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**Title:** Barriers and Facilitators to Community-Based Psycho-oncology Services: A Qualitative Study of Health Professionals' Attitudes to the Feasibility and Acceptability of a Shared Care Model

**Running Title:** Feasibility and Acceptability of Community-Based Psycho-oncology

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**ABSTRACT**

**Objective:** Psychological therapies combined with medication are effective treatments for depression and anxiety in patients with cancer. However, the psycho-oncology workforce is insufficient to meet patient need and is hard to access outside of major cities. To bridge this gap, innovative models of care are required. Implementation of a new model of care requires attention to the facilitators and barriers. The aim of this study was to explore stakeholders' attitudes to the feasibility and acceptability of a community-based, shared care model for the treatment of depression and anxiety.

**Methods:** Semi-structured interviews were conducted with community-based clinical psychologists (n=10), general practitioners (n=6) and hospital-based psychologists working in psycho-oncology (n=9). Framework analysis was conducted to identify key themes.

**Results:** All stakeholders perceived the model as feasible and acceptable. Potential barriers/facilitators to implementation were summarised under six key themes: (1) initiative, ownership and autonomy, (2) resources, (3) pathway establishment, (4) support, (5) skill acquisition, and (6) patient engagement. Facilitators included quality communication between

health professionals across primary and tertiary care, and appropriate education and support for community-based clinicians.

**Conclusions:** This in-depth exploration of Australian health professionals' perceptions of the feasibility and acceptability of a community-based model of psycho-oncology care revealed that most clinicians were willing to adopt the proposed changes into practice. An RCT of a shared care intervention for depressed patients with cancer is needed.

**Key words:**

cancer, **cognitive behaviour therapy**, collaborative care, **depression**, health professionals, oncology, psycho-oncology, qualitative interviews, shared care

**Abbreviations:**

Cognitive Behaviour Therapy (CBT)

Community-based psychologists (CBP)

General practitioners (GP)

Hospital-based psycho-oncology specialists (HPS)

## BACKGROUND

Clinical depression and anxiety are prevalent in patients with cancer (1, 2). While cognitive-behavioural therapy (CBT), and psychotropic medication (where appropriate), are effective (3-5), many patients receive treatment (6, 7). Access may be hindered by a failure to identify anxiety/depression (8); lack of information about, or referral to, services (9) and lack of access to locally available services (8). The consequences of untreated anxiety and depression include poorer adherence to anti-cancer treatments (10, 11), poorer quality of life (12), higher health service utilization (13, 14); and, severe depression is associated with suicidal ideation and reduced cancer survival (15, 16). Despite clinical pathways for the identification and management of anxiety and depression in patients with cancer (17), significant barriers to appropriate timely treatment remain. Increasing the number of health professionals trained to deliver cancer-specific anxiety/depression treatment and moving care from tertiary hospital settings to the community under a shared care model may facilitate timely access to treatment.

Shared, or collaborative, care entails integration of primary- and tertiary-level care (18) where specialist and the primary care providers share clinical responsibilities for patient management (19). This model has successfully been applied in depression (20), mental health care more broadly (21, 22); and chronic disease managements (18, 23), with significant improvements in physical and mental wellbeing (24,25). The effectiveness of depression shared care models in cancer has been demonstrated (26). However, these models were reliant on hospital teams and specialist psychiatry services, and retained a hierarchical structure, reducing their feasibility and post-research sustainability (27).

We propose a variation of shared care in which existing community-based health professionals collaborate with specialist hospital-based psycho-oncology clinicians. This model (outlined in Figure 1) shares care between community-based clinical psychologists (CBPs), general practitioners (GPs), and hospital-based specialists (HPSs). Under the model,

community-based clinical psychologists, already trained to deliver CBT will be provided with cancer-specific training and support from specialist hospital-based psycho-oncology trained clinical psychologists, General practitioners who already have a major role in management of depressed patients in the community and facilitate access to community-based clinical psychologists, will be provided with cancer-specific training, prescribing algorithms and links to hospital-based support as part of the model. The model includes mutually agreed communication pathways and formalised clinical supervision and training for community-based clinical psychologists provided by hospital-based clinical psychologists with specialist psycho-oncology expertise. This model aims to move care from hospital to community settings to both relieve the pressure on the hospital-based workforce and provide treatment options for patients closer to home, by upskilling and supporting community-based clinicians.

In Australia, clinical psychology services are subsidised under a national health scheme (Medicare) when a GP refers the patient as part of a mental health care plan. This provides an economic and quality care framework for the shared care model, (28). However, successful translation of this evidence into practice requires attention to the barriers and facilitators to implementation (29).

Successful system change requires individual health professionals to modify their clinical behaviour. The Promoting Action on Research Implementation in Health Services (PARIHS) framework (30) suggests successful implementation is determined by the interplay of the level and nature of **evidence**, **context**, and the method in which the process is **facilitated**. Similarly, the Proctor framework (31) conceptualises acceptability, adoption, appropriateness, fidelity and feasibility as key to improving implementation. Stakeholders who will need to change the way care is delivered provide a vital perspective empowering this implementation.

As such, this study explored CBPs', GPs' and HPSs' attitudes to the feasibility and acceptability of the shared care model. Specifically, we explored their perceptions of (1) the potential barriers to working within a shared care model involving hospital-based clinical psychologists, general practice and community-based clinical psychologists, and (2) the potential facilitators to assist implementation of this shared care model into routine care.

## **METHODS**

### **Participants**

Participants were recruited through professional organisations and networks, such as the Psycho-Oncology Co-operative Research Group (PoCoG), Australian Primary Care Research Network (APCRen), General Practice Mental Health Standards Collaboration (GPMHSC), Primary Care Collaborative Cancer Clinical Trials Group (PC4) and General Practice Research Network (GPRN). We also used a snowballing technique to identify community-based clinical psychologists. Health professionals with > five years of professional experience were invited to participate.

### **Data collection**

Interviews were conducted by telephone or face to face, using a semi-structured schedule (see online supplemental materials) and were audio-recorded and transcribed verbatim; although one participant requested note-taking only. Field notes were used to explore researcher reflexivity and further support the interpretation of data (33).

### **Data Analysis**

Participant characteristics were collated using descriptive statistics. The COREQ checklist (34) (supplemental materials) and standards for reporting qualitative research (35) guided reporting.

The interview transcripts underwent five stages of data analysis using the framework approach (36) (Table 1). A constant comparative methodology was employed to each

interview and any new subjects raised were included in subsequent interviews. Recruitment continued until no new information was identified from the interviews (theoretical saturation). (32). To develop the coding schedule three transcripts were chosen at random and an initial coding framework developed and applied to all transcripts. The framework was amended as new themes were identified. Open, axial and selective coding was conducted followed by a thematic analysis to conceptualise higher order themes. Interviews were independently analysed by two reviewers and coding disagreements discussed until consensus was achieved.

Coding was carried out using qualitative data analysis software - NVivo 11 (QSR International, Cambridge, MA). The study was approved by the University of Sydney Human Research Ethics Committee (2017/389).

## **RESULTS**

### **Participant Characteristics**

Email invitations were distributed through professional networks. For privacy reasons, member details were not provided by the professional groups. Based on snowballing, 42 invitation emails were sent, 28 health professionals expressed interest and 25 participated in interviews (mean interview length=57 minutes; range: 36-120). Reasons for non-participation were: difficulty scheduling an interview (n=1), preference for providing written feedback only (n=1), and not working with adult patients (n=1). See Table 2 for sample characteristics. GPs had 10 to 35 years of professional experience. CBP and HPS *oncology* experience ranged from none (oncology-naïve) to 18 years and four to 12 years, respectively.

## **Barriers and facilitators to the shared care model**

A thematic analysis identified six key themes: (1) initiative, ownership and autonomy, (2) resources, (3) pathway establishment, (4) support, (5) skill acquisition, and (6) patient engagement and therapeutic alliance. Sub-themes were also identified. Themes and sub-themes are described below. Recruitment from each health professional group continued until no new themes or ideas emerged. For CBP this was reached after 10 interviews. For HPSs this was reached after 9 interviews. For GPs this was reached after 6 interviews.

### ***Theme 1: Initiative, ownership and autonomy***

The CBPs felt ready and responsible for their role in shared care, describing the importance of autonomy in caring for patients and being able to use their judgement to individualise care. Some CBPs were concerned about adhering to a prescribed treatment protocol and the impact of this on their ability to flexibly respond to changing patient needs.

*Sometimes issues arise unexpectedly. And protocol-based interventions, if they are very inflexible, that can be difficult to incorporate. (CBP08).*

Other CBPs welcomed a structured CBT manual:

*I would very much appreciate a training manual... I prefer treatments that are structured and manualised and that are evidence based. (CBP01)*

GPs reported their primary commitment was to their patients; if their role was passive or obligational, this could be a barrier.

*Remember, we won't do it for you, but we will do it for our patients. (GP02)*

### ***Theme 2: Resources***

Financial, practical and logistical factors were potential barriers.

## **Financial implications**

The financial implications of implementing the shared care model was identified as a potential barrier for all health professionals. Some CBPs expressed concern about cancellation rates of medically unwell patients affecting their income.

*They [patients with cancer] are too inconsistent. You cannot predict if they will turn up to their appointments... If you do not see them, you are not paid. (CBP02)*

GPs and HPSs were concerned about the ability and willingness of patients with cancer to pay for psychological services for which there are sometimes additional out-of-pocket costs despite a government subsidy.

*Even when I refer patients under the Better Access Scheme [sic] – the psychologists charge a gap – this means that sometimes patients will forgo treatment because they do not want (or cannot afford) to pay the gap. (GP01)*

*Finances are a huge issue – people [patients] will just say “I cannot afford that”. (HPS03)*

Reimbursement for time and any expenses incurred for training in the shared care was identified as an incentive for GP participation.

*... the challenge is still to make sure that you have the cover at the practise when you take the time off. But it [reimbursement] would be useful for doctors to get in a locum. (GP04)*

## **Practicalities**

CBPs cited their ability to see new referrals in a timely manner as a practical constraint.

Other CBPs saw the shared care model as potentially increasing their referral base for new patients beyond current practice.

*I do not know many psychologists who do not have a waiting list. Ours is about a four to six week waiting list, but it can be up to three months in some practices. (CBP07)*

Several HPSs saw waiting lists as a barrier but noted that increasing the pool of CBPs competent in psycho-oncology facilitated sustainability of the shared care model.

*The good psychologists, with psycho-oncology experience, are hard to get into to see because they have huge waitlists. (HPS08)*

*...we are interested in the capacity of other sectors in the health care system to meet this population's needs. (HPS05)*

Access to the clinical setting could be a barrier for patients experiencing treatment side-effects or frailty or fatigue limiting their mobility. One CBP explained how they dealt with this situation:

*People with mobility issues might have some difficulty getting into the clinic. I usually discuss this beforehand with any new patients, so that they can decide if they would be able to get in or are willing to try. (CBP08)*

### **Proximity**

HPSs noted improved access as one benefit of patients receiving treatment in the community.

*Private practitioners can see patient's after-hours or weekends. Also, ...there is likely to be someone closer to their work or where they live who can help them. (HPS02)*

However, patients living in rural or regional areas still faced limited access to services.

*Sometimes there are not any options. For example, when they come from a rural setting, I will search online for psychologist that I might refer them to – but there is no-one within 200 kilometres. (HPS07)*

## **Time**

Some participants stated that administrative requirements could detract from their capacity and willingness to play a role in the shared care model. However, others felt that the administrative requirements of the model matched their current load so did not see it as burdensome.

*Psychologists will want to help but they may not have the time to spend on extra administration requirements. (CBP02)*

*... it would integrate well into a practice like mine. (CBP10)*

The timing of treatment/care was identified as an important consideration.

*I will be seeing a new patient next week who is already really very sick – nausea and vomiting. It is really very hard to deal with it [their depression] at that stage. (GP03)*

### **Theme 3: Pathway establishment**

Two important pathways to feasible and sustainable implementation of shared care were identified: (1) active communication, and (2) the referral pathway.

#### **Active communication**

Most participants described the value of responsive, bidirectional communication between all health professionals on a patient's treating team, to implementing shared care. Community-based health professionals highlighted the difficulty in trying to understand what their patients were experiencing in the absence of information. Most GPs reported that once their patients were diagnosed with cancer they often *vanished* from their care.

*The patients go into a cave, then they receive their treatment. At some stage they pop back out again. And I have to work out how to pick that up – which is exceedingly difficult. (GP02)*

GPs expressed their desire to be part of the care 'team' and were particularly concerned about continuity of care, citing the importance of active communication across the healthcare team.

The CBPs highlighted how being linked into the cancer teams would facilitate their delivery of appropriate psychological care. For example, one CBP described how understanding the prognosis of a cancer type, and the patient's own awareness of this, was integral to enable realistic goal setting.

*It is important to have good communication across the team and that I have an awareness of their prognosis. Trying to navigate what is known but not disclosed, is very problematic to helping people with realistic goal setting. (CBP06)*

#### **Referral pathway**

A clear and efficient referral pathway was perceived as integral to shared care. The participants' familiarity and comfort with the referral system (*Better Access for Mental Health*) increased willingness to adopt the shared care model.

*I think that most practices are already receiving referrals under the Better Access Scheme [sic] and thus this won't be difficult for them to adopt. (CBP01)*

However, both GPs and HPSs reported a system to identify CBPs with psycho-oncology expertise would facilitate the model. Despite psycho-oncology expertise, some CBPs currently received few referrals for the treatment of anxiety or depression in patients with cancer.

*The barrier is that we do not get the referrals. I don't know why that is. Whether it is because GPs don't know that we exist. (CBP06)*

#### **Theme 4: Support**

Professional relationships and self-care practices, organisational sustainability and medicolegal/ethical concerns were identified by health professionals as key areas of support impacting on their ability to participate in shared care.

### **Self-care and Supervision**

HSPs and CBPs highlighted the importance of appropriate supervision and self-care, when working with this patient cohort.

*Supervision and training are essential for the community clinicians. Because lots of people die from their cancer. This is something that is difficult for clinicians and not something that many clinicians will be used to. (HPS08)*

*If you had a lot of clients that were passing away, then for me personally, that would be very draining. (CBP01)*

They explained how important self-care, peer-support and supervision could be to overcome this.

*I think that it is important to recognise that it is a different type of work. It would impress me if it was addressed... because they do not usually talk about it in training. Not even a minute given to – “what is it like to work with this cohort”. (CBP09)*

General practitioners also appreciated that the shared care model provided access to support from psycho-oncology psychiatry specialists, to help them resolve complex issues (e.g. around drug interactions and comorbidities).

*We are quite confident with prescribing antidepressants. The difficult thing is knowing how to interact with a person’s particular context... Somewhere along the way there needs to be that opportunity of getting that specialist opinion. (GP02)*

## Medico-legal and Ethical Concerns

Issues of patient consent, confidentiality and disclosure of information, risk-management, and information transfer were identified by some of the participants as potential barriers to shared care. Psychologists (hospital and community based) wanted clarity around the boundaries of their role and responsibility (i.e. duty of care) in providing and receiving supervision.

*The main issues are around clinical responsibility and lines of reporting and risk... it needs to be clear that it is supervision and not about taking clinical responsibility ... This would really need to be delineated for this model, to protect everybody. To be feasible and sustainable the legal concerns of health services would need to be accounted for. (HPS05)*

For GPs, a formalised consent process was important to ensure patient endorsement for the sharing of data and information about their care.

*We would need a signed agreement from the patient. Even for us to send information, we have special protocols. (GP04)*

### **Theme 5: Skill acquisition**

How health professionals acquired, developed and practised the appropriate skills/knowledge required, was key to their acceptability of the shared care model. Psychologists identified the knowledge gap that many CBPs would experience and how overcoming this was essential to providing appropriate care.

*I can imagine that for a psychologist who has never had any contact with a patient with a cancer diagnosis and who is undergoing treatment, there is a whole set of new knowledge that would need to be obtained. (CBP08)*

CBPs wanted general information about the types of oncology treatment and the potential side-effects of these.

*Working in oncology is a speciality area of psychology and requires a significant knowledge of oncology and of the health care system. Knowledge of the side-effects of treatments is important for being able to correctly identify the context of the depression or anxiety and treat it effectively. (CBP04)*

General practitioners also wanted information on treatments and their side-effects but preferred it was delivered tailored specifically for their patient.

*The thing that GPs are more likely to need is advice or feedback around patient specific needs, rather than generic feedback about the cohort. (GP06)*

### ***Theme 6: Patient engagement and Therapeutic Alliance***

Most participants identified the importance of establishing and maintaining a professional and therapeutic relationship with patients. HPSs identified continuity of care as important for establishing a true therapeutic relationship with patients.

*So what I really like is that I provide continuity for the patients... that is something that people really value because often health professionals come in and out of their lives. (HPS04)*

Participants also described the need to educate people with cancer and health professionals about the importance of dealing with any mental health issues (i.e. psychoeducation).

*Referrers [oncologists] need to be skilled at having a conversation with their patients about accessing mental health care and facilitating them through the referral pathway to mental health care. (CBP04)*

## Mapping themes

The final step in the analysis was an examination of the interaction between themes. This revealed the wholistic value of the shared care model. A thematic map is provided in Figure

1.

*Patient Engagement and Therapeutic Alliance* was influenced by *Skill Acquisition*.

For example, having the appropriate knowledge affected ability to engage patients and build therapeutic relationships.

*The feedback that I get from my clients, is that they like that you are very familiar with the language, the treatment the medication, the side effects, the cause, the outcome of cancer.*

*(CBP09)*

*If I am being frank, there have been of my patients over the years who have sought community help and had really crappy service. So, people feel really comforted by knowing you are an expert. (HPS09)*

A GP explained how their own understanding of a patient's experiences impacted patient discussions about seeking help for anxiety or depression:

*If I have a very clear framework, then it is much easier for me to negotiate that sort of thing... (GP05)*

Additionally, a bidirectional connection existed between *Initiative, Ownership & Autonomy* and *Skill Acquisition*. More knowledgeable and skilled clinicians preferred autonomy and wanted to be more innovative in their own therapeutic performance.

An oncology naïve but experienced CBP highlighted the importance of autonomy in the role.

*I am pretty hard-core CBT, but that model does not always work. It depends very much on the presentation. I do not like to be restricted in that. I feel like I should be able to have options and having a more eclectic approach. (CBP09)*

The participants stated that they were willing to engage in upskilling if they had a professional interest and a feeling of ownership in shared care.

*This model is not complicated. It is not a complicated process, it is just a variation on what we do all the time... However, if you made it a requirement I would not probably be interested. (GP05)*

## CONCLUSIONS

This study's primary aim was to identify the feasibility and acceptability among health professional stakeholders of a shared care model for depression and anxiety in patients with cancer. Successful implementation of the model, requires a change in clinical practice both within the hospital and community settings. This study highlighted that although significant barriers to health professionals' engagement with shared care exist; most of the participants in this study were willing, with support and resources, to adopt the proposed changes in practice.

Fundamental facilitators included *quality communication* between health professionals, and appropriate *education and support* for community-based clinicians, in line with the wider literature (18, 20-23). Effective interprofessional collaboration requires information sharing and ongoing communication between providers and across healthcare settings, and upskilling of health practitioners.

Our findings support a model of shared care in which health professionals have clearly defined roles (22) with specialist support for community-based health professionals,

an approach trialled successfully in palliative care (37). Community-based health professionals perceived that access to specialists was integral to guiding care decisions for their patients.

Standardised care and prescriptive guidelines were met with some level of concern. Clinicians appreciate the utility of standardised guidelines (such as care pathways); however, when these are externally imposed, they threaten clinical autonomy (38, 39).

### **Study Limitations**

Firstly, this study was conducted in Australia, and may not reflect the perceptions of health professionals practicing elsewhere. Secondly, participants self-selected to participate, and their views may not be representative, although a range of oncology experience was represented to maximise generalisability of the results. Recruitment utilised emails to professional networks and a snow-balling technique to recruit community-based psychologists. Response rate using both of these methods was low and may have impacted the generalisability of the views expressed. Additionally, although psychiatrists may be called upon to provide advice to GPs with respect to anti-depressant prescribing, their views were not elicited. Similarly, the views of oncologists were not included despite their role in referral of patients to psycho-oncology services and management of cancer treatment more broadly.

Despite these limitations, this exploratory study provided insights on barriers and facilitators to community-based shared psycho-oncology care from diverse perspectives.

Future research should explore the perspectives of patients with cancer, to facilitate implementation of these strategies. However, preliminary evidence suggests that shared care could be acceptable to patients with cancer (40).

### **Clinical Implications**

Overall, our qualitative findings confirm shared psycho-oncology care to be acceptable and sustainable if health professionals felt adequately supported, engaged and ‘part of the team’.

Health professionals' decisions to engage depends on multiple factors which are highly interdependent. The results of this study highlighted the perceived utility of the resources developed to support the model: (1) manualized cancer-specific CBT to orientate community-based psychologists with expertise in CBT to cancer, (2) prescribing algorithms and academic detailing for GPs to facilitate evidence-based medication management, (3) oncology education modules to provide educational support, and (4) standardised mentoring by hospital-based clinical psychologists and psychiatrists and communication protocols to ensure integration of care beyond cancer services. The model and associated resources will be trialled in a RCT of a shared care intervention for depressed patients with cancer.

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## **CONFLICT OF INTEREST STATEMENT**

The authors declare that they have no competing interests related to the research presented in this manuscript.

## **ETHICS STATEMENT**

All procedures were conducted in accordance with institutional and national ethical standards and the Declaration of Helsinki.

## **DATA AVAILABILITY STATEMENT**

The authors will provide access to the de-identified data on request

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**Table 1: Stages of Qualitative Analyses**

Stage	Description of stage	Description of approach (researcher initials)
1. Familiarisation	Transcript review	The transcripts were read and re-read, and initial key ideas noted (LV, SS)
2. Identification of thematic framework	Key themes identified	Research questions were used to develop an initial coding structure (LV, SS)
3. Indexing	Emerging themes applied to text	By comparing and contrasting potential themes, recurring themes and discrete categories were identified across the entire data set (LV, SS)
4. Charting	Codebook created	Themes were defined and named to develop an agreed set of themes (JS, LV, SS)
5. Mapping and Interpretation	Codebook used to define concepts, and map/find associations between themes	The themes were explored and mapped (LV, SS, JS)

**Table 2: Participant Characteristics by Stakeholder Group**

	Stakeholder Group		
	CBP (n=10)	GP (n=6)	HPS (n=9)
<b>Gender</b>			
<b>Male</b>	0	1	2
<b>Female</b>	10	5	7
<b>Age (Years)</b>			
<b>≤30</b>	0	0	1
<b>31-40</b>	3	1	4
<b>41-50</b>	5	1	3
<b>&gt;50</b>	2	4	1
<b>Years of clinical experience (Median, Range)</b>	17.5(5-25)	25(10-35)	12(5-18)
<b>Years of cancer experience (Median, Range)</b>	8(0-18)	†	10(4-11)
<b>Mean Interview Length (Minutes)</b>	57.1	54.5	71.2

Notes: CBP = Community-based psychologists, GP = General Practitioners, HPS = Hospital-based Psycho-oncology Specialists, † = data was not collected from GPs.

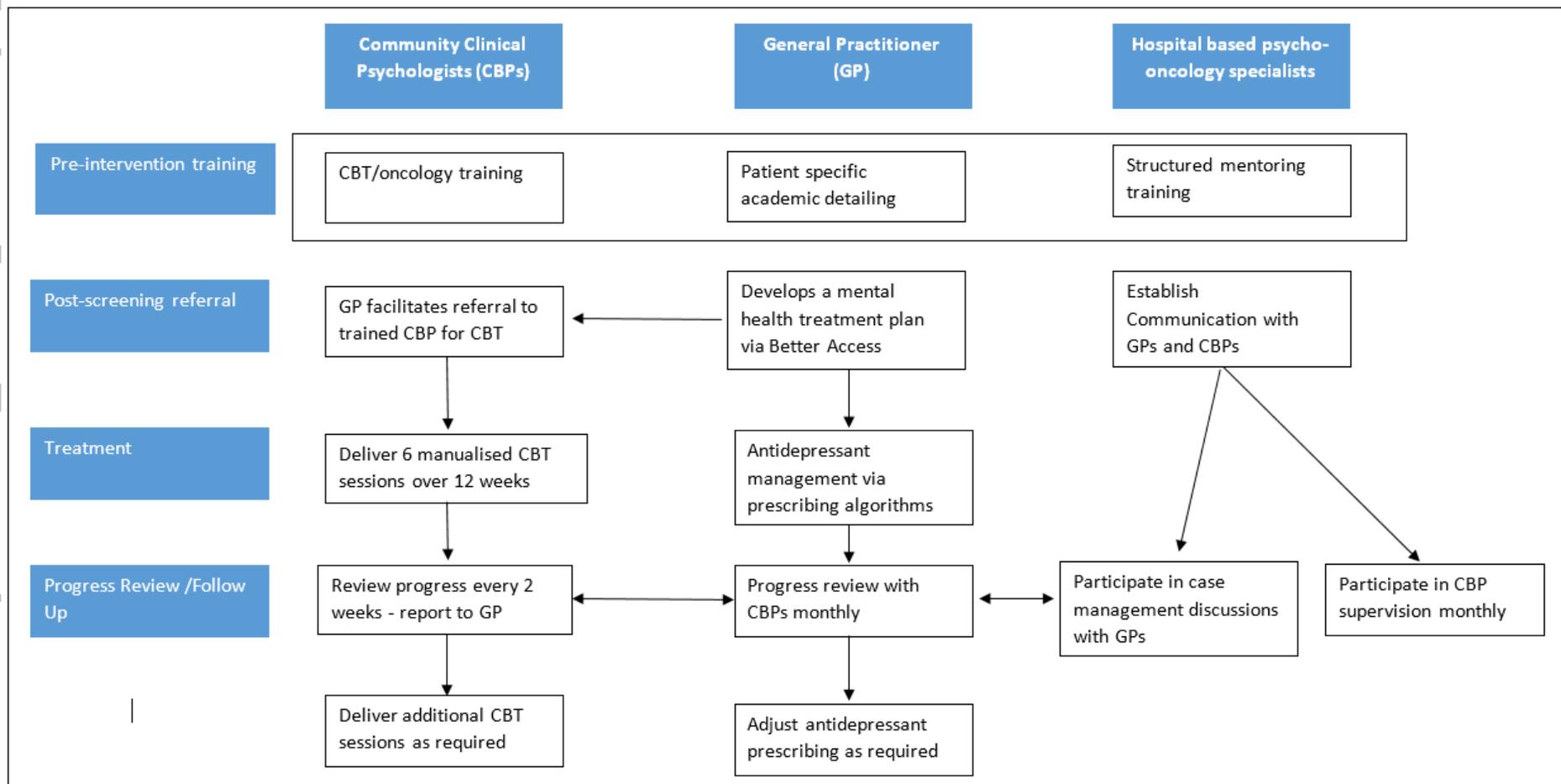


Figure 1: Summary of Shared Care Model

**Figure 2. Map of the Thematic Relationships Across Barriers and Facilitators to Shared Care Identified by Health Professionals**

