National Institute for Health and Care Excellence

Final

Rehabilitation in adults with complex psychosis and related severe mental health conditions

[B] Barriers in accessing rehabilitation services

NICE guideline NG181

Evidence review

August 2020

Final

This evidence review was developed by the National Guideline Alliance which is part of the Royal College of Obstetricians and Gynaecologists

Disclaimer

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or service users. The recommendations in this guideline are not mandatory and the guideline does not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

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Review question 1.2: What co-existing medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis in accessing rehabilitation services?

Introduction

People with complex psychosis and related severe mental health conditions may experience difficulty in accessing rehabilitation services even though they meet the entry criteria. This review aims to explore reasons why there may be barriers to accessing rehabilitation.

The title of the guideline changed to “Rehabilitation for adults with complex psychosis” during development. The previous title of the guideline has been retained in the evidence reviews for consistency with the wording used in the review protocols.

Summary of the protocol

Please see Table 1 for a summary of the population, interest and context (PICo) characteristics of this review.

Table 1: Summary of the protocol (PICo table)

Population	Adults (aged 18 years and older) with complex psychosis and related severe mental health conditions (as defined in scope) who are candidates for rehabilitation and/or currently receiving rehabilitation in an inpatient rehabilitation unit or while living in supported accommodation community
Phenomena of interest	Themes and specific outcomes will be identified from the literature, but expected themes are: • Medical/physical health (including comorbidities including substance misuse) • Social (including family, cultural, language, homelessness, age, lack of awareness of service users regarding expectations from services, gender and ethnicity) • Communication • Neurodevelopmental, cognitive or mental health problems (including learning disabilities autistic spectrum, • Service level (lack of local rehabilitation resources, lack of staff knowledge/training, lack of supported housing, rural versus urban services)
Context	Countries: UK, Australasia, Europe, USA, Canada. Date: Studies conducted post 1990

For further details see the review protocol in appendix A

Clinical evidence

Included studies

A total of 9 qualitative studies were included examining the factors that hinder access to rehabilitation services for people with complex psychosis and related severe mental health conditions. Of the studies identified 6 were from the USA, 2 were from the Australia, and 1 was from Sweden.

The included studies were published between 2007 and 2017. Two studies investigated barriers to accessing rehabilitation services generally, and 7 looked at access to rehabilitative sub-services embedded within broader rehabilitation service that focused on specific problems. A total of 4 of these 7 focused on access to rehabilitative employment support services and 3 looked at access to rehabilitative physical activity services.

The included studies are summarised in Table 2. See the literature search strategy in appendix B and study selection flow chart in appendix C.

Excluded studies

Studies not included in this review with reasons for their exclusions are provided in appendix K.

Summary of clinical studies included in the evidence review

A summary of the studies that were included in this review is presented in Table 2. See the full evidence tables in appendix D and map of the themes in Appendix E.

Table 2: Summary of included studies

Study and aim of the study	Participants	Methods	Themes
Browne 2016 **Country** USA **Aim of the study** To explore client and clinician perspectives on exercise, exercise intervention, and associated barriers in individuals with SMI. Also to obtain specific input from both clients and clinicians on the potential for a walking group intervention in this population.	**Sample size** 12 service users. **Diagnoses** Schizoaffective disorder: 7, Schizophrenia: 1, Bipolar disorder: 1, Major depressive disorder: 1, Other: 2. **Characteristics** Male/female: 7/5 Mean age (SD): 39.7 (7.7) Race: Caucasian = 5, African American = 7	**Recruitment Details** Recruited from local clinics through referrals, flyers, and emails. **Data collection details** Focus groups. **Analysis Details** Constant comparison was used, completed by two raters.	• Priorities of service users
Dunn 2010 **Country** USA **Aim of the study** To identify factors and processes that facilitated return to work or sustained employment.	**Sample size** 23 service users. **Diagnoses** Schizophrenia-spectrum disorder: 16, Major depression: 2, Bipolar disorder: 5. **Characteristics**	**Recruitment Details** Thirty nine respondents were screened and 24 were included in the study. **Data collection details** Semi-structured interviews.	• Access to services

Study and aim of the study	Participants	Methods	Themes
	Age range: 27 - 59	**Analysis Details** Cross-case analysis	
Frounfelker 2010 **Country** USA **Aim of the study** To provide further understanding of the influence of severe mental illness and criminal justice involvement on access to Supported Employment services.	**Sample size** 4 service users. **Diagnoses** Schizophrenia, bipolar disorder, or schizoaffective disorder. **Characteristics** Male/female: 2/2 Race: White = 0, African American = 4	**Recruitment Details** Recruited through email and phone invitations. **Data collection details** Unspecified interviews. **Analysis Details** Content analysis by two authors.	• Access to services • Specific characteristics
Jensen 2007 **Country** USA **Aim of the study** To identify important factors, both formal and informal, that contributed to recovery from the perspective of persons with mental illnesses.	**Sample size** 20 service users **Diagnoses** Serious and persistent mental illness, receiving formal mental health treatment including antipsychotic medication. **Characteristics** Male/female: 9/11	**Recruitment Details** Purposive sampling of mental health service users in a mid-western state. **Data collection details** Semi-structured interviews. **Analysis Details** Audio-recorded interviews were transcribed. An editing analysis style was used to develop concept categories. These were checked with some of the participants.	• Access to services
King 2009 **Country** Australia **Aim of the study** To identify employment-related information needs among clients, clinicians and employment specialists, with a view to developing a new vocational information resource.	**Sample size** 10 service users **Diagnoses** Bipolar disorder: 4, Schizophrenia: 2, Anxiety disorder:1, Nervous disorder: 1, Unreported: 2. **Characteristics** Male/female: 5/5 Age (range): 20-70	**Recruitment Details** Participants were recruited from a large state service, using a mix of purposive and snowball sampling. **Data collection details** Focus groups. **Analysis Details** Framework analysis was used to organise responses according to key themes, concepts and emergent categories. These were subsequently checked with some of the participants.	• Access to services
Leutwyler 2014 **Country** USA **Aim of the study** To describe the perceptions of older adults with schizophrenia about barriers and	**Sample size** 16 service users. **Diagnoses** Schizophrenia or schizoaffective disorder. **Characteristics** N/R	**Recruitment Details** Recruited from a transitional residential and day treatment centre, a locked residential facility, and an intensive case management program. **Data collection details**	• Access to services • Priorities of service users • Specific characteristics

Study and aim of the study	Participants	Methods	Themes
facilitators to engage in physical activities that promote physical function.		Mixed qualitative methods. **Analysis Details** A constant comparison approach was used. Initial open codes were refined down to six.	
Parker 2017 **Country** Australia **Aim of the study** To explore the expectations consumers hold when they commence at a residential rehabilitation service for people affected by severe mental illness in Australia called a Community Care Unit.	**Sample size** 24 service users. **Diagnoses** Schizophrenia or related psychotic disorder: 87%, Other: 13%. **Characteristics** Age (SD): 30 (7.8) Male/female: 75%/25%	**Recruitment Details** A convenience sample was taken - using the first service users to consent. **Data collection details** Semi-structured interviews. **Analysis Details** A pragmatic grounded theory approach to thematic analysis was followed.	• Access to services • Priorities of service users
Pooremamali 2017 **Country** Sweden **Aim of the study** To investigate how mentally ill ethnic minority clients experience, feel and think about participation in occupation-based rehabilitation, and potential barriers they might encounter.	**Sample size** 9 service users. **Diagnoses** Psychotic episodes: 7, Long-term depression: 2. **Characteristics** Age range: 30-60 Male/female: 6/3 Immigrants from Bosnia, Turkey, Bulgaria, Iran, Iraq, and Israel.	**Recruitment Details** Nineteen potential participants identified purposively, although 4 were subsequently hositalised. After 9 interviews data saturation was reached, and so 6 were dropped. **Data collection details** Semi-structured interviews. **Analysis Details** Grounded Theory framework.	• Access to services • Specific characteristics
Yarborough 2016 **Country** USA **Aim of the study** To identify modifiable factors associated with making and maintaining healthy lifestyle changes in order to inform clinicians and improve the development of future interventions for individuals with serious mental illnesses.	**Sample size** 84 service users. **Diagnoses** Schizophrenia/schizoaffective disorder: 41%, Bipolar disorder: 20%, Affective psychoses 37%, PTSD: 2%. **Characteristics** Mean age (SD): 48.1 (10.1) Male/female: 36%/64%	**Recruitment Details** Recruited from a large mental health service and from three large publicly funded community mental health clinics. **Data collection details** Unspecified interviews. **Analysis Details** Thematic analysis under the domains of 'barriers and facilitators'.	• Priorities of service users • Specific characteristics

M/F: male/female; N/R: not reported; PTSD: post-traumatic stress disorder; SD: standard deviation;

See the full evidence tables in appendix D and the theme map in appendix E.

Quality assessment of clinical outcomes included in the evidence review

See the clinical evidence profiles in appendix F and quotes extracted from the qualitative studies in appendix M.

Economic evidence

Included studies

A systematic review of the economic literature was conducted but no economic studies were identified which were applicable to this review question.

Excluded studies

Studies not included in this review with reasons for their exclusions are provided in appendix K.

Summary of studies included in the economic evidence review

No economic studies were identified which were applicable to this review question

Economic model

No economic modelling was undertaken for this review because this review did not address a comparison of competing alternatives and only a qualitative review was being undertaken for this question. Therefore, there was no effectiveness evidence available to inform economic modelling.

Qualitative evidence statements

Theme 1) Access to services

1.1) Service users may not have suitable rehabilitation services available in their area, or may not be aware of them. Some service users reported passivity about their pathway saying that they go where they are told, while staff and case managers may not know about rehabilitation services or know their service user is suitable in order to refer them. This was based on moderate quality evidence from 2 US studies and 2 Australian studies.

1.2) Service users may not have self-belief that they can recover. They need staff who encourage them and instil belief in them, but staff are also often very cautious and risk-averse. Family and carers may also provide encouragement, but may also reinforce the belief that the person is beyond help. This was based on moderate quality evidence from 3 US studies, 1 Swedish study and 1 Australian study.

Theme 2) Priorities of service users

2.1) Service users care about having a safe and stable place to live. They may be attracted to a live-in rehabilitation service if it is better than their current living situation. However, they may avoid a rehabilitation service that could cause disruption in their living situation. This was based on low quality evidence from 1 Australian study.

2.2) Service users were put off by rehabilitation services that did not fit into their schedule or routine. They also felt anxious about services that became part of their routine but then ended due to time limitations. Making rehabilitation activities a stable part of their routine facilitated ongoing access. This was based on moderate quality evidence from 2 US studies and 1 Australian study.

2.3) Fear of not knowing anybody or being socially excluded or outcast acted as a barrier. Company, friendship and social interaction is a strong facilitator for participating in and staying with rehabilitation activities. This was based on moderate quality evidence from 3 US studies.

Theme 3) Specific characteristics

3.1) Psychiatric symptoms and medication side effects such as tiredness, lethargy, depression and anxiety act as a barrier to proactive access and engagement with rehabilitation services. This was based on low quality evidence from 2 US studies.

3.2) Older service users may be put off by rehabilitation services (for example exercise groups) if they don't feel confident that they are considerate of age and its associated physical limitations. This was based on very low quality evidence from 1 US study.

3.3) Service users from racial and ethnic minorities face communication barriers, stigma and systematic disadvantages related to being a minority, as well as to having a mental health condition, and also some unique stigma and disadvantage as a result of the combination of the two. They felt that rehabilitation resources and services were not always well adapted and suited for them. This was based on very low quality evidence from 1 Swedish study.

3.4) Some services users reported that physical limitations such as foot problems, arthritis, breathing difficulties, sciatica, and pain from previous injuries could be a barrier to mobility and to accessing certain rehabilitation services. This was based on very low quality evidence from 1 US study.

3.5) Service users with a history of criminal justice involvement believed that this may be a barrier to accessing and being accepted to some rehabilitation services such as employment support. This was based on very low quality evidence from 1 US study.

Economic evidence statements

No economic evidence was identified which was applicable to this review question.

The committee's discussion of the evidence

Interpreting the evidence

The outcomes that matter most

The three themes from the findings were access to services, priorities of service users, and specific characteristics. The most important outcomes were decided by the committee from within the qualitative themes rather than being predefined in the protocol. They agreed the most important barriers to utilising rehabilitation were awareness and availability, representing basic precursors to access. Other important themes affecting access were staff and service attitudes, and equal access with

respect to protected characteristics. The thematic map (see appendix E) was presented to the committee summarising the themes and also any interactions between them, although there were no interactions in this case.

The quality of the evidence

The evidence statements were assessed using GRADE CERQual methodology and ranged in quality from very-low to moderate. Ratings were most commonly downgraded due to adequacy of the data, as around three quarters of the evidence statements had only one or two studies supporting them. For a couple of the evidence statements there was also some downgrading where methodological limitations in the studies (assessed individually using the CASP quality ratings) limited how much confidence could be had in their findings. Some downgrading also occurred for applicability when half or more of the studies were based on services that were described as rehabilitative services but this was not made explicitly clear.

The committee discussed all the evidence statements, including those of lower quality, as they felt these were still complimentary to their own experience.Two of the included studies were concerned with access to rehabilitation services overall, while the remaining seven related to access to employment or physical activity services which were embedded within a broader rehabilitative framework. In each case the committee deliberated the appropriateness of generalising findings from embedded rehabilitative 'sub-services' to the rest of the rehabilitation context. They concluded that the findings were suitable to be applied more widely, as the barriers were considered common features across all rehabilitation.

When forming the protocol, the committee agreed that the views of service users were the priority for this question – and so views of staff or family were not included. The findings and recommendations can be considered a representation of the experiences of service users exclusively, however it also means some factors from staff and family perspectives may have been missed.

Benefits and harms

The committee discussed the evidence in relation to the current review about accessing rehabilitation services, but also how it related to other topics in this guideline – especially those about the rehabilitation pathway (see Evidence Report F), identifying those who would benefit from rehabilitation (Evidence Report A), working collaboratively and being recovery oriented (see Evidence Report J). To avoid duplication the committee agreed to use this evidence to reinforce recommendations in other reviews where relevant rather than create duplicate ones.

The evidence suggested that awareness about what services are available is a crucial precursor to access. The committee discussed the implicit link between awareness about services and the availability of information. The evidence aligned with the committee's experience that service users often wish they'd known sooner that certain services were available to them. They concluded that services should ensure service users and their families/carers have all the information available to them from the start, and suggested the need for a coherent system to identify which people require what information and support to access the services available. However they noted that staff themselves aren't always aware about the range of services available. It was further suggested that it may also be beneficial to let service users know what services are not currently available to them in their area. Additionally, more practical information may be needed than just what's available – for example service access for some service users may have implications for their current tenancy which they need to be aware of. Visits to potential new placements and meetings with staff can be useful to give service users and their families/carers

practical insights to make an informed decision. Some services may only be accessible outside of the local area, and the impact of distance and new locality also need to be considered.

Another barrier to accessing services was low self-belief by service users that they could join and use rehabilitation services successfully. The committee discussed the role of staff to impart such self-belief, and the evidence about cultures of paternalism and negativity amongst staff in mental health services. They concluded that access to rehabilitation may be blocked by misassumptions from staff about their service users' ability to rehabilitate and gain more independence. This reinforced the recommendations made in Report J (Services and approaches valued by service users) about promoting a culture of recovery-orientation amongst staff. They added how this may also involve work with families, carers and extended networks to promote positivity in the service user's entire support system.

The committee agreed based on experience that availability of services is also crucial to access. Each area needs to have the right services available to match the needs of their population; however services may not exist or may be full. The committee's view was that local commissioners need to be responsible for monitoring what their local population's needs are. Where services aren't available people may need to relocate for out-of-area treatment, which may raise other difficulties.

Evidence about the priorities of service users suggests they valued safety and feeling secure in the environments or locations of the services they use. This was based on low quality evidence and so the committee did not make any recommendations about this here, and instead incorporated it with similar evidence into the recommendations about a safe environment from Report P (Promoting successful community living). The findings about the importance of being able to make and spend time with friends was used to compliment the recommendations in Report M (Participation in community activities).

The committee discussed evidence showing that a barrier occurs to rehabilitation access when it does not fit with peoples existing lives and schedules. The committee discussed this as an example of what makes a services 'person centred'. In the committee's experience many services still operate within a counterproductive culture whereby service users are expected to move from service to service and if they become a bit better they must uproot and relocate to the next step. They thought that access for all rehabilitation could be improved if services were encouraged to fit better around people's existing lives. They saw this as complimentary to the findings of evidence report J (approaches that are valued) suggesting that services should be recovery oriented, and used this finding to add to the wording within that recommendation.

Evidence was identified about a number of personal characteristics such as physical disability and gender which may act as barriers in service access. Because they are protected characteristics these are discussed below alongside legislation (see Other Considerations). One characteristic the committee discussed was how to support people coming to rehabilitation services from forensic services. The evidence from evidence report A suggested there may be specific risks associated with people coming from forensic services. The committee were aware of 'forensic tattooing', where people from forensic services are informally labelled, and their prospects in terms of access to services are limited. However, they were also aware there may be specialist services working with this group that other services should be aware and collaborate with. The committee discussed the importance of better linking between community services and forensic services.

Cost effectiveness and resource use

A systematic review of the economic literature was conducted but no relevant studies were identified which were applicable to this review question.

The recommendation that a lead commissioner should ensure that everyone with complex psychosis and related severe mental health conditions has equal access to rehabilitation services follows best recommended practice and is in accordance with the Equality Act 2010. The committee were mindful that there were regional differences with the current implementation of this recommendation, and that there may be resource implications in regions where rehabilitative services are in short supply.

With respect to the committee's recommendation on advice and information provision, it was noted that this recommendation would maximise what is supposed to be current practice and would help make the most of the benefits to be accrued from the uptake of available rehabilitation services. This may have some resource implications but would depend on the current level of practice.

The recommendation to support people to access legal advice about their status to reside in the UK could require access to costly legal specialists; however, the committee noted this is currently being done in practice.

Other considerations

The committee discussed issues of access in relation to protected characteristics. In line with the evidence the committee agreed that implicit service features are likely to disadvantage service access and usability for black and minority ethnic service users due to additional cultural and language barriers, or racial biases and prejudices. Equally people may experience stigma resulting from their mental health condition as well as any minority status. The committee agreed access to services may also be disrupted by age or disability status, and agreed that the Equality Act (2010) puts the responsibility on services to address this.

The committee recommended assessing the number of frail people in the Joint Strategic Needs Assessment, so that the need for specialist provision for elderly people was identified. The committee also discussed the potential need for extra provision to provide female-only accommodation. Evidence Report P (successful community living) identified qualitative reports that some female residents in supported accommodation had experienced gender-based assault and sexual exploitation. This contributed to the committee's discussion of their experience that some service users avoid certain services as the other service users are likely to be mostly males. Vulnerability to sexual exploitation was discussed as a gendered issue, and then was further discussed as an issue applying to all vulnerable adults in rehabilitation.

The committee were also aware that some people without legal status to reside in the UK, or with uncertainty around their legal status (for example refugees), may be concerned about being deported if they access services. The committee recommended that services should support people to access legal advice about their immigration status if required.

The committee also noted that people in rural areas may be disproportionately affected by lack of access to rehabilitation services. The committee recommended a local rehabilitation pathway for all local areas (see evidence report F).

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Appendices

Appendix A – Review protocol

Review protocol for review question 1.2: What co-existing medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis in accessing rehabilitation services?

Table 3: Review protocol for barriers to accessing rehabilitation services

Field (based on PRISMA-P	Content
Review question	What coexisting medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis and related severe mental health conditions in accessing rehabilitation services?
Type of review question	Qualitative systematic review
Objective of the review	To determine the factors that hinder access to rehabilitation services in people with complex psychosis and related severe mental health conditions
Eligibility criteria – population & disease	Adults (aged 18 years and older) with complex psychosis and related severe mental health conditions (as defined in scope) who are candidates for rehabilitation and/or currently receiving rehabilitation in an inpatient rehabilitation unit or while living in supported accommodation community. Studies will be included if more than 66% of those studied were from these populations.
Eligibility criteria – intervention	N/A
Eligibility criteria – comparator	N/A
Outcomes and prioritisation	Themes and specific outcomes will be identified from the literature, but expected themes are: Barriers: • Medical/physical health (including comorbidities including substance misuse)

Field (based on PRISMA-P	Content
	• Social (including family, cultural, language, homelessness, age, lack of awareness of service users regarding expectations from services, gender and ethnicity) • Communication • Neurodevelopmental, cognitive or mental health problems (including learning disabilities autistic spectrum, • Service level (lack of local rehabilitation resources, lack of staff knowledge/training, lack of supported housing, rural versus urban services)
Eligibility criteria – study design	Qualitative studies: semi-structured and structured interviews, focus groups investigating experiences, needs, opinions and preferences on rehabilitation services, approaches, care, and support. Qualitative components of effectiveness and mixed methods studies will be included. Systematic review findings will be extracted from directly if the quality and detail of their synthesis is high – in the case of low quality syntheses (where important details are lost), the component studies will be extracted from individually. Opinion pieces by authors will not be included. Policy papers will not be included, however any that are prominent/commonly mentioned and relevant to the current time and UK context will be highlighted in the discussion for context.
Other inclusion exclusion criteria	Studies conducted post 1990 only. Studies before 1990 were included in the electronic search but then excluded during the manual sifting phase. The date limit for studies after 1990 is suggested considering the change in provision of mental health services from institutionalized care in the 1970s to deinstitutionalise and community based care from 1990s onwards. Country limit: UK, USA, Australasia, Europe, Canada. The committee limited to these countries because they have similar cultures to the UK, given the importance of the cultural setting in which mental health rehabilitation takes place.

Field (based on PRISMA-P	Content
	Note for GRADE CERQual scoring: Findings that have only been observed in one or two non-UK countries may be culturally specific to that context and so will be downgraded. If a finding is replicated in 3 or more non-UK countries it will be considered that there is a reasonable chance it's applicable in the UK context also and so will not be downgraded. English language papers only Minimum number of people in study: 4. This was specified to exclude case-study reports, which were considered lower quality because they don't seek to fill out and saturate their themes. Complete peer reviewed papers only – abstracts, conferences papers and dissertations excluded.
Proposed sensitivity/sub-group analysis, or meta-regression	No subgroup analysis
Selection process – duplicate screening/selection/analysis	Sifting, data extraction, appraisal of methodological quality and GRADE-CERQual assessment will be performed by the systematic reviewer. A random sample of the references identified in the search will be sifted by a second reviewer. This sample size of this pilot round will be 10% of the total, (with a minimum of 100 studies). Resolution of any disputes will be with the senior systematic reviewer and the Topic Advisor. Quality control will be performed by the senior systematic reviewer.
Data management (software)	NGA STAR software will be used for generating bibliographies and citations, study sifting, data extraction and recording quality assessment of studies. A GRADE-CERQual Microsoft Excel template will be used to record the overall quality of findings from the qualitative evidence; a Microsoft Excel template will also be used to organise data into themes
Information sources – databases and dates	Sources to be searched: Embase, Medline, PsycINFO, Cochrane library (CDSR and CENTRAL), DARE and HTA (via CRD) Limits (e.g. date, study design): Human studies/English language
Identify if an update	This review question is not an update
Author contacts	For details please see https://www.nice.org.uk/guidance/indevelopment/gid-ng10092
Highlight if amendment to previous protocol	For details please see section 4.5 of Developing NICE guidelines: the manual 2014

Field (based on PRISMA-P	Content
Search strategy – for one database	For details please see appendix B
Data collection process – forms/duplicate	A standardised evidence table format will be used, and published as appendix D (clinical evidence tables) or H (economic evidence tables)
Data items – define all variables to be collected	A standardised evidence table format will be used, and published as appendix G (evidence tables) or H (economic evidence tables) of the guideline.
Methods for assessing bias at outcome/study level	For details please see evidence tables in appendix G (evidence tables) or H (economic evidence tables) of the guideline.
Criteria for quantitative synthesis (where suitable)	Standard study checklists were used to critically appraise individual studies. For details please see section 6.2 of Developing NICE guidelines: the manual 2014 Surveys would be assessed using the quality checklist for questionnaire surveys (CEBM checklist) listed as the preferred checklist in appendix H of the NICE guideline Manual (2018). The confidence in the evidence extracted from the included studies will be evaluated for each theme using GRADE CERQual approach: https://www.cerqual.org/
Methods for analysis – combining studies and exploring (in)consistency	For details please see section 6.4 of Developing NICE guidelines: the manual 2014
Meta-bias assessment – publication bias, selective reporting bias	For details please see the methods chapter of the guideline
Assessment of confidence in cumulative evidence	For details please see section 6.2 of Developing NICE guidelines: the manual 2014
Rationale/context – Current management	For details please see sections 6.4 and 9.1 of Developing NICE guidelines: the manual 2014
Describe contributions of authors and guarantor	For details please see the introduction to the evidence review in the guideline.
Sources of funding/support	A multidisciplinary committee [add link to history page of the guideline] developed the evidence review. The committee was convened by the NGA and chaired by Gillian Baird in line with section 3 of Developing NICE guidelines: the manual. Staff from the NGA undertook systematic literature searches, appraised the evidence, conducted meta-analysis and cost-effectiveness analysis where appropriate, and drafted the evidence review in collaboration with the committee. For details please see Developing NICE guidelines: the manual.
Name of sponsor	The National Guideline Alliance is funded by NICE and hosted by The Royal College of Obstetricians and Gynaecologists

Field (based on PRISMA-P	Content
Roles of sponsor	The National Guideline Alliance is funded by NICE and hosted by The Royal College of Obstetricians and Gynaecologists
PROSPERO registration number	NICE funds The National Guideline Alliance to develop guidelines for those working in the NHS, public health, and social care in England

CDSR: Cochrane Database of Systematic Reviews; CENTRAL: Cochrane Central Register of Controlled Trials; DARE: Database of Abstracts of Reviews of Effects; GC: guideline committee; GRADE-CERQual: Grading of Recommendations Assessment, Development and Evaluation – certainty in qualitative evidence; N/A: not applicable; NGA: National Guideline Alliance; NHS: National health service; NICE: National Institute for Health and Care Excellence; RoB: risk of bias;

Appendix B – Literature search strategies

Literature search strategies for review question 1.2: What co-existing medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis in accessing rehabilitation services?

Databases: Embase/Medline/PsycInfo

Date searched: 02/10/2018

#	Searches
1	exp psychosis/ use emczd
2	Psychotic disorders/ use ppez
3	exp psychosis/ use psyh
4	(psychos?s or psychotic).tw.
5	exp schizophrenia/ use emczd
6	exp schizophrenia/ or exp "schizophrenia spectrum and other psychotic disorders"/ use ppez
7	(exp schizophrenia/ or "fragmentation (schizophrenia)"/) use psyh
8	schizoaffective psychosis/ use emczd
9	schizoaffective disorder/ use psyh
10	(schizophren* or schizoaffective*).tw.
11	exp bipolar disorder/ use emczd
12	exp "Bipolar and Related Disorders"/ use ppez
13	exp bipolar disorder/ use psyh
14	((bipolar or bipolar type) adj2 (disorder* or disease or spectrum)).tw.
15	Depressive psychosis/ use emczd
16	Delusional disorder/ use emczd
17	delusions/ use psyh
18	(delusion* adj3 (disorder* or disease)).tw.
19	mental disease/ use emczd
20	mental disorders/ use ppez
21	mental disorders/ use psyh
22	(psychiatric adj2 (illness* or disease* or disorder* or disabilit* or problem*)).tw.
23	((severe or serious) adj3 (mental adj2 (illness* or disease* or disorder* or disabilit* or problem*))).tw.
24	(complex adj2 (mental adj2 (illness* or disease* or disorder* or disabilit* or problem*))).tw.
25	or/1-24
26	(Rehabilitation/ or cognitive rehabilitation/ or community based rehabilitation/ or psychosocial rehabilitation/ or rehabilitation care/ or rehabilitation center/) use emczd
27	(exp rehabilitation/ or exp rehabilitation centers/) use ppez
28	(Rehabilitation/ or cognitive rehabilitation/ or neuropsychological rehabilitation/ or psychosocial rehabilitation/ or independent living programs/ or rehabilitation centers/ or rehabilitation counselling/) use psyh
29	residential care/ use emczd
30	(residential facilities/ or assisted living facilities/ or halfway houses/) use ppez
31	(residential care institutions/ or halfway houses/ or assisted living/) use psyh
32	(resident* adj (care or centre or center)).tw.
33	(halfway house* or assist* living).tw.
34	((inpatient or in-patient or long-stay) adj3 (psychiatric or mental health)).tw.
35	(Support* adj (hous* or accommodat* or living)).tw.
36	(rehabilitation or rehabilitative or rehabilitate).tw.
37	rehabilitation.fs.
38	or/26-37
39	exp Interview/ use emczd
40	interview/ use ppez

#	Searches
41	interviews/ use psyh
42	(interview* adj3 (in-depth or indepth or semistructured or semi structured or unstructured or un structured)).tw.
43	(interview* and (attitude* or choice* or dissatisf* or expectation* or experienc* or inform* or opinion* or perceive* or perception* or perspective* or preferen* or priorit* or satisf* or view*)).tw.
44	open ended questionnaire/ use emczd
45	((open end* or openend*) adj3 questionnaire*).tw.
46	qualitative research/
47	qualitative*.tw.
48	(ethno* or fieldwork or field work or focus group* or grounded theory or key informant or theoretical sampl*).tw.
49	thematic analysis/ use emczd
50	(thematic* adj3 analys*).tw.
51	(parental attitude/ or patient satisfaction/ or patient preference/ or personal experience/) use emczd
52	(exp parental attitudes/ or exp client attitudes/) use psyh
53	exp patient satisfaction/ use ppez
54	((carer* or caregiver* or care giver* or famil* or father* or mother* or brother or sister or parent* or patient* or participant* or service user) adj2 (dissatisf* or experienc* or opinion* or perceive* or perspective* or preferenc* or satisf* or views)).tw.
55	shared decision making/ use emczd
56	((share* or collaborat*) adj3 decision).tw.
57	((access* or aversion or barrier* or facilitat* or hinder* or obstacle* or obstruct*) adj2 (intervention* or pathway* or program* or rehab* or service* or therap* or treat*)).ti,ab.
58	or/39-57
59	25 and 38 and 58
60	limit 59 to (yr="1970 - current" and english language)
61	animals/ not humans/ use ppez
62	animal/ not human/ use emczd
63	nonhuman/ use emczd
64	"primates (nonhuman)"/
65	exp Animals, Laboratory/ use ppez
66	exp Animal Experimentation/ use ppez
67	exp Animal Experiment/ use emczd
68	exp Experimental Animal/ use emczd
69	animal research/ use psyh
70	exp Models, Animal/ use ppez
71	animal model/ use emczd
72	animal models/ use psyh
73	exp Rodentia/ use ppez
74	exp Rodent/ use emczd
75	rodents/ use psyh
76	(rat or rats or mouse or mice).ti.
77	or/61-76
78	60 not 77
79	limit 78 to yr=1970-2005
80	limit 78 to yr=2006-2015
81	limit 78 to yr=2016 - current
82	remove duplicates from 79
83	remove duplicates from 80
84	remove duplicates from 81
85	82 or 83 or 84

Database: Cochrane Library

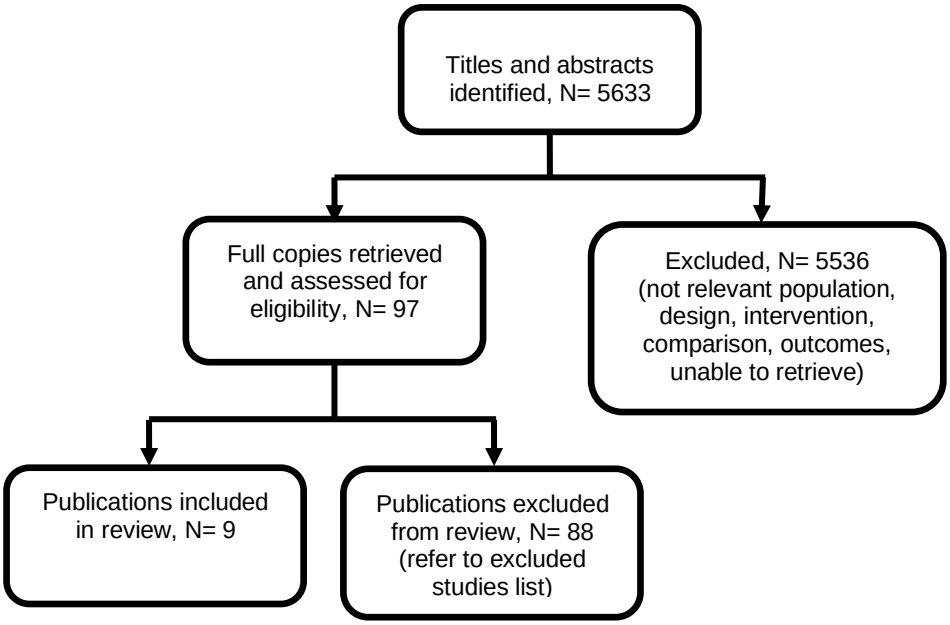
Date searched: 02/10/2018

#	Searches
1	MeSH descriptor: [Psychotic Disorders] explode all trees
2	(psychos?s or psychotic):ti,ab,kw
3	MeSH descriptor: [Schizophrenia] explode all trees
4	(schizophren* or schizoaffective*):ti,ab,kw
5	MeSH descriptor: [Bipolar Disorder] explode all trees
6	(((bipolar or bipolar type) near/2 (disorder* or disease or spectrum))):ti,ab,kw
7	MeSH descriptor: [Delusions] this term only
8	((delusion* near/3 (disorder* or disease))):ti,ab,kw
9	MeSH descriptor: [Mental Disorders] this term only
10	((psychiatric near/2 (illness* or disease* or disorder* or disabilit* or problem*))):ti,ab,kw
11	(((severe or serious) near/3 (mental adj2 (illness* or disease* or disorder* or disabilit* or problem*)))):ti,ab,kw
12	((complex near/2 (mental adj2 (illness* or disease* or disorder* or disabilit* or problem*)))):ti,ab,kw
13	(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12)
14	MeSH descriptor: [Rehabilitation] this term only
15	MeSH descriptor: [Rehabilitation, Vocational] this term only
16	MeSH descriptor: [Residential Facilities] this term only
17	MeSH descriptor: [Assisted Living Facilities] this term only
18	MeSH descriptor: [Halfway Houses] this term only
19	((resident* near (care or centre or center))):ti,ab,kw
20	(((inpatient or in-patient or long-stay) near/3 (psychiatric or mental health))):ti,ab,kw
21	(((Support*) near (hous* or accommodat* or living))):ti,ab,kw
22	((halfway house* or assist* living)):ti,ab,kw
23	(rehabilitation or rehabilitative or rehabilitate):ti,ab,kw
24	(#14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23)
25	MeSH descriptor: [Interviews as Topic] explode all trees
26	(interview* near/3 (in-depth or indepth or semistructured or semi structured or unstructured or un structured)):ti,ab,kw
27	(interview* and (attitude* or choice* or dissatisf* or expectation* or experienc* or inform* or opinion* or perceive* or perception* or perspective* or preferen* or priorit* or satisf* or view*)):ti,ab,kw
28	((open end* or openend*) near/3 questionnaire*):ti,ab,kw
29	MeSH descriptor: [Qualitative Research] explode all trees
30	qualitative*:ti,ab,kw
31	(ethno* or fieldwork or field work or focus group* or grounded theory or key informant or theoretical sampl*):ti,ab,kw
32	(thematic* near/3 analys*):ti,ab,kw
33	MeSH descriptor: [Patient Satisfaction] explode all trees
34	((carer* or caregiver* or care giver* or famil* or father* or mother* or brother or sister or parent* or patient* or participant* or service user) near/2 (dissatisf* or experienc* or opinion* or perceive* or perspective* or preferenc* or satisf* or views)):ti,ab,kw
35	((share* or collaborat*) near/3 decision):ti,ab,kw
36	((access* or aversion or barrier* or facilitat* or hinder* or obstacle* or obstruct*) near/2 (intervention* or pathway* or program* or rehab* or service* or therap* or treat*)):ti,ab,kw
37	(#25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36)
38	(#13 AND #24 AND #37) with Cochrane Library publication date between Jan 1970 and Nov 2018

Appendix C – Qualitative evidence study selection

Qualitative study selection for review question 1.2: What co-existing medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis in accessing rehabilitation services?

Figure 1: Flow diagram of qualitative article selection



Appendix D – Clinical evidence tables

Clinical evidence tables for review question 1.2: What co-existing medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis in accessing rehabilitation services?

Table 4: Clinical evidence tables

Study details	Participants	Methods	Themes and findings	Comments
Full citation Browne, J., Mihas, P., Penn, D. L., Focus on Exercise: Client and Clinician Perspectives on Exercise in Individuals with Serious Mental Illness, Community Mental Health Journal, 52, 387-94, 2016 **Ref Id** 906196 **Country where the study was carried out** USA **Study type** Focus groups. **Aim of the study** To explore client and clinician perspectives on exercise, exercise intervention, and associated barriers in individuals with SMI. Also to obtain specific input from both clients and clinicians on the potential for a walking group intervention in this population.	**Sample size** 12 service users. **Diagnosis** Schizoaffective disorder: 7, Schizophrenia: 1, Bipolar disorder: 1, Major depressive disorder: 1, Other: 2. **Characteristics** Male/female: 7/5 Mean age (SD): 39.7 (7.7) Race: Caucasian = 5, African American = 7 **Inclusion criteria** Participants had to have a diagnosis of a serious mental illness, and be willing and able to consent. **Exclusion criteria** NR	**Phenomenon of interest** Interest in a walking group, and ideas or recommendations for how to make it acceptible. **Recruitment Details** Recruited from local clinics through referrals, flyers, and emails. **Collection Details** Focus groups were conducted following a semi-structured topic guide. Each ended with a brief quanitative questonnaire. Focus groups lasted 60-75mins, and were audio recorded. Participants were given $15 for their time. **Analysis Details** Constant comparison was used, completed by two raters.	**Findings:** • Attitudes on Walking Groups - Client Perspectives **Findings are summarised under the following themes:** • Priorities of service users	**Limitations (CASP: checklist for qualitative studies)** **Q1: Was there a clear statement of the aims of the research?** Yes. **Q2: Was a qualitative methodology appropriate?** Yes. **Q3 Was the research design appropriate to address the aims of the research?** Yes. **Q4: Was the recruitment strategy appropriate to the aims of the research?** Unclear - The reasons for particular recruitment methods were not well explained. **Q5: Were the data collected in a way that addressed the research issue?** Unclear - does not explain why focus groups were used rather than individual interviews.

Study details	Participants	Methods	Themes and findings	Comments
Date of data collection NR **Source of funding** None stated.				**Q6: Has the relationship between researcher and participants been adequately considered?** Unclear - not explained, however there is no obvious power relationship between the researchers and the participants. **Q7: Have ethical issues been taken into consideration?** Yes - board approval and some consideration to ethics and consent. **Q8: Was the data analysis sufficiently rigorous?** Yes - clearly described. **Q9: Is there a clear statement of findings?** Yes. **Q10: Is the research valuable for the UK? (1. Contribution to literature and 2. Transferability)** Unclear - Not in a UK, and the US multi-payer context may be especially unsuitable to generalise from. **Overall methodological limitations** Moderate
Full citation Dunn, E. C., Wewiorski, N. J., Rogers, E. S., A qualitative investigation of individual and contextual factors associated with vocational recovery among people with serious mental illness,	**Sample size** 23 service users. **Diagnosis**	**Phenomenon of interest** Perspectives on employment and its relationship to vocational recovery. **Recruitment Details**	**Findings:** • Having access to consumer-oriented programs **Findings are summarised under the following themes:**	**Limitations (CASP: checklist for qualitative studies)** **Q1: Was there a clear statement of the aims of the research?** Yes.

Study details	Participants	Methods	Themes and findings	Comments
American Journal of Orthopsychiatry, 80, 185-94, 2010 **Ref Id** 906782 **Country where the study was carried out** USA **Study type** Semi-structured interviews. **Aim of the study** To identify factors and processes that facilitated return to work or sustained employment. **Date of data collection** February 2002 to May 2004. **Source of funding** Supported by a grant from the National Institute on Disability and Rehabilitation Research (NIDRR) within the Department of Education and the Center for Mental Health Services (CMHS), a division of the Substance Abuse and Mental Health Services Administration Grant H133B40024.	Schizophrenia-spectrum disorder: 16, Major depression: 2, Bipolar disorder: 5. **Characteristics** Age range: 27 - 59 **Inclusion criteria** (1) Experience of psychosis and the self-perception of achieving a moderate to high level of recovery from serious mental illness(2)Those having a range of social relationships outside the mental health community, minimal use of mental health services (3) Stability of psychiatric symptoms. **Exclusion criteria** Those without a history of psychosis.	Thirty nine respondents were screened and 24 were included in the study. **Collection Details** Semi-structured in depth interviews. **Analysis Details** Interviews were transcribed by a professional transcriptionist, checked for accuracy , coded using cross-case analysis until consensus was reached and conceptual framework was developed.	• Access to services	**Q2: Was a qualitative methodology appropriate?** Yes. **Q3 Was the research design appropriate to address the aims of the research?** Yes. **Q4: Was the recruitment strategy appropriate to the aims of the research?** Yes-purposeful, criterion-based, and maximum variation sampling was used. However only included individuals with moderately advanced level of recovery. **Q5: Were the data collected in a way that addressed the research issue?** Yes. **Q6: Has the relationship between researcher and participants been adequately considered?** No - not clearly considered. **Q7: Have ethical issues been taken into consideration?** Yes- Institutional review approval , and measures to protect confidentiality described. **Q8: Was the data analysis sufficiently rigorous?** Yes. **Q9: Is there a clear statement of findings?**

Study details	Participants	Methods	Themes and findings	Comments
				Yes. **Q10: Is the research valuable for the UK? (1. Contribution to literature and 2. Transferability)** Yes. **Overall methodological limitations** Minor.
Full citation Frounfelker, R. L., Glover, C. M., Teachout, A., Wilkniss, S. M., Whitley, R., Access to supported employment for consumers with criminal justice involvement, Psychiatric rehabilitation journal, 34, 49-56, 2010 **Ref Id** 907016 **Country where the study was carried out** USA **Study type** Unspecified interviews. **Aim of the study** To provide further understanding of the influence of severe mental illness and criminal justice involvement on access to Supported Employment services. **Date of data collection** Dec 2007 to Dec 2008	**Sample size** 4 service users. Also 8 service staff. **Diagnosis** Schizophrenia, bipolar disorder, or schizoaffective disorder. **Characteristics** Male/female: 2/2 Race: White = 0, African American = 4 **Inclusion criteria** A primary psychiatric diagnosis of a SMI such as schizophrenia, bipolar disorder, or schizoaffective disorder. **Exclusion criteria** NR	**Phenomenon of interest** Perspectives of service users with Criminal Justice involvement on entry to supported employment, and specific barriers and facilitators to this access. **Recruitment Details** Recruited through email and phone invitations. **Collection Details** Half hour interviews which were audio recorded. **Analysis Details** Content analysis by two authors.	**Findings:** • Negative Psychosocial Impact of Criminal Justice Involvement • Truncated Social Networks **Findings are summarised under the following themes:** • Access to services • Specific characteristics	**Limitations (CASP: checklist for qualitative studies)** **Q1: Was there a clear statement of the aims of the research?** Yes. **Q2: Was a qualitative methodology appropriate?** Yes. **Q3 Was the research design appropriate to address the aims of the research?** Unclear - nature of the interviews was not clearly explained. **Q4: Was the recruitment strategy appropriate to the aims of the research?** Unclear - the reasons why certain participants were chosen is not well specified. **Q5: Were the data collected in a way that addressed the research issue?** Yes.

Study details	Participants	Methods	Themes and findings	Comments
Source of funding NR				**Q6: Has the relationship between researcher and participants been adequately considered?** Unclear. **Q7: Have ethical issues been taken into consideration?** Yes - board approval and some consideration to ethics and consent **Q8: Was the data analysis sufficiently rigorous?** Unclear - not well explained. **Q9: Is there a clear statement of findings?** Yes. **Q10: Is the research valuable for the UK? (1. Contribution to literature and 2. Transferability)** Unclear - Not in a UK, and the US multi-payer context may be especially unsuitable to generalise from. **Overall methodological limitations** Moderate.
Full citation Jensen, L. W., Wadkins, T. A., Mental health success stories: finding paths to recovery, Issues in Mental Health Nursing, 28, 325-40, 2007 **Ref Id** 907665	**Sample size** 20 service users **Diagnosis** Serious and persistent mental illness, receiving formal mental health treatment including antipsychotic medication.	**Phenomenon of interest** Paths to recovery. **Recruitment Details** Purposive sampling of mental health service users in a mid-western state.	**Findings:** • Barriers in the Paths to Recovery **Findings are summarised under the following themes:** • Access to services	**Limitations (CASP: checklist for qualitative studies)** **Q1: Was there a clear statement of the aims of the research?** Yes.

Study details	Participants	Methods	Themes and findings	Comments
Country where the study was carried out USA **Study type** Semi-structured interviews **Aim of the study** To identify important factors, both formal and informal, that contributed to recovery from the perspective of persons with mental illnesses. **Date of data collection** NR **Source of funding** Funded by a grant from the U.S. Department of Health and Human Services, Administration for Children and Families, Office of Community Services, grant 90EJ0010.	**Characteristics** Male/female: 9/11 **Inclusion criteria** An adult who self-report a mental illness and considered themselves successful in recovery. **Exclusion criteria** Those currently hospitalised or institutionalised were excluded.	**Collection Details** Individual interviews lasting one or two hours were conducted in a location of the participants' choosing. Interviews followed a topic guide. Each participent was given a $10 stipend afterwards. **Analysis Details** Audio-recorded interviews were transcribed. An editing analysis style was used to develop concept categories. These were checked with some of the participants.		**Q2: Was a qualitative methodology appropriate?** Yes. **Q3 Was the research design appropriate to address the aims of the research?** Yes. **Q4: Was the recruitment strategy appropriate to the aims of the research?** Yes - purposive to gain a range of relevant perspectives. **Q5: Were the data collected in a way that addressed the research issue?** Yes - clearly detailed. **Q6: Has the relationship between researcher and participants been adequately considered?** Unclear - not explained, although there is no obvious power relationship between the interviewers and the participants. **Q7: Have ethical issues been taken into consideration?** Yes - board approval and some consideration to ethics and consent. **Q8: Was the data analysis sufficiently rigorous?** Yes - clearly explained. **Q9: Is there a clear statement of findings?** Yes.

Study details	Participants	Methods	Themes and findings	Comments
				Q10: Is the research valuable for the UK? (1. Contribution to literature and 2. Transferability) Unclear - Not in a UK, and the US multi-payer context may be especially unsuitable to generalise from. **Overall methodological limitations** Minor
Full citation King, J., Cleary, C., Harris, M. G., Lloyd, C., Waghorn, G., Employment-related information for clients receiving mental health services and clinicians, Work (Reading, Mass.), 39, 291-303, 2011 **Ref Id** 907840 **Country where the study was carried out** Australia **Study type** Focus groups. **Aim of the study** To identify employment-related information needs among clients, clinicians and employment specialists, with a view to developing a new vocational information resource. **Date of data collection** February 2008.	**Sample size** 10 service users. Also 13 service staff. **Diagnosis** Bipolar disorder: 4, Schizophrenia: 2, Anxiety disorder:1, Nervous disorder: 1, Unreported: 2. **Characteristics** Male/female: 5/5 Age (range): 20-70 **Inclusion criteria** Participants were current consumers of the two local public mental health services, and were interested in employment issues. **Exclusion criteria** NR	**Phenomenon of interest** Employment-related information needs of service users and also clinicians. **Recruitment Details** Participants were recruited from a large state service, using a mix of purposive and snowball sampling. **Collection Details** Participants each completed a brief survey of demographics and employment history, and then a focus group was conducted following a semi-structured topic guide. PRompts were used to illicit more information when necassary. Focus groups lasted 60-90mins, and afterwards participants were given a $50 gift voucher as compensation for time and travel expenses.	**Findings:** • Countering incorrect beliefs about clients' ability to work • Service pathways • Communication styles and strategies **Findings are summarised under the following themes:** • Access to services	**Limitations (CASP: checklist for qualitative studies)** **Q1: Was there a clear statement of the aims of the research?** Yes. **Q2: Was a qualitative methodology appropriate?** Yes. **Q3 Was the research design appropriate to address the aims of the research?** Yes. **Q4: Was the recruitment strategy appropriate to the aims of the research?** Yes. Reasonable justification. **Q5: Were the data collected in a way that addressed the research issue?** No. Used focus groups, and stated this might help low-confidence clients become more confident. But the opposite could be true. Focus groups may have allowed participants to mask their opinions.

Study details	Participants	Methods	Themes and findings	Comments
Source of funding Supported by the Australian Government Department of Health and Ageing.		**Analysis Details** Framework analysis was used to organise responses according to key themes, concepts and emergent categories. These were subsequently checked with some of the participants.		**Q6: Has the relationship between researcher and participants been adequately considered?** Unclear - not explained, however there is no obvious power relationship between the interviewers and the participants. **Q7: Have ethical issues been taken into consideration?** Yes - board approval and some consideration to ethics and consent. **Q8: Was the data analysis sufficiently rigorous?** Yes. **Q9: Is there a clear statement of findings?** Yes. **Q10: Is the research valuable for the UK? (1. Contribution to literature and 2. Transferability)** Yes. Not in a UK context Australian system did not seem too dissimilar. Was imprecise about the diagnoses of the participants, so could not tell their applicability to our target population. **Overall methodological limitations** Moderate.
Full citation Leutwyler, H., Hubbard, E. M., Slater, M., Jeste, D. V., "It's good for me": physical activity in older adults with schizophrenia,	**Sample size** 16 service users. **Diagnosis** Schizophrenia or schizoaffective disorder.	**Phenomenon of interest** The perceptions of older adults with schizophrenia about barriers and facilitators to engaging in physical activities.	**Findings:** • Mental Health • No Longer a Spring Chicken • Belonging	**Limitations (CASP: checklist for qualitative studies)** **Q1: Was there a clear statement of the aims of the research?** Yes.

Study details	Participants	Methods	Themes and findings	Comments
Community Mental Health Journal, 50, 75-80, 2014 **Ref Id** 908101 **Country where the study was carried out** USA **Study type** Mixed qualitative methods. **Aim of the study** To describe the perceptions of older adults with schizophrenia about barriers and facilitators to engage in physical activities that promote physical function. **Date of data collection** December 2010 - July 2011. **Source of funding** Supported by the National Center for Research Resources [KL2R024130 & UL1RR024131] and the National Institute of Nursing Research [P30-NR011934-0]. The content was solely the responsibility of the authors.	**Characteristics** N/R **Inclusion criteria** Participants had to be age 55 years or older, have a diagnosis of schizophrenia or schizoaffective disorder, and competent to consent using the consent form. **Exclusion criteria** NR	**Recruitment Details** Recruited from 3 services - a transitional residential and day treatment center, a locked residential facility, and an intensive case management program. **Collection Details** A focus group was conducted with 10 participants, and another 6 took part in individual interviews. A semi-structured interview guide was used which was usable with both methods. Interviews were transcribed verbatim, and also field notes were taken. **Analysis Details** A constant comparison approach was used. Initial open codes were refined down to six.	**Findings are summarised under the following themes:** • Access to services • Priorities of service users • Specific characteristics	**Q2: Was a qualitative methodology appropriate?** Yes. **Q3 Was the research design appropriate to address the aims of the research?** Yes. **Q4: Was the recruitment strategy appropriate to the aims of the research?** Unclear - although the locations were clear, it was not very clear about why the specific participants were chosen and not others. **Q5: Were the data collected in a way that addressed the research issue?** Yes. Clear description. **Q6: Has the relationship between researcher and participants been adequately considered?** Unclear - not explained, however there is no obvious power relationship between the researchers and the participants. **Q7: Have ethical issues been taken into consideration?** Yes - board approval and some consideration to ethics and consent. **Q8: Was the data analysis sufficiently rigorous?** Yes. **Q9: Is there a clear statement of findings?**

Study details	Participants	Methods	Themes and findings	Comments
				Yes. Well described. **Q10: Is the research valuable for the UK? (1. Contribution to literature and 2. Transferability)** Unclear - A well defined and relevant population. Not in a UK, and the US multi-payer context may be especially unsuitable to generalise from. **Overall methodological limitations** Minor.
Full citation Parker, S., Dark, F., Newman, E., Hanley, D., McKinlay, W., Meurk, C., Consumers' understanding and expectations of a community-based recovery-oriented mental health rehabilitation unit: a pragmatic grounded theory analysis, Epidemiology and Psychiatric Sciences, 1-10, 2017 **Ref Id** 909001 **Country where the study was carried out** Australia **Study type** Semi-structured interviews. **Aim of the study** To explore the expectations consumers hold when they commence at a residential rehabilitation service for people affected by severe mental illness	**Sample size** 24 service users. **Diagnosis** Schizophrenia or related psychotic disorder: 87%, Other: 13%. **Characteristics** Age (SD): 30 (7.8) Male/female: 75%/25% **Inclusion criteria** People with severe and persisting mental illness residing in Community Care Units. **Exclusion criteria** There were no exclusion criteria.	**Phenomenon of interest** How participants came to be there; expectations of the experience; and expectations of how this would compare to previous mental health care experiences. **Recruitment Details** A convenience sample was taken - using the first service users to consent. **Collection Details** Participants undertook a semi-structured interview within the first six weeks of their stay. **Analysis Details** A pragmatic grounded theory approach was followed.	**Findings:** • Why am I here? • A transitional environment is anxiety provoking **Findings are summarised under the following themes:** • Access to services • Priorities of service users	**Limitations (CASP: checklist for qualitative studies)** **Q1: Was there a clear statement of the aims of the research?** Yes. **Q2: Was a qualitative methodology appropriate?** Yes. **Q3 Was the research design appropriate to address the aims of the research?** Yes. **Q4: Was the recruitment strategy appropriate to the aims of the research?** Yes. **Q5: Were the data collected in a way that addressed the research issue?** Yes.

Study details	Participants	Methods	Themes and findings	Comments
in Australia called a Community Care Unit (CCU). **Date of data collection** December 2014 to January 2016 **Source of funding** N/R				**Q6: Has the relationship between researcher and participants been adequately considered?** Yes - discussed explicitly. **Q7: Have ethical issues been taken into consideration?** Yes. **Q8: Was the data analysis sufficiently rigorous?** Yes. Potential bias from within the team, may have wished to show the organisation it the best light **Q9: Is there a clear statement of findings?** Yes. **Q10: Is the research valuable for the UK? (1. Contribution to literature and 2. Transferability)** Unclear - contributes to the literature, but not clear how applicable it would be to UK services and settings. **Overall methodological limitations** Minor.
Full citation Pooremamali, P., Morville, A. L., Eklund, M., Barriers to continuity in the pathway toward occupational engagement among ethnic minorities with mental illness, Scandinavian journal of occupational therapy, 24, 259-268, 2017	**Sample size** 9 service users. **Diagnosis** Psychotic episodes: 7, Long-term depression: 2. **Characteristics**	**Phenomenon of interest** Occupation based rehabilitation for ethnic minorities. **Recruitment Details** Staff at the four centres acted as mediators in the recruitment of participants.	**Findings:** • Lack of access to adequate support and resources **Findings are summarised under the following themes:** • Access to services • Specific characteristics	**Limitations (CASP: checklist for qualitative studies)** **Q1: Was there a clear statement of the aims of the research?** Yes.

Study details	Participants	Methods	Themes and findings	Comments
Ref Id 909134 **Country where the study was carried out** Sweden **Study type** Semi-structured interviews. **Aim of the study** To investigate how mentally ill ethnic minority clients experience, feel and think about participation in occupation-based rehabilitation, and potential barriers they might encounter. **Date of data collection** N/R **Source of funding** The study was founded by the Swedish National Board of Health and Welfare.	Age range: 30-60 Male/female: 6/3 Immigrants from Bosnia, Turkey, Bulgaria, Iran, Iraq, and Israel. **Inclusion criteria** A non-Swedish ethnic background, a mental illness, and having received community-based rehabilitation for at least 4 h per week with a duration of more than 1 month. **Exclusion criteria** None of the participants reported having mental illness prior to migrating.	Nineteen were identified, of which four were subsequently hospitalised. Of the remaining fifteen, nine were interviewed and the final six were informed they would not be as the authors reached data saturation. **Collection Details** Themed (semi-structured) interviews **Analysis Details** Grounded Theory framework.		**Q2: Was a qualitative methodology appropriate?** Yes. **Q3 Was the research design appropriate to address the aims of the research?** Yes. **Q4: Was the recruitment strategy appropriate to the aims of the research?** Yes. **Q5: Were the data collected in a way that addressed the research issue?** Yes. Linguistic and cultural differences may have created some barriers. **Q6: Has the relationship between researcher and participants been adequately considered?** Unclear - in the conclusions section the author mentions they met several times to establish 'trust', but this is not well explained or explored. **Q7: Have ethical issues been taken into consideration?** Yes- Institutional review approval , and measures to protect confidentiality described. **Q8: Was the data analysis sufficiently rigorous?** Yes. Although in grounded theory the authors own preconceptions can impact their analysis. **Q9: Is there a clear statement of findings?**

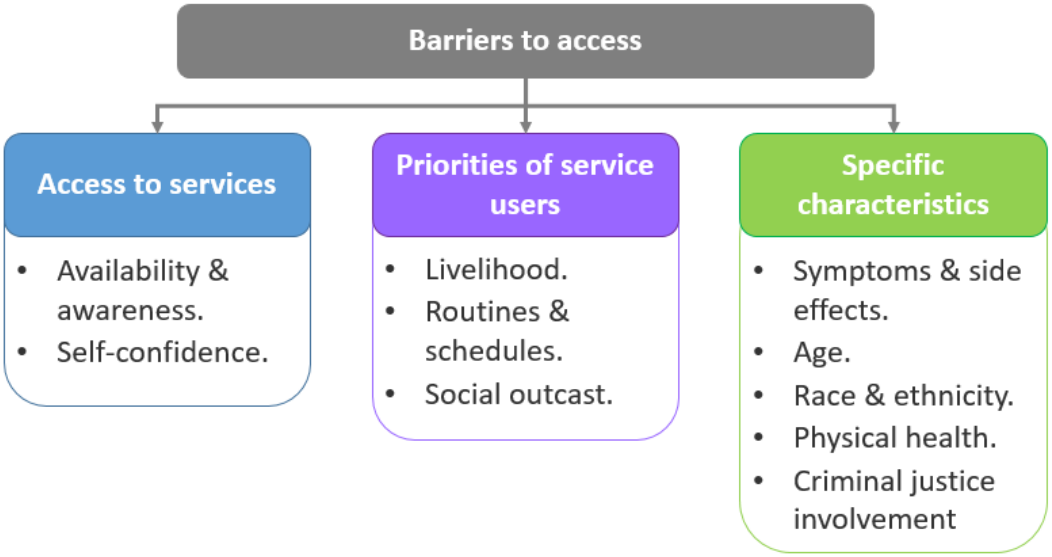
Study details	Participants	Methods	Themes and findings	Comments
				Yes. **Q10: Is the research valuable for the UK? (1. Contribution to literature and 2. Transferability)** Yes - a Swedish context, but lots of data given so the reader can judge for themselves how applicable the findings are to their own context. **Overall methodological limitations** Minor.
Full citation Yarborough, B. J., Stumbo, S. P., Yarborough, M. T., Young, T. J., Green, C. A., Improving lifestyle interventions for people with serious mental illnesses: Qualitative results from the STRIDE study, Psychiatric rehabilitation journal, 39, 33-41, 2016 **Ref Id** 910456 **Country where the study was carried out** USA **Study type** Unspecified interviews. **Aim of the study** To identify modifiable factors associated with making and maintaining healthy lifestyle changes in order to inform clinicians and improve the development of future	**Sample size** 84 service users - participants from both arms of an RCT. **Diagnosis** Schizophrenia/schizoaffective disorder: 41%, Bipolar disorder: 20%, Affective psychoses 37%, PTSD: 2%. **Characteristics** Mean age (SD): 48.1 (10.1) Male/female: 36%/64% **Inclusion criteria** Participants from intervention and control arms of an RCT investigating a weight-loss and lifestyle-change program, all of whom had a diagnosis of a serious mental illness. Some participants could not be reached.	**Phenomenon of interest** The factors that facilitate or hinder lifestyle change (changed eating habits, increased exercise, losing weight) for people with serious mental illness. **Recruitment Details** Participants were recruited from a large mental health service and from three large publicly funded community mental health clinics. **Collection Details** Interviews were 30-60mins long and were audio recorded. They were conducted at different phases of the RCT, and some participants were interviewed more than once. Participants recieved a $35	**Findings:** • Depressive symptoms interfere with lifestyle change efforts • Friends help facilitate exercise but loss of exercise buddies can inhibit exercise motivation **Findings are summarised under the following themes:** • Priorities of service users • Specific characteristics	**Limitations (CASP: checklist for qualitative studies)** **Q1: Was there a clear statement of the aims of the research?** Yes. **Q2: Was a qualitative methodology appropriate?** Yes. **Q3 Was the research design appropriate to address the aims of the research?** Unclear - the type of interviewing used is not clearly stated. **Q4: Was the recruitment strategy appropriate to the aims of the research?** Yes. **Q5: Were the data collected in a way that addressed the research issue?** Yes.

Study details	Participants	Methods	Themes and findings	Comments
interventions for individuals with serious mental illnesses. **Date of data collection** NR **Source of funding** Funded by the National Institute of Diabetes and Digestive and Kidney Diseases, Grant R18DK076775.	**Exclusion criteria** NR	gift card for completing interviews. **Analysis Details** Thematic analysis under the domains of 'barriers and facilitators'.		**Q6: Has the relationship between researcher and participants been adequately considered?** Unclear - not explained. **Q7: Have ethical issues been taken into consideration?** Unclear - board approval but little discussion of consent or other ethics. **Q8: Was the data analysis sufficiently rigorous?** Yes. **Q9: Is there a clear statement of findings?** Yes. **Q10: Is the research valuable for the UK? (1. Contribution to literature and 2. Transferability)** Unclear - Not in a UK, and the US multi-payer context may be especially unsuitable to generalise from. **Overall methodological limitations** Moderate.

Appendix E – Theme maps

Theme maps for review question 1.2: What co-existing medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis in accessing rehabilitation services?

Figure 2: Theme map



Appendix F – GRADE CERQual tables

GRADE CERQual tables for review question 1.2: What co-existing medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis in accessing rehabilitation services?

Table 5: Summary of evidence (GRADE-CERQual), Topic I. Approaches to rehabilitation

Study information		Description of Theme or Finding	CERQUAL Quality Assessment				
Number of studies	Design		Methodological Limitations	Coherence of findings	Applicability of evidence	Adequacy of Data	Overall Confidence
Theme 1) Access to services							
4 studies (Frounfelker 2010, Jensen 2007, King 2009, Parker 2017)	2 semi-structured interviews, 1 unspecified interviews, 1 focus groups	Service users may not have suitable rehabilitation services available in their area, or may not be aware of them. Some service users reported passivity about their pathway saying that they go where they are told, while staff and case managers may not know about rehabilitation services or know their service user is suitable in order to refer them.	Minor concerns	Minor concerns	Moderate concerns[1]	Minor concerns	MODERATE
5 studies (Frounfelker 2010, Jensen 2007, King 2009, Leutwyler 2014, Pooremamali 2017)	2 semi-structured interviews, 1 unspecified interviews, 1 focus groups, 1 mixed qualitative methods.	Service users may not have self-belief that they can recover. They need staff who encourage them and instil belief in them, but staff are also often very cautious and risk-averse. Family and carers may also provide encouragement, but may also reinforce the belief that the person is beyond help.	Minor concerns	Moderate concerns[2]	Minor concerns	Very minor concerns	MODERATE
Theme 2) Priorities of service users							
1 study (Parker 2017)	1 semi-structured interviews	Service users care about having a safe and stable place to live. They may be attracted to a live-in rehabilitation service if it is better than their current living situation.	Minor concerns	Minor concerns	Moderate concerns[1]	Serious concerns[3]	LOW

Study information		Description of Theme or Finding	CERQUAL Quality Assessment				
Number of studies	Design		Methodological Limitations	Coherence of findings	Applicability of evidence	Adequacy of Data	Overall Confidence
		However they may avoid a rehabilitation service that could cause disruption in their living situation.					
3 studies (Browne 2016, Leutwyler 2014, Parker 2017)	1 semi-structured interviews, 1 focus groups, 1 mixed qualitative methods.	Service users were put off by rehabilitation services that did not fit into their schedule or routine. They also felt anxious about services that became part of their routine but then ended due to time limitations. Making rehabilitation activities a stable part of their routine facilitated ongoing access.	Minor concerns	Minor concerns	Moderate concerns[1]	Minor concerns	MODERATE
3 studies (Browne 2016, Leutwyler 2014, Yarborough 2016)	1 unspecified interviews, 1 focus groups, 1 mixed qualitative methods.	Fear of not knowing anybody or being socially excluded or outcast acted as a barrier. Company, friendship and social interaction is a strong facilitator for participating in and staying with rehabilitation activities.	Minor concerns	Minor concerns	Moderate concerns[1]	Minor concerns	MODERATE
Theme 3) Specific characteristics							
2 studies (Leutwyler 2014, Yarborough 2016)	1 mixed qualitative methods, 1 unspecified interviews.	Psychiatric symptoms and medication side effects such as tiredness, lethargy, depression and anxiety act as a barrier to proactive access and engagement with rehabilitation services.	Minor concerns	Minor concerns	Moderate concerns[1]	Moderate concerns[4]	LOW
1 study (Leutwyler 2014)	1 mixed qualitative methods.	Older service users may be put off by rehabilitation services (for example exercise groups) if they don't feel confident that they are considerate of age and its associated physical limitations.	Minor concerns	Minor concerns	Moderate concerns[1]	Serious concerns[3]	VERY LOW
1 study (Pooremamali 2017)	1 semi-structured interviews	Service users from racial and ethnic minorities face communication barriers, stigma and systematic disadvantages	Minor concerns	Minor concerns	Moderate concerns[1]	Serious concerns[3]	VERY LOW

Study information		Description of Theme or Finding	CERQUAL Quality Assessment				
Number of studies	Design		Methodological Limitations	Coherence of findings	Applicability of evidence	Adequacy of Data	Overall Confidence
		related to being a minority, as well as to having a mental health condition, and also some unique stigma and disadvantage as a result of the combination of the two. They felt that rehabilitation resources and services were not always well adapted and suited for them.					
1 study (Leutwyler 2014)	1 mixed qualitative methods.	Some services users reported that physical limitations such as foot problems, arthritis, breathing difficulties, sciatica, and pain from previous injuries could be a barrier to mobility and to accessing certain rehabilitation services.	Minor concerns	Minor concerns	Moderate concerns[1]	Serious concerns[3]	VERY LOW
1 study (Frounfelker 2010)	1 unspecified interviews	Service users with a history of criminal justice involvement felt believed that this may be a barrier to accessing and being accepted to some rehabilitation services such as employment support.	Moderate concerns[5]	Minor concerns	Moderate concerns[1]	Serious concerns[3]	VERY LOW

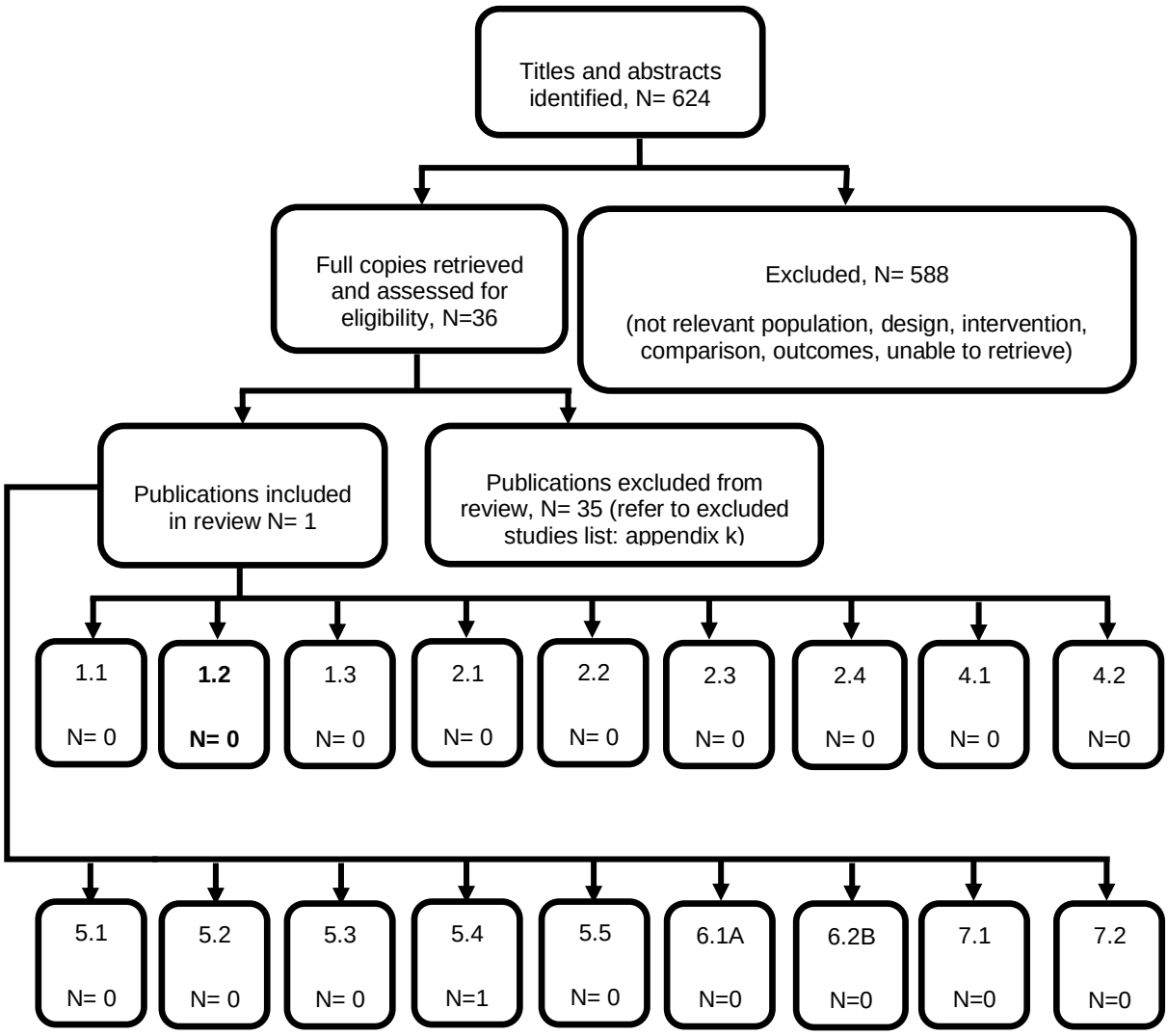
1 Evidence downgraded by 1 due to applicability of evidence, as there were no UK studies included, and not 3 or more different countries studied
2 Evidence was downgraded 1 due to incoherence of findings, as the construct contained nuances and variations in experiences
3 Evidence was downgraded by 2 due to adequacy of data, as only one study supported the review's findings (offering poor data)
4 Evidence was downgraded by 1 due to adequacy of data, as only two studies supported the review's findings (offering thin data)
5 Downgraded following CASP assessment, where a single study with moderate limitations was used, or where at least half of studies used had serious limitations

Appendix G – Economic evidence study selection

Economic evidence study selection for review question 1.2: What co-existing medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis in accessing rehabilitation services?

A global health economic literature search was undertaken, covering all review questions in this guideline. However, as shown in Figure 3, no evidence was identified which was applicable to this review question.

Figure 3: Health economic study selection flow chart



Appendix H – Economic evidence tables

Economic evidence tables for review question 1.2: What co-existing medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis in accessing rehabilitation services?

No evidence was identified which was applicable to this review question.

Appendix I – Health economic evidence profiles

Economic evidence profiles for review question 1.2: What co-existing medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis in accessing rehabilitation services?

No evidence was identified which was applicable to this review question.

Appendix J – Health economic analysis

Economic evidence analysis for review question 1.2 : What co-existing medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis in accessing rehabilitation services?

No evidence was identified which was applicable to this review question.

Appendix K – Excluded studies

Excluded studies for review question 1.2: What co-existing medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis in accessing rehabilitation services?

Table 6: Excluded clinical studies

Study	Reason for Exclusion
Alvidrez, J., Kaiser, D., Havassy, B. E., Severely mentally ill consumers' perspectives on drug use, Journal of Psychoactive Drugs, 36, 347-355, 2004	Not related to access to mental health rehabilitation services.
Andresen, R., Oades, L., Caputi, P., The experience of recovery from schizophrenia: Towards an empirically validated stage model, Australian and New Zealand Journal of Psychiatry, 37, 586-594, 2003	Did not use qualitative methodology as specified in the scope.
Atkinson, S., Bramley, C., Schneider, J., Professionals' perceptions of the obstacles to education for people using mental health services, Psychiatric rehabilitation journal, 33, 26-31, 2009	Did not include the views of the target population
Battams, S., Baum, F., What policies and policy processes are needed to ensure that people with psychiatric disabilities have access to appropriate housing?, Social Science and Medicine, 70, 1026-1034, 2010	Did not include the views of the target population
Bell, M. D., Weinstein, A., Simulated job interview skill training for people with psychiatric disability: Feasibility and tolerability of virtual reality training, Schizophrenia Bulletin, 37, S91-S97, 2011	Study was not related to access to mental health rehabilitation services.
Biebel, K., Nicholson, J., Woolsey, K., Wolf, T., Shifting an agency's paradigm: Creating the capacity to intervene with parents with mental illness, American Journal of Psychiatric Rehabilitation, 19, 315-338, 2016	Did not include the views of the target population.
Blixen, C. E., Kanuch, S., Perzynski, A. T., Thomas, C., Dawson, N. V., Sajatovic, M., Barriers to Self-management of Serious Mental Illness and Diabetes, American Journal of Health Behavior, 40, 194-204, 2016	Population studied was not two thirds adults with complex psychosis and related severe mental health conditions.
Boyce, Melanie, Secker, Jenny, Johnson, Robyn, Floyd, Mike, Grove, Bob, Schneider, Justine, Slade, Jan, Mental health service usersâ€ ™ experiences of returning to paid employment, Disability & Society, 23, 77-88, 2008	Identified in Kinn 2014. It was not clear if the population studied was two thirds adults with complex psychosis and related severe mental health conditions.
Brinchmann, B., Lorentsen, O., Early intervention: Integrating vocational and medical rehabilitation during admittance in a mental health institution. A study in a rural part of North-Norway, Early Intervention in Psychiatry, 6 (SUPPL.1), 111, 2012	Conference abstract only.
Bybee, Deborah, Bellamy, Chyrell, Mowbray, Carol T., Analysis of participation in an innovative psychiatric rehabilitation intervention: Supported education, Evaluation and Program Planning, 23, 41-52, 2000	It was not clear if the population studied was two thirds adults with complex psychosis and related severe mental health conditions.
Carpenter-Song, E. A., Holcombe, B. D., Torrey, J., Hipolito, M. M., Peterson, L. D., Recovery in a family context: experiences of mothers with serious mental illnesses, Psychiatric rehabilitation journal, 37, 162-169, 2014	Less than two thirds of the participants had a diagnosis matching the scope

Study	Reason for Exclusion
Chen, F. p, Assisting Adults with Severe Mental Illness in Transitioning from Parental Homes to Independent Living, Community Mental Health Journal, 1-9, 2009	Population studied was not adults with complex psychosis and related severe mental health conditions.
Cook, J. A., Morrow, M., Battersby, L., Intersectional policy analysis of self-directed mental health care in Canada, Psychiatric rehabilitation journal, 40, 244-251, 2017	Did not use a qualitative methodology specified in the scope.
Coulthard, K., Patel, D., Brizzolara, C., Morriss, R., Watson, S., A feasibility study of expert patient and community mental health team led bipolar psychoeducation groups: implementing an evidence based practice, BMC Psychiatry, 13, 301, 2013	Did not include the views of the target population.
Cuddeback, G. S., Pettus-Davis, C., Scheyett, A., Consumers' perceptions of forensic assertive community treatment, Psychiatric rehabilitation journal, 35, 101-109, 2011	Less than two thirds of the service users had a diagnosis of psychosis or related disorder
Davies, B., Allen, D., Integrating 'mental illness' and 'motherhood': the positive use of surveillance by health professionals. A qualitative study, International Journal of Nursing Studies, 44, 365-76, 2007	Population studied was not two thirds adults with complex psychosis and related severe mental health conditions.
De Vecchi, N., Kenny, A., Kidd, S., Stakeholder views on a recovery-oriented psychiatric rehabilitation art therapy program in a rural Australian mental health service: A qualitative description, International Journal of Mental Health Systems, 9 (1) (no pagination), 2015	Focused on access to an art program, not on mental health rehabilitation services.
Dickerson, F., Bennett, M., Dixon, L., Burke, E., Vaughan, C., Delahanty, J., Diclemente, C., Smoking cessation in persons with serious mental illnesses: the experience of successful quitters, Psychiatric rehabilitation journal, 34, 311-316, 2011	Did not use a qualitative methodology specified in the scope.
Edge, D., Degnan, A., Cotterill, S., Berry, K., Baker, J., Drake, R., Abel, K., NIHR Journals Library. Health Services and Delivery Research, 9, 9, 2018	Study was not related to access to mental health rehabilitation services.
Edland-Gryt, M., Skatvedt, A. H., Thresholds in a low-threshold setting: an empirical study of barriers in a centre for people with drug problems and mental health disorders, International Journal of Drug Policy, 24, 257-64, 2013	Did not specify whether participants were from the target population
Farnworth, L., Nikitin, L., Fossey, E., Being in a secure forensic psychiatric unit: Every day is the same, killing time or making the most of it, British Journal of Occupational Therapy, 67, 430-438, 2004	Study was not related to access to mental health rehabilitation services.
Fitzgerald, S., Kimmel, K., Locust, A., Miller, S., Uncovering the early vocational recovery phases for persons with psychiatric disabilities participating in a supported employment program, Journal of Vocational Rehabilitation, 48, 27-36, 2018	Population studied was not two thirds adults with complex psychosis and related severe mental health conditions.
Flaherty-Jones, G. M., Carne, A. S., Dexter-Smith, S., The steps to recovery program: Evaluation of a group-based intervention for older individuals receiving mental health services, Psychiatric rehabilitation journal, 39, 68-70, 2016	Did not use a qualitative methodology specified in the scope.
Gagne, Cheryl Ann, A qualitative study of consumer-survivors' perspectives about the effects of choice and coercion within the mental health system on recovery from psychiatric disability, Dissertation Abstracts International: Section B: The Sciences and Engineering, 66, 1975, 2005	Article was a dissertation, excluded by the protocol.

Study	Reason for Exclusion
Gidugu, V., Rogers, E. S., Harrington, S., Maru, M., Johnson, G., Cohee, J., Hinkel, J., Individual peer support: a qualitative study of mechanisms of its effectiveness, Community Mental Health Journal, 51, 445-52, 2015	Did not specify that the context was a rehabilitation setting.
Gillard, S., Adams, K., Edwards, C., Lucock, M., Miller, S., Simons, L., Turner, K., White, R., White, S., Self Care in Mental Health research, team, Informing the development of services supporting self-care for severe, long term mental health conditions: a mixed method study of community based mental health initiatives in England, BMC Health Services Research, 12, 189, 2012	Less than two thirds of the service users had a diagnosis of psychosis or related disorder
Glover, C. M., Ferron, J. C., Whitley, R., Barriers to exercise among people with severe mental illnesses, Psychiatric rehabilitation journal, 36, 45-47, 2013	It was not clear if the population was at least two thirds adults with complex psychosis and related severe mental health conditions.
Graham, C. R., Larstone, R., Griffiths, B., de Leeuw, S., Anderson, L., Powell-Hellyer, S., Long, N., Development and Evaluation of Innovative Peer-Led Physical Activity Programs for Mental Health Service Users, Journal of Nervous & Mental Disease, 205, 840-847, 2017	Population studied was not two thirds adults with complex psychosis and related severe mental health conditions.
Graham, C., Rollings, C., De Leeuw, S., Anderson, L., Griffiths, B., Long, N., A qualitative study exploring facilitators for improved health behaviors and health behavior programs: Mental health service users' perspectives, Scientific World Journal, 2014 (no pagination), 2014	Population studied was not two thirds adults with complex psychosis and related severe mental health conditions.
Hampton, Nan Zhang, Yeung, Teresa, Nguyen, Courtney Hoa, Perceptions of mental illness and rehabilitation services in Chinese and Vietnamese Americans, Journal of Applied Rehabilitation Counseling, 38, 14-23, 2007	Population studied was not adults with complex psychosis and related severe mental health conditions.
Henry, A. D., Lucca, A. M., Facilitators and barriers to employment: the perspectives of people with psychiatric disabilities and employment service providers, Work, 22, 169-82, 2004	Identified in Kinn 2014. Study was not on barriers/facilitators of access to mental health rehabilitation services.
Henwood, B. F., Stanhope, V., Padgett, D. K., The role of housing: a comparison of front-line provider views in housing first and traditional programs, Administration and policy in mental health, 38, 77-85, 2011	Did not include the views of the target population
Hinden, Betsy, Wolf, Toni, Biebel, Kathleen, Nicholson, Joanne, Supporting clubhouse members in their role as parents: Necessary conditions for policy and practice initiatives, Psychiatric rehabilitation journal, 33, 98-105, 2009	It was not clear if the population studied was two thirds adults with complex psychosis and related severe mental health conditions.
Isaacs, Anton N., Sutton, Keith, Dalziel, Kim, Maybery, Darryl, Outcomes of a care coordinated service model for persons with severe and persistent mental illness: A qualitative study, International Journal of Social Psychiatry, 63, 40-47, 2017	It was not clear if the population studied was two thirds adults with complex psychosis and related severe mental health conditions.
Jacobson, N., Farah, D., Recovery through the Lens of Cultural Diversity, Psychiatric rehabilitation journal, 35, 333-335, 2012	Did not present findings of a qualitative study as specified in the scope.
Jerrell, J. M., Wilson, J. L., The utility of dual diagnosis services for consumers from nonwhite ethnic groups, Psychiatric Services, 47, 1256-8, 1996	Did not use a qualitative methodology specified in the scope.

Study	Reason for Exclusion
Jivanjee, P., Kruzich, J., Gordon, L. J., Community integration of transition-age individuals: views of young with mental health disorders, Journal of Behavioral Health Services & Research, 35, 402-18, 2008	Population studied was not two thirds adults with complex psychosis and related severe mental health conditions.
Johnson, B., Montgomery, P., Chronic mentally ill individuals reentering the community after hospitalization. Phase II: The urban experience, Journal of Psychiatric & Mental Health NursingJ Psychiatr Ment Health Nurs, 6, 445-51, 1999	Study was not related to access to mental health rehabilitation services.
Kartalova-O'Doherty, Y., Doherty, D. T., Recovering from mental health problems: perceived positive and negative effects of medication on reconnecting with life, The International journal of social psychiatry, 57, 610-618, 2011	Population studied was not two thirds adults with complex psychosis and related severe mental health conditions.
Kartalova-O'Doherty, Y., Stevenson, C., Higgins, A., Reconnecting with life: a grounded theory study of mental health recovery in Ireland, Journal of Mental Health, 21, 135-43, 2012	Population studied was not two thirds adults with complex psychosis and related severe mental health conditions.
Kennedy-Jones, Mary, Cooper, Joanne, Fossey, Ellie, Developing a worker role: Stories of four people with mental illness, Australian occupational therapy journal, 52, 116-126, 2005	Identified in Kinn 2014. Study was not related to access to mental health rehabilitation services.
Killaspy, H., King, M., Holloway, F., Craig, T. J., Cook, S., Mundy, T., Leavey, G., McCrone, P., Koeser, L., Omar, R., Marston, L., Arbuthnott, M., Green, N., Harrison, I., Lean, M., Gee, M., Bhanbhro, S., NIHR Journals Library. Programme Grants for Applied Research, 03, 03, 2017	Study was not related to access to mental health rehabilitation services.
Kinn, L. G., Holgersen, H., Aas, R. W., Davidson, L., "Balancing on Skates on the Icy Surface of Work": a metasynthesis of work participation for persons with psychiatric disabilities, Journal of Occupational Rehabilitation, 24, 125-38, 2014	Review was excluded as the majority of papers weren't relevant, however four of the references contained were subsequently screened.
Knaeps, J., DeSmet, A., Van Audenhove, C., Supported employment fidelity in Flemish vocational programs, Psychiatrische Praxis. Conference: 9th International Conference of the European Network for Mental Health Service Evaluation, ENMESH, 38, 2011	Study was excluded as a conference abstract
Knox, Dorothy Headley, Urban mental patients' perception of their family support systems in the readjustment process, Dissertation Abstracts International: Section B: The Sciences and Engineering, 65, 3712, 2005	Study was excluded as a dissertation.
Lane, A., McCoy, L., Ewashen, C., The textual organization of placement into long-term care: Issues for older adults with mental illness, Nursing Inquiry, 17, 2-13, 2010	Did not use a qualitative methodology specified in the scope.
Lannigan, Elizabeth Griffin, The experience of individuals with severe mental illness participating in vocational rehabilitation programs: A qualitative study, Dissertation Abstracts International: Section B: The Sciences and Engineering, 64, 3739, 2004	Study was excluded as a dissertation
Lee, K. K., Yamada, A. M., Kim, M. A., Dinh, T. Q., Interdependent recovery of adults with schizophrenia: Asian American consumer perspectives of family involvement and influence, Psychiatric rehabilitation journal, 38, 273-275, 2015	Study was not related to access to mental health rehabilitation services.
Lee, K. S., Harrison, K., Mills, K., Conigrave, K. M., Needs of Aboriginal Australian women with comorbid mental and	Population studied was not two thirds adults with complex psychosis

Study	Reason for Exclusion
alcohol and other drug use disorders, Drug & Alcohol Review, 33, 473-81, 2014	and related severe mental health conditions.
Lu, W., Mueser, K. T., Rosenberg, S. D., Yanos, P. T., Mahmoud, N., Posttraumatic reactions to psychosis: A qualitative analysis, Frontiers in Psychiatry, 8 (JUL) (no pagination), 2017	Study was not on barriers/facilitators of access to mental health rehabilitation services.
Lucksted, A., Dixon, L. B., Sembly, J. B., A focus group pilot study of tobacco smoking among psychosocial rehabilitation clients, Psychiatric ServicesPsychiatr Serv, 51, 1544-8, 2000	It was not clear if the population was at least two thirds adults with complex psychosis and related severe mental health conditions.
Lyons, C., Hopley, P., Burton, C. R., Horrocks, J., Mental health crisis and respite services: Service user and carer aspirations, Journal of Psychiatric and Mental Health Nursing, 16, 424-433, 2009	It was not clear if the population studied was two thirds adults with complex psychosis and related severe mental health conditions.
Macnaughton, E. L., Goering, P. N., Nelson, G. B., Exploring the value of mixed methods within the At Home/Chez Soi housing first project: a strategy to evaluate the implementation of a complex population health intervention for people with mental illness who have been homeless, Canadian journal of public health = Revue canadienne de sante publique, 103, eS57-63, 2012	Did not use a qualitative methodology specified in the scope.
Mancini, M. A., Hardiman, E. R., Lawson, H. A., Making sense of it all: consumer providers' theories about factors facilitating and impeding recovery from psychiatric disabilities, Psychiatric rehabilitation journal, 29, 48-55, 2005	It was not clear if the population studied was two thirds adults with complex psychosis and related severe mental health conditions.
Manuel, J. I., Hinterland, K., Conover, S., Herman, D. B., "I hope I can make it out there": perceptions of women with severe mental illness on the transition from hospital to community, Community Mental Health Journal, 48, 302-308, 2012	It was not clear if the population studied was two thirds adults with complex psychosis and related severe mental health conditions.
McDonel, E. C., Bond, G. R., Salyers, M., Fekete, D., Chen, A., McGrew, J. H., Miller, L., Implementing assertive community treatment programs in rural settings, Administration and policy in mental health, 25, 153â€• 173, 1997	Did not use a qualitative methodology specified in the scope.
McQueen, J. M., Turner, J., Exploring forensic mental health service users' views on work: An interpretative phenomenological analysis, British Journal of Forensic Practice, 14, 168-179, 2012	Study was not related to access to mental health rehabilitation services.
Megivern, D., Pellerito, S., Mowbray, C., Barriers to higher education for individuals with psychiatric disabilities, Psychiatric rehabilitation journal, 26, 217-231, 2003	Study was not related to access to mental health rehabilitation services.
Mesidor, M., Gidugu, V., Rogers, E. S., Kash-Macdonald, V. M., Boardman, J. B., A qualitative study: barriers and facilitators to health care access for individuals with psychiatric disabilities, Psychiatric rehabilitation journal, 34, 285-294, 2011	Did not include the views of the target population
Millner, Uma Chandrika, Kim, Min, Perspectives on work and work-related challenges among Asian Americans with psychiatric disabilities, Asian American Journal of Psychology, 8, 177-189, 2017	Population studied was not two thirds adults with complex psychosis and related severe mental health conditions.
Mirza, Mansha, Gossett, Andrea, Chan, Nathan Kai-Cheong, Burford, Larry, Hammel, Joy, Community reintegration for people with psychiatric disabilities:	It was not clear if the population studied was two thirds adults with

Study	Reason for Exclusion
Challenging systemic barriers to service provision and public policy through participatory action research, Disability & Society, 23, 323-336, 2008	complex psychosis and related severe mental health conditions.
Mize, Timothy I., Paolo-Calabrese, Michelle A., Williams, Thelma J., Margolin, Helen K., Managing the landlord role: How can one agency provide both rehabilitation services and housing with collaboration?, Psychiatric rehabilitation journal, 22, 117-122, 1998	This review paper did not present any qualitative data
Mizock, Lauren, Russinova, Zlatka, Racial and ethnic cultural factors in the process of acceptance of mental illness, Rehabilitation Counseling Bulletin, 56, 229-239, 2013	Study was not related to access to mental health rehabilitation services.
Montgomery, P., Johnson, B., Chronically mentally ill individuals re-entering the community after hospitalization, Journal of Psychiatric and Mental Health Nursing, 5, 497-503, 1998	Population studied was not two thirds adults with complex psychosis and related severe mental health conditions.
Nagle, Susan, Cook, Joanne Valiant, Polatajko, Helene J., I'm doing as much as I can: Occupational choices of persons with a severe and persistent mental illness, Journal of Occupational Science, 9, 72-81, 2002	Study was not related to access to mental health rehabilitation services.
Nicholson, J., Henry, A. D., Achieving the goal of evidence-based psychiatric rehabilitation practices for mothers with mental illnesses, Psychiatric rehabilitation journal, 27, 122-130, 2003	Population studied was not two thirds adults with complex psychosis and related severe mental health conditions.
O'Day, B., Killeen, M., Does U.S. Federal policy support employment and recovery for people with psychiatric disabilities?, Behavioral Sciences and the Law, 20, 559-583, 2002	It was not clear if the population studied was two thirds adults with complex psychosis and related severe mental health conditions.
Oulvey, E., Carpenter-Song, E. A., Swanson, S. J., Principles for enhancing the role of state vocational rehabilitation in IPS-supported employment, Psychiatric rehabilitation journal, 36, 4-6, 2013	It was not clear if the population studied was two thirds adults with complex psychosis and related severe mental health conditions.
Panczak, A., Pietkiewicz, I., Work activity in the process of recovery - an interpretive phenomenological analysis of the experiences of people with a schizophrenia spectrum diagnosis, Psychiatria PolskaPsychiatr Pol, 50, 805-826, 2016	Study findings were not related to access to mental health rehabilitation services.
Peckham, Janine, Muller, Juanita, Schizophrenia and employment: The subjective perspective, Journal of Applied Health Behaviour, 2, 1-7, 2000	Study was not on barriers/facilitators of access to mental health rehabilitation services.
Petersen, Kirsten Schultz, Friis, Vivi Soegaard, Haxholm, Birthe Lodahl, Nielsen, Claus Vinther, Wind, Gitte, Recovery from mental illness: A service user perspective on facilitators and barriers, Community Mental Health Journal, 51, 1-13, 2015	Study related to a mental health rehabilitation services but did not relate to access to these services.
Pfeiffer, P. N., Bowersox, N., Birgenheir, D., Burgess, J., Forman, J., Valenstein, M., Preferences and Barriers to Care Following Psychiatric Hospitalization at Two Veterans Affairs Medical Centers: A Mixed Methods Study, Journal of Behavioral Health Services & Research, 43, 88-103, 2016	Population studied was not two thirds adults with complex psychosis and related severe mental health conditions.
Piat, M., Seida, K., Sabetti, J., Padgett, D., (Em)placing recovery: Sites of health and wellness for individuals with serious mental illness in supported housing, Health and Place, 47, 71-79, 2017	Study was not related to access to mental health rehabilitation services.

Study	Reason for Exclusion
Poremski, D., Woodhall-Melnik, J., Lemieux, A. J., Stergiopoulos, V., Persisting Barriers to Employment for Recently Housed Adults with Mental Illness Who Were Homeless, Journal of Urban Health, 93, 96-108, 2016	Less than two thirds of the participants had a diagnosis matching the scope
Pulice, R. T., McCormick, L. L., Dewees, M., A qualitative approach to assessing the effects of system change on consumers, families, and providers, Psychiatric Services, 46, 575-9, 1995	It was not clear if the population studied was two thirds adults with complex psychosis and related severe mental health conditions.
Randolph, F., Blasinsky, M., Leginski, W., Parker, L. B., Goldman, H. H., Creating integrated service systems for homeless persons with mental illness: The ACCESS program, Psychiatric Services, 48, 369-373, 1997	The study did not use qualitative methods as specified in the scope.
Ronngren, Y. M., Bjork, A., Haage, D., Kristiansen, L., LIFEHOPE.EU: lifestyle and healthy outcome in physical education, Journal of Psychiatric and Mental Health Nursing, 21, 924-930, 2014	It was not clear if the population was at least two thirds adults with complex psychosis and related severe mental health conditions.
Roos, E., Bjerkeset, O., Sondenaa, E., Antonsen, D. O., Steinsbekk, A., A qualitative study of how people with severe mental illness experience living in sheltered housing with a private fully equipped apartment, BMC Psychiatry, 16 (1) (no pagination), 2016	Participants' diagnoses not specified, unclear if they match target population specification
Savvidou, I., Bozikas, V. P., Hatzigeleki, S., Karavatos, A., Narratives about their children by mothers hospitalized on a psychiatric unit, Family process, 42, 391-402, 2003	Study was not related to access to mental health rehabilitation services.
Schindler, V. P., Kientz, M., Supports and barriers to higher education and employment for individuals diagnosed with mental illness, Journal of Vocational Rehabilitation, 39, 29-41, 2013	Study was not related to access to mental health rehabilitation services.
Schmidt, G., Barriers to recovery in a First Nations community, Canadian Journal of Community Mental Health, 19, 75-87, 2000	Population studied was not two thirds adults with complex psychosis and related severe mental health conditions.
Spaniol, L., Wewiorski, N. J., Gagne, C., Anthony, W. A., The process of recovery from schizophrenia, International Review of Psychiatry, 14, 327-336, 2002	Study was not on barriers/facilitators of access to mental health rehabilitation services.
Spaniol, Leroy, Wewiorski, Nancy J., Gagne, Cheryl, Anthony, William A., The Process of Recovery from Schizophrenia, 82-99, 2005	Reprint of Spaniol 2002
Tsai, J., Bond, G. R., Salyers, M. P., Godfrey, J. L., Davis, K. E., Housing Preferences and Choices Among Adults with Mental Illness and Substance Use Disorders: A Qualitative Study, Community Mental Health Journal, 1-8, 2009	It was not clear if the population studied was two thirds adults with complex psychosis and related severe mental health conditions.
Tse, S., Yeats, M., What helps people with bipolar affective disorder succeed in employment: A grounded theory approach, Work, 19, 47-62, 2002	Identified in Kinn 2014. Study was not on barriers/facilitators of access to mental health rehabilitation services.
Urbanoski, K. A., Cairney, J., Bassani, D. G., Rush, B. R., Perceived unmet need for mental health care for Canadians with co-occurring mental and substance use disorders, Psychiatric Services, 59, 283-9, 2008	Did not use a qualitative methodology specified in the scope.
Wisdom, J. P., Bruce, K., Saedi, G. A., Weis, T., Green, C. A., 'Stealing me from myself': identity and recovery in personal accounts of mental illness, Australian & New Zealand Journal of Psychiatry, 42, 489-95, 2008	Population studied was not two thirds adults with complex psychosis and related severe mental health conditions.

Study	Reason for Exclusion
Yang, Jian, Law, Samuel, Chow, Wendy, Andermann, Lisa, Steinberg, Rosalie, Sadavoy, Joel, Glazer, William M., Assertive Community Treatment for Persons With Severe and Persistent Mental Illness in Ethnic Minority Groups, Psychiatric Services, 56, 1053-1155, 2005	Did not use a qualitative methodology specified in the scope.

Economic studies

A global economic literature search was undertaken for this guideline, covering all 18 review questions. The table below is a list of excluded studies across the entire guideline and studies listed were not necessarily identified for this review question.

Table 7: Excluded studies from the economic component of the review

Study	Reason for Exclusion
Aitchison, K J, Kerwin, R W, Cost-effectiveness of clozapine: a UK clinic-based study (Structured abstract), British Journal of PsychiatryBr J Psychiatry, 171, 125-130, 1997	Available as abstract only.
Barnes, T. R., Leeson, V. C., Paton, C., Costelloe, C., Simon, J., Kiss, N., Osborn, D., Killaspy, H., Craig, T. K., Lewis, S., Keown, P., Ismail, S., Crawford, M., Baldwin, D., Lewis, G., Geddes, J., Kumar, M., Pathak, R., Taylor, S., Antidepressant Controlled Trial For Negative Symptoms In Schizophrenia (ACTIONS): a double-blind, placebo-controlled, randomised clinical trial, Health Technology Assessment (Winchester, England)Health Technol Assess, 20, 1-46, 2016	Does not match any review questions considered in the guideline.
Barton, Gr, Hodgekins, J, Mugford, M, Jones, Pb, Croudace, T, Fowler, D, Cognitive behaviour therapy for improving social recovery in psychosis: cost-effectiveness analysis (Structured abstract), Schizophrenia ResearchSchizophr Res, 112, 158-163, 2009	Available as abstract only.
Becker, T., Kilian, R., Psychiatric services for people with severe mental illness across western Europe: what can be generalized from current knowledge about differences in provision, costs and outcomes of mental health care?, Acta Psychiatrica Scandinavica, SupplementumActa Psychiatr Scand Suppl, 9-16, 2006	Not an economic evaluation.
Beecham, J, Knapp, M, McGilloway, S, Kavanagh, S, Fenyo, A, Donnelly, M, Mays, N, Leaving hospital II: the cost-effectiveness of community care for former long-stay psychiatric hospital patients (Structured abstract), Journal of Mental HealthJ Ment Health, 5, 379-94, 1996	Available as abstract only.
Beecham, J., Knapp, M., Fenyo, A., Costs, needs, and outcomes, Schizophrenia BulletinSchizophr Bull, 17, 427-39, 1991	Costing analysis prior to year 2000

Study	Reason for Exclusion
Burns, T., Raftery, J., Cost of schizophrenia in a randomized trial of home-based treatment, Schizophrenia BulletinSchizophr Bull, 17, 407-10, 1991	Not an economic evaluation. Date is prior to 2000
Bush, P. W., Drake, R. E., Xie, H., McHugo, G. J., Haslett, W. R., The long-term impact of employment on mental health service use and costs for persons with severe mental illness, Psychiatric ServicesPsychiatr Serv, 60, 1024-31, 2009	A United States costing analysis. Outcomes which relate to the Welfare system differs in substantial ways to a UK context.
Chalamat, M., Mihalopoulos, C., Carter, R., Vos, T., Assessing cost-effectiveness in mental health: vocational rehabilitation for schizophrenia and related conditions, Australian & New Zealand Journal of PsychiatryAust N Z J Psychiatry, 39, 693-700, 2005	Australian cost-benefit analysis - welfare system differs from UK context.
Chan, S., Mackenzie, A., Jacobs, P., Cost-effectiveness analysis of case management versus a routine community care organization for patients with chronic schizophrenia, Archives of Psychiatric NursingArch Psychiatr Nurs, 14, 98-104, 2000	Study conducted in Hong Kong. A costing analysis.
Clark, R. E., Teague, G. B., Ricketts, S. K., Bush, P. W., Xie, H., McGuire, T. G., Drake, R. E., McHugo, G. J., Keller, A. M., Zubkoff, M., Cost-effectiveness of assertive community treatment versus standard case management for persons with co-occurring severe mental illness and substance use disorders, Health Services ResearchHealth Serv Res, 33, 1285-308, 1998	Not cost-utility analysis. Cost-effectiveness analysis but does not consider UK setting. Date of study is prior to year 2000.
Crawford, M. J., Killaspy, H., Barnes, T. R., Barrett, B., Byford, S., Clayton, K., Dinsmore, J., Floyd, S., Hoadley, A., Johnson, T., Kalaitzaki, E., King, M., Leurent, B., Maratos, A., O'Neill, F. A., Osborn, D., Patterson, S., Soteriou, T., Tyrer, P., Waller, D., Matisse project team, Group art therapy as an adjunctive treatment for people with schizophrenia: a randomised controlled trial (MATISSE), Health Technology Assessment (Winchester, England)Health Technol Assess, 16, iii-iv, 1-76, 2012	Study not an economic evaluation.
Dauwalder, J. P., Ciompi, L., Cost-effectiveness over 10 years. A study of community-based social psychiatric care in the 1980s, Social Psychiatry & Psychiatric EpidemiologySoc Psychiatry Psychiatr Epidemiol, 30, 171-84, 1995	Practice has changed somewhat since 1980s - not a cost effectiveness study.
Garrido, G., Penades, R., Barrios, M., Aragay, N., Ramos, I., Valles, V., Faixa, C., Vendrell, J. M., Computer-assisted cognitive remediation therapy in schizophrenia: Durability of the effects and cost-utility analysis, Psychiatry ResearchPsychiatry Res, 254, 198-204, 2017	Cost effectiveness study, but population of interest is not focussed on rehabilitation for people with complex psychosis.
Hallam, A., Beecham, J., Knapp, M., Fenyo, A., The costs of accommodation and care. Community provision for former long-stay	Economic evaluation predates 2000. Organisation and provision of care may have changed by some degree.

Study	Reason for Exclusion
psychiatric hospital patients, European Archives of Psychiatry & Clinical NeuroscienceEur Arch Psychiatry Clin Neurosci, 243, 304-10, 1994	
Hu, T. W., Jerrell, J., Cost-effectiveness of alternative approaches in treating severely mentally ill in California, Schizophrenia BulletinSchizophr Bull, 17, 461-8, 1991	A United States costing analysis. Outcomes which relate to the Welfare system differs in substantial ways to a UK context.
Jaeger, J., Berns, S., Douglas, E., Creech, B., Glick, B., Kane, J., Community-based vocational rehabilitation: effectiveness and cost impact of a proposed program model.[Erratum appears in Aust N Z J Psychiatry. 2006 Jun-Jul;40(6-7):611], Australian & New Zealand Journal of PsychiatryAust N Z J Psychiatry, 40, 452-61, 2006	Study is a New Zealand based costing analysis of limited applicability to the UK.
Jonsson, D., Walinder, J., Cost-effectiveness of clozapine treatment in therapy-refractory schizophrenia, Acta Psychiatrica ScandinavicaActa Psychiatr Scand, 92, 199-201, 1995	Costing analysis which predates year 2000.
Knapp, M, Patel, A, Curran, C, Latimer, E, Catty, J, Becker, T, Drake, Re, Fioritti, A, Kilian, R, Lauber, C, Rossler, W, Tomov, T, Busschbach, J, Comas-Herrera, A, White, S, Wiersma, D, Burns, T, Supported employment: cost-effectiveness across six European sites (Structured abstract), World Psychiatry, 12, 60-68, 2013	Available as abstract only.
Lazar, S. G., The cost-effectiveness of psychotherapy for the major psychiatric diagnoses, Psychodynamic psychiatry, 42, 2014	Review of clinical and cost studies on psychotherapy. Studies cited do not match population for relevant review question.
Leff, J, Sharpley, M, Chisholm, D, Bell, R, Gamble, C, Training community psychiatric nurses in schizophrenia family work: a study of clinical and economic outcomes for patients and relatives (Structured abstract), Journal of Mental HealthJ Ment Health, 10, 189-197, 2001	Structured abstract. Not a cost effectiveness study.
Liffick, E., Mehdiyoun, N. F., Vohs, J. L., Francis, M. M., Breier, A., Utilization and Cost of Health Care Services During the First Episode of Psychosis, Psychiatric ServicesPsychiatr Serv, 68, 131-136, 2017	A United States costing analysis. Outcomes which relate to the Welfare system differs in substantial ways to a UK context.
Mihalopoulos, C., Harris, M., Henry, L., Harrigan, S., McGorry, P., Is early intervention in psychosis cost-effective over the long term?, Schizophrenia BulletinSchizophr Bull, 35, 909-18, 2009	Not a cost utility analysis. Australian costing analysis.
Perlis, R H, Ganz, D A, Avorn, J, Schneeweiss, S, Glynn, R J, Smoller, J W, Wang, P S, Pharmacogenetic testing in the clinical management of schizophrenia: a decision-analytic model (Structured abstract), Journal of Clinical Psychopharmacology, 25, 427-434, 2005	Structured abstract. Does not match any review question considered in this guideline.

Study	Reason for Exclusion
Quinlivan, R., Hough, R., Crowell, A., Beach, C., Hofstetter, R., Kenworthy, K., Service utilization and costs of care for severely mentally ill clients in an intensive case management program, Psychiatric ServicesPsychiatr Serv, 46, 365-71, 1995	A United States costing analysis. Outcomes which relate to the Welfare system differs in substantial ways to a UK context.
Roine, E., Roine, R. P., Rasanen, P., Vuori, I., Sintonen, H., Saarto, T., Cost-effectiveness of interventions based on physical exercise in the treatment of various diseases: a systematic literature review, International Journal of Technology Assessment in Health CareInt J Technol Assess Health Care, 25, 427-54, 2009	Literature review on cost effectiveness studies based on physical exercise for various diseases and population groups - none of which are for complex psychosis.
Rosenheck, R A, Evaluating the cost-effectiveness of reduced tardive dyskinesia with second-generation antipsychotics (Structured abstract), British Journal of PsychiatryBr J Psychiatry, 191, 238-245, 2007	Structured abstract. Does not match any review question considered in this guideline.
Rund, B. R., Moe, L., Sollien, T., Fjell, A., Borchgrevink, T., Hallert, M., Naess, P. O., The Psychosis Project: outcome and cost-effectiveness of a psychoeducational treatment programme for schizophrenic adolescents, Acta Psychiatrica ScandinavicaActa Psychiatr Scand, 89, 211-8, 1994	Not an economic evaluation. Cost effectiveness discussed in narrative only, with a few short sentences.
Sacristan, J A, Gomez, J C, Salvador-Carulla, L, Cost effectiveness analysis of olanzapine versus haloperidol in the treatment of schizophrenia in Spain (Structured abstract), Actas Luso-espanolas de Neurologia, Psiquiatria y Ciencias Afines, 25, 225-234, 1997	Available as abstract only.
Torres-Carbajo, A, Olivares, J M, Merino, H, Vazquez, H, Diaz, A, Cruz, E, Efficacy and effectiveness of an exercise program as community support for schizophrenic patients (Structured abstract), American Journal of Recreation Therapy, 4, 41-47, 2005	Available as abstract only
Wang, P S, Ganz, D A, Benner, J S, Glynn, R J, Avorn, J, Should clozapine continue to be restricted to third-line status for schizophrenia: a decision-analytic model (Structured abstract), Journal of Mental Health Policy and Economics, 7, 77-85, 2004	Available as abstract only.
Yang, Y K, Tarn, Y H, Wang, T Y, Liu, C Y, Laio, Y C, Chou, Y H, Lee, S M, Chen, C C, Pharmacoeconomic evaluation of schizophrenia in Taiwan: model comparison of long-acting risperidone versus olanzapine versus depot haloperidol based on estimated costs (Structured abstract), Psychiatry and Clinical Neurosciences, 59, 385-394, 2005	Taiwan is not an OECD country.
Zhu, B., Ascher-Svanum, H., Faries, D. E., Peng, X., Salkever, D., Slade, E. P., Costs of treating patients with schizophrenia who have illness-related crisis events, BMC Psychiatry, 8, 2008	USA costing analysis. The structure of the US health system means that costs do not translate well into a UK context.

Appendix L – Research recommendations

Research recommendations for review question 1.2: What co-existing medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis in accessing rehabilitation services?

No research recommendations were made for this review question.

Appendix M – Quotes extracted from the qualitative papers

Quotes extracted from qualitative papers for review question 1.2: What co-existing medical, social (including family, cultural and ethnicity), communication, neurodevelopmental, cognitive or mental health problems pose barriers for people with complex psychosis in accessing rehabilitation services?

Table 8: Quotes extracted from the qualitative papers

Author	Finding	Quote
Browne 2016	Attitudes on Walking Groups - Client Perspectives	Another thing is, it's nice to go with other people, to meet people, sometimes when you're dealing with depression and things you get isolated, so to combine exercise with socialization is really good. I think exercising with people I know and stuff would help me too. Because when I exercise at the Y and at the mall I was by myself so exercising with people probably might help me a little bit.
Dunn 2010	Having access to consumer-oriented programs	I'd just spent time at [psychiatric hospital] . . . looking for work, and someone . . . told me that [consumer leader] was looking for someone to do some bookkeeping, so . . . I went to the [self-help program]. . . . And I did their bookkeeping for a number of years. And that was a good experience for me. So I got to know a lot about what [name of consumer leader] was doing, and other people in the movement.
Frounfelker 2010	Truncated Social Networks.	I mean, a lot of people have to depend on support from others. You know family members. And if you've been incarcerated several times, 9 times out of 10 the family member don't want to be bothered with you. Because they don't see where you're going to change. And then that's somewhat understandable.
Jensen 2007	Barriers in the Paths to Recovery	My first hospitalization and we got me on some medication. I didn't stay at the hospital long enough the first time. They gave me medicine and kicked me out of the door very quickly. I was back in within a month and at that time, I stayed longer, and I was put on more medication.
		Not a very positive attitude toward the end . . . I wanted to work on something, they told me I couldn't work on it. They were very negative to me, very condescending to me.
King 2009	Countering incorrect beliefs about clients' ability to work	I think you need to tell consumers that they don't have to wait until they are completely well to work. I needed someone to tell me that.
	Service pathways	We need information about employment services but so do our case managers. I want my case manager to help me get into an employment service instead of just telling me to go to Centrelink.
	Communication styles and strategies	We need to send consumers the message that they are in control of their lives and have the ability to make their own life choices. They don't need to wait until their case manager suggests employment.
Leutwyler 2014	Mental Health	I think the mental health and the psychotropics slow you down.
		depression makes me exercise less, it keeps me from walking… if it wasn't the boredom, then my mental illness would keep me inside all the time.
		If I feel I'm feeling kind of nutty, I don't go out.
	No Longer a Spring Chicken	I'm no longer a spring chicken…I'm going to turn 59. And I'm limited to, how much exertion I can go through without causing a bad problem, so I want to approach this thing with my eyes open, see? But the calisthenics, I can do
		I got trouble with my ankles and my knee from my suicide attempt and that limits me, because I can't run now…And I can't ride a bike, see?
	Belonging	you meet a lot of people…everybody's in there (gym) for the same thing, and that's to build your health up. It's cool, you could relate to everybody, because everybody is trying to help themselves, old, young…
		I just like going to groups…, it's a regular routine that—we automatically go to groups…they have group exercise here. Once in a while I'll do it with the group.
Parker 2017	Why am I here?	I had heard of it before and didn't want to come here. I thought it would be more clinical. . .like the hospital. [CLIN090]

Author	Finding	Quote
		Um, no I don't think there was very many [other places] to choose from. There were hostels, but there's too many drugs there, so I didn't want to go there [laughs]. [CLIN094]
		I don't know, it's just oh well, arguing a lot, a lot more with parents, so I'm like just get out of that scene. [INT066]
	A transitional environment is anxiety provoking	I almost fear for, um, where I will go after this because it couldn't be as good. . .I say to myself. . .you've just got to enjoy the experience, and maybe one day I'll live in a. . .nice place like this again [laughs]. [CLIN090]
Poorema mali 2017	Lack of access to adequate support and resources	'I feel that I can handle things when I get support and the activities are adjusted . . . those of us who are mentally ill need adapted resources and tasks. Specifically, those of us who are immigrants. . .' [Sam]
		'It's very important for me to have an occupational therapist who can assess my work ability, my problems and see my strengths and limitations, and support me in doing what I want to do' [Sam].
Yarborou gh 2016	Depressive symptoms interfere with lifestyle change efforts	It's hard to make changes in your diet and follow the routine…when you're at a point where you just don't care; [intervention arm, 3 months].
	Friends help facilitate exercise but loss of exercise buddies can inhibit exercise motivation	…having a buddy to walk with helps a lot. You can talk while you're walking and it doesn't seem like it is taking so long to do the walk. So that helps. That's one of the reasons why I do it with my friend. When I'm at home I don't have anybody to walk with. So there's not so much of a reason to do it; [intervention arm, 9 months].