Explanation of context, mechanisms and outcomes in adult community mental health crisis care: the MH-CREST realist evidence synthesis

Nicola Clibbens,^{1,2,3,4*} John Baker,^{1,5} Andrew Booth,⁶ Kathryn Berzins,¹ Michael C Ashman,^{1,7} Leila Sharda,¹ Jill Thompson,⁸ Sarah Kendal¹ and Scott Weich^{2,6}

¹School of Healthcare, University of Leeds, Leeds, UK
²Sheffield Health and Social Care NHS Foundation Trust, Sheffield, UK
³Department of Nursing, Midwifery and Health, Northumbria University, Newcastle upon Tyne, UK
⁴Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust, Newcastle upon Tyne, UK
⁵Leeds and York Partnership NHS Foundation Trust, Leeds, UK
⁶School of Health and Related Research, University of Sheffield, Sheffield, UK
⁷Independent consultant
⁸Health Sciences School, University of Sheffield, Sheffield, UK

*Corresponding author Nicola.clibbens@northumbria.ac.uk

Disclosure of interests

Full disclosure of interests: Completed ICMJE forms for all authors, including all related interests, are available in the toolkit on the NIHR Journals Library report publication page at https://doi.org/10.3310/TWKK5110.

Primary conflicts of interest: Nicola Clibbens is a member of the National Institute for Health and Care Research (NIHR) Research for Patient Benefit funding panel for Yorkshire and the North East of England (2021–24). She also declares that pre-protocol funding was provided by Sheffield Health and Social Care NHS Foundation Trust (2018). John Baker is committee chairperson for the Health Education England/ NIHR Integrated Clinical and Practitioner Academic Programme (February 2022 to present); he was a member of the NIHR Advanced Fellowship funding panel (September 2015 to February 2022) and was a non-executive director of the Leeds and York Partnership NHS Foundation Trust (August 2016 to August 2022). Andrew Booth declares previous membership of the NIHR Evidence Synthesis Programme Advisory Group and Programme Grants Committee (September 2018 to August 2022), the Systematic Reviews NIHR Cochrane Incentive Awards (2019–20), the NIHR Evidence Synthesis Incentive Awards Committee (2021–22) and the NIHR HSDR Funding Committee (September 2018 to November 2022). and declares current membership of the NIHR Complex Review Support Unit Funding Board (2017 to present) and the HSDR Unmet Needs Sub-Committee (November 2019 to present). Scott Weich was a member, and later chairperson, of the NIHR Health Technology Assessment (HTA) Psychological and Community Therapies Panel and its predecessors and the NIHR HTA Prioritisation Strategy Group (2007-16), and the HTA Funding Committee Clinical Evaluation and Trials (1 November 2015 to 30 November 2019), and was a member of the HTA Programme Oversight Committee (2012-16).

Published September 2023 DOI: 10.3310/TWKK5110

Scientific summary

Explanation of context, mechanisms and outcomes in adult community mental health crisis care: the MH-CREST realist evidence synthesis

Health and Social Care Delivery Research 2023; Vol. 11: No. 15 DOI: 10.3310/TWKK5110

NIHR Journals Library www.journalslibrary.nihr.ac.uk

Scientific summary

Background

Mental health crises cause significant disruption to the lives of individuals and families and can be lifethreatening. The drive for community care alongside large reductions in hospital beds has led to a proliferation of community crisis services delivered by a diverse range of provider agencies, contributing to difficulties for people in navigating to timely crisis support. There is no single definition of a mental health crisis; people have diverse needs, resulting in a large variation in routes into and through mental health crisis care. Service users report unmet need. Services have diversified quickly in response to reported gaps and delayed responses, and continue to do so. Diversification has led to geographic differences in available crisis care and created a complex web of agencies with different values, referral processes, interventions and access thresholds. It is unclear, in this complex system, which underpinning mechanisms of crisis care are most effective, for whom and in which circumstances.

Aim

The aim was to identify mechanisms to explain how, for whom and in what circumstances mental health community crisis services for adults work to resolve crises, with a view to informing current and future intervention design and development.

Objectives

- 1. Use stakeholder expertise, current practice and research evidence to develop programme theories to explain how different crisis services work to produce the outcome of resolution of mental health crises.
- 2. Use a context, intervention, mechanism and outcome (CIMO) framework to construct a sampling frame to identify subsets of literature within which to test programme theories.
- 3. Iteratively consult, via an expert stakeholder group (ESG) and individual interviews, with diverse stakeholders to test and refine programme theories.
- 4. Identify and describe pen portraits of UK crisis services that provide exemplars of the programme theories to explain how mental health crisis interventions work in order to explore and explain contextual variation.
- 5. Synthesise, test and refine the programme theories, and, where possible, identify mid-range theory, to explain how crisis services work to produce the outcome of resolution of the crisis. Provide a framework for future empirical testing of theories in and for further intervention design and development.
- 6. Produce dissemination materials that communicate the most important mechanisms needed to trigger desired context-specific crisis care outcomes, to inform current and future crisis care interventions and service designs.

Design

A four-phase realist evidence synthesis, reported in accordance with Realist And Meta-narrative Evidence Syntheses: Evolving Standards (RAMESES) reporting guidelines and comprising (1) identification of candidate programme theories from academic and grey literature; (2) iterative consultation with an ESG and individual interviews to prioritise, test and refine programme theories; (3) focused realist reviews of prioritised theory components; and (4) synthesis to mid-range theory.

Main outcome measures

The principal aim of the review was to generate and test programme theories, and then synthesise these with mid-range theory, to explain what works, for whom and in what circumstances in adult mental health community crisis care.

Data sources

The following were conducted: Google Scholar (Google Inc., Mountain View, CA, USA) searches to identify initial programme theories and logic models, focused searches of academic databases with backward citation searching, grey literature searches and hand-searches by the research team and expert stakeholders to test and refine three theory components. An ESG, with membership from lived experience, health professional, social care, policy expertise, health management and commissioning, was consulted on four occasions across the life of the research to test and refine theories and to connect them with real-world experience. Twenty individual realist interviews were conducted with 19 participants to further test, refine and sense-check theory components where there were gaps in topic expertise or theory; the 19 participants included service users; health, social care, ambulance and police professionals; and research and policy experts.

Analysis

A realist evidence synthesis with stakeholder primary data was used to test and refine three initial programme theories in adult mental health community crisis care: (1) urgent and accessible crisis care, (2) compassionate and therapeutic crisis care and (3) inter-agency working.

Data analysis involved using realist logic to identify initial programme theories (objectives 1–3), and testing and refining the programme theories through a focused review of the literature, to extract and configure explanatory causal relationships between CIMO (objectives 3–5). Expert stakeholder consultations supported analysis through linking theories to real-world experience, enabling exploration and explanation of contextual variation as it related to putative mechanisms (objectives 3–5). Individual interviews with experts, who were purposively selected for their topic expertise related to the programme theory components, were deductively analysed according to the CIMO framework. An inductive process identified any new mechanisms not identified from other data sources (objective 3). Pen portraits were developed as illustrative exemplars of the link between CIMO and were refined in collaboration with expert stakeholders (objective 4). Findings from the focused review of the three theory components were synthesised with mid-range theories to produce a framework for any future empirical testing that may be developed (objective 5).

Results

The scope of the realist review was refined through an initial consultation and discussion between the ESG and the research team. A Diamond-9 prioritisation process was used to facilitate discussion between the ESG and the research team and to refine the scope of the review. This process resulted in three initial programme theories for testing, focused on (1) urgent and accessible crisis care, (2) compassionate and therapeutic crisis care and (3) inter-agency working.

The findings from the three focused reviews were synthesised with mid-range theory. Mental health crisis care is provided by a complex array of agencies, each with different definitions of crises, different values about the nature of interventions and different approaches to prioritisation. This is further complicated by multiple overlapping service boundaries. What is apparent is that these differences can only be accommodated within an inter-agency system in which information and decisions are shared from commissioning through to front-line delivery.

Inter-agency working provides mechanisms that trigger seamless service delivery through improved communication and collaboration. For this system to work, representation from all agencies and stakeholders is needed. National co-ordination at policy level ensures that investment is appropriately targeted and that important strategic aspirations are met. National co-ordination should steer, but not dictate, local configurations of the agencies needed. Local crisis services should be configured to meet the crisis care needs of local populations within their geography, taking account of any marginalised individuals or communities they serve.

Commissioning for inter-agency working needs a focus on managing complex boundaries and transitions across agencies to avoid gaps and disputes. Attention is also needed on how the inter-agency crisis system engages with wider systems important to resolution of crises, including, for example housing, police, local authority, safeguarding and the justice system. The ultimate aim of inter-agency system

should be that there is no wrong door through which to access mental health crisis care, and, once in a service, navigation should be facilitated via a single trusted point of liaison. Evaluation is not restricted by organisational boundaries and aims to provide data that take account of how the whole inter-agency system is operating. Conceptualisations of crises as single events or as the sole responsibility of statutory secondary mental health systems are unhelpful and generate fragmentation, leading to gaps and delays for those seeking crisis care and frustration for leaders and front-line staff.

The perception of whether or not a service and service providers are accessible carries more of an inhibitive effect than the way that the service is actually organised. People experiencing a crisis choose to access services they perceive as providing a guaranteed response, that are easy to navigate to and that fit with their definition of the crisis. Although the timing of responses in relation to outcomes remains unclear, what is clear is that people feel safer and have a reduced sense of urgency when they trust services. Trust is established through compassionate interactions and proactive management of transitions and waiting. Involvement of the person and their family or support network in decisions supports a sense of trust and relational safety, which may help meet a need for continuity for some.

To sustain compassion, front-line staff need access to support for themselves, as well as resources to deliver crisis care that meets their personal and professional ideals. Training in the knowledge, skills and values required for compassion can build confidence among front-line staff in all agencies. System leaders must provide resources and communicate an expectation for compassionate engagement so that it becomes the norm for staff to seek support.

This is achieved in an inter-agency context when there is interpersonal contact between all levels of worker, from commissioning through to front-line delivery, that facilitates learning, communication and appreciation of different roles. Furthermore, co-production of crisis care can be facilitated within the inter-agency system, enabling crisis care to be recognised and valued by the community it serves. Service users perceive a crisis when they feel overwhelmed and anxious and when they perceive that they lack a sense of control. Familiar contacts and a safe environment, coupled with reassurance, can help to shape their perception of the service, but, more importantly, can help to reduce distress, thereby mitigating risk and making it more likely that a service user is able to respond to suggested strategies. With an emphasis on rapport and compassion, professionals are encouraged to exhibit positive behaviours that mitigate against the dehumanisation and stigma that service users may perceive when they encounter a service, and which may precipitate or exacerbate a crisis.

Compassion shown to front-line staff by leaders leads to compassionate care. A tension between exerting control and providing support was evident at all levels. As integrated care systems are introduced, there is an aspiration that strategic partnerships will reduce competing priorities, which appear debilitating to organisations. Alongside these strategic partnerships, there is a need for coherent local strategies for compassionate and psychologically safe crisis care cognisant of the fact that high-quality care can coexist alongside the worst examples of care in the same organisation. Strategies should include how compassionate and psychologically safe crisis care is provided. Different values and definitions of crisis are accommodated, allowing challenge and debate to become accepted as an opportunity to drive quality improvement.

Strengths and limitations

Much of the literature was descriptive; therefore, the evidence base was limited. The programme theories identified outline the mechanisms needed to facilitate the best inter-agency community crisis care. Meaningful consultation with expert stakeholders grounded the theories in the reality of community crisis care, although UK evidence is heavily weighted towards England. Project delivery was affected by the COVID-19 pandemic, reducing the number of individual interviews and delaying stakeholder consultations. Stakeholder consultation did not reach as wide a group as originally intended.

Conclusion

Community crisis care is likely to continue to be delivered by a complex array of agencies responding to a heterogeneous population that presents with different mental health concerns and perceptions of crisis.

Inter-agency working provides a platform for seamless transitions between services and timely responses. To deliver desired outcomes, inter-agency working requires continual systems of engagement locally and nationally involving all providers of crisis care through compassionate leadership, sharing of values and shared understanding of systems. Compassion is central and begins with leaders who can influence the culture of crisis organisations. Compassionate leadership is focused on people over systems, enabling front-line staff to retain their compassion and hope, and to work collaboratively across agencies, and it provides a platform for shared decision-making and co-production. All of this helps people in crisis to recognise the service as designed for them and to have trust in community crisis services.

The study achieved its objectives, despite unexpected difficulties resulting from the effects of the COVID-19 pandemic, owing to an agile and committed research team, flexible and accommodating stakeholders and support from the funders. Project milestones were adjusted to accommodate the changing context of the study.

Future work

A framework of programme theories synthesised with mid-range theory developed from this study can inform future research that seeks to develop better mental health crisis care systems. Further work might explore how inter-agency service configurations work, including how telehealth interventions are perceived by service users and how these interventions produce optimal outcomes. Evaluation of crisis care for marginalised groups is needed. The implementation and effect of mental health triage could be explored further. Meaningful engagement with expert stakeholders could be incorporated routinely into research design and delivery.

Mental health triage appears to be a promising approach, but has a limited evidence base. Future research could explore and test the implementation and effect of mental health triage systems. This work could focus on different values about prioritisation and how these can be accommodated within an inter-agency system. Further exploration of models of crisis care to mitigate barriers to access for those with substance use or alcohol use problems, personality disorders, physical health conditions and autistic spectrum disorders is needed. Inter-agency models of crisis care are causally linked to optimal crisis outcomes. A focused realist evaluation is needed to explore in more depth the factors influencing access to, and transition through, crisis care for these populations. These outcomes are at times theoretical and have been subjected to limited testing in primary research. UK inter-agency crisis service models provide an opportunity for mixed-method case study approaches to evaluation. A neglected area of focus for this research is the efficacy of models for rural populations. Crisis interventions involving police and mental health services have a growing body of evidence; however, there is a lack of evidence for co-response models involving ambulance paramedic staff or emergency control rooms.

There is a lack of focus on individual recovery outcomes. This review highlights the importance of mechanisms such as psychological and relational safety, compassion and trust in producing optimal crisis outcomes. Research is needed to develop evaluation approaches to measure the presence and impact of these mechanisms in crisis care.

Data from the literature and from engagement with stakeholders (via the ESG and individual interviews) were combined to refine the realist programme theory/ies to identify key mechanisms that might operate across multiple interventions to 'trigger' an appropriate treatment response, and contexts related to these key mechanisms that might enhance or detract from intervention success. Meaningful co-production with service users and other expert stakeholders enhances the relevance of research and should be incorporated routinely into research design and delivery.

Study registration

The study is registered as PROSPERO CRD42019141680.

Funding

This project was funded by the National Institute for Health and Care Research (NIHR) Health and Social Care Delivery Research programme and will be published in full in *Health and Social Care Delivery Research*; Vol. 11, No. 15. See the NIHR Journals Library website for further project information.

Health and Social Care Delivery Research

ISSN 2755-0060 (Print)

ISSN 2755-0079 (Online)

Health and Social Care Delivery Research (HSDR) was launched in 2013 and is indexed by Europe PMC, DOAJ, INAHTA, Ulrichsweb[™] (ProQuest LLC, Ann Arbor, MI, USA), NCBI Bookshelf and MEDLINE.

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) (www.publicationethics.org/).

Editorial contact: journals.library@nihr.ac.uk

This journal was previously published as Health Services and Delivery Research (Volumes 1–9); ISSN 2050-4349 (print), ISSN 2050-4357 (online)

The full HSDR archive is freely available to view online at www.journalslibrary.nihr.ac.uk/hsdr.

Criteria for inclusion in the Health and Social Care Delivery Research journal

Reports are published in *Health and Social Care Delivery Research* (HSDR) if (1) they have resulted from work for the HSDR programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

HSDR programme

The HSDR programme funds research to produce evidence to impact on the quality, accessibility and organisation of health and social care services. This includes evaluations of how the NHS and social care might improve delivery of services.

For more information about the HSDR programme please visit the website at https://www.nihr.ac.uk/explore-nihr/funding-programmes/ health-and-social-care-delivery-research.htm.

This report

The research reported in this issue of the journal was funded by the HSDR programme or one of its preceding programmes as project number NIHR127709. The contractual start date was in September 2019. The final report began editorial review in October 2021 and was accepted for publication in June 2022. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HSDR editors and production house have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the final report document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health and Care Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, the HSDR programme or the Department of Health and Social Care. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the NHS, those of the authors, those of the NHS, the NIHR, the HSDR programme or the Department of Health and Social Care.

Copyright © 2023 Clibbens *et al.* This work was produced by Clibbens *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health and Social Care. This is an Open Access publication distributed under the terms of the Creative Commons Attribution CC BY 4.0 licence, which permits unrestricted use, distribution, reproduction and adaption in any medium and for any purpose provided that it is properly attributed. See: https://creativecommons.org/licenses/by/4.0/. For attribution the title, original author(s), the publication source – NIHR Journals Library, and the DOI of the publication must be cited.

Published by the NIHR Journals Library (www.journalslibrary.nihr.ac.uk), produced by Prepress Projects Ltd, Perth, Scotland, final files produced by Newgen Digitalworks Pvt Ltd, Chennai, India (www.newgen.co).

NIHR Journals Library Editor-in-Chief

Dr Cat Chatfield Director of Health Services Research UK

NIHR Journals Library Editors

Professor Andrée Le May Chair of NIHR Journals Library Editorial Group (HSDR, PGfAR, PHR journals) and Editorin-Chief of HSDR, PGfAR, PHR journals

Dr Peter Davidson Interim Chair of HTA and EME Editorial Board. Consultant Advisor, School of Healthcare Enterprise and Innovation, University of Southampton, UK

Professor Matthias Beck Professor of Management, Cork University Business School, Department of Management and Marketing, University College Cork, Ireland

Dr Tessa Crilly Director, Crystal Blue Consulting Ltd, UK

Dr Eugenia Cronin Consultant in Public Health, Delta Public Health Consulting Ltd, UK

Ms Tara Lamont Senior Adviser, School of Healthcare Enterprise and Innovation, University of Southampton, UK Dr Catriona McDaid Reader in Trials, Department of Health Sciences, University of York, UK

Dr Catriona McDaid Reader in Trials, Department of Health Sciences, University of York, UK

Professor William McGuire Professor of Child Health, Hull York Medical School, University of York, UK Professor Geoffrey Meads Emeritus Professor of Wellbeing Research, University of Winchester, UK

Professor Geoffrey Meads Emeritus Professor of Wellbeing Research, University of Winchester, UK

Professor James Raftery Professor of Health Technology Assessment, School of Healthcare Enterprise and Innovation, University of Southampton, UK

Dr Rob Riemsma Consultant Advisor, School of Healthcare Enterprise and Innovation, University of Southampton, UK

Professor Helen Roberts Professor of Child Health Research, Child and Adolescent Mental Health, Palliative Care and Paediatrics Unit, Population Policy and Practice Programme, UCL Great Ormond Street Institute of Child Health, London, UK

Professor Jonathan Ross Professor of Sexual Health and HIV, University Hospital Birmingham, UK

Professor Helen Snooks Professor of Health Services Research, Institute of Life Science, College of Medicine, Swansea University, UK

Please visit the website for a list of editors: www.journalslibrary.nihr.ac.uk/about/editors

Editorial contact: journals.library@nihr.ac.uk