



Best-in-class patient remote monitoring and devices clinic optimisation

Tampere Heart Hospital (Tays), a high volume device implant centre in Finland, is aiming to enrol all cardiac device patients into remote monitoring to offer the best possible care.

With the support of Boston Scientific, Tampere Heart Hospital has already established itself as a best-in-class centre in Europe. The next objective is to provide an excellent device monitoring service to patients living in a large catchment area and improve utilisation of resources.

By leveraging Boston Scientific Latitude™ Remote Monitoring system and ADVANTICS™ solutions, the hospital has been able to:

- Better focus on the patients in need of clinical attention
- Re-allocate and optimise processes and capacity
- Maintain a cost-effective patient and device monitoring service
- Retain high-level staff skills

Challenge

In 2018 the hospital implanted ~1000 pacemakers and ICDs and currently has ~3500 patients enrolled in remote monitoring.

These patients generate ~600 alert transmissions per month, each of which needs to be investigated and assessed by highly skilled clinicians. Alert volumes have been growing on average by 10% every month, from 900 alerts per year in 2015 to over 7300 in 2018.

Against the background of such a significant increase in demand, both from alerts and scheduled transmissions, the hospital asked Boston Scientific's ADVANTICS team for help to optimise the service.

About the Hospital

Tampere University Heart Hospital is a full-service cardiac hospital serving both public and private patients from across Finland and internationally. Its operations are designed around a patient's treatment pathway, and they manage 25,000 outpatient visits annually. The Heart Hospital has functioned as an independent company since 2013 and is wholly owned by Tampere University Hospital, the fastest-growing life sciences centre in Finland.

Twice the workload, same staff capacity

Decreased time spent per patient by 30 minutes

Reduced alert transmissions by 30%

Action

To reduce workload and prepare the outpatient clinic for future demand, the ADVANTICS team worked together with the clinical team to:

- Assess and optimise the clinic's organisation model and workflows across the entire patient pathway
- Analyse **follow-up activities**, which revealed that 95% of scheduled transmissions were not needed to assess the patients clinically. Follow-up management was therefore changed and now reflect best-in-class practices
- Assess individual skills and run a **tailored education programme** for two years
- Implement an **alert management dashboard** to help the clinical team identify high volume alerting patients and to direct clinical resources to them
- Implement **shared guidelines** to ensure alignment on device programming and alert management

As a continuing service, Boston Scientific supports the clinic with a native Finnish speaking trouble-shooter service to relieve workload by directly solving technical issues with patients' remote connections.

Outcomes*

- **Managed** a case load that doubled over the last two years with the same staff capacity
- **Decreased time spent per patient** from 45 min to 12 min per year allowing to focus on the most complex patient cases.
- **Freed up ward bed capacity by enabling same day implants** for most pacemaker patients by implementing fast Latitude™ programme enrolment (previously all patients would stay one additional night)
- **Optimised workflows** for current and forecasted activity, preparing the clinic capacity and staff skills for future increases in device transmission reports
- **Reduced alert transmission volumes** by 30% with Boston Scientific's tool that identifies devices that transmit a higher than average number of alerts

*Outcomes from real ADVANTICS programme from 2017 and 2018. Results from case studies are not predictive of results in other cases. Results in other cases may vary.



"Boston Scientific guided us in analysing our device clinics workflow and helped us identify how to improve our device follow-up activities. Their support was invaluable in highlighting critical areas for improvement, preparing us for future demand growth. Together we built a new model that helped reduce workload, free-up capacity and support the expansion of the service, enabling seamless, reliable and safe treatment experience for our patients."

- Dr Kari Niemelä, CEO and Chief Medical Officer

ADVANTICS™ Innovative Healthcare Solutions

Together, we have developed sustainable data driven programmes in collaboration with world renown healthcare institutions to improve quality of care and outcomes while lowering costs.



Operational
Efficiencies



Therapy
Access



Quality
Outcomes



Patient
Experience



Financial
Health

**Boston
Scientific**
Advancing science for life™

BostonScientific.eu

Copyright © 2019 by Boston Scientific Corporation or its affiliates. All rights reserved. CORP-684201 AA SEP19

Learn more at BostonScientific.eu/ADVANTICS