What motivates Australian health service users with chronic illness to engage in self-management behaviour?

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Abstract

Context Health policy in Australia emphasizes the role of health service users (HSU) in managing their own care but does not include mechanisms to assist HSUs to do so.

Objective To describe motivation towards or away from self-management in a diverse group of older Australians with diabetes, chronic heart failure (CHF) or chronic obstructive pulmonary disease (COPD) and suggest policy interventions to increase patient motivation to manage effectively.

Design Content and thematic analyses of in-depth semi-structured interviews. Participants were asked to describe their experience of having chronic illness, including experiences with health professionals and health services. Secondary analysis was undertaken to expose descriptions of self-management behaviours and their corresponding motivational factors.

Participants Health service users with diabetes, COPD and/or CHF ($N = 52$).

Results Participant descriptions exposed internal and external sources of motivation. Internal motivation was most often framed positively in terms of the desire to optimize health, independence and wellness and negatively in terms of avoiding the loss of those attributes. External motivation commonly arose from interactions with family, carers and health professionals. Different motivators appeared to work simultaneously and interactively in individuals, and some motivators seemed to be both positive and negative drivers.

Conclusion Successful management of chronic illness requires recognition that the driving forces behind motivation are interconnected. In particular, the significance of family as an external source of motivation suggests a need for increased investment in the knowledge and skill building of family members who contribute to care.

Introduction

Australia's health system faces increasing pressure created by an ageing population, workforce shortages, tight budgets and skyrocketing prevalence and burden of chronic illness. During the past 15 years, research has identified the necessity to engage health service users (HSU) in self-management to ameliorate these increasing pressures and improve health outcomes.¹⁻³

Australian health policy reflects this, most importantly in the National Chronic Disease Strategy (2005) and National Service Improvement Frameworks.⁴⁻⁶ These documents, which form the foundation for current chronic disease policy in Australia, included a strategic vision of increased HSU capacity to engage in self-management.

Subsequent State and Territory policies and initiatives operationalized this vision.⁷ The National Health and Hospitals Reform Commission's (NHHRC) 2009 Final Report concluded 2 years of consultation on the reform of the Australian health system. The report emphasized the need for increased patient-centredness and support of self-management⁸ through consumer empowerment, health literacy and activation in self-management. The Strategy and the NHHRC report together reflect the growing body of international literature describing how effective HSU self-management can improve outcomes and reduce burden on health systems.⁹⁻¹¹ However, the Australian policies do not address motivation, a crucial element for successful self-management.

A 2002 meta-analysis showed that the efficacy of disease management interventions was largely dependent on the support they provided through HSU education and development of self-management ability.¹² More recent research indicates that HSU self-management is maximized in health systems that include strategies to support people with chronic illness.^{10,13,14}

The degree to which HSUs are motivated to engage in their own care contributes to the success of interventions that are designed to reduce the social and economic burden of chronic conditions.^{15,16} What constitutes motivation and what

factors affect it has been addressed from a number of theoretical perspectives, including the work of Deci and Ryan¹⁵ in their meta-theory on self-determination, which, put very simply, postulates that intentional behaviour arises from the interplay between intrinsic and extrinsic factors.

Recently, Shigaki *et al.* (2010), using this theory, hypothesized that autonomous motivation, that is, motivation arising from a congruence between behaviour and personal values, would lead to greater success in diabetes self-management than controlled motivation, where health behaviour is driven by external demands or a 'rigidly held belief' that self-managing behaviour will enable avoidance of shame or guilt. Their study of people with type 2 diabetes showed support for this hypothesis for managing diet and for monitoring, but not for exercise.¹⁷

Researchers have broadly addressed issues concerning motivational interviewing in the Australian context^{18,19} and disease-specific issues associated with motivation, such as those concerning mental illnesses²⁰ and cardiovascular disease.²¹ Little is known about motivation to self-manage across chronic illness groups.

We undertook secondary analysis of qualitative study data to identify motivating factors. This study included 52 adults who had type 2 diabetes, chronic heart failure (CHF) and/or chronic obstructive pulmonary disease (COPD). Eighty-seven per cent of the participants had at least one comorbid condition.

We report internal and external motivating factors, as well as de-motivators, as experienced within this diverse group. We further report the way these factors emerge as interconnected and how policy interventions could link to increased motivation.

Design

The analysis described in this paper is part of a qualitative project on personal experience of chronic illness undertaken by the Serious and Continuing Illness Policy and Practice Study. The study aimed to develop systems and policy interventions to improve outcomes for people with chronic illness. It was undertaken in two urban

Australian areas: the Australian Capital Territory (ACT) and Western Sydney. The two areas have diverse socio-demographics, with Western Sydney having dense immigrant and Aboriginal populations. These urban populations are often not included in Australian research. Ethics approval was obtained from local Ethics Committees and from the Aboriginal Health and Medical Research Council in NSW.

Participants were aged between 45 and 85 years with one or more of diabetes, COPD or CHF that was deemed to be moderate or severe by their referring clinicians. Eligible HSUs were recruited via hospitals ($n = 24$), general practices ($n = 12$), ethnic respite services ($n = 7$), Aboriginal medical services ($n = 6$) and Anglicare retirement villages ($n = 3$) in two urban areas. Purposive sampling was used to achieve variation in HSU characteristics including diagnosis, age, gender, indigenous status as well as cultural and linguistic backgrounds. As a result, the sample is highly heterogeneous (see Table 1).

The study methods have been reported in detail elsewhere.²² Face-to-face, semi-structured, in-

depth interviews each between 45 and 90 min duration were conducted by one of six researchers. The interview questions explored the experience of chronic illness from a HSU's point of view. All interviews were electronically recorded and transcribed verbatim. Qualitative content analysis was performed following Morse & Field (1995)²³ with the aid of qualitative data software.²⁴ The data collection and analysis was guided by Lincoln & Guba²⁵ in terms of the credibility, confirmability, transferability and dependability to maximize the rigour of the study. Interviews continued until saturation of themes occurred, at which point the data set was closed²³ and completed with 52 HSUs. The primary analysis focused on HSU experiences of chronic illness and interactions with health care services.

Self-management behaviours, defined as those behaviours engaged in by participants with the intention of improving their health and actively managing their illness, emerged as a theme from the primary analysis.^{13,16} These behaviours included the following: acting on risk factors, attending medical appointments, adhering to medication regimens, following advice provided by health professionals and adapting to physical and/or psychosocial demands of the illness. Secondary (content) analysis of motivation was undertaken. This involved iteratively identifying and coding interview data to emerging sub-themes of motivation and looking for patterns of association between the sub-themes of motivation and other previously identified themes.^{23,26}

Participant characteristics

Participants were assigned codes including for location (A = location 1; S = location 2), patient/carer (PT/FC) and condition (DM/CHF/COPD). These codes are consistent with all study publications (Table 1).

Results

Analysis revealed that participants articulated both internal and external sources of motivation to engage in self-management behaviours. Internal factors included the desire to optimize

Table 1 Participant sample characteristics

Characteristic	Number	Percent
Male/female	28 : 24	54 : 46
Married	27	52
Non-indigenous Australian born	35	67
Aboriginal	7	14
Immigrant	10	19
Age (range, 34–85 years)		
< 65	20	38
66–85	32	62
Employment		
Working (part or full time)	4	< 1
'Sick'	6	1
Retired	40	77
Experiencing financial difficulty*	31	60
Participant has a family carer	22	42
Chronic condition		
Diabetes	27	52
COPD^	17	33
Chronic heart failure	20	38
More than one of above	11	21
Other comorbidities	45	87

*Participants were asked: Are you having financial difficulties or experiencing financial pressure? Household incomes were not measured.

^Chronic obstructive pulmonary disease.

health and independence and concern about poor health and loss of independence, pain and premature death. External motivating factors were described in terms of family and friends and health-care professionals. Both internal and external sources were expressed as having positive (approach) and negative (avoidance) aspects.

Participants also reported factors that demotivated them, such as perceiving self-management behaviour as having limited benefit, being too time consuming and too difficult to maintain (sometimes because of comorbid illness or costs associated with some behaviours). Participants described both periods of being highly motivated and changes to their motivation levels. They also described being motivated simultaneously by multiple factors. In this paper, we distil the sources of motivation and also show that these sources are interconnected and often overlap. The findings are reported below under:

1. Internal positive motivating factors.
2. Internal negative motivating factors.
3. External motivating factors.
4. De-motivators.

Internal positive motivating factors

The desire to optimize and control health was identified as an important internal positive motivating factor. Participants reported several key strategies: remaining positive, seeking information and support about the illness, adhering to medication regimens, following the advice of health-care professionals and acting on risk factors. Remaining positive was one of the most important strategies many used for optimizing and controlling their health. Participants made comments like *'you've got to stay positive..make the most of it'* (APT023, CHF, 83 years) and *'You've really got to manage this yourself and adopt a positive approach to it. And sort of take it on as a challenge to your life'* (APT011, DM, 75 years).

Participants actively sought information about their illness and its management to enhance their ability to control their health. A man in his seventies said *'I went to Diabetes*

Australia and bought some books and talked to all the people with diabetes...' (SPT009, DM, 79 years). Most participants took medication as an active self-management strategy to control undesirable outcomes and feel well. Describing the motivation behind medication adherence, participants made comments like *'I understand that without the insulin I would be feeling annoyed, I would be feeling tired a lot, so [taking insulin] helps'* (APT005, DM, COPD, 74 years). A man in his sixties with COPD was so motivated to optimize his health that he created his own medication management plan for exacerbations; *'I now have a management plan where I know the symptoms of an infection coming on. And when those symptoms get to a certain point, I know what drugs to hit it with'* (APT022, COPD, 68 years).

Participants commonly acted on risk factors by managing diet and exercise often driven by the motivation to optimize and control health but within the boundaries of their assessment of capacity to do so. Participants made comments like *'you can live with [DM], make everyday count... you get used to it... I could go without a soft drink for months, years...'* (APT013, DM, 67 years,) and *'just be careful. Don't walk where you can't walk don't try and do anything you can't manage. That's all. Just keep yourself under control. Just do what you can and don't over-do it'* (APT008, COPD, 74 years).

Most participants who reported believing that it was possible to optimize health and control illness also reported a desire to maintain independence.

This belief was sometimes described as a positive influencing factor on motivation. Participants used a number of strategies to maintain their autonomy, including downplaying their illness, putting on a brave face and finding practical self-management strategies. A woman in her seventies with diabetes maintained a fierce independence, so much so that she had not told her children of her diabetes diagnosis:

'I've not told them.... Because they worry. Especially after my husband died. I had all the children around and I got to the stage where I thought to myself I'm going to suffocate in a minute if this goes on... One of

them will ring every night... they all worry about their mother like mad, and so I thought if I tell them I've got diabetes this is going to add an extra worry to them' (APT011, DM, 75 years).

She went on to explain that she optimized her health (and by extension her self-sufficiency) by remaining positive, seeking information and support about the illness, following a strict diet and maintaining exercise. While APT011 clearly illustrates her motivation to maintain independence and 'take on the challenge' of managing her diabetes, she also reports what we are interpreting as an external avoidance motivation; she is motivated to avoid situations that will lead to her feeling 'suffocated' by her children.

Participants frequently reported that being well informed positively motivated and empowered them to engage in self-management behaviour. They believed that increasing their health knowledge could enable them to optimize and control their health. They made comments like '*[the dietician] was very helpful so the initial management was very good ... it was all clear what I had to do*' (APT006, DM, 53 years) and '*Weight-wise I did well, I was 90 kilos before, now 70... I was told that I need to be 65. And I was told that it helped with the heart and other things*' (SPT019, DM, CHF, 72 years).

Internal negative motivating factors

Many participants described instances where the drive to avoid complications of the condition, needing additional medication, pain, suffering and/or death had motivated them to self-manage. The key self-management strategies to avoid negative consequences include medication management, acting on risk factors and actively attempting to maintain independence and control. Fear of complications was expressed by participants in all three chronic condition groups leading them to follow their medication regimes and act on risk factors. A man with diabetes described concerns of the complications of diabetes as a strong motivating factor:

'I've heard of people with diabetes having to have amputations... They can't control themselves very much... Perhaps they hate injecting themselves... I

hope that never happens to me. I have tried to control it' (APT017, DM, 74 years).

A woman in her fifties with diabetes said her recognition of possible early death motivated her when she said: '*you know you've got to change... you know that you've got to, if you don't abide by these rules then you are going to be 10 feet under*' (APT029, DM, 54 years). A man in his sixties with CHF said his concern about 'trouble' or deterioration in his condition, meant he was diligent with his medications when he said '*... you don't know what it's going to be like the next day, you know, you can go out and the tablets that you are taking, you know, you've only got to miss one or two and you are in trouble*' (SPT003, CHF, 64 years). Alternatively, fear of having to use medication, particularly of injecting insulin, was the motivating factor for some participants with diabetes to self-manage through diet and exercise.

While maintaining independence was a positive motivating factor, participants also reported that fear of losing their valued independence motivated them to self-manage. Participants made comments like '*What concerns me the most is if my condition deteriorates, that's my fear! I'm a very independent sort of person you know, I wouldn't want something to happen to me in the shower and stuff like that, I want to be able to do things for myself*' (SPT004, CHF, 59 years). When asked who helped them to manage their health at home these participants described experiences of managing on their own as much as possible, usually in an attempt to not be a burden to their loved ones. A woman said '*No, I don't want to put a burden on them. Not when it is not necessary and I don't think it's necessary*' (APT019, DM, CHF, 71 years). A man said '*I wouldn't want to be a burden to family and stuff*' (SPT004, CHF, 59 years).

External motivating factors – family and friends

Participants reported receiving many forms of practical support from family for managing their health such as help with food preparation and provision of transport. However, they did not specify whether this support motivated them.

Participants did report being motivated by family to act on risk factors and to model appropriate behaviours for family members. The external sources of motivation held positive and negative components. Participants were positively motivated when family members encouraged and 'keep reminding' (SPT015) them about self-management.

Participants sometimes couched motivation stemming from family in negative-sounding terms. A participant whose sons were concerned about his health said '*I mean the younger one [son] particularly, if he thinks I'm being stupid then he tells me so and tries to modify the behaviour*' (APT001, CHF, DM, 80 years). Other participants said family members 'tell me what to do...tell me that it's not a good time to eat and so on' (APT005, DM, COPD, 74 years) or that family members 'keep hassling' (APT006) or 'go crook' (APT019) at them. A minority of participants indicated that they found it anxiety-producing and de-motivating. Nonetheless, most participants indicated a preference for, and appreciation of, the support the family members provided and indeed were motivated by them. These examples illustrate avoidance factors contributing to motivation.

Some were positively motivated to self-manage by the desire to have more time with loved ones: '*We have a little girl who's now three and so I want to be around as she's growing up, you know. So that's a motivating factor*' (APT006, DM, 53 years). When participants reported being motivated by their role in the family, they described a desire to be a role model for others. A man said:

'When [my granddaughter] comes down I've got to watch her. I know that [when] she's there she's doing her [insulin]. I've got to set an example so that's something that motivates me with taking my sugar levels and everything in front of her, because so then she does it, because she's going to be affected more because hers are worse than mine, child diabetes' (SPT023, DM, CHF, 66 years).

Participants also reported receiving support from and being motivated to self-manage by friends and support groups, although much less frequently than with family members. A woman

in her sixties with diabetes said '*doing things in a group [like] exercising or walking helps you manage*' (APT016, DM, 64 years).

External positive motivating factors – health-care professionals

Participants were asked to describe both positive and negative experiences they had with health professionals. Most responded with positive accounts of how health professionals had informed, motivated and supported them in self-management. Participants couched positive experiences in terms of expressions of trust, feeling cared for and receiving encouragement. A woman who enjoyed a strong relationship with one health professional trusted her judgement and described her as a motivating influence. She said '*the Aboriginal worker, she's a friend of mine....we were smoking mates and everything, and she gave it [smoking] all up. If she can do it I can do it. That's what she's saying [laughs]*' (SPT020, DM, CHF, 54 years).

Although some participants reported being involved in decision making and goal setting, participants more frequently reported being provided with instructions by health professionals and feeling motivated to follow the instructions (this was reported more frequently by Aboriginal and immigrant participants). A man with DM and CHF said '*well they tell me to do one thing, and I've done it. You know, I try to stick to it*' (SPT026, DM, CHF, 64 years). Another said '*they're telling you what to do and what not to and what to eat and what not to eat. I thought they were helpful*' (SPT020, DM, CHF, 54 years). Motivation often stemmed from a desire to please the health professional and to be seen as a 'good patient'.²⁷ Participant SPT019 said '*I'm trying to follow the instruction given by doctors, I'm trying to cut down on the sweets, I'm cutting down on salts and I'm following all the direction given to me by doctors*' (SPT019, DM, CHF, 72 years). Earlier, we have noted that this same participant believed that increasing his health knowledge could enable him to optimize and control his health, which we report as an internal positive motivating factor. This illus-

trates the way in which people can be motivated by different sources simultaneously.

Participants described being motivated by receiving encouragement from health-care professionals in combination with support from others. For example, the following participants described exercise with others and in rehabilitation programmes. They said

'Dr I says 'What you need to do is just go for a walk or something'.... me and another girl would go for a walk. So that might be during our lunch hour' (APT029, DM, 54 years) and

'In recent times I've been doing that course, that cardiac rehabilitation course, and I think in one sense it wasn't the exercises that helped me there but the fact that I was going twice a week to that course and they were friendly, apparently interested... Nurses and physios...always willing to listen and give advice or suggest things, and I found that particularly not just helpful but what's the word I want? Comforting' (APT028, CHF, 78 years).

De-motivating factors

In the previous section, we reported internal and external factors that led participants to adopt self-managing behaviours. However, participants also identified factors that drove them away from effective self-managing behaviour. Financial hardship was the most frequently described barrier both to seeking appropriate health care and to engaging in self-management behaviour. Some participants reported not being able to afford exercise equipment or special low-fat/sugar foods, which had led them to feel unmotivated and to not seek less expensive alternatives.

Participants reported that the cost of health services and medication affected their ability to use them but did not necessarily de-motivate them in that if the services or medication were made more financially accessible they would access them. An immigrant in her sixties with diabetes said she needed dental care, better access to suitable foods and podiatry care, but could not afford them: 'I haven't gone [to see the podiatrist] yet. Because before I wasn't qualified

[for subsidies]. It's a financial issue too, if you... don't have no support anywhere and you are not really highly paid...there is no help' (APT002, DM, 65 years). She suggested dentists, podiatrists and other allied health professionals should be based at or near the diabetic clinic and their services should be more affordable. A man in his sixties with diabetes and leukaemia felt guilty about taking his highly state subsidized medication and had considered no longer filling scripts because he felt it was too expensive for society. He said *'It's too expensive. There's nobody worth that kind of money. Look, I'm coming to the end of the road... Well it really bothers me it's so expensive.... I don't really want to die but if it happens it happens. But it is pitiful that it's a lot of money, honest to God'* (APT013, DM, 67 yrs). While this participant signals that he believed he could die soon, which might contribute to being de-motivated to take medication or engage in other self-management behaviours, it is important to note that despite his feeling frustrated and guilty about the costs of medication he continued to take it.

Although HSU health knowledge was not measured, HSUs with good expressed understanding of their illness and its management, such as APT022 who had developed his own comprehensive management plan, reported being motivated to self-manage more often than HSUs who demonstrated less understanding. However, a very few HSUs said that they understood their condition, but were not motivated to manage ($n = 6$; none of whom had COPD). They attributed their de-motivation to the fact that their children had grown up and moved away or that sickness and premature death were inevitable regardless of whether they made an effort to self-manage. A man with DM and CHF described his lack of motivation and the reasons for it in the following way: *'there don't seem to be anything there to motivate me... I can't do much because of my legs. I got osteoarthritis in [my ankle]... Maybe because the kids are grown up I'm less motivated for anything'* (SPT023, DM, CHF, 66 years).

As previously described, fear or concern could be a positive motivating influence on self-management. However, fear and concern caused some participants to become de-motivated. They reported becoming despondent and feeling depressed. Fear of death led the following participant, and others, to say, for example '*I think psychologically too it impacts on you that you are coming to the end of your time and you are aware of it*' (APT018, CHF, 69 years). However, he sought help to overcome his depression and was able to increase his motivation and capacity to engage in self-management behaviour.

Discussion

This study shows, in line with Deci and Ryan, the interconnectedness of motivation in health-related behaviour. In addition, it shows the powerful impact of family as an external motivator and the importance of recognizing and dealing with depression in patients who appear to have 'given up'. From a policy perspective, the study shows that some factors, amenable to policy intervention, may drive people with chronic illness away from effective self-management.

Participants described complex and interconnected internal and external motivations. For the most part, they were motivated to follow instructions of health professionals and to work alongside health professionals and/or family members in a combined effort to maintain control over their health. For many, these motivations were intrinsically tied to the desire to maintain independence, optimize and control health or mitigate fear and concerns. These factors were not exclusive, and many participants identified with several of these factors simultaneously. In addition to identifying motivating factors across chronic diseases, this study identified factors that were salient for participants from a range of different cultural and linguistic backgrounds.

Where Shigaki *et al.*^{15,17,28,29} used self-determination theory to describe autonomous and controlled motivation, we have differentiated

between positive and negative internal motivations. We interpreted expressions of fear of worsening health or death as negative internal motivation: fear that was a feature of motivation to self-manage for our participants but did not feature as a measured variable in the work of Shigaki *et al.* We further suggest that fear may be a strong autonomous motivator in addition to guilt as a controlled motivator and the links between fear and engagement in self-management behaviour should be measured.

In attempting to understand whether and how governments and policy makers can support self-management, understanding the connections between HSU agency and motivation is important.³⁰ HSUs desire to act in ways that are meaningful to them, and this will to meaning can motivate them to behave in ways that serve to increase their well-being. Rijken *et al.*³⁰ provide a summary of widely used theoretical models for understanding and increasing motivation in self-management. They note that the Prochaska *et al.*³¹ Trans-theoretical Model of Change (which provides a framework for identifying the relationship between people's knowledge of a subject and how much they value it, and their actions) has been applied to chronic illness self-management. However, they suggest that the sequential nature of change stipulated in this model tends to 'oversimplify reality'.³⁰ Our findings support this observation, suggesting that motivation and de-motivation fluctuate over time and that people can be motivated by multiple influences simultaneously. This calls into question the role of aligning interventions to levels of motivation. Current measures such as the Patient Activation Measure³² that assesses patient knowledge, skill and confidence for self-management and models such as the Trans-theoretical Model of Change³¹ focus largely on the individual. The specific importance of a person's family, friends and carers as forces on motivation are less emphasized. Our findings suggest that such measures may miss important elements of motivation, particularly the strength of family as a motivator, and in modelling around 'point in time' or

'stages' may not appropriately take account of changes to levels of motivation in the context of a chronic illness.

In their review of chronic disease management, Zwar *et al.*³³ found that motivational approaches by health professionals contributed to the development of self-management ability. Our findings support the use of strategies by health professionals to increase HSU motivation. However, our findings indicate that motivational approaches should be utilized alongside approaches that target increasing trust and rapport with HSUs to optimize HSU motivation. Our findings concerning de-motivation and being informed but not motivated also point to gaps in health services. These gaps go beyond issues of trust to recognizing and incorporating the time needed to provide care of the kind that HSUs will find motivating.

Effective relationships with health professionals and their impact on better self-management are prevented by financial constraints and time constraints. Financial constraints may be reduced by, for example, medicare-supported dental health and allied health services (an initiative where people with chronic illnesses can be referred by their GP for a fixed number of subsidized services), as well as support provided through the Medicare Benefits Schedule and Pharmaceutical Benefits Scheme, which offer subsidized rates and lower copayments for people on low incomes. This financial support subsidizes self-management, therefore making effective self-management more attainable. Maintaining a motivational, educative and encouraging relationship with both HSUs and their families in the care of a chronic illness takes time, and time is something that health providers tend to be short on. However, the continued development of practice-based teams, either as part of a single practice, through a collaborative or as a colocated team, or practitioners in a superclinic, provides opportunities for relationships between HSUs and multiple health providers to form. The building of such relationships over time is essential to the process of instigating and maintaining support for HSUs in their journeys of self-management.

These factors are all relevant in identifying ways that policy might address issues affecting the motivation of HSUs to achieve more effective self-management, but more particularly, offer insights into the issues that policy might address in how it might be achieved.

Study strengths and limitations

This study incorporates the experiences of indigenous and non-indigenous people born in Australia and immigrants to Australia, an approach taken by few studies because of the cultural and language issues inherent in such research. The findings contribute to our understanding of common motivations to self-manage in the range of cultures and settings. Limitations of the study are that we did not ask participants what motivated them to self-manage, instead relying on the motivations that emerged spontaneously.

We were unable, in this diverse group of participants, to show that motivation to self-manage was different between illness groups or that internal motivation was more, or less, effective than external motivation in self-management.

Conclusion

Where attempts are made in the face of skyrocketing rates of chronic illness to engage patients in active management, motivation to self-manage presents a clear issue for health policy consideration. An array of complex theories has been developed concerning what drives and sustains motivation. Motivation is difficult to measure, difficult to understand and therefore difficult to locate in the health services and policy spaces.

However, this study provides a framework for understanding the interconnected factors that motivate and de-motivate people living with chronic illness and then identifies specific factors that are amenable to health policy intervention and may lead patients and practitioners to more effective management and better health and system outcomes.

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Conflict of interests

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