40,000 single trips between Bornholm and Copenhagen

- outpatient teleclinics save patients from travelling



Bornholm's Hospital has set up two outpatient teleclinics to save patients from having to travel to Copenhagen for specialist appointments at Rigshospitalet and other hospitals in the Capital Region. Every year, patients take around 40,000 single trips between Bornholm and the capital city, often for just a brief medical consultation or check-up.

Digital Island makes life easier for patients

The outpatient teleclinics, supported by VOPD*, are part of a broader digitalisation effort at Bornholm Hospital, called Digital Island. Two video consultation rooms have been set up, where patients can meet

with specialists online, accompanied by a local nurse or assistant doctor to ensure the quality of the consultation. The overall idea is simply to make it easier for patients in Bornholm to get in touch with the healthcare and hospital system.

"The feedback from our patients has been excellent, and all the clinical personnel's initial concerns and scepticism have vanished." says Alex Kjøller, Chief of Implementation at Bornholm's Hospital. "For instance, there were doubts about whether this would be a viable option for vulnerable cancer patients. The concern was that you might lose some of the intimacy of the consultation and the personal relation between patient and physician. That has not been the case, from our experience, and there's no doubt that these patients benefit greatly from not having to travel."

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There are, of course, limitations to which types of consultations and treatment patients can access through telemedicine. All video consultations are carried out based on a clinical assessment, and only when remote delivery provides an extra benefit to the patient. This new digital option has been tested within different medical specialities during the pilot phase, and all the technical details are now in place.

"Apart from setting up the teleclinics at Bornholm Hospital, they also had to be integrated into the EPIC Health Platform, the electronic health record system used at all hospitals in the Capital Region, "says Lisbeth Kjellberg, Management Consultant at LiTh Consulting. "The integration took some time, but now, speciality doctors at the hospitals in Copenhagen can schedule video consultations directly through the platform."

Excellent alternative for many patients

According to Kjøller, the pilot has shown that the teleclinics are an excellent alternative for many types of patients, including chronic headache patients, heart patients, cancer patients and people receiving treatment for sleep apnoea. Bornholm Hospital is currently in dialogue with Rigshospitalet, Herlev Hospital and Steno Diabetes Centre about expanding the collaboration to include seven to eight additional medical specialities.

"One particularly promising area is the treatment of children and adolescents," Kjøller says. The benefits here are obvious, especially for families with children who have to travel to Copenhagen for regular check-ups, perhaps once a month or even once a week. "Our data indicates that we could deliver a significant share of their treatment digitally."

According to Lisbeth Kjellberg, the task is now to increase awareness of this new option in hospitals in the Capital Region. She explains that when a patient is referred to a specialist in Copenhagen, that person is no longer registered as a patient at Bornholm's Hospital.

"This means that it's up to the doctor in Copenhagen to refer patients to the teleclinics in Bornholm. Therefore, we must be able to present detailed calculations of the costs and more precise estimates of the benefits for the patients. Everyone can see

Patient journeys – Bornholm's Hospital

- The distance between Bornholm and Copenhagen is approximately 150 kilometres
- A single trip by train or car typically takes three-four hours
- Non-emergency patient transport takes between three and six hours
- The flying time is 40 minutes

Due to Covid-19, there were considerably fewer patient journeys in 2020 than in an average year. The number of single trips was 33,500 compared to around 42,500 in 2019. Fifteen thousand of the journeys were made by plane, or approximately 45 per cent, 4,000 by bus, and 3,500 by car. In addition, 11,000 non-emergency patient transports were carried out, 500 of which were with patients required to lie down during the journey.

The average cost of a single trip between Bornholm and Copenhagen, excluding patient transports, was around DKK 900 by plane and DKK 300 by car or public transport.

the potential, but despite that, getting the other hospitals on board has not been so straightforward."

Better data to illustrate patient benefits

A crucial first step in that direction was to examine the patients' 40,000 annual single trips between Bornholm and Copenhagen. With the help of a civil engineer, the Digital Island project management has compiled detailed data regarding the purpose of each trip.

"Is the patient travelling for a check-up, blood sample or diagnostic imaging, for instance, or is the purpose to get medication?" says Kjøller. "This data allows us to present a much stronger case, focusing specifically on the benefits for the patients in each speciality."

The data has already proven valuable in encouraging further use of the outpatient teleclinics. As an example, Kjøller explains that while the sleep apnoea unit at Rigshospitalet knew precisely how

many patients they had in Bornholm, there was no complete overview of the treatment they received.

"This is the first time we've been able to visualise the exact nature of their visit," he says. Based on our data set, we could conclude that many more of the patients could receive their follow-up treatment in our outpatient teleclinics."

The cost of providing better treatment

One would think that reducing the need for travel would automatically reduce cost, but this is not always the case. The reason is that in addition to the speciality doctor in Copenhagen, all consultations in the teleclinics are supervised by healthcare professionals at Bornholm Hospital.

"Overall, the healthcare personnel spends more time on each consultation, which means that the digital treatment is often more expensive for the hospitals," says Kjøller. "However, there are clear economic benefits for the patients as well as for society as a whole. It's more a matter of convincing people of the value of providing better access and higher quality healthcare. That's the case that we have to make toward our politicians."

The Capital Region of Denmark is funding the Digital Island project by DKK 1.5 million a year in 2020-2023 to develop digital tools for admissions and outpatient procedures. In light of the experience from Bornholm Hospital, Rigshospitalet is now planning similar initiatives in Greenland, the Faroe Islands, and other remote areas in Denmark.

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*Healthcare and care through distance spanning solutions

Healthcare and care through distance spanning solutions 2018-2021 (VOPD) is a priority project forming part of the Swedish presidency of the Nordic Council of Ministers.

VOPD 2018-2021 has over the years mapped out all existing distance spanning services within healthcare and care in the Nordics, and supported implementation by applying the practical guide *Roadmap for service innovation* and related tools. This article describes digital telehealth services implemented in Bornholm, Denmark.

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