Improving outcomes for people in mental health crisis: a rapid synthesis of the evidence for available models of care

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Scientific summary

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Background

Challenges of mental health crisis services

It is widely acknowledged that the quality and accessibility of care for people in crisis is highly variable. Although many people in a mental health crisis experience high-quality care and support when they need it, there are also a number of occasions when people find that services do not respond well to their needs.

It is also often recognised that emergency services related to mental health can sometimes compare unfavourably with those related to emergency physical health services. Therefore, it is a priority to improve crisis services for people with mental health problems in order to meet the objectives of parity of esteem set out in the NHS Mandate.

The NHS mandate for 2014/15 identified several objectives for mental health crisis services including accessibility and quality of emergency mental health care, improving liaison psychiatric services, and for every community to plan to have sufficient resources available for crisis care.

In addition, NHS planning guidance 2015/16 listed the following criteria as essential for the appropriate support of people experiencing a mental health crisis: mental health support as integral to NHS 111 services; 24/7 crisis care home treatment teams; and enough capacity to prevent children, young people or vulnerable adults receiving mental health assessment in police cells.

In response to these issues the Mental Health Crisis Care Concordat, *Improving Outcomes for People Experiencing Mental Health Crisis*, was developed, which highlighted the need for a review of urgent and emergency care, with a focus on models of care for people in mental health crisis.

It has long been recognised that improvements are needed in how health services, social services and police forces work together. Where problems exist, they often happen where these services intersect, concern how the different professional groups interact with one another and transfer from one service to another.

The Mental Health Crisis Care Concordat also highlighted the disproportionate rate at which some communities reach crisis point or access mental health services through involvement with the criminal justice system. Black service users were detained at higher rates under the Mental Health Act 1983 and a higher proportion were admitted to hospital. Although recent research suggests, when analyses are adjusted for confounding, ethnicity is no longer a predictor of detention under the Mental Health Act.

An independent inquiry into crisis care, carried out by Mind in 2010/11 as part of a Crisis Care Campaign, suggested that people from some black and ethnic minority (BME) groups seemed to be treated more neglectfully or coercively in the crisis care system than other people. The inquiry also highlighted certain barriers that may be faced by different ethnic groups in relation to accessing crisis care:

- There is variable access to crisis resolution and home treatment teams (CRHTTs), with lowest referral rates identified for Indian, Bangladeshi and Chinese people.
- Once assessed by a CRHTT, BME groups are generally more likely to be admitted to hospital, particularly black Caribbean people.

Crisis care pathway

The Crisis Concordat proposed four key stages of the mental health crisis care pathway:

1. Access to support before crisis point: the provision of readily accessible support 24 hours a day and 7 days a week. This is for people who are close to crisis and need quick access to support that may help prevent escalation of their problems.
2. Urgent and emergency access to crisis care: when people need emergency help related to their mental health needs when in crisis. The emphasis is on treatment being accessed urgently and with respect in a similar manner to a physical health emergency.
3. Quality of treatment and care when in crisis: the provision of support and treatment for people in mental health crisis. Effective treatment is provided by competent practitioners, who focus on the service user's recovery, and is provided in a setting that best suits their needs.
4. Promoting recovery/preventing future crises: the provision of services that will support the process of recovery for people with mental health problems and help them stay well.

Objectives

The aim of the Crisis Concordat is to improve the quality and accessibility of services for the four key stages of the mental health crisis pathway. Therefore, our review aims to conduct a rapid evidence synthesis evaluating the clinical effectiveness and cost-effectiveness of models of care at each of the four stages identified by the Crisis Concordat.

We hope this will help inform the provision of effective mental health crisis services in England and highlight key uncertainties regarding effectiveness of models of care where future research is a priority.

Methods

Electronic databases were searched for guidelines, reviews and, where necessary, primary studies. The searches were performed on 25 and 26 June 2014 for NHS Evidence, Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effects, NHS Economic Evaluation Database, and the Health Technology Assessment (HTA) and PROSPERO databases, and on 11 November 2014 for MEDLINE, PsycINFO and the Criminal Justice Abstracts database. Relevant reports and reference lists of retrieved articles were scanned to identify additional studies.

Relevant evidence was included in the synthesis according to the following hierarchy [with preference given in ascending order (1–4)]:

1. Guidelines: guidelines produced or accredited by the National Institute for Health and Care Excellence (NICE). This included UK guidelines produced by NICE or by UK bodies accredited by NICE such as the Royal College of Physicians. It also included guidelines produced in English by non-UK guidance producers who had received NICE accreditation.
2. Systematic reviews of reviews.
3. Systematic reviews of primary studies and economic evaluations.
4. Good-quality primary studies: when no relevant guidelines, reviews of reviews, or systematic reviews of primary studies were available, we included primary studies (both randomised and non-randomised controlled trials).

Results

Access to support before crisis point

Studies across a range of disorders suggest telephone support and triage appear to result in quick access, acceptable referral decisions and minimal harm. However, at present there are very few data in relation to the use of telephone support and triage for providing support to people before the point of mental health crisis.

In addition, studies that have assessed the benefits of training and supporting primary care and community-based staff have not identified any models that clearly benefit service user outcomes.

Recommendations by NICE on access to support before crisis point are derived mainly from expert consensus and overlap largely with recommendations from the Crisis Concordat and the London Strategic Network commissioning guide. These include the importance of receiving care with a minimum of delay, the importance of quick referral (either through self-referral or building links between mental health services, primary care and third-sector organisations) and equality of access.

Urgent and emergency access to crisis care

There is limited quantitative evidence on the clinical effectiveness of interventions to improve urgent and emergency access to crisis care. Most studies were on liaison psychiatry models that were associated with reduced readmission rates, reduced waiting times (in most studies) and improved service user satisfaction. However, there was a lack of high-quality well-controlled trials and, for most studies, it was not possible to rule out the potential for confounding. There was less evidence on the benefits of providing mental health training to emergency department staff.

The evidence was even more limited regarding the provision of support from mental health professionals to police officers, either through training programmes, street triage or telephone triage. Street triage and training of police officers both appeared to reduce police time at the scene of mental health-related incidents. Street triage may also potentially improve service user engagement with outpatient treatment services. Police officers with mental health training were more likely to transport people to a health-care setting and less likely to arrest people with potential mental health problems. However, there was no evidence that either street triage or mental health training reduced level of force used by police officers in mental health-related calls.

Quality treatment and care in crisis

Crisis resolution and home treatment teams were found to be both clinically effective and cost-effective with benefits including substantial reductions in the probability of hospital admission and greater service user satisfaction compared with inpatient treatment. However, the quality of evidence was rated low because of the small number of studies, a high risk of bias in included studies and high heterogeneity. Reviews of factors affecting clinical effectiveness and cost-effectiveness of CRHTTs found a great deal of variability when implementing these interventions. Although there were examples of good practice in the UK regarding various elements of CRHTT care it appears that few teams were exhibiting good practice across a comprehensive range of criteria.

Crisis houses and acute day hospitals were not found to be more clinically effective than inpatient treatment. However, it should be noted that there is no evidence that crisis houses and acute day hospitals are associated with greater readmissions and are recommended by NICE as viable alternatives to inpatient treatment. In addition, there is evidence that crisis houses are associated with greater service user satisfaction in both quantitative and qualitative studies.

In terms of conflict and containment in inpatient mental health services, the evidence was largely based on descriptive studies with few controlled trials. The Safewards model has been suggested as a foundation for future research on inpatient treatment. They propose six factors that influence conflict and containment: (1) staff team; (2) physical environment; (3) outside hospital; (4) patient community; (5) patient characteristics; and (6) regulatory framework. A recent cluster randomised trial has been completed based on the Safewards model and found reductions in conflict and containment versus controls.

Promoting recovery/preventing future crises

Promoting recovery and staying well covers a large and diverse literature. We have sought to review this literature primarily by drawing on systematic reviews of interventions recommended by NICE mental health guidelines.

For all other stages of the care pathway we only included service models. However, we also included individual-level interventions on promoting recovery to reflect the emphasis of these interventions in the Crisis Care Concordat and also feedback provided by service user members of the advisory group.

There are a large number of effective interventions for promoting recovery and preventing relapse recommended by NICE. These include service models [e.g. early intervention services (EISs)], pharmacological interventions (e.g. antidepressants for people with depression and antipsychotics for people with psychosis), individual-level interventions to prevent relapse of mental health conditions [e.g. cognitive–behavioural therapy (CBT) for people with psychosis, family intervention for people with psychosis, dialectical behaviour therapy (DBT) for people with borderline personality disorder (BPD)] and strengths-based interventions to promote recovery (e.g. self-management and supported employment).

Limitations

A common limitation across all four major elements of the care pathway was a general lack of rigorous randomised and cluster randomised trials evaluating models of mental health crisis care. Further high-quality trials conducted in the UK would have a considerable impact on reducing uncertainty regarding what are the most effective models of care for people experiencing mental health crisis.

Conclusions

Implications for practice

Access to support before crisis point

- Services should ensure that people at risk of mental health crisis receive care with minimum delay, receive quick referral (either through self-referral or building links between services) and that there is equality of access to such care.

Urgent and emergency access to crisis care

- Although there is evidence of benefits for liaison psychiatry teams in improving waiting times and reducing readmission this is largely based on uncontrolled studies and a lack of data from the UK.

Quality treatment and care in crisis

- Crisis resolution teams (CRTs) are more effective than inpatient care for a range of outcomes, although implementation of this model of care varies across the UK with few teams meeting all evidence-based criteria for good practice.
- Crisis houses and acute day hospitals appear as clinically effective as inpatient treatment but are associated with greater service user satisfaction.

Promoting recovery

- Effective service models include EISs for people with psychosis and other serious mental illnesses, and collaborative care for depression (particularly for people with chronic physical health problems).
- Effective pharmacological interventions include antidepressants for people with depression, lithium for people with bipolar disorder and antipsychotics for people with psychosis.
- Effective individual-level strengths-based interventions include self-management and supported employment. There is also some evidence for benefit for peer support (but this needs further high-quality research to validate these findings).
- Individual-level interventions with evidence of benefit include for people:
  - with psychosis – CBT, family interventions
  - with bipolar disorder – psychological interventions
  - who self-harm – psychological interventions
  - with BPD – DBT and mentalisation-based therapy
  - with depression – CBT (particularly mindfulness-based cognitive therapy).
- Crisis planning is currently recommended by NICE, although more recent research has raised questions regarding the clinical effectiveness of this intervention; therefore, further research is needed on whether or not this is an effective approach to promoting recovery.

Recommendations for research

Access to support before crisis point

- Most current recommendations and service developments are based on expert opinion with limited research in this area. Rigorous evaluation of current service developments are needed to ensure evidence-based and effective support for service users.

Urgent and emergency access to crisis care

- Potential benefits of liaison psychiatry teams are based on limited evidence; therefore, confirmation of the clinical effectiveness of these models of care in high-quality trials (e.g. cluster randomised trials) is needed.
- Data on clinical effectiveness and cost-effectiveness of mental health training of police officers, street triage and telephone triage to assist police officers with potentially mental health-related incidents is very limited and requires rigorous high-quality evaluation.

Quality treatment and care in crisis

- Current work from the Crisis resolution team Optimisation and RElapse prevention study aims to improve implementation of good practice in CRTs and is an important component of improving the quality of treatment for people in crisis.
- Further work is needed to examine the clinical effectiveness and cost-effectiveness of various aspects of inpatient care on service user outcomes.

Promoting recovery

- Many of the key service models to provide long-term management and treatment of mental health problems lack a clear evidence base (e.g. Community Mental Health Teams, intensive case management); therefore, further developments are needed.
- There is a key need to develop models of care that reduce self-harm, suicide and relapse after discharge from crisis services and inpatient treatment.
- Large-scale studies are currently under way to investigate the effectiveness of peer support, which is a key area of uncertainty.
- Interventions on improving social networks and social capital are also important developments currently being evaluated in the UK.
- Interventions to promote equality of access to mental health services for BME populations are needed.

Study registration

This study is registered as PROSPERO CRD42014013279.

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