

INTEGRATED HEALTH SOLUTIONS<sup>SM</sup>

ASSESS  
POTENTIAL.  
IDENTIFY  
BARRIERS.  
IMPROVE  
PATIENT  
RECRUITMENT.

A case study of a cardiac centre of excellence  
in the Netherlands



## THE CHALLENGE

This hospital is considered a centre of excellence in Transcatheter Aortic Valve Replacement (TAVR) therapy in the Netherlands.

Given its status, there was high interest from both physicians and administrators to ensure that all patients in need of TAVR within its service area had access to the therapy. Because the number of annual procedures had stagnated to 40–50 annually, the hospital team was eager to understand whether the need for treatment had tapered because all patients eligible for TAVR had received the therapy, or if there were barriers affecting the proper identification and channelling of patients to the hospital.

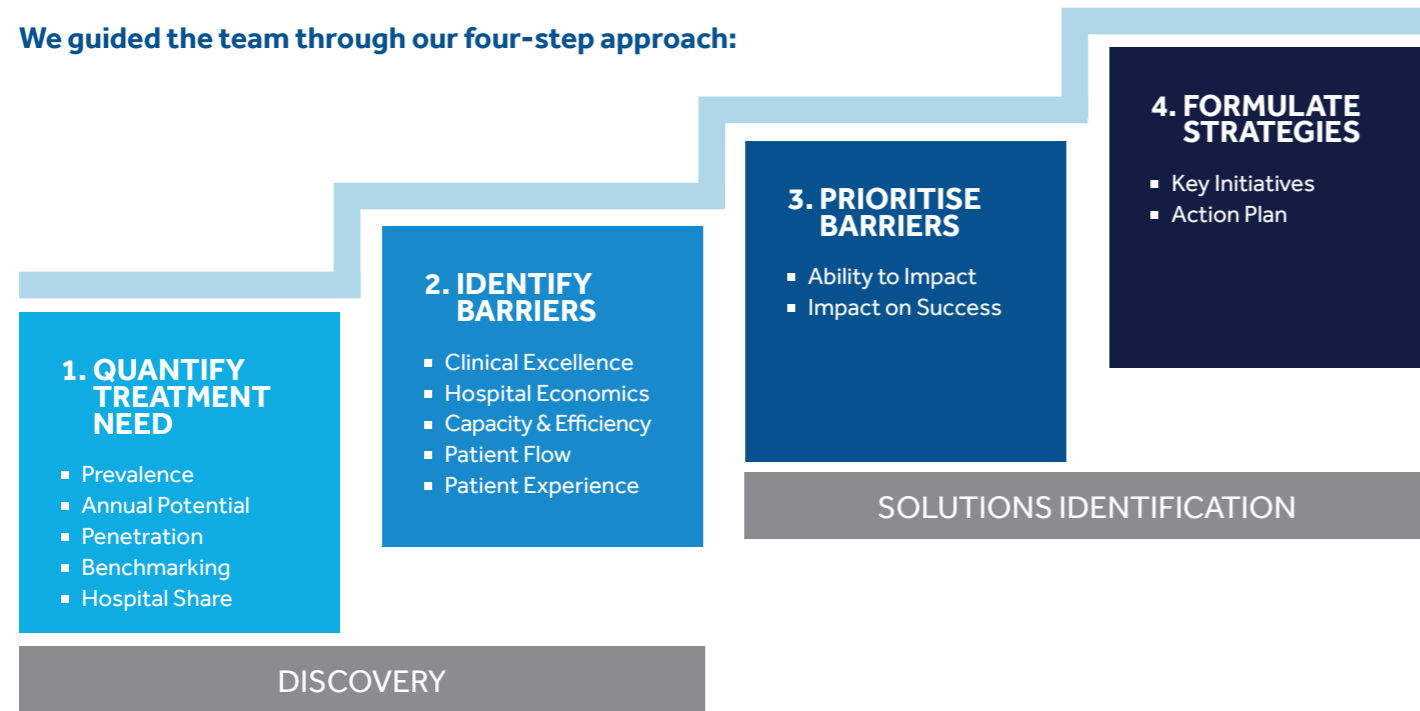
In addition, the hospital wanted to perform a benchmarking exercise to gauge how its treatment rates for TAVR fared with those of other top heart centres in the country.

# THE SOLUTION

In 2013, the hospital partnered with **Integrated Health Solutions<sup>SM</sup>** to quantify the potential unmet patient need and assess the key barriers within their service area.

We engaged the hospital team, clinicians, administrative and financial staff using Medtronic's 'Patient Access Solutions' methodology, a statistically-validated framework designed to analyse the market and surrounding competition to boost patient access. Our current database includes more than 430 assessments over 10 years.

We guided the team through our four-step approach:

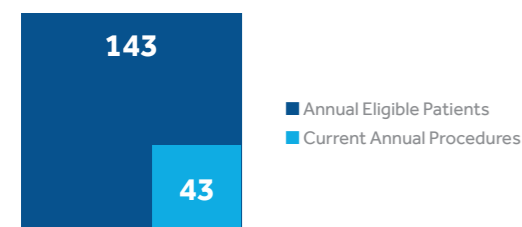


## Step 1 – Quantify Treatment Need

We rigorously analysed epidemiological research and clinical literature reviews on the prevalence and incidence of the target indications for TAVR. We deduced that there was a significant underutilisation of TAVR therapy in the hospital's service area of 2.1 million people.

The research indicated that there were 143 people who suffered from symptomatic severe aortic stenosis and were not suitable candidates for open heart surgery, making them eligible for TAVR therapy. Only 43 people were getting the treatment annually.

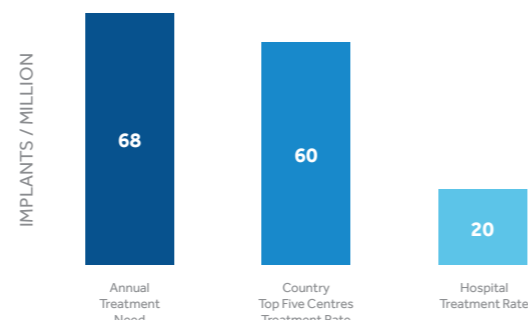
### Untapped Potential



**143 in need vs. 43 procedures annually**

A benchmarking analysis compared the annual TAVR procedure rate at the hospital per million of population in the service area with the same rates observed in the top five heart centres in the country. The annual treatment rates in other centres were three times higher. This provided further indication that not all patients who could benefit from TAVR were getting access to the therapy in this hospital's service area.

### Uncovering Opportunities



## Step 2 – Identify Barriers

We engaged the hospital team in an interactive brainstorming session that aligned all stakeholders on the barriers limiting patient access. Barriers were examined across five areas:

- Clinical Excellence
- Hospital Economics
- Capacity & Efficiency
- Patient Flow
- Patient Experience


This process helped identify and get consensus on existing areas of strength as well as barriers to eligible patient recruitment.

## Step 3 – Prioritise Barriers


The hospital team worked to select the ten most critical barriers, which were each vetted based on

- Relative impact on patient access
- Hospital's ability to overcome the barrier

## As a result, we prioritised two barriers



**Capacity:** insufficient CathLab capacity to accommodate the annual patient treatment need given the current mix and volumes of procedures performed



**Patient care pathways:** insufficient patient flow resulting from:

- Weak referral linkages with referrers outside the hospital
- Sub-optimal inter-departmental cooperation within the hospital

## Step 4 – Formulate Strategies

We supported the hospital team in agreeing on a clear action plan.

- To address the capacity issue, the hospital implemented CathLab process improvements and unlocked additional capacity for TAVR implantations by changing its case mix and moving less complicated procedures to a referral hospital nearby
- To address the patient care pathways issue, the hospital team established a monthly 'Heart Valve Meeting' with referrers to educate them on the appropriate indications for TAVR, the procedure itself and to offer a forum to discuss patient cases



# WHY PARTNER WITH US?

With more than 65 years of experience in the medical technology industry, combined with our global in-hospital presence and long-standing relationships with health providers and physicians, we have an in-depth understanding of your needs and challenges. Partnering with us brings you:

- **Benchmarks:** Our broad hospital footprint allows you to compare with other world-class institutions and gauge variability in patient outcomes, length of stay, workforce productivity, and asset utilisation
- **Resources:** Our access to capital resources enables you to equip your cardiac departments with the latest technology
- **Unique mix of skills:** Our 200+ experts in consulting, hospital management, biomedical engineering, clinical experience, and building and managing cardiac departments can complement your own organisation's competencies

## THE IMPACT

### The TAVR annual implant rate more than doubled within one year.

The number of patients getting access to TAVR treatment at the hospital increased from 43 to 108 (58% compound annual growth rate).

This was achieved in two steps:

- Create capacity at the hospital to accommodate more patients
- Establish a regular process for better care coordination with referrers to identify appropriate patients and channel them to the hospital

The value of our involvement was realised from enabling the hospital to objectively estimate the patient treatment untapped potential, understand the key barriers and, most importantly, align the organisation on the most efficient initiatives to accelerate recruitment.

### TAILORED SOLUTIONS BASED ON FOUR PILLARS

- 1. Turnkey set-up:** Provide affordable access to state-of-the-art technologies and infrastructure
- 2. Manage:** Manage non-clinical operations so you can focus on patient care
- 3. Optimise:** Deliver best-in-class cost efficiency and patient outcomes
- 4. Develop:** Accelerate patient recruitment and referrals, and enhance your services and reputation

### SHARED RISK AND REWARD

We aim to be the leading company to support hospitals, physicians, payers and health systems to **deliver high quality care in a cost-effective way.**

Our business model is therefore based on taking an **active role** with **long-term partnerships** that hinge on **risk and value-sharing** schemes as well as on predictable 'fee-per-procedure' models.

**In short, we have a larger stake in your success than ever before.**

### BEST POSSIBLE OUTCOMES

**Working together**, we can help you move toward **value-based healthcare** by designing tailored solutions that **optimise your outcomes** – enabling you to:

- Improve quality of care
- Enhance operational performance
- Boost financial returns

INTERESTED IN  
A DATA-DRIVEN  
APPROACH  
**TO ASSESS AND  
IMPROVE PATIENT  
ACCESS?**

WE ARE  
**HERE TO HELP**

Contact us at [integratedhealthsolutions@medtronic.com](mailto:integratedhealthsolutions@medtronic.com)

**INTEGRATED HEALTH SOLUTIONS<sup>SM</sup>**

**Medtronic**

Medtronic International Trading Sàrl.  
Route du Molliau 31  
Case postale  
CH-1131 Tolochenaz  
Tel: +41 (0)21 802 70 00  
Fax: +41 (0)21 802 79 00

[www.medtronic.eu](http://www.medtronic.eu)