Introduction
The UK has amongst the highest child mortality rates in Europe\(^1\). A UK pilot review of child deaths\(^2\) identified the most frequent avoidable factor as failure to recognise severity of illness, often at first point of contact. Until recently each NHS board in Scotland used a different paediatric early warning score (PEWS) and as a result there was no national common language for either scoring or the escalation processes. With this wide variation in communication around the sick child, the paediatric community identified this as an opportunity for improvement.

The paediatric programme of the Maternity and Children Quality Improvement Collaborative (MCQIC)\(^3\) facilitated introduction of the national standardised PEWS (Figure 1) for use by clinical teams to aid assessment of sick children at all points of care.

![Figure 1: National PEWS chart](image)

Method

1. **Build the will**
2. **Delphi process & national data review**
3. **Literature review**
   - Scores and escalation thresholds agreed
4. **All NHS boards contributed to chart design**
   - Five different charts were developed reflecting different age ranges
5. **Simulation testing with human factors chart design work involving all NHS boards (Figure 2)**
6. **Comparative score validation\(^4\) for in-hospital use against 18 other scores**
7. **Chart tested in three NHS boards in all clinical environments**
8. **National rollout**
9. **Score validated for pre-hospital use**

Results

All 14 NHS boards have agreed to adopt the national PEWS chart. Each NHS board will adapt the actions for the escalation levels to fit their local context.

![Figure 2: Simulation testing](image)

![Figure 3: PEWS handy guide](image)

Conclusions

At present, 10/14 paediatric teams are working to introduce the national PEWS. The national team has developed a handy guide (Figure 3) as a resource to support practitioners with the new chart.

Work is now under way to validate national PEWS for out-of-hospital use, for example in primary care and the Scottish Ambulance Service, thereby providing a national system-wide approach to assessing and responding to sick children.

References: