Evaluating an Early Warning Tool: setting the standard of safe care for infants with complex heart conditions at home.

The Aim
The aim of the collaborative improvement project is to implement in the clinical setting the CHAT 2 Early Warning Tool for infants with complex congenital heart disease home across 4 national cardiac children’s centres. The tool is expected to be part of a bundle of care for a national home monitoring programme (HMP), including a training and education programme. The tool will support decision making by families and children’s community teams to improve safety, quality of care and standardize care provision

Evaluation
- Organisation of key domains into mutually agreed visual formatted tool
- Focus group work with parents and stakeholders acceptance to families, understanding of the tool
- Trial of the tool using retrospective clinical record review
- Scenario based (table top) with stakeholders and clinical experts
- Correctly triggers with escalation plan in the clinical setting within local HMP bundle

Progress to date
Standardizing & review of the HMP at each centre
Review of tool and discussion against national guidelines
Scenarios to trial tool across professional groups
Clinical simulation scenario (Worcester)- very positive event using telephone consultation & discharge preparation. Outcomes included training time & package for tool use, changes to the tool layout, how would it sit in the discharge bundle

Planned
Focus & feedback work with parents - acceptability, design, training & education support plan, understanding of words used (Little Heart Matters)

Background
Congenital heart disease (CHD) affects 7,1000 UK live births (Knowles 2005). National CHD data shows there were 888 operations/interventions in the neonatal group (CCAD 2016), with 30 day survival of 98.2%, ~150 infants a year have extremely complex CHD associated with the highest risk of mortality and morbidity. Home Monitoring Programs (HMP) have been shown to reduce the risk of mortality & morbidity in this group (Ghanayem 2004, Giardini 2015) and there is evidence of the vigilance of families/carers in optimising the outcome of infants in the first year of life (Rempel, 2012, Gaskin 2016).