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TALKING ABOUT HEALTH

Long term conditions study

2016-2018

Practitioner results 2018

Claire Budge & Melanie Taylor

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LIFESTYLE EDUCATION PRACTICE UNDERSTANDING TEAMWORK INFORMATION
WHANAU ADVICE SELF-MANAGEMENT ACTIVATION HEALTH RESEARCH CO-
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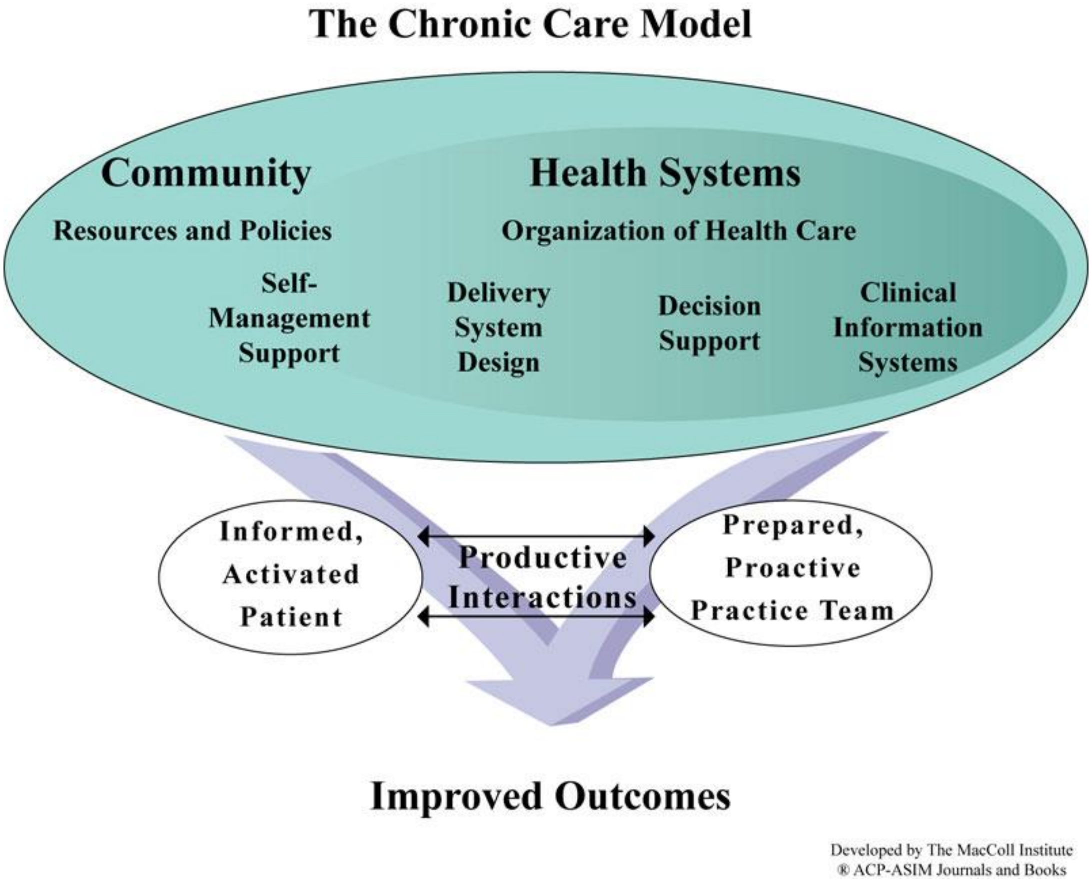
Contents

List of Abbreviations

CPHO	Central PHO
CCM	Chronic Care Model
CCN-LTC	Community Clinical Nurses: Long Term Conditions
CS-PAM	Clinician Support for Patient Activation Measure
GPT	General practice team
HCHP	Health Care Home Programme
IFHC	Integrated Family Health Centre
LTC	Long term condition
M	Mean (average)
Mode	Most common score/rating
MPACIC	Modified Patient Assessment of Chronic Illness Care
N	Number of respondents
PMS	Patient Management System
r	Pearson’s correlation coefficient

Executive summary

Long term conditions (LTCs) are those defined as being ongoing, requiring regular involvement with the healthcare system and having a significant impact on quality of life. Enabling people to have the skills, knowledge and confidence to self-manage is a key role for their health practitioners - particularly those in general practice, their first port of call. Self-management support is also a key component of Wagner's Chronic Care Model (CCM; Wagner, 1998) the internationally accepted model for delivery of support to people with LTCs through primary care, and the basis for the current study.



The Ministry of Health (MoH, 2016) frames self-management as "fundamental to the health and well-being of people with LTC, and enables the health system to make the best use of increasingly scarce resources".

Talking about Health

Talking about Health is a longitudinal (3 year), observational study that aims to capture the experiences of both patients and practitioners as they utilise/provide long term condition services in the context of general practice. This work builds on earlier studies carried out in the region and continues to have the Chronic Care Model as its foundation. The Chronic Care Model presents what are regarded as the six key components of long term conditions support: the community; the health system; self-management support; delivery system design; decision support and clinical information systems. The questionnaires consequently include some items relating to the various CCM components but the main focus is on productive interaction of patients and practitioners in general practice, patient activation, self-management and self-management support.

This report presents the practitioner findings from the second survey of primary care practitioners providing care for people with long term conditions in the MidCentral region. An information sheet and a slightly modified questionnaire were sent out to 370 doctors and nurses working in general practice or at the PHO. Questionnaires were sent out in August 2018 and an online option using SurveyMonkey was provided. Responses were received from only 34 practitioners representing a response rate of 9.2% which can be compared to the 18.1% achieved in 2016. The participant group consisted of 8 GPs and 25 nurses, almost half of whom were aged between 55 and 64 years. Most (78%) were NZ or other European.

Conclusions and recommendations

This report concludes the 'Talking about Health' Practitioner Study. Given the low response rate to this study, it is difficult to make recommendations that would be applicable to the primary care workforce across the region. Overall it appears that little has changed in terms of care delivery since the last time this work was carried out in 2013. Although the practitioner respondents demonstrated a reasonable understanding of what self-management support entails there is scope for more frequent support, individualised to meet patient need, and a stronger partnership between practitioner and patient. There are still apparent problems in providing care for people with long term conditions within an appropriate framework (LTC approach). There is an acknowledged need for more protected LTC care time, and evidence of a need for: a more regular and collaborative care planning approach; linking patients in with outside resources such as community groups and organisations; regular follow up; and further development of staff competence.

Nurses predominantly scored higher on the various aspects of LTC care provision than doctors did. Across both professional groups, the tasks respondents rated themselves as performing most frequently included the relationship building aspects such as: listening; putting patients at ease during physical examinations; establishing and maintaining a trusting relationship; and asking fully about symptoms - all of which are key components of good clinical practice and not specific to LTC care. Tasks carried out least often were: using a tool to refine patient goals; liaising with community groups and organisations regarding patient attendance and progress; provision of a book/log for patients to monitor their own progress; and providing them with a written list of things to do to improve their health status. Providing a written care plan is helpful for patients to take home and use from day to day and the same applies to having a book in which to record home based measurements such as blood pressures, blood glucose levels, monitoring medications or for dietary/exercise/smoking/sleep related behaviours. Both health diaries and care plans can be used to generate lists of things to do at home - which many people would appreciate and use and may be useful to bring to each consultation.

The following points pick up on some of the findings accompanied by **brief recommendations** which are intended to facilitate productive interactions between provider and patient. A fuller set of recommendations can be found at the end of the report.

Health system

- Barriers to the provision of LTC care were predominantly identified as: insufficient time; patients who are not engaged in the self-management process or have health literacy issues; and lack of resources such as IT and staff.
- Enablers were: time (when available); having an appropriate model of care to suit people with LTCs; and teamwork between providers (internal and external to the primary care team). **A whole of system**

approach gained through participating in the Health Care Home Programme is highly recommended to address the barriers for effective long term condition management.

- **Current care pathways should be reviewed, specifically looking at the self management/self management support, health literacy and cultural competence components.**
- Providing appropriate care for people with long term conditions demands a dedicated focus on both LTCs and LTC support - something that is problematic for practitioners and consequently for patients. **MDHB and Central PHO should continue to explore how general practice teams are funded to provide LTC care**, as it still struggles with incorporating good LTC management into a model which is acute focused.
- **Promotion of the MyHealth myself self-management programme (the local name for the LTC Stanford Programme) to practitioners is important** as informed practitioners who see recruitment as part of their role are essential.

Delivery system design

- Ratings of the general practice team on care provision for people with LTCs suggest that the things done best are: working with other members of the practice team to enhance care delivery; giving patient feedback on test results; doing timely recalls; and following up to see if referrals have been actioned. Things done less well were: identifying and delivering education/training in response to practice team needs; allocating protected time for LTC care; providing extended appointment times; and undertaking case/peer review/auditing related to LTC care. **All of these are important and it is recommended that individual practitioners, general practice teams and Central PHO explore how they can be more readily integrated into routine practice.**
- The number of participants who didn't know how well their GPT was doing in relation to a range of LTC care delivery tasks highlights the **need for better transparency/education around quality improvement processes, clinical education, case review and auditing of LTC care.**
- The Clinician Support of Patient Activation Measure scores were generally high. This is important as practitioners who believe in the importance of their patient being engaged in their own health care as active self-managers are more likely encourage it. However **the delivery system needs to support practitioners to act on their beliefs about patient self-management.** Research has demonstrated that people can become more health activated with support and encouragement and has found health advantages associated with increased activation.

Self-management support

- Further education of practitioners is required in the areas of health literacy and self management/self management support. **Central PHO should coordinate and fund this type of education in the sector.**
- In putting good self-management support into practice, providing regular follow-up was problematic for many practitioners despite being a vital part of support. Education should promote this as an aspect of best practice.
- **Promotion of the MyHealth myself self-management programme by practitioners to patients is important,** as this course enables patients to develop skills, knowledge and confidence to self manage. Conversations about the programme are best held within the consult based on individual need.
- Asking about health behaviours, and providing appropriate resources, along with showing interest in the patient goals were identified as areas for improvement. **Funding Health Navigator will provide essential infrastructure to support patient self management, with resources available for both consumers and practitioners.**

Community

- Connecting patients to community and social supports is also an important component of care. **The development of an up to date regional community resource which identifies services and support groups and key contacts is also important for self management support.**

Decision support

- There are basic care planning tools available but it appears they are not well used. **The current change of Patient Management System provides an opportunity for practices to discuss who should have a care plan and for Central PHO to provide practitioner training on how to access, use, contribute to and print off a LTC care plan as part of the care planning process and to evaluate its use.**
- Self-rated competence in managing different long term conditions was found to be variable and generally lower for nurses than for doctors. Areas where competence was reported to be lacking included non arthritis related chronic pain, mental health and memory decline for doctors and nurses and Type 1 diabetes, angina, CKD, renal failure and anxiety/depression associated with LTCs for nurses. **This identifies areas where education could usefully be directed.** It was interesting to see that none of these areas were highlighted as areas where practices were investing effort in quality improvement.

Clinical information systems

- We are aware from the patient data that the majority of patients do not have care plans, and some that have a care plan do not have a physical copy. This means that they are unable to use it to assist with daily living and to know what to do when their health deteriorates. **Patients need to participate in the development of their care plan and be given a copy to take home. They also should be given encouragement to use their care plans in the day to day self-management of their conditions.**

In line with MDHB moving to a cluster model the following recommendation is made:

- That this report is made available to the Primary, Community and Public Health cluster to inform the development of the Long Term Condition Framework and to support the clusters' work moving forward.

Background

Overview

Long term conditions (LTCs) are those defined as being ongoing, requiring regular involvement with the healthcare system and having a significant impact on quality of life. For people with long term conditions self-management is vital as on average only 6 hours a year is spent with health practitioners (AHRQ) leaving the other 8,754 for them to provide their own care – with support from family/whānau and friends. There is evidence to suggest that good self-managers are more independent and achieve better health outcomes (Lorig & Holman, 2003).

Enabling people to have the skills, knowledge and confidence to self-manage is a key role for their health practitioners - particularly those in general practice, their first port of call. Self-management support is also a key component of Wagner's Chronic Care Model (CCM; Wagner, 1998) the internationally accepted model for delivery of support to people with LTCs through primary care, and the basis for the current study. The Ministry of Health (MoH, 2016) frames self-management as "fundamental to the health and well-being of people with LTC, and enables the health system to make the best use of increasingly scarce resources".

An additional construct of interest is health activation, a term coined by Hibbard and colleagues (2004) to represent a state of being where individuals have the knowledge, skills and confidence to manage their own health. Subsequent research has shown that increased activation is associated with improved self-care behaviour (Hibbard et al., 2006) and health outcomes (Hibbard et al., 2015).

Talking about Health

Talking about Health is a longitudinal (3 year), observational study that aims to capture the experiences of both patients and practitioners as they utilise/provide long term condition services in the context of general practice. This work builds on earlier studies carried out in the region and continues to have the Chronic Care Model as its foundation. The Chronic Care Model presents what are regarded as the six key components of long term conditions support: the community; the health system; self-management support; delivery system design; decision support and clinical information systems. The questionnaires consequently include some items relating to the various CCM components but the main focus is on productive interaction of patients and practitioners in general practice, patient activation, self-management and self-management support.

Consultation with Māori and Pacific colleagues has been carried out, with the team including one Māori and one Pacific member for ongoing support and liaison. It was originally intended to have two cohorts, patient and practitioner, which were followed for three years. This has happened with the patient sample who completed questionnaires in 2016, 2017 and 2018. However due to the low response rate from practitioners in 2016 it was decided to leave 2017 out and to attempt to re-engage with the practitioner group in 2018.

We are aware that since we first collected data in 2016, some initiatives have stopped and others have started within primary care and this may have an impact on the practitioners' responses.

Preparation

Originally, an outline of the proposed 'Talking about Health' study and its procedures was sent out to all general practices, Iwi and Māori providers and PHO practitioners, requesting feedback and suggestions. No feedback was received for the practitioner part of the study. Pilot testing of the practitioner questionnaire was undertaken by a small number of primary health care practitioners including general practice staff, Community Clinical Nurses: Long Term Conditions (CCN-LTC) and a NGO health promoter. Minor changes were made as a result of their feedback and ethics approval was obtained from the Northern A Health and Disability Ethics Committee (16/NTA/32/AM01).

2018 Procedure

Following a thorough update of the PHO practitioner list, an information sheet and a slightly modified questionnaire was sent out to 370 doctors and nurses working in general practice or at the PHO. Questionnaires were sent out in August 2018 and an online option using SurveyMonkey was provided. After several weeks a reminder was sent out by email as well as through the PHO newsletter. The end of November was used as a cut off date and by this point 34 responses had been received, 3 online and 31 written. The questionnaire was anonymous and in order to receive feedback respondents were required to email a member of the study team to request it. As no requests were made feedback cannot be sent out to individuals but this report will be included in the Talking about Health reports on the PHO website and practitioners will be told when it is available.

The 34 responses constitute a response rate of 9.2% which can be compared to the 18.1% achieved in 2016. Consequently, as in 2016, these results cannot be considered representative of the practitioner group as a whole and any conclusions apply only to the sample group and cannot be generalised to other primary care practitioners in the DHB. As there was some missing data, the percentages reported reflect the percentage of those who answered each specific question.

Participants

The participant group consisted of 8 General Practitioners and 25 nurses representing a broad range of roles including practice nurses (8), CCN-LTCs (7) and Nurse Practitioners (6). There were 26 women (81.3%) and 6 men (18.8%) and the age ranges represented (N=33) appear in the chart to the right.

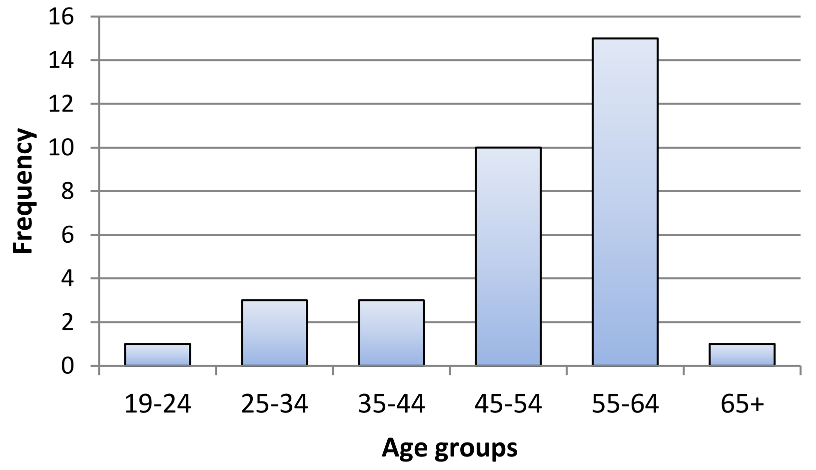


Figure 1: Participants' grouped ages

More than one ethnicity was able to be selected and consequently the percentages add to more than 100. Most were NZ or other European (77.8%), four were combined into 'other'[1] (11.1%), two were Māori (5.6%) and one Pacific (2.8%). Regarding employment status (N=30), 18 (60.0%) were in full-time employment, 11 (36.7%) were part-time and one (3.3%) was casually employed.

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[1] Includes mixed, South African, Chinese and Indian

Twenty five (78.1%) of the 32 who answered the question indicated they had received some form of long term conditions related education in the previous year. We asked about whether any barriers had been experienced in accessing education and the responses were:

- Being required to pay for education
- The PHO not providing good information about what is available
- The continuing professional development calendar not being easy to use
- Sometimes only being given short notice which limits the ability to attend

More positively one comment was made about Central PHO providing great educational opportunities.

Introductory questions

Definitions of good self-management

The practitioners were asked to describe, in a sentence or two, what **good self-management** looks like from their perspective. Twenty six responses were provided and these were coded according to their content.

The descriptors represented in the responses, along with some examples, are presented in Table 1. The numbers in brackets reflect the number of comments pertaining to that descriptor.

Table 1: Descriptors of good self-management and response examples

Descriptors	Examples
Knowledge &skills (12)	• An expert patient with the knowledge and skills to manage symptoms, conditions and life • Patient has good knowledge of their condition and medication • Having the skills, knowledge and understanding to competently manage one's own health • Meaningful understanding of the health condition, what is requires re lifestyle, medication monitoring etc and why
Behaviour when unwell (5)	• Know what to do when things aren't going well • Know when to ask for help • Avoidance of precipitance of disease/exacerbations
Recognition (4)	• Able to recognise early symptoms of disease and change/start treatment early • Recognise signs of deterioration and well-being
Responsibility (4)	• Where the patient takes responsibility for their own conditions and health • People taking care of their own health needs
Healthy behaviour (4)	• Partakes in activities that will improve/reduce disease deterioration e.g. exercise, diet, stop smoking • Knowing how to manage LTC and being able to action this to maintain an even (or improving) base • Positive lifestyle, confidence in routine requirements

Empowerment (3)	• Being empowered to work with their health professionals • When a patient is empowered to manage their own health
Plan (3)	• Has a plan of what to do and who to contact when not sure • Has a plan of care that makes sense • Monitors conditions - i.e. action plan
Collaboration (2)	• Where the person and family work synergistically with the provider to manage their LTC • Where the patient and health provider are in the same waka

The importance of patients having good knowledge of their condition, treatment and behaviour required to optimise their health came through here. Related to this is the idea that good self-managers not only know how to maintain their health by acting appropriately, but also know what to do when symptoms increase or their condition requires additional intervention or a different management approach. This requires people to recognise early signs of deterioration which in turn relies on them knowing what is normal for them. Having a care plan and participating in the care planning process helps with this in that it supports them in monitoring their condition/s and knowing what to do when help is required. Empowerment was mentioned in terms of an individual having the confidence to work with health practitioners and to take responsibility for their own health. Additional ideas related to a good self-manager being able to effectively manage medications, and being confident, proactive and actively engaged. Missing from this list is patients managing the effects of illness on physical, emotional and social roles and patients having the confidence, access and ability to use social support services, two of the seven key principles of self management as defined within the Flinders Model.[2]

The second question asked practitioners, in a sentence or two, to describe what **good self-management support looks like** from their perspective. Again the twenty five responses were coded according to content and the results appear in Table 2 on the following page.

The strongest theme within these responses related to the need for a good partnership between provider and patient in order to work together towards goals and better self-management of conditions. Education was also considered important. This included both the education provided to patients to ensure that they have a good understanding of their condition, their medications and what they can do to improve their health or avoid problems as well as the education health practitioners need personally in order to have the necessary skills to support patient self-management (provider knowledge). A few people observed that care planning, undertaken in collaboration with the patient, was seen to be beneficial both for the patients' maintenance of health and wellbeing as well as assisting nurses to provide a consistent response to the patient. Additional individual comments related to: having adequate resources; recognising patient expertise because "patients become experts in their LTC"; being proactive in managing their health before them become sick; and knowing you are providing good self-management support when quality of life improves.

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[2] www.flinders.edu.au

Table 2: Descriptors of good self-management support and response examples

Descriptors	Examples
Partnership (12)	• Provide possible options for the client to allow them to make informed choices regarding their health • Connection and therapeutic relationship with patient/family/whānau • When an individual works in partnership with their health professionals to achieve the individual health status they want • Patient centred, patient goals • Primary care team walking alongside the person to give encouragement and provide the necessary education for the person to manage their LTC • Competent health workers cooperating and communicating well with the lead Dr and the patient
Education (7)	• Adequate education to support good self-management • Education is paramount. The client has to be aware of what is going on and be clear as to what they can do to improve the course of disease themselves • It's about supporting them to help achieve self-management by giving them information about their conditions and medications
Access (6)	• Easy access by phone/email/outpatient visit to medical care • An appropriate workforce for each patient e.g. having a Pacific Island LTC CCN for Pacific patients • A supportive team being able to seek advice from specialist nurses if needed so patient gets best care
Listen (3)	• Being there to listen • The support is in recognising and listening to the patient and what they need to know about their medications and conditions
Provider knowledge (2)	• An appropriately trained health professional workforce • Having the skills and understanding to educate/support a person to develop the necessary "tools" to manage their health
Care plan (2)	• Setting goals and writing a plan of care in partnership with a patient to ensure they can maintain their health/wellbeing and access the necessary health/services if their health deteriorates • Having an active care plan so they if they call the clinic they are getting the same information from every nurse they speak to.

Battersby and colleagues (2010) define self-management support as including "actions by health care providers (formal and informal) that assist self-management. This definition assumes that optimal self-management is the product of a partnership between the patient, the family, and health care providers" (p. 562). Partnership between the health care provider and patient was strongly recognised by the practitioner group, however, engagement with the participant's family as part of the partnership was identified by only one participant. Increasing patient knowledge continues to be a priority area for practitioners, and we could argue that increased knowledge may lead to increased patient skill and confidence, essential to being a good self manager. Conversely, studies have shown that a strong focus on education (in groups) often failed to help participants make these skills part of their everyday lives and skills weren't maintained without additional support and follow up (Heller et al., 2014).

Long term condition management and support

Practitioners were asked to indicate which of 14 long term conditions they felt competent in managing and Figure 2 on the following page provides the results for doctors and nurses separately.

A different pattern for the professions is evident with a larger percentage of doctors than nurses indicating that they feel competent in managing LTCs overall. The number of conditions doctors felt competent managing ranged from 9 to 14; the range for nurses was 3 to 14. Three from each group indicated they felt competent in managing all 14 listed conditions. The mean number of conditions practitioners felt competent managing was 12.3 for doctors (median 13) and 9.1 for nurses (median 9).

At least three quarters of both groups felt competent in managing Type 2 diabetes, asthma, COPD and hypertension. The lowest scoring conditions were mental health, pain other than arthritis, depression/anxiety related to having a long term condition and memory decline for doctors and Type 1 diabetes, pain other than arthritis and mental health for nurses.

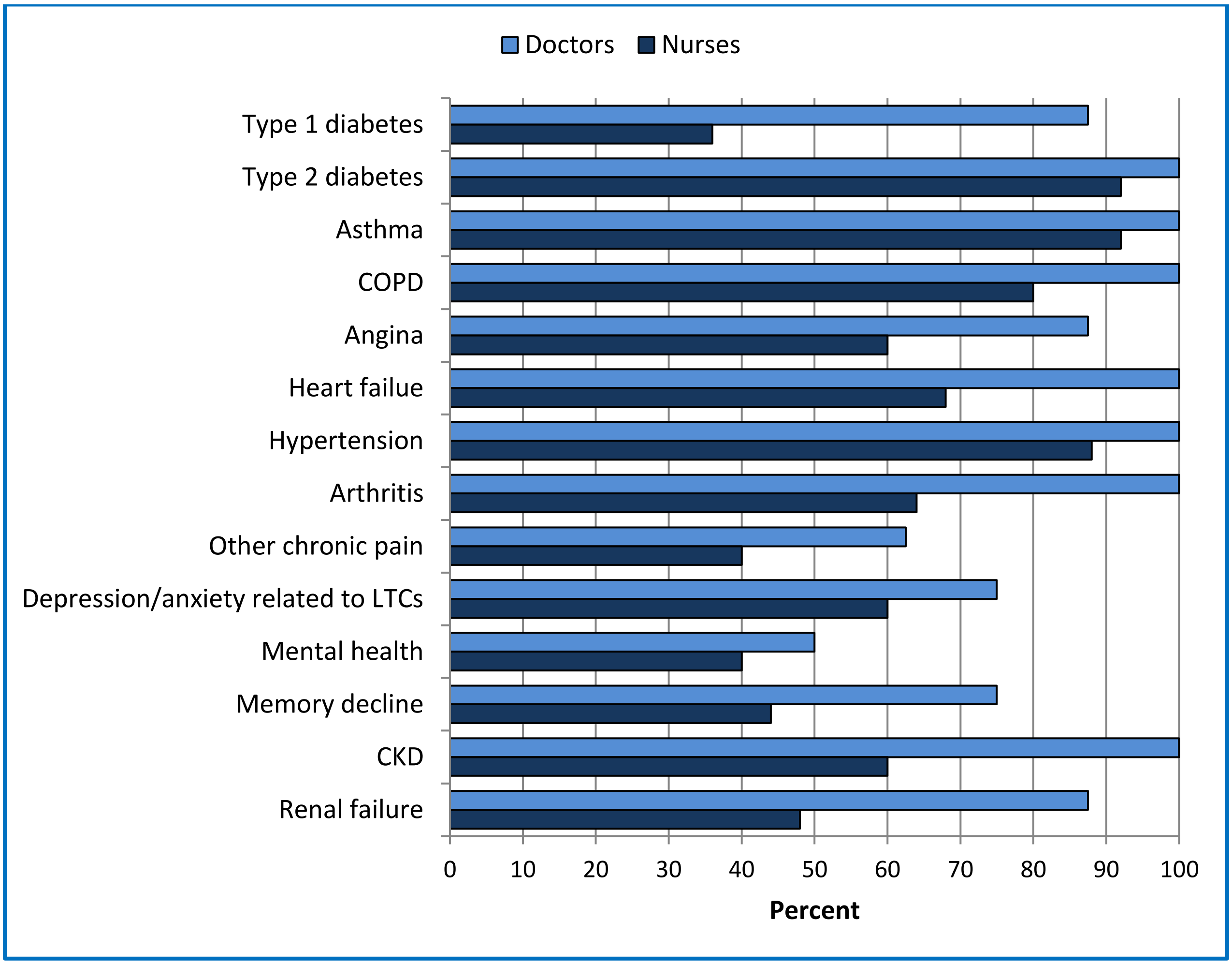

Figure 2: Long term conditions doctors and nurses reported feeling competent in managing

Importance, confidence and knowledge

With respect to self-management support overall, the practitioners were asked to rate: the importance of self-management support ('not at all important' to 'extremely important'); their confidence in providing self-management support ('not at all confident' to 'extremely confident'); their knowledge of the community groups/organisations available to support people with long term conditions ('not at all good' to 'excellent'); and their knowledge of the social support services available to people with long term conditions ('not at all good' to 'excellent'). These were all rated on an 11-point scale ranging from 0 to 10.

As can be seen from Table 3, the provision of good self-management support to people with long term conditions was considered to be of strong importance, with the average score being 9.5 (median 10). When broken down by professional role, the mean score was 9.1 for doctors and 9.6 for nurses.

Confidence in providing good self-management support was slightly lower for most participants, ranging from 5 to 10. The overall mean was 7.9; 7.3 for doctors and 8.0 for nurses.

Table 3: Importance and confidence in providing self-management support and knowledge of available community groups and social services to support people with LTCs

	Role	Range	Mean	Median
Importance of the provision of self-management support	Doctor	7 – 10	9.1	9.5
	Nurse	8 – 10	9.6	10
	Total	7 – 10	9.5	10
Overall confidence in providing good self-management support	Doctor	5 – 10	7.3	8
	Nurse	5 – 10	8.0	8
	Total	5 – 10	7.9	8
Knowledge of community groups/organisations available to support people with LTCs	Doctor	4 – 7	5.9	6
	Nurse	5 – 10	7.4	7
	Total	4 – 10	7.0	7
Knowledge of social support services available to people with LTCs	Doctor	5 – 8	6.3	6
	Nurse	5 – 9	7.1	7
	Total	5 – 9	6.8	7

There was a weak correlation between confidence in providing self-management support and the number of conditions practitioners felt competent in managing (r=.24) suggesting that people who felt confident in managing a greater number of LTCs were more likely to feel more confident in providing support for self-management to their patients. No correlation was found between ratings of importance of self-management support and confidence in providing it.

Nurses' knowledge of community groups (M=7.4) and knowledge of social support services (M=7.1) available for people with long term conditions were rated higher than those of doctors whose means were 5.9 for knowledge of community groups and 6.3 for knowledge of social support services.

Not surprisingly, these scores were strongly correlated (r=.80) suggesting that knowledge of community groups and knowledge of social support services were similarly rated by the same individuals.

Discussion and comparison with 2016 findings

When compared to the 2016 findings, Type 1 diabetes, pain (other than arthritis), mental health and memory problems remain the conditions nurses feel least competent in managing. In 2016 doctors identified Type 1 diabetes and memory decline as their areas of least competence, while this year it was mental health and non arthritis related pain. However the low numbers of both doctor and nurse respondents makes it difficult to draw any meaningful conclusion. Similar results regarding the importance of, and confidence in, providing self-management support were found across the two data collection years but this year a weak positive correlation was found between the numbers of conditions respondents felt *competent* in managing and their *confidence* in providing self-management support.

In 2018 two additional questions were included in order to assess self-rated knowledge of the support services available to people with long term conditions. Knowledge of community groups/organisations people can be referred to for support was rated lower by doctors than nurses as was knowledge of social services. To have a current list of groups, clubs, organisations and support services in the region that is updated and is available through the provider portal, or via an established web-based tool such as Health Navigator or Health Point, would be a very useful resource. The list should contain contact information, and a brief description of who they are designed for and exactly what they provide could be included.

Section 1: Clinician support for patient activation

Background and previous findings

Having patients who are health activated and able to be proactive in managing their health on a daily basis is key to implementing the chronic care model. Hibbard and colleagues (2004) developed a measure to assess patient activation, the Patient Activation Measure (PAM® survey) and subsequently adapted it to measure clinician beliefs about the importance of patient self-management competencies and behaviours. The original version of the Clinician Support for Patient Activation Measure (CS-PAM; Hibbard et al., 2009) consisted of 14 statements with five response options; 'disagree strongly', 'disagree', 'agree', 'agree strongly' and 'not applicable'. The items were divided into four sets based on Rasch analysis indicating how easy it is for clinicians to agree with each item. The level of difficulty increases sequentially throughout the four sets. The process for calculating CS-PAM scores provided by Insignia Health generates scores on a 100 point scale. The measure was tested in a study comparing responses of 77 UK and 98 US participants and the same overall mean score of 69, and range of 10 to 100, was found with both samples (Hibbard et al., 2009). A Cronbach's alpha coefficient, signalling internal consistency of the full item set, was found to be a very acceptable .86. This can be compared to a Dutch study (Rademakers et al., 2015) where an overall mean of 65.1 and Cronbach's alphas ranging from .82 to .97 for three different samples were found. The Dutch researchers identified a slightly different item structure based on 489 primary care practitioners and using the 13 item version of the CS-PAM provided by Insignia Health - as was used in the current study. A recent study of 181 primary care practitioners (Alvarez et al., 2016) found an overall mean score of 66.1 with women scoring higher than men (68.2 cf 62.8).

The Hibbard study found a slight age effect such that younger respondents (<50 years) scored higher but not significantly so. No difference was found according to professional training. Rademakers and colleagues (2015) found lower scores for general practitioners (63.7) than for other primary care providers (67.2) including nurses, doctors' assistants and practice assistants.

Current findings

The mean score for the CS-PAM was higher at 81.1 than that found in either of the previous overseas studies, suggesting that the NZ practitioners hold stronger beliefs about the importance of patient self-management competencies and behaviours. The internal consistency of the scale was high (α=.91) and the range for the CS-PAM scores was from 48.9 to 100. These scores can be converted into three levels labelled low, medium and high. This year 4 (12.1%) were classified as low, 8 (24.2%) as medium and 21 (63.6%) as high. A comparison of younger (<55) and older (55+) practitioners found little difference in scores, 79.7 cf 81.3 respectively. A comparison between professional roles identified a slightly higher mean score for doctors (82.1) than nurses (80.0) but again these could be considered more or less equivalent.

Discussion and comparison with 2016 findings

The CS-PAM mean score was higher than that found in previous published research and was equivalent to the mean of 80.9 found in 2016. The range was also different to that found in overseas studies as it started considerably higher up the scale; 53.2 in 2016 and 48.9 in the 2018 sample. The distribution of practitioners across the three levels was slightly different to 2016 with the number of medium level scores remaining the same but a greater number of high scores and fewer low scores than were previously found. In 2016 nurses were found to score higher than doctors on the CS-PAM which supported UK findings by Sharma and colleagues (2015) with a study of NHS doctors (M=70.1) and nurses (M=75.9). In our 2018 results there was less evidence of a difference but given the low numbers included in both 2016 and 2018 the results are difficult to draw conclusions from. The age effect found in 2016, with younger practitioners scoring lower than older (75.1 cf 83.4, was not evident in 2018. The high scores overall are a positive finding as there is a growing body of evidence that more activated patients are better self-managers, achieving better outcomes. People can be supported to become more highly activated and engaged in their own health care but practitioners themselves need to be in favour of patient activation and empowerment in order to support them appropriately. A recent study demonstrated that the primary care practitioners "whose beliefs are more supportive of patient self-management are more likely to engage with patients with more collaborative and partnership-building behaviours and that the patients of these more supportive clinicians are also more likely to exhibit gains in activation" (Alvarez, 2016).

A Pearson's correlation found a moderate positive association between CS-PAM scores and ratings of the importance of providing good self-management support (r=.38). This suggests that those practitioners who had stronger belief in the importance of self-management support also believe in the importance of patients' self-management competencies and behaviours in relation to their long term conditions, and are consequently more likely to implement it into care delivery.

Pearson's correlations between the CS-PAM scores and other variables measured in this study were calculated and a moderate positive association was found between the CS-PAM and ratings of the importance of providing good self-management support (r=.38). This suggests that those practitioners who had stronger belief in the importance of self-management support also believe in the importance of patients' self-management competencies and behaviours in relation to their long term conditions. However no correlation was found between the CS-PAM scores and confidence in providing self-management support (r= -.04). CS-PAM scores were also moderately correlated with Patient Interaction scores (r=.34, see Section 2).

Section 2: Individual provision of long term conditions care and self-management support

Interaction with patients

This was assessed by asking practitioners to rate their performance with respect to different aspects of the patient consultation for long term conditions management. The first 26 of the 46 questions used, were sourced from the modified, practitioner version of the Patient Assessment of Chronic Illness Care (MPACIC) (Carryer et al., 2010). Others were based on the General Practice Questionnaire (GPAQ) used in the UK to audit patient perceptions of general practice performance. Additional questions were added to extend the scope of this section, some focusing on culturally appropriate care provision and others to address health literacy.

The questions were presented in such a way that they required two responses to each. The first was a rating of ***how often*** each aspect of care was provided for people with long term conditions. Options provided were: 'almost always' (scored as 5); 'most of the time' (4); 'sometimes' (3); 'generally not' (2); and 'almost never' (1). The second part of the question asked the respondents to rate ***how good*** they are at doing these things, bearing in mind time constraints, competence, confidence, experience etc. An 11-point scale was again provided and respondents were asked to put a number between 0 'not at all good' and 10 'excellent' in the box beside each item. There was a considerable amount of missing data associated with these questions so it would appear that the instructions were not followed as intended – perhaps due to lack of clarity, respondents skimming over them or not being prepared to answer each question twice.

Frequency with which aspects of long term conditions care are provided

In reporting the findings from this set of questions, the answers to the 'how often do you do this' component are presented as response frequencies for the total group and mean scores (calculated from averaging the 0 to 5 responses linked to the options) for the total group and for doctors and nurses separately. These results appear in Appendix A. The aspects of care receiving the highest and lowest mean scores are provided in Table 4 along with the percentage of respondents indicating they perform them almost always or most of the time and generally not or almost never.

Table 4: LTC care activities undertaken with the greatest (top) and least (bottom) frequency

	When you see a patient with a long term condition, how often do you ...	Mean	Almost always/most of the time %	Generally not/almost never %
TOP	• Listen to what they have to say	4.7	96.8	0
	• Put them at ease during a physical examination	4.7	96.6	0
	• Establish and maintain a trusting relationship with the patient	4.7	96.8	0
	• Ask fully about their symptoms and how they are feeling	4.6	93.5	0
	• Respond patiently to their questions or worries	4.5	96.8	0
BOTTOM	• Contact them after a visit to see how things are going	3.4	38.8	9.7
	• Give them a copy of their treatment/care plan	3.4	33.4	6.7
	• Provide a written list of things they should do to improve their health	3.2	29.0	22.6
	• Provide them with a book or log to monitor their progress	3.1	38.7	29.1
	• Liaise with community groups/organisations to know which of your patients uses them and how they are getting on	2.7	26.7	50.0
	• Use a tool such as the importance/confidence ruler to refine patient goals and maximise success	2.7	23.3	56.7

As can be seen from the full set of results (Appendix A), on average the doctors rated themselves as being able to put patients at ease during a physical examination slightly more often than the nurses rated themselves. However on every other item nurses rated themselves as providing these aspects of care with greater frequency than doctors did, perhaps this is due to the broader role nurses have in the delivery of long term conditions care. The range of mean item scores for both doctors and nurses was from 2.6 to 4.8.

The difference between the two sets of mean item scores (nurses' - doctors') ranged from -0.1 to 1.5. The largest differences occurred for: actively following up on each patient's goals (a difference of 1.5 scale points: doctors 2.6; nurses 4.1); asking them to talk about their own goals in caring for themselves (1.2 difference: doctors 3.0; nurses 4.2); helping them to plan ahead so that they can take care of themselves even in hard times (1.2 difference: doctors 3.1; nurses 4.3); and providing them with a book or log to monitor their progress (1.2 difference; doctors 2.3; nurses 3.5).

The items appearing in the top set were not unexpected as practitioners are likely to see these as part of professional practice, intrinsic to daily performance. Half of the items that featured in the bottom set were not unexpected either as previous evaluation studies undertaken in the region using solely the MPACIC tool had shown similar results: providing a copy of care plan; providing a written list of things they could do; and providing a log book (Budge & Taylor, 2014). Unfortunately all of the items at the bottom relate to the provision of good self management support and the lower frequency with which they are implemented may be an unfortunate consequence of the busyness of general practice.

Comparison with 2016[3]

When we look at the top and bottom rated items we can see that there is a degree of overlap in the highest rated items across the two years. The top three in 2018 (listening, putting patients at ease during physical examinations and establishing and maintaining a trusting relationship) were the same top three in 2016. The other two questions were included in the 2016 questionnaire but did not rank in the top 5 in 2016. There is only one item appearing in the bottom set both years, and that was liaison with community groups to see how patients are doing. However there were differences in questions asked so we can't draw a direct comparison. It is interesting to note that contacting patients after a visit was in the bottom set for 2018 but appeared in the top set in 2016.

Cultural sensitivity

Three questions related to cultural sensitivity. Providing culturally appropriate care for Māori was rated as taking place with a similar frequency by doctors and nurses, with mean scores of 4.4 and 4.3 respectively. Culturally appropriate care for Pacific patients was rated similarly, with a mean of 4.3 for both doctors and nurses. The third related to appropriate involvement of family/whānau/fanau in discussions about management and care and this was rated as happening less often by doctors (*M*=3.9) than nurses (*M*=4.3).

Health literacy

There were two questions specifically related to health literacy. Explaining problems or any treatment in ways that patients can understand was rated as happening most of the time overall (*M*=4.4), slightly less often by doctors (*M*=4.3) than by nurses (*M*=4.5). Checking that people with LTCs understand what is being talked about was rated similarly overall (*M*=4.5), with doctors again rating themselves doing this slightly less often than nurses (*M*=4.1 cf *M*=4.6).

Total score

A total Patient Interaction score was calculated by summing responses to each of the items and dividing through by the number of items (46). Scores for individual practitioners ranged from 3.1 to 4.7 out of 5 (a 'sometimes' to 'almost all of the time' range) with a mean score of 4.0. Doctors' scores ranged from 3.2 to 4.7 (*M*=3.6) and nurses' scores ranged from 3.1 to 4.7 (*M*=4.1). A Pearson's correlation found Patient Interaction scores to be moderately associated with their overall confidence in providing good self-management support (r=.38) as described on page 9.

How good the practitioners are at providing aspects of long term conditions care

Answers to the 'how good are you at this' component are presented as mean ratings, again for the total group and for the separate professions. Full results can be found in Appendix B. The aspects of care receiving the highest and lowest mean scores are provided in Table 5 with the total group means as well as means and ranges for doctors and nurses separately.

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[3] The sets of questions asked were altered in an effort to reduce the length of the questionnaire and make it less of a burden to complete

Table 5: LTC care activities undertaken best (top) and least (bottom) well

	When you see a patient with a long term condition, how good are you at ...	Total mean	Doctors		Nurses	
			Range	Mean	Range	Mean
TOP	Listening to what they have to say	9.3	7 - 10	9.0	8 - 10	9.4
	Asking fully about their symptoms and how they are feeling	9.1	7 - 10	8.7	8 - 10	9.3
	Putting them at ease during a physical examination	9.1	8 - 10	9.1	7 - 10	9.1
	Establishing and maintaining a trusting relationship with them	9.0	7 - 10	8.7	8 - 10	9.2
	Telling them how important the things they do to take care of themselves are for their health	8.7	7 - 10	7.7	6 - 10	9.1
BOTTOM	Ask questions, either directly or in a health survey, about their health habits	6.7	0 - 8	5.0	4 - 10	7.4
	Contact them after a visit to see how things are going	6.7	1 - 8	5.0	2 - 10	7.4
	Give them a copy of their treatment/care plan	6.5	4 - 8	5.3	1 - 10	7.1
	Provide a written list of things they should do to improve their health	6.0	1 - 8	4.6	2 - 10	6.6
	Liaise with community groups/organisations to know which of your patients uses them and how they are getting on	4.8	0 - 8	4.1	0 - 10	5.1
	Use a tool such as the importance/confidence ruler to refine patient goals and maximise success	4.6	1 - 8	3.1	0 - 10	5.3

From this it can be seen that, on average, the doctors and nurses rated themselves equally well at putting patients at ease during a physical examination. For all the other aspects in the table, nurses rated themselves more highly than doctors rated themselves. When we look at all of the results in Appendix B, the range of mean item scores for doctors was from 3.1 to 9.1 and for nurses was from 5.3 to 9.4. The difference between the two sets of mean item scores (nurses - doctors) ranged from -0.9 to 3.1. The largest differences occurred for: providing them with a book or log to monitor their progress (a difference of 3.1 scale points: doctors 4.7; nurses 7.8); actively following up on each patient's goals (2.8 difference: doctors 4.9; nurses 7.7); asking questions about their health habits (2.4 difference: doctors 5.0; nurses 7.4); and contacting them after a visit to see how they are going (2.4 difference; doctors 5.0; nurses 7.4). This shows that overall nurses feel they are better at providing self management support than the doctors consider themselves to be.

As was found with the frequency of care question, items scored in the highest category are likely to be identified as intrinsic to being a good practitioner hence it is not surprising that practitioners rate themselves highly. The statement '*Telling them how important the things they do to take care of themselves are for health'* featured in the top 5 in an earlier evaluation in the region (Budge & Taylor, 2014) but this only related to frequency of provision, not how good they perceive themselves to be at doing it. It is good to see that practitioners have a high level of confidence in their ability as it is essential to supporting patient self management. Like the frequency scores, the bottom scores primarily relate to the provision of self management support.

Cultural sensitivity

With respect to the three cultural questions, and how good they perceive themselves to be at performing these tasks, nurses rated themselves higher than doctors did on all three questions. Mean scores on the 0-10 scale for nurses and doctors respectively were as follows:

- Providing culturally appropriate care for Māori (8.4, 8.1)
- Culturally appropriate care for Pacific patients (8.4, 8.0)
- Appropriate involvement of family/whānau/fanau in discussions about management and care (8.5, 7.6)

Health literacy

The nurses again rated themselves higher than doctors did at explanations and checking. Mean scores for nurses and doctors were:

- Explaining their problems or any treatment in a way they can understand (8.7, 8.1)
- Checking that they understand what is being talked about (9.0, 7.7)

Total score

Combining all the individual scores and dividing by the number of items produced an overall rating of how good the respondents perceived themselves to be at providing these aspects of long term conditions care. Due to some missing data, four missing answers were allowed when computing the overall score which still resulted in only 25 responses. The range of scores across the individual practitioners was from 5.7 to 9.5 with a mean of 7.6. Doctors' scores ranged from 5.7 to 8.3 (*M*=6.9) and nurses' scores ranged from 5.7 to 9.5 (*M*=7.9).

Discussion

The top ranked items suggest that the practitioners report they are most frequently engaging with their patients with respect to communication and relationship building. Several of the components of care ranked the lowest relate to talking about health behaviours - either asking about or providing written information about them. The care plan is part of this as it should include the goals the patient is working towards and what behaviour changes are involved in achieving them. There is evidence from the patient arm of this study, as well as from previous published research, that having a practitioner show interest in goals and whether or not they are being achieved is beneficial in terms of perceived health status, ratings of general practice interactions and patient activation. Discussing patient goals, however basic, and giving the patient a written summary of their goals - as well as a list of ways they might work towards achieving them - is an easy thing to do and can provide a useful framework for discussing a broader range long term condition related concerns. Tools are available to help with this but the results of this study suggest that fewer than half of the practitioner respondents are routinely using them.

By asking ***how good*** practitioners perceive themselves to be in achieving these tasks we hoped to gain insight into where education or support would prove effective. However in attempting to draw conclusions from the results we realised that the question was somewhat ambiguous and consequently it is difficult to conclude whether the frequency with which tasks are managed and how good practitioners perceive themselves to be at achieving them is related to personal attributes, such as confidence, skill or attitude, or to system limitations such as time and autonomy. With hindsight it would have been better if we had provided a definition of 'good' or perhaps measured competence instead. Comparing the ratings of frequency with which these tasks are being put into practice with those of how good the practitioners are at doing them showed a reasonable but not complete concordance.

Overall, the listed aspects of care are being done sometimes to most of the time for people with LTCs. Additional quality improvement, education and support to practitioners could be beneficial in improving practice particularly for the lower scoring items. It is more likely however, that addressing the way in which appointments are structured in the general practice environment to enhance consultation time would have the greatest benefit for practitioners working with patients with long term conditions. Reviewing the self management/self management support components of the Care Pathways used by local practitioners could also be worthwhile. Attention to health literacy and meeting patients' cultural needs could be addressed at the same time.

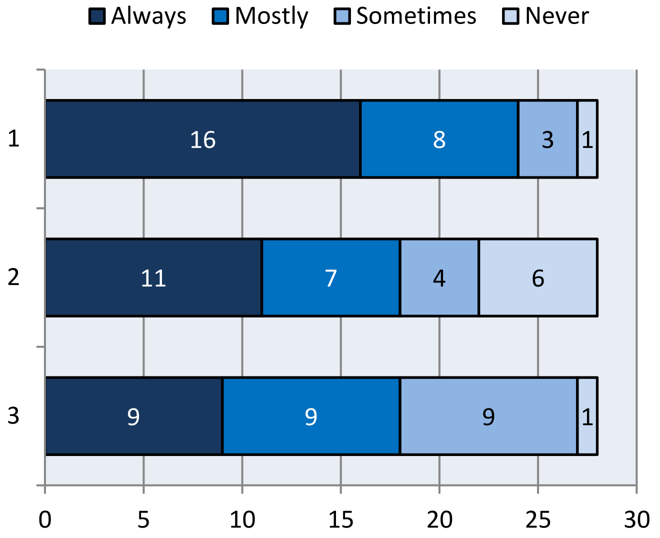
Care planning

Care planning can be seen as a part of a consultation where treatment decisions are made either independently by the practitioner or collaboratively with the patient and the 'next steps' identified. Alternatively care planning can be a more formal process of discussion with the patient regarding their health/illness needs and goals and how they are to be worked towards or achieved. As we did not provide a specific definition of care planning in the practitioner questionnaire, respondents may have interpreted it differently and this is something to note for future work. Thirty two practitioners answered the question of whether or not they undertake care planning as part of their routine long term conditions care. Most said they did (81.3%), but five (15.6%) said they did not and one said both yes and no. The reasons given for why care planning was not carried out were: that it was not part of their role (3, 8.8%), one respondent pointing out that the LTC team did this; that there was not enough time available to do it (4, 11.8%); and that they don't have access to care planning tools (1, 2.9%).

Those who do engage in care planning were asked about the frequency with which they undertake specific care planning tasks and how good they are at doing them. The results are presented in Figure 3.

As a practitioner who develops care plans for patients with LTCs, how often do you ... (N)

1. Document patient care plans in the PMS (28)
2. Document LTC care plans on a specific care planning form (21)
3. Encourage your patients to use their written care plan to help them manage their health day to day (28)



	How good are you at this?	
	N	**Mean**
1	20	8.1
2	20	6.9
3	19	6.8

Figure 3: Frequency with which practitioners undertake specific care planning tasks and mean self-rated expertise

These results suggest that specific care planning forms are not being used as part of routine practice, however the documentation of care plans in patient notes is taking place with greater frequency. Of the 28 who responded, 9 practitioners said they never or only sometimes encourage patients to use their care plan to manage their own health, which seems like a missed opportunity to engage people in their own health care.

When asked about how often practitioners review care plans with patients, the responses were (N, %):

- Never (2, 7.4)
- Annually (4, 14.8)
- Between annually and 6 monthly (1, 3.7)
- Six monthly (3, 11.1)
- Three monthly (10, 37.0)
- More often than 3 monthly (4, 14.8)
- Varies (1, 3.7)

Therefore over half of this group of 27 respondents indicated they were reviewing care plans with their patients at least three monthly.

When scores of 1 (never) to 4 (always) were assigned to responses to the questions depicted in Figure 3, mean scores for the two professions could be compared. These are presented in Figure 4 below where it can be seen that nurses reported performing all aspects of care planning with greater frequency than did doctors. This is likely the result of some nurses having longer consult times with patients, part of a changing model of care to better cater for people with LTCs in the region.

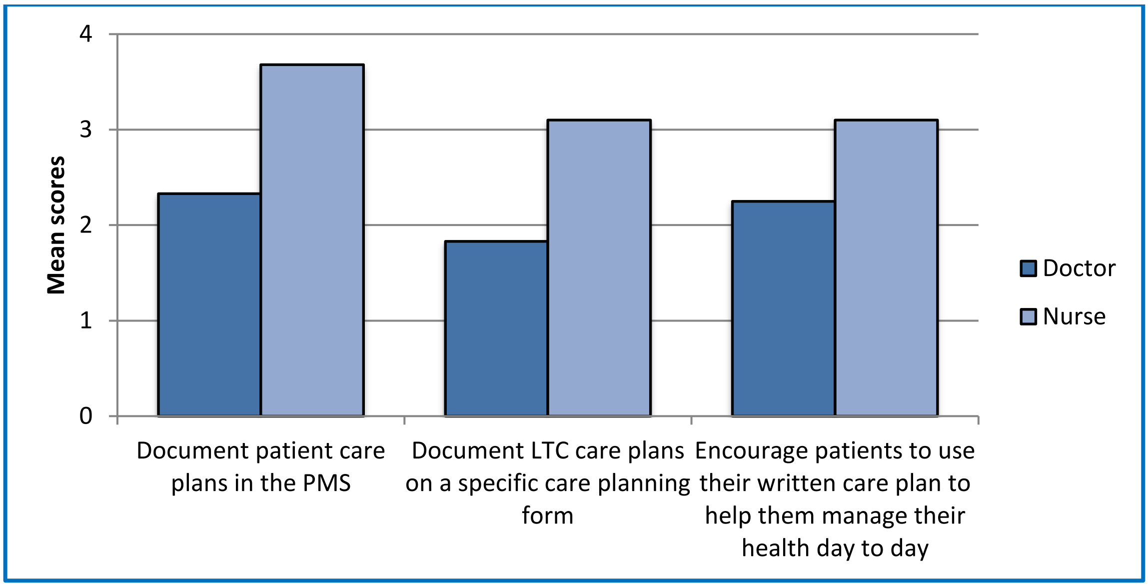


Figure 4: Frequency with which care planning tasks are carried out by doctors and nurses

Analyses by employment status

With the study sample having low numbers, and also an uneven distribution of most demographic characteristics, the opportunity to contrast different subsamples was limited. However we decided to look at employment status as we were aware that part-time and casual employees might find it harder to provide ongoing LTC care than full-timers. The respondent group was therefore divided into two; full-time practitioners (n=18) and part-time/casual practitioners (n=12). Figure 5 presents mean scores for these two groups on a range of study questions and scales.

These results show that the there was little difference between these two groups of practitioners on most of these measures. However the full-time practitioners scored higher on average on the number of conditions they felt competent in managing. The CS-PAM scores, reflecting clinician beliefs about the importance of patient self-management competencies and behaviours, showed a similar trend with the mean scores being 82.3 for fulltime practitioners and 76.1 for part-time or casual practitioners. This can be compared to the 81.8 and 78.9 found in 2016.

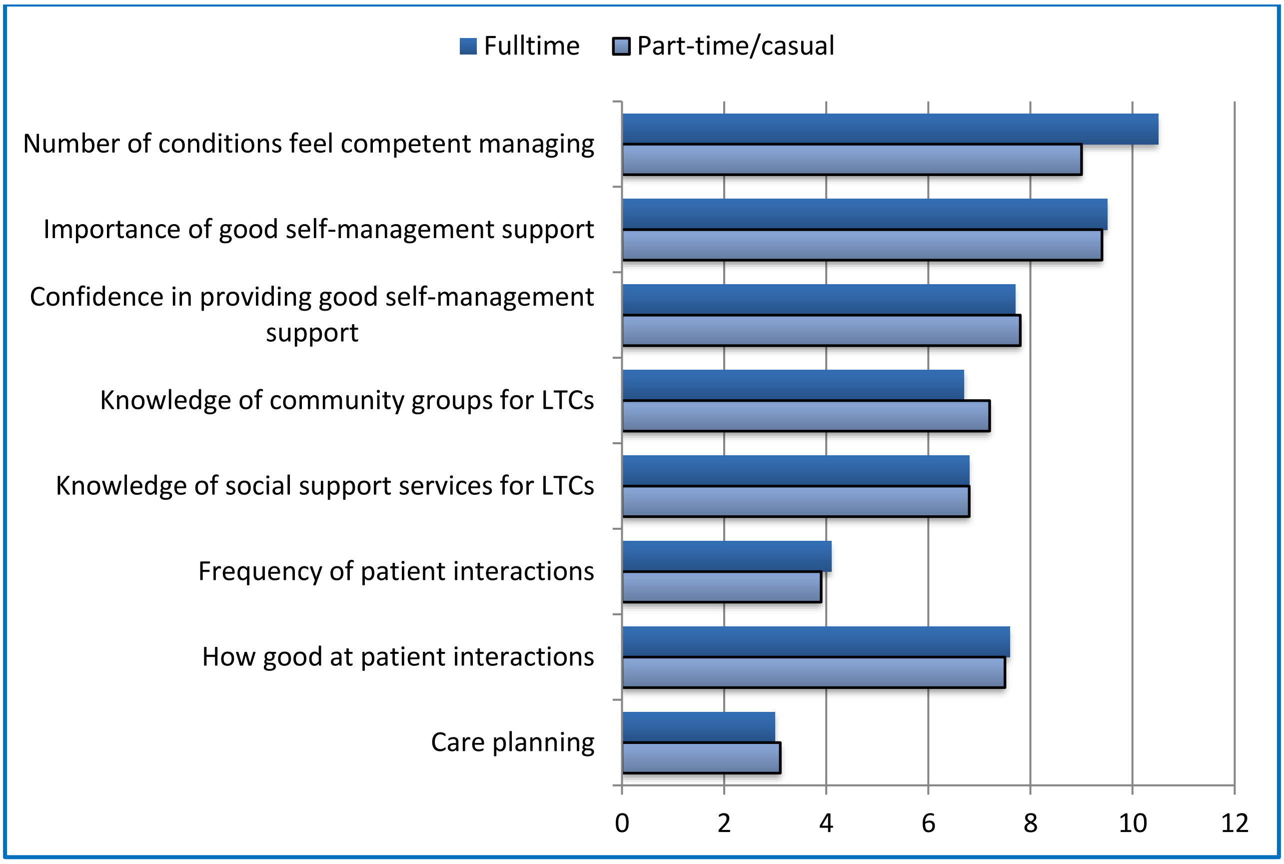


Figure 4: Mean scores for full-time and part-time/casual employees across a range of study variables

Enablers and barriers to delivery of long term conditions care

Firstly, the practitioners were asked to identify the key factors **enabling** them to deliver effective long term conditions care and self-management practice support in their current practice. This open response format question generated a broad range of answers and twenty six respondents provided between one and five comments each. They were grouped by theme as follows.

Main enablers (Number of comments)	Examples (quotes)
Sufficient **time** to spend with individual patients (16)	• Longer appointment times • Dedicated time with no interruptions • Our CEO allows for time with LTC clients
Teamwork between practitioners either within the practice team or with other practitioners to whom referrals are made (13)	• Support from other team members • Good teamwork with specialist interest members e.g. nurse specialists • Team accessible to work with for care of patient i.e. each patient I usually need to liaise with prescriber or practice nurse to ensure right care, meds etc co-ordinated • Ability to refer in-house to other agencies/providers so allows for ease of access for client
Model of care appropriate for people with LTCs (7)	• Being able to visit them in their homes • Flexibility in where, when , how long, frequency to build and maintain ongoing relationship to enable client to self-manage • Packages of care to reduce costs/barriers to access
Personal **attributes/skills** (7)	• Building a relationship with the patient • My current/contemporary knowledge and skills • Knowledge of LTC to enable patient • Empathetic approach
Good **resources** including IT, community programmes, support services (5)	• Manage my Health is a winner for staying in touch • Community support services • Good programmes in community that are accessible
Other enablers	
Patient attributes (2)	• Engagement from patients who want to improve their health • Patient being 'on-board'
Involvement of whānau/interpreters for support (1)	• Having support people/whānau present or interpreters where needed

Secondly, practitioners were asked to describe the key factors that **limit** their delivery of effective long term conditions care and self-management support in their current practice. Twenty six of the respondents provided up to three comments each. The following themes emerged.

Main limitations (Number of comments)	Examples (quotes)
Time for longer appointments/discussion (18)	- Time that I am able to spend with patient. In the future the reduced appointment times will be a factor in providing effective management of patients with long term conditions - Not enough time in general practice - very hard to address all issues and concerns in the limited time slot
Patient attributes such as health literacy, interest in LTC support and engagement (12)	- Having patients that are willing to embrace self-management - Health literacy - Poor compliance on part of patient - Unrealistic expectations for some patients
Resources such as IT, costs and staffing (11)	- Cost to patient to return or have longer appointment - Sometimes clinic demands due to short staffing - Clunky MedTech not designed for care plans - Access to transport
Other limitations	
Model of care (4)	- Frequently patients will bring several 'acute' problems and then say 'I need my regular pills too' which effectively negates the opportunity to monitor the LTC - Increasing burden trying to care for an aging population with multiple LTCs - Lack of clinical leader driving change within practice - lately improved. LTC care is being targeted more
Communication (3)	- Difficulties knowing where patient is at if have been referred to another provider e.g. secondary care or PHO counselling etc as often delay or no feedback - Poor communication between primary/secondary care
Personal attributes/skills (2)	- Not knowing available resources outside of the practice - Sometimes lack of knowledge
Care co-ordination/follow-up (1)	- Need to refer patients on for others to follow up care so need to establish a new relationship with a new practitioner

Sufficient time was identified by the most practitioners as a key enabler and as the main barrier to good care. Whilst it was expected that insufficient time would be identified as a barrier in our current environment, with increasing pressures placed on the general practice team, it does show that for some practitioners this is less of an issue with long term conditions care receiving 'protected time' and longer consults being included within the model of care. Personal skills and attributes of the practitioner (empathy, relationship building and knowledge and skills) and a good practice team were also seen as key enablers. Models of care that enabled flexibility, home visits, and reduced access barriers were also considered important.

Half of the practitioner group identified patient attributes that served as barriers. These included a lack of compliance, health literacy issues, having unrealistic expectations and a lack of commitment to self management. This highlights a problem, as often the reason patients don't engage in the activities listed relates to either the skill level of the practitioner (commonly found in health literacy problems), or to the degree of engagement and time allocated to working alongside patients in order to increase their readiness for change. Some patients need little assistance whilst others need considerable practitioner understanding, guidance, follow-up and support. A lack of resources was also identified by eleven of the respondents and these related to either the patient (cost and transport to return for ongoing sessions) or the practice (such as computer issues not designed for care plans, clinic demands and staffing). Resources were also seen as enablers, with good community programmes and support services and ManageMyHealth identified. Other barriers related to lack of communication between services, lack of leadership and patient expectations.

Section 3: Provision of care and self-management support by the general practice team

Practice information

The first questions in this section collected information about the practices within which the respondents were employed. Twelve practices were named by 24 respondents, the other 8 did not identify where they were employed. The next set of questions enquired about whether the practice they were employed within: is an Integrated Family Health Centre (IFHC); is part of the Health Care Home Programme; actively supports and encourages patients to use a patient portal.

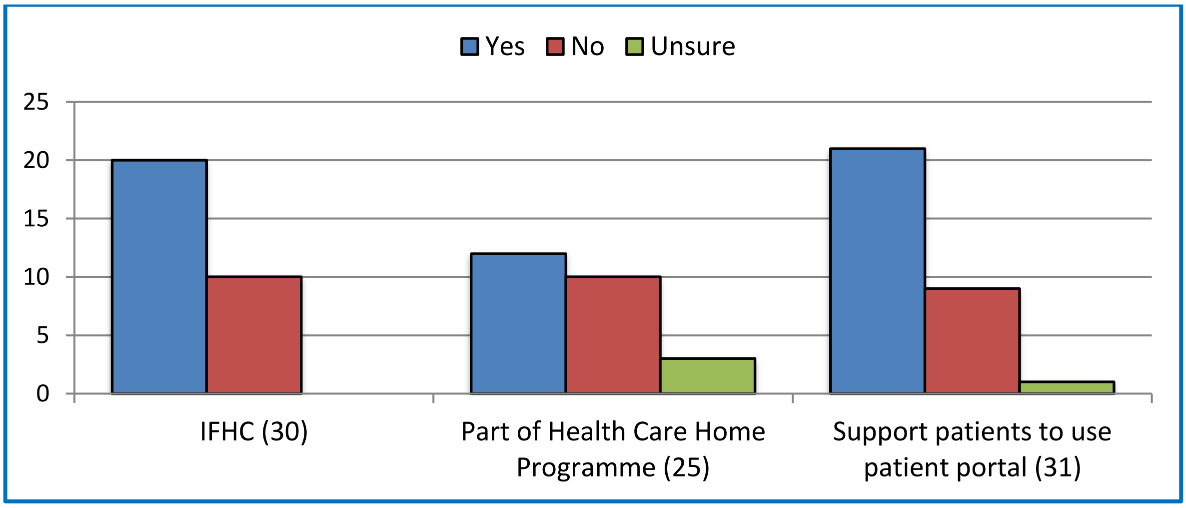


Figure 5: Practice information

From Figure 5 it can be seen that, firstly the number of responses (N) was variable across the three questions. The lowest response was related to the question of whether or not the practice was currently part of the Health Care Home Programme, suggesting that more than the three respondents who said they were unsure actually didn’t know. Based on the people who did respond, around two thirds of the represented practices were IFHCs, a little over half were involved in the health Care Home Programme and about two thirds actively support and encourage patients to use the patient portal.

Condition management

The next questions asked respondents to list the long term conditions they considered their practice to manage (a) best and (b) less well. The question suggested that they should consider diabetes management, pre-diabetes care, chronic kidney disease management, renal failure care, cardiac management, respiratory care, pain management and any other conditions in their responses. Thirty practitioners answered the question and the conditions said to be **managed best** are listed, with the number of responses in brackets, in the box below.

- Diabetes (19)
- Pre-diabetes (8)
- T2 Diabetes (1)
- Respiratory/asthma (17)
- Cardiac/heart failure (13)
- CKD (7)
- Hypertension (4)
- All those described in the question (3)
- Renal failure (2)
- Pain (2)
- Eczema (1)
- Most conditions (1)
- Insomnia (1)
- None (1)

While some participants mentioned only one condition, most responses referred to multiple conditions that their practice was managing well. One respondent said they didn’t know which conditions were managed best and another said that the question showed a “lack of understanding of the nature of general practice”.

The conditions reported to be **managed less well** were as follows:

- Pain (16)
- CKD (6)
- Respiratory/asthma/COPD (5)
- Mental health (3)
- Renal failure (2)
- Arthritis (2)
- T2 Diabetes (1)
- Diabetes (1)
- Pre-diabetes (1)
- Insomnia (1)
- Cardiac (1)
- Addiction (1)
- Eczema (1)
- Cushings/Addisons (1)
- Care of frail elderly (1)
- Cancer (1)
- Leg ulcers (1)

It is notable that three conditions major conditions (diabetes, respiratory and cardiac) were considered to be *well managed* by over half of the respondents but pain was the only condition considered to be *less well managed* by a sizeable proportion.

The third question in this set asked whether there are specific LTCs that the practice is currently trying to improve, and how this is being achieved. Twenty two responses were provided and the results are presented in the next box.

Condition	Practice approach
Respiratory	Action plan - ensure client understands inhalers. Action when taken, when to seek help.
Respiratory and diabetes	Action planning, education pending. LTC support provided by practice nurses. CVRA changes (new guidance. Free appointments for LTC patients and practice nurses.
Asthma, heart failure	Using LTC RNs to work with patients to up-titrate medication as per pathways. NP with respiratory expertise, spirometry in the practice. New Massey Psychology FACT therapy.
CVRA, diabetes	Nurse led clinics
CHF	Formation of action plans individualised to each pt
COPD, asthma	Better processes in place and starting to do better screening and plans for diagnosis
Diabetes	Working with newly diagnosed diabetics to provide the initial care and liaising with the CCN at practice
Diabetes	Trying to improve diabetes patients having their annual checks on time. A nurse sends out a letter with blood tests and follows up if not responded to. Also covers retinal screening for these patients.
Respiratory and cardiac	Looking at classifications and care plans
Every LTC	Education about health promotion and disease

Some responses simply listed the conditions being worked on and these were:

- Diabetes
- Heart failure and respiratory
- Asthma and CKD
- Pre-diabetes
- Respiratory, renal failure and CKD
- COPD and CKD

Four respondents said that no particular condition was being worked on, one adding that there was always room for improvement. Another didn't know.

General practice team delivery of care

The remaining questions concerned care delivery more generally and a set of 19 descriptions of good practice in relation to providing care for people with long term conditions was presented. Respondents were asked to rate how good their general practice team is at each, using the same 0 to 10 point scale as before. A 'don't know' option was also provided.

The ranges, means and modal ratings are presented in Table 3 on the following page. The four highest and four lowest mean scores have been highlighted. It can be seen that the aspects of care being managed least well by these general practices were: providing longer appointment times; carrying out case review, peer review and auditing in relation to long term conditions care; allocating protected LTC time; and the identification and delivery of education in response to team needs. Aspects managed best were: timely recalls; providing patient feedback on test results; following up on referrals; and working with team members to enhance care delivery.

Table 3: General practice team management of LTC support

In relation to your patients with LTCs, how good is the general practice team at ...	Range	Mean	Mode/s	N	D/K
Ensuring the same provider(s) consistently sees the patient for LTC care and support	0 - 10	6.7	6, 8 & 10	27	2
Undertaking case review, peer review or auditing related to LTC care	0 - 10	**5.4**	7	23	5
Identifying and delivering education/training in response to practice team needs	0 - 10	**6.0**	8	25	3
Providing leadership for long term conditions care	0 - 10	6.2	8	26	3
Allocating protected time for long term conditions care	0 - 10	**5.8**	6 & 10	27	2
Providing extended appointment times for long term conditions care	0 - 10	**5.1**	5	26	3
Working with other members of the practice team to enhance care delivery	3 - 10	**7.3**	8	26	3
Providing self-management education and coaching as part of the LTC care package	0 - 10	6.4	8	25	4
Giving patient feedback on test results (blood tests, scans)	1 - 10	**7.5**	8	26	2
Using the Map of Medicine to structure care provision	0 - 10	6.2	7	23	4
Doing timely recalls	1 - 10	**7.6**	8	27	2
Establishing and maintaining specific patient conditions registers e.g. patients with pre-diabetes	0 - 10	6.7	8	20	7
Communicating with other practitioners involved in an individual's care	2 - 10	6.7	8	26	3
Following up to see if referrals have been actioned	3 - 10	**7.4**	8	25	3
Identifying patients requiring medication review or medicine management support	2 - 10	7.0	7	25	4
Aligning with community programmes that provide ongoing support, education or self-management support	1 - 10	6.5	8	22	6
Using the data provided by CPHO to inform discussions/planning of LTC care within the practice	0 - 10	6.3	8	23	5
Involving family/whānau members in consultations	1 - 10	6.8	7 & 8	26	2
Checking that care is equitable for Māori	0 - 10	6.7	7 & 8	21	7

Looking at the responses in Table 3, it is interesting to see the number of ‘don’t know’ responses. All of the questions received at least two, and some up to seven. Although some questions were probably harder to answer than others, it is notable that 7 of the 20 respondents (35%) did not know how good their GPT is at maintaining condition specific registers and 5 out of 23 (22%) couldn’t rate their GPT on undertaking case review, peer review or auditing related to LTC care.

Discussion

The need for a different approach to LTC care provision than that provided by the acute care model has been evident for many years but the adaptation of systems to accommodate the necessary changes continues to be slow. The comment about patients presenting with acute care needs as well as requiring LTC medication renewals within a single appointment represents the reality of the patient experience. It also highlights a key problem within the primary care system - time. The patient results suggest that they are well aware of this and have concerns about being told that they can only discuss one or two things during a GP appointment. This hardly meets the needs of LTC clients who are in all likelihood coping with multiple conditions, often including pain and sleep problems, and may have other demands (work/family) and limited resources. Clearly practitioners are well aware of the time pressures. As was the case in 2016, many of the comments about enablers and limitations focused on time (55% of respondents in 2016 and 62% in 2018). While double appointments may be offered, many clients are not aware of this option, nor may they be prepared (or able) to pay the additional cost as was noted in the comments. The loss of the EnhancedCare+ programme as it was originally implemented (enabling more and longer appointments at reduced cost) has been noted by the patient sample and one nurse acknowledged its usefulness for providing “the opportunity to develop plans and relationships with the patient and give additional support”.

A large number of the other enablers and limitations to practice described by the practitioners in this study (teamwork, resources, good communication, and a LTC model of care delivery), are fundamental aspects of the Chronic Care Model. In fact, many of these factors sit within the delivery system design element of the model. The goal of health redesign within this element is to “assure the delivery of effective, efficient clinical care and self management support”. (14) It is broken down into five parts as follows:

- Roles need to be defined and tasks distributed among team members
- Services should be framed using planned interactions to support evidence-based care
- A clinical case management service should be provided for complex patients
- Regular follow-up by the care team should be included as part of ‘normal practice’
- Care provision must meet clients’ cultural and health literacy needs

The need for practices to allocate dedicated time and develop better systems to undertake effective long term condition management using a CCM approach, has been supported and reported in the region in earlier health redesign work (Ayling & Taylor, 2010; Ayling et al., 2013) and continues to be a recommendation for today’s clinical practice environment. There is clearly room for improvement given that longer appointment times for LTC patients and protected time for LTC care delivery were both rated in the lowest four of the practice team care delivery items.

Practitioners also described personal attributes and skills that acted as enablers to practice. These included knowledge of community resources, LTC related knowledge and skills, empathy and ability to build relationships with clients. A lack of knowledge was also identified as a barrier. Not surprisingly, a lack of client engagement with LTC care was also mentioned as a limitation to care delivery and this appeared to be seen as a patient issue rather than a practitioner one. Although it must be frustrating to work with people who are apparently unengaged with their own health, encouraging patient engagement is a key role for LTC care providers. Provision of education around conditions and their management is only one aspect of the self-management support role - and perhaps the easiest. Others include: getting to know people individually in order to understand their challenges, needs and feelings about self-management; working with them to choose (and document) relevant and achievable goals; and following up on their progress, asking about what is working and what is not and making changes to make working towards goals easier; connecting them to community and/or social services if required; and showing a genuine interest in how they are doing - which includes looking at any health records they might be keeping at home. Whilst some people are more ready to participate in activities such as lifestyle change, others may require a more intensive and supportive approach to enable them to become ready, willing and able. This may require considerable input and effort on the part of the practitioner but is likely to produce better engagement and more competent and enduring self-management behaviours.

It should also be noted that for some patients increasing age and illness complexity may contribute to an apparent lack of engagement in self-management, as may pain and sleep deprivation. The number of people in the patient arm of the Talking about Health study who acknowledge having pain is surprisingly high (63%) and many do not have plans for managing pain in place and some have not had pain-related consultations in the previous year. Sleeping was indicated to be a challenge for 44% of the patient group, and it was one of the least well achieved self-management behaviours for the participants with pain. Levels of anxiety and depression associated with having a LTC are also quite high (14%) and this too may be something people are reluctant to raise in a general practice appointment unless prompted - especially if they feel rushed or not listened to.

Changing the way that general practice operates to provide effective long term condition management is complex, as too often a ‘LTC approach’ is inserted into an ‘acute system’ creating considerable challenges and competing priorities. Having enough time was seen as a major barrier for practitioners providing care. Throughout the report practitioners reported items that couldn’t be done as part of routine practice, and unfortunately most of these related to the provision of effective self management support. Many practitioners expected patients to be good self managers, and to be immediately able to commit to lifestyle changes that would benefit their health.

Encouraging communication amongst practitioners in general practice is recommended, as a number of practitioners were unaware of the practice’s approach to long term condition care. With LTCs presenting the greatest health burden, all practitioners should be aware of best practice principles, and how quality improvement work is being implemented within their practice to improve LTC care delivery.

Whilst there is significant variation in practice, what is clear is that there are some great examples of excellence from practitioners and a strong desire for patients to be better self managers, all of which contribute to the NZ health strategy for people to live well, stay well, and get well.

Figure from the 2016 New Zealand Health Strategy update

Conclusion and recommendations

This report concludes the 'Talking about Health' Practitioner Study. Given the low response rate to this study, it is difficult to make recommendations that would be applicable to the primary care workforce across the region. This is unfortunate as the breadth of questions and the use of two standardised measures should have enabled us to gather some meaningful and useful regional data regarding long term conditions care.

Overall it appears that while some programmes have been removed or changed, namely Enhanced Care+, little has changed in terms of care delivery since the last time this work was carried out in 2013. Although the practitioner respondents demonstrated a reasonable understanding of what self-management support entails there is scope for more frequent support, individualised to meet patient need, and a stronger partnership. There are still apparent problems in providing care for people with long term conditions within an appropriate framework (LTC approach). There is an acknowledged need for more protected LTC care time and evidence of a need for: a more regular and collaborative care planning approach; linking patients in with outside resources such as community groups and organisations; regular follow up; and further development of staff competence.

A few concluding points and recommendations can be made. As the aim of the study was to look at delivery of long term conditions care from the perspective of the Chronic Care Model, they have been grouped according to the CCM components. Recommendations are intended to facilitate productive interactions between provider and patient.

Nurses predominantly scored higher on the various aspects of LTC care provision than doctors did, as was found in earlier research of this kind within MidCentral DHB. Across both professional groups, the tasks respondents rated themselves as performing most frequently included the relationship building aspects such as: listening; putting patients at ease during physical examinations; establishing and maintaining a trusting relationship; and asking fully about symptoms - all of which are key components of good clinical practice and not specific to LTC care. Tasks carried out least often were: using a tool to refine patient goals; liaising with community groups and organisations regarding patient attendance and progress; provision of a book/log for patients to monitor their own progress; and providing them with a written list of things to do to improve their health status. Providing a written care plan is helpful for patients to take home and use from day to day and the same applies to having a book in which to record home based measurements such as blood pressures, blood glucose levels, monitoring medications or for dietary/exercise/smoking/sleep related behaviours. Both health diaries and care plans can be used to generate lists of things to do at home - which many people would appreciate and use and may be useful to bring to each consultation.

Health system

- Barriers to the provision of LTC care were predominantly identified as: insufficient time; patients who are not engaged in the self-management process or have health literacy issues; and lack of resources such as IT and staff. Enablers were time (when available), having an appropriate model of care to suit people with LTCs and teamwork between providers (internal and external to the primary care team). A whole of system approach gained through participating in the Health Care Home Programme is highly recommended to address the barriers for effective long term condition management.
- MDHB and Central PHO should continue to explore how general practice teams are funded to provide LTC care, as it still struggles with incorporating good LTC management into a model which is acute focused and extremely busy, with many competing priorities.
- Current care pathways should be reviewed, specifically looking at the self management/self management support, health literacy and cultural competence components.
- Providing appropriate care for people with long term conditions demands a dedicated focus on both LTCs and LTC support - something that is problematic for practitioners and clearly lacking from the patients' perspective as reported in the patient arm of the study.
- Central PHO can support practices by offering education through the Continuing Professional Development Calendar and providing other LTC related sessions as determined by the region's quality plan, practitioner demand and changing trends in LTC management.
- Promotion of the MyHealth myself self management programme (the local name for the LTC Stanford Programme) **to practitioners** is important, as this course enables participants to develop skills, knowledge and confidence to self manage. In 2019 a specific chronic pain course and a diabetes course is being run in the region, to better meet the needs of patients with these conditions. Te Reo options are also

currently being explored. Additional funding would be required to enable this programme to be extended to meet the needs of specific groups.

Delivery system design

- Ratings of the general practice team on care provision for people with LTCs suggest that the things done best are: working with other members of the practice team to enhance care delivery; giving patient feedback on test results; doing timely recalls; and following up to see if referrals have been actioned. All of these received mean scores in the region of 7.5 out of 10. However the things done less well were: identifying and delivering education/training in response to practice team needs; allocating protected time for LTC care; providing extended appointment times; and undertaking case/peer review/auditing related to LTC care. As these are all important, we recommend that both individual practitioners, general practice teams and Central PHO explore how they can be more readily integrated into routine practice.
- The number of participants who didn't know how well their GPT was doing in relation to a range of LTC care delivery tasks highlights a need for better transparency/education around quality improvement processes, clinical education, case review and auditing of LTC care.

Self-management support

- Further education of practitioners is required in the areas of health literacy and self management/self management support. Central PHO should coordinate and fund this type of education in the sector.
- Central PHO and MDHB should continue to fund key patient videos essential to self management in partnership with Health Literacy.org and Health Navigator. These short videos will be screened on GP TV, and help to inform patients about their self-management role.
- When asked to define a "good self-manager" and "good self-management support", the key themes of education, knowledge and partnership emerged. Patients who are good self-managers are seen to be knowledgeable about their conditions, treatments and medications and know how to remain well and manage health deterioration appropriately. Practitioners identified good self-management support involved providing the education required for patients to become self-managers and working in partnership with patients to achieve their goals and positive outcomes.
- In putting good self-management support into practice, providing regular follow-up was problematic for many practitioners despite being a vital part of support. Education should promote this component of care as being best practice.
- Promotion of the MyHealth myself self-management programme (the local name for the LTC Stanford Programme) **by practitioners to patients** is important, as this course enables participants to develop skills, knowledge and confidence to self manage. Informed practitioners who see recruitment as part of their role are essential, as conversations are best had within the consult based on individual need
- Asking about health behaviours and providing appropriate resources along with showing interest in the patient goals were identified as areas for improvement. Funding Health Navigator will provide essential infrastructure to support patient self management, with resources targeted at both consumers and practitioners.
- We are aware from the patient data that the majority of patients do not have care plans, or at least do not have a copy of their plan. This means that they are unable to use it to assist with daily living and to know what to do when their health deteriorates. Patients need to be given a copy and also given encouragement to use their care plans in the daily self-management of their conditions.

- It was good to see the generally high scores on the Clinician Support of Patient Activation Measure as practitioners who believe in the importance of their patient being engaged in their own health care as active self-managers are more likely to behave in ways that encourage it within the clinical encounter. A better response rate would have enabled further exploration of this. Research has demonstrated that people can become more health activated with support and encouragement and has found health advantages associated with increased activation. Practitioners acting on their beliefs about the importance of patient engagement should improve patient self-management.

Community

- Connecting patients to community and social supports is also an important component of care. The development of an up to date regional community resource which identifies services and support groups and key contacts is also important for self management support. The DHB/Central PHO should explore options to achieve this whether locally, or nationally via Health Navigator or HealthPoint. This would require significant funding and staff dedicated to the upkeep of the information to keep it relevant. This would benefit patients in both primary and secondary care.

Decision support

- Self-rated competence in managing different long term conditions was found to be variable and generally lower for nurses than for doctors. Areas where competence was reported to be lacking (fewer than 60% of the sample indicating they felt competent) included non arthritis related chronic pain, mental health and memory decline for both doctors and nurses and Type 1 diabetes, angina, CKD, renal failure and anxiety/depression associated with LTCs for nurses. This identifies areas where education could usefully be directed. It was interesting to see that none of these areas were highlighted as areas where practices were investing effort in management improvement.

Clinical Information Systems

- The process of care planning and the care plan that is produced is an important part of the support primary care practitioners provide for people with long terms conditions and there are tools available to assist with this task. However a number of respondents indicated that they do not engage in care planning and even more said they don't avail themselves of the care planning tools. The discussion required for collaborative care planning can be a useful way of getting to know more about patients as individuals, learning what is important to them, and what they are/are not prepared to do in order to positively change behaviours and enhance their quality of life. With the change of Patient Management System in the region, it is an ideal time for practices to discuss who should have a care plan and for Central PHO to provide practitioner training on how to access, use and print off a LTC care plan as part of the care planning process. The PHO should also measure the uptake of this important aspect of care.

In line with MDHB moving to a cluster model the following recommendation is made:

- Ensure this report is available to the Primary, Community and Public Health cluster to inform the development of the Long Term Condition Framework and to support the clusters' work moving forward.

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Appendix A: Percentage responses to how practitioners personally provide care and self-management support to patients with long term conditions. The items are ranked from highest to lowest according to overall mean scores, and the modal (most frequent) responses and the lowest and highest means for the total group and by professional role are highlighted.

When you see a patient with a long term condition how often do you .... (N)	Almost always	Most of the time	Some-times	Gener-ally not	Almost never	Means		
						Doctor	Nurse	Total
Ask for their ideas when making a treatment plan (31)	32.3	45.2	22.6	0	0	3.6	4.2	4.1
Give them choices to think about regarding treatment (31)	41.9	45.2	12.9	0	0	4.0	4.4	4.3
Ask them to talk about any problems with their medicines and their effects (31)	48.4	41.9	9.7	0	0	4.0	4.5	4.4
Provide a written list of things they should do to improve their health (31)	12.9	16.1	48.4	19.4	3.2	2.6	3.3	3.2
Do a good job in organising their care (31)	25.8	54.8	16.1	3.2	0	3.6	4.2	4.0
Show them how what they do to take care of themselves influences their condition (31)	29.0	41.9	29.0	0	0	3.5	4.1	4.0
Ask them to talk about their own goals in caring for themselves (31)	38.7	22.6	32.3	6.5	0	3.0	4.2	4.0
Help them to set specific goals in caring for themselves (30)	26.7	26.7	36.7	10.0	0	3.0	4.0	3.7
Give them a copy of their treatment/care plan (30)	16.7	16.7	60.0	6.7	0	3.3	3.5	3.4
Encourage them to attend a specific group or class to help them cope with their condition/s (31)	16.1	38.7	38.7	6.5	0	3.4	3.7	3.6
Ask questions, either directly or in a health survey, about their health habits (31)	29.0	22.6	25.8	19.4	3.2	2.9	3.8	3.5
Consider their values and their traditions when recommending treatments (31)	29.0	48.4	16.1	6.5	0	3.5	4.1	4.0
Help them to make a treatment plan that they can carry out in their daily life (31)	32.3	38.7	22.6	6.5	0	3.4	4.1	4.0
Help them to plan ahead so that they can take care of themselves even in hard times (30)	36.7	36.7	20.0	6.7	0	3.1	4.3	4.0
Ask them how their long term condition affects their life (31)	42.2	35.5	12.9	6.5	0	3.5	4.4	4.2

When you see a patient with a long term condition how often do you .... (N)	**Almost always**	**Most of the time**	**Some-times**	**Generally not**	**Almost never**	**Means**		
						Doctor	**Nurse**	**Total**
Contact them after a visit to see how things are going (31)	19.4	19.4	**51.6**	3.2	6.5	2.9	3.6	**3.4**
Encourage them to attend programmes in the community that could be helpful (31)	19.4	35.5	**38.7**	6.5	0	3.1	3.9	3.7
Provide referrals to other health professionals like dietitians, health educators and counsellors (30)	40.0	40.0	20.0	0	0	3.9	4.3	4.2
Tell them how appointments with other health professionals help with their treatment (32)	18.8	**46.9**	34.4	0	0	3.8	3.9	3.8
Ask how visits with other health professionals are going (32)	37.5	**40.6**	21.9	0	0	3.8	4.3	4.2
Ask what they would like to discuss during the current appointment (32)	**56.3**	28.1	15.6	0	0	**4.5**	4.3	4.4
Ask about how work, family or social situations relate to them taking care of themselves (32)	25.0	**46.9**	25.0	3.1	0	3.3	4.1	3.9
Help them to make plans for how they can get support from friends, family or the community (32)	15.6	34.4	**37.5**	12.5	0	2.8	3.8	3.5
Tell them how important the things they do to take care of themselves are for their health (31)	**45.2**	**45.2**	6.5	3.2	0	3.8	4.5	4.3
Help them to set a goal for managing their long term conditions (31)	22.6	**58.1**	12.9	6.5	0	3.3	4.2	4.0
Provide them with a book or log to monitor their progress (31)	16.1	22.6	**32.3**	19.4	9.7	**2.3**	**3.5**	**3.1**
Put them at ease during a physical examination (30)	**73.3**	23.3	3.3	0	0	**4.8**	**4.7**	**4.7**
Provide culturally appropriate care for Māori patients (30)	43.3	**46.7**	10.0	0	0	4.4	4.3	4.3
Provide culturally appropriate care for Pacific patients (30)	**43.3**	**43.3**	13.3	0	0	4.3	4.3	4.3
Appropriately involve family/whānau/fanau in discussions about management and care (31)	32.3	**51.6**	16.1	0	0	3.9	4.3	4.2
Spend enough time with them (31)	29.0	29.0	**32.3**	9.7	0	3.4	3.9	3.8
Explain their problems or any treatment in a way they can understand (30)	**50.0**	43.3	6.7	0	0	4.3	4.5	4.4

When you see a patient with a long term condition how often do you .... (N)	**Almost always**	**Most of the time**	**Sometimes**	**Generally not**	**Almost never**	**Means**		
						Doctor	**Nurse**	**Total**
Check that they understand what is being talked about (31)	**51.6**	41.9	6.5	0	0	4.1	**4.6**	4.5
Establish and maintain a trusting relationship with them (31)	**71.0**	25.8	3.2	0	0	**4.5**	**4.7**	**4.7**
Take into account what has worked (and what has not worked) for the individual patient when discussing self-management strategies (31)	**48.4**	45.2	6.5	0	0	4.3	4.5	4.4
Use a tool such as the importance/confidence ruler to refine patient goals and maximise success (30)	10.0	13.3	20.0	**46.7**	10.0	**2.3**	**2.8**	**2.7**
Actively follow up on each patient's goals (31)	**32.3**	29.0	25.8	6.5	6.5	**2.6**	4.1	3.7
Ask fully about their symptoms and how they are feeling (31)	**64.5**	29.0	6.5	0	0	**4.5**	**4.6**	**4.6**
Listen to what they have to say (31)	**74.2**	22.6	3.2	0	0	**4.5**	**4.8**	**4.7**
Ensure they are comfortable with making joint decisions (31)	41.9	**48.4**	9.7	0	0	4.0	4.4	4.3
Help people with LTCs to develop the skills needed for effective self management (31)	38.7	**48.4**	12.9	0	0	3.8	4.4	4.3
Respond patiently to their questions or worries (31)	**48.4**	**48.4**	3.2	0	0	4.1	**4.6**	**4.5**
Ensure patient care is well co-ordinated between different members of the general practice team (31)	**45.2**	38.7	16.1	0	0	4.0	4.4	4.3
Ensure care is well co-ordinated between the GPT and secondary care and other external practitioners (31)	35.5	**48.4**	12.9	3.2	0	4.1	4.2	4.2
Liaise with community groups/organisations to know which of your patients uses them and how they are getting on (including requesting feedback) (30)	20.0	6.7	23.3	**26.7**	23.3	**2.3**	**2.9**	**2.7**
Provide follow-up appointments (31)	**48.4**	35.5	16.1	0	0	4.0	4.4	4.3

Appendix B: Ratings of how good respondents feel they are at providing different aspects of long term conditions care

When you see a patient with a long term condition how good are you .... (N)	Doctor		Nurse		Mean difference (N – D)	Total mean
	Range	Mean	Range	Mean		
Ask for their ideas when making a treatment plan (25)	5 - 9	7.1	5 - 10	7.5	0.4	7.4
Give them choices to think about regarding treatment (25)	5 - 10	7.9	5 - 10	8.1	0.2	8.0
Ask them to talk about any problems with their medicines and their effects (25)	7 - 10	7.4	5 - 10	8.5	1.1	8.2
Provide a written list of things they should do to improve their health (25)	1 - 8	4.6	2 - 10	6.6	2.0	6.0
Do a good job in organising their care (25)	3 - 8	6.4	5 - 10	8.1	1.7	7.6
Show them how what they do to take care of themselves influences their condition (25)	5 - 8	6.4	5 - 10	8.0	1.6	7.6
Ask them to talk about their own goals in caring for themselves	2 - 8	5.4	5 - 10	7.6	2.2	7.0
Help them to set specific goals in caring for themselves (25)	2 - 8	5.3	5 - 10	7.6	2.3	6.9
Give them a copy of their treatment/care plan (24)	4 - 8	5.3	1 - 10	7.1	1.8	6.5
Encourage them to attend a specific group or class to help them cope with their condition/s (24)	3 - 8	5.9	4 - 10	7.4	1.5	7.0
Ask questions, either directly or in a health survey, about their health habits (24)	0 - 8	5.0	4 - 10	7.4	2.4	6.7
Consider their values and their traditions when recommending treatments (24)	4 - 8	6.6	4 - 10	7.6	1.0	7.3
Help them to make a treatment plan that they can carry out in their daily life (24)	3 - 8	6.4	1 - 10	7.4	1.0	7.1
Help them to plan ahead so that they can take care of themselves even in hard times (24)	2 - 8	5.9	5 - 10	7.9	2.0	7.3
Ask them how their long term condition affects their life (24)	2 - 9	6.6	5 - 10	8.2	1.6	7.7

When you see a patient with a long term condition how good are you .... (N)	**Doctor**		**Nurse**		**Mean difference (N – D)**	**Total mean**
	Range	**Mean**	**Range**	**Mean**		
Contact them after a visit to see how things are going (24)	1 - 8	5.0	2 - 10	7.4	2.4	6.7
Encourage them to attend programmes in the community that could be helpful (23)	5 - 8	6.3	4 - 10	7.6	1.3	7.2
Provide referrals to other health professionals like dietitians, health educators and counsellors (23)	6 - 9	7.7	6 - 10	8.6	0.9	8.3
Tell them how appointments with other health professionals help with their treatment (21)	7 - 9	7.7	4 - 10	8.4	0.7	8.2
Ask how visits with other health professionals are going (21)	5 - 8	7.3	5 - 10	8.9	1.6	8.3
Ask what they would like to discuss during the current appointment (21)	7 - 10	9.1	5 - 10	8.2	-0.9	8.5
Ask about how work, family or social situations relate to them taking care of themselves (21)	3 - 9	6.9	6 - 10	8.5	1.6	8.0
Help them to make plans for how they can get support from friends, family or the community (21)	3 - 8	5.7	4 - 10	7.9	2.2	7.2
Tell them how important the things they do to take care of themselves are for their health (21)	7 - 10	7.7	6 - 10	9.1	1.4	8.7
Help them to set a goal for managing their long term conditions (21)	2 - 9	6.6	6 - 10	8.4	1.8	7.8
Provide them with a book or log to monitor their progress (21)	1 - 10	4.7	2 - 10	7.8	3.1	6.8
Put them at ease during a physical examination (20)	8 - 10	9.1	7 - 10	9.1	0	9.1
Provide culturally appropriate care for Māori patients 21)	7 - 10	8.1	6 - 10	8.4	0.3	8.3
Provide culturally appropriate care for Pacific patients (21)	7 - 9	8.0	6 - 10	8.4	0.4	8.3
Appropriately involve family/whānau/fanau in discussions about management and care (21)	6 - 10	7.7	6 - 10	8.5	0.9	8.2
Spend enough time with them (21)	3 - 10	6.7	4 - 10	8.0	1.3	7.6
Explain their problems or any treatment in a way they can understand (21)	7 - 10	8.1	6 - 10	8.7	0.6	8.5

When you see a patient with a long term condition how good are you .... (N)	Doctor		Nurse		Mean difference (N – D)	Total mean
	Range	Mean	Range	Mean		
Check that they understand what is being talked about (21)	7 - 9	7.7	6 - 10	9.0	1.3	8.6
Establish and maintain a trusting relationship with them (21)	7 - 10	8.7	8 - 10	9.2	0.5	9.0
Take into account what has worked (and what has not worked) for the individual patient when discussing self-management strategies (21)	7 - 9	8.1	6 - 10	8.9	0.8	8.6
Use a tool such as the importance/confidence ruler to refine patient goals and maximise success (20)	1 - 8	3.1	0 - 10	5.3	2.2	4.6
Actively follow up on each patient's goals (22)	1 - 8	4.9	0 - 10	7.7	2.8	6.8
Ask fully about their symptoms and how they are feeling (22)	7 - 10	8.7	8 - 10	9.3	0.6	9.1
Listen to what they have to say (22)	7 - 10	9.0	8 - 10	9.4	0.4	9.3
Ensure they are comfortable with making joint decisions (22)	6 - 9	7.9	7 - 10	8.8	0.9	8.5
Help people with LTCs to develop the skills needed for effective self management (22)	5 - 8	7.3	7 - 10	8.9	1.6	8.4
Respond patiently to their questions or worries (22)	7 - 10	8.1	6 - 10	8.9	0.8	8.6
Ensure patient care is well co-ordinated between different members of the general practice team (22)	6 - 9	7.7	7 - 10	8.8	1,1	8.5
Ensure care is well co-ordinated between the GPT and secondary care and other external practitioners (22)	6 - 9	7.4	2 - 10	7.5	0.1	7.5
Liaise with community groups/organisations to know which of your patients uses them and how they are getting on (including requesting feedback) (22)	0 - 8	4.1	0 - 10	5.1	1.0	4.8
Provide follow-up appointments (22)	5 - 10	8.3	0 - 10	8.7	0.4	8.6