

# Integrated responses for people with cognitive disability and complex support needs: Factors and principles

Leanne Dowse<sup>1,\*</sup>, Isabella Dillon-Savage<sup>2</sup>, Angela Dew<sup>3</sup> and Iva Strnadová<sup>4</sup>

<sup>1</sup>Professor of Disability Studies, School of Social Sciences, University of New South Wales Sydney, NSW AUSTRALIA.

<sup>2</sup>Research Assistant, School of Social Sciences, UNSW.

<sup>3</sup>Associate Professor, Disability and Inclusion, Faculty of Health, Deakin University.

<sup>4</sup>Professor of Special Education and Disability Studies, School of Education, UNSW.

\*Author contact: L.Dowse@unsw.edu.au

## Abstract

People with cognitive disability who have complex support needs typically engage with multiple services across social care domains that operate in silos. These services are individually ill-equipped to adequately recognise the presence or impact of disability and respond to the breadth, depth and intersectional nature of people's support needs. This lack of appropriate recognition and response often in turn works to further exacerbate the complexity of a person's support needs. This paper reports on a systematic review of current national and international evidence addressing good practice in supporting people with complex support needs. The review assesses evidence in policy and practice in disciplines including homelessness, child protection, disability, social work, youth studies, health, mental health and drug and alcohol to identify key factors that facilitate or hamper person-centred integrated social care. An analytic frame adapted from Ecological Systems Theory is deployed to present the key factors identified to shape responsive support at the level of people, services and systems. The paper concludes with a discussion of three key principles synthesised from the review as the crucial underpinnings of a responsive social care system for people with cognitive disability and complex support needs.

## Keywords

cognitive disability, complex support needs, integrated response, social care system.

Australia requires a coherent framework that recognises and addresses the importance of responsive supports for people with cognitive disability (cognitive disability is utilised here as an umbrella term associated with neurodevelopmental diagnostic labels including intellectual disability, borderline intellectual disability or Foetal Alcohol Spectrum Disorder, as well as acquired brain injury) who have complex support needs. This group typically engages with multiple service systems that often do not adequately recognise the presence or impact of disability. Effective responses are limited by the siloed nature of the policy and service context in Australia. Social or clinical specialised service approaches are often ill-equipped to respond to the breadth and depth of people's support needs. Strict

service eligibility criteria may exclude them on the basis of the presence of compounding issues that are outside the remit of any one particular agency. These eligibility issues significantly limit the pool of agencies designated, prepared to, and capable of, providing support to people whose support needs are multiple and interconnected. Thus, typically people 'bounce' between and across service systems, including disability, mental health, health, drug and alcohol, housing and justice. This lack of appropriate recognition and response in turn often works to further exacerbate the complexity of an individual's support needs. Not only is this instability damaging for the individual, it is also costly to the service system, to governments and to the wider community.

## Complex Support Needs: Definitions, Policy and Theory in Context

While the terms ‘complex needs’ and ‘complex support needs’ are increasingly used in research, policy and practice across various disciplines and sectors, there is currently no consistently agreed definition. The terms have been broadly used to describe the presence of a high level of need in one or more areas in combination with needs across multiple domains, in interaction with the services and systems tasked with support (Rankin and Regan, 2004). For people with cognitive disability, complex support needs are commonly associated with multiple co-occurring impairments or conditions and significant circumstantial disadvantage. These may include factors such as mental illness, behaviours that may be a harm to themselves or others, significant health conditions, drug and/or alcohol addiction, histories of trauma, violence or neglect, poverty, social isolation and involvement with the criminal justice system (Dowse et al., 2014). Complexity may also be shaped by age, gender, ethnicity, refugee status or being Aboriginal or Torres Strait Islander. People with cognitive disability who have complex support needs have typically experienced either long-term engagement with multiple service systems or exclusion from services on the basis of being ‘excessively demanding’ (Department of Human Services, Victoria DHS, 2002, 6), and thus fall into the too-hard basket (Dowse et al., 2014).

While relatively small in number, people with cognitive disability who have complex support needs often require intensive and coordinated support. The agencies best placed to intervene earlier and more effectively in a person’s life often have the least involvement (Baldry et al., 2012). In their absence, disadvantage and the need for support often escalate, and intervention is frequently defrayed to more costly services of last resort, such as emergency services, hospitals or police (Baldry and Dowse, 2013). In response to the increasingly complex array of specialist intervention proliferating in social care, health and justice that forms part of the repertoire of service responses to complex support needs, integrated working is increasingly recognised as the preferred response or, as Hood (2012, 28) observes, ‘managing complexity underlies most rationales for integration’. This aligns with the broader trend in public welfare provision identified by Carnwell and Buchanan (2005), where an ecology of autonomous professions is giving way to a more fluid interdisciplinary world of practice.

Concurrent with these trends in practice is the move to personalisation in social care policy in

Australia, most closely associated with the introduction of the National Disability Insurance Scheme (NDIS)—a nationally consistent, individual needs-based scheme in part funded via a population-wide tax levy. People with disability who have complex support needs straddle multiple policy portfolios, such as health, disability, welfare, education, justice, transport and housing. The National Disability Insurance Agency (NDIA) recognises that ‘in determining the approach to the supports funded by the NDIS and other service systems, governments will have regard to efficiency, the existing statutory responsibilities and policy objectives of other service systems and operational implications’ (National Disability Insurance Agency NDIA 2013, 2). The articulation of this principle signals a clear expectation that policymakers working within and across jurisdictions and sectors have responsibilities to be inclusive of all people with disability.

Theoretically, Ecological Systems Theory (EST), developed by Urie Bronfenbrenner (1992), has been deployed in understanding people’s complex support needs and their position within a complex structure of systems (Collings, Dew and Dowse, 2018; Dew et al., 2019; Collings et al., 2015; Danker et al., 2017). In applying an ecological approach to individualised planning for people with cognitive disability and complex support needs, Dew et al. (2019, 401) noted that ‘complexity occurs in the intersection between an individual with a high level of need in one or more areas and across multiple domains, and his or her environment including the services and systems underpinning them which are often ill-equipped to meet these needs’. Collings et al. (2015) described services and systems as often lacking the flexibility to respond to the breadth and depth of needs of individuals with complex support needs. The application of the EST framework allows an in-depth consideration of the reciprocal interactions at the person, service and system levels and elucidation of the factors and principles that guide integrated responses to people with cognitive disability and complex support needs.

Addressing the systematic escalation of risk and complexity for people with cognitive disability who have multiple, interconnected and compounding support needs therefore requires evidence-informed, targeted and universal policy settings and service and practice responses to ensure accessibility, inclusion and interagency coordination (Dew et al., 2019; Collings et al., 2016; Rankin and Regan, 2004). This paper reports on a systematic review of current national and international literature to identify the facilitators of and barriers to achievement of the

integration and coordination of support for people with cognitive disability and complex support needs at person, service and system levels.

## Methods

This systematic review of peer-reviewed articles and grey literature was informed by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) approach (Moher et al., 2009). The review aimed to address the question: 'What factors underpin integrated responses to people with complex support needs?'

Five bibliographic databases were searched between June and August 2018: Scopus (Elsevier), Social Services Citation Index (Web of Science), Social Services Abstracts (Proquest), MEDLINE and Google Scholar. Only literature from the past six years was searched, to capture current practice. To explore the compounding needs of populations defined as 'complex' and the necessary intersectoral practices required to support them, multiple search strategies were employed, with the main search terms including variations of 'cognitive disability' and 'service integration'. Appendix 1 details the specific combinations of key search terms with different areas of complexity.

The criteria for inclusion were:

- Published between 2013 and 2018.
- Focused on adults (18 years old and over) or young people (15–18 years old).
- Peer-reviewed journal articles that provided an evaluation or comprehensive overview of responses to populations with a confluence of complex needs and intersectional disadvantage (i.e., cognitive disability, substance misuse, homelessness, contact with the criminal justice system).
- Grey literature, including reports of models of support for the identified population, including evaluations of these models (using qualitative and quantitative measures).

## Nature of the evidence base

The nature of this review—which sought to understand cross-disciplinary responses to people with complex support needs—together with the diversity of the evidence base examined, meant that one single approach to assessing the quality of the evidence base was not possible. We believe that the perspectives of service users and providers

offer valuable insight into the principles underpinning responses and therefore included studies that took a qualitative approach to assessing the delivery and outcomes of support for people with complex support needs, as well as studies that used quantitative data to evaluate the impact of responses. This approach aimed to address earlier calls for a greater examination of measures of success for people with complex support needs—'particularly the complex interrelation of "hard" quantifiable targets and "soft" or more subjective outcomes' (Duncan and Corner, 2012, 16).

The difficulty in this approach, as outlined by Daly et al. (2007, 44), is that existing guidelines assume a homogeneity in qualitative research that in reality incorporates 'a diversity that includes anything from discourse analysis to ethnography, data collected in personal interviews or focus groups (with samples of varying sizes), by participant observation or through documentary analysis'. As this is the case with our dataset, we adopted Daly's approach to the critical appraisal of qualitative studies, which involves creating a hierarchy of evidence for practice with generalisable studies at the top and single case studies at the bottom. Our approach to quantitative studies involved a consideration of methodological rigour, the quality of data elicited and the conclusions drawn.

The diversity of methodological approaches used to examine responses to people with complex support needs limited the extent to which findings could be interpreted and generalised. This was exacerbated by the necessary inclusion of material from multiple sectors and disciplines. Diamond et al. (2014, 14) identified that the inconsistent and interchangeable language used to conceptualise complex support needs creates a challenge for authors examining the current evidence base, highlighting the fact that, depending on the discipline, 'the same terminology is used to mean quite different things'. This remains true, and the contested nature of complex needs resulted in a diverse range of outcomes being considered when assessing the impact of responses.

An additional limitation identified in the literature was an overreliance on pilot studies and small sample sizes. In an earlier review of responses to severe and multiple disadvantage, Duncan and Corner (2012, 16) argued that 'the long term economic case for improved action needs to be properly quantified'. The few included studies that provided cost-effectiveness analyses used inconsistent costing approaches, making generalisation difficult. However, the general trend reported was a decrease in negative costs such as emergency department visits and criminal justice

involvement and an increase in positive costs such as training and education.

The lack of longitudinal studies—arguably, a symptom of restrictive funding and overall poor data collection—means that our current understanding of support for this population remains limited. While this is an important gap in our understanding that needs to be addressed, it also reflects the innate challenges to conducting what is considered ‘robust’ research in this area, with Diamond et al. (2012) describing the complexity of creating a control group to establish the counterfactual position and the difficulty in tracking over a long period client groups who, by definition, ‘fall through the cracks’. Despite some positive signs that greater consideration is being given to the unique impact of compounding disadvantage on ethnic minorities, women and people with cognitive disability, the specific experiences of these groups remain understudied. However, while the evidence

base included varying terminology and diverse approaches to measuring the impact of response, there were consistently identifiable factors that were described as supporting or hindering good practice, which are discussed in detail below.

## Peer-reviewed literature

As depicted in Figure 1, the initial search stage elicited a large number of peer-reviewed articles. Duplicates and titles that focused on populations deemed to be outside the scope of the review (e.g., children and older people, studies related to people with cognitive impairment due to dementia or Alzheimer’s) were removed. Dissertations, editorials, books and non-English-language papers were also excluded. Following this stage, 685 abstracts were reviewed by two authors to ensure rigour and agreement; inter-rater reliability counted using

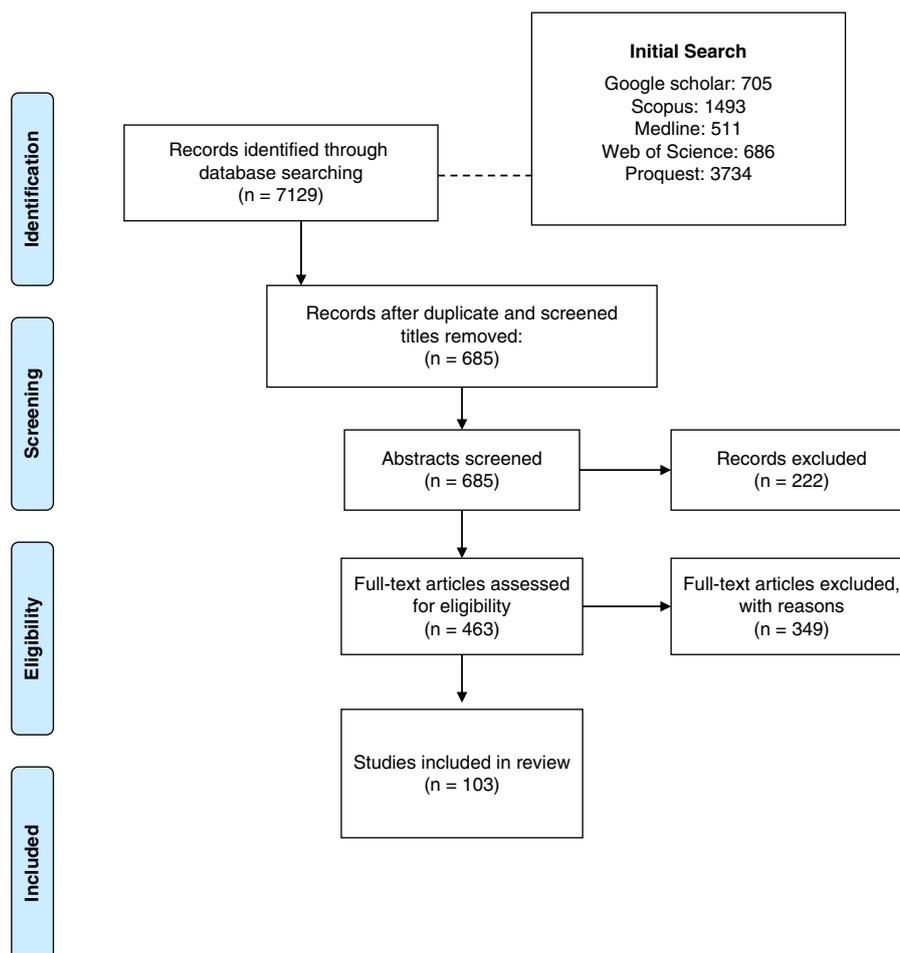


Figure 1: PRISMA flow diagram for article screening and review.

Cohen’s kappa was substantial at  $\kappa = 0.7493$  (Cohen, 1960; McHugh, 2012). The disagreements were resolved by repeated readings of the abstracts and discussion. This process resulted in 463 articles being deemed broadly relevant and included in a full text review. Again, each paper was assessed by two authors and only papers that provided substantial information on elements that may be important for models of support were included in the final set of 103 articles. Inter-rater reliability counted using Cohen’s kappa was substantial at  $\kappa = 0.7505$  (Cohen, 1960; McHugh, 2012). Repeated readings of the articles and discussion resolved any disagreements. The large number of included papers (summarised in Table 2) reflects the complex nature of the topic, regarding both the targeted populations and the multitude of disciplines engaged in their support.

In keeping with the focus on models of support for populations with interconnected needs, the majority of the included literature examined cross-sector and multisector interventions including the criminal justice system and police, mental health, specialised drug and alcohol services, homelessness interventions and health. Fifty percent of the included literature specifically focused on people with cognitive disability. The geographic origins of the studies were diverse and included: 23 from Australasia, 38 from North America, 29 from the United Kingdom, 12 from Europe and one from South Africa. Twenty-seven articles reported on evaluations and eight of these included cost analysis of interventions.

## Grey literature

Grey literature was included to supplement peer-reviewed papers and capture innovative examples of practice. Following Godin et al. (2015) guidelines for systematic grey literature searches, one author searched: 1) grey literature databases, 2) Google search engines, and 3) targeted websites. As abstracts were often unavailable, the executive summaries and tables of content in the documents were screened instead. Only grey literature that presented a rigorous evaluation of a model (as per inclusion criteria) was included. Screening of publications’ full text followed, resulting in the inclusion of five reports.

## Analysis

A purpose-designed proforma was completed for each included article and grey literature report, providing information relevant to the focus of the review, including: a description of an integrated response or specialised intervention; identified

factors making up interventions and whether these factors were barriers to or facilitators of good practice; whether the article reported an evaluation of an intervention and, if so, what the principles and practices underpinning this were; and whether the article represented a useful case study. Completed proformas were imported into NVivo11™ qualitative data analysis software. An initial overview of the data revealed that factors were identified at the level of practice and policy and affirmed that EST provided a useful data analysis framework. EST recognises human development and experiences as existing within a series of nested ecological environments, reflecting personal, interpersonal and collective social elements (Bronfenbrenner, 2005). Using an adapted EST framework, the data were organised into three categories relating to person, service and system. Each of the categories is defined in Table 1 below:

Once proformas had undergone the first stage of analysis by one author, the three broad categories (person, service and system) and a broad list of emerging codes were identified by a second author and reviewed by the others. At this stage, all authors provided feedback concerning: a) their level of agreement regarding the suitability of the data in

**Table 1. Analytic categories defined.**

Categories	Definition
Person	
Person with complex support needs	Barriers and facilitators related to the experiences and needs of populations with complex support needs.
Practitioners/ staff	Barriers and facilitators related to the characteristics, approaches and attributes of practitioners and staff who work directly with populations with complex support needs.
Service	Barriers and facilitators related to aspects of service provision, program and service design and service coordination and communication for populations with complex support needs.
System	Facilitators and barriers related to policy, governance and funding of services supporting populations with complex support needs.

Table 2. Summary of included papers.

Author	Year	Title	Country	Focus of the paper	Methods used:	Findings
J. F. Weise, K. R.: Whittle et al. (2018) Whittle, E.: Trollor, J. N.	2018	What Can the Experiences of People With an Intellectual Disability Tell Us About the Desirable Attributes of a Mental Health Professional?	Australia	Presents the experiences of people with intellectual disability regarding the attributes that may assist mainstream mental health professionals to provide them with a quality mental health service	Interviews and focus groups with 6 individuals with intellectual disability and co-morbid mental health issues	Reinforced previous findings that mental health professionals to be adaptable, able to communicate, and work with a person's support network. Also identified the importance of building trust and rapport and undertaking professional development
B. R. Van Straaten, G.: Van der Laan, J.: Boersma, S. N.: Wolf, Jrim: Van de Mheen, D.	2017	Self-reported care needs of Dutch homeless people with and without a suspected intellectual disability: a 1.5-year follow-up study	The Netherlands	Explores self-reported care needs within a broad range of life domains among Dutch homeless people with and without a suspected intellectual disability to gain insight into the transition of self-reported care needs from baseline to follow-up in both subgroups	Questionnaire and face to face interviews with 513 homeless people with and without intellectual disability and 336 participants interviewed at 1.5 year follow-up	The number of life domains with care needs between these groups of homeless people is similar when entering the social relief system, but that the care needs of those with a suspected intellectual disability last longer than those without a suspected intellectual disability
N. V. van Duijvenbode, J. E. L.: Didden, R.: Engels, Rome: Buitelaar, J. K.: Kiewik, M.: de Jong, C. A. J.	2015	Substance use disorders in individuals with mild to borderline intellectual disability: Current status and future directions	The Netherlands	Provides an overview of the current evidence base regarding substance use disorder (SUD) in populations with intellectual disability and explore insights on the conceptualisation of SUD from other fields such as addiction medicine and general psychiatry	Critical review of literature on substance abuse disorders in people with intellectual disability and insights from the broader evidence base	Individuals with ID are at risk for developing SUD and experience more severe consequences. Need to improve identification, screening and assessment of SUD in this population. Tailored interventions and collaboration between sectors to provide integrated treatment is needed

<p>A. C. Stephens, J.: Massey, L.: Bohanna, I.</p>	<p>2014</p>	<p>Will the National Disability Insurance Scheme Improve the Lives of those Most in Need? Effective Service Delivery for People with Acquired Brain Injury and other Disabilities in Remote Aboriginal and Torres Strait Islander Communities</p>	<p>Australia</p>	<p>Provides an overview of the state of acquired brain injury disability for Aboriginal and Torres Strait Islanders in remote and outer regional settings, and the present sets of barriers they face to obtaining quality care and effective interventions within the content of the NDIS</p>	<p>Descriptive overview of current evidence and practice regarding Aboriginal and Torres Strait Islander people with Acquired Brain Injury and other Disabilities in Remote Communities</p>	<p>NDIS provides a significant opportunity but equitable benefit can only be achieved if additional and specialised measures are devised and implemented to appropriately screen for, and assess, incidence of ABI; disability services are appropriately resourced to overcome the pre-existing disadvantage, and education, training and recruitment of Aboriginal and Torres Strait Islanders with the NDIS is undertaken to lead attitudinal changes in community to disability and health services</p>
<p>B. L. Rossow-Kimball, M.: Blackhurst, M.</p>	<p>2017</p>	<p>I can find my own Elder! Cultural engagement as serious leisure for Aboriginal adults living in non-Aboriginal group homes</p>	<p>Canada</p>	<p>To understand the knowledge, experience, and meaning of Aboriginal culture to Aboriginal adults with intellectual disabilities living in a group home/ supportive living setting, and develop strategies to address barriers to connecting with their culture</p>	<p>Collaborative, participatory research methods (one-on-one interviews, group activities, photo-elicitation and focus group settings) with four Aboriginal people with intellectual disability who live in non-Aboriginal group homes</p>	<p>There is a need to recognise the it is important to recognise the influence of external entities such as people, policy, attitudes and finances which may not be in support of Aboriginal people with intellectual disability engaging with their traditional culture. Support services and staff should work from a strengths perspective to ensure that this group can connect with their cultural identity</p>
<p>A. S. Quinlan, S.</p>	<p>2017</p>	<p>The "problem" of abuse in Ontario's Social Inclusion Act: A critical exploration</p>	<p>Canada</p>	<p>Examines the abuse policy recently implemented through the Social Inclusion Act of Ontario, Canada's developmental services sector (DSS)</p>	<p>Critical review of policy, training materials and compliance of a policy designed to address abuse against people with intellectual disability</p>	<p>The conceptualisation of sexual abuse as a policy problem that can be managed and solved with criminal justice interventions narrows the scope of imagined strategies to address sexual assault</p>

A. C. Olsen, C.	2016	'Responding to the needs of people with learning disabilities who have been raped: co-production in action	The UK	Discusses a project that explored why mainstream rape support services are still failing to meet the needs of women with learning disabilities	Action research with 4 representatives from a university, a third sector organisation and a rape crisis centre, one of whom had a intellectual disability and personal experience with rape	Process resulted in the development of an easy-read/accessible leaflet. enabled them to explore the issues from a range of experiences, sharing knowledge and expertise and enabling them to begin to develop better service responses
P. J. G. S. Nouwens, N. B. M.: Embregts, Pjcm: van Nieuwenhuizen, C.	2017	Meeting the support needs of persons with mild intellectual disability or borderline intellectual functioning: still a long way to go	The Netherlands	Retrospective examination of whether the history of support/ treatment programs and the type of healthcare providers involved met the specific support needs of people with a mild intellectual disability or borderline intellectual functioning	Retrospective cohort study. Five (previously identified) profiles of persons with a mild intellectual disability or borderline intellectual functioning were used to investigate to what extent the support needs of this group had been met. For the 250 persons with mild intellectual disability or borderline intellectual functioning who matched these five profiles, data were collected retrospectively from their case files	The support programs for a heterogeneous population of persons with mild intellectual disability or borderline intellectual functioning were considered suboptimal, indicating that more differentiation is required in the services offered to these individuals
D. B. C. Nicholas, A.: McLaughlin, A. M.: Shankar, J.: Kreitzer, L.: Uzande, M.	2017	Care Experiences of Adults With a Dual Diagnosis and Their Family Caregivers	Canada	Examines the experiences of care and systematic barriers faced by individuals diagnosed with intellectual disability and mental health conditions	Qualitative interviews conducted separately with adults with a dual diagnosis of intellectual disability and mental illness (n = 7) and their caregiving parents (n = 8)	Families provide informal complex care amid insufficient and uncoordinated services but are often excluded from formal care planning. A lack of available funding and services further impedes care. There is a lack of sufficiently targeted resources, leaving families to absorb system-related care gaps. Recommendations include person- and family-centred care, navigation support, and capacity building

<p>2014</p> <p>S. E. P. V. L. Munce, R.: Levy, C.: Parsons, D.: Jaglal, S. B.</p>	<p>Systems analysis of community and health services for acquired brain injury in Ontario, Canada</p>	<p>Canada</p>	<p>A systems analysis on community and health services for individuals with acquired brain injury (ABI) in the province of Ontario, Canada</p>	<p>Phone surveys with 42 healthcare professionals and/or healthcare administrators involved in support provision for people with ABI. Focus group with 38 individuals (which included some of the same individuals from the survey phase)</p>	<p>study revealed: (1) a lack of services for children/adolescents; (2) service gaps for individuals with co-existing mental health conditions; (3) changes in case mix, in terms of more individuals with co-morbid medical and mental health conditions (with many of the organizations reporting medical instability and severe behavioural disorders as exclusion criteria); and (4) a need for more organizations to track patient outcomes for evaluation and/or accountability purposes</p>
<p>2016</p> <p>I. G. T. McKinnon, S. D. M.: Noga, H. L.: Senior, J.</p>	<p>Police custody health care: a review of health morbidity, models of care and innovations within police custody in the UK, with international comparisons</p>	<p>The UK</p>	<p>Describes the types and prevalence of health disorders encountered in custody and provides an overview of current practice and recent innovations in police custody health care</p>	<p>Literature review of pertaining to available evidence regarding health care issues in police custody (acute injury, chronic physical health problems, mental and cognitive disorders, and the risks associated with drug and alcohol intoxication or withdrawal)</p>	<p>There is a lack of data from many jurisdictions and more research is required to investigate the true prevalence of health morbidity by using joined up and triangulated data. Police personnel continue to experience difficulties identifying detainees with health issues relevant to their safe detention, but research shows that the use of evidence-based screening tools improves detection of such morbidities. Street triage and diversion are showing promise</p>

<p>M. T. McIntyre, C.: Cullen, J.</p>	<p>2017</p>	<p>Responding to the needs of homeless Aboriginal and Torres Strait Islander young people with complex disability: The Guddi for Young People</p>	<p>Australia</p>	<p>Examination of the complex support needs of homeless Aboriginal and Torres Strait Islander young people with neurocognitive disability (NCD) and discussion of a service enhancement model</p>	<p>Descriptive overview of evidence relating to Homeless Aboriginal and Torres Strait Islander young people with complex disability. Overview of a service enhancement model (the Guddi Protocol) designed to address the service gaps outlined in the literature review</p>	<p>The Guddi Partnership offers a model of community and service engagement and capacity building that is underpinned and led by Aboriginal and Torres Strait Islander community values and knowledge. The key components of the Guddi for Young People which address this need are: utilisation of culturally sensitive engagement processes; development of a culturally informed and appropriate screening and appropriate screening protocol to identify NCD and assess physical, mental, and social health domains; and building service and community capacity to better understand and respond to this cohort</p>
<p>Lansdell et al., (2018) G. S. Lansdell, B.: Eriksson, A.: Bunn, R.: Baidawi, S.</p>	<p>2018</p>	<p>Enhancing the rights and well-being of people with acquired brain injuries in the criminal justice system: Some findings from a qualitative study</p>	<p>Australia</p>	<p>Identifies the advantages and limitations of current policy and practices, and to identify possible actions which could lead to improved outcomes for people with acquired brain injury in the criminal justice system</p>	<p>101 in-depth interviews and 1 focus group with key stakeholders including service providers from community support and health (n = 25) court personnel (n = 5), Magistrates (n = 7) and Judges (n = 8), legal practitioners (n = 20), police prosecutors (n = 6), financial counsellors (n = 2) and persons living with an ABI (n = 22) and their carers (n = 3)</p>	<p>Appropriate and timely intervention to respond to the needs of a person with an ABI ultimately relies on an ability to adequately identify the condition, which is difficult for corrective services staff and others to accurately achieve. The lack of awareness of ABI amongst legal practitioners and service providers, should be addressed with better education, training and professional development</p>

<p>C. S. Kouimtsidis, K.: Baio, G.: Hunter, R.: Pezzoni, V.: Hassiotis, A.</p>	<p>2017</p>	<p>Development and evaluation of a manual for extended brief intervention for alcohol misuse for adults with mild to moderate intellectual disabilities living in the community: The EBI-LD study manual</p>	<p>The UK</p>	<p>Evaluation of a manual for the treatment of alcohol misuse for adults with mild to moderate intellectual disabilities</p>	<p>Feasibility randomized controlled trial. Thirty individuals with intellectual disability and alcohol misuse issues were equally randomized to the intervention or control arm. Thirteen individuals received the intervention. The sessions were recorded and scored using an adapted version of the Yale Adherence and Competence Scale (YACS II). Feedback was provided by therapists</p>	<p>None of the participants in this study had previously received treatment tailored to their needs by either specialist substance misuse services or specialist intellectual disability services. The feasibility study showed although that the intervention as described in the manual can be delivered to community-based populations by suitably qualified professionals with minimal training and support, and thus could be incorporated into routine NHS care or non-statutory services</p>
<p>J. Keller</p>	<p>2016</p>	<p>Improving Practices of Risk Assessment and Intervention Planning for Persons with Intellectual Disabilities Who Sexually Offend</p>	<p>Canada</p>	<p>Examination of current literature concerning effective specialized risk assessment and intervention planning for people with intellectual disability who sexually offend</p>	<p>Systematic literature review of current evidence base</p>	<p>Effective collaboration between support teams and the clinical professional, maximizing focus on individual risk factors and strengths, will enhance outcomes of risk assessment and intervention planning for persons with ID who sexually offend</p>

J. M. Keesler	2016	Trauma-informed Day Services for Individuals with Intellectual/Developmental Disabilities: Exploring Staff Understanding and Perception within an Innovative Programme	America	Exploration of staff perceptions of an innovative trauma-informed day program for individuals with Intellectual/developmental disabilities	Semi-structured interviews regarding trauma and TIC conducted with 20 staff members from a single, trauma-informed day programme for individuals with intellectual disabilities	Five key principals of TIC revealed: choice, collaboration, empowerment, safety and trust. Challenges to approach included individuals struggling to adapt to increased choice with the absence of structure associated with increased anxiety, testing boundaries and the resurgence of historic behaviours for some individuals. Staff identified challenges with ensuring consistency in the implementation of TIC and concerns with maintaining daily staff meetings (e.g. lacking content and purpose) and an inability to adapt to new approach. Resistance to interagency collaboration was also a challenge with state employees seen as restricting communication and withholding documentation from the TIC programme staff
J. M. Keesler	2014	A Call for the Integration of Trauma- Informed Care Among Intellectual and Developmental Disability Organizations	America	Discusses implications for service delivery and the potential assimilation of trauma-informed care within intellectual disability organizations. The effectiveness of TIC applications and potential barriers are discussed	Descriptive overview of the principles of TIC and barriers to successful implementation	Becoming trauma-informed requires a commitment to changing organizational culture, policies, and practices. Staff attrition, lack of time to foster communication and team building, as well as interdepartmental differences in treatment approach were identified as barriers to TIC

22	M. L. L. Horn, D. J.	2016	TRAUMATIC BRAIN INJURY IN THE CRIMINAL JUSTICE SYSTEM: IDENTIFICATION AND RESPONSE TO NEUROLOGICAL TRAUMA	America	Describes the unique challenges confronting individuals with traumatic brain injury in criminal justice system. Discusses what changes can be made by correctional entities to help this group more successfully reintegrate into society	Literature review of current evidence and policy approaches to TBI	Untreated individuals at greater risk for criminal activity. Early identification and treatment of TBIs within children and teenagers reduces the chances of them committing crimes later in life. Creating and implementing individualized treatment plans for those with TBI, and training correctional staff has the potential to help this population more successfully reintegrate into society
	J. P. C. Gentile, A. E.: Harper, B.: Mast, R.:	2018	Reaching rural Ohio with intellectual disability psychiatry	America	Describes the model, design and implementation of Ohio's Telepsychiatry Project for people with intellectual disability in rural Ohio. Recommendations and responses to key challenges are provided	Overview of design and implementation of model and evaluation of impact after five years. Looks at outcomes for patients with intellectual disability enrolled in service including utilisation rates of medical services	Five years after initiation of the project, over 900 patients from 64 of Ohio's 88 counties receive mental health treatment through this state-wide grant-funded project. Initial results for the first 120 patients enrolled in the project demonstrated a dramatic reduction in the utilization of high-cost medical services in the 12 months following treatment when compared with the 12 months preceding treatment via the telepsychiatry model. Emergency room visits decreased 96% from 195 visits to eight, and hospitalizations decreased 85% from 74 hospitalizations to 10

E. I. Gardiner, G.: Moretti, M.	2017	Integrative Care for Adolescents With Dual Diagnosis: Considering Trauma and Attachment Within an Innovative Model for Clinical Practice	Canada	Reviews research examining attachment- and trauma-informed care, and highlight practical approaches to treat adolescents with intellectual disability and co-morbid mental health and/or behavioural conditions	Review and analysis of current research. Provides model of care for adolescents with complex needs	Best-practice models for implementing clinical care that are sensitive to the unique needs of these youth should be individual and strength-based responses, responsive, trauma informed, and collaborative. Assessment should be multi-disciplinary. To maximise continuity and sustainability on-going caregiver training and support should be provided
I. Freckelton	2016	Sentencing Offenders with Foetal Alcohol Spectrum Disorder (FASD): The Challenge of Effective Management: Churnside v The State of Western Australia 2016 WASCA 146 per Martin CJ and Mazza and Mitchell JJA	Australia	Reviews the judgment of the Western Australian Court of Appeal in Churnside v The State of Western Australia [2016] WASCA 146 to present a model for the efforts that should be made by sentencing judges and magistrates required to deal with recidivist offenders with Foetal Alcohol Spectrum Disorder (FASD)	Analysis of a sentencing decision relating to an Aboriginal man with FASD. Paper considers the ramifications of the case for other decisions, law reform, clinical practice and advocacy and argues that the decision provides a 'roadmap' for the kinds of interventions that should be made by sentencing courts for reclamation of young recidivist persons with FASD	The Churnside decision constitutes a constructive (and realistic) model for the formulation of creative attempts to reduce the likelihood of recidivism, drawing upon pro-social mentoring and structured environments fashioned so as to provide support, and searching out and deploying appropriate community- based services

<p>H. T. Blagg, T.: Bush, Z.</p>	<p>2017</p>	<p>Indefinite Detention Meets Colonial Dispossession: Indigenous Youths With Foetal Alcohol Spectrum Disorders in a White Settler Justice System</p>	<p>Australia</p>	<p>Explores issues surrounding justice intervention in the lives of Indigenous children and young people with foetal alcohol spectrum disorders (FASD) and maps a reform agenda based on what the authors label a 'decolonizing' alternative to the mainstream justice process</p>	<p>Study included a comparative legal analysis (comparing Western Australia with similar jurisdictions in Australia and overseas); a review of the extant policy and practice literature around FASD; an examination of the literature on the Western Australian justice system in relation to Indigenous youth, including statistics on over-imprisonment; and a qualitative research phase, involving a range of place based interviews and focus groups with community members, justice professionals and key individuals and groups in the West Kimberley region</p>	<p>A mobile 'needs focused' Court – takes elements from Aboriginal courts, with their focus on the involvement of Elders in the court process can better support this population. Early triage and a 'no wrong door' approach can potentially activate a mix of services, irrespective of plea, and can even involve support services for family and others of significance</p>
<p>Lukersmith, S., Millington, M., Salvador-Carulla, L.</p>	<p>2016</p>	<p>What is case management? A scoping and mapping review</p>	<p>Australia</p>	<p>Scopes and maps case management in the literature to identify how case management is described in the literature for key complex health conditions including brain injury, diabetes, mental health, spinal cord injury)</p>	<p>Literature review of current models of case management</p>	<p>Five models of case management identified in the literature. From this key components were extracted including: - Case finding - Establishing rapport - Assessment - Planning - Navigation - Provision of care - Implementation - Coordination - Monitoring - Evaluation - Feedback - Education/information - Advocacy - Supportive counselling - Administration - Discharge/disengagement - Community service development</p>

Bartle, J., Crossland, T., Hewitt, O.	2016	'Planning Live': using a person-centred intervention to reduce admissions to and length of stay in learning disability inpatient facilities	The UK	Examines a novel intervention based on person-centred planning practice, which aimed to coordinate a person's support, identify outstanding needs and increase communication	102 people with intellectual disability who partook in 'Planning Live' intervention. Study assessed the number of people admitted to the inpatient services before and after the intervention, the length of inpatient admissions before and after the intervention, and by analysing qualitative feedback from participants in the intervention	The total number of days spent as an inpatient admission before and after the introduction of 'Planning Live' was compared and found to be significantly lower at the $P < 0.05$ level after the introduction of 'Planning Live' meeting. Other outcomes from intervention included a better understanding of client's presentations (generally due to sharing information within the person's system), increases to their social care package, admission to other hospital provision, the completion of physical health checks, changes to day service provision or where they lived
Rhodes et al., (2014) Rhodes, P., Donnelly, M., Whatson, L., Brearley, K., Diklan, J., Hansson, A., Franic, T., Mora, L.	2014	Beyond the impasse? Systemic consultation and understanding complex cases	Australia	Evaluates the impact of systemic consultations for clinicians working with people with intellectual disability and complex cases and behaviours of concern. Systematic consultations promote reflection on interpersonal dynamics that may be inhibiting change	Thematic analysis of interviews and field notes was used to explore the experience of 11 clinicians working with people with intellectual disability and complex needs attending systemic consultation. Clinicians were experienced in behaviour support, had no prior experience in family therapy and presented with complex cases described as 'stuck'	Practitioners reported a heightened awareness of the interpersonal needs of both clients and carers and the development of a facilitative position and skills to apply to cases after using systemic consultations. However, less experienced clinicians were more likely to feel overwhelmed by this less structured, more relationally oriented focus

	Author	Year	Country	Description	Findings
	Wood, S., Gangadharan, S., Tyrer, F., Gumber, R., Devapriam, J., Hiremath, A., Bhaumik, S.	2014	The UK	Successes and challenges in the implementation of care pathways in an intellectual disability service: Health professionals' experiences	Preliminary findings showed improved self-assessment of ability to stay sober and as well as an increase in overall readiness for change
	Sakdaan, J. A., Kittner, D. M., Judd, D.	2017	New Zealand	ASAP-ID: substance abuse programme for a forensic ID population	Six participants completed a 27-week SA treatment programme (the Alcohol and Substance Abuse Programme-Intellectual Disability) which incorporated the use of dialectical behavioural therapy (DBT) and the Good Lives Model concepts. Pre- and post-measures aimed to assess readiness for change and confidence in ability to stay clean and sober
	van Rensburg, A. J., Fourie, P.	2016	South Africa	Health policy and integrated mental health care in the SADC region: Strategic clarification using the Rainbow Model	Analysis found that clinical integration strategies (coordination of person-focused care) such as centrality of client needs, case management and continuity were central considerations of policies, while patient education and client satisfaction were largely lacking

Atyeo, H., Forchuk, C.	2013	Psychiatric/ psychosocial rehabilitation (PSR) in relation to residential environments: Housing and homelessness	The UK	Looks at the impact of psychiatric/psychosocial rehabilitation (PSR) is an effective means to assist homeless individuals with serious mental illness achieve recovery	A systematic narrative review of the research literature was conducted to explore the role of PSR in relation to housing, including homelessness, supportive/supported housing and independent living	PSR interventions that focus on enhancement of independent living and social skills promote greater social role functioning and engagement with community. Individualized approaches, respect for client preference and use of empowering strategies to engage with clients as equal partners in decision-making processes were the most effective in supporting recovery
Sillanpää, V.	2013	Measuring the impacts of welfare service innovations	Finland	Presents a framework to measure the multidimensional impacts of welfare service innovations and details the empirical results from two case studies focuses on homeless populations and people with disability	Review of impact measurement literature and the development of a framework for measuring the impacts of welfare services is presented. Information on service utilization at individual level and costs related to the service use was obtained from client databases administrated by different authorities and analysed. Semi-structured interviews used to provide qualitative data on intervention impact	Paper determined that framework was a useful tool for decision-makers for assessing the impacts of different services and service innovations in the welfare service sector
Lukersmith, S., Fernandez, A., Millington, M., Salvador-Carulla, L.	2016	The brain injury case management taxonomy (BICM-T); A classification of community-based case management interventions for a common language	Australia	Develops a community-based case management in brain injury taxonomy to provide a common language and understanding of case in management for use in quality analysis, policy, planning and practice	Descriptive mixed qualitative methods using multiple sources of knowledge including scoping, framing and a nominal group techniques to iteratively develop the draft of the taxonomy	Paper provides a definition of community-based case management, taxonomy trees, tables and a glossary. Authors state the use of the taxonomy as a common language will benefit practice, quality analysis, evaluation, policy, planning and resource allocation

<p>Bellon, M., Crocker, R., Farden, J., Gardner, J., Sando, S., Peterson, C.</p>	<p>2015</p>	<p>Family Support Needs Following Acquired Brain Injury Across Metropolitan and Regional/Remote South Australia</p>	<p>Australia</p>	<p>Compares family support needs following an acquired brain injury (ABI) in metropolitan and regional/remote areas in order to inform the development of a state-wide family peer support network</p>	<p>Mixed methods design including postal survey completed by 194 family members who provide support to an adult with ABI and focus groups with 43 participants (29 family members, 14 people with ABI)</p>	<p>Regional/remote participants commented more frequently on the need for coordinated, accessible and tailored services. All participants, regardless of geography, stated the need for counselling and emotional support, as well as family support groups. Emotional support; family support groups; ABI information; family social activities; help to navigate the system; early supports (within the first year of ABI); and self-advocacy training were also cited as important by all participants</p>
<p>Gutman, S. A., Raphael-Greenfield, E. I.</p>	<p>2017</p>	<p>Effectiveness of a supportive housing program for homeless adults with mental illness and substance use: A two-group controlled trial</p>	<p>America</p>	<p>Assesses effectiveness of a housing transition program for homeless shelter residents with chronic mental illness and substance use</p>	<p>Case/control study with 10 participants experiencing homelessness, substance abuse and mental illness being assigned to SMART treatment and 10 being assigned to treatment as usual</p>	<p>At a 6-month follow-up, 57.14% of intervention group participants had transitioned into supportive housing, while only 25% of control group participants had transitioned</p>
<p>Wylie, L. A., Griffin, H. L.</p>	<p>2014</p>	<p>G-map's application of the Good Lives Model to adolescent males who sexually harm: A case study</p>	<p>The UK</p>	<p>Examines a young person's pathway into sexually harmful behaviour and demonstrate how the Good life model can be used as a framework for therapeutic practice with adolescents who sexually harm</p>	<p>Single-case study approach used to illustrate the 'typical' G-map experience and practice</p>	<p>Good life model built internal skills and resources, including emotional regulation and self-management, and was fundamental to the acquisition of key external resources such as positive social support networks</p>

<p>Hoft, T. J., Fortney, J. C., Patel, V., Unützer, J.</p>	<p>2013</p>	<p>Task-Sharing Approaches to Improve Mental Health Care in Rural and Other Low-Resource Settings: A Systematic Review</p>	<p>America</p>	<p>Assesses evidence base on the effectiveness of task sharing in addressing unmet mental health needs in rural and other low-resource areas</p>	<p>Systematic review on task sharing of mental health care in rural areas of high-income countries included</p>	<p>Technology was identified as a way to leverage mental health specialists to support care across settings both within primary care and out in the community. More research on issues like confidentiality is needed</p>
<p>Grant, K. L., Simmons, M. B., Davey, C. G.</p>	<p>2018</p>	<p>Three nontraditional approaches to improving the capacity, accessibility, and quality of mental health services: An overview</p>	<p>Canada</p>	<p>Examines three approaches to mental health service provision—peer support worker (PSW) programs, task shifting, and mental health first-aid and community advocacy organizations and discusses their respective effectiveness</p>	<p>Review of literature pertaining to peer support worker (PSW) programs, task shifting, and mental health first-aid and community advocacy organizations</p>	<p>All three approaches seen as beneficial to addressing mental health. PSWs can be particularly effective in reducing hospital admissions and inpatient days. When certain care tasks are given to individuals with less training than professionals (task shifting), these staff members can effectively provide psychoeducation, engage service users in treatment, and help them achieve symptom reduction and manage risk of relapse. Mental health first-aid and community organizations can reduce stigma, increase awareness of mental health issues, and encourage help seeking</p>

Bowers, A., Owen, R., Heller, T.	2017	Care coordination experiences of people with disabilities enrolled in medicaid managed care	America	Presents experience of enrollees with disabilities with care coordinators on Medicaid Managed Care (MMC)	Surveys sent to a stratified random sample of 6000 people out of the 100,000 enrollees with disabilities in the MMC state program. 1041 people with disabilities enrolled in the MMC program completed the survey; 442 respondents were included in the analysis which assessed outcomes of number of unmet health care needs and enrollee appraisal of the health services they received	Positive enrollee experiences with care coordinators significantly related to more positive enrollee health service appraisals and fewer unmet health care needs; frequency of contact did not have any significant impacts. People with mental health disabilities and intellectual/developmental disabilities had significantly lower health service appraisals. People with mental health disabilities had significantly more unmet needs
van Duijn, S., Zonneveld, N., Lara Montero, A., Minkman, M., Nies, H.	2018	Service integration across sectors in Europe: Literature and practice	The Netherlands	Provides a review of service integration across sectors in Europe between social services, health, employment and/or education and improve conceptual clarity regarding service integration across sectors	A literature review (34 articles) and a survey of practice examples across Europe (44 practices)	Systems to monitor and evaluate social service integration are present, but require further development. Good leadership and organizational support is integral to successful integrated service delivery
Mason, R., Du Mont, J., Paterson, M., Hyman, I.	2018	Experiences of child protection workers in collaborating with adult mental health providers: An exploratory study from Ontario, Canada	Canada	Describes findings regarding identified barriers and facilitators to collaboration between child welfare and adult mental health service providers	Semi-structured survey instrument completed by 339 service providers in child protection in Ontario, Canada. Guided by an Advisory group comprised of Service providers from child welfare organizations, adult mental health services, the violence against women sector and people with lived experience who had used those services	Respondents recommended better clarity of roles and goals, increased information sharing, capacity building across sectors and new models of integrated service delivery

<p>Earl, F., Cocksedge, K., Morgan, J., Bolt, M.</p>	<p>2017</p> <p>Evaluating liaison and diversion schemes: an analysis of health, criminal and economic data</p>	<p>The UK</p>	<p>Looks at impact of Liaison and Diversion intervention in Cornwall on health, criminal and economic outcomes</p>	<p>retrospective cross-sectional survey using baseline clinical and demographic information for all new referrals from the first 3 months of intervention. Sample included people who came in contact with the CJS and had additional complexities including mental health, learning disabilities, alcohol/substance needs. A 12-month period either side of the date of referral allowed for comparison between each service user's contact with the CJS pre and post intervention</p>	<p>L&amp;D enabled reduced use of police and criminal justice resources. Post intervention individuals' contact with the police as either victim or perpetrator reduced significantly as did their unmet needs</p>
<p>Jennings, P., Matheson-Monnet, C. B.</p>	<p>2017</p> <p>Multi-agency mentoring pilot intervention for high intensity service users of emergency public services: the Isle of Wight Integrated Recovery Programme</p>	<p>The UK</p>	<p>Presents impact of a pilot program called the Integrated Recovery Programme designed to integrate mental health professionals and a trained police officer directly into the care pathway of repeated users of emergency public services with complex mental health needs</p>	<p>Four participants took part in the new integrated and intensive mentoring model of care. The extent to which the clinical and social aims were met was explored using semi-structured interviews with all 12 members of the multi-disciplinary team (MDT) involved in the care of the HIUs who had interacted with the police officer working alongside the mental health team and other healthcare professionals</p>	<p>Mental health nurses reported improved compliance with treatment. Although the sample was small, the number of police mental health crisis detentions was reduced by 66 per cent after one year and by 100 per cent after 18 months</p>

<p>Duffy, J., Davidson, G., Kavanagh, D.</p>	<p>2016</p>	<p>Applying the recovery approach to the interface between mental health and child protection services</p>	<p>The UK</p>	<p>Identifies positive, integrated approaches to service user engagement, risk assessment and management may lead to better outcomes in working with families experiencing parental mental health problems and child protection concerns</p>	<p>Examination of current research, policy and inquiries are also examined as a context for how to more effectively respond to cases where there are issues around parental mental health problems and child protection</p>	<p>The promotion of user involvement, partnership working and a commitment to strengths and resilience-based thinking is fundamental to improving outcomes for families with mental health issues in contact with child protection</p>
<p>Browning, M., Gray, R., Tomlins, R.</p>	<p>2016</p>	<p>A community forensic team for people with intellectual disabilities</p>	<p>The UK</p>	<p>Examines characteristics of adults with intellectual disabilities supported by a Community Forensic Learning Disability Team (CFT) and the impact of the intervention on outcomes such as recidivism</p>	<p>Retrospective case note review of all 70 service users open to the Community Forensic Teams during June 2013 was carried out, using a structured service evaluation tool</p>	<p>Following CFT involvement there was an increase in service users living in supported living in the community and a decrease in people in secure or out of area placements. Over half of service users engaged in no further offending behaviour since their referral, and those who did offend generally showed a decrease in the severity of offending behaviours</p>
<p>Till, A., Exworthy, T., Forrester, A.</p>	<p>2015</p>	<p>Integration and offender mental health</p>	<p>The UK</p>	<p>Conceptualises integration and its role within offender healthcare</p>	<p>Descriptive overview of integration within the context of offender health</p>	<p>Integration is key to improving outcomes for populations with complex needs whose care is currently poorly coordinated. Challenges include ensuring that integration does not introduce systemic mental health care disadvantages, by causing the translocation of resources to physical health care services</p>

Dooris, M., McArt, D., Hurley, M. A., Baybutt, M.	2013	The UK	<p>Probation as a setting for building well-being through integrated service provision: Evaluating an Offender Health Trainer service</p>	<p>Evaluation of the Offender Health Trainer service delivered in probation settings and designed to improve the health of offenders, improve their access to mainstream services, and help reduce health inequalities</p>	<p>mixed-methods approach including the interrogation and analysis of routinely collected quantitative data extracted from the National Health Trainer Data Collection Recording System of 474 clients and in-depth qualitative research using interviews and focus groups with 8 clients and 2 health trainers</p>	<p>Evaluation revealed promising short-term trends in behaviour change and self-perceived health and well-being. Trust and motivation was key to success of intervention</p>
Hutchison, M., Hummer, D., Wooditch, A.	2013	America	<p>A survey of existing program strategies for offenders with intellectual and developmental disabilities under correctional supervision in Pennsylvania</p>	<p>Looks at treatment programs for offenders with intellectual and developmental disabilities in county jails and probation and parole offices in Pennsylvania to examine current treatment models</p>	<p>Surveys with county administrators at jails (N = 69) and probation and parole departments (N = 67) exploring specific methods to screen incoming offenders for disabilities were in place, if specialized programming was available, the prevalence of the population within their facilities, and whether the department organized aftercare options</p>	<p>There is a state wide lack of knowledge regarding clients with intellectual disability by upper management of agencies charged with supervising a majority of the offending population</p>
Kerman, N., Sirohi, R., Curwood, S. E., Trainor, J.	2017	Canada	<p>Canadian service providers' perceptions of barriers and support gaps in housing and mental health</p>	<p>Determines equitability of health services in New Zealand by measuring the level of development of components of chronic care management systems across district health boards</p>	<p>A national survey of district health boards (DHBs) was undertaken on macro approaches to chronic condition management with detail on cardiovascular disease, chronic obstructive pulmonary disease, congestive heart failure, stroke and diabetes</p>	<p>Equity principles are not adequately implemented in practice. Measuring, monitoring and targeting equity is not systematically undertaken. Populations that conventional practitioners find hard to reach, despite recognized needs, are often underserved</p>

Kelly, M.	2017	The implementation of the Care Programme Approach for service users with a learning disability. Building Bridges to the same Old Horizons?	The UK	Explores factors shaping the recent implementation of the Community Practice Approach for service users with a dual diagnosis	Data were collected from key CPA staff (psychiatrists, psychologists, learning disability social workers, trust and social service managers, nurses, and staff from user and carer support agencies) through interview (n = 26), documentary analysis (n = 64), steering group observation (n = 3) and the Partnership Assessment Tool (n = 26). And analysed using the Framework Approach	The CPA has become more aligned with risk management protocols than supporting individual service user's recovery
M. Raftery, K. Burke, N. Murray, O. O'Duinn, I. Murray and B. Hallahan	2016	An intensive personalised support approach to treating individuals with psychosis and co-morbid mild intellectual disability	Ireland	Evaluates clinical benefits and associated cost effectiveness of an intensive personalised support approach for clients suffering from psychosis and co-morbid mild intellectual disability	Four individuals with a psychotic disorder and co-morbid mild ID participated in an 18-month IPS rehabilitative intervention. Biopsychosocial measures were used to evaluate clinical effectiveness. Case studies are presented in addition to a cost analysis was undertaken to examine the cost effectiveness of the intervention	Reductions in psychopathology including anxiety symptoms were noted in all individuals. In addition, increased functioning and quality of life were demonstrated in all cases. Overall cost reductions were noted in inpatient care, accommodation and legal/emergency expenses

J. Michalski	2016	Mental health issues and the Canadian criminal justice system**	Canada	Examines key evidence pertaining to the incarceration of people with mental health issues	Literature review of current evidence and practice regarding the incarceration of people with mental health issues and the development of case studies as exemplars of 'best practices' to illustrate promising directions conducive to integrated, holistic, and effective responses at the intersection of the criminal justice and mental health systems	No one response can prevent recidivism for this population but promising initiatives can have a significant impact if integrated into a coherent criminal justice framework, including preventative community responses; police training to cope more effectively with initial encounters with the mentally ill; mental health courts and diversion programs; treatment programs within the prison system; and intensive follow-up and community re-integration programs
S. Vandeveld F. Vander Laenen L. Van Damme W. Vanderplasschena K. Audenaert E. Broekaert T. Vander Beken	2017	Dilemmas in applying strengths-based approaches in working with offenders with mental illness: A critical multidisciplinary review	Belgium	Multidisciplinary review of evidence pertaining to strength-based approaches to working with people with mental illness in the criminal justice system	Literature review of strength-based approaches in various disciplines including law (e.g. human rights), criminology (e.g. desistance), mental health care (e.g. recovery), forensic psychology (e.g. the Good Lives Model), special needs education (e.g. Quality of Life) and family studies (e.g. family recovery)	All disciplines should ensure an explicit shift towards abilities-oriented instead of a deficit-oriented point of view when working with offenders with mental illness
M. Quirouette	2016	Managing Multiple Disadvantages: The Regulation of Complex Needs in Emergency Shelters for the Homeless	Canada	Looks at provision of support for people who face multiple disadvantages (re: poverty, criminalization, discrimination, addiction, health/mental health, disabilities) who make up the majority of the homeless shelter clients	Policy and organizational document analysis as well as 20 in-depth interviews with emergency shelter practitioners	Rather than improving and tailoring support for this population, institutional recognition of people's "complicated" needs translates into tighter regulation and/or decreased support

<p>Noga, H., Wilmington, A., Walsh, E., Shaw, J. &amp; Senior, J.</p>	<p>2015</p>	<p>Multi-agency action learning: Challenging institutional barriers in policing and mental health services</p>	<p>The UK</p>	<p>Describes the experience of action learning as a method for engaging multi-agency staff, operating under different occupational goals and cultures, to develop shared practice-oriented outcomes within the context of the criminal justice systems response to offenders with mental illness</p>	<p>The establishment of a learning group comprising key professionals from relevant services was tasked with developing a manual and training materials to support the implementation of a mental health screening tool by frontline staff. Facilitator's reflective notes, meeting minutes and emails were analysed to examine the benefits of action research as a method to engage multi-agency staff</p>	<p>Outcome of action research process was the development of a health and justice pathway for mentally disordered offenders in police custody which informed both officers and health professionals on the safer management of this vulnerable group. The action research method was highly effective at promoting cross-disciplinary communication</p>
<p>J. B. Beasley, A. Klein, and K. Weigle</p>	<p>2016</p>	<p>Diagnostic, treatment and service considerations to address challenging behavior: A model program for integrated service delivery</p>	<p>America</p>	<p>Provides an overview of the factors that contribute to challenging behaviour for people with IDD and demonstrates how the START (Systemic, Therapeutic, Assessment, Resources and Treatment) program can address the needs of this population</p>	<p>Demographic, service usage, and outcomes data were collected on 1055 START service recipients in several locations in the United States between March 2012 and December 2013 to provide evidence of impact. Overview of model and case studies of clients also provided</p>	<p>A skilled integrated and coordinated approach to service delivery can reduce the need for acute care and emergency services from people with autism and co-morbid mental health and/or challenging behaviours</p>

<p>C. Hemmings, N. Bouras, T. Craig</p>	<p>2014</p>	<p>How should community mental health of intellectual disability services evolve?</p>	<p>The UK</p>	<p>Overview of three linked recent studies in the UK which have provided evidence on essential service provision from staff, service users and carers on the care of people with intellectual disability with co-morbid mental health issues</p>	<p>Descriptive overview of studies pertaining to the provision of services and recommendations for the evolution of community care for people with intellectual disability</p>	<p>The best opportunity for improving the mental health care of people with ID may be in seeking to work directly from within mainstream mental health services including the newer crisis, home treatment and “assertive outreach” teams .MHID staff, in order to align more closely with their mental health colleagues, split organisationally from other specialist ID health services, including those staff primarily concerned with challenging behaviour without diagnosable mental illness</p>
<p>S. T. Azar, M. C. Maggi &amp; S. N. Proctor</p>	<p>2013</p>	<p>Practices Changes in the Child Protection System to Address the Needs of Parents With Cognitive Disabilities</p>	<p>America</p>	<p>Argues for changes to ensure parents with cognitive disability are more effectively served and that staff and contract providers are better equipped support this population</p>	<p>Descriptive overview of research, policy and practice</p>	<p>Analysis of current approaches reveals a need for the development of better measurement to improve our assessment of parents with cognitive disabilities needs, and fostering of wide dissemination of behavioural approaches to intervention</p>
<p>R. Hardwick</p>	<p>2013</p>	<p>Integrated services for women through a One Stop Shop: A realist review</p>	<p>The UK</p>	<p>Provides a preliminary framework for explaining the effectiveness of One Stop Shops (OSSs) for women in the criminal justice system with complex needs</p>	<p>A ‘realist review’ applied to synthesise evidence on social programmes and policies pertaining to OSS for women in the criminal justice system in two phases: theory building and theory refinement</p>	<p>The organisational or legal structure of the service provider is less important as the values and attitudes of their staff</p>

<p>68</p> <p>E. McCauley, L. Samples</p>	<p>2017</p>	<p>Navigating the Disability Determination Process from the Perspective of Incarcerated Adults with Serious Mental Illnesses</p>	<p>America</p>	<p>Explores the impact of a jail program which assists people with serious mental health issues with the disability determination process.</p>	<p>Mixed-method study consisting of semi-structured interviews with clients (n = 25) and employees (n = 4), field observations of coordinating meetings, and administrative data collected on participants (demographics, denial and acceptance rates, recidivism, and program referrals) to understand the impact of the SSI/SSDI Outreach, Access, and Recovery (SOAR) InReach program</p>	<p>The program was effective at increasing resource access, and provided clients with feelings of hope and safety</p>
<p>F. Ahmed, K. Bechtold, G. Smith, D. Roy, A. Everett, V. Rao</p>	<p>2016</p>	<p>Program of Enhanced Psychiatric Services for Patients With Brain Injury and Neuropsychiatric Disturbances: A Proposed Model of Care</p>	<p>America</p>	<p>Examines a community- based, multidisciplinary program designed to address the physical, cognitive, and psychiatric needs of patients with brain injury</p>	<p>Overview of current support provision</p>	<p>Addressing all domains of impairment within a comprehensive, patient- centred program maximizes rehabilitation potential and facilitates true community integration of the individual with brain injury including supporting healthy relationships</p>
<p>M. Kelly, C. Humphrey</p>	<p>2013</p>	<p>Implementation of the care programme approach across health and social services for dual diagnosis clients</p>	<p>The UK</p>	<p>Presents a recent attempt to implement Community programme approaches for clients with mental illness and concurrent intellectual disability in one mental health foundation trust, to identify factors at the strategic level that facilitate or hinder the process</p>	<p>Semi-structured interviews with key informants at Trust and borough levels focused on the Trust's overall strategy for implementing CPA and on how it was being put into practice at the front line. Documentary analysis and the administration of the Partnership Assessment Tool were also undertaken</p>	<p>Six key challenges to effective implementation were identified: organizational complexity; arrangements for governance and accountability; competing priorities; financial constraints; high staff turnover and complex information and IT systems</p>

<p>Bruns et al. (2016) E. J. Bruns M. D. Pulmann A. Sather R. D. Brinson M. Ramey</p>	<p>2014</p>	<p>Effectiveness of wraparound versus case management for children and adolescents; results of a randomized study</p>	<p>Americia</p>	<p>Comparison of wraparound services and case management for adolescents with serious emotional disorders and other complexities</p>	<p>RCT comparing outcomes for youths with serious emotional disorder (SED) randomly assigned to care coordination via a defined wraparound process (n = 47) versus more traditional intensive case management (ICM; n = 46)</p>	<p>For less-impaired youths with SED, less intensive options such as ICM may be equally effective to poor-quality wraparound delivered in the absence of wraparound implementation supports and favourable system conditions. Quality of wrap-around service implementation was impacted by organizational culture and climate, and worker morale</p>
<p>T. Henning</p>	<p>2015</p>	<p>Ameliorating vulnerability arising from involvement with criminal courts</p>	<p>Australia</p>	<p>Provides an overview of major mechanisms instituted in Australia to address the experience of vulnerability arising as a corollary of involvement in Australian criminal courts</p>	<p>Descriptive overview of human rights framework relating to vulnerability, current criminal justice landscape and supports</p>	<p>The fragmented or siloed nature of current services designed to ameliorate vulnerability in the criminal justice system often render them inaccessible. A single gateway service should be implemented to facilitate access to other services. The Victorian Court Network model which provides emotional support to court users, and assists them to make contact with necessary legal and non-legal services, has the potential to address some significant deficiencies identified in the current system</p>

L. Davidson, A. C. Evans, I. Acharya- Abrahams, W. White	2014	Beyond co-occurring disorders to behavioral health integration	America	Examines the respective roles of treatment and recovery support services assisting people with co-occurring psychiatric and substance use disorders	Review of the literature pertaining to mental health and substance abuse treatments. Presents a case study of Philadelphia's Department of Behavioural Health and Intellectual disAbility Services to illustrate strategies for achieving two forms of integration: mental health and addiction and treatment and recovery supports	Successful integration of mental health and addiction services require co-location and increased collaboration, common values, a consistent approach, and a shared vision for the people they serve
H. Munthe-Kaas R. C. Berg N. Blaasvær	2018	Effectiveness of interventions to reduce homelessness	Norway	Summarises the evidence on the effectiveness of housing programs and case management to improve housing stability and reduce homelessness among people who are homeless or at-risk of becoming homeless	Systematic literature review of 43 relevant studies pertaining to homelessness interventions	Included housing programs and case management interventions reduced homelessness and improve housing stability, compared to usual services. The findings showed no indication of housing programs or case management resulting in poorer outcomes for homeless or at-risk individuals than usual services
Morton J.	2017	How working differently improved homeless people's access to healthcare	The UK	Details how a Staffordshire health inclusion team used different approaches to improve homeless people's access to healthcare and how these approaches overcame traditional barriers to care	Provides an overview of model and current research and practice in this area. Examined the admissions data for a cohort of 20 patients who were or had been homeless and who had a history of frequent attendances at the ED and compared post intervention	Aspects fundamental to success of intervention include staff attitudes, lack of stigma, flexibility, provision of transport to attend clinics, a service philosophy of seeing the individual not the addiction and joint appointments so clients could have multiple issues addressed in one visit

J. Campbell	2016	Building on mental health training for law enforcement: strengthening community partnerships	America	Describes current law enforcement training related to the high number of interactions with persons with mental illness, and provides recommendations to more effectively meet this challenge	Literature review of relevant law enforcement training programs, and case study to exemplify opportunities to improve and enhance law enforcement preparedness for the challenge of responding to persons with mental illness	Treatment centres with no-refusal policies, and a coordinating person or agency to effectively liaise among law enforcement and mental health services and stakeholders are critical enhancements to divert people with mental health issues from the criminal justice system
C. Day, A. Lampraki, D.Ridings, K. Currell	2016	Intellectual disability and substance use/ misuse: a narrative review	The UK	Focusses on prevalence, motivation and implications of substance use in intellectual disability populations as well as documenting interventions for misuse	Descriptive narrative review of research focused on substance use and intellectual disability (defined as IQ of 70 or less with onset in the developmental period)	Lack of agreement regarding prevalence. People with intellectual disability generally do not engage with generic interventions for substance misuse suggesting the need for specialised interventions. Professionals responsible for the provision of interventions identify a lack of training and support to meet the needs of this group
W. Dyer P. Biddle	2016	'Enhanced Support for High Intensity Users of the Criminal Justice System': An Evaluation of Mental Health Nurse Input into Integrated Offender Management Services in the North East of England	The UK	Evaluates a service development in the North East of England which co-located mental health nurses with two Integrated Offender Management teams	Literature review of current practice, and repeat semi-structured interviews and focus groups with twenty-three key staff responsible for the development and delivery of the IOM-MH service including Team Managers, Probation Officer Managers, Police Officers, Advanced Mental Health Practitioners, Housing Officers, Drug and Alcohol Recovery Workers, Area Safer Partnership representatives and the IOM-MH nurses	Co-location of mental health nurses increased identification and awareness of mental health issues on the part of other staff. Issues around a lack of cooperation from other services have been noted and better monitoring of effective pathways is needed

<p>Am I there yet? The views of people with learning disability on forensic community rehabilitation</p>	<p>The UK</p>	<p>Explores impact of new legislation promoting community-based rehabilitation over hospitalisation for people with intellectual disability and serious forensic needs from the perspective of this population</p>	<p>Semi-structured interviews with ten participants with intellectual disability and forensic needs subject to a community-based order</p>	<p>Mixed results were reported—some participants valued a new sense of feelings while others felt they lack control and an awareness of the rules. A strengths-based approach which allows for clear, shared goals and positive risk-taking in the context of solid risk management planning is suggested to address negatives of approach</p>
<p>M. Davis, A. J. Sheidow, M. R. McCart</p>	<p>2014</p>	<p>Reducing Recidivism and Symptoms in Emerging Adults with Serious Mental Health Conditions and Justice System Involvement</p>	<p>America</p>	<p>Pre-post-analyses revealed significant reductions in participants' MH symptoms, justice system involvement, and associations with antisocial peers</p>
<p>A. Steen D. MacKenzie</p>	<p>2017</p>	<p>The sustainability of the youth foyer model: A comparison of the UK and Australia</p>	<p>Australia</p>	<p>The additional health and justice costs to the community from homelessness and lost productivity from early school leaving are substantial. These costs could be substantially reduced by the provision of foyer-like support packages and foyer accommodation for at-risk homeless youth. Currently the Australian funding system of foyers makes them unsustainable</p>

<p>S. G. Kertesz G. Johnson</p>	<p>2017</p>	<p>Housing First: Lessons from the United States and Challenges for Australia</p>	<p>Australia</p>	<p>Examines the Housing First model which prioritises the rapid placement of clients into independent, permanent accommodation and eschews traditionally favoured requirements that clients demonstrate sobriety or success in treatment programs prior to being offered housing</p>	<p>Overview of model and presentation of evidence relating to outcomes and cost-effectiveness in the US and Australian context</p>	<p>Inconsistent findings regarding cost-effectiveness of model. Evidence from Australia shows statistically significant housing outcomes and reductions in intensity and frequency of service use relative to preintervention levels</p>
<p>M. T. Gonzalez, E. Andvig</p>	<p>2015</p>	<p>Evaluation of an integrated housing and recovery model for people with severe and persistent mental illnesses: The Doorway program</p>	<p>Australia</p>	<p>Evaluates a 3-year pilot integrated housing and recovery support program aimed at people with a severe and persistent mental illness who are 'at risk' or actually homeless</p>	<p>Interviewer-administered measurement tool designed to assess general health and social functioning of mentally ill people and the Outcomes Star (Homelessness) system which measures various aspects of the homelessness experience was used with 59 participants. Baseline measurements were performed routinely by staff at entry to the program and then at 6-monthly intervals across the evaluation period</p>	<p>The Doorway program was effective at securing housing with additional benefits in client outcomes including improved physical and mental health and social relations for the majority of participants. Reduced use and cost of health services was also documented</p>
<p>M. T. Gonzalez, E. Andvig</p>	<p>2015</p>	<p>Experiences of tenants with serious mental illness regarding housing support and contextual issues: A meta-synthesis</p>	<p>Norway</p>	<p>Documents experiences of tenants with serious mental illness regarding housing support and complex issues</p>	<p>Meta-Synthesis of 24 qualitative studies</p>	<p>Permanent housing facilitated experiences of belonging and integration with the neighbourhood and community</p>

<p>44</p>	<p>S.t J Lee, E. Crowther, C. Keating and J. Kulkarni</p>	<p>2013</p>	<p>What is needed to deliver collaborative care to address comorbidity more effectively for adults with a severe mental illness?</p>	<p>Australia</p>	<p>Focuses on sectorial collaboration to address comorbidities affecting homelessness; substance addiction; physical ill-health; unemployment; and forensic issues</p>	<p>Literature review focused on collaborative care models. Representatives of the mental health branches of each Australian state and territory health department also contacted to help identify further examples of innovative collaborative care models established within their jurisdiction</p>	<p>Housing first approaches should be prioritised. Enhanced communication between relevant sectors has been achieved through mechanisms such as the co-location of staff from different agencies to enhance sharing of expertise and interagency continuity of care, shared treatment plans and client records, and shared case review meetings</p>
<p>A. Petch, A. Cook, E. Miller</p>	<p>2013</p>	<p>Partnership working and outcomes: do health and social care partnerships deliver for users and carers?</p>	<p>The UK</p>	<p>Identifies features of partnership that particularly contributed to improved outcomes for people with complex needs</p>	<p>Conducted in partnership with three user-led organisations, Service User Research Enterprise (SURE), Central England People First and Older People Researching Social Issues which facilitated semi-structured, qualitative interviews with 230 people using services delivered in partnership between health and social care, including 63 older people, 87 people with an intellectual disability and 80 people using mental health services</p>	<p>Continuity of staff, better availability of long-term and preventative services, flexible hours and opportunities for meaningful activities were identified as facilitators to better outcomes. Co-location was seen as fundamental to most positive outcomes</p>	
<p></p>	<p></p>	<p>Serving people with complex health needs: Emerging models, with a focus on people experiencing homelessness or living in permanent supportive housing</p>	<p>America</p>	<p>Examines impact of care-coordination on homeless populations with complexity</p>	<p>Descriptive overview of 6 models of care coordination</p>	<p>Only short term impact available in current evidence base but all 6 models are shown to have a positive impact on key outcomes including better physical and mental health</p>	

B. D. Watt, G. Robin, L. Fleming & E. Graf	2013	Complex needs assessment panel and integrated support: Description and initial evaluation	Australia	Evaluates the impact of Complex Needs Assessment Panel and Integrated Support on young adults with complex needs presenting with co-occurring substance misuse, physical, personality, and/or psychological problem	a multi-method evaluation approach, 11 consumer interviews and 20 file reviews were completed appraising the service's effectiveness	Initial results show improvements relating to intervention including quality and availability of support, coordinating care, service integration, flexibility in service delivery and responding to consumer's needs
M. Cornes, J. Manthorpe, L. Joly, S. O' Halloran	2014	Reconciling recovery, personalisation and Housing First: Integrating practice and outcome in the field of multiple exclusion homelessness	The UK	Looks at the impact of the recovery model on homeless populations with mental health and/or substance abuse issues	Researcher 'tracked' the experiences of 34 service users in each site over a 6 month period using interviews and case file reviews	Recovery model can result in the exclusion of people with unresolved needs. A more personalised and inclusive practice model, which can accommodate 'recovery' alongside those for maintenance and prevention is needed to support those with more complex needs
C. Malvaso, P. Delfabbro	2015	Young people with complex needs leaving out-of-home care: Service issues and the need to enhance practice and policy	Australia	Identifies policy and practice improvements for youth with multiple and complex needs, such as mental health problems and disabilities	Twenty-nine individual interviews and focus groups were conducted with people working in organisations who have knowledge of, or contact with, young people leaving care (N = 66)	Placement instability, high staff turnover and lack of awareness of borderline issues were cited as barriers to appropriate care. An understanding that 'one size does not fit all' is necessary
M. Brown, Z. Chouliara, J. MacArthur, A. McKechnin, S. Mack, M. Hayes, J. Fletcher	2016	The perspectives of stakeholders of intellectual disability liaison nurses: a model of compassionate, person-centred care	The UK	Proposes a model of person-centred care based on the experiences of people with intellectual disabilities and comorbidities, family and paid carers	Semi structured interviews and focus groups were conducted with (1) patients with intellectual disabilities or paid carers (n = 13)	liaison nurses are an innovative mechanism to support compassionate and person-centred care for patients with intellectual disabilities when attending general hospitals. Providing a 'human interface' mitigated barriers of poor communication and fear of services

<p>46</p>	<p>E. J. Bruns, J. S. Walker, A. Bernstein, E. Daleiden, M. D. Pullmann &amp; B. F. Chorpita</p>	<p>2013</p>	<p>Family voice with informed choice: Coordinating wraparound with research-based treatment for children and adolescents</p>	<p>America</p>	<p>Looks at the impact of wraparound services for youths with extremely complex needs and their families</p>	<p>literature review of care coordination and wraparound models, with a focus on theory and research that indicates the need to better connect wraparound-enrolled children and adolescents to evidence-based treatment (EBT)</p>	<p>Better role definition, more frequent review of progress and tailored treatments could be achieved by appropriate training in, and use of, Managing and Adapting Practice (MAP) knowledge management system</p>
<p>F. P. Chen</p>	<p>2014</p>	<p>Developing community support for homeless people with mental illness in transition</p>	<p>America</p>	<p>Studies the impact of critical time intervention (CTI), a time-limited, short-term psychosocial rehabilitation program designed to facilitate the critical transition from institutional to community settings for homeless populations with mental health conditions</p>	<p>Inaccurate diagnosis, unavailability of suitable service for specific conditions (e.g., cognitive impairment in addition to psychiatric conditions), or difficulty in matching clients' preferences (e.g., race and gender of a provider) were identified as barriers to finding appropriate community support</p>	<p>Conducted interviews with 12 critical time intervention staff working with homeless people with mental illness</p>	<p>Policy makers need to take a holistic and long-term perspective to achieve needed changes for population with complex needs</p>
<p>M. D. Naylor</p>	<p>2015</p>	<p>An assessment of state-led reform of long-term services and supports</p>	<p>America</p>	<p>Looks at the limitations of current long-term services and supports (LTSS) focusing on the three main strategies: no institutional care, integrating payment and care delivery, and realigning incentives through market-based reforms</p>	<p>Qualitative overview and analysis of the primary care system using an evaluation model across 9 domains</p>	<p>Qualitative overview and analysis of the primary care system using an evaluation model across 9 domains</p>	<p>Policy makers need to take a holistic and long-term perspective to achieve needed changes for population with complex needs</p>

L. B. Dixon, Y. Holoshitz, I. Nossel	2016	Treatment engagement of individuals experiencing mental illness: review and update	America	Reviews various evidence-based, recovery-oriented treatment techniques impact on service engagement for populations with mental illness and additional complexity (homelessness, substance abuse)	Literature review of evidence pertaining to hard to engage populations with mental health	To adequately implement innovative models mental health workers need to be open-mindedness and flexible
F. Barbabella, M. G. Melchiorre, S. Quattrini, R. Papa, G. Lamura	2016	How can eHealth improve care for people with multimorbidity in Europe	Sweden	Discusses potential of Ehealth to support the needs of people with co-morbidities	Overview of policies relating to Ehealth for people with multimorbidity and recommendations	Improving access to health care services: especially in rural and deprived areas with low (or no) availability of health care services, eHealth tools can enable remote consultations, therapies and rehabilitation. Specific policies should be develop to support its implementation
J. Reeve, L. Cooper, S. Harrington, P. Rosbottom and J. Watkins	2016	Developing, delivering and evaluating primary mental health care: the co-production of a new complex intervention	The UK	Describes the implementation of a model of care designed to assess and manage mental health and wellbeing in a primary care setting	Observation of meetings between AIW Health and participating practices, between case workers and patients, as well as weekly and monthly practice meetings of AIW team. Interviews with staff and patients and review of service database	New model initially resulted undefined roles for staff. Authors highlighted the importance of continuous flexibility and adaptability required

<p>48</p>	<p>C. E. Vanderboom, D. E. Holland, C. M. Lohse, P. V. Targonski, and E. A. Madigan</p>	<p>2014</p>	<p>Enhancing patient-centered care: Pilot study results of a community care team intervention</p>	<p>America</p>	<p>Describes the design and impact of a short-term, intensive, patient-centred community care team intervention that fosters active partnerships among community services, a nurse care coordinator (NCC) from a HCH, and a patient and their support person (family member or other informal support) using principles developed by the Wraparound Initiative</p>	<p>56 community-dwelling older adult patients and 31 support persons were randomly assigned to receive either the community care team intervention or usual primary care services. Physical, emotional, and social health outcomes were assessed pre and post treatment for both groups</p>	<p>Nurse Care Coordinator (NCC) provided a pivotal connection between patients, the Health Care Homes (HCH), and community providers</p>
<p>I. Weiber, M. Eklund, P. A. Tengland</p>	<p>2015</p>	<p>The characteristics of local support systems, and the roles of professionals, in supporting families where a mother has an intellectual disability</p>	<p>Sweden</p>	<p>Describes 'Collaboration, Development, and Parenthood groups' for parents with intellectual disability from the perspective of professionals working with this population</p>	<p>Focus group interviews involving 29 professionals working in services supporting mothers with intellectual disability were conducted and analysed using content analysis</p>	<p>Engaging a coordinating person who initiates and maintains the group and durable structures not reliant on one person. Results in enhanced quality of support and reduce child removals</p>	
<p>J. E. Johnson, Y. Chatav Schonbrun, M. E. Peabody, R. T. Shefner, K. M. Fernandes, R. K. Rosen, C. Zlotnick</p>	<p>2015</p>	<p>... experiences with prison care and aftercare for women with co-occurring mental health and substance use disorders: Treatment, resource, and systems integration</p>	<p>America</p>	<p>Develops a community-based case management in brain injury taxonomy to provide a common language and understanding of case management for use in quality analysis, policy, planning and practice</p>	<p>Semi-structured interviews with 14 correctional staff working with re-entering women with COD within one state prison and aftercare system</p>	<p>This population has needs unique to those just with substance abuse issues. Lack of relational support, trauma and discontinuation of medication were all identified as triggers for relapse. Continuity of care through the re-entry period through contact with the same provider before and after release, (2) providing assistance in the critical period of 24–72h after release, (3) catching slips before they escalated, and (4) offering long-term support was pivotal</p>	

L. Edgren, K. Barnard	2015	Achieving integrated care through CAS thinking and a collaborative mindset	Sweden	Presents findings that providers in health and social care who have adopted complex adaptive systems thinking (CAS thinking) and have a collaborative mindset are in a better position to achieve integrated care than those who adopt reductionist approaches	Qualitative conceptual overview of collaboration	Readiness to collaborate is key to risk minimisation and integrated care
V. Stergiopoulos, A. Schuler, R. Nisenbaum, W. deRuiter, T. Guimond, D. Wasylenki, J. S. Hoch, S. W. Hwang, K. Rouleau and C. Dewa	2015	... an integrated collaborative care model vs. a shifted outpatient collaborative care model on community functioning, residential stability, and health service use ...	Canada	Compares the outcomes of two shelter-based collaborative mental health care models for men experiencing homelessness and mental illness: (1) an integrated multidisciplinary collaborative care (IMCC) model and (2) a less resource intensive shifted outpatient collaborative care (SOCC) model	Quasi-experimental study with 142 participants, 70 from IMCC and 72 from SOCC were enrolled and followed for 12 months. Outcome measures included community functioning, residential stability, and health service use	Improvements were seen in both programs including community functioning, residential stability, hospitalizations, emergency department visits and community physician visits, with no significant differences between groups over time on these outcome measures
M. Kirst, K. Francombe Pridham, R. Narrandes, F. Matheson, L. Young, K. Niedra & V. Stergiopoulos	2015	Examining implementation of mobile, police-mental health crisis intervention teams in a large urban center	Canada	Documents the strengths and weaknesses of Mobile Crisis Intervention Teams (MCITs) when responding to individuals experiencing mental health crises	Interviews and focus groups with 54 participants: Thirty-five percent were team members (police officers or nurses), 23% were police partners, 16% were community stakeholders, 12% were program managers, 7% were hospital partners, and 7% were program funders	Respectful interaction with consumers, cross-sector training and collaboration, and ensuring clarity in program mandate and staff roles were key aspects of intervention success

<p>D. Sestoft, M. F. Rasmussen, K. Vitus, L. Kongsrud</p>	<p>2014</p>	<p>The police, social services and psychiatry cooperation in Denmark--a new model of working practice between governmental sectors. A description of the concept, process, practice and experience</p>	<p>Denmark</p>	<p>Evaluates a new model of working practice between three public sectors, the local Police Department, Social Services and Psychiatry/Mental Health Services (PSP) and its impact on vulnerable populations</p>	<p>structured interviews, focus group discussions and observations, was performed in four selected municipalities in Denmark with a mixture of police, user organisations and managers</p>	<p>Willingness to collaborate was fundamental to success of model. In order to avoid breaching the law on information sharing, inclusion of more stakeholders should be done with care</p>
<p>F. Earl, K. Cocksedge, B. Rheeder, J. Morgan &amp; J. Palmer</p>	<p>2015</p>	<p>Neighbourhood outreach: a novel approach to Liaison and Diversion</p>	<p>The UK</p>	<p>Evaluates the initial outcomes from the Cornwall Criminal Justice Liaison and Diversion Service (CJLDS) which includes a pilot Neighbourhood Outreach scheme to support police interactions with vulnerable individuals with suspected mental illness</p>	<p>A retrospective cross-sectional survey using baseline clinical and demographic information from all new referrals into the CJLDS in the first nine months' operational data, including a six month follow-up of the initial three months' to assess the impact of intervention</p>	<p>Intervention saw a reduction in the number of contacts with police across all areas of activity, with an overall highly statistically significant reduction of 40% (<math>p &lt; .0001</math>). It is of interest to note that the most significant reduction was in the custody and court appearances, suggesting a substantial reduction in criminal activity</p>
<p>A. Venville, A. M. Sawyer, M. Long, N. Edwards &amp; S. Hair</p>	<p>2015</p>	<p>Supporting People with an Intellectual Disability and Mental Health Problems: A Scoping Review of What They Say About Service Provision</p>	<p>Australia</p>	<p>Reviews peer-reviewed research that investigates the formal support experiences of adults with an intellectual disability and mental health problems</p>	<p>Literature review of evidence pertaining to supports of people with comorbid mental health and intellectual disability, categorised by service type and social justice issues</p>	<p>Dearth of evidence in this area. Findings reiterate that this population often experience distress and alienation in mainstream inpatient units, and in emergency departments. Services should prioritise respect and dignity of users and integrated care</p>

H. Whiteford, G. McKeon M. Harris S. Diminic D. Siskind R. Scheurer	2014	System-level intersectoral linkages between the mental health and non-clinical support sectors: a qualitative systematic review	Australia	Looks at system-level intersectoral linkages involving mental health services and non-clinical support services, and documents barriers and facilitators to effective care coordination	A systematic, qualitative review of studies describing attempts to coordinate the activities of multiple service agencies aimed at supporting populations with persistent mental health issues at the policy, program or organisational level	Facilitators to care coordination include service co-location; and blended funding initiatives to ensure funding aligns with program integration; formalised interagency collaborative agreements; formalised training of staff to ensure shared knowledge and attitudes. Barriers include inadequate funding and technology; unrealistic workloads; 'turf issues'
E. L. Whittle, K. R. Fisher, S. Reppermund, R. Lenroot, J. Trollor	2017	Barriers and Enablers to Accessing Mental Health Services for People With Intellectual Disability: A Scoping Review	Australia	Identification of barriers and facilitators to accessing mental health services for people with an intellectual disability	Systematic review of evidence regarding barriers or enablers to access, mental health services, and intellectual disability	Interagency collaboration, and training and education of staff were identified as key facilitators to access
Lisa Brophy, C. Hodges, K. Halloran, M. Grigg, M. Swift	2014	Impact of care coordination on Australia's mental health service delivery system	Australia	Explores best practice in mental health care coordination with a focus on the Australian initiative Partners in Recovery	Descriptive	Successful models of care coordination requires well-trained and enthusiastic practitioners with a sophisticated appreciation of current barriers to care
S. Wilson K. McKenzie E. Quayle G. Murray	2014	A systematic review of interventions to promote social support and parenting skills in parents with an intellectual disability	The UK	Examines interventions for parents with intellectual disability designed to strengthen social relationships and those teaching parenting skills	Literature review of evidence pertaining to interventions for parents with ID	Limited evidence base but current findings suggest behavioural based interventions are more effective than less intensive forms such as lesson booklets and the provision of normal services

M. Bogenschutz	2014	"We find a way": challenges and facilitators for health care access among immigrants and refugees with intellectual and developmental disabilities	America	Examines experiences migrants with cognitive impairment accessing health care	Interviews and participant observation conducted with individuals with developmental disabilities from 3 different immigrant communities	Barriers to access included difficulty finding accurate information on insurance and service providers, troubles with coordinating multiple specialist services, and a lack of cultural competence in all levels of health service provision. Facilitators include linguistically and culturally sensitive practitioners, and systems such as schools that helped to coordinate care
J. Summers, C. Bartha, P. Desarkar, L. Duggan, J. Fineczko, L. Golding, A. Shahrami, C. Uranis	2016	Inter-Professional collaborative care: A way to enhance services for adults with intellectual disability and/or autism spectrum disorder and mental health problems	Canada	Describes an inter-professional mental health service for adults with intellectual disability and/or autism spectrum disorder	Descriptive overview of the Adult Neurodevelopmental Service and its key components	Found interdisciplinary teams resulted in better outcomes for this population as each profession's contributions to care and decision making are modified, enhanced or changed based on input from other members of the team. Strong leadership to clarify roles and ensure team's share values and goals is essential to intervention's success

each code, b) refinement of code definitions, and c) additional subcodes.

## **Responding to complex support needs: People, service and system factors**

This section documents the key elements of support provision for people with cognitive disability who have complex support needs as identified in the evidence base. The findings are presented utilising the adapted EST framework, using groupings at the levels of person, service and system. Across these levels, observations are presented regarding identified factors that may facilitate or be a barrier to effective policy and practice.

### **Person level: Individuals with complex support needs**

The evidence base overwhelmingly identifies individualised and person-centred care as a central enabler of effective support provision, with this tailored to the needs, personal preferences, values, goals and challenges experienced by an individual with complex support needs (Ahmed et al., 2016; Barnao, 2013; Beasley et al., 2016; Bowers et al., 2017). This approach links to evidence that successful models encourage 'personal growth' by emphasising motivation and confidence (Browning et al., 2016; Davidson et al., 2014; Davies et al., 2016), a sense of belonging and increased community engagement (Dixon et al., 2016; Gonzalez and Andvig, 2015; Wylie and Griffin, 2013), meaningful activities (Cornes et al., 2014) and the creation of supportive and ongoing relationships (Davis et al., 2016; de Vet et al., 2017; Johnson et al., 2014; Urbis, 2015). An important element of these relationships, especially pertaining to practitioners and staff, was continuity (Hardwick, 2013; Johnson et al., 2015; Padwa et al., 2016). When possible and desired by the person, families and broader networks of support should be engaged in the process to assist with clear communication of plans (Ahmed et al., 2016; Davis et al., 2016). The development of accessible information that reflects the cultural specifics of targeted populations (McIntyre et al., 2017) and which, ideally, is created through coproduction with people with disability and complex support needs (Olsen et al., 2016), significantly contributed to the successful implementation of models of care at the person level.

The literature also consistently cites barriers to effective support for people with disability and complex support needs as being associated with difficulties on the part of those supporting them to conceptualise individuals as situated within multiple interconnected systems (Day et al., 2016; McCauley

and Samples, 2017; Quinlan and Smele, 2017). For example, people diagnosed with mental illness often struggle to find adequate housing, hold employment, gain access to both mental and physical health care and lack transportation, which in turn results in further marginalisation (Brown et al., 2016; McCauley and Samples, 2017; Nicholas et al., 2017). Despite an increasing focus on integrated care, interrelated and compounding complexities often result in individuals having to navigate uncoordinated or siloed systems with little to no support (Bogenschutz, 2014; Hardwick, 2013; Kelly, 2017; Sestoft et al., 2014; Whiteford et al., 2014). Transitions between, for example, primary care and specialist services were identified as points of high service dropout (Padwa et al., 2016); or those remaining in services become 'stuck' in services that are ill-equipped and inappropriate for long-term support, such as emergency shelters or the criminal justice system (Dyer and Biddle, 2016; Quirouette, 2016). It has been found that these person-level difficulties are exacerbated by a lack of accessible or culturally relevant information (Bogenschutz, 2014; McIntyre et al., 2017; Olsen and Carter, 2016), a reluctance on behalf of the individual to engage with mainstream services (Day et al., 2016; de Vet et al., 2017; Dyer and Biddle, 2016) and negative experiences due to staff attitudes (Davies et al., 2016; Venville et al., 2016; Quirouette, 2016). Additionally, the evidence base consistently referenced reports of the person with complex support needs and/or their support networks experiencing marginalisation in decision-making processes relating to their needs (Keller, 2016; Kelly, 2017; Nicholas et al., 2017; van Rensburg and Fourie, 2016; Venville et al., 2015).

### **Person level: Practitioners**

The ability of those working with people with complex support needs to recognise and respond to the complex support needs of people with disability is fundamental to successful support provision. Bowers et al. (2017) described a perceived willingness to advocate for the person's wishes as also being a pivotal component of support. Themes of receptive listening, inclusiveness and genuine openness to collaboration featured frequently throughout the literature as exemplars of good practice (Davidson et al., 2014; Dixon et al., 2016; Edgren and Barnard, 2015; Gibson et al., 2016; Hardwick, 2013; Nicholas et al., 2017; Urbis, 2015). A collaborative approach for practitioners was evidenced by a preparedness to adopt an inclusive mindset that valued the varied expertise of multidisciplinary teams, often facilitated through frequent team meetings (Ahmed et al., 2016; Hardwick, 2013; Home Office,

2014; Henning, 2016; Keesler, 2014) and the provision of feedback regarding how staff implement new and collaborative ways of working (Reeve et al., 2016). These skills, and practitioners' ability to better respond to the varied needs of complex populations, were enhanced by a readiness to engage in training and skills development (Henning, 2016; Keesler, 2014; Kirst et al., 2015; Lee et al., 2013). Notable training examples included: a) training for two clinical psychologists in a community forensic team for people with cognitive disability (Browning et al., 2016); b) specialist officer training to recognise mental illness and cognitive disability and learn de-escalation techniques for law enforcement staff (Campbell et al., 2017); c) specific training in how to identify, communicate with and provide legal (and other) support to people with Acquired Brain Injury for criminal justice staff (Landsell, 2018); and d) training for homeless services and Indigenous community services in a culturally safe tool (the Guddi Protocol) to assess neurocognitive disability affecting young Aboriginal and Torres Strait Islander people (McIntyre and Townsend, 2017).

Key challenges that affected the capacity of practitioners and staff to successfully implement good practice were also a focus of the evidence. A lack of specialist clinical knowledge and expertise relating to complex populations was cited as a factor influencing fidelity to best practice (Day et al., 2016; Keller, 2016; Mason et al., 2018; Whittle et al., 2017). Clinical knowledge deficits were exacerbated by the additional complexity of rurality (Caxaj, 2016; Stephens et al., 2014), lack of guidance regarding how to engage necessary additional services to promote intersectoral collaboration (Duffy et al., 2016; Edgren and Barnard, 2015; Mason et al., 2018) and preconceived attitudes pertaining to complex populations, especially those in forensic settings (Davies et al., 2016; Dixon et al., 2016; Dyer and Biddle, 2016). These issues exist within an environment of unrealistic expectation placed on underresourced, time-scarce and often poorly paid staff (Johnson et al., 2015; Mason et al., 2018; Quinlan and Smele, 2017; Rhodes et al., 2013). Professional judgement and an ability to work flexibly to meet the needs of a diverse client base were restricted by organisational structures preoccupied with procedural, managerial and 'tick-the-box' types of assessments (Duffy et al., 2016).

## Service level

While the structure and framing of models of interventions presented in the evidence were varied, common components were linked to the effective provision of support to populations with complex

support needs. Collaborative interagency models were defined as partnerships with shared understanding and commitment (Davidson et al., 2014; Gardiner et al., 2017; Kerman et al., 2017). These models typically involved frequent multidisciplinary and multiagency meetings (Ahmed et al., 2016; Campbell et al., 2017; Henning, 2016) or multiagency learning groups that encouraged practitioners to critically reflect on collaboration with partner agencies and exchange professional expertise (Noga et al., 2016).

Interagency collaboration was further enhanced by secure information-sharing systems (Barbabella et al., 2017; Centre for Disability Research and Policy, University of Sydney CDRP and Young People in Nursing Homes National Alliance YPINHNA (2014); Bruns et al., 2015; Morton, 2017), shared practice guidelines and formal protocols (Duffy et al., 2016; Mason et al., 2018; McIntyre et al., 2017), streamlining of administrative processes (Davidson et al., 2014; McKinnon et al., 2016) and allowing sufficient time to collaborate and for team-building (Keesler, 2014; Lee et al., 2013)—all of which required adequate funding (Kerman et al., 2017; Landsell, 2018; Till et al., 2015). Co-location of services to provide a single point of access and a gateway to a variety of services (Dooris et al., 2013; Dyer and Briddle, 2016; Hardwick, 2015; Whiteford et al., 2013) was identified as effective in facilitating improved information sharing between service users and services and between services and partner agencies (Petch et al., 2013). The facilitation of better information sharing allowed improved assessments of risk and need as a more complete picture of clients was achieved through coordinated, accurate and timely intelligence from a wider range of services (Home Office, 2014). Important, too, were transparent decision-making processes with clear referral pathways (Henning, 2016; Mason et al., 2018; McKinnon et al., 2016) and an identified liaison person to act as a champion for and coordinate effective interagency collaboration (Brown et al., 2016; van Duijn et al., 2018; Padwa et al., 2016; Whittle et al., 2017). This collaboration resulted in increased client understanding of the services available and enhanced appropriateness of the services provided (Gibson et al., 2016; Home Office, 2014). The provision of appropriate services reduced strain on sectors not designed for the provision of specialised support, like the criminal justice system and hospital emergency departments (Fisher et al., 2016). The importance of flexibility identified at the practitioner level is mirrored at the service level, with the literature describing a need for agile service delivery to reflect target populations' needs (Gibson et al., 2016; Munce et al., 2014; Weiber et al., 2016), such as less 'formal'

services and out-of-hours support offered to young people with complex needs (Malvaso and Delfabbro, 2015).

Barriers to the successful implementation of practice models at the service level included administrative and bureaucratic impediments such as an organisational culture unreceptive to relational approaches to complex populations (Keesler, 2014; Rhodes et al., 2013), rigid screening and assessment requirements and intake procedures that can result in the denial of services for those deemed too 'complex' (Dyer and Biddle, 2016; Quirouette, 2016) and long waiting lists (Campbell et al., 2017; Kirst et al., 2015; Johnson et al., 2015). Also noted was an overemphasis on risk (Dyer and Briddle, 2016; Kelly, 2017), sometimes coupled with poor guidance regarding what constituted 'risk' (Keller, 2016). In addition, a lack of clarity around service 'readiness' was reported at the organisational level, often resulting in staff making arbitrary assessments of the likelihood of success or assigning 'red flags' that could disproportionately stigmatise and penalise individuals with complex support needs (Quirouette, 2016, 331).

Further identified barriers were lack of role clarity (Brown et al., 2016; Kirst et al., 2015; Mason et al., 2018; van Duijn et al., 2018; Urbis, 2015), poor interprofessional practices such as an unwillingness to share information between agencies (Dyer and Briddle, 2016; Mason et al., 2018) and subpar co-working between specialist clinicians and mainstream services (Hemmings et al., 2014). Also described was a lack of managerial guidance and support around policy and practice (Day et al., 2016; Keller, 2016). Additional interagency blockages included poor communication and information sharing due to untrusting attitudes or 'turf' wars (Dooris et al., 2013; Hoeft et al., 2018; Home Office, 2014; Mason et al., 2018; Stephens et al., 2014; van Rensburg and Fourie, 2016), incompatible communication or information technology systems (Kelly, 2016; van Duijn et al., 2018) and inadequate time allocated to coordinate across services (Day et al., 2016; Mason et al., 2018; Quinlan and Smele, 2017). It was also noted that inappropriate service design and evaluation resulted in the exclusion of users (Kelly, 2016; Michalski, 2017; Whittle et al., 2017), inadequate responses to, or acknowledgement of, diverse cultural needs and 'one-size-fits-all' service models (Bogenschutz, 2014; Caxaj, 2016; Hoeft et al., 2018; Malvaso and Delfabbro, 2015; McIntyre et al., 2017) and geographical challenges that increased resourcing, infrastructure and staffing shortages (Stephens et al., 2014; Hoeft et al., 2018; Whittle et al., 2017).

## Systems level

Collaborative systems-level reforms were widely identified as being key to good practice in supporting people with complex support needs. To achieve this, the evidence base suggests increased involvement of end users in system design, evaluation, policymaking and funding (Davidson et al., 2014; Home Office, 2014; McIntyre and Townsend, 2017; Roberts et al., 2013), systems and databases designed to capture complexity (Hardwick, 2014) and utilisation of technological innovations to overcome geographical barriers such as telemedicine-based collaborative care, which can be used to provide previously unavailable specialty consultations and facilitate training and education for local staff (Caxaj, 2016; Hoeft et al., 2018). Hoeft et al. (2018) suggested that the establishment of legitimate working partnerships, not only across sectors but also with culturally specific organisations, tribal councils and Indigenous groups, could mitigate compounding the marginalisation of vulnerable populations. Additionally, greater attention to early identification and intervention is vital to adequately address the needs of people with disability and complex support needs, alongside cross-sectoral education regarding identification and support (Dyer and Briddle, 2016; Landsell et al., 2018; McKinnon et al., 2016; Munce et al., 2014). All these solutions require adequate funding and time to develop innovative, integrated and tailored services and systems, including blended and flexible funding initiatives (Gibson et al., 2016; Lee et al., 2013; Malvaso and Delfabbro, 2015; Mason et al., 2018; Munce et al., 2014; Stephens et al., 2014; Whiteford et al., 2014). Alongside this, performance monitoring and data collection are required to better capture the impact of specialist interventions targeting these groups (Barbabella et al., 2017; Dooris et al., 2013; Gibson et al., 2016; Hardwick, 2014). Increased use of population-level data by services and funders can also ensure that services are geographically situated in the communities with the most need (Padwa et al., 2016).

The overarching policy, governance and funding contexts within which services operate also presented impediments to good practice. Identified systemic barriers included the marginalisation of specific groups who are disproportionately exposed to risk factors for poor mental health, substance abuse, suicide and injury, such as people with disability and complex support needs (Quinlan and Smele, 2017), Aboriginal people with disability (McIntyre and Townsend, 2017; Stephens et al., 2014; Quirouette 2016) and people from culturally and linguistically

diverse backgrounds (Bogenschutz, 2014). This marginalisation was often compounded by social issues including poverty and discrimination (Caxaj, 2016; Gardiner et al., 2017; Henning, 2016; Johnson et al., 2015), which services frequently did not adequately consider (Davidson et al., 2014; Quirouette, 2016). Additionally, people with complex support needs living in rural and remote communities were identified as experiencing specific barriers to service access due to poor availability of geographically proximate specialist services (Barbabella et al., 2017; Bellon et al., 2015; Caxaj, 2016; Hoeft et al., 2018). Community prejudice and resistance to the support of populations with complex support needs were also cited as contributing to the systematic marginalisation of these groups (Johnson et al., 2015; McCauley and Samples, 2017). Additionally, systems and policies that do not support collaborative models (Barbabella et al., 2017; Day et al., 2016), reductive policy and reporting requirements that stifle input and innovation at the service and service-user levels (Dixon et al., 2016; Hardwick, 2014; Urbis, 2015) and entrenched silos, boundaries and gatekeeping (Duffy et al., 2016; Home Office, 2014; Whittle et al., 2017) constrain the proper implementation of models designed to provide integrated care for populations with compounding complexity. The systemic chronic underfunding of services was consistently identified as the underlying cause of the inability of staff and organisations to implement best practice at the person and service levels (Munce et al., 2014; Quirouette, 2016).

## Discussion: Principles for Good Practice

This systematic review of the factors underpinning effective support provides insights into the foundational principles of an integrated system of responses that address the needs of people with cognitive disability who have complex support needs. As identified in the introduction, people in this group are users of multiple services with a frequency and intensity of engagement disproportionate to their relatively small numbers. They have typically been excluded from individual services and service sectors due to restrictive eligibility criteria and siloed responses and, as a group, experience significant barriers to receiving continuity of support such that it is rarely achieved, particularly over the long term. In Australia, the introduction of the NDIS ostensibly may provide greater options for this group but, in reality, may perpetuate their marginalisation from both disability specialist and mainstream services as they struggle to access the scheme (Dowse and Dew, 2016).

An integrated response was clearly established in the literature as the preferred framework for delivering support to this group and yet, as described in many of the articles and reports, it is seemingly extremely difficult to achieve and sustain implementation of this type of system. The barriers to achievement are well documented in this paper and those we reviewed. So, too, are the facilitators of an integrated service system model as applied to specific groups, service types or sectors. Its key underpinnings have been shown to be a strengths-based relational model, collaborative interagency servicing and systems-wide policy coherence. The ways these factors may coalesce to enhance responses are explored via three key principles set out below.

### Inclusive person-centred engagement

The engagement of service users as co-designers of the services they seek to use is fundamental to building an integrated service system that is acceptable to, and will be used by, people with cognitive disability and complex support needs, their families and carers. Engagement of this kind taps into the strengths of the person, building motivation and confidence and developing skills they may apply to other situations. The evidence is clear that input from service users is optimal for service system development and implementation. Some service users will require support—from family, peers or an independent advocate—and/or accessible, culturally specific materials and resources to fully engage in service design and use. Service users invariably want their practical needs (e.g., housing, transport, mobility, finances) to be addressed, preferably via a ‘one-stop-shop’ through which they can access a range of support and develop a sense of belonging. They want sustained relationships with workers who listen to them and whom they trust and respect. On occasions, the support a person requires may be specialised and sourced from multiple systems (e.g., drug and alcohol rehabilitation or legal aid). The role of a ‘case manager’ is identified as being crucial in this regard to assist the person to develop strategies to help them avert or manage future risks and crises. Workers/practitioners play a key role in engaging service users in the design and use of services. Workers are best equipped to do this if they bring to the relationship a collaborative mindset, an understanding of person-centred approaches and sufficient knowledge of different service sectors to assist the person to effectively navigate their service pathway. Preparedness to engage in, and the availability of, training and development will ensure

workers are equipped with knowledge and skills based on the best available evidence.

### Collaborative interagency working

A holistic, culturally inclusive and safe collaborative interagency model is needed to enable identification of service gaps and promote cooperative working with community partners to ensure optimal care and support for service users with cognitive disability and complex support needs. The evidence indicates that, for collaborative interagency service models to be successful, they require strong support from senior leadership to champion and lead the shift to a partnership model involving shared understanding and transparent decision-making processes. Just as service users must be involved in service design and operation, so, too, should workers. Service model changes must be underpinned by adequate funding and allow sufficient time for implementation and adjustment so they become embedded into practice. Long-term management and monitoring are essential to maintain service focus and quality alongside continuity of care and support. Physical or virtual co-location of multidisciplinary services is key to providing service users with a single point of access and a gateway to a variety of supports. Alongside co-location, agreed interagency protocols covering referral pathways, information-sharing systems, practice guidelines and administrative processes including joint meetings can assist in achieving interconnected working. Collaborative cross-sector training also ensures a mix of staff skillsets and a shared knowledge base.

### Integrated systems

Coordinated and coherent cross-departmental policy, governance and funding approaches are central to the implementation of person-centred and interagency service-level models. Siloed systems are incompatible with the development of the holistic, person-centred, integrated service systems identified as the optimal model for addressing the needs of service users with cognitive disability and complex support needs. Reform of collaborative systems requires end users and practitioners to be involved in design and implementation. Adequate funding and time are required to develop innovative, integrated and tailored services and systems, and performance must be monitored, evaluated and adapted to capture complexity and ensure good practice. Systems must be equitably applied, with recognition of the specific barriers faced by service users and workers in rural and remote areas and those from marginalised

groups including Aboriginal and Torres Strait Islanders and people from culturally and linguistically diverse backgrounds. ‘Blue-sky’ thinking is required at the systems level to build infrastructure to fill identified gaps.

### Conclusion

A key strength of the approach adopted in this review is its comprehensive interrogation of multiple sectors and populations, which yielded an overview of the intersecting barriers and facilitators experienced by people with cognitive disability and complex support needs. The large number of sources also represented a limitation, as we were required to rigidly apply our inclusion criteria to reduce the reviewed papers to a manageable number. Inevitably, this means some potentially useful examples were discarded. However, this rigorous process ensured capture of the key components identified in excluded as well as included articles. Importantly, the lack of longitudinal outcome data has been a key barrier to assessing the impact of interventions.

Nonetheless, the review presented here reaffirms the fact that individuals with cognitive disability and complex support needs face particular challenges in accessing adequate and effective support across multiple sectors. Agencies are frequently insufficiently flexible to meet the individual’s range of needs and lack capacity for collaborative and integrated responses to the complexity of these needs. However, the issue is beyond the qualities of any one agency or sector; rather, in large part, this is due to systemic inflexibility, which works against the implementation of an integrated support system to ensure this group receives the multiple and simultaneous support they require. The implication of this system incapacity is that people with cognitive disability who have complex support needs risk continued exclusion and poor support experiences.

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