

# Effects of an intervention and an organisational implementation for identification and treatment of common mental disorders in primary healthcare

Akademisk avhandling

Som för avläggande av Medicine doktorsexamen vid Sahlgrenska akademien, Göteborgs universitet kommer att offentligen försvaras i hörsal Arvid Carlsson, Medicinargatan 3, fredagen den 18 juni, klockan 13.00.

av Christine Sandheimer

Fakultetsopponent:

Siw Carlford, biträdande professor

Institutionen för hälsa, medicin och vård, Linköpings universitet

## Avhandlingen baseras på följande delarbeten

- I. Sandheimer C., Hedenrud T., Hensing G., Holmgren K.  
Effects of a work-stress intervention on healthcare use and treatment compared to treatment as usual. A randomised controlled trial in Swedish Primary Health Care  
*BMC Family Practice* 2020; 21: 133.
- II. Sandheimer C., Björkelund C., Hensing G., Mehlig K., Hedenrud T.  
Implementation of a care manager organisation and its association with antidepressant medication patterns – a register-based study of primary care centres in Sweden  
*BMJ Open* 2021 Mar 5;11(3):e044959.
- III. Sandheimer C., Björkelund C., Hensing G., Hedenrud T.  
Implementation of a care manager organisation and its association with healthcare contacts and psychotherapy – a register-based study of real-life outcomes at primary healthcare centres in Sweden  
(Submitted)

# Effects of an intervention and an organisational implementation for identification and treatment of common mental disorders in primary healthcare

Christine Sandheimer

School of Public Health and Community Medicine, Institute of Medicine, Sahlgrenska akademien, Göteborgs universitet, Sverige, 2021.

## Abstract

**Aim:** This thesis aimed to evaluate the effects of one intervention and one organisational implementation for identification and treatment of common mental disorders (CMDs) in the primary healthcare in Region Västra Götaland, in south-west of Sweden. Paper I aimed to evaluate the use of a work stress questionnaire in combination with feedback from the physician and its effects on further healthcare use and treatment. Paper II aimed at evaluating the impact of the care manager organisation on adequate antidepressant medication users. Paper III aimed at evaluating the impact of the care manager organisation on healthcare contacts and extent of psychotherapy among both female and male patients with CMD. All three papers compared the enhanced care efforts with usual care and treatment. Moreover, the three papers also evaluated whether the care efforts led to care more in accordance with clinical treatment guidelines.

**Methods:** Paper I (271 patients) was a randomised controlled trial (RCT) with register-based follow-up of healthcare measures from the healthcare database VEGA. Paper II (190 primary healthcare centres 'PHCCs') and paper III (215 PHCCs) were register-based studies with data on PHCC level obtained from VEGA and from the regional pharmaceutical database Digitalis (only paper II).

**Results:** Paper I showed that intervention participants with high perceived stress had more visits to psychotherapists (20% vs 7%,  $p < 0.05$ ), received more CBT (16% vs 10%), and had more collaborative care (23% vs 11 %,  $p < 0.05$ ), compared to controls with high stress. Paper II showed that PHCCs with a care manager organisation had a lower proportion of inadequate medication users compared to PHCCs without the organisation during follow-up (-6%,  $p < 0.02$ ). PHCC that shifted to a care manager organisation from mid-2016 had a significantly lower proportion of inadequate medication users over time ( $p < 0.01$ ). Paper III showed that PHCCs with a care manager organisation had more visits to a nurse ( $p < 0.001$ ) and fewer patients with psychotherapy of short duration compared to PHCCs without the organisation. PHCCs with usual care had a significantly lower proportion of visits to psychotherapists compared to the PHCCs with the care manager organisation.

**Conclusions:** All three papers showed that enhanced care efforts in primary healthcare for patients with CMD had positive effects on the received care including healthcare contacts, antidepressant medication, and psychological treatment. Furthermore, these efforts made the received treatment more in line with established treatment guidelines.

**Keywords:** antidepressants, CBT, collaborative care, health services research, intervention, implementation, mental disorders, mental ill-health, primary care, psychological treatment