Telemental Health: what works for whom

Presentation for NHS England Children and young people team

FUNDED BY
NIHR | National Institute for Health Research

Context of the PRU's Telemental health programme

- Worldwide, main element in response to COVID-19: switch to telemental health (video calls, phone calls, messaging)
- Previously: much more limited. Prominent in remote places, programmes where efficiency paramount (IAPT).
- Pre-2020 evidence base derived from relatively small-scale implementation, often with volunteers.
- Some services completely closed in COVID except for telemental health, most secondary services in UK still delivering some F2F care, but much less.
- MHPRU: initial response to COVID - overview of impact on mental health care and mental health service users
- No. 1 questions from policy makers for follow-up work:
  - What's working for whom in telemental health, and what's not working?
  - How should future incorporation of telemental health in NHS care look?

Original Paper | Open Access | Published: 28 August 2020

Impact on mental health care and on mental health service users of the COVID-19 pandemic: a mixed methods survey of UK mental health care staff

Sonia Johnson, Christian Dalton-Locke, Norha Vera San Juan, Una Foye, Sian Oram, Alexandra Papamichail, Sabine Landau, Rachel Rowan Olive, Tamar Jeynes, Prisha Shah, Luke Sheridan Rains, Brynmor Lloyd-Evans, Sarah Carr, Helen Killaspy, Steve Gillard, Alan Simpson & The COVID-19 Mental Health Policy Research Unit Group

Social Psychiatry and Psychiatric Epidemiology **56**, 25–37 (2021) | Cite this article

Abstract

Original Paper | Open Access | Published: 17 August 2020

Early impacts of the COVID-19 pandemic on mental health care and on people with mental health conditions: framework synthesis of international experiences and responses

Luke Sheridan Rains, Sonia Johnson, Phoebe Barnett, Thomas Steare, Justin J. Needle, Sarah Carr, Billie Lever Taylor, Francesca Bentivegna, Julian Edbrooke-Childs, Hannah Rachel Scott, Jessica Rees, Prisha Shah, Jo Lomani, Beverley Chipp, Nick Barber, Zainab Dedat, Sian Oram, Nicola Morant, Alan Simpson on behalf of The COVID-19 Mental Health Policy Research Unit Group

Social Psychiatry and Psychiatric Epidemiology **56**, 13–24 (2021) | Cite this article

Original Paper | Open Access | Published: 04 March 2021

Experiences of living with mental health problems during the COVID-19 pandemic in the UK: a coproduced, participatory qualitative interview study

Steven Gillard, Ceri Dare, Jackie Hardy, Patrick Nyikavaranda, Rachel Rowan Olive, Prisha Shah, Mary Birken, Una Foye, Josephine Ocloo, Ellie Pearce, Theodora Stefanidou, Alexandra Pitman, Alan Simpson, Sonia Johnson, Brynmor Lloyd-Evans & NIHR Mental Health Policy Research Unit Covid coproduction research group

Social Psychiatry and Psychiatric Epidemiology **56**, 1447–1457 (2021) | Cite this article

Soc Psychiatry Psychiatr Epidemiol. 2022 Mar 10;1-13. doi: 10.1007/s00127-022-02254-6.
Online ahead of print.

What has changed in the experiences of people with mental health problems during the COVID-19 pandemic: a coproduced, qualitative interview study

Prisha Shah [#1], Jackie Hardy [#1], Mary Birken [1], Una Foye [2], Rachel Rowan Olive [1], Patrick Nyikavaranda [1], Ceri Dare [1], Theodora Stefanidou [1], Merle Schlief [1], Eiluned Pearce [1], Natasha Lyons [1], Karen Machin [1], Tamar Jeynes [1], Beverley Chipp [1], Anjie Chhapia [1], Nick Barber [1], Steven Gillard [3], Alexandra Pitman [1], Alan Simpson [2], Sonia Johnson [1], Brynmor Lloyd-Evans [4], NIHR Mental Health Policy Research Unit Covid coproduction research group

Affiliations + expand

PMID: 35267053 PMCID: PMC8908744 DOI: 10.1007/s00127-022-02254-6

J Med Internet Res. 2021 Dec 9;23(12):e31746. doi: 10.2196/31746.

Implementation, Adoption, and Perceptions of Telemental Health During the COVID-19 Pandemic: Systematic Review

Rebecca Appleton [#1], Julie Williams [#2], Norha Vera San Juan [#3], Justin J Needle [4], Merle Schlief [1], Harriet Jordan [2], Luke Sheridan Rains [1], Lucy Goulding [5], Monika Badhan [6], Emily Roxburgh [7], Phoebe Barnett [1 8], Spyros Spyridonidis [1], Magdalena Tomaskova [1], Jiping Mo [1], Jasmine Harju-Seppänen [9], Zoë Haime [9], Cecilia Casetta [10], Alexandra Papamichail [3], Brynmor Lloyd-Evans [1], Alan Simpson [3], Nick Sevdalis [2 3], Fiona Gaughran [# 10 11], Sonia Johnson [# 1 6]

Affiliations + expand

PMID: 34709179 PMCID: PMC8664153 DOI: 10.2196/31746

Free PMC article

PUBLISH ABOUT BROWS

PLOS ONE

OPEN ACCESS PEER-REVIEWED

RESEARCH ARTICLE

Service user experiences and views regarding telemental health during the COVID-19 pandemic: A co-produced framework analysis

Norha Vera San Juan, Prisha Shah, Merle Schlief, Rebecca Appleton, Patrick Nyikavaranda, Mary Birken, Una Foye, Brynmor Lloyd-Evans, Nicola Morant, Justin J. Needle, Alan Simpson, Natasha Lyons, Luke Sheridan Rains, Zainab Dedat, Sonia Johnson

Published: September 16, 2021 • https://doi.org/10.1371/journal.pone.0257270

Article | Authors | Metrics | Comments | Media Coverage | Peer Review

Published on 20.7.2021 in Vol 23, No 7 (2021): July

Preprints (earlier versions) of this paper are available at , first published December 14, 2020.

Implementation of Telemental Health Services Before COVID-19: Rapid Umbrella Review of Systematic Reviews

Phoebe Barnett [1,2]; Lucy Goulding [3]; Cecilia Casetta [4]; Harriet Jordan [4,5]; Luke Sheridan-Rains [2]; Thomas Steare [2]; Julie Williams [6]; Lisa Wood [7]; Fiona Gaughran [4,5]; Sonia Johnson [2,8]

Article | Authors | Cited by (1) | Tweetations (11) | Metrics

- Abstract
- Introduction

Abstract

Background:

Methodologies for telemental health studies

UMBRELLA REVIEW ON PRE-COVID EVIDENCE ON TELEMENTAL HEALTH

Lead: Phoebe Barnett (with Kings ARC)

What is an umbrella review?

- Also known as a 'review of reviews'- a synthesis of evidence from all existing systematic reviews
- A broad review of evidence, but with little attention to details of context

Methods

- Search for systematic reviews on all aspects of telemental health
- Tele-mental studies prior to COVID pandemic
- 19 reviews included, including two Cochrane reviews, reporting on 239 individual studies and 20 guidance documents

SYSTEMATIC REVIEW ON COVID EVIDENCE ON TELEMENTAL HEALTH

Lead: Becky Appleton (with Kings ARC)

Objective

To get an overview of extent and results of telemental health adoption during the COVID-19 Pandemic, and facilitators and barriers to optimal implementation.

Methods

- 4 databases searched in December 2020 for primary research relating to:
  - Remote working in mental health settings during COVID-10
  - Mental health care
  - Covid-19 (limited research to 2020 only)

- Included any type of telemental health which involved communication between a service user and healthcare professional.

QUALITATIVE INTERVIEW STUDY OF TELEMENTAL HEALTH EXPERIENCES

Lead: Norha Vera San Juan (with co-production groups from Mental Health Policy Research Unit and UKRI Loneliness and Social Isolation Network)

Research questions

- What are the experiences, from a service user perspective, of the switch to telemental health care?
- Which factors facilitate or impede people engaging with remote contact with different tools and in different settings?
- How do service users envisage the future for telemental health?

Study methods

- Data collection and analysis used a participatory approach: Researchers with relevant lived experience, contributed to all stages of data collection, analysis and interpretation of findings.
- Forty-four qualitative interviews (via phone or video) with mental health service users already living with mental health conditions prior to the pandemic.

SYSTEMATIC REVIEW ON EVIDENCE ON STRATEGIES AIMED AT IMPROVING SUCCESS OF TELEMENTAL HEALTH IMPLEMENTATION

Lead: Becky Appleton

Aim

To identify planned strategies used to try and make telemental health work better in clinical settings, and how these influence outcomes

Methods

- 5 databases searched in July 2021 for pre-pandemic primary studies
- Structured identification of implementation strategies
- Exploration of how strategies adopted may influence outcomes (especially implementation outcomes such as adoption, acceptability)

RAPID REALIST REVIEW OF WHAT WORKS FOR WHOM IN TELEMENTAL HALTH

Leads: Merle Schlief and Kitty Saunders

Purpose of a rapid realist review?

- A realist review generates theory on "**which interventions work for whom and in which context"**
- Rapid realist reviews combine literature review and extraction of evidence of what works for whom in different contexts with stakeholder input
- Rapid realist reviews aim to rapidly produce **policy-relevant and actionable recommendations**

RAPID REALIST REVIEW OF WHAT WORKS FOR WHOM IN TELEMENTAL HALTH

Our rapid realist review on telemental health

- **"What telemental health approaches work for whom, in which contexts and how?"**
  - Across different service user groups with a specific focus on 1) **Children and young people**, 2) Crisis and inpatient setting, 3) Groups at risk of digital exclusion
- Used **peer-reviewed evidence (including from above reviews), reports and stakeholder input** to develop **theories**
- **Included 108 sources**
  - Identified through literature searches, consultations with stakeholders, websites of provider organisations and service user and carer groups, and a call for evidence on twitter
- Refined theories during **weekly meetings with an expert reference group**, including
  - Lived experience researchers with personal experiences of using mental health services and/or supporting others
  - Frontline clinicians

SYSTEMATIC REVIEW OF ECONOMIC EVIDENCE ON TELEMENTAL HEALTH

Leads: Paul McCrone and Amy Clarke

Aim

- To identify and summarise economic evaluations of remote mental health care interventions

Methods

- We reviewed literature published since a previous review (2018-2020) and included studies in 'grey literature' and economic models (2000-2020)
- Six databases searched
- Information on study design, setting, costs and outcomes summarised
- Study quality assessed

Uptake and reach of telemental health

Uptake and reach of telemental health during COVID-19

- Worldwide, services were able to rapidly adjust to offer remote forms of mental health care due to COVID-19
  - Around 70-80% of service users remained engaged with care after the switch to telemental health
- Attendance: no difference in the number of cancellations/no shows
  - likely due to removal of barriers to attendance
- Telemental health had the potential to result in reduced waiting times

Evidence on effectiveness and acceptability of telemental health

Acceptability: pre-Covid

Clinicians tend to prefer face-to-face interventions (especially if they haven't tried telmental health yet) but do report acceptability of telemental health (2 views).

Service users were generally as satisfied with telemedicine as face-to-face (7 reviews). Initial scepticism tended to dissipate following positive experiences of video-conferencing (1 review).

Practical benefits and added **convenience.**

Therapeutic alliance comparable to face-to-face overall, but some patient groups report being more comfortable in face-to-face settings e.g. female older adults or veterans.

Acceptability during COVID-19

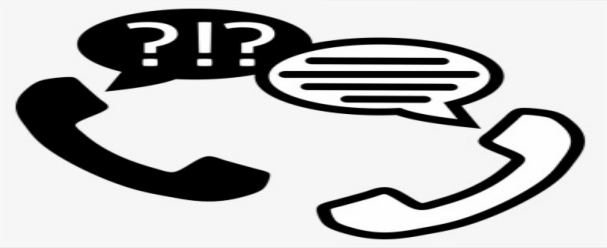
- Generally, good acceptability from service users and clinicians
- Increased access among some groups who would have struggled to access face-to-face support e.g. people shielding
- However,…
  - … a few studies reported lower levels of acceptability for clinicians and service users.
  - … a range of barriers to remote care were identified.
  - … service users who found remote care acceptable during this emergency did not necessarily want it to continue beyond pandemic.
  - … masking and other infection control precautions may have made face-to-face less engaging and appealing during pandemic.

Clinical outcomes - pre-COVID evidence

Videoconferencing interventions led to reduction in symptom severity across all patient populations (anxiety, PTSD, patients, substance use disorders, multiple comorbidities).

Some report of maintenance of effect (up to 6 months) in 3 reviews, but two other reviews report inconsistent evidence and there was some suggestion that videoconferencing may show less longevity than face-to-face at longer follow ups in 1 review.

Telephone interventions may not be as effective



Implementation of telemental health

Implementation outcomes – pre-COVID

Fidelity and therapist competence using tele-mental health is comparable to face-to-face in interventions for PTSD in veterans. (1 review)

In general **comprehension of tasks and completion rates** are high in telephone and video CBT (3 reviews)

Some (limited) evidence has reported better adherence in face-to-face interventions (1 review)

Technical difficulties reported but did not identify severe barriers (3 reviews).

Mistrust in technology in older adults (1 review)

Some logistical challenges such as connectivity (1 review)

In patients with PTSD, if correct steps are taken, **safety** can be managed in remote settings and is deemed satisfactory (2 reviews)

Increased **uptake and access to care** following introduction of tele-mental health across populations. Comparable drop-out rates to face to face interventions.

There may be some difficulty reaching ethnic minority patients (1 review)

Video-conferencing **assessments** are consistent with face-to-face assessment. (1 review)

Limited evidence on telephone assessment.

Guidelines

- One review of guidelines
- Firm recommendations:
  - Ensure remote interventions are appropriate for the needs of individual patients
  - Ensure within boundaries of therapist competence
  - Adhere to laws and regulations
  - Maintain confidentiality
  - Seek informed consent for remote-specific aspects of telemedicine e.g. data security
  - Ensure in-person support available for cases of crisis or emergency
- Guidelines suggested a higher risk of harm for people with cognitive impairments and psychotic disorders, but no recommendations for adaptions.

Strategies to improve implementation

Implementation review - planned strategies to support successful implementation:

- Ongoing support/facilitation, e.g. through either technical assistance or ongoing consultation
- Providing initial training and modelling best practice, e.g. through 'digital champions'

Rapid realist review:

- Taking into account **service user preferences** removes barriers to telemental health
- Taking into account individual **service and service user contexts**
  - ➡ The appropriateness and effectiveness of implementation strategies depend on the **service context** in which the intervention is being delivered in
  - ➡ Tailor implementation strategies to current/potential barriers

Making a connection

Minimum requirements to engage with telemental health

Preparation, adjustments and specialised support may be required for certain groups

Access to a charged, up-to-date device that enables internet access

+

An internet (Wi-Fi or data) or signal connection

+

The knowledge, ability and confidence to engage online

Strategies include device provision (e.g. by Trusts, The Good Things Foundation, and schools), charging lockers, providing data bundles, offering the use of rooms on-site which have internet connection and video-call capabilities.

Strategies for service users include training, peer support from other young service users, mentoring and trialling contacts ahead of time.

Without these criteria met, face-to-face sessions must be provided.

Facilitating a telemental health connection

Dealing with disruptions

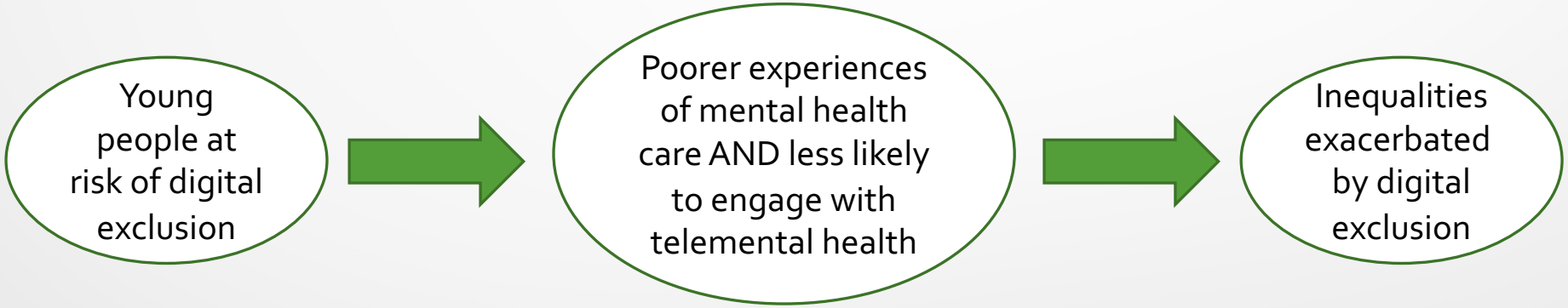
Choice of modality (video, phone, text)

Familiar, usable, and accessible platforms

Ongoing technical support and troubleshooting

Digital exclusion, the digital inverse care law and young people

Groups at risk of digital exclusion include very young children, children and young people living in poverty, those receiving inpatient and crisis care, children and young people with disabilities.



Existing inequalities are likely to widen

Privacy and Confidentiality

Access to private space

Examples of groups affected include children who require caregivers to be present, young people living in crowded homes

Additional risks for young service users at risk from people they live with

Face to face sessions may need to be made available

When a private space is available, telemental health may provide a welcome sense of anonymity for some young people who are conscious of potential stigma attending mental health care premises

Managing crises

It may be more difficult for staff to detect, respond to and manage risk and crisis situations when using telemental health

Strategies

- Back-up plan for re-establishing contact if lost
- Knowing where the service user is located
- Access to a face-to-face crisis team available 24/7

Flexibility and personalisation theme

Flexibility and Personalisation

- Shared decision-making throughout
- Convenience
- Facilitating collaboration and access to specialist care

Shared decision-making throughout

Individual preferences and choices regarding telemental health vary greatly and cannot be predicted reliably from demographic or clinical factors

- Telemental health or face-to-face?
- Should others be involved in care? (e.g. parents)
- When to use telemental health? (e.g. during school hours)
- What modality?
- Frequency and length of sessions

Convenience

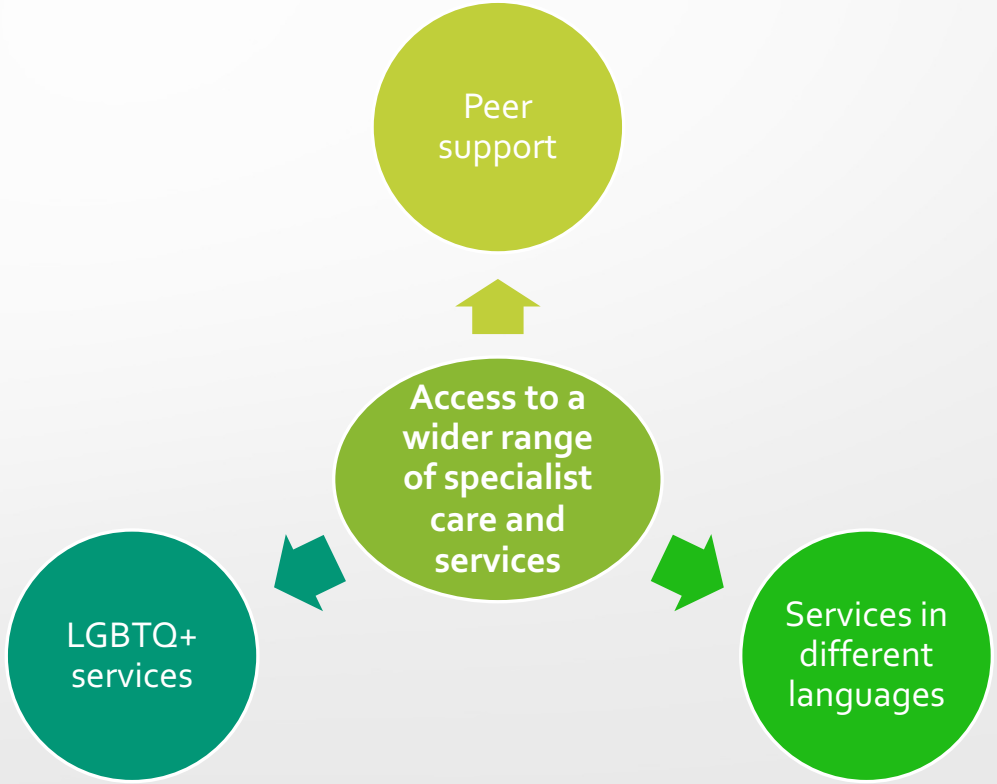
Service users valued personalised, flexible and convenient options that include a combination of different types of remote and face-to-face contact

This may reduce some barriers to accessing face-to-face mental health care

Examples include young people who do not have the ability to travel (e.g. due to anxiety, lack of funds, or lack of access) or have limited time due to school or caring commitments

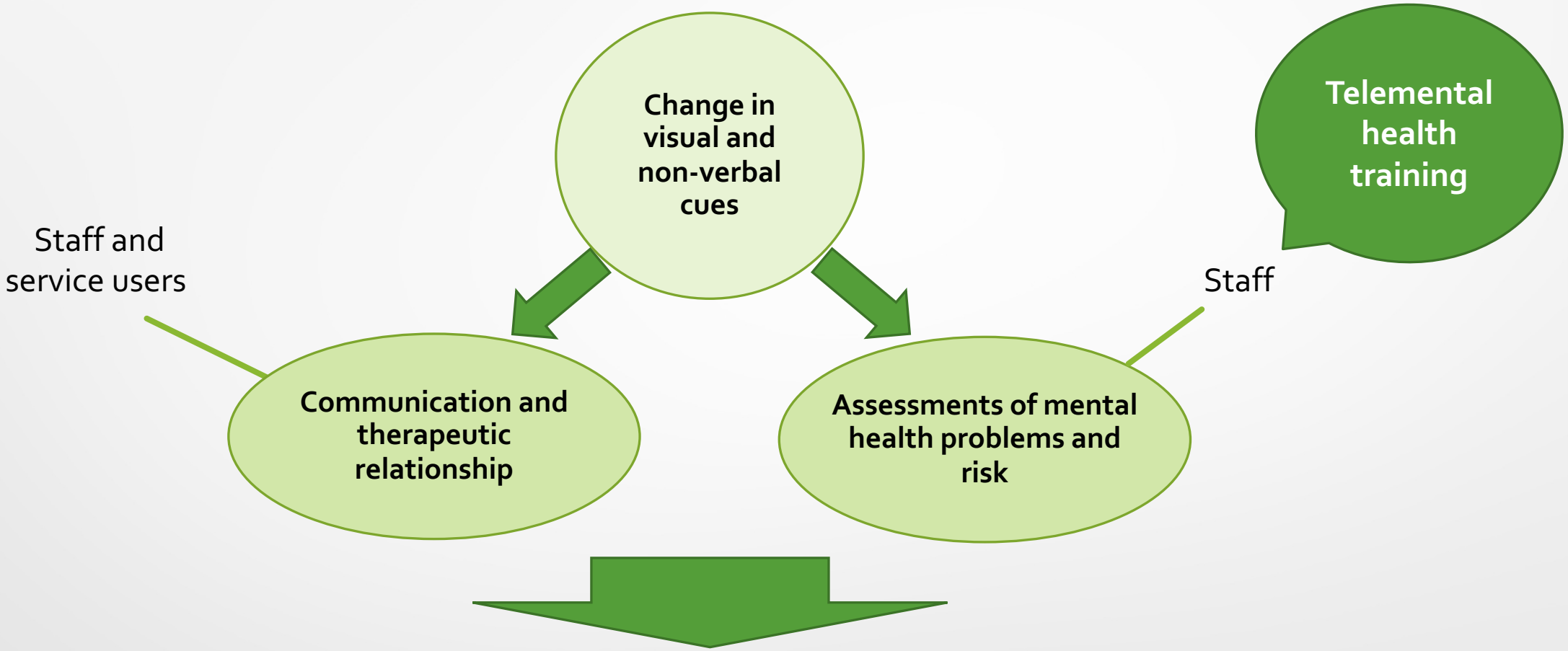
Also allows for young inpatients to stay in touch with family and friends

Facilitating collaboration and access to specialist care



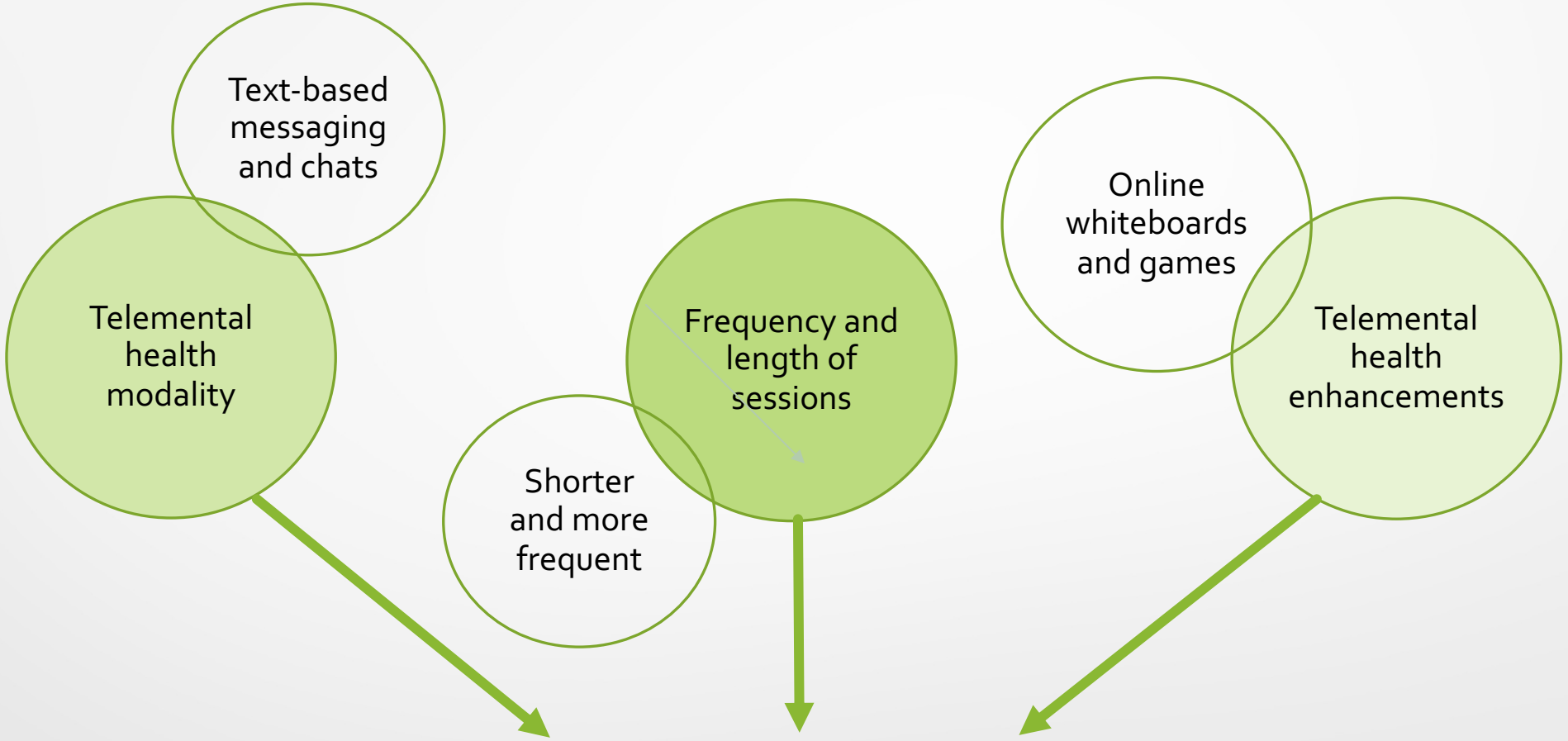
Therapeutic Relationships and Quality

Therapeutic relationship and quality of care



1. Less willing to take up telemental health
2. More likely to be dissatisfied
3. More likely to view telemental health as less effective

Therapeutic relationships and quality of care

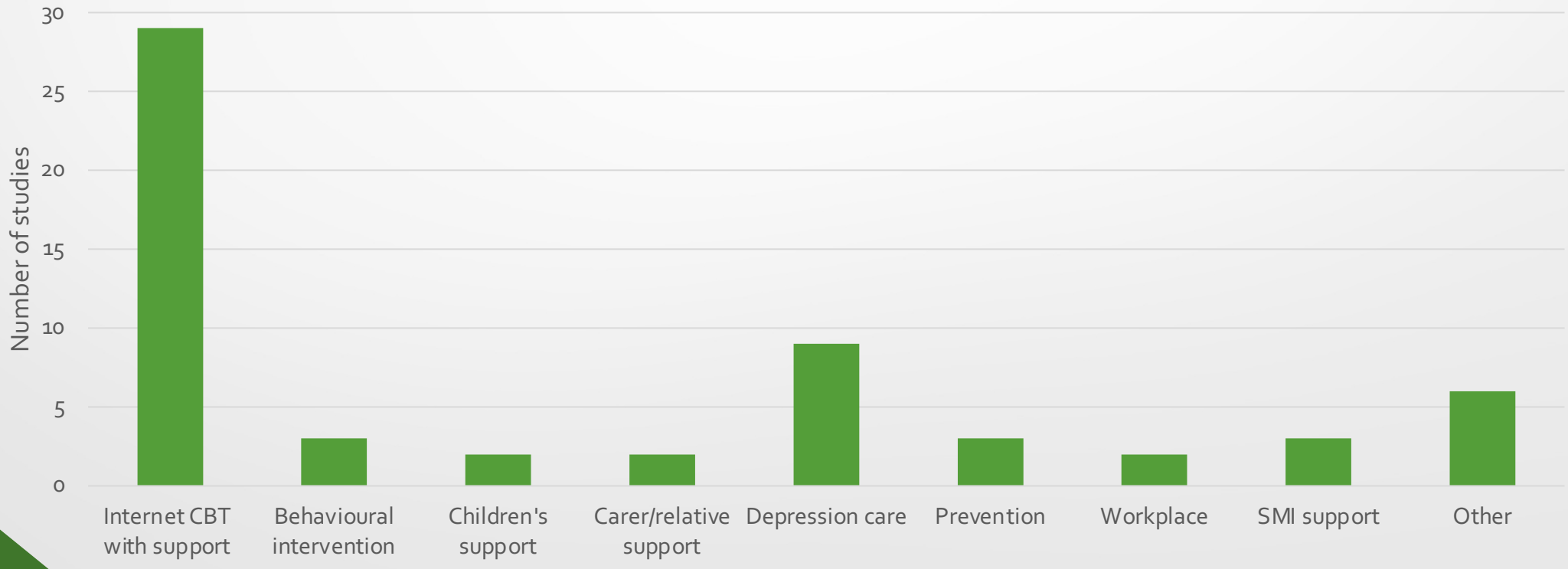


Greater engagement, quality of care, and therapeutic relationship

Economic evidence on telemental health

Results

- 59 separate studies identified (4 from grey literature)
- 8 studies were from the UK, 9 from Sweden, 7 from Netherlands, 8 from other European countries, 14 from USA, 4 from Canada, 3 from Australia and 1 from China



Results (continued)

- 30 studies used QALYs
- The results showed that cost-effectiveness was greater for telemental health than for the comparator in 46 studies
- The comparator was more cost-effective in 5 studies
- The findings were unclear in 8 studies

Some suggested next steps in telemental health research

- **Implementation research:** Robust evaluations of co-produced strategies building on all the available evidence to optimise roll-out of a blended model of telemental health
- **Effectiveness research:** Effectiveness and cost-effectiveness research comparing standard face-to-face care with a hybrid telemental health approach
- **Research to further understand impacts on therapeutic alliance:** Detailed investigation of how telemental health changes content of contacts and therapeutic relationships
- **Research to further understand impacts of digital exclusion:** Investigation of who is not reached through telemental health, what impacts are on them and how to mitigate them AND of whether there are people who are reached more effectively through telemental health
- **Research regarding telemental health and children and young people:** Further research to better understand when telemental health is useful with children and young people and their families (especially very young children), how to optimise its use

Authors

A big thanks to the authors of our work on telemental health:

Rebecca Appleton
Monika Badhan
Phoebe Barnett
Mary Birken
Carrie-Ann Black
Cecilia Casetta
Beverley Chipp
Amy Clarke
Zainab Dedat
Una Foye
Fiona Gaughran
Evdoxia Gkaintatzi
Lucy Golding
Tom Graham
Jeremy Greening
Raza Griffiths
Jasmine Harju-Seppanen
Zoe Haime
Tamar Jeynes
Sonia Johnson
Harriet Jordan
Erika Kalocsanyiova
Brynmor Lloyd-Evans
Natasha Lyons
Karen Machin
Rose McCabe
Nicola Morant
Jiping Mo
Justin J Needle
Patrick Nyikavaranda
Alexandra Papamichail
Karen Persaud
Farida Pirani
Simon Riches
Rachel Rowan Olive
Emily Roxburgh
Katherine K.R. Saunders
Merle Schlief
Nick Sevdalis
Prisha Shah
Luke Sheridan-Raines
Alan Simpson
Jacqueline Sin
Spyros Spyridonidis
Thomas Steare
Camilla Tamworth
Magdalena Tomaskova
Norha Vera San Juan
Julie Williams
Lisa Wood
Minnie Worden
Melisa Yilmas

Acknowledgements

This presentation presents independent research commissioned and funded by the National Institute for Health Research Policy Research Programme. The views expressed are those of the author(s) and not necessarily those of the NHS, the National Institute for Health Research, the Department of Health and Social Care or its arm's length bodies, and other Government Departments.