



# **General practitioners' evaluation of the implementation of a collaborative stepped care model for the treatment of anxiety disorders**

Master's thesis of Clinical and Health Psychology

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**Abstract:**

Objective: To improve the treatment of anxiety disorders, ‘collaborative care’ has been proposed; a cooperation model with general practitioner (GP), care manager, psychiatrist and patient. Collaborative stepped care (CSC) combines collaborative care with stepped care; treatment consists of stepped care beginning with the least intensive treatment. When this treatment does not lead to significant symptom reduction, treatment will be intensified until the desired outcome is achieved. This qualitative study examines the experiences and opinions of GPs about the implementation of CSC in the treatment of anxiety disorders in primary care.

Methods: Using semi-structured interviews, the experiences and opinions of GPs about the implementation of CSC were evaluated. Ten GPs were interviewed; six men and four women. Purposive sampling was used to achieve different opinions of the GPs.

Results: Experiences and opinions of GPs reflected three themes. First, GPs appreciated the principles of CSC. Second, GPs with high personal interest in anxiety disorders were more motivated to invest time and effort in the implementation of CSC than GPs with moderate personal interest. Finally, GPs who worked in the same building as their care manager were more satisfied with the communication with their care managers than GPs who did not work in the same building as their care manager.

Conclusion: Personal interest in anxiety disorders and the presence of the care manager in the same building seem to be the most important facilitating factors for implementation of CSC.

**Samenvatting**

Inleiding: Om de behandeling van angststoornissen te verbeteren is ‘collaborative care’ ontwikkeld; een samenwerkingsmodel met huisarts, care manager, psychiater en de patiënt. ‘Collaborative stepped care’ (CSC) combineert collaborative care met stepped care waarbij de behandeling bestaat uit verschillende stappen en begint met de minst intensieve behandeling. Als de eerste stap de symptomen niet genoeg verminderd wordt de behandeling geïntensiveerd, totdat het gewenste resultaat is bereikt. Dit kwalitatieve onderzoek evalueert de meningen en ervaringen van huisartsen over de implementatie van CSC in de behandeling van angststoornissen in de eerste lijn.

Methode: Met behulp van semi-gestructureerde interviews zijn de meningen van huisartsen over CSC geëvalueerd. Er zijn tien huisartsen geïnterviewd; zes mannen en vier vrouwen. ‘Purposive sampling’ is gebruikt om de huisartsen met verschillende meningen te selecteren.

Resultaten: De ervaringen en meningen van de huisarts kunnen ondergebracht worden in drie thema's. Allereerst waren de huisartsen tevreden over de principes van CSC. Ten tweede waren huisartsen met persoonlijke interesse in angststoornissen gemotiveerder om tijd en energie te investeren in de implementatie van CSC dan huisartsen zonder persoonlijke interesse. Tenslotte waren huisartsen die in dezelfde praktijk werkten als hun care manager meer tevreden over de communicatie met de care manager dan huisartsen die niet in dezelfde praktijk werkten als hun care manager.

Conclusie: Persoonlijke interesse in angststoornissen en de aanwezigheid van de care manager in dezelfde praktijk lijken de belangrijkste faciliterende factoren te zijn voor implementatie van CSC.

## **Preface**

This qualitative study was conducted simultaneously with another qualitative study which examined the experiences and opinions of care managers about the implementation of CSC in the treatment of anxiety disorders in primary care. In the beginning of the process, we have intensively worked together. Therefore, the introduction and method of this study show many similarities with the study of T. Bouman. Nevertheless, both researchers interviewed their own participants and processed their own results and discussion; they are individually responsible for their own thesis.

I would like to thank several people who supported me during my thesis. I would like to thank Christina van der Feltz-Cornelis for her supervision and her guidance in the research process and for the opportunity she gave me to gain experience at the Trimbos-Institute. Further, I would like to thank my supervisor Anna Muntingh for her support and the many fruitful discussions we had about my findings. Besides, I want to thank my supervisor Sibe Doosje for critically reviewing my thesis, and for helping me write in English. Finally, I would like to thank Hennie Boeije from the University of Utrecht. She offered advice, and helped me with this qualitative study, which was entirely new to me.

## **Introduction**

The prevalence of anxiety symptoms in general practice is high; 15.8% (Kroenke, Spitzer, Williams, Monahan & Lowe, 2007). Despite the frequency of presentation of anxiety disorders in primary care and the availability of effective treatment options, anxiety disorders are not always recognized and treated well by the general practitioner (GP) (Smolders et al., 2009; Young, Klap, Sherbourne & Wells, 2001).

To improve treatment of anxiety disorders in primary care, various interventions have been proposed. Smolders et al. (2008), reviewed the effectiveness of two important strategies for improving treatment of anxiety disorders; professional-directed and organizational interventions. Professional-directed interventions have been designed to improve professional decision making through training the GP, but show no effectiveness in increasing physicians' knowledge of anxiety disorders, no effectiveness on medication prescription rate, and no improvement over time on patient outcomes. Organizational interventions aim at changing the structure or process of health care delivery, through the introduction of a mental health specialist. According to Smolders' et al. (2008) study, one of these interventions, collaborative care seems the most effective program, resulting in more anxiety-free days, in adequate prescription of medication and increased medication adherence.

Collaborative care includes a model of cooperation developed for chronic care diseases by Wagner (Wagner, Austin & Von, 1996). This model involves cooperative disease management with a pivotal role for the care manager. A care manager is usually a non-physician professional. The GP refers the patient to the care manager and formulates a treatment plan in collaboration with the care manager and the patient. GP and care manager evaluate progress and the GP may prescribe medication in consultation with the patient. Both GP and care manager can, if necessary, consult a psychiatrist to provide optimal care to the patient.

Only a few studies have tested the effectiveness of collaborative care in the treatment of anxiety disorders. Findings indicate that collaborative care results in increases in patient satisfaction and reduced anxiety symptoms compared to usual care (Price, Beck, Nimmer & Bensen, 2000). Furthermore, patients in the intervention group have more often received medication that meets international guidelines and a more adequate dose of medication (Roy-Byrne, Katon, Cowley & Russo, 2001). Similar conclusions have been drawn by Roy-Byrne et al. (2005) and Rollman et al. (2005). However, Van Orden, Hoffman, Hafmans, Spinhoven and Hoencamp (2009) found no differences in patient outcomes and patient satisfaction between collaborative care and usual care. But collaborative care in this study resulted in

higher satisfaction with service among GPs, shorter referral delay, reduced time in treatment, fewer appointments and consequently lower treatment costs.

To conclude, collaborative care appears to be a promising intervention for the treatment of anxiety disorders. However, most of the studies of collaborative care in the treatment of anxiety disorders have been performed in the United States. Because of the differences between health care systems in the United States and The Netherlands, results of collaborative care studies may not be generalized without further consideration (De Jong et al., 2009).

To make collaborative care more cost-effective, international guidelines and investigators of the collaborative care trials recommend a stepped care approach for mental health interventions in primary care (Roy-Byrne et al., 2001). Stepped care begins with the least intense treatment. When this treatment does not lead to significant symptom reduction, the next step is taken, intensifying treatment until the desired outcome has been achieved. When symptoms are sufficiently reduced, relapse prevention will be started. The combination of collaborative care and stepped care, called collaborative stepped care (CSC), may increase cooperation between disciplines and may increase accessibility of different types of professional care for patients (Meeuwissen & Donker, 2004). Moreover, proceeding from lower to higher levels of care based on observed outcomes can increase effectiveness while lowering the overall costs (Katon, Von Korff, Lin & Simon, 2001).

A study about the effectiveness of CSC in The Netherlands is currently being conducted (Muntingh et al., 2009). This cluster randomized controlled trial evaluates the effects and costs of CSC in primary care for patients with panic disorder and generalized anxiety disorder. In this study, CSC is provided in four steps. The first step is a guided self-help, in which the care manager assists patients during five consultations. When this step does not lead to significant reductions in anxiety symptoms, a six-session cognitive behavioral therapy intervention by the care manager will be started. The third step is antidepressant medication, prescribed by the GP. The fourth and last step is optimization of medication or referring the patient to secondary care. During therapy, the care manager monitors progression in anxiety symptoms with the Beck Anxiety Inventory (Beck, Epstein, Brown & Steer, 1988). If a patient achieves remission in anxiety symptoms after finishing a step, relapse prevention is offered by the care manager.

Collaborative care seems an effective, but complex and multifaceted intervention (Bower, Gilbody, Richards, Fletcher & Sutton, 2006). Effectiveness of collaborative care and CSC is often studied by evaluating reductions in anxiety symptoms in patient groups.

However, the role and opinions of the GP have not been studied very well, despite the fact that they are important for the implementation of CSC. It has been found that part of the GPs prefers to refer the patient to secondary care, whereas the largest group prefers a consult by a psychiatrist, keeping the patient in primary care. CSC seems to be consistent with the needs of these GPs (Herbert & Van der Feltz-Cornelis, 2004). Besides, GPs who using collaborative care were more satisfied with treatment compared to GPs who gave usual care (Van Orden et al., 2009). Despite the important role of the GPs and their influence on the implementation of this model in practice, little is known about the GP's experiences and opinions regarding CSC.

The purpose of this study is to summarize the experiences and opinions of GPs regarding the implementation of CSC in the treatment of anxiety disorders in primary care. Factors that obstruct or promote the implementation of CSC in primary care will be assessed. This study might contribute to an increase in insight in the influencing factors of CSC, and attempt to define preconditions for the facilitation of implementation of CSC in primary care.

## **Methods**

### Research design

This qualitative study was designed to obtain maximum information about experiences and opinions of the GPs. Because the purpose of this study was to evaluate the experiences and opinions of the GPs, the research method was based on a thematic survey. It was proposed to explore a range of themes that represent repetitive responses by GPs (Sandelowski & Barroso, 2003). Themes were formed step by step while data was systematically obtained and analyzed. These themes were explored, described and interpreted instead of merely listing topics (Boeije, 2009).

### Settings and participants

GPs who were trained in CSC and were participating in the randomized controlled trial of Muntingh et al. (2009) were selected. The primary care clinics were located in the regions of Haagstreek, Rijnstreek, Midden-Holland, Duin en Bollenstreek, Zoetermeer and Leiden, which are situated in the west of The Netherlands. To collect a maximum of different opinions of these GPs, purposive sampling was used (Boeije, 2005), selecting GPs according to a preconceived set of dissimilar respondent characteristics. In this study GPs with different characteristics were recruited, who might therefore be expected to have potentially different

views of CSC. Characteristics were for example the number of patients the GP had referred to the care manager, the location and size of the practice, and gender and age of the GP. These variables were thought to influence the nature of experiences and opinions of GPs.

Overall, 31 GPs were trained in CSC. Twelve selected GPs were approached for an interview. One GP refused to take part in this study because of time constraints. Another GP cancelled his appointment and had no possibility for a new appointment, also because of time constraints. Six men and four women were interviewed. The mean age in this sample was 47.9 with a standard deviation of 6.5 (range 35-57). Two GPs had solo practices, the others worked with other GPs in the same practice, with a maximum of six GPs in one practice. One GP had a private pharmacy in his practice. Size of practices ranged from 2.000 to 10.000 patients. All GPs worked with a care manager. Five GPs had a care manager stationed in the same building, five GPs did not. The number of referred patients to the care manager ranged from 0 to 11 patients. The interviews were conducted between November 2009 and January 2010.

### Assessment

For the interview, a semi-structured survey was developed to ensure that all information of the relevant topics was gathered. Also, opportunities were created for GPs to discuss their ideas, experiences and opinions. This semi-structured interview was based on a topic list derived from the literature (Meere, 2009; Muntingh et al., 2009). The questionnaire included the following topics: treatment of anxiety disorders according to CSC, communication and collaboration between health professionals and factors that possibly obstructed or facilitated the implementation of CSC. Before the interview, GPs received a questionnaire by e-mail about general characteristics of the GP and their practice. This was done to save time. The questionnaire with general information and a topic list for the interview are included in Appendix 1.

### Data collection

GPs were phoned to ask them permission for an interview. The type of study and its aims were explained to them first. GPs were ensured that the data was processed anonymously and confidentially, and that no references would be possible to the GP or their practices. When the GP agreed, an appointment for an interview was scheduled. Nine GPs were visited in their practices for an interview of 30 up to 45 minutes, and one GP was interviewed by telephone. After approval of the GP, the interviews were recorded using a voice-recorder. In

this way, it was possible to focus completely on the interview. It also enhanced the quality of data, because in this way all data was obtained and memory bias would be avoided (Boeije, 2005). During transcription of the interviews, non-verbal behavior cues were lost. Therefore, impressions about the GPs were noted separately after the interview and were included in the data analysis. GPs as a group were interviewed until no new information was achieved (data saturation) (Boeije, 2005).

### Analysis

Interviews on the voice-recorder were transcribed literally into a computer file with the computer program MAXQDA (Kuckartz, 2007). This program facilitated the coding process of the interviews and increased reliability. The analysis was started with 'open coding'. This means that the entire text was read carefully, and was divided into fragments. Each fragment received a label; a code that reflected the topic of that fragment. By open coding a code tree was created and data became more organized (Boeije, 2005). The final code tree is included in Appendix 2. After all interviews were coded, axial coding was used to integrate data and make connections between categories. Codes were compared again to check whether fragments had received the correct code, the codes correctly covered the fragment, and whether all fragments of one code matched. Codes could be divided or merged. Finally, selective coding was used to select the core category, systematically relating it to other categories, and filling in categories that need further refinement and development. In this way information was integrated and categories were linked (Strauss & Corbin, 1998).

For a couple of interviews, the coding process was conducted and compared by two different researchers, also called research triangulation. In this way, the inter-rater reliability was enlarged. In case of disagreement, a third researcher was available for final decision making. After three interviews were conducted, the obtained information and code tree were discussed with two researchers, to detect missing information or questions. When this analysis of interviews resulted in new hypotheses, these were tested in the next interviews. This process was repeated after about three interviews were conducted. Therefore, the research process was cyclical, alternating between data collection and data analysis.

### **Results**

During the interview three themes were discussed; opinions and experiences of GPs about treatment according to CSC, collaboration and communication with the care manager and



psychiatrist, and the evaluation of factors that could obstruct or facilitate the implementation of CSC. Results are now grouped into three other areas because these seem to cover the content of the most important opinions and experiences of GPs better. These areas are appreciation of the principles of CSC, motivation of the GP for investment in CSC and communication and collaboration with the care manager. They include the most important promoting and obstructing factors for implementation of CSC. Experiences and opinions of GPs about these factors are discussed below. Finally, some recommendations of GPs about implementation are mentioned.

#### Appreciation of the principles of CSC

GPs had high expectations about the effectiveness of the treatment and indicated without exception that they appreciated the principles of CSC. These positive opinions about the principles of CSC were caused by a number of features of CSC. First, GPs appreciated the treatment. All GPs were interested in stepped care and more specifically in self-help. Patients are held responsible for their own recovery, so they should be able to control their own problems and develop tools to solve problems in the future by themselves. With minimal recourses, patients could make a lot of progress in treatment. Another advantage of the treatment was the reduction in prescription of medication, which is the third step in CSC. In usual care medication is often the starting point. Finally, GPs were satisfied with the effectiveness of guided self-help. Most patients had improved after the first step, and there was little drop-out. Satisfaction with treatment according to CSC is demonstrated in the following quote.

*'I find it attractive that patients come to understand underlying mechanisms. With this treatment you make full use of the opportunities that people have themselves. It is actually more a kind of coaching than therapy, I like that.'*

The second factor relating to the principles of CSC was increased patient care. GPs mentioned that for patients, the threshold for seeing a care manager in their own general practice was much lower than in secondary care. Patients felt more comfortable because treatment took place in a familiar environment. Patients could also be referred to the care manager directly, without visiting other specialists first. This means that they had to tell their story only once. Compared with secondary care, patient care also improved through

reductions in waiting time and probably also in travel time. The enthusiasm about the improved patient care was illustrated by the quote of one GP:

*'In treatment, patients have to rely on their own resolution skills. When the first step in the treatment does not reduce symptoms sufficiently, the next treatment step follows logically. This means no new referral, so the patient will have to tell his story only once.'*

Finally, there were also some benefits for the GP. GPs were able to learn a lot from the care manager, so they could deal themselves with the less complex problems in the future. Moreover, GPs were also able to consult their care manager more easily for small problems or information about symptoms. In this way, contact with the care manager will be faster and more satisfying initiated than contact with professionals in secondary care.

#### Motivation of the GP for investment in CSC

Besides the appreciation of the principles of CSC, motivation of the GP to invest in the implementation of CSC could also influence implementation of CSC. Investment in CSC may be time consuming and therefore unattractive. GPs were often accessed for new treatment methods or research to improve primary care. So, GPs must have personal interest in anxiety disorders to select CSC, and must be motivated to work with and investigate in CSC. Most GPs indicated that they were persistently attached to their own procedures and would not easily change them. When GPs had personal interest in anxiety disorders they were more likely to invest time to increase knowledge and to change their working methods. Four GPs argued that they had high personal interest in anxiety disorders, whereas the other GPs had moderate personal interest in anxiety disorders.

GPs with high personal interest distinguished themselves from GPs who had a moderate interest in anxiety disorders, because they worked more actively with CSC. These active GPs argued, in contrast with the other GPs, that they recognized anxiety disorders more often, probably because they spent more time to increase their knowledge about anxiety disorders. Investment of the GP also improved communication with the care manager, psychiatrist en research supervisor. Motivated GPs contacted them more often with questions or comments and took more initiative in the communication with them. Only three GPs had contacted their psychiatrist, the other GPs indicated that they appreciated to be connected with a psychiatrist, but did not use this connection. Furthermore, motivated GPs referred

more patients to the care manager. Because they were so enthusiastic themselves, they motivated their patients more often to be treated according to CSC. One GP with high personal interest found it unattractive to refer patients to the care manager, because in this way he lost his own skills in treatment of anxiety symptoms. Another motivated GP would also rather treat patients himself and therefore participated in the training of guided self-help. Finally, motivation of GPs was reflected in a higher overall judgment of CSC; motivated GPs judged CSC with an 8.3 whereas moderately motivated GPs judged CSC with a 6.3.

#### Communication and collaboration with the care manager

The most intensely discussed topics in the interviews were communication and collaboration with the care manager. Looking at the emphasis that most of the GPs placed at this topic, it seemed to be a very important factor in implementing CSC. Satisfaction of the GP with CSC seemed to be greatly determined by satisfaction with the communication and collaboration with their care manager. GPs who were satisfied with the communication and collaboration with their care manager judged CSC with a 7.8, whereas GPs who were dissatisfied about this judged CSC with a 5.3. Communication and collaboration would be improved when the GP and the care manager worked in the same building.

Five GPs worked in the same building as their care manager. With exception of one GP, all of these GPs were satisfied about the communication with their care manager. This could be explained by their more intense and frequent face to face contact during for example lunch and coffee breaks. In this informal way, they were able to discuss problems and patient information. The enthusiasm for a care manager in the same practice was illustrated by this quote by one of these GPs:

*'Just walking into each other's office is very pleasant but also much easier. When I have to call the care manager by telephone, he is in conversation and when he calls back I am in conversation or in a meeting. It is a lot easier if someone is around the corner.'*

The GP who was not satisfied about communication and collaboration with the care manager who was located in the same office, was absent at the days that the care manager was present. In this way, intense face to face contact was impossible. This situation was comparable to GPs who did not work in the same building as the care manager. A part of these GPs, who did not work in the same building as their care manager did, were also dissatisfied about the

amount of communication. They argued that they received no feedback from the care manager. After they referred patients to the care manager, they lost contact with the patient, had no insight in treatment progress and did not even know if the treatment had started. The disappointment of GPs about communication with the care manager is made clear in the following quotes.

*'I just expect feedback about how treatment goes on. I do not have to know every detail, but I want to know whether patients have control over their fear. This feedback could be very brief, but as a GP I want to stay in contact with my patients.'*

*'If I have to judge CSC I will give it a four or a five. At this time I see no benefits for this treatment. If the communication with the care manager was better, this probably would be a lot higher.'*

However, the other part of the GPs was satisfied with the communication and collaboration with their care manager who was located in another building. This could be explained by the fact that these GPs were highly involved in this study and took a lot of initiative themselves. These were the GPs with high personal interest in anxiety disorders. They contacted their care managers themselves to obtain information about their patients and their progress in treatment, instead of waiting for initiatives by the care manager.

Because communication and collaboration between GPs and care managers were at time so difficult, it was hypothesized that there were no clear agreements about communication. Therefore, questions were added about the presence and the content of the appointments about contact. Most GPs argued that there were no agreements about feedback. GPs had the opinion that by referring the patient, it should be the GPs who should initiate contact. They had to inform the care manager about the patients and their problems. But afterwards, the care manager should inform the GP, because they knew the progress of the patient during treatment and they were responsible for patient care. A GP described this as follows:

*'I think that at referral responsibility should be taken by the GP, we diagnose patients. But it is most natural that the care manager maintains contact when the patient receives treatment, because he has the most interaction with the patient.'*

Besides regular contact with the care manager, working in the same building also had some other benefits. A care manager was more accessible for patients than professionals in secondary care. A reason for this may be the familiar environment. Furthermore, GPs would have better control of the treatment progress of patients. Finally, GPs could also easily consult their care manager for small problems or to get information about symptoms. Contact with the care manager for patients as well as GPs, could be faster and more satisfying initiated than contact with professionals in secondary care.

Factors that were discussed above will promote or obstruct implementation of CSC. These factors and the interaction between them are summarized in Figure 1.

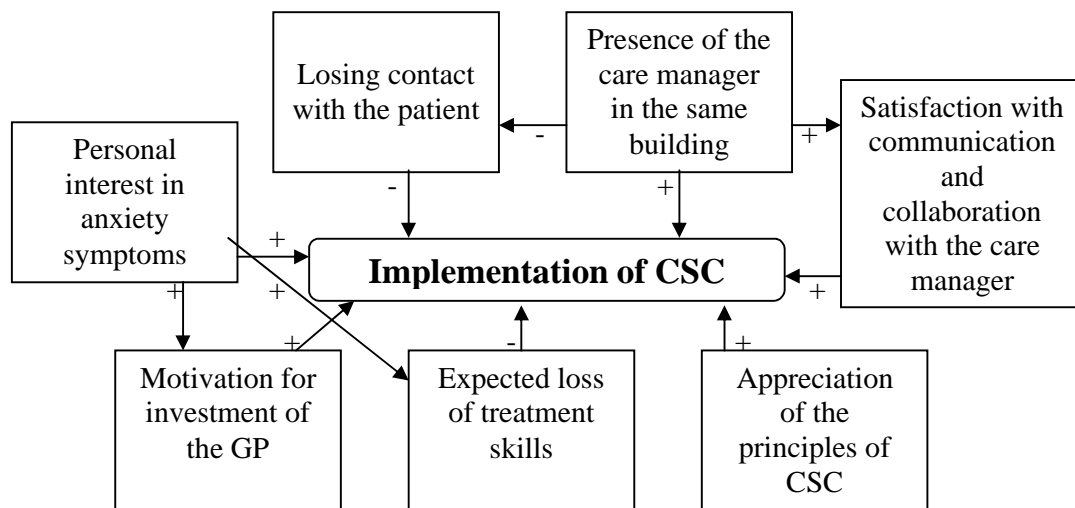


Figure 1: Factors that promote and obstruct implementation of CSC in primary care.

### Recommendations of GPs

Most GPs were satisfied about CSC; overall they judged CSC with a 7.1. Most GPs wanted CSC to be implemented further. One GP described this in the next quote:

*'I hope that when this study has been completed, this approach will be implemented by the mental health care organizations. If this is not done, I will have to return to a prehistoric situation.'*

However, GPs mentioned some recommendations for improving CSC when this would continued be introduced in The Netherlands. Most of these recommendations focused on communication and collaboration between the care manager and the GP. Communication could be improved by a shared patient file, in which both the care manager and the GP could

report and obtain information. GPs also mentioned that appointments should be made for a meeting between care managers, GPs and probably psychiatrists and patients. In this way, GPs could stay in contact with their patients, have control over treatment progress and problems about treatment and patient care could be discussed. It was suggested that these meetings could be once a month or every three months. These recommendations were done by GPs who were dissatisfied with the communication with the care manager. These GPs also argued that appointments should be made about the content and amount of feedback. Finally, GPs recommended a care manager in the same building, because this would improve communication and collaboration with the care manager and improve patient care.

GPs also argued that adequate implementation of CSC would be best realized through extra training for the GP. GPs are required to train themselves one week a year. In this way many GPs could be informed about CSC. Another advice to improve implementation was to incorporate CSC in the guidelines for treatment of anxiety disorders. For GPs it was important that results could be shown about successes with CSC. Before GPs were motivated to invest in CSC, they wanted to know how many patients benefit from treatment according to CSC.

## **Discussion**

This study provides insight in which factors influence implementation of CSC in primary care. A number of promoting and obstructing factors have been identified in this study. Some factors can promote CSC in some ways, but can also obstruct it in others. Because all GPs appreciated the principles of CSC, these seem to be adequate. When GPs are satisfied with the principles of CSC, they must also be motivated to invest time and effort in implementation of CSC. Motivation to invest in CSC seems to depend largely on the amount of personal interest of the GP in anxiety disorders, which will increase activity of GPs because they will invest more time and effort in CSC. However, this interest can also strengthen the GPs motivation to treat anxiety disorders themselves. Whereas high personal interest seems to be a promoting factor for implementation of CSC, the expected loss in treatment skills for anxiety disorders by referring patients to the care manager can also be an obstructing factor for the implementation of CSC. When the GPs decide to implement CSC, the most important factor for successful implementation seems to be satisfaction with communication and collaboration with the care manager. Good communication and collaboration with the care manager is important for the GPs to control treatment progress

and to stay in touch with their patients. To conclude, personal interest in anxiety disorders and the presence of the care manager in the same building seem to be the most important preconditions of implementation of CSC in primary care.

In line with the findings of the study of Herbert and Van der Feltz-Cornelis (2004), the data which is presented in this study suggest that most GPs find it attractive to keep patients in primary care. This gives the GP control over the treatment progress and their patients. Both studies have show that treatment in primary care has lower thresholds than in secondary care, and that treatment for psychiatric problems is improved when using collaborative (stepped) care. This is consistent with the finding that it is easier for patients to be treated with CSC compared with usual care, because CSC includes various types of care (Meeuwissen & Donker, 2004). GPs in the present study also mentioned that they found the principles of CSC attractive. The satisfaction of GPs with the treatment according to collaborative care is consistent with the study of Van Orden et al. (2009). However, this study did also show that GPs have to invest in this kind of treatment, which may be a reason for GPs to be reluctant to implement CSC. The motivation of GPs to invest in implementation of CSC largely depends on their personal interest in anxiety disorders, an observation which has also been reported by Ormel and Tiemens (1995). They proposed that GPs who are not personally interested in the disorder often mentioned that they experienced a lack of treatment skills and experience with the disorder and that treatment is time consuming.

In contrast with the suggestion of De Jong et al. (2009), the notion that single practices have more problems to invest time and effort in CSC than large practices was not confirmed in the present study. Similar to their study, the present study found a lack of communication between GPs and care managers because these two professionals did not share a building, a finding that was also reported by Meere (2009). However, it should be noted that the studies of Meere and De Jong et al. focused on depression and not on anxiety disorders. It is obvious that problems about the communication between GPs and care managers were also mentioned by care managers. GPs in this study mentioned that after referral, the care managers should take the initiative in communication, which is in line with the findings of Bouman (2009). The care managers in this study mentioned that they felt responsible for communication, but that GPs are often limited accessible.

Evaluating of the strengths and limitations of this study, the qualitative design seems well suited to investigate this topic. The GPs generally felt encouraged to talk about their experiences and opinions, leading to a maximum amount of information. During the research process, researchers were aware of the possibility of bias. Everything possible has been done

to acknowledge and minimize the effect of possible bias on the interviews and on the interpretation. Inter-rater reliability has been increased by coding the interviews by different researchers. Furthermore, data saturation was achieved in this study, so we expect that all possible opinions and experiences have been obtained. To meet the guidelines for qualitative research, a qualitative research professional was consulted.

Although, the intention was to intermittently analyze the codebook with more researchers to detect missing information, but because of time constraints, interviews were not always coded before the next interview took place. Following every interview, opinions and experiences were discussed with several researchers. Although this yielded to an overall picture about which information had been obtained and which information had been missed, it could still be possible that some details were missed because not all information had been written down. Despite a lack of intermittently analyzed code trees, we see no reason to believe that there is information missing. During the study, more questions about communication with the care manager were added to the interviews, because there was a lack of information about who should take initiative in contact.

It should also be noted that the population of GPs described here, may not be representative for all GPs. As noted above, GPs have to be motivated to implement CSC. Because GPs are often approached for new treatment methods or research for improvement of primary care, they must have personal interest in anxiety disorders to be motivated to work with and investigate in CSC. The interviewed GPs were a small group of the GPs who were approached for the study of Muntingh et al. (2009). It may be assumed that these GPs were more interested in anxiety disorders than other GPs who did not participate in this study.

Finally, data about this study is often compared to studies of collaborative care. Because the present study combines collaborative care and stepped care, there might be some differences between other studies which used only collaborative care. Because of the differences between these two approaches, these can not always be compared.

Limitations notwithstanding, this study identifies several important themes regarding the GPs' perspective on CSC. Future research should aim to create a valid picture of implementation of CSC, by analyzing opinions and experiences of other mental health professionals and patients. For example, this study can be combined with a study about the experiences and opinions of the care manager about the implementation of CSC in primary care (Bouman, 2009). Besides, this study did not take into account the opinions of patients themselves. These opinions are important because CSC is designed for the benefit of these patients.



Furthermore, because GPs are so enthusiastic about treatment according to CSC, the effectiveness and cost-effectiveness of CSC can be studied to examine whether or not this approach is more effective and more cost-effective than usual care. Finally, in the future CSC can be combined with a computer-assisted CBT program that guides both clinician and patient. In this way, care managers will not need to have extensive training or experience in cognitive behavioral therapy, which will promote the cost-effectiveness (Craske et al., 2009).

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## Appendix 1: Interview

### General questions prior to the interview

1. What is your age?  
.....
2. How long have you been a general practitioner?  
.....
3. How many hours a week do you work as a general practitioner?  
.....
4. Do you also have another job or other activities? If so, what kind of job and for how many hours a week?  
.....
5. How do you experience the time pressure?
  - Low
  - Fairly low
  - Average
  - Fairly high
  - High
6. Do you have work experiences in psychiatry? If so, what kind of experiences?  
.....
7. What is the patient population in your practice?  
.....

### Interview general practitioner

#### Treatment

1. How would you describe CSC in your own words?
2. What were your reasons to participate in the project?
3. Does the project meet your expectations?
4. Has your role in the treatment of anxiety disorders changed with the introduction of CSC? If so, how?
5. What is your opinion about the treatment of anxiety disorders by CSC?
6. What are the differences in treatment of anxiety disorders since the introduction of CSC?
7. Which are the main improvements in the treatment of anxiety disorders by CSC?
8. What are the main limitations in the treatment of anxiety disorders by CSC?

9. Which part of CSC do you use?
10. Which part of CSC don't you use? Why?
11. Do you think the treatment by CSC is suitable for all patients with an anxiety disorders?
12. Which patients will benefit the most by treatment according to CSC?
13. Which patients are less suitable for treatment according to CSC?
14. In which case would you approve treatment according to CSC?

### **Collaboration and contact between general practitioner, care manager and psychiatrist**

15. What are your experiences and opinions about the collaboration with the care manager?
16. Which problems do you have in the collaboration with the care manager?
17. Who do you think can perform the role of care manager the best and why?
18. What are your experiences and opinions about the collaboration with the psychiatrist?
19. Which problems do you have in the collaboration with the psychiatrist?
20. What are the benefits of collaboration with care manager and psychiatrist?
21. What are the limitations of collaboration with care manager and psychiatrist?

### **Evaluation of implementation of CSC**

22. Which factors can improve the implementation of CSC in the general practice?
23. Which factors can obstruct the implementation of CSC in the general practice?
24. What would you change about the model to improve the implementation of CSC in the general practice in the future?
25. Would you recommend this approach to your colleagues?
26. What could be reasons for colleagues not wanting to work with the CSC program?
27. Do you think CSC can be introduced nationally? Why do you think so?
28. If you have to give an overall report mark for the evaluation of CSC as a whole, what grade would it be?

### **Final**

29. Was there a topic that you found more important or less important than the other topics?
30. What is your opinion about the interview?
31. Are there any elements that you have missed in the interview?
32. Can I call you if I have further questions?
33. Are you interested in the results of this study?
34. Do you have any further questions?

## Appendix 2: Code tree

Differences urban/ rural

Description of CSC

Motivation for participation

Increase in knowledge of the GP

Recognition of anxiety disorders

Outcome of expectations of GPs

- Expectations

- Confirmed

- Disappointments

Treatment

- Anxiety disorders role for the GP

- Judgment of treatment

- Neutral

- Negative

- Positive

- Recommendations

- Differences in treatment before and after CSC

- Improvements

Patients

- Patients indicated for CSC

- Patients not indicated for CSC

Collaboration

- Contact with the care manager

- Function of the care manager

- Contact with the psychiatrist

- Clarity about contact by problems

- Judgment of collaboration in Total

- Neutral

- Negative

- Positive

- Recommendations

Implementation



Obstructing factor  
Facilitating factors  
Disadvantages of CSC  
Further implementations  
    Approach  
    Improvements  
Grades  
Criticism about the research  
    Judgment of presentation in advance  
Advice to colleagues  
Questions about further course of the research