

# EWS, PEWS & NEWS

## Western Perspective



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# Introduction

- How does patient harm occur?
- How do we deal with failure?
- When EWS met NEWS...
- CMEWS
- What are our options?

# Patient Harm - IHI



*Unintended physical injury resulting from medical care (including absence of indicated treatment) that requires additional monitoring, hospitalisation or results in death.*

# Patient harm



- Defective systems of care
- Massive variation in clinical practice
- High rates of inappropriate care
- Unacceptable rates of patient injury
- Underuse of effective treatments
- Waste & inefficiency



# Response to failure?

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# What has failed in the past?

- Blame & train
- Fire and forget
- A new chart....
- Everyone doing their own thing...
- Nobody measuring anything
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# System redesign



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- Agreed metrics
- Change built-in

# EWS vs NEWS

- Important differences
  - resp rates
  - O2 sats and oxygen administration
  - BP, heart rates and temperatures
- CCOS
  - 54 patients
  - 6 wards



# When NEWS met EWS

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EWS Score
0-1
2-3
4-6 (or 3*)
7 +



# When NEWS met EWS

EWS Score	No Patients
0-1	22
2-3	25
4-6 (or 3*)	6
7 +	1

# When NEWS met EWS

EWS Score	No Patients	NEWS Score
0-1	22	0-
2-3	25	1-3
4-6 (or 3*)	6	4,5 (or 3*)
7 +	1	6 +



# When NEWS met EWS

EWS Score	No Patients	NEWS Score	No Patients
0-1	22	0-	6
2-3	25	1-3	32
4-6 (or 3*)	6	4,5 (or 3*)	9
7 +	1	6 +	7

# NEWS vs EWS - points of note

- Presence of O2 - more in cat 2
- 3 pts reduced a cat (chronic Hypertension)
- CAT 2
  - 25 on hourly obs (EWS)
  - 32 on 4-hourly obs (NEWS)
- 1 senior med referral in EWS (7 NEWS)



- RTO study
- 40 non triggering patients
- 17 triggered on NEWS
- 7 triggered reg review

# EWS for children?

- 70% of UK adults
- ~30% childrens' hospitals
- More rapid physiological decline
- Complexity
  - Age-related
  - Disease states





# Averting disaster - adults...





# ...disaster in children





# EWS for children?

- Validated systems already exist
- BCH (Duncan et al)
- (CAH)
- Should be introduced!
  - RQIA 2011

The image shows a detailed paediatric EWS observation sheet. It includes a grid for recording vital signs and clinical observations over time. The grid is divided into sections for 'Vital Signs' (Heart Rate, Respiratory Rate, Blood Pressure, SpO2, Temperature) and 'Clinical Observations' (Mental State, Breathing, Circulation, Skin). The grid is color-coded with yellow and orange bands. To the right of the grid, there are sections for 'Patient Details' (Name, Date of Birth, Consultant), 'Patient Specific Parameters' (APACHE II, SOFA, etc.), and 'Notes'.

# CMEWS Pilot

- SR Mary McKenna
- Wd 6 Altnagelvin
- Usability
- Ergonomics
- Awaiting regional steer





# Conclusions

- Let's not all reinvent the wheel
- Learn from elsewhere
- Don't overlook kids
- Regional approach
  - Implementation
  - Measurement (O&P)
  - Learning



# one more thing....

