ISRCTN49839991 https://doi.org/10.1186/ISRCTN49839991

Evaluation of a digital eHub to improve access and utilisation of existing primary health, mental health, and social services

Submission date
10/05/2023

Registration date
13/06/2023

Last Edited
23/01/2025

Recruitment status
No longer recruiting

Overall study status
Completed

Condition category
Other

☐ Prospectively registered
☐ Protocol
☐ Statistical analysis plan
☐ Results
☐ Individual participant data
☒ Record updated in last year

Plain English summary of protocol
Background and study aims
The aim of this study is to improve access and use of existing primary health, mental health, and social services via a digital Child and Family eHub for children aged 0-12 years and families, especially those who are most vulnerable, to address mental health needs and outcomes.
This study was started because of the following issues:
1. There are high levels of mental health disorders in children (14% in 2013-14).
2. Despite services being available, few children access these services (9-27%) and parents are not confident knowing where to go for professional help for their children.
3. There is an unequal distribution of mental health issues across different population groups, with higher levels in vulnerable groups (family dysfunction, domestic violence, discrimination, parent mental illness, childhood maltreatment, socioeconomic adversity).
4. The rate of mental health disorders is being adversely impacted by COVID-19; financial strain, social isolation, increased domestic violence and school closures. These are also often at the root of a range of other problems from learning difficulties to child protection issues.

Who can participate?
1. Caregivers who are the primary carer to at least one child aged from birth to 12 years old, who live in Marrickville, Fairfield in NSW, or Wyndham Vale in Victoria, and can speak sufficient English to participate in the study
2. Service providers (adults aged 18 years and older) who are currently employed in one of the participating hub sites at Marrickville, Fairfield in NSW, or Wyndham Vale in Victoria
3. Government policymakers who work within local, state or federal government as policy decision-makers

What does the study involve?
Caregivers will be asked to complete two surveys at the start of the study and 6 months after they have access to the Child and Family eHub. Each survey lasts about 30 minutes. The surveys will be completed online.
There will also be an optional interview at 6 months for caregivers to provide their perspectives on access to health, mental health and social services as well as their overall experience when

utilising the eHub portal.
Service providers and government policymakers will be invited to participate in individual semi-structured interviews at 6 months and beyond post eHub implementation. These interviews will obtain opinions on barriers and enablers and thoughts on the sustainability of the eHub in other communities across Australia.

What are the possible benefits and risks of participating?
This study is being performed for research purposes. The information gathered will be used to strengthen access and engagement with services for families of young children aged 0 - 12 years. A risk of participating is that sometimes when completing a survey or interview, people become upset by the questions. Participants can skip any questions they do not want to answer. They can also stop at any time without explaining why. If participants become uncomfortable or upset, the study researcher can provide options for further support.

Where is the study run from?
This project is being led by the Centre of Research Excellence (CRE) in Childhood Adversity and Mental Health. The CRE team are based at Murdoch Children's Research Institute (MCRI) and at Sydney Local Health District (SLHD) (Australia)

When is the study starting and how long is it expected to run for?
February 2021 to February 2025

Who is funding the study?
1. National Health and Medical Research Council (NHMRC) (Australia)
2. Sydney Local Health District (SLHD) (Australia)
3. Department of Families, Fairness and Housing (DFFH) (Australia)
4. Ingham Institute for Applied Medical Research (Australia)
5. Karitane (Australia)

Who is the main contact?
Prof. Sharon Goldfeld, Sharon.Goldfeld@rch.org.au

Study website
https://www.childandfamilyehub.org.au

Contact information

Type(s)
Principal Investigator

Contact name
Prof Sharon Goldfeld

ORCID ID
http://orcid.org/0000-0001-6520-7094

Contact details
Murdoch Children's Research Institute
Royal Children's Hospital
50 Flemington Road
Parkville

Australia
3052
+61 (0)3 9345 6408
sharon.goldfeld@rch.org.au

Type(s)
Public

Contact name
Ms Lisa Minton

Contact details
Murdoch Children's Research Institute
Royal Children's Hospital
50 Flemington Road
Parkville
Australia
3052
+61 (0)405592092
lisa.minton@mcri.edu.au

Additional identifiers

EudraCT/CTIS number
Nil known

IRAS number

ClinicalTrials.gov number
Nil known

Secondary identifying numbers
84970

Study information

Scientific Title
Child and Family eHub @Wyndham Vale, @Marrickville, @Fairfield

Acronym
CFeHub

Study objectives
The Child and Family eHub will aim to increase access to and use of: i) information and ii) the existing primary health, mental health, and social services system in order to improve mental health outcomes through adequate and responsive service delivery for caregivers with children (aged 0-12 years).

Ethics approval required
Ethics approval required

Ethics approval(s)

Approved 28/06/2023, The Royal Children’s Hospital Human Research Ethics Committee (HREC) (The Royal Children's Hospital Melbourne, Level 4, South Building, 50 Flemington Road, Parkville , VIC 3052, Australia; +61 (0)3 9345 5044; rch.ethics@rch.org.au), ref: HREC/84970

Study design

Multi-site mixed methods evaluation utilising a population and a prospective cohort sample

Primary study design

Interventional

Secondary study design

Non randomised study

Study setting(s)

Community, Internet/virtual

Study type(s)

Other

Participant information sheet

Not available in web format, please use contact details to request a participant information sheet

Health condition(s) or problem(s) studied

Improve access and utilisation of existing primary health, mental health, and social services through digital eHub for children aged 0 - 12 years

Interventions

This is a multi-site mixed methods evaluation utilising a population and a prospective cohort sample. This approach will assist in understanding the general access and use of the eHub by caregivers, while also providing a ‘deep dive’ into factors affecting caregiver access and use of the eHub through the prospective cohort samples in each of the three study sites.

This study will use the following interventions:
1. Evaluation cohort baseline data collection via a caregiver baseline survey:
Caregivers that consent to be involved in the evaluation will form the evaluation cohort group. A baseline survey will be undertaken by participants. Caregivers' baseline data will be collected via an online survey built into REDCap through the eHub portal
2. Process and population data collection via eHub meta-data collection and analytics:
Digital meta-data will be captured anonymously via Google Analytics and Hot Jar on the eHub site and include participants' average session length and frequency, task completion and exit rate when utilising the eHub as well as user data including satisfaction scores and responses to short online pop-up questions.
3. Evaluation cohort outcome data collection at 6 months post implementation of the eHub:
Caregivers will be contacted to complete an online survey at 6 months post baseline measurement to measure primary outcomes on access and use of the eHub, accessibility and overall experience of utilising the eHub. Secondary outcomes will also be measured via the caregiver outcome survey. Surveys will be built in REDCap.
4. Caregiver and cross-sectoral service provider individual semi-structured interviews:

Caregivers and intersectoral service providers from the three sites will be invited to participate in individual semi-structured interviews at 6 months post eHub implementation. Participants will be asked for their perspectives on access to health, mental health and social services as well as their overall experience when utilising the eHub portal.
5. Knowledge translation data collection:
Caregiver, intersectoral and government policy decision maker semi-structured interviews to provide their opinion on barriers and enablers and thoughts on the sustainability of the eHub in other communities across Australia. These interviews aim to help understand potential policy opportunities. This policy context information and the testing of the eHub undertaken within the three sites will inform future work of developing a 'scaling framework' for broader scale-up and sustainability of the eHub to other sites across Australia.

Intervention Type
Behavioural

Primary outcome measure
Primary outcome objectives: eHub implementation
1. eHub access:
1.1. Reach: the proportion of caregivers within each site that access the eHub, measured using eHub meta-data: site visits. Numerator: number of evaluation cohort participants and population cohort accessing the eHub / denominator: number of families (1 and 2 parents) that have children under 15 years in each site. Measured continuously throughout the evaluation.
1.2. Coverage (is the eHub reaching the intended audience of vulnerable/in-need families?), measured using eHub meta-data: site visits at each tier. Those families accessing the eHub at each the site who are vulnerable (demographic characteristics of caregivers that access the eHub, including postcode to link SEIFA, parents' place of birth compared with caregiver data from ABS), measured continuously throughout the evaluation.
2. eHub use: caregiver/user rated:
2.1. eHub engagement (are families engaging with the eHub?), measured using eHub meta-data via Google Analytics: do caregivers passively use the eHub (page hits, links opened to information and services within each tier of the eHub), and/or actively use the eHub(searches undertaken through tiers 2 and 3, and clicking through to tier 4 support), measured continuously throughout the evaluation.
2.2. eHub acceptability (do caregivers view the eHub as agreeable/satisfactory?), measured using eHub meta-data: pop-up surveys on satisfaction, did you find what you were looking for?/ was this useful? (thumbs up/down or smiley/sad face). Survey: satisfaction with content, delivery, level of support provided, credibility. Measured continuously throughout the evaluation.
2.3. eHub adoption:
2.3.1. To what extent can caregivers find and use information and services on the eHub, measured using survey and interview:
2.3.1.1. Did caregivers find information provided useful for their needs?
2.3.1.2. Were caregivers able to find an appropriate service or information to support their/their child's needs?
2.3.1.3. Did caregivers use or intend to use strategies provided in information?
2.3.1.4. Changes to caregivers' behaviour (e.g., help-seeking, implementing new strategies) Measured at 6 months
2.3.2. Is each tier of the eHub being used by the relevant caregivers (i.e., with associated need)? Measured using eHub Meta-data via Google Analytics: page visits, clicks, time on pages/sites, search terms, continuously throughout the evaluation
2.4. eHub appropriateness:
2.4.1. Do caregivers perceive the eHub as useful and relevant, measured using survey: perceived

fit; relevance; compatibility; suitability; usefulness; practicability: at 6 months
2.4.2. Did the caregiver feel reassured/supported by the information or services provided, measured using interview at 6 months
2.5. Barriers and enablers to accessing and using information, services and supports on the eHub, measured using semi-structured interviews at 6 months
3. Demographics:
3.1. Postcode
3.2. Number of children you care for
3.3. Single parent/own home etc
3.4. Country of birth
3.5. Language spoken at home
3.6. Educational attainment
3.7. Are you experiencing any of the following life challenges (adversity)
Measured using survey at baseline

Secondary outcome measures

Secondary outcome objectives: Impact
1. Information and service access and use:
1.1. Service access and use (Did the eHub assist caregivers with finding and connecting with relevant services? If not, why?) measured using survey:
1.1.1. Services used in the last 4 months; number of times accessed
1.1.2. If not connected with services, why not (See CRE questions which consider wait lists, transport, cost etc)
1.1.3. If connected, was it helpful for your child? (See CRE questions)
Measured at baseline and 6 months
1.2. Information access and use (Did caregivers find the information needed? If not, why? And whether accessing information changed the caregiver’s behaviour), measured using survey at baseline and 6 months
2. Caregiver mental health:
2.1. Caregiver distress (is eHub exposure associated with improvements in caregiver distress) measured using survey K10 at baseline and 6 months
2.2. Caregiver stress (is eHub exposure associated with reduced caregiver stress levels related to access to services and their child’s mental health, measured using survey: Likert scales of stress at baseline and 6 months
3. Child mental health:
3.1. Child mental health needs met (did the caregivers’ child have unmet mental health care needs, either they had seen a mental health service that did not fully meet their needs, or they had not seen a service but needed to), measured using a survey: Ride et al. survey of three questions on unmet child mental health needs at baseline and 6 months
3.2. Child mental health symptoms (did families’ eHub exposure improve parent-reported child mental health symptoms), measured using caregiver-reported child mental health outcomes: Survey of Well-being of Young Children (SWYC) for children aged 2 months to 2 years and Strengths and Difficulties Questionnaire (SDQ) for children aged 2 to 12 years at baseline and 6 months

Overall study start date

01/02/2021

Completion date

28/02/2025

Eligibility

Key inclusion criteria

Caregivers:
1. Parents or primary caregivers with at least one child aged 0-12 years
2. Only one primary caregiver per family unit can enrol in the evaluation study
3. Live in Marrickville, Fairfield in NSW, or Wyndham Vale in Victoria
4. Can speak sufficient English to participate in the study
5. Provide informed consent

Inter-sectoral service providers and government policymakers:
1. Adults aged 18 years or older
2. For health service providers: Work within the area of Marrickville, Fairfield or Wyndham Vale in health, or social service located at the Marrickville Community Health Service, Karitane in Fairfield or IPC Community Health Service in Victoria
3. For government policymakers: Work within local, state or federal government as policy decision-makers
4. Provide verbal informed consent

Participant type(s)

Health professional, Carer

Age group

Adult

Lower age limit

18 Years

Upper age limit

80 Years

Sex

Both

Target number of participants

Caregivers of children aged 0-12 years: n = 270 (90 per site); Intersectoral service providers and government policy makers: n = 15-21

Total final enrolment

254

Key exclusion criteria

Caregivers:
Caregivers with their youngest child over the age of 12 years

Date of first enrolment

01/06/2023

Date of final enrolment

15/06/2024

Locations

Countries of recruitment
Australia

Study participating centre
IPC Health Super Clinic
510 Ballan Road
Wyndham Vale
Australia
3024

Study participating centre
Marrickville Health Centre
155-157 Livingstone Road
Marrickville
Australia
2204

Study participating centre
Karitane
138-150 The Horsley Drive
Carramar
Australia
2163

Sponsor information

Organisation
Murdoch Children's Research Institute

Sponsor details
Royal Children's Hospital
50 Flemington Road
Parkville
Australia
3052
+ 61 (0)3 8341 6200
mcri@mcri.edu.au

Sponsor type

Research organisation

Website
https://www.mcri.edu.au/

ROR
https://ror.org/048fyec77

Funder(s)

Funder type
Research council

Funder Name
National Health and Medical Research Council

Alternative Name(s)
NHMRC

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
Australia

Funder Name
Sydney Local Health District

Funder Name
Department of Families, Fairness and Housing

Funder Name
Ingham Institute for Applied Medical Research

Alternative Name(s)
Ingham Institute

Funding Body Type

Private sector organisation

Funding Body Subtype
Research institutes and centers

Location
Australia

Funder Name
Karitane

Results and Publications

Publication and dissemination plan
Planned publication in a high-impact peer-reviewed journal.

Intention to publish date
31/05/2025

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study will be stored in a non-publicly available repository, REDCap. The REDCap software is a secure, web-based application for building and managing online surveys and databases, developed by Vanderbilt University. REDCap is hosted on Murdoch Children's Research Institute's infrastructure.

The data (or parts of it) may also be used in related research projects by other researchers in collaboration with the project team for purposes of comparing analyses or applying different statistical techniques in a rapidly evolving methodological field. Only anonymised data will be used for this, and all analyses will be agreed with the project team.

IPD sharing plan summary
Stored in non-publicly available repository