TABLE 1 Alder Hey action plan initiatives

Initiative	Element of system that initiative is designed to address	Understanding of the problem	Intended scope
Monthly critical deterioration review	Detect	• Inadequate monitoring of patients across institution; variable response to PTTT; missed opportunities for detecting deterioration	Organisation
Out-of-hours SOP for on-call doctors	Detect, plan, act	• Doctors not working systematically to prioritise sickest children	On-call medical and surgical teams (not the cardiac ward)
Family Engagement Tool	Detect	• No formal process for staff–family communication • Built environment problematic • Parents not formally involved in ward rounds	Cardiac ward
Training clinical staff on (1) PEWS, (2) recognition and response to deterioration and (3) NICE sepsis screening	Detect, plan, act	• Staff not compliant with trust policy in obtaining and recording observations • No standardised/trust-wide tool to aid recognition of sepsis	Organisation
SOP for improving ward rounds	Plan	• Variable format/quality of ward rounds • Inconsistent involvement of nursing staff	Cardiac ward

TABLE 2 Arrowe Park action plan initiatives

Initiative	Element of system that initiative is designed to address	Understanding of the problem	Intended scope
Nurse education	Detect	No structured approach to ongoing nurse education – particularly with regard to PEWS, and identifying potential deterioration on the ward	Ward
Introduction of a second daily huddle	Plan	Communication between senior nurses and doctors is more challenging in the afternoon/evening when doctors are located away from the ward on the PAU	
Introduction of the SHINE leaflets and poster	Detect	No formal process for encouraging family members to express their concerns about possible deterioration	
Joint handover sheets, using the SBAR tool	Plan	Nursing and medical handovers are conducted separately (although nurses occasionally attend medical handover). However, there is a belief that the doctors' handover sheets contain information that would be useful for the nurses – and vice versa	

TABLE 3 Noah's Ark action plan initiatives

Initiative	Element of system that initiative is designed to address	Understanding of the problem	Intended scope
Modified SHINE posters in clinical areas	Detect	Communication with families ad hoc and not standardised. Perception that some family members do not feel empowered to raise concerns and report deterioration. Overly anxious parents not well managed	Organisation
Electronic site board at nurses' stations	Plan	No clear mechanism for highlighting and communicating at-risk children between teams. Clinical staff are not always aware of the most at-risk children and are not efficient in prioritising them	Organisation
Reviewing and adjusting existing communication mediums	Plan	No clear mechanism for highlighting and communicating at-risk children between teams. Clinical staff are not always aware of the most at-risk children and are not efficient in prioritising them	Organisation
Escalation plan	Act	Formal escalation process is not used. Informal escalation relied on through senior nurses. Escalation during night shifts particularly difficult: 'depends on who is on'	Organisation

TABLE 4 Morriston action plan initiatives

Initiative	Element of system that initiative is designed to address	Understanding of the problem	Intended scope
Update and disseminate observation policy	Detect	• Lack of awareness of policy • Some in-house guidelines for frequency for some conditions, but not for all patients – no pro forma • No definition of 'routine'	Ward
Create posters and cards for staff to signpost abnormal thresholds for vital signs	Detect	• No normal ranges on current observation charts; need to be clearer, and signpost staff to escalation of care	Ward
Update observation charts to include normal age-related thresholds	Detect	• Existing observation charts outdated. Need more clarity, for ease of use as a signpost to escalation	Organisation
Conduct inventory of equipment	Detect	• Not enough suitable equipment to enable staff to conduct observations effectively	Ward
Formally establish Deteriorating Child Study Day across health board	Plan	• Staff not always able to go to training for identifying risk because of staffing issues. Desire to formalise course with health board approval, make a biannual event	Organisation
Roll out in-house e-learning package for nursing and medical staff	Plan	• Staff not always able to go to training for identifying risk because of staffing issues • Staff feel they need more training on communication of critical information	Organisation
Ward nursing staff to spend more time observing HDU staff	Plan	• Inexperienced staff to gain more knowledge, enhance their learning about critically ill children	Ward
Move to adopt 3 × daily 'huddles'/board rounds	Plan	• Current board round felt to be very useful for communication and increased situational awareness • Greater frequency to improve and update patient reviews; plan for a.m., 16.30 and 21.00	Ward

TABLE 4 Morriston action plan initiatives (*continued*)

Initiative	Element of system that initiative is designed to address	Understanding of the problem	Intended scope
Introduce process for identifying 'watchers' at each 'huddle' and handover, for example with markers on a whiteboard	Plan	• Board rounds and ward rounds could be improved. Increase and maintain staff awareness of children at risk	Ward
Review handover content. Possibility of including nursing staff in medical handover	Plan	• Handover content could be standardised to aid identification of potential deterioration. Opportunity for information-sharing, improved situational awareness, less chance of missing information in separate handovers	Organisation
Re-establish a nursing supernumerary role	Plan	• Compliance with RCN standards • Widespread agreement on advantages of supernumerary role (advocate for patients and families, greater situational awareness and ward acuity awareness) • Increased ability to identify clinical risk, less patient and family information 'lost' from board round	Organisation
Establish a staff training course on situational awareness	Plan	• There is no regular training on risk management; staff not routinely trained in situational awareness	Organisation
Review and disseminate existing escalation policy	Act	• Lack of awareness of policy. Some staff unsure of roles and responsibilities around escalation	Organisation
Review communication tools to aid escalation of patient care	Act	• Staff feel that they need more training on communicating critical information; junior-level communication could be improved	Organisation
Explore tools for family/parental involvement	Detect	• Not sure if parents always receive/understand information • Buzzer not often used	Organisation