

# Reducing unwarranted variation to improve care for common acute paediatric conditions across the Children's Emergency Department and Paediatric Assessment Unit

David R James

## 1. Background:

- Current service model: Paediatric Assessment Unit (PAU) seeing GP referrals and known patients and a Children's Emergency Department (CED) seeing self presenting unfiltered patients
- Those requiring longer than 4 hours observation or treatment transferred from CED to PAU
- Large potential for duplication, inefficiency and clinical conflict
- Planned service transformation to 'single front door' model with co-located Short Stay Unit (SSU)

## 2. Aim:

Reduce variability in treatment of common paediatric conditions leading to better and more efficient care as measured by length of stay and patient/family reported experience in the Children's Emergency Department and Assessment Unit over 9 months.

## 3. Project design/strategy & changes:

### Stage 1: Scoping

- Engagement with key stakeholders (CED, PAU, management, families)
- Obtain baseline data on most common presentations
- Obtain baseline data on admission rates, length of stay and treatment
- Significant variation between teams

### Stage 2: Develop Integrated Clinical Pathways

- Initial action checklists (IAC): to ensure timely initial treatment by nursing team
- Cross specialty clinical treatment pathways to reduce variability
- Criteria Led Discharge (CLD) to improve workflow, speed up discharge and increase capacity

### Stage 3: Measure and amend

- Ongoing measurement of change in response to above interventions with further development in PDSA cycles.

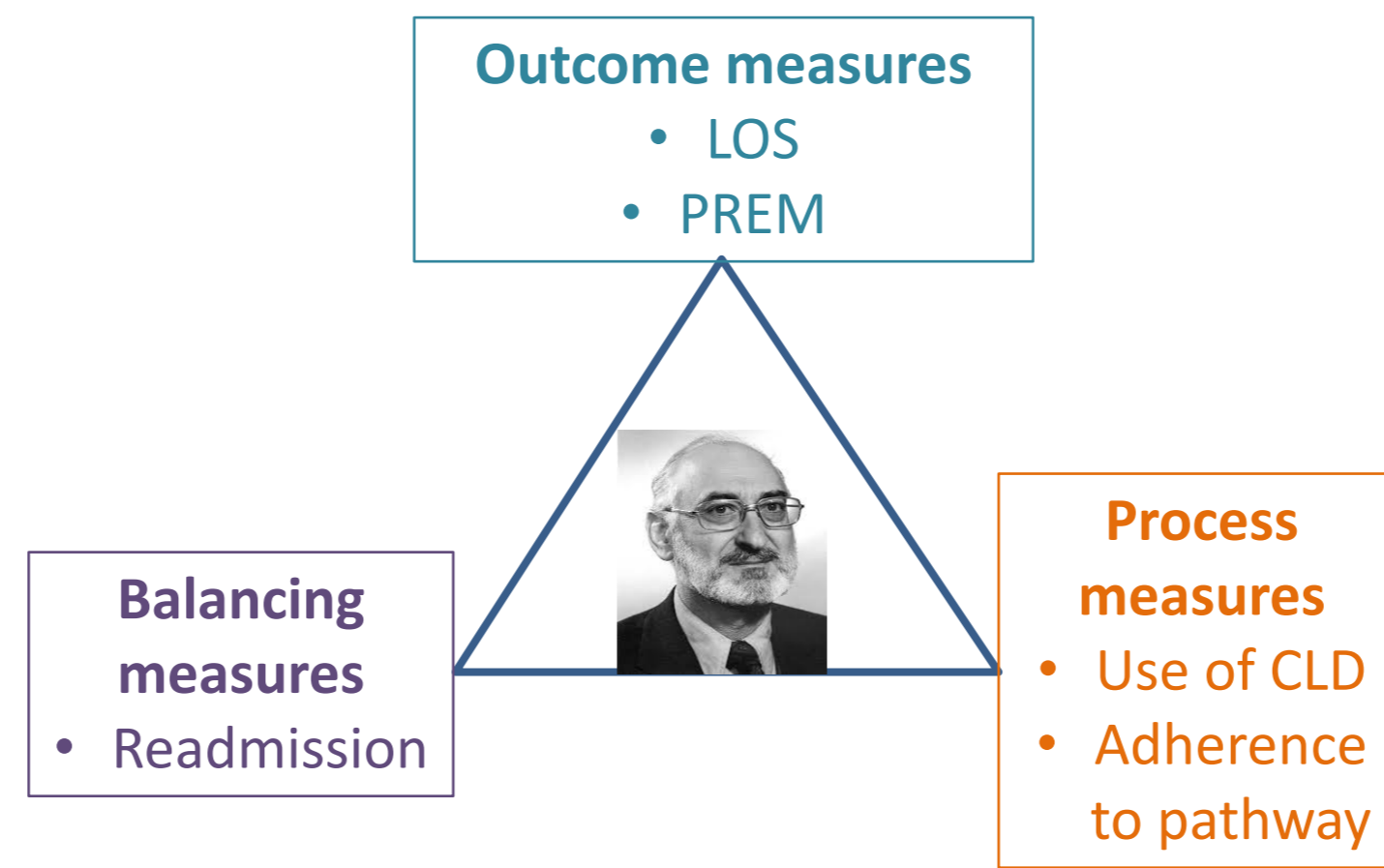


Figure 1: Donabedian Triangle: Outcome measures

## 5. Learning points:

- Acute seasonal conditions challenging to measure
- Thorough stakeholder engagement is vital before and during project
- Break down large projects into manageable pieces
- Be prepared to adapt and change – be fixed on the outcome not the intervention!

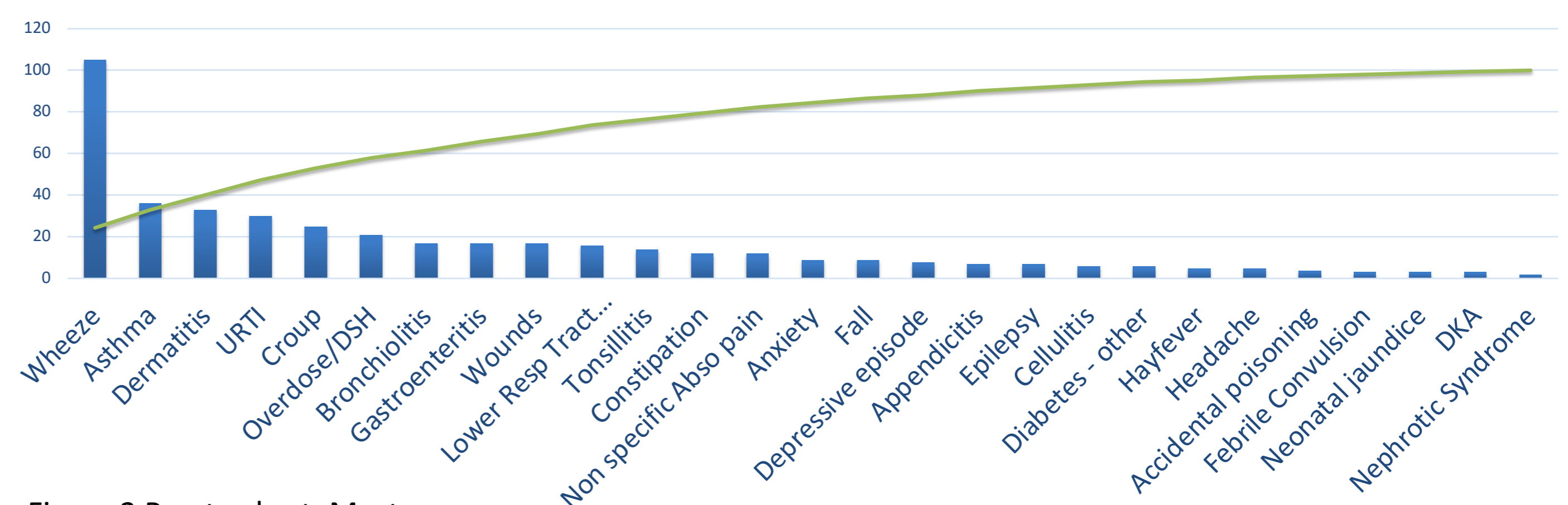


Figure 2 Pareto chart: Most frequent conditions seen in PAU

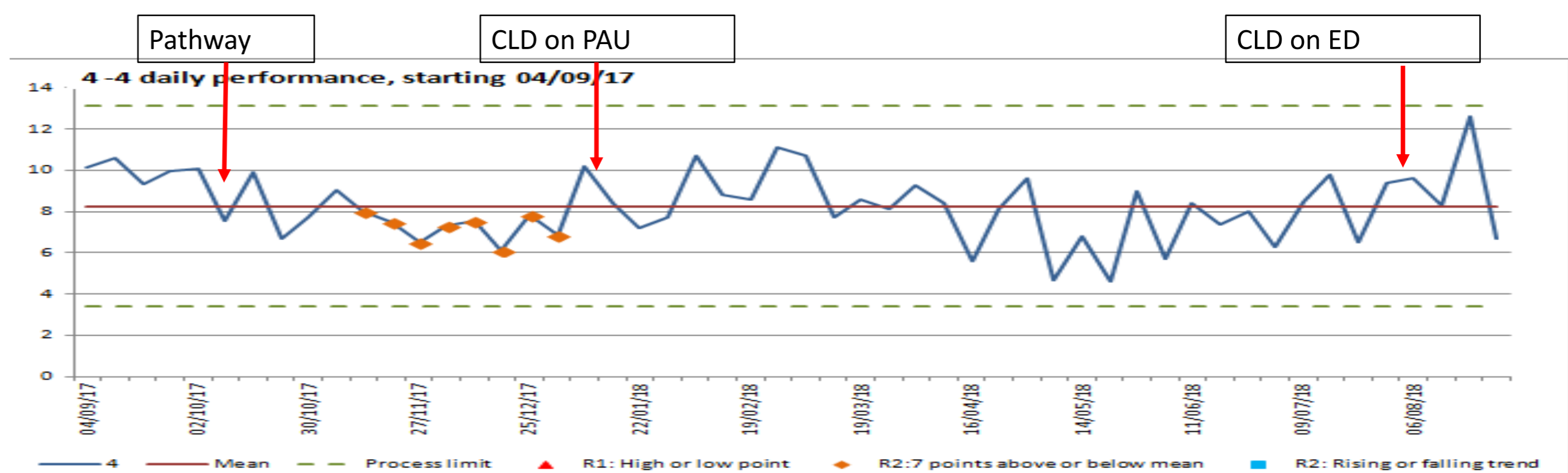


Figure 3: SPC chart Length of Stay: Patients with wheeze on PAU

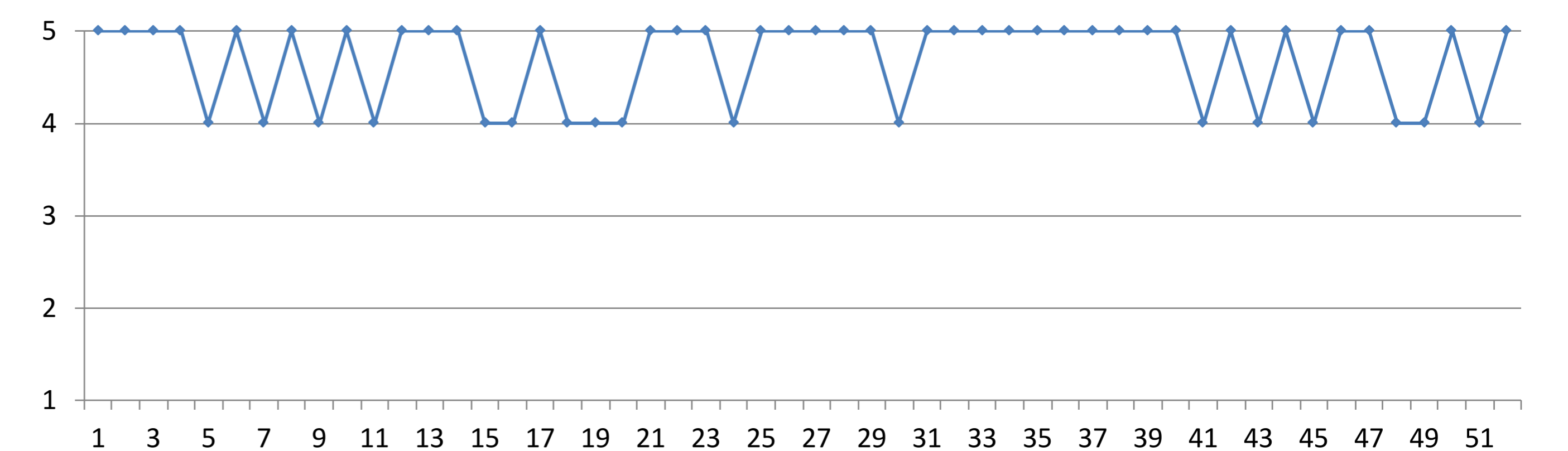


Figure 4: Parental self reported confidences in care on PAU (out of 5) sequential families Sep 17-Aug 18

## 4. Results:

- CLD designed and introduced across CED, PAU and inpatient wards for: wheeze, croup, gastroenteritis & bronchiolitis.
- Wheeze pathway introduced.
- Reduced LOS during seasonal peak (100 mins average) 34 bed days, £ with continued high confidence in care and no change to readmission rate.

## 6. Next steps:

- Introduce IAC for wheeze, croup, gastroenteritis & bronchiolitis alongside redesigning further pathways
- Develop CLD for other conditions
- Monitor year on year performance

## Acknowledgements:

Dr Kate Pryde, Dr Jason Barling, Michelle Casey, Suzie Knight, QI school, My fellow fellows!