# Collaborative care initiatives for patients with serious mental disorders treated in primary care setting

This is an excerpt from the full technical report, which is written in Norwegian. The excerpt provides the report's main messages in English. NO. 03–2008 Systematic reviews

**kunnskapssenteret** 

Title	Collaborative care initiatives for patients with serious mental disorders treated in
	primary care setting
Norwegian title	Samhandling om pasienter med alvorlige psykiske problemer I allmennpraksis.
Institution	Norwegian Knowledge Centre for the Health Services
	(Nasjonalt kunnskapssenter for helsetjenesten)
	John-Arne Røttingen, <i>Director</i>
Authors	Hviding, Krystyna, Senior Advisor, Project leader
	Petter Bugge, Senior Consultant
	Petter Brelin
	Petter Ekern, Senior Consultant
	Tordis Sørensen Høifødt, Senior Consultant
	John Nessa, Senior Consultant
	Signe Flottorp, Research manager
	Peer reviwer:
	Odd Jarle Kvamme
	Olav Thorsen
ISBN	978-82-8121-190-2
ISSN	1890-1298
Report	No. 3 – 2008
Project number	339
Type of report	Systematic reviews
No. of pages	107 (193 incl. attachments)
Client	The Norwegian Directorate of Health
Subject heading	_
(MeSH)	
Citation	Hviding K, Bugge P, Ekern P, Brelin P, Høifødt TS, Nessa J, Flottorp S. Collaborativ

Hviding K, Bugge P, Ekern P, Brelin P, Høifødt TS, Nessa J, Flottorp S. Collaborative care initiatives for patients with serious mental disorders treated in primary care setting. Report from Kunnskapssenteret no. 3–2008. Oslo: Norwegian Knowledge Centre for the Health Services, 2008.

Norwegian Knowledge Centre for the Health Services summarizes and disseminates evidence concerning the effect of treatments, methods, and interventions in health services, in addition to monitoring health service quality. Our goal is to support good decision making in order to provide patients in Norway with the best possible care. The Centre is organized under The Norwegian Directorate for Health, but is scientifically and professionally independent. The Centre has no authority to develop health policy or responsibility to implement policies.

We would like to thank all contributers for their expertise in this project. Norwegian Knowledge Centre for the Health Services assumes final responsibility for the content of this report.

Norwegian Knowledge Centre for the Health Services Oslo, December 2007

# **Key messages**

The Norwegian Knowledge Centre for the Health Services (NOKC) was asked to perform a systematic review of effects of enhanced collaboration initiatives to improve the management of serious mental illness in primary care settings. The request came in autumn 2006 from the Norwegian Directorate for Health and Social Affairs in autumn 2006. The review was conducted by NOKC staff as well as a group of experts from the field.

We searched electronic databases: EPOC, Medline, Psych info, Cochrane Library and EMBASE. We selected 19 studies, nine systematic reviews and ten primary studies. Outcomes relating to changes in process of care and patient-related outcome of treatment were sought together with costs and cost- effectiveness data. Methodological details and outcomes were extracted and checked by two reviewers. Most primary studies were conducted in the US primary health-care system, often in Health Maintenance Organizations (HMOs) or at university clinics. We did not find any Norwegian or Nordic effect studies which satisfied our inclusion criteria. A narrative synthesis was conducted.

Multifaceted collaborative care treatment for major depression or/and anxiety disorders which combine educative and organizational initiatives improve patient outcomes and increase the quality of treatment compare to usual care. The intervention group had greater reduction in symptoms and remission rates along with better adherence to treatment. The effect size was moderate.

Following factors seem vital for the effect: integration of collaborative care initiatives at all organizational levels, coordinate and patient-focused health services, integrated specialist mental health care in primary care, clinician and patient education, active monitoring of patients with feedback to primary care physician. Collaborative care across organizational levels and professions seems to increase total costs for health services and to consume more resources. Transferability of these models of collaborative care in the Norwegian health care system has to be evaluated from case to case.

We did not identify any effect studies of collaboration initiatives between general practitioner and professions outside the health care system. There is a sparse evi-

dence for the effect of collaborative treatment care for patients with schizophrenia, psychosis or other personality and behavioral disorders.

## **Executive summary**

Collaborative care initiatives for patients with serious mental disorders treated in primary care setting. Systematic review of the evidence.

#### BACKGROUND

Changes in health system delivery for psychiatric patients with emphases on nearhome based therapy, out-patient treatment where possible, and reduction of beds for in-patients care have led to increased number of patients with serious mental disorders living in the community. These patients represent a big challenge for primary care due to their needs for specialised care, active monitoring of treatment adherence and possible side effect of medication, continuity of care and nonetheless the necessity for cooperation with other health professionals often involved in the treatment of a single patient. International studies indicate that enhancements to the process of care may improve patient's outcomes and quality of care in primary care setting. It seems that multifaceted interventions which include patient-related care processes are more likely to improve depression outcomes then singlecomponent intervention. This overview was requested by the Norwegian Directorate for Health and Social Affaires. The aim of the review is to identify relevant interventions and to critically assess documentation of the health effects of enhanced collaborative-care interventions for patients with serious mental illness who are cared for in primary care setting.

#### METHOD

We searched in: EPOC, Medline; EMBASE ; Cochrane Library; PsychInfo. Additionally we conducted hand searches in the reference list of the retrieved papers. Criteria for study selection were deliberate broad: patients with chronic and serious mental illness (DSM IV or ICD-10 criteria) cared for in primary care setting; interventions included collaboration between primary care physician and specialist health care or other professionals at community-based care. Principal outcomes were changes in clinical symptoms, changes in process of care and cost-effectiveness and costs. Study design: systematic review, randomized controlled trials, before and after controlled studies and interrupted case-series, cost-effectiveness studies. Studies were excluded where results were available only as abstracts or without clearly stated method or of low methodological quality. In cases where results from a single study were reported in several publications we tried to select the most updated study. For systematic reviews with great overlap of included studies we've always tried to select the most recent review or the one with best quality.

Two researchers independently extracted data and assessed study quality. We rated all studies in good, moderate or low quality according to predefined criteria. Low quality studies were excluded from the review. Following outcome measures were assessed: severity of depression symptoms, clinical response defined as 50 % improvement from baseline, remission. Process of care outcomes were: medication adherence, medication in accordance to clinical guidelines, satisfaction with care, costeffectiveness and cost.

We conducted qualitative synthesis of results. We did not performed meta-analysis of results due to heterogeneity between the included studies in terms of population, duration, intensity and comprehensiveness of the intervention and timing of outcome assessments. Economic evaluations were only descriptively summarized. We described the identified interventions in text and extracted data from each included study to evidence tables.

#### RESULTS

Our electronic search identified 1136 published articles. After further assessment, 116 studies were obtained in full text. Of these, 19 studies, nine systematic reviews and ten primary studies met the final inclusion criteria. The main reason for exclusion were: study design, not conducted in primary care setting, unclear role of family physician, less then 50 % of the study sample were diagnosed with serious mental illness.

Majority of study patients were 18-60 yrs old, diagnosed with serious mental illness, mainly depression or anxiety and depression. Many studies included also patients with moderate disease. Most studies excluded patients with drugs or alcohol abuse, serious cognitive impairment, or dementia. All studies offered more then three components of collaborative care: active and planned monitoring contact with the intervention's patients, feedback to physician, treatment guidelines, on-site specialist care, educational interventions for doctors and patients, coordination of care. Usual care always included basic pharmacological treatment, but was not standardized otherwise. Follow-up periods ranged from four months to five years.

Results were reported as cumulative effect of multifaceted interventions compare to usual care. We do not know which components of these multifaceted interventions are most effective. Collaborative care initiatives in general improved patient-related outcomes for patients with moderate to serious depression and anxiety. More intervention patients experienced symptom reduction: (SMD = -0.40; 95 % CI); full re-

mission (RR= 1.39, 95 % CI), or general improvement in health status: (RR =0.75; 95 % CI). The difference was significant until two years of follow up. Documentation was insufficient for a direct comparison of different models of collaborative care.

Health economic analysis based on US studies showed en increase in resource use and in total health costs in intervention group compare to usual care. The increase use of drugs and primary health care services was often offset by less use of specialist health care nonetheless the total costs for health services increased. The costs were within the range of other widely accepted public health improvements, but no clear conclusions about cost-effectiveness can be made. The analyses were performed from health care perspective and not from a societal perspective which might be more relevant in the Norwegian health care system.

The documentation of effect of collaborative interventions is based on results from research projects performed in countries with health systems which differ from the Norwegian health system. Most primary studies were conducted in the US primary health-care system, often in Health Maintenance Organizations (HMOs) or at university clinics. Transferability of the results from international studies to Norwegian setting will be affected by the differences. We did not find any relevant Norwegian effect studies of enhancement of collaborative interventions.

## CONCLUSION

- Multifaceted collaborative care treatment for major depression or/and anxiety disorders which combine educative and organizational initiatives improve patient outcomes and increase the quality of treatment compare to usual care.
- Following factors seem vital for the effect: integration of collaborative care initiatives at all organizational levels, coordinate and patient-focused health services, integrated specialist mental health care in primary care, clinician and patient education, active monitoring of patients with feedback to primary care physician.
- Collaborative care across organizational levels and professions seems to increase total costs for health services and to consume more resources.
- We did not identify any effect studies of collaboration initiatives between family physician and professions outside health care system.
- There is a lack of evidence for the effect of collaborative treatment care for patients with schizophrenia, psychosis or other personality and behavioral disorders.
- Future research should focus on long-term results of collaborative initiatives and transferability of foreign models of collaborative care into Norwegian setting.

### Norwegian Knowledge Centre for the Health Services

Norwegian Knowledge Centre for the Health Services summarizes and disseminates evidence concerning the effect of treatments, methods, and interventions in health services, in addition to monitoring health service quality. Our goal is to support good decision making in order to provide patients in Norway with the best possible care. The Centre is organized under The Directorate for Health and Social Affairs, but is scientifically and professionally independent. The Centre has no authority to develop health policy or responsibility to implement policies.

Norwegian Knowledge Centre for the Health Services PB 7004 St. Olavs plass N-0130 Oslo, Norway Telephone: +47 23 25 50 00 E-mail: post@kunnskapssenteret.no Full report (pdf): www.kunnskapssenteret.no