Self-management support:

A win-win solution for the 21st century

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ABSTRACT

Long-term health conditions are responsible for over 70% of all health care spending[1] and approximately 80% of all deaths in New Zealand.[2] With rates of many diseases such as diabetes, some cancers, depression, and asthma continuing to rise, the burden of disease, health disparities and escalating costs are predicted to overwhelm most health systems. To reverse these trends, major changes are needed. Research has identified increased self-management support as one of the essential elements for improving chronic care outcomes, reducing demand, supporting positive behaviour change and reducing common disease risk factors.[3]

Virtually everyone can be supported and encouraged to self manage some aspect of their health care more successfully. Instead of relying on medications, we need to broaden our approach to include the many and varied self-management interventions available. Practical solutions for general practice range from self-care devices, decision aids and multiple e-health applications through to peer-led self-management courses, care planning, health provider training and practice system changes.

Key words

Self-management, chronic care, care planning, general practice

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Introduction

Self-management is a concept that is now being adopted by many countries as a key action area and strategy for improving chronic care.[3–5] Within New Zealand, however, it remains relatively underdeveloped and rarely prioritised or funded. The aim of this article will be to introduce the principles of self-management and self-management education, and highlight some examples of practical, evidence-based interventions that are relevant to general practice within New Zealand.

What is self-management?

Multiple definitions exist, however a useful definition for self-management was established in 1996 by the Centre for Advancement in Health. This states that self-management involves *'engaging in activities that protect and promote health, monitoring and managing symptoms and signs of illness, managing the impacts of illness on functioning, emotions and interpersonal relationships and adhering to treatment regimes in partnership with health professionals and community resources.'*[6] Lorig and colleagues[7] have emphasised that it is also about enabling people *'to make informed decisions, to adapt new perspectives and generic skills that can be applied to new problems as they arise, to practice new behaviours and to maintain or regain emotional stability.'*

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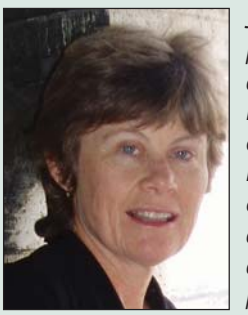

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Self-care tends to refer to activities individuals do to care for themselves with or without medical support. Self-management, on the other hand, implies activities to manage the medical, social, and psychological aspects of one's health, in partnership with health care providers. While some countries such as the United Kingdom frequently use the term 'self-care' interchangeably with 'self-management', for this article the term 'self-management' is used since this remains the dominant terminology in the literature.

Self–management support

Self-management support is defined by Adams and colleagues[8] as *'the systematic provision of education and supportive interventions by health care staff to increase patients' skills and confidence in managing their health problems, including regular assessment of progress and problems, goal setting, and problem-solving support.'* It also refers to the multilevel changes health care organisations and systems can implement to facilitate improved patient self-management.

Self–management education

Traditional patient education focuses on giving disease specific information and imparting technical skills, but is relatively ineffective at changing behaviour.[9] In contrast, self-management education teaches practical skills such as problem-solving, action planning and decision-making which are more effective at supporting behaviour change. Whereas the goal of traditional patient education is 'compliance', the goal in self-management education is increased self-efficacy (the confidence to carry out a specific behaviour) and improved health outcomes.[10]

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Benefits of increased self–management support

There is now good evidence and multiple examples of organisations that have significantly improved health outcomes by adopting self-management strategies.

Typical findings include:

(a) reduced hospitalisations by up to 50%,[5] (patients can self-triage more successfully, monitor for warning signs and act earlier);
(b) reduced service demand (informed, activated patients make better decisions, are more independent and can self-care minor ailments more confidently[5]);
(c) improved consumer and clinician satisfaction[5] (more productive and effective patient-health provider interactions, patient-centred care);
(d) improved health outcomes and quality of life;[5,11]
(e) improved medication adherence and reduced drug expenditure;[11]
(f) cost-effectiveness[12] – (some studies have shown a positive cost benefit ratio of up to five times[13]);
(g) most beneficial for higher risk patients[14] (During the Australian Co-ordinated Care Trials, the patients that benefited most from the self-management assessment and care planning process had either lifestyle risk factors, poorly controlled disease, were not linked with services, depressed, unmotivated to change, or lacked knowledge of their condition[14]).

Self-management has also been identified by the Health Disparities Collaboratives and the World Health Organization[3] as an important strategy for reducing health disparities and assisting high needs populations. Lorig and colleagues[15] have demonstrated that self-management skills (such as problem-solving, improving communication, goal setting, and action planning) can be learnt by diverse cultural groups and high needs populations. Furthermore, the benefits of learning such 'life' skills often extend to improve overall financial, emotional and social functioning.

The landmark Quality Chasm Report identified the huge gap between what is known to be 'best care' and what usually happens or 'usual care'. Following on from this report, the quality committee have identified and prioritised self-management as one of the few cross-cutting strategies for improving outcomes for all chronic conditions.[8]

Self-management is also one of the six pillars of the Chronic Care Model (CCM), a popular and well researched model for improving chronic care.[16]

Key principles of self–management

According to Battersby and colleagues at Flinders Human Behaviour and Health Research Unit (FHBHRU),[17] the six key principles of self-management are:

1. To know and understand one's condition;
2. To monitor and manage signs and symptoms of one's condition;
3. To actively share in decision-making with health professionals;
4. To adopt lifestyles that promote health;
5. To manage the impact of the condition on one's physical, emotional and social life;
6. To follow a treatment plan (care plan) agreed with one's health care providers.

Enablers and barriers to self–management

Not surprisingly, high needs populations experience multiple barriers to effective self-care as there is strong overlap with the wider determinants of health. Some of the common barriers and enablers for effective self-management are highlighted in Table 1. While some are outside

Table 1. Barriers and enablers for effective self-managing

	Barriers	Enablers
Socioeconomic	Below average income	Average to above average income
Education	Limited education	Average or above education level
Literacy	Low	Average or greater
Cultural affiliation	Differs from majority	Align with dominant cultural group
Socially	Isolated or disconnected	Strong social support
IT	Technologically challenged	Confident using computers and Internet
Time	Time pressured	Manage time well
Personal Characteristics & Skills		
Disease knowledge	Low	Low to high
Lifestyle choices	Unhealthy	Healthier eating, exercise and non smoking
Memory	Forgetful, don't write things down or lose things	Good short-term memory or takes notes to prompt self later
Attitude to life	More negative, passive	Positive
Stress	Easily stressed	Multiple strategies for managing stress, also maintain healthier balance
Self Management Skills		
Organisational skills	Disorganised	Very organised, follows instructions, attends appointments regularly
Problem-solving ability	Struggles, easily overwhelmed	Good problem solvers
Communication skills	Limited or poor Rarely ask questions	Clear historians, ask questions, Seek clarification when uncertain
Action Plan	No	Yes and know how to get help
Follow-up	Irregular, tend to present with acute problems	Attend for planned, regular visits
Organisational & Health Provider Characteristics		
Clinician attitudes	Traditional, doctor knows best	Patients are experts about themselves, equal partners
Roles	Limited teamwork	Clear roles and responsibilities, multidisciplinary, strong teamwork
Attitude to change	Resistant	Seek to continually improve self, organisation and services

the health sector's influence, there are a number of self-management skills and health provider factors that are modifiable.

During the large Australian Coordinated Care Trials,[14] one of the important learnings from multiple focus groups was that allocation of coordination services based on disease severity or complexity didn't work. Rather, those with poorer self-management skills or multiple barriers needed the most support from health care coordinators[14] and were the most at risk of poorer long-term outcomes. Most funding streams and chronic care management programmes remain based on disease severity. Assessment of self-management capacity is one measure that may improve the matching of increased services and funding with actual need.

Everyone self-cares to some extent. Only a few hours per year are spent with health care providers. The rest of the time patients are on their own. Every day patients make multiple decisions and choices about what to eat, how to spend their time and what advice to follow. The list of daily or frequent tasks is extensive and ranges from self-triage and self-care of minor ailments, to changing long-standing habits and trying to maintain a balanced, fulfilled life (See Table 2). Chronic conditions are rarely curable and consequently these daily actions have greater impact on long-term outcomes than most medical care. The number of daily tasks and complexity obviously increases with disease severity and comorbidity, but

nearly everyone can be supported to self-manage some aspects more successfully. The flow on benefits for improved quality of life, self-worth, improved health outcomes and society are enormous.

Practical self management interventions and solutions for general practice

Within primary care there are multiple opportunities to support patients and their families to increase their self-management capacity. These range from self-care devices through to care plans and interactive online interventions. The following list introduces some of the more common options.

1. **Self-care devices** such as peak flow meters, can be used for monitoring and recording, however they need to be part of a care plan with appropriate goals and action steps.
2. **Self-care tools and resources** is a broad category including everything from chest pain action plans through to patient-friendly drug information and audit tools. Asthma action plans are commonly used, but equally useful are written action plans for migraine or pain management, mild depression, eczema, heart failure, COPD and diabetes.
3. **Self-management education** as defined before, teaches people self-care skills and can be one-on-one, in a group or even online. One well-known evidence-based model of group self-management education is the Stanford Model. This community-based course is typically led by lay-leaders for six weekly sessions of 2.5 hours each. Studies have confirmed sustained benefits, applicability in multiethnic settings and efficacy of lay-leaders.[12] In fact, a Chinese study found lay-leaders to be as effective if not more effective at teaching the course than health professionals.[18]
4. **Mentoring and phone support** from peers, support groups, nurses or GPs can significantly improve confidence and capacity to self-manage. Multiple studies have shown regular phone support improves self-care behaviours, reduces accessibility barriers and improves health outcomes for a broad range of conditions.[3]
5. **Patient-centred decision support** refers to any tool, decision-aid or electronic system designed to support patients to make decisions. Examples include over 200 Cochrane reviewed decision aids[19] for common general practice situations such as 'Should I take a statin to lower my cholesterol?' Information therapy takes this even further and recognises that the *'timely prescription and availability of evidence-based health information to meet individuals' specific needs and support sound decision making'* is as effective as medicine.[20]
6. **Self-management assessment and care planning** – one of the most useful interventions for improving chronic care is the systematic assessment of a patient's self-management capacity. Most patients will have areas they can improve if the right help, encouragement and support are given. The Flinders Model is an evidence-based system designed to provide health professionals with the training, skills and tools to systematically assess self-management and confidently support patients to develop patient-centred care plans and support ongoing behaviour change.[17]
7. **Health professional training** – few GPs or practice nurses have specific training in behaviour change techniques, yet for chronic care such skills are highly desirable. Psychological tools and techniques in motivational interviewing, structured problem-solving, goal setting, cognitive behaviour therapy (CBT) and brief structured interventions are just some of the skills worth developing. Suitable training courses include Flinders Workshops, the Goodfellow Unit's brief intervention training (TADS) and motivational interviewing courses.
8. **e-health applications and interventions** – an extensive range of online tools, programmes and interventions now exist ranging from diabetes monitoring software, telehealth initiatives through to online CBT for mild to moderate depression, anxiety and panic disorders.
9. **Community resources** – one of the simplest interventions is finding out what is available locally and linking patients to some of the excellent support organisations or local physical activity groups as a way of encouraging increased physical activity, socialisation and mutual support.
10. **Practice system changes** – Improving chronic care outcomes remains a challenge throughout the world. Adoption of the Chronic Care Model, (CCM) appears to be one of the most successful methods for

Table 2. Daily or frequent self-management tasks

• Self-care for minor ailments	• Manage pain
• Self-triage	• Manage energy levels
• Take medications regularly	• Increase activity levels
• Follow treatment advice	• Change long-standing habits
• Manage any side-effects and watch for any adverse effects	• Eat healthier foods, avoid certain foods
• Make informed decisions	• Manage social impact of condition
• Communicate clearly and ask when not sure	• Manage emotional impact
Live a balanced and fulfilled life	

improving care to date. A range of tools and resources were developed by the MacColl Institute and include the Assessing Chronic Illness Care (ACIC) tool, Patient Assessment of Chronic Illness Care (PACIC) and a step by step manual *'Improving your practice'* to assist practices with *Plan*, *Do*, *Study*, *Act* (PDSA) cycles for incremental changes. See Table 3 for website details.

11. **Health professional attitudes** – perhaps the most important intervention is assessing our own attitudes and current habits during consultations. A large survey in England on public attitudes to self-care found that 76% of the public agree they would be far more confident about taking care of their own health if they had guidance and support from a health professional.[21] The same survey found over half of the public feels they do not often receive encouragement from health professionals to do self-care. Hopefully a similar study in New Zealand would reveal more positive findings given our longer consultations, however it does highlight the importance of what we say and do.

The range of self-care tools, community resources, self-management programmes and online interventions are extensive. The challenge is for individual practitioners, practices and consumers to know what is reliable, accurate and evidence-based. This is where organisations need to collectively pool resources and share information. One Auckland based organisation that is attempting to do this is the Self Management Network and eventually it is hoped an online website/portal can be developed that links clinicians and consumers to key local and national self-management resources.

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Opportunities for integrating self-management within general practice

Self-management is an amalgam of old and new principles and techniques. It incorporates patient/whanau-centred care with behaviour change research, health promotion strategies and population health approaches. With new funding streams, capitation and Primary Health Organisations, the opportunity exists for practices to shift from a reactive, acute care model to a prepared, proactive chronic care model. If practices complete a baseline ACIC audit, use the *'Improving your practice'* manual and introduce small regular changes and PDSA cycles, they will be well on their way towards improving chronic care for their populations.

Practices that are most successful with Care Plus and chronic care programmes are generally practices that have systematically assessed their chronic care systems and applied patient-centred goal setting, action planning, established chronic care clinics and provided dedicated nursing time. If these programmes

Table 3. Useful websites

Self care tools and devices	www.dh.gov.uk/ and use search function
Diabetes self management tools	www.ihi.org/IHI/Topics/ChronicConditions/Diabetes/Tools
Self management education	http://patienteducation.stanford.edu/programs/
Flinders Model	Flinders Human Behaviour and Health Research Unit: http://som.flinders.edu.au/FUSA/CCTU/
My Shared Care Plan	http://www.ihi.org/IHI/Topics/ChronicConditions/AllConditions/Tools/My%20Shared%20Care%20Plan.htm
Online Shared Care Plan	https://www.sharedcareplan.org/Default.asp?Javascript=Yes
Decision Aids	Ottawa Health Research Institute: http://decisionaid.ohri.ca/
e-health – online CBT for depression	Living Life to the Full: http://www.livinglifetothefull.com/
	Australian National University – MoodGYM: http://moodgym.anu.edu.au/
Chronic Care Model	http://www.improvingchroniccare.org/
ACIC Tool and PACIC tool	http://www.improvingchroniccare.org/tools/acic.html
Improving Your Practice Manual	http://www.improvingchroniccare.org/improvement/sequencing/Introduction.htm

are not going as well for your practice as they could, then consider introducing some of the self-management strategies and quality improvement tools listed in Table 3 as well as ensuring that your staff receive the training they need. Whatever stage your practice is at, there are additional benefits from implementing practice strategies and system changes that encourage greater self management by our patients.

Conclusions

Chronic conditions are costly and disabling. Self-management support is an evidence-based strategy that not only improves health outcomes, resource utilisation and treatment adherence, but also improves quality of life and general well-being. Self-management helps move people from being passive recipients of health services, to becoming activated and informed partners.

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Virtually everyone can be supported to self-manage some aspects of daily living more successfully. Instead of relying on medications, we need to broaden our approach to include the many and varied self-management interventions available. Practical solutions for general practice range from self-care devices, decision aids and multiple e-health applications through to peer-led self-management courses, care planning, health provider training and practice system changes.

Increased self-management support provides win-win benefits for the health system and overworked practice teams while also strengthening communities, enhancing personal skills and patient satisfaction. This broad spanning approach warrants greater prioritisation and adoption within primary care and the wider health sector.

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Competing interests

None declared.

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