# Perceptions of the need for improvements in healthcare after implementation of the chronic care model

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# PERCEPTIONS OF THE NEED FOR IMPROVEMENTS IN HEALTHCARE AFTER IMPLEMENTATION OF THE CHRONIC CARE MODEL (CCM)

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**Contributions**

Study Design; Elisabeth Severinsson and Anne Lise Holm.

Data Collection; Anne Lise Holm.

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## Abstract

Depressed older persons constitute a vulnerable group and evidence from different parts of the world has demonstrated the need for healthcare improvements at community level. The aim was to describe team members' perceptions of improvements in the care of depressed older persons living in the community after the implementation of the CCM, with focus on delivery system design, self-management support and teamwork. This follow-up study was based on focus group interviews with healthcare team members. The data were analysed by qualitative content analysis. Four themes emerged; Ensuring a pathway to the top level of the organisation, The need for leadership from senior managers, The need to formalize collaboration and Increasing self-management. Senior managers should cooperate with specialist care and the administration in the community. They must also redesign the delivery system to facilitate teamwork and the self-management ability of depressed older persons**.**

*Key words:* Chronic Care Model, focus group, healthcare team, improvements, quality

**INTRODUCTION**

In response to increasing concerns about quality in healthcare, many countries are currently carrying out improvement programmes (Øvretveit & Gustafson, 2002). Collaboration enhances the ability to share ideas and expand the quality improvement programme in the community (Arling *et al.* 2013). In Norway, the Coordination Reform (Report no. 47 to the Parliament, 2008-2009), aimed at improving the quality and effectiveness of healthcare, stated that patients' need for coordinated services is not sufficiently met. In the UK, the National Health Service (NHS) Plan emphasizes the importance of person-centred care planning by means of protocols for each condition, thus ensuring best evidence-based practice (Department of Health, 2000). One decade ago Wagner *et al.* (2001 a, b) presented the Chronic Care Model (CCM) to guide practice redesign of care for persons suffering from long-term conditions in the USA. The above-mentioned authors (2001 b: 68) suggested that care should be characterized by "productive interactions between a practice team and patients through timely assessments, increased self-management, therapy and follow-up". Such care requires planning in order to coordinate the actions of multiple caregivers (Wagner *et al.,* 2001a, b). Implementation issues are related to the development of Evidence Based practice (EBP) and programmes as well as the concern that people will not benefit unless such interventions and programmes are correctly implemented (Johansson, 2010). The CCM can be seen as Implementation Research (IR), i.e., "the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and, hence, to improve the quality and effectiveness of health services and care" (Eccles & Mittman, 2006:1). Research on different programmes for chronic diseases revealed that professionals need to understand self-care behaviour (Sharoni & Wu, 2012; Wu *et al*, 2012; Kato *et al.* 2012), self-efficacy and self-management (Yukawa *et al*., 2010; Wu *et al*., 2011).

Depression is an illness that has increased markedly over the past decade (Compton *et al*., 2006) and is described as a chronic condition (Unützer *et al.*, 2001). The World Health Organization (WHO, 2004) revealed that by the year 2020, depression is predicted to be the second largest cause of injury and disease in the world for all ages and both sexes. The systematic review by Holm and Severinsson (2012) identified barriers to and facilitators of success when implementing the CCM for people with depression in primary care. The barriers were categorized under two themes: Lack of organizational, administrative and professional ability to change and implement the components of the CCM and Lack of clarity pertaining to the responsibility inherent in the role of care manager (often a nurse) when it comes to promoting the patient's self-management ability. In terms of the facilitators of success, two themes emerged: Leadership support and vision and Redesigning the delivery system (Holm & Severinsson, 2012). The CCM assumes that healthcare team members cooperate in order to achieve common health goals (Wagner *et al.,* 2001 a, b). In the present study the CCM is used as a conceptual model for quality improvement comprising six components: I) community resources and policy; II) the health system and the organization of healthcare; III) self-management support; IV) delivery system design; V) decision support; and VI) clinical information systems. This follow up-study focused on two central components of the CCM; Delivery system design and Self-management support based on the need for quality improvement. Wagner *et al.* (2001 a, b) stated that *delivery system design* was intended to provide high-quality care and that it should be individually organised and coordinated by a healthcare team. This team was essential for promoting and enabling positive interaction. However, the delivery system cannot be productive without strong leadership, appropriate incentives and improvement strategies on the part of the healthcare organization (Wagner *et al.,* 2001 a, b). *Self-management support* included both individual and group interventions that highlighted self-management as a way of empowering persons who suffer from ill health

(Wagner *et al.*, 2001 a, b). The interventions suggested by Wagner *et al.* (2001 a, b) were intended to help patients to better cope with everyday life. The aim of self-management is for patients to gain an in-depth understanding of their illness and lived experiences, not only the symptoms of the disease (Holm *et al.,* 2013).

This study represents the final phase of a larger investigation aimed at implementing the CCM for depressed older persons in the community (Holm & Severinsson 2013; Holm et al. 2013). The researchers who conducted the present study identified the healthcare team members' perceptions of improvements in the care of depressed older persons after implementation of the CCM.

## METHODS

### Aim

This follow-up study represents the final phase of a larger investigation intended to implement and report healthcare improvements for depressed older people. The aim was to describe team members' perceptions of improvements in the care of depressed older persons living in the community after the implementation of the CCM, with focus on delivery system design, self-management support and teamwork (Figure 1). The research question was; What improvements were described in the delivery system and in self-management?

**Design**

The study has a qualitative implementation design. According to Polit and Beck (2010), such a design tends to be eclectic and is based on the general premises of naturalistic inquiry.

**Participants**

The participants comprised one community psychiatric team (Team A) and one experienced geriatric nurse on a psycho-geriatric team (Team B) based in a specialist geriatric hospital on the west coast of Norway. The participants were interviewed one year after the first two focus group sessions reported in two previous studies (Holm & Severinsson, 2013a; 2013b). The community psychiatric team comprised three mental health nurses. All the participants had over 20 years' experience of working with different kinds of mental health problem such as depression. They were all women with a mean age of 55 years.

**Data collection**

The data collection took the form of a focus group interview at the end of January 2013 attended by Team A and Team B, which was audio-taped by the first author who later translated the transcripts from Norwegian into English. In a focus group interview, the discussion sheds light on the participants' collective values, experiences and observations that are subsequently interpreted in the light of the context. Sometimes group synergy or consensus occurs, but this is not always the case (Schneider *et al.,* 2007). After the implementation of the CCM, the two teams were asked to reflect on improvements, with focus on delivery system design, self-management support and teamwork. It was important to establish whether the team members perceived that these two CCM components might have contributed to improving the care of depressed older people. This session lasted for about two

and a half hours. The main question was: Can you please describe your perceptions of improvements in the care of depressed older persons during the 12-month CCM implementation period with focus on delivery system design, self-management support and teamwork? The unique group dynamic and insights resulting from the interaction between the participants demonstrated that their level of engagement in the group was high. A focus group interview requires skill on the part of the moderator to prevent individuals from dominating the dialogue as well as eliciting contributions from quieter members. However, such interviews are a useful part of an evaluative framework for assessing implementation outcomes (Banning, 2005).

**Qualitative content analysis**

Qualitative content analysis is the method of choice in qualitative descriptive studies (Sandelowski, 2001). The analysis can be seen as a summary of the content of the text (Morgan, 1993; Sandelowski, 2001), where the emerging themes are abstractions of the participants' perceptions. The researchers read and explored the text in order to identify the participants' descriptions of improvements in the delivery of healthcare. The text was then reread several times before descriptive themes and sub-themes were identified (Figure 1). A descriptive analysis of focus group interviews does not explore issues in as much detail as in-depth interviews. In this process, the researchers validated the text by discussing how it reflected the two CCM components.

**Trustworthiness**

Polit and Beck's (2010) criteria for establishing the trustworthiness of qualitative data are credibility, confirmability, dependability and transferability. Credibility refers to confidence in the truth of the data and their interpretation (Polit & Beck, 2010). Thus credibility in this study implied that the perspectives of the participants were represented as clearly as possible and demanded an understanding of the team's situation. The researchers presented quotations from the text in order to help the reader to judge if they have succeeded in representing the participants' perspectives. Confirmability refers to the objectivity or neutrality of the data (Polit & Beck, 2010).

**Ethical considerations**

The participants were informed about the purpose, method and their right to withdraw from the study, that the data would be treated confidentially and that their names would be removed from the transcripts (World Medical Association, 2008). They were asked for permission to audio-tape the interviews. The study was approved by the Regional Ethics Committee of Western Norway (No. 2010/2242) and carried out in accordance with the Ethical Guidelines for Nursing Research in the Nordic countries (Northern Nurses Federation, 2003).

**FINDINGS**

Four themes emerged; Ensuring a pathway to the top level of the organisation, The need for leadership from senior managers, The need to formalize collaboration and Increasing self-management.

Please insert Figure 1 about here

*Ensuring a pathway to the top level of the organisation*

The participants from teams A and B reported that the organization both in the community and in the psychogeriatric hospital ward was fairly rigid and that it took time to change delivery system decisions and routines. They shared their perceptions of the CCM components and discussed the necessity of improving the care as well as barriers that prevented them from so doing. They added that the healthcare system itself was too inflexible and that the implementation of the Coordination Reform in Norway (Report no. 47 to the Parliament, 2008-2009) is taking time. One of the participants stated;

> 'As a team we have no guarantee that our case will reach the right level because it's a long way to the top and we don't know what will happen on the way. It's quite difficult to reach the top level. We have a good tradition of moving the case to the next level, but often the whole process stops at some point'. (Participant H, Team A)

The participant from team B agreed that her perception of the delivery system at the hospital **was** the same as those of the community team, namely that the way to the top level was too long and the delivery system inflexible.

*The need for leadership from senior managers*

Team A reported being exhausted, unmotivated and not having the strength to continue due to the lack of leadership. They explained that contact is minimal despite having taken many initiatives to improve cooperation. They believe the reason may be that they are not included in the organizational plans, but are not sure if this is in fact the case. The senior managers are too remote and the team members found it incredible that they and their colleagues had remained engaged and not quit their jobs. Team B reported that the staff members on the psychogeriatric ward exhibit enormous engagement and initiative, continuing in the job for years despite lack of leadership from senior managers. Their complaints were also related to increasing demands for greater effectiveness with fewer resources. In Norway the demands resulting from the healthcare sector reforms have increased over the last ten years, without any change in the budgets of hospitals and communities. A vicious circle has developed due to the increased demands on healthcare providers for effectiveness and productivity, while the lack of support from senior managers has led to staff members' frustration about the shortage of time, money and staff, which make it more difficult to care for older patients in the home healthcare sector. Thus when senior managers employ a language of effectiveness and productivity in relation to vulnerable elderly patients, the staff members consider it absurd.

One participant stated;

> ‘However, if you have a good leader who tackles such issues you don’t have to become personally involved in the struggle. (Participant B, Team B)

Team A reported a lack of leadership from senior management, which was the reason its members could not work in accordance with the CCM. It was impossible for them to cooperate with the managers in the community because of their leader’s inability to make decisions. One of the participants stated;

> ‘It’s frustrating that we do not have a leader with the authority to make decisions. It’s a sort of burden.’ (Participant H, Team A)

*The need to formalize collaboration*

The participants from Teams A and B revealed that the healthcare reform had made them aware of their need for increased collaboration with the community and hospital administration as well as with senior management. The CCM requires depressed older persons to take an active part in their own care. The team members stated that the implementation of the CCM had influenced their view of work, as it highlighted the need to improve the delivery system in the community as well as in the psychogeriatric ward by increasing the focus on self-management for depressed older persons. Their perception was that initiatives related to cooperation between Teams A and B were positive, as they led to improved care. One of the participants stated; ‘In my experience things function better that way’. (Participant T, Team B)

During Team B's so-called network meetings the members cooperate using a follow-up plan aimed at empowering the patient. The members of Team A reported that they had been invited to these meetings. The participant from Team B stated that the implementation of the CCM had led to an awareness of what depressed older patients need and thus what should be included in the follow-up plan. She added that being a member of the research team was especially interesting and that a psychiatrist in the psychogeriatric ward had been willing to change routines. This participant also commented that the intention of the cooperation reform has not yet been achieved. This is the main problem and a participant from Team A highlighted the need for more formalized ways of working, stating;

> 'It's your own choice what you decide to do and how you choose to carry out the decision.' (Participant B, Team A)

*Increasing self-management*

Team A reported that the community had introduced an educational programme pertaining to older persons with special needs to enable them to care for a greater number of people with mental health problems. This programme increased *self-management* and participation by means of cognitive therapy. All the members of Team A took part in the programme in 2012 and regret the fact that there was no money to continue it in 2013. Teams A and B revealed that depressed older persons often suffer from physical health problems that require community healthcare resources, for example, home care nurses. However, members of both teams stated that home care nurses need more knowledge and competence in order to work with depressed older persons and agreed on the need for increased focus on self-management.

**DISCUSSION**

The following themes emerged from the focus group interview on improvements in the care of depressed older persons resulting from the implementation of the CCM; *Ensuring a pathway to the top level of the organisation, The need for leadership from senior managers, The need to formalize collaboration and Increasing self-management*. Our findings highlight the fact that *ensuring a quicker pathway to the top level of the organisation* seems to take time. Healthcare systems in the community and hospitals are described as complex hierarchical organizations intended to meet a range of competing goals and thus cannot be regarded as receptive to implementing significant changes, no matter how rational (Rosenheck, 2001). The way to the top level of the organisation can be long and, according to Melnyk and Fineout-Overholt (2005), attempts to change a system can lead to scepticism. If the CCM is to improve interventions, it is essential to increase team coordination as suggested by Wagner *et al.* (2001 a, b). According to Allen et al. (2009), in order to develop teamwork it is necessary to redesign and improve healthcare processes.

The findings revealed *the need for leadership from senior managers*. Bass (l985) defined such leadership as transformational. Transformational leadership is important because it creates opportunities for professional development (O'Brien *et al*. 2008) and must be based on trust (Holm & Severinsson, 2013). The challenge for senior management is to develop a leadership model that supports the teams. According to Melnyk and Fineout-Overholt (2005), this strengthens commitment to the implementation project, in this case the CCM. Thus senior management in the community and hospitals is responsible for redesigning the delivery system and must take part in the quality improvement discourse. The sharing of responsibility has become increasingly important (Doody & Doody, 2012). The quality and quantity of leadership support have proved critical for successful teamwork (Wagner *et al.* 2001a, b). Redesigning the delivery system is essential for healthcare improvements. Wagner *et al.*

(2001 a, b) suggested that the team cannot function without strong leadership, appropriate incentives and improvement strategies. Redesigning the delivery system is of crucial importance if senior management, as in some parts of the western world, focuses solely on efficiency and productivity guided by conceptual models such as New Public Management (NPM) (Rombach, 2005). As such models seem to increase the frustration in healthcare organizations both in the community and hospitals, it is vital to start a dialogue about their meaning when caring for vulnerable older persons suffering from depression and other mental health problems as well as chronic diseases. As suggested by Yurumezoglu and Kocaman (2012), leaders and managers need solutions to the nursing shortage problem and to prevent nurses from leaving the organization.

Implementation of the CCM underlines *the need to formalize the collaboration* between the team and depressed older persons. This requires a team that functions according to the CCM criteria thereby increasing productive interactions between the psychogeriatric ward and the depressed older persons. This mainly involved the sharing of relevant patient information as well as having sufficient time and resources to act. The team should be organized as outlined by Wagner *et al*. (2001 a, b), including coordinated by a nurse or medical sub-specialist who possesses the necessary competence to increase depressed older people's participation and self-management. The nurse or medical sub-specialist should collaborate and participate in activities aimed at improving healthcare services in the community as well as in the psycho geriatric ward. Such cooperation with senior management must take place in an environment of respect and trust (Holm & Severinsson, 2013a). Formalizing collaboration involves clarifying roles and responsibilities as well as improving teamwork and communication (Holm & Severinsson, 2013b). However, focusing solely on cost rather than quality could limit the teams' professional development (Atwal & Caldwell,

2002). In order to formalize cooperation between the team members and depressed older persons, Barker (2011) highlighted self-determination as the most significant human right.

The findings indicated the need to *increase self-management* as a means of improving quality of care. In order to achieve this aim, it is necessary to shift from didactic patient education to encouragement and empowerment. The team members must understand that the depressed older person should be active and informed in order to assume responsibility for her/his own care. Such a shift in responsibility implies that the depressed older person is capable of taking part in the planning of goals, based on the notion that people are moral agents with their own values (Redman 2005). To achieve self-management, healthcare professionals should strengthen optimism, control, well-being and the pathways that lead to recovery (Holm & Severinsson, 2012 b). The core of self-management seems to have an existential dimension of being in the world as well as related to freedom and dignity. Interventions that highlight the depressed older person's empowerment, participation and involvement have been described in the literature (Yeung *et al*. 2010). Several studies revealed how problems arise because the working methods are inadequate for supporting self-management (Macdonald *et al.*, 2008; Holm & Severinsson, 2012). Koch *et al.* (2004) concluded that professionals must gain a new understanding of self-management that includes respect for the expertise that a person brings to the management of her/his condition.

**Conclusion**

Healthcare improvements require a discourse in order to reduce the fragmentation of healthcare provision to depressed older persons. However, healthcare is not a product, but a personal experience in which our body and soul are rendered vulnerable due to being placed in the hands of others. It will take time to redesign the healthcare delivery system and develop a practice characterized by increased interaction of all parts − a healthcare organization that has the potential to genuinely enhance the delivery system as well as self-management in vulnerable and depressed older persons.

Implications for nursing practice

Nursing practice should have a discourse, in which it must be stressed that depressed older persons are not consumers of a commodity but need a relationship. When describing and evaluating programmes and interventions such as the CCM, more information than merely whether they work or not is necessary (Berwick, 2008). As highlighted by Wagner *et al.* (2001 a, b), the CCM is not a theoretical but an evidence-based model of practice and the way it functions provides knowledge that can be used to change dysfunctional aspects of the healthcare system. Criticism has been levelled at researchers for not including inter-professional relationships when redesigning the delivery system (Atwal & Caldwell, 2002). However, the problem with such models is the focus on free will and rational choice, as they consider depressed older people as consumers and their choices as rational.

Nursing practice needs a formal job description of the role of the healthcare team coordinator with responsibility for depressed older persons (Wagner *et al.,* 2001a). Much of care managers' time and effort seems to be devoted to educating and motivating depressed

older persons (Belnap *et al.,* 2006) and protocols that specify the role are required. However, improved interaction presupposes that healthcare teams have the necessary expertise, relevant patient information, time and resources to act rather than just react*,* as described by Wagner *et al.* (2001 a, b).

## Limitation

Both researchers have long experience as psychiatric nurses, which may have had a bearing on their understanding of the data. They discussed the text repeatedly before agreeing on the different themes and sub-themes. They also tried to establish whether the data remained stable over time, which is related to the concept of dependability as described by Lincoln and Guba (l985).

This follow-up study was conducted in a community on the west coast of Norway. The small number of participants from one healthcare team makes it difficult to claim transferability to other community settings in Norway or other countries. More research is required to explore healthcare improvements in different parts of the world.

## Contributions

Study design: ALH, ES, Acquisition of funding and administrative support: ES, ALH, Data collection: ALH, Data analysis: ALH, ES, Development of the manuscript: ALH, ES.

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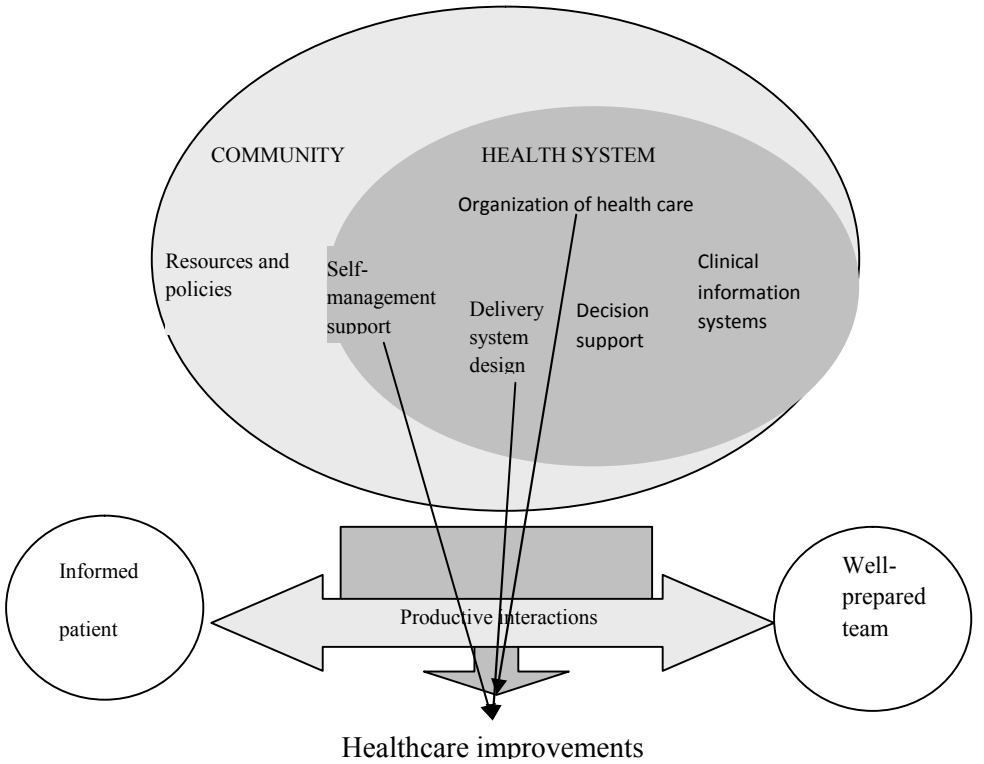
**Figure 1** Summary of the study outcomes: Healthcare improvements based on the components of the Chronic Care Model (CCM, Wagner et al. 2010a, b)

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| Ensuring a pathway to the top level of the organization | The need for leadership from senior managers | The need to formalize collaboration | Increasing focus on self-management |

**Table 1** Demographic characteristics

| No. | Age | Living alone/widow/widower/divorced | Gender | Depression | Mood disorder |
|---|---|---|---|---|---|
| 1 | 67 | Widow, living alone | Female | Depression | |
| 2 | 62 | Widow, living alone | Female | Depression | |
| 3 | 64 | Divorced, living alone | Male | Depression | |
| 4 | 65 | Divorced, living alone | Female | | Bipolar |
| 5 | ?? | Living with spouse?? | Female | Depression | |
| 6 | 82 | Widow, living alone | Female | | Bipolar |
| 7 | 67 | Divorced, living alone | Female | Depression | |
| 8 | 74 | Divorced?? | Female | Depression | |
| 9 | 76 | Divorced?? | Male | Depression | |
| 10 | 65 | Divorced | Male | Depression | |
| 11 | 72 | Divorced | Female | Depression | |