ARTICLE

Health coaching and motivational interviewing: evaluating the chronic disease self-management toolbox as a resource for person-centered healthcare

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Abstract

Objective: Many tools have been developed to assist patients in the self-management of chronic disease. Despite the role of clinicians in guiding patients to positive health outcomes, there has been little investigation of the tools from their perspective. The aim of this study was to investigate the preferences and motivations with which health professionals use chronic disease self-management (CDSM) tools as vehicles to improve the person-centeredness of clinical care.

Method: Data collection was conducted in three phases comprising key informant interviews, piloting of data collection materials and interviews with CDSM practitioners.

Findings: Key informant interviews established a need to explore clinicians' use of health coaching and motivational interviewing in CDSM. While all participants used multiple tools for CDSM, there was a strong preference for health coaching for its effectiveness, adaptability and strong applicability to CDSM. There was widespread use of motivational interviewing, yet it was the least preferred tool. A third tool, Acceptance and Commitment Therapy (ACT), was considered to produce positive outcomes by reducing patient barriers. However, it was of limited applicability to CDSM. Four themes emerged as determinants of clinicians' tool preferences and use: (i) strengths and weaknesses; (ii) flexibility; (iii) skills and (iv) barriers to implementation.

Conclusion: Beyond descriptions of individual tools, this study shows how health professionals adopt a 'toolbox' approach to tailor CDSM to their patients. Adaptable and flexible tools such as health coaching and motivational interviewing empower clinicians to meet the complex needs of people living with chronic disease and to increase the person-centeredness of clinical care. However, workplace and patient barriers continue to impact on the acquisition of patients' self-management skills and the satisfaction of health professionals working to achieve better patient outcomes.

Keywords

Acceptance and Commitment Therapy, chronic disease, evaluation, health coaching, motivational interviewing, person-centered healthcare, self-management

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Introduction

Self-management involves the active negotiation of the medical, behavioural and emotional aspects of life and is a central tool of person-centered healthcare [1]. Health professionals working to assist patients to self-manage the effects of chronic disease have a range of tools at their disposal. For example, the Stanford Program [2] and Flinders Program [3], motivational interviewing [4] and health coaching [5] are used to improve patients' self-management skills via behavioural change [6]. Despite wide use of these tools for chronic disease management

(CDSM), understanding of their efficacy is limited. Clinical evaluations of CDSM tools have demonstrated improvement in aspects of patient health, such as glycaemic control, mental health, self efficacy and health behaviours [7-13]. However, there are two imbalances in our knowledge base. Firstly, most studies have been based on patient data, such as health outcomes and program feasibility and few studies have included data from health professionals. Those evaluating CDSM tools from the health professional perspective have provided insight into the challenges to patient self-management [14-16] and have revealed challenges to CDSM approaches within medical training [17,18] and barriers to the uptake and implementation of CDSM programs [19-28]. No study has specifically explored the perspectives of health professionals on their experience with CDSM tools in their daily clinical practice. Secondly, rigorous evaluation has been conducted with the Stanford and Flinders programs [29-32] while those of health coaching and motivational interviewing have been less comprehensive (see Table 1). Although there are fewer evaluations of the Flinders Program, the evaluations are rigorous and comprehensive [3,13,19,24,25,31,32].

Table 1 Studies into the efficacy of CDSM tools

Tool	Study focus		Total number of studies
	Patient data	Health professional data	
Stanford Program	36	4	40
Flinders Program	4	3	7
Health coaching	8	1	9
Motivational interviewing	6	3	9
TOTAL	54	10	64

Motivational interviewing is a counselling-based skill, used to promote behaviour change [33]. Initially developed for the management of addictions [34], it has been extensively evaluated in this context. More recently, motivational interviewing has been applied to chronic conditions such as weight loss, diabetes and asthma care [35,36]. While designed as a stand-alone method, motivational interviewing has been used alongside other CDSM tools and has been incorporated into health coaching models [5,10,12,18,22,36,37]. Motivational interviewing-based health coaching uses techniques of motivational interviewing within a health coaching structure [38]. Health coaching practitioners, peer or professional, apply evidence-based principles to support patients actively to participate in the self-management of their condition [38]. While health coaching is an umbrella term that describes a range of coaching-based programs [11,39,40], this study focuses on the Health Coaching Australia (HCA) model [5]. Widely adopted throughout Australia for use in CDSM, this model integrates a range of techniques, including motivational interviewing and cognitive behaviour therapy, to improve patient health outcomes in chronic disease care [5].

Health coaching and motivational interviewing are frequently used in chronic disease self-management programs, yet there is little discussion of the reasons behind their popularity. Thus, the lack of investigations into these tools is an oversight. Accordingly, the aim of this study was to investigate health professionals' use of health coaching and motivational interviewing and their perspectives on the factors influencing their choices. By examining the perspectives of health professionals, we are able to gain understanding of the reasons behind their choices of CDSM tools and their perceptions of their advantages and disadvantages in daily clinical practice. Clinicians make specific recommendations to patients to assist them to manage their conditions. The quality of CDSM practice is reliant on an evidence base that guides clinician choices and has the potential to inform health policy and clinician training. The insights from this study complement research findings based on patient participation and health outcomes and therefore significantly add to the CDSM evidence base.

Methods

The research was a multi-method study conducted in three phases during the period of March to September 2011. The function of Phase 1, featuring key informant interviews, was to understand the *in situ* use of these tools by expert practitioners. The knowledge from Phase 1 provided the foundation to develop and pilot test an interview guide in Phase 2. This enabled an in-depth examination of clinicians' practice with health coaching and motivational interviewing to be conducted in Phase 3. Data collection took place within two regional health services in south eastern Australia. A total of 17 participants took part across the three phases. Ethics committee approval for this project was given by the University of New South Wales (Social/Health Research Human Research Ethics Advisory panel: 2009-7-13), the ACT Health Human Research Ethics Committee (ETHLR.10.274) and the Australian National University Human Research Ethics Committee: Human Ethics (Protocol 2010/349).

Phase 1: Key informant interviews

Phase 1 consisted of unstructured interviews conducted with six key informants, as expert sources of information [41]. These informants were selected because of their knowledge of the health system and CDSM research, their extensive experience in managing CDSM teams and their work with patients in self-management programs. They had expertise in multiple fields including chronic disease management, research and clinical service management (Table 2). The informants gave an overview of the role of CDSM in their service, including the range of tools offered, the training requirements for staff and the health system issues that impacted on the implementation of the tools. They identified a number of barriers associated with the tools and explained the limitations of previous research conducted with health professionals using CDSM tools.

Table 2 Key informant characteristics

Key Informant	Organisational and clinical expertise			Knowledge expertise		
	Management of CDSM teams	Clinical service delivery	CDSM	Organisational management	Clinical management	Research
1	✓	✓	✓	✓	✓	
2	✓	✓	✓		✓	✓
3		✓	✓	✓		
4	✓	✓	✓	✓	✓	✓
5			✓			✓
6			✓			✓

Informants were interviewed for one hour in their workplace. Field notes were used to record their responses.

Phase 2: Development and piloting of the interview guide

A semi-structured interview guide [42] was developed in reference to the literature and the experience of key informants. It was pilot-tested by the key informants for content and credibility and to incorporate their insights into the analysis. Following feedback the guide was refined and finalised for use with the remaining interviewees (see Appendix 1). Sixteen questions explored the health professionals' opinions on health coaching and motivational interviewing, the training clinicians had undertaken and the supports and barriers to successful implementation of the tools.

Phase 3: Semi-structured interviews

Interviews were then conducted with individuals from five clinical teams. The teams included a specialist chronic conditions self-management team, a chronic care team, a diabetes team, a community health team and a cancer team. Purposive sampling [42] was used to recruit the participants. The key informants identified health professionals who had experience in health coaching or motivational interviewing and then distributed invitations, via email, to participate. Eleven health professionals were recruited, as described in Table 3.

The participants represented the breadth of health professions working in the area of CDSM. Nine of eleven participants had worked in healthcare for six years or longer; five of these had over 10 years experience. Seven of the health professionals had three or more years experience in CDSM. Five participants worked in their discipline-specific roles within chronic disease teams, while the remaining six worked as CDSM practitioners. The combination of teams, professional roles, extensive health service experience and CDSM practice resulted in a pool of diverse and skilled participants, able to draw on the strengths of their knowledge and skill base.

Interviews were conducted in the workplace or venue nominated by the participant or by telephone. The interviews lasted approximately one hour. All responses were recorded using field notes taken during the interview. Electronic transcripts for thematic analysis [19,43] were produced from these notes. The participants' responses were coded to elicit the features of tool use and selection and these were classified into themes. The themes were grouped to enable comparison between each tool. In line with other similar research, the research team reviewed the analysis and resolved any disagreements by discussion [44]. Each individual's identity was protected by the removal of names and profession; quotes are presented using interview numbers only.

Findings

The findings are presented in two sections. The first section identifies the tools that the participants had been using. The second section explores the participants' views on the tools, to reveal why and how they used them. The participants' responses are first examined for the tools' strengths and weaknesses and then for the common challenges and assets, dimensions and conditions of CDSM practice.

What tools did health professionals use?

All respondents reported having been trained in multiple tools for CDSM. Ten of eleven participants used more than one tool in their clinical practice. The remaining health professional used health coaching only. Access to multiple tools was considered valuable to CDSM practice:

> *"It's good to use the Flinders principles and health coaching together. They make a good combination. I use the Flinders principles to help build confidence; for example, using puffers. And then I use the health coaching principles to move on from that. I use a mix of techniques and principles rather than just the set tools." (Interview 3)*

Table 3 Health professional characteristics

Health professional participants (n=11)			
Professional role	**Number**	**Professional background**	**Number**
CDSM practitioners	6	Psychology	1
Social work	3	Social work	4
Dietitian	1	Nutrition	1
Physiotherapist	1	Physiotherapy	1
Nurse	1	Nursing	3
		Health promotion	1
Health service experience (years)		Range = 3.5 – 31	
CDSM experience (years)		Range -= 0 5 - 15	

The range of tools available was influenced by the policies of the health service. Funding, training availability, staff retention and the evidence base of each tool determined whether health professionals would be supported by their organisation to attend training and offer the tool as part of their service. The tools used by the participants included the Stanford Program, the Flinders Program, motivational interviewing and health coaching and an additional tool that had not been identified by the key informants in Phase 1. Acceptance and Commitment Therapy (ACT) was used in CDSM by social workers from one health service. As a form of psychotherapy, ACT aims to enable behaviour change by increasing psychological flexibility [45,46]. ACT has been applied to chronic conditions, including chronic pain [47] and diabetes management [48]. The clinicians using ACT considered it valuable to CDSM; therefore ACT was incorporated into the evaluation.

Respondents described health coaching, motivational interviewing and ACT as effective tools for CDSM. Comparison revealed a significant majority (72%) of participants used health coaching in their daily practice. Health coaching was used by all teams except the cancer team. Motivational interviewing was used as a stand-alone tool by four participants (36%) from three teams. However, as motivational interviewing was a component of health coaching, all respondents used it to some degree. ACT was used by three participants (27%) from three teams.

What were the health professionals' views on their use of health coaching, motivational interviewing and ACT?

Four themes, with associated sub-themes, emerged to describe the clinicians' use of health coaching, motivational interviewing and ACT and gave an understanding of the reasons behind their preferences as influences on their delivery of care. The themes were: (i) strengths and weaknesses of the tools; (ii) flexibility; (iii) skills and (iv) barriers to implementation. These were the variables that influenced the views and practices of the clinical support provided by the clinicians.

Strengths and weaknesses

Participants characterised the strengths and weaknesses of each tool in terms of the benefits it offered them as CDSM practitioners, the benefits to their patients and the limitations the tool presented. The strengths and weaknesses of health coaching (Table 4), motivational interviewing (Table 5) and ACT (Table 6) are summarised in the tables overleaf.

Participants' responses explored the themes of flexibility, professional skills and barriers to the implementation of health coaching, motivational interviewing and ACT. These themes were common to the participants and served as criteria for selecting tools to suit each patient's requirements.

Flexibility

Respondents highlighted the need for flexibility in CDSM practice. They valued how well a tool adapted to the patients' needs and how well it fitted into the service delivery format. Practitioners reported tailoring programs to the individual patient. Frequently, the patient's psychosocial needs would be incorporated into the goal setting before the chronic disease issues could be addressed. Participants who were trained in multiple tools were able to do this by adapting the tools at their disposal:

> *"I find that I use the principles of the tools, rather than the tools themselves (with the Flinders tool and health coaching). You develop a sense of understanding about the clients and their condition. I start by using a more Flinders approach to get the goal setting happening. And then we look at how we get there. Health coaching helps the implementation of the goals. I find many people are using it informally without having training in it." (Interview 3)*

> *"I would use a holistic approach during interviews using a variety of models (naturally without any pre structured format). In my opinion ACT is basically a mixture of many useful tools from other approaches and of course with its add-on characteristics." (Interview 1)*

Table 4 Strengths and weaknesses of health coaching

Benefits to health professionals	Exemplar evidence
• **Facilitates goal setting** • **Reduces patient's ambivalence** • **Immediate implementation post training** • **Transdisciplinary** • **Combines well with other tools** • **Embeds well into consultation format** • **Comprehensive toolkit** • **Job satisfaction** • **Self confidence**	"Health coaching is helpful in creating a goal setting process, in breaking the goals down. It gets patients to think about what will help them to reach their goals and how to tackle the barriers to reaching these goals. Also, it helps me in chatting to them about tackling a certain problem or a barrier to treatment." (Interview 11) "It encompasses many other tools. Reflective listening, motivational interviewing, it's an umbrella. There's a lot of flexibility, not just one technique we use. You need a range of tools in a toolkit and you have to be receptive. You have to see the whole health picture. It's comprehensive." (Interview 4) "I get more job satisfaction using health coaching. My confidence increases as I use it, with patients who are appropriate." (Interview 5)
Benefits to patients	**Exemplar evidence**
• **Tailored to patient's needs** • **Supports and empowers patient** • **Patient sets own goals** • **Promotes patient choice** • **Improved health and symptom control** • **Improved health behaviours**	"One thing to note with health coaching – it is important to explain to the patient that if they don't reach their goal, it's not a failure but that a different strategy needs to be chosen, because the chosen strategy was not working." (Interview 11) "Change in behaviour results in rewards such as improved BGLs or weight loss. There is a cost benefit to changing early. For example 5 to 10% of weight loss can decrease blood sugars and delay further diabetes treatment and help the patient to avoid insulin. The benefits of change now outweigh the costs in the long term." (Interview 2) "I have a client who is very motivated and she has had good success with managing her chronic disease. She's very goal-focused, and has set a number of realistic goals, which have helped to build her self-confidence. At first she found using oxygen a hindrance. However she now is very confident in using her oxygen. She's participating in a gym program, cooking and going out to the shops. She's now breathing properly, so she no longer has blackouts. She's gained independence and her husband is now able to go out and leave her on her own for a few hours in the day." (Interview 3)
Limitations	**Exemplar evidence**
• **Time constraints** • **Timing of intervention** • **High levels of clinical skills** • **Requires good relationship with client** • **Relies on patient's awareness and ability to engage**	"Sometimes people aren't ready. They are in shock at the diagnosis and we need to give them time and space. They need to know they can come back when they're ready, because the service is always there. Self-management means allowing them to move in and out of the process. Not holding on to the patient or creating dependence." (Interview 4) "It's time-consuming. It requires development of trust with the client. It takes time to build up this trust with them." (Interview 5)

Respondents viewed health coaching and motivational interviewing as compatible with other more structured tools, including the Flinders and Stanford programs. They also considered them compliant with the formal requirements of a consultation appointment, including the completion of care plans and patient education components. Participants found health coaching and motivational interviewing to be flexible enough to work well in both face to face and telephone consultation formats. However, ACT could only be delivered in face to face sessions with the practitioner as a formal and intensive therapy program delivered in treatment blocks.

Skills

The participants reported that their skills for the successful use of health coaching, motivational interviewing and ACT developed from a combination of experiences: as the product of training courses; informal 'on the job' training they received from peers and mentors and the professional and interpersonal skills they used to work with their patients. While each tool had formal training requirements, the costs of these courses were met fully or partially by the workplace and were not considered a barrier to accessing the tools. Health professionals particularly acknowledged the role of the training they received 'on the job'. This was valued for the development of skills, confidence, peer support and mentoring relationships:

Table 5 Strengths and weaknesses of motivational interviewing

Benefits to health professionals	Exemplar evidence
• **Facilitates preparation for change** • **Easy to engage client** • **Rapid results** • **Works well with co-morbidities and management of multiple issues** • **Job satisfaction**	"I use motivational interviewing within health coaching. In some sessions I only use motivational interviewing. It helps patients to identify why they want to make changes to their lives, what the benefits of these changes are, whether they are ready and confident to make those changes. Sometimes all you can get done is to get them to think that little bit deeper and further. So some health coaching sessions are only about motivational interviewing." (Interview 8) "It is a core technique to get people to move on. It applies to people who are stuck and can't see a way out from their current situation (with) dietary issues, obesity, mental health issues and addictions." (Interview 1)
Benefits to patients	**Exemplar evidence**
• **Practical** • **Promotes patient choice and control** • **Based on patient priorities** • **Patient-friendly** • **Builds self-confidence** • **Addresses physical and emotional aspects of chronic disease** • **High success rate**	"It uses a simple formula, something that clients can take away with them." (Interview 6) "They *[the patients*] don't always see problems, you can help them to discover them … Change is seen on a daily basis." (Interview 1) "It's non-judgemental, non-confrontational and easy for patients to understand." (Interview 6) "Sometimes the patient has a negative self-image. You have to build up trust with them. You have to build up self-confidence with them. Only then can they set achievable goals, when they have enough self-confidence to do so. Too often they feel overwhelmed and have very low self-confidence. It is very interesting, rewarding and takes time." (Interview 5)
Limitations	**Exemplar evidence**
• **Time commitment** • **Requires clinician guidance and monitoring** • **Reliance on patient's awareness, confidence and willingness to change**	"Motivational interviewing can be effective if health professionals are well-trained and they have a good amount of consultation time. It can't be rushed… you have to have the space to explore concerns." (Interview 6)

Table 6 Strengths and weaknesses of ACT

Benefits to health professionals	Exemplar evidence
• **Holistic therapy** • **Facilitates breaking down of barriers** • **Motivation maintained by results** • **Promotes mindfulness** • **Job satisfaction**	"I use it more and more overall. It's less goal oriented and more about client values. It attempts to align to the client's life. For example a client might have problems exercising. Previously, I would've broken down the activity. Now, I'm looking at their experience of exercise. What are the barriers? I use defusion techniques and mindfulness, generaliseable mechanisms to maintain change." (Interview 6) "It's about learning what is important to the person. It involves self-talk." (Interview 7) "You are encouraged as a clinician to engage in the process yourself and review your own health and wellbeing. If you engage in it you pick up so much more." (Interview 6)
Benefits to patients	**Exemplar evidence**
• **'Whole of life' approach** • **Based on patient values**	"It gives them long-term skills, so that when they are off track they can get themselves back on… They say the exercises have changed their life." (Interview 6)
Limitations	**Exemplar evidence**
• **Time-consuming** • **Therapist training requirements** • **Ongoing commitment of therapist** • **Ongoing commitment of client** • **Patient engagement**	"The main barriers are time and resources… ACT has great expectations of the client and therapist particularly with time. It takes much longer than motivational interviewing to do." (Interview 6) "Some people just don't get it." (Interview 7)

"It helps to do it as a group or to build a culture in your work team. It's much easier doing it that way than in isolation, you have a critical mass. That's the way you get workplace support. And that stops you from becoming overwhelmed. Workplace support comes from having clinicians training and management training together." (Interview 4)

Professional skills, such as clinical expertise and time management and interpersonal skills, such as patience, were considered essential to complement more formal training. Respondents identified strong communication, interpersonal and psychosocial skills as key to building relationships with their patients. They viewed the ability for critical self-reflection as essential to the success of counselling-based approaches of motivational interviewing and ACT. Participants valued life experience, particularly those familiar with chronic disease in their personal lives.

Barriers to implementation

Respondents identified two sources of barriers to health coaching, motivational interviewing and ACT: the workplace and the patient. Clinicians from CDSM-specific teams differed in their views on workplace barriers to those from generalist teams. Participants from a generalist service reported lack of time, resources (including staffing) and management support, as well as service delivery restrictions, as the greatest impediments to the effective use of CDSM tools. Additionally, patient waiting lists and mixed caseloads were noted as adding to the difficulties experienced. However, staff from a dedicated CDSM unit did not find time or resources to be a barrier. As their service specialised in CDSM, resources were allocated sufficiently. They reported the impact of clinical inexperience and lack of support, on selection and integration of CDSM tools as the significant barriers:

"I think the challenging part is integration … It is hard to integrate new skills like health coaching into the system, I find healthcare professionals who train in any of these tools are motivated to start, but quickly loose that motivation and end up going back to the old models of care. Training alone is not enough – healthcare professionals need support afterward they have been trained and they need the system to support change, to allow it to be incorporated into the system." (Interview 8)

Participants with experience in inpatient settings reported further barriers. Inpatient hospital stays were seen as disruptive to patient self-management. The culture of inpatient care was viewed as 'hands on' and directive, in opposition to the tenets of CDSM and prevented the patient from being involved in their care. Clinicians reported that, as a result, patients ceased their self-management routines during an inpatient stay, necessitating a re-setting of goals after discharge:

"Upper levels of management don't really understand what health coaching is about. This is particularly true for nursing. The managers in the chronic disease program are okay with it. Health coaching is opposite to hands-on nursing care. That can make it very difficult when patients are in hospital. They become disempowered. They have little sense of ownership of their condition and difficulty voicing their rights as an inpatient. When I go to see them on the wards they say to me, "The nurses are doing it for me". This means 'I am not in control'. It creates problems with discharge planning. Planning can be very difficult if the nurses are doing all the care. The patient needs to show that they are able to manage their care before they can be discharged. However, they are not doing anything for themselves when they are in hospital, because they have been disempowered." (Interview 3)

One respondent expressed concern for patients who developed chronic care needs during long term inpatient stays. These patients were considered to be vulnerable to re-admission following their discharge due to the lack of CDSM education received as an inpatient.

Participants also identified barriers to CDSM that stemmed from the patients themselves. Barriers arose when the clinician was unable to engage the patient in the CDSM process or develop a trusting relationship with the patient. Respondents considered that patients presenting with cognitive or mental health issues were the hardest to engage and also perceived difficulties engaging with patients who feared or lacked motivation for change. The ongoing commitment required to achieve care goals was often undermined by the patients' psychosocial issues or by being overwhelmed by the impact of their disease. Practitioners believed that each tool offered different and complimentary strategies to deal with these barriers. Motivational interviewing facilitated the development of awareness prior to goal setting, while health coaching incorporated psychosocial needs into goal setting. Participants using ACT addressed patient needs by developing skills for life management within the therapy plan. All practitioners reported reliance on the patient's willingness to engage in CDSM and where that failed, 'keeping the door open' until the patient was ready.

Discussion

Chronic disease self-management literature, defining and evaluating individual tools and their use, has underestimated the dynamic nature in which clinicians combine various tools in the spontaneity of real time to tailor healthcare to the unique needs of their patients. Clinicians deploy informed perspectives on particular tools and customise them to their patients. This paper gave some insight into those views and the ways in which clinicians apply them. The findings identify and account for the use of three CDSM tools from the perspective of healthcare practitioners. Previous literature has reviewed the strengths and weaknesses of particular CDSM tools [6]. The views of health professionals, their preferences and the

challenges they experience add to this knowledge base by providing insight into their effectiveness at the level of the workplace. The study is limited by small participant and site numbers, but provides a snapshot of the experience of expert clinicians working in CDSM.

Participants' attitudes to the three tools varied. On one hand, motivational interviewing was the most frequently used of the three tools, either within health coaching or in combination with other tools. It was also the most transdisciplinary tool [35], used by all professionals from all backgrounds and in all CDSM caseloads. However, it was the least preferred as a stand-alone tool for CDSM. Motivational interviewing was considered complementary to other tools and best applied to the caseloads for which it was developed; that is, addictions and mental health issues. As such, it was preferred for managing the co-morbidities of chronic disease, rather than the disease itself. While motivational interviewing has emerging evidence as a tool in diabetes self-management [9,49], health coaching was predominantly used by the diabetes care practitioners in this study. ACT was seen to be an effective tool for managing chronic disease and the associated, underlying conditions. While ACT is emerging for use within chronic disease care [48], it was limited to a small number of professions and fell within the scope of practice of practitioners from psychosocial backgrounds. The influence of clinical background on tool choice was only evident with those working in discipline-based roles. Those who worked as CDSM practitioners showed a preference for CDSM-specific tools, that is, health coaching.

CDSM practitioners value a 'toolbox' approach to CDSM. The participants in this study were trained in multiple tools and felt that a range of tools gave them the best chance to teach patient self-management strategies and improve patient health outcomes. However, there were clear preferences for specific tools within that toolbox. The popularity of health coaching was evident. It was considered to be the tool that met most of the needs of the health professionals and patients, most of the time. Health coaching is an amalgamation of components cherry picked from several fields, creating a toolbox within a tool [5,6]. The component of motivational interviewing within health coaching allowed health professionals to deal with underlying issues as well as CDSM while overcoming some of the barriers patients presented. Of the tools explored in this study, health coaching was the only tool specifically developed for CDSM [5]. Motivational interviewing and ACT are both counselling tools that have more recently been applied to CDSM.

As the health services funded the training for CDSM programs, they determined the choice of tools health professionals were able to access. Emerging CDSM programs were under consideration by both health services. While there was no dissatisfaction expressed about the range of tools available to health professionals, it was acknowledged that costs and training needs were likely to impact on the uptake and availability of emerging evidence-based tools. However, barriers stemmed from a clash between CDSM approaches and health service priorities. Health coaching, motivational interviewing and ACT all emphasise a patient-centred approach that allows health professionals to work with patients from their point of need and at their own pace. While health services support person-centred care, the health system revolves around patient turnover. Staff shortages, long waiting lists and requirements for high occasions of service meant that health professionals were under constant pressure to discharge patients as quickly as possible. The health services supported and funded the CDSM programs, but the health system did not always provide a supportive environment in which to operate. Most evident was the gap in CDSM support between inpatient and community settings, resulting in disrupted continuity of care. Clinician confidence was also seen to suffer in the struggle between developing CDSM experience and high caseload demands [6].

Conclusions

If clinicians are to support the self-management of patients, the contexts which structure and guide their practice must support the dynamic manner in which they combine various tools aimed at delivering optimal and individualised patient care. Health professionals seek effective and adaptable tools to promote the best possible health outcomes for their patients. Patient self-management is facilitated by access to a range of tools including health coaching, motivational interviewing and ACT that can be tailored to the individual needs of the patient in order to increase the person-centeredness of clinical care. However, health systems create barriers to this approach. Training and support for CDSM in inpatient settings requires a culture change to enable a consistent approach to CDSM across healthcare settings [20]. Patient engagement may be better supported by a health system that promotes CDSM across the continuum of care. Given the growing policy imperative to align clinical practice with consumer needs and desires, policy-makers and clinical educators would do well to ground policies, procedures and evidence in the sophisticated way that clinicians customise chronic disease care.

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Appendix 1

Interview guide

Interview questions for health professionals trained in motivational Interviewing and/or health coaching
Questions about your perspectives of chronic disease self-management and the tools you use
1. How would you describe the self-management of chronic disease?
2. What chronic disease self-management techniques do you use with patients?
Questions about your perspectives and use of Motivational Interviewing and/or Health Coaching
3. What training have you completed in motivational interviewing/health coaching?
4. What do you remember from attending the training?
5. How do you use motivational interviewing/health coaching in your work?
6. How often have you used motivational interviewing/health coaching?
7. What has it been like for you to use motivational interviewing/health coaching in your workplace? • Barriers/facilitators to implementation?
8. How do you decide when you will use motivational interviewing/health coaching?
9. What are the strengths of motivational interviewing/health coaching?
10. What are the weaknesses of motivational interviewing/health coaching?
11. How do patients/clients respond to the use of motivational interviewing/health coaching? • Good and bad responses • Can you give an example of when motivational interviewing/health coaching has been successful or not as successful as planned?
12. How does motivational interviewing/health coaching compare to other chronic disease self-management tools you have used?
13. Is motivational interviewing/health coaching more suited to be used by some professionals than others?
14. What skills does a health professional need to be successful in motivational interviewing/health coaching?
15. What would you say to people who are considering completing training in motivational interviewing/health coaching?
16. Do you have any other thoughts on motivational interviewing/health coaching that you would like to share?