M12 Tommy's Clinical Decision Support Tool: lessons learned from an early adopter implementation evaluation

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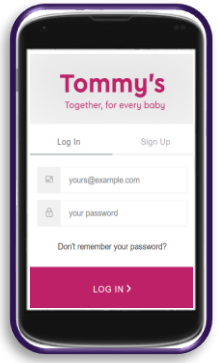
Tommy's National Centre for Maternity Improvement

Royal College of Midwives

Royal College of Obstetricians & Gynaecologists



1. Background

- Preterm birth and stillbirth are more common for those living in areas of social deprivation and from ethnic minority groups[1]. This may be due to variation in care.
- To address this, the Tommy's Clinical Decision Support Tool was developed to provide improved risk assessment and instant clinical decision support.

2. Methods

- Design: Early adopter implementation evaluation study in five NHS hospitals [2].
- Participants: women (n=1,181) and healthcare professionals (n=112).
- Data collection: online surveys (n=1,260); 29 interviews; 8 focus groups.
- Data analysis informed by NASSS (Non-adoption or Abandonment of technology by individuals and difficulties achieving Scale-up, Spread and Sustainability) framework[3] [Figure].

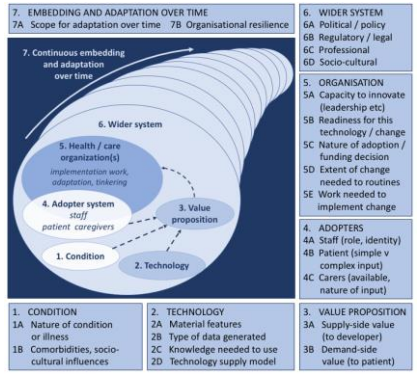
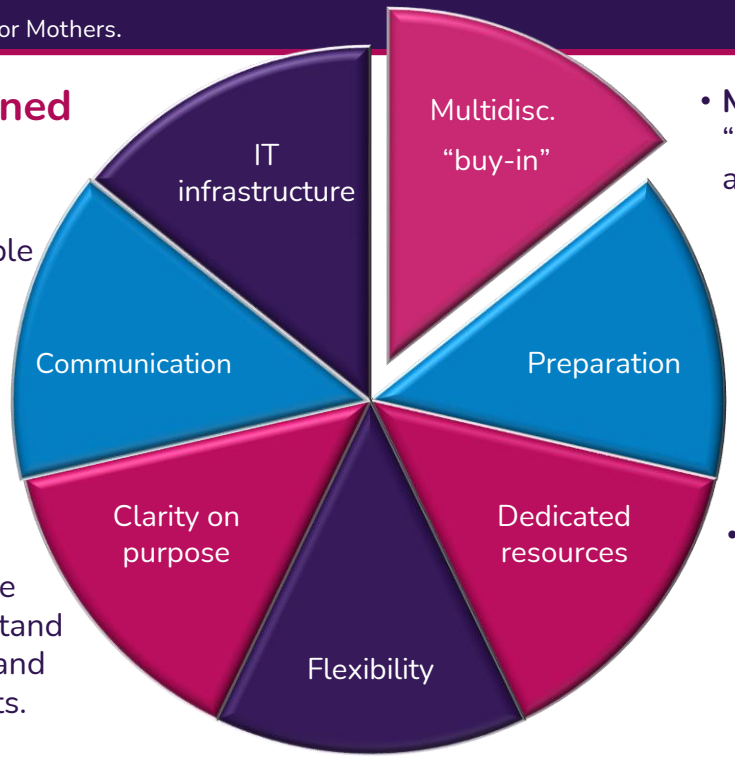


Figure: NASSS Framework [3].

3. Lessons learned

- **IT infrastructure** optimisation and mitigation of double data entry.
- **Communication**, particularly when risk result is unexpected.
- **Clarity:** everyone needs to understand purpose, scope and potential benefits.



- **Multidisciplinary** "buy-in" from start, all professionals.
- **Preparation** for transitional period and harmonisation of guidelines.
- **Dedicated resources**, incl. local champions across professions and settings.
- **Flexibility** in training and accessibility of resources.

4. Conclusions and next steps

This study gave us the opportunity to evaluate implementation processes in early adopter Trusts. We were able to identify barriers and opportunities to inform a cluster randomised controlled trial (PARTNER) which will maximise the chance of trial results being conclusive.

With thanks to the women and health professionals who took part in this study. Also, to the RCOG Women's Voices Involvement Panel and members of the Community of Practice, who have contributed to the development and success of this programme.

1. Jardine *et. al.*, "Adverse pregnancy outcomes attributable to socioeconomic and ethnic inequalities in England: a national cohort study." *The Lancet*. 2021 Nov 20;398(10314):1905-12.
2. Carter *et al.*, "The Tommy's Clinical Decision Tool, a device for reducing the clinical impact of placental dysfunction and preterm birth: protocol for a mixed-methods early implementation evaluation study." *BMC Pregnancy and Childbirth*. 2022. [in press]
3. Greenhalgh *et. al.*, "Beyond adoption: a new framework for theorizing and evaluating nonadoption, abandonment, and challenges to the scale-up, spread, and sustainability of health and care technologies." *Journal of Medical Internet Research*. 2017 Nov 1;19(11):e8775.

For more information about the PARTNER RCT: partner-trial@bristol.ac.uk

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