Full title of the manuscript:

Exploring the meaning of value-based occupational therapy services from the perspectives of managers, therapists and clients

Short title:

The meaning of value-based occupational therapy services

Authors' names: (listed in order for publication, with current position (job title) and affiliations)

Dr Su Ren WONG, Principal Occupational Therapist, National University Hospital, Singapore Ms Bi Xia NGOOI, Senior Occupational Therapist, National University Hospital, Singapore Ms Fang Yin KWA, Student Occupational Therapist, Health and Social Sciences, Singapore Institute of Technology

Ms Xiang Ting KOH, Occupational Therapist, Changi General Hospital, Singapore
Ms Rachel Jia Jun CHUA, Occupational Therapist, Ng Teng Fong General Hospital, Singapore
Dr Karina DANCZA, Assistant Professor, Health and Social Sciences, Singapore Institute of Technology

Name, postal address and email address of the corresponding author

Dr Karina DANCZA, Assistant Professor, Health and Social Sciences, Singapore Institute of Technology Email: karina.dancza@singaporetech.edu.sg

Research ethics:

Ethical approval was obtained from National Health Group Domain Specific Review Board (NHG DSRB #2018/01382) in 2019 and Singapore Institute of Technology's Institutional Review Board (Project #2019127) in 2019

Declaration of conflicting interests:

The Author(s) confirm that there is no conflict of interest.

Statement of contributorship:

SRW and KD conceived the study and developed the protocol. SRW and BXN was involved in literature review and gaining ethics approval. FYK, XTK, RJJC were involved in literature review, patient recruitment and data analysis. SRW, BXN and KD wrote the first draft of the manuscript. All authors reviewed and edited the manuscript and approved the final version of the manuscript.

Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Acknowledgements:

The research team wishes to acknowledge the contribution of staff, patients and caregivers who participated in this study.

Published reference:

Wong SR, Ngooi BX, Kwa FY, Koh XT, Chua RJJ, Dancza KM. Exploring the meaning of value-based occupational therapy services from the perspectives of managers, therapists and clients. *British Journal of Occupational Therapy*. 2022;85(5):377-386. doi:10.1177/03080226211030095

Introduction

There is a worldwide trend towards value-based healthcare (VBHC), which strives to control healthcare costs while maximising value for people accessing services. The objective of VBHC is to maximise what matters to people, such as health outcomes and personal experience, relative to the cost of achieving those outcomes (European Commission, 2019). The approach is consistent with occupational therapy as VBHC focuses on the person's experience throughout their care and delivering person-centred care. However, to remain relevant in the healthcare transformation, occupational therapy services will need to be explicit in how they align with VBHC principles (Lamb and Metzler, 2014).

To implement VBHC, it is important to understand what value means to people in relation to occupational therapy services, as multiple understandings of what value means may exist in parallel. Therefore, the aim of this research was to explore how occupational therapy managers, occupational therapists and clients perceived value in occupational therapy services in a large tertiary hospital in Singapore.

Literature Review

Healthcare in Singapore is provided by a combination of public and private healthcare facilities and is consistently ranked as one of the world's most efficient healthcare systems with good outcomes (Lim, 2017). Despite having a world class healthcare system, Singapore only spends an average of 4.5 percent of its Gross Domestic Product on healthcare (Lee, 2020). Although healthcare is subsidised, Singapore's reliance on patient co-payments has been a key factor for containing national and public health spending (Lee, 2020).

Providing affordable healthcare has become increasingly complicated with rising healthcare demands from an ageing population and prevalence of chronic disease (Lim, 2017). This is reflective of increasing healthcare expenditure in many countries, causing national healthcare affordability to become a topic of importance worldwide (Fantini and Vaccaro, 2019; Maron, 2020). It has been argued that the inability of healthcare organizations to effectively measure and manage the true costs and value of healthcare has contributed to healthcare's escalating costs (Fantini and Vaccaro, 2019).

VBHC was first introduced as a way of supporting the sustainability of healthcare systems (Porter and Teisberg, 2006). The authors advocated for a patient-centric system organised around patient needs, a move away from the traditional volume-based approach centred around health professionals' priorities. The main concept of value has been defined as health outcomes achieved per dollar spent (Porter and Teisberg, 2006). Important principles in implementing VBHC include engaging and activating patients throughout their care journey, ensuring patient-centred goals and preferences in treatment via shared decision making, and empowering all staff to perform empathetic listening and communication skills to enhance patient self-efficacy (Keswani et al., 2016). The focus is on improving health experiences and health outcomes that matter most to patients, rather than on cost reduction or health professionals' valued outcomes (Porter, 2010).

Although the goal of VBHC is optimizing population health, utilitarian societies (e.g. United Kingdom and Singapore) are varied in their methods to achieve this goal. Different models have been proposed, reflecting the healthcare systems' social values and funding structure. In a recent report by an expert panel (European Commission, 2019), four pillars of value were identified including personal value, societal value, allocative value and technical value. Personal value is value as perceived by the patient, which includes health benefits as well as process elements including patient experience. Societal value reflects the need to consider how healthcare can contribute to the society's goals which may include inclusivity, connectedness and participation. Allocative value refers to how equitable resources are distributed across groups, and technical value is the achievement of best possible outcomes with available resources.

Despite VBHC being a forward-looking approach to managing the rising costs of healthcare, little has been discussed within allied health literature. Few commentaries from podiatry (White, 2019), physical therapy (Lentz et al., 2020), and radiotherapy (Lievens et al., 2019) have suggested that these professions are well positioned to implement VBHC, but urged more to be done in developing a teambased approach, defining patient-centred outcomes, and embracing rigorous research study designs to better understand how value can be delivered. They warned that while opportunities exist, value and growth of their professions can be threatened if existing practice and research standards do not evolve and embrace VBHC principles (Lentz et al., 2020; Lievens et al., 2019).

Similar discussions have been seen in occupational therapy. Occupational therapy's expertise in enabling and empowering clients to engage in occupations reflects several of the patient-centred VBHC outcomes proposed by Porter (2010). There is also increasing evidence of the potential of occupational therapy in bringing about cost savings and improvements in quality of care for older adults and the management of various illnesses and chronic conditions (Nagayama et al., 2016; Rexe et al., 2013). Despite advances towards VBHC in occupational therapy, it is imperative that the profession further demonstrates its contribution to value-based patient outcomes or risk becoming marginalised in the rapidly changing healthcare environment (Leland et al., 2015).

Defining value and translating it into service delivery is not straightforward. Various stakeholders such as patients, managers and practitioners may have differing perceptions of what value is in occupational therapy services (Maron, 2020; Porter, 2010; Schapira et al., 2020). For example, some studies have observed that while patients valued participation-based goals, occupational therapists tended to set impairment- or activity-based goals as a way to deliver achievable and measurable goals that were in line with organisational expectations and resource constraints (Leach et al., 2010; Rosewilliam et al., 2011). Additionally, perspectives of value are usually explored with different protocols and usually do not include perspectives of multiple stakeholders within a single study (e.g. Pendleton, 2018; World Economic Forum and Boston Consulting Group, 2017). Lack of clarity and consensus among the stakeholders can lead to a failure to implement VBHC, while continuing to drive up costs with mediocre care for patients (Fantini and Vaccaro, 2019; Maron, 2020; Porter, 2010).

Ultimately, it is important for outcome measures to demonstrate the value of occupational therapy to enable service comparisons and facilitate resource allocation (Leland et al., 2015). Thus, the clarification of the perception of value of occupational therapy services by different stakeholders can potentially better inform the interdisciplinary healthcare team about the unique responsibilities of occupational therapists. The challenge remains to develop a practical understanding of value in occupational therapy services that stakeholders can agree on to inform the development of appropriate measures. As such, the research aimed to explore how clients of occupational therapy services, managers and occupational therapists in an acute hospital in Singapore perceive value in occupational therapy services.

Methods

Study Design

This study employed a qualitative design guided by grounded theory (Tie et al., 2019). This study was carried out in a public tertiary hospital in Singapore and appropriate ethical approval was obtained. All participants provided informed consent and were able to withdraw from the study at any point without adversely impacting on their employment or therapy sessions, whichever was relevant to them. Each participant was given a \$SGD20 voucher at the end of each focus group or interview as a token reimbursement for their time.

Sampling and Recruitment

Purposive sampling enabled recruitment of clients (i.e. patients and caregivers) of occupational therapy services, managers and occupational therapists. All clients were recruited from the outpatient occupational therapy waiting areas as this population was likely medically stable to participate in the research. To focus on family caregivers, paid and formal caregivers were excluded. Eleven clients participated (Table 1), with six additional clients recruited but withdrew prior to any data collection due to scheduling and/or commuting inconveniences (n=4) and inability to be contacted (n=2).

Table 1. Demographics of clients

Participant Code	Gender	Age	Occupational therapy service received	Number of sessions in preceding 12 months (x)	Frequency of sessions
Patient-A	Female	65	Hand Therapy	<u><</u> 5	Monthly
Patient-B	Female	22	Hand Therapy, Mental Health	6 to 10	Monthly
Patient-C	Female	22	Hand Therapy, Neurorehabilitation, Paediatrics	≥ 10	Fortnightly
Patient-D	Male	25	Mental Health	6 to 10	Quarterly

Patient-E	Male	75	Community Mobility	<u>≥</u> 10	Monthly
Patient-F	Male	34	Hand Therapy	6 to 10	Monthly
Patient-G	Female	44	Hand Therapy	<u><</u> 5	Bi-monthly
Patient-H	Male	41	Low Vision	<u><</u> 5	Monthly
Caregiver-A	Female	36	Paediatrics	<u><</u> 5	Monthly
Caregiver-B	Female	47	Paediatrics, Mental	<u>≥</u> 10	Monthly
			Health,		
			Neurorehabilitation		
Caregiver-C	Male	56	Paediatrics	<u><</u> 5	Monthly
			[Incort Table 1 bare]		

[Insert Table 1 here]

Seven occupational therapists and seven managers were recruited following an information sharing session during a department staff meeting. The seven occupational therapists were aged between 25 and 33 years (average: 28 years) with a mean working experience of 4 years at the hospital across specialisations of neurorehabilitation, orthopaedics, low vision, oncology, geriatrics, hand therapy and mental health. The seven managers were aged between 31 and 61 years (average: 41 years), with an average of 15-years of clinical and 7-years of managerial experience. Managers were recruited from occupational therapy specialisations of paediatrics, hand therapy, geriatrics and orthopaedics.

Data collection

Appreciative inquiry (AI) guided the semi-structured interviews (n=5) and focus groups (n=6). Each session lasted around 60 to 90 minutes. Focus groups were chosen to enable participants to build on ideas and clarify perspectives with others (Nyumba et al., 2018). Individual interviews were separately held for participants (n=5) who were unable to attend any of the scheduled focus group sessions.

Al was selected as it is a strength-based approach which capitalises on existing and past positive experiences to facilitate the generation of ideas that might contribute to future service improvements (Cooperrider et al., 2008). The use of Al has been gaining traction in healthcare, in a bid to depart from the conventional focus on the drawbacks of the current services to focus instead on its merits (Wright and Baker, 2005). Al was therefore deemed a suitable framework for exploring the concept of value in occupational therapy services.

Al includes four stages of Discover, Dream, Design and Destiny. Interview questions were developed following the definition of value as high quality at low cost along the four Al stages (Table 2). Phase one focus groups were based on the Discover and Dream stages and phase two on Design and Destiny (Figure 1). A brief analysis of phase one data was conducted so that preliminary ideas could be checked with members and shared across all participant groups in phase two (Patton, 2015). Interviews covered the four Al stages in a single session and were conducted at the conclusion of all focus groups so that ideas could be shared. All sessions were audio and video recorded, transcribed verbatim and anonymised prior to analysis.

Figure 1. Four stages of appreciative inquiry conducted in two phases

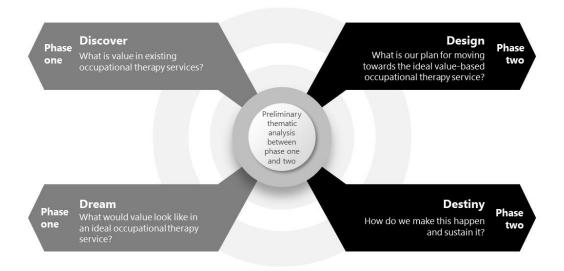


Table 2. Interview guide for focus group and interviews

Phase 1 Guide for Interview/Focus Groups - Discovery and Dream					
Clients	Occupational Therapists and Managers				
DISCOVER	DISCOVER				
Quality 1. How would you describe an experience that you had that you felt was quality occupational therapy? What do you think made it a positive experience for you? 2. What were important for you to achieve out of your occupational therapy sessions? Cost	 Quality How would you describe your experience as an occupational therapist / manager in ensuring quality occupational therapy services? What do you think made it positive for you? What outcomes/quality indicators helped to inform you that your practice was successful in improving quality of occupational therapy services? 				
3. What were some of the direct and indirect costs that you considered when you attended occupational therapy sessions?4. How and when do you decide if it is still worth it to attend therapy sessions?	 Cost 3. What are the steps that you have taken to address the direct and indirect cost of services you provide? 4. What were the most important cost considerations you were trying to manage? 				

DREAM

- Based on your sharing so far, what do you think you would notice and experience in an ideal situation where the value of occupational therapy services is the highest possible level?
- 2. What would you notice or experience in your therapy experience that was different from the usual sessions that you have had so far? What will you see more of or less of?
- 3. How do you think the direct and indirect costs of therapy in this ideal situation differs compared to your usual sessions?
- 4. What will you be able to achieve out of your therapy sessions you receive in this ideal situation?

DREAM

- 1. Based on your sharing so far, what do you think you would observe in an ideal situation where the value of occupational therapy services is maximised?
- 2. What are some outcomes which indicate that things are moving in the right direction?
- 3. How do you think the direct and indirect costs of therapy in this ideal situation differs compared to usual sessions?
- 4. What would clients see that is different in this ideal situation?

Phase 2 Guide for Interview/Focus Groups - Design and Destiny

Pridse 2 duide for interview/ Focus Groups - Design and Destiny						
Clients	Occupational Therapists and Managers					
 As you think about the ideal future, how do you think you can play a role or who else do you think will play a role in enabling this change? How will you/they go about doing it? How will the results/ outcomes of this ideal situation be measured? Based on the ideas you have shared, what do you think are steps that can be taken in the near future to achieve them? 	 With a better understanding of what value in occupational therapy looks like currently and ideally, what do you think needs to be done in order to achieve the changes? How might you play a role in bringing about this change? Based on the ideas you have shared, what do you think are steps that can be taken in the near future to achieve them? 					

[Insert Figure 1 and Table 2 here]

Data analysis

Consistent with grounded theory's constant comparative analysis, data collection and thematic analysis occurred simultaneously (Tie et al., 2019). Thematic analysis was carried out using NVivo 12 software (QSR International, 2018). The researchers used inductive and deductive coding to establish themes which helped to understand the perceived value of occupational therapy services (Fereday and Muir-

Cochrane, 2006). The themes were then processed, narrowed or changed by contrasting the initially grouped data within the themes. Codes and themes were continuously refined as each session's data was compared and analysed with data from all sessions (Tie et al., 2019). Twenty percent of each transcript was independently coded by another researcher and compared through discussions until agreement was reached (Syed and Nelson, 2015). To further ensure trustworthiness of data analysis, coded data were cross checked with reference to video recordings (to observe non-verbal communication) and regular reflections with the research team (Patton, 2015).

Findings

Three themes encompassed the participants' perceived value of occupational therapy services: (1) outcomes which are meaningful to daily life, (2) a constructive client-therapist relationship, and (3) affordable, coordinated and understandable therapy. As this study was conducted in a large acute hospital, the terms 'patient' and 'caregiver' were used by participants to describe clients using the occupational therapy services.

Outcomes which are meaningful to daily life

Outcomes, or the meaningful difference therapy sessions made to the person's life, was considered a marker of a quality occupational therapy service and indicator of value. Meaningful outcomes were defined through the achievement of the goals which were set during therapy. These goals needed to be clear for the client and relate to something which was important for their, or their family members' lives.

"At the end of each session, [the occupational therapist] will go through [the plan]... And she would emphasise on what other things I should do before I meet her again for the next session, and that works. Yeah. It brings more quality because we have that goal to achieve" (Patient-B)

"To provide a better service and better-quality service to the patient, [the service needs to] make sure that the patient knows what the goals is... If you achieve the goal that is set for you, then you will feel the sense of achievement. Then you will work harder towards the next goal. As compared to when you have no goal, no target, nothing, you just go and see therapist again and again" (Patient-F)

The expertise of both the client's and therapist's opinions were appreciated in the goal setting process. While the clients wanted to be involved in establishing their own goals, they also saw that the therapist's contribution could add value as they could break down the goal into smaller tasks and offer encouragement as to what might be possible.

"<u>Patient</u>: I would prefer [the occupational therapist] set goals that are important to me, so I have the motivation to do the therapy. But I feel that sometimes when they set goals that they think is beneficial for me, it's like something that I can work towards also, ... that means they think that I can do it and that's why they set the goal for me.

<u>Facilitator</u>: So, in some sense you do value the therapist's input in setting your goals? <u>Patient</u>: Yeah" (Patient-C)

"Goal setting is not a therapist-set goal [but] a discussion between the patient and therapist...I think it's a way of patient-centredness for patients to tell us what they think is important, and what they want to achieve" (Manager-X)

Goal setting tended to happen at the start of the therapy process and monitored in subsequent sessions. While some objective measures of goal achievement were discussed, the participants suggested that subjective measures such as the patient's opinion were more commonly used for short-term progress checks. It was suggested that a longer-term measure of impact on quality of life was more difficult to measure and that a structured system for that was not yet in place.

"It's quite difficult to measure, or maybe we're not sure or not aware of what are some of the long-term measures that what we do impacts on the patient's life or the family's life. But we do get quite a lot of subjective feedback from the parents telling us... but we don't really have a score to measure the impact on the family's life and the patient's life" (Manager-T)

Therapists discussed how setting goals and achieving meaningful outcomes was a marker of a quality service and indicator of value. There was some debate, however, as to what was considered meaningful and to whom. Therapists who encouraged the patient to set goals which related to their participation in life situations, were challenged when some patients or the governing body of the hospital wanted to see measurable improvements in a patient's impairment or disability.

"How [therapists] measure the outcome is [that] we look at [the patient's] overall eventual participation in their activities, whether [they have] managed to achieve their goal of returning to [a] particular activity or occupation; which is still quite different from what some of our [patients] perceive as the goal of therapy because... to them, the disability is there, then they just focus on reducing or improving the [impairment]" (Occupational Therapist-R)

"What we see as outcomes is very different from what the ministry [governing body of the health system] sees as an outcome ... We might look into quality of life and how they cope with their life, but they are looking at significant changes, numbers or things that are very different from our perspective" (Manager - X)

A constructive client-therapist relationship

Participants frequently spoke about how the perceived quality of the service was influenced by the client-therapist relationship. Clients described positive relationships using phrases such as 'putting herself in my shoes'; 'comfortable'; 'really listen'; 'understand what I was going through'; 'motivate'; 'encouraging'; and 'caring'. Being listened to and understood were suggested as markers of quality and a strength of occupational therapists.

"I am still facing difficulties in my daily life, so like I feel that occupational therapists are still the ones that listen, yeah... in comparison to the other like healthcare professionals like doctors" (Patient-C)

"We have [a good relationship] I think. [The occupational therapist] understands me yah there's really like no communication breakdown. She really understands what I was going through and then I feel that I can really understand her too" (Caregiver-A)

Clients placed value on the relationship they had with their therapist and appreciated consistency when seeing the same therapist over time. Some described how changing therapists or seeing more than one therapist for their problems could be challenging as they needed to re-invest their energy in creating a new working relationship.

"It's fragmentation...I have to see different occupational therapists because of different problems. It will be better if there is one therapist with general skills, then refer me to a specialist... If I have to switch again...I have to build rapport again...The therapist-patient relationship is very important" (Patient-C)

Communication skills were highlighted as vital to developing constructive relationships by therapists. They did, however, express that the advanced communication skills required to develop rapport with some clients were limited. Quality professional development opportunities focusing on communication, along with experience were suggested as ways to develop these skills.

"When it comes to patients with a bit more complex care or if they have more emotional needs, sometimes we do not really have the skills... sometimes we feel like we are lacking in the communication skills to really communicate with them to go into like a deeper level to understand them. So that might also affect the rapport with some of these groups of patients as well" (Occupational Therapist – R)

Along with communication skills, therapists and managers reflected that constructive relationships required time with the client to develop. Time was often a challenge for therapists in the acute setting and proposed as a potentially limiting factor in developing these relationships.

"I resonate with the idea about having the time to see patients, to build the relationship, [and] the rapport... I think having that time to build rapport and for [patients] to understand what you do, for them to understand what we can offer to them, would make a difference" (Occupational Therapist-M)

"The dream that we have is [to] not [be] restricted by time. I think outpatients is a very complex setting, and that is the time we get in touch with the patient, we understand the patient, but we are also [bound by] productivity" (Manager-Z)

Affordable, coordinated and understandable therapy

Costs were discussed by all participants when they considered the value of the occupational therapy service. Some clients found the costs of occupational therapy reasonable, when compared to other services previously received. Therapists also considered costs and found ways to keep costs to a minimum by scheduling sessions when they could provide therapy to the patient and educate the caregiver simultaneously. Self-management strategies were another common approach advocated to reduce the cost of therapy.

"Cheap in terms of 1-to-1 coach, anywhere in Singapore, 1-to-1 coaching is really expensive. A personal trainer like that. This is like my personal trainer. So, I find [the cost of therapy] like reasonable. Very reasonable" (Patient-H)

"I think in terms of direct costs... we will wait until the care giver comes in so that it will be one session and that we don't need to charge the patient so many times" (Occupational Therapist-P)

"We really hope that patients and family members ... take up the role of self-management and reduce long term costs" (Manager-L)

The cost of therapy went beyond money. Participants spoke of the indirect costs associated with therapy, including the time for the appointment itself, the travel time to the hospital, and inconvenience associated with scheduling appointments around work or other commitments. Clients also discussed the time required for carrying out the therapy at home, which sometimes prevented them from doing other meaningful activities.

"I feel I'm losing out to my friends in terms of how they have more time to study...I have less time because I have to spend time exercising at home, and I have to travel down to the hospital" (Patient-C)

"We don't really have a lot of choice [of therapy time slots], so if it's like smack in the middle of the day, I also have to take leave because [the occupational therapist] only has this slot. It's either I take it or don't, you know?" (Caregiver-A)

In view of managing these costs, participants described how the coordination of therapy services was another marker of a quality service and represented value. Scheduling appointments so that the client could see other health professionals on the same day and good communication between health professionals was critical.

"They [the speech therapist and occupational therapist] have to share information about my daughter...if both therapists know what's going on, they can help my child" (Caregiver-C)

"Working closely with other healthcare professionals is really important... [In the] acute setting, [therapists] need to know what are the investigation results, ... communicate with the team [to know] what are the discharge plans, and [work] together with the physiotherapist, speech therapist, psychologist" (Manager-L)

All participants spoke about the lack of awareness and clarity about what occupational therapists can offer. Clients discussed how they did not always see the difference between a physiotherapist and occupational therapist, particularly when both professions were asking the client to complete exercises. Confusion arose in a few cases when clients were seeing hand therapists, who were also occupational therapists. Participants suggested that due to the complexity of understanding the profession, occupational therapists should better promote what they do, indicating that despite the confusion, they still valued the service.

"What's the difference? ...From the laymen [perspective], people are asking me, 'Are you going for [physiotherapy]?'. I [replied]: '[yes], some exercise'. To me, it's the same but now you keep using the word occupational therapist... [whereas] in the centre, they use 'hand therapist' so to me I thought it's under the umbrella of physiotherapy... For your sake as...professionals, you should tell people [what occupational therapy does]. I think you all should champion what you all do" (Patient-G)

"I think in the ideal world, OT needs to be better publicized or positioned to know what we can give and offer...to outside people – the doctors, families, [and] caregivers" (Manager-T)

"[The patients] value the impact of improving their everyday activities. So, it does show that actually [patients] value the role of OTs, [although] maybe they don't know the term is OT, but they...value the overall goal that everyone is working towards improving their overall health and wellbeing" (Therapist-O)

Discussion and implications

The value of occupational therapy services in this study was considered primarily reflecting personal and societal value, according to the European Commission's (2019) four pillars of value. Personal value was expressed in the participants' focus on setting meaningful goals and the achievement of outcomes which made a difference to the client's life, while managing personal costs. The therapeutic process during service delivery emphasised the personal value placed on the relationship between the client and therapist, as well as the connectedness associated with societal value (European Commission, 2019).

Personal value expressed through goal setting

VBHC signifies a shift towards a more client-centred approach, with client-centred goals being key in operationalising value (European Commission, 2019). One of the primary ways of increasing personal

value highlighted in this study was the importance of collaborative goal setting to align goals of different stakeholders. The occupational therapy profession has long upheld the importance of a client-centred practice at the core of the profession (American Occupational Therapy Association; AOTA, 2020). However, goal setting is a complex process requiring an understanding of the values of the client, considering what therapy has to offer, within the constraints of the system. Challenges are seen when stakeholders have differing or conflicting goals (Brewer et al., 2018), which was also reflected in this study.

For example, clients proposed goals which related to both occupational performance or participation improvements, and a reduction of impairment or disability. For occupational therapists working from an occupation-centred perspective (AOTA, 2020), goals which focused primarily on reduction of impairment or disability presented a challenge to their own perceived value of occupational therapy as making a difference to people's lives through engagement in occupation and participation in life roles. This was further complicated when the governing body of the health service also valued quantifiable targets which often reflected a measurable reduction in impairment or disability. It is possible that these different views contributed to the confusion expressed by clients as to the role of occupational therapy. Therefore, as collaborative goal setting could be problematic for therapists to facilitate given the potentially differing perspectives of stakeholders and lack of clarity in the occupational therapy role, more may need to be done to enhance the goal setting skills of therapists (Brewer et al., 2018).

Personal value expressed through outcomes

In recent years, there has been a call from various organisations and regulatory authorities to consider if outcome measures are meaningful to the individual (European Commission, 2019). Like previous studies, managers and therapists in this study highlighted the current gap in existing outcome measures used and challenges in selecting outcome measures that accurately reflected goals within their practice (Bowman, 2006). Patient reported outcome measures (PROMs) and patient reported experience measures (PREMs) were used by therapists in this study and have been suggested as important ways to capture what is meaningful to patients (European Commission, 2019).

Findings from the study, however, also suggest that we should strive to use outcome measures that are flexible enough to account for individualised goals but produce results that can be aggregated and generalized for service-level reporting, in an attempt to meet the needs of different stakeholders. This may be supported by using the International Classification of Functioning, Disability and Health Framework (ICF; World Health Organization, 2003) as a way of categorising goals which can reflect both body functions and structures improvements and changes to activity and participation (Powrie and Dancza, 2018). For example, if a person wanted to cook a meal but was limited by pain, goals could be set and categorised around the reduction of pain (body functions ICF code b280) and preparation of meals (activity and participation ICF code d640). Outcomes would reflect goal achievement (or not) which could be collated for service-level analysis based on the ICF codes.

Personal value expressed through managing personal cost

The focus on managing personal financial cost may have different applicability in healthcare contexts globally. Societies that rely on funding structures such as insurance providers or public funding, may emphasise fair distribution of resources, efficiency and low waste (European Commission, 2019). In Singapore, healthcare financing requires client co-payment, reflecting the sociocultural belief that universal healthcare is one of shared responsibility (Lee, 2020). It was therefore no surprise that stakeholders were cognizant to manage the financial cost to the client. Managing the opportunity cost of investing time in receiving healthcare, and re-investing in multiple relationships when interacting with the healthcare team were also described as significant for clients.

The importance of self-management was identified in this study as both a valued outcome, and a way to manage financial and opportunity costs. The idea of 'coping' or 'managing' appeared to be referred to as a satisfactory outcome. At the same time, it was suggested that encouraging self-management may also be an appropriate way to manage financial and opportunity costs of attending therapy sessions and reduce long-term reliance on the healthcare system. Occupational therapists are well-skilled to assess for and provide intervention for self-management (Leland et al., 2017). This may also reflect the need to measure outcomes not just at discharge but post-discharge when clients return to daily life in their homes and community.

Personal and societal value expressed through therapeutic relationships

Beyond patient experience, investing in a therapeutic relationship with clients is key in the occupational therapy process (AOTA, 2020). It is, however, reassuring that the therapeutic relationship was similarly valued by clients in this study and perceived to be critical to their care. Therapeutic communication skills were particularly valued and desired. Similar to previous findings, occupational therapists expressed limitations in providing therapeutic communication and highlighted the need for continuing professional development (Solman and Clouston, 2016).

Interprofessional communication was also valued by clients. Although seamless coordination of care is often what hospitals aim to achieve, it is interesting to note that clients expressed perceived increased value when the interprofessional communication within the team was made explicit to them. Moreover, clients appeared to be understanding about costs when therapists communicated what services were for, how the services related to each other and reasons for possible constraints.

Limitations and further research

This study was limited by its small sample size and restricted demographics of the participants. Clients were recruited from outpatient settings and therapists who participated were mainly from the inpatient setting. From a macro-perspective, further research should be done to identify value from a range of allied health services. Within occupational therapy, further research should be done to identify suitable outcome measures to accurately reflect the unique value of occupational therapy.

Conclusion

This study is the first of its kind to explore the perceptions of value of occupational therapy services from different stakeholders' perspectives in Singapore. VBHC literature often describes value in terms of medical services, with an implicit reference to the value of allied health services. Identifying value in relation to occupational therapy services means the profession can have a voice in how healthcare systems tailor their algorithms of value and allocate resources in healthcare transformation for the ultimate benefit of clients. In this study, value was attributed to personalised goal setting, achieving meaningful outcomes, managing personal costs and the extent of the therapeutic relationship. A starting focus could be placed in four key areas: (1) ensuring occupational therapists are skilled in collaborative goal setting, (2) determining suitable outcome measures which are meaningful for individualised goals, but can produce aggregated and generalised data for service-level reporting, (3) encouraging self-management strategies, and (4) emphasising the importance of the therapeutic relationship and supporting occupational therapists to continuously develop therapeutic communication skills. Further research is needed to explore how using VBHC concepts in service design can be used to enhance meaningful service provision.

Key findings:

- Value in occupational therapy services includes personalised goal setting, achieving meaningful outcomes, managing personal costs and positive therapeutic relationships
- Occupational therapy services need to operationalise value-based principles in service development

What the study has added

Understanding what value means within occupational therapy services from the perspectives of clients, occupational therapists and managers can be used to enhance value-based healthcare delivery in occupational therapy.

References

American Occupational Therapy Association (2020). Occupational therapy practice framework: Domain and process- Fourth edition. *American Journal of Occupational Therapy* 74(Supp.2), 7412410010.

Bowman J (2006) Challenges to measuring outcomes in occupational therapy: A qualitative focus group study. British Journal of Occupational Therapy 69(10): 464-472.

Brewer K, Pollock N and Wright FV (2014) Addressing the challenges of collaborative goal setting with children and their families. Physical and Occupational Therapy in Pediatrics 34(2): 138-152.

Cooperrider D, Whitney D and Stavros JM (2008) *Appreciative inquiry handbook: For leaders of change*, 2nd ed. Brunswick, OH: Crown Custom Publishing, Inc.

European Commission (2019) Defining value in "value-based" healthcare. Report of the Expert Panel on effective ways of investing in Health (EXPH). Luxembourg: Publications Office of the European Union, 2019.

Fantini B and Vaccaro CM (2019) Value based healthcare for rare diseases: efficiency, efficacy, equity. *Annali dell'Istituti Superiore di Sanita* 55(3): 251-257.

Fereday J and Muir-Cochrane E (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods* 5(1): 80–92.

World Health Organization (2003). ICF checklist. Version 2.1a, Clinician form for International Classification, of Functioning, Disability and Health. Geneva: World Health Organization.

Keswani A, Koenig KM and Bozic KJ (2016) Value-based healthcare: Part 1 – Designing and implementing integrated practice units for the management of musculoskeletal disease. *Clinical Orthopaedics and Related Research* 474(10): 2100-2103.

Lamb AJ and Metzler CA (2014) Defining the value of occupational therapy: A health policy lens on research and practice. *American Journal of Occupational Therapy* 68(1): 9–14.

Leach E, Cornwell P, Fleming J, et al. (2010) Patient centered goal-setting in a subacute rehabilitation setting. *Disability and Rehabilitation* 32(2): 159-172.

Lee CE (2020) International health care system profiles: Singapore. Available at: www.commonwealthfund.org/international-health-policy-center/countries/singapore (accessed 4 October 2020).

Leland NE, Crum K, Phipps S, et al. (2015) Advancing the value and quality of occupational therapy in health service delivery. *American Journal of Occupational Therapy* 69(1): 6901090010p1–6901090010p7.

Leland NE, Fogelberg DJ, Halle AD and Mroz TM (2017) Occupational therapy and management of multiple chronic conditions in the context of health care reform. American Journal of Occupational Therapy 71(1): 7101090010p1–7101090010p6. DOI: 10.5014/ajot.2017.711001

Lentz TA, Goode AP, Thigpen CA, et al. (2020) Value-based care for musculoskeletal pain: Are physical therapists ready to deliver? *Physical Therapy* 100(4): 621-632.

Lievens Y, Grau C and Aggarwal A (2019) Value-based health care – what does it mean for radiotherapy? *Acta Oncologica* 58(10): 1328-1332.

Lim J (2017) Sustainable health care financing: The Singapore experience. *Global Policy* 8(S2): 103-109.

Maron JL (2020) The shared responsibility of implementing value-based health care. *Clinical Therapeutics* 42(1): 7-9.

Nagayama H, Tomori K, Ohno K, et al. (2016) Cost-effectiveness of occupational therapy in older people: Systematic review of randomized controlled trials. *Occupational Therapy International* 23(2): 102-120.

Nyumba TO, Wilson K, Derrick CJ, et al. (2018) The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution* 9(1): 20-32.

QSR International (2018) NVivo qualitative data analysis software version 12 [Software]. Available at: https://qsrinternational.com/nvivo/nvivo-products/

Patton MQ (2015) *Qualitative research and evaluation methods*, 4th ed. Thousand Oaks: Sage Publications.

Pendleton RC (2018) We won't get value-based health care until we agree on what "value" means. *Harvard Business Review*, 27 February. Available at: https://hbr.org/2018/02/wewont-get-value-based-health-care-until-we-agree-on-what-value-means (accessed 19 September 2020).

Porter ME (2010) What is value in health care? *New England Journal of Medicine* 363: 2477-2481.

Porter ME and Teisberg EO (2006) *Refining health care: Creating value-based competition on results*. Boston: Harvard Business School Press.

Powrie B and Dancza K (2018) Poster: Goals and outcomes which are relevant for clients and services. In: *World Federation of Occupational Therapists Congress 2018*, Cape Town, South Africa, 21-25 May.

Rexe K, Lammi BM and Von Zweck C (2013) Occupational therapy: Cost-effective solutions for changing health system needs. *Healthcare Quarterly* 16(1): 69-75.

Rosewilliam S, Roskell CA and Pandyan AD (2011) A systematic review and synthesis of the quantitative and qualitative evidence behind patient-centred goal setting in stroke rehabilitation. *Clinical Rehabilitation* 25(6): 501-514.

Schapira MM, Williams M, Balch A, et al. (2020) Seeking consensus on the terminology of value-based transformation through use of a Delphi Process. *Population Health Management* 23(3): 243-255.

Solman B and Clouston T (2016). Occupational therapy and the therapeutic use of self. British Journal of Occupational Therapy 79(8): 514-516.

Syed M and Nelson SC (2015) Guidelines for establishing reliability when coding narrative data. *Emerging Adulthood* 3(6): 375-387.

Tie YC, Birks M and Francis K (2019) Grounded theory research: A design framework for novice researchers. *SAGE Open Medicine* 7: 1-8.

White J (2019) How will podiatry deal with value-based care? *Podiatry Management,* October 2019, 77-83.

World Economic Forum and Boston Consulting Group (2017) *Value in healthcare: Laying the foundation for health system transformation.* Report, April 2017. Cologny/Geneva, Switzerland: World Economic Forum. Available at http://www3.weforum.org/docs/WEF_Insight_Report_Value_Healthcare_Laying_Foundation.pdf (accessed 1 July 2020).

Wright M and Baker A (2005) The effects of appreciative inquiry interviews on staff in the UK national health service. *International Journal of Health Care Quality Assurance* 18(1): 41–61.