
CONFERENCE ABSTRACT

World's largest case management RCT

16th International Conference on Integrated Care, Barcelona 23-25 May 2016

Joachim Werr¹, Gunnar Öhlén²

1: Health Navigator, Sweden;

2: Karolinska University Hospital, Sweden

We have developed and implemented a large scale, centralized case management program to prevent healthcare consumption for frequent visitors to Emergency Departments. In a randomized trial of more than 12 000 patients we demonstrate sustained reductions of up to 20-40% in health care utilization. This session will focus on results and learnings gathered during a 5-year multicenter trial, growing from a small pilot to an international concept.

The results have been published in several articles, e.g. A case management intervention targeted to reduce health care consumption for frequent emergency department visitors: results from an adaptive randomized trial in *European Journal of Emergency Medicine* (2015/05/06).

The reason for initiating this program was the insight that a small group of frequent visitors to Emergency Departments accounts for a disproportionately large fraction of the overall healthcare costs. In response, several programs for integrated care aimed at reducing healthcare consumption in this group have been tested, with varying results. However, we can now present evidence with our program.

The aim of the program is to improve patients' quality of life while reducing unplanned care admissions. In addition, the program further improves providers' and payers' understanding of the factors driving unplanned care admissions and what can be done to address them. The model is based on existing health care structures to enable long term sustainability.

The program consists of patient identification through a predictive model finding patients with high, and avoidable, risk for care. After inclusion, the patient meets a specially trained nurse, called a health coach, in an assessment interview, followed by telephone contact. The intervention is focused on strengthening the patients' ability to self-manage and navigate in the health care system. The frequency of the contact between the health coach and the patient depends on the risk of the patient needing care. After 6-9 months, the contact is ended, and the health coach continues with new patients.

The target group is patients in five counties in Sweden, one in Denmark and one in United Kingdom. The program has been commissioned by health care regions, managed by Health Navigator and evaluated and published in collaboration with the Karolinska Institute in Stockholm, Sweden.

The results show statistically significant reductions in care consumption of up to 20-40% vs randomized controls. Meanwhile, the self-assessed quality of life for the participating patients has increased. In addition, there has been no significant change in mortality.

The results have been published in several articles, e.g. A case management intervention targeted to reduce health care consumption for frequent emergency department visitors: results from an adaptive randomized trial in *European Journal of Emergency Medicine* (2015/05/06).

In developing this from a small pilot at one hospital in one county council to implementation in several countries, we have learnt that case management programs like this are sensitive. If not implemented correctly, it could even result in an increase of health consumption. The collaboration between identification, intervention and evaluation is key to succeed, also on a large scale.

Key success elements of the program concern patient identification, intervention and continuous evaluation. To begin with, identification should be early and proactive, since coaching has the biggest impact at the early stage of disease progression. Also, a combination of tools and clinical judgement is necessary for a successful identification, with predictive models helping to identify patients at risk of high healthcare utilization but clinical judgement is needed to identify patients likely to respond favorably to health coaching.

When it comes to the intervention, rapid enrollment within days of identification minimizes deterioration of risk. A holistic and personalized assessment for each patient further increases the probability to succeed. The nurses providing the intervention need clear methods and standardized support tools in their daily work. The focus should not be medical, but rather on the activation of the patient itself through motivational/ educational coaching.

Finally, continuous evaluation is needed on several levels, starting with the patient. The results for each patient provide valuable input for future coaching needs. Also, each nurse needs feedback on frequency of patient contacts and focus on intervention. Finally, aggregated results analysis provides continuous learning to constantly develop the predictive model and intervention content.

To conclude, our study provides evidence that a carefully designed telephone-based intervention with accurate and systematic patient selection and appropriate staff training in a centralized setup can lead to sustainable, significant decreases in healthcare consumption and costs. Transferring the learnings to other target groups, geographies or health care systems are possible, but require careful assessment along the way.

Keywords: casemanagement; rct; coaching; patient activation; international
