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Critical time Intervention for Severely mentally ill Prisoners (CrISP): a randomised controlled trial

Jenny Shaw, Sarah Conover, Dan Herman, Manuela Jarrett, Morven Leese, Paul McCrone, Caroline Murphy, Jane Senior, Ezra Susser, Graham Thornicroft, Nat Wright, Dawn Edge, Richard Emsley, Charlotte Lennox, Alyson Williams, Henry Cust, Gareth Hopkin and Caroline Stevenson

National Institute for Health Research

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Jenny Shaw,[1] Sarah Conover,[2] Dan Herman,[2] Manuela Jarrett,[3] Morven Leese,[3] Paul McCrone,[3] Caroline Murphy,[4] Jane Senior,[1]* Ezra Susser,[5,6] Graham Thornicroft,[3] Nat Wright,[7] Dawn Edge,[8] Richard Emsley,[9] Charlotte Lennox,[1] Alyson Williams,[1] Henry Cust,[3] Gareth Hopkin[3] and Caroline Stevenson[1]

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Abstract

Critical time Intervention for Severely mentally ill Prisoners (CrISP): a randomised controlled trial

Jenny Shaw,[1] Sarah Conover,[2] Dan Herman,[2] Manuela Jarrett,[3] Morven Leese,[3] Paul McCrone,[3] Caroline Murphy,[4] Jane Senior,[1]* Ezra Susser,[5,6] Graham Thornicroft,[3] Nat Wright,[7] Dawn Edge,[8] Richard Emsley,[9] Charlotte Lennox,[1] Alyson Williams,[1] Henry Cust,[3] Gareth Hopkin[3] and Caroline Stevenson[1]

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Background: The transition from prison to community is difficult for prisoners with mental illness. Critical time intervention (CTI) is designed to provide intensive support to meet health, social care and resettlement needs through close working between client and key worker pre, and up to 6 weeks post, release.

Objectives: To establish whether or not CTI is effective in (1) improving engagement of discharged male prisoners who have mental illness with community mental health teams (CMHTs) and (2) providing practical support with housing, finance and re-establishing social networks.

Trial design: A multicentre, parallel-group randomised controlled trial, with follow-up at 6 weeks and at 6 and 12 months. A subset of prisoners and case managers participated in a complementary qualitative study.

Setting: Eight English prisons.

Participants: One hundred and fifty adult male prisoners, convicted or remanded, cared for by mental health in-reach teams and diagnosed with severe mental illness, with a discharge date within 6 months of the point of recruitment.

Intervention: Participants were randomised to either the intervention or the control (treatment as usual). The intervention group was assigned a case manager who assessed mental and physical health before and following release, made appropriate links to health, housing and financial services and supported the re-establishment of family/peer contact.

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Outcome: The primary outcome measure was engagement with a CMHT 6 weeks post discharge. Secondary outcomes included contact with mental health services at 6 and 12 months. A health economic evaluation was undertaken using service contact at the follow-up time points. We were unable to assess the intervention's effect on reoffending and longer-term health-care use because of study delays.

Results: One hundred and fifty prisoners were recruited: 72 were randomised to the intervention and 78 were randomised to the control. Engagement with teams at 6 weeks was 53% for the intervention group compared with 27% for the control group [95% confidence interval (CI) 0.13% to 0.78%; $p = 0.012$]. At 6 months' follow-up, intervention participants showed continued increase in engagement with teams compared with control participants (95% CI 0.12% to 0.89%; $p = 0.029$); there were no significant differences at 12 months. Increased engagement resulted in higher levels of service use and costs for the intervention than for the control. Qualitative data showed the intervention group reporting better continuity of care and improved access to services.

Conclusion: The intervention significantly improved contact with services at 6 weeks, although at a higher cost than the control. This is important as, in the days and weeks following release, recently released individuals are at a particularly high risk of suicide and drug overdose. Further research is required to establish how teams can better maintain contact with clients when the intervention ends.

Future work: Further studies are indicated for groups with different needs, for example women, young prisoners and those in police custody, and at other transition points, for example following arrest and short-term custody, and at points of transition between different mental health services.

Trial registration: Current Controlled Trials ISRCTN98067793.

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Contents

List of tables xiii

List of figures xv

List of boxes xvii

List of abbreviations xix

Plain English summary xxi

Scientific summary xxiii

Chapter 1 Introduction 1
Background 1
Prevalence of mental illness 1
Diagnosis, treatment and care: the role of the prison in-reach team 1
Transition: reoffending and post-release mortality, health and socioeconomic factors 2
The development of integrated health and social care services 4
Forerunners to critical time intervention: the case management and assertive community treatment models 4
Critical time intervention 5
Critical time intervention: prison to community feasibility trial by current authors 6
Rationale for current study 7

Chapter 2 Quantitative methodology 9
Study design 9
Ethics approval 9
Changes to protocol 9
Increase of study sites from three to eight 9
Research and development approval 9
Use of Operational Criteria Checklist for Psychotic and Affective Illness rather than Structured Clinical Interview for Diagnostic and Statistical Manual of Mental Disorders-*Fourth Edition Axis 1 disorders* 10
Other changes to protocol not requiring research ethics committee approval 10
Sites 10
Participants 11
Inclusion criteria 11
Exclusion criteria 11
Recruitment procedure 11
Randomisation 12
Intervention 12
Treatment as usual 12
Critical time intervention: adaptation for current randomised controlled trial 13
Data collection and management 15
Baseline assessment 15
Follow-up 16

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Outcomes 16
Primary outcome 16
Secondary outcomes 16
Fidelity 16
Sample size 16
Original sample size justification 16
Revised sample size justification 16
Statistical analysis 16
Harms reporting 17
Definitions 17
Relationship 18
Reporting serious adverse events 18
Data sharing and accessibility 18

Chapter 3 Quantitative results **19**
Trial results 19
Recruitment 19
Flow of participants in the trial 19
Baseline comparability 19
Primary outcome 27
Secondary outcomes 27
Issues with fidelity 31
Harms 32

Chapter 4 Trial participants' and health professionals' views and experiences of critical time intervention: a nested qualitative study **33**
Introduction 33
Part 1: trial participants' view and experiences 33
Methods 33
Qualitative findings part 1: participants' views and experiences 35
Theme 1: uncertainty 35
Theme 2: support 36
Theme 3: accommodation 40
Theme 4: mental health and medication 41
Theme 5: stigma 42
Summary 42
Part 2: health and care professionals' views and experiences 43
Methods 43
Qualitative findings part 2: health and justice professionals' views and experiences on critical time intervention 43
Theme 1: liaison 44
Theme 2: transition 47
Summary 51

Chapter 5 The case manager manual **53**

Chapter 6 Health economics evaluation **55**
Introduction 55
Methods 55
Results 56
Summary 62

Chapter 7 Discussion **63**
Introduction 63
Summary of main findings 63
Achievement of the objectives of the study 63
Qualitative study: service user and professionals' view of the intervention 64
Strengths and limitations 65
Strengths 65
Limitations 65
Discussion 67
Recommendations for future research 69

Chapter 8 Conclusions **71**
Implications for health care 71

Acknowledgements **73**

References **75**

Appendix 1 Case manager manual **81**

Appendix 2 Critical time intervention fidelity scale **129**

Appendix 3 Harms reporting: Consolidated Standards of Reporting Trials – causal relationships' definitions **131**

Appendix 4 Interview schedules: intervention participants **133**

Appendix 5 Interview schedules: health professionals **137**

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List of tables

TABLE 1 Summary of changes to the original protocol approved by the REC 9

TABLE 2 Description of all prison establishments 11

TABLE 3 Revised sample size calculation 17

TABLE 4 Overview of recruitment at each site 19

TABLE 5 Baseline demographic measures, by randomised group 23

TABLE 6 Baseline service contact measures, by randomised group 25

TABLE 7 Engagement with mental health services at 6 weeks 27

TABLE 8 Contacts, service use and lifestyle variables at 6 weeks 28

TABLE 9 Contacts, service use and lifestyle variables at 6 months post release 28

TABLE 10 Contacts, service use and lifestyle variables at 12 months post release 30

TABLE 11 Average fidelity ratings over all time points 31

TABLE 12 Key topic area explored during pre- and post-release interviews 34

TABLE 13 Themes and subthemes of trial participants' views and experiences 36

TABLE 14 Topics covered in the interviews with professionals 43

TABLE 15 Themes and subthemes of health and care professionals' views and experiences 44

TABLE 16 Service use in 4 weeks before release 56

TABLE 17 Mean costs in 4 weeks before release (2013/14, £) 57

TABLE 18 Service use from release to the 6-week follow-up 57

TABLE 19 Mean costs from release to the 6-week follow-up (2013/14, £) 58

TABLE 20 Service use from the 6-week follow-up to the 6-month follow-up 59

TABLE 21 Mean costs from the 6-week follow-up to the 6-month follow-up (2013/14, £) 59

TABLE 22 Service use from the 6-month follow-up to the 12-month follow-up 60

TABLE 23 Mean costs from the 6-month follow-up to the 12-month follow-up (2013/14, £) 60

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TABLE 24 Average costs per person across all the follow-up periods (2013/14, £) **61**

TABLE 25 The CONSORT definitions of causal relationships **131**

List of figures

FIGURE 1 The CONSORT flow diagram 22

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List of boxes

BOX 1 Examples of a priori themes included in the analytical framework 35

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List of abbreviations

ACT	assertive community treatment
CI	confidence interval
CJS	criminal justice system
CM	case management
CMHT	community mental health team
CONSORT	Consolidated Standards of Reporting Trials
CPA	care programme approach
CTI	critical time intervention
DAST	Drug Abuse Screening Test
GP	general practitioner
HES	Hospital Episode Statistics
HMPS	Her Majesty's Prison Service
MAPPA	multiagency public protection arrangements
MAST	Michigan Alcohol Screening Test
ONS	Office for National Statistics
OPCRIT	Operational Criteria Checklist for Psychotic and Affective Illness
PD	personality disorder
PNC	Police National Computer
R&D	research and development
RCT	randomised controlled trial
REC	research ethics committee
SAE	serious adverse event
SCID-II	Structured Clinical Interview for *Diagnostic and Statistical Manual of Mental Disorders*-Fourth Edition Personality Disorders
SMI	severe mental illness
SPA	single point of access
TAU	treatment as usual

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Plain English summary

Many people in prison have long-term mental health problems. Mental health in-reach teams provide similar treatment and care in prison to that delivered by community mental health teams to the general public, but few people make contact with mental health services on release. Many people become unwell again and may commit further crimes. We investigated whether or not an intensive model of care, known as critical time intervention, started in prison and continued on release helped people to keep contact with mental health services in the long term. The intervention involves detailed assessment and planning for services needed after release, and help with sorting out housing/money issues and contacting family.

One hundred and fifty adult men with severe mental illness in prison took part. Half of the men received the new intervention, and the other half received the treatment that prison mental health workers usually offer. At 6 weeks and 6 and 12 months, we checked whether or not the participants were still in touch with community mental health services.

Those receiving the new intervention were more likely to have contact with mental health services at the 6-week and 6-month checks, but not at the 12-month check. This is positive because, in the time immediately following release, recently released individuals are at especially high risk of suicide or drug overdose. Staff and patients involved in the intervention were very positive about it; however, it was a more expensive way of supporting people. Further studies are needed to see if the intervention can help stop people committing crimes and whether or not it would work for other types of prisoners, for example women and young people.

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Scientific summary

Background

The prevalence of mental illness among prisoners is significantly higher than in the general population. A series of national surveys that were undertaken in England and Wales reported community prevalence of functional psychosis as 4.5 per 1000; for adult prisoners it was 52 per 1000.

In England, mental health in-reach services deliver specialist mental health care to prisoner patients. However, their effectiveness has been criticised because of inadequate identification and treatment of severe mental illness (SMI) during early custody and flawed discharge planning on release.

For prisoners with SMI, the transition from institution to community is a vulnerable period, associated with increased risk of relapse, reoffending and suicide. Managing transitions for individuals with complex needs is challenging. Robust discharge planning to seamlessly transfer care to holistic community services is vital; finding suitable accommodation, work and financial support and family contact are all important for success.

Developing a model for integrating health and social services for those leaving institutional care has been challenging in the UK since the 1970s, when large psychiatric hospitals closed and care transferred to community settings. Initially, the case management (CM) model was adopted, in which care was assigned to a case manager who organised the meeting of needs by multiple providers. A systematic review of CM concluded that it was effective in helping clients maintain contact with services, but involved higher rates of hospitalisation. No significant differences between the intervention (CM) and control (treatment as usual) group clients on measures of social functioning or quality of life were observed.

A variant of CM, assertive community treatment (ACT), adopted a multidisciplinary team approach with small caseloads of clients. The model has been extensively evaluated with good evidence for its efficacy.

Critical time intervention ('the intervention') was developed in the USA in the 1990s, based on the main principles of CM and ACT. It is a structured time-limited intervention, with the overarching aim of long-term engagement with community services. It was originally designed for the transition from psychiatric hospital to community for homeless people, proving superior to usual treatment in preventing homelessness.

In a pilot study by the current authors, the original intervention model was adapted for implementation with a male prison population. Case managers proactively engaged with prisoners with SMI before release, agreeing a discharge plan, supporting the participant 'through the gate' and liaising with community providers to ensure suitable support from services to meet an individual's needs. The pilot demonstrated that the adapted model was both feasible to implement and acceptable to clients.

In this study, we conducted a full randomised controlled trial (RCT) of the intervention involving the delivery of the intervention by trained case managers who undertook assessment and needs identification of clients pre release, brokered contact with suitable community services and remained in contact with clients for up to 6 weeks post release.

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Objectives

The primary objective was:

- to establish whether or not the intervention is clinically effective and cost-effective for released adult male prisoners with SMI in:
  - improving engagement with health- and social-care services
  - reducing mental health hospital admissions
  - reducing reoffending
  - increasing community tenure through reducing time in prison.

The secondary objectives were:

- to establish the cost-effectiveness of the intervention for this population
- to develop service manuals and training materials to support implementation of the intervention with criminal justice agencies, the NHS and relevant third-sector organisations
- to facilitate and promote active service user, criminal justice, third-sector and health staff participation in the research work programme, thus encouraging greater engagement between the academic community of researchers, the practice community of health and justice staff and users of criminal justice, community-based health-care and third-sector services.

Method

A multicentre, parallel-group RCT in which the intervention was compared with the control. The original three-stage intervention model was adapted to become a four-stage intervention to include an intensive phase 1, 'pre release', when detailed needs assessment is undertaken, a release plan is formulated and most of the case manager's groundwork to establish links to community services takes place. There then followed phase 2, 'transition to community', phase 3, 'try-out', and phase 4, 'transfer of care'.

Participants were recruited from eight prisons in England.

The inclusion criteria were:

- clients with SMI of prison in-reach mental health services
- male
- discharge from prison to occur within 6 months of initial recruitment to the study.

Participants were excluded if they:

- did not have SMI
- were to be released outside the agreed geographical discharge area
- posed security/safety issues that compromised safety
- were unable to give informed consent
- had participated in the trial during an earlier period in custody.

Severe mental illness was defined as major depressive disorder, hypomania, bipolar disorder and/or any form of psychosis including schizophrenia, schizoaffective disorder and any other non-affective non-organic psychosis.

Prisoners on the prison in-reach caseload meeting the inclusion criteria were approached and their informed consent was sought for inclusion. Individual randomisation in a ratio of 1 : 1 to intervention or control was carried out by the King's Clinical Trials Unit using an online system. Individual participants were allocated using block randomisation, with randomly varying block sizes of two and four, which were stratified by prison. Data were entered onto the online MACRO® (Elsevier, Amsterdam, the Netherlands) data entry system, which was hosted at the King's Clinical Trials Unit.

Participants randomised to the intervention were assigned to a member of the prison in-reach team who was designated as case manager and undertook the intervention. The case manager worked only with the intervention group throughout the life of the trial to avoid contamination of the control group.

The intervention started up to 6 months before each prisoner's known release date and continued for 6 weeks after. For suitable prisoners on remand, the intervention began immediately following recruitment because of their unpredictable length of stay in custody. During phase 1, prisoners in the intervention arm of the trial underwent a detailed needs assessment by their case manager to identify the services required both while in prison and on discharge to the community. In addition, registration with a local general practitioner was arranged, housing needs were assessed, a key source of income was identified and family and peer group networks were contacted as appropriate. The case manager arranged appointments with community service providers to ensure receipt of services or income were in place as soon after release as possible, and accompanied the prisoner to those appointments to aid engagement.

As the intervention progressed, the case manager reviewed and adjusted service provision in real time to ensure that the 'best fit' of provider to participant need was in place. As the person settled into the community, gained confidence living independently and was more able to advocate for themselves to address changing need, the case manager withdrew gradually. At the end of the intervention period, the case manager, participant and service providers agreed longer-term goals and strategies to achieve those goals, and the person's care was signed over fully to community services.

Participants randomised to the control group were cared for by other members of the prison in-reach health team and underwent the prison's usual discharge planning process and follow-up care.

In addition to formally establishing a diagnosis of SMI, all participants underwent a baseline assessment for evidence of personality disorder and lifetime use of alcohol and/or drugs, and a comprehensive summary of the participant's sociodemographic details and service receipt was obtained.

The primary outcome measure was the proportion of participants still engaged with their community mental health team 6 weeks after release. Secondary outcomes included contact with mental health services at 6 and 12 months. The cost of intervention compared with control was calculated using measures of service use over time. We intended to establish reconviction rates but, because of the externally created delays in the study, these data will be collected and analysed after the report submission.

A subset of 14 prisoners (eight receiving the intervention and six the control), three in-reach case managers delivering the intervention and five other professionals involved in supporting participants took part in a complementary qualitative study of their experiences.

Public and patient involvement

People who had previous contact with criminal justice and mental health services were involved in study design and methods development, were Trial Steering Committee members and formed, alongside professionals, the working group that developed the intervention manual and training resources.

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Results

Eight prisons participated. One hundred and fifty male prisoners meeting the study criteria consented to take part: 72 were randomised to the intervention and 78 were randomised to the control group. Seventeen participants in the intervention and control arms of the trial were lost to follow-up at the 6-week stage. A further eight intervention and 10 control participants were lost to follow-up at 6 months, and a further six intervention and seven control participants were lost to follow-up at 12 months. Of the remaining participants, 53% of the intervention group were in contact with their team at 6 weeks, compared with 27% of the control group [95% confidence interval (CI) 0.13% to 0.78%; $p = 0.012$]. At 6 months' follow-up, intervention participants showed a continued increase in engagement with teams compared with the control group (95% CI 0.12% to 0.89%; $p = 0.029$); there were no significant differences at 12 months' follow-up for the primary outcome.

In the 6 weeks after release, the intervention group made more use of care co-ordinators and psychiatrists than the control group. Psychiatrist and care co-ordinator costs were around twice as much for the intervention group (£63.01) as for the control group (£33.80); the use of these two professional groups remained higher for the intervention group at all follow-up points. The overall average contact (excluding inpatient services) was higher for the intervention group. Cost-effectiveness analysis indicated that an extra cost of £15,426 would be incurred for every extra person engaged at 1 year after release. This, coupled with an association between high service use costs in the intervention arm (including the cost of the intervention), provides tentative evidence of increased service use by the intervention group. However, limitations with the cost data, for example a short time horizon and a small number of service use categories collected, mean that we can make only tentative economic conclusions.

Qualitative interviews with participants identified five main themes: uncertainty, support, accommodation, mental health, and medication and stigma. All participants commented on uncertainty about post-release plans and experienced increasing levels of stress and anxiety. Participants reported their reliance on others for practical help, particularly in terms of accommodation and financial support. Financial reliance on families reinforced their perceptions of being seen as 'other' and deviant. Embarrassment at needing financial help increased the risk of reoffending. Both intervention and control participants stated that a lack of suitable accommodation had serious implications for reoffending. Similarly, not having a permanent address restricted access to benefits and services. Both groups of participants reported feeling coerced into taking psychotropic medication and complained about a lack of access to psychological interventions. This, together with stigma, caused some participants not to disclose their mental health problems to professionals.

Members of the intervention group, who had experienced previous incarcerations, reported less uncertainty and a sense that, on this release, care would be more integrated; this was linked to reductions in stress, anxiety and potential for reoffending. The intervention group also reported better continuity of care and improved access to services attributed, at least in part, to case managers advocating on their behalf. From these participants' perspectives, there was a direct correlation between improved discharge planning, increased levels of support, greater continuity of care provided by case managers and a reduction in the likelihood of reoffending.

The qualitative interviews with health and justice professionals identified two main themes: liaison and transition. Professionals reported barriers to effective planning and delivery of services as linked to increasingly limited resources, leading to raised thresholds for access to services and more robust gate-keeping.

Perceptions and experiences of the intervention were positive. However, interviewees raised concerns about the availability of funding to roll out services. Supportive relationships, such as those provided by case managers alongside family and friends, were regarded as vital for effective transition. In common with service users, professionals frequently complained about the lack of suitable accommodation, highlighting the increased risk of reoffending and exacerbation of mental illness within this vulnerable group caused by unsuitable housing.

Conclusions

The intervention was effective in increasing engagement with services at 6 weeks; this is important as, in the days and weeks following release, recently released individuals are at a particularly high risk of death by suicide and drug overdose. Furthermore, the difference between the intervention and control groups was maintained at the 6-month follow-up, but not at the 12-month follow-up. Overall, staff and participants interviewed as part of the qualitative arm of the study were positive about the intervention. Analysis with regard to cost showed that the intervention group had higher levels of service use and costs than the control group.

Limitations

Severe delays outside the research team's control hampered our ability to achieve all of our original objectives. Delays were encountered gaining research and governance permissions for the study, even though all required procedures were rigorously adhered to. During the study, some prisons changed their role, leading to delays or to the end of participant recruitment and the need to find new sites. The delays encountered prevented us from fully examining the intervention's impact on reoffending and the use of NHS services in the longer term.

Implications for health care

The intervention was found to be clinically effective at improving initial engagement with mental health services. Consideration needs to be given to how teams interact with this complex group in the longer term, including an understanding that additional efforts are likely to be required to maintain close contact with clients after the initial intense intervention phase ends. Maintaining contact is likely to reduce reoffending, admissions to hospital and use of out-of-hours health-care services. Health commissioners, providers and policy-makers should consider the role that the intervention can play in better meeting the needs of offenders with SMI.

Recommendations for research

Further research is required to examine the effect of variations in duration of the intervention, for example an increase to a 9-month follow-up period in line with original studies on the critical time intervention model. Further adaptation and trial of the intervention in groups with different needs (e.g. female prisoners and older or younger people) and at other transition points (e.g. following arrest and short-term custody), or at points of transition between different mental health services (e.g. inpatient care to community and adolescent to adult services is indicated).

Trial registration

This trial is registered as ISRCTN98067793.

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Chapter 1 Introduction

Background

Prevalence of mental illness

In a large-scale study conducted for the Office for National Statistics (ONS) in 1997,[1] > 90% of prisoners had one or more of the five psychiatric disorders studied [psychosis, neurosis, personality disorder (PD), hazardous drinking and drug dependence], with remand prisoners having higher rates of disorder than sentenced prisoners. More than half (59%) of men remanded, and 40% of men sentenced, had a neurotic disorder, with the corresponding figures for women being 76% and 63%, respectively. Rates of psychosis varied from 7% in the male sentenced population to 14% in female sentenced population. In addition, 78% of male remand prisoners and 50% of female remand prisoners had a PD. Levels of substance misuse were also high, with 51% of male remand, 43% of male sentenced, 41% of female sentenced and 54% of female remand prisoners being drug dependent in the year before prison. Over 50% of the men in the sample screened positive for hazardous drinking in the year before coming into prison; the analogous figure for female prisoners was 38%.[1]

The ONS survey and other studies in England and Wales have shown that psychiatric comorbidity is the norm.[2–5] Between 12% and 15% of sentenced prisoners in the ONS study[1] had four or five psychiatric disorders, and many prisoners present with complex psychiatric treatment needs,[5] often confounded by issues of dual diagnosis, especially of personality or substance misuse disorders.

The high prevalence of mental disorder in prisons is not confined to England and Wales. In a large-scale systematic review of serious mental disorder in 23,000 prisoners in Western countries,[6] approximately one in seven prisoners had either a psychotic illness or major depression, with approximately half of male prisoners and one-fifth of female prisoners having antisocial PD.

Compounding high levels of psychiatric morbidity, prison populations have high levels of suicidal and deliberate self-harming behaviours, with prisoners at a far greater risk of suicide than the general population. In the ONS study,[1] around 24% of male and 40% of female prisoners had attempted suicide at some time in their lives. Twelve per cent of male remand and 23% of female remand prisoners reported having experienced suicidal thoughts in the week before interview (rates for sentenced prisoners were considerably lower); these figures rose to 35% and 50%, respectively, when measured over the past year. After a decade of the prison suicide rate in England and Wales reducing year on year, there has been a more recent trend of increasing numbers of suicide from around 2011, attributed by commentators on penal matters to increased population pressures and overcrowding, smaller budgets and significant deliberate reductions in staff numbers.[7]

Diagnosis, treatment and care: the role of the prison in-reach team

Historically, Her Majesty's Prison Service (HMPS), through the existence of the Prison Medical Service, latterly renamed the Prison Health Service, was responsible for the provision of the majority of health-care services for prisoners. Almost all services were provided in house, ranging from primary care for everyday physical complaints through to inpatient care for those with severe mental health problems. Staff, including doctors, prison health-care officers and qualified nurses were directly employed by HMPS. For decades, the development of multidisciplinary care in prisons lagged behind such initiatives in the NHS; for example, at a time when much mental health care in the wider community was being delivered by multidisciplinary community mental health teams (CMHTs), most care in prisons was dependent on input from visiting forensic psychiatrists, with little contribution from wider clinical disciplines.[8,9]

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In 1999, the NHS and HMPS formed a partnership to modernise the delivery of health care in prisons, acknowledging that the then current arrangements varied considerably in terms of organisation, delivery, quality, clinical effectiveness and links with the NHS.[10] One of the early areas targeted for reform was mental health provision and, in 2001, a specific strategy for mental health, *Changing the Outlook*, was published.[11]

The strategy document reaffirmed that the existing delivery model did not meet prisoners' needs and was ineffective and inflexible. It was acknowledged that most prisoners with mental health problems were not so ill as to require detention under mental health legislation and, if they were not in prison, would be receiving treatment in the community rather than as an inpatient. The strategy suggested a move away from the historically held assumption that prisoners with mental health problems should be located in prison health-care centres, towards supporting prisoners with mental health problems on 'normal' prison wings through the establishment of multidisciplinary mental health in-reach teams. Such teams were to be funded by local primary care trusts and provide specialist mental health services analogous to those provided by CMHTs. Although it was expected that all prisoners would eventually benefit from the introduction of in-reach teams, the early focus of the teams' work was on those with severe mental illness (SMI), utilising the principles of the care programme approach (CPA),[12] in particular to help ensure continuity of care between prison and community on release.

A national evaluation of prison in-reach services reported that, in spite of the new model of care, major challenges remained.[13] In particular, in-reach services struggled to effectively target their priority client group, those with SMI. Research demonstrated that in the month following reception into custody only one-quarter (25%) of those with current SMI were assessed by in-reach services and only 13% accepted into caseload.[14] An examination of the composition of in-reach caseloads identified that only 40% had SMI. Of the 60% with no diagnosis of SMI, 42% had PD, 32% had a common mental illness and 42% had neither. Those with no current diagnosis of SMI, PD or common mental illness exhibited high rates of previous contact with mental health services (lifetime 93%) and substance misuse (69%) before custody.[13]

In a parallel study of the management of prisoners with SMI on in-reach caseloads, widespread disengagement from mental health services at the point of release from custody was identified. On examination of the prison in-reach case notes for 53 service users, the authors found evidence of discharge planning for only 27 (51%) individuals; fewer still, 20 (38%), had direct contact with their CMHT before release and, of those, only four (20%) had made contact with the CMHT at follow-up 1 month later.[15] Dyer and Biddle[16] highlighted that functioning within the operational constraints of a prison often makes the task of planning and preparation for discharge challenging for in-reach services because of limited resources, functioning overcapacity in the delivery of treatment programmes and/or the sudden transfer of prisoners at short notice.

Transition: reoffending and post-release mortality, health and socioeconomic factors

The transition from institutional to community living is a vulnerable period, associated with a range of negative outcomes. Reoffending by released prisoners in England and Wales continues to be a challenge for the criminal justice system (CJS). In 2013, the reoffending rate of adults released from custody was 45.8%, a rate that has remained relatively static (45–49%) since 2004. Notably, adults who served sentences of < 12 months reoffended at a rate of 59.3%, compared with 34.7% for those who served determinate sentences of ≥ 12 months.[17]

Several studies have shown that released prisoners with a history of mental illness and/or comorbid substance misuse, many of whom return to unstable environments characterised by socioeconomic disadvantage, are particularly vulnerable to relapse and reoffending. A large retrospective study in the USA found that prisoners with a diagnosis of SMI were more likely than those without to have experienced multiple prison terms in the 6 years before their index offence. For example, prisoners with a diagnosis of bipolar disorder were 3.3 times more likely to have had four or more previous prison terms than prisoners with no major psychiatric disorder.[18] In a further study of the same cohort, prisoners with comorbid SMI

and substance misuse were more likely to have experienced multiple prison terms than those with a single such diagnosis.[19] Similar findings were reported in a study of parole violation in which a diagnosis of SMI was found to increase the likelihood of an individual breaking the terms of their parole; a comorbid diagnosis of substance use disorder increased that risk further.[20]

Prison provides an opportunity for individuals with SMI to receive mental health treatment, including participation in programmes designed to reduce and control substance misuse. However, improvement is likely to be quickly jeopardised if, on release, the person does not engage with community services to enable treatment started during imprisonment to be continued. A failure to connect with community providers of mental health and substance misuse services has been linked to the high incidence of mortality in recently released prisoners. Farrell and Marsden[21] found that newly released prisoners in England and Wales were at an acute risk of drug-related death in the first 2 weeks of leaving prison, with male and female prisoners, respectively, 29 and 69 times more likely to die of drug-related causes, relative to the general population, during their first week of release. This finding was confirmed in a later meta-analysis of drug-related deaths after release, which reported that drug-using prisoners had a three- to eightfold increased risk of drug-related death in the first 2 weeks post release compared with the subsequent 10 weeks, with risks remaining elevated through weeks 3 and 4.[22] Factors such as reduced tolerance to specific drugs, the high and variable potency of street drugs, and the temptation to engage in 'celebratory' drug-taking behaviour on release, were suggested explanations for these findings. Similar findings were reported in a systematic review and meta-analysis of all-cause and external mortality in released prisoners, identifying that released prisoners were at a substantially increased risk of death from all causes but from drugs, suicide and homicide in particular.[23]

Studies of suicide by prisoners following release bring most sharply into focus how overwhelming transition can be for some.[24,25] A study of completed suicide by released prisoners found that age-adjusted standardised mortality rates were, compared with the general population, 8.3 times higher for men in the 12 months post release; the risk was even greater for women, at 35.8 times higher. Furthermore, 21% of those who completed suicide did so within 28 days post release, with just over half (51%) of deaths occurring within 4 months of release.[24] The authors conducted a subsequent study, identifying key risk factors for suicide by released prisoners. These included increasing age > 25 years, having a psychiatric diagnosis, previous contact with psychiatric services before custody, a history of alcohol misuse and a history of self-harm. Contact with prison mental health in-reach services while in custody and being recognised as 'at risk' of suicide while in prison were also relevant factors. The study authors reiterated the importance of improved release planning for those prisoners most at risk, to ensure immediate engagement with community mental health services, assertive follow-up and intensive post-release support.[25]

Planning to prevent discontinuity of mental health and substance misuse treatment on release is critical, but addressing socioeconomic and psychological factors that might adversely impact on service engagement is also vital. Williamson[26] listed multiple health and social care needs and factors that reflected the lifelong social disadvantage experienced by many prisoners, all or any of which may negatively influence the establishment of a stable routine lifestyle outside prison. For example, prisoners were more likely to have spent time as a child in local authority care, have a poor education and have a family history of CJS contact than those who had never been imprisoned. On release from prison, 42% had no fixed abode, 50% were not registered with a local general practitioner (GP) and 60% were unemployed. Despite this, it has also been reported that prisoners' expectations of what life will be like following release may be unrealistically high or, equally damaging, the individual may be overwhelmed by concerns about how they are going to cope. In a longitudinal qualitative study of 40 prisoners, over one-quarter of whom self-reported a mental ill health problem, many prisoners' aspirations before release were high with regard to finding work or going back into education, overcoming their drug and alcohol misuse and/or generally regaining some stability in the community. However, in the absence of co-ordinated service planning and advice, goals were often unrealistic and, therefore, difficult for the individual to achieve. Having family or peer support helped, but individuals without this support found their plans quickly fell through, negatively impacting on their ability to manage

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their housing arrangements and control drug and alcohol use, with reoffending once again becoming a coping mechanism.[27]

A number of other studies have reported similar findings, noting that having a safe place to live, finding employment and maintaining mental and physical well-being are high priorities on release for prisoners, particularly as good mental and physical health is viewed as very important for securing employment. The prospect of relying on hostel accommodation and entering an environment in which the misuse of drugs and alcohol by others may be commonplace was a source of anxiety for soon to be released prisoners. In addition, the stigma attached to being identified as an 'ex-offender', with the associated disadvantages in terms of access to employment and other opportunities, provoked high levels of anxiety.[28,29]

Integrating health and social care services to meet prisoners' needs in a holistic way on release is therefore vital to successful community reintegration. Thus, effective release planning and resettlement requires not only continuity of health care but also measures designed to meet the economic and social needs of the prisoner.

The development of integrated health and social care services

More than 40 years ago, mental health-care policy moved away from the widespread provision of care in large psychiatric institutions towards delivering care in the community. Long-term care in hospital was viewed as untherapeutic, stigmatising and costly.[30–32] It was expected that providing care in the community would enable individuals with SMI to live with greater autonomy, have a better quality of life, and maximise community links and tenure. However, it became increasingly evident that the transition to community living was not always easy or straightforward, with many people needing proactive support with their illness not only from clinical services, but also from a range of social and community agencies.

Forerunners to critical time intervention: the case management and assertive community treatment models

Case management

To address this challenge of delivering effective and multifaceted community care, case management (CM), which was initially developed in the 1980s in the USA but took hold in the UK through the 1990s, required health and social care agencies to join together to form multidisciplinary multiagency teams.[33–37] The key aims of CM are to maintain client contact with mental health services, reduce the risk of rehospitalisation and, generally, improve the client's functioning and ability to live independently, with all actions to be co-ordinated by a case manager. A review of CM summarised the case manager's role as assessing a client's needs, developing a care plan, arranging for that care to be provided, monitoring the quality of care and maintaining contact with the person.[38] Although initially likened to a 'brokerage' role for ensuring that the range of services the client needs are in place, the authors commented that the CM model had developed over time to include elements of clinical/therapeutic input by the case manager and the use of techniques to identify and work with the client's strengths.

However, although CM was adopted widely by service providers, its efficacy in achieving its aims has been questioned. In a randomised controlled trial (RCT), patients under the care of a case manager generally fared better during the resettlement period than patients receiving standard care based on measures of social behaviour and social integration, deviant behaviour and improved mental state; however, the difference was only significant with regard to deviant behaviour.[39] A later systematic review and meta-analysis went on to show that CM clients were more likely to maintain contact with services, but with a greatly increased rate and length of hospitalisation compared with standard care. In addition, little improvement in other measures of clinical and social outcomes and mental state were achieved.[38]

More recently, and with particular relevance to the current study, the efficacy of a low-intensity CM model on increasing contact between ex-prisoners and community primary care services was the subject of a RCT undertaken in Australia.[40] On release, prisoners were given their own personalised 'passport' detailing their health-care needs and listing the important contacts necessary to ensure physical and psychosocial needs were met and tasks such as securing accommodation and income were taken forward. The intervention involved following up participants by telephone on a weekly basis for the first 4 weeks post release. Research follow-up involved interviews at 1, 3 and 6 months post release. The authors concluded that, compared with treatment-as-usual (TAU) participants, those receiving the intervention were more likely to be in touch with primary care and mental health services at 6 months.[40]

Assertive community treatment

Assertive community treatment (ACT), again developed in the USA, adopted a multidisciplinary team approach to jointly care for small caseloads of commonly high-need and high-risk clients.[41–43] In contrast to the CM model, ACT team members are not assigned specific clients but rather bring their discrete expertise, as required, to all clients under the care of the team.

Systematic reviews of ACT compared with standard care, hospital rehabilitation and CM have indicated that ACT is more successful in maintaining client contact with services, reducing the number of admissions and average days spent in hospital, maintaining stable accommodation, increasing days in employment and increasing rates of general client satisfaction compared with standard care. Data were not sufficient for reviews to make robust comparisons between ACT and hospital rehabilitation or CM.[44,45]

Critical time intervention

Critical time intervention (CTI), a variant of ACT, was developed in the USA in the 1990s. CTI was designed as a structured but, unlike ACT, specifically time-limited (to a maximum of 9 months in original trials) intervention to prevent recurrent homelessness in transient individuals with SMI moving from hospital care to the community.[46–48] The intervention had two key components: first, to strengthen ties with service providers, family and friends; and, second, to provide practical and emotional support during transition from institution to the community.

To realise the first component, case managers made appointments with key service providers and accompanied clients to those appointments following discharge from hospital. The case manager ensured that clients had a named contact at each service and facilitated the formation of a relationship between the client and provider to better ensure continued engagement. The case manager also supported the client and his family in re-establishing their relationship; if the client's family wished to be involved in providing care, the case manager helped them to better understand their relative's illness, the difficulties they might encounter in their role as carer and ways to resolve those situations. To achieve the second component of the intervention, the case manager maintained close contact with the client, observing how they were adapting to living in the community, stepping in, if necessary, to provide practical help with the development of skills necessary to function independently. The case manager reviewed the extent to which their input was needed throughout the intervention period to the point when they judged they could withdraw without any disruption to engagement.

In an early trial, those in receipt of CTI had significantly fewer nights' homelessness than the TAU group: 30 compared with 91 homeless nights, respectively. In addition, the strong ties with service providers that CTI put into place persisted after the intervention was withdrawn, with survival curves showing that, after 9 months of the intervention, the differences between the groups did not diminish. The authors noted that CTI could be used in any transition scenario, for example from prison to community, to better co-ordinate and augment existing processes in place to link individuals to other important services.[46]

To examine this assertion, as well as the research described in this report, the CTI model is currently being trialled in the transition of two discrete populations leaving shelters for supported or independent housing: (1) individuals previously homeless and (2) women who have experienced domestic violence.[49] In addition,

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a trial using CTI at the point people first make contact with mental health services in order to put in place a comprehensive and enduring network from the start is under way.[50] These studies will, in due course, add to the body of evidence with respect to the transferability of the model to other scenarios.

Critical time intervention: prison to community feasibility trial by current authors

As previously outlined, many prisoners with mental illness reach the end of their time in custody without a clear plan of how to contact services in the community, or indeed what services they require and/or are available where they live. Staff working in prison are frequently hampered in planning care by having to do so at very short notice, for example when home detention monitoring is granted or if a remand prisoner is released unexpectedly following a routine court appearance. In addition, many prisoners are still held far away from their home area and this can bring problems for staff trying to contact and co-ordinate with a range of unfamiliar community services at great geographical distance from the prison, hampering their abilities to achieve a clear handover of responsibility to external providers. Owing to increased competitive tendering within the NHS, including offender health services, even when a prisoner is in custody within their home area, the prison mental care provider is increasingly likely to be a different NHS or private organisation from the community service; thus, referral processes can be as problematic as those undertaken remotely.[51]

Although engaging with mental health services in order to 'stay well' might be understood as important by prisoners, research shows that other matters, such as housing, financial security and re-establishing relationships with family are often more highly prioritised on release, often to the expense of attending any appointments made with the CMHT or substance misuse services.[52] As a result, it was suggested that the CTI model could be usefully adapted to better plan for transition for this population.[53]

In our earlier study, the CTI model was adapted and piloted for use with a male prisoner population.[54] Case managers were identified to proactively engage with prisoners with SMI before their release from prison in order to agree a discharge plan and provide practical help to ensure, as far as possible, that the prisoner's most pressing needs on release could be met. In addition, their role was to proactively support the person and liaise in person with service providers following release to ensure that engagement and transfer of care to community services went smoothly. The original CTI model was adapted to better reflect the stages of transition for prisoners in England; the major change was that the post-release duration of the intervention was shortened to 6 weeks, recognising that 9 months would be cost prohibitive to deliver and reflecting the views of staff and service users involved that community services in the UK were generally superior to those in the USA. The adaptation of the original model also included a vastly increased input in the pre-release period, with early preparation of a detailed discharge plan that could be activated if unexpected discharge occurred, particularly likely in the case of remand prisoners.

The feasibility of implementing this intervention was tested. Sixty prisoners were recruited to the study, with 32 randomly allocated to the CTI arm and 28 to TAU. Of these, 23 were followed up 4–6 weeks post release. Participants assigned to the CTI group were more likely to be in touch with either mental health or substance abuse services, receiving their medication, registered with a GP and in receipt of benefits than TAU participants, although only the outcomes relating to being in receipt of medication and registered with a GP were statistically significant. There were no differences in terms of social support or housing.

The key aim of the pilot was to ascertain whether or not it was feasible to deliver CTI to prisoners with SMI during their transition to the community. We concluded that, because of the intensive pre-release input required by the case manager to identify prisoners' needs and prepare community agencies to provide services, the case manager role was best carried out by someone based in prison and working with the in-reach team. Feedback from prisoners who received the intervention was positive and case managers reported that the intervention 'felt like the right thing to do'. Although most differences in engagement

and other outcome measures proved not to be statistically significant, the support provided by the case manager, particularly in the event of a delay in the start of community service provision, was thought to be valuable by staff and service users alike.

Although the feasibility trial involved a relatively small number of participants, the potential for the CTI model to improve transition for SMI prisoners merited a larger-scale study.

Rationale for current study

Managing transition for prisoners with SMI to the community has many similarities with the meeting of the health and social care needs of previously homeless individuals with SMI leaving hospital care. These similarities were the impetus for the development of the feasibility study in the prison population using CTI.

Our pilot to test the feasibility of delivering CTI within a prison setting with adult men with SMI was successful. A larger RCT was therefore undertaken to more rigorously test the utility of CTI for improving through-the-gate engagement of male prisoners with SMI with community mental health services and to examine the cost/benefits of this approach.

The primary objective was to establish whether or not CTI is clinically effective and cost-effective for released adult male prisoners with SMI in:

- improving engagement with health and social care services
- reducing mental health hospital admissions
- reducing reoffending
- increasing community tenure through reducing time in prison.

The secondary objectives were:

- to establish the cost-effectiveness of CTI for this population
- to develop service model manuals and training materials to support the implementation of CTI with criminal justice agencies, the NHS and relevant third-sector organisations
- to facilitate and promote active service user, criminal justice, third-sector and health staff participation in the research work programme, thus encouraging greater engagement between the academic community of researchers, the practice community of health and justice staff, and users of criminal justice, community-based health-care and third-sector services.

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Chapter 2 Quantitative methodology

Study design

The study was designed to evaluate CTI specifically adapted for male prisoners with SMI. It was designed as a parallel two-group RCT with 1 : 1 individual participant allocation to either CTI plus TAU (intervention group) or TAU alone (control group). The main trial was supplemented with (1) an economic evaluation examining the cost-effectiveness of providing CTI (see *Chapter 6*) and (2) a qualitative study to explore the views and experiences of participants and professionals involved in the study (see *Chapter 4*).

Ethics approval

Ethics approval for the study was granted by the research ethics committee (REC) for Wales in January 2012 (reference number 11/WA/0328). The National Offender Management Service research approval was given in February 2012 (reference number 184-11). The trial was registered with the International Standard Randomised Controlled Trial Number (reference number ISRCTN98067793). In addition, all required site-specific permissions and research governance approvals, that is the research and development (R&D) approvals, were obtained from the relevant NHS trusts.

Changes to protocol

The progress of this trial was severely impacted by recruitment shortfalls at the original sites and significant delays in obtaining a number of R&D approvals at new sites. We increased the number of sites involved from three to eight. A summary of the changes to the original protocol notified to the REC is given in *Table 1*. Approvals were also sought for another three prison establishments but, because of significant delays in obtaining these approvals, recruitment never commenced.

Increase of study sites from three to eight

The number of study sites was increased because of slow recruitment rates in the original three sites. This was mainly caused by potential participants failing to meet one or more of the eligibility criteria. The main reasons people were ineligible were (1) not likely to be released within the lifetime of the study and (2) not likely to be discharged to the local geographical area, thus unable to be followed up. One site, which had been the site with the largest recruitment in our feasibility study, was rerolled during this study, changing it from a category B remand local prison to a category C/D resettlement establishment. This meant that the prison started to take prisoners with longer sentences, so many were not likely to be released within the lifetime of the study. In one site, the original CTI manager left and the NHS trust was unable to recruit a replacement.

Research and development approval

For three of the trusts involved, it took approximately 6 months to obtain R&D approval and, in two cases, a complaint was lodged with the concerned trusts' medical director in order to expedite matters. Complex commissioning and provider arrangements resulted in a lack of transparency as to where responsibilities lay; this required seeking multiple permissions from several provider organisations at single sites. In addition,

TABLE 1 Summary of changes to the original protocol approved by the REC

Changes to protocol	Date
Increase of study sites from three to eight	10 February 2014
Use of the Operational Criteria Checklist for Psychotic and Affective Illness rather than the Structured Clinical Interview for *Diagnostic and Statistical Manual of Mental Disorders*-Fourth Edition Axis 1 disorders to record axis I mental health diagnosis	10 February 2014

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retendering processes resulting in the award of contracts to new provider organisations impacted negatively on recruitment. In addition, two sites that had originally agreed to take part in the research pulled out before recruitment could begin, citing staffing shortages.

Use of Operational Criteria Checklist for Psychotic and Affective Illness rather than Structured Clinical Interview for Diagnostic and Statistical Manual of Mental Disorders-*Fourth Edition Axis 1 disorders*

Before data collection commenced, the use of the Structured Clinical Interview for *Diagnostic and Statistical Manual of Mental Disorders*-Fourth Edition Axis 1 disorders (SCID-I)[55] by non-clinically trained researchers was reassessed because of concerns about the specialist knowledge required for its accurate completion. The use of the Operational Criteria Checklist for Psychotic and Affective Illness (OPCRIT)[56] was agreed to solve this issue, as its completion is not as dependent on expert clinical assessment skills.

Other changes to protocol not requiring research ethics committee approval

Hospital admission

The number of days in hospital, including any detention under the Mental Health Act 1983,[57] was collected via case notes at each follow-up. This varied from the original protocol in which we envisaged accessing Hospital Episode Statistics (HES), a nationally collated data source. Owing to slow recruitment rates and not being able to extend the study any further we are unable to use HES data in this report because recording lags in HES would have led to greater inaccuracies than collecting the data from individual notes.

Criminal justice contact and reconviction

In the original protocol, we planned to access Police National Computer (PNC) records to compare criminal justice contact and reconviction at 12 months post release from prison. As recruitment was slow and we could not extend the study, we were unable to use PNC data because recording lags would have made the available data incomplete. We will collect PNC data after this report is submitted, as this has been formally agreed with the Greater Manchester Police Service; this will form part of our subsequent publications, which will be available for the funders.

Community tenure

In the original protocol, we stated that we would calculate community tenure by subtracting days in hospital or custody from total time in the community. However, because of the inability to collect PNC data, we were unable to do this. However, this will form part of our subsequent publications, which will be available for the funders.

Definition of engagement with community mental health team

In the original protocol, we stated that engagement would be defined as (1) having an allocated care co-ordinator and care plan, (2) receiving appropriate medical treatment for mental health problems and (3) in regular, planned contact with their care co-ordinator. This was changed to (1) evidence of having an allocated care co-ordinator, (2) evidence of having a current care plan and (3) receiving medical treatment for mental health problems. Appropriate medical treatment was changed to medical treatment, as it was not possible for the researchers collecting the data via file records alone to make decisions about appropriateness. In addition, evidence of being in regular and planned contact was difficult to collect from file information alone, as it was very often not recorded. These changes were made before analysis and with the agreement of the Trial Steering Committee.

Sites

The study sought to recruit adult male prisoners with SMI. Originally, this was to be from three prison establishments (two in the north-west and one in the south of England) but, because of recruitment difficulties, this was subsequently expanded to include a further five prison establishments (two in the

north-west and three in the south of England). *Table 2* provides a brief description of the function of each site. Throughout the report, to maintain anonymity, prisons will be identified only by the letters A–H.

Participants

Inclusion criteria

Participants were considered for inclusion if they met all the following criteria:

- were male
- had SMI
- were a service user of the prison mental health in-reach team
- were able to give informed consent
- were to be released from prison within the lifetime of the study
- release would be to an agreed geographical area local to the prison.

Severe mental illness was defined as major depressive disorder, hypomania, bipolar disorder and/or any form of psychosis including schizophrenia, schizoaffective disorder and any other non-affective non-organic psychosis.

Exclusion criteria

Participants were excluded if they:

- did not have SMI
- were to be released outside the agreed geographical discharge area
- posed security/safety issues that would compromise researcher/practitioner safety in prison or the community
- were unable to give informed consent
- had previously participated in the trial during an earlier period in custody.

Recruitment procedure

In all sites, the mental health in-reach team identified existing (at the start of the study in each site) and new (as the study continued) service users who fulfilled the inclusion criteria.

The in-reach team informed the service users of the proposed study and asked if they wished to learn more about it. If the service user expressed an interest, the in-reach team member, with the person's

TABLE 2 Description of all prison establishments

Establishment	Type
A	Category B local prison accepting convicted and remand prisoners from local courts
B	Category A high-secure site, with a category B local function for convicted and remand prisoners
C	At the start of the project, this prison was a category B remand local prison, but during the course of the study became a category C/D resettlement establishment
D	Category B local prison accepting convicted and remand prisoners from local courts
E	Category C training prison holding convicted prisoners
F	Category B local prison accepting convicted and remand prisoners from local courts
G	Category B local prison accepting convicted and remand prisoners from local courts
H	Category B local prison accepting convicted and remand prisoners from local courts

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permission, passed their name on to a member of the research team. A researcher then arranged a time to meet with the service user to describe the study. The potential participant was provided with all relevant clearly written information about the study and its implications. They had the opportunity to ask questions about the research and were given a minimum of 24 hours to decide if they would like to take part. Given the unique problems of gaining consent in custodial environments, careful emphasis was given to their rights to consent/not consent, including the right to withdraw at any time, without the need to give a reason for doing so, and free of any coercion or negative consequences to their mental health care or their progress in custody in general. If any concerns regarding capacity to give informed consent because of mental illness were raised, the researcher sought the opinion of the mental health in-reach team. The original signed and dated consent forms were held securely as part of the trial site file, with a copy held in the participant's clinical records.

The likely release dates for unconvicted prisoners were predicted using the *Sentencing Council Guidelines*,[58] based on the person's index offence. Geographical discharge area for each prison was based on NHS R&D approval areas.

Randomisation

Eligible and consenting participants were randomised after baseline assessments were completed at the level of the individual participant to CTI or TAU by block randomisation, with randomly varying block sizes of two and four, stratified by prison. Randomisation was undertaken by the King's College London Clinical Trials Unit, using an online system. Once the randomisation procedure had been completed, the outcome and further details about the allocated treatment were immediately communicated to the researcher and to the participant. Owing to the nature of the intervention, it was not possible to blind participants, researchers or CTI managers to the treatment allocation.

Intervention

Treatment as usual

Individuals in the control group received TAU. While still in prison, they were able to access primary care, secondary mental health and substance misuse services as would usually be the case. They also received support from criminal justice and any other third-sector organisations in the standard way.

South of England prisons (prisons C, F, G and H)

Treatment as usual at the south of England prisons was delivered by the prison mental health in-reach team and, when appropriate, other agencies. The in-reach teams aimed to complete a CPA meeting for each service user before release, inviting professionals from prison and community services. For sentenced prisoners, in-reach teams aimed to notify community teams in the relevant area of the date of release and provided them with contact details for further information as required. For remand prisoners, the teams checked HMPS and NHS information systems [Prison National Offender Management Information System (p-NOMIS; NOMS, London, UK) and SystmOne (tpp, Leeds, UK), respectively] to establish whether or not a person had been further remanded into custody and had returned to the prison following a court date. If they had not returned to custody, community teams would be notified. The extent to which this happened at each prison varied according to their resources.

At all four prisons, the in-reach teams were supported by probation officers and offender managers. In addition, a third-sector organisation provided resettlement support at prisons C, G and H; similar support was provided in conjunction with a different third-sector provider at prison C and H. A further third-sector provider provided resettlement support at prison F. One of these providers withdrew from prison H towards the end of the recruitment period.

At prison G, one NHS trust employed a criminal justice liaison nurse who followed patients from court to prison. Their main role was in planning for psychiatric hospitalisation if this was needed, but they also notified and provided information to CMHTs and GPs about released prisoners. Prison F was also eligible for this service, but the private health-care provider declined this input for the duration of this project.

North of England prisons (prisons A, B, D and E)

In prison A, the in-reach team took over care co-ordination responsibility while people were in custody. The CPA process was standardised and aimed to address all needs. Everyone on the in-reach caseload was assessed and reviewed under CPA every 6 months. If people were serving < 6 months, care co-ordination was not formally transferred and they kept contact with their CMHT. If they were not in receipt of any service in the community, in-reach tried to link them in before they left, usually 1 or 2 months before release. Staff from certain CMHTs came to the prison to complete assessments before release, but not all.

The in-reach team liaised with a range of CMHTs, community forensic mental health teams, assertive outreach services, the Personality Disorder Network, probation service, community drug and alcohol teams, homeless teams and third-sector organisations providing housing and social support. Some services, for example the Personality Disorder Network, could be accessed only from the community and, thus, no assessment process was possible pre release and service users had to attend appointments once in the community.

All mental health referrals from primary to secondary care went through a single point of access (SPA) referral system. SPA included brokering access to CMHTs, the crisis team, home intensive treatment team, adult psychology services and links to acute psychiatric wards but not to some more specialist services.

Once a service user was released, there was an expectation that the receiving community service, whether that be a new or previously involved service, would re-establish care co-ordination and follow-up the client within 7 days. Linking in with services is acknowledged to be more difficult with remand prisoners; however, the in-reach team sometimes attended court with clients.

In prison B, the in-reach team did not take over care co-ordination responsibility. Therefore, release preparation involved liaison with existing CMHTs or referring to a CMHT if the person had no contact with services before custody or has been discharged from caseload while in prison. Addressing needs, such as accommodation, was usually done by probation service staff and/or external CMHTs.

In prison D, the in-reach team assumed care co-ordination responsibility. Clients were referred to appropriate services in the community including CMHTs, drug and alcohol teams, and a range of third-sector providers. A third-sector organisation specialising in accommodation was based within the prison and the in-reach team liaised with them if needed. Service users were seen regularly leading up to, and including, the day of release. Some service users were accompanied to first community appointments on the day of release.

In prison E, the in-reach team held care co-ordination responsibilities. Release planning included needs-led liaison with services such as CMHTs, other mental health services, for example early intervention, complex care and/or criminal justice liaison teams, social services, drug and alcohol teams, rehabilitation units and accommodation services. The in-reach care remit ended at the gate, with no community activities or responsibilities.

Critical time intervention: adaptation for current randomised controlled trial

Critical time intervention is intensive CM at times of transition between the prison and community. CTI managers provide direct care where and when needed, for a limited time period. They commence their involvement with the service user in prison. For sentenced prisoners, this starts 4 weeks before discharge. For remand prisoners, or those with unpredictable dates of release, this work commences as soon as the person is on the caseload of the mental health team. The length of their involvement pre release is, therefore, ideally 4 weeks but may be shorter or longer in those with unpredictable release dates. In this

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adaptation of CTI, the period of contact post discharge was set at 6 weeks. The 6-week period of intervention was adopted because (1) the pilot study indicated that, by this stage, the service user would be engaged with the CMHT if that was going to occur at all; (2) it allowed a reasonable period post discharge in which adjustments to vital support systems, including accommodation and/or benefit entitlement/employment are most likely to be required; (3) to keep community caseloads low and workable for the CTI managers, some of whom were part-time; and (4) the adapted version of the intervention was heavily frontloaded with most of the vital liaison work being completed while the service user was still in prison.

The holistic intervention involved work with clients and clients' families (when possible), as well as active liaison and joint working with relevant prison and community services. Five key areas were prioritised: (1) psychiatric treatment and medication management, (2) money management, (3) substance abuse treatment, (4) housing crisis management and (5) life-skills training. CTI is not prescriptive; it responds to the needs of each individual client. The intervention comprised four phases.

Phase 1 is conducted while the person is in prison. The CTI manager engages with the individual and develops a tailor-made discharge package based on a comprehensive assessment of the individual's needs. This typically includes plans for engagement with community mental health treatment and addressing accommodation, financial and social support needs. The CTI manager and prisoner meet as often as required to make the discharge arrangements; pre-release contact is routinely twice weekly. In addition, the CTI manager liaises closely with community services to ensure their availability and suitability.

Phase 2 occurs immediately after release and focuses on providing very intensive personal support. In the first few weeks post discharge, the CTI manager maintains a high level of contact, including accompanying people to appointments to promote engagement and to help them establish relationships with community providers in order to facilitate the development of durable ties. The number of meetings/visits involved is directly influenced by the complexity of each person's needs, but routinely involves up to 15 meetings per week for the first 2 weeks following discharge.

In phase 3, community services assume primary responsibility for the provision of support and services, and the CTI manager focuses on assessing whether or not the support system is adequate and functioning as planned. During this phase, the CTI manager encourages the individual to start to handle problems on their own. They meet less frequently but maintain regular contact in order to judge how the plan is working. The CTI manager remains ready to intervene if a crisis or potentially destabilising event arises. Again, the frequency of meetings is individually determined, but is typically at least weekly for 3 weeks.

In phase 4, care is fully transferred to community services in order to provide long-term support, thus work focuses on completing the transfer of care. This phase may typically consist of a meeting with the community care co-ordinator, service user and CTI manager, reviewing progress and agreeing future care. Throughout, the CTI manager will gradually reduce their role in delivering direct services to the individual. Their main function in this phase is to ensure that the most significant members of the 'receiving' support system meet together and, along with the individual, reach a consensus about the components of the ongoing system of support.

A manual for use by the CTI case manager was also developed to support their delivery of the intervention (see *Chapter 5* and reproduced in full in *Appendix 1*).

Each CTI case manager received 2 days' training on the manual, undertaken by the study's principal investigator, a consultant forensic psychiatrist. The CTI case managers then received weekly CTI-specific supervision locally in addition to their normal clinical and/or line management supervision. In addition, group supervision was held by telephone, every 3 months, with the study principal investigator. The aim of the CTI supervision was to correct CM that was inconsistent with CTI principles and practices, provide guidance to assure that the approach was consistent with CTI principles and practices, and schedule case presentations for all new clients within a few weeks of enrolment into CTI.

All professionals who took part in this study in the role of CTI manager were qualified and experienced mental health clinicians; most were mental health nurses and one was a clinical psychologist. All had previous experience working in both prisons and either forensic community mental health services or intensive home treatment/assertive outreach teams. As such, they brought with them an extensive skill set, including existing motivational interviewing training; thus, the majority of training focused on describing the content of CTI as distinct from other ways of working in previous roles rather than clinical skills training per se.

Public and patient involvement

People with previous contact with criminal justice and mental health services were involved in study design and methods development, were Trial Steering Committee members and formed, alongside professionals, the working group which developed the intervention manual and training resources.

Data collection and management

Data were entered onto the online MACRO® (Elsevier, Amsterdam, the Netherlands) data entry system, which was hosted at the King's College London Clinical Trials Unit. The system is compliant with good clinical practice guidelines,[59] with a full audit trail, data entry and monitoring roles and formal database lock functionality.

To standardise recruitment/retention processes across the trial sites and maximise data quality, researchers were trained to use standard operating procedures for each stage of data collection. The database was designed to flag up data errors and a number of cross-checks were routinely performed as a means of ensuring that any data inconsistencies arising from either baseline assessment or follow-up were identified and resolved at the earliest opportunity.

Baseline assessment

At baseline all participants were seen by a member of the research team and the following data were collected:

- OPCRIT+[56] – the OPCRIT+ was used to obtain an Axis 1 diagnosis (*Diagnostic and Statistical Manual of Mental Disorders*-Fourth Edition[55]). OPCRIT+ is an electronic checklist of psychopathology items with algorithms for objective diagnosis of psychotic and affective disorders. Participants were asked about a range of mental health symptoms and responses entered into the OPCRIT database to produce a diagnosis. In its original format, OPCRIT data are designed to be gathered from case notes alone.[55] However, in a small pilot, it became apparent that there were frequently insufficient data in the notes alone to make a reliable diagnosis and, therefore, the case note data collection was supplemented by direct inquiry with the participant.
- Structured Clinical Interview for *Diagnostic and Statistical Manual of Mental Disorders*-Fourth Edition Personality Disorders (SCID-II) – the SCID-II is a semistructured interview for the assessment of PD. The first part consists of eight open questions on the patient's general behaviour, interpersonal relationships and self-reflective abilities. The second part has 140 items to be scored as 1 (absent), 2 (subthreshold) or 3 (threshold).[60] The full SCID-II interview was administered to all participants and any resulting diagnoses recorded.
- The Michigan Alcohol Screening Test (MAST) – the MAST consists of 24 yes/no questions pertaining to lifetime use of alcohol. Each item is scored 0 or 1, with scores of ≥ 10 indicating evidence of having had a lifetime alcohol problem.[61]
- The Drug Abuse Screening Test (DAST) – the DAST is similar in design to the MAST. It consists of 20 yes/no questions, each scored 0 or 1. Scores of ≥ 11 indicate substantial problems with drug abuse.[62]
- Adapted Client Services Receipt Inventory – developed from the Client Services Receipt Inventory.[63] A pro forma was developed that enabled data on a specific range of services to be collected from health-care records by the research team.

All baseline assessments were conducted between October 2012 and July 2015.

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Follow-up

Follow-up data collection was scheduled to take place at three time points: 6 weeks and 6 and 12 months post release from prison. The 6-week follow-up coincided approximately with the end of the intervention delivery phase and the 12-month follow-up was designed to inform the investigation of any longer-term effects of the intervention on study outcomes. All follow-up data were collected via file information from each participant's care team in the community. All follow-up data were collected between November 2012 and October 2015.

Outcomes

Primary outcome

The primary outcome measure was engagement with mental health services at 6 weeks post release from prison. Engagement was defined as currently being in receipt of an appropriate level of mental health care, by virtue of (1) having an allocated care co-ordinator, (2) having a current care plan and (3) receiving medical treatment for mental health problems. To create the binary engagement variable, a score of 1 was assigned if all three of these were true, and a score of 0 assigned if any or all of these were not true (i.e. they did not have an allocated care co-ordinator, they did not have a current care plan or they were not receiving medical treatment for mental health problems).

Secondary outcomes

The secondary outcome measures were engagement, as defined above, with mental health services at 6 and 12 months.

Fidelity

Fidelity was assessed using an adapted version of the fidelity scale used in the Critical Time Intervention – Task Shifting study.[64] The adapted version took into account all changes to procedures from earlier CTI studies. The fidelity scale, included in this report as *Appendix 2*, was completed at eight time points during the intervention delivery phase.

Sample size

Original sample size justification

The original calculation for the research proposal, taking into account the attrition rate in the feasibility trial of 15%, required 100 participants randomised to each arm (CTI and TAU) to give 90% power to detect a difference at 6-week follow-up of 50% in the treatment group compared with 25% in the control group (or greater), at the conventional 5% significance level. Thus, 85 participants were required in each group at 6-week follow-up.

Revised sample size justification

Owing to slow recruitment rates, we checked our earlier assumptions after 120 participants had been randomised and found that the attrition rate was 9%. In addition, we also proposed reducing the statistical power available to detect a significant difference from 90% to 80%. The revised calculations are shown in *Table 3*. The number required for the primary outcome was 132.

Statistical analysis

The analysis and reporting of this trial was undertaken in accordance with the Consolidated Standards of Reporting Trials (CONSORT) 2010 statement,[65] showing attrition rates and loss to follow-up. All analyses

TABLE 3 Revised sample size calculation

Power (%)	Attrition (%)	Number randomised	Number required for the primary outcome
90	15	200	170
90	9	188	170
85	15	178	150
85	9	166	150
80	15	156	132
80	9	146	132

were carried out using the intention-to-treat principle, with available data from all participants included in the analysis according to the group they were randomised to, including those who did not complete therapy. In addition, the report abides to Standard Protocol Items: Recommendations for Interventional Trials (SPIRIT) guidelines.

Analysis was conducted in Stata version 14 (StataCorp LP, College Station, TX, USA). The statistician was blinded to allocation groups until all analyses were performed.

Descriptive statistics within each randomised group are presented for baseline values. These include counts and percentages for binary and categorical variables and means and standard deviations, or medians with lower and upper quartiles, for continuous variables, along with minimum and maximum values and counts of missing values. There were no tests of statistical significance or confidence intervals (CIs) for differences between randomised groups on any baseline variables. Descriptive statistics were used to summarise assessments of feasibility and acceptability in terms of recruitment, dropouts and completeness of therapy.

The primary hypothesis for between-group differences in the primary outcome measure, engagement at 6 weeks, was analysed using a logistic regression model allowing for the site (prison in the north or south) and treatment assignment as fixed effects. Secondary outcome measures were analysed using the same modelling approach. The same models were used for the analysis of all the outcomes at 6 and 12 months. We report odds ratios and 95% CIs for all treatment effects.

Harms reporting

Definitions

Adverse event

An adverse event was defined as any untoward medical occurrence, unintended disease or injury or any untoward clinical signs (including an abnormal laboratory finding) in participants whether or not related to any research procedures or to the intervention.

Seriousness

Any adverse event will be regarded as serious if it:

- results in death
- is life-threatening
- requires hospitalisation or prolongation of existing hospitalisation
- results in persistent or significant disability or incapacity
- consists of a congenital anomaly or birth defect.

An adverse event meeting any one of these criteria was considered as a serious adverse event (SAE).

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Relationship

The expression 'reasonable causal relationship' means to convey, in general, that there is evidence or argument to suggest a causal relationship. The research team assessed the causal relationship between reported events and trial participation according to CONSORT[65] guidance (see *Appendix 3*).

Reporting serious adverse events

In this study, SAEs were reported to the chief investigator (JS) regardless of relatedness within 24 hours of the principal investigator (or authorised delegate) becoming aware of the event. All SAEs deemed to have a causal relationship were reported to the Trial Steering Committee. Any non-SAEs (regardless of relatedness) were not reported in this study.

Data sharing and accessibility

Study data are handled in strict accordance with the University of Manchester's data protection policy, which can be found at: www.dataprotection.manchester.ac.uk/ (accessed 10 October 2016).

As the data contain medical details, they will be kept securely for 10 years. Participant consent forms did not specifically allow for the sharing of anonymised data to third parties. Any request for access under the Data Protection Act 1998[66] or Freedom of Information Act 2000[67] would be referred to the University of Manchester's records office for advice before disclosure. Please contact the corresponding author for more information.

Chapter 3 Quantitative results

Trial results

Recruitment

The NHS ethics and National Offender Management Service approvals were received by February 2012 but first recruitment did not commence until October 2012. *Table 4* shows the recruitment issues at each site that contributed to delays and the number of participants randomised at each site.

Flow of participants in the trial

In total, 150 individuals were recruited to the trial, with 72 allocated to the intervention group and 78 to the TAU group. *Figure 1* presents the CONSORT[65] flow diagram for the trial and summarises participant throughput from eligibility screening and randomisation to completion of the 6-week, and 6- and 12-month follow-ups, as appropriate. The diagram also reports numbers of participants who declined, did not meet inclusion criteria, were excluded from the study, withdrew following randomisation or were lost to follow-up at the 6-week, or 6- and 12-month follow-up points.

Baseline comparability

Table 5 presents a summary of the baseline demographics to describe the sample and demonstrate the baseline comparability of the randomised groups.

TABLE 4 Overview of recruitment at each site

Prison	Delays in commencing	Recruitment		Reason for ending	Other problems	Number recruited
		Started	Ended			
A	Obtaining R&D approval took > 5 months. Once the CTI manager had been identified, there were delays in commencement because of training needs and commitments to a previous role. The CTI manager started delivery of the intervention in November 2012	November 2012	April 2013	CTI manager became pregnant and could no longer work in the prison. Host service could not find suitable replacement		3
B	Reaching an agreement on excess treatment costs. Permission from the prison took 3 months and was not received until 20 March 2012. As the prison is part of the high-secure estate, the lengthy vetting and induction process for researchers was started early but took until 29 October 2012	November 2012	May 2014	Excess treatment cost money ended	Slow recruitment	14
C	Reaching an agreement on excess treatment costs. Identifying a suitable CTI manager, first person left post unexpectedly	October 2012	July 2014	Excess treatment cost money ended	Rerolled to a category C/D resettlement prison so recruitment slowed	29

continued

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TABLE 4 Overview of recruitment at each site (*continued*)

Prison	Delays in commencing	Recruitment		Reason for ending	Other problems	Number recruited
		Started	Ended			
D	R&D approval form was received quickly; however, there were subsequent delays negotiating information technology access for the CTI manager. We had to wait several months for an Information governance meeting for this to be approved. The induction meeting at the prison was cancelled on three occasions for the researchers and four times for the CTI manager	August 2013	May 2014	Excess treatment cost money ended		7
E	First contact with R&D was made on 16 October 2012. After getting no response we involved the local research network for help, but eventually complained to the medical director. The R&D manager requested that we review in-reach caseload to assess for numbers eligible and report back before R&D would approve the study. This took us 5 months to gain access to the prison and the information required. Once data had been collected, we reapproached the R&D manager who had left and the new R&D manager requested that we start the application process again	February 2014	May 2014	Excess treatment cost money ended		7
F	We had first meeting at the prison on 17 October 2012. Recruitment took 9 months to begin because of a new in-reach team setting up and lack of immediate support for the project because of staffing and resource concerns. There were also long delays in obtaining permission to follow up participants in one release catchment area. One R&D took > 6 months to receive. They required a local collaborator who held a contract with the trust; however, we were not informed of this until the application had been submitted. This meant it was rejected and we had to resubmit. The trust did not identify a suitable local collaborator within a reasonable time frame. Despite chasing up on a regular basis, approval was not received until July 2013	July 2013	May 2014	Excess treatment cost money ended		35

TABLE 4 Overview of recruitment at each site (*continued*)

Prison	Delays in commencing	Recruitment		Reason for ending	Other problems	Number recruited
		Started	Ended			
G	Initially informed approval needed from one NHS trust, which we obtained, but then they informed us we would need two additional approvals from other NHS trusts. This appeared to be a particular issue because of the complex commissioning arrangements for health care within the south of England. None of the trusts knew which should take the lead and, therefore, one of the applications was initially rejected because of resource concerns and the imminent retendering of the service. Permission was eventually granted after 6 months	February 2014	April 2014	Excess treatment cost money ended		18
H	Site approached 5 months before the service provider was because of change (January 2014). It took until March to get access, assess caseload suitability and obtain backing from the health-care provider. So when the R&D application was submitted the existing trust had 2 months left before change over. This resulted in a lengthy disagreement between outgoing and incoming providers about who should issue approval. This meant that all required trust approvals were not in place until 20 May 2014	June 2014	July 2015	No longer possible because of report deadline		37
I	The prison originally agreed to participate but then informed us that they would have to withdraw owing to staffing issues. Agreement regarding their involvement was finally reached, but this caused significant delays and took approximately 6 months. There were then no eligible recruits so the study did not start			No participants identified as eligible		0
J				No participants identified as eligible		0
K				No participants identified as eligible		0

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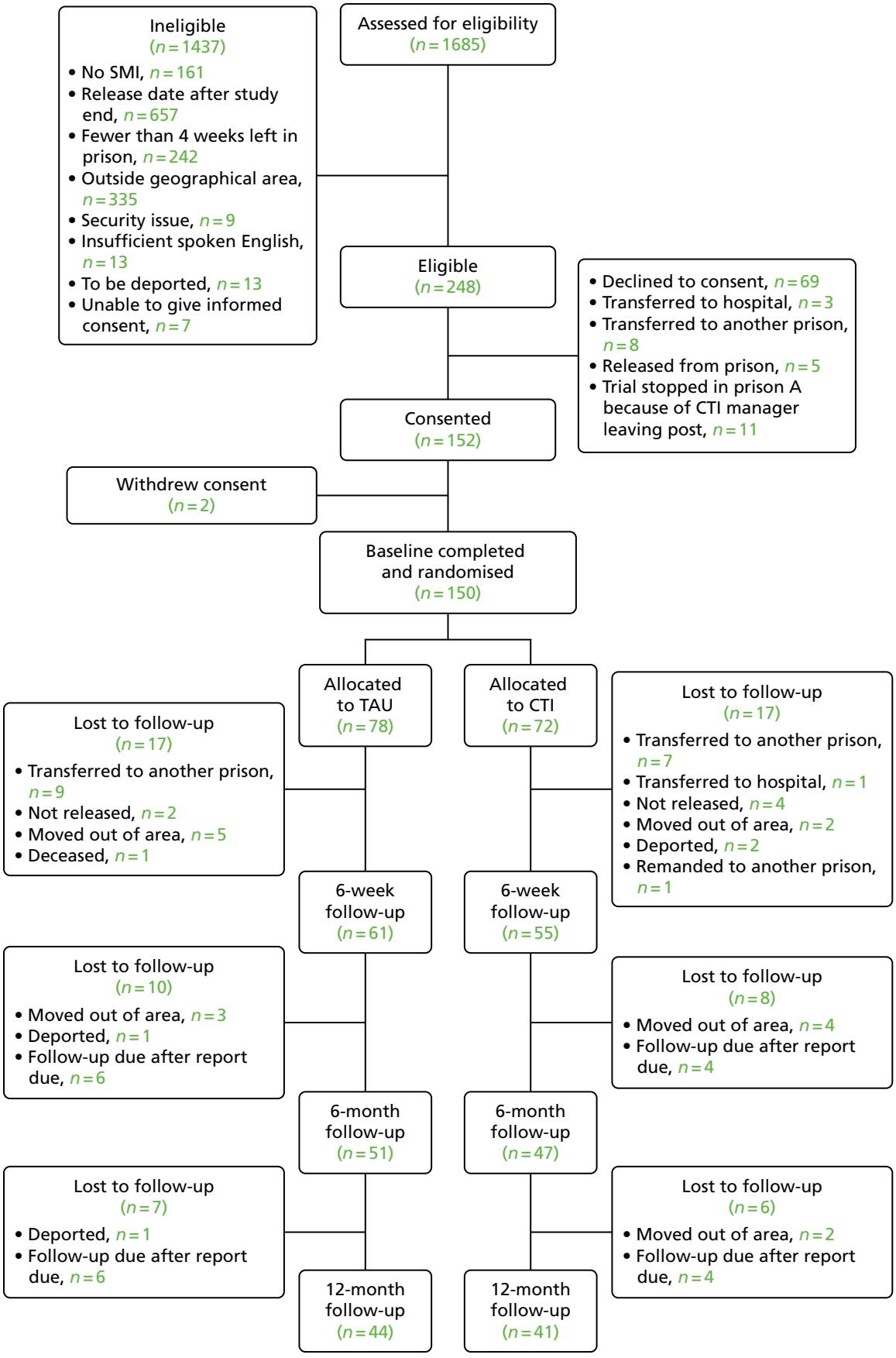

FIGURE 1 The CONSORT flow diagram.

TABLE 5 Baseline demographic measures, by randomised group

Characteristic	Trial arm		
	CTI (*N* = 72)	TAU (*N* = 78)	All (*N* = 150)
Age (years), mean (SD)	36.2 (9.5)	36.5 (10.1)	36.3 (9.8)
Ethnicity, *n* (%)			
White	35 (49)	37 (47)	72 (48)
Black and minority ethnic	37 (51)	41 (53)	78 (52)
Marital status, *n* (%)			
Single (including divorced/separated/widow)	65 (90)	69 (88)	134 (89)
Married/partner	7 (10)	9 (12)	16 (11)
Employment, *n* (%)			
Unemployed/retired/benefits	63 (88)	71 (91)	134 (89)
Employed/self-employed	9 (12)	7 (9)	16 (11)
Living arrangements, *n* (%)			
Alone	56 (78)	45 (58)	101 (67)
With partner/children/family	16 (22)	33 (42)	49 (33)
Accommodation, *n* (%)			
House/flat	34 (47)	39 (50)	73 (49)
Hostel/temporary accommodation	21 (29)	29 (37)	50 (33)
Homeless/no fixed address	17 (24)	10 (13)	27 (18)
Index offence, *n* (%)			
Violent (including sexual offences and robbery)	32 (44)	38 (49)	80 (53)
Non-violent (all others)	40 (56)	40 (51)	70 (47)
Prisoner status, *n* (%)			
Remand	18 (25)	28 (36)	46 (31)
Convicted (unsentenced/sentenced)	54 (75)	50 (64)	104 (69)
Time in prison current (months), mean (SD)	12.4 (18.6)	11.6 (19.7)	12.0 (19.1)
Previous imprisonment, *n* (%)			
Yes	12 (17)	14 (18)	124 (83)
No	60 (83)	64 (82)	26 (17)
Number of times in prison, mean (SD)[a]	6.3 (5.7)	7.9 (8.1)	7.1 (7.1)
Axis I diagnosis (OPCRIT), *n* (%)			
Schizophrenia	51 (71)	57 (73)	108 (72)
Schizoaffective/schizophreniform disorder	7 (10)	5 (6)	12 (8)
Psychosis	3 (4)	4 (5)	7 (5)
Major depressive disorder	9 (13)	11 (14)	20 (13)
Hypomanic episode	0 (0)	1 (1)	1 (1)
None	2 (3)	0 (0)	2 (1)

continued

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TABLE 5 Baseline demographic measures, by randomised group (*continued*)

Characteristic	Trial arm		All (*N* = 150)
	CTI (*N* = 72)	TAU (*N* = 78)	
Axis II diagnosis (SCID-II), *n* (%)			
Yes	38 (53)	42 (54)	80 (53)
No	34 (47)	36 (46)	70 (47)
Avoidant	5 (7)	7 (9)	12 (8)
Dependent	1 (1)	2 (3)	3 (2)
Obsessive–compulsive	3 (4)	3 (4)	6 (4)
Passive-aggressive	0 (0)	8 (10)	8 (5)
Depressive	2 (3)	11 (14)	13 (9)
Paranoid	6 (8)	9 (12)	15 (10)
Schizotypal	0 (0)	2 (3)	2 (1)
Schizoid	1 (1)	4 (5)	5 (3)
Histrionic	1 (1)	1 (1)	2 (1)
Narcissistic	1 (1)	1 (1)	2 (1)
Borderline	10 (14)	10 (13)	20 (13)
Antisocial	35 (49)	38 (49)	73 (49)
MAST			
Total, mean (SD)[b]	7.9 (5.7)	6.3 (5.6)	7.1 (5.7)
Cut-off points, *n* (%)[b]			
≤ 9	48 (68)	61 (78)	109 (73)
≥ 10	23 (33)	17 (22)	40 (27)
DAST			
Total, mean (SD)[c]	13.8 (6.4)	13.5 (6.9)	13.6 (6.7)
Cut-off point, *n* (%)[c]			
≤ 10	23 (33)	30 (39)	53 (36)
≥ 11	47 (67)	46 (61)	93 (64)

SD, standard deviation.
a *N* = 123.
b *N* = 149.
c *N* = 146.

The sample were all male, with broadly half (48%) from a white ethnic background and half (52%) from a black or minority ethnic background. The majority of the participants were single (89%), unemployed (89%) and living alone (67%). Nearly 20% of the sample said that they were homeless or had no fixed abode on arrival at prison. Proportionally more participants randomised to the CTI arm had been homeless. In relation to offending, half of the sample had committed a violent index offence. On average, participants had spent 1 year in prison at the point of baseline assessment and the majority (83%) had been in prison previously, with an average of seven previous prison terms.

In relation to mental health, all participants had an Axis I diagnosis, as determined by OPCRIT.[56] The most common primary diagnosis was schizophrenia, affecting 71% and 73% of the CTI and TAU groups,

respectively. Overall, 13% of the sample was experiencing a major depressive disorder and 8% a schizoaffective/schizophreniform disorder. There were no significant differences across the intervention and TAU groups in terms of Axis I diagnoses.

In relation to Axis II diagnoses, 53% of the sample overall had at least one PD, as determined by the SCID-II assessment tool. The most common diagnosis was antisocial PD, identified in 49% of the sample overall. Thirteen per cent of the sample was identified as having borderline and 10% a paranoid PD.

In relation to drug and alcohol misuse, nearly 30% of the sample scored ≥ 10 on the MAST, indicating that they had had a severe drinking problem at some point in their life; more participants scoring over > 10 were randomised to the CTI group. In total, 64% of participants scored ≥ 11 on the DAST, indicating substantial problems with drug abuse. *Table 6* presents a summary of the key service contact of the randomised groups.

With regard to dual diagnosis, less than half (42%; $n = 63$) of the sample had a diagnosis of a single Axis I condition alone. Eight (5%) had dual SMI and substance misuse issues, 56 (37%) had dual SMI and PD diagnoses and 23 (15%) had SMI, substance misuse and PD diagnoses.

TABLE 6 Baseline service contact measures, by randomised group

Characteristic	Trial arm, *n* (%)		
	CTI (*N* = 72)	TAU (*N* = 78)	All (*N* = 150), *n* (%)
Previous mental health intervention, lifetime			
Yes	69 (96)	77 (99)	146 (97)
No	3 (4)	1 (1)	4 (3)
Previous CMHT intervention			
Yes	59 (82)	62 (79)	121 (81)
No	13 (18)	16 (21)	29 (19)
Mental health intervention in prison previously			
Yes	47 (68)	48 (63)	95 (66)
No	22 (32)	28 (37)	50 (34)
Inpatient drug detox previously			
Yes	8 (11)	10 (13)	18 (12)
No	64 (89)	68 (87)	132 (88)
Residential drug rehabilitation previously			
Yes	6 (8)	9 (12)	15 (10)
No	66 (92)	69 (88)	135 (90)
Inpatient alcohol detox previously			
Yes	6 (8)	5 (6)	11 (7)
No	66 (92)	73 (94)	139 (93)
Inpatient alcohol rehabilitation previously			
Yes	4 (6)	6 (8)	10 (7)
No	68 (94)	72 (92)	140 (93)

continued

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TABLE 6 Baseline service contact measures, by randomised group (*continued*)

Characteristic	Trial arm, *n* (%)		
	CTI (*N* = 72)	TAU (*N* = 78)	All (*N* = 150), *n* (%)
First contact with mental health services (months)			
< 12	8 (11)	14 (18)	22 (15)
> 12	64 (89)	64 (82)	128 (85)
Most recent contact with mental health services prior to imprisonment (months)			
< 1	62 (86)	59 (77)	121 (81)
> 1 and < 6	3 (4)	7 (9)	10 (7)
≥ 6	7 (10)	11 (14)	18 (12)
Most recent contact with mental health services prior to imprisonment (months)			
< 1	62 (86)	59 (77)	121 (81)
> 1 and < 6	3 (4)	7 (9)	10 (7)
≥ 6	7 (10)	11 (14)	18 (12)
Contact with mental health services on admission to prison			
Yes	33 (46)	49 (63)	82 (55)
No	39 (54)	29 (37)	68 (45)
Mental health services treatment from GP on admission			
Yes	21 (29)	27 (35)	48 (32)
No	51 (71)	51 (65)	102 (68)
Prescribed psychiatric medication on admission			
Yes	13 (18)	10 (13)	23 (15)
No	59 (82)	68 (87)	127 (85)
Alcohol treatment on admission			
Yes	1 (1)	3 (4)	4 (3)
No	67 (99)	70 (96)	137 (97)
Current psychological interventions (in prison)			
Yes	5 (7)	7 (9)	12 (8)
No or N/A	67 (93)	71 (91)	138 (92)
Perceived current need for help with alcohol problem			
Yes	13 (18)	12 (15)	25 (17)
No	59 (82)	66 (85)	125 (83)
Perceived current need for help with drug problem			
Yes	29 (40)	19 (24)	48 (32)
No	43 (60)	59 (76)	102 (68)
Perceived current need for help with mental health problem			
Yes	55 (76)	57 (73)	112 (75)
No	17 (24)	21 (27)	38 (25)

N/A, not applicable.

In relation to contact with services at baseline, the vast majority (97%) had previously received a mental health intervention, with 81% receiving that from a CMHT. For the majority of participants (85%), their first contact with mental health services was > 12 months prior to baseline assessment, and their most recent contact was within the last month (81%). Around half (55%) of participants were in current contact with community mental health services on reception into custody and 32% were receiving support/treatment for mental health problems from their GP on reception. Few participants were receiving drug (15%) or alcohol (3%) treatment on reception. Very few participants were receiving any psychological interventions (8%) while in prison.

Primary outcome

The primary outcome measure was engagement with mental health services at 6 weeks post release from prison. Engagement was defined as a composite variable of (1) evidence of having an allocated care co-ordinator, (2) evidence of having a current care plan and (3) receiving medical treatment for mental health problems.

There were significant differences between the two groups with participants receiving CTI significantly more likely to be engaged with mental health services at 6 weeks; significantly more were likely to have a care co-ordinator in place, have evidence of a current care plan and be in receipt of medication (*Table 7*).

Secondary outcomes

At 6 weeks

In addition, at 6 weeks, data were also collected on a wider range of contact, service use and lifestyle variables. The only significant difference between the two groups was that those receiving CTI were more likely to be registered with a GP (*Table 8*).

At 6 and 12 months

Outcomes for participants at 6 and 12 months are shown in *Tables 9* and *10*, respectively. A significant difference in engagement with mental health services at 6 months was maintained for the CTI group. There were no other significant differences between the groups at 6 or 12 months.

TABLE 7 Engagement with mental health services at 6 weeks

	Trial arm, *n* (%)		Analysis				
Characteristic	CTI (*N* = 55)	TAU (*N* = 61)	Odds ratio	Standard error	95% CI	*p*-value	*N*
Engagement with mental health services (care co-ordinator, care plan, medication)							
Yes	26 (53)	14 (27)	0.32	0.15	0.13 to 0.78	0.012	100
No	23 (47)	37 (73)					
Care co-ordinator							
Yes	31 (56)	17 (28)	0.27	0.12	0.12 to 0.64	0.003	115
No	24 (44)	43 (72)					
Current care plan							
Yes	30 (55)	16 (27)	0.27	0.12	0.11 to 0.63	0.002	115
No	25 (45)	44 (73)					
Receiving medication							
Yes	45 (92)	39 (75)	0.27	0.17	0.08 to 0.90	0.033	101
No	4 (8)	13 (25)					

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TABLE 8 Contacts, service use and lifestyle variables at 6 weeks

	Trial arm, *n* (%)		Analysis				
Characteristic	CTI (*N* = 55)	TAU (*N* = 61)	Odds ratio	Standard error	95% CI	*p*-value	*N*
Planned contact							
Yes	16 (52)	14 (82)	2.04	1.74	0.38 to 10.85	0.403	48
No	15 (48)	3 (18)					
Currently under CPA							
Yes	3 (5)	5 (8)	1.62	1.22	0.37 to 7.12	0.525	114
No	52 (95)	54 (92)					
CPA arranged							
Yes	8 (15)	4 (7)	0.42	0.27	0.12 to 1.48	0.176	113
No	46 (85)	55 (93)					
Medication compliant							
Yes	37 (84)	33 (87)	1.25[a]	0.79	0.36 to 4.35	0.727	82
No	7 (16)	5 (13)					
Registered with GP							
Yes	44 (90)	40 (69)	0.25	0.15	0.08 to 0.79	0.018	107
No	5 (10)	18 (31)					
Hospitalisation							
Yes	1 (2)	3 (5)	2.79[a]	3.28	0.28 to 27.93	0.383	114
No	53 (98)	57 (95)					
Referral to drug and alcohol services							
Yes	11 (24)	9 (18)	0.69	0.35	0.26 to 1.88	0.470	96
No	35 (76)	41 (82)					
Employment							
Yes	2 (5)	1 (3)	0.55	0.74	0.04 to 7.59	0.657	78
No	38 (95)	37 (97)					
Contact with family							
Yes	34 (79)	28 (78)	0.92	0.52	0.30 to 2.79	0.878	66
No	9 (21)	8 (22)					

a Unadjusted for site because of perfect prediction.

TABLE 9 Contacts, service use and lifestyle variables at 6 months post release

	Trial arm, *n* (%)		Analysis				
Characteristic	CTI (*N* = 47)	TAU (*N* = 51)	Odds ratio	Standard error	95% CI	*p*-value	*N*
Engagement with mental health services (care co-ordinator, care plan, medication)							
Yes	28 (74)	21 (50)	0.33	0.17	0.12 to 0.89	0.029	80
No	10 (26)	21 (50)					

TABLE 9 Contacts, service use and lifestyle variables at 6 months post release (*continued*)

	Trial arm, *n* (%)		Analysis				
Characteristic	CTI (*N* = 47)	TAU (*N* = 51)	Odds ratio	Standard error	95% CI	*p*-value	*N*
Care co-ordinator							
Yes	31 (66)	24 (49)	0.50	0.21	0.21 to 1.15	0.103	96
No	16 (34)	25 (51)					
Planned contact							
Yes	11 (37)	13 (54)	2.04[a]	1.15	0.68 to 6.16	0.205	54
No	19 (63)	11 (46)					
Current care plan							
Yes	29 (64)	23 (46)	0.44	0.20	0.18 to 1.05	0.065	95
No	16 (36)	27 (54)					
Currently under CPA							
Yes	18 (39)	12 (24)	0.49	0.22	0.20 to 1.18	0.112	96
No	28 (61)	38 (76)					
CPA arranged							
Yes	7 (16)	7 (14)	0.84	0.52	0.25 to 2.80	0.781	95
No	38 (84)	43 (86)					
Receiving medication							
Yes	36 (95)	37 (84)	0.27	0.23	0.05 to 1.41	0.120	82
No	2 (5)	7 (16)					
Medication compliant							
Yes	31 (86)	30 (83)	0.81[a]	0.53	0.22 to 2.95	0.745	72
No	5 (14)	6 (17)					
Registered with GP							
Yes	39 (95)	40 (85)	0.29	0.24	0.06 to 1.47	0.134	88
No	2 (5)	7 (15)					
Hospitalisation							
Yes	2 (4)	3 (6)	1.42	1.37	0.22 to 9.37	0.714	96
No	44 (96)	47 (94)					
Referral to drug and alcohol services							
Yes	14 (36)	11 (26)	0.64	0.32	0.25 to 1.68	0.368	81
No	25 (64)	31 (74)					
Employment							
Yes	2 (6)	2 (6)	1.03	1.06	0.14 to 7.79	0.978	71
No	34 (94)	33 (94)					
Contact with family							
Yes	27 (77)	28 (78)	1.04[a]	0.59	0.34 to 3.18	0.949	71
No	8 (23)	8 (22)					

a Unadjusted for site because of perfect prediction.

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TABLE 10 Contacts, service use and lifestyle variables at 12 months post release

	Trial arm, *n* (%)		Analysis				
Characteristic	CTI (*N* = 41)	TAU (*N* = 44)	Odds ratio	Standard error	95% CI	*p*-value	*N*
Engagement with mental health services (care co-ordinator, care plan, medication)							
Yes	19 (59)	20 (71)	1.70	0.95	0.56 to 5.11	0.347	60
No	13 (41)	8 (29)					
Care co-ordinator							
Yes	27 (68)	25 (58)	0.67	0.31	0.27 to 1.65	0.382	83
No	13 (33)	18 (42)					
Planned contact							
Yes	12 (44)	7 (29)	0.51[a]	0.31	0.16 to 1.66	0.267	51
No	15 (56)	17 (71)					
Current care plan							
Yes	19 (50)	21 (50)	1.01	0.45	0.42 to 2.44	0.990	80
No	19 (50)	21 (50)					
Currently under CPA							
Yes	19 (48)	8 (20)	0.27	0.14	0.10 to 0.73	0.010	81
No	21 (53)	33 (80)					
CPA arranged							
Yes	6 (15)	5 (13)	0.81	0.54	0.22 to 2.98	0.751	79
No	33 (85)	35 (88)					
Receiving medication							
Yes	33 (97)	27 (96)	0.82[a]	1.19	0.05 to 14.02	0.890	62
No	1 (3)	1 (4)					
Medication compliant							
Yes	28 (85)	20 (74)	0.51	0.34	0.14 to 1.88	0.313	60
No	5 (15)	7 (26)					
Hospitalisation							
Yes	1 (3)	2 (5)	2.05	2.54	0.18 to 23.37	0.564	80
No	38 (97)	39 (95)					
Referral to drug and alcohol services							
Yes	8 (27)	8 (27)	1.06	0.63	0.33 to 3.43	0.925	60
No	22 (73)	22 (73)					
Employment							
Yes	3 (10)	1 (4)	0.36[a]	0.43	0.03 to 3.77	0.394	56
No	27 (90)	25 (96)					
Contact with family							
Yes	23 (82)	20 (83)	1.09[a]	0.81	0.25 to 4.68	0.911	52
No	5 (18)	4 (17)					

a Unadjusted for site because of perfect prediction.

Issues with fidelity

The contact forms and progress notes of the CTI managers during the engagement and early linking phase provided little written evidence that there was communication with, and/or visits to, housing providers, family or CMHT at two time points (across different CTI managers) (*Table 11*). This activity may have happened, but was not being recorded adequately.

Overall, intensive outreach was well implemented. However, one CTI manager had very limited contact with clients in the community.

Care plans were well implemented for many, but there was limited evidence of creating care plans for clients at one site. Encouragingly, the rating for this item improved over time.

At one site, monitoring was rated as 1, based on the criterion that contact with the participants at the relevant phase should have been reducing but, because of the complex nature of the participants' needs, contact with the CTI manager remained frequent.

Cases closed was rated low for some CTI managers, as many participants were still on the caseload after the 6-week (standard deviation ± 2 days) cut-off point.

Post-release contact at 6 weeks post release was rated low for one CTI manager because they had either lost contact with the client or the client had refused to continue to engage, before the 6-week point.

TABLE 11 Average fidelity ratings over all time points

Fidelity items	Rating average (range)
Components	
Engagement and early linking	2.87 (1–4)
Intensive outreach	3.12 (1–5)
Care plans	3.5 (1–5)
Focused work	5.00 (5)
Monitoring	3.87 (1–5)
Cases closed	4.00 (1–5)
6-week post-release contact	3.62 (1–5)
Structure	
Caseload size	5.00 (5)
Quality	
Intake assessment	5.00 (5)
Phase planning	4.87 (4–5)
Cases closed	2.87 (1–5)
CTI managers role with client	4.12 (2–5)
Clinical supervision	4.00 (1–5)
Organisational support	4.75 (4–5)
Total fidelity score	4.04 (3–4)

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Closing cases, defined as making sure there was a clear transfer of care meeting with the client and services, was limited for some CTI managers and at different time points. Some CTI managers struggled to access other services' information technology systems to ensure that notes were recorded or they were not part of a specific team and, therefore, again, had no access at certain clinical information technology systems.

When participants were engaged there was evidence that CTI managers were clear that care was ending but, for participants who struggled to engage, evidence of a clear ending was difficult to find.

Overall, clinical supervision was well implemented. However, for one CTI manager at one time point, no clinical supervision had been received and, for another, clinical supervision did not appear to be successful in correcting their use of inconsistent CTI principles, for example limited community contact.

Harms

In total, there were 10 SAEs during the trial, one leading to the death of a participant (see *Figure 1*) and nine resulting in periods of hospitalisation. Two were in the CTI group and seven were in the TAU group. None of the SAEs was deemed to have a causal relationship to participation in the trial.

Chapter 4 Trial participants' and health professionals' views and experiences of critical time intervention: a nested qualitative study

Introduction

Although still relatively uncommon, qualitative studies are increasingly used to complement RCTs of complex health-care interventions.[68] By exploring a range of stakeholder perspectives, qualitative research can provide an effective means of improving our understanding of key aspects of trial interventions and processes, such as the relationship between context and outcomes, thus providing insights that aid implementation. To gain a comprehensive picture of the perceptions and experiences of CTI, including barriers to, and facilitators of, its implementation, a nested qualitative study was conducted to explore trial participant and health professionals' views and experiences of the intervention. The specific objectives of the qualitative study were to investigate:

- trial participants' previous and current experience of prison and through-the-gate support
- trial participants' views on the acceptability and experience of the intervention
- health professionals' experiences/views of CTI, with a particular focus on the barriers to, and facilitators of, implementation.

Although complementary, the two aspects of the study were conducted discretely and are thus reported separately. In the final section of the report, we examine similarities and differences between trial participants' and health professionals' perspectives, and comment on their implications for implementation.

Part 1: trial participants' view and experiences

Methods

Recruitment and sampling

All trial participants were informed about the qualitative study at baseline and asked to give consent to being approached at a later time with a view to participating in this aspect of the study. Potential participants were purposively sampled to ensure maximum sample variation, specifically the inclusion of participants from each arm of the trial, both pre and post release, and across all sites. Consenting participants were first interviewed while still in prison and asked to give process consent to being invited for post-release follow-up interviews. Comprehensive contact details, including discharge addresses, telephone numbers (mobile and landline) and relative and friends' contact details were taken to maximise the likely success of post-release contact.

Data collection

To provide insight into CTI from service users' perspectives and to triangulate both health professionals' views and quantitative findings, participants were interviewed at two time points: (1) within 3 weeks before release and (2) approximately 6–7 weeks post release. This allowed participants' experiences and views to be tracked over time so that, alongside emergent perceptions and experiences, issues that were raised in the first (pre-release) interviews could be revisited 6 weeks post release.

For both (pre- and post-release) interviews, a semistructured interview schedule (see *Appendix 4*) was used to ensure consistency across interviews while allowing participants to raise issues that were important to them, but might not have been considered by the research team (*Table 12*). In addition, those who

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TABLE 12 Key topic area explored during pre- and post-release interviews

Time of interview	Interview schedule items
Pre release	Previous experiences of support during release from prison (if applicable)
	Issues/needs likely to be experienced on this release, for example health, substance misuse, housing, finances, employment and family
	Support from mainstream services intended to meet these issues/needs
	Receipt of treatment
	Views on available post-discharge support
6 weeks post release	Support needed in the community
	Current well-being
	Current support received
	Receipt of treatment
	Views on support put in place
	Contact with the police
	Hospital admissions

received the intervention were asked about frequency of contact with CTI managers, the support put in place by CTI managers, and to comment on what worked well and what did not. All interviews were conducted by GH and CS.

A total of 19 interviews were conducted with 14 participants: eight intervention recipients and six TAU recipients. Five people approached refused to take part in the interviews. Ten participants did not complete their post-release interview. This was either because they were uncontactable ($n = 8$) via the details taken pre release or because they refused to meet the researcher for interview when contacted ($n = 2$).

The majority of interviews ($n = 15$) were digitally recorded and documented using intelligent verbatim transcription. When prison establishments did not allow audio devices to be used, the researcher took brief notes during the interview and then expanded these immediately afterwards to minimise data loss and recall bias. Data were managed using NVivo version 10 (QSR International, Warrington, UK) software for qualitative analysis.

Data analysis

Data were analysed within a qualitative methodological framework. Owing to its systematic, rigorous and transparent approach, framework analysis has gained popularity in policy-related health services research. The framework approach allows for both deductive and inductive coding to be used concurrently, enabling important a priori themes or concepts to be combined with themes that emerge from the data.[69]

The five key stages of this analytical process were as follows:

1. Familiarisation – two researchers (CS and CL) immersed themselves in the raw data by listening to recorded interviews, reading and rereading all interview transcripts and field notes, and making notes or 'analytic memos' on spontaneously arising topics of interest (inductive codes) as well as a priori (deductive) codes. One-quarter of the transcripts ($n = 5$) were also read by DE (qualitative supervisor) to ensure that all key codes were identified and that there were no significant omissions.
2. Identifying a thematic framework – developing the analytical thematic framework was an iterative process. A succession of analyses was conducted resulting in modification of the framework over time, based on resolution of the discrepancies between coders (CS and CL), indexing (coding using the themes and subthemes in the framework) and, subsequently, using the latest version of the framework

to code across all transcripts. The first analytical framework drew on a priori issues based on the interview questions and phases of CTI (*Box 1*).

3. Indexing – this involved systematically applying the codes within the agreed analytical framework to code/recode all transcripts in the data set. CS and CL independently indexed the same five transcripts and met to discuss and agree codes and the coding framework. Coders, CS and CL, also met with the wider research team (JSh, JS, DE and AW) to further refine codes, for example subdividing complex or overlapping codes, ensuring that codes remained grounded in the original data. All data were then indexed by CS and checked for consistency by CL. Any disagreements were resolved by discussion and arriving at a consensus with the wider team.
4. Charting – data were entered into a framework matrix created by CS and CL. The matrix was a spreadsheet containing cells into which summarised data were entered. There were separate rows for each theme and separate columns for each group of interviewee, for example pre/post release and CTI/TAU. It also included participants' direct quotations, providing a visual aid to improving organisation analysis and interpretation by establishing patterns within the data.
5. Mapping and interpretation – the matrix was then used to further refine codes into categories and to develop, define and discriminate concepts (themes and subthemes), ensuring that these encapsulated the full range of participants' views. The data were finally reassigned to these themes producing interpretive concepts that describe and explain the final output of the data set.

Qualitative findings part 1: participants' views and experiences

Qualitative analyses were completed before analysis of the trial data to ensure that, although they could be used to interpret quantitative findings, the risk of introducing bias into the interpretation was minimised. *Table 13* shows the five main themes that emerged from the data; the theme 'support' had three subthemes. In reporting, themes are illustrated with direct quotations. To protect confidentiality and maintain anonymity, quotations are identified only by timing of interview, pre/post release, and by group allocation, that is CTI or TAU.

Theme 1: uncertainty

Conceptually, the 'uncertainty' theme reflected participants' lack of clarity about post-release plans. Their accounts characterised the pre-release period as one during which they experienced increasing levels of stress, tension, worry and anxiety. Uncertainty about release dates is evident from this participant's response to a specific query regarding his release date:

> *. . . about a month. But I'm going to court next week and it could be then. I don't really know.*
>
> *CTI, prison*

BOX 1 Examples of a priori themes included in the analytical framework

- Multiagency working and information sharing.
- Establishing links with community services.
- Accommodation.
- Medication.
- Money and benefits.
- Substance misuse.
- Employment, education and training.
- Family relationships and social networks.
- Physical health.
- Life skills.

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TABLE 13 Themes and subthemes of trial participants' views and experiences

Theme	Subtheme
Uncertainty	
Support	Advocacy
	Lack of continuity
	Reliance on others
Accommodation	
Mental health and medication	
Stigma	

This level of uncertainty made it virtually impossible to implement meaningful discharge planning:

> *I don't know when I'll actually be leaving and so I can't tell people that and that means they can't see where I can go because they [accommodation provider] won't keep somewhere open waiting for me if I'm not actually going to be there.*
>
> *TAU, prison*

Among participants with previous experience of incarceration, the spectre of 'release day' loomed large. Instead of being a cause for celebration, their return to society was associated with anxiety about the likelihood of negative outcomes, as illustrated by this participant's account of a previous release day, about how a lack of appropriate pre-release planning resulted in a 'bad' release day and 'things going off track' from the outset:

> *My brother picked me up and we had to go to bail hostel but we said we'd go for breakfast first. I felt agitated when I left, but my brother wasn't there so if I'm honest I went for a beer, yeah. Just wanted to see what it was like.*
>
> *CTI, prison*

Indeed, some participants found their experiences so stressful that they considered reoffending in order to return to prison:

> *People get nervous when they're going to go. You leave and you want to turn around and walk back in. Or do something to get back in. I don't want to be like that though. You know, prison is tough, and the outside is tough too really. But I want to move on.*
>
> *CTI, prison*

In contrast, CTI appeared to have alleviated some participants' uncertainty and associated anxiety for their upcoming release:

> *Most things were sorted and everyone knew when I was leaving so yeah I guess you could say 'integrating'.*
>
> *CTI, community*

> *I found it easier with the CTI manager. I was getting help that didn't get before and found everything less stressful. It's a big help.*
>
> *CTI, community*

Theme 2: support

This theme also contained three related, but distinct, subthemes ('advocacy', 'lack of continuity' and 'reliance on others'), each of which is explored in subsequent subsections.

In general, participants in the TAU group were more likely to characterise their current experiences as lacking in support. Those with previous experience of prison and expecting their upcoming release spoke candidly about services that, from their perspective, seemed to lack coherence or focus on the needs of prisoners and recently released individuals:

> *As far as I'm concerned I'm not in touch with any services. They come and ask questions then just go off and you don't know who they're speaking to or who you're meant to speak to when you get released. That's how it is, you might get a bit of information when you leave but it all seems to happen between them and not with us.*
>
> *TAU, prison*

> *No one helps with that [benefits] it's down to you. You get the forms when you go and you sort that out when you can. Well like I've been saying, it's rubbish isn't it. There isn't really any support. You just have to sort things yourself and try and work out whether people know you're coming out or where you need to go. And it's always like that.*
>
> *TAU, prison*

This contrasted sharply with participants in the intervention arm. CTI recipients predominantly reported receiving positive support from their CTI manager. Significantly, this support was available at various stages, including pre release:

> *I've been a bit stressed actually, and that support is good. With [CTI manager] I feel like I get seen more. Which I think I need before I go. Just to make sure.*
>
> *CTI, prison*

On the day of release:

> *[CTI manager] was there waiting outside the gate because I'd told her when I would be released. And she'd checked where we need to go so we could get the train and then the bus over to this hostel together. That was something I was worried about because I get so anxious about being on buses, being with other people in public. I think it would have been too overwhelming but [CTI manager] was there saying it's OK.*
>
> *CTI, community*

And in the community:

> *I would have struggled to sort everything and go to appointments on my own as I'd forget.*
>
> *CTI, community*

Critical time intervention managers were also credited with trying to help people reintegrate into their communities:

> *I've been saying I want to get back into doing good activities and [CTI manager] gave me the details of some football teams for people who have problems like me. Like mental health problems or they've been in prison. So I want to start doing that. And he showed me how I can join a gym too.*
>
> *CTI, community*

According to this participant, immediate and ongoing support from the CTI manager both reduced the risk of reoffending and provided a realistic hope of a future outside prison:

> *Well just to say that this thing has been pretty good for me and it definitely has helped. [CTI manager] has helped me a lot and I reckon now I've been out this long I can keep it up. You know don't you that I was in 8 years because of that one thing which was a long time and now I'm looking forward to staying out.*
>
> *CTI, community*

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Advocacy

An emergent subtheme was the notion of advocacy. Participants reported that CTI managers, acting as advocates on their behalf, had been instrumental in improving access to services:

> *Yeah he's [CTI manager] talked to them and I think he's explained the situation that I keep getting told I don't need help. And he said he'd refer me like normal but then he'd be able to come with me. And that's going to make a difference isn't it because it isn't just a con coming to the office saying they need help, you've got someone who knows how things work saying this guy needs med[ication]s and needs to be seen that then they're going to listen. You know what it's like, when you get a probation officer they force the council to give you a hostel and the council knows they can't say no to probation like they can say no to you.*
>
> *CTI, prison*

> *She arranged with probation to come here. She arranged when I could go to the community team. I think that kind of stuff, talking to people and making sure things get done.*
>
> *CTI, community*

Participants felt that advocacy was essential, as services rarely understood their needs:

> *But you and them don't get it. You haven't been in my position but you all think you know what I need. So it's that too they won't send you for the help you actually need.*
>
> *TAU, prison*

Lack of continuity

Participants in the TAU group frequently reported a lack of continuity both between and within services. This was most evident at the point of release:

> *. . . sometimes I don't think they've realised you've gone. If you go from court not from prison sometimes you talk to the treatment team and no one has told them you're out. Even if you want them to contact you they won't know to.*
>
> *TAU, prison*

For this participant, who had been imprisoned several times, lack of continuity of care was directly correlated with reoffending and reimprisonment:

> *I get told I need this service or that service, then I go there and they change their mind. They're always promising this and that and then it never happens does it. And that's what always happens. I've been released so many times and this or that was meant to happen and it never does and I just end up back in here.*
>
> *TAU, prison*

The accounts of those receiving CTI suggested that the level of support and continuity of care compared favourably with previous incarcerations:

> *I think I've had a lot more help. I'm not sure whether that's to do with your project but I think it might be. Things have gone a lot smoother than they ever have before. Like having that hostel and I had a CMHT worker visit me within a couple of weeks and make sure things were going fine, and seeing a doctor too.*
>
> *CTI, community*

Things have been more planned. Last time, I had that thing where I had loads of probation officers. My community team were pretty bad and they just gave me drugs, that was it. But this time it was more planned. I actually had one person who I needed to see and they were better at seeing me. [CTI manager] has seen me there [prison], seen me here [community], she can explain a lot more to them. She knows me better. And I don't want to have to keep meeting new people but she was helpful being there.

CTI, community

Reliance on others (family relationships)

Participants reported receiving mostly practical compared with emotional support from family members. This was most apparent in relation to providing accommodation. However, this was often the source of tension as the individual transitioned back into their families and wider community:

My mum doesn't like me drinking and we do argue about that and it's none of her business. But I guess I do live there.

CTI, community

There have been some problems there and I have spent a few nights out as well. But that was in the first weeks and I've settled down a bit and got used to being with them again now so that hasn't happened recently.

TAU, community

Participants in both arms of the trial reported reliance on their families for financial support. This was frequently needed because of delays in receiving benefits, which left individuals short of funds:

Yeah I'll get some benefits but it isn't much. And this is bad but I'll have to rely on my mum won't I? Because it takes a bit for benefits to come in. But it isn't like I have rent or something, that's when it's more tough. Like I have friends who have flats or whatever and doing rent on benefits that's what's tough.

CTI, prison

Some participants found financial reliance on others very difficult. They reported that this was a source of embarrassment as well as signalling their lack of independence:

Yea that's a problem. I've only just got my benefits back. My family can give me money, which I don't like to do because that's their money. I should be living by myself and I did used to. But they can help, they give me money for travel otherwise I can't get nowhere.

CTI, community

Well, benefits obviously, but they don't come in for about 5 or 6 week, I don't think. That's what I got told anyway. So I expect my family will give me a bit here and there. Yeah well it would be a problem. What am I going to do if I've got no money? I don't thieve anymore, I stopped that years ago. And you know, it's a bit embarrassing asking my little brother for money, puts on them a lot.

CTI, community

Financial dependence also served to reinforce a sense of 'otherness' and deviance in comparison with siblings who had not been to prison:

My brothers come round and they have jobs and the like and I'm the one who is staying with my mum. I'm the odd one out, the black sheep, and I'm the oldest too, I'll just tell you that. They've all got houses, all got jobs, and I'm in prison.

CTI, community

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Although families were cited as sources of practical and financial help and support, participants reported that they were ill equipped in terms of providing support with mental health problems:

> *My mum and dad do most things but maybe someone who knows more about the voices and mental health so they could talk to me and make sure things are going ok . . . to be honest, this whole mental thing is affecting that [family] because they're getting stressed with it as well and it's not good for our relationship.*
>
> *TAU, community*

Theme 3: accommodation

Accommodation (in particular uncertainty about accommodation on/post release) was an issue not only in its own right, but also one that impacted on other areas, as exemplified in earlier reports about support and reliance on others. Participants in both arms of the trial voiced concerns about both the availability and suitability of accommodation:

> *They [hostels] aren't even that much better than prison. You can go out during the day I guess, but that'd happen on day release anyway. But the rooms aren't good and you know the people here. They take drugs, they drink. Which I do too. But we shouldn't be all together should we. Load of mad men all together. It's not a good idea.*
>
> *CTI, community*

This was especially the case when accommodation had to be shared with others with similar problems, chiefly mental health and substance misuse:

> *I don't like being around people with symptoms because it makes me worse. Like in the hostel, if you have someone who's got symptoms it makes you worse and I don't want to be around that.*
>
> *CTI, prison*

Participants felt that securing accommodation was a vital part of the resettlement process as lack of suitable accommodation was regarded as a key aspect of being able to access services:

> *Well because you leave and you need somewhere to sleep that first night out don't you. And then that gives you a base to plan everything. You can't be homeless and getting benefits and getting letters from people and your probation knowing how to see you. If you haven't got that then you've got no hope.*
>
> *TAU, prison*

In addition, experience had taught them that a lack of accommodation increased their risk of reoffending and incarceration:

> *I've done this so many times and if you don't have a hostel then that's it you'll be back in a week. That's why I keep coming back, you don't get somewhere to live you don't have any chance.*
>
> *TAU, prison*

However, some participants reported that living in hostels had increased their access to services, some of which were available on site:

> *That's the reason they put me here because the CMHT workers come here and they see everyone who needs to be seen rather than you having to go to them. It's better. It means I don't have to be going to their building and waiting around I can just come down from my room and see them.*
>
> *CTI, community*

Theme 4: mental health and medication

All participants talked about their mental health problems and symptoms. In particular, they talked about how poor mental health disrupted function and prevented them from working:

> *Because of my mental health, I don't have to work. That is fair I think. I mean you can't be working and thinking you're hearing voices or something. That doesn't work does it?*
>
> *CTI, community*

> *I can only really work when things aren't too bad. There are days when I can't get out of the house so then I can't be in a job where they expect me in at the same time every day.*
>
> *TAU, prison*

Participants in both intervention and control groups talked about medication in relation to their mental health. Some individuals reflected on the positive impact of medication on their lives:

> *Well just medication to keep me on the level. Keep me grounded like. And that's all really. I can cope pretty well with that.*
>
> *CTI, community*

Others felt that, without high levels of professional support, they would not be able to continue to take medication on a regular basis. Reinstitutionalisation, to either hospital or prison, appeared inevitable:

> *It's going to start going downhill because you either don't take your medication or when it runs out you stop and then there's no going back. For me when that happens I'll end up in prison or hospital.*
>
> *TAU, prison*

A more common theme in participants' narratives was a sense of coercion in relation to medication:

> *They always think they know best. They'll tell you 'you need this or that drug' and everything you think is wrong but I can sort myself out.*
>
> *TAU, prison*

> *Tablets for what they say is schizophrenia but I don't always take them.*
>
> *TAU, prison*

Participants also protested about the unavailability of other treatment options, in particular a lack of psychological therapies:

> *They push me to keep taking these drugs and saying I can't have this or that therapy or services. I don't want that, drugs and psychiatrists, I want them to get me into counselling. I need counselling, that's what would help me. Because I've been through so much, I don't just need the drugs, I need someone to sit and listen to me and help me through this.*
>
> *TAU, prison*

Participants seemed to suggest that CTI was providing them with more support around mental health than previously:

> *All it was, yeah, was an injection. I'd go there, they'd do the injection then I'd go. No psychiatrist or no talking or anything. This time they reckon I'll have a CPA in first 2 weeks so that'll be better. I'm hoping everything goes right with the CPA. I needed support. For mental health mainly. And that's been there this time. I feel very positive about the future now. It might not seem big to you or anyone else but [CTI manager] she's been really helpful.*
>
> *CTI, community*

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Theme 5: stigma

Participants' accounts highlighted their feelings that the stigma of being an (ex)-offender permeated every aspect of their lives. They reported that stigma negatively impacted quality of life, hindered their job prospects and increased the risk of reincarceration:

> *There's no chance of anyone employing me, is there? Why would they [employ me]? They'd find out I've been in prison and that's it. Not even a chance.*
>
> *TAU, prison*

> *Almost 10 years in prison, I don't have any chance of a job, do I?*
>
> *CTI, community*

> *A job isn't an option with me being like I am and the history I've got.*
>
> *TAU, prison*

Participants reported that the stigma associated with being an offender not only impeded job prospects, it also had serious implications for access to their children:

> *I'm pretty gutted about this but I don't know whether I can see my lad. That gets to me and I'm sad about that but maybe I just have to accept it. I don't mean not think about him, I don't want you to think that. But that I won't be able to see him like I hoped. I'd have to go to court but I don't think I can do that. I don't know how I'd do that. And they'd see me wouldn't they? Ex con[vict]. They aren't going to like me are they?*
>
> *CTI, community*

Participants also reported self-imposed stigma in relation to mental illness, often keeping them from disclosing difficulties and from seeking mental health treatment in prison. This participant's account typified the views of others. When asked about now receiving mental health support in prison, he replied:

> *Yeah, first time, in here, I always just kept it quiet, the voices and that, and self-medicated, because my idea of mental health and shrinks was that they'd put you in a straitjacket in a hospital and that would be it.*
>
> *CTI, prison*

It is noteworthy that the support this participant had been receiving from the CTI manager appeared to be changing his views of mental health treatment:

> *Yeah, they're alright yeah. That guy who's left seemed like he knew what he was doing, and that tall guy, dresses smart, he's OK.*
>
> *CTI, prison*

Summary

There were commonalities and differences between participants in the CTI and TAU arms of the study. Commonalities were most apparent in participants' reports of their reliance on others for practical help, particularly in terms of accommodation and financial support. The former was regarded as a potential source of tension within families, which had the potential to trigger reoffending. Financial reliance on families reinforced self-reported perceptions of being seen as 'other' and deviant. Embarrassment at needing financial help, particularly when received from siblings, increased the risk of reoffending.
Both CTI and TAU participants stated that a lack of suitable accommodation had serious implications for reoffending. Similarly, not having a permanent address restricted access to benefits and services. Sharing accommodation with other (ex)-offenders and people with mental health and substance misuse problems increased participants' vulnerability to resuming involvement with drugs and alcohol as well as putting their mental health at risk more generally. In both cases, participants indicated that this increased the risk

of reoffending. Both groups of participants reported feeling coerced into taking psychotropic medication and expressed disappointment that there was a lack of access to psychological interventions. This, together with stigma, caused some participants not to disclose their mental health problems to professionals.

There were, however, differences between groups. Most notably, members of the CTI group who had experienced previous incarcerations reported less uncertainty and a sense that on this release care would be more integrated; this was linked to reduction in stress, anxiety and potential for reoffending. The CTI group also reported better continuity of care and improved access to services attributed, at least in part, to CTI managers advocating on their behalf. From these participants' perspectives, there was a direct correlation between improved discharge planning, increased levels of support, greater continuity of care provided by CTI managers and a reduction in the likelihood of reoffending.

Part 2: health and care professionals' views and experiences

Methods

Recruitment and sampling

To complement data from trial participants, three of the five CTI managers were recruited to participate in interviews. In addition, other health and care professionals, not delivering CTI but involved in supporting participants either in prison or in the community, were invited to take part. Although 12 were approached and agreed to participate in interviews, ultimately only five interviews were undertaken with professionals. The remainder were either unable to commit to a time for interview because of work pressures ($n = 5$) or did not respond when followed up ($n = 2$).

Data collection and analysis

Professionals were interviewed face to face at their place at work using a semistructured interview schedule (see *Appendix 5*), administered by GH and CS. This approach enabled the interviewer to focus on key areas of interest, specifically addressing the study aims and objectives. *Table 14* provides an overview of the main topics covered by the interview schedule.

Adopting the approach described above regarding patient participants, interviews were digitally recorded, transcribed intelligent verbatim and analysed using framework analysis. The coding frame incorporating both a priori and emerging themes was developed and all transcripts.

Qualitative findings part 2: health and justice professionals' views and experiences on critical time intervention

Two main and eight subthemes emerged from the data (*Table 15*). These will be presented using health and justice professionals' verbatim quotations and, as with trial participants, quotations are assigned only to professional roles to preserve anonymity and confidentiality.

TABLE 14 Topics covered in the interviews with professionals

Type of interview	Topic guide
Professionals	Discharge planning (pro/cons)
	Multiagency working
	CTI (pros/cons)

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TABLE 15 Themes and subthemes of health and care professionals' views and experiences

Theme	Subtheme
Liaison	Collaborative care
	Information sharing
	Gate keeping
	Resources
Transition	Relationships/support
	Accommodation
	Temptation/association
	Endings

Theme 1: liaison

Health and justice professionals' interviews highlighted the importance of liaison between individuals and agencies if interdisciplinary approaches were to prove effective. Within this overarching theme, there were four subthemes: collaborative care, information sharing, gate keeping and resource.

Collaborative care

Collaborative care is a key component of delivering person-centred care. Depending on the complexity of needs of the particular client, successful release planning might involve several agencies and services. However, the level of planning and interagency collaboration can vary greatly depending on geographical location:

> *There are 30 plus London boroughs I think? 32 or 36 something like that and there are prisoners from each of them, so therefore that means that we have to have in excess of 30 working relationships with different boroughs and with the various teams inside them, so that can be a bit challenging.*
>
> *Consultant forensic psychiatrist*

Although some services and agencies demonstrate high levels of collaboration, this was by no means universal, even when services espoused an interagency/multidisciplinary approach:

> *They'll just get a letter to the GP and CMHT. There won't be any chasing and whether it's followed up, you don't know.*
>
> *CTI manager prison mental health nurse*

> *Everything mental health related usually goes through the SPA first though. This is the gateway between primary and secondary care services. This doesn't cover some specialist services though and generally includes CMHTs, the crisis team, home intensive treatment team, adult psychology services and links to acute psychiatric wards.*
>
> *CTI manager (mental health nurse)*

The collaborative care process also requires health and criminal justice organisations to work together, which is not always successfully achieved. This quotation illustrates health professionals' frustration about their inability to deliver collaborative care when other agencies fail to consider the need for effective planning and collaboration to ensure that services are in place post release:

> *One of the difficulties we sometimes encounter is the prison service does not do 'joined-up thinking' and they are not involved really in the planning of the aftercare. Very often they will, for arbitrary reasons, transfer a prisoner to another prison with no notice whatsoever and that makes it very difficult then to follow up and ensure that services are following them and planning for their release.*
>
> *Prison liaison specialist*

Professionals' perceptions of disjointed pre-release planning, resulting from little or no communication and interdisciplinary competition instead of teamwork, were reflected in their concerns about the potential for individuals to fall through the gaps between services:

> *There just tends to be a real lack of engagement. And you never, you know, you're always slightly anxious whether actually they are going to pick that person up and are they going to see them. And, you know, and will they assertively try to see them rather than offer them an opt-in letter, you know.*
>
> *Lead prison mental health nurse*

> *I think the problem is endemic now with this notion of everybody has to compete where really it is not in anybody's interest, it is all about the bottom line, it is not about the quality of care, you can tick boxes, you can go through any exercise and people look for ways to fake the results basically and that is not helping anybody at all. I think that they have got to get rid of this internal competition.*
>
> *Prison liaison specialist*

Despite these challenges, interviewees remained committed to working within the principles of collaborative care, acknowledging that the approach is essential for ensuring continuity of care between prison and community. However, they cited lack of resources as a major barrier to doing so:

> *[I]f we had the capacity then I think prison staff could actually go and visit community teams individually and present to them and try and sort of network and engage with them more and offer them, sort of, slots to come into the prison to spend time with the outreach team. I think that would work really well.*
>
> *Lead prison mental health nurse*

Information sharing

A lack of information sharing was identified as a major contributor to gaps in service between prison and community, as highlighted by these accounts of the impact on the referral process in general and medication in particular:

> *If you get that clear information with reasoning and detail on why this referral is being made that helps. But often it's just a pro forma letter without very much detail and then you're working out from an assessment whether this person is for the service and if they aren't giving a full account you have to chase other people for more complete records.*
>
> *Community psychiatric nurse*

> *Sometimes medication information needs to be shared better between services (e.g. how much medication someone has been released with). Overmedication can be dangerous.*
>
> *CTI manager (mental health nurse)*

Lack of information sharing was sometimes because patients exercised their rights to withhold permission for information to be shared with other agencies:

> *[V]ery often a prisoner will not wish mental health services to communicate with their legal team and very often they forbid their legal team from talking to us which compromises their own future and safety.*
>
> *Prison liaison specialist*

However, there was also evidence of information not being shared because of professionals' fear of breaching information governance rules, specifically the Data Protection Act 1998:[66]

> *They are highly fearful that they will pass on information that they shouldn't, that they will do it by a means that is insecure.*
>
> *Prison liaison specialist*

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As well as affecting care quality and patient safety, a lack of information sharing was perceived as having implications for public safety. This was particularly the case if individuals identified as being at high risk were falling through the gap between prison and community services:

> *We had a guy that was very high risk, he was, sort of, level 2 MAPPA [multiagency public protection arrangements], he'd served a long sentence, and there was difficulties pre release in terms of the community team saying they hadn't received the referral and then sending it again and then they did receive it and then we assumed that they'd picked him up but then it looked like they hadn't picked him up and, you know, who was taking responsibility?*
>
> *Lead prison mental health nurse*

Note that multiagency public protection arrangements (MAPPAs) are in place to ensure the successful management of violent and sexual offenders. MAPPA offenders are managed at one of three levels according to the extent of agency involvement needed and the number of different agencies involved. The great majority are managed at level 1 (ordinary agency management). This involves the sharing of information but does not require multiagency meetings. The others are managed at level 2 if an active multiagency approach is required (multiagency public protection meetings) and at level 3 if senior representatives of the relevant agencies with the authority to commit resources are also needed.

This case illustrated an important feature of CTI, namely the value of there being an individual well acquainted with all aspects of the client's care at the centre of the collaborative care process. In this instance, CTI was able to 'plug the gap', thereby helping avert potentially serious consequences:

> *This was a CTI guy and it did get resolved. Otherwise, we wouldn't have known anything about it, we certainly wouldn't have been able to follow him up and it would have been very unclear who was going to follow him up and I think potentially things could have gone really horribly wrong there.*
>
> *Lead prison mental health nurse*

Gate keeping

Echoing trial participants' views, staff spoke about difficulties of getting patients accepted to services as thresholds of clinical need/urgency were being raised and entry criteria becoming increasingly strict:

> *CMHTs are very selective and it's difficult to get followed up.*
>
> *CTI manager prison mental health nurse*

> *If someone has been on the caseload in the past, we might accept them before they're released because we can be fairly sure they meet our criteria, but if we have no knowledge of someone or we do but they've been discharged in the past then we'd need to arrange an assessment on release where we'd consider the notes from the prison team but also be making judgements about do they need to be accepted or can this be managed elsewhere.*
>
> *Community psychiatric nurse*

Somewhat counterintuitively, participants reported that there was no culture of gate keeping per se within services; rather the phenomenon was often because of individual practice:

> *I believe that by and large it is individuals rather that agencies that are perhaps more responsible for the gate keeping. It depends on sometimes the managers, of course, they tend to take the view that they are protecting a beleaguered staff which I find is not the best way of dealing with things.*
>
> *Prison liaison specialist*

Whether at individual or organisational level, the practice of gate keeping was perceived to be commonplace and firmly entrenched. This has implications for the implementation of CTI. The effectiveness of a CM model

based on liaison with, and referral to, services will be reduced if, as a means of managing resources, thresholds continue to rise and entry criteria become more difficult to meet:

> *I think that there are certain cultures of gate keeping out there that will not be budged or not impressed by it [CTI] and not want to actually fall in with it.*
>
> *Prison liaison specialist*

Resources

Variations in through-the-gate services were perceived to be a result of resource issues. Some staff reported feeling increasingly overstretched and under pressure. In these circumstances, individuals described being unable to deliver the quality of care and support that they would like to offer:

> *I don't mean to sound like we're passing the buck or not wanting to engage, but everyone is under pressure, none of us have all the time to do what we'd ideally do or what might be strictly best practice, and I'm sure the prison teams or whoever else will tell you this too. There just isn't the time to get all this done.*
>
> *Community psychiatric nurse*

> *Well, the in-reach team don't have that much time for discharge planning really, because there's 80 people on the caseload so they need seeing and there's always people coming in who you have to treat as higher importance because you don't know what you're dealing with.*
>
> *CTI manager prison mental health nurse*

Service restrictions resulting from limited resources appeared to disproportionately affect availability of community services, especially in relation to the release planning process:

> *Certainly much more engagement from community teams prior to release. You very rarely find any community nurse, I understand that there's pressure on them in terms of their time and they have large caseloads, but they very rarely come into visit prisoners whilst they're with us and very rarely turn up as part of the CPA. And there just tends to be a real lack of engagement. And you never, you know, you're always slightly anxious whether actually they are going to pick that person up and are they going to see them. And, you know, and will they assertively try to see them rather than offer them an opt-in letter, you know.*
>
> *Lead prison mental health nurse*

In this context, although perceiving CTI as having a potentially pivotal role in delivery of collaborative care, participants questioned whether or not the required resources would be made available:

> *Well, the major question is who's going to pay for it isn't it? When budgets are being cut I'm not sure who's going to have the money to fund that and keep it going. But if someone is willing to then great, some extra help is something we'd all be open to.*
>
> *Community psychiatric nurse*

Theme 2: transition

Importance of relationships/support

Imprisonment is difficult for anyone; for those with mental health problems, it can be especially challenging and transition back to the community particularly difficult. Professionals expressed the view that having someone to support the client through this transition can mean the difference between success and failure:

> *A familiar face is massive. Seeing [the] same person really reduces anxiety. They feel supported and like they're not going out on their own. Expecting clients to find their own way and meet all the new people can be a big ask, especially when they have a lot going on.*
>
> *CTI manager (mental health nurse)*

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However, levels of release planning and resettlement support were reported to vary greatly, with some individuals having no support at all:

> *The people it works worst for I can say is people in prison who have no input and then they come out and no one knows who they are and what their situation is. They can be quite psychotic and have been for some time and no one has picked that up. I do wonder how in the prison atmosphere where you're being monitored, how that is missed, but it does happen.*
>
> *Community psychiatric nurse*

> *If somebody is lucky enough to have a diligent care co-ordinator that will follow them in [to prison] then all well and good, things go swimmingly. When it doesn't or if it is a difficult and perhaps unpleasant individual they may have a bumpier ride and they will get no service really because they will find themselves with nobody willing to particularly help them, or if you get someone who can draw a marvellous care plan but it is largely a work of fiction then they are worse than useless, they are dangerous in fact.*
>
> *Prison liaison specialist*

In the absence of effective through-the-gate care, it can fall to families, specifically parents, to provide the transitional support required. However, some individuals have never had good family relationships. Relationships with others might have deteriorated because of offending and imprisonment, resulting in:

> *. . . fractured family units because of that period of exclusion and being away from either the partners or from parents.*
>
> *Community psychiatric nurse*

Even where positive family relations exist, these may become strained in the early 'post-honeymoon' phase of resettlement:

> *One thing I might say is whether there's maybe a honeymoon period after release and it's after 6 weeks that the major problems start. That's just a hunch but their families might be glad to have them back, maybe they can handle drugs and alcohol for a short while before that causes an issue too.*
>
> *Community psychiatric nurse*

Critical time intervention is aimed at bridging this service gap via liaison with appropriate services and supporting the service user through the initial engagement phase. This seamless plugging into services should also remove some of the pressure from families. Professionals involved in the release-planning process felt that CTI achieved this aim:

> *Well I mean it [CTI] sounds ideal in many ways because you have a tangible, physical link, a person you know before and who follows you out.*
>
> *Prison liaison specialist*

> *It's exactly the kind of thing that's going to fill that gap between what the prison teams do and what we do. And it's targeting that first period where we might struggle to pick people up.*
>
> *Community psychiatric nurse*

Critical time intervention managers also saw the real benefits of the intervention:

> *CTI is a good extension of normal services and can help people more seamlessly into the community.*
>
> *CTI manager (mental health nurse)*

Well, release is a big thing for inmates. I think a lot of the time they are really lost. They don't know what's happening, and they don't know how to go about it. CTI is really about helping them in that period.

CTI manager prison mental health nurse

Accommodation

Endorsing trial participants' views, health professionals stated that securing suitable accommodation was arguably the number one priority for many released prisoners because it establishes a stable base from which to address other resettlement concerns:

If they're going to be homeless then that's a real problem. Services always insist on an address.

CTI manager prison mental health nurse

Professionals also linked a lack of accommodation with reoffending:

If someone is more or less sofa surfing then it's a matter of time before they're going to commit an offence.

Probation officer

Lack of accommodation was also linked to exacerbating mental health problems:

If you go out [of prison] to homelessness then how could you possibly look after your mental health? People need some form of stability there to enable mental health needs to be met.

Consultant forensic psychiatrist

Mental health isn't always the priority for released prisoners, housing and money is. If these aren't addressed properly then mental health states can be made worse.

CTI manager (mental health nurse)

In this context, interviewees reported that the process for housing applications was seriously flawed:

I think housing is the biggest problem and really that system works really badly. When someone's released they need somewhere to sleep that same day. We've sat at the council with people until 8 p.m. just waiting to see if someone has a hostel that night or not. Where we're working homelessness is a massive problem so these places can be quite full and I think people who've just come out of prison probably aren't a priority. So that's an issue, I think they should be processing applications before release and not just say when someone comes out they haven't got any places.

CTI manager prison mental health nurse

In common with trial participants' views and experiences, professionals also reported the need to advocate on behalf of clients for them to gain access to services:

Councils dismiss these people very quickly. If I go with them then I'll say to them OK go to talk to the person, but I have to step in and explain the situation and then councils will do something. I think prisoners on their own will find it quite tricky and won't get very far.

CTI manager prison mental health nurse

Finding suitable accommodation can also be hindered by certain licence restrictions:

If you're working with some of the people with serious group offending, which is pretty common now, you can't often go back to families or can't often go back to local areas because they've got exclusions. Same goes for those who've sexually offended. They might have restrictions.

Probation officer

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There were quite a lot of hostels contacted but there were conditions that he couldn't live so close to places where children were.

CTI manager prison mental health nurse

As well as licence restrictions, a client's reputation with housing services may be a major barrier to obtaining accommodation:

It is difficult unless they have some kind of working relationship with housing or if the prisoner hasn't blotted their ticket basically.

Prison liaison specialist

He'd lived in so many hostels, and caused trouble and so he's banned from a lot of them.

CTI manager prison mental health nurse

Temptation/associations

The initial period following release can be very important for people with substance misuse issues. Incarceration might have removed/reduced access to illegal substances and social networks associated with their drug or alcohol problems, but this access can be reinstated on release. Coupled with the stress of community reintegration, (ex)-offenders can quickly lose any progress made in prison:

. . . 6 weeks basically after coming out. I mean those can be 6 very busy weeks and very frustrating weeks and that's when people become tempted to drink or drugs and they can start sliding back into bad old ways . . . once under the influence of their peers and the drugs and the alcohol how quickly things spiral out of control.

Prison liaison specialist

The risk of 'sliding back into old ways' was exacerbated by being allocated unsuitable accommodation:

For example, someone who's got substance misuse issues and mental health issues placed in the hostel with other users and things like that and it can be setting them up to fail quite a lot.

Probation officer

They can take quite a slide down the social ladder in many ways and be at a disadvantage and in with other people that have exactly the same problems regarding drugs, alcohol etc. it [hostels] tends to be a ghetto basically, a dumping ground for people with mental health and alcohol problems.

Prison liaison specialist

Coupled with unsuitable accommodation, a lack of appropriate daytime activities was also seen as contributing to the potential return to old habits:

I think also if they have something productive it helps, they have a path to follow. Otherwise I think they end up just hanging around, they get bored. If they go to a hostel that's full of drugs then they'll fall into that trap.

CTI manager prison mental health nurse

Endings

Professionals recognised that the ending of any episode of care or therapeutic engagement needs to be prepared for and properly managed, and the same applies to CTI:

Yeah, I mean I think potentially for both the CTI manager and for the patients as well I think actually that disengagement process can be difficult. If you've worked with them for a, sort of, significant period of time, you might have been their care co-ordinator in prison or known them for a number of years and yeah, I think that disengagement can potentially be difficult.

Lead prison mental health nurse

Some staff felt there was potential to create dependence on CTI:

> *Maybe with patients, because of their character, they can actually become quite dependent. Every little thing they'll be calling and in contact with you and maybe then when they get to 6 weeks they've got used to that and can't do things for themselves.*
>
> *CTI manager prison mental health nurse*

Others felt that, if managed appropriately, disengagement need not be problematic:

> *If you were clear about the limits of what you're doing I'm not sure that would be a big issue. Our clients are usually too high intensity for this but, if you think about IAPT [Improving Access to Psychological Therapies], it's clear that that isn't an open-ended service so if you're clear then I think that would be OK.*
>
> *Community psychiatric nurse*

A member of the prison-based staff suggested that a step down in intensity might be more appropriate than a 6-week cut-off point:

> *In terms of the 6-week point, I mean obviously we'd like it to go on forever but I think being realistic I think 6 weeks is probably sufficient. It's just . . . there would need to be something in place for the next point. I mean, it may well be that you have a person who is now quite capable of going to every appointment and doing things for themselves and a significant improvement in mental health but you could also have that person at 6 weeks who is nowhere near that.*
>
> *Probation officer*

This view point was endorsed by one of the CTI managers who felt that clarity and flexibility in terms of endings should reflect individual's needs and varying contexts:

> *The CTI period should be flexible as people have different circumstances. Needs to be long enough but if too long then this can also create some dependence in the service user. You need to be really clear and open about disengagement.*
>
> *CTI manager (mental health nurse)*

Summary

Perhaps unsurprisingly, the emergent themes from professionals' narratives indicated a preoccupation with liaison, specifically the extent to which collaborative care was being realised in everyday practice. Participants reported barriers to effective planning and delivery of services as linked to increasingly limited resources. This had led to the raising of thresholds for gaining access to services and more robust gate-keeping on the part of individuals, rather than necessarily being indicative of service culture.

Perceptions and experiences of CTI were positive. However, interviewees raised concerns about the availability of funding to roll out services, highlighting the considerable variation not only across the country, but also within localities such as London. Given that best practice suggests that service users should receive individualised care that is tailored to meet their discrete needs, participants wondered whether or not this was possible in the context of a manualised 'Improving Access to Psychological Therapies-like' approach to service, characterised by the delivery of a predetermined number of sessions, compared with a needs-led model, incorporating time to build and appropriately disengage from therapeutic relationships with CTI managers.

Supportive relationships, such as those provided by CTI managers alongside family and friends, were regarded as vital for effective transition from prison to the community. However, participants reported that these could not make up for shortcomings in more practical and essential aspects of care, specifically with regard to accommodation. In common with service users, professionals frequently complained about the lack of suitable accommodation, highlighting the increased risk of reoffending and exacerbation of mental illness within this vulnerable group caused by unsuitable housing.

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Chapter 5 The case manager manual

To support the CTI case manager in the delivery of the intervention, the manual developed as part of the original CTI study[46] was revised to reflect the adaptation of the intervention for use with the prison population included in this trial. A copy of the manual is included in *Appendix 1*.

The manual includes an introduction to the development and aims of the original CTI study; how the original model has been adapted, that is from a three- to four-stage intervention for mentally ill prisoners (see previous chapters); and the theoretical underpinning to the method(s) for interacting with service users and for developing good working relationships. The manual also presents some scenarios to stimulate reflection on situations the CTI case manager might encounter while interacting with the service user and practical advice in the form of 'Notes' (or tips) for consideration when planning or reviewing the mental health and social care that the service user needs.

As part of the evaluation of the trial, the mental health professionals that had acted as CTI managers were surveyed informally on how helpful the manual had been in guiding the implementation of the intervention day to day. These comments were fed into an independent review of the manual undertaken by a small working group comprised of research team members, colleagues from prison in-reach teams not involved directly with the trial and experts by experience.

The working group met on three occasions, with meetings focusing on whether or not the contents of the manual were clear, relevant and, importantly, covered the range of issues related to community reintegration that the experts by experience had considered most important at the time prisoners had faced release and resettlement. Similarly, experienced prison in-reach colleagues on the working group were able to comment on whether or not the manual provided sufficient professional guidance to enable them to assume the case manager role. The group also agreed what kind of practical information for embedding the intervention into a service might be helpful and how to monitor that the intervention was being implemented as intended.

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Chapter 6 Health economics evaluation

Introduction

The health economic component of the Critical time Intervention for Severely mentally ill Prisoners (CrISP) study aimed to measure and compare service use and costs between the two study groups. Further aims were to assess the link between costs and outcomes, and to identify predictors of cost over time.

Methods

The approach taken in the economic evaluation was similar to previous studies. The objective was to measure service use over time (pre and post intervention) using established methods.[63] Service use was measured for the 4 weeks before release and then in the periods up to 6 weeks and 6 and 12 months post release. Data were collected by researchers from case notes and records rather than directly from participants.

The first stage in the process was to clean the data and to identify any inconsistencies. This was followed by regrouping some of the service categories according to levels of use. Six categories of service use were collected: psychiatrist, psychologist, occupational therapist, mental health nurse, care co-ordinator and other. All other contacts were categorised into the following categories: other nurse, outpatient contacts, GP and social care. 'Other nurse' included contacts such as general, physical and mental health nurses, substance misuse workers and psychological therapy sessions. Outpatient included those other contacts that were based in hospitals (including the accident and emergency department). GP contacts were contacts in a primary care setting. Social care included social workers, housing officers, community support workers, counsellors and probation officers; it is acknowledged that the last two services are not strictly social care but the use of these was relatively low.

The second stage was to combine the service use data with appropriate unit cost information. These data were mainly derived from the annual compendium published by the Personal Social Services Research Unit at the University of Kent,[70] with others coming from *NHS Reference Costs 2012–2013*.[71] Unit costs were multiplied by the number of contacts to calculate a cost per person. These total costs were averaged across all people for the different follow-up periods.

The unit cost of the intervention was based on the wages of the CTI managers for the time that they spent performing the intervention, plus a percentage increase to account for on costs and capital costs. This was then divided by the number of contacts a person in the CTI arm would typically have with their CTI manager ($n = 41$), identified earlier in the report. The assumption is that the entire CTI group received their full intended care and that, on average, there were 41 contacts per patient in the intervention group. The cost per contact was £65.23 and is applied at a flat rate for everyone in the intervention group based on when their contacts typically took place; therefore, information about intervention contacts was not extracted directly from case notes. This is because the case notes did not hold an accurate account of the number and length of CTI contacts participants were having, which is an important limitation of the data.

Results are presented separately for the different follow-up periods. Given that each covers a different length of time, the comparability of the data between time periods is problematic. In the tables we report the number and percentage of participants who had a particular service contact, the mean number of contacts among those actually using a service and the mean of cost across all participants. A total number of contacts (excluding inpatient days) and a total cost are also reported. (It is assumed that it may be positive for a

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participant to have more contacts with health services; however, inpatient contacts may indicate a poor outcome, therefore inclusion in the measure for average contacts per person would be counterintuitive.)

Results

In the 4-week period before release, about two-thirds of both groups had contacts with care co-ordinators, and around one-third had contacts with psychiatrists and mental health nurses (*Table 16*). People having contact with 'other nurses' and 'mental health nurses' were slightly higher in the TAU group than in the CTI group, with frequency of 'other nurse' being particularly high in the TAU group. Overall, total contacts per person using services were similar between the groups, at around five per person.

The highest mean cost in both groups, after the cost of CTI, was for psychiatrist contacts, followed by care co-ordinators and other nurses (*Table 17*). Together, these services made up 76% of costs for both the CTI and TAU groups. The total for the CTI group was 12% higher than for the TAU group.

Table 18 shows the service use in the 6 weeks after release. The CTI group made more use of care co-ordinators and psychiatrists than the TAU group. The overall average contact (excluding inpatient services) was higher for the CTI group. When looking at inpatient care it can be seen that few were admitted. However, the number of days in hospital differed. CTI participants had more days admitted to medical wards and TAU participants had more days admitted to psychiatric wards.

Even though very few participants were admitted to hospital, this care accounted for 77% of costs for the CTI group and 84% for the TAU group, excluding CTI costs (*Table 19*). Psychiatrist and care co-ordinator costs were around twice as much for the CTI group than for the TAU group.

Critical time intervention contacts account for majority of the costs from release to the 6-week follow-up (see *Table 19*). This is because the majority of the intervention, in terms of contacts, is carried out in this

TABLE 16 Service use in 4 weeks before release

	Group					
	CTI			TAU		
Service	*n*	%	Mean[a]	*n*	%	Mean[a]
Psychiatrist	26	36.6	1.81	27	34.6	1.44
Psychologist	3	4.2	1.67	4	5.1	1.75
Occupational therapist	1	1.4	1.00	0	0.0	0.00
Mental health nurse	27	38.0	2.82	31	39.7	2.19
Care co-ordinator	46	64.8	2.61	47	60.3	2.45
Other nurse	22	31.0	2.97	27	34.6	4.85
Outpatient contact	1	1.4	1.00	2	2.6	3.00
GP	13	18.3	1.31	8	10.3	1.13
Social care contact	4	5.6	1.50	3	3.8	1.00
Psychiatric inpatient stay	0	0.0	0.00	0	0.0	0.00
Medical inpatient stay	0	0.0	0.00	0	0.0	0.00
Total	71			78		
Average contacts per patient[b]			5.27			4.85

a Mean number of contacts for those that had contacts.
b Excluding inpatients.

TABLE 17 Mean costs in 4 weeks before release (2013/14, £)

	Group			
	CTI		TAU	
Service	Mean cost (£)	SD (£)	Mean cost (£)	SD (£)
Psychiatrist	74.39	127	56.19	91.9
Psychologist	5.01	27.7	6.38	30.7
Occupational therapist	0.26	2.2	0.00	0
Mental health nurse	28.70	65.1	23.37	43.3
Care co-ordinator	45.31	42.9	39.53	43.6
CTI contact[a]	521.84	0	N/A	N/A
Other nurse	25.30	73.6	45.03	212
Outpatient contact	1.58	13.3	8.64	64.7
GP	11.36	25.9	5.47	17.1
Social care contact	3.44	15	1.57	7.88
Psychiatric inpatient stay	0.00	0	0.00	0
Medical inpatient stay	0.00	0	0.00	0
Total	717.19	245	186.19	283

N/A, not applicable; SD, standard deviation.
a CTI contacts imputed.

TABLE 18 Service use from release to the 6-week follow-up

	Group					
	CTI			TAU		
Service	*n*	%	Mean[a]	*n*	%	Mean[a]
Psychiatrist	15	27.3	1.13	10	16.4	1.00
Psychologist	2	3.6	1.50	0	0.0	1.50
Occupational therapist	2	3.6	1.00	0	0.0	1.00
Mental health nurse	20	36.4	1.80	23	37.7	2.04
Care co-ordinator	27	49.1	2.15	13	12.3	2.69
Other nurse	2	3.6	3.00	1	1.6	2.00
Outpatient contact	1	1.8	1.00	0	0.0	0.00
GP	0	0.0	0.00	0	0.0	0.00
Social care contact	2	3.6	3.00	3	4.9	2.67
Psychiatric inpatient stay	0	0.0	0.00	2	3.3	26.00
Medical inpatient stay	1	1.8	31.00	1	1.6	1.00
Total	55			61		
Average contacts per patient[b]			2.58			1.52

a Mean number of contacts for those that had contacts.
b Excluding inpatients.

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TABLE 19 Mean costs from release to the 6-week follow-up (2013/14, £)

	Group			
	CTI		TAU	
Service	Mean cost (£)	SD (£)	Mean cost (£)	SD (£)
Psychiatrist	34.74	60.7	18.42	42
Psychologist	3.88	21.2	0.00	0
Occupational therapist	0.68	3.51	0.00	0
Mental health nurse	17.55	30.6	20.66	35.4
Care co-ordinator	28.27	33.6	15.38	37.4
CTI contacts[a]	2152.59	0	N/A	N/A
Other nurse	2.92	16	0.88	6.87
Outpatient contact	2.04	15.2	0.00	0
GP	0.00	0	0.00	0
Social care contact	4.43	24.4	5.34	25.2
Psychiatric inpatient stay	0.00	0	312.61	1891
Medical inpatient stay	345.70	2564	10.05	78.5
Total	2592.80	2579	383.35	1897

N/A, not applicable; SD, standard deviation.
a CTI contact imputed.

time period. However, in reality, this cost would likely be more spread out across the follow-ups, as the work would be not be so concentrated in this period. Preparation work that does not involve actual patient contact would shift some of the cost before this period. Similarly, monitoring of patients in the final few months that does not typically result in regular face-to-face contact would also shift some of the costs to later in time. In addition, the single person with a 31-day stay in hospital is driving up the cost per person in the CTI arm as well as the intervention costs.

The period before the 6-month follow-up covers a period of 20 weeks. The number of people in the CTI arm having contacts with care co-ordinators was higher than at 6 weeks and the frequency of these contacts was also higher (*Table 20*). The TAU group had increased contact with mental health nurses compared with the 6-week follow-up point and also compared with the CTI group. The use of care co-ordinators was slightly higher in the CTI group at 6 months than in the TAU group. The average total service costs were again higher for the CTI group (*Table 21*). There is not a significant difference in the cost of mental health nurse contacts between the two groups because of the lower frequency of contacts.

At the 12-month follow-up, the CTI group's use of care co-ordinators remained similar to the previous follow-up and noticeably higher than for the TAU group (*Table 22*). The mean number of contacts with care co-ordinators was also far higher in the CTI group. Contacts with psychiatrists are slightly higher and more frequent in the CTI group. A higher number of the TAU group have contacts with mental health nurses; however, the frequency of these contacts is lower. Overall, the number of service contacts in the CTI group was about three times higher than in the TAU group.

Table 23 shows that psychiatrists and care co-ordinators are the drivers of costs in the CTI arm. For the TAU group, inpatient care is the main cost driver. Overall, the costs are almost identical including mental health nurse contacts.

TABLE 20 Service use from the 6-week follow-up to the 6-month follow-up

	Group					
	CTI			TAU		
Service	*n*	%	Mean[a]	*n*	%	Mean[a]
Psychiatrist	23	48.9	1.78	17	33.3	1.59
Psychologist	1	2.1	4.00	0	0.0	0.00
Occupational therapist	1	2.1	1.00	0	0.0	0.00
Mental health nurse	17	36.2	4.59	29	56.9	2.72
Care co-ordinator	27	57.4	4.96	23	45.1	3.39
Other nurse	3	6.4	1.33	5	9.8	1.40
Outpatient contact	0	0.0	0.00	1	2.0	24.00
GP	1	2.1	2.00	0	0.0	2.00
Social care contact	3	6.4	1.67	2	3.9	2.00
Psychiatric inpatient stay	0	0.0	0.00	2	3.9	9.00
Medical inpatient stay	1	2.1	31.00	0	0.0	0.00
Total	47			51		
Average contacts per patient[b]			5.745			4.294

a Mean number of contacts for those that had contacts.
b Excluding inpatients.

TABLE 21 Mean costs from the 6-week follow-up to the 6-month follow-up (2013/14, £)

	Group			
	CTI		TAU	
Service	Mean cost (£)	SD (£)	Mean cost (£)	SD (£)
Psychiatrist	98.03	125	59.50	104
Psychologist	6.05	41.5	0.00	0
Occupational therapist	0.39	2.71	0.00	0
Mental health nurse	44.49	108	41.53	73.6
Care co-ordinator	76.43	103	41.00	68.1
CTI contacts[a]	0	0	N/A	N/A
Other nurse	2.85	9.4	3.68	13.2
Outpatient contact	0.00	0	52.88	378
GP	2.02	13.8	0.00	0
Social care contact	4.33	17.5	3.19	17.9
Psychiatric inpatient stay	0.00	0	129.43	651
Medical inpatient stay	404.54	2773	0.00	0
Total	638.58	2761	331.22	1003

N/A, not applicable; SD, standard deviation.
a CTI contact imputed.

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TABLE 22 Service use from the 6-month follow-up to the 12-month follow-up

	Group					
	CTI			TAU		
Service	*n*	%	Mean[a]	*n*	%	Mean[a]
Psychiatrist	16	39.0	2.44	13	30.2	1.39
Psychologist	2	4.9	2.50	1	2.3	1.00
Occupational therapist	2	4.9	1.50	1	2.3	5.00
Mental health nurse	14	34.1	4.86	18	41.9	3.94
Care co-ordinator	21	51.2	5.33	17	39.5	2.88
Other nurse	2	4.9	7.00	3	7.0	2.33
Outpatient contact	0	0.0	0.00	0	0.0	0.00
GP	0	0.0	0.00	0	0.0	0.00
Social care contact	3	7.3	11.67	2	4.7	2.00
Psychiatric inpatient stay	0	0.0	0.00	1	2.3	12.00
Medical inpatient stay	0	0.0	0.00	1	2.3	3.00
Total	41			43		
Average contacts per patient[b]			6.732			3.604

a Mean number of contacts for those participants that had contacts.
b Excluding inpatients.

TABLE 23 Mean costs from the 6-month follow-up to the 12-month follow-up (2013/14, £)

	CTI		TAU	
Service	Mean cost (£)	SD (£)	Mean cost (£)	SD (£)
Psychiatrist	106.90	201	47.04	82.2
Psychologist	8.68	45.5	1.65	10.8
Occupational therapist	1.36	6.41	2.16	14.2
Mental health nurse	44.47	112	44.27	108
Care co-ordinator	73.24	95	30.55	44.8
CTI contacts[a]	0	0	N/A	N/A
Other nurse	9.15	47.4	4.36	21
Outpatient contact	0.00	0	0.00	0
GP	0.00	0	0.00	0
Social care contact	34.76	197	3.79	19.5
Psychiatric inpatient stay	0.00	0	102.34	671
Medical inpatient stay	0.00	0	42.79	280
Total	278.55	518	278.96	874

N/A, not applicable; SD, standard deviation.
a CTI contact imputed.

At each time point, excluding the 12-month follow-up, the mean costs are higher for the CTI group (*Table 24*). The cost per week is helpful when comparing between time periods. It can be seen that costs increase initially for both groups and then fall after the 6-week follow-up.

Without the imputed CTI intervention costs, the average service use costs in the intervention arm for the 4 weeks before release and the period from release to the 6-week follow-up are £195.35 (down from £717.19) and £440.21 (down from £2592.80), respectively. Both the service costs at 4 weeks before release and at the 6-week follow-up are not significantly different once CTI contacts are taken out, possibly because of the small sample size and high number of dropouts.

Service costs over the whole follow-up period in relation to age show large differences. For those participants aged 20–29 years the mean cost was £2432.94, for those aged 30–39 years it was £4521.58, for those aged 40–49 years it was £1647.20, and for those aged ≥ 50 years it was £2087.87. Participants with schizophrenia had mean costs of £3217.07, whereas for those with depression the cost was £1867.48. Participants who were diagnosed with schizophrenia complicated by a PD had average service costs of £3528.85. The remaining had an average cost of £2445.49. Those with schizophrenia complicated by alcohol or drug misuse had average costs of £3382.34 compared with £2735.07 for those without. Participants with an Axis II diagnosis had average costs of £3071.89 compared with £2546.88 for those without.

White participants' costs were higher (£3523.04) than black (£2272.75) or Asian (£1953.12) participants' costs. Perhaps not surprisingly, costs were substantially higher for participants who were unemployed (£3539.55) than for those in work (£1385.40).

Regression analysis performed on the cost data showed that service costs for unemployed participants were 1.5 times higher than for those who were in employment, and that costs for those not at work due to sickness (and those absent from work due to illness) were, similarly, 1.5 times higher than for those in employment. However, this relationship becomes insignificant when you exclude inpatient costs, suggesting that this relationship is driven by the inpatient costs, a service that relatively few people used. The cost breakdowns previously are for only the patients who had full service use information for the year, which totalled 84 participants. These costs also include the imputed cost of the intervention.

Combining the clinical effectiveness from the primary outcome measure, a difference of proportion of people engaged of 0.161 at 1-year follow-up and, costs, a difference of £2485.10 in favour of the CTI arm, gives a cost per additional person engaged of £15,426. To determine if this is cost-effective depends on society's willingness to pay for an additional person to be engaged with mental health services at 1 year following release.

TABLE 24 Average costs per person across all the follow-up periods (2013/14, £)

		Group					
		CTI			TAU		
Time point	Weeks covered	Total (£)	SD (£)	Per week (£)	Total (£)	SD (£)	Per week (£)
4 weeks before release	4	717.19	245	179.30	186.19	283	46.55
6-week follow-up	6	2592.80	2579	432.13	349.02	1897	58.17
6-month follow-up	20	638.58	2761	31.93	331.22	1003	16.56
12-month follow-up	26	278.55	518	10.71	278.96	874	10.73
Total year after release	52	4418.59	5924	84.97	1445.96	2940	22.04

SD, standard deviation.

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Summary

This chapter has reported on service use and costs for the two groups at different points in time. The CTI manager input was the most expensive element of costs for the intervention group and led to a major cost difference at the 6-week follow-up. However, costs were also higher at the other time points, with the exception of the final one at 12 months post release.

Aside from the intervention costs, it was also apparent that the CTI group had a greater level of service use than the control group. This is to be expected, given that the main aim of the intervention was to increase engagement and that, to a large extent, this was achieved. Increased engagement should lead to increased service use and costs.

We have briefly linked engagement to costs; however, we have not formally tested cost-effectiveness through cost-effectiveness acceptability curves in this chapter. As a result of the strong link between engagement and costs, to do so would have been less informative than having a clinical measure as a primary outcome. Future studies should consider using patient-reported outcomes, such as quality-adjusted life-years, in the economic evaluation.

Chapter 7 Discussion

Introduction

This chapter aims to bring together the discrete component parts of the study, discuss results, identify limitations and explore implications for service planning and delivery.

In *Summary of main findings*, findings related to the primary and secondary outcomes and other quantitative analyses are reviewed and discussed. In addition, the key findings of the qualitative and health economics aspects of the study are summarised.

In *Strengths and limitations*, the impact of the study is considered and challenges faced in securing the relevant permissions to conduct the trial are presented.

In *Discussion* and *Recommendations for future research*, we discuss the implications of this work for clinical practice and future RCTs in prison populations or at other points of transition within mental health services.

Summary of main findings

Achievement of the objectives of the study

The primary objective at the start of the trial was to establish whether or not CTI was clinically effective for released adult prisoners with SMI in:

- improving engagement with health and social care services
- reducing mental health hospital admissions
- reducing reoffending
- increasing community tenure through reducing time in prison.

The primary objective was partially met.

- Those allocated to the CTI arm of the trial were more likely to be engaged with mental health services at the 6-week follow-up stage of the trial.
- Those who received CTI were also more likely to be registered with a GP.
- Continuing engagement with services was demonstrated for the CTI group at 6 months following release.
- This advantage was not observed at the 12-month follow-up, although CTI participants were still more likely to be currently under CPA at this point.

As noted earlier, delays in recruitment led to us being unable to analyse the impact of CTI on hospital admission, reoffending and overall community tenure. This is considered further in *Limitations*.

The secondary objectives at the start of the trial were:

- to establish the cost-effectiveness of CTI for this population
- to develop a service delivery manual and training materials to support the implementation of CTI in vivo
- to facilitate and promote active service user, CJS and NHS staff participation in the research programme, thus encouraging greater engagement between the academic and practice communities.

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The study's secondary objectives were achieved.

The health economic analysis consisted of a cost comparison between the two groups. The analysis indicated that:

- participants receiving CTI incurred higher costs in relation to their service use than the TAU group before, and after, release
- at each time point (except at the 12-month follow-up), the associated cost of service use by CTI participants was higher than those for the TAU group. Largely these costs were associated with psychiatrist and care co-ordinator contact
- at no point during the course of the trial were costs incurred because of psychiatric inpatient hospitalisation for the CTI group. This positive outcome for the CTI group may reflect their increased contact with community services. Given that hospitalisation is by far the most expensive form of service provision, the increased service cost incurred by the CTI group may, over a longer time period, be cost-effective.

The main contributor to cost was that of the CTI managers. These costs were mostly incurred during the 6-week follow-up period. However, the use of other services was also generally increased. That costs were increased for the intervention group does not imply that the intervention is not cost-effective. If outcomes are improved by a sufficient amount then these extra costs would be acceptable. The outcomes described show that engagement was improved. We can assume that better engagement leads to more clinically effective treatment and, ultimately, improved well-being. We would argue that the increased costs would be justified. Ultimately, however, it is a value judgement whether or not this is a good use of funds.

A treatment intervention manual, with training materials included, was achieved. The manual was developed through a working group comprising prison- and community-based staff, experts by experience and researchers. The manual details the origins of CTI, outlines results of previous and current research, details the stages and content of the intervention to allow replication and includes skills training suggestions for staff. The establishment of the working group to participate in the development of the case manager manual also achieved our final secondary objective, that of encouraging engagement between researchers, practitioners and users of mental health services.

Qualitative study: service user and professionals' view of the intervention

The quantitative results summarised were augmented by a strand of concurrent qualitative enquiry running throughout the life of the trial.

The comments received by the service users allocated to the CTI group were overwhelmingly positive. CTI participants reported:

- reduced anxiety with respect to their impending release from prison
- on the value of the CTI manager's role linking with community services, which made contact and engagement easier and less daunting
- on the CTI manager's advocacy role, that is having someone who understood their needs, and how community providers operate to ensure appropriate transfer of care
- receiving emotional support from the CTI manager, that is having someone they knew and trusted on both sides of the gate
- an increased ability/wish to persevere with attending mental health/drug and alcohol service appointments, and maintaining treatment programmes that previously have fallen by the wayside
- a continuing increase in self-confidence and self-reliance over time with regard to getting what they want from service providers
- higher personal aspirations in relation to finding work, vocational training and/or education
- improved relationships with peers and family members.

Staff who delivered CTI or staff who had observed the running of CTI within their service reflected on the barriers to, and facilitators of, successful delivery of the intervention, including the following:

- Information sharing across service boundaries was seen as a barrier, taking a long time for CTI managers to establish; however, it could also facilitate care when it was functioning properly, contributing to averting potentially serious consequences.
- The ability to spend more time with service users enabled CTI managers to establish rapport and facilitated continued engagement with them and other services.
- Increasingly limited resources led to raising of thresholds for gaining access to community services, resulting in CTI managers spending increasing amounts of time negotiating access.
- The time-limited nature of CTI was seen as a positive, but some felt that the 6-week cut-off point was too rigid and needed some flexibility to account for individual need.
- There was a lack of suitable accommodation options for clients.

Strengths and limitations

Strengths

This research is the first RCT, worldwide, of CTI as a model for service delivery to support the transition of male prisoners with SMI back to community living. Prisoners have complex and comorbid mental health problems at rates significantly higher than the general population, and they frequently find themselves socially disadvantaged when resettling into the community life. Existing research has identified the problems that they face around gaining suitable accommodation and employment, and in repairing fractured family relationships. Their complex mental health needs make them unpopular patients in many community services both in terms of their clinical needs and their patterns of engagement, which can be chaotic and sporadic, influenced negatively by other lifestyle factors.

The study is also the first UK economic evaluation of delivering CTI as a high-intensity time-limited through-the-gate intervention for prisoners with SMI.

Limitations

Throughout the study we encountered numerous obstacles that challenged study set-up and recruitment. Our experiences provide evidence on the difficulties of obtaining research and ethics permissions and, when these systems fail, with implications for research in general. In addition, it also needs to be acknowledged that retendering and changes of provider, which are common throughout the NHS, including prison-based services, can effectively halt, or at least severely delay, ongoing research.

Delays in obtaining research and development permission from the prison estate

Negotiating access to the prison-based NHS and private health-care provider services presented the research team with several challenges that impacted negatively on the start of data collection. We experienced long delays in obtaining local R&D permission at prison sites which, in two instances, necessitated the escalation of the request to the medical director of the trust providing in-reach care to the establishment. In all instances of delay, all correct procedures had been followed by the research team.

In two establishments, following initial agreement, access was subsequently denied, with staff shortages stated as the reason. This meant that a large amount of work undertaken to gain permissions was wasted and the work had to start anew in additional sites.

As noted above, retendering processes resulted in providers changing midway through the study, leading to uncertainty regarding whether or not new governance permissions needed to be sought from the incoming provider. Retendering often led to fragmentation of service provision, with a number of statutory and third-sector services providing seemingly analogous or overlapping services, creating difficulties

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identifying precisely from which organisation(s) permission was required. This liaison with multiple organisations added both time and complexity to the permissions process and, in the case of third-sector providers, often placed the research team in the position of trying to educate providers about what they should require from us, as their own R&D procedures were non-existent.

Delays in adding additional sites because of excess treatment costs

All delivery of the intervention was covered by excess treatment costs. As already mentioned, as a result of slow recruitment, which was not expected by the feasibility trial, additional sites had to be added. In some cases, if the provider/commissioner was the same, it was possible to spread the excess treatment costs already agreed across sites. However, many of the new sites were run by a different provider/commissioner, meaning that new applications for excess treatment costs had to be submitted. This was a lengthy process in many sites, taking around 6–9 months, and, in some instances, our application for excess treatment costs was rejected because the provider/commissioner had not been included in the original grant application stage.

Issues accessing national data sources in a timely manner

First, it proved ultimately impossible, within the time scale of the project, to complete the additional analyses of the effect of CTI on rates of hospital admissions, reoffending and overall community tenure.

In relation to hospital admissions, the original plan was to obtain these data from the HES, which is a national database of bed usage. Owing to the delays to recruitment previously described, the end dates of recruitment and follow-up were later than stated in the original protocol. As a direct result, the time lag between a hospital stay being recorded locally and that information being notified to, and processed by, HES meant that HES data would be incomplete when we would have needed to gather it and, thus, would have led to inaccurate analyses. To counter this, each person's individual care records were interrogated and any records of time as an inpatient were recorded locally.

Second, delayed recruitment also meant that it has not been possible to gather CJS contact and reoffending data as, again, the time lag between offences being committed and outcomes recorded on the PNC would have over-run the lifetime of the study.

Third, the inability to calculate impact on community tenure is directly related to not having access to days in hospital/reoffending data; these two variables were to be added together for each trial participant to obtain a measure of stay in the community. Although no longer within the scope of this report, the research team aims to pursue reoffending data outside the duration of this trial's funding in order to subsequently report on any impact that CTI may have had on this post-release variable.

Economic evaluation

The health economic analyses consisted of a cost comparison between the two groups. A full evaluation would involve a synthesis of the cost and outcomes and, ideally, would involve a measure of quality-adjusted life-years; this was not feasible here because we had access only to data from notes rather than from patient-reported measures as would be required.

Fidelity to the intervention

The fidelity was assessed using an adapted version of the fidelity scale used in the Critical Time Intervention – Task Shifting study[64] at eight time points over the course of the trial, which is a similar approach to other studies of CTI. However, a more reliable and detailed way to assess fidelity would have been for the CTI manager to complete a checklist per participant against core CTI principles. This would have allowed more detailed analysis of what each participant received, mapped against their needs.

There was variation in fidelity to the intervention across the different CTI managers. Low scores were not attributed to one person alone but across all CTI managers for different aspects (see *Table 11*). The study was not large enough to be able to evaluate the skills of those delivering the intervention against outcomes. However, the variation may be important to consider in terms of implementation issues, such as

training, core competencies and information governance. For example, the researchers assessing fidelity rated items as low if there was no recorded evidence, although it is possible that an activity might have occurred but not have been recorded. This highlights the importance of maintaining clear and accurate records. In addition, cases closed at 6 weeks were generally among the lowest in terms of fidelity to the intervention; this may be an indication that, because of the complex nature of this group, full re-engagement with services by 6 weeks is difficult to achieve, or simply that it occurred but was not adequately evidenced in the records satisfactorily.

Discussion

Our trial showed significantly improved engagement with mental health services for the CTI group compared with TAU at 6 weeks. Recipients and staff spoke overwhelmingly in support of the intervention; recipients valued the additional support and the advocacy role adopted by the CTI manager, and staff appreciated the value of delivering a holistic package of care to difficult-to-engage patients with complex needs. However, at the final follow-up for this trial, 12 months post discharge, those who received CTI were no more likely to be engaged with services than the TAU group, the advantage lost somewhere between 6 and 12 months. We suggest that this loss of advantage may stem from several issues, relating to both individual patients and the response from services.

Our decision to adapt the CTI intensive post-discharge period from the original 9 months to 6 weeks was based on the findings of our pilot study, which indicated that, by 6 weeks, the service user should be engaged with the CMHT, if that was going to occur at all. This was sufficient time to address clinical and immediate accommodation and benefit entitlement/employment needs and, because the intervention was heavily frontloaded by work completed while the service user was still in prison, systems should be able to slot into place relatively rapidly after discharge. Importantly, the limited post-release support period kept community caseloads manageable for CTI managers, given the large number of people likely to be eligible for the intervention.

In addition, as noted earlier, it is known that in the first weeks and months following release from prison recently released individuals are particularly at risk of suicide and/or death due to accidental overdose. In a UK study, age-adjusted standardised mortality among men and women in the 12-month period following release from prison was 8.3 and 35.8 times higher, respectively, than in the general population. Crucially in the current context, 21% of those who completed suicide did so within 28 days post release, with just over half (51%) of deaths occurring within 4 months of release.[24] The study authors placed emphasis on the importance of improved release planning for those prisoners most at risk to ensure immediate engagement with community mental health services, assertive follow-up and intensive post-release support.[25] With regard to drug-related mortality, a meta-analysis reported that drug-using prisoners had a three- to eightfold increased risk of drug-related death in the first 2 weeks post release compared with the subsequent 10 weeks, with risks remaining elevated through weeks 3 and 4.[22] Recent Ministry of Justice statistics[72] similarly identify the risk of reoffending in the immediate post-release period. Figures released in early 2016 show that 8.6% of prisoners released during 2013 were later convicted of a criminal offence committed within 18 days of release. Loss of engagement with services following the cessation of the intense phases of CTI is probably a result, at least in part, of the nature of the client group, who revert to their established pattern of engagement with the NHS. When not in prison, offenders have been demonstrated as having chaotic patterns of engagement with health-care services, with contact often crisis driven and characterised by heavy use of emergency care options, such as accident and emergency departments and ambulance services, rather than routine primary care. The essential nature of CTI is to offer intensive support for clients to engage with services and, in this study, post-release support was limited to 6 weeks of highly concentrated effort targeting a range of health and social care domains. The work is labour intensive, involving the CTI manager spending much more time with a client than would normally be the case in the community and, similarly, concentrating on needs other than those relating to the clinical treatment of SMI to an extent beyond standard CMHT involvement.

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Routine contact with CMHTs is normally based on the presumption that patients choose to remain involved and that services are wholly non-coercive unless additional risks develop. Thus, a patient who by nature, evidenced by his or her history, finds it hard to remain in contact with services and starts to disengage, is likely, if this disengagement is not addressed robustly by CMHT staff very quickly, to fall out of contact. This leads, therefore logically, to consider the need for CMHTs to offer something other than routine care with CTI clients, in particular additional efforts in keeping someone in touch, above and beyond the efforts they would go to with their 'normal' clients.

Making additional efforts to keep in touch with CTI clients is a significant ask of CMHTs, who are routinely working with large caseloads and dealing with increasingly complex mental health issues in many clients, compared with years past when psychiatric inpatient beds were plentiful and admission much easier to arrange. When already facing these routine pressures, the request to be additionally proactive with CTI clients from prison will not be universally welcomed by CMHT staff.

Prins[73] refers to offenders with mental disorders as 'the unloved, the unlovely and the unloveable', who are doubly stigmatised by mental illness and criminality. Our study sample, in line with offenders who have mental disorders more generally, had high levels of comorbid conditions and needs. Fewer than half of the participants (42%) had a straightforward diagnosis of a single SMI. Over one-third of the group (37%) had both SMI and PD, and 15% had SMI, PD and substance misuse diagnoses. This combination of chaotic engagement, multiple morbidity and criminality serves, very often, to make mentally disordered offenders 'heart-sink patients', described in general practice literature as patients who create 'the feelings felt in the pit of your stomach when their names are seen on the morning's appointment list'[74] and/or those who 'exasperate, defeat and overwhelm [clinicians] by their behaviour'.[75] Thus, individual practitioners who already feel beleaguered by the routine pressures they face with their standard caseload may not have the motivation to put in the work required to keep hold of CTI clients with multiple morbidities. That acknowledged, this is not an excuse for therapeutic nihilism; however difficult, this is a large group with needs that should be met by appropriate services. To do this, frontline staff need to feel suitably trained, working with adequate resources and supported in their clinical decision-making by managers and organisations. Providers and commissioners need to be honest and open about how they meet their duties and responsibilities to complex patients, acknowledging that it is likely that there will always be a subset of patients more resource intensive than others but that, by meeting needs holistically, people feel supported and lifestyle chaos and ultimately their needs overall reduce over time.

The second consideration is whether or not the reduction of the CTI post-discharge period to 6 weeks only, from the 9 months in the original trials, needs to be reconsidered. Logically, but ultimately untestable in this trial, long-term engagement with an appropriate mental health service is hypothesised to increase community tenure and reduce reoffending. Thus, is 6 weeks of intensive support insufficient to assure this long term?

As discussed, increasing the post-release period of CTI support would have implications for resources in the community, because of the large number of potentially eligible prisoner-patients. The intensive nature of CTI dictates small caseloads; thus, maintaining intensity is resource intensive. If the 9-month duration from the original trials was adopted, CTI community caseloads would increase in size and, in effect, would involve the running of a discrete service for this client group, running parallel to routine CMHT care.

Running parallel services is expensive and, in effect, serves merely to delay the inevitable transfer to routine CMHT care, given that the time-limited nature of CTI means that it must end at some point. The economic evaluation of this trial has clearly identified that CTI is more expensive than TAU, and the economic climate within the NHS is not one that would readily respond to increased costs over long periods of time. Parallel services for mentally disordered offenders are also at odds with the national policy of mainstreaming offender health care, rather than creating or maintaining 'service silos'. We therefore do not believe that there are logical and economic arguments to advocate a 9-month post-discharge CTI intervention period, especially given that, within our model of 6 weeks of post-discharge support, much more work was tackled

in the pre-discharge period than was the case in the early CTI trials. This therefore leads to the consideration that CMHTs may need to 'do something different' with this client group.

In the current and previous trials of CTI, only the actions of the CTI manager were ultimately determinable; no specific actions were prescribed from CMHT staff, for example in terms of frequency of ongoing contact and/or set contingency plans in response to likely disengagement. This raises the question of whether or not more consideration needs to be given to what CMHTs do when CTI intensive support has officially ended. We have commented throughout regarding the multiple clinical morbidities and measures of social exclusion experienced by this group, in particular their pattern of crisis-driven contact with health-care services. Knowing this, it is therefore reasonable to expect that, when 'downgraded' to the status of receiving routine CMHT support, with less frequent contact, an emphasis on personal autonomy and responsibility and continued engagement predicated on free choice, contact and engagement will wane.

If engagement is significantly improved when patients are given a period of very intensive support but that improvement is lost when their contact is with 'routine' community care, one solution may be to enhance the offering from CMHTs to these complex and, in terms of reoffending at least, high-risk patients, especially in terms of frequency of interventions/appointments and more robust efforts to be made to maintain contact when disengagement is likely. If 'routine' CMHTs cannot offer such intensity of contact and follow-up, should such patients be referred to assertive outreach teams, where they continue to exist, as standard? Assertive outreach teams' core operating models are predicated on maintaining contact with complex clients, especially those who have proved difficult to keep in contact with routine community services. The difficulty is that assertive outreach teams are being phased out across the country in light of limited evidence of their superiority over standard CMHT on a number of outcomes.[38,45] This strengthens the argument that CMHTs simply have to come to terms with their role managing 'difficult' patients, as they are the only widely available and accessible service for people leaving prison.

Accepting that CMHTs are to be the main care provider in the community, then the transition between prison and community has to be handled effectively. CMHT staff will need CTI training and the time and resources to dedicate to their clients. This could be done by having CMHT staff who have reduced caseloads of only CTI clients, or giving all CMHT staff a small number of CTI clients along with a reduced 'normal' caseload. A further question is whether or not in-reach staff from outside the prison should follow people up and hand over care when they are in the community or if CMHT staff should take responsibility for CTI delivery while the person is still in prison, thus removing the need for a client to have two key workers within a relatively short period. This was a model we explored in our pilot study,[54] choosing to adopt the former model for this trial, but a fuller examination of models is warranted in attempts to maximise resources and service delivery.

All of these options have significant resource implications in already overstretched NHS mental health services. However, the longer-term benefits across the health and justice domains may be large in terms of reducing reoffending and more sustained well-being. This requires further exploration.

Recommendations for future research

1. Completion of the examination of the impact of CTI on reoffending, hospitalisation and community tenure, as included within our original protocol but prevented by external events.
2. Adaptations of CTI for other prisoner groups. This could include women, young people and older adults, all of whom are likely to have discrete resettlement needs.
3. Examination of best mode of delivery, in particular evaluating prison in-reach staff maintaining time-limited contact with people in the community compared with CMHT staff assuming responsibility while the person is still in prison.

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4. Further investigation of alternative holistic service models for offenders with mental disorders when leaving prison and serving sentences in the community, including both CTI-specific roles and required responses from standard mental health services. We would recommend a 360° qualitative exploration of how to provide better care for this group, consulting community service providers, commissioners, policy-makers and service users.
5. Adaptations of CTI at different points of transition would merit further exploration, for example as part of police custody-based mental health liaison and diversion services, and at transition between different mental health services, for example from inpatient care to home, child and adolescent to adult services.

Chapter 8 Conclusions

The CTI intervention, as delivered in this trial, was effective in ensuring engagement with services at 6 weeks. Furthermore, the difference between the intervention and the TAU group was maintained at 6 months; however, this advantage was lost by 12 months. We have discussed in previous chapters the factors we feel may have contributed to this.

Overall, staff and participants who were interviewed as part of the qualitative arm of the study were positive about CTI. Participants who received CTI generally reported an improved experience of transition back to the community, whereas case managers commented that CTI 'feels like the right thing to do'.

Our economic analyses showed that the costs associated with the delivery of CTI are higher than the cost of TAU, and increase with the frequency and duration of contact between CTI participants and mental health professionals including CTI managers, psychiatrists, care co-ordinators and nursing professionals. However, this trial suggests that this may be beneficial in keeping people well and within the community. The possibility that this results in lower costs associated with longer-term inpatient care and a reduction in further periods of imprisonment or reoffending generally merits further consideration. It should be noted that other limitations in the cost data, for example the short time horizon and small number of service use categories collected, mean that we can draw only tentative economic conclusions.

Implications for health care

Critical time intervention achieved sustained engagement with mental health services in a difficult to care for, complex group whose normal pattern of contact with NHS services is chaotic and crisis driven. CTI was more expensive to deliver than TAU, but this does not take into account that in the real world TAU for this group is already more expensive than TAU for the wider population because of their heavy use of non-routine, emergency care options.

Critical time intervention achieved better contact with services for at least 6 months post prison discharge but the advantage was lost by 12 months. This has implications for community mental health services accepting CTI clients in terms of the likely need for them to adopt robust and proactive approaches to keeping patients engaged in the long term.

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Jenny Shaw (Professor of Forensic Psychiatry/Consultant Forensic Psychiatrist) contributed to design of the study, overall interpretation of the findings and implications for service development and practice, and was a member of the study steering group.

Sarah Conover (Mental Health Researcher) contributed to design of the study, revising the report and final approval of the report to be published.

Dan Herman (Associate Professor of Clinical Epidemiology) contributed to design of the study, revising the report and final approval of the report to be published.

Manuela Jarrett (Researcher, Psychiatry) contributed to design of the study, revising the report and final approval of the report to be published.

Morven Leese (Reader, Psychiatry) contributed to design of the study, revising the report and final approval of the report to be published.

Paul McCrone (Professor of Health Economics) conducted the economic evaluation of the intervention, co-authored the relevant chapters of the report, contributed to design of the study, revising the report, final approval of the report to be published and was a member of the study steering group.

Caroline Murphy (Operations Director, King's College London Clinical Trials Unit) contributed to design of the study, responsible for randomisation process, revising the report, final approval of the report to be published and member of the study steering group.

Jane Senior (Senior Research Fellow, Offender Health Research Network) contributed to design of the study, provided clinical guidance in the interpretation of the findings and implications for service development, revising the report, final approval of the report to be published, was also responsible for the review and revision of the case manager manual, and a member of the study steering group.

Ezra Susser (Professor of Epidemiology and Psychiatry) contributed to design of the study, revising the report and final approval of the report to be published.

Graham Thornicroft (Professor of Community Psychiatry) contributed to design of the study, revising the report, final approval of the report to be published and was a member of the study steering group.

Nat Wright (Spectrum Community Interest Company) contributed design of the study, revising the report, final approval of the report to be published and was a member of the study steering group.

Dawn Edge (Senior Lecturer, Psychology) authored *Chapters 2* and *3*, and was a member of the study steering group.

Richard Emsley (Senior Lecturer, Biostatistics) conducted the quantitative data analyses, co-authored *Chapter 3* and was a member of the study steering group.

Charlotte Lennox (Research Fellow, Offender Health Research Network) interpreted the findings of the quantitative analyses, carried out the coding and analysis of the qualitative data, and co-authored *Chapters 1–4*, *7* and *8*.

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Alyson Williams (Research Fellow, Offender Health Research Network) wrote the introductory background sections to the report, undertook the initial compilation and formatting of the final report, and was also responsible for the review and revision of the case manager manual.

Henry Cust (Research Assistant) conducted the economic evaluation of the intervention and co-authored *Chapter 6*.

Gareth Hopkin (Research Assistant) was responsible for site set-up, collecting data, liaising with case managers and qualitative interviewing, and was a member of the study steering group.

Caroline Stevenson (Research Assistant) compiled the quantitative data for analysis, interpreted the findings of the quantitative analyses and carried out the transcription, coding and analysis of the qualitative data, and co-authored *Chapter 4*.

Case managers in the Critical time Intervention for Severely mentally ill Prisoners study

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Data sharing statement

Participant consent forms did not specifically allow for the sharing of anonymised data to third parties. Any request for access would be referred to the University of Manchester's records office for advice before disclosure. For further information about this study please contact the corresponding author.

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Appendix 1 Case manager manual

The University of Manchester

Critical Time Intervention for Severely Mentally Ill Released Prisoners

CrISP

Manual for Case Managers

[November 2015]

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Critical Time Intervention for Severely Mentally Ill Released Prisoners CrISP

About this manual

This manual has been developed to guide and support health and social care professionals using Critical Time Intervention (CTI) as a method for providing intensive, time-limited support for prisoners with severe and enduring mental illness (SMI) in their transition from prison to community living. CTI was initially developed in the United States of America specifically to support homeless people with SMI being discharged from hospital and is described in Chapter 1. This version is an adaptation of the original intervention.

Acknowledgements

Contributions were received from members of the core research team, the Steering Group formed for the randomized controlled trial that tested the adapted intervention, practitioners who worked as CTI managers during the randomised controlled trial and a Working Group established to revise the original manual comprising practitioners and public/patient representatives with mental illness who had experience of the transition from prison to community. A full list of manual contributors is included at the end of the manual.

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CONTENTS

1. INTRODUCTION TO CRITICAL TIME INTERVENTION
   A. The original Critical Time Intervention (CTI) study
   B. Mental illness in prison
   C. Adapting CTI for prisoners with severe mental illness (SMI)
2. WHAT IS CRITICAL TIME INTERVENTION?
   A. Introduction
   B. Psychiatric treatment and medication management
   C. Money management
   D. Substance abuse treatment
   E. Housing management
   F. Life skills
   G. Family and carer liaison
3. THE ADAPTED CTI 4-PHASE MODEL
   A. Introduction
   B. Phase 1: Pre-Release
   C. Phase 2: Transition to the Community
   D. Phase 3: Try-Out
   E. Phase 4: Transfer of Care
4. THE CLINICAL PRINCIPLES OF CTI
   A. Introduction
   B. Active and focused
   C. Supportive and empathic
   D. Flexible but consistent
   E. Fostering autonomy while remaining available
   F. Dealing with disengagement from treatment
5. HOW TO START A CTI PROGRAMME
   A. Introduction
   B. Establishing the intervention home base
   C. Establishing community linkages
   D. Recording and sharing client information between care providers
   E. Ending the intervention
   F. Case manager training
   G. Staffing, safety and supervision
   H. Performance indicators
   I. Summary

GLOSSARY OF TERMS
APPENDICES
APPENDIX A: CTI Fidelity Assessment
APPENDIX B: Works Cited
APPENDIX C: Contributors

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TABLE OF FIGURES

Figure 1: Summary of the adapted CTI model
Figure 2: Key areas in which CTI is focused
Figure 3: The stages of change and CTI manager intervention techniques
Figure 4: Assessment of concrete needs and areas of CTI intervention
Figure 5: Therapeutic guidelines to foster a positive relationship between case manager and client.
Figure 6: The key areas of the CTI intervention and expected community links
Figure 7: Key elements of long term care

1. INTRODUCTION TO CRITICAL TIME INTERVENTION

A. The original Critical Time Intervention (CTI) study

Originally, CTI was designed to prevent homelessness among people diagnosed with severe mental illness (SMI) as they transitioned from specialised sheltered accommodation and hospital care to accommodation in the community (Susser, E. et al., 1997). The developers of the intervention recognised that poor continuation of care and support at this vulnerable time point put successful re-entry to community living in jeopardy. Factors such as not taking medication as prescribed; difficulty managing drug and/or alcohol abuse; an inability to sort out finances; and problems re-establishing social and family networks increased the risk of independent community living arrangements breaking down and at-risk individuals becoming homeless once more. CTI aimed to redress this problem by providing a time limited, specialised intervention designed to bridge the gap between specialist services for the homeless and the mainstream community services that would provide longer term care.

The original CTI intervention was delivered by trained staff over a 9 month period and comprised 3 main phases, each of 3 months in duration: (i) transition to community, (ii) try-out, and (iii) transfer of care. During these stages, robust links between the client, service providers and social support networks were put in place; the ground rules for these relationships agreed; and practical advice and support provided for the client, service providers and friends/family as issues arose. The intervention proved successful with fewer homeless nights experienced by individuals who received the intervention than those who did not - and the positive effect persisted after the intervention period ended.

The success of CTI for those at high risk of homelessness opened up the possibility of it being suitable for other high risk groups and research started to test its efficacy in managing the transition between prison and community for people with SMI.

B. Mental illness in prison

There is considerable evidence to show that the prevalence of psychiatric morbidity among prisoners is higher than in the general population (Office for National Statistics, 1997; Birmingham et al., 1996). A recently published review confirmed that serious mental disorder is also disproportionately prevalent in prisoners, with about one in seven prisoners having a psychotic illness or major depression, (Fazel & Danesh, 2002). Thus severe mental disorders occur around 5-10 times more frequently in prisoners than people in the community, with prisons accommodating an increasing number of people with severe and enduring illnesses and complex needs. It has also been found that prisoners are less likely to have their mental health problems accurately identified (Birmingham, et al, 1996; Senior et al., 2013).

It is current English Government policy to provide mental health care of an equivalent standard in prison to care in the wider community (Bradley Report, 2009). This extends to an obligation to ensure continuity of care when the prisoner leaves prison. In reality, unpredictable release dates, particularly in the case of remand prisoners, means that often there is very limited time available for linking released mentally ill prisoners with community services. However, even where routine discharge planning has been possible, research has shown that few prisoners with severe and enduring mental illness go on to make contact with community mental health services (Lennox, et al., 2012), strengthening the argument for the implementation of more assertive through-care and discharge planning.

C. Adapting CTI for prisoners with severe mental illness (SMI)

There are clear parallels between the challenges faced by the client group of the original CTI study and prisoners with SMI re-entering community life, particularly in respect to the poor transfer of care to community mental health providers, negatively affected by co-morbid substance misuse and chaotic and unstable lifestyles. To investigate the potential utility of CTI to improve prisoners' engagement with community mental health services on leaving prison, the authors and collaborators of this manual trialed an adaptation of the original CTI model in two studies.

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(1) Feasibility pilot study

In a study funded by the Medical Research Council (Ref: G0401268) participants under the care of mental health in-reach teams in three prisons, with a diagnosis of SMI and within 3 months of their release date were recruited to take part in a pilot study. In total 60 prisoners were randomly allocated to receive either the revised CTI or treatment as usual.

The findings from the pilot were encouraging. When the participants were followed up at 6 weeks from date of release, those that had received CTI were significantly more likely to be in contact with community mental health teams (CMHTs), registered with a General Practitioner (GP) and receiving medication than those who had received treatment as usual (Jarrett et al., 2012).

(2) The CrISP randomised controlled trial

Following on from the feasibility study, a much larger randomised controlled trial involving 200 male prisoners with severe and enduring mental illness was undertaken. The period of intervention and its phases mirrored those of the pilot study. Follow up took place over a longer period. Contact with the CMHT at 6 weeks following release was again the primary outcome measure however additional factors, including number of days in hospital, detention under the Mental Health Act and any subsequent convictions were also examined.

Findings: The intervention was effective in ensuring engagement with services at six weeks. Further, the difference between the intervention and Treatment as Usual group was maintained at the six, but not 12, month follow up points. Overall, staff and participants interviewed as part of the qualitative arm of the study were positive about the intervention. Analysis in regard to cost showed intervention group had higher levels of service use and costs than the control group.

Find out more about ...

Critical Time Intervention:
For information about current research using CTI follow the link below to the Centre for Advancement of Critical Time Intervention:
http://sssw.hunter.cuny.edu/cti/about-us/

2. WHAT IS CRITICAL TIME INTERVENTION?

A. Introduction

Key to the success of the original CTI intervention was ensuring continuity of mental health care at the point of transition from institution to community living. For mentally ill prisoners the transition from prison to community is a similarly vulnerable period during which the transfer of care from the prison in-reach team to community services is frequently poor. Prisoners with a mental health diagnosis may not readily engage with their local CMHT on returning to the community and of prisoners that have in place a pre-arranged appointment on release – few actually keep that appointment (Lennox et al., 2012).

Failure to engage with community services may reflect the prisoner's immediate priorities on release. Maintaining mental and physical good health are very important, particularly in respect to securing employment (Woodall et al., 2013) – however, having a place to live, sorting out a source of income (benefits, a job) and making contact with family again are likely to be the foremost concerns for the individual when walking through the prison gate and making community service contact is further down the list of priorities.

Developing a holistic plan to address both health and social care needs as part of the transition from prison to community is a central principle of CTI; when this doesn't happen the negative outcomes that may occur following release are well documented.

- Many mentally ill offenders often return to an environment of socio-economic disadvantage that puts them at increased risk of re-offending and a return to the Criminal Justice System (CJS).

Note: Currently 25% of all released prisoners in England and Wales will reoffend within 12 months (Ministry of Justice, 2013). Previous research has indicated that: 42% of released prisoners have no fixed abode, 50% are not registered with a local General Practitioner and 60% are unemployed (Williamson, 2007).

- The rate of comorbid substance abuse in the mentally ill prison population is high (Office for National Statistics, 1997). Following release, discontinuity of treatment initiated in prison to control/ reduce substance dependency, and the likelihood of returning to an environment in which drugs and alcohol are readily available puts the offender at risk of relapse and possible overdose.

Note: In the first 12 weeks following release from prison the risk of drug related death for drug using offenders is elevated, with risk in the first 2 weeks 3 to 8 times higher than in the rest of this period (Merrall et al., 2010).

- An increased risk of suicide following release has also been reported.

Note: Of prisoners that die by suicide that were discharged within the previous 12 months: 21% die in the first 28 days and 51% in the first four months (Pratt et al., 2006).

The CTI provides a model for assertive health care delivery as well as personal and social support to ensure engagement with services on release from prison and to facilitate the offenders return to settled and stable community living.

The original 3-stage CTI model was adapted to a 4-stage model for use with mentally ill prisoners to include the period in prison, pre-release, when the case manager begins the in-depth assessment of the prisoner's needs on transition to the community and the community services that will be necessary to continue the health care delivered by in-reach services during custody. The assessment also identifies other external agencies and significant individuals the prisoner must link to for practical help and psychological support. The figure below illustrates the phases of the adapted model.

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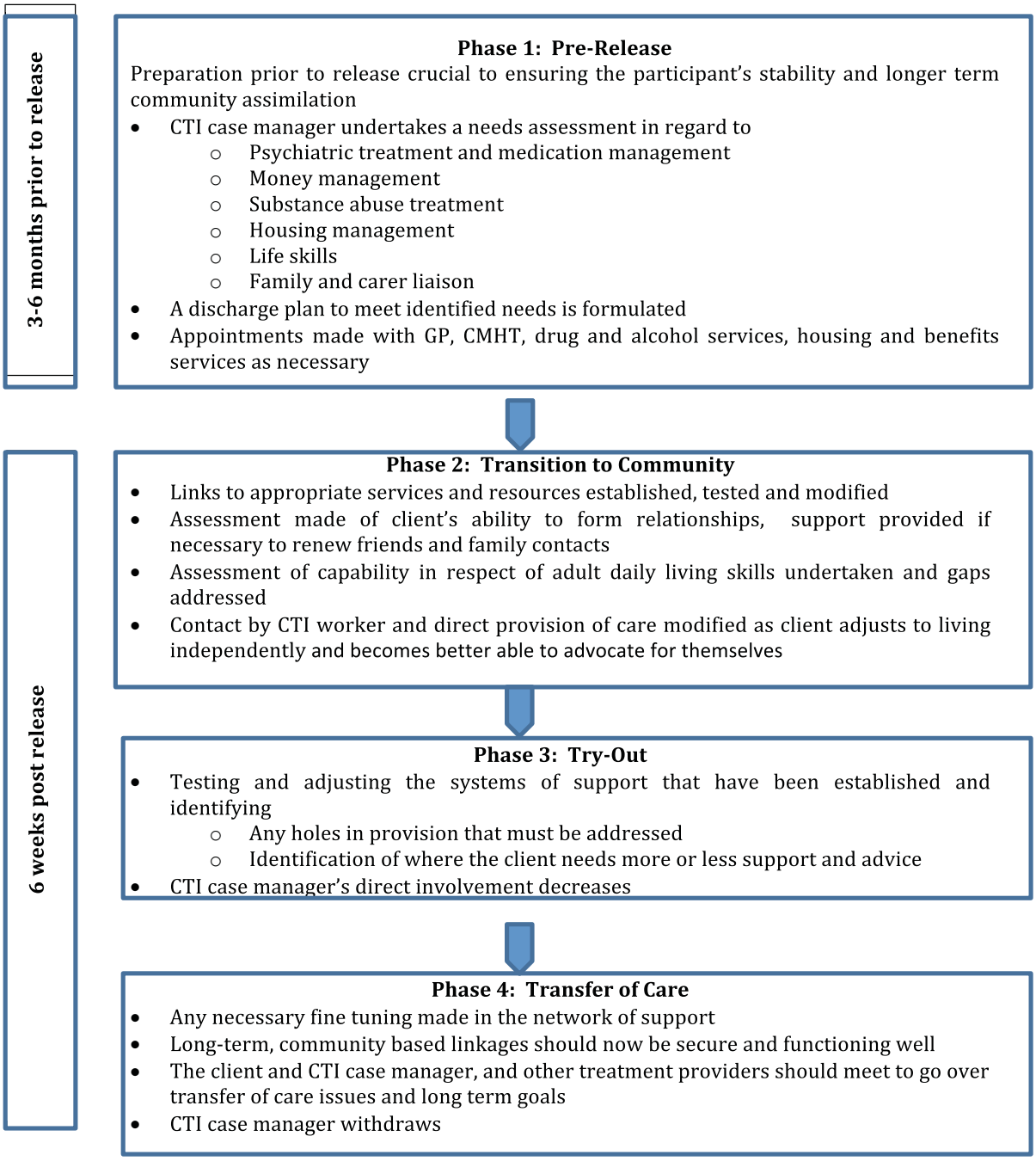
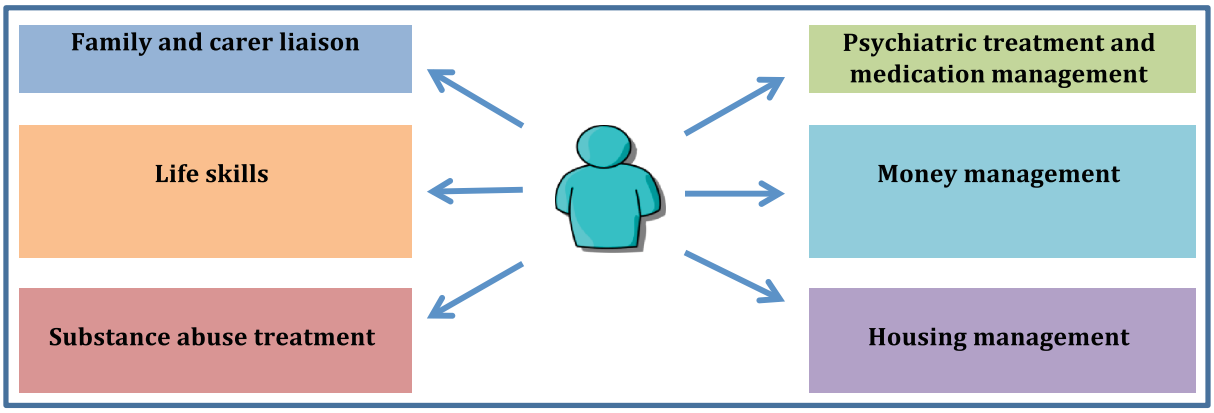
Figure 1: Summary of the adapted CTI model



In Phase 1 of the intervention, Pre-Release, the following key factors have been identified as crucial in facilitating stability and successful community assimilation.

Figure 2: Key areas in which CTI is focused



These areas should be addressed and monitored in every stage of CTI. Two or 3 should become the primary focus, depending on the individual client. Some may not be applicable, e.g., not all clients have contact with family, or have substance abuse problems. The following sections describe why each area has been identified as crucial to CTI's success.

B. Psychiatric treatment and medication management

Establishing psychiatric services in the community is an integral part of a successful transition to community living (Lamb, 1992; Susser, et al., 1992). The CTI case manager facilitates this link between the client and the new psychiatric provider, and serves as a resource for both parties.

For the client:
- accompanying them to the first few appointments
- talking to them about how comfortable they feel with their new provider
- trying to make other arrangements if the provider match seems poor.

This element of the CTI case manager's role may be particularly important in the first phase of the CTI intervention, when clients may refuse treatment, or when there are delays in access to community services.

For the service provider:
- giving insight into the client's particular strengths and vulnerabilities
- supplying information about psychiatric and medical history.

(1) Linking clients to the right mode of provision of health care

This will depend upon the client's desires and the particular problems they are working on. Since all clients in the CTI target group have a mental illness:
- all will need a psychiatrist or community psychiatric nurses as one of the providers of services
- many clients will also need other services including psychotherapy
- long-term care coordinators under the Care Program Approach (CPA) must also be in place.

Since the CTI model recognises the importance of both formal and informal mental health supports:
- community providers may be enlisted in addition to traditional services, including self-help groups and family members
- specialist teams such as Assertive Community Treatment (ACT) teams, crisis teams, home treatment teams etc. might also be required to play a role.

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(2) Ensuring medication compliance

Continuing to take medication as prescribed is a vital part of ongoing psychiatric treatment. The CTI case manager:

- should attempt to establish a system in which the client can easily obtain medications and be encouraged to take them
- plays a crucial role in psychoeducation, ensuring the client understands the importance of taking their medication as prescribed

Note: Discussions of the rationale for taking medication should be carried out by the CTI case manager with the client and the psychiatrist, the client's family, and residential staff, where appropriate.

- must address the possibility of side effects and other factors that might interfere with a client's medication compliance.

Note: The CTI case manager might role-play with the client ways of talking to his psychiatrist about medication issues.

(3) Setting up a medication monitoring system

Whenever possible, a medication monitoring system should also be set up, this might take the format of:

- self-monitoring by the client

Note: Options might include using a pill box, putting the week's medication into small envelopes for daily use, or using a diary.

- enlisting the help of someone else

Note: The CTI case manager might ask someone at the client's residence to monitor pill intake until the client can manage independently.

Careful medicines management is vital to ensuring the client continues to take prescribed treatment as required in order to stay well. In England, the Care Quality Commission require all care providers, regardless of care setting, to store, administer and record medicines safely. Professional bodies such as the Nursing Midwifery Council also publish standards for medicines management. The CTI manager should work follow the trust's protocol and best practice recommendations for the safe management of clients prescribed medicines.

C. Money management

Successful money management is another crucial component in a client's adaptation to community living. The CTI case manager:

- helps the client learn to budget their money
- monitors the client's success in this endeavor
- assists in identifying financial entitlement if appropriate
  - ideally, benefit entitlement will be applied for before the client moves into the community
- ensures the client learns where their local Job Centre Plus/ other benefit offices are, and that they have contact numbers for the individual case workers handling their benefits
- supports the client in their job search.

D. Substance abuse treatment

Substance abuse problems are very serious and potentially undermining of CTI's effectiveness. The original CTI study showed that the intervention was less effective for individuals with serious

substance abuse problems. Studies have also shown that clients who are dually diagnosed have poorer mental health outcomes than those with only mental illness (Drake, et al., 1989). It is therefore imperative that CTI targets this problem. Since CTI is time-limited, the most practical approach is to try to facilitate the client's commitment to change harmful addictive behaviours.

(1) CTI substance abuse intervention techniques

CTI approaches substance abuse both through a careful analysis of the client's long-term needs, and the supports this necessitates. The CTI model uses the following principles outlined in the substance abuse literature (Carey, 1996):

- treatment intensity
- stages of change
- motivational intervention
- harm reduction.

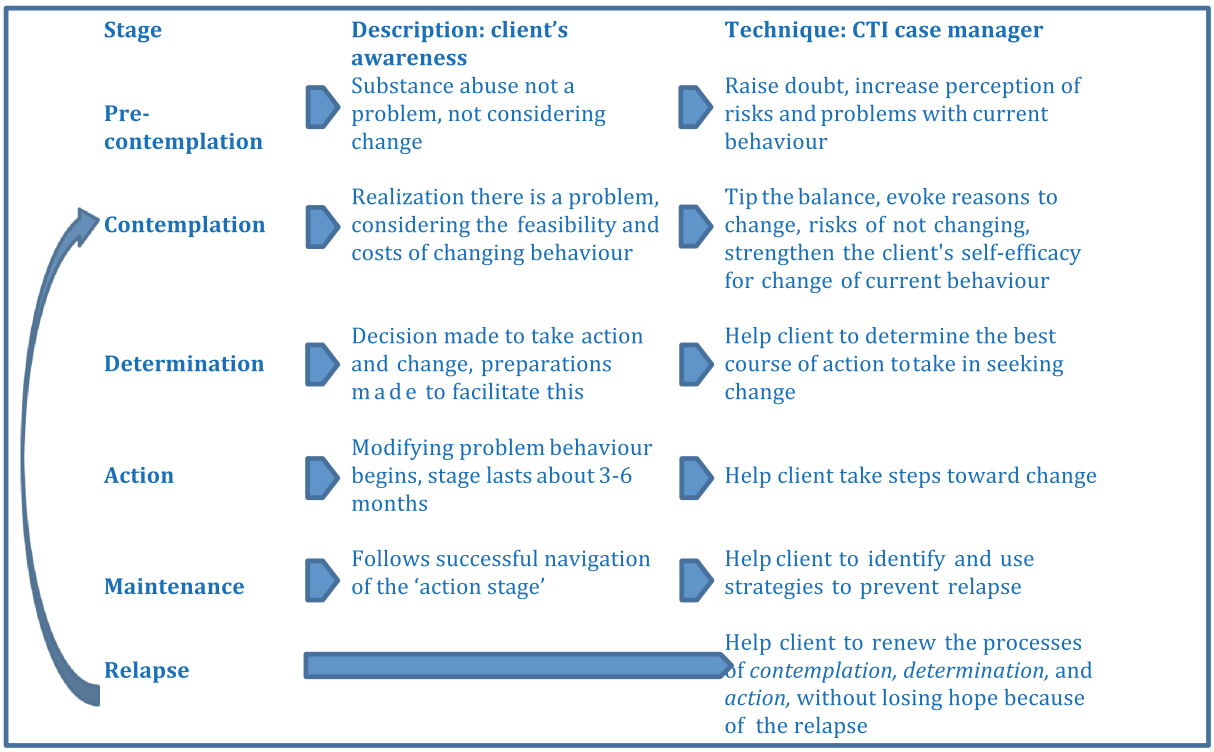
(i) Treatment intensity

The first principle stresses that since drug and alcohol problems vary in magnitude, the intensity of treatment should match the severity of the disorder (Institute of Medicine, 1990).

(ii) Stages of change

Motivational interviewing is informed by Prochaska and DiClemente's Stage Model of the Process of Change (1992) which is a trans-theoretical model of how people change addictive behaviours, with or without formal treatment.

Figure 3: The stages of change and CTI manager intervention techniques



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Relapse is also recognised as a stage in this cycle. It is worth emphasising that relapse is not seen as a treatment failure, but as an inevitable part of the process of recovery.

- It is vital for the CTI case manager to identify which stage the client is in. Each stage implies a different level of awareness and readiness for change, and different intervention techniques to bring about this change.

Note: If the CTI case manager initiates a discussion of the benefits of Alcoholics Anonymous meetings to her client who is in the pre-contemplation stage, her recommendation will fall on deaf ears; her client is not yet aware that substance abuse is adversely affecting his life.

If techniques are used that do not match the client's level of awareness and commitment, they will be ineffective. If they are appropriate, however, they are an excellent spur to help the client move to the next stage in the change process.

(iii) Motivational interviewing

The substance abuse intervention carried out by the CTI case manager is based on motivational interviewing techniques (Miller & Rollnick, 2012). Motivational interviewing is designed to mobilise the client's own desire to change; its techniques are non-confrontational, and geared to minimize the defensiveness often created by traditional confrontational techniques. Motivational interviewing helps clients move through the stages of change faster and more effectively than they would without intervention. It assumes, however, that the responsibility and capability for change lie within the client.

Motivational interviewing has specific recommendations of how counsellors can work most effectively with clients, depending on their stage of change. CTI has modified the model by only using the interviewing techniques.

The CTI case manager should take a history of substance use, with a particular focus on:

- frequency
- severity
- choice of substances
- how the client views the costs and benefits of continued use
- strategies the client has used in the past, if any, to curb use.

CTI case managers should also rely on their clinical skills to monitor what the client is not willing to reveal about their substance use. CTI case managers might be on the lookout for:

- money seeking behavior
- the selling of possessions
- probation violations
- irritability
- other significant changes in the client's mental status
- physical signs, such as poor hygiene, weight loss etc.

Triggers for substance use should also be explored; if the client is not aware of any, the case manager might ask for several stories about past use episodes. Together, the client and case manager might be able to identify what feelings or circumstances lead to substance use. This inquiry will help inform the CTI case manager about the intensity of treatment needed, the stage of change the client is in, "trigger" situations, and strategies that may help the client curb his use.

(iv) Harm reduction

Harm reduction (Marlatt & Tapert, 1993) is based on the idea that substance use exists on a continuum of abstinence to abuse. If a person reduces the quantity or frequency of substance use its harm will be reduced. Although abstinence may still be the ultimate goal, any reduction in use is encouraged.

This stance is in contrast to traditional all-or-nothing approaches to substance abuse treatment, where clinicians refuse to treat anyone who has not made a commitment to abstinence.

Scenario: The CTI manager is aware her client is still using substances when he moves into housing in the community. If substance abuse might jeopardize the client's housing, the client and case manager might find a way to minimize this risk. For example, the client might agree not to get high or drink in the residence. Although this is not ideal, it is a realistic first step in helping the client preserve his housing, and move towards sobriety.

(2) Long term referrals

The CTI case manager will make referrals informed by her understanding of where the client is in the stages of change, and the intensity of the treatment needed. Forging strong links with specialist substance misuse service providers in order to match the client to the most appropriate community service provider(s) to meet their needs is key. The National Institute of Health and Care Excellence (NICE) provide a comprehensive and regularly reviewed pathway of care for individuals with severe mental illness and coexisting substance misuse. The pathway, which brings together NICE guidance and quality standards for caring for dual diagnosis service users, advocates the close involvement of substance misuse health professionals in the planning of care, in helping to train healthcare professionals and in the development of local protocols to set out responsibilities, processes for assessment, referral, treatment and shared care across the pathway. In the *determination, action,* and *maintenance* stages, 12-step groups such as Alcoholics Anonymous and Narcotics Anonymous groups are excellent resources.

In addition to making referrals, the CTI case manager should work with informal community supports, such as family members, educating them about the biology and dynamics of substance abuse, and helping them set appropriate limits and establish strategies to help clients maintain their sobriety.

E. Housing management

Client and environment congruence, conceptualized as the degree to which the client's needs, capacities, and aspirations are consistent with the resources, demands and opportunities of the community living situation, can be a deciding factor in clients' success in retaining housing (Coulton et al., 1984). Clients who are satisfied with their residences will be much more likelyto make their living situations work.

Housing need varies along a continuum from accommodation with high levels of support to independent housing. The best match immediately on release from prison might need to be reviewed further into the intervention period. During the initial part of the transition, supervised accommodation or staying with family may be most appropriate as the client adjusts to community living and receipt of services settles down.

Note: Different residences offer differing levels of support, if the residence the client has chosen doesn't seem to be a good match, an alternative should be sought. However, CTI case manager may need to evaluate whether a genuine problem exists with the accommodation arrangement, or whether the client is reacting with anxiety to an unfamiliar, daunting environment.

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As the Try-Out phase progresses however, the case manager may find that her client expresses a desire to move toward living independently in which case the case manager and client will work together to agree the local options that best fit the client's changing need.

Crisis situations related to housing involve a range of scenarios, such as threat of eviction, or psychiatric decompensation. The CTI case manager and client should try to foresee potential housing crises, identify ways to avoid them, help to develop coping strategies and have signposts to other resources if a crisis should occur.

Scenario: A client who is living with his family, has been acting in a bizarre manner, and has not showered in several weeks. In this situation, the CTI case manager might arrange a meeting with all parties to negotiate a new understanding about what the client must do to continue living with his family; they might agree that the client take his medication in front of someone for the next month, and showers at least once a week.

When facing housing loss, the client will almost certainly need to call on someone to help negotiate the situation with the accommodation provider. Therefore, in addition to her direct care role, the CTI case manager should help identify appropriate community resources for the client to call upon if needed.

This plan for dealing with housing crises should be one which can be implemented during and beyond the intervention period.

F. Life skills

The fundamental nature of the CTI intervention is to provide support, assessment, treatment, and life skills training in the community. The merits of social skills training have been extensively reported (Liberman et al, 1998; Test & Stein, 2000) for individuals with chronic mental illness. We prefer the more encompassing term "life skills" over social skills, since it encompasses the learning of a range of adaptive behaviors, for example: use of transportation, cooking, personal hygiene and how to behave and interact in a social situation.

G. Family and carer liaison

When appropriate, CTI works with clients' families in order to provide psychoeducation on the nature and treatment of mental illness. This education will facilitate families' abilities to respond to crises that might arise after the client's placement in the community. In the first period of CTI, the CTI case manager will cover the following areas:

- **The nature of CTI**

How the CTI model works, its aims.

- The stages of the intervention model and the role of the family in adding to its success.
- The need for support at the time of transition.
- The type of services that CTI offers, the role of the case manager and how the family may support the client.

- **The nature of mental illness**

Facilitating a better understanding of the typical symptoms of the client's mental illness, and psychiatric and psychosocial approaches to treatment.

- The symptoms the medication treats, common side effects.
- Help to alleviate possible guilt and stigma the family might feel when a relative has a mental illness.
- Clarification of misconceptions, e.g., some family members may believe that their child's drug use has caused his mental illness.

- **Providing positive and negative support**

How to most effectively and sensitively confront issues in order to support the client's residential stability, growth, and independence.

- Adopting the principles the CTI case manager employs:
  - being supportive, empathic, flexible, consistent, and encouraging of autonomy but available in times of crisis.
- Dealing with stress through better communication:
  - learning how to communicate clearly, and use problem-solving skills (Grunebaum & Friedman, 1988)
  - making positive comments in a calm, supportive tone, requests made simply and directly (McFarlane, 1991)
  - learning how to listen, and how to speak to each other without going on the attack.
- Setting clear boundaries and limits, ensuring the family understand the importance of having a clear and consistent way of interacting with the client.

Case managers can also gather valuable information from the family about how to most effectively support the client, e.g., families can provide a history about what has worked and what has failed in the past.

After these psychoeducational sessions have been completed, CTI case managers will remain available to mediate between clients and their families for the remainder of the CTI period. Common situations where the CTI intervention can be beneficial are:

- mediating substance abuse related conflicts, handling situations in which the client may demand money or resort to petty thievery, facilitating communication between family and staff at community residences

- giving general counseling, where CTI case managers can talk with families about their feelings about the client.

In general, family interventions should be increased when conflicts develop and continue, as needed, after their resolution to safeguard any new contracts the family members have agreed upon.

Find out more about ...

Motivational interviewing:
A general, online resource for more information about motivational interviewing can be found at:
www.motivationalinterviewing.org

Assertive Community Treatment:
The Royal College of Psychiatrists has published several documents on community mental health services which discuss the role of ACT. The College website may be accessed here:
www.rcpsych.ac.uk

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National Institute of Health and Care Excellence
The overview for the NICE Pathway for Psychosis with coexisting substance misuse and links to associated documents may be accessed here:
http://pathways.nice.org.uk/

3. THE ADAPTED CTI 4-PHASE MODEL

A. Introduction

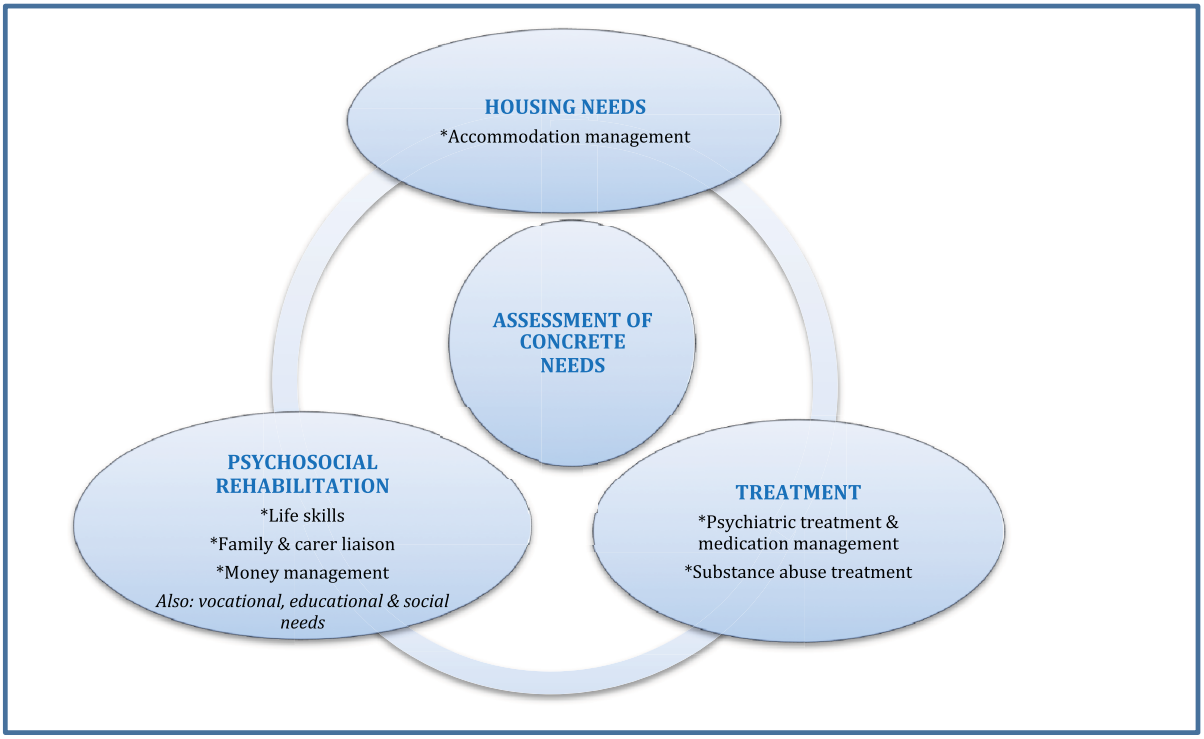
CTI is sensitive to the changing needs clients have during the transitional period from institutional to community living. At each stage of the intervention the following key component are tested and reviewed:

- assessment of concrete needs and linking,
- assessment of psychological needs
- client's strengths.

(1) Assessment of concrete needs and linking

In each of the stages of CTI, the CTI case manager will assess the client's concrete needs. During the course of recovery, the needs of a person with SMI will change. In this context, we refer to "needs" in three spheres: housing, treatment, and psychosocial rehabilitation. Careful evaluation of the needs of people with SMI is vital for successful community living (Ford et al., 1992). The needs of the client are evaluated for each area of intervention by CTI described in Chapter 2.

Figure 4: Assessment of concrete needs and areas of CTI intervention



In addition to the key areas of CTI intervention described in Chapter 2, the client and CTI case manager should explore what might give the client a sense of meaning and purpose in his life.

Note: Options to explore might include:

- employment
- vocational rehabilitation
- volunteer work.

Often, people with mental illness have talents and abilities that are unrecognised or neglected by themselves and those around them.

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If the client and CTI case manager decide that these areas are of interest, but not practical or desirable at the present time, some options will have been pinpointed that may instill in the client a sense of hope for the future, and motivation for change.

Note: Since CTI is time-limited, it is particularly important to establish a long-term plan for the client prior to the conclusion of CTI. A comprehensive assessment of a client's long-term housing, treatment, and psychosocial needs is necessary during the initial phase of CTI.

(2) Assessment of psychological needs

Different psychological issues come up in each stage of CTI. These psychological issues are often overlooked by practitioners working with the mentally ill because concrete needs and psychiatric symptoms tend to dominate the clinical picture. However, the philosophy of CTI recognises that these psychological issues are crucial, and must be carefully handled if the intervention is going to be successful.

There are common, "baseline" psychological issues that might emerge and the CTI case manager may find it helpful to keep the following questions in mind:

- How much support does the client want?
- Are the CTI case manager's interventions experienced as helpful, or intrusive?

Note: CTI case managers should be aware of all these issues, and bring them to CTI team meetings, discuss them with involved community providers, or talk about them directly with the client, as the situation warrants.

- Does the client accept suggestions from the case manager, prefer to ignore them, or do the opposite?
- What is the client's cultural background?
    - How does it affect how the client is able to seek or receive help?
- Is there a cultural or racial difference between the client and CTI case manager?
    - If so, how will that affect the work they do together?
- How does the client typically deal with stress?

The CTI case manager will also want to establish what "natural" support systems are available to the client, such as family or friends?

- Does the client typically make use of them in times of trouble?
- Or, when crisis hits, does he isolate himself?
- What are typical scenarios that have led to the client experiencing difficulties in the past?

The case manager should try to evaluate all these questions from multiple viewpoints:

- from discussions with the client
- observations of the client's behaviors
- consideration of treatment history
- conversations with others involved in the client's life, e.g., family, friends, or treatment providers.

Most people struggle with opposing wishes when they seek help. On the one hand, they may wish to be dependent, taken care of, and relieved of responsibility; on the other hand, they may wish to maintain a sense of autonomy, independence, and self-esteem (Mann, J., 1973). When the CTI case manager is sensitive to this dimension of the client's experience, she is able to work more empathetically with him, and is better able to balance being supportive with leaving room for autonomy. Over time, the CTI case manager will try to find the right balance between providing structure and waiting on the sidelines for the client to find his own way. In general, CTI advocates the least coercive approach, so increased client autonomy is always the goal.

(3) Assessment of the client's strengths

All clients have a wealth of strengths and abilities they bring to their situations; these may include job skills, social skills, educational strengths, or creativity. These strengths, however, are often not recognised by clients or by those around them.

We believe that clients can be most effectively engaged when their individuality is recognised and nurtured. Our clinical philosophy also follows this model: clients are assumed to have the internal resources needed to make positive changes in their lives; however, these resources may have atrophied from disuse, or may need to be adjusted for use in new settings. The CTI case manager's role is to help discover and rehabilitate these strengths. In addition, CTI case managers can regard elements of the client's personality usually seen as bothersome – such as loudness or constant talking, as a strength, as these characteristics may help the client persevere, and get the attention he needs.

B. Phase 1: Pre-Release

Clients appropriate for CTI will be identified from the mental health in-reach team caseload. In the randomised controlled trials, participants were prisoners on remand or with short sentences and likely to be discharged within 3 months of recruitment. However, CTI could potentially be started earlier than 3 months prior to release for any longer sentenced prisoner with a known release date. Once identified, at the earliest opportunity following referral to the in-reach team, the client would be seen and a full assessment of needs undertaken.

A CTI care plan is then developed which includes work to be addressed in prison, during transition and then longer term in the community.

Note: The CTI intervention does not utilize bespoke documentation to avoid additional administrative burden for the case manager; locally used care planning documentation will be employed.

The rationale for developing a CTI discharge plan at this early stage is that remand prisoners' length of stay within the prison is unpredictable and the prisoner could be discharged from prison/court hearing at any stage. For longer term prisoners, starting the needs assessment 3 or more months before discharge ensures the maximum opportunity for a detailed exploration of all local care providers to ensure the best match for longer term care.

(1) Psychiatric treatment and medication management

(i) Psychiatric and primary care input

The CTI case manager should establish whether the client is registered with a GP and whether the client has had previous contact with the CMHT and psychiatric services in the locality they are returning to.

Note: If the client is not registered the CTI case manager should establish where the prisoner is likely to live and then make contact with local services, e.g., general practice, CMHT and drug and alcohol services, as required.

In the Pre-Release phase it is essential that the CTI case manager develops a relationship with the CMHT that will be treating the client in the community in order to facilitate the exchange of information. In the case of previously homeless prisoners, contacting primary care and psychiatric care providers will follow on from work to arrange the client's accommodation.

For remand prisoners, the CTI case managers should establish when the prisoner is next in court and for each court appearance it should be assumed that they could be discharged at that point. Preparation on the part of the CTI case manager should therefore include liaison with the following:

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- **Solicitor**

Note: For remand or shorter sentence prisoners, the CTI case manager, with the client's permission, should make contact with his solicitor to establish:

- whether the client will be given bail and/or acquitted at the next hearing, and if likely
- whether it is possible for the client to be remanded in custody for a further period to ensure, e.g., housing and any other practical arrangements needed immediately on release are in place.

- **General Practitioner**

Note: The CTI case manager should make contact with the client's GP and:

- inform them of the progress of their patient
- if appropriate to the prisoner's circumstances, tell the GP the date of the next court appearance
- arrange an appointment with the GP, hopefully within 2 days of the court date (or for longer term prisoners - their expected release date) in order for the client to obtain medication.

- **Community Mental Health Teams**

Note: The CMHT members who will be caring for the prisoner will be invited into the prison and/or the CTI Manager will visit the CMHT in the community prior to discharge to outline the needs of the prisoner and any potential problems with their treatment in the community. Additionally:

- for remand or shorter sentence prisoners, the CMHT will be informed of the next date of court appearance (or for longer term prisoners - their expected release date)
- arrange an appointment with the CMHT within a week of discharge.

(ii) Medication

Using motivational interviewing techniques, the CTI case manager will work with the client in prison to address views on medication adherence and engagement with mental health services. Additionally whether self-management of medication, or help from a third party will be required. This may have implications for the client's accommodation on release.

Note: The CTI case manager:

- will speak to service providers about the client's previous engagement (if any) with services
- will encourage the client to engage with services
- might role play with the client different ways of talking to their CMHT worker about medication issues
- will assess in prison the need for supervision of medication in the community and whether the client would cope with a pill box or might need supervision of their medication.

For remand prisoners, the CTI case manager will accompany the prisoner to each court appearance.

Note: The CTI case manager will take with them a week's supply of the client's medication, or make arrangements with other appropriate personnel, e.g., Criminal Justice Liaison Team, to hold the clients medication to issue to the client if he is bailed or acquitted and will not return to prison.

If necessary the case manager will:

- accompany the client to their post-discharge address
- accompany the client to the pre-arranged GP and CMHT appointment.

(iii) Transfers

The CTI case manager will request that when an individual is receiving CTI intervention that they remain at the designated prison and are not transferred to another establishment.

(2) Money management

This is potentially a difficult area. Prisoners on remand do not receive a payment on discharge from prison, unlike sentenced prisoners. Some individuals will move quickly in to employment, others will rely on the benefits system.

Note: Whilst the prisoner is still an in-mate the CTI case manager should complete as far as possible any documentation required by the Department for Work and Pensions (DWP) for receipt of benefits to get the claim process underway prior to the client's prison release date. The CTI Manager may also explore the possibility of obtaining a crisis loan from social services to cover the interim before DWP payments begin.

(3) Substance abuse treatment

The CTI case manager will take a full history of substance and alcohol misuse and will establish what treatment the client has had prior to imprisonment.

Note: Ideally, the substance misuse team would visit the client whilst still in prison. Appointments should be made with substance misuse services as near to the court date as possible for remand prisoners, or for longer term prisoners, their expected release date. CTI case managers should establish the venue and timings of Alcoholics Anonymous, Narcotics Anonymous meetings and other self-help groups in the vicinity, of the prisoner's community residence.

The case manager will assess at what stage in the Prochaska and DiClementes (1992) Stage Model the prisoner is (see Chapter2). Prior to release, the CTI case manager will use motivational interviewing techniques to try and mobilise the clients desire to change and will simultaneously make contact if appropriate with statutory and voluntary services in the community.

(4) Housing management

The CTI case manager will establish the client's housing and accommodation history.

Scenario: The client may wish to live alone but in reality mental health and substance dependency problems may mean 24 hour staffed accommodation is more appropriate.

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The case manager will also establish the client's desired location of discharge and assess whether that is appropriate to the client's needs.

Enquiries about accommodation should include discussion with colleagues in the probation service.

Note: If stable accommodation is found in the community this may improve the client's chances of being bailed. The CTI case manager should, with the client's consent, keep in touch with his solicitor about whether this outcome is likely. Additionally, if the client is to be discharged to residential accommodation, with the client's consent, the case manager should visit the residence to check it is appropriate and also share information as necessary to facilitate the client settling in successfully.

(5) Life skills

As part of the needs assessment, the CTI case manager will establish:

- the client's competency in daily living skills, their potential to develop/ improve these skills and also their wishes in terms of education, employment, hobbies etc.
- whether the client has any difficulties with social engagement or with forming relationships
- what level of support the client needs in managing their accommodation, this will of course lead into the type of accommodation best suited to the client's needs
- whether the client requires particular therapies or the specific input of e.g., an occupational therapist, counsellor, or family interventions.

(6) Family and carer liaison

In respect to liaison with the client's family and peer group network, the CTI case manager will establish:

- the identity of family and friends that the client is in contact with in the community
    - with the client's consent, they will take the phone numbers of anyone of specific importance to the client
    - make contact with family members and/or friends to gain an overview of the client's likely network
- if the client intends to live with any specific family member or with a friend, or will receive significant input from these individuals, and if so
    - the case manager will go to visit the family prior to her client's release to provide psycho-education, e.g., the nature of mental illness, providing positive and negative support and also information about the nature of CTI.

C. Phase 2: Transition to the Community

The CTI case manager formulates a treatment plan with specific attention to the five key areas of the intervention described in Chapter 2. Since the intervention is time-limited, services must be prioritized; some will need immediate attention, and others can be addressed later.

(1) Assessment of concrete needs and linking

The main task of this phase is linking clients to appropriate resources, and moving away from providing assertive, direct care. The client will need a psychiatric care provider. Some clients may want vocational training, and some may want to find work. The CTI case manager should work with the client in determining which options would be most realistic and beneficial. This process should be commenced as early on following identification by the in-reach team as possible.

Good linkages are crucial to the success of the intervention; these are the people and agencies that will gradually assume the primary role of supporting the individual in the community. It is essential that the formation of links is a gradual process that is tested and modified as indicated.

During Transition to the community, the CTI case manager has a high level of contact with the client.

Note: The CTI case manager will maintain regular phone contact, and visit the client's new residence to evaluate his adjustment to community living.

The client may not immediately feel comfortable with the treatment provider arranged in the Pre-Release phase, or the new program or agency he is attending.

Note: The CTI case manager may decide to:
- accompany clients to appointments with new agencies to help smooth this stressful experience
- work with clients to strengthen their ability to advocate for themselves.

(2) Assessment of psychological needs

When a client first leaves prison, separation issues may arise. Whilst in prison, the client will likely have achieved some level of comfort and familiarity in that environment.

Note: The CTI case manager may need to plan frequent contact with clients during this period as their need for support is perhaps at its highest. Increased peer or family contact may also be recommended.

In addition, it is likely that he will be leaving behind some important relationships. CTI, therefore, tries to provide the opportunity for a gradual, empathic separation, so as not to compound the challenges of this already difficult time.

(3) Assessment of client's strengths

A vital strength that can help the client in this period is the ability to form new relationships. Relationships in the client's residence, peers, and the range of service providers delivering care, will become the bedrock of the client's adjustment to his new living situation. It is important, therefore, for the CTI case manager to gauge how easy it is for the client to develop and maintain these links. If this strength is not present, the case manager may need to act as a bridge between the client and those with whom he will be forming new relationships.

Another strength that must be assessed in the initial phase is adult daily living (ADL) skills. The CTI case manager will gauge whether their client can cook, keep their residence clean and do their laundry, etc.

Note: The CTI case manager may:
- step in and teach or model ADL skills when necessary
- mobilise the client's own natural support network, e.g.,
  - if the client has a brother who cooks well, the brother might be enlisted to provide some lessons
  - if the client has a friend living in the community he is entering, that friend might be enlisted to show him around the area, pointing out local shops and facilities.

Perhaps most importantly, the client will need to ask for advice and support during this difficult initial transitional time. Many issues will come up in this period, and the client may not know how to deal with some of them. The CTI case manager may have to encourage the client to call her in these situations, if the client seems unlikely to do so naturally.

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(4) Summary

The essential task of the Transition to the Community phase is to facilitate the clients' transition from the prison by linking them to services in their new communities. A multitude of practical and emotional issues arise during this period, including finding good service linkages, and helping the client to deal with the anxieties and challenges of moving into the community. The CTI case manager's skills in dealing with the difficulties inherent in this phase will be vital, as will be finding ways to access and nurture the strengths the client will be bringing to his new situation.

D. Phase 3: Try-Out

This stage is devoted to testing and adjusting the systems of support that have been established in the community. The role of the CTI case manager in this phase will increasingly taper off, with the expectation that the client will develop confidence in interacting with his treatment providers without the case manager's presence.

(1) Assessment of concrete needs and linking

The CTI case manager should pay particular attention to the key areas of intervention previously outlined, and determine how the client is faring in each area applicable to him. Some areas will need to be targeted for more intensive work, especially those that have triggered a crisis in the past. The case manager must use her judgment about how active to be at this stage; if possible, she should step back and observe how sturdy the client's new community links are. If services seem to be operating smoothly, she can become less active with her client.

However, systems usually need time to settle down and problems will arise which will require mediation and resolution. In this stage, with the basics in place, the CTI case manager should undertake in vivo needs assessment when a difficulty occurs.

Note: When problems arise between the client and new community providers, the CTI case manager might schedule a meeting with all parties to try to resolve the difficulty. It is very important during this stage for the case manager to act as a liaison between the client and his care providers. These new community links are still at an early stage of development and need to be reinforced as much as possible.

The case manager can observe where there are holes in meeting the client's needs, and where more – or less – support or services are required.

(2) Assessment of psychological issues

In the Try-Out phase, the CTI case manager begins to step back to see how well the client can manage new independence, but is ready to get more closely involved again if required.

Note: While some direct, assertive intervention by the CTI case manager may still be necessary, priority should be placed on strengthening the client's skills and his links with community based supports to address changing needs.

The goal is to allow the client to maximize his strengths and capabilities, and to be available to help in areas where the client cannot cope well on his own. In assessing service provision, emphasis must be placed not only on the client's ability to seek help, but also on the ability of community resources to respond to and meet the needs of the client. Clinical judgment is of the utmost importance in these situations, but the team, and an experienced clinical supervisor, can offer guidance.

When crises occur in treatment during the Try-Out phase they can often take the form of the client expressing a simultaneous need for help and a rejection of the very things he most needs. When this dilemma is enacted in the client's behaviour, receipt of services or the security of the client's living arrangements may be jeopardized.

During the Try-Out phase clients might:

- refuse treatment because they are afraid of further progress and independence, or

Note: The CTI case manager might temporarily increase phone or direct contacts with the client to discuss anxieties about moving forward, offer reassurance and perhaps greater structure in the short-term.

- "outgrow" treatment and refuse services that feel too restrictive or paternalistic.

Note: The CTI case manager might meet with the client to formulate a new plan that would allow greater growth and independence, to try to maximise the client's active participation in his treatment and rehabilitation, and in so doing taper down the case manager's contact time.

(3) Assessment of the client's strengths

During this phase, the client will begin to rely on community resources and be consistent in maintaining these new relationships.

For example, he might have monthly meetings with his psychiatrist. This will require the client to be organised, i.e., to know the time and the date of the appointment, and how to get to the site.

Note: If the client is forgetful and has a tendency to miss appointments, the case manager and client might find ways to compensate for this, e.g., putting a reminder sign up in the client's room, or asking someone to remind him.

In general, important strengths during the Try-Out phase are the ability to access and utilise community resources, manage money and demonstrate competency in a range of adult daily living skills. This also might be a time when clients might want to strengthen ties with friends or family that might become good supports.

(4) Summary

The essential task of the Try-Out phase is assessing the client's level of functioning, and working with the client to maximize his strengths, and anticipate his vulnerabilities. To this end, the client and CTI case manager will evaluate the linkages made with community support systems and adjust them as necessary. The CTI case manager will see how well the client can manage his new independence, and be ready to step in, or step back, as necessary. The main psychological task of this phase is working to help the client become more independent, more self-reliant.

E. Phase 4: Transfer of Care

This is the 'end-stage' of the intervention, when the case manager hands over longer term care of the client to community providers.

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(1) Assessment of concrete needs and linking

Since the CTI relationship will be ending in this phase, it is vital that all links to community providers are secure.

Last minute fine-tunings may be needed, but ideally everything should be in place for the client's network of long-term support.

Note: The CTI case manager, client, and various key players should meet together before the end of the intervention period to discuss the transfer of care, and go over long-term goals. Key players might include:

- family members
- a therapist or psychiatrist
- someone from the client's residence.

This discussion should take place with enough time to correct any issues.

(2) Assessment of psychological needs

The most salient issue psychologically during this phase is dealing with the end of the CTI relationship. As in the Transition to Community stage, separation issues may be revived because of the upcoming termination of the case manager's involvement:

- anxiety and low mood might develop as termination evokes feelings related to past losses
- underlying feelings of anger and abandonment might fuel a treatment refusal
- clients might also be tempted to sabotage progress as a means of obtaining increased contact with the case manager.

In these instances, the case manager should let the client know that she is available to witness progress, and need not only be called upon in times of trouble.

This stage is also a good time to review and reflect on the work that the client and case manager have done together. They might want to consider:

- where the client was in the beginning of the intervention
- his achievements, how he has developed and where he is now
- the possibilities that lie ahead in the future.

It is important that the CTI case manager conveys her confidence that the client can continue to make progress and grow. The termination of the CTI relationship can then be a step in the journey to greater self-improvement. Now that the client is stabilised, he may begin to feel able to tackle things which have been on the back burner for years.

Note: The CTI case manager and client should:

- discuss the client's strengths, new skills, vulnerabilities, and the "safety net" in place should the client need it
- talk about their relationship – what it has meant to them both.

A celebration might also be a nice way to mark the end of the CTI relationship.

(3) Summary

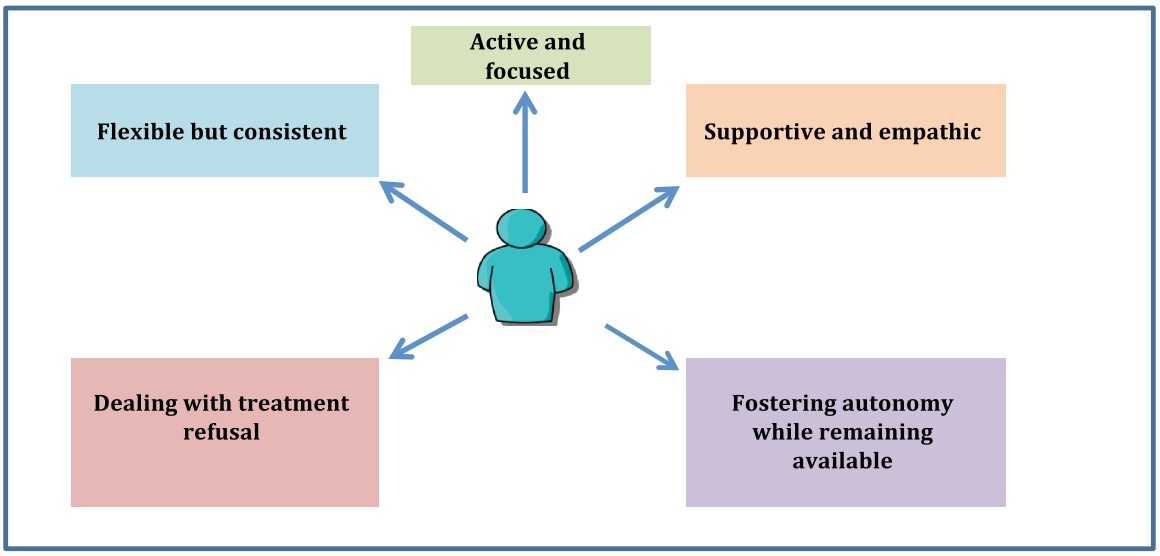
The essential task of the Transfer of Care phase is to deal with the end of the CTI relationship, and to address the client's long-term needs. Fine-tuning in the client's system of community care may be needed, but optimally everything will be in place at this stage. It is important to bring together all the key players in the client's treatment at this time, to discuss work accomplished and goals for the future. CTI case· managers must be especially alert to dealing with client's feelings about separation, as the termination may bring up painful past losses. One of the ways that the CTI intervention can be effective is in allowing a very different type of separation one that is planned for and dealt with, both practically and emotionally.

4. THE CLINICAL PRINCIPLES OF CTI

A. Introduction

In a review of the psychotherapy research literature, Orlinsky and Howard, (1978) found that the relationship between the therapist and client was a major determinant of successful treatment outcomes. Although the CTI case manager is not a therapist in the strict sense of the word, we believe that the ingredients for a successful therapeutic relationship are present in constructing the CTI case manager and client relationship. With this in mind, CTI recommends a few guidelines which can foster a positive relationship between the case manager and the client and are appropriate for a time-limited intervention.

Figure 5: Therapeutic guidelines to foster a positive relationship between case manager and client.



B. Active and focused

Since CTI is time-limited, CTI case managers must be active and focused to be effective, e.g., when the case manager and client undertake an assessment of needs and agree a treatment plan.

Note: Both client and CTI case manager responsibilities and tasks should be clearly outlined, and a time-table for achieving the plan should bemade.

During this process both parties should collaborate in how to manage the key areas of the intervention identified as priorities. The CTI case manager should:

- obtain a commitment from the client to actively work to accomplish points on the plan
- place issues about which there is disagreement on the back burner to be taken up again periodically
- develop an alternative plan to which the client can agree can be devised.

C. Supportive and empathic

Support and empathy are crucial in the formation and maintenance of the therapeutic alliance between client and CTI case manager. When the case manager is empathic about the client's feelings, needs, beliefs and ideas, the client will feel supported. CTI case managers should be especially sensitive to a client's self-esteem. When a person's self-esteem is injured, he is likely to retreat defensively, or react aggressively towards himself or others. If this happens between a client and CTI case manager, the client

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may not be receptive to the case manager's input. Clients may be very sensitive to critical tones and feeling criticized will inhibit their free expression of concerns, perceived failures, and present conflicts.

Paying attention to certain details will also help the case manager to understand her client:

- Non-verbal behaviour

Note: The client's facial expressions, body movement, posture, physical distance, eye contact, and general appearance will yield information about:
- how receptive the client is to the case manager
- how much psychological distress the client is in.

- Verbal statements

Note: The client's choice of words, recurring themes, voice volume, speed and tone of speech all provide an indication of how the client is feeling.

- Whether non-verbal and verbal expressions are discrepant

Note: The client may tell the CTI case manager that he agrees with the plan, but the case manager observes that his speech is clipped, his body averted, and he will not make eye contact.

The following techniques can aid in conveying the case manager's support and empathy:

Reflect the client's feelings. Simple statements to show the client that the CTI case manager has been listening.

Scenario: The client talks for ten minutes about how his neighbour's loud music kept him awake until 2 a. m., the case manager might say, "Sounds like you are feeling angry at your neighbour."

- Obtain clarification. The client's feelings about a particular situation may not be clear. In this case, it is best for the CTI case manager to ask directly, rather than trying to infer what the client might be feeling. This helps to:
  - clear up questions in the case manager's mind
  - give the client the opportunity to think something through in more detail, thus clarifying for himself how he feels about the issue.

- Develop awareness of the client's past experiences. Previous experiences might impact upon the client's present beliefs, expectations, and feelings about others. It is helpful for the CTI case manager to keep in mind:
  - the way each client typically experiences the world
  - how the client perceives others' interactions with him.

However, this understanding should be used with discretion; it is usually ineffective to dispute a client's perception of a situation. Instead, the CTI case manager might gently suggest some alternative explanations for his experiences.

- The CTI case manager to be aware of her own feelings when working with different clients. Case managers may notice that they feel very differently towards different clients. For example, a case manager may feel very protective towards one client, and ready to help whatever trouble arises. With another client, she may feel like giving up, believing that the client does not actually want help. The case manager's feelings can be a valuable indication about how the client feels about himself, and how he typically interacts with others. This can help the case manager deal with the difficult feelings some clients may engender.

Examples might include:

- a client that makes a case manager feel helpless and inept, this might indicate that the client feels these things

Note: Issues should be talked about in CTI team meetings, where the role of a senior clinical team leader or supervisor will play an essential role.

- a client that tries to avoid the experience of being disappointed and so takes the view that the case manager is someone with nothing to offer.

The important thing for the case manager to realise is that her own feelings have an impact onthe clinical process, and can bring valuable information to light. For these reasons, they should not be disregarded or considered the case manager's private problem.

- Cultural awareness is also a vital component in providing support and empathy.

Note: A client who abuses alcohol might be asked about what cultural role it plays for him. The case manager can still work with the client's substance abuse as a problem, but be empathic to the extra layer of difficulty in the client's abstention.

When the CTI case manager and client come from different racial, ethnic, or social class backgrounds the case manager must be aware of how these differences may contribute to misunderstandings between the dyad. The CTI case manager might be sensitive to these issues by asking the client how certain issues are viewed within the client's culture. In other areas, case managers might deviate from their standard practice to be sensitive to the client's culture, e.g., accepting a gift, knowing that gift-giving is an important way of expressing gratitude.

D. Flexible but consistent

To be flexible and consistent may seem like a contradiction, but it can be done. Both clinical stances are very important.

Flexibility allows CTI case managers to:

- respond sensitively and practically to a myriad of situations

Note: A feature of the treatment plan designed before the client moved back into the community may prove impractical or undesirable when the time comes to put it into action.

- work more collaboratively with client and service provider than is typically offered in the mental health system
- make a more informed evaluation of a client's failure to take up recommendations; is it 'treatment resistance' or is the client protesting at a poor service link

Scenario: A case manager's trip to a day-treatment program that a client has been refusing to attend might reveal a poor match between client and provider, e.g., the other clients at the program might be much lower functioning than the client.

Where the client's difficulty cannot be attributed to a poor match, the CTI case manager may just have to "roll with resistance" until the client is ready to change.

- respond to the client on an as-needed basis, studies have revealed that clients with mental illnesses prefer this to a more rigid structure (Tanzman, 1993)
- better carry out in vivo needs assessment, which takes into account changing individual needs, and allows for a more realistic appraisal of, and response to, a client's capacities, strengths, and

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limitations

- treat their clients differently depending on each individual's particular constellation of strengths and difficulties.

Consistency is the complement of flexibility.

In some situations, the case manager may feel it is not in the client's best interests to change an agreed-upon plan.

Scenario: A client might not want to attend psychiatric appointments. Although the case manager cannot control what the client will do, she would do well to stick to this part of the treatment plan, and engage in psychoeducation with her client.

It is also important for clients to feel that the CTI case manager is consistent as a person, that she remembers their appointments and arrives for them on time, that she reiterates goals agreed upon in the treatment plan, and that she behaves towards the client in a similar manner over the course of their many meetings.

E. Fostering autonomy while remaining available

CTI case managers must try to strike a balance between being responsive and encouraging independence; clients need the ability to move along a continuum of support. At times, the client may need more autonomy in order to grow. At other times, the client may need greater support to maintain psychological or material stability.

These principles are especially important in the second and third stages of CTI, when clients are increasingly caring for themselves, or finding people in the community who can help them where and when they need it.

F. Dealing with disengagement from treatment

In this section, we present two perspectives on dealing with a client's disengagement from his treatment plan.

(1) A client's perspective – helping through trust

People who have mental illness, especially those who are homeless, may have good reasons for refusing services. They may have a history of forced or coerced treatment, which may have done them more harm than good or, at the very least, caused them to feel powerless over their own lives.

The key to overcoming the client's resistance is for CTI case managers to foster the development of a trusting and stable relationship between themselves and the individuals they are seeking to engage. When developing a trusting relationship with the client, it is important for the case manager to remember:

- Don't push it.

- The CTI case manager should keep making offers of help, but shouldn't take it personally if someone refuses:
  - wait for a while and repeat the offer.

- People are always more willing to accept something from someone they know than from a stranger.

- The client needs the freedom to make that choice to accept services when they're ready:
  - go at their pace.

- Find out what the client wants; be prepared to give the client substantive help.

  - The full range of services the client needs should be available:
    - when the client is ready to take advantage of those services
    - at the same time, there should be no pressure to do so.

- Don't give up.

  - Providers may discharge people because they say they don't want services anymore:
    - if someone who has been accepting services decides they don't want services anymore, bear with them.

(2) A mental health care provider's perspective

In the course of treating a mentally disordered offender, clinicians must anticipate some degree of treatment refusal at some point in time. However, the significance of the refusal will vary depending on the individual client and the timing of it. As a general rule, CTI holds that:

- treatment refusal should be viewed as a client's way of communicating something to the clinician, not simply as an act of defiance
- the therapeutic stance should be to aim to understand the client and not to engage in a power struggle
- when the CTI case manager is able to help the client put the reasons for treatment refusal into words, the client is less likely to keep expressing the communication through action.

Treatment refusal by a mentally disordered offender can be understood based on the stage of treatment. When a new client refuses treatment, the clinician should:

- gently test his willingness to discuss it, realising that the refusal to accept treatment might preclude any such discussion

  Note: It may be important for the CTI case manager to back-off and reassure the client of her availability when the client is ready to address the issue.

- shift the focus from the usual clinical aims, e.g., taking a history, assessing mental status, making a diagnosis, prescribing treatment, to explore what the client perceives to be his most immediate needs.

  Note: Patience and empathy must guide this nonintrusive approach and of course, the clinician must feel secure that the client is not a danger to himself or others for the approach to be appropriate and effective.

This will often provide an opportunity for engagement.

Should a client continue to refuse treatment despite attempts to engage him, it helps to recognise the importance of periodic monitoring and checking in with that client; the case manager can still be helpful to the client who refuses services. By making contact with the client periodically, the case manager can identify signs of decompensation.

Commonly, clients refuse services when first engaged by mental health providers. Again, the case manager should ask "What is the client telling me?"

Is the client:

- having medication side effects

  Note: The client may feel too embarrassed to discuss side effects, or believe nothing can be done to address them.

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- not applying for housing because he fears change
- refusing vocational training because he is worried about losing benefits
- in relapse with regard to substance abuse?

Some clients refuse treatment when they become angry with staff for any number of reasons. Being able to recognise the reason is essential for any clinician working with this population.

5. HOW TO START A CTI PROGRAMME

A. Introduction

The setup of CTI in any given location will be shaped by the:

- type of service taking responsibility for delivering the intervention, e.g., in-reach team vs. a community based service provider; the originators of the CTI model recognised that case managers need not themselves be clinically qualified as long as they had experience of working with the client group and carried out the intervention under the supervision of a psychiatrist or other mental health professional. In some areas therefore the CTI team might include case managers who are experienced social workers
- profile of the prison population targeted, e.g., the balance of long-serving prisoners vs. shorter term prisoners
- nature of the prison accommodation and daily protocols which may constrain the delivery of the intervention
- range of community services that may be required to play a part in the locality.

Other issues may also require consideration at the setup stage, e.g., how contacts might be developed with colleagues in local prisons and community services in other parts of the country – in the event that a prisoner is transferred to accommodation elsewhere prior to release.

The following sections represent the elements of set up, delivery and evaluation of CTI and are intended as a guide to inform the development of the intervention in collaboration with local, community service providers.

B. Establishing the intervention home base

The fundamental principle of CTI is the provision of comprehensive services that are continuous during the transition from prison to living in the community. The target client group of this adapted CTI program are male prisoners with SMI, therefore the home base where the preparatory work for successful transition is carried out is prison accommodation with provision of access to psychiatric services, medical care, and the CTI case manager.

A room in which the prisoner and case manager can meet privately to discuss how the intervention works, undertake assessment of needs and discuss the spectrum of services that the client will require to resettle in the community is crucial. An atmosphere of safety must be created in which prisoners can express their feelings, feel understood, and perceive the staff as advocates.

Once a client demonstrates trust in the case manager, new goals and greater expectations can be introduced.

C. Establishing community linkages

CTI is assertive and takes a holistic approach to needs assessment in the early period of the intervention however community service links must be established and tested throughout the intervention.

The CTI team will meet with all likely community care providers, e. g., ACT, CMHT, housing, drug and alcohol services teams – to outline the principals of CTI, the involvement of their service, and the role the CTI case manager plays.

Note: A presentation at a service provider's monthly team meeting or at a training event might be effective at reaching a broad range of staff from front-line practitioners to service managers. Information about CTI should also be posted to all general practitioners' surgeries within the prison catchment area and to the courts, probation and social services.

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It is important that the CTI program has access to an array of service providers so that services can be tailored to the individual's needs. See Figure 6.

Note: A client demonstrating a capacity for relative self-sufficiency might be linked to work opportunities and self-help groups, whereas a client with greater needs might be linked to an ACT team for long-term care.

It is vital that the CTI case manager clearly communicates to the client and service providers the time-limited nature of CTI and longer term reliance on links made during the intervention.

Note: The CTI manager should make contact with all community teams as the prisoner could be discharged at any time. They will telephone care providers and family/friends and meet with them to plan care on discharge.

Figure 6: The key areas of the CTI intervention and expected community links

Area of intervention	Expected community links*
• Psychiatric treatment and medication management	• GP surgeries • CMHT/ ACT/ Crisis Team • Providers of psychological therapies
• Housing management	• Local authority housing services • Individual housing associations
• Substance abuse treatment	• Local 3rd sector providers of substance abuse services
• Money management	• Social Services – for remand prisoners that might require an emergency loan payment • Job Centre Plus – to sign on for Job Seeker's Allowance (JSA), other benefits • Bank/ Post Office – to help clients to arrange an account; bank account may make benefit payments/ payment of wages to client easier , similarly easier for the client to make payments for rent and other outgoing payments longer term
• Life skills	• Community centres providing support in developing/ improving life skills • Drop-in centres that provide advice on job search and the facilities to work on job applications • Local co-ordinators for volunteer opportunities • Faith group meetings/ community support provision
• Family and carer liaison	• Family member that may be enlisted to – monitor adherence to medication schedule • Other family members and friends that can play a role in supporting the client during the transition period and longer term

*The suggestions are not exhaustive; rather they are intended as a guide. The CTI case manager should compile her own list of providers to link clients to (according to need) based upon the available resources in her locality. Local probation teams and community rehabilitation providers will also be important contacts for the CTI case manager to liaise with.

(1) Peer support initiatives

A CTI case manager might explore whether there are local opportunities to introduce a client to someone who has themselves made a successful transition from life in prison to life in the community. Sometimes referred to as 'gate buddies', the opportunity to link a client to someone who has experience of the challenges the client is currently facing may improve the likelihood of the CTI client engaging with service providers, continuing with a programme to address drug and alcohol misuse and generally developing a positive attitude toward building a stable life in the community.

The introduction of a client to a gate buddy may be possible in the Pre-Release phase of CTI so that the client has peer support from the time they walk through the prison gate on release and throughout the first few weeks of resettlement. The availability of a local buddy facility may be particularly relevant for the support of CTI client's with no strong ties to family of previous friendship networks.

D. Recording and sharing client information between care providers

Sharing information across agencies, making sure it is relevant and kept up to date, is a challenge but central to the success of the intervention. The case manager and her primary contacts within each health and social care provider involved with meeting the needs of the client in the community must consider the following issues:

(1) Obtaining the client's consent to share information

An essential part of the Pre-Release phase of the intervention is explaining to the new client how the intervention works. Ensuring the client understands the necessity for the CTI case manager to share relevant information with community service providers is crucial.

Note: During Phase 1 Pre-release: The case manager and client should discuss the circumstances in which information about the client may have to be shared, e.g., to progress making appointments with service providers prior to release, or to secure the accommodation that will best suit the client, or in preparing family and friends who might be directly involved in supporting the client's resettlement in the community. The scope and extent of what might be necessary to share should be explained carefully to the client. It may be helpful to draw up a consent form or some other written form of agreement to help consolidate understanding.

(2) Sharing information between CTI team and community providers

When establishing the intervention with community providers, a critical part of the case manager's role is to agree in what format, and where, information about the CTI client will be recorded and how this information will be shared and kept up to date.

Bespoke, CTI case-file documents have not been developed in recognition that (i) case managers will be bound to the completion of local services approved documentation, and (ii) that the contents of a CTI specific document would duplicate aspects of local documentation and therefore become an administrative burden.

Note: The team implementing CTI in their locality for the first time should review the current paperwork involved in assessment and post-release care planning to establish whether the document(s) provide adequate opportunity for the case manager to record the needs, and action points identified, for the key areas of the intervention. Similarly a review of paperwork shared between service provider organisations should be undertaken with the same aims. A local decision should be then be made with respect to whether an amendment would be helpful.

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It is vital that the CTI case manager clearly communicates to the client and service providers the time-limited nature of CTI and longer term reliance on links made during the intervention.

Note: The CTI manager should make contact with all community teams as the prisoner could be discharged at any time. They will telephone care providers and family/friends and meet with them to plan care on discharge.

The following issues should be discussed by the case manager and her primary contact at each provider at the earliest stage of introducing CTI, i.e., setting up the community links identified above for the first time:

- How will information be stored?

Note: The case manager and primary contact within the link organisation must consider the security of paper storage systems, i.e., the location in which documents will be stored and access to this area. If client information is to be stored electronically what system level security policies and procedures are in place to safeguard client records?

- Which members of staff within the link organization will have access to the client's information?

Note: Are the link organisation's staff trained and fully aware of the importance of maintaining the confidentiality of a client's information?

- Does the organisation the case manager is operating from already have data sharing agreements with the link organisation?

Note: A data sharing agreement might already be in place between health and social care providers however this may not be the case when establishing links with, e.g., housing services. The case manager and provider organisation may wish to put in place a data sharing agreement to ensure the client's personal information is protected.

- How will organisations involved in the client's longer term care be informed of changes to service provision, e.g., change in the provision of substance misuse services, changes in the client's residency during the period of the intervention.

Note: In setting up the community provider links in the earliest stages of introducing CTI, a system for updating relevant client information held by multiple providers is very important. Health and social care systems may already be linked – but keeping a 3rd sector provider of changes that might impact on their work with the client must also be considered.

- Ending the intervention.

Note: A process for informing multiple service providers of the end date of the intervention period must also be put into place. CTI post-release from prison extends for 6 weeks from the client's release date. A clear end to the case manager's input, and acknowledgement by all parties that long-term service provision is now handed to community providers, is vital.

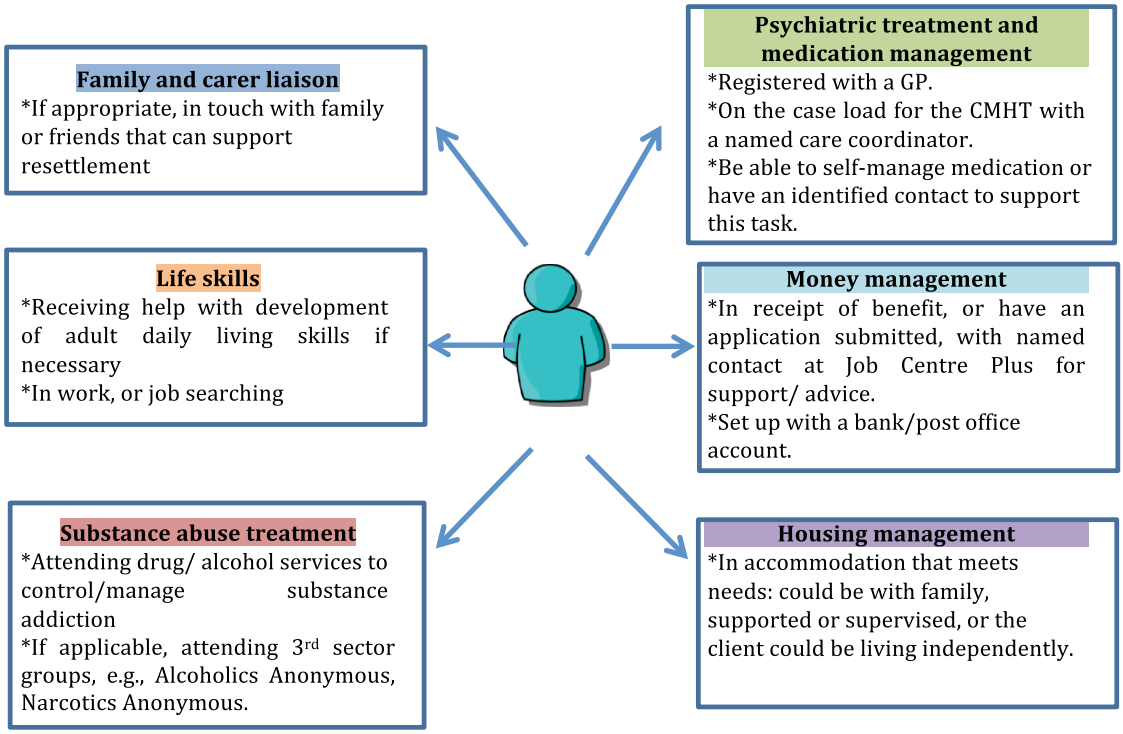
E. Ending the intervention

The CTI program is time limited, extending for a period of 6 weeks following release from prison. Important at this end-stage of the program is the case manager's handling of the 'disconnect' from the client and ensuring that providers of longer term care and practical support understand that the case manager has withdrawn.

(1) Ending for the client

At the end of the intervention, the following issues related to long term care and successful resettlement should have been actioned or should have a clear action plan in place between the client and appropriate service provider to meet the outstanding need:

Figure 7: Key elements of long term care



The case manager should compile for their client a list of the community health care providers and organisations providing financial and employment services providing longer term support for the client. This list should be comprised of named contacts, ideally that the client has met, e.g., in the initial meeting set up and attended by the case manage.

(2) Ending for community based service providers

At the point the case manager closes the intervention for her client, all community service providers and organisations providing practical day to day services must be notified. The case manager will have a continual through put of clients from in-reach and therefore it is important that she and the community providers have a clear method for monitoring where the case manager is along the intervention timeline for any given client – and particularly when her input has come to an end. At this point the service provider should understand that they are now responsible for ensuring continuity of service provision and for assessing any changes in need in discussion directly with the client.

The case manager might find it helpful to set up a regular meeting with her named contact within an organisation during which:

- any documentation related to the handover of a client at the end of his intervention period can be completed
- the contact can be briefed about new clients coming on to the case manager's caseload for whom an appointment with the service provider might be required, etc.

The handover stage is also an opportune moment for the case manager and her service contact to review the systems and processes that they have put into place as part of the implementation of CTI and to discuss any refinements to improve liaison for new clients coming through.

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F. Case manager training

The CTI training manual is intended to be a guide for providers wishing to incorporate the CTI approach into the delivery of local services. To this end it is deliberately non-prescriptive in regard to the training of CTI managers; providers may identify members of staff with different healthcare expertise to those elsewhere as most appropriate within their current service structure to deliver the intervention. However tools are available that service managers may find helpful when assessing whether staff need additional support or training to deliver CTI effectively and which can help to structure discussions of professional development needs as the service beds in, e.g. the Dual Diagnosis Framework (2006) developed to assist in the implementation of the Department of Health Dual Diagnosis Practice Implementation Guide (2002)].

Generally CTI is a model which incorporates best practice from a range of existing clinical actions/interventions already developed by service providers to meet national policy or minimum quality standards, e.g., The NHS Patient Experience Framework (2012) published by the NHS National Quality Board or NICE Quality Standards for care.

G. Staffing, safety and supervision

Staffing, case manager safety and supervision require careful consideration during the process of establishing the intervention.

- Staffing: The early work of engaging and treating the mentally ill on discharge from prison can be labour intensive and emotionally demanding.

Note: Case loads should rarely exceed 10-12 clients per full time case manager.

In Phase 2, Transition to Community, clients may require frequent visits (at least one visit per week); by Phase 4, Transfer of Care, much of the CTI work might be managed by phone. Face-to-face visits may still be required in the event of a crisis developing that threatens to overwhelm the client and established service provider organisations. Importantly, personal visits are essential to help the client navigate through the termination of the intervention.

- Safety: The personal safety of case workers visiting clients in the community is vital. Protocols for safe working when on home visits must be in place.

Note: It is likely that community visit protocols have been developed by the service from which the CTI intervention is run however these should be reviewed at time of implementation and regularly thereafter. The range of environments in which the case manager might now find they are engaging with their clients may necessitate amendments or extension to usual safety practice.

- Supervision: Regular supervision with the case manager's clinical lead for CTI is essential. Fidelity to the intervention model can be checked and any difficulties encountered delivering the intervention may be discussed and options for resolution considered.

Note: Fidelity to the model refers to how closely the original procedures for each stage of the intervention were implemented as they were originally conceived by the originators. In the randomized controlled trials that tested CTI with SMI prisoners, a fidelity checklist was devised that was completed in discussion with case managers at intervals during the intervention period. The elements of the checklist are included in Appendix A and may help to structure discussion of procedural issues arising during team meetings.

Ideally supervision meetings will take place on a weekly basis.

H. Performance indicators

The implementation of a CTI programme requires some measures of performance to be collected in order that the efficacy of the intervention can be established; these data are likely to be important during the annual, service budget review to be able to make the business case for resources to enable the intervention to be continued. The necessity for a service to be able to show that it is making a difference is important and therefore the following indicators may serve as baseline evidence to this effect. The number of clients:

- in contact with CMHT at 6 months post release
- on probation that were recalled to prison
- that reoffended
- that were admitted to hospital

These measures may be extended to further time periods e.g., a further follow up check at 12 months, or tailored to include continued contact with a range of other community services as deemed appropriate by the CTI team.

I. Summary

This chapter of the manual gives an overview of the foundation elements to be considered in the set up and delivery of CTI in a new locality. Each element should be considered by the CTI provider service in respect to their target client group and link organisations locally.

Find out more about ...

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NHS Patient Experience Framework: https://www.gov.uk/government/publications/nhs-patient-experience-framework

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GLOSSARY OF TERMS

3rd sector	Term describing not-for-profit, non-governmental organisations including the voluntary sector
ACT	Assertive Community Treatment team
CQC	Care Quality Commission
CJS	Criminal Justice Service
CMHT	Community Mental Health Team
CPA	Care Programme Approach
CrISP	Critical Time Intervention for Severely Mentally Ill Released Prisoners
DWP	Department for Work and Pensions
GP	General Practitioner
JSA	Job Seekers Allowance
NICE	National Institute of Health and Care Excellence
SMI	severe mental illness

APPENDICES

Appendix A CTI Fidelity Assessment

Appendix B Works cited

Appendix C Contributors

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APPENDIX A: CTI Fidelity Assessment

CTI Fidelity Scale

COMPONENTS (compliance fidelity)	
Phase 1 (Prison 4 weeks prior to release)	**CMP1 Engagement and early linking**
1) visited client twice weekly 2) communicated (visits, calls and/or emails) with in-reach staff at least weekly 3) visited housing provider/family caregiver at least twice 5) communicated (visits, calls and/or emails) with housing provider/family caregiver at least fortnightly 6) communicated (visits, calls and/or emails) with community mental health provider at least fortnightly	
Phase 2 (Release - 2 weeks post release)	**CMP2 Intensive outreach**
1) visited client at least once a week (or other contact maintained) 2) visited and/or talked by phone with client at least 4 times 3) communicated (visits, calls and/or emails) with community mental health provider at least 4 times 4) visited housing provider/family caregiver at least once 5) visited and/or talked by phone with housing provider/family caregiver at least 3 times	
Phase 1 - 3	**CMP3 Three Phases**
1) created a care plan for each phase 2) completed the care plans on time (± 2 days)	
Phase 1 - 3	**CMP4 Focused**
1) limited each care plan to 1 to 3 actions 2) selected actions only from the 6 CTI areas: psychiatric treatment & medication; money management; living skills training; family intervention; substance abuse treatment; housing crisis prevention & management	
Phase 3 (3-6 weeks post release)	**CMP5 Monitoring**
1) communicated with client no more than once a week during Phase 3 2) communicated with community linkages no more than once a week during Phase 3 3) recorded specific ways support network was/was not working	
Closed cases	**CMP6 Time-Limited**
1) did not provide CTI intervention after the 6 week date (±2 days)	
6 week post discharge	**CMP7 6-Week Follow-Up**
1) CTI manager was in touch with client at the 6-week date (±2 days) 2) CTI manager provided at least 4 weeks active Phase 2-3 intervention (i.e., excluding gaps when client disappeared)	
STRUCTURE (context fidelity)	
Any phase	**STR1 Caseload Size**
Caseload size is 18 standard caseload equivalents or less per worker	
QUALITY (competence fidelity)	
Phase 1	**QUA1 Intake Assessment**
1) demographic history (age, gender, ethnicity, marital status, children, family support/abuse), especially detailed homelessness & reasons for housing loss and criminal history. 2) psychiatric, medical & substance abuse history (diagnosis, symptoms, meds, hospitalisations) 3) talents, training, Activity for Daily Living skills, what gives meaning to life	
Any phase	**QUA2 Phase Planning**
1) recorded today's date & phase start date 2) recorded rationale for each focus area in terms of client's needs 3) recorded general objectives for each area	

CTI Fidelity Scale (continued)

Closed cases	**QUA3 Closing Note**
1) transfer-of-care meeting with client & all primary linkages or evidence of case closure (emails etc) 2) made prognosis for client's long-term continuity of care	
Phases 1 & 2	**QUA4 CTI Managers Role with Client**
1) was accessible to client when in field 2) encouraged contact between client & linkages, and between different linkages 3) mediated & negotiated between client & linkages, and between different linkages 4) took harm reduction approach to behavioural change	
Not based on phase	**QUA5 Clinical Supervision**
1) corrected case management that was inconsistent with CTI principles & practices 2) provided guidance to assure approach was consistent with CTI principles & practices 3) scheduled case presentations for all new clients within a few weeks of enrollment into CTI	
Not based on phase	**QUA6 Organizational Support**
1) minimum staff were hired (CTI-trained supervisor & workers) to maintain small caseloads & ensure fidelity	

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Appendix 2 Critical time intervention fidelity scale

Components (compliance fidelity)	
Phase 1 (prison – 4 weeks prior to release)	***Engagement and early linking***
1. Visited client twice weekly 2. Communicated (visits, calls and/or e-mails) with in-reach staff at least weekly 3. Visited housing provider/family caregiver at least twice 4. Communicated (visits, calls and/or e-mails) with housing provider/family caregiver at least fortnightly 5. Communicated (visits, calls and/or e-mails) with community mental health provider at least fortnightly	
Phase 2 (release – 2 weeks post release)	***Intensive outreach***
1. Visited client at least once a week (or other contact maintained) 2. Visited and/or talked by telephone with client at least four times 3. Communicated (visits, calls and/or e-mails) with community mental health provider at least four times 4. Visited housing provider/family caregiver at least once 5. Visited and/or talked by telephone with housing provider/family caregiver at least three times	
Phases 1–3	***Three phases***
1. Created a care plan for each phase 2. Completed the care plans on time (± 2 days)	
Phases 1–3	***Focused***
1. Limited each care plan to 1–3 actions 2. Selected actions only from the six CTI areas: psychiatric treatment and medication, money management, living skills training, family intervention, substance abuse treatment, and housing crisis prevention and management	
Phase 3 (3–6 weeks post release)	***Monitoring***
1. Communicated with client no more than once a week during phase 3 2. Communicated with community linkages no more than once a week during phase 3 3. Recorded specific ways support network was/was not working	
Closed cases	***Time limited***
1. Did not provide CTI intervention after the 6-week date (± 2 days)	
6 week post discharge	***6-week follow-up***
1. CTI manager was in touch with client at the 6-week date (± 2 days) 2. CTI manager provided at least 4 weeks active phase 2–3 intervention (i.e. excluding gaps when client disappeared)	
Structure (context fidelity)	
Any phase	***Caseload size***
Caseload size is 18 standard caseload equivalents or fewer per worker	
Quality (competence fidelity)	
Phase 1	***Intake assessment***
1. Demographic history (age, sex, ethnicity, marital status, children and family support/abuse), especially detailed homelessness and reasons for housing loss and criminal history 2. Psychiatric, medical and substance abuse history (diagnosis, symptoms, medications and hospitalisations) 3. Talents, training, activity for daily living skills, what gives meaning to life	
Any phase	***Phase planning***
1. Recorded today's date and phase start date 2. Recorded rationale for each focus area in terms of client's needs 3. Recorded general objectives for each area	

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Quality (competence fidelity)	
Closed cases	***Closing note***
1. Transfer-of-care meeting with client and all primary linkages or evidence of case closure (e-mails, etc.) 2. Made prognosis for client's long-term continuity of care	
Phases 1 and 2	***CTI managers role with client***
1. Was accessible to client when in field 2. Encouraged contact between client and linkages, and between different linkages 3. Mediated and negotiated between client and linkages, and between different linkages 4. Took harm reduction approach to behavioural change	
Not based on phase	***Clinical supervision***
1. Corrected CM that was inconsistent with CTI principles and practices 2. Provided guidance to assure approach was consistent with CTI principles and practices 3. Scheduled case presentations for all new clients within a few weeks of enrolment into CTI	
Not based on phase	***Organisational support***
1. Minimum staff were hired (CTI-trained supervisor and workers) to maintain small caseloads and ensure fidelity	

Appendix 3 Harms reporting: Consolidated Standards of Reporting Trials – causal relationships' definitions

The causal relationship between reported events and trial participation was assessed as follows.

TABLE 25 The CONSORT definitions of causal relationships

Relationship	Description
Unrelated	There is no evidence of any causal relationship
Unlikely	There is little evidence to suggest that there is a causal relationship (e.g. the event did not occur within a reasonable time after administration of the trial treatment/procedure). There is another reasonable explanation for the event (e.g. the participant's clinical condition, other concomitant treatment)
Possible	There is some evidence to suggest a causal relationship (e.g. because the event occurs within a reasonable time after administration of the trial treatment/procedure). However, the influence of other factors may have contributed to the event (e.g. the participant's clinical condition, other concomitant treatments)
Probable	There is evidence to suggest a causal relationship and the influence of other factors is unlikely
Definitely	There is clear evidence to suggest a causal relationship and other possible contributing factors can be ruled out

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Appendix 4 Interview schedules: intervention participants

Semistructured qualitative interview schedule: pre-release treatment-as-usual participant

1. How long to go until you are released?
2. Do you need help with anything when you are released?

    i. Health.
    ii. Substance misuse.
    iii. Housing.
    iv. Finances.
    v. Employment.
    vi. Family.
    vii. Are these things you feel you would need help with or are these things your care team have suggested would be helpful?

3. What responses to/support for these needs have you received?
4. Have you been put in contact with any services yet? If so,

    i. Which ones?
    ii. Who organised this?
    iii. In what way?
    iv. If not, why not? (Services poor, hard to organise, not needed.)

5. Are you receiving any treatment at the moment? If so,

    i. What?
    ii. Who organised this for you?
    iii. If on medication, what kind and will this continue when released? (If so, who will organise continuation?)
    iv. Are you taking the medication? If not, why not?

6. What do you think of the support you have received in preparing for release?

    i. Is there anything that has been particularly good/helpful?
    ii. Is there anything that you feel should be improved?

Semistructured qualitative interview schedule: post-release treatment-as-usual participant

1. How long have you been released from prison?
2. When you were released did you feel you needed help with anything?

    i. Health.
    ii. Substance misuse.
    iii. Housing.
    iv. Finances.
    v. Employment.
    vi. Family.

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3. How have things been going for you since you were released?

    i. Health.
    ii. Substance misuse.
    iii. Housing.
    iv. Finances.
    v. Employment.
    vi. Family.

4. What responses to/support for these needs have you received?
5. Are you in contact with any services at the moment? If so,

    i. Which ones?
    ii. Who organised this?
    iii. In what way?
    iv. At what time point?
    v. If not, why not? (Services poor, too hard to organise, not needed.)

6. Are you receiving any treatment at the moment? If so,

    i. What?
    ii. Who organised this for you?
    iii. If on medication, what and did this continue from prison? (If so, who organised continuation?)
    iv. If not, who made the appointment/started the medication?
    v. Are you taking the medication? If not, why not?

7. What do you think of the support you have received since release?

    i. Is there anything that has been particularly good/helpful?
    ii. Is there anything that you feel should be improved?

8. Have you been in contact with the police since release?

    i. If so, for what reason?
    ii. How many times?

9. Have you been in hospital since release?

    i. How did this come about?
    ii. How many times?

Semistructured qualitative interview schedule: pre-release critical time intervention participant

1. How long to go until you are released?
2. Do you need help with anything when you are released?

    i. Health.
    ii. Substance misuse.
    iii. Housing.
    iv. Finances.
    v. Employment.

vi. Family.
vii. Are these things you feel you would need help with or are these things your care team have suggested would be helpful?

3. How often have you been seeing your CTI manager?
4. What have they been doing to address your problems/needs?

i. So far, has this been helpful?
ii. What has been good?
iii. What could be improved?

5. Have you been put in contact with any services yet? If so,

i. Which ones?
ii. Who organised this?
iii. In what way?
iv. If not, why not? (Services poor, hard to organise, not needed.)

6. Are you receiving any treatment at the moment? If so,

i. What?
ii. Who organised this for you?
iii. If on medication, what kind and will this continue when released? (If so, who will organise this?)
iv. Are you taking the medication? If not, why not?

7. Have you been in prison before? If so, how have you been finding the release process this time, compared with the previous time/s?

Semistructured qualitative interview schedule: post-release critical time intervention participant

1. How long have you been released from prison?
2. When you were released did you feel you needed help with anything?

i. Health.
ii. Substance misuse.
iii. Housing.
iv. Finances.
v. Employment.
vi. Family.

3. How have things been going for you since you were released?

i. Health.
ii. Substance misuse.
iii. Housing.
iv. Finances.
v. Employment.
vi. Family.

4. How often did you see your CTI manager before and after release?

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5. What did they do to address your problems/needs?

    i. Was this helpful?
    ii. What was good?
    iii. What could be improved?

6. Are you in contact with any services at the moment? If so,

    i. Which ones?
    ii. Who organised this?
    iii. In what way?
    iv. At what time point?
    v. If not, why not? (Services poor, too hard to organise, not needed.)

7. Are you receiving any treatment at the moment? If so,

    i. What?
    ii. Who organised this for you?
    iii. If on medication, what and did this continue from prison? (If so, who organised continuation?)
    iv. If not, who made the appointment/started the medication?
    v. Are you taking the medication? If not, why not?

8. Have you been in prison before? If so, how did you find the release process this time, compared with the previous time/s?
9. Have you been in contact with the police since release?

    i. If so, for what reason?
    ii. How many times?

10. Have you been in hospital since release?

    i. How did this come about?
    ii. How many times?

Critical time intervention participant qualitative matrix

	Pre-release TAU participant	Pre-release CTI participant	Post-release TAU participant	Post-release CTI participant
Continuity of care				
Support/advocacy				
Uncertainty				
Coercion				
Loss/starting over				
Stable/suitable environment				
Reliance on others (family relationships)				
Established relationships/rapport				
Mental health				
Stigma/hopelessness				

Appendix 5 Interview schedules: health professionals

Semistructured qualitative interview schedule: community mental health staff

1. What is your professional role?
2. Can you talk me through the usual post-release process for patients coming out of prison?
    i. How long before release do you liaise with prison mental health services?
    ii. Is this initiated by staff at the prison?
    iii. What are the common needs of patients on release?
    iv. What areas do they receive help with and who has responsibility for these? How do you provide help?
    v. Is the process formally defined/standardised?
3. What organisations, if any, do you liaise with?
    i. Are shared protocols held between all the relevant organisations?
    ii. Are roles and responsibilities formally defined?
4. What is the process for linking patients in with these services/organisations they may need contact with?
    i. Is this a formal process or has it developed locally?
5. Is there a system for checking if patients attend appointments made for them?
    i. Are there follow-up protocols?
    ii. Is there an agreed procedure if patients did not attend?
6. Which aspects of the release process work well?
    i. Why?
7. Which areas of this process could be improved?
    i. How?
    ii. Do you feel there are any gaps in the process that allow people to slip through the net?
8. Overall, how well would you say the release preparation and transition to community processes work?
9. What do you think of the CTI process?
    i. Positives?
    ii. Negatives?
10. If CTI were to replace TAU do you think this would work?
    i. If yes, why and what would be the benefits?
    ii. If no, why not and could changes be made to facilitate implementation?
11. What barriers to, and facilitators of, CTI have you come across?

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Semistructured qualitative interview schedule: prison mental health staff

1. What is your professional role?
2. Can you talk me through the usual pre-release process for patients being discharged from prison?

    i. How long before discharge does this begin?
    ii. How often are they seen?
    iii. What are the common needs of prisoners?
    iv. What areas do they receive help with and who has responsibility for these? How do you provide help?
    v. After release, who is responsible for their care?
    vi. Is the process formally defined/standardised?

3. What organisations, if any, do you liaise with?

    i. Are shared protocols held between all the relevant organisations?
    ii. Are roles and responsibilities formally defined?

4. What is the process for linking prisoners in with these services/organisations they may need contact with?

    i. Is this a formal process or has it developed locally?

5. Which aspects of the release process work well?

    i. Why?

6. Which areas of this process could be improved?

    i. How?
    ii. Do you feel there are any gaps in the process that allow people to slip through the net?

7. Overall, how well would you say the pre-release preparation and transition to community processes work?
8. What do you think of the CTI process?

    i. Positives?
    ii. Negatives?

9. If CTI were to replace TAU do you think this would work?

    i. If yes, why and what would be the benefits?
    ii. If no, why not and could changes be made to facilitate implementation?

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