Person-centered and integrated care for patients with complex needs – a Norwegian case on how to move from concept to new evidence based health care services

Introduction:

Demographic change is believed to result in an increase in the number of older, frail, and complex patients. This will place a significant burden on healthcare systems, necessitating a shift towards more preventive, user-driven, and coherent care approaches. Recognizing the challenges faced by frail elderly individuals with complex long-term needs, particularly those dealing with multiple care providers and susceptible to care fragmentation, we aimed to design a novel healthcare intervention. This patient group constitutes a substantial portion of the 5-10% top spenders, contributing to two-thirds of high-level healthcare spending both in Norway and internationally.

In collaboration with five municipalities, general practitioners and our hospital, Akershus University Hospital, we developed the Integrated Health Care (IHC) program. The IHC-program focuses on the use of individualized care plans, emphasizing extensive collaboration to provide optimal service and quality treatment. The aim is to provide the patient with the best possible service and quality treatment, regardless of which involved provider has to perform the activities. As a part of the model we developed a set of tools to identify new IHC-patients, control process flows and measure results of the intervention.

Methods:

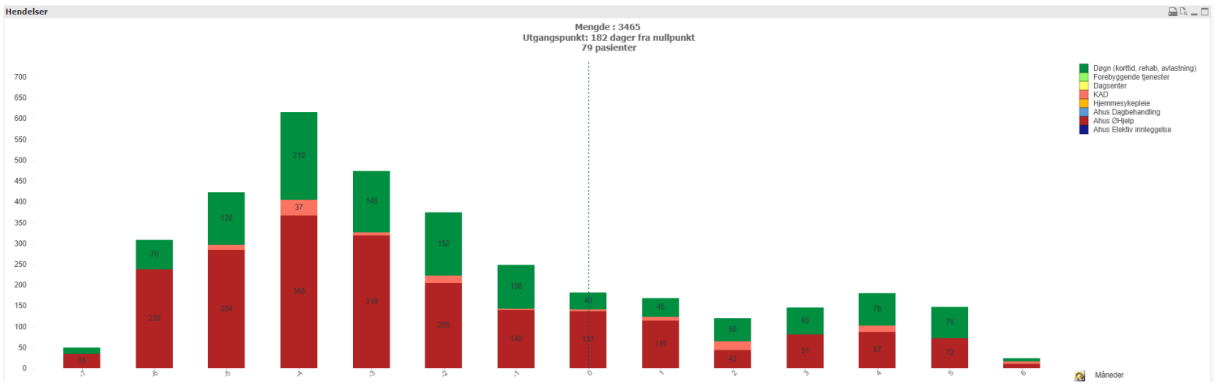
In patient-centred and integrated care models, it is necessary to combine data from different sources to achieve a complete view of the intervention. The IHC-team developed several new applications because there was no existing integration between the hospital, general practitioners and the municipalities' data systems that could be utilized to accomplish our common objectives. We created:

- an application to identify new patients we wanted to include in the IHC program, using daily updated data from the hospital's EPJ.
- an application to alert involved care providers when certain activities occurred, enhancing collaboration efficiency across providers.
- an application to follow each patient's clinical pathway, allowing us to plan and assess the clinical process .
- an application to monitor results and track each patient's progress based on data from both the hospital, general practitioners and municipalities, allowing us to assess the effectiveness of the IHC program.

Results:

We conducted an analysis of the use of healthcare services for 79 IHC-patients six months before and after the inclusion. We observed a significant decrease in acute hospital admissions, use of municipal emergency stays and institutional care stays. Additionally, the total cost for these patients was lower

during the same period after they entered the IHC program. These findings indicate that this approach not only reduces costs but also improves the quality of patient treatment.



Discussion:

Shifting towards patient-centred and integrated care models, opposed to isolated care provided by individual providers, appears to reduce total costs and improve the quality of treatment. However, due to poor integration between the data systems of different providers and GDPR-regulations, accomplishing this on a larger scale is challenging. Overcoming the hurdles related to sharing data among all involved parties remains difficult, and we are now working with the Norwegian health directorate and regional health authorities to make this possible.