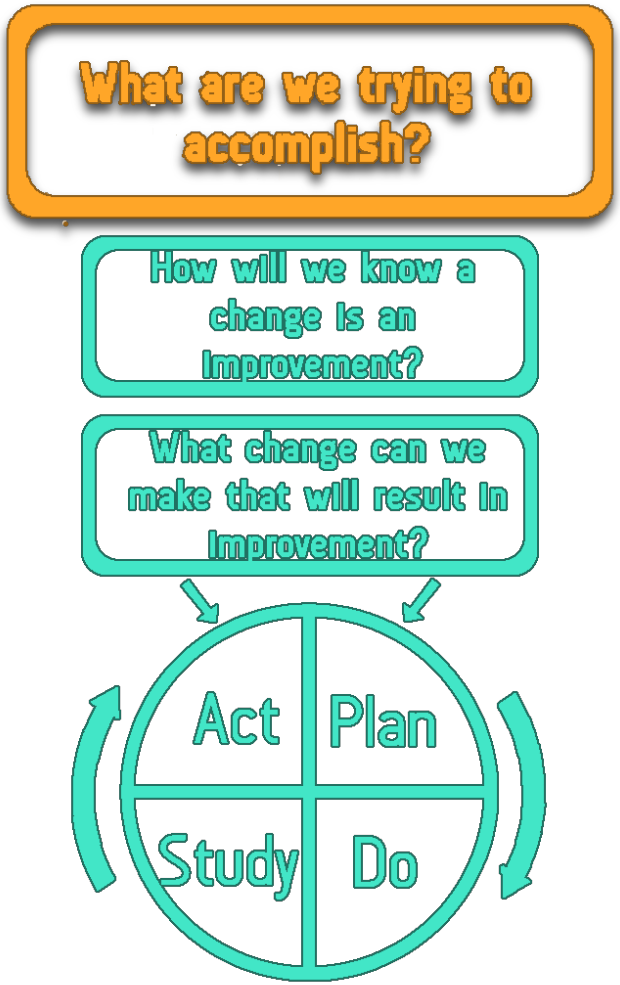
Step 1: Project Rationale



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Project Rationale

Background

There is growing strain on the NHS and Emergency Departments UK wide

Stockport issues:

- Increased winter pressures
- Ageing and complex patients
- Under resourced
- Poor 4-hour wait target indicates burden on ED

One way to improve patient outcomes and overall performance of ED would be to **reduce demand** on our current resources

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Project Rationale

EMJ Publication

Characteristics and determinants of high-risk unscheduled return visits to the emergency department

Eveline A Hiti ,[1] Hani Tamim,[2] Maha Makki,[1] Mirabelle Geha,[1] Rima Kaddoura,[1] Ziad Obermeyer[3]

Information

Definition:

- Return visits within 72hours that require admission, or;
- die in the ED on representation

Risk Factors:

- Seen during off-hour shifts
- diagnosed with digestive system disorders and infectious diseases
- whose visit includes at least one handover

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Project Rationale

Background

What is the incidence of HRURV at SHH ED?

- Unknown…

Is it possible **identify** and **describe** the characteristics and predictors of HRURVs to SHH ED, and look at interventions that may **reduce** incidence?

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Project Rationale

Aims (SMART)

We examine one way that stress on ED can be relieved by reducing overall attendances, and by identifying patients who are at high risk of representing.

- Identify number of HRURVs at SHH
- Achieve a significant reduction in HRURVs ($P < 0.05$)
- Show reduction after PDSA cycle
- This can be achieved using weekly figures over as little as 3 months

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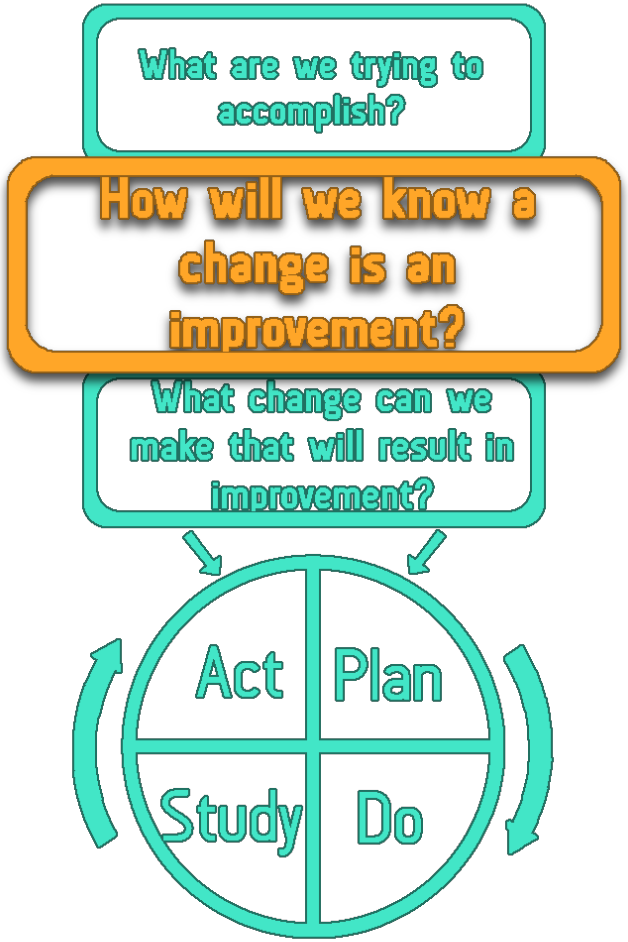
Step 2: Data collection



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Data Collection

Patient data

- Already available collected through Advantis ED
- Obtainable from Business Intelligence (BI) with help of `Business Support Manager'

Data request

Patients whom meet the HRURV definition (Outcome Measure):

1. Presentation to ED within 72 hours of disposal from previous visit, AND;
2. Requires admission OR dies in the ED on representation

Additional data fields (Balancing Measures):

- Age
- Diagnostic category
- Hospitalisation in the prior 30 days prior to returning to ED
- Gender
- Number of ED visits in the past year
- Total number of Weekly ED visits
- Specified period of time

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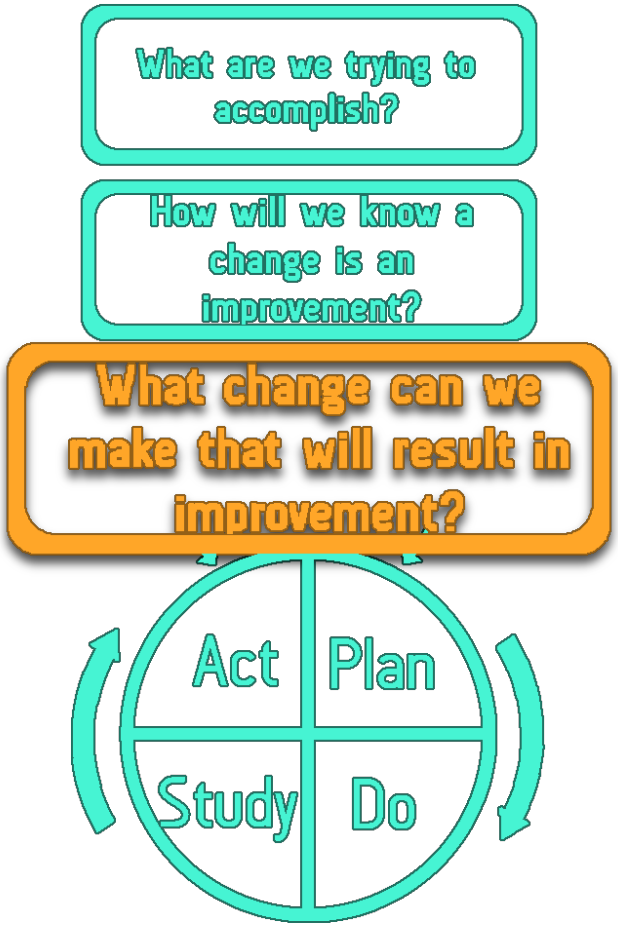
Step 3: Tackling the problem



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Tackling the problem

Basic issues

HRURV is a new acronym, that describes a relatively small, but significant, cohort of the ED population.

There was a general lack of awareness of this category of patient, or the risk factors that made then more likely to revisit the ED.

With ED as busy as it is, people don't have time to take on seemingly arbitrary information unless it can prove useful, or they are repeatedly informed about the issue.

There may well be doubt as to whether knowing about these patients will change practice in any way.

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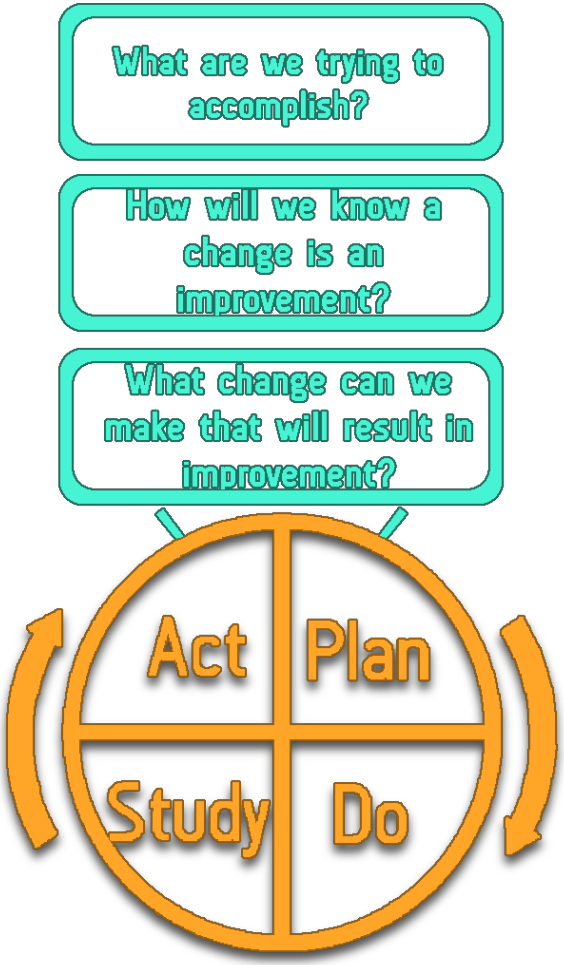
PDSA Cycle: Increase awareness



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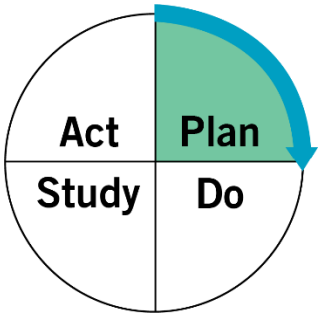
PDSA cycle

HRURVs at SHH



Using available information from previous studies and baseline data obtained from BI to identify characteristics particular to SHH HRURVs

In addition to previously identified risk factors, SHH ED HRURVs more likely to have initially left the department without having been reviewed by a clinician (18%)

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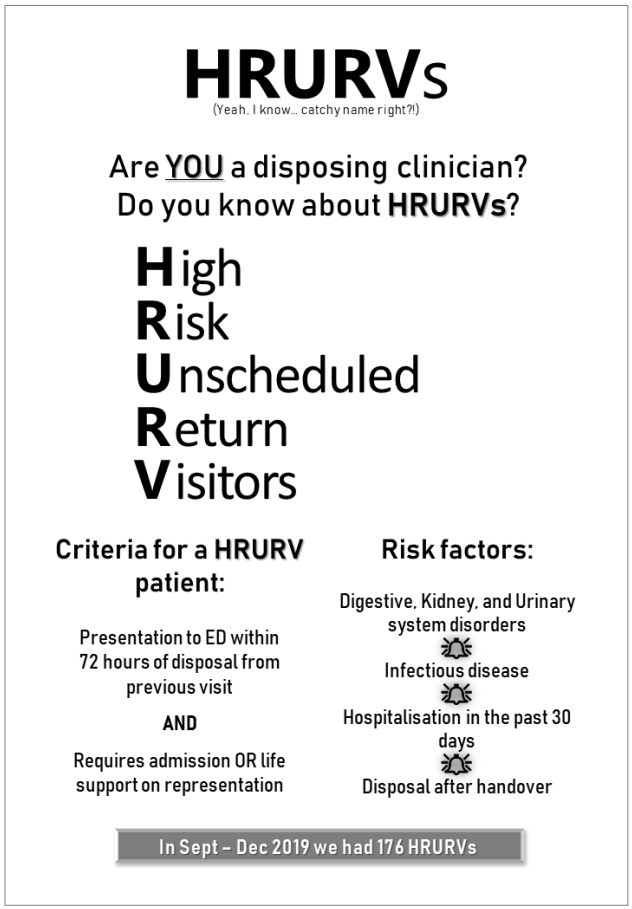
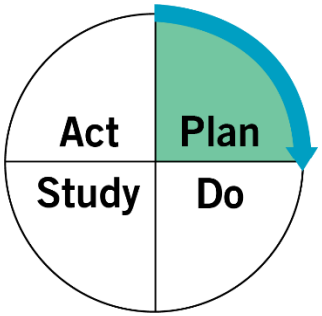
PDSA cycle

Poster

Poster was placed in two key areas in the ED where it was thought they would be seen by most disposing clinicians





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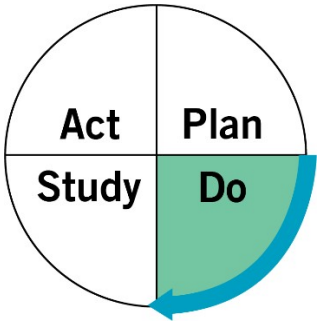
PDSA cycle

Data Collection



During this phase of the cycle there were two tasks that were completed:

1. Baseline data obtained from the start of October 2019

2. Poster intervention started 14th January 2020

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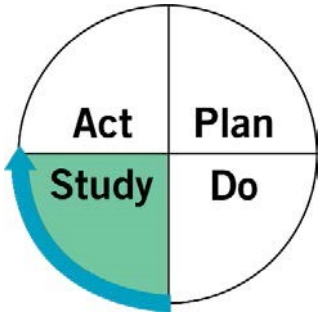
PDSA cycle

Data Analysis



- Data was obtained from BI
- Stata 13 was used to clean up and analyse data
- No significant change in HRURV frequency as demonstrated on run chart

<u>Analysis of the data (summary statistics)</u>

- No difference in HRURV gender, total of **249** over **4.5** months
- Age ranges not normally distributed
- Initial PC: **Unwell (29%)**, **Abdo pain (13%)**, **Breathing diff. (7%)**, **Fall (5%)**
- Upon reattendance, PC of **Unwell** had risen to **36%** (likely reflecting incidence of sepsis), with **16.5%** of HRURVs **admitted directly to speciality**
- **14.5%** of patients had **attended ED in the 30 days prior** to HRURV
- **36%** of HRURVs had **attended once in the year prior to admission**, while **18% visited ED two or more times** before admission (Highest was **27** visits)

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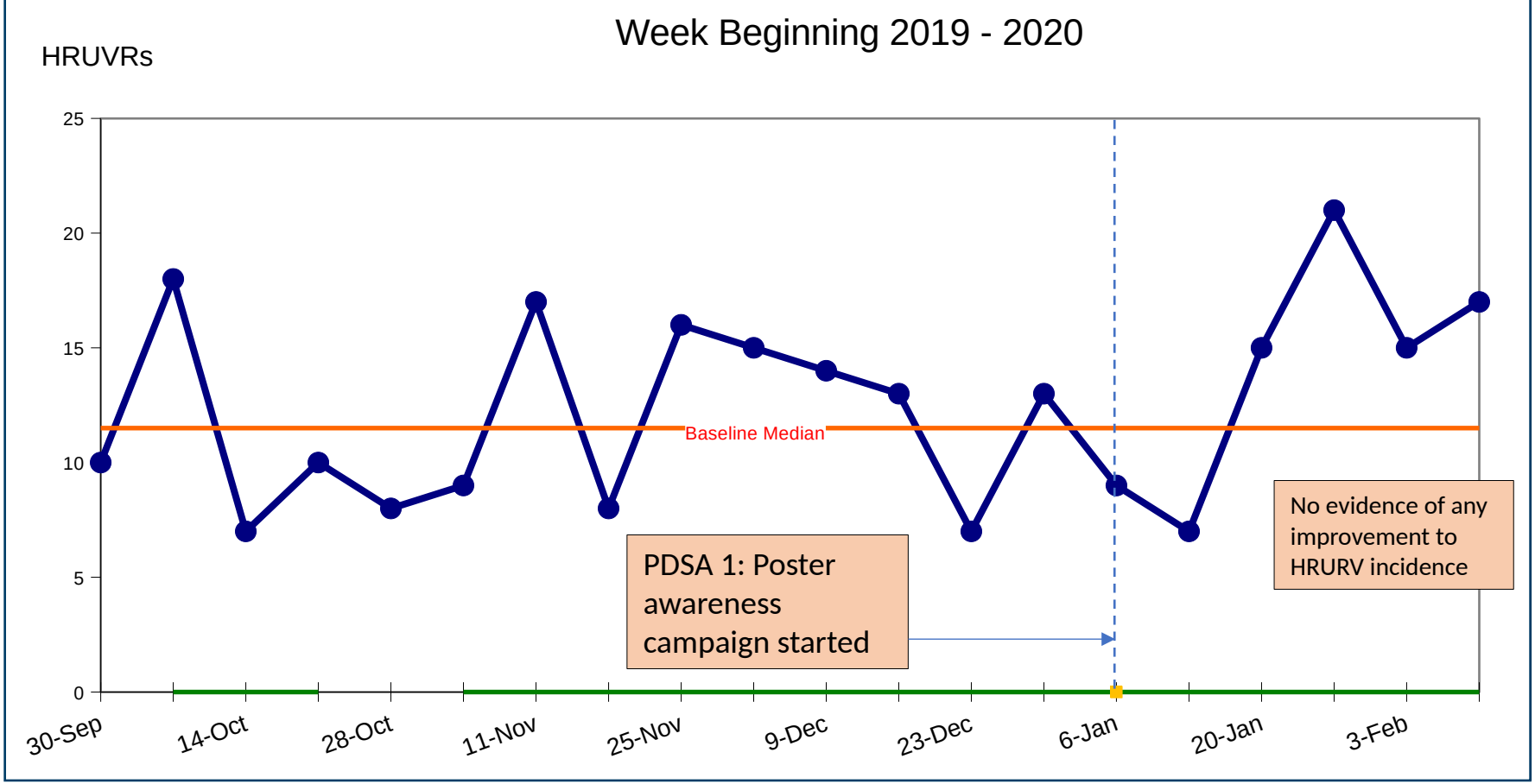
PDSA cycle

Run Chart



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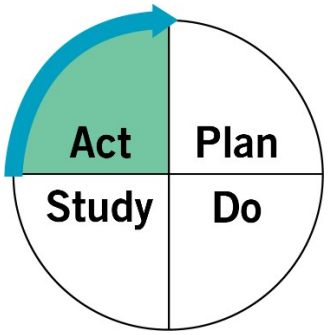
PDSA cycle

What next?



Should we adopt, adapt, or abandon this approach?

- Awareness of the problem was never a primary driver of the problem. Solving the awareness issues is still necessary, but we will need to examine other issues and address these too
- Idea is worth adopting, and increasing in scale for another test

Discussions are ongoing with clinical partners for further change ideas for continuing project development.

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End of Presentation

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