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Child and Adolescent Mental Health Service: Extension for Community Health Care Options [CAMHS ECHO]

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Abstract

Aims

To explore the feasibility and identify the perceived barriers and enablers of developing an ECHO programme for CAMHs in Ireland.

Methods

The study adopted a qualitative research design incorporating a CAMHS:ECHO seminar and workshops with (N=29) healthcare professionals working in primary care/ mental health services. Participant consent was received, and thematic analysis conducted on rapporteur notes.

Results

Clinicians reported a high-level of interest in the project. Perceived opportunities included potential reduction in CAMHS waiting lists, opportunity for shared care of ADHD, improved time management, clinical skills, and access to advice on referrals. Perceived challenges included the issue of clinical governance, increased GP workload and the issue of incentives.

Conclusion

Barriers to successful rollout of an ECHO model in CAMHS were outweighed by perceived benefits and enablers identified by participants. Given the increased use and acceptability of telepsychiatry during COVID-19, coupled with the positive support offered by attendees, consideration should be given to more formally piloting CAMHS:ECHO.

Introduction

It is accepted that Child and Adolescent Mental Health Services [CAMHS] in Ireland are currently fragmented, over stretched, and under resourced with staffing levels well below recommended levels[1]. Currently, there are approximately 2,700 children on CAHMS waiting lists, with 14% of these referrals waiting longer than 12 months [1, 2, 3]. With the current operational models of CAMHS overwhelmed by demand, exploration of workable innovative models of care by the HSE is long overdue. It is proposed that CAMHS:ECHO Ireland will enhance available expertise at a community level by providing virtual clinical consultations to GPs by multidisciplinary experts in the field.

The *Extension for Community Health Care Outcomes* [ECHO] was originally developed in New Mexico (United States) to address a lack of access to clinical services for those with Hepatitis C living long distances from centres of care[4]. As such, the ECHO model was developed to improve access to care for persons with complex health needs that were being underserved with the aim of democratising knowledge from specialist medical hubs out into the community[5]. As time progressed the ECHO model has been extended to address a growing awareness of a shortage of specialists, long waiting lists and problems around patients having to travel long distances for care/treatment[,6, 7, 8]. Initially designed for management of medical illnesses, ECHO has subsequently been successfully extended to include neurodevelopmental and mental health (MH) disorders[4]. This model is seen as an affordable healthcare intervention for rural communities where certain chronic diseases have reached epidemic levels and healthcare resources are scarce[4,6]. Moreover, such service inequalities are compounded further by long waiting lists, a scarcity of out-of-hours services, and a deficiency in the number of youth services that are led by specialists in child and adolescent psychiatry[1,3]. To date, the ECHO model has exclusively been used in Ireland to advance specialist knowledge and services for chronic physical illness. Such as palliative care [9], Hepatitis C[10], and heart failure[11]. This paper proposes that CAMHS:ECHO Ireland will allow for the connection between mental health experts, GPs and community health representatives over a telehealth network. Given the expected increase in demand post COVID-19, increased access for GPs to specialist advice and services is welcome.

Using freely available multi-point video technology platform (e.g. ZOOM) to deliver 24 one-hour telemedicine clinics facilitated by expert clinicians, CAMHS:ECHO will be the first program of its kind to provide specialist child and adolescent MH training and supports to GP's in the community. Each session allows up to 100 GPs to sign into a virtual didactic teaching environment and share learnings from case studies provided. Sessions are led by a range of clinical experts. Proposed topics include anxiety, depression, ADHD, eating disorders, neurodevelopmental delays, trauma, medication management and other paediatric mental health issues requested by attendees.

Before developing the programme, stakeholder engagement was identified as essential to informing awareness as to key barriers and enablers of an effective ECHO model for GPs. This study aimed to gather such insights by hosting a CAMHS:ECHO workshop for key stakeholders.

Methods

This exploratory study adopted a qualitative research design incorporating a participant workshop with healthcare professionals working in primary care and MH services (N=29).

Purposive sampling was used to identify Consultant Child and Adolescent Psychiatrists, GP's and Primary Health Care professionals (clinical psychologists, primary care nurses) working within the catchment area for the Lucena Clinic, St John of God Child and Adolescent Mental Health Services (South County Dublin & County Wicklow). The participants selected to take part were potential users of the pilot program and had expertise regarding the management of child and adolescent mental health in primary care in their catchment area. This gave them a unique insight into the potential barriers and enablers of a proposed model CAMHS:ECHO. Participants were invited to attend a workshop that consisted of a series of presentations by The Oregon ECHO Network: *Delivery and Evaluation of the ECHO Model for Child and Adolescent MH*; The Heartbeat Trust: *Ireland's Heart Failure Virtual Clinic*; and University College Dublin's Department of Child and Adolescent Psychiatry: *Piloting CAMHS:ECHO.* Following workshop presentations attendees were split into five groups of 5/6 clinicians. Following a literature review on previous ECHO model development, group facilitators presented participants with a schedule of discussion points to explore potential barriers and enablers, opportunities and challenges associated with CAMHS:ECHO[12, 13,14,15].

Rapporteurs recorded participant insights during the workshops (handwritten notes) and transcripts were analysed using QDA Miner Lite, a qualitative analysis softwear tool. Thematic analysis was selected due to its flexibility and established validity in qualitative studies of this sort[16]. This included data familiarisation, code development, searching, reviewing, defining, and naming themes. A total of 7 major themes (table 1) and 18 subthemes were identified.

Results

Key themes are presented under the headings 'Opportunities' and 'Challenges' and discussed in turn.

Table 1. Major themes identified following thematic analysis.

Opportunities	Challenges
High level of Interest *Timely Access to CAMHS Experts* *Access & Usability* *Managing Specific Diagnoses*	*Responsibility and Clinical Liability* *Time and Workload* *Incentives.*

Opportunities

High level of Interest: Findings indicated a high level of interest in the CAMHS:ECHO model amongst health care professionals. Participants were encouraged by the successful application of the ECHO model to *Ireland's Heart Failure Virtual Clinic*, which was found to improve accessibility and provide a better service for the treatment of heart failure. The CAMHS:ECHO model was perceived to have potential to reduce wait times for patients and enable GP management of specific diagnoses. Finally, participants indicated that there is a demand and market for the CAMHS:ECHO beyond GP's to other health care professionals, such as supporting nurse practitioners and primary care psychologists.

Timely Access to CAMHS Experts: The inability to provide timely access for families to CAMHS clinicians due to long waiting lists and the impact of wait times on patients emerged as a salient discussion point across all participant groups. Attendees felt that adoption of the ECHO model to upskill GPs to provide more first level psychological support, could preserve time and expertise for children and families with more severe psychopathology. Ensuring appropriate referrals and access to CAMHS was also seen to have positive effects on the wellbeing of staff in otherwise over-stretched services. The potential for CAMHS:ECHO to reduce wait times not only emerged as a key motivating factor for 'buy in' but was foreseen by participants as the most valuable potential outcome associated with scale-up.

Access & Usability: Participants viewed CAMHS:ECHO as easily accessible and user friendly. The idea of simply logging into a virtual teaching platform and in turn saving time and energy that would typically be spent travelling to an educational institution was extremely appealing to attendees. Moreover, the incorporation of administrative/IT staff to do most of the work ahead of time was also cited as a major advantage. Participants felt the model was a practical mechanism for professional development that was also conducive to their busy clinical schedules.

Geographical inequalities in service accessibility across urban and rural locations emerged as prominent discussion points on the day. Attendees described the capacity for CAMHS:ECHOs to upskill and provide sub-specialist advice to practitioners, irrespective of their location, as a 'gamechanger'. Individual accounts of difficulties faced when geographically isolated attested to the benefits accrued by program uptake and development of expertise and competence, which was then seen as a valuable asset to share with other colleague in their area.

Managing Specific Diagnoses: Upskilling clinicians in the shared management of children on psychotropic medication, along with access to clinical supervision of patients with specific diagnoses - specifically children with ADHD - was also identified as a key benefit. Participants felt the model would be effective in the provision of guidance to GPs when faced with cases they felt ill-equipped to deal with. In addition, attendees stated that having access to a forum, such as CAMHS:ECHO, to discuss complex presentations and their legitimacy for referral would be an invaluable resource that could help streamline care pathways and abet waiting lists.

Challenges

Responsibility/ Clinical Liability: The biggest barrier to the model's success was the issue of responsibility and clinical liability. Participants expressed concern about who would be held accountable for negative treatment outcomes - the GP, the CAMHS:ECHO facilitator or both? Some GPs expressed feeling uncomfortable and apprehensive about managing patients with diagnoses they have very little previous experience with, even with the advice and support provided via ECHO. In addition, some attendees worried that participation in the program could put patients at reduced access to CAMHS, thus adding to the burden experienced by GP. These findings reveal the necessity to develop specific guidelines concerning clinical liability and who is responsible for quality assurance prior to CAMHS:ECHOs going live.

Time and Workload: Another challenge identified by participants was the issue of time and workload. Lack of protected clinical slots for educational purposes in general practice was identified as a practical barrier. Some GPs felt they simply do not have the time given their own service demand, or financial constraints.

Accordingly, this issue will need to be worked out between the GP and the CAMHS:ECHO facilitator prior to committing to the program. Finally, in the interest of best practice and quality service provision, participants voiced the necessity for GP workloads to be alleviated as opposed to further inflamed. The implementation of the CAMHS:ECHO model would require significant organisational/operational supports. Participants were concerned whether sufficient time would be allocated by the Health Service Executive to ensure the program viability. Given that GPs are already over-stretched, concern was expressed about whether they would have the time to take on such a large project.

Incentives: Whilst upskilling clinicians is of the utmost importance, attendees reported that GP turnover is high and longstanding issues associated with securing and incentivising practitioner 'buy in' to new and innovative models and continued professional development [CPD] programs remain. Accordingly, participants highlighted the importance of offering equitably incentives to entice GPs and make the added work associated with CPD worth their while.

Discussion

This exploratory study indicates a high level of interest and support from CAMHS Consultants, GPs and primary health care professionals in terms of adopting the ECHO model to improve the provision of mental health care to children and adolescents. All participants acknowledged the financial and resource constraints on CAMHS despite recognition of ongoing demand and referral rates. Participants considered that upskilling GPs could help improve preventive MH care, decrease CAMHS referrals and waiting lists and ultimately improve patient experience. The reduction of CAMHS waiting lists was identified as the key motivator for buy in from the health care professionals. A number of perceived benefits of the model were identified, which included reducing waiting times and the accessibility of the model, assistance with the management of specific diagnoses (i.e. ADHD) in primary care, assistance with the management of referrals and the opportunity for upskilling for GPs and psychiatrists. Several challenges to implementing the model also came to light, including the issue of clinical liability, concerns about GP time and workload and the issue of incentives. Addressing these issues prior to the implementation of an ECHO pilot model as has been the case with similar programmes for other conditions such as heart failure, is a priority. Overall, this research reveals that a range of clinical professionals perceive the opportunities associated with CAMHS:ECHO to far outweigh the challenges, indicating impetus to pilot a regional CAMHS:ECHO program with a view to upscaling it on a national level in the future.

The current COVID-19 pandemic has brought unprecedented challenges for health care delivery. Telepsychiatry has come into its own and anecdotal evidence has shown it has been effective and welcome by both providers and patients. Given the recognition of prolonged adverse psycho-social effects of pandemics, it is likely that the demand placed on both GP and MH services will increase. Using this crisis as a time for opportunity and change might lead to traumatic growth.

Declaration of Conflicts of Interest:
The authors have no conflict of interest to disclose.

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References:

1. McNicholas F, Sharma S, O' Connor C, & Barrett E. Burnout in consultants in child and adolescent mental health services (CAMHS) in Ireland: a cross-sectional study. 2020 BMJ Open 2020;10:e030354. doi: 10.1136/bmjopen-2019-030354
2. Houses of Oireachtas. Seanad Éireann debate -Wednesday, 29 May 2019, Vol. 265 No. 14. 2019. Available at: https://www.oireachtas.ie/en/debates/debate/seanad/2019-05-29/16/
3. Mental Health Reform. Mental Health Reform submission on review of A Vision for Change. 2017. 2019. Available at: https://www.mentalhealthreform.ie/wp-content/uploads/2017/09/Submission-on-review-of-A-Vision-for-Change.pdf
4. Project ECHO. School of Medicine, New Mexico University Project ECHO: A Revolution in Medical Education and Care Delivery. 2019. Available at: https://echo.unm.edu/
5. Komaromy M, Duhigg D, Metcalf A, Carlson C, Kalishman S, Hayes L, Burke T, Thornton K, Arora S. Project ECHO (Extension for Community Healthcare Outcomes): A new model for educating primary care providers about treatment of substance use disorders. Substance abuse. 2016 Jan 2;37(1):20-4.
6. Serhal E, Arena A, Sockalingam S, Mohri L, Crawford A. Adapting the consolidated framework for implementation research to create organizational readiness and implementation tools for project ECHO. The Journal of continuing education in the health professions. 2018;38(2):145.
7. Rhind C, Hibbs R, Goddard E, Schmidt U, Micali N, Gowers S, Beecham J, Macdonald P, Todd G, Tchanturia K, Treasure J. Experienced Carers Helping Others (ECHO): protocol for a pilot randomised controlled trial to examine a psycho-educational intervention for adolescents with anorexia nervosa and their carers. European Eating Disorders Review. 2014 Jul;22(4):267-77.
8. Zhou C, Crawford A, Serhal E, Kurdyak P, & Sockalingam S. The impact of project ECHO on participant and patient outcomes: a systematic review. 2016 Academic Medicine, 91(10): 1439-1461.
9. All Ireland Institute of Hospice and Palliative Care, 2020. Available at: http://www.professionalpalliativehub.com/education/project-echo-aiihpc.
10. Cheallaigh CN, O'Leary A, Keating S, Singleton A, Heffernan S, Keenan E, Robson L, Sears J, Moloney J, Arora S, Bergin C. Telementoring with project ECHO: a pilot study in Europe. BMJ innovations. 2017 Jul 1;3(3):144-51.
11. E Health Ireland. The Heart Failure Virtual Clinic, 2020. Available at: https://www.ehealthireland.ie/Case%20Studies/Heart-Failure-Virtual-Clinic/
12. May CR, Finch TL, Cornford J, et al. Integrating telecare for chronic disease management in the community: what needs to be done? BMC Health Serv Res 2011; 11(1): 1.
13. Levine M, Richardson JE, Granieri E, Reid MC. Novel telemedicine technologies in geriatric chronic non-cancer pain: primary care providers' perspectives. Pain medicine. 2014 Feb 1;15(2):206-13.

14. Weinstein RS, Lopez AM, Joseph BA, Erps KA, Holcomb M, Barker GP, Krupinski EA. Telemedicine, telehealth, and mobile health applications that work: opportunities and barriers. The American journal of medicine. 2014 Mar 1;127(3):183-7.
15. Mohr DC, Burns MN, Schueller SM, et al. Behavioral intervention technologies: evidence review and recommendations for future research in mental health. Gen Hosp Psychiat 2013; 35(4): 332–338.
16. Braun V, Clarke V. Using thematic analysis in psychology. Qualitative research in psychology. 2006 Jan 1;3(2):77-101.