Understanding paediatric rehabilitation therapists’ lack of use of outcome measures

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Abstract

Purpose. Despite widespread educational and promotional efforts, paediatric rehabilitation therapists still do not systematically or routinely use outcome measures.

Method. A review of contextual and psychosocial factors affecting therapists’ use of outcome measures was performed, incorporating information from past studies of barriers to therapists’ use of measures and more recent information about measure use, knowledge brokering and expert practice.

Results. This cumulative and contextual overview provided insights into how many therapists may approach practice. Therapists’ beliefs in the importance of establishing effective relationships may lead them to place less value on formal measurement, to adopt a less rigorous and more pragmatic approach to ascertaining whether outcomes are achieved, and to avoid measures that may show little improvement.

Conclusions. A relational goal-oriented approach to practice is proposed in which therapists adopt a broader facilitative and educational role with families about the importance of the measurement process.

Keywords: Children, therapist, outcome measures, psychosocial

Introduction

Outcome measurement is an extremely important topic in paediatric rehabilitation today, reflecting tensions that exist between clinical and organisational agendas, as well as research and the art of practice. Over the past decade, there has been increasing emphasis on evidence-based practice (EBP) and the use of standardised and individualised outcome measures to document improvements from intervention. However, despite educational and promotional efforts by researchers and clinical managers, studies consistently show that rehabilitation therapists (e.g. occupational, physical and speech-language therapists) do not systematically or routinely use outcome measures [1,2].

The intent of this article is to present existing knowledge on the use of outcome measures in paediatric rehabilitation practice, including barriers and facilitators to use, and then build on the existing literature by incorporating findings from our recent research experiences and reflections on their implications. Our aim is to provide new insights into therapists’ lack of routine use of outcomes measures, thereby stimulating debate and broadening the perspective from a focus on deficits in therapist knowledge and skill to one that incorporates organisational and psychosocial factors. We hope to provide a new frame of reference and a compelling stepping off point for new investigations. We wish to stress that our perspective builds on the existing literature on outcome measure use by integrating the literature on contextual and psychosocial aspects of clinical practice.

We first briefly review the literature on the most commonly considered barriers to the use of outcome measures. Second, we review the literature on contextual and psychosocial influences on measure use. These bodies of literature were identified using an electronic search of articles published in...
PsychINFO, CINAHL and Google Scholar, using the following keywords: therapist, paediatric rehabilitation, outcome measures, barriers and psychosocial factors. Third, we discuss insights regarding therapists’ views of measurement, derived from recent studies involving the present authors, which examined therapists’ measurement practices, knowledge brokering and expert practice. Fourth, we provide a novel conceptual consideration of psychosocial factors inherent in practice that may influence therapists’ views of the utility of measurement tools, including factors related to the client-professional relationship and the organisational context of practice. Finally, we propose the use of a relational goal-oriented perspective to reframe and support the use of outcome measures. Since many studies on barriers to optimal health care lack a theoretical framework or conceptual model [3], we believe our conceptual framework will make an important contribution.

**Literature on barriers to the use of outcome measures**

Despite more than a decade of promotion, even recent studies consistently show the low routine use of outcome measures [1,2,4,5]. The most frequently mentioned barriers are therapist-related, dealing with time constraints, lack of knowledge and skill, and reluctance to use measures that fail to meet client need.

Therapist time constraints are the most commonly cited reason for lack of use of standardised outcome measures. Time issues include therapists’ lack of time to find and learn about available measures, lack of time to use them due to high clinical caseloads and short-term intervention models and lack of time to score and interpret the results [1,6,7]. However, recent studies suggest that ‘lack of time’ may be an excuse used to justify lack of knowledge about what measures are available and how to use them, rather than a legitimate reason for non-use [2]. An in-depth study of paediatric rehabilitation therapists’ use of outcome measures in Ontario Canada indicated that time represented only 9% of the reasons given for lack of use [8].

A second frequently described barrier is lack of knowledge or skill. Therapists may lack awareness of available measures, not know how to score them, not feel able to interpret findings or be uncomfortable in giving feedback and guidance to families based on the results, for fear of upsetting them or leading them astray [2,9,10]. A third frequently described barrier is reluctance to use measures that fail to meet clients’ needs [4,5]. Therapists may feel outcome measures are not appropriate to clients’ individual circumstances or goals, or are too confusing or difficult for clients to complete [1,2,7,11,12].

Time constraints, lack of knowledge and skill and inappropriateness of measures to suit a client’s needs appear, on the surface, to be issues that can be addressed by developing child/family friendly measures or by providing time, education and resources to therapists. However, interventions designed to address therapist needs often fail to change measure use. There have been many attempts to promote the use of outcome measures in children’s services by removing barriers and providing supports [13,14]. Work on the utility of traditional knowledge translation (KT) strategies (e.g. educational materials, internet resources) points to the challenges involved in moving measures into practice [14]. Systematic reviews of KT interventions indicate that even the most promising educational strategies (i.e. multi-faceted interventions involving educational materials, meetings and outreach) have only modest or moderate effects on EBP [15,16]. A recent review of EBP in children’s mental health indicated that measurement training had little effect on practitioners’ use of measures and proposed that participatory approaches considering therapists’ needs and preferences are required [17].

One promising intervention is the use of knowledge brokers (KBs) to enhance clinicians’ knowledge of and comfort with tools, to encourage their engagement with the measurement process and provide them with ‘hands on’ experience and support [14,18]. A recent study in paediatric rehabilitation organisations indicated that KBs were effective in increasing therapists’ self-reported knowledge and use of specific evidence-based measures, with these changes being sustained 12 months later [19]. However, many supports were provided to the KBs and therapists, suggesting that knowledge brokering may be a cost-intensive process that needs to be implemented measure by measure.

**Contextual and psychosocial influences on measure use**

In light of this information about barriers to measure use and challenges in knowledge mobilisation, we began to wonder about contextual and psychosocial aspects of service provision that may influence therapists’ perceptions of the utility of measurement tools, including the cultural norms and expectations of children’s rehabilitation organisations and therapists’ beliefs about their role and the nature of optimal practice. Contextual and psychosocial factors have received little direct attention in the KT literature on measure use, which has largely focused on practitioner capacity or performance (i.e. knowledge and skill). The broader literature on KT does, however, acknowledge the importance of the needs
and organisational interests of the users of innovations and assumes that organisational structures, rules and norms are essential determinants of knowledge utilisation [20,21].

A recent systematic review of barriers to the use of research evidence and clinical practice guidelines in health care has indicated multiple barriers to optimal care [3]. This review indicated the importance of gaining enhanced understanding of the challenges practitioners face when trying to adhere to a guideline or implement evidence into clinical practice. The review identified the importance of contextual and psychosocial factors, including attitudinal barriers (e.g. practitioners’ lack of confidence or lack of outcome expectancy) and system barriers (e.g. lack of organisation and structure, lack of harmony with health and oversight systems and lack of a teamwork structure and ethic). The present article focuses on the role of these types of influences on one particular aspect of optimal health care – the use of outcome assessments. Our focus is not simply on therapist and systems factors, however. We also consider the fundamental role of relationships and the engagement of clients in the care process.

Our intent, therefore, was to consider contextual and psychosocial factors that may help to explain the lack of widespread, routine use of outcome measures. The synthesis we present is based on a review of several areas of research, including descriptive information about the extent of measure use, qualitative information about perceptions of measure use and qualitative and quantitative information about expert therapists’ approach to practice. Our aim is to draw attention to attitudinal and motivational processes inherent in the client–practitioner relationship, which reflect therapists’ perceptions of their role, as influenced by their organisational context.

Client–practitioner and practitioner–organisation relationships

To fully understand the factors influencing clinical decision making and measure use, we need to consider the context of paediatric rehabilitation practice. The importance of collaborative client–practitioner relationships is now widely accepted [22,23]. In addition, there is increasing acknowledgement of the importance of workplace culture, climate and communities of practice on the quality of practitioners’ work with clients [24–26]. Therapists work within organisations and systems that influence practice in many direct and indirect ways, such as through shared values, caseload sizes, pressures to be efficient, decision-making latitude, opportunities for development and demands for accountability [27,28].

Today, organisations are experiencing greater demands from funders and health care systems to demonstrate the utility of the services they provide. They therefore have a strong interest in the assessment of outcome. Therapists understand that organisations need to collect aggregate performance data to demonstrate accountability and the effectiveness of services and programmes, as well as to identify interventions and programmes that work [29–31]. However, in our experience as researchers in paediatric health care organisations, there sometimes are tensions and discontinuities with respect to clinical needs. Therapists have concerns about ‘recipe-oriented’ practice and may feel there are contradictions between using standardised measures and providing client- or family-centred care [2]. Mandated measures may be seen to be irrelevant and may encourage a narrow focus on outcomes (vs process), programme efficiency (vs effectiveness) and easily measurable indicators. The result may be a lack of attention to what is really important – service quality and the appropriateness of actions that are taken [32].

Perceptions of quality improvement efforts

Although outcome measurement is important for programme evaluation, service improvements and to justify new services [31], in our experience some therapists question the utility of collecting data for quality improvement purposes. They may be uncomfortable with the need for strict scoring and systematic use of the same tools because the domains assessed may not be directly applicable to a particular family. The timely return of scored measures for use with individual clients is essential for buy in but may not happen [30]. Unfortunately, outcome data may be seen mostly as satisfying the need for reports to senior managers and funders. Therapists may have no clear evidence that management makes valuable use of outcome data for either clinical purposes or service planning.

Short-term intervention models

Due to system changes and financial and managed-care constraints, there has been a shift from long-term therapy to short-term intervention or consultation for children with physical disabilities [33–35]. In our experience, an increasingly popular form of treatment is a 2- or 3-month block of intervention, repeated up to several times a year. Short-term evaluation fits this short-term service model, but unfortunately may undermine the importance and occurrence of longer-term evaluation.
As well, more time is now spent in providing consultation services. We have observed that therapists providing consultation services may be less likely to do formal goal setting or evaluation due to inherent time and system constraints; rather, they may identify strengths and problems through discussion with clients, develop a series of process-related (rather than outcome-related) goals, and follow-up informally later on.

Understanding therapists’ views of measurement

In this section, we discuss findings from recent studies examining therapists’ measurement practices, the effectiveness of a knowledge brokering intervention and how expert therapists approach practice. These diverse research studies provide insights into contextual and psychosocial factors that may decrease the likelihood of measure use.

Insights from studies of therapists’ measurement practices

Here we consider the findings of two recent studies investigating measurement practices in paediatric rehabilitation. First Hanna, Russell and colleagues [4] conducted a survey to examine the measurement practices of 63 physical, 72 occupational and 74 speech-language therapists working in one of 16 children’s rehabilitation programmes in Ontario, Canada. The findings indicated that therapists frequently modify standardised measures to meet their needs or the needs of clients. This study also indicated the presence of treatment centre-specific variation in measurement attitudes and practices, suggesting the role of organisational or peer influences.

Second, Wright and the OACRS Measuring Change Project Steering Committee [8] set out to produce an inventory of current outcome measurement practices across Ontario children’s treatment centres. The study involved 409 interviews with randomly selected therapists in 16 of the 20 Ontario Association of Children’s Rehabilitation Centres (OACRS). Rather than asking about barriers to the use of measures, the study examined the approaches therapists actually used to measure change in client status. They reported using a combination of approaches with any one client, including clinical observation, informal interview (with parent, child, and/or teacher), standardised measures and informal measures developed in-house. Standardised measures were typically used only to the extent required to comply with organizational or licensing standards.

Insights from a study on knowledge brokering

A recent KT study used mixed methods to evaluate the effectiveness of using KBs to facilitate the knowledge and use of evidence-based measurement tools in paediatric clinical practice in Ontario, Alberta, and British Columbia, Canada [19]. The 24 KBs involved in this study completed weekly activity logs and took part in semi-structured telephone interviews that were analysed qualitatively to provide insight into their perceptions of their role and the brokering process [6]. Of interest to the present article, KBs discussed the importance of understanding the practice context and organisational factors that affect the use of measurement tools [6]. They highlighted the need to communicate information that was helpful to families and share it at a time sensitive to the family’s circumstances [6,19]. Administrators at each site were also interviewed in this study and a few indicated that standardised assessments were not always useful in planning treatment: ‘Often what you need to plan your treatment . . . doesn’t come out of . . . a standardized assessment’. Another said: ‘It practically has to be something mandatory or it will not [be used] . . . you’ll go to what gets you through the session’.

Insights from a study on the nature of expert practice

A recent study of the practice approaches and behaviours of paediatric therapists [36] also provided insights into the lack of routine use of outcome measures. The expertise level of practicing therapists was assessed using a reliable and valid system of self-, peer- and parent-completed measures [37]. Seventy-five therapists from five disciplines (physical, occupational, speech-language, behaviour and recreational therapy) were involved, along with 170 peers and 188 parents of children with disabilities. A cluster analysis of 10 indicators of expertise revealed three levels of therapist expertise – novice, intermediate and expert. The conceptualisation of expertise, as displayed by the measures used, involved practicing in a family-centred manner; displaying clinical skill, interpersonal skill, mentorship and critical thinking ability; and being seen by peers (as well as themselves) as displaying characteristics associated with expertise [37]. Thus, expert therapists were not defined simply as those with more years of experience or good peer reputations. The measures of expertise did not explicitly ask about EBP or the use of measurement tools; however, the peer-completed assessments captured EBP-related aspects (e.g. positive outcomes for clients, active searching for ways to enhance practice).

Two qualitative studies were then conducted. Thirteen therapists took part in a study using the
critical incident interview technique and 11 therapists took part in a study using the ‘think aloud’ technique when observing videotaped interactions of themselves in practice [36]. Data were analysed using a grounded theory approach. Expert and intermediate therapists differed from novices with respect to content, self- and procedural knowledge. The study indicated that expert therapists see their role as relationship-oriented, pragmatic facilitators of change – a role that encompasses educating, supporting and enabling clients and families by providing them with information; emotional, instrumental and cognitive support; resources and opportunities; and a sense of control over their circumstances [36]. The relational and pragmatic nature of expert therapists’ approach was striking, and led us to wonder about implications for the use of outcome measures.

**Implications for measure use**

Based on the insights gained from the studies described above, we hypothesised that four key psychosocial factors, dealing with therapists’ approaches to practice, may influence their use of measurement tools.

*A primary focus on relationship and family needs: lesser valuing of measurement*

Parents of children with disabilities want to have child and family needs met, to be respected, supported, listened to and to have hope and a vision of a positive future life for their child [38–40]. They value the relational competencies of therapists, including caring, respect, communication and a personalised approach [41]. Studies also indicate that expert therapists are oriented to the family point of view, and highly sensitive and responsive to family needs, issues and concerns [36,42].

Based on these findings, therapists may therefore see measure use as an impediment to their overarching goal of helping families in as supportive a manner as possible and, furthermore, they may believe that outcome measurement is not an important issue for families. They may eliminate items that they are not comfortable addressing in treatment, even though these may be part of a standardised assessment and may be important problem areas for clients. In the OACRS study, there was some indication that therapists do not want to waste the time and energies of families, suggesting that the needs and time constraints of families are at the forefront of their minds [8]. Similarly, in the field of mental health, many clinicians fear that manualised treatments will harm their relationship with their clients [43].

There is also evidence that expert practitioners work on session-specific outcomes, which provide the supportive foundation for clients’ self-directed change, and also on longer-term outcomes related to adjustment and quality of life [36]. Thus, although mid-term goals related to a child’s functional ability are important for organisational accountability, they may not be the most important goals in the minds of practitioners or families, who typically focus on the process of intervention (responsible treatment, information and guidance) and the child’s participation and sense of belonging. This is not to say that parents do not want to see changes in their child’s functional outcomes or that they believe only quality of life should be measured – just that their child’s happiness, ability to fit in and be accepted and ability to make a meaningful contribution to society are their most important issues [22].

It is important to note, however, that parents may be more interested in learning about their child’s scores on outcome measures than therapists believe. Research indicates that parents are interested in their child’s progress, like to see what is working and do value information derived from measures [22]. In the KB study [44], an administrator stated: ‘Parents actually do value these tools. One of the things that we heard … in the past [was that] families don’t want us to spend time doing this kind of stuff—they just want us to treat kids, and what they’ve found is that when they used the GMFM and … showed that to parents … parents actually found it useful’.

*A focus on understanding and engaging families versus attaining specific outcomes*

Expert therapists focus on the process of practice, believing that positive outcomes will be attained when issues are properly conceptualised and addressed [36]. For them, the pivotal aspect of practice is to understand the nature of the client’s issues and situation, and establish agreed-upon goals. From there, the implementation steps usually fall easily into place. Evidence indicates that experts take the time needed to build a consensual understanding of the predicament, whereas novices have a tendency to presume what the child/family goals are and jump into providing hands-on treatment [36]. Attaining specific outcomes may therefore be less important to expert therapists, due to their focus on the front-end of practice and the process of engaging and working with the client to bring about desired change [36]. They may recognise that family goals change frequently, creating difficulties for outcome measurement. In the KB study, an administrator stated: ‘I’ve
important in fostering children’s motivation and concern that measures will not show change. A focus on celebrating small gains and providing hope: to change.

A pragmatic approach to practice and to measurement

Reflecting a pragmatic approach, therapists appear to use the most direct ways to evaluate client progress, using observation, parent report, informal assessments or their own clinical judgment rather than a multi-item tool [1,2]. Clinicians in the OACRS study most often used informal measurement techniques based on their own clinical observations of a limited set of skills [8]. This practical and time-efficient approach has advantages for busy clinicians and fits with the perceived imperative to move on to do something with the child. In addition, OACRS clinicians felt that informal measurement practices met their needs for sharing information with parents and other clinicians. Some viewed standardised outcome measures as containing many items that are not relevant to particular children. Why assess things that are already either obvious in terms of the child’s level of functioning or have little bearing on salient issues for that child? These beliefs may underlie the observation that many tools are adapted and shortened for use [4,8]. Reflecting their relational and pragmatic focus, therapists may remove offending or irrelevant items in order not to upset families, or administer only specific items or subscales of measures that they believe will be sensitive to change.

A focus on celebrating small gains and providing hope: concern that measures will not show change

Expert therapists know that celebrating small gains is important in fostering children’s motivation and parents’ appreciation of their child and hopes for the future [39]. Since therapists strive to set realistic goals for children, targeted outcomes may reflect small gains or even maintenance of skills or abilities [36]. Therapists therefore may be reluctant to use standardised tools that are unable to pick up the small changes typically seen in children with physical and developmental disabilities. Although researchers are now developing more sensitive measures, practitioners may have learned from research and their own experience that, for short-term intervention, not enough change occurs to be detected even with individualised tools [8]. We speculate that sharing post-intervention levels of functioning that show little change may undermine the clinical intent to instill a hopeful appreciation of child strengths and abilities [48]. Furthermore, not showing change may be worrisome to therapists from the standpoint of evaluating the quality of an organisation’s services. We wonder whether therapists may, on some level, be concerned about the consequences for services, families and even their own employment, if outcome measures fail to capture the accomplishments that they, in their clinical eyes, recognise and appreciate.

In summary, therapists’ beliefs in the importance of establishing effective relationships with clients and adopting a supportive, facilitative role may lead them to place less value on formal measurement, to adopt a less rigorous, pragmatic approach to ascertaining whether outcomes are achieved and to avoid measures that may show little improvement, in order not to undermine the efforts of children and families. For some therapists, the result may be a strong network of beliefs about measure use not being useful and, at times, detrimental to practice. It is well known that resistance to research findings occurs when recommendations do not match personal experience, are not utilitarian and when knowledge is inconsistent with practitioners’ existing belief structures [47].

The role of measurement in a relational goal-oriented approach to practice

A relational goal-oriented approach may be helpful in addressing the contextual and psychosocial issues we have discussed. There is increasing acknowledgement in paediatric rehabilitation of the need for services to be collaborative, goal-directed and evidence-based [23,35]. This approach views clinical practice as a knowledge-intensive activity involving professional know-how and insight gained through the use of assessments [23,26]. This perspective encourages therapists to incorporate evidence gained from the use of measurement tools with the art of practice, while keeping the focus of attention on
service quality and the appropriateness of their actions and recommendations.

A relational goal-oriented model of service delivery acknowledges the importance of both client-practitioner relationships (those involving clients and the practitioner or practitioner team) and practitioner-organisation relationships (those involving clinicians, supervisors, and other service organisation members) [23]. In a relationship-based model, there is a shift to thinking about intervention in terms of client needs rather than specific techniques or discipline-based outcomes, and a focus on parent, family and child physical, communication, social-emotional and behavioural outcomes [23,49,50]. This approach shifts the perspective from direct hands-on services to one that encourages a broader facilitative and educational role with families, where more time is spent on relationship building and joint envisioning of goals. According to this viewpoint, effective health care interventions are those that pay attention to the quality of the client–practitioner relationship within a goal-oriented framework [23,35,51].

A relational goal-oriented approach encompasses the principles of family-centred services [52,53] but goes beyond them by incorporating what is known about relationship-based practice [54]; the worldviews and priorities of families; the approaches, knowledge and skills of expert practitioners; organisational contexts that support practitioners to deliver the best services possible; and the nature of human relational systems and fundamental mechanisms by which change occurs [23]. This approach provides a broad view of the clinical process, in which formal outcome measurement is integral but only one part of the assessment and evaluation methods used by therapists. A firm foundation for decision making is provided by four complementary pillars of assessment, consisting of interviews, observations, informal assessments and objective measures [55]. Although it is important to have markers to indicate progress and motivate all players, measured outcomes are not ends in themselves. Formal outcomes can be seen as artificial endpoints related to the demands of clinical practice (i.e. the need to demonstrate the effectiveness of discrete, time-limited services) and client-related endpoints may be quite different from provider- or context-related ones [51]. Goal-oriented (but not goal driven) services involve goals as a way to ensure that intervention is focused.

A relational goal-oriented model considers the perspectives of each player in the service delivery process and calls for mutual valuing of these perspectives. Therapists need to be comfortable with the organisation’s need to collect outcome information to demonstrate accountability; families need to understand the measurement process, including its utility and potential pitfalls; and administrators need to understand the clinical realities, qualms and dilemmas faced by therapists when using outcome measures in certain situations. The complexity of the measurement issue requires a multifaceted solution incorporating practical, educational and organisational aspects. Ways to ‘reframe’ and thereby support the use of measures are discussed below. These deal with the previously identified contextual and psychosocial barriers, considered from a relational goal-oriented perspective.

Measurement as a mutual goal-oriented activity facilitating informed practice and decision making

From a relational perspective, tools are important for goal-setting once practitioners have clarified parents’ issues, needs and expectations regarding their child. Therapists can introduce tools to families as being helpful in identifying specific aspects of their child’s strengths/deficits, functioning and participation challenges. They can explain to parents that examining progress on goals (i.e. measured outcomes) will provide a natural time and opportunity to reflect on what has transpired and been achieved, allowing collaborative decisions to be made about whether to keep going or take another path. Rather than seeing measures as an impediment to collaboration with families, therapists can present measures to families as an important shared tool that helps them understand the child, communicate with one another, develop a collaborative relationship and engage in shared decision making.

When therapists believe that measurement tools meet their needs and those of families and organisations, their use of measures will likely increase [20]. This can be encouraged by viewing the measurement process as pragmatic – useful to therapists (increasing knowledge and skill), useful in relationships with clients (increasing the likelihood of informed, shared decision making and building motivation to change) and useful in relationships with other members of the organisation (increasing communication, the ability to improve services and accountability).

First, with respect to therapists themselves, a relational goal-oriented approach helps therapists to understand that measures allow them to develop an appropriate understanding of the child’s needs, to organise their clinical thinking and to obtain support for their decision making [56]. Over time, information from measures can allow them to link specific clinical factors to later outcomes, contributing to their theory of practice and prognostic skill. The co-creation of measurement tools by therapists, clients and researchers may result in therapist- and family-friendly measures – ones that allow ease of feedback
to families [4], thus allaying therapist fears about providing incorrect interpretations. Co-created tools will most likely keep the focus of attention on meaningful indicators of service quality.

Second, with respect to relationships with clients, the use of measures and the information they provide can foster dialogue, highlight client strengths, motivate clients by showing progress, contribute to relationship building, provide clarity around issues and, in addition, enhance shared decision making and the development of an appropriate intervention plan [1,14,56,57]. Providing parents with feedback on their child’s strengths and a strong rationale for assessments can empower them to address their child’s needs [57]. A relational goal-oriented approach acknowledges the importance of an individualised approach to both service provision and measurement, in which families are actively involved and individualised criterion-referenced measures such as goal attainment scaling and the Canadian Occupational Performance Measure (COPM) are used. These measures are highly responsive to clinically meaningful change in short time periods [35].

When tools are appropriate and relevant to the child’s context, they can facilitate information sharing with families [6]. Capturing useful information with measurement tools is an effective way to build consensus with families about goals, share successes and mutually reflect and strategise on issues impeding success. Appropriate tools open up awareness of possibilities, issues, strengths and resources not previously considered, and they provide signposts for progress, allowing therapists to celebrate successes with children and families. In our experience, parents sometimes experience epiphanies through dialogue with therapists when completing questionnaires [48]. The measurement process enables realistic goals to be set and maximises the likelihood of a smooth intervention process because part of what is shared is the therapist’s knowledge of the journeys of other children and families.

Third, with respect to relationships with colleagues, measurement tools provide a common language that facilitates communication and contributes to interprofessional collaborative practice [14]. With respect to organisations, measures can provide the information needed to improve clinical programmes, thereby completing the cycle of providing optimal services to children and families.

The educational role of therapists: explaining the usefulness of the measurement process

Therapists should not assume that clients do not want to take the time to complete measures. Their value needs to be explained to families. It is also important for therapists to prepare parents so that appropriate expectations of assessment, intervention and the client–practitioner partnership are established. An important aspect of this is helping parents understand the role of measurement within the whole intervention process, explaining the utility of measurement tools and linking the use of measures to optimal care. Through therapists’ educational role, families can understand the benefits of measurement for themselves, other children and families, the clinical service organisation and the health care system.

The design of effective interventions to increase measure use

According to the viewpoint presented here, intervention strategies need to consider aspects of client–practitioner and practitioner–organisation relationships that influence the measurement process. Such strategies could be aimed at changing therapist interactions with clients around measures and the data they provide, and the organisational culture regarding the routine integration of measurement into practice. Systematic reviews of educational strategies designed to bring about change in clinical practice indicate the importance of a combined approach involving therapist and organisation-level strategies that acknowledge contextual and psychosocial factors [58]. Individuals cannot be expected to change without corresponding changes within the teams in which they practice and across their organisations [58]. A mix of actions is required, including training, supports, feedback and organisational strategies addressing the needs and concerns of therapists, families and managers [26]. These strategies could involve dialogue about client expectations of therapists, organisational expectations of therapists and infrastructure supporting measure use.

As well, the literature on interprofessional education and practice provides many ideas on how to develop communities of practice where the use of evidence is the norm. This literature indicates the importance of establishing a collaborative, learning-oriented workplace culture and ensuring that workplace settings provide natural learning opportunities involving therapist interaction, dialogue and feedback [59,60]. When teams adopt the use of measurement tools as standard practice, the organisational culture changes, clients’ progress can be discussed in terms of objective indicators and practitioners become truly evidence informed as well as collaborative and relationship oriented in their practice.

In conclusion, this article has considered contextual and psychosocial factors influencing therapists’ beliefs, fears and tensions related to outcome
measure use, based on a review incorporating information from research on measure use, knowledge brokering and expert practice. We have proposed that measure use is an integral part of a relational goal-oriented approach. Effective service delivery requires awareness and sensitivity to mindfully select appropriate tools, engage families in the measurement process, correctly interpret information and share information in ways that encourage informed decision making. By understanding the benefits of the measurement process and the beliefs that deter measure use, therapists can turn these insights into opportunities to improve the quality of services they provide.

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