SPSP Perinatal and Paediatric Programmes National Learning Session

Leadership to support a culture of safety

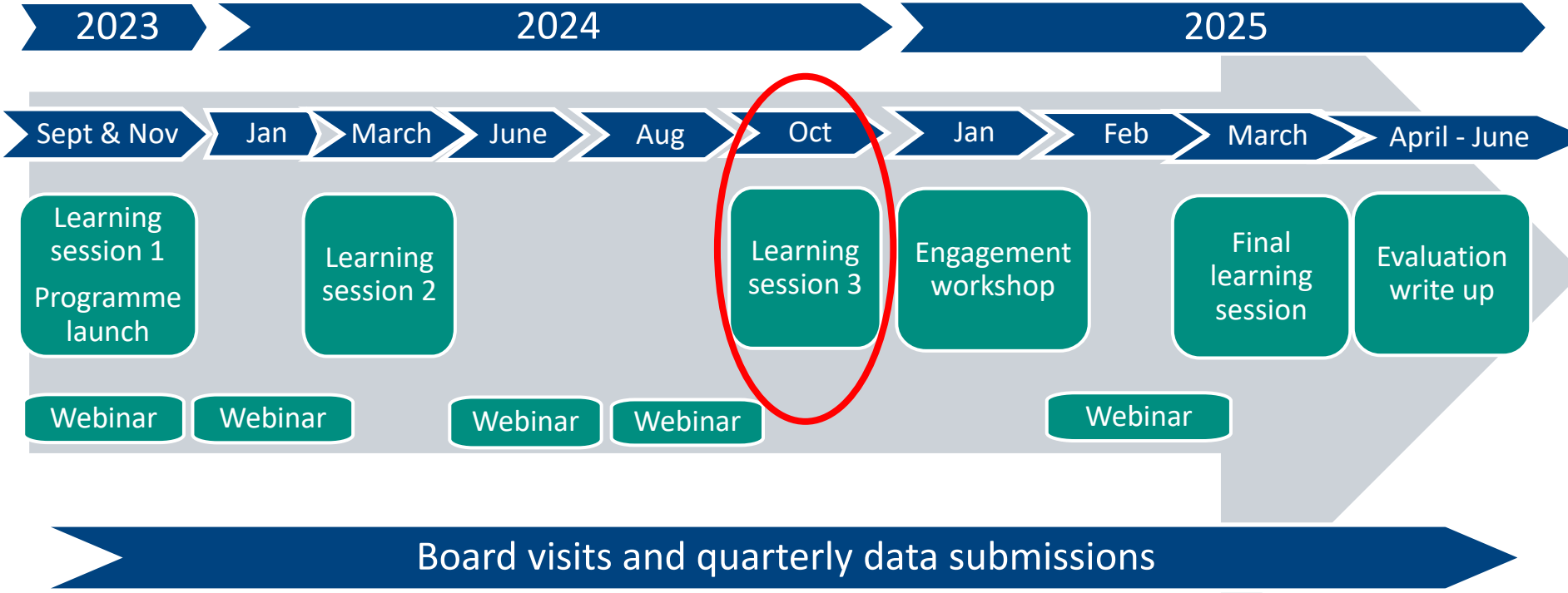
30 October 2024

Leading quality health and care for Scotland

Focus on escalation

Sonia Joseph
Strategic National Clinical Lead for Child Health

Programmes timeline



SPSP Perinatal and SPSP Paediatric Activity

3 paediatric data submissions
2 perinatal data submissions

22 paediatric board visits completed
17 perinatal board visits completed

Racialised health inequalities webinar

Learning session 3
30 October 2024

IHI improvement scale

Driver Diagram

What are we trying to achieve…

To reduce harm from deterioration by improving the recognition, response and review of the deteriorating child and young person**

By [locally agreed %] by 31st March 2025

Essentials of Safe Care
****Measurements may include existing Excellence in Care data***

We need to ensure…

- Person-centred care*
- Recognition of acute deterioration
- Standardised, structured response and review
- Safe communication across care pathways*
- Leadership to support a culture of safety at all levels*

Which requires…

- Patients, families and carers are listened to and included
- Person-centred care planning
- Anticipatory care planning & CYPADM
- Discussions with families are well managed
- Observations using PEWS (Scotland)
- Action on staff concern
- Action on patient, family and carer concern
- Timely review by appropriate decision maker
- Assessment for causes of acute deterioration
- Escalation
- Regular review and assessment
- Interdisciplinary teamwork and collaboration*
- Use of standardised communication tools*
- Effective communication in different situations*
- Psychological safety for staff*
- Staff wellbeing*
- Safe Staffing*
- System for learning*

Primary Driver

Standardised, structured response & review

Secondary drivers	Change ideas			
Timely review by appropriate decision maker	Locally agreed process for timely review	Education programmes to include trigger, escalation and response process	Use of locally agreed watchers bundle	Use of standardised structured ward rounds
Assessment for causes of acute deterioration	Use of evidence-based tools e.g. Sepsis 6			
Escalation	Locally agreed process for escalation	Use of existing evidence based guidelines e.g. bronchiolitis	Use of hospital huddles to escalate care	Admission information includes how to use call system effectively
Regular review and assessment	Local escalation process includes follow-up clinical review			

Evidence, tools and resources to support escalation

Tim Shearman

Improvement Advisor

Escalation

Guidelines:

- SIGN 167: Care of deteriorating patients
  - 16 and over only
  - Structured response tools, critical care outreach, and prehospital response
- NICE Guideline on suspected sepsis
  - Covers under 16's
  - Recommends senior review, critical care outreach and informing the consultant if no response within one hour

Healthcare Improvement Scotland | SIGN

NICE National Institute for Health and Care Excellence

Escalation

Resources:

- RCPCH safe system framework for children at risk of deterioration: Responding to deterioration
  - Involve children, families and carers in decisions including communication protocols
  - Structured communication model for escalation e.g. SBAR
  - Awareness of negative attitudes towards escalation that may be downgraded on review
  - Clear plans for treatment/clinical monitoring and review
  - Situational awareness
  - Discharge and transfer protocols

References

- SPSP Paediatrics Resources to Support Paediatric Care
- SIGN 167 Care of deteriorating patients
- NICE 51 Suspected Sepsis
- RCPCH Safe system framework for children at risk of deterioration

Deteriorating child and young person: focus on escalation

Sam Fredricksen-Freer, NHS Ayrshire and Arran
Laura McCulloch, NHS Ayrshire and Arran

Our purpose

Working together to achieve the healthiest life possible for everyone in Ayrshire and Arran

NHS Ayrshire & Arran

Deteriorating child and young person: Focus on escalation.

Samantha Fredriksen Freer, Clinical Nurse Manager, Acute Paediatrics

Laura McCulloch, Senior Charge Nurse, Acute Paediatrics

Our values

Caring Safe Respectful

What is the pebble in our shoe?

- **Unexpected death in Paediatrics triggers an automatic SAER**
- **Key findings revealed similar themes of good practice and areas for improvement.**

  retrospective audit of 10 random patients that were transferred to ITU in 2023.
- **We found our pebble:**

Accurate PEWS and Escalation

The Quality Improvement Journey

Our Journey so far….

Creating Conditions

Sense of urgency. • Why the change was needed. • Eva's Story	Guiding Coalition • Team • Guidelines	Communicate a clear vision • Vision set at study days. • Education

Understanding Systems

The escalation pathway • Understanding the process of escalation.	Staff feedback of system • Lack of awareness of pathway • What are the barriers to the process • Attitudes towards the system	Human Factors • Miscalculated PEWS • Busy unit and was distracted. • Capacity to review patients.

Developing Aims

By January 2026, 95% of patients with elevated PEWS score of 5 and above will escalated to Advanced Paediatric Nurse Practioners or middle grade doctors and above for an urgent medical review, aligning with the Scottish Patient Safety Programme for Paediatrics.

Version one of Escalation Sticker

Testing Changes

Escalation of Care

Escalation requested by: _____ **Date:** _____ **TIME OF ESCALATION** ____:____ **hrs**

1. **Reason:**

   ☐ Elevated PEWS Score. PEWS of _____
   ☐ Staff Concern
   ☐ Parent Concern

2. Request for medical review made to _____ (APNP/Middle Grade/ Consultant)

3. Nurse in Charge aware ☐ Signed by NIC_____

4. Is a watcher's bundle required? Yes ☐ No ☐

To be filled in by Reviewer:

5. Time of Patient review: _____ Reviewed by:_____

Please document details of the review below in patient's clinical notes.

Escalation Sticker

Testing Changes

Escalation of Care

Date & Time of Request	Signature/Stamp

1.	Reason:	☐ Elevated PEWS (PEWS of _____) ☐ Staff Concern ☐ Parental Concern
2.	Request made to:	Name: _____ (APNP/Middle Grade/Consultant)
3.	Nurse in Charge Aware?	NIC Signature/Stamp
4.	Watcher Bundle Required?	☐ YES ☐ NO

TO BE FILLED IN BY REVIEWER

		Date & Time of Review	Signature/Stamp
5.	Review		

Please document details of the review below in patient's clinical notes

Training & Evaluation from cycle one

- Study day for all members of nursing staff with focus on PEWS training and escalation of care.

- Process of escalation NIC versus Medical Staff?
- Name change of sticker?
- Update of PEWS escalation to meet local requirements
- Plan of care documentation

Other Work we are doing:

- Development of Aspen Suite
- SEPSIS Sticker
- HDU competency document
- PCAR course
- Annual PEWS Training Programme
- Clinical Risk Group
- Resuscitation Scribe Booklet

Patientrack (eObs) Paediatrics

Billy Gibson, NHS Tayside

Lisa Law, NHS Tayside

Why move to electronic observations?

NHS Tayside's Digital Strategy 2022 – 2027

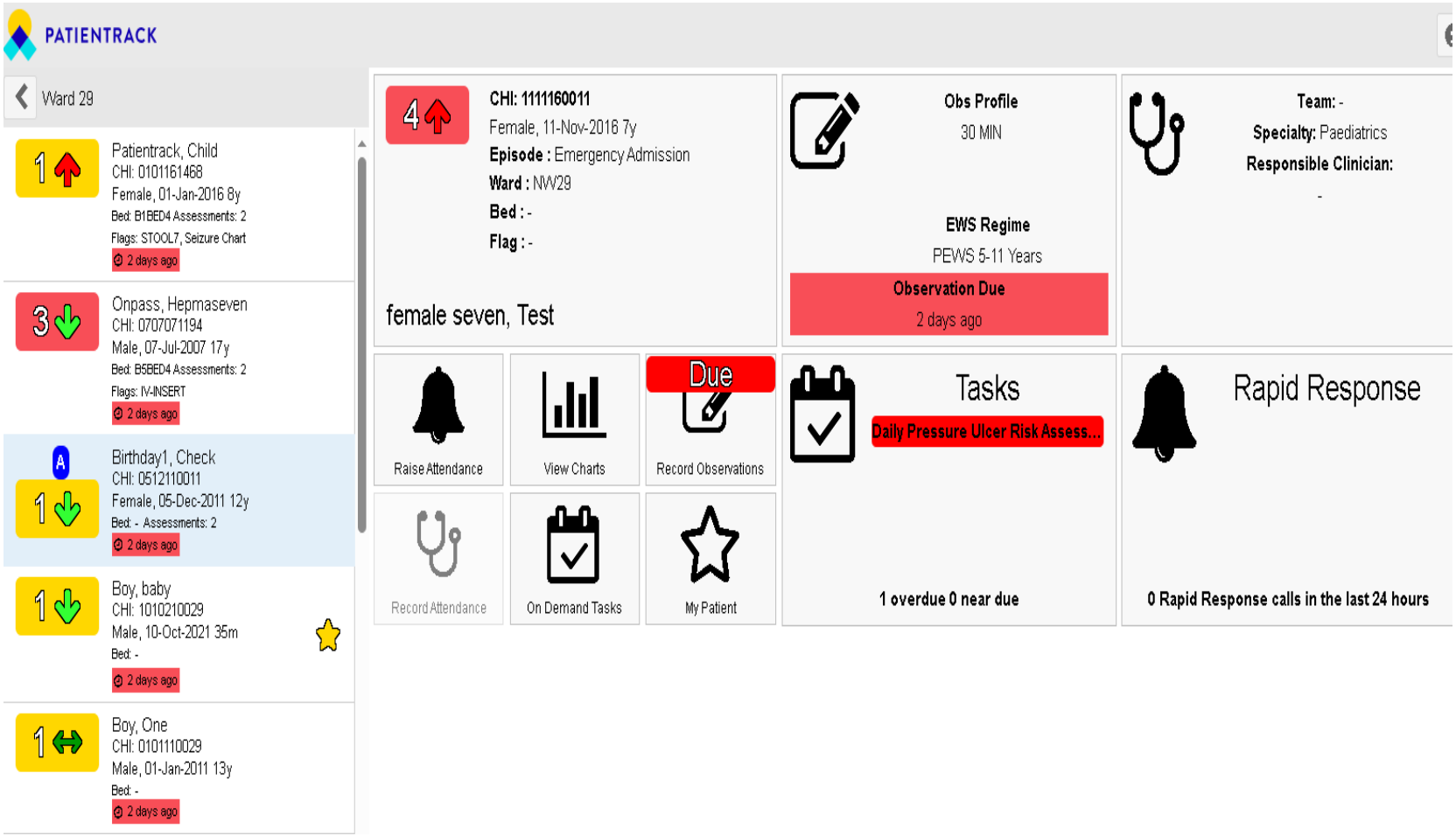
"Helping people live longer, healthier and happier lives through digital technology"

Why move to electronic observations

- Saving lives and preventing harm by providing ‘live’ patient data intelligence to identify deteriorating patients early
- Establishing a single electronic patient record and closing the digital gap
- Supporting remote/mobile working
- Reducing transcriptions errors and the need for repetition
- Improving clinical decision support capabilities
- Providing real-time access to patient data at the point of care improving compliance with observation protocols/clinical assessment guidelines
- Improving standardisation of vital signs/clinical assessments approaches
- Improving accessibility and legibility of patient data
- Improving communication between health care staff
- Reducing the burden, bias, and risk from manual audit functions
- Ability to create person centered scoring

Introducing electronic observations

- Engaging with the senior clinical team
- Developing the system to meet our needs
- Testing the application
- Education and Engagment with the wider clinical team
- Understanding and acting on feedback prior to Go Live
- Supporting during the period of change
- Listen to user feedback

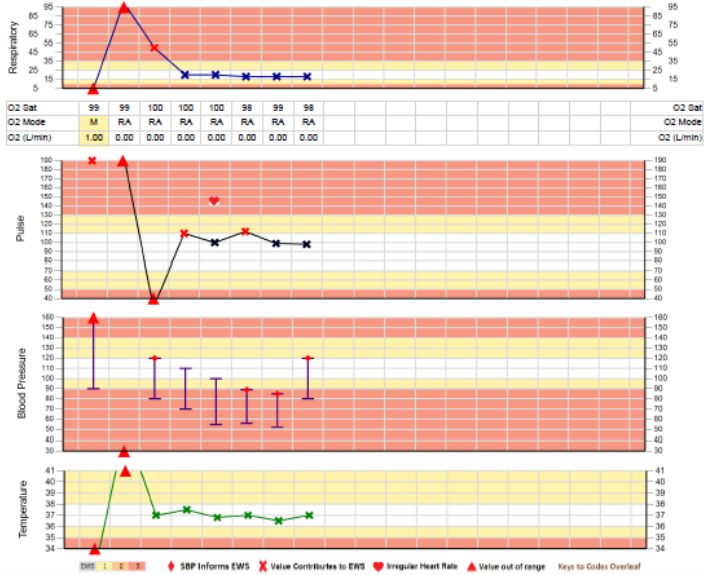

PATIENTRACK
Ward 29
1
Patientrack, Child
CHI: 0101161468
Female, 01-Jan-2016 8y
Bed: B1BED4 Assessments: 2
Flags: STOOL7, Seizure Chart
2 days ago
3
Onpass, Hepmaseven
CHI: 0707071194
Male, 07-Jul-2007 17y
Bed: B5BED4 Assessments: 2
Flags: IV-INSERT
2 days ago
A
1
Birthday1, Check
CHI: 0512110011
Female, 05-Dec-2011 12y
Bed: - Assessments: 2
2 days ago
1
Boy, baby
CHI: 1010210029
Male, 10-Oct-2021 35m
Bed: -
2 days ago
1
Boy, One
CHI: 0101110029
Male, 01-Jan-2011 13y
Bed: -
2 days ago
4
CHI: 1111160011
Female, 11-Nov-2016 7y
Episode : Emergency Admission
Ward : NW29
Bed : -
Flag : -
female seven, Test
Obs Profile
30 MIN
EWS Regime
PEWS 5-11 Years
Observation Due
2 days ago
Team: -
Specialty: Paediatrics
Responsible Clinician:
-
Raise Attendance
View Charts
Due
Record Observations
Record Attendance
On Demand Tasks
My Patient
Tasks
Daily Pressure Ulcer Risk Assess...
1 overdue 0 near due
Rapid Response
0 Rapid Response calls in the last 24 hours

ID: CHI: 0707071194
Patient Name: ONPASS, Hepmaseven
Admitted: 08 - Feb - 2024
DOB: 07 Jul 2007 (17y) Gender: Male

PEWS Over 12 Years

NHS Tayside

Date	13/03	13/03	13/03	13/03	13/03	17/09	01/10	09/10	Date
Time	15:36	15:38	15:39	15:41	15:43	11:18	08:20	13:22	Time
PEWS	17	10	7	1	0	4	3	1	PEWS



O2 Sat	99	99	100	100	100	98	99	98	O2 Sat
O2 Mode	M	RA	RA	RA	RA	RA	RA	RA	O2 Mode
O2 (L/min)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	O2 (L/min)

Ward	NW29								Ward
Resp	4	100	50	20	20	18	18	18	Resp
O2 Sat	99	99	100	100	100	98	99	98	O2 Sat
O2 Mode	M	RA	RA	RA	RA	RA	RA	RA	O2 Mode
O2 (L/min)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	O2 (L/min)
Lying SBP	200	20	120	110	100	89	85	120	Lying SBP
Lying DBP	90	15	80	70	55	56	52	80	Lying DBP
MAP (Lying)	127	17	93	83	70	67	63	93	MAP (Lying)
Cuff Size					CH				Cuff Size
Pulse (p/m)	190	200	30	110	100	112	99	98	Pulse (p/m)
Capillary Return	2-4	<2	<2	<2	<2	<2	<2	<2	Capillary Return
Consciousness	V	U	A	A	A	A	A	A	Consciousness
Temp	32.0	45.0	37.0	37.5	36.8	37.0	36.5	37.0	Temp
Staff Concern	N	S	N	N	N	N	N	C	Staff Concern
Blood Glucose					6.80				Blood Glucose
Pain Score					N				Pain Score

Lessons learned

Engagement with the clinical teams is key

Understand the patient journey

Listen to feedback to ensure system works for users

Use of other systems can impact on data (TrakCare)

Change takes time

Ensure WiFi is reliable

Escalation of deterioration

- Automatic calculation of PEWS score
- Highlights increasing and decreasing scores
- Filter screen to quickly identify "at risk" patients
- Ability to auto-page in future

Ward view

Name	EWS	Location	Obs. Due	Obs. Profile	Flags	EWS Regime
Lightyear, Buzz	7	Ward 29	08:42	15 MIN		PEWS 12-23 Months
female seven, Test	4	Ward 29	08:55	30 MIN		PEWS 5-11 Years
Girl, Bonnie	3	Ward 29	08:56	30 MIN		PEWS 2-4 Years
Onpass, Hepmaseven	3	Ward 29	08:50	30 MIN	IV-INSERT	PEWS Over 12 Years
Patientrack, Child	1	Ward 29	09:23	1 HR	STOOL7, Seizure Chart	PEWS 5-11 Years
Boy, One	1	Ward 29	09:21	1 HR		PEWS Over 12 Years
Birthday1, Check	1	Ward 29	09:21	1 HR		Personal: PEWS Over…
Boy, baby	1	Ward 29	09:24	1 HR		PEWS 2-4 Years
Child, One Year	1	Ward 29	09:22	1 HR	DAILY WEIGHT	PEWS 2-4 Years
Girl, One	1	Ward 29	09:26	1 HR	Seizure Chart	PEWS Over 12 Years

Data

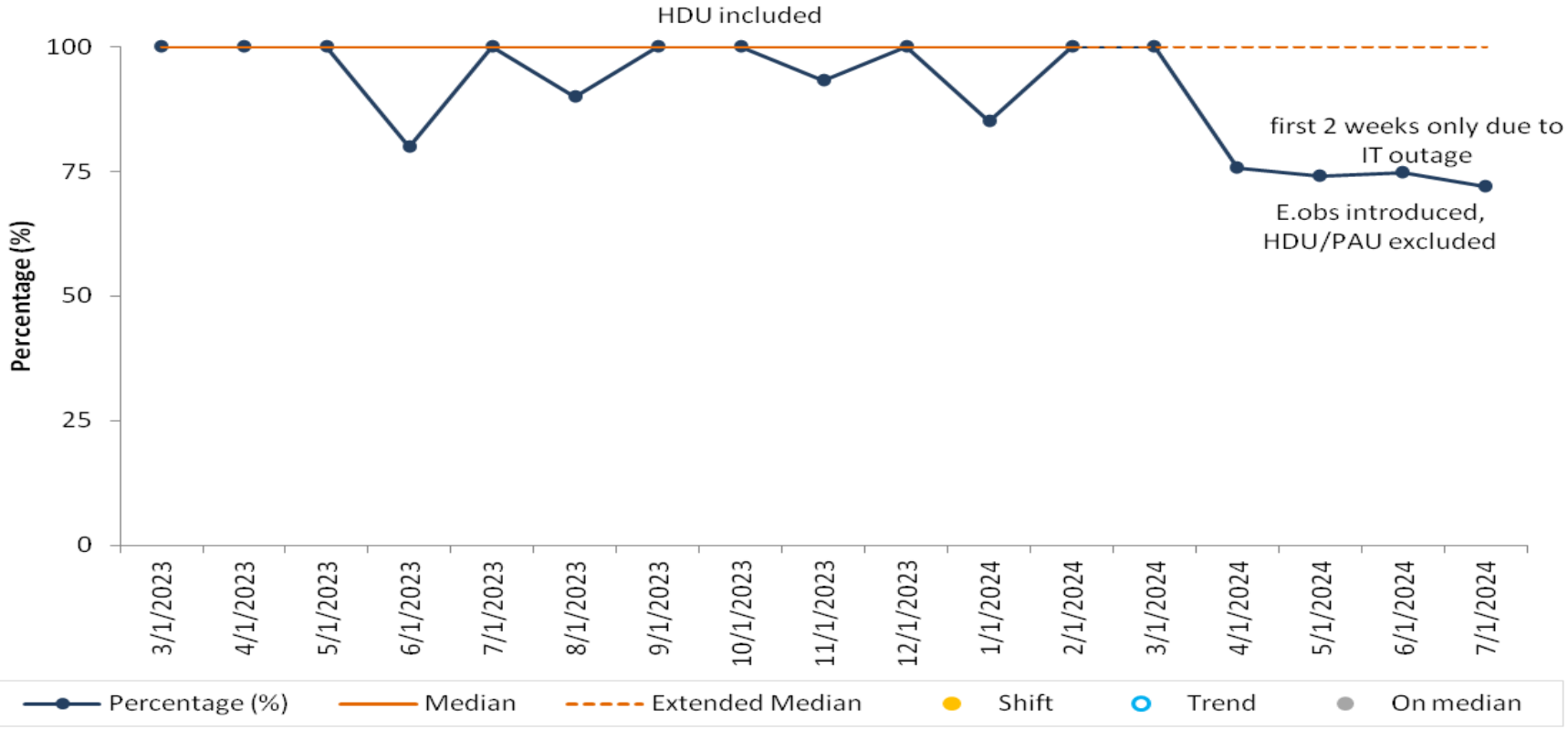
Pre implementation

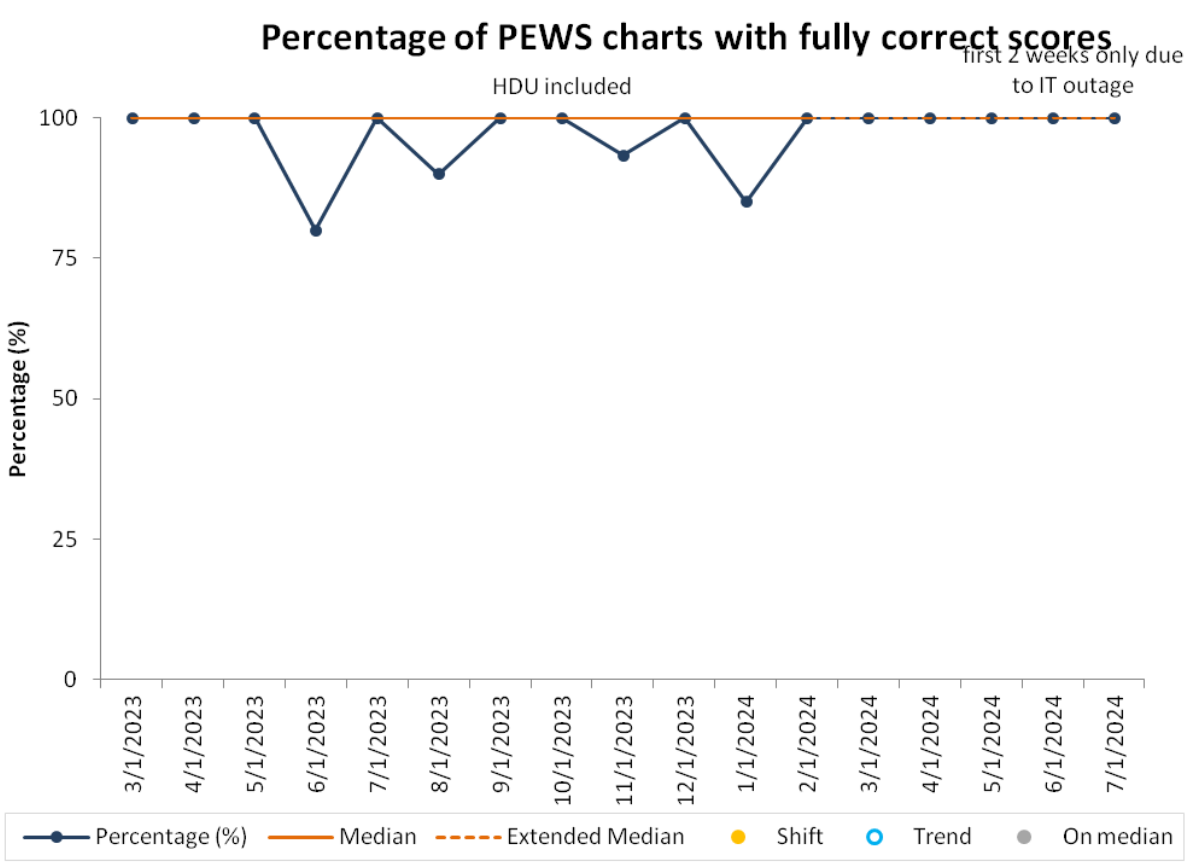
- Variation on data collected
- Relient on physical collection
- Time away from clinical work

Post implementation

- No variation
- Collated from E obs system, eliminating human error
- Highlights very quickly areas for improvement

Percentage of PEWS charts with fully correct observations taken at correct frequency




Percentage of PEWS charts with fully correct scores
HDU included
first 2 weeks only due to IT outage
Percentage (%)
100
75
50
25
0
3/1/2023
4/1/2023
5/1/2023
6/1/2023
7/1/2023
8/1/2023
9/1/2023
10/1/2023
11/1/2023
12/1/2023
1/1/2024
2/1/2024
3/1/2024
4/1/2024
5/1/2024
6/1/2024
7/1/2024
Percentage (%)
Median
Extended Median
Shift
Trend
On median

Feedback from Nursing & Medical

NHS Tayside

- Love the ability to review charts remotely
- Easy to view charts and see trends
- Handheld devices would be preferred
- Ability to "Star" my own patients
- Training material easy to understand
- System advising more frequent observations than clinically required
- System easy to use
- Initially felt anxious about using eObs but much happier now
- Would be good if digital system "spoke" to each other

Next steps

- Introduction of visual prompts at each observation completion
- Further assessments – Combined lines and Neuro Obs
- Introduction of electronic observations into paediatric HDU
- Wireless transfer of observation data

Structured response

Tim Shearman
Improvement Advisor

Structured response

What?

- An agreed framework or process for responding to deterioration

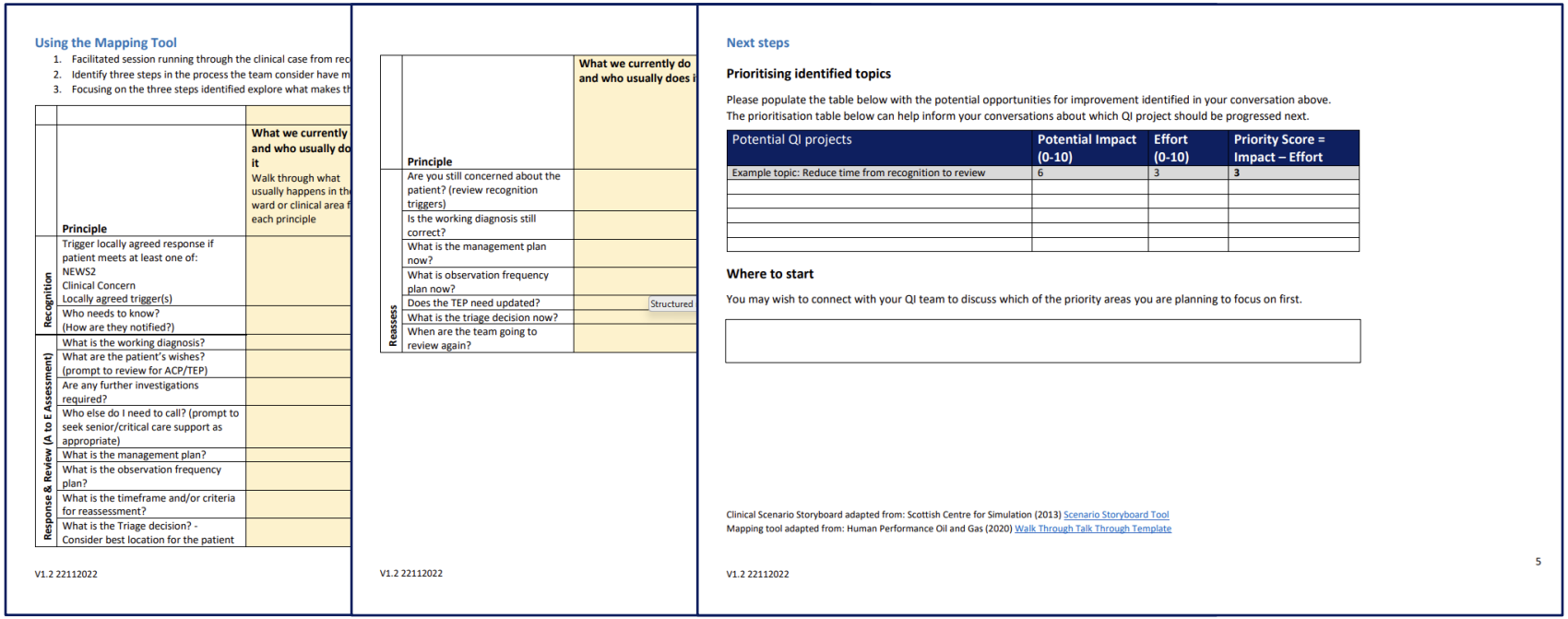
Why?

- Could offer decision support
- Improves shared understanding

How?

- Recognise
- Respond and Review
- Reassess

Structured response mapping tool



Using the Mapping Tool

1. Facilitated session running through the clinical case from rec
2. Identify three steps in the process the team consider have m
3. Focusing on the three steps identified explore what makes th

	Principle	What we currently and who usually do it Walk through what usually happens in th ward or clinical area f each principle
Recognition	Trigger locally agreed response if patient meets at least one of: NEWS2 Clinical Concern Locally agreed trigger(s)	
	Who needs to know? (How are they notified?)	
Response & Review (A to E Assessment)	What is the working diagnosis?	
	What are the patient's wishes? (prompt to review for ACP/TEP)	
	Are any further investigations required?	
	Who else do I need to call? (prompt to seek senior/critical care support as appropriate)	
	What is the management plan?	
	What is the observation frequency plan?	
	What is the timeframe and/or criteria for reassessment?	
	What is the Triage decision? - Consider best location for the patient	

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	Principle	What we currently do and who usually does i
Reassess	Are you still concerned about the patient? (review recognition triggers)	
	Is the working diagnosis still correct?	
	What is the management plan now?	
	What is observation frequency plan now?	
	Does the TEP need updated?	Structured
	What is the triage decision now?	
	When are the team going to review again?	

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Next steps

Prioritising identified topics

Please populate the table below with the potential opportunities for improvement identified in your conversation above.
The prioritisation table below can help inform your conversations about which QI project should be progressed next.

Potential QI projects	Potential Impact (0-10)	Effort (0-10)	Priority Score = Impact – Effort
Example topic: Reduce time from recognition to review	6	3	3

Where to start

You may wish to connect with your QI team to discuss which of the priority areas you are planning to focus on first.

Clinical Scenario Storyboard adapted from: Scottish Centre for Simulation (2013) Scenario Storyboard Tool
Mapping tool adapted from: Human Performance Oil and Gas (2020) Walk Through Talk Through Template

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5

Structured response mapping tool

SPSP Acute Adult Deteriorating Patient web page

Principles of a Structured Response

Structured Response to Deterioration Mapping Tool

Structured response mapping tool…

Make sure everybody knows each other → Work through this high-level version of the tool together ⬇ → Discuss if/how this tool could be used in your board

Understanding your response to deterioration…		
Who should be involved?		
Principles of structured response		
Principle	**What do we do currently?**	**How could we improve?**
How do we recognise?		
How do we respond?		
How do we reassess?		

Keep in touch

Twitter: @online_his

Email: his.spsppp@nhs.scot

Web: healthcareimprovementscotland.scot