A worked example of the initial programme theory development phase in theory-driven evaluation: PARTNERS2 collaborative care for people who have experienced psychosis in England

Abstract

In this paper we present an exemplar of the initial programme theory (IPT) development phase of Theory-driven Evaluation (TDE) for the PARTNERS2 project, a collaborative care intervention for people with experience of psychosis in England. Our IPT was based on analysis of the literature, interviews with key leaders, and focus groups with service users. The IPT was developed from these sources in an iterative process between researchers and stakeholders (service users, practitioners, commissioners) involving four activities: articulation of 442 explanatory statements systematically developed using realist methods; debate and consensus; communication; interrogation.

We refute two criticisms of TDE of complex interventions. We demonstrate how the process of IPT made a meaningful contribution to our complex intervention in five ways. Although time consuming, it was possible to develop an internally coherent and well documented intervention.

This study and the lessons learnt provide a detailed resource for other researchers wishing to employ TDE.

Keywords: Programme theory development; theory-driven evaluation; complex interventions; collaborative care; personal recovery; psychosis

Abstrait

Dans cet article, nous présentons un exemple de la phase de développement de la théorie du programme initial (TPI) de l'évaluation basée sur la théorie (TDE) pour le projet PARTNERS2, une intervention de soins en collaboration pour les personnes ayant une expérience de la psychose en Angleterre. Notre IPT était basé sur une analyse de la littérature, des entretiens avec des leaders clés et des groupes de discussion avec des utilisateurs de services. Le TPI a été développé à partir de ces sources dans le cadre d'un processus itératif entre chercheurs et parties prenantes (utilisateurs de services, praticiens, commissaires) comprenant quatre activités: articulation de 442 déclarations explicatives systématiquement développées à l'aide de méthodes réalistes; débat et consensus; la communication; interrogatoire.

Nous réfutons deux critiques du TDE d'interventions complexes. Nous montrons comment le processus de TPI a apporté une contribution significative à notre intervention complexe de cinq manières. Bien que prenant beaucoup de temps, il était possible de développer une intervention interne cohérente et bien documentée.
Cette étude et les leçons apprises fournissent une ressource détaillée aux autres chercheurs souhaitant utiliser le TDE.

Keywords: Développement de la théorie du programme; évaluation théorique; interventions complexes; soins en collaboration; récupération personnelle; psychose

Introduction

Evaluations of complex interventions have expanded from a focus on 'what works?' to asking 'how and why does an intervention work, for whom, in what context?'. Theory-driven evaluation (TDE) is one approach to answering complex questions about complex interventions. In this paper we focus on the initial programme theory (IPT) development phase of TDE for the PARTNERS2 project, a collaborative care intervention for people with experience of psychosis in England.
Complex interventions can be understood to be complex because of intervention content, for example because of number of components, number of social levels targeted, diversity and variability of outcomes, and level of skill required to deliver the intervention (Craig et al., 2008). Interventions are often introduced to re-align existing systems in an attempt to solve problems, and so complexity also follows from the extent of change required in different contexts and the amenability of individual systems to the changes required (Hawe et al., 2009). According to recent guidance from the Medical Research Council, complex interventions are characterised by unpredictability and non-linear outcomes (Moore et al., 2015).
One approach to addressing such aspects of complexity in the evaluation of interventions involves TDE. TDE involves the development of programme theory to hypothesise how and why an intervention will work by identifying relationships between intervention components and how they relate to contexts, the actions and decision-making processes of the people who deliver and receive the intervention, and outcomes. The programme theory can then be used to inform evaluation design, make sense of evaluation findings and to tailor interventions to specific contexts; evaluation processes and findings can also inform refinement of programme theories (Coryn et al., 2011; Weiss, 1995; Funnell and Rogers, 2011; Moore et al. 2015). Thus programme theory complements randomised controlled trials (RCTs) which provide estimates of aggregate effects but are not able to generate adequate explanations for why and how interventions work or not, and do not account for context (Bonner, 2003). The initial programme development phase in TDE involves creating a programme theory that can later be tested and then refined in response to evaluation findings.
In their review of the use of theory in interventions reported by the journal *Evaluation*, Leeuw and Donaldson (2015) suggest the meaning of 'theory' in evaluation can be complex and potentially confusing. To begin to clarify fragmented approaches they identify two helpful typologies of theory. Typology 1 consists of theories of policy makers, stakeholders and evaluators underlying their professional work in making policies and doing evaluations. Typology 2 consists of scientific theories capable of contextualizing and explaining the consequences of policies, programmes and evaluators' actions.

Typology 1 represents what Pawson (1997) calls 'theories incarnate' – they articulate the rationales and expectations of stakeholders and researchers. Because stakeholders are already embedded in specific contexts, they are likely to have valuable, contextualised knowledge to which researchers are not privy. Developing programme theory from stakeholder knowledge is therefore considered an important means of linking theory and context (Moore and Evans, 2017). Leeuw and Donaldson (2015) detail numerous potential aspects of TDE within Typology 1 to include, in addition to programme theory: theories of change, theories in use, logic models, logical frameworks, theory/anti-theory and evaluation/implementation theories. These all have in common their origin in the perceptions about how the intervention works of the stakeholders, researchers and evaluators involved.

By contrast, Typology 2 represents existing, more abstract social science theory. These provide theoretical explanation at the social and institutional level. Medical Research Council guidance suggests drawing on existing evidence and theory, and supplementing this with primary data (Craig et al., 2006). This corresponds to findings by Leeuw & Donaldson (2015) where almost half of the studies they reviewed synthesised both stakeholder/researcher theory and existing scientific theory to create a 'plausible' programme theory. The authors suggest that combining the two typologies represents the most robust approach.

However, not all evaluation scientists are convinced that TDE is beneficial. Two objections to TDE summarised by Coryn et al. (2011) surmise that: 1) explication of programme theory is unnecessary because it is often not used in any meaningful way, and 2) since developing high quality programme theories is often not feasible, and poor quality programme theories can be counter-productive, conducting TDE is a waste of valuable resources. Although there is a growing body of work in the field of TDE that debates what should be done to develop a useful programme theory, there are few examples that explore the role of this approach within specific projects. Coryn et al. (2011) conclude their review of projects employing TDE by calling for "exemplars, including reports of successes and failures, methods and analytic techniques" (p216) after finding a paucity of evidence either to support or contradict claims made by both critics of or advocates for TDE. Inquiry into the method of using theory during evaluation of interventions is rare (Brand et al. 2018), however scrutiny of IPT development is perhaps even more so. We were only able to find a few detailed accounts of IPT development (Pearson et al. 2015; Shearn et al 2017), both of which discussed IPT development specifically in relation to realist approaches. In this paper, although we draw from realist approaches as one aspect of theory development (see 'Articulation drawing from realist approaches'), we present an exemplar of IPT development that is more generally relevant to TDE.

The PARTNERS2 project is funded by a UK National Institute of Health Research Programme Grant for 5 years to include stages of IPT development, formative evaluation and RCT with process evaluation. The PARTNERS project involved a stage of IPT development in order to design an intervention that would later be evaluated at pilot and trial stages. Although we test our programme theory during later stages of the project, this paper focuses on the IPT development stage only. In creating IPT we aimed to define and develop the key components of collaborative care for people with a diagnosis of schizophrenia or bipolar in an English primary care context. In doing this we aimed to conserve fundamental principles of collaborative care, including components and elements for which there was evidence of likely benefit, and adapting other components to make them optimal for people with experience of psychosis.

We adopted a theory-driven approach to support evaluation of a number of elements of complexity in the intervention, including multiple components, two targeted levels for change, multiple outcomes, tailoring of the intervention to individual recipients, and intervention sites involving multiple institutional systems, so complexity of context. Our aim

in this paper is to provide a worked example and to contribute to the debate about the value of TDE approaches, by describing the activities we engaged in related to IPT development, and by reflecting on how these activities impacted its creation and content.

Developing the PARTNERS2 IPT

We developed the IPT in an iterative process from April 2014 to October 2015. This IPT involved collaborative care approaches such as a multi-professional approach to care (an experienced mental health professional called a 'care partner' sited within primary care), appropriate psycho-social intervention (sign-posting/referral and a coaching approach to individualized care), regular/systematic monitoring and improved inter-professional communication (see Figure 1 for a graphic representation of the IPT). We framed these approaches using the concept widely used in mental health care in England of 'personal recovery', and coaching principles in order to support service users to be more active in managing their mental health, and to orientate care around service user priorities.

To set the programme theory in context, we describe here its progress over the time of the PARTNERS2 grant period, although we only detail development of IPT in this paper. The IPT was operationalised in our pilot intervention that was formatively evaluated from November 2016 to April 2017. The formative evaluation contributed to further refinement of the IPT (reported elsewhere) and we drew from the refined programme theory to design the RCT which is currently taking place. We anticipate that findings from the RCT and process evaluation will inform further refinement, representing overall a continuing, gradual and iterative process across the project that may potentially continue should other researchers draw from the theory in future.

The IPT development was conducted by the same members of the PARTNERS2 team later conducting formative and then process evaluation, although we purposely integrated discussion about development of the IPT content across the wider programme evaluation team during the IPT development stage. One researcher [researcher's initials] acted as 'the keeper of the theory'; she supported coherence by involvement with, communication about and integration of the different IPT sources and activities. Critical evaluation and questioning of proposed theory was encouraged within the team and with stakeholders as an approach to minimizing bias. We view the in-depth familiarity with the intervention content across the team as a strength that later supported particularly relevant formative and process evaluation designs, though for the full RCT we separated trial and process evaluation team members.

In the sections below we describe the range of sources that we drew from to develop the IPT, only some of which had been specified in our original protocol. We then describe four activities which the PARTNERS2 team engaged in: articulation drawing from realist approaches; debate and consensus; communication; and interrogation. While the formal data sources contributing to the synthesis were planned in advance, the four activities contributing to synthesis represent our post hoc understanding of how we developed the model from these and knowledge held by stakeholders (service users, primary and secondary practitioners and policy makers). Figure 2 depicts the overall process of IPT development. Figure 3 shows sources and activities. Although a collective understanding of the IPT was complete by October 2015, we continued to articulate and interrogate it after this time. Due to space constraints, in this paper we are only able to give an overview of methods in relation to data sources (additional detail can be requested from the authors).

Description of IPT sources

Our IPT was developed from two types of sources: formal data sources; and researcher and stakeholder knowledge and experience.

Formal data sources

Formal data sources included literature on collaborative care and personal recovery, twelve interviews with key leaders in collaborative care and personal recovery, and six focus groups with service users. Ethical consent was granted by NRES Committee West Midlands – Edgbaston (REC reference number 14/WM/0052).

Research literature on collaborative care and personal recovery provided the foundational structure for components and key content of the IPT. Social science theory, including the Chronic Care Model (Wagner et al., 1996) and a conceptual framework for personal recovery in mental health (Leamy et al., 2011), with research evidence about collaborative care (Reilly S, 2013; Druss et al., 2001; Bauer et al., 2006; Kilbourne, 2008; van der Voort et al., 2015; Waxmonsky et al., 2014; Meadows et al., 2007; Chatterjee et al., 2014) supported our aim to follow fundamental principles of collaborative care optimised for people with experience of psychosis, where there was evidence of potential benefit.

Additional literature on personal recovery was surveyed and selected to represent views of service users, practitioners and policy makers (Bird et al., 2014; Bora et al., 2010; Brown and Kandirikirira, 2007; CSIP et al., 2007) about how and why personal recovery approaches were beneficial. One hundred and forty-four explanatory statements (ESs – see the section describing "articulation drawing from realist approaches" below) were written from this literature.

Eleven key experts were interviewed in order to explore their experience of how and why collaborative care and personal recovery approaches work. Because we drew from realist approaches to articulate the IPT (see the section 'Articulation drawing from realist approaches'), it was agreed in keeping with realist principles of building on prior theory to formally draw from expertise on collaborative care in the researcher team, so [authors' initials] were invited to interview. Those who agreed (total 11; collaborative care: 10 researchers from the US (5), UK (3), Australia (1) and the Netherlands (1); personal recovery: 1 researcher from the UK) were emailed information about the study, details of our preliminary ideas for model components and documents for obtaining their consent. Where consent was given, we interviewed these experts between October 2014 and February 2015 by telephone (9) or in person (2) about their experiences of intervention approaches, exploring how and why they thought the PARTNERS2 intervention might or might not work. Interviews lasted 30-60 minutes. Two hundred and nine ESs were written from this data.

Focus groups with service users were held to explore current experiences of care. These were jointly held by two to three researchers from the PARTNERS2 team but were led by researchers with lived experience of mental health services. Service users who were not currently in crisis and had received care for psychosis in the previous two years were recruited through third sector organisations. At each of the three sites of the study, 1 focus group was held with participants with a diagnosis of schizophrenia (SZ) and 1 was held with participants with a diagnosis of bipolar (BP). A total of six focus groups involving 33 participants (13 women, 20 men) were conducted between January and March 2015, in Devon, Birmingham and Lancashire. Participants gave written consent, travel expenses were paid and each participant received a £10 voucher. Focus groups were audio recorded and transcribed. Transcriptions were coded in qualitative coding software (*Nvivo* 10), to collate data about processes of care, positive and negative experiences of care, and recommendations for care. Eighty nine ESs were written from this data.

Researcher and stakeholder knowledge and experience

Although researcher and stakeholder knowledge and experience was usually a less explicit basis for developing the IPT compared to the formal data sources, it implicitly provided a further source by contextualising, shaping and providing a referent from which to prioritise and evaluate the other data sources, as well as informing the writing of ESs.
Researchers, for example, brought additional ideas rather than just acting as 'neutral' programme theory builders. A number of researchers were purposely recruited to the project because they had experience of receiving mental health services, and they contributed expertise across the programme theory development phase, but particularly during focus groups with service users, analysis of focus group data and writing and providing feedback about explanatory statements from focus groups and personal recovery literature. Clinician researchers each brought relevant knowledge and experience about collaborative care and methodology. For example, [Author's initials] brought particular experience about supervision in collaborative care from her experience with other projects (Coventry et al., 2015; Richards et al., 2013). [Author's initials] was involved in a separate collaborative care intervention for offenders (Lennox et al., 2018) which involved a realist review and evidence synthesis (Pearson et al., 2015). We also drew from the collaborative care expertise of [Authors' initials] more formally by interviewing them as key leaders (see 'Formal data sources' above).
We recruited Lived Experience Advisory Panels (LEAPs) that met four times a year from third sector organisations in each of the three study sites. Meetings rotated by site so researchers had one LEAP to consult every month of the year for advice and guidance. The main role of the LEAPs were to provide expert input into the PARTNERS2 research study based upon experiential knowledge of psychosis, schizophrenia or bipolar. We recruited both service users and family members and each LEAP had up to 10 members. In each site, potential members attended an information gathering meeting in 2014 to assess what was involved and meet staff as well as other potential members. Criteria to join a LEAP were: interest in mental health research; understanding of secondary mental health and primary care services for people who experience psychosis and/or had a diagnosis of schizophrenia or bipolar; ideally experience of previous committee membership. We sought to build the panels with diverse perspectives through variations in gender, age, ethnicity and diagnostic label. The LEAP members gave feedback about explanatory statements, focus group topic guides and manual wording and content.

Description of activities to develop the IPT

Our IPT was developed through four activities: articulation drawing from realist approaches, debate and consensus, communication and interrogation. Realist approaches specifically guided the activity of articulation, however, the other activities we engaged in to create our IPT – debate and consensus, communication and interrogation – are relevant to TDE processes more generally.

Articulation drawing from realist approaches

The activity of articulation involved identifying potential theories proposed within the formal data sources described above. Because realist approaches (Pawson, 2006; Pawson and Tilley, 1997) draw from a generative theory of causation that accounts for complexity and change over time in open systems, and so can be a useful approach within TDE, we adopted a realist approach in articulating our IPT. From a realist perspective, change due to an intervention does not only follow from the addition of intervention resources to a context, but is contingent on internal decisions by individuals. Such reasoned responses by individuals to

intervention resources in a specific context is the mechanism by which an intervention brings about its outcomes (Lacouture et al., 2015). Exploration of the potential range of relational patterns between context, mechanisms and outcomes creates detailed programme theory, predicting how, why and for whom an intervention works. Realist approaches create mid-level theory (Pawson, 2010) that evaluators can draw from and adapt for use in other interventions that share similar aims.

The sources from which we drew to articulate the IPT include existing social science theory and medical research to identify broad structures and evidenced components, and we synthesised this with literature and stakeholder/researcher-level expertise to further elaborate and explain the intervention (for more detail of sources see below, Table 1). As is an aim within realist approaches, we were able to draw from relevant aspects of the programme theory of a project running in parallel, but ahead of, the PARTNERS2 project, the ENGAGER project (http://clahrc-peninsula.nihr.ac.uk/research/engager). Overlap of a co-applicant investigator ([Author's initials]) between PARTNERS2 and ENGAGER bolstered this sharing.

Our methods for articulating the IPT involved adaptation of an approach to realist review adopted in the ENGAGER project (Pearson et al., 2015). We wrote explanatory statements (ESs) in the format 'If… then…', for example, "*If* the care partner acts as a three-way liaison, a conveyor of information between service user, general practitioner & community mental health team, *then* communication improves" [ES162]. Each ES describes a potential causal relationship within the intervention. We numbered the statements, recorded the data source and type of stakeholder, then categorised and consolidated ESs. We further drew from the Engager project by applying the macro, meso and micro levels they identified (Pearson et al., 2015) as an initial framework for consolidation. We adapted these to be relevant to our data, identifying 9 categories: 1. Practitioner organisational, social and cultural context (macro); 2. Practitioner—practitioner interactions (meso); 3. Practitioner engagement and acceptability (meso); 4. Practitioner perceptions, understanding and skills (micro); 5. Service user—practitioner interactions (meso); 6. Service user experiences of care (meso); 7. Service user perceptions, understanding, skills and mental/physical health (micro); 8. Research aspects (intervention content, trial practicalities and approach to fidelity/process evaluation -- macro); 9. Carer perceptions, understanding and skills (micro). Researcher teams met repeatedly to discuss ES writing and consolidation. The directory of PARTNERS2 Consolidated ESs can be found in Supplementary figure S1.

Debate and consensus

While activities of articulation identified potential content and causal pathways for the PARTNERS2 IPT, activities of debate and consensus between researchers and stakeholders determined the detail of what was and was not included in the IPT, and how it would be implemented.

Activities of debate and consensus were conducted during regular researcher telephone conferences, consultation with our LEAPs, stakeholder workshops where researchers, LEAP members and practitioners met, and face to face researcher meetings (see the timeline in Figure 2). The PARTNERS2 research team included a number of co-applicant investigators ([Author's initials]) with a range of specialisations including primary care, secondary care (clinical psychology and psychiatry) and Patient & Public Involvement. Research Fellows, Associate Research Fellows, Service User Researchers and Researcher Consultants ([Author's initials]) also varied in their experience and knowledge of methodologies and mental health. The research team spanned seven universities (University of Birmingham, Lancaster University, University of Manchester, University of Warwick, University of Exeter, University of Plymouth and the London School of Economics and Political Science) and a research centre in London (The McPin Foundation). Varied areas of speciality and the

distributed nature of the team meant that face to face meetings and workshops were particularly important, though limited for practical and financial reasons.

We drew from the knowledge and experience of stakeholders by consulting with LEAP service users and carers, primary and secondary health and mental health practitioners, and health commissioners recruited from our three intervention sites in Lancashire, Birmingham and Devon.

Finally, processes of discussion and negotiation with local Trusts circumscribed or shaped the application of the IPT. In some instances, we were unable to adopt aspects of the intervention because of local research site contexts. For example, personal recovery literature, the interview with a key leader in personal recovery, focus group data and input from stakeholder workshops suggested employing peer support workers to carry out the care partner role to support egalitarian relationships. However, there were not adequate numbers of peer support workers within the local Trusts at our research sites to enable this. In preparing for both formative and process evaluations, negotiations and discussions with Trusts about how the IPT and/or local context could be adapted in order for the two to work together was a crucial and often complex prior stage to recruitment.

Communication

Aspects of the IPT were made explicit in order to communicate PARTNERS2 to others through a graphic representation (see Figure 1, the PARTNERS2 initial model) and manuals (available on request to the authors).

The graphic representation is a visual summary of the PARTNERS2 intervention, and highlights the main types of intervention resources that include structures, information and people. Change occurs primarily at two levels; practitioner change following training, resources and supervision, and service user change following interactions with a care partner including engagement and retention, coaching, care coordination and review. We also communicated the IPT by writing manuals for care partners and their supervisors, service users, carers and GPs. We adapted some of the resources from the ENGAGER intervention (Pearson et al., 2015) and part of its manual framework and content where its aims were similar to the aims within PARTNERS2. The manuals were initially written by a few researchers based on the collective understanding, and subsequently debated across the research team and LEAPs, and revised at length.

Interrogation

We interrogated the IPT by comparing content between different representations of the intervention, and by comparing the practitioner manual to clinical guidelines for best practice. The practitioner manual was compared to the directory of 442 ESs, in order to check consistency and identify gaps. The two representations of the model were highly consistent, although a few gaps, where the manual did not completely represent ESs were identified, for example, responsibilities of the care partner and supervisors in relation to liaison with primary care staff needed further clarification. These gaps were discussed across the researcher team, and the manual was adapted to more fully reflect the ESs.

The manual was compared to relevant NICE clinical guidelines (NICE, 2006; NICE, 2014; NICE, 2012) in order to explore how consistent it was with current guidelines for good practice, and to identify any gaps. The comparison showed the manual and guidelines to be mostly consistent. The gaps identified related to issues that had been agreed within the research team, but that had been postponed due to lack of capacity (e.g. creating a Carers/Friends and Family manual and directories of local resources; manualising preparation for the end of PARTNERS2) or were identified in the ESs but not the manual (e.g. being sensitive to service users' multiple identities). These gaps were discussed across the research team, and we adapted our ESs and/or the manual to address them.

Lessons learnt about developing the IPT

The four activities described above worked interactively in a non-linear manner. Activities of debate and consensus evaluated, circumscribed, structured and/or guided the impacts of articulation, communication and interrogation. Articulation provided evidenced content for debate and consensus. Activities of communication created public representations of the IPT from processes of articulation, debate and consensus, and interrogation. Interrogation established consistency and robustness of the processes of articulation, debate and consensus, and communication and helped reduce the risks of bias from any one source.

Through ongoing dialogue about the intervention, a collective and increasingly explicit understanding was created between PARTNERS2 researchers and LEAP members about what the intervention involved. In an ongoing iterative process, all four activities both contributed to, and were tailored by, the developing collective understanding. Inevitably individual researchers and LEAP members understood the model in slightly different ways, but the collective understanding represented distributed meanings across the PARTNERS2 team.

Below we reflect on each of the activities in turn, then discuss a particularly beneficial aspect of the interaction between activities of articulation, and debate and consensus.

Lessons learnt about articulation

The activities of articulation created a foundation and process for establishing content of the IPT. From social science theory (Wagner et al., 1996; Leamy et al., 2011) we established core components of the model. The PARTNERS2 directory of ESs explicated in detail a number of potential causal patterns that provide a transparent record of explanation for the content of the intervention and how we anticipated it would work. Organising ESs into macro-meso-micro levels clarified content at different levels within the intervention, and supported understanding about relationships between them.

Different formal data sources provided detail for different categories and levels of ESs (see Table 1). This demonstrated how important it was to draw across sources chosen in order to illuminate different aspects of the complex PARTNERS2 intervention. Drawing from a range of sources was also beneficial because information from one source often provided support for or challenge to the relevance and meaning of issues flagged in other sources. Where sources supported each other, this substantiated potential ESs; where sources challenged each other, this highlighted areas requiring debate and consensus. Through these processes we were able to reduce the risks of bias from any one source.

There were also a number of difficulties related to ESs. Originally, our intention was for the directory of ESs to represent the IPT as fully as possible. However, because of project financial constraints and long term illness of more than one researcher, capacity was limited during the first three years of the study. The time needed for this process was already lengthy due to unfamiliarity with realist approaches for most of the researcher team and its time-consuming nature. Our process of writing ESs was adapted as a result.

Initially, we intended to write ESs systematically not only in response to literature and primary data, but also researcher discussions, citing each meeting as a source. Instead, during identification and consolidation of ESs, we adapted the original text of data sources to be relevant to our PARTNERS2 collective understanding. We also intended to refine ESs further, for example by consolidating the individual-level service user theory around personal recovery by mechanism as well as outcome, because the relationships tended to be bi-directional. This process was curtailed, along with intentions to write narratives for each of the nine main categories of theory, due to time constraints. Even with these adaptations, the

process of identifying and consolidating ESs continued on through the formative evaluation. In effect, the collective understanding, graphic representation and manuals represented our IPT that was tested during formative evaluation, while the ESs were more slowly explicated. Eventually we moved on to the needs of conducting process evaluation of the upcoming RCT, rather than developing the ESs further. The time-consuming nature of the process of identifying and consolidating ESs was problematic, though it provided a robust basis for developing our IPT.

Lessons learnt about debate and consensus

A particular benefit to the intervention resulting from activities of debate and consensus was the identification of, and work to prevent, unintended consequences. For example, there was an awareness from the focus groups with service users that in changing healthcare providers (the intervention requires relocating service users' care from secondary mental health care services to primary care) there was the risk we would destabilise existing, supportive relationships between practitioners and service users. In addition, until agreements had been negotiated with local Trusts who provided the secondary mental health care, we did not know how service users would be re-integrated into existing mental health services when the PARTNERS2 intervention concluded, or if the collaborative care model might continue locally beyond the trial. Through ongoing consultation with the PARTNERS2 LEAPs, service users and carers reiterated transfer in and out of PARTNERS2 as a crucial aspect of the intervention, and developed recruitment materials and intervention resources and content to support transfer back into usual care after leaving PARTNERS2. While the intervention's approaches to transfer have not yet been fully tested, the input from LEAPs enabled more nuanced, sensitive and complete resources to be developed.

Lessons learnt about communication

The graphic representation of the model was used during recruitment to explain the intervention to local Trusts and GP surgery staff, and was included in the Care Partner/Supervisor Manual. Although of perhaps limited use in isolation, it provided a shorthand for the contents of the intervention, and a reference for ongoing discussion about what the intervention involved.

The manuals were highly important during the lead up to the pilot phase and formative evaluation; they described how the intervention was to be carried out in practice. The content of the practitioner manuals included aspects of the model that we anticipated might not already be part of usual care, in order to focus on areas of change. Service user and Friends and Family manuals explained the support they would receive and clarified roles of practitioners and the service user, in order to inform and direct expectations. Because of the extended time period necessary to complete the directory of ESs and because of its complexity, the PARTNERS2 manuals acted as the primary means of communication about the IPT during the formative evaluation and after adaptation in the main trial.

Lessons learnt about interrogation

The activities of interrogation represented self-checking exercises for the IPT. They allowed us to systematically identify and remedy gaps. The consistency established by these two activities of interrogation supported our confidence in the rigour and quality of the IPT for PARTNERS2.

Interactions between articulation and debate and consensus

A beneficial but unanticipated aspect of activities of articulation involved their effect of specifying and grounding what might have otherwise been more abstract concepts, which facilitated activities of debate and consensus. The level of the ESs (relating to specific circumstances and issues) reduced perceptions that the theory was over-abstract or removed from practice. The process of developing ESs therefore seemed to create a structure and bridge for researchers and stakeholders to meaningfully move back and forth between practice and theory. The process of realist synthesis supported the development of IPT not only as a method for articulating causal patterns and synthesising these, but perhaps as importantly, by creating a structure and focus for negotiating understanding across researchers and stakeholders with widely divergent experience and knowledge.

Processes of data collection and analysis framed multiple potential aspects of the intervention with a focus on 'why' and 'how'. This brought to discussion many topics and initiated face to face meetings between researchers and stakeholders that might not have occurred otherwise, and created a context for discussion that naturally moved beyond 'this is what I think we should do', to 'we could do this because'. In other words, it encouraged focus on the reason *behind* choices that was less influenced by status, expert opinion and/or gestalt meanings.

One example involves two of the co-applicant investigators who were practitioner researchers from primary ([Author's initials]) and secondary ([Author's initials]) care and who had extensive experience working with collaborative care interventions (Lennox et al., 2018; Coventry et al., 2015; Richards et al., 2013). Their input carried particular weight in the theory-building process though their experiences and perspectives were quite different. [Author's initials] tended to think and communicate on a more conceptually abstract basis, whereas [Author's initials] tended to prioritise a more grounded, pragmatic approach. The two researchers' different styles, combined with different practitioner emphases, could sometimes create barriers to understanding and/or consensus between them. Initially, [Author's initials] expressed reservations about framing collaborative care with principles of personal recovery, because its meaning could be misunderstood by practitioners and service users (Slade et al., 2014) and because it was often discussed in highly abstract terms. There was also concern across the team that inclusion of such principles mistakenly suggested the focus of collaborative care was as much about care partner—service user collaboration as about primary—secondary care collaboration. These differences were resolved through open discussion and debate as there were found to be few if any substantive differences of view once differences related to language had been understood.

Through activities of articulation such as reviewing research on collaborative care and psychosis, interviews with key leaders and writing and consolidating ESs from literature on personal recovery, we were able to distinguish implicit aspects of personal recovery in existing collaborative care interventions and convincing beneficial aspects of a personal recovery approach in relation to psychosis, which led to consensus. We operationalised these for practice through adoption of coaching principles (Bora et al., 2010) to guide interactions between the PARTNERS2 case managers and service users. Explicit incorporation of recovery principles is a distinguishing feature of PARTNERS2 collaborative care for people who experience psychosis.

Discussion

In this paper we have provided a worked example of the IPT development phase of TDE for PARTNERS2 collaborative care for psychosis, a complex intervention. We have described data sources and IPT development activities, and reflected on the lessons learnt. While not

intended to be a guide, we hope that our post hoc 'warts and all' description of the four varied activities we ended up engaging in to create the IPT, and our discussion of the interactions between these activities, will be helpful to others developing complex interventions. We drew from similar activities again during our formative evaluation (reported elsewhere), and anticipate these activities will support us in evaluating the intervention during our RCT and process evaluation. Although we only report the activities in detail for the IPT development phase, we posit that they are beneficial within evaluation as well as theory development phases of TDE.

We would now like to draw on our experience during this process to contribute to the debate on the value of IPT development in a TDE approach. We return to the two objections (Coryn et al., 2011) to TDE raised in the Introduction to this paper, that 1) explication of programme theory is unnecessary because it is often not used in any meaningful way, and 2) since developing high quality programme theories is often not feasible, and poor quality programme theories can be counter-productive, conducting TDE is a waste of valuable resources. In contrast to the first objection, the process of IPT development contributed meaningfully to our complex intervention in a number of ways, including: a) detailed clarification of the intervention rationale; b) establishing a high level of internal consistency between IPT and communications of the model such as the intervention manuals; c) highlighting issues that prepared us to better train practitioners; d) creating a framework for thorough evaluation including hypotheses about why the intervention might or might not work; and e) providing a structure that fostered dialogue and understanding amongst researchers, service users, carers and practitioners, allowing more egalitarian and thorough exploration of the issues around collaborative care for people who experience psychosis.

With regards to the second objection, our experience both supported and refuted it in different ways. In accordance with the charge that high quality programme theory development is not feasible, we found the activities of articulation drawing from realist approaches as well as the activity of debate and consensus to be particularly time consuming, and we could easily have spent additional time in developing the IPT further. Other projects have reported similar difficulties (Lloyd et al., 2017). As recipients of a 5-year Programme Grant from the UK National Institute of Health Research, we were able to expend extensive resources on IPT development, but smaller research projects may not be able to do so, and this is a limitation of the approach. Finding the right amounts of time and resources to develop a programme theory robust enough for the purposes of each project remains a matter of judgment and fine balance.

In refutation to the second objection, although we were obliged to follow Coryn's (2011) recommendation for the need to prioritise and balance IPT development in the face of pragmatic limitations, we *were* able to develop an internally coherent complex intervention that is documented in detail. We found the realist approach of tabulating and consolidating hypothetical relationships, although time consuming, supported high quality activities of debate and consensus, and particularly in-depth conceptualisations about how the intervention might work. And, having expended these resources, other researchers and healthcare practitioners can now draw from the study as a resource.

A further question concerning the programme theory at this time is that its utility and efficacy have yet to be tested in a full trial. A further strength is the large number of collaborators involved in the IPT development, which guards against individual biases or idiosyncrasies. We have contributed to the cumulation of research around collaborative care, by drawing from existing theory and strengthening this with primary data and further development. Because the IPT is mid-range, it is likely to be generalisable to other interventions with similar aims applied within similar contexts.

The work done on PARTNERS2 is timely. The Independent Mental Health Taskforce has recently published the five year forward view for mental health in the UK (Farmer and Dyer, 2016), which includes recommendations for improved physical healthcare for people with more severe mental health problems, and support for mental health from primary care. In future, UK Healthcare Trusts may therefore be likely to work on the implementation of models with aims similar to PARTNERS2. The IPT that we have built is deeply rooted in existing literature and theory on collaborative care and personal recovery as well as the experience of many experts. We hope others will build it further and use this as a resource for evaluation work in the future.

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Tables

Table 1. Contribution of each formal data source to the Initial Model.

Formal data source	**Contribution**	**Notes**
Social science theory	Source for foundational theory underpinning the Initial Model	(Leamy et al., 2011; Wagner et al., 1996)
Systematic review and/or studies on collaborative care for psychosis	Provided evidence and detail about foundational components for the Initial Model	(Bauer et al., 2006; Chatterjee et al., 2014; Druss et al., 2001; Kilbourne, 2008; Meadows et al., 2007; Reilly S, 2013; van der Voort et al., 2015; Waxmonsky et al., 2014)
Personal recovery literature	ESs* detailing content and approach to implementation at primarily meso and micro levels	Contributed mostly to ES* categories: 5. Service user – practitioner interactions; 7. Service users' perceptions, understanding, skills and/or physical and mental health.
Interviews with key leaders	ESs* detailing content and approach to implementation at primarily macro and meso levels	Contributed mostly to ES* categories: 1. Organisational, social and cultural context; 2. Practitioner—practitioner interactions; 3. Participant engagement/acceptability; 4. Practitioner perceptions, understanding and skills; 5. Practitioner—service user interactions;

		8. Research aspects.
Focus groups with service users	ESs* detailing content and approach to implementation primarily at the meso and micro level	Contributed mostly to ES* categories: 6. Service users' experience of care 7. Service users' perceptions, understanding, skills and/or physical and mental health. Current perspectives of local service users substantiated literature on personal recovery.

*ES: Explanatory statement

Figures

Figure 1. Graphic representation of the PARTNERS2 IPT.

Figure 2. Diagram depicting the process of Initial Model development. Representations of the Model are shown with rectangles; sources of the Model are shown with ovals; explicit elements have solid boundaries; more implicit elements have dotted boundaries. Outlines and arrows in blue represent the overlapping role of debate and consensus with other activities.

Figure 3. Timeline showing sources and activities. **Key** ESs: Explanatory statements; LP: LEAP meeting; RC: researcher consensus meeting; RM: face to face researcher meeting; RW: researcher workshop; SW: stakeholder workshop; TC: researcher telephone conference. Representations of the Model are shown with rectangles; sources of the Model are shown with ovals; explicit elements have solid boundaries; more implicit elements have dotted boundaries.

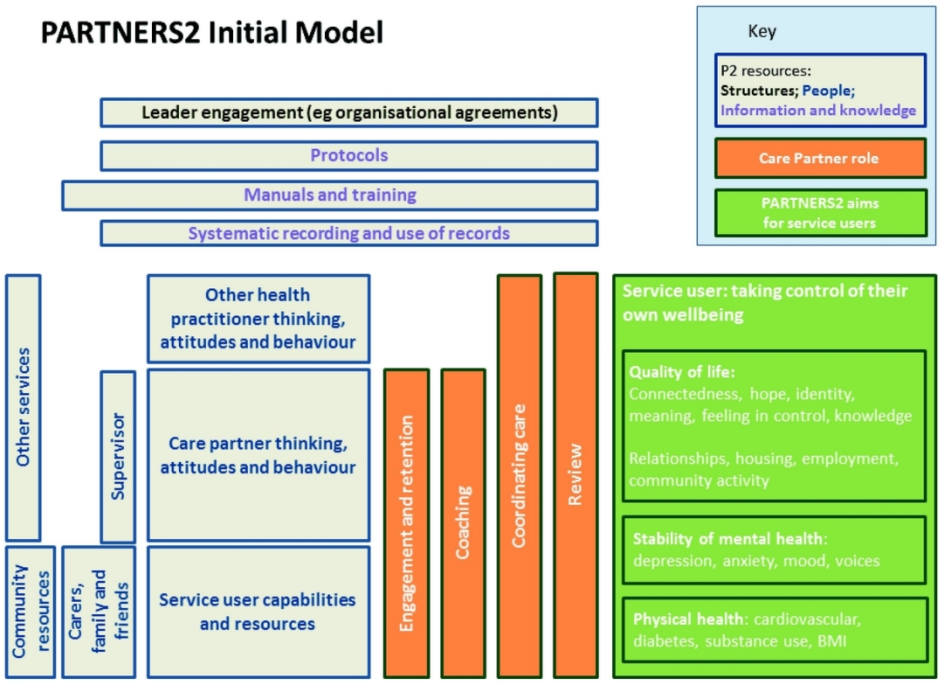

Figure 1. Graphic representation of the PARTNERS2 IPT.

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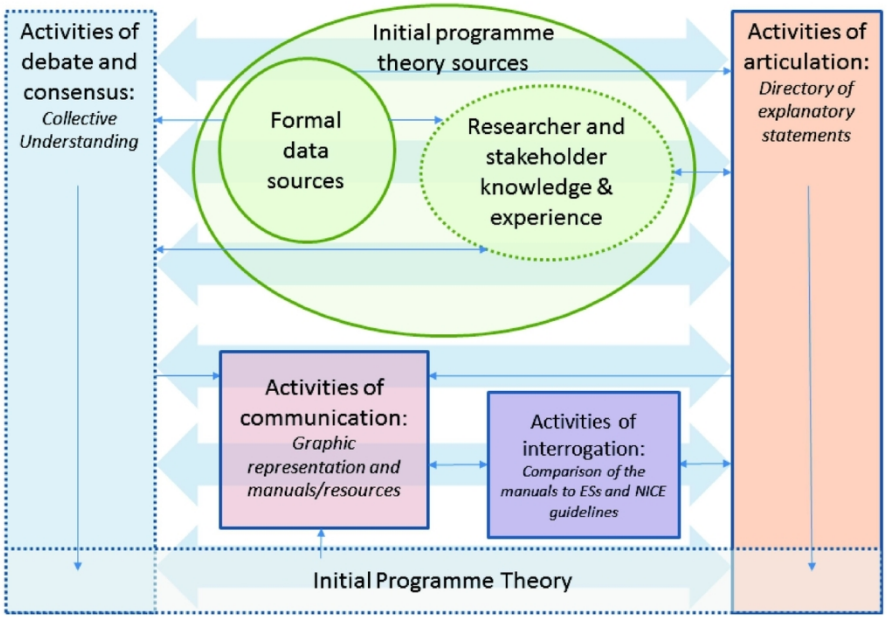
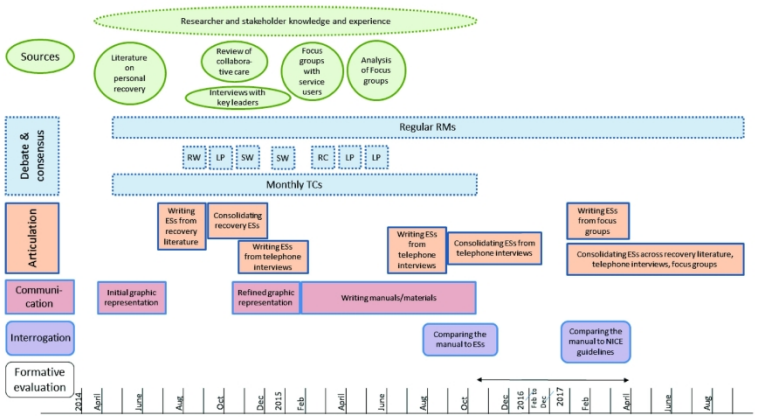


Figure 2. Diagram depicting the process of Initial Model development. Representations of the Model are shown with rectangles; sources of the Model are shown with ovals; explicit elements have solid boundaries; more implicit elements have dotted boundaries. Outlines and arrows in blue represent the overlapping role of debate and consensus with other activities.

134x100mm (300 x 300 DPI)



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247x146mm (300 x 300 DPI)

Directory of PARTNERS2 Consolidated Explanatory Statements

Abbreviations

CES: Consolidated Explanatory Statement; ES: Explanatory Statement; CP: Care Partner; SU: Service user; MH: mental health

Source number references

1 Selected recovery literature (Bird, V, Leamy, M, Tew, J, et al. Fit for purpose? Validation of a conceptual framework for personal recovery with current mental health consumers. The n and New Zealand journal of psychiatry 2014.

2 Selected recovery literature (Bora, R, Leaning, S, Moores, A, et al. Life coaching for mental health recovery: the emerging practice of recovery coaching. Advances in Psychiatric Treatment 2010; 16: 459-67.

3 Selected recovery literature (CSIP, RCPsych, SCIE. A common purpose: Recovery in future mental health services. London: SCIEW (Social Care Institute for Excellence), 2007.

4 Selected recovery literature (Brown, W and Kandirikirira, N. Recovering mental health in Scotland. Report on narrative investigation of mental health recovery. Glasgow: Scottish Recovery Network, 2007.

5 Birmingham LEAP mtg October 2014

6 Recovery workshop August 2014

7 Key leader interviews

8 Focus groups with SUs

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
1. **Practitioner: organisational, social and cultural context (Macro)**	Organisational culture	Recovery principles for practitioners	1	If a central aim within PARTNERS is towards personal recovery, then there may need to be attitude change towards this aim, because established expectations within mental health care, for practitioners and potentially service users, can revolve around symptom reduction. If recovery principles are adopted by organisation leaders in their interactions with health care staff, then the cultural change needed to bring about recovery-oriented practice will be supported.	S3	If recovery principles are adopted by organisation leaders in their interactions with health care staff, then cultural change needed to bring about recovery-oriented practice will be supported	practitioners, 2; MH policy makers, 3
	General improvement for SUs: wellbeing	Focus on attitude change towards personal recovery			204	If a central aim within PARTNERS is towards personal recovery, eg., helping the service user find his way in life beyond symptoms of severe mental illness, then there needs to be	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
						a real focus on bringing about an attitude change towards this aim, because established expectations within mental health care, for practitioners and potentially service users, revolve around symptom reduction.	
	Increased system capacity	Practitioners given responsibility to vary intensity of input by need	2	If practitioners (are given responsibility to) vary intensity of input by need, then the system can cope with more people. If intensity of input is restricted by availability of resources, then SUs may be redefined as having fewer needs or thresholds for access may change as a means to reduce demand for services.	255	If practitioners (are given responsibility to) vary intensity of input by need, then system can cope with more people.	key leader, 7
	Changing access criteria (decreased system capacity)	Reduced access to care			371	If there are reduced resources then SUs may be redefined as having fewer needs or thresholds for access may change	SU, 8
	Team-based care	Roles are clearly defined	3	If practitioners who have contact with Partners (for example those within primary and secondary care) have a clear understanding of the role of the CP, then this prevents gaps and overlap.	163	If roles [across practitioners] are clarified, then work doesn't overlap If roles are clarified, then this prevents gaps	key leader, 7
	Team-based care	Roles are clearly defined			233	If roles are clear and agreed, then care can be team based.	key leader, 7
	Team-based care	Organisational clarity that CP is responsible for care coordination			307	*If* confusion around who is in charge of service users individual care is to be avoided *then* there needs to be clarity that (from an organisational perspective) the case manager/CP is responsible for coordinating care around the individual goals.	key leader, 7
	Smoother transitions when stepping up	CPs with mh training & qualifications support development of crisis plan	4	If CPs have experience of mental health practice (eg. medication) and prepare crisis plans that are detailed and clear, and Partners emergency protocols are available, then this will support quick, smooth and appropriate transitions in response to acute harm risk	246	If case managers with some experience of mental health and practitioner training, particularly medication, such as nursing can support development of crisis plan, then this could ensure smooth transitions of change in intensity with need.	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Smoother transitions when stepping up	Emergency protocols detailed and clear			164	If emergency protocols are detailed and clear, then instances of acute harm risk can be responded to immediately and appropriately	key leader, 7
	Shared care	Range of individuals see role to support crisis	5	If specialist mental health practitioners are based in primary care and provide care coordination, support for medication, psycho-social intervention, and crisis management then genuinely shared care can be delivered.	250	If a range of individuals (eg GP, nurse, Psychiatrist etc) are in primary care and see their role to support a crisis, then stepped up intensive care during a crisis can be created without need to transition to new service or team.	key leader, 7
	Shared care	MH worker in primary care providing medication & PSI			229	If mental health specialist support covered medication and psycho-social interventions for mental health, then team based care without need for referral can be put in place.	key leader, 7
	Shared care	Primary and secondary care less constrained by defining who manages each condition			238	If primary and secondary care are less constrained by defining who manages which conditions, then a model can work more flexibly sharing responsibility for different groups of patients.	key leader, 7
	Shared care	MH practitioners co-located and accessible to primary care			257	If specialist practitioners are co-located and directly accessible to primary care, then this increases chance of both gaining specialist input and doing genuinely shared care through a combination of face to face and written communication.	key leader, 7
	Shared care	Interactions between primary and secondary care			212	If PARTNERS created better structures for collaboration between primary and secondary care, for example by improving the quality of information available about service user needs through coordination of care by the CP, and by providing improved relationships between GPs and psychiatrists, then the GP's role would be to support the physical health of the service user, and the mental health of the service user in liaison with, and supported by, a psychiatrist. (Discussed in Nov 2015 as being about GP engagement & what will help them in	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
						actually doing the role (attention to mental and physical health))	
	Better relationships between 1ry & 2ry care	Co-location (of primary & secondary care)	6	If secondary care workers are based in primary care and make entries in primary care notes as well as sharing information with secondary care then there will be better communication and relationships between primary and secondary care.	247	If collocation improves, then relationships and dynamics of system could improve	key leader, 7
	Better communications between 1ry & 2ry care	CPs enter data to electronic primary are records & share with secondary care			356	*If* systemic communication for P2 service users is to be effective *then* an electronic primary care notes based system of communication; with CPs entering data and sharing information electronically (with secondary care) with those who need access to it, is required.	key leader, 7
	Better relationships between 1ry & 2ry care (barrier)	Not shared system of record keeping			201	If there is not a shared system of record keeping between primary and secondary care during the PARTNERS intervention, then this is likely to act as a barrier to collaboration between services	key leader, 7
	Links between P2 and third sector	Improved culture within GP practices of working with supporting access to 3rd sector organisations.	7	If appropriate links between P2 and third sector organisations are to be established then GP practices must improve their culture of working with and aligning individuals with third sector organisations.	361	If appropriate links between P2 and third sector organisations are to be established then GP practices must improve their culture of working with and aligning individuals with third sector organisations.	key leader, 7
	Managing risk	Managing risk	8	*If* practitioners move beyond preoccupations with risk avoidance, *then* the local area mental health team may be held accountable for any following harm done by the service user to themselves or others but	S59	*If* practitioners move beyond preoccupations with risk avoidance, *then* the local area mental health team may be held accountable for any following harm done by the service user to themselves or others	SU, 5

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				If supervisors had authority/experience etc, and an understanding of critical medication issues, either having psychiatry supervision of another practitioner with psychiatry back up, then the system will be and appear to be safe from a medication and risk perspective.			
	Managing risk	Supervisor skills Cp-psychiatrist interactions			263a	If supervisors had authority/experience etc, and an understanding of critical medication issues, either having psychiatry supervision of another practitioner with psychiatry back up, then the system will be and appear to be safe from a medication and risk perspective.	key leader, 7
2. Practitioner—Practitioner interactions (Meso)	CP-CP	CPs from across sites meet regularly	9	If CPs engage in regular, planned peer supervision they can support each other and learn from each other's experiences.	176	If CPs from across sites meet regularly, then they can share success stories and build a community of peers	key leader, 7
	CP-CP	Planned time for CPs to discuss questions & problems with each other			208	If time is planned for CPs to discuss questions and problems they are experiencing within PARTNERS with each other, then they are able to generate their own solutions, and to learn from each other.	key leader, 7
	CP-CP	Whole team approach to supervision and training			309	*If* a whole-team approach is followed in supervision and training *then* CPs (who may bring very specific experience and ways of working) can learn from each other and each other's cases	key leader, 7
	GP—CP Practitioner--practitioner	Goals are agreed and documented	10	*If* the goals practitioners (CPs and GPs) are working towards are agreed and documented *then* there is possibility for practitioners to work independently with service users but also fluidly and together with other practitioners around these and other agreed goals.	313	*If* the goals practitioners (CPs and GPs) are working towards are agreed and documented *then* there is possibility for practitioners to work independently with service users but also fluidly and together with other practitioners around these and other agreed goals.	key leader, 7
	CP-GP	CP tries to change experienced clinicians	11	If CPs are based in GP practices for a sustained period and are seen as an official part of the treatment team and processes of engaging the primary care are seen as helpful then they will effectively influence	286	*If* the case manager makes an effort to try and change the behaviour of experienced clinicians *then* they are unlikely to make any difference.	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				the primary care team. But, if they try to tell other practitioners what to do and are seen as meddling then they will not be effective.			
	CP-GP	CP dogmatic & tells GP what to do			182	If CPs are dogmatic and 'tell' GPs what to do, then GPs are less likely to listen and respect their views	key leader, 7
	CP-GP	CP based in GP practice for sustained period			320	*If* CPs are to build the appropriate relationships and respect to work effectively with GPs *Then* it is important that those from less senior practitioner backgrounds are based in GP practices for a sustained period of time	key leader, 7
	CP-GP / primary care	CP official part of primary care team & engagement with primary care thought through			343	*If* the CP is to interface effectively with those in primary care *then* it is important that they are an official part of the treatment team and that the processes of engaging and influencing primary care are thought through thoroughly so they are perceived as helpful rather than meddling.	key leader, 7
	CP-GP-CMHT	CP acts as 3 way liaison between SU, GP & CMHT	12	the case manager acts as a three-way liaison, a conveyor of information between SU, GP & CMHT, then communication improves	162	If the case manager acts as a three-way liaison, a conveyor of information between SU, GP & CMHT, then communication improves	
	CP-GP-psychiatrist	meetings between practitioners	13	If there are regular formal liaison meetings between CP, primary and secondary care practitioners then mutual trust will develop, problems can be tackled and more informal consultation can follow. Whereas, Heavy workloads and lack of trust will prevent peer consultation.	232	If initial liaison meetings are the building blocks for care, then more informal supportive decision making can follow	key leader, 7
	CP-GP-psychiatrist	meetings between practitioners			243	If practitioners from both organisations meet to discuss cases, then mutual trust can develop and the skills of GPs can be evaluated (and developed).	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	CP-GP-psychiatrist	meetings between practitioners			362	*If* Psychiatrists are to be linked in with the P2 intervention effectively *then* regular (every three months) meetings with GPs and CPs at the GP practice will build help build trust and tackle problems. This should not however replace clinical supervision through a separate P2 supervisor.	key leader, 7
	GP-psychiatrist	GPs overwhelmed by work GPs don't have relationship of trust with psychiatrist			213	If GPs are overwhelmed by work, and there is not a relationship of trust with the psychiatrist, then they may be unwilling to contact them for peer consultation.	key leader, 7
	CP-other services	If CP is in close communication with SU	14	IF CP is in close communication with the SU and collaborative care is clearly defined and monitored (using protocols, training and supervision) then CPs will actively seek appropriate help for SUs.	220a	If the case manager is in close communication with the patient, then early physical/mental/social signs can be spotted early and referrals made quickly if needed to physical or mental health services for reactive care.– moved into this section	key leader, 7
	CP-other services	Collaborative care clearly defined and monitored across, protocols, training and supervision			328	*If* CPs are to actively seek appropriate help for service users *then* it is important that this form of collaborative working is clearly defined and monitored across protocols, training and supervision	key leader, 7
	CP-SV	Dual supervision	15	If CP get supervision from experts in both primary and secondary care they will have the support they need in terms of technical assistance and working with physical and mental health needs.	226	If a dual supervision model is implemented, then case managers can get support for both mental and physical care issues	key leader, 7
	CP-SV	Dual supervision			175	If CPs ask for support from supervisors who are secondary care experts, then their support may not be adequate because such supervisors may not have adequate organisational knowledge about primary care If CPs are routed to organisational experts in primary care for support on technical assistance, then this support is likely to be more helpful then if they are routed to	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
						experts in secondary care. Also maybe 3. Resources for CP, backup and support.	
	CP-SV	Regular supervision	16	If CPs have regular supervision from supervisors who understand P2, have broad experience and knowledge, take a balanced view on medication vs therapy, understand the culture that CPs are working in, are good communicators, concise, able to tolerate uncertainty, make decisions on limited information and be democratic in decision making, then SV will be effective in supporting CPs with challenging caseloads and managing large caseloads in primary care settings	172	If CPs meet regularly (eg on a weekly basis) with their supervisor to review cases, then they can benefit from the supervisors' knowledge and experience in dealing with difficult or more challenging cases *(NB this could perhaps also go into Category Practitioners' understanding and skills)*	key leader, 7
	CP-SV	SV qualities & qualifications			177	If a senior nurse supervises CPs who understands P2 well and has both the content expertise and a sense of the culture and the social networks that nurses have to navigate, then this will provide optimal supervision	key leader, 7
	CP-SV	SV qualities			264	If supervisors are good communicators, concise, able to tolerate uncertainty, make decisions on limited information, be democratic in decision, have a broad experience, take a balanced view on medication vs therapy, then they are likely to be able to work well as supervisors for large caseloads in a primary care setting.	key leader, 7
	general	Importance of networks, supervision protocols continually emphasised	17	*If* experienced professionals are to work collaboratively rather than in traditional individual idiosyncratic ways *then* the importance of networks, supervision and protocols must be continually emphasised	323	*If* experienced professionals are to work collaboratively rather than in traditional individual idiosyncratic ways *then* the importance of networks, supervision and protocols must be continually emphasised	key leader, 7
3. engagement / acceptability (technically subcategory of 8)							

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Clinicians Barriers	Language used by researchers	18	If practitioners feel threatened or that the intervention is a criticism of their current practice then they will not accept it.	292	*If* the researchers use language such as 'appropriate psychosocial interventions' *then* this will turn clinicians off (because no one thinks they are giving inappropriate psychosocial interventions)	key leader, 7
	Clinicians barriers	Practitioners feel changes challenge their professionalism			195	If practitioners feel that changes to care challenge their professionalism, then they may resist by stating that they already know about and practice according to the proposed changes, when they do *not* know about and practice according to the changes to care	key leader, 7 Netherlands
	Clinicians Barriers	Practitioners threatened			S139	*If* practitioners feel threatened by principles of recovery, *then* they may not engage honestly and/or openly with recovery principles	MH policy makers, 3
	Clinicians Barriers	Intervention complex, many components	21	*If* the intervention is too complicated or has too many components *then* clinicians will not engage with it	290	*If* the intervention is too complicated or has too many components *then* clinicians will not engage with it	key leader, 7
	Clinicians Facilitators	Professionals equate recovery to growing with continued disability	22	*If* professionals equate recovery with a way for service users to grow with or despite continuing disability, *then* working with everyone with severe mental illness towards the aim of recovery regardless of the severity of their SMI symptoms is realistic	S142	*If* professionals equate recovery with a way for service users to grow with or despite continuing disability, *then* working with everyone with severe mental illness towards the aim of recovery regardless of the severity of their SMI symptoms is realistic	MH policy makers, 3
	Clinicians Facilitators	Intervention framed as updating clinical skills & responding to national policy	23	If the intervention is developed in collaboration with relevant stakeholders and is framed as updating clinical skills and responding to national policy and linked to SU benefit then it is more likely to be accepted.	288	*If* the intervention is framed as updating clinical skills and responding to national policy instead of criticising the clinicians *then* they will be more likely to accept it (JA also added in Practitioners: social/cultural context)	key leader, 7
	Clinicians Facilitators	Intervention presented to show link between what clinicians asked to do and patient benefit			289	*If* the intervention is presented in a way which shows the link between what clinicians are being asked to do and patient benefit *then* they will be more likely to accept it	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Clinicians facilitators GPs facilitators SU facilitators	Intervention developed with all relevant stakeholders			284	*If* the intervention is developed in collaboration with all the relevant stakeholders *then* it is more likely to be taken up	key leader, 7
	GP Facilitators	GPs understanding of intervention	24	If researchers explain clearly the benefits of PARTNERS to GPs, for example, improved support for SUs leading to better outcomes, flexible support for GPs to handle complex cases, and how the intervention meets local needs and targets, And If researchers prioritise informal relationships with GPs, for example by meeting them to talk at lunchtime sessions, more than communicating systematically and regularly, for example by emailed newsletters, And Then GPs are more likely to engage.	186	If GPs understand P2 to offer support for treating people with SMI in a stepped care system, for example through protocols, liaison with mental health professionals like CP and/or improved access to psychiatric peer consultation, then they are more likely to be willing to engage with and appreciate P2	key leader, 7
	GP Facilitators	GPs understanding of intervention			242	If GPs are provided with the flexible support they require for complex cases and to contribute to overall productive work, then the model will be acceptable to them.	key leader, 7
	GP Facilitators	Researcher-GP interactions			191	If P2 is adaptable to local primary care contexts, and explained to GPs according to local primary care needs and practice targets, then GPs are more likely to become engaged	key leader, 7
	GP Facilitators	Researcher-GP interactions			293	*If* researchers are very clear and precise about what practices will get from the intervention (eg coaching for patients or a specific way of achieving shared decision making) *then* practices will be more likely to engage	key leader, 7
	GP facilitators	Researcher—GP interactions			291	*If* the researchers spend a great deal of time and effort on regular and systematic	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
						communication with teams *then* this is unlikely to be taken much notice of	
	GP facilitators	Researcher—GP interactions			335	*If* GPs and GP practices are to engage with P2 *then* talking at a lunchtime session may be the best way to gain their support for P2	key leader, 7
	GP Facilitators	Researcher—GP interactions	25	If GPs can be trained to understand the recovery model then (they will be able to support a recovery oriented model).	265	If GPs can be trained to understand the recovery model then (they will be able to support a recovery oriented model).	key leader, 7
	Teams facilitators	Teams have adequate leadership, stability and readiness to change	26	*If* teams have adequate leadership, stability and readiness to change *then* they will engage with a new intervention	281	*If* teams have adequate leadership, stability and readiness to change *then* they will engage with a new intervention	key leader, 7
	Organisational facilitators	Organisation: culture	27	If researchers discuss the intervention with community leaders and the health service culture can tolerate risk and uncertainty then P2 is more likely to be accepted.	239	If the health service culture can tolerate risk and uncertainty, then a model which provides lighter touch input to larger numbers of individuals with severe mental illness based in primary care is more likely to be acceptable.	key leader, 7
	Organisational facilitators	Practitioner perceptions, understanding and skills: leader engagement			294	If the researchers discuss a proposed intervention with community leaders before the project gets going then it is more likely to be locally acceptable	key leader, 7
	SU barriers	SU previous positive experience	28		S144	*If* service users are satisfied with their current treatment, *then* they may feel concern that adoption of recovery principles may threaten their established coping mechanisms.	MH policy makers, 3
	SU facilitators	Patient and public involvement	29		217	If service users and carers are involved in the preliminary and later stages of a programme grant, then this will improve the relevance of the intervention	key leader, 7
4. Practitioner, perceptions, understanding and skills (Micro)	CP Empowerment	Organisational approach	30	If policy, funding, structures and organisations support the delivery of care based on recovery principles through eg supervision and job descriptions then CPs will be empowered to deliver the intervention.	S1	If policy and funding are sympathetic to recovery-related ways of thinking and working then practitioners will be empowered to implement recovery principles	practitioners, 2 MH policy makers, 3

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	CP Empowerment	Organisational approach			S2	If structures and organisations change (e.g. workforce, training, outcomes evaluation) to recovery-related ways of thinking and working, *then* practitioners will be empowered to implement recovery principles	practitioners, 2 MH policy makers, 3
	CP Empowerment / confidence	CPs have significant supervisory, managerial an organisational support			351	*If* CPs are to feel safe and supported in delivering the P2 model *then* they require significant supervisory, managerial and organisational support and agreement (including explicit job descriptions) to deliver individualised P2 protocolised care.	key leader, 7
	Managing CP anxiety re risk	Reliable recall system	31	If there is monitoring of functioning across all SUs, a reliable recall system and handover between practitioners then practitioners may be less anxious and manage risk more effectively.	260	If there is a reliable recall system, then risk averse practitioners may worry less and be able to tolerate a larger caseload.	key leader, 7
	Managing CP anxiety re risk	Practitioner—practitioner interactions			261	[Also in 4. And 8.] If there is a hand over from old to new practitioner, then anxieties are reduced in anxious practitioners, carers and patients, as well as improving care.	key leader, 7
	Managing CP anxiety re risk	If CP monitors symptoms and functioning across all SUs on casload			230	If symptom (and function) monitoring by case manager across all patients happened, then they could ensure an understanding of who is most at risk .	key leader, 7
	Care Partner perceptions, understanding and skills	Ideologies	32	If practitioners are preoccupied by evidence-based approaches, then they may focus on treating symptoms and see SU as passive. Whereas if there is a focus on meaningful individual goals, which are communicated through documentation, then practitioners will be mindful to work to deliver this focus.	S61	*If* practitioners are preoccupied by evidence-based approaches, *then* this can narrow ideas of treatment to the alleviation of symptoms	MH policy makers, 3

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Care Partner perceptions, understanding and skills	Ideologies			S62	*If* practitioners are preoccupied by evidence-based approaches, *then* this can create ideas of ideal practice to be the kind where the specialist specifies treatment for a passive patient	MH policy makers, 3
	CP perceptions, understandings & skills	Meaningful individual goal identified and communicated through records			306	*If* a meaningful individual goal rather than a medical practitioner focussed goal is identified by the service user and this focus is supported, highlighted and communicated through their care plan/documented records, *then* CPs and GPs will be more mindful to work to reinforce this focus.	key leader, 7
	Care Partner perceptions, understanding and skills	Intervention described from point of view of CP	33	*If* the proposed intervention is described from the point of view of the person delivering it *then* they will have a better understanding of what they are being expected to do	287	*If* the proposed intervention is described from the point of view of the person delivering it *then* they will have a better understanding of what they are being expected to do	key leader, 7
	CP knowledge of physical & mental health	Training covers mental and physical care and addresses CPs individuals skills deficits	34	If training for CPs covers mental and physical care and addresses CP's skills deficits or the CP has experience of physical healthcare cultures or has a background as an advance practice nurse then the CP will be equipped to support the SU's physical and mental health care needs	227	Training for case manager should cover mental and physical care and emphasise the individual's person skillset deficit, then they will be more equipped to support the whole person.	key leader, 7
	CP knowledge of physical & mental health	CP has experience of physical health care			218	If case manager has experience of physical health care and illness, then they will be more easily able to co-ordinate physical and mental health care (JA could potentially add in interactions between practitioners and practitioners)	key leader, 7
	CP knowledge of physical & mental health	CP has knowledge of culture of physical & mental health care services			234	If the case manager is familiar with cultures of mental health and physical health, then they can more easily fulfil role that involves both worlds.	key leader, 7
	CP knowledge of physical health	CP is advanced nurse			156	If the professional background of the case worker is that of an advanced practice nurse, then they are more able to support the medical aspects of self-care management	key leader, 7
	CP skills	If CPs are experienced mental health nurses	35	If CPs are experienced mental health nurses, then they will have the skills they need to work with service users	202	If CPs are experienced mental health nurses, then they will have the skills they need to work with service users	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	CP profession	If CP role adapted to account for professional background	36	If the role of the CP is adapted according to their professional background or an adequate level of supervision is provided Then CPs can be from any professional background	157	If the role of the case manager is adapted to account for their professional background, then hiring case managers from a range of different professional backgrounds is feasible	key leader, 7
	CP profession	Adequate level of supervision provided			321	*If* an adequate level of supervision is provided *then* CPs can be nurses, social workers or OTs. This is particularly relevant for social workers and OTs whose assessment skills for psychosis may not be optimal	key leader, 7
	CP qualities	If CPs seconded, if they are younger, not embedded in system	37	*If* a care manager is to be seconded to work on P2 *then* they are more likely to be proactive and energetic if they are a little younger and open rather than someone who is embedded in the system from having worked in it for a sustained period of time.	342	*If* a care manager is to be seconded to work on P2 *then* they are more likely to be proactive and energetic if they are a little younger and open rather than someone who is embedded in the system from having worked in it for a sustained period of time.	key leader, 7
	GP attitude	Transfer to GPs seen as mark of esteem	38	If transfer to GPs is seen as a mark of esteem, training is provided for primary care workers, secondary care workers are based in a primary care and meet regularly with the primary care team, as part of a protocolised collaborative care approach practised over time, allowing GPs to gain trust in other practitioners, then GPs will be more comfortable, work constructively with other practitioners, develop skills and become progressively empowered to deliver care to SU diagnosed with SMI	244	If transfer to GPs is seen as a mark of esteem, then GPs will ask for and more easily accept transfers to primary care.	key leader, 7
	GP attitude	Flexible approach built on confidence and appropriate protocols			310	*If* a flexible approach built on confidence, trust and appropriate protocols is developed with GPs and GP practice nurses (I think) *then* they are likely to be more engaged with the team working around the service user and the multi-professional focus on the wider health and well-being of the service user. A little vague this one!	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	GP attitude	If CC programme implemented			311	*If* a collaborative care programme is implemented *then* GPs learn to be more comfortable, flexible and adaptive after they hand over care of their patients to the CP.	key leader, 7
	GP knowledge	If CC practiced over time			339	*If* collaborative care is practiced over time *then* primary care providers gain progressive empowerment and shoulder more of the care as they gain experience, deal with complicated tasks and ask more complicated questions of Psychiatrists (Supervisors).	key leader, 7
	GP knowledge	Providing training for GPs			279	If collaborative care is to be achieved by providing some basic education and training for primary care providers initially, gradually empowering them whilst reducing the role of consultant psychiatrists, then this could be achieved as more of an evolving process rather than a static protocolised process.	key leader, 7
	GP behaviour	Relationship between CP & GP should be thought through in depth			347	*If the goal of P2 is to change the practice of primary care doctors then* the relationship between CPs and GPs should be thought through in-depth as the primary care doctor is likely to have competing system pressures from their own care provider/organisations.	key leader, 7
	GP knowledge	If 1ry & 2ry care practitioners meet to discuss cases			243	If practitioners from both organisations meet to discuss cases, then mutual trust can develop and the skills of GPs can be evaluated (and developed).	
	GP confidence	Co-location of primary & 2ry services			258	If collocated, then GPs feel more confident in the system.	key leader, 7
	GP attitudes	Meaningful individual goal identified and communicated through records	39	*If* a meaningful individual goal rather than a medical practitioner focussed goal is identified by the service user and this focus is supported, highlighted and communicated through their care plan/documented records, *then* CPs and GPs will be more mindful to work to reinforce this focus.	306b	*If* a meaningful individual goal rather than a medical practitioner focussed goal is identified by the service user and this focus is supported, highlighted and communicated through their care plan/documented records, *then* CPs and GPs will be more mindful to work to reinforce this focus.	key leader, 7
	GP knowledge lost	GP training not immediately before intervention	40	If GPs are trained but then do not utilise the content soon after then the new knowledge is likely to be lost.	187	If GPs are trained but then do not utilise the content soon after then the new knowledge is likely to be lost.	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Dr's attitudes	Call meetings between GPs & psychiatrists consultation not supervision	41	If contact is established between GPs & psychiatrists, and this is called peer consultation rather than supervision, then GPs will be well supported to work with people with SMI	173	If more senior health care practitioners (eg, GPs and psychiatrists) meet to discuss difficult cases, then their seniority is respected by calling this 'peer consultation' rather than 'supervision'	key leader, 7
	GP knowledge / skills	GP- psychiatrist peer consultation, relationships where GPs can interact easily with psychiatrists			185	If GPs and willing or required to treat people with SMI, then they are best trained/supported by facilitating GP—psychiatrist peer consultation, where relationships are established so that GP can telephone/interact easily with psychiatrists *Then GPs will be well supported to work with people with SMI*	key leader, 7
5. SU—practitioner interactions (meso)							
5	SU-CP interactions Barrier to shared understanding	Organisational context Lack of continuity	42	If there are frequent changes of practitioner, then practitioners and service users can't build trusting relationships in which there is a good understanding of the SU. Whereas, If service users have continuity of care, then practitioners and SUs can build relationships in which there is a good understanding of the SUs needs.	366	If there are frequent changes of practitioner, due to high staff turnover, reorganisation of services, or transfer between services, then practitioners and service users can't build trusting relationships in which there is a good understanding of the SU	SU, 8
5	SU-CP interactions Shared understanding	Organisational context Continuity			367	If service users have continuity of care, seeing the same practitioner over longer periods then practitioners and SU can build relationships in which there is a good understanding of the SU	SU, 8
5	SU-CP interactions	Organisational context Reduced resources	43	If there are reduced resources then clinicians may offer less time for talking and	374	If there are reduced resources then clinicians may offer less time for talking and	SU, 8

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Barrier to shared understanding			use a more controlling approach to working with service users.		use a more controlling approach to working with service users.	
	SU—practitioner interactions	SU appearance	44	*If* service users looked 'too well', *then* others (eg state benefits) could refuse to believe they needed help	S131	*If* service users looked 'too well', *then* others (eg state benefits) could refuse to believe they needed help	SU, 4
	SU—CP interactions	Practitioner behaviour	45	If the practitioner generalises the confidence they have that service users can set, own and achieve meaningful goals for themselves to the extent that they blame the service user for the difficulties they find themselves in, then the practitioners' confidence is unrealistic and becomes destructive to the service user.	S39	If the practitioner generalises the confidence they have that service users can set, own and achieve meaningful goals for themselves to the extent that they blame the service user for the difficulties they find themselves in, then the practitioners' confidence is unrealistic and becomes destructive to the service user.	practitioners, 2
	SU-CP interactions	SU-CP interactions	46	If the CP is in close communication with the SU and provides a non-judgmental relationship, so that SUs trust CPs enough to be open, and balances aspiration and realism, then CPs can identify SU needs and respond appropriately and meaningful goals can be planned and achieved	180	If CPs develop non-judgmental relationships with SUs, where SUs feel able to talk about issues that are not socially acceptable, then together they can talk about behaviour change in a more realistic way	key leader, 7
	SU—CP interactions	SU—CP interactions			S41	If the practitioner and service user balance hope, aspiration, expectation and realism, then meaningful goals can be planned and achieved	practitioners, 2
	SU-CP interactions	SU-CP interactions			220b	If the case manager is in close communication with the patient, then early physical/mental/social signs can be spotted early and referrals made quickly if needed to physical or mental health services for reactive care.– moved into this section	key leader, 7
	SU—CP interactions	SU-CP interactions			181	If SUs trust CPs enough to be honest about the reasons for their behaviour, then CPs can respond more appropriately in supporting SUs because they have a more accurate shared understanding of the individuals' context	key leader, 7
	SU—CP interactions Equal relationship	SU-CP interactions (different from usual care)	47	If CPs follow the ethos of P2, where the SU is seen as part of the team, rather than focus on risk and surveillance and aims during care planning are of equal value to	326	If CPs are to engage service users to work collaboratively and towards the recovery agenda then they must follow the key ethos of P2 rather than the traditional surveillance	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				practitioner and SU then CPs are more likely work to collaboratively, on an equal basis with SUs		and risk culture often evident in acute mental health care.	
	SU—CP interactions Equal relationship	SU—CP interactions			S37	*If* the aims during care planning are of equal value to both practitioner and service user, *then* interactions on a partnership level (as opposed to unequal professional—passive patient relationships) are more likely	practitioners, 2
5	CP-SU interactions Power imbalance	Practitioner characteristics			432	If mental health practitioners are paid workers than there is an inevitable power imbalance between them and service users.	SU, 8
	SU—practitioner interactions Power imbalance	Conceptualising relationship			273	If you think of the team as one group of people acting ON another group then the relationship is inevitably unequal	key leader, 7
	SU-CP interactions	Supervision for CP	48		303	*If* CPs are to continue to try and support and engage with service users *Then* they need a lot of support and empathy from the supervision team to ensure they don't feel unwanted, rejected or that they are delivering a programme of support that service users do not like or is letting them (the service user) down.	key leader, 7
	SU—CP interactions	SU previous experience	49	If Sus have negative experiences of mental health care, and this has negatively affected their identity then the SU may disengage.	S143	*If* service users have negative experiences of mental health care, *then* they may work to appear to be 'recovered' to get out of the system even though they have not recovered in any meaningful sense	MH policy makers, 3; researcher, 6
	SU—CP interactions	SU identity / previous experience			S23	If a 'service user identity' takes over a person's whole identity, then they may seek to distance themselves from the mental health community (and services) in order to affirm themselves as more than their mental illness	SU, 4
6. Service users: organisational context (experience of care) (macro)							
	General improvement for SUs: experience of care	Physical health QoF	50	If CPs acts as a liason between SU (and their families), and practitioners in primary and secondary care, coordinating mental health	190	If CPs follow a protocol to ensure that primary and secondary health screening for SUs was in line with NICE guidelines, liaising	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
		Coordination of care		input, working with all parties to ensure physical health screening takes place, and liaising with community/third sector groups to support social support, then the SU will experience improved care		with primary or secondary practitioners to prompt screening where needed, and preparing SUs to attend screening visits, then this will improve SUs mental and physical health care.	
	General improvement for SUs: experience of care	CP coordinates mh input			219	If the care manager has a role to coordinate mental health input – both educational/self-help and therapeutic, then the total care will be more likely to be what the individual as a whole needs.	key leader, 7
	General improvement for SUs: experience of care	CP coordinates care			162	If the case manager acts as a three-way liaison, a conveyor of information between SU, GP & CMHT, then improved communication leads to improved care	key leader, 7
	General improvement for SUs: experience of care	CP coordinates care, CP-SU-carer interaction			199	If the CP takes the initiative in involving the service users and their carers and/or family in PARTNERS care, and coordinates that care with other practitioners for example the GP or psychiatrist, then the quality of care received by the service user in relation to that care will improve	key leader, 7
6	SUs experience of care (positive)	CP care coordination role			379	If there is a single practitioner managing input from multiple services and following up on how input is delivered on the service users behalf, then service users experience this as helpful.	SU, 8
	General improvement for SUs: experience of care	Handover between practitioners			261	[Also in 2. And 4.] If there is a hand over from old to new practitioner, then anxieties are reduced in anxious practitioners, carers and patients, as well as improving care.	key leader, 7
6	SU experiences of care (positive)	Communication between services Practitioner knowledge			452	If mental health and physical health services communicate about the person's needs and both take into account the likely impact of the other condition then this is experienced as good care.	SU, 8

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
6	SU experiences of care (positive)	SU-practitioner interactions Practitioner knowledge			451	If SU are given support to take care of their physical health and practitioners understand the links between physical and mental health, this is experienced as positive by SUs.	SU, 8
	Improvement for SUs: access to peer support & groups	Coordination of care CP-3rd sector			300	If the CP creates links and liaison with existing groups in the community then this may be an efficient way or organising peer support/group work.	key leader, 7
	Appropriate support, identifies & meets needs	CP knowledge, skills Organisation: roles	51	*If* the CP: acts as a primary point of contact, follows up care, has appropriate training, has access to consultation, has good communication skills, assesses needs on an individual basis, involves SUs in decisions, provides guidance based on knowledge, and/or offers rather than imposes strategies, *then* SUs are most likely to have their individual needs identified and get appropriate personalised support that meets their needs	249	[also in 7. SU perceptions, understanding and skills] If a case manager has good communication skills AND a role to follow up, then individuals are more likely to be retained in care and get the support they need.	key leader, 7
	Appropriate support, identifies & meets needs	CP coordinates care			221	If the case manager has responsibility to be primary point of contact and assess needs on an individual basis, then the individual can receive the most appropriate proactive care for their needs.	key leader, 7
	Appropriate support, identifies & meets needs	CP skills / training Relationship between services			322	*if* service users are to be assessed appropriately for psychosis(relapse) *then* it is important that appropriate training and service connections are available so that CPs can access appropriate medical support or arrange appropriate reassessments	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Appropriate support, identifies & meets needs	CP –Su interactions, Cp Behvaiour			200	If the CP identified the needs of the service user including mental, physical and social needs, then worked to help provide those needs, then this would be the optimal intervention	key leader, 7
	Appropriate support, identifies & meets needs	CP-SU interactions			222	If in the decision making process patients are involved through eliciting their preferences AND practitioners provide structured guidance based on knowledge (and experience), then the most appropriate decisions will be made.	key leader, 7
	General improvement for SUs: experience of care, personalised	CP training			276	If support staff (JA – check interview and this relates to key practitioners not admin) are trained to work differently with service users then the intervention will offer a service that is different from usual care	key leader, 7
	Appropriate support, identifies & meets needs	CP-SU interactions			278	If clinicians offer things that the individual may or may not choose to take up then the intervention is more likely to fit in with the person's recovery journey	key leader, 7
	Inappropriate support, needs not identified & meets (non-responsive)	Trust	52	If a therapeutic relationship with the SU is established by the CP, eg., CPs are gentle, caring, compassionate, supportive, empathetic; Go above and beyond; Make SUs feel relaxed & safe by following through on commitments; and/or Respect SUs as people, taking them seriously, establishing a shared connection/friendship that develops over time and working with SUs 'as a team', involving SUs in decisions, giving choices and negotiating about disagreement,	426a	If SUs do not trust practitioners then they won't open up or follow their advice and so care will not be appropriate.	SU, 8

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				focussing on personally valued goals rather than professional goals; *Then* SUs will trust the CP, talk openly with them and have a positive experience of care.			
	SU perceptions and experience	SU-CP interactions			427a	If SU experience a sense of authentic, human connection or friendship with practitioners, which may be founded in shared experience or background and some degree of mutuality and develops over time then SUs are more likely to trust and open up and will be empowered and have positive experience of care. [Also in 7]	SU, 8
	Appropriate support, identifies & meets needs (responsive)	Practitioner behaviour and characteristics			415a	[Also in 7] If mental health practitioners are gentle caring, compassionate, supportive, empathic and seem to go 'above and beyond' then service users feel they can talk openly and will be listened to, so SU recovery is supported and stability is maintained.	SU, 8
	Appropriate support, identifies & meets needs (responsive)	practitioner characteristics & behaviour			425a	[Also in 7.] If practitioners make SU feel relaxed & safe, follow through on their commitments and treat them as people, providing a consistent relationship over a period of time, then SUs will trust them, feel able to open up and recovery will be supported.	SU, 8
6	SU experience of care (positive)	SU-CP interactions			427b	If SU experience a sense of authentic, human connection or friendship with practitioners, which may be founded in shared experience or background and some degree of mutuality and develops over time then SUs are more likely to trust and open up and will be empowered and have positive	SU, 8

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
						experience of care.	
6	SUs experience of care (positive)	SU-CP interactions			430b	If practitioners take a collaborative approach to SUs, working 'as a team', involving SUs in decisions, giving choices and negotiating about disagreement, focussing on personally valued goals rather than professional goals then this is experienced as good care and leads to better adherence to treatment plans.	SU, 8
6	SU experience of care (negative)	SU—practitioner interactions			426b	If SUs do not trust practitioners then they won't open up or follow their advice and care will not be appropriate.	SU, 8
6	Experience of care (negative)	Practitioner characteristics / attitudes			417a	If mental health practitioners are callous, negligent and self-interested then SU feel neglected and angry and their recovery is not supported.	SU, 8
6	SUs experience of care (negative)	SU-practitioner interactions / practitioner behaviour			433a	If practitioners take an authoritarian, controlling, expert-driven approach, taking actions without involving the SU or relying purely on a medical model then SU feel angry, helpless and unsafe and experience of care is negative.	SU, 8
6	SU experiences of care: positive	Organisational context			369	If mental health services are available and responsive (easy to access and take people seriously) then services users feel well supported and safe.	SU, 8
6	SU experiences of care: negative	Organisational context			370	If mental health services are hard to access, only offer time limited contact or do not seem to take people seriously, service users feel neglected, unsafe and that care is poor.	SU, 8
	Appropriate support, identifies & meets needs (responsive)	practitioner interactions	53	*If* the correct decisions are to be reached for appropriate individualised P2 care delivery *then* some discussion between professionals may happen quickly between two individuals whilst elsewhere prolonged negotiation across multi-professional staff may be required. *[reverse]*	360	*If* the correct decisions are to be reached for appropriate individualised P2 care delivery *then* some discussion between professionals may happen quickly between two individuals whilst elsewhere prolonged negotiation across multi-professional staff may be required. *[reverse]*	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Appropriate support, identifies & meets needs (responsive), managing risk	Psychiatry support	54		231	If CC is based on primary care for those with SMI AND a psychiatrist is available to support decisions, then care would be (safe/appropriate).	key leader, 7
	Appropriate support, identifies & meets needs (responsive), managing risk	Appropriate recipients of the intervention	55		251	If you have a skilled well established service, then individuals with reasonable functioning who may once have been classified as high risk can be seen long/term/for life in a primary care based service.	key leader, 7
	Managing risk	Shared understanding	56	If practitioners and SUs balance hope and realism, so that practitioners take over responsibility from SUs when necessary, then it is possible to constructively manage risks	S36	*If* practitioners do not take over responsibility from service users when needed, *then* the safety of service users and/or others is put at risk	SU, 4
	Managing risk	CP—SU interactions			S42	If the practitioner and service user balance hope, aspiration, expectation and realism, then it is possible to constructively manage risks	practitioners, 2
6	SU experiences of care: negative	Organisational context	57	If service users have continuity of care, seeing the same practitioner over longer periods, or handover between practitioners is well managed then SU have a positive experience of care, But If these things do not happen, the SU experiences care negatively	364	If there are frequent changes of practitioner, due to high staff turnover, reorganisation of services, or transfer between services, then service users have negative experiences of care	SU, 8
6	SU experiences of care: positive	Organisational context			365	If service users have continuity of care, seeing the same practitioner over longer periods, or handover between practitioners is well managed then SU have a positive experience of care	SU, 8
6	SU experiences of care: positive	Organisational context	58	If mental health services are available and responsive (easy to access) then services users feel well supported and safe, But	369	If mental health services are available and responsive (easy to access and take people seriously) then services users feel well supported and safe.	SU, 8

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				If mental health services are hard to access, resources are limited, service users feel neglected, unsafe and that care is poor.			
6	SU experiences of care: negative	Organisational context			370	If mental health services are hard to access, only offer time limited contact or do not seem to take people seriously, service users feel neglected, unsafe and that care is poor.	SU, 8
6	SU experiences of care: negative	Organisational context			373	If there are reduced resources then service users may feel unsupported and lose confidence in mental health services	SU, 8
6	SU experiences of care: positive	Organisational context	59	If there is good communication within and between services, which includes SUs, about the SUs needs, options & plans to address them then this is experienced as good care, But If there is poor communication within and between services, which does not include SUs then SUs experience frustration, feel abandoned and this is as experienced as poor care.	375	If there is good communication within and between services, which includes SUs, about the SUs needs, options & plans to address them then this is experienced as good care.	SU, 8
6	SU experiences of care: negative	Organisational context			376	If there is poor communication within and between services, which does not include SUs then SUs experience frustration, feel abandoned and this is as experienced as poor care.	SU, 8
6	SUs experience of care (positive)	Service location	60		378	If contact with practitioners is in a normalising, social setting then service users experience this as positive.	SU, 8
6	SUs experience of care (positive)	Care processes: review	61	If there is regular review of service users' needs, including prescriber review of how medication is affecting them, then new needs are identified and service users experience this as helpful, But If regular review (including medication) does not take place then care is not adequate and treatment is not optimal.	380	If there is regular review of service users' needs, including prescriber review of how medication is affecting them, then service users experience this as helpful.	SU, 8

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
6	SU experience of care (negative)	Care processes: review			381	If regular review (including medication) does not take place then care is not adequate and treatment is not optimal.	SU, 8
	Appropriate support, identifies & meets needs	Review			253	If some form of specialist review is done annually, then it will ensure new needs are identified and optimal treatment can be considered.	key leader, 7
6	SU experience of care (negative)	Care processes: step down	62	If step down to less intense care is based on reduced resources, happens suddenly and the service user does not understand the rationale, then service users may experience anxiety, lose trust and feel they have to fight for help, But If step down to less intense care is gradual, reflects improvements in the service user's wellbeing and is agreed with them, then service users experience this as positive.	382	If step down to less intense care is based on reduced resources, happens suddenly and the service user does not understand the rationale, then service users may experience anxiety, lose trust and feel they have to fight for help.	SU, 8
6	SUs experience of care (positive)	Care processes: step down			383	If step down to less intense care is gradual, reflects improvements in the service user's wellbeing and is agreed with them, then service users experience this as positive.	SU, 8
6	SUs experience of care negative	SU-CP interactions Organisational policies			394a	If discharge is sudden, especially after many years in services, based on service needs rather than clinical needs and SUs are told that they are being discharged rather than involved in a process of negotiation and preparation then this is experienced as poor care and can lead to deterioration.	SU, 8
6	Experience of care (positive)	SU-CP interactions			396a	If discharge is based on genuine improvement in SUs wellbeing, is negotiated with the SU and they feel it is appropriate for them, then it is likely to be experienced as positive and lead to establishing a preferred identity.	SU, 8
6	SUs experience of care (positive)	Care processes: step-up	63	If there is increased access at times of crisis (or additional need) to company and opportunities to talk (e.g. CPs, respite, crisis house, Soteria house, increased mental health support),	385	If there is increased access at times of crisis to company and opportunities to talk (e.g. respite, crisis house, Soteria house) then SUs experience this as helpful.	SU, 8

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				CPs and/or crisis teams provide responsive, individualised care and do not impose a strategy, and or medication is provided in a timely way and helps to stabilise the SU's mental state, then SUs experience this as helpful; At the same time, When some SUs lack awareness of the way in which their mental health is deteriorating and medication is given against their will, this can be experienced as helpful by SUs. But, If practitioners pressure people to talk during a crisis or additional need when they do not feel ready, and/or GPs and other non-mental health services (such as A&E) don't know how to respond, for example refer on without understanding what each service should provide to help, then SUs experience this as unhelpful.			
6	SUs experience of care (positive)	SU-CP interactions: crisis			404	IF SUs lack awareness of the way in which their mental health is deteriorating and medication is given against their will, then this can be experienced as helpful by SUs.	SU, 8
	Appropriate support, identifies & meets needs (responsive)	risk			358	*If* mental health crisis are to appropriately supported for P2 service users *then* the P2 protocol needs governance arrangements that allow service users to move across to appropriate secondary care.	key leader, 7
	Appropriate support, identifies & meets needs (responsive)	risk			235	If the care manager is alert to relapses, especially in bipolar, then care can be more reactive.	key leader, 7
6	SUs experience of care (positive)	Psychiatric services			390	If there is a psychiatric liaison team who can give the SU quick access to increased mental health support then this is experienced as helpful.	SU, 8

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
6	SU experience of care (negative)	SU-CP interactions – crisis			386	If practitioners pressure people to talk during a crisis when they do not feel ready then SU experience this as unhelpful.	SU, 8
6	SU experience of care (negative)	GP / primary care knowledge – crisis			387	If GPs and other non-mental health services (such as A&E) don't know how to respond at times of crisis service users experience this as unhelpful.	SU, 8
6**	SU experience of care (negative)	Other services info & knowledge – crisis			388	If services do not know what each service should provide to help manage crisis and refer SUs on then SU experience this as unhelpful.	SU, 8
6	SUs experience of care (positive)	SU-CP interaction / other services info & knowledge—crisis			392	If crisis teams provide responsive, individualised care and do not impose a strategy, then this is experienced as supportive during crisis.	SU, 8
6	SUs experience of care (positive)	Effective medication			397	If medication is provided in a timely way and helps to stabilise the SU's mental state then this is experienced as helpful.	SU, 8
6	SUs experience of care (positive)	SU knowledge of services	64	If SUs are provided support for self-management of their mental health, including information about the role of different services and how to access them, and/or SUs are assertive, then they are more able to access the support they want.	389	If SUs are themselves aware of the role of different services and how to access them then this is helpful.	SU, 8
6	SUs experience of care (positive)	SU knowledge & skills			437	If SUs are assertive they are more able to access the support they want.	SU, 8
6	Experience of care (positive)	SU-CP interactions Practitioner knowledge			410a	If SUs are provided support for self-management of their mental health, such as information, coping strategies, measures, community based groups, then this empowers SUs, supports their wellbeing and recovery, and is experienced as helpful by SUs.	SU, 8
6	SUs experience of care (negative)	Medication vs other therapies	65	*If* practitioners including GPs are well informed and/or well qualified about mental health and medication but also honest about the limits of their knowledge,	398	If too much emphasis is given to medication and support for self-management and talking therapies are not provided then this is experienced as unhelpful.	SU, 8

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				practitioners with specialist knowledge of mental health conditions share this knowledge with SUs to support SUs to understand themselves, and/or allow SUs to negotiate increases and decreases of dose, including coming off medication altogether, appropriate therapies are available alongside medication and self-management training, and/or mental health practitioners are not compassionate but adhere to practice standards *then* this is experienced as helpful, But, If practitioners do not have qualifications and/or knowledge about mental health, too much emphasis is given to medication and support for self-management and talking therapies are not provided, are limited in type (eg therapy is provided but it is not relevant to the difficulties that the SU is experiencing), the therapy is time limited or there are long waiting lists, practitioners do not give SUs information and explanations, focus on problems, are risk averse, and/or do not have a full, accurate understanding of the person, then SUs do not feel safe, their mental health deteriorates and/or they have negative experiences of care.			

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				At the same time, If practitioners do not have mental health qualifications then they are more approachable and more likely to support peer processes.			
6	SUs experience of care (positive)	SU-CP interactions: medication			402	If SU feel in charge of decisions about their medication and negotiate increases and decreases of dose, including coming off medication altogether then SUs experience this as helpful.	SU, 8
6	SUs experience of care (positive)	Organisational roles: medication			405	If mental health medication is available from the GP then this is experienced as helpful by SUs.	SU, 8
6	SUs experience of care (negative)	Organisational policies & processes: medication			406	If certain medications are prescribed then SUs are retained in secondary services for longer (and this is unhelpful).	SU, 8
6	SUs experience of care (negative)	Organisational context, resources: therapy resources			408	If there are limited therapy resources, leading to therapies being time limited and long waiting lists then this is experienced as unhelpful by SUs.	SU, 8
6	SUs experience of care (negative)	Organisational context, resources			409	If therapy is provided but it is not relevant to the difficulties that the SU is experiencing then this is not experienced as helpful.	SU, 8
6	SU experiences of care (positive)	SU-CP interactions			453	If SUs are offered appropriate support to address problematic substance use this is experienced as good care.	SU, 8
6	SUs experience of care (positive)	Practitioner knowledge / SU-CP interactions			399	If practitioners are well informed about medication but also honest about the limits of their knowledge then this is experienced as helpful.	SU, 8
6	SUs experience of care (positive)	Practitioner characteristics & behaviour			416	If mental health practitioners are not compassionate but adhere to practice standards then this is valued by SUs.	SU, 8
6	SUs experience of care (positive)	Practitioner knowledge Practitioner-SU interactions			418	If mental health practitioners have specialist knowledge of mental health conditions, but are aware of the limits or their knowledge and share this knowledge with SUs to support SUs to understand themselves then SUs feel confident in the care they are receiving and experience support as useful.	SU, 8
6	SUs experience of care (negative)	Practitioner knowledge & skills			422	If mental health practitioners focus on problems or do not have a full, accurate understanding of the person then this leads to poor care.	SU, 8
6	SUs experience of care (positive)	Practitioner knowledge and skills			423	If practitioners are qualified mental health workers than they provide a better quality service.	SU, 8

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6	SUs experience of care (positive)	Practitioner knowledge and skills			424	If practitioners do not have mental health qualifications then they are more approachable and more likely to support peer processes.	SU, 8
6	SUs experience of care (negative)	Practitioner attitudes—risk			434	If mental health practitioners are risk averse then SU do not feel safe and have negative experiences of care.	SU, 8
6	SUs experience of care (negative)	Practitioner knowledge & skills (lack)			420a	If mental health practitioners do not give SU information and explanations, apply single models rigidly or have limited knowledge of alternative explanations then this can lead to deterioration in SU mental health and is experienced as unhelpful by SUs.	SU, 8
6	SUs experience of care (positive)	GP-SU interactions GP knowledge			411	If SUs have a good relationship with their GP and / or practice nurse and their GP is helpful to them, by referring appropriately, negotiating about medication, allowing longer appointments for mental health issues, responding sensitively to physical health issues and concerns, especially in the absence of secondary care input, then this is experienced as good care and meets the need for continuity.	SU, 8
6	SUs experience of care (negative)	GP knowledge (lack)			413	IF GPs do not understand mental health in general or the needs of the individual SU, only provide short appointments and do not know how to respond in crisis or access relevant services then this is experienced as unhelpful by SUs.	SU, 8
6	SUs experience of care (positive)	GP knowledge & skills	66	If GP surgery contexts are relevant to the particular needs of people with severe mental health problems, for example receptionists are sensitive towards them and information about mental health is displayed, then this is experienced as helpful by SUs.	412	If GP receptionists are sensitive to the particular needs of people with severe mental health problems then this is experienced as helpful by SUs.	SU, 8
6	SUs experience of care (negative)	Physical environment: GP's surgeries posting information			414	If GP surgeries do not display information about mental health this gives the impression that it is not a service that provides mental health care.	SU, 8
6	SU experience of care (negative)	SU-practitioner interaction	67	If SUs experience a lack of connection with practitioners, possibly related to a lack of	428	If SUs experience a lack of connection with practitioners, possibly related to a lack of shared experience or background, then SUs experience this as unhelpful.	SU, 8

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				shared experience or background, then SUs experience this as unhelpful, But at the same time, If SUs and practitioners come from the same cultural background this can also create conflicts.			
6	SU experience of care (negative)	SU-practitioner interaction			429	If SUs and practitioners come from the same cultural background this can create conflicts (not clear why, maybe if they have different roles or status in that culture?)	SU, 8
6	SUs experience of care (positive)	Organisational policies & processes	68		435	If organisations involve SUs in service design in a meaningful, non-tokenistic way then this will lead to improved care	SU, 8
6	SU experiences of care (positive)	SU-practitioner interactions	69	If SUs receive appropriate professional support to claim all the benefits they are entitled to, then this is experienced as helpful by SUs.	446	If SUs receive appropriate professional support to claim all the benefits they are entitled to, then this is experienced as helpful by SUs.	SU, 8
6	SU experiences of care (negative)	SU-practitioner interactions			449	If SU receive the wrong advice or miss out on benefits they are entitled to, this is experienced as unhelpful by SUs.	SU, 8
6	SUs experience of care (negative)	Practitioner behaviour Practitioner –family interactions	70		441a	Where SUs are consenting, if family and friends are not offered support or involvement by mental health services then this is experienced as inadequate care.	SU, 8
7. Service users: perceptions, understanding, skills and/or mental and physical health (micro)							
Therapeutic relationship	SU perceptions and experience, empowerment, identity, hope	SU perceptions	71	If mental health practitioners are gentle caring, compassionate, supportive, non-judgmental, empathic and seem to go 'above and beyond', make SU feel relaxed & safe, follow through on their commitments and treat them as people, providing a consistent relationship	426a	If SUs do not trust practitioners then they won't open up or follow their advice and care will not be appropriate. [also in 6.]	SU, 8

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				over a period of time, and/or respect service users' multiple aspects of identity, *then* service users are more likely to trust and feel they can talk openly and will be listened to, service users are provided with a 'normalising' sense of positivity that supports their self-esteem, and/or SU recovery is supported. But, If SUs do not trust practitioners then they won't open up or follow their advice.			
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	CP—SU interactions			S21	If practitioners respect service users' multiple aspects of identity, then the service user's identity as a worthwhile person will be strengthened	SU, 1
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	SU—practitioner interactions			S8	If practitioners demonstrate non-judgmental, positive attitudes toward service users, then service users are provided with a 'normalising' sense of positivity that supports their self-esteem	SU, 4
	SU perceptions and experience	Practitioner behaviour and characteristics			415a	If mental health practitioners are gentle caring, compassionate, supportive, empathic and seem to go 'above and beyond' then service users feel they can talk openly and will be listened to, SU recovery is supported and stability is maintained and this is experienced positively by SUs [also in 6.]	SU, 8
	SU perceptions and experience	SU-CP interactions			427a	If SUs experience a sense of authentic, human connection or friendship with practitioners, which may be founded in shared experience or background and some	SU, 8

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
						degree of mutuality and develops over time then SUs are more likely to trust and open up and will be empowered and have positive experience of care. [also in 6]	
	SU perceptions and experience	practitioner characteristics & behaviour			425a	If practitioners make SU feel relaxed & safe, follow through on their commitments and treat them as people, providing a consistent relationship over a period of time, then SUs will trust them, feel able to open up and recovery will be supported. [also in 6.]	SU, 8
	SU empowerment, agency, confidence and/or self-belief	Respect/acceptance Strengths Shared understanding			11	*[Also SU Meaning]* *If* health care practitioners demonstrate non-judgmental, positive attitudes towards service users, focusing on their resilience, strengths and performance, and acknowledging their multiple identities, supporting service users' self-acceptance, self-confidence and self-belief, *then* such self-perceptions can act as internal answers and drivers to recovery	SU, 4
SU engagement	SU perceptions: retention	CP skills	72	If SUs have a choice in relation to how they are contacted (face-to-face, over the phone etc..), a guarantee that if they slip out of contact someone will try and reengage them unless this support is explicitly rejected, and if sensitivity around vocabulary is maintained, then engagement is more likely to be maintained.	252	If CPs work hard at retaining contact, then people with schizophrenia will be reassured that if they start slipping out of contact, then someone will respond by trying to get them back	key leader, 7
	SU perceptions: retention	CP skills			301	*If* CPs do not give up on service users and continue to follow them up assertively to ensure the follow up occurs, unless their support is explicitly rejected, *then* service users are more likely to remain engaged in P2	key leader, 7
	SU perceptions: retention	CP skills Organisation: roles			249	[also in 6] If a case manager has good communication skills AND a role to follow up, then individuals are more likely to be retained in care and get the support they need.	key leader, 7

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	SU perceptions: retention	CP—SU interactions			331	*If* service users can specify the type of contact (face-to-face, over the phone etc..) they would prefer, then they will be more likely to be engaged with collaborative care (*How* individuals are actually engaged rather than through a particular communication method is most important.)	key leader, 7
	SU Perceptions: Vocabulary	SU retention			302	*If* ongoing contact and engagement with service users is to be maintained *then* using the term 'scheduled' and 'schedules' (regarding follow up appointments) may not be appropriate for all service users. ONGOING	key leader, 7
Endings	SU perceptions: Endings	Practitioner—practitioner interactions	73	If there is a hand over from old to new practitioner, and care partners are sensitive to loss issues from former practitioners after transfer, then anxieties are reduced in service users, and the experience could be transformed to a positive learning experience.	261	[also in 4. And 6.] If there is a hand over from old to new practitioner, then anxieties are reduced in anxious practitioners, carers and patients, as well as improving care.	key leader, 7
	SU perceptions: Transfer into Partners	CP—SU interactions			259	If case managers are sensitive to loss issues from former practitioners after transfer, then these effects may be ameliorated (and the experience could be transformed to a positive learning experience – rb addition).	key leader, 7
Stigmatising behaviour and locations	SU empowerment, agency, confidence and/or self-belief: disempowerment	Stigma: Disrespect	74	If health care practitioners or others evoke a stigmatised identity for service users, for example by overshadowing, ignoring, disrespecting wishes of, and/or refusing to believe service users, by refusing to allow them to make choices or take responsibility, and/or by focusing on disability, symptoms and negative prognosis while ignoring strengths and other aspects of identity outside of 'mentally ill', such as social, ethnic, gender and sexual orientation differences,	S31	If practitioners overshadow, ignore, disrespect wishes of, or refuse to believe service users, then this leaves service users feeling powerless, demotivated and dependent	SU, 4

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				then this can be corrosive to service users' positive identity, confidence and initiative, can limit choices, over time they are likely to internalise a negative identity of 'mentally ill person', and/or they will be disempowered. Also, their recovery will become a dual process of recovering not only from the illness, but also from the role and identity of a person with mental illness. If people go to the same place for mental health care that they go to receive their usual care, then this greatly reduces barriers based on self-stigma and stigma from others about seeking mental health care.			
	General improvement for SUs: wellbeing	Stigma			S27	*If* stigma and discrimination are reduced, *then* recovery is supported	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	SU—practitioner interactions			S29	If practitioners overshadow, ignore, disrespect wishes of, or refuse to believe service users, then this depletes a service users' positive identity	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	SU—practitioner interactions			S30	If practitioners do not allow service users to make choices or to take responsibility, then this depletes a service users' positive identity	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	SU—practitioner interactions			S52	If practitioners focus on disabilities and symptoms and negative messages about prognosis, then this is likely to lower individual self-esteem without serving a constructive purpose	SU, 4

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	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	SU—practitioner interactions			S53	If practitioners focus on disabilities and symptoms, then this is likely to leave service users feeling inadequate and stigmatised	practitioners, 2
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	SU—practitioner interactions: stigma			S11	If practitioners evoke a stigmatised identity for service users, over time they are likely to internalise a negative identity of 'mentally ill person'	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	SU—practitioner interactions: practitioners who refuse to adapt care for individual needs			S22b	If individual differences and histories as well as social, ethnic, gender and sexual orientation differences are ignored by practitioners in a 'one size fits all' approach, then such practice can be stigmatising as 'mentally ill' subsumes other identities	practitioners, 2
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	SU—others interactions: stigma			S12	If service users experience stigma alongside their mental illness, then their recovery becomes a dual process of recovering not only from the illness, but also from the role and identity of a person with mental illness	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	Continuity			256	If people can go to the same place where they receive their usual care, then this greatly reduces a lot of the barriers based on self-stigma and stigma from others to seeking mental health care.	key leader, 7
	SU empowerment, agency, confidence and/or self-belief	Marginalisation/stigma			S16	If service users experience 'social affliction' during mental illness, then negative perceptions (imposed by others, and/or internalised) can be corrosive to confidence	SU, 4
	SU empowerment, agency, confidence and/or self-belief: disempowerment	Marginalisation/stigma			S14	If service users experience 'social affliction' during mental illness, then negative perceptions (imposed by others, and/or internalised) can limit choices	SU, 4
	SU empowerment, agency, confidence and/or self-belief: disempowerment	Marginalisation/stigma			S17	If service users experience 'social affliction' during mental illness, then negative perceptions (imposed by others, and/or internalised) can be corrosive to initiative	SU, 4

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
Strengths	SU empowerment, hope	Strengths	75	*If* practitioners focus on resilience, strengths and performance, and communicate the potential for recovery, *then* service users' self-belief is strengthened, and this can provide internal answers and drivers to recovery, leaving people feeling hopeful, empowered and motivated. Whereas, If service users do not know about the potential to be well, then, although they may dislike being mentally ill, they may prefer the safety and security of mental illness to the unknown.	S50	*If* practitioners focus on resilience, strengths and performance, *then* service users' self-belief is strengthened	practitioners, 2
	General improvement for SUs: wellbeing	Focus on attitude change towards personal recovery			204	If a central aim within PARTNERS is towards personal recovery, eg., helping the service user find his way in life beyond symptoms of severe mental illness, then there needs to be a real focus on bringing about an attitude change towards this aim, because established expectations within mental health care, for practitioners and potentially service users, revolve around symptom reduction.	key leader, 7
	Hope	SU lack of knowledge about the potential for recovery			S66	If service users do not know about the potential to be well, then, although they may dislike being mentally ill, they may prefer the safety and security of mental illness to the unknown.	SU, 4
	SU hope, willingness to change	Others—SU interactions: communicating potential for personal recovery			S4	*If* practitioners, family and peers communicate the potential for recovery, *then* service users are more likely to feel hopeful	SU, 1 SU, 4 MH policy makers, 3
	SU hope, willingness to change	CP—SU interactions: focus on strengths			S48	*If* practitioners focus on resilience, strengths and performance, *then* service users feel hopeful	practitioners, 2

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	SU empowerment, agency, confidence and/or self-belief	Strengths			S49	If practitioners focus on resilience, strengths and performance, then service users feel empowered and motivated	practitioners, 2
	SU empowerment, agency, confidence and/or self-belief	Respect/acceptance Strengths Shared understanding			11	*[Also SU Meaning]* *If* health care practitioners demonstrate non-judgmental, positive attitudes towards service users, focusing on their resilience, strengths and performance, and acknowledging their multiple identities, supporting service users' self-acceptance, self-confidence and self-belief, *then* such self-perceptions can act as internal answers and drivers to recovery	SU, 4
Shared understanding: person-centred care	SU empowerment, agency, confidence and/or self-belief	CP—SU interactions: Shared understanding	76	*If* the care partner uses coaching to support the person to clarify their goals, personal preferences and cultural/spiritual values, *then* the person will be actively engaged, more willing to follow treatment plans, and achieve some agency and empowerment despite ongoing symptoms. If care partners offer a level of guidance in response to individual service user need, then the self-determination of service users may be initiated, preventing them from feeling lost and full of doubt as might happen if they had too much choice.	272	*If* the intervention does things that are important to service users *then* the service users will be motivated to be engaged and activated	key leader, 7
Person-centred care **Self-management (same as information?)**	SU empowerment, agency, confidence and/or self-belief	CP—SU interactions: Shared understanding; coping strategies			285	*If* the case manager uses coaching to support the person to make best use of the health care team, clarify their goals, preferences and values, develop self-management skills etc *then* the person will achieve some agency and empowerment	key leader, 7
Person-centred care	SU empowerment, agency, confidence and/or self-belief	CP—SU: Shared understanding			S44	If practitioners make treatment decisions with service users in ways that suit their cultural, spiritual and personal ideals, then they are motivated to participate actively in their care.	MH policy makers, 3

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
Person-centred care	SU empowerment, agency, confidence and/or self-belief	Shared understanding			272	*If* the intervention does things that are important to service users *then* the service users will be motivated to be engaged and activated	key leader, 7
Person-centred	SU empowerment, agency, confidence and/or self-belief: disempowerment	Shared Understanding			S34	If some service users had too much choice, then they felt lost and full of doubt about making choices	SU, 4
Person-centred	SU empowerment, agency, confidence and/or self-belief	CP—SU: Shared understanding			S33	If practitioners are able to offer an appropriate level of guidance then the self-determination of service users may be initiated	SU, 4
Person-centred	SU perceptions and experiences	SU-CP interactions			430a	[also in 6 as 430b] If practitioners take a collaborative approach to SUs, working 'as a team', involving SUs in decisions, giving choices and negotiating about disagreement, focussing on personally valued goals rather than professional goals then this is experienced as good care and leads to better adherence to treatment plans.	SU, 8
Person-centred	SU empowerment, agency, confidence and/or self-belief	CP—SU interactions			170	If CPs interact with service users in ways that are relevant to the service users' values and goals, And If CPs teach service users strategies for interacting with their health care providers, Then Service users will develop their self-management skills	key leader, 7
Managing risk	SU empowerment, agency, confidence and/or self-belief Identity	Managing risk: Shared understanding	77	*If* practitioners move beyond preoccupations with risk avoidance, towards constructive and creative risk-taking related to what is personally meaningful to the services user and their family, and/or Encourage service users to 'fail without fear', *Then* the service user will be supported to develop self-efficacy and positive identity, and opportunities that are taken up can establish the ability to cope with adversity,	S60a	If practitioners move beyond preoccupations with risk avoidance, towards constructive and creative risk-taking related to what is personally meaningful to the services user and their family, then the service user will be supported to develop self-determination and self-efficacy	MH policy makers, 3

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				because the person is important enough to justify trying. If practitioners do not allow service users to make choices or to take responsibility, then this lack of challenge, responsibility or control leaves service users feeling undervalued, powerless, demotivated and dependent.			
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	SU—practitioner interactions: managing risk			S58	If service users are encouraged to 'fail without fear', then opportunities that are taken up can establish self-esteem and identity, because the person is important enough to justify trying	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	Practitioner understandings			S60b	If practitioners move beyond preoccupations with risk avoidance, then the service user will be supported to develop self-esteem and positive identity	MH policymakers, 3
	SU empowerment, agency, confidence and/or self-belief: disempowerment	Managing risk			S32	If practitioners do not allow service users to make choices or to take responsibility, then this leaves service users feeling powerless, demotivated and dependent	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Managing risk			S35	If unnecessary constraints on service users' activities are removed, then they are more likely to regain self-determination	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Managing risk			S57	If service users are encouraged to 'try and succeed', then opportunities that are taken up can establish the ability to cope with adversity	SU, 4
	SU empowerment, agency, confidence and/or self-belief: disempowerment	Managing risk			S99	If the element of risk or choice is removed from positions in order not to 'stress' service users too much, this lack of challenge, responsibility or control can demotivate service users, leaving them feeling undervalued and powerless	SU, 4
	Empowerment Identity	Information	78	*If* practitioners gave service users information about symptoms, coping strategies and self-help literature,	S65	*If* practitioners gave service users information about symptoms and coping strategies, *then* this knowledge could help them take note of triggers, events and	MH policy makers, 3 SU, 4

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				then this knowledge could help them take note of triggers, events and symptoms involved with their own ill health, helping them to learn to take action to prevent the escalation of their symptoms, help them know what keeps them well, and/or service users will be able to normalise these symptoms/experiences, supporting self-acceptance and reducing self-stigma. *If* CPs support service users to have changed expectations about consultations, and support the person to make best use of the health care team, *then* they will be more likely to behave as activated patients. But, If service users are not given information about their illness, then service users can be disempowered.		symptoms involved with their own ill health, as well as what keeps them well	
	General improvement for SUs: wellbeing	Knowledge about MH			S108	*If* service users involved themselves in education about their condition, *then* this helped facilitate recovery	SU, 4
	General improvement for SUs: wellbeing	Coping strategies			166	If CPs support service users to develop their self-management skills, then their health is likely to improve with or without specialised psychotherapy	key leader, 7
	General improvement for SUs: wellbeing	Coping strategies			168	If CPs work with the SU on self-management, then their health will improve to a greater extent than it would if the CP took only a psychoeducation (lecture) approach	key leader, 7
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	SU—practitioner interactions: information			S25	*If* practitioners give information to service users that helps them make meaning/sense of their experiences of SMI, *then* service users will be able to normalise these experiences, supporting self-acceptance and reducing self-stigma	SU, 1

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	SU empowerment, agency, confidence and/or self-belief	Information			S68	*If* service users are provided with information about activities, *then* they are more likely to become involved in these activities	MH policy makers, 3 SU, 4
	SU empowerment, agency, confidence and/or self-belief	Information			S69	If diagnosis was given with information about symptoms and coping strategies, then service users could find it empowering	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Information			S133	If service users learn to access self-help materials as needed, then this will support their self-management	SU, 1
	SU empowerment, agency, confidence and/or self-belief	Diagnosis/treatment			S70	If diagnosis is suppressed by professionals or symptoms are not diagnosed and treated appropriately, then service users can be disempowered	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Self-knowledge			S63	If service users come to know their limitations, including what for them is a good work life balance, then this can guide planning and decisions about when it is useful to 'push things' and when it is better to take it easy	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Self-knowledge/coping strategies			169	If CPs discuss triggers and warning signs for symptoms of SMI with service users, and use these as the basis for creating an action or coping plan for self-management, then service users can learn to take action to prevent the escalation of their symptoms	key leader, 7
	SU empowerment, agency, confidence and/or self-belief	Coping strategies			S134	*If* service users learn self-management, *then* they will be able to continue with everyday life despite ongoing symptoms	SU, 1
Information	SU empowerment, agency, confidence and/or self-belief	CP—SU interaction			269	*If* service users are supported to have changed expectations about the consultation *then* they will be more likely to behave as activated patients	key leader, 7
Information	SU empowerment, agency, confidence and/or self-belief	CP—SU interactions: Shared understanding; coping strategies			285	*If* the case manager uses coaching to support the person to make best use of the health care team, clarify their goals, preferences and values, develop self-management skills etc *then* the person will achieve some agency and empowerment	key leader, 7
Information	SU empowerment, agency, confidence and/or self-belief	CP—SU interactions			170	If CPs interact with service users in ways that are relevant to the service users' values and goals,	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
						And If CPs teach service users strategies for interacting with their health care providers, Then Service users will develop their self-management skills	
	SU empowerment, agency, confidence and/or self-belief	Knowledge/information			165	If roles within collaborative care are explained to the SU, then they will be able to call on the appropriate person according to what they need help for	key leader, 7
	SU empowerment, meaning	Meaning (understanding): Faith	79	*If* service users adopt a fundamental belief system, *then* this can provide a reason to carry on through distress, provide meaning in their lives, and/or provide motivation to do well and prosper. However, If service users believed in something bigger than themselves, then this faith could impact them negatively if they understand mental illness as a punishment, or if this faith led them to surrender their inner authority and personal accountability.	S116	If service users believed in something bigger than themselves, then this faith could impact them negatively when they understand mental illness as a punishment	SU, 4
	SU Meaning	Meaning (understanding/faith)			S113a	*If* service users believed in something bigger than themselves, *then* this faith could provide meaning to their lives	SU, 4
	SU Meaning	Meaning (understanding)			S113b	If service users adopt a fundamental belief system, then this can provide meaning to their lives	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Faith			S113c	If service users adopt a fundamental belief system, then this can provide a reason to carry on through distress	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Faith			S114	*If* service users believed in something bigger than themselves, *then* this faith could provide motivation to do well and prosper	SU, 4
	SU empowerment, agency, confidence	Faith			S145	*If* service users believed in something bigger than themselves, then this faith could lead them to surrender their inner authority and personal accountability	Carer, 5

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	and/or self-belief: disempowerment						
	SU empowerment, agency, confidence and/or self-belief	Hope	80	*If* CPs support service users to understand mental illness as something it is possible to have alongside a meaningful life and/or help them to hope that things can be different, *then* SUs are more likely to be psychologically and physically active and energetic and so engage in meaningful activities, persevere when things go wrong, and make real changes in their lives. However, *If* service users feel hope without taking responsibility for their own lives, as a form of 'wishful thinking', for example by depending solely on medication or health care professionals for recovery, *then* it may involve a surrender of inner authority, and be disempowering Or, If others communicate a lack of belief in the ability of a service user to be able to fulfil a task, then this can motivate the service user to 'show them' and work towards the task	S6	If practitioners, family and peers communicate the potential for recovery, then service users are more likely to persevere when things go wrong	SU, 1
	SU empowerment, agency, confidence and/or self-belief	Coordination of care			S5	If practitioners, family and peers communicate the potential for recovery, then service users are more likely to engage in constructive action	SU, 1 MH policy makers, 3
	SU empowerment, agency, confidence and/or self-belief	Hope			S9	If service users reframe mental illness as something it is possible to have alongside a meaningful life, then they are more likely to be active psychologically	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Hope			280	*If* the intervention can support people to have hope *then* they can make a real change in their lives	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	SU empowerment, agency, confidence and/or self-belief	Hope (?) Meaning (?)			S10	*If* service users reframe mental illness as something it is possible to have alongside a meaningful life, *then* they are more likely to be active and energetic and so engage in meaningful activities	SU, 4
	SU empowerment, agency, confidence and/or self-belief: disempowerment	SU perceptions: unrealistic hope			S146	*If* service users feel hope without taking responsibility for their own lives, as a form of 'wishful thinking', *then* it may involve a surrender of inner authority, and be disempowering	SU, 5
	SU empowerment, agency, confidence and/or self-belief: disempowerment	Hope: medication			S147	*If* service users invest their hope in pharmaceuticals and the decisions of those dispensing them, *then* they may abdicate responsibility for their own recovery	SU, 5
	SU empowerment, agency, confidence and/or self-belief: disempowerment	CP—SU interaction: low expectations			S7	[contradictory statement?] If others communicate a lack of belief in the ability of a service user to be able to fulfil a task, then this can motivate the service user to 'show them' and work towards the task	SU, 4
	SU empowerment, agency, confidence and/or self-belief: disempowerment	SU Empowerment: disempowerment			S45	If service users feel powerless or disenfranchised, then these feelings can interfere with initiation and maintenance of mental health and medical care.	MH policy makers, 3
! needs more thinking through	SU empowerment, identity, meaning	SU input	81	If recovery results from the development of a service user's inner strength and self-acceptance, then recovery is not completely within the scope of the mental health system, but must always depend on involvement by the service user, where service users must be willing, ready, able, and allowed to action change before recovery can happen. If service users are willing, ready, able and allowed to action change, then such self-involvement and determination can result in re-finding and redefining identity, as well as establishing self-efficacy. However, If the service user does not feel able to act positively within the problem situation,	S46	If recovery results from the development of a service user's inner strength, then recovery is not completely within the scope of the mental health system, but must always depend on involvement by the service user	SU, 4

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				does not feel ready for change and/or is unwilling to assume responsibility for his or her choices and action, then they may remain stuck, unable to benefit from coaching.			
	SU Meaning	Identity			S20a	*If* service users accept themselves with symptoms of mental illness and develop self-confidence and self-belief, *then* these can act as internal answers and drivers to recovery	SU, 4
	SU Meaning	Empowerment			S20b	*If* service users develop self-determination, *then* this acts as an internal answer and driver to recovery	SU, 4
	SU identity	SU input SU—CP interactions			S13a	If recovery involves re-finding and redefining identity, then service users must be willing, ready, able, and allowed to action change If service users are willing, ready, able, and allowed to action change, then they must be supported by giving them the space to re-find and redefine their identity	SU, 4
	SU empowerment, agency, confidence and/or self-belief	SU input			S54	If service users are required to muster internal reserves to continue to function in the role they occupy, then the determination mustered can establish self-efficacy	SU, 4
	SU empowerment, agency, confidence and/or self-belief: disempowerment	Hopelessness			S40	If the service user does not feel able to act positively within the problem situation, does not feel ready for change and/or is unwilling to assume responsibility for his or her choices and action, then they may remain stuck, unable to benefit from coaching	practitioners, 2
SU input	SU empowerment, agency, confidence and/or self-belief	SU identity			S13a	If recovery involves re-finding and redefining identity, then service users must be willing, ready, able, and allowed to action change	SU, 4
	Empowerment Identity Meaning	Social roles and connectedness	82	*If* service users become or are involved in relevant social roles and activities, and/or develop a focus outside their mental illness, such as artistic expression/creativity, *then* this provides a space for contemplation, self-expression and/or self-development away from mental health	S91a	[Also in SU identity…] If service users have meaningful social roles, then they are particularly likely to build confidence and self-esteem	SU, 1 SU, 4

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				issues, and/or can provide meaning and purpose to their lives. If SUs are required to muster internal reserves to continue to function in the role they occupy, or to respond creatively in order to meet challenges, then they are likely to build confidence, self-efficacy and self-esteem and be motivated to future constructive action. If the role/activity leads a service user to recover a sense of being a whole person for whom mental health problems are just one aspect of their life, then this may support them to accept themselves alongside their symptoms of mental illness. But, *If* service users live rurally, *then* this can act as a barrier to community involvement.			
	General improvement for SUs: wellbeing	Community activity			S28	*If* employment prospects; education and training opportunities; access to leisure, culture and recreation is increased, *then* recovery is supported	SU, 4
	General improvement for SUs: wellbeing	Income Community activity			S101	*If* service users gain access to mainstream services that support ordinary living such as housing, adequate personal finances, education and leisure facilities, *then* they recover	MH policy makers, 3
	General improvement for SUs: wellbeing	Self-expression			S109	*If* service users involved themselves in self-expression, *then* this helped facilitate recovery	SU, 4
	SU Meaning	Artistic expression/creativity			S123	*If* service users engage in artistic or creative expression *then* this can create an ambiance of health because service users are involved in creating something of value	SU, 4

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	SU connectedness	Location: rural			S85	*If* service users live rurally, *then* this can act as a barrier to involvement with peer support and other community involvement	SU, 4
	SU Meaning	Meaningful activity			S103d	*If* a service user becomes involved in community activities, *then* it may provide structure for the day	SU, 4
	SU Meaning	Meaningful activity			S103e	*If* a service user becomes involved in community activities, *then* it may give a sense of achievement	SU, 4
	SU Meaning	Artistic expression/creativity			S121	*If* service users express their creativity, *then* this may be a means to provide an improved sense of purpose or meaning	SU, 4
	SU Meaning	Connectedness			S73	*If* service users engage in social activity or feel more connected to place, *then* they are more likely to find meaning and purpose in life	SU, 4 researcher, 6
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	Meaningful focus/activity			S110	If service users have a focus outside their mental illness, then this can provide a new positive identity	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	Artistic expression/creativity			S118	If service users express their creativity, then this may be a means to establish a new identity	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	Artistic expression/creativity			S117	If service users express their creativity, then this may be a means to demonstrate their identity	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	Artistic expression/creativity			S122	If service users engage in artistic or creative expression then they can express themselves without feeling exposed, allowing expression of those parts of the self	SU, 4

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
						which may be difficult to express in any other way.	
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	Connectedness			S72	If service users engage in social activity, then their self-esteem is likely to increase	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	Artistic expression/creativity			S56	If service users respond creatively in order to meet challenges, then they can develop self-esteem	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	SU—practitioner interactions			S55	If service users are required to muster internal reserves to continue to function in the role they occupy, then the determination mustered can develop self-esteem	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Social roles			S93a	*[Also in SU identity]* *If* service users become involved in meaningful social roles, *then* they are likely to build confidence and self-esteem	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Social roles			S93b	*If* service users build confidence and self-esteem in response to meaningful social roles, *then* they are likely to be motivated to future constructive action	SU, 1 SU, 4 MH policy makers, 3
	SU empowerment, agency, confidence and/or self-belief Identity	Focus of interest			S106	*If* service users have a focus outside their mental illness *then* this provides a space for contemplation away from mental health issues	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Focus of interest			S107	*If* service users have a focus outside their mental illness *then* this provides a means for	SU, 4

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
						self-development away from mental health issues	
	SU empowerment, agency, confidence and/or self-belief	Artistic expression/creativity			S125	*If* service users engage in artistic or creative expression *then* the activity can offer an escape from negative thoughts	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Artistic expression/creativity			S119	*If* service users express their creativity, *then* this may be a means to learn a different skill	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Community activities			S103c	If a service user becomes involved in community activities, then they may learn new skills	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Community activities			S103f	*If* a service user becomes involved in community activities, *then* it may provide individuals with an external focus outside of their own recovery journey	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	Meaning (understanding)			S24	If a service user recovers a sense of being a whole person for whom mental health problems are just one aspect of their life, then this may support them to accept themselves alongside their symptoms of mental illness	SU, 4
Return to employment/activity	SU empowerment, agency, confidence and/or self-belief	Employment	83	*If* service users are allowed to return to a suitable and meaningful position at their own pace, including employment, voluntary work, creative and other community activities and/or education, *then* this supports a safe return to activity, allowing them to be less involved in times of ill health.	S64	If service users engage in work allowing a self-determined level of responsibility, then this would allow them to be less involved in times of ill health	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Employment			S95	*If* service users found work stressful *then* not having to work could support their recovery	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Employment			S100	*If* service users are allowed to return to a suitable and meaningful position at their own pace, *then* this supports a safe return to work	SU, 4

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	SU empowerment, agency, confidence and/or self-belief: disempowerment	Employment			S98	If service users return to work through supported employment, then they may feel patronised by excessive nannying	SU, 4
	SU empowerment, agency, confidence and/or self-belief: disempowerment	Employment			S98	*If* service users return to work through supported employment, *then* they may feel patronised by excessive nannying	SU, 4
	SU empowerment, agency, confidence and/or self-belief: disempowerment	Employment			S96	*If* service users' drive to work and provide for oneself was overshadowed by a fear that illness would return and jeopardise employment, this fear of failing in work acted as a major barrier to seeking employment	SU, 4
	SU empowerment, agency, confidence and/or self-belief: disempowerment	Employment			S97	*If* service users return directly to previous employment without a paced return or transition period, *then* this may result in excessive stress and potential relapse	SU, 4
	SU empowerment, identity	Income	84	*If* a service user receives a steady income from work, *then* this may provide a means to gain social status, improve standard of living and increase quality of life, to pursue other activities, to provide a restoration of normality, and/or to provide a sense of pleasure, pride and self-respect. *If* service users do not have adequate income, *then* they may not be able to afford to maintain a balanced diet and fresh clothing.	S132	*If* service users do not have adequate income, *then* they may not be able to afford to maintain a balanced diet and fresh clothing	SU, 4
	General improvement for SUs: wellbeing	Income Community activity			S101	*If* service users gain access to mainstream services that support ordinary living such as housing, adequate personal finances,	MH policy makers, 3

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
						education and leisure facilities, *then* they recover	
	General improvement for SUs: wellbeing	Income			104a	*If* a service user receives a steady income from work, *then* this may provide a better standard of living and quality of life	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Income			S104d	If a service user receives a steady income from work, then this may provide a means to gain social status	SU, 4
	SU empowerment, agency, confidence and/or self-belief	Income			S104b	If a service user receives a steady income from work, then this may provide financial means to pursue other activities	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	Income			S104c	If a service user receives a steady income from work, then this may provide the restoration of normality	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	Income			S104e	If a service user receives a steady income from work, then this may provide a sense of pleasure, pride and self-respect	SU, 4
[Added in CP referral to make it relevant to P2]	SU empowerment, identity	SU—SU interactions	85	If CPs offer referrals, planning and support to a service user about peer groups, *then* through talking to others who have their own experience of mental health problems, peers can provide a role model to facilitate self-belief, self-worth and/or hope, support understanding and insight about difficulties with mental health, and/or support SUs to achieve motivational change. However,	S78	If service users become involved in peer support groups, then they will become more confident	SU, 4

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				If service users live rurally, *then* this can act as a barrier to involvement with peer support.			
	SU Meaning	Connectedness			S81	*If* help is provided to service users by peers who have their own experience of mental health problems, *then* it is more meaningful [RGJ interpretation of 113 and 145]	SU, 4
	SU hope, willingness to change	SU—SU interactions			S82a	*If* help is provided to service users by peers who have their own experience of mental health problems, *then* peers can provide a role model to facilitate hope	SU, 4
	SU knowledge and insights about MH	SU—SU interactions			S77	If service users become involved in peer support groups, then they will be supported by the common understanding and unique insight offered by peers	SU, 4
	SU self-knowledge	SU—SU interactions			S76	*If* service users become involved in peer support groups, *then* it gives them the opportunity to become more informed about themselves and their conditions	SU, 4
	SU connectedness	Location: rural			S85	*If* service users live rurally, *then* this can act as a barrier to involvement with peer support and other community involvement	SU, 4
	SU empowerment, agency, confidence and/or self-belief	SU—SU interactions			345	*If* service users interact with their peers then this can support them to achieve motivational change	key leader, 7
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	CP—SU interactions: referral			S82b	If help is provided to service users by peers who have their own experience of mental health problems, then peers can provide a role model to facilitate self-belief and self-worth	SU, 4
??	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	Meaning (understanding)	86	If service users communicate the potential for positive aspects of mental illness, then this can alter the self-conceptions and societal conceptions of mental illness	S51	If service users communicate the potential for positive aspects of mental illness, then this can alter the self-conceptions and societal conceptions of mental illness	SU, 4

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	SU empowerment, identity	Physical health	87	If service users gain weight as a side effect to drug treatment, then service users could feel more vulnerable and less self-assured in their appearance and overall demeanour. But, If a service user follows an exercise regime and/or a healthy diet, then their wellbeing and self-esteem is likely to improve.	S129	If service users gain weight as a side effect to drug treatment, then service users could feel more vulnerable and less self-assured in their appearance and overall demeanour	SU, 4
	General improvement for SUs: wellbeing	Physical health			S126b	*If* a service user follows a healthy diet, *then* their wellbeing is likely to improve	SU, 4
	General improvement for SUs: wellbeing	Physical health			S127b	*If* a service user follows an exercise regime, *then* their wellbeing is likely to improve	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	Meaningful activity			S127a	If a service user follows an exercise regime, then their wellbeing and self-esteem is likely to improve	SU, 4
	SU identity, self-esteem, self-understandings (including meaning of symptoms) and/or stigma	Physical health			S126a	If a service user follows a healthy diet, then their wellbeing and self-esteem is likely to improve	SU, 4
	SU Meaning	Connectedness	88	*If* service users feel more connected to place, *then* they are more likely to find meaning and purpose in life	S73	*If* service users engage in social activity or feel more connected to place, *then* they are more likely to find meaning and purpose in life	SU, 4 researcher, 6
	SU Meaning	**Giving back**	89	*If* service users become involved in peer support groups, creative expression, or work as a volunteer, *then* it gives them the opportunity to 'give back'	S75	*If* service users become involved in peer support groups, *then* it gives them the opportunity to 'give back' as they help others in similar experiences	SU, 4
	SU Meaning	Meaningful activity			102	*If* a service user becomes a volunteer, *then* it may fill the desire to give back to others	SU, 4
	SU Meaning	Artistic expression/creativity			S124	If service users engage in artistic or creative expression then they can create things they can give to other people	SU, 4

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
8. Intervention content, trial practicalities and fidelity/process evaluation							
	Long term outcomes	Intervention design/content	90	If the CP role is endogenous to the practice, and the research team facilitate setting up the model within the practice but do not provide the workers to carry out the model, *then* the changes brought about by the intervention do not collapse when the research project ends. Whereas, If new workers are added to test an intervention then this is articificial; you are measuring or studying a situation that is not sustaining, so it is best to use existing staff	155	If the case worker role is endogenous to the practice, and the research team facilitate setting up the model within the practice but do not provide the workers to carry out the model, *then* the changes brought about by the intervention do not collapse when the research project ends	key leader, 7
	Long-term outcome	Organisational			203	If new workers are added to test an intervention then this is articificial; you are measuring or studying a situation that is not sustaining, so it is best to use existing staff	key leader, 7
	Long term outcomes	Organisational: Leader by-in, knowledge	91	(If starting a pilot, then it's possible to work bottom up without gaining structural/political support). If risks are understood and taken on at high level in organisation, then it's more likely that a model will be scaled up and sustainable.	241	If risks are understood and taken on at high level in organisation, then it's more likely that a model will be scaled up and sustainable.	key leader, 7
	Fidelity to the model: facilitators	Researchers support to organisation	92	If, during the intervention, a change in service circumstance becomes apparent, then it may be necessary for the researchers to assertively seek Trust support for PARTNERS in order to maintain fidelity to the model	210	If, during the intervention, a change in service circumstance becomes apparent, then it may be necessary for the researchers to assertively seek Trust support for PARTNERS	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Fidelity to the model: facilitators	Intervention set up, engaging stakeholders	93	*If* researchers, in implementing PARTNERS in primary care, Target surgeries with an interest in mental health, Take time for planning and relationship building, for example explore the local culture in order to think about how to link into its synergies; respect the wider team including GPs, practice managers, nurses and receptionists; and involve them all in understanding the model of care, *Then* there should be fewer implementation barriers	236	If implementation takes time with planning and relationship building and if this is factored in, then it is more likely to be successful	key leader, 7
	Fidelity to the model: facilitators	Intervention set up, engaging stakeholders			248	If receptionists feel respected and involved in a model of care, then they will both contribute directly through use of their interpersonal skills and indirectly provide support for project to practice manager and GPs	key leader, 7
	Fidelity to the model: facilitators	Intervention set up, engaging stakeholders			282	*If* the intervention is targeted at GPs/practices with an interest in mental health *then* it is more likely to be delivered	key leader, 7
	Fidelity to the model: facilitators	Intervention set up, engaging stakeholders			314	*If* practices are aware of the principles of collaborative care *then* there should be fewer implementation barriers.	key leader, 7
	Fidelity to the model: facilitators	Intervention set up, engaging stakeholders			314	*If* practices have a particular culture *then* linking into the synergies of this culture is important for the implementation of collaborative care	key leader, 7
	Fidelity to the model: barriers	Intervention set up, engaging stakeholders			344	*If* primary care providers are provided with important information and education about the P2 cohort *then* this alone will not make much of a difference to the care provided.	key leader, 7
	Fidelity to the model/effectiveness: facilitators	Organisational change	94	*If* problems related to health system changes such as leadership, staff and service delivery are overcome, for example, care providers connect together appropriately,	318	*If* collaborative care rather than regular/traditional mental health care is to be achieved *then* care providers need to connect together appropriately.	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				It is stressed that P2 will be looking at ways to help practitioners use their time more efficiently whilst improving health outcomes, and/or clear incentives of the intervention are communicated to practitioners, *Then* collaborative care will be implemented.			
	Fidelity to the model: facilitators	Support for Organisational change			346	*If* collaborative care is implemented *Then* problems related to health systems changes such as leadership, staff and service delivery will most likely need to be overcome	key leader, 7
	Fidelity to the model: facilitators	Support for Organisational change			337	*If* the organisational barriers related to the time available in the current climate of NHS care are to be overcome *then*	key leader, 7
	Fidelity to the model: facilitators	Support for Organisational change			275	*If there are clear incentives then it will be easier to introduce the new paperwork and inter-professional communication required for regular and systematic monitoring*	
	Effectiveness: facilitators	Record keeping: communication	95	If the following facilitators are present: There is an appropriate supportive context (across training, organisations etc..) for all those contributing to the intervention to be able to co-construct appropriate care, Professionals are aware of relevant information about service users in primary care records and through informal communication cultures, such as appropriate mental health contact information and progress information including key goal/s for the individual service user, and the professionals align appropriately behind the individual as they (service user) complete the actual work towards these goal/s, Then the PARTNERS intervention will be effective.	329	*If* P2 is to work effectively *then* GPs need to be able to see appropriate mental health contact information and progress notes in service user,s primary care records.	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Effectiveness: facilitators	Cross practitioner focus on goals			348	*If* P2 is to work effectively *then* all professionals need to be fully aware of the key goal/s for the individual service user with the intervention, training, monitoring, recovery and multi-professional communication centred on it.	key leader, 7
	Effectiveness: facilitators	Use of resources to support SU goals			349	*If* P2 is to work effectively *then* a whole range of resources need to align around the goals and wants of the individual service user. This involves the family, voluntary services and key professional such as the GP & Psychiatrists aligning appropriately behind the individual as they (service user) complete the actual work with appropriate support as required.	key leader, 7
	Effectiveness: facilitators	Organisational support			350	*If* better outcomes are to be achieved through P2 *then* there needs to be an appropriate supportive context (across training, organisations etc..) and layers of support for all those contributing to the care intervention in order that they can co-construct appropriate care.	key leader, 7
	Effectiveness: facilitators	Organisatioanl support / culture: formal and informal			354	*If* P2 is to work effectively *then* there needs to be both an appropriate formal infrastructure (training, system adaptation, supervision) and appropriate informal communication culture. This will allow for appropriate information to be shared and the creation of a shared understanding around service users. [also in practitioner—practitioner interactions]	key leader, 7
	Effectiveness: facilitators	Support for CP CP-GP and other practitioner interactions			317	*If* the P2 intervention is to be successful *then* it is crucial that the CP is trained/supported to work in a collaborative joined up way with GPs, other services and the whole system rather than with the service user individually and exclusively. Central to this is the re-engagement with GPs.	key leader, 7
	Fidelity to the model: barriers	Service relationships / communication			215	If primary and secondary care do not share information freely, then this could be a barrier to implementing PARTNERS –	key leader, 7
	Fidelity to the model/effectiveness: facilitators	Support to supervisors	96	*If* supervision structures are highlighted and communicated as systemically different to current CMHT practices,	334	*If* optimal clinical care is to be provided whilst a level of fidelity with the study protocol is maintained *then* support and advice for supervisors is crucial to ensure that appropriate patient centred decisions are made.	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				support and advice for supervisors (including from the research team where appropriate) is given to ensure that they can oversee appropriate patient centred decisions with CPs, Supervisors oversee and monitor care partner's delivery of care using supervision protocols, particularly ensuring focus across the whole intervention population/cohort, as well as proactive follow up of service users who may be disengaging with services, Supervisors not only support CPs, giving them information and advice about how to handle difficult situations, but also appropriately challenge them to deliver high quality of care, *Then* optimal clinical care will be provided whilst a level of fidelity with the study protocol is maintained.			
	Fidelity to the model: facilitators	Support for supervisors			333	*If* and when the P2 intervention throws up important issues for supervisors during the formative stages of the intervention *then* appropriate support and clinical contact from P2 researchers who have been involved in developing the protocol is important.	key leader, 7
	Fidelity to the model: facilitators	Changes to practice, including supervision			336	*If* appropriate collaborative care is to be achieved *then it* is important that assertive systemic ways of following up and linking people together along with different supervision structures are highlighted and communicated as systemically different to current CMHT practices that may be inappropriately described by practitioners as collaborative care.	key leader, 7
	Fidelity to the model: facilitators	supervision			324	*If* CPs are to deliver the P2 intervention appropriately and as protocolised *then* supervision that oversees their delivery of care is crucial . This will ensure they don't deliver non-protocolised or inappropriate advice or mental health intervention.	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Fidelity to the model: facilitators	supervision			319	*If* collaborative care is to be achieved *then* actively engaged supervision between CPs and supervisors rather than traditional CMHT supervision is crucially important.	key leader, 7
	Fidelity to the model: facilitators	Supervision protocols			304	*If* the P2 team want to ensure that a collaborative models does not go "off the rails" *Then* clear structured supervision protocols focussed across the whole intervention population/cohort, and in particular difficult/unsuccessful groups rather than individual success stories or narratives for successful groups, needs to be in place.	key leader, 7
	Fidelity to the model: facilitators	Supervision / support for supervisors			171	If supervisors are adequately trained to a criterion, And If supervisors monitor the practice of CPs in the long run, Then The CPs are more likely to practice according to that criterion	key leader, 7
	Effectiveness: facilitators	Supervision			211	If supervisors not only support CPs, giving them information and advice about how to Handle difficult situations, but also challenge them to deliver high quality of care, then the intervention outcome will be optimal. (RG-J ? -is there additional theory needed here to address being demotivated by criticism? In other words, if challenged inappropriately?	key leader, 7
	Effectiveness: facilitators	Support for CP CP behaviour			315	*If* the P2 intervention is to be delivered effectively *then* a well supervised CP who actually makes the intervention take place, ensures that people are being followed up and connects them to the things they need to move forward is the key component	
	Effectiveness: facilitators	Support for CP CP-SU interactions			316	*If* the P2 intervention is to be successful *then* it is crucial that the CP is trained/supported (JA – from interview this includes supervision) to think differently in how they proactively and assertively follow up service users who may be disengaging with services.	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Fidelity to the model: barriers	CP behaviour / training			205	If CPs respond positively to intervention training, then this does not necessarily mean they will implement the intervention according to the manual	key leader, 7
	Fidelity to the model/Effectiveness: facilitators	Organisational support for CP	97	*If* organisational, information sharing and governance structures support PARTNERS and communicate to CPs that PARTNERS is normal routine practice, and CPs have access to technical assistance so that they can draw on to navigate around barriers to implementation of organisational level factors, and the CP is given fewer, prioritised tasks, for example they focus specifically on the individuals they are supporting rather than organisational requirements and restrictions, *Then* fidelity to the model will be facilitated.	352	*If* CPs are to deliver P2 effectively *then* organisational, information sharing and governance structures must communicate that is normal routine practice.	key leader, 7
	Effectiveness: barriers	Organisational support to CPs			209	If Trust managers do not support CPs to spend their time on PARTNERS, then this could act as a barrier to the intervention resulting in its expected outcomes	key leader, 7
	Fidelity to the model: facilitators	Organisational support for CP			353	*If* practitioners are to be to be released from organisational constraints to deliver P2 in the right way *then* a multistage outer ring of organisational behavioural change is necessary	key leader, 7
	Fidelity to the model: facilitators	Organisational support			338	*If* P2 is to work as an intervention *then* it is crucial that senior management and senior individuals in healthcare organisations are fully supportive of the study.	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Fidelity to the model: facilitators	(Technical)organisational support for CPs			174	If CPs have access to technical assistance, then if they face barriers to implementation around organisational level factors they can access support and ideas for navigating around such barriers	key leader, 7
	Fidelity to the model: facilitators	Organisational support for CP			283	*If* the case manager is given fewer rather than more tasks *then* they are more likely to do what they've been asked to do	
	Fidelity to the model: facilitators	CP behaviour, organisational support			359	*If* P2 is to be delivered effectively *then* CPs and their team need to focus specifically on the individuals they are supporting rather than organisational requirements and restrictions	key leader, 7
	Fidelity to the model: barriers	Intervention design			214	If there are too many components in PARTNERS, and our expectations for service change are too high, then this may act as a barrier to implementation	key leader, 7
	Fidelity to the model: facilitators	CP training	98	*If* researchers provide quality training relevant to the intervention, including developing their knowledge of primary care where there may be gaps, then the CPs are more likely to practice with fidelity to the model	327	*If* CPs are to be able to deliver P2 *then* they may need to develop their knowledge of primary care and other areas where there may be gaps.	key leader, 7
	Fidelity to the model: barriers	training			179	If trainers do not provide quality training relevant to the intervention, for example by involving past CPs and supervisors in future CP training, then this is a significant barrier to fidelity	key leader, 7
	Effectiveness (CP)	CP skills	99	If CPs are hired not only in response to previous experience (nurse, social worker, peer worker) but also due to individual characteristics, for example non-confrontational, proactive advocacy with GPs; sensitive, appropriately challenging support with SUs; and the ability to	340	*If* a CP is to be effective *then* it is not just about their type of past experience/job title (nurse, social worker, peer worker) but also their individual ability in this role.	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				problem solve, then a CP is likely to be effective			
	Effectiveness (CP)	CP skills			341	*If* a case manager is to be effective *then* they need to be proactive and able to problem solve in ways that are not necessarily taught through professional training.	key leader, 7
	Fidelity to the model: facilitators	CP skills			183	If CPs have highly developed interpersonal skills, and are able to respond appropriately to both GPs (advocating non-confrontationally) and SUs (sensitive, listening, supportive, appropriately challenging) then this best supports the aims of P2.	key leader, 7
	Fidelity to the model: barriers	CP GP interactions			182	If CPs are reluctant to talk to GPs then this could be a substantial barrier to effective multi-professional working	key leader, 7
	Fidelity to the model: barriers	CP behaviour			196	If CPs say they will implement PARTNERS according to the manual but do not do so, then this can be a crucial barrier to the intervention working as expected (JA this was discussed as being about honesty = not sure what to do about this one)	key leader, 7
	Intervention design / content	Evidence base	100	*If* a key long or short term motivational goal is identified with a service user *then* the tensions between a patient-centred approach and a protocol/evidence driven approach may be overcome through ongoing, trustful and flexible relationships	274	If you focus on evidence based guidelines then you will not achieve individualised care	key leader, 7
	Intervention design / content	Working with, not working on SUs			305	*If* a key long or short term motivational goal is identified with a service user *then* the tensions between a patient-centred approach and a protocol driven approach may be overcome through ongoing, trustful and flexible relationships	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Fidelity to the model: facilitators	Intervention design			271	If the service user is part of the team then collaborative care can be delivered	key leader, 7
	Intervention design	Access	101	If service users stay under review and/or are able to access professional services as needed, then the chance of relapse is reduced, and they will be able to continue with everyday life despite ongoing symptoms.	S135	*If* service users are able to access professional services as needed, *then* they will be able to continue with everyday life despite ongoing symptoms	SU, 1
	Intervention design	Remain under review			254	If people stay under review rather than being discharged from all specialist follow up, then the chance of relapse is reduced.	key leader, 7
	Fidelity to the model: facilitators	Methods	102	If training for CPs and meetings between CPs-SUs are audio recorded, then a more accurate record is maintained and closer adherence to the intervention protocol and theory more likely.	325	If meetings between CPs and service users are recorded, then CPs are more likely to follow the intervention protocol appropriately and the fidelity of the intervention is more likely to be established	key leader, 7
	Fidelity to the model: facilitators	Methods			206	If fidelity is recorded by a third party or a recording, then this can create a more accurate record	key leader, 7
	Fidelity to the model: facilitators	Methods			308	*If* training sessions with case managers/therapist are recorded *then* poor adherence to intervention theory may be reduced.	key leader, 7
	Process evaluation: Evaluation of use of GP benefits	Organisation: Care Partner role	103	If CPs are responsible for engaging, retaining, monitoring and recording data on primary care systems according to the P2 manual, then GPs are recipients of an external service If GPs are recipients of the benefits of P2 more than implementers, then evaluation of the intervention should involve monitoring how GPs use these benefits	189	If CPs are responsible for engaging, retaining, monitoring and recording data on primary care systems according to the P2 manual, then GPs are recipients of an external service If GPs are recipients of the benefits of P2 more than implementers, then evaluation of the intervention should involve monitoring how GPs use these benefits	key leader, 7
	Process evaluation: evaluation of CP learning	Focus of process evaluation	104	If process evaluation explores learning processes only during training or in relation to the manual or during supervision, then	211	If process evaluation explores learning processes only during training or in relation to the manual or during supervision, then important aspects are likely to be missed as much learning occurs on the job	key leader, 7

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
				important aspects are likely to be missed as much learning occurs on the job			
	Outcome measures	Type of measure	105	If certain patient focussed measures/assessments and outcomes are used for P2 -such as those relating to recovery, symptoms, functioning, quality of life or practice change- then these issues are likely to remain prominent, wider discussions around these areas may be driven forward and care may be directed to deficits in these areas.	160	If assessments relevant to recovery are used in collaborative care trials, then this helps aspects of personal recovery to remain prominent in the intervention	key leader, 7
	Outcome measures	Type of measure			263b	*If* outcomes for the trialled intervention are chosen around areas of practice change, then these outcomes can be a means to drive wider discussions forward [NB edited from the original and renumbered]	key leader, 7
	Outcome measures	Type of measure			225	[reverse] If measures of symptoms, functioning and quality of life that are valid (and relevant) are used to monitor outcomes over time, then (care will be more directed to deficits that matter).	key leader, 7
9. carer perceptions, understanding and skills							
	Carer perceptions, understanding and skills	Information	106	*If* carers and family members: develop coaching attitudes and skills, communicate the potential for recovery, and/or are involved in transitions and stepping down, *then* they will be more likely to support SUs and be less anxious, and/or SUs are more likely to engage in constructive action.	S86	*If* carers and family members develop coaching attitudes and skills, *then* their capacity to be appropriately supportive would increase	practitioners, 2

Macro/Meso/Micro level	Outcome (*then*) category	Context/Mechanism (*if*) category	CES No.	Consolidated Candidate Theory	ES No.	ESs	stakeholder, source number
	Carer perceptions, understanding and skills	Carer involvement			262	If carers are involved in transitions and stepping down, then they will be more likely to support and be less anxious.	key leader, 7
	Carer perceptions: Endings	Practitioner—practitioner interactions			261	[Also in 4. And 6.] If there is a hand over from old to new practitioner, then anxieties are reduced in anxious practitioners, carers and patients, as well as improving care.	key leader, 7
	SU empowerment, agency, confidence and/or self-belief	Coordination of care			S5	If practitioners, family and peers communicate the potential for recovery, then service users are more likely to engage in constructive action	SU, 1 MH policy makers, 3