A conceptual review of engagement in healthcare: Relevance to rehabilitation

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A conceptual review of engagement in healthcare and rehabilitation

Purpose: This review sought to develop an understanding of how engagement in healthcare has been conceptualized in the literature in order to inform future clinical practice and research in rehabilitation. A secondary purpose was to propose a working definition of engagement.

Method: EBSCO and SCOPUS databases and reference lists were searched for papers that sought to understand or describe the concept of engagement in healthcare or reported the development of a measure of engagement in healthcare. We drew on a Pragmatic Utility approach to concept analysis.

Results: Thirty-one articles met the criteria and were included in the review. Engagement appeared to be conceptualized in two inter-connected ways: as a gradual process of connection between the healthcare provider and patient; and as an internal state which may be accompanied by observable behaviors indicating engagement.

Conclusion: Our review suggests engagement to be multi-dimensional, comprising both a co-constructed process and a patient state. While engagement is commonly considered a patient behavior, the review findings suggest clinicians play a pivotal role in patient engagement. This review challenges some understandings of engagement and how we work with patients, and highlights conceptual limitations of some measures.

Introduction

'Patient engagement' is a term increasingly used in rehabilitation and the broader healthcare context [1]. Several authors have argued the benefits of rehabilitation are limited if the patient is not fully engaged in the process [2, 3]. For example, levels of engagement have been associated with improved functional improvement during inpatient rehabilitation and levels of functioning after discharge. Levels of engagement have also been associated with lower levels of depression and with higher levels of affect, adherence and attendance [2, 4]. In addition, within clinical rehabilitation practice, the 'engaged patient' is perhaps identified as being the 'desirable patient', one who is easy for providers to work with [5]. On the face of it, these findings suggest that patient engagement is both positive and desirable.

While the term 'engagement' is increasingly used in clinical practice and research, there has been relatively little critical exploration of what 'engagement' means and the underpinning concept/s the term may represent. Research of engagement appears to be in its early days, with little consensus on what engagement is, what leads to a patient being perceived as engaged or disengaged or indeed, how engagement occurs. The term engagement is used in multiple ways in the literature, variably referring to patient actions and behaviors such as accessing services [6], retention within services [7, 8], enthusiasm [2] and self-management of health conditions [8], or

referred to a hospital's provision of health resources and social media usage [9], and to the interaction between the patient and healthcare provider [10].

It could be argued that it does not matter if engagement is used and defined in different ways. However, we suggest this variability presents challenges for researchers seeking to explore ways of operationalizing or measuring engagement, and for clinicians trying to facilitate engagement. If engagement is a key factor influencing outcomes of rehabilitation, something that is prioritised in clinical practice or that is measured or evaluated as is proposed in the literature and clinical practice, then clarity is in fact essential.

The aim of this conceptual review was to develop a comprehensive understanding of how engagement has been conceptualised in work explicitly exploring engagement in healthcare. Our purpose was to collate and synthesize existing conceptualisations of engagement, so as to better support clinicians in reflecting on engagement-related issues in clinical practice and to underpin future research and practice through guiding interpretation and applicability of existing literature. A second purpose was to propose a definition of engagement as further guidance for future research exploring how best to operationalize and facilitate engagement.

Methods

Methodology

Over the last two decades, there has been an increasing focus on exploring 'taken-for-granted' concepts and terms, seeking to elucidate and clarify them in order to inform clinical practice, future research and to challenge how we think about concepts [11-13]. Concept analysis can help identify the features and complexities inherent within a concept [14]. This review drew on Morse's Pragmatic Utility approach to concept analysis [12, 15], an approach to concept analysis which explores the usefulness of the concept for clinical practice and/or research [15]. Concept analysis involves literature review, critical appraisal, coding, analytic questioning and data synthesis in order to inform the development of a clinically applicable definition and/or model of the concept [16, 17].

Data sources

We used a systematic approach to literature searching to identify articles for inclusion in the review. The search was conducted using EBSCO databases (specifically: Biomedical Reference Collection: Basic, CINAHL Plus, Health Business Elite, Health Source – Nursing/Academic Edition, MEDLINE, Psychology and Behavioural Sciences Collection, SPORTDiscus and Dentistry & Oral Sciences Source) and SCOPUS. The search terms are provided in Appendix A. A citation search was undertaken to capture articles not found in the database searches with the citation lists of all included articles being reviewed along with citation tracking of all included articles using SCOPUS.

Articles were included if they reported a theoretical or empirical study where the stated objective was to: (a) understand or describe the concept of patient engagement in hospital or community-based healthcare where there was an on-going therapeutic interaction, beyond medical testing and medication management; or (b) if the paper described the development of a measure of engagement for use in health-care where there was on-going therapeutic interaction as defined above. Only articles published in English-language, peer-reviewed journals between 1990 and 2012 were included. They were excluded if they: (a) solely sought to explore barriers and facilitators to, or influencing factors of engagement, without also explicitly providing a theoretically-informed or data-derived definition of engagement; (b) explored engagement in child or adolescent services given their engagement is likely to differ from adults undergoing rehabilitation [18]; and/or (c) explored engagement in prison or forensic settings due to there being other complexities (such as mandated treatment) in these settings that distinguish them from standard hospital or community-based healthcare [19].

The titles and abstracts of all retrieved articles were reviewed for relevance and to determine whether they possibly or probably met the inclusion criteria. The full text of articles that possibly or probably met the inclusion criteria were retrieved and read to confirm eligibility for inclusion in the review. The first author (FB) had responsibility for data selection and analysis. The second author (NK) reviewed a selection of articles to confirm eligibility. In cases of disagreement, the fourth author (KM) also reviewed the article in question and a consensus regarding eligibility was reached through discussion. Included papers function as data for the purposes of conceptual review; our use of the term 'data' in this paper refers to the included articles.

Data extraction and synthesis

Each included article was read in its entirety to gain a broad understanding of how engagement had been defined and/or conceptualized [12]. Following this, a more comprehensive analysis of how engagement had been conceptualized was undertaken. This drew on principles of analytic questioning [12, 15] which saw us develop questions to guide the analysis, for example, querying how patient and healthcare provider participants defined engagement and exploring how these definitions differed. This process facilitated close examination of definitions and characteristics of engagement and the process, outcomes and behaviors associated with engagement. The findings were recorded using matrices which facilitated comparison within and between articles [17, 20]. Core themes were extracted and refined using a process of constant comparison [21] in order to synthesize data. These core themes were then synthesized to form a theoretically-derived definition of engagement.

Quality appraisal

Each included article was appraised for quality using an appropriate appraisal tool except in cases where none were available, i.e. for theoretical papers. Articles reporting measures of engagement were appraised using Holmbeck and Devine's [22] checklist. Qualitative papers were appraised with the relevant Critical Appraisal Skills Programme assessment tool [23]. Articles were not excluded

based on methodological quality, consistent with this approach to concept analysis [12]. However, the quality of the research will be discussed as it provides information about the current state of research and knowledge in this area.

Rigor

There was regular discussion between all co-authors regarding the emerging conceptualization of engagement. Preliminary findings were presented to three panels of experienced rehabilitation researchers and practitioners representative of all rehabilitation professions. This offered multiple opportunities for peer review and member checks of methodology and interpretation [24]. Their comments prompted us to ensure the presentation of the findings were consistent with the methodological approach used and that there was sufficient justification for the findings.

Results

Literature search results

The search and subsequent screening process is illustrated in Figure 1. In total, 1141 abstracts were retrieved and reviewed for relevance. Following initial review of abstracts, 1082 were excluded primarily because the paper did not seek to explore the concept of engagement or did not explore engagement in a therapeutic encounter. A number of articles used the *word* 'engagement' without exploring it as a concept. For example, while the word 'engagement' was used within a discussion of adherence to a physiotherapy program [25] and also in an article exploring compliance with HIV testing and medication management [26], neither paper presented a definition of engagement nor explored the concept itself. The full text of 59 articles were retrieved following which a further 31 papers were excluded. The reasons for exclusion were that articles solely explored barriers and facilitators to, or influencing factors of engagement, without also exploring the *construct* of engagement [e.g. 27]; or were not about engagement in an on-going therapeutic encounter, but rather considered engagement in healthcare planning, medical consultations or activities [e.g. 28].

Insert Figure One about here

In total, 28 articles met the inclusion criteria. Two further articles were identified through reviewing reference lists of these articles [29, 30] and another identified through citation searching [31] resulting in 31 articles being included in the review. The 31 articles included in the review represented a range of designs including theoretical, measurement and qualitative studies. Seventeen articles were from the field of mental health; the other 14 were from rehabilitation, speech-language therapy, chronic care, social work and primary

care. Details of the included articles, including core information about how engagement was described within each, are summarized in Table One.

Insert Table One about here

Quality of included papers

The quality of the included papers varied. Qualitative papers received high scores on the CASP analysis [23] and demonstrated robust approaches to study design, data collection and analysis. In contrast, there were short-comings in the design of many of the measures available in the literature, specifically that six of the ten measures were not developed from robust conceptual understandings of engagement [22, 32-36]. Instead, they were based on clinician and researcher perceptions of what engagement might mean. For example, the items from one measure were drawn from an existing form used by a clinical team and from discussions with team members about what was thought to be relevant to client engagement [34]. By not considering patient perceptions of engagement, questions are raised about the face and content validity of these measures. These limitations were somewhat mediated by early trialing and refinement of some measures [33-35, 37]. Had there been more consideration of patient perspectives in the design process, and had the item development been based on robust empirical and/or theoretical studies of engagement, as done by Macgowan [38] and as recommended by McDowell [39], they may be considered more reliable and valid. Four measures did not explicitly define engagement, the construct at the center of the measure [32, 34, 35, 40]. The lack of a conceptual base and lack of clarity around the construct may limit how much these indicators can be said to be reliable indicators of engagement [22].

Conceptualisations of engagement: 'Engaging with' and 'Engaged in'

Engagement was conceptualized in two inter-related ways, as a process ('engaging with') and a state ('engaged in'). It consistently appeared to be co-constructed through interaction [41]. The process of engagement centered on the development of a connection between the patient and clinician or patient and service while the state of engagement was an internal state experienced by the patient expressed via a number of observable behaviors. Core components of each aspect of engagement are summarized in Table Two and described in further detail below.

Insert Table Two about here

The process of engagement: 'Engaging with'

The process of engagement was described as a gradual, often "invisible" [10] process of "being drawn in and having a connection to an activity or person" [42]. The development of a mutually trusting relationship or 'connection' [29, 30, 42-47] between the two parties in the therapeutic encounter appeared crucial in facilitating a state of engagement [29-32, 41, 42, 44, 46-50]. Danzl and colleagues suggested the connection "grounded and supported" the patient's engagement in rehabilitation [42] while Konrad said it established a "relational foundation" for therapeutic intervention [50]. The clinician appeared to have a crucial role in the process of engagement [30, 31, 43-45, 48, 49, 51, 52]; several authors suggested this required significant skill [31, 50]. Communication appeared central [10, 48] with the patient feeling able to talk and tell their story and sensing this was listened to [40, 43, 45, 48, 50] and understood [48, 50]. Also identified as key to 'engaging with' were responsiveness to the patient [50], seeing them as a person rather than a diagnosis or impairment [30, 43, 45, 46, 48, 49, 52, 53], demonstrating a genuine interest in getting to know the person and their story [50, 53], addressing core needs [33, 47], valuing their expertise [29, 30, 43, 46] and strengths [31].

As such, 'engaging with' was considered to be a way of working on the part of the clinician or service [31, 44, 45, 53]. Clinician interest was perceived to be demonstrated through behaviors such as sitting down with the patient to talk about their story, being present, respectful, attentive, going above and beyond, doing more than just the bare basics of the job [43, 46, 52] and showing empathy [54] resulting in the patient feeling known, respected and not judged [52]. Patients appeared to value clinicians who they viewed as knowledgeable [43, 45] and credible [49] which helped them trust in the clinician [37, 52, 55]. Both patients and providers suggested the connection was enhanced if the clinician was perceived to be engaged themselves [43] and passionate about their job [49]. Within the context of engagement, one paper suggested that the relationship between the provider and patient needed to be developed before commencing the "therapeutic sequence" [56]. The presence of the relationship appeared to create an atmosphere of collaboration and connection which then supported the patient to take action [42, 44, 46, 50, 53, 56] and become engaged in the specific components of the therapy program or intervention [31, 41, 54] or simply to continue to attend the service [52].

Data from patients and clinicians suggested the process of engaging in healthcare started at, or before, the initial contact with the service and continued throughout the episode of care [48, 49, 57]. It did not appear to cease once the patient became involved with the service or in a therapy task; instead it was fluid and could further develop, or in fact diminish over time without on-going work and from both parties [10, 30, 43, 44, 48, 58]. It was said to be maintained through an internal feedback loop, which involved the patient making on-going decisions to remain engaged [58] and through the clinician's way of working [52, 57]; this could include periods of intermittent disengagement from services [43].

With regard to published measures of engagement, the interaction and relationship between clinician and patient was considered within some measures, for example, the 'quality of the relationship' [32, 34] 'attitudes toward staff' [33], and the 'client's perception of being listened to' [40]. Of note is that items in the measures commonly focused on the patient's actions and perceived attitudes despite the body of evidence detailed above emphasizing the clinician's actions and perceived attitudes. An alternative indicator of the relationship was identified by Chase and colleagues [29]. Their discourse analysis study suggested the use of the pronoun 'we' by patients

when discussing engagement could indicate an engaged relationship, signaling that the patient had a sense of agency and an active role in the relationship. In contrast, the pronouns 'them' and 'us' were proposed as markers of disengagement with the patient positioned as a passive recipient of care compared with the "all-powerful" health providers .

The state of engagement: 'Engaged in'

Beyond the process of engaging, the state of engagement was described as a patient state of "being ... within what you're doing" [10] "doing ... participating ... in action beyond talk" [10] in a therapy task or therapeutic encounter . It appeared to result from the process of engagement [10, 30]. Kemppainen and colleagues [37] suggested the key influence to be how the patient perceived the attitudes and behaviors of the clinician. It appeared to involve an internal state of engagement which may be accompanied by observable behaviors indicating engagement. Roy and colleagues argued that both should be present in order for the patient to be considered 'engaged' [57].

Engagement was discussed in conjunction with treatment retention [51, 54] and active participation in the therapy tasks and process [10, 30, 36-38, 42, 55, 57, 58]. However, it was suggested that patients needed to do more than just participate [58]. [57]. 'Engagement' appeared to involve active commitment [41, 45, 49, 58], enthusiasm, energy and effort [2, 36, 42, 58], and required the patient to have a high level of vested interest or investment in the activity or therapy [2, 41, 58]. That said, the state of engagement appeared to be somewhat fluid. The papers included in this review indicated there may be a continuum of engagement, from tolerating treatment [44], agreeing to what is offered, being "involved in the proposed treatment" [34], collaborating and contributing to decision-making for healthcare [38, 55], actively participating in care [10, 30, 36-38, 42, 55, 58] and finally, being emotionally invested in the therapeutic encounter [2, 41, 49, 58]. In a group situation, engagement also involved the development of relationships with other patients and active collaborative work to address each other's needs [38]. It was said to be influenced by environmental factors [54, 58] and intrinsic factors such as accepting the need for treatment, perceiving the benefits of treatment [40, 58] and self-efficacy [54].

A number of behaviors have been suggested as markers of patient engagement, predominantly in published measures of engagement. These include: willingness to participate [33], contributions to the session [38], retention in a service [51] and attendance at therapy [2, 34, 38, 40, 55]. Compliance with, and adherence to, recommendations has been suggested as a marker of engagement [40, 49, 55]. However, such an interpretation is challenged by patient participants in a study of seemingly engaged mental health service users, many of whom reported they complied because they did not feel they had a choice and lacked the confidence to discuss the issues with their providers [45]. Similarly, Roy and colleagues considered attendance may demonstrate "pseudo-engagement" [57]. Other markers of engagement included in measures of engagement included: the quality of relationship and communication with the therapy provider [32, 34, 35, 38, 55], relationships with others [33], attitudes toward help [33], perceived attitude toward therapy [2, 36, 57], perceived usefulness of treatment [32, 34], persistence and determination in activities [36], ability to assert their identity and individual experience [45], and collaboration in therapy planning [35, 55]. Simmons-Mackie and Kovarsky [41] focused on the specific patient behaviors that may

indicate engagement such as gaze, tone, use of non-verbal behaviors such as gesture and body orientation, engrossment in an activity and attention to others present.

A proposed definition of engagement

Synthesis of the core aspects of engagement as detailed above results in a theoretically and empirically derived definition of engagement:

Engagement is a co-constructed process and state. It incorporates a process of gradually connecting with each other and/or a therapeutic program which enables the individual to become an active, committed and invested collaborator in healthcare.

Discussion

Review findings indicate that engagement is multi-faceted and co-constructed. Key features of engagement identified in this review include: (a) engagement as a process and a state; (b) engagement as co-constructed, occurring through relationship with the clinician; and (c) the state of engagement involves an internal state expressed through observable behaviors. While these features are derived from the engagement literature included in this review, we will discuss each of these in light of broader health and rehabilitation literature to assist with contextualization and critical reflection on the findings.

This conceptual review proposes engagement appears to be both a process and a state. This challenges the view that engagement is solely a patient behavior, instead indicating it may be a fluid internal state influenced by a number of factors including the rehabilitation practitioner. The growing evidence regarding the role of the therapeutic relationship in rehabilitation outcomes [59] and the increasing calls for person-centered or relationship-centered care [60, 61] give weight to the finding that engagement includes a relational process. The review indicated that through a process of connection, the patient may move toward a state of engagement, but they may at times also move away from this state [43], highlighting the need to critically consider both the process and state when reflecting on patient engagement. Viewing engagement as a process, not just a static behavior, could challenge how clinicians view and work with the so-called 'disengaged' patient. Disengagement (or failure to engage) is commonly portrayed as a patient 'problem' and responsibility. This ignores the role of the healthcare provider, therapeutic process or environment in disengagement [62]. Such a label may have ramifications for on-going participation in rehabilitation [63] by influencing clinician attitudes and behaviors toward the individual [64] and potentially influencing decisions about on-going rehabilitation [5]. Viewing engagement as a process and asking, 'how can we facilitate engagement?' may promote a more reflective, relational approach to working with such patients. By highlighting the role of the therapeutic dyad in the engagement process, engagement is identified as being about more than 'just' the patient, hence challenging the individualist perspective that engagement is solely attributable to the patient [47, 62, 65].

A strong review finding was that engagement is co-constructed; that the healthcare provider plays a significant role in patient engagement. This finding is not dissimilar to studies of engagement conducted in alternate settings such as education, where engagement has been identified as requiring connections between the different parties; these relationships facilitate engagement in the education process and tasks [66, 67]. Similarly, in homeopathy, connections have been described as the core process that helped patient engagement in care [68]. Taking the view that engagement is co-constructed through interpersonal connection opens up new ways of thinking about engagement in clinical practice. As we discussed above, it has implications for how we view and work with the 'disengaged' patient. It also draws attention to the clinician's own engagement. Several papers included in the review suggesting patient perceptions of *clinician engagement* may be important in their decision to engage [43, 49]. This is supported by other literature for example, a study of pediatric care suggested clinician engagement could impact on how they worked with their patients. This paper also suggested that clinician engagement could be influenced by their perception of the patient and their behavior, supporting the notion that engagement is co-constructed [69]. Further exploration of clinician engagement in rehabilitation may inform understanding of this complex concept. Indeed, a measure of clinician engagement may assist clinicians to reflect on their own practice, provide insight into how they could develop patient engagement and make possible research that seeks to explore engagement-related variables impacting on patient outcomes.

The review highlighted that the state of engagement included an internal state (which appeared to be dynamic and on a continuum) expressed through observable behaviors. Viewing engagement as being on a continuum may provide a framework that enables clinicians to consider both where the patient is on the continuum and what may influence, or what is influencing their movement along the continuum. It may also prompt the clinician to consider their own role in facilitating patient engagement. However, it raises the possibility that 'full' engagement (incorporating collaboration, contribution, active participation and emotional investment) could be seen as the desired endpoint and failure to reach that point could negatively reflect on the patient and/or the clinician. It is not known whether this level of engagement is essential, whether there are some circumstances where tolerating rehabilitation may be sufficient, or whether full engagement using this definition is universally applicable or may in fact reflect a Western model of healthcare [70]. Nor is it known if this is feasible in the context of rehabilitation where, for a number of reasons, patients may have difficulty demonstrating engagement due to the effects of the very condition that brought them to rehabilitation. One such example is difficulty collaborating or contributing to decision-making due to the presence of cognitive or communication impairments from a stroke or brain injury. In these circumstances, participants may be emotionally invested in therapy [2, 41, 49, 58] but unable to independently participate in some aspects of rehabilitation. This arguably should prompt reflection on both the state and behaviors, and consideration of how practitioners and services may facilitate both. However it also sounds a caution about 'full engagement' being seen the desired endpoint of the engagement continuum, given the current lack of evidence to support this.

Implications for measuring engagement

Viewing engagement as both a process and a state has very real implications for measurement. If engagement is in fact a co-constructed process and state, measures that consider engagement

should include items that better represent this multi-dimensional concept. Existing measures indicate a tendency to focus on solely the state of engagement. Current measures may demonstrate how a patient is behaving in a therapeutic encounter, but fail to capture the more process-oriented indicators of engagement such as the behaviors and attitudes of clinicians, and the therapeutic interaction taking place. This raises questions about the validity of current measures and whether they accurately measure engagement.

This review also highlights that we may need to consider how we best measure the internal state of engagement, if indeed we can. Existing measures of patient engagement are predominantly completed by the clinician with the exception of the Singh O'Brien Level of Engagement Score [40] and Gillespie's self-report scale [32]. The latter found that patients and providers rated engagement differently. While this may reflect issues with the measure itself (for example the patient version had not undergone preliminary testing), or that it may be measuring a different construct; it may also reflect that patients and clinicians have different perspectives of what engagement is. We would argue that clinicians are not well-positioned to judge this subjective, internal state and that their 'assessment' of a patient's engagement may at best provide only a partial view of engagement and at worst, reflect an inaccurate picture [45]. It could be anticipated that the patient may have a different perspective that should be considered [32, 40, 57, 66].

Related concepts

The purpose of this review was to explore the concept of engagement itself rather than explore how it differs from related concepts [14]. However, given that engagement was commonly used alongside terms such as 'compliance', 'involvement' and 'participation' [46, 71], it is important to briefly consider how these concepts may differ. For example, compliance refers to "the extent to which the patient's behavior matches the [clinician's] recommendations" [72] while involvement exists on a continuum from being passive recipients of information through to autonomously making decisions [73]. Participation infers the patient is in an active role, for example participating in decisions regarding therapy or discharge [2, 74, 75]. Based on our review of engagement, while these constructs may form part of 'engagement', we would suggest that in isolation, they do not adequately represent it in its entirety, a conclusion supported by Roy, Gourde & Couto [57]. While compliance may represent a behavior associated with engagement, it does not represent many other aspects of engagement and as Chase and colleagues [45] highlighted, compliance is a complex construct in and of its own right. We suggest the term 'engagement' may sometimes be used as a euphemism for 'compliance' and 'adherence' - perhaps being seen as more acceptable or inclusive than these more pejorative terms. Further exploration of how 'engagement' maps with other concepts may be beneficial.

Limitations of review

There are some limitations which must be acknowledged. The term 'engagement' was not well-indexed in databases, making it less amenable to keyword searches. As a result, despite scoping and the review itself expanding the synonyms included in our search terms, it is possible that not all

relevant articles were retrieved. Non-indexed reports or books would also be anticipated to contribute to our understanding of engagement. We excluded papers that simply explored barriers and facilitators to engagement without providing a definition of engagement derived from theory or data. Further examination of this literature in the future may further refine our understanding of engagement and could contribute to development of a model of engagement in rehabilitation. We also acknowledge that we focused on engagement in therapeutic interactions; exploring engagement from other perspectives such as how engagement is considered at a systemic or service level may offer different perspectives on engagement.

Future research

This review raises a number of areas for consideration in future research. With regard to the process of engagement, it would be useful to know if there are particular components of the process that are essential or non-negotiable. Identifying these components would be beneficial to support clinicians to operationalize them. The temporal aspects we have highlighted concerning the *process* of engagement do not appear to be well-captured by existing measures, commonly administered by the clinician at only one time point despite the literature indicating engagement may fluctuate over time [43, 44]. It may also be that it is beneficial to measure engagement at different time-points. The review also included papers from diverse clinical populations including primary healthcare and a variety of rehabilitation settings including substance abuse, mental health and physical rehabilitation. There may be aspects of engagement that are unique to each clinical group; this has not been explored within this review and may be worthy of investigation in future research. The role of the patient-clinician relationship in engagement has been suggested as key in this review and further study of this would be valuable. Furthermore, providing a working definition of engagement provides a platform for considering existing literature and planning future research exploring the operationalization, facilitation and measurement of engagement.

Conclusion

This conceptual review highlights that engagement is a complex, multi-dimensional construct. The findings contrast with rhetoric in clinical practice which commonly sees engagement and failure to engage as solely attributable to the client. Proposing engagement as a co-constructed process and state challenges some understandings of engagement and makes explicit the clinician's role in engagement. As such, this provides a starting point for clinicians to consider engagement in rehabilitation. Viewing engagement as a co-constructed concept provides a rationale for shifting the responsibility to engage from the patient, to the therapeutic dyad. Challenges in engagement may be seen as a prompt to critically reflect on what the clinician is doing and how the two parties are working together and consider new ways of working in order to promote engagement in rehabilitation.

Implications for rehabilitation

- Engagement appears to be a multi-dimensional construct, comprising both a coconstructed process and a patient state.
- Conceptualising engagement as a co-constructed process may help clinicians be more aware of their role in patient engagement and sees the responsibility to engage shift from the patient to the therapeutic dyad.
- Challenges in engagement may be a prompt to reflect on how the clinician is working and whether different ways of working may be beneficial.

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References

- 1. Horton, S., et al., Engagement and learning: An exploratory study of situated practice in multi-disciplinary stroke rehabilitation. Disability and Rehabilitation, 2011. **33**(3): p. 270-279.
- 2. Kortte, K., et al., *The Hopkins Rehabilitation Engagement Rating Scale: Development and psychometric properties.* Archives in Physical Medicine and Rehabilitation, 2007. **88**(7): p. 877-884.
- 3. Medley, A. and T. Powell, *Motivational Interviewing to promote self-awareness and engagement in rehabilitation following acquired brain injury: A conceptual review.*Neuropsychological Rehabilitation, 2010. **20**(4): p. 481-508.
- 4. Lequerica, A., et al., *Psychometric properties of the rehabilitation therapy engagement scale when used among individuals with acquired brain injury.* Rehabilitation Psychology, 2006. **51**(4): p. 331-337.
- 5. Bright, F., Does how we think about therapy matter? Voices and values in speech language therapy, in New Zealand Speech-language Therapists' Association Professional Development Seminar 2013: Hamilton, New Zealand.
- 6. Basta, T., E. Shacham, and M. Reece, *Psychological distress and engagement in HIV-related services among individuals seeking mental health care.* AIDS Care, 2008. **20**(8): p. 969-976.
- 7. Couper, M.P., et al., Engagement and retention: measuring breadth and depth of participant use of an online intervention. Journal of Medical Internet Research, 2010. **12**(4): p. e52-e52.
- 8. Mattox, M., Axial Exchange debuts Patient Engagement Index (PEI) hospital ranking, in Axial Exchange2013.
- 9. Axial Exchange. *Patient Engagement Index Methodology*. 2013 [cited 2013 8 October 2013]; Available from: http://axialexchange.com/engagement/methodology/.
- 10. Hitch, D., *Experiences of engagement in occupations and assertive outreach services*. British Journal of Occupational Therapy, 2009. **72**(11): p. 482-490.
- 11. Morse, J., Exploring the theoretical basis of nursing using advanced techniques of concept analysis. Advances in Nursing Science, 1995. **17**(3): p. 31-46.
- 12. Morse, J., Exploring pragmatic utility: Concept analysis by critically appraising the literature, in Concept development in nursing: Foundations, techniques and applications, B. Ridgers and K. Knafl, Editors. 2000, Saunders: Philadelphia, PA. p. 333-352.
- 13. Rodgers, B. and K. Knafl, eds. *Concept development in nursing: Techniques and applications*. 2000, Saunders: Philadelphia.
- 14. Morse, J., et al., *Concept analysis in nursing research: A critical appraisal.* Scholarly Inquiry for Nursing Practice: An International Journal, 1996. **10**(3): p. 253-277.
- 15. Weaver, K. and J. Morse, *Pragmatic utility: Using analytical questions to explore the concept of ethical sensitivity.* Research and Theory for Nursing Practice, 2006. **20**(3): p. 191-214.
- 16. Penrod, J. and J. Hupcey, *Enhancing methodological clarity: Principle-based concept analysis.* Journal of Advanced Nursing, 2005. **50**(4): p. 403-409.
- 17. Hawkins, S. and J. Morse, *The praxis of courage as a foundation for care.* Journal of Nursing Scholarship, 2014. **46**(4): p. 1-8.
- 18. Anderson, B.J. and H.A. Wolpert, *A developmental perspective on the challenges of diabetes education and care during the young adult period.* Patient Education and Counseling, 2004. **53**(3): p. 347-352.
- 19. Rempel, M. and C. Destefano, *Predictors of engagement in court-mandated treatment.* Journal of Offender Rehabilitation, 2002. **33**(4): p. 87-124.
- 20. Bright, F., et al., *Understanding hope after stroke: A systematic review of the literature.* Topics in Stroke Rehabilitation, 2010. **18**(5): p. 490-508.
- 21. Charmaz, K., *Constructing grounded theory: A practical guide through qualitative analysis* 2006, Thousand Oaks, CA: Sage.

- 22. Holmbeck, G. and K. Devine, *Editorial: An author's checklist for measure development and validation manuscripts.* Journal of Pediatric Psychology, 2009. **34**(7): p. 691-696.
- 23. Critical Skills Appraisal Programme. *Ten questions to help you make sense of qualitative research*. 2010 [cited 2012 19 December 2012]; Available from: http://www.casp-uk.net/wp-content/uploads/2011/11/CASP Qualitative Appraisal Checklist 14oct10.pdf.
- 24. Mays, N. and C. Pope, *Qualitative research: Observational methods in health care settings.* BMJ, 1995. **311**(6998): p. 182-184.
- 25. Crook, P., et al., *Adherence to group exercise: physiotherapist-led experimental programmes.* Physiotherapy, 1998. **84**(8): p. 366-372.
- 26. Gardner, E.M., et al., *The spectrum of engagement in HIV care and its relevance to test-and-treat strategies for prevention of HIV infection.* Clinical Infectious Diseases, 2011. **52**(6): p. 793-800.
- 27. Kayes, N.M., et al., Facilitators and barriers to engagement in physical activity for people with multiple sclerosis: A qualitative investigation. Disability and Rehabilitation, 2011. **33**(8): p. 625-642.
- 28. McCabe, R., et al., *Engagement of patients with psychosis in the consultation: Conversation analytic study.* British Medical Journal, 2002. **325**(7373): p. 1148-1151.
- 29. Chase, M., et al., 'These psychiatrists rate themselves as gods': Disengagement and engagement discourses of people living with severe mental illness. Communication and Medicine, 2010. **7**(1): p. 43-53.
- 30. Priebe, S., et al., *Processes of disengagement and engagement in assertive outreach patients: Qualitative study.* British Journal of Psychiatry, 2005. **187**(NOV.): p. 438-443.
- 31. Drury, N. and T.A. Munro, *Crisis engagement in mental health: A New Zealand Māori contribution*. International Journal of Mental Health Nursing, 2008. **17**(5): p. 317-325.
- 32. Gillespie, M., et al., *Clients' engagement with assertive outreach services: A comparison of client and staff perceptions of engagement and its impact on later engagement.* Journal of Mental Health, 2004. **13**(5): p. 439-452.
- 33. Park, M., et al., *The measurement of engagement in the homeless mentally ill: The Homeless Engagement and Acceptance Scale HEAS.* Psychological Medicine, 2002. **32**(5): p. 855-861.
- 34. Hall, M., et al., *Brief report: The development and psychometric properties of an observer-rated measure of engagement with mental health services.* Journal of Mental Health, 2001. **10**(4): p. 457-465.
- 35. Meaden, A., et al., *Developing a measurement of engagement: The Residential Rehabilitation Engagement Scale for Psychosis.* Journal of Mental Health, 2012. **21**(2): p. 183-192.
- 36. Lequerica, A.H., et al., *Psychometric properties of the rehabilitation therapy engagement scale when used among individuals with acquired brain injury.* Rehabilitation Psychology, 2006. **51**(4): p. 331-337.
- 37. Kemppainen, J.K., et al., *Quantifying patient engagement with nurses: validation of a scale with AIDS patients*. Outcomes Management for Nursing Practice, 1999. **3**(4): p. 167-174.
- 38. Macgowan, M., *The Group Engagement Measure: A review of its conceptual and empirical properties.* Journal of Groups in Addiction and Recovery, 2006. **1**(2): p. 33-52.
- 39. McDowell, I., *Measuring health: A guide to rating scales and questionnaires*. 3rd ed2006, Oxford, UK: Oxford University Press.
- 40. O'Brien, A., et al., *The development and validation of the SOLES, a new scale measuring engagement with mental health services in people with psychosis*. Journal of Mental Health, 2009. **18**(6): p. 510-522.
- 41. Simmons-Mackie, N. and D. Kovarsky, *Engagement in clinical interaction: An introduction*. Seminars in Speech and Language, 2009. **30**(1): p. 5-10.
- 42. Danzl, M.M., et al., *Facilitating neurorehabilitation through principles of engagement*. Journal of Allied Health, 2012. **41**(1): p. 35-41.

- 43. Mallinson, R.K., S. Rajabiun, and S. Coleman, *The provider role in client engagement in HIV care*. AIDS Patient Care and STDs, 2007. **21**(SUPPL. 1): p. S-77-S-84.
- 44. Addis, J. and C. Gamble, *Assertive outreach nurses' experience of engagement*. Journal of Psychiatric & Mental Health Nursing, 2004. **11**(4): p. 452-460.
- 45. Chase, M., et al., 'In sight, out of mind': The experiences of the compliantly engaged community psychiatric out-patient. Community Mental Health Journal, 2012: p. 1-10.
- 46. Duchan, J., *Engagement: A concept and some possible uses.* Seminars in Speech and Language, 2009. **31**(1): p. 11-17.
- 47. Watkins, K.E., A. Shaner, and G. Sullivan, *The role of gender in engaging the dually diagnosed in treatment.* Community Mental Health Journal, 1999. **35**(2): p. 115-126.
- 48. Wright, N., P. Callaghan, and P. Bartlett, *Mental health service users' and practitioners'* experiences of engagement in assertive outreach: A qualitative study. Journal of Psychiatric and Mental Health Nursing, 2011.
- 49. Staudt, M., G. Lodato, and C. Hickman, *Therapists talk about the engagement process*. Community Mental Health Journal, 2012. **48**(2): p. 212-218.
- 50. Konrad, S.C., Loss in translation: A model for therapeutic engagement and intervention with grieving clients. Families in Society, 2009. **90**(4): p. 407-412.
- 51. Padgett, D.K., et al., Engagement and retention in services among formerly homeless adults with co-occurring mental illness and substance abuse: Voices from the margins. Psychiatric Rehabilitation Journal, 2008. **31**(3): p. 226-233.
- 52. Woolhouse, S., J. Brown, and A. Thind, 'Meeting people where they're at': Experiences of family physicians engaging women who use illicit drugs. Annals Of Family Medicine, 2011. **9**(3): p. 244-249.
- 53. Cumbie, S.A., V.M. Conley, and M.E. Burman, *Advanced practice nursing model for comprehensive care with chronic illness: Model for promoting process engagement.* Advances in Nursing Science, 2004. **27**(1): p. 70-80.
- 54. Godlaski, T.M., et al., A qualitative exploration of engagement among rural women entering substance user treatment. Substance Use and Misuse, 2009. **44**(1): p. 62-83.
- 55. Tait, L., M. Birchwood, and P. Trower, *A new scale (SES) to measure engagement with community mental health services.* Journal of Mental Health, 2002. **11**(2): p. 191-198.
- Zubialde, J.P., D. Eubank, and L.D. Fink, *Cultivating engaged patients: a lesson from adult learning.* Families, Systems & Health: The Journal of Collaborative Family HealthCare, 2007. **25**(4): p. 355-366.
- 57. Roy, V., M.A. Gourde, and E. Couto, *Engagement of men in group treatment programs: A review of the literature*. Groupwork, 2011. **21**(1): p. 28-45.
- 58. Lequerica, A. and K. Kortte, *Therapeutic engagement: A proposed model of engagement in medical rehabilitation* American Journal of Physical Medicine and Rehabilitation, 2010. **89**(5): p. 415-422.
- 59. Kayes, N., et al., Whose behaviour matters? Rethinking practitioner behaviour and its influence on rehabilitation outcomes, in Rethinking Rehabilitation, K. McPherson, B. Gibson, and A. LePlege, Editors. in press.
- 60. Frankel, R. and T. Quill, *Integrating biopsychosocial and relationship-centered care into mainstream medical practice: A challenge that continues to produce positive results.*Families, Systems & Health 2005. **23**(4): p. 413-421.
- 61. Cott, C., *Client-centred rehabilitation: What is it and how do we do it?* Physiotherapy, 2008. **94**(2): p. 89-90.
- 62. van Hal, L., et al., A sociological perspective on "the unmotivated client": Public accountability and professional work methods in vocational rehabilitation. Disability and Rehabilitation, 2012. **35**(10): p. 809-919.

- 63. Koekkoek, B., et al., What makes community psychiatric nurses label non-psychotic chronic patients as 'difficult': Patient, professional, treatment and social variables. Social Psychiatry and Psychiatric Epidemiology, 2011. **46**: p. 1045-1053.
- 64. Hill, T., How clinicians make (or avoid) moral judgements of patients: Implications of the evidence for relationships and research. Philosophy, Ethics and Humanities in Medicine, 2010. **5**(1): p. 11.
- 65. Maclean, N. and P. Pound, *A critical review of the concept of patient motivation in the literature on physical rehabilitation*. Social Science and Medicine, 2000. **50**(4): p. 495-506.
- 66. Furlong, M. and S. Christenson, *Engaging students at school and with learning: A relevant construct for all students.* Psychology in the Schools, 2008. **45**(5): p. 365-368.
- 67. Pianta, R., B. Hamre, and J. Allen, *Teacher-student relationships and engagement: Conceptualizing, measuring and improving the capacity of classroom interactions*, in *Handbook of Research on Student Engagement*, S. Christencon, A. Reschley, and C. Wylie,
 Editors. 2012, Springer: New York, NY. p. 365-386.
- 68. Eyles, C., G. Leydon, and S. Brien, *Forming connections in the homeopathic consultation*. Patient Education & Counseling, 2012. **89**(3): p. 501-506.
- 69. Meltzer, L., et al., *Staff engagement during complex pediatric medical care: The role of patient, family and treatment variables.* Patient Education & Counseling, 2009. **74**(1): p. 77-83.
- 70. Charles, C., et al., *Cultural influences on the physician-patient encounter: The case of shared treatment decision-making.* Patient Education & Counseling, 2006. **64**(4): p. 262-267.
- 71. Roberts, K., *Exploring participation: Older people on discharge from hospital.* Journal of Advanced Nursing, 2002. **40**: p. 413-420.
- 72. Horne, R., et al., *Concordance, adherence and compliance in medicine taking* 2005, National Co-ordinating Centre for NHS Service Delivery and Organisation R&D.
- 73. Thompson, A., *The meaning of patient involvement and participation in health care consultations: A taxonomy.* Social Science and Medicine, 2007. **1297**: p. 1297-1310.
- 74. Cahill, J., *Patient participation a review of the literature.* Journal of Clinical Nursing, 1998. **7**(2): p. 119-128.
- 75. Schoeb, V. and E. Burge, *Perceptions of patients and physiotherapists on patient participation: A narrative synthesis of qualitative studies.* Physiotherapy Research International, 2011. **17**(2): p. 80-91.

Appendix A: Search terms

EBSCO search terms

[(therap* N10 engag*) OR (treatment* N10 engag*) OR (rehabilit* N10 engag*) OR (physiotherap* N10 engag*) OR ("mental health" N10 engag*) OR (speech N10 engag*) OR ("allied health" N10 engag*) OR (nurs* N10 engag*) OR (doctor N10 engag*) OR (physician N10 engag*) OR (patient* N10 engag*) OR ("clinical practice" N10 engag*) OR ("social work" N10 engag*) OR ("assertive outreach" N10 engagement)] AND [(review N5 engag*) OR (measure* N5 engag*) OR (assess* N5 engag*) OR (perception* N5 engag*) OR (experience* N5 engag*) OR (model* N5 engag*) OR (construct N5 engag*) OR (concept* N5 engag*)] in abstract, title or keywords

SCOPUS search terms

[(therap* W/10 engag*) OR (treatment* W/10 engag*) OR (rehabilit* W/10 engag*) OR (physiotherap* W/10 engag*) OR ("mental health" W/10 engag*) OR (speech W/10 engag*) OR ("allied health" W/10 engag*) OR (nurs* W/10 engag*) OR (doctor W/10 engag*) OR (physician W/10 engag*) OR (patient* W/10 engag*) OR ("clinical practice" W/10 engag*) OR ("social work" W/10 engag*) OR ("assertive outreach" W/10 engagement)] AND [(review W/5 engag*) OR (measure* W/5 engag*) OR (assess* W/5 engag*) OR (perception* W/5 engag*) OR (experience* W/5 engag*) OR (model* W/5 engag*) OR (construct W/5 engag*) OR (concept* W/5 engag*)] in abstract, title or keywords

Figure One

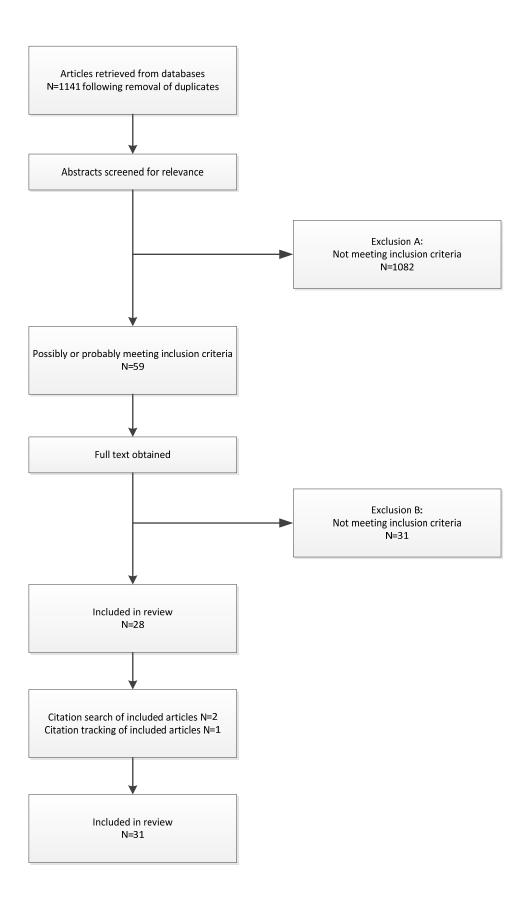


Table OneSummary of included papers

Reference	Article type	Study population	Study purpose	Key findings
Addis & Gamble, 2004	Qualitative	Mental health	Explored nurses' understandings of engagement and explored experiences of engaging patients in assertive outreach services.	Engagement occurs over time and involves connecting with the individual at a human level. May require persistence and patients on the part of the nurses. Engagement did not always occur. Process could be challenging and exhausting for staff. Attitudes towards patients (e.g. 'caring for') considered vital.
Chase et al., 2012	Qualitative	Mental health	Explored the experience of people engaged in community psychiatric services.	The human connection between patient and provider was perceived to be crucial. The clinicians' skills and attributes were considered vital, such as active listening and seeing them as an individual rather than a diagnosis. Service structures were perceived to impact on engagement. Participants indicated engagement differed from compliance, attending but not connecting with their clinicians or actively participating in care.
Chase et al., 2010	Qualitative	Mental health	Explored the discourses of engagement and disengagement in the narratives of people accessing mental health services.	The use of 'we' was considered to be a marker of engagement with treatment providers. Engaged patients positioned themselves positive, expressing their ability to be active in the therapeutic relationship, communication and treatment. This active role could develop over time. Engaged patients spoke positive of the therapeutic relationship using terms such as "a balance, a level or a two-way process" (p. 49).
Cumbie, Conley & Burman, 2004	Theoretical	Chronic illness	Proposed model of nursing care to promote engagement of people with chronic illness based on a synthesis of	Engagement was conceptualised as a process that involves collaboration between patient and provider and the use of strategies to enhance engagement. It is based

			the literature.	on a patient-centred approach to care. Engagement strategies included: making information and activities personally meaningful, understanding the patient's perspective, helping the patient develop model of their illness experience, co-establishing priorities, goals and action plans. The desired outcome is that the patient will be able to identify and sustain strategies to manage their chronic illness.
Danzl et al., 2012	Theoretical	Physical rehabilitation	Explored concept of engagement and its role in neurorehabilitation.	Engagement was defined as an "increased motivation, attention and active participation in rehabilitation, grounded in and supported by the interaction and relationship between the patient and clinician" (p. 36).
Drury & Munro, 2008	Theoretical	Mental health	Reviewed the role of engagement in crisis mental health; proposed strategies for promoting engagement from a Māori perspective.	The importance of therapeutic engagement was emphasised. Engagement could be dependent on the clinician's actions and the resulting relationship between the patient and provider, through <i>manaakitanga</i> (the skill of hospitality, respecting the <i>mana</i> of all involved).
Duchan, 2009	Theoretical	Speech- language therapy	Explored how the term engagement has been used in the literature with a focus on its application to speech-language therapy (pathology).	Engagement describes "a person's avid and active connection with another person", and/or the sense of being "drawn into and having connection with an activity" (p. 12), and the feelings associated with these. Multiple objects of engagement were identified including people, events or activities. Clinicians were said to be able to create a "climate of engagement" through their ways of working.
Gillespie et al., 2004	Measure development	Mental health	Reported the development and initial testing of a self-report measure of engagement in mental health services.	Engagement was not explicitly defined. Measure contained domains of appointment keeping, patient-therapist interaction, patient communication/openness, perceived usefulness of treatment, and collaboration with treatment. Patient and clinician rating of engagement were not consistently correlated.
Godlaski et al., 2009	Qualitative	Mental health	Explored what women with substance abuse related problems find most	Engagement with providers, and others in the context of group treatment, was considered crucial in order to

			engaging about treatment.	engage in treatment. It involved a sense of feeling safe, welcome and valued, and feeling understood. This was important in order for the women to openly and honestly participate in the treatment program.
Hall et al., 2001	Measure development	Mental health	Reported the development of a measure of engagement in mental health services.	Engagement was not explicitly defined. Measure contained domains of appointment keeping, patient-therapist interaction, patient communication/openness, perceived usefulness of treatment, and collaboration with treatment.
Hitch, 2009	Qualitative	Mental health	Sought to capture the experience and meaning of engagement for staff and patients in assertive outreach teams.	Engagement had several forms: an interpersonal relationship, occupational engagement (in meaningful activities) and service-oriented. Engagement was seen to be both a 'process' (the relationship and collaboration between patient and provider) and an 'outcome' (patient action – participation, initiation, self-initiated activity).
Kemppainen et al., 1999	Measure development	Chronic illness	Developed a scale of patient engagement in AIDS care.	Engagement was defined as the "level of involvement that patients demonstrate in nursing care" (p. 168). Scales focused on the patient's behavioural responses to their nurses. Factor analysis suggested the measure had two scales – the Participation Scale focused on positive engagement such as participation, respect and appreciation (e.g. I treated the nurses swell, I did what the nurses told me to do) and the Anger Scale in which interpersonal engagement was characterised by anger or aggression (e.g. I was irritable back to the nurses, I have the nurses a terrible time).
Konrad, 2009	Theoretical	Social work	Developed a model of therapeutic engagement in social work with grieving patients.	Engagement was discussed with regard to "relational engagement" (p. 407). Engagement was seen as a process which provided a foundation for therapeutic intervention and required clinician skills and attitudes. These include a "willingness and desire to truly know" (p. 408), "emotional presence, responsively and empathy" (p. 409) and responsiveness to the emergent meaning in

Kortte et al., 2007	Measure development	Physical rehabilitation	Developed a measure of engagement in acute physical rehabilitation services.	what the patient is saying. It requires the clinician to themselves be engaged in the process. Engagement was defined as "an interest in, and an intentional effort to, work toward the rehabilitation goals" (p. 878). Patients were treated on five scales: attendance, extent of prompting required, attitude toward treatment, acknowledgement of need for rehabilitation services/activities, extent of active participation in treatment.
Lequerica and Kortte, 2010	Theoretical	Physical rehabilitation	Proposed a theoretical model of engagement in physical rehabilitation.	Engagement defined as "a deliberate effort and commitment to working toward the goals of rehabilitation interventions, typically demonstrated through active, effortful participation in therapies and cooperation with treatment providers" (p. 416). Engagement was conceptualised as a process and a state influenced by both the intrinsic variables within the patient such as willingness, self-efficacy and outcome expectancies, and their social and physical environment.
Lequerica et al., 2006	Measure development	Physical rehabilitation	Examined properties of measure of engagement in physiotherapy and occupational therapy in acute rehabilitation.	Engagement defined as "a deliberate effort and commitment to working toward the goals of rehabilitation therapy" (p. 331). Items included intrinsic patient variables (e.g. expectations, interest, motivation, optimism) and patient behaviours (e.g. effort, responses to prompting and co-operation).
Macgowan, 2006	Measure development	Social work	Developed measure of engagement in group social work services.	Engagement conceptualised as multi-dimensional including attendance, therapeutic alliance, participation, helping self and helping others. Measure included seven dimensions: attentions, contributing, relating to worker, relating to other members, contracting, working on own problems and working on others' problems.
Mallinson, Rajabiun & Coleman, 2007	Qualitative	Chronic illness	Explored the process by which people living with HIV/AIDS engaged in primary care for treatment.	Engagement in care was seen as a cyclical process which could involve times of disengagement. Perceptions of the relationship with the provider were a core element of the

Meaden et al., 2012	Measure development	Mental health	Developed a measure of engagement in inpatient mental health rehabilitation services.	engagement process, either facilitating or impeding engagement. Engagement was facilitated through connection, validation and partnering; it was impeded through perceptions of paternalistic care. The clinicians actions and attitudes appeared crucial. Engagement was not explicitly defined. Measure consisted of seven domains: quality of relationships, patient communication and openness, goal-setting, perceived usefulness of rehabilitation, collaboration with rehabilitation, appointment-keeping and compliance.
O'Brien et al., 2009	Measure development	Mental health	Developed measure of engagement in mental health services in people with psychosis.	Engagement was not explicitly defined. Measure consisted of ten items related to attendance, perceived need for treatment, adequacy and usefulness of providers and treatment, sense of being listened to and compliance.
Padgett et al., 2009	Qualitative	Mental health	Explored experience of engagement and retention in mental health and substance abuse services in order to develop model of engagement.	Engagement conceptualised as a process influenced by patient and systemic factors. Patient factors included severity and mental illness and substance abuse. Systemic factors included physical surroundings, rules and restrictions of services, staff actions and perceived kindness, and models of service provision. Engagement was considered to be entwined with 'retention' in care.
Park et al., 2002	Measure development	Mental health	Developed measure of engagement in homeless patients with mental illness.	Engagement was defined as "a process during which the worker focuses on assuring that basic life support services (food and shelter) are in place while attending to the development of rapport to overcome barriers to further collaboration" (p. 855). Measure consisted of five ratings: patient attitudes toward provider, ease of engagement (i.e. contact with services), attitude to help, attitude to housing, and engagement with others (ie. Interpersonal interaction).
Priebe et al., 2005	Qualitative	Mental health	Explored views of engagement and disengagement held by patients of	Patients most likely to have a relationship with services and service providers if they feel listened to and have a

			assertive outreach teams.	say in care decisions. Trusting therapeutic relationships appeared crucial. Developing a sense of autonomy was helped when patients were actively involved in decisions.
				Disengagement occurred as a result of a loss of autonomy and identity.
Roy, Gourde & Couto, 2011	Qualitative	Social work	Sought to understand process of men's engagement in treatment groups through a review of the literature.	Definition of engagement based on Macgowan's construct of engagement in groups. Engagement influenced by multiple factors: participant factors such as attitudes and co-morbidities; treatment program variables such as therapeutic alliance and group dynamics; legal factors such as mandated treatment; and cultural and social values.
Simmons- Mackie & Kovarsky, 2009	Theoretical	Speech- language therapy	Reviewed concept of engagement in clinical interaction.	Engagement was defined as the "level of interpersonal involvement displayed by participants in social situations or interactive activities" (p. 6). Engagement could be demonstrated through verbal and non-verbal behaviours and was said signal "commitment to and involvement in therapy" (p. 7).
Staudt, Lodato & Hickman, 2012	Qualitative	Mental health	Developed understanding of concept of engagement from perspectives of community mental health therapists.	"The affective relationship between therapists and clients defined engagement for the participants" (p.215), and involved the establishment of a 'safe environment' and a therapeutic connection. Engagement could be influenced by a number of patient, clinician and/or service factors. Engagement was "conceptualized as a process that begins with patients accessing services and progressing to a successful therapeutic alliance, and ideally leaving services knowing there is an open door to return if and when needed" (p. 217).
Tait, Birchwood & Trower, 2002	Measure development	Mental health	Developed measure of engagement in community health services.	Engagement was not explicitly defined. The measure consisted of four scales: patient availability, collaboration, help-seeking and treatment adherence.
Watkins, Shaner &	Qualitative	Mental health	Explored perceptions of engagement from the perspectives of those with dual	Engagement was seen as an on-going cyclical process which could involve disengagement. Engagement was

Sullivan, 1999			diagnosis.	closely associated with retention in care. Clinician actions could facilitate the engagement process.
Woolhouse, Brown & Thind, 2011	Qualitative	Family care	Explored experiences of doctors engaging women who use substances	Engagement was seen as a process in relationship development which was a necessary pre-cursor to maintaining the patient in medical care. Therapeutic relationships underpinned the engagement process; trust and presence were consisted crucial. Engagement was an on-going process which required the clinician to closely read the patient in order to respond in a way that helped them stay engage in treatment.
Wright, Callaghan & Bartlett, 2011	Qualitative	Mental health	Explored nature and meaning of engagement for practitioners and service users in assertive outreach mental health services	Engagement was seen as an on-going process that occurred between the patient and provider. Contact between the two formed the 'building block' for on-going engagement. It was facilitated through dialogue (talking and active listening). This led to engagement with the other person. Have a user-led perspective was seen as important as was having a shared understanding of the patient's story and the service model. Patients emphasised their need to feel understood by the provider.
Zubialde, Eubank & Fink, 2007	Theoretical	Chronic illness	Proposed model of patient engagement in healthcare	Patient engagement was conceptualised as being "mindful of their personal health needs within their life context, clear about their health related goals, and proactive in acquiring new capabilities and resources that help them meet their goals" (p. 355). It is based on the patient's story and context and sees the clinician take a coaching role in service provision.

Table TwoCore components of engagement: 'Engaging with' and 'engaging in'

Engaging with	Engaged in
Process of connecting with activity or person [10, 29, 30, 42-47]	Being with what you're doing, participating beyond talk [10]
Clinician's attitudes and behaviours crucial [30, 43, 45, 46, 48-53]	Internal state: commitment, enthusiasm, effort, investment [2, 4, 41, 42, 45, 52, 54]
Establishment of therapeutic relationship may precede state of engagement [29-32, 41-47, 50-52, 55]	Observable behaviours include participation, contribution, persistence [10, 30, 36-38, 42, 49, 54, 56-58]
Fluid on-going process, may lead to state of engagement or disengagement [10, 30, 43, 44, 51, 54]	State of engagement: Both internal state and observable behaviours are present [54, 57]
Limited acknowledgement in engagement measures [32-34, 40]	Observable behaviours dominate engagement measures [2, 4, 33-35, 38, 40, 56]