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Improving healthcare decisions

SP1: Defining Value in Medical Devices: The Stakeholder Matters

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ISPOR Latin America 2019 – 12 September 2019

Defining Value in Medical Devices – "The Stakeholder" Matters

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EVOLVING PROCUREMENT LANDSCAPE FOR DEVICES

STRATEGY

VALUE

Devices

Frequent Approach

Focus is on volume and price

Procurement of medical devices with no regards for impact on total health costs or outcomes.

Value Devices

Device Optimization

Focus is on intrinsic value of devices

Procurement includes technical differentiation and performance indicators that impact health care costs and patients (e.g., MRI compatibility, battery life).

Devices + Services for Operational Improvements

Episodic Pathway

Focus is on total cost of operations

Procurement projects include operational excellence, equipment management and repair, material management, IT enablement, clinical pathways, and more. KPIs include operational efficiencies and clinical outcomes (e.g., OR and Cath Lab productivity, wait times reduction, LOS reductions, etc.).

Devices + Services for Better Health Outcomes

Chronic Pathway

Focus is on better health care outcomes

Procurement projects are designed to improve health outcomes. Key Performance indicators may include implant success rates, reduction of hospital visits and readmission rates, reduction of infection rates, reduction of inappropriate shocks, survival rates after 1 or 3 years, etc.).

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ST. ANTONIUS HOSPITAL
OPERATIONAL EXCELLENCE PROGRAM IN THE HEART CENTRE

OVERALL $1.7m
OF ECONOMIC VALUE

Value created through the optimisation of CathLab use alone is estimated at more than **$170,000 PER YEAR***

>15%
ADDITIONAL PROCEDURES**
with same staff, number of CathLabs and opening hours

GAIN OF 30 MIN / DAY / CATHLAB
Reduction in late starts by 18 minutes / day
Reduction in turnover time between patients by 15 minutes / day

WHAT HOSPITAL STAFF SAY
"Our renewed way of working allows us to help more patients, with the same resources and working hours."
"IHS helped us improve aspects of our operational processes that we had been struggling with for quite a long period."

ERASMUS MEDICAL CENTER
PLANNING & SCHEDULING OPTIMISATION IN THE THORACIC SURGERY CENTRE

+26%
in total number of surgeries

+20%
in open-heart surgeries

$800,000
OF INCREMENTAL VALUE*

REDUCED ACCESS TIME
FROM **12–14** WEEKS
TO **2–3** WEEKS

LESS VARIABILITY
in number of surgeries per month resulting in improved use of hospital resources

WITH MEMBERS OF STAFF INCREASING BY
ONLY 14 PERCENT

-20% IN LENGTH OF STAY

Improved working environment

STRONGER REFERRAL NETWORK

WHAT HOSPITAL STAFF SAY
"I like that they can take over work that keeps us from doing our daily jobs and provide us with the tools to resolve issues."

UNIVERSITY HOSPITAL OF SOUTH MANCHESTER
CATHLAB MANAGED SERVICES DEPLOYMENT AND OPERATIONAL EXCELLENCE

+25% ACTIVITY
WORTH £1,4M INCREMENTAL REVENUE PER YEAR

ABILITY TO SELF-FUND A FIFTH CATHLAB
which represents 1,200 extra patients per year

HIGH CATHLAB OPERATIONS PERFORMANCE

98% OF MATERIAL AVAILABILITY

98% OF EQUIPMENT UPTIME

HAPPIER PATIENTS - WHAT THEY SAY
"Within a couple of hours of my consultant confirming I needed a CathLab procedure I had been transferred to UHSM and I was in the lab having my angiography performed."

HIGHER STAFF MORALE - WHAT THEY SAY
"The partnership is seamless with Medtronic staff totally part of the CathLab team. We are able to replace equipment and expand the department by building a fifth Lab."
Lead cardiac radiographer

+100
PATIENTS TREATED PER MONTH

SAINT JOHN REGIONAL HOSPITAL
INCREASING OR CAPACITY AND REDUCING WAIT TIMES

SITUATION

118 days to 66 days
Median wait time for cardiac surgery

Over 17,000 patients served annually by the Saint John Regional Hospital, which is the only provider of adult tertiary cardiac care for New Brunswick and Prince Edward Island. They were challenged with:

- **Wait times** – struggled to meet CCS guidelines for max wait
- **ICU Capacity constraints** – led to OR cancellations
- **Bottlenecks** – prevented people from being discharged

What is **different with the IHS project** is we are doing a **whole program review.** It allows us to change our culture at Horizon to be continuously improving the way we care for patients."

–Melissa Stark, Process Improvement Facilitator, Horizon Health

SOLUTION

Medtronic Integrated Health Solutions
Results after the first 6 months were:

- **14%** increase in OR capacity
- **31%** reduction in 90th percentile wait times from 283 days to 195 days.
- **44%** reduction in median wait times from 118 days to 66 days.

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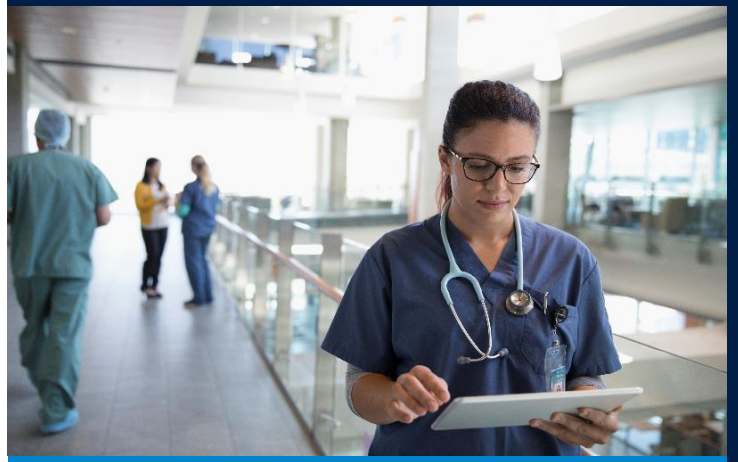
Southlake Reginal Hospital (Canada)



- Increase # of patients within target wait time to **88%**
  - Referral volume capacity increased from **75 to 124 patients**
- They are now the **first** in the province for target wait times.

INCREASED CAPACITY IN REFERRAL VOLUMES BY

40%

35% average savings; additional $1M in value adds

Hospital Sant Pau (Barcelona)

- Device transmissions resulting in hospital treatment at **1/3 of the target**
  - Infections less than **1/3 of the target**
- LV Implant success is **100%**
- Increased **patient experience**

REDUCTION IN HOSPITAL VISITS

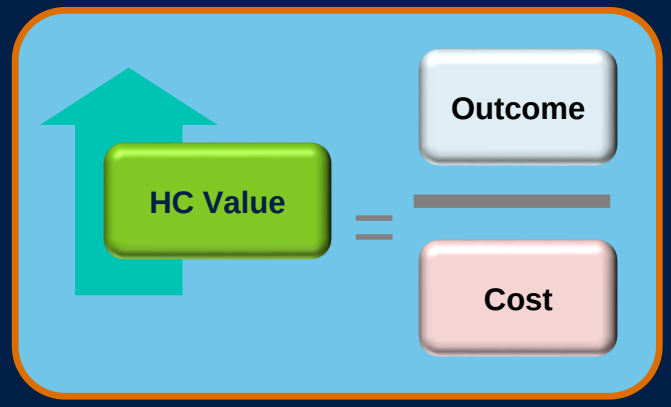
MORE THAN TWICE OF THE TARGET

Success has inspired other similar projects in Europe

VALUE-BASED PROCUREMENT

ENABLES THE IMPLEMENTATION OF VALUE-BASED HEALTH CARE

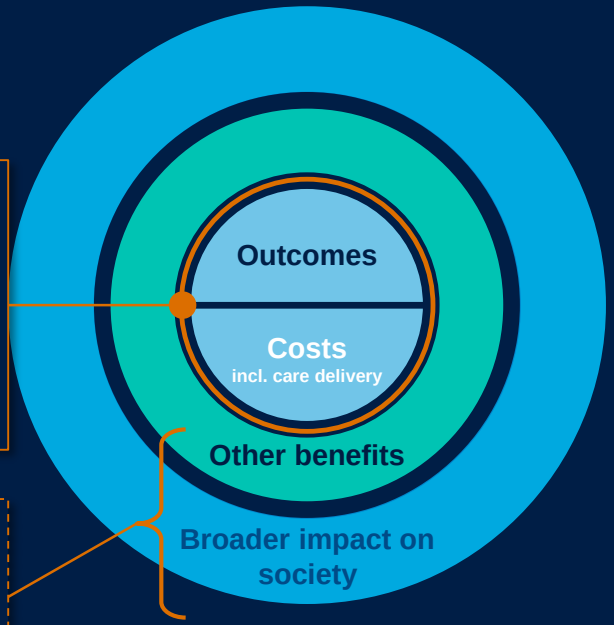
Value-Based Health Care



Value-Based Procurement

Criteria for tender evaluation to explicitly include patient outcomes as well as total costs (price, life-cycle and total operating costs)

Outcomes beyond patients also to be included as secondary considerations



In addition to costs, procurement projects should include the outcomes that matter to patients and healthcare systems. This will ensure the attainment of VBHC goals.

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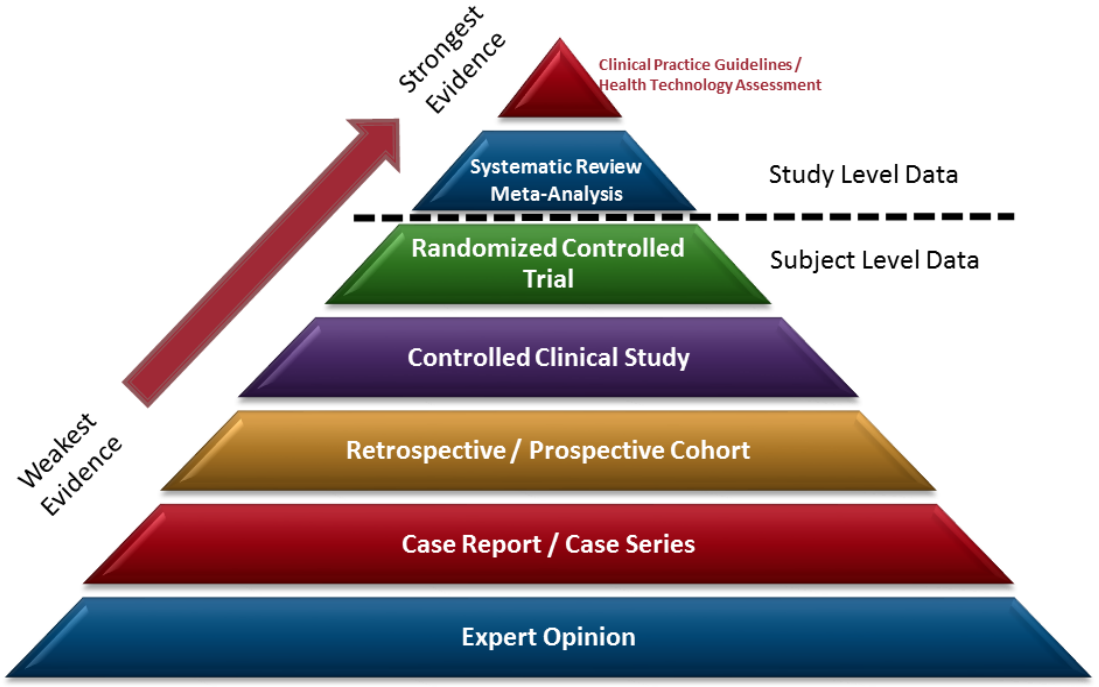

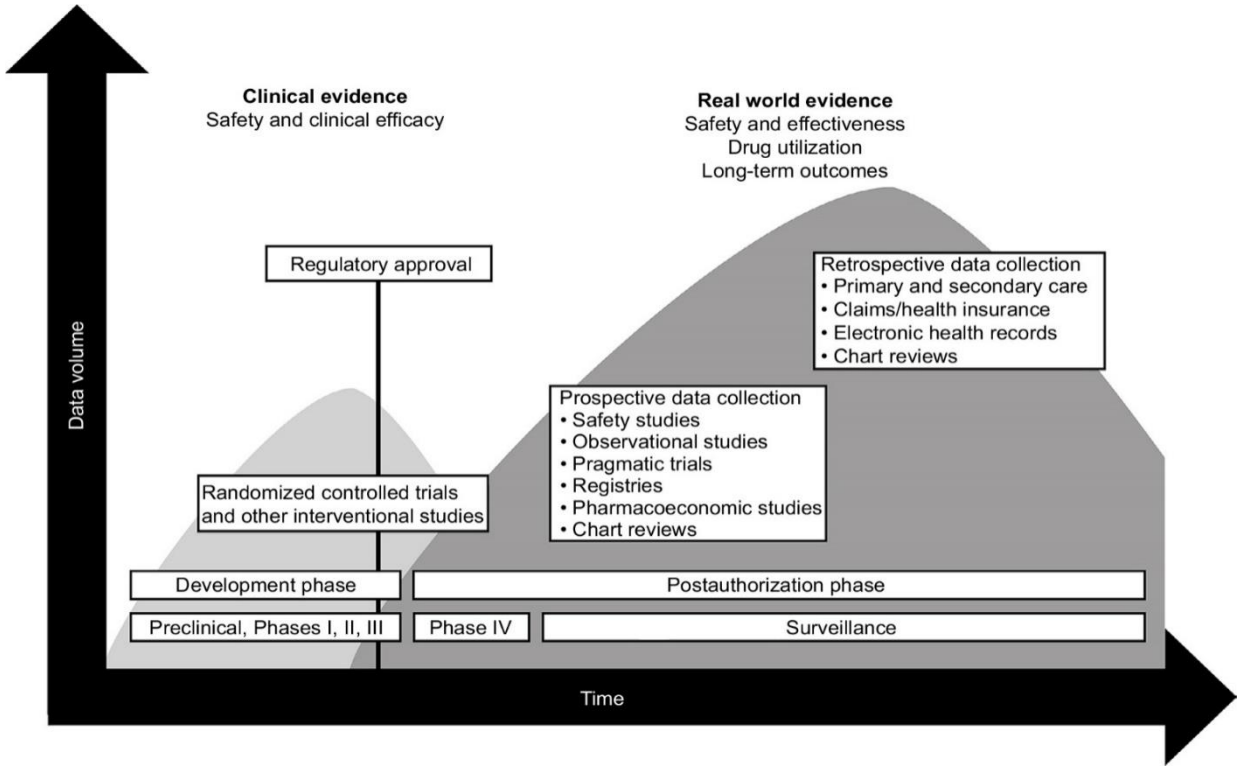

Real world data: an opportunity to supplement existing evidence for the use of long-established medicines in health care decision making