A protocol for a multi-site cohort study to evaluate child and adolescent mental health service transformation in England using the i-THRIVE model

Moore, A., Baron-Cohen, K. L., Simes, E., Chen, S., Fonagy, P. (2023).

Aim: 1) Evaluate the effectiveness of i-THRIVE to improve care for children and young people's mental health and 2) Evaluate the approach to implementation.

Design: A matched cohort study design with a mixed-methods approach.

Participants/Sample:

- N = 10 : CAMHS sites that adopt i-THRIVE from the start of the NHS England-funded CAMHS transformation
- N = 10 : 'Comparator sites' that choose to use different transformation approaches within the same timeframe.
- 20 sites matched on population size, urbanicity, funding, level of deprivation and expected prevalence of mental health care needs.

Methods

Data was collected between 2015 and 2020 for all sites – baseline and then annually over the 4-year study period.

Outcome Measures:

- **Clinical Outcomes**
  - Symptom improvement
  - Patient routinely reported outcomes
- **Patient Experience and Engagement with Services**
  - Friends and Families Test
  - The Children's Global Assessment Scale
  - Attended vs not attended
- **Service Performance Outcomes:**
  - Access: Numbers of
    - new referrals
    - referrals assessed by triage/Tier 3 services
    - patients receiving treatment)
  - Waiting times: Average times between
    - referral received to triage
    - referral received to assessment
    - referral received to 1st episode of care
  - Efficiency: Average number of:
    - contacts per patient
    - face to face appointments
    - non face to face appointments
    - discharges
    - re-referrals

- (+ diversity of those accessing CAMHS):
  - ethnicity
  - age
  - diagnoses

Process Evaluation Measures:

Exploring what?	Why?	How / using what?
Local context	To understand barriers and facilitators to implementation	Survey based on the inner and outer setting constructs defined by the Consolidated Framework for Implementation Research (CFIR) (validated mixed method multi-level framework that conceptualises implementation completed by leads)
Fidelity to the model	To understand how close local models align with THRIVE principles	Semi-structured interviews at baseline and follow up using the i-THRIVE Assessment Tool using purposive sampling to recruit 3 interviewees per macro, meso & micro level at each site – researchers scoring the transcripts were blinded to how the service is performing
Dose	To measure the quantity of what is implemented	9-item 'adoption' survey based on the RE-AIM Framework which is sent via email at baseline and follow up, to all front line staff on accelerator sites to measure their understanding of i-THRIVE and its principles. And semi-structured interviews to understand mechanisms of impact on service transformation with accelerator and comparator sites through questions related to barriers and facilitators of the service implementation.
Reach	To understand the extent that the intervention reaches its target audience	
Pathway mapping	To compare the structures of CYP MH pathways, services offered and the extent to which these are integrated at baseline and after transformation	To explore if transformation led to pathways becoming more consistent with NHS England guidelines and the extent to which services and pathways are integrated. Recorded by reviewing documents of local transformation plans at baseline and after transformation: Services provided, who provides it, its modality, its relationship to other services in the pathway and the number of access and assessment points in each system. And supplemented by semi-structured interviews with the site leads to confirm key details and accuracy.

Results will be reported in subsequent papers…

Results will explore whether implementation of the THRIVE Framework can support, guide and improve the introduction of new services.

It is anticipated that this will facilitate and effectively support the whole system transformation demanded of children and young people's services.

Hypotheses - sites implementing the THRIVE Framework will demonstrate:
- More integrated services

- Barriers to implementation will be more easily overcome

- Improved service and patient outcomes (improved access to services, shorter waiting times and shorter length of stay)

- Better engagement with services, improved experience of care, fewer dropouts and better clinical outcomes.

- Shared decision making and improved signposting will support broader access, positively impacting on diversity and inclusion in services.