https://doi.org/10.33591/sfp.46.7.u2

UNIT NO. 2

PERSON-CENTRED CARE IN DIABETES: WHAT IS IT BASED ON AND DOES IT WORK?

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ABSTRACT

Chronic diseases are now the top cause of death and disability around the world. This creates challenges for global health systems, which are mostly designed for acute care, requiring them to transform to optimise the health of patients living with chronic diseases. The Chronic Care Model provides the best evidence-based framework for optimising diabetes care delivery by modifying essential elements of the healthcare system to support person-centred care. In this article, we review the theoretical basis of person-centred care, with special focus on the Chronic Care Model, and describe the steps involved in performing person-centred care. We also discuss the evidence for the impact of person-centred care on chronic disease outcomes, self-management, as well as individual and healthcare professional (HCP) satisfaction.

Keywords: Chronic disease care, person-centred care, evidence-based models

SFP2020; 46(7) : 11-15

INTRODUCTION

Chronic or long-term conditions are rising in prevalence and are now the leading cause of death and disability worldwide.[1] Although most healthcare systems are very effective at treating and resolving acute conditions, they are not ideal for managing chronic conditions. These conditions often persist for many years and require continuous management by the affected person.[2] This includes making daily decisions such as what food to eat, whether to take their medication, and whether to exercise. Factors such as family, friends, jobs and stressors in their lives impact on these many, seemingly small decisions. In turn, each of these decisions affects their health outcomes.

The time constraints and prescriptive approach of a typical healthcare visit make it difficult for individuals to discuss these challenges and receive meaningful support from their healthcare professionals (HCPs). Consider these sentiments expressed by people living with diabetes about their doctor's visits, obtained from in-depth discussions conducted by the Ministry of Health as part of the War on Diabetes' design thinking workstream:

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"I think the pressure could also be that when I go into the clinic right, the amount of people is there I feel bad that I take up so much time…I don't ask much…"

"We don't really know how much action we should take. It is what I call like "placeholder advice," not something that is actionable…The general message we hear from society is that exercise is good for you, help lose weight…This is the blanket message, we all agree, la."

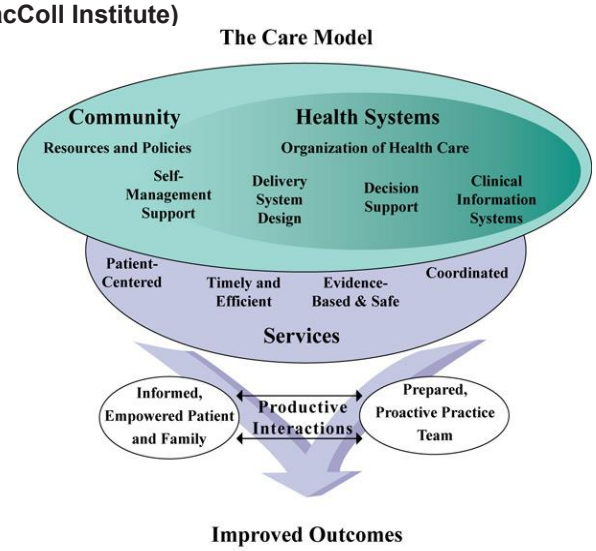
To better address the needs of people with chronic disease, a different approach is required. This alternative approach calls for a redesign of the existing healthcare system and community programmes to better support patients as they self-manage their chronic or long-term conditions, including diabetes. But what modifications need to be made in this redesign?

REDESIGNING DIABETES CARE USING THE CHRONIC CARE MODEL

The Chronic Care Model (CCM) provides the best evidence-based framework for improving and optimising diabetes care delivery, emphasising the delivery of high-quality person-centred care.[3-7] Person-centred (or patient-centred) care, is defined as care that is respectful and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions.[8]

The CCM focuses on six elements that can be modified to support productive interactions between an informed, empowered patient (one who plays an active role in their care) and a prepared, proactive team of HCPs. The theory is that these interactions will lead to improved patient care and outcomes. The six elements are: 1) the health system, 2) the community, 3) self-management support, 4) delivery system design, 5) decision support and 6) clinical information systems (Figure 1).[3,9]

Figure 1. The Chronic Care Model (Developed by The MacColl Institute)



The first element in the CCM is the health system, in which people at all levels of the organisation, starting with senior leadership, support improvement in care and a transparent approach to identifying and addressing problems.

The second element, the community, involves partnering with community programmes to support and develop interventions that improve the health of patients, followed by connecting patients with these programmes and interventions.

The third to sixth elements are clinical practice elements that influence the ability to deliver effective care for chronic disease. The third element is self-management support, in which the patient is the main person responsible for managing their health. The HCP works with the patient to jointly identify problems, set goals, establish priorities, and develop an action plan and strategy for solving the problems that have been identified.

The fourth element, decision support, incorporates evidence-based guidelines in clinical care. The HCP stays current on the latest guidelines and evidence, and explains this information to their patients to help them understand the principles underlying their care.

Another element, delivery system design, involves changing how care is delivered by specifying roles and tasks of various personnel to ensure that patients receive the structured, planned interactions and follow-up that they need to support their self-management.

The last element in the CCM, clinical information systems, includes the organisation of patient and population data to provide patient and HCP with timely reminders about necessary services, identify patient subpopulations who may need additional care, and facilitate tracking of care improvements.

Ultimately, the CCM lays a foundation for change in order to deliver effective and timely person-centred care for chronic diseases.

How to Perform Person-Centred Diabetes Care in Five Steps: The Year of Care Example

The Year of Care (YoC) programme uses person-centred care to engage patients in decisions about their care; provide emotional, psychological and practical support for self-management; as well as coordinate health and social care to more effectively treat chronic diseases such as diabetes. It involves transforming traditional clinic consultations into meaningful Care and Support Planning (CSP) conversations. Originally started in the United Kingdom (U.K.) YoC has now been implemented in Singapore, where we have successfully conducted a YoC pilot programme at the National University Hospital (NUH) Division of Endocrinology and extended it to primary care through the Patient Activation through Community Empowerment/ Engagement for Diabetes Management (PACE-D) programme.

We discuss five steps for performing person-centred diabetes care (adapted from Roberts et al[10]) and present examples from our own experiences in re-designing the health system and workflow at NUH, pointing out the relevant CCM elements on which we based our changes.

1. The first step is preparation, which entails gathering information from a medical examination, laboratory tests, and other assessments. Two weeks before the HCP conversation, the results are sent to the patient, together with simple explanations and prompts to set the agenda for the conversation. The HCP also prepares by reviewing the individual's results, health records, and information from colleagues to identify the most important issues for that patient.

   For example, at NUH, we used to have patients come to the clinic one week before their consultation to undergo annual testing. We would then give our patients their test results during the consultation. In alignment with the CCM, we changed our health system and delivery system design so that, once a year, patients undergo annual testing two weeks before their consultation. The test results are then incorporated with past test results in the form of a results letter, which we send to our patients before their consultation. To do this, we implemented changes in our clinical information systems.

   We designed this results letter together with our patients to ensure that it presents the results in a way that is understandable and relevant to them. In the same letter, we also provide agenda-setting prompts for the consultation and encourage patients to think about other issues that are important to them in their lives besides their test results. Our patients use the results letter as a decision support aide to think about what is important to them and the goals they would like to discuss with their HCP. This preparation allows them to influence the conversation and puts them at the centre of the conversation as the main person responsible for managing their health.

2. The second step is the conversation, which is called the Care and Support Planning (CSP) conversation in the YoC programme. The conversation includes discussion; prioritisation; identification of personal goals; development of an action plan; and contingency planning. The HCP (usually a doctor or nurse) will focus on the most important issues for the specific patient. The ultimate goal is to support the patient in their self-management, instead of solely "ticking boxes" for the many process indicators that need to be covered from the HCP's point of view. The skills of the HCP are crucial in this step, not just their technical expertise but their ability to combine their expertise with the lived experience of the individual.

At NUH, the longer time required for a productive

conversation (vs a traditional consultation) was an initial concern. We addressed this issue by implementing the following changes in the health system and delivery system design:

a. We shifted the communication of results and processing of results by the patient to the preparation step, prior to the conversation. This freed up time in the conversation that could be used to discuss specific results about which the patient had questions, as well as to set goals and develop an action plan.
b. We re-organised our clinic workflow to shift the task of reviewing the patient's records to see when their annual screening tests were due from the HCP to the clinic operational staff, who have set up the automatic ordering of annual screening tests.
c. To enable these annual conversations to be of a longer duration, we created 20-minute slots once a year at NUH, early in the clinic schedule. For PACE-D, we created dedicated clinic sessions for CSPs in the polyclinics, scheduling about six CSPs in a half-day session.

We incorporated the CCM elements of self-management support and decision support in our conversations by training our HCPs to apply the techniques of shared decision making and motivational interviewing (MI).

Shared decision making involves examining different alternatives as a team, discussing these alternatives (using decision support tools, if appropriate), and helping patients explore and identify their preferences.[11] Both patient and HCP then jointly develop an action plan, incorporating the patient's preferences. This does not discount the professional role of the HCP, but they provide their views as part of decision support in a manner that promotes patient autonomy and supports a shared decision.

A cornerstone of addiction counselling, MI is a set of techniques that are useful for stimulating behavioural change, especially when an individual is ambivalent about making the change.[11] In a non-judgmental and collaborative way, the HCP explores the patient's ambivalence. To resolve this ambivalence, the HCP develops a specific direction for change, using the patient's own motivations for change and considering their perspectives and barriers. A plan of action is then developed, based on the patient's own solutions, increasing the talk about change as the plan takes shape.

3. Next is the recording step, in which the HCP records the discussion in a care plan. In doing so, the HCP highlights the important issues for the particular patient, ideally in the patient's own words. The care plan serves as a reminder for the person and HCP in the actions step.

4. The actions step comprises self-management by the patient and follow-up activities for the HCP, e.g., coordinating care for people with complex needs. At the same time, family members, peers, and community groups may also support the individuals in their self-management. At NUH, we linked the patients with other services or members of the multidisciplinary team relevant to the action plans, as appropriate. This was based on the CCM elements of self-management support and delivery system design. We also referred patients to relevant community activities that could help them in achieving their goals, as per the community element in the CCM.

5. The final step is a review of behaviour changes and/or clinical indicators in usual clinic follow-ups after the CSP conversation, based on the agreed-upon action plan. These plans may be modified according to the patients' progress and changes in circumstances.

The above steps in this person-centred care programme utilise modifications to the elements described in the CCM. These steps and the CCM concepts on which they are based can be applied to other chronic diseases, not just diabetes.

How to Perform Person-Centred Diabetes Care: Engaging and Training HCPs

A crucial part of implementing person-centred care in everyday clinical practice is engaging HCPs such that they are motivated to change the way they deliver care. The Normalisation Process Theory lays out a series of steps to do just this, including ensuring that the intervention makes clinical sense to HCPs (coherence) in their particular context, which leads to engagement (cognitive participation) of the HCPs.[12] This, in turn, provokes a collective action by HCPs to change behaviour. When the intervention is implemented, HCPs and patients evaluate its benefits and impact on the clinical workflow and outcomes (reflexive monitoring). These steps overlap with the health system, delivery system design, and clinical information systems elements in the CCM.

At NUH, in our person-centred care training for HCPs, we emphasise creating multiple opportunities to evoke the following in the HCPs: 1) the realisation that traditional healthcare does not optimally engage the patient, 2) the value of embracing a genuine person-centred paradigm, and 3) the effectiveness of certain communication skills in enabling truly meaningful conversations. We then engage the HCPs in the process of re-designing care in their organisational setting, to address their patients' concerns and aspirations, as well as their own.

Does Person-Centred Care Work?

The short answer is "Yes." Person-centred care has been shown to improve outcomes such as physical and mental health measures; patient self-management; patient and HCP satisfaction; as well as healthcare costs.

Impact on clinical outcomes

A Cochrane review of 19 randomised clinical trials showed slightly better reductions with person-centred care in physical health measures such as HbA1c (-0.24 percent vs standard care) and systolic blood pressure (-2.64 mm/Hg) compared with

standard care, six months to one year after the intervention.[13] Another review of 31 randomised clinical trials corroborated the HbA1c findings, reporting a 0.26 percent greater HbA1c reduction after a few months with person-centred care, compared with standard care or less intensive interventions.[14] In our YoC pilot programme at NUH, the average HbA1c of diabetes patients who had been in the programme for one year decreased by 0.4 percent from the average baseline value, and the proportion of patients meeting their HbA1c targets increased by 16 percent (preliminary results presented at 2020 Diabetes UK Professional Conference).

Person-centred care was also associated with a greater decrease in depression (-0.36 standardised mean difference), and an increased adherence to medication.[15] In our NUH YoC programme, we also found that diabetes-related emotional distress decreased by 19 percent after one year in the programme (unpublished data).

The nature of the person-centred intervention also influenced effectiveness. Based on the findings of the Cochrane review and another review of 550 studies, person-centred care initiatives work better when they incorporate more person-centred care steps, are more intense (more frequent) and are incorporated into a primary care context that includes effective training of HCPs, as well as educational programmes and community and family support systems for the individual.[13,16]

Impact on self-efficacy and self-management

Person-centred care has been associated with improvements in self-care and self-efficacy, compared with standard care. Two reviews that evaluated multiple studies, including randomised trials, found that self-management behaviour improved with person-centred care that included education about self-management.[17,18] A review of person-centred care studies reported that the most effective interventions for improving self-efficacy employed behavioural change strategies and training in problem-solving skills.[16]

Impact on self-reported satisfaction

In a study conducted by Doherty et al on patients and HCPs experiencing person-centred care, the patients reported positive feedback about receiving results in the mail before their doctor's visit and having a preparation tool to help them think of questions beforehand.[19] Patients expressed positive feelings after the visit, perceived it to be longer in duration than conventional visits, and reported feelings of ownership and responsibility for their condition. At NUH, we observed a 15 percent increase in the proportion of diabetes patients who reported experiencing shared decision making after one year in the YoC programme (unpublished data).

In the study by Doherty et al., all HCPs interviewed recognised the benefits to their patients and reported an increased understanding of their patients' wants, needs, and feelings, as well as an enhanced sense of the HCP's own fulfilment.[19] HCPs also corroborated the patient-reported benefits of receiving the results letter before the visit, saying that patients were better prepared and felt more at ease.

Impact on healthcare costs

With the prevalence of chronic diseases rising steeply, the cost of these diseases is exploding as well. By 2030, the global economic burden of the five leading chronic diseases is projected to reach US$47 trillion.[20] Interventions that encourage self-care can reduce some of these healthcare costs and help to optimise healthcare spending. According to a report submitted to the United Kingdom (U.K.) Treasury in 2002, as much as £30 billion in total National Health Service (NHS) costs can be saved by 2023 with a fully engaged scenario, where people exercise a high degree of self-care and make good use of services.[21] The report also estimated that every £100 spent on facilitating self-care could lead to a return of £150 worth of benefits. Another report developed by Nesta's People Powered Health Programme estimated over £4 billion in annual savings if comprehensive support for self-management was implemented in the U.K.[2]

CONCLUSION

Person-centred care, based on the CCM and other concepts, is an effective alternative to the current care model for patients with chronic disease. To aid practitioners who wish to implement person-centred care in their clinical practice, we have described a step-by-step method, relating the various steps to the modifications to the health system and community elements proposed in the CCM. We have also discussed the evidence of the impact of person-centred care on health outcomes, including improvements in clinical measures, self-management, self-efficacy, patient, and HCP satisfaction, as well as healthcare costs.

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LEARNING POINTS

- **The person-centred care approach for chronic disease care uses principles from various evidence-based models, with the Chronic Care Model (CCM) being the main one.**
- **Through the five steps of preparation, conversation, recording, actions and review, which incorporate elements of the CCM, individuals are informed, engaged, and supported in their self-management.**
- **Person-centred care has been shown to improve outcomes such as HbA1c and systolic blood pressure; diabetes-related anxiety; medication adherence; self-management; as well as individual and HCP satisfaction.**