Medical Device Industry's Perspective on the Adoption of Innovation in Canada

Neil Fraser

President
Medtronic Canada

Goals of Healthcare & MEDEC

TRIPLE AIM

- Improve patient care
- Improve population health
- Reduce per capita cost

MEDEC STRATEGIC FRAMEWORK

- Demonstrate Value of Medical Tech
- Promote Strategic Procurement
- Support Canadian Innovation

+ Serve as a Thought Leader

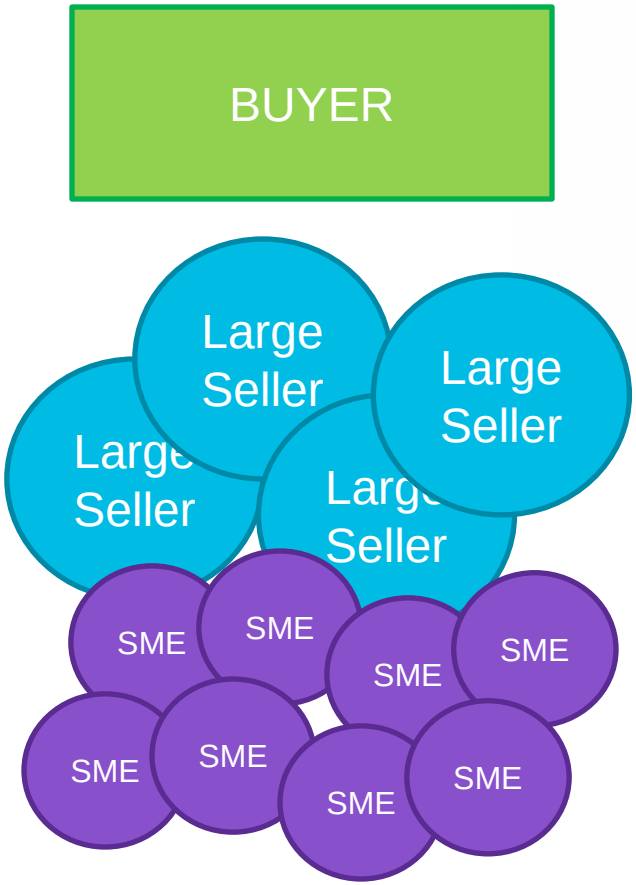
Monopsony

noun mo·nop·so·ny \mə-ˈnäp-sə-nē

Definition of MONOPSONY:

a market situation in which there is only one buyer

Monopsony

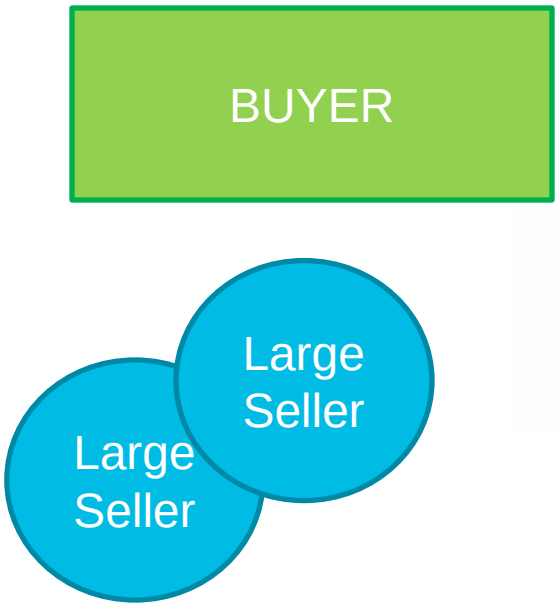


Benefits:

- Increased purchasing power
- Fiercer competition
- Streamlined procurement

- Lower prices/lower cost

Monopsony



Drawbacks:

- Drives competitors out
- SMEs unable to compete
- Creates an oligopoly
- Reduces access to innovation

- Limited supply & minimal savings

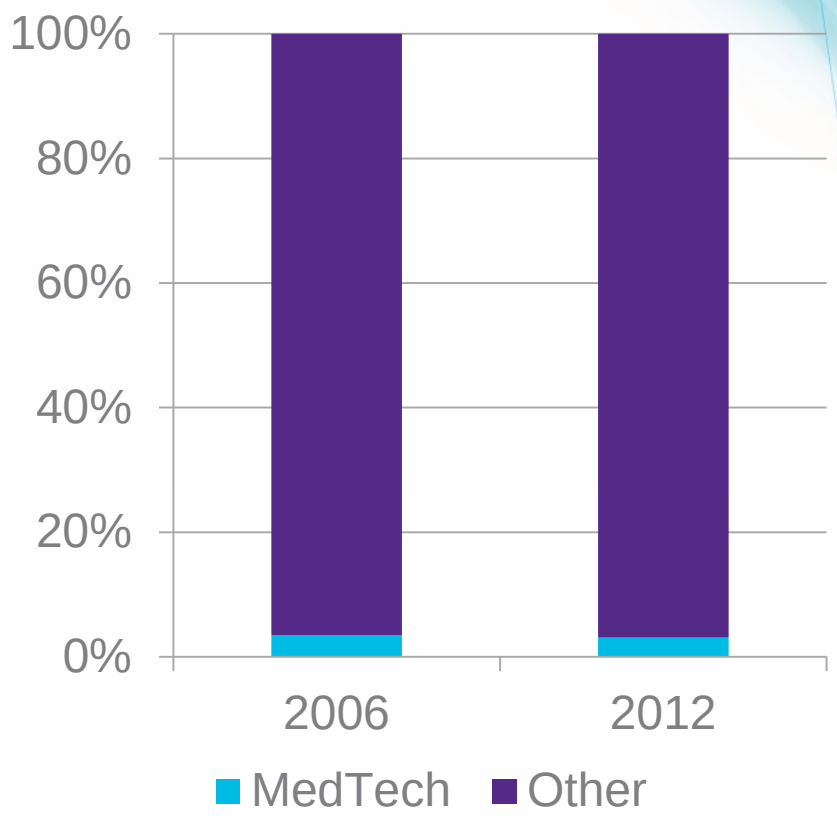
Savings Are NOT The Most Impactful

Healthcare Spend

- Spend on Healthcare[1]
  - 2006: $151B
  - 2012: $207B
- Spend on Medical Devices
  - 2006: 3.5%[2]
  - 2012: 3.1%[3]

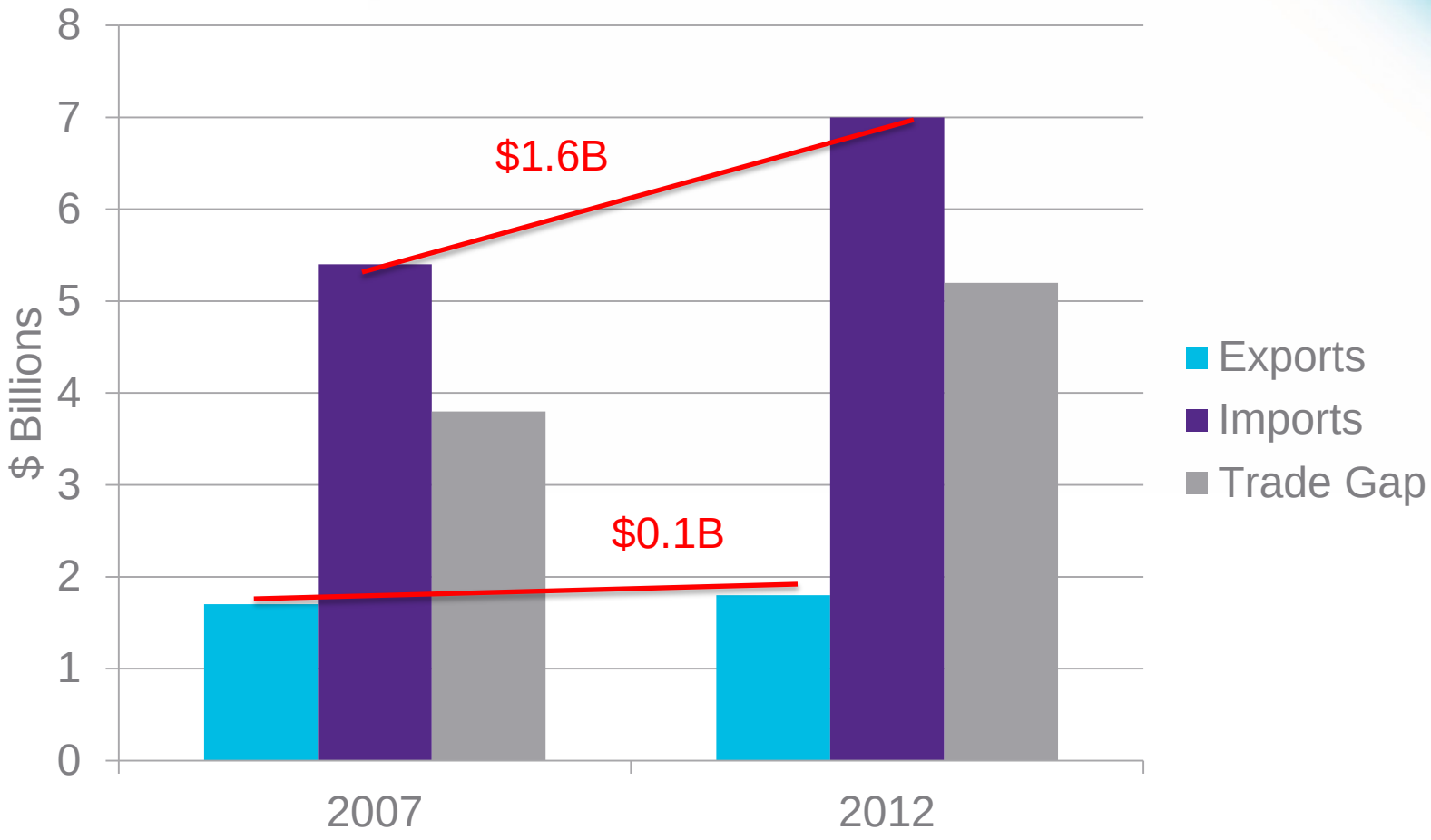
0.4% Reduction after 6 Years

Med Device as % of Total



1) CIHI - National Health Expenditure Trends, 1975 to 2012
2) CHPI - Medical devices and healthcare costs in Canada and 65 other countries, 2006 to 2011
3) Industry Canada - Medical Device Industry Profile 2013

Savings are NOT Helping Our Economy



Source: Industry Canada

Savings Are NOT Helping Patients

We Need to Break the Mould

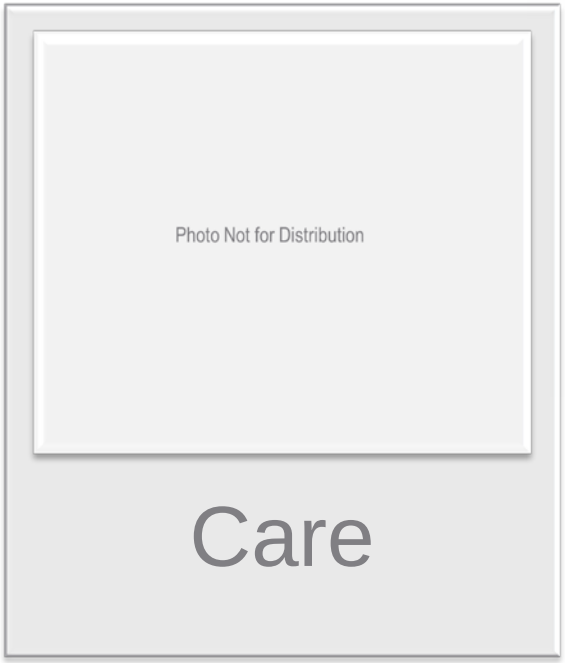
How Do We Procure Value & Outcomes?

Minimally Invasive

Faster Diagnosis

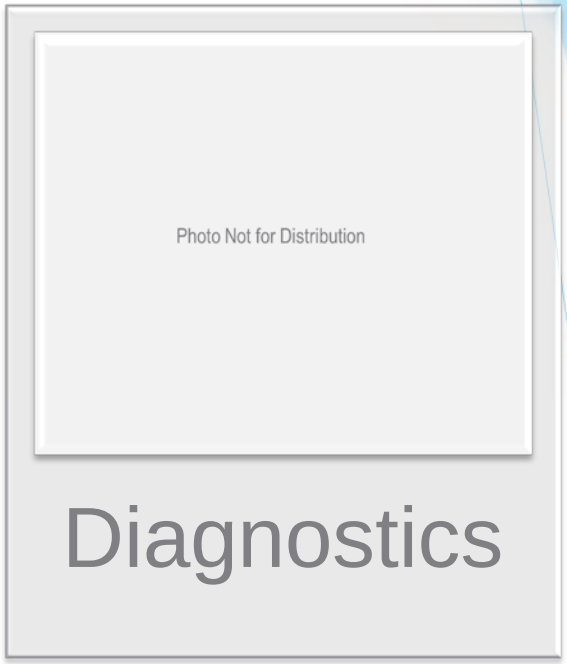
Compatible

How Do We Procure Virtual Care?



Care

Monitoring



Diagnostics

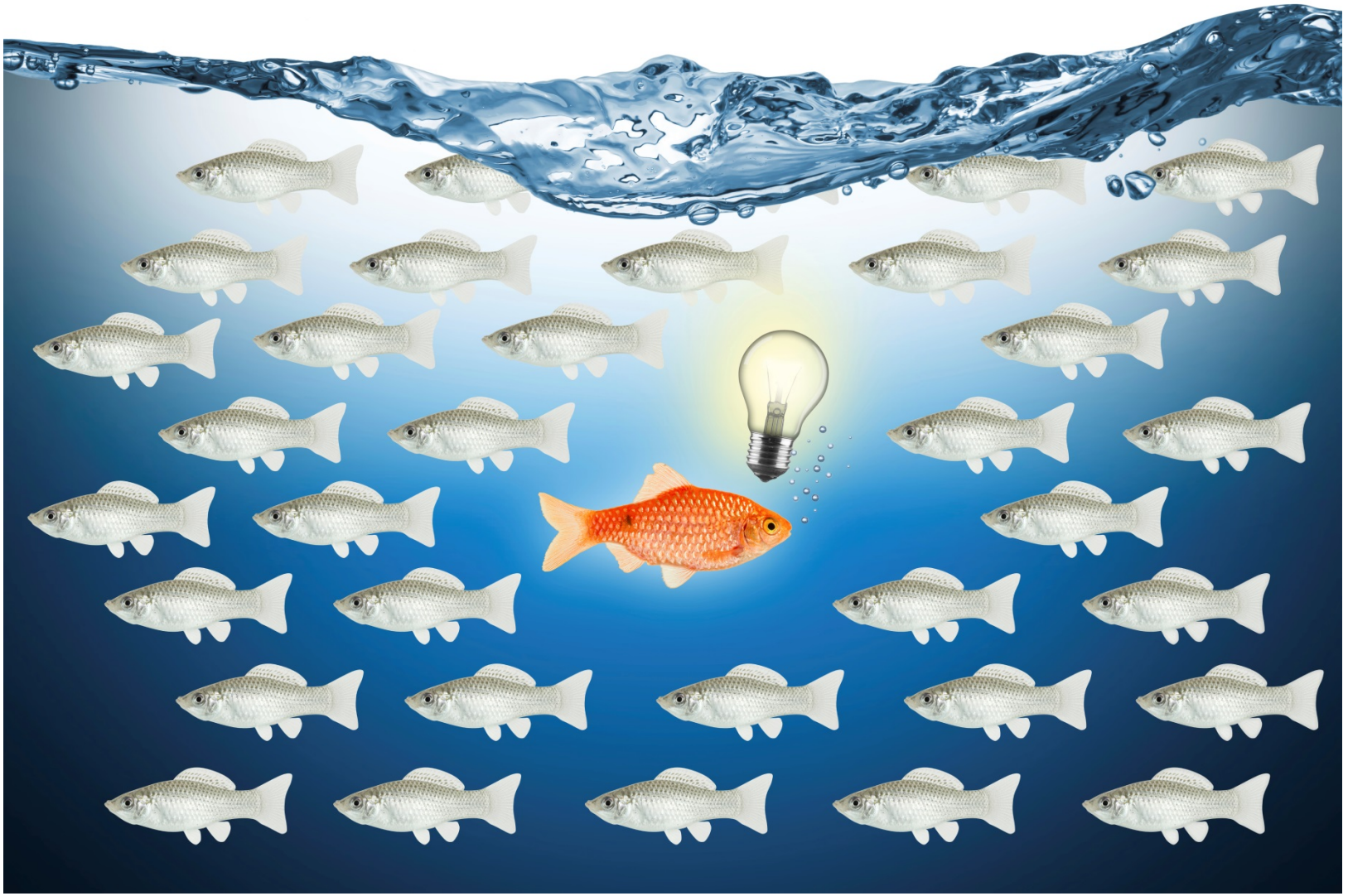
How Do We Procure Solutions?

Beyond Products

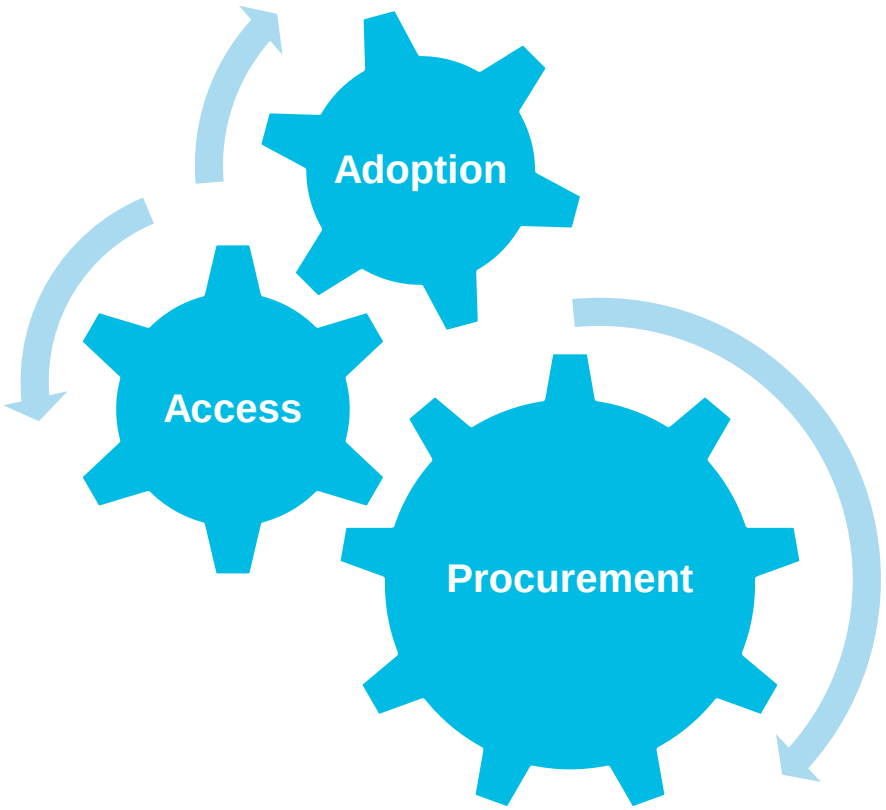
Beyond Treatments

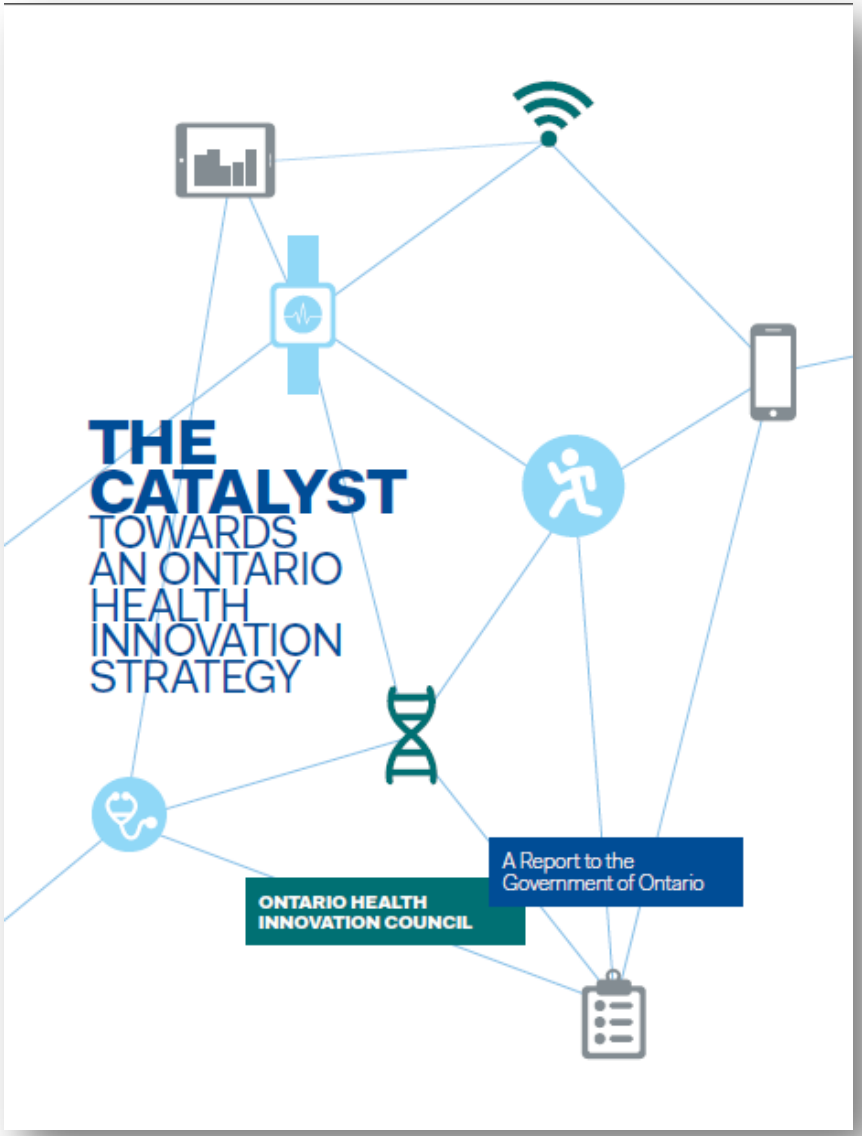
Beyond Hospitals

We are starting to move in a new direction



Ontario Health Innovation Council





Advisory Panel On Healthcare Innovation

Established in 2014 to:

1. ID 5 most promising areas of innovation with potential to reduce growth in health spending while improving quality & access.
2. Recommend 5 ways the federal government could support these areas.

Leading Change in Alberta

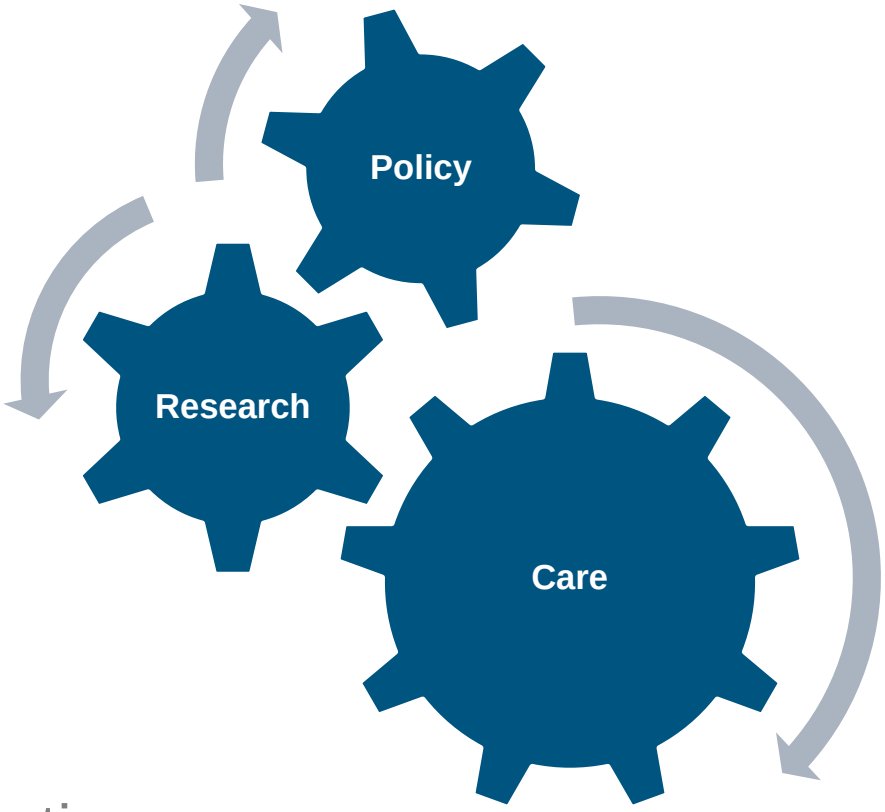
Strategic Clinical Networks

Incredible Start

- Delivers need for focus
- Clear outcomes to date
- Model for other provinces

Going Forward

- Translate momentum
- Drive decisions into practice
- Procurement at the table
- Local adoption of SME innovations



Experts in Spread & Scale

“I skate to where the puck is going to be, not where it has been.”

Photo Not for Distribution

“The value [of Alberta Innovates] lies in the potential of our assets, mobilising collaborations to capitalise on them and working collectively for long-lasting, sustainable results.”

Strategic Clinical Networks
MEDEC/SCN/AIHS
June 24, 2015

Blair O'Neill MD FRCPC
Associate Chief Medical Officer-SCNs
Alberta Health Services
Professor of Medicine
University of Alberta

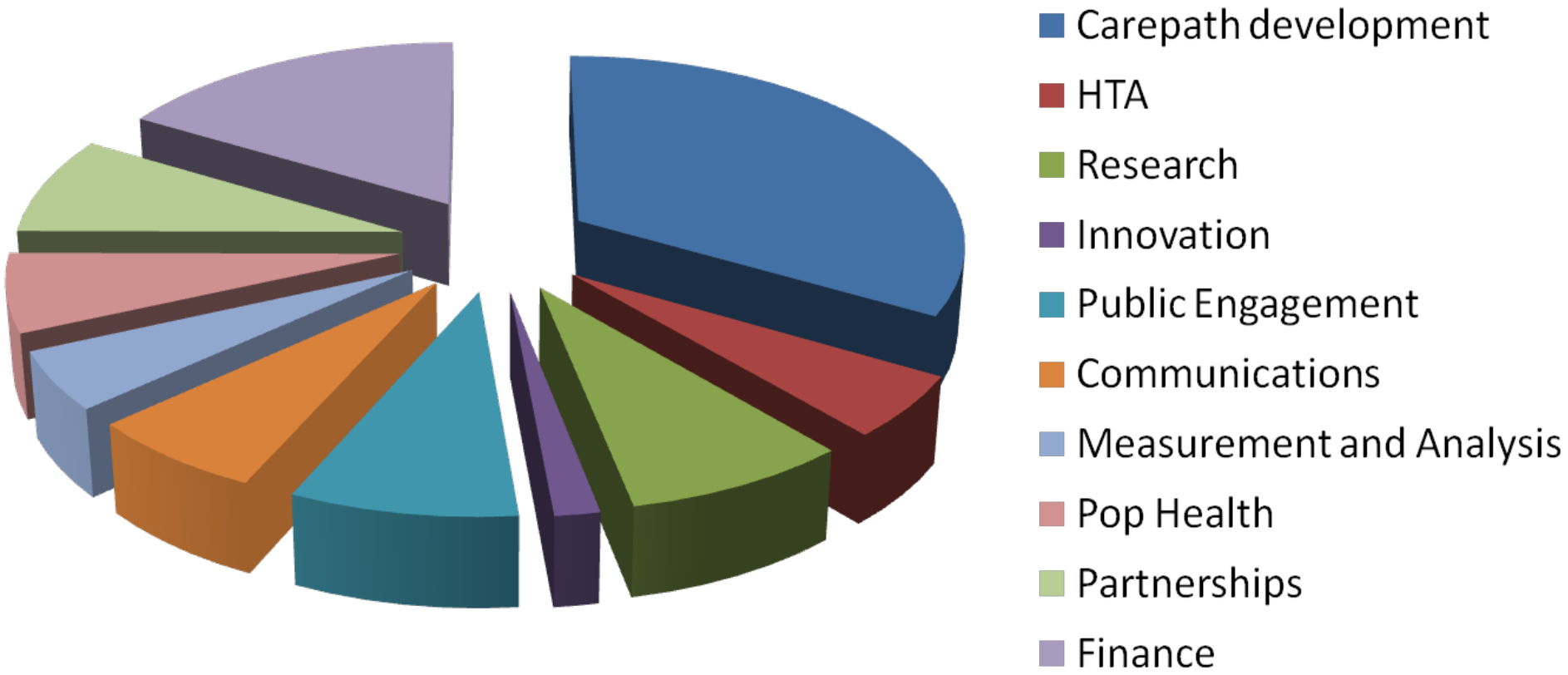
Strategic Clinical Networks

- Engines to transform the health system into a highly performing integrated patient centered ecosystem
- Engines of innovation
- Engines of Health Technology Assessment/ Reassessment
- Engines to cultivate research of relevance that will improve the health and wellness of Albertans
- Engines of quality and its measurement

CORE intended to function like a 'Business Unit'

with specific leads of roles/functions – supported by staff

SCN Core Group

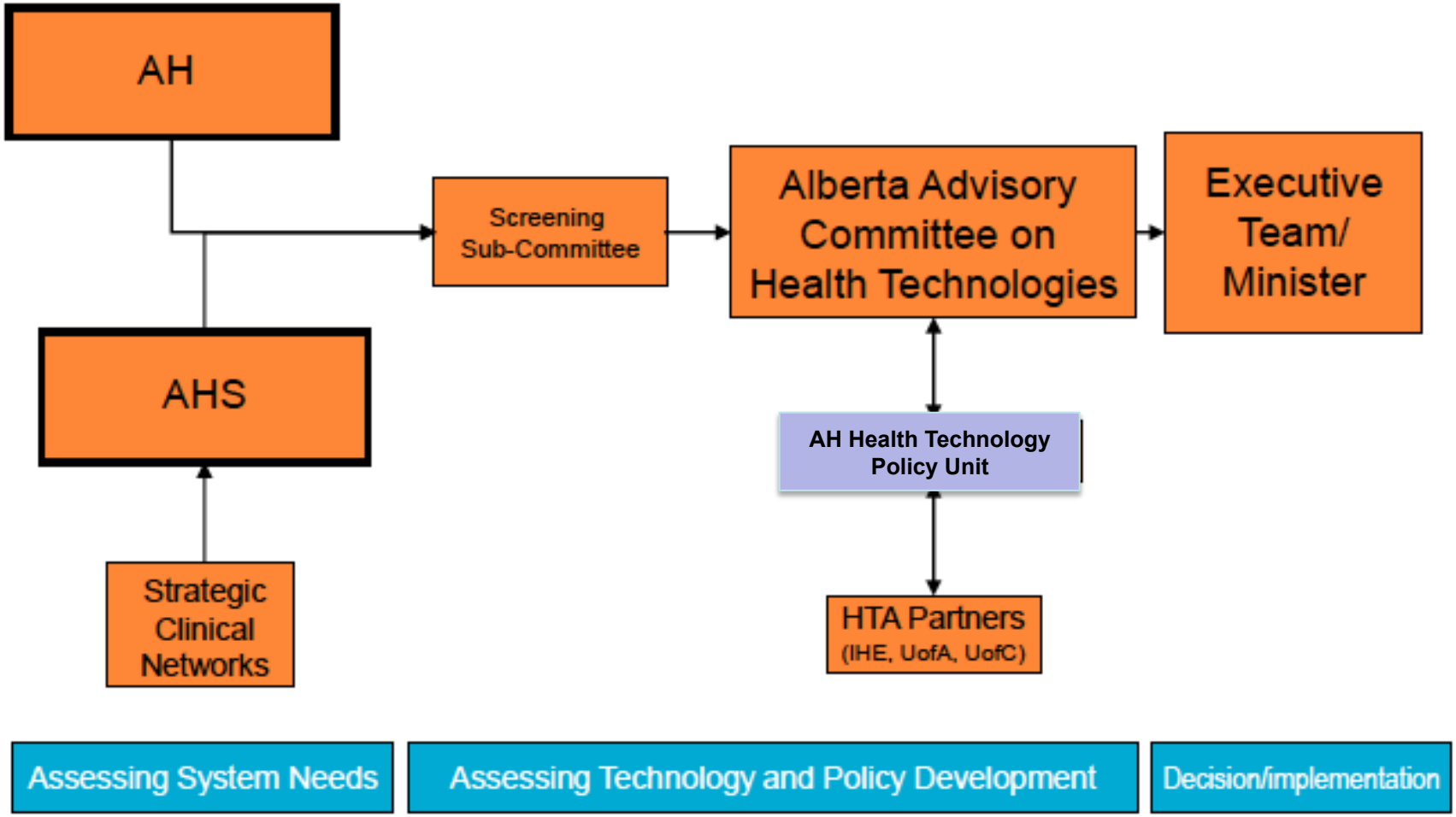


SCNs – June 2015

2012 - 2016/17 (under consideration)

1. Diabetes, Obesity and Nutrition - SCN
2. Seniors Health - SCN
3. Bone & Joint Health - SCN
4. Cardiovascular Health and Stroke - SCN
5. Cancer - SCN
6. Addiction & Mental Health - SCN
7. Emergency - SCN
8. Critical Care - SCN
9. Surgery – SCN
10. Respiratory Health – SCN
11. Maternal, Newborn, Child & Youth Health
12. Population, Aboriginal & Public Health – 3rd Q 2015
13. Primary Health Care – 3rd Q 2015
14. Kidney – 3rd Q 2015
15. Gastrointestinal
16. Neurosciences & Vision

AH Technology Decision Process



Health Technology Accelerators

SPARC

SPARC Goals, Challenges and Project Framework

SPARC Goals – three broad areas of focus that were arrived at collaboratively following examination of strategic documents from each of the partners

- **SPARC Goal:** Partnered Solutions & Entrepreneurial Community Development
- **SPARC Goal:** Integrated Primary Health Care & Appropriate Care in the Community
- **SPARC Goal:** Health System Human Capacity Building

SPARC Challenges – specific health system problem

- High Acute Care Costs
- Inequities in First Nations Populations.
- High Incidence of MS
- Quality of Aging and Burden of End-of-Life Care
- Cost & Health Status of Vulnerable Populations
- Increasing Demand, High Facility Cost & Non Patient Centric Approach to Cancer Care

SPARC Project – proposed body of work with clearly articulated goals, scope, outcomes, and timeline

Project 1 | **Project 2** | **Project 3** | **Project 4** | **Project 5**

Role of Strategic Clinical Networks

- In a zero sum game environment:
  - Evidence based Clinical Input into new technologies
  - Evidence based Reassessment of low value technologies to make room for new innovation
  - Provide framework to follow new technology to confirm/define its value in health care

Needs in Areas under SCN Spheres of Care

SCN	Need
ALL	Learning Patient Management Systems (not siloed) Smart Apps at the Front Line Point of Care eClinical Decision Support, measurement and reporting/feedback Value Added Industry Partners
Addictions/Mental Health	Better Patient /Family Support
BJ	Better PatientJourney IS linked to AB Bone & Joint Institute Better Arthroplasty devices
Cancer	Personalized Treatment
CVH&S	Percutaneous Valves Myocardial Regeneration Better bioabsorbable scaffolds Better longer lasting pacing devices Less expensive and portable brain imaging Better Endovascular Devices Robotic Stroke PhysioRx/SLP

Needs in Areas under SCN Spheres of Care

SCN	Need
Diabetes, Obesity, Nutrition	Foot Ulcer prevention and care Promote Healthier Lifestyles across social strata
Critical Care	Better predictive algorythms- for patients and ICU capacity
Seniors	Promote Healthier Lifestyles Healthier Aging At Home
Surgery	Better OR Info Systems/Synaptic Reporting Better Value / Outcomes from Robotics
Multiple SCNs	Collaborative Care across geographies (supporting better collegial critical care, obstetrical, surgical, stroke etc. care) Supply Chain Tracking

QUESTIONS

- Comments?
- Observations?

Best Practices –The Christie NHS Foundation Trust: Baxter Partnership

Mike Oliver

President Baxter Canada

Background

- The Christie NHS Foundation Trust treats more than 40,000 cancer patients a year
- For 18 years Baxter has been in partnership with The Christie for the provision of its chemotherapy for delivery to the main hospital site and a number of separate Christie community based clinics in the region
- Clear objectives of the partnership focused on improving the patient experience, reducing drug wastage and reallocation of pharmacy workload to allow great patent focused activity
- Result; a onsite “delivery hub” service model to hold and release the chemotherapy dose upon notification

The Christie Hospital Joint Venture

Factors that led to our partnership

- Capacity issues
- Limited access to capital investment
- Increasing standards requirements for aseptic facilities
- Patient Safety initiatives
- Development of new therapies adding complexity to the product mix
- Increasing patient waiting times

Baxter Solutions

- Just-in-time compounding
- Baxter Hub
  - Baxter staff located on the treatment floor fully integrated
  - Follow the patient into the clinics (The Christie Franchise)
- Follow the patients to their home with Baxter@Home

Impact for the Christie

- 90% of oncology drugs prepared by BAXTER
- Pharmacists can spend more time with patients
- $800K savings a year (waste management)
- Reduced patient wait time (95% commitment product is delivered in less than 2.5 hrs)

The Christie Hospital Joint Venture – Strategic Partnership

Strategic Relationships

Customer Strategic Imperatives

- Leading cancer care (48 clinical trials)
- Deliver the right drugs to the right patients
- Servicing 80% of patients 'close to home'
- Strengthen clinical pharmacy practice
- Efficiency and patient satisfaction

Baxter Solutions

- Just in time compounding
- Baxter Hub
  - Baxter staff located on the treatment floor fully integrated with the nursing team
  - Cold chain management
  - 37 days stability data allows for dose management
  - Follow the patient into the clinics (The Christie Franchise)
- Follow the patients to their home with the Willow

Business Impact

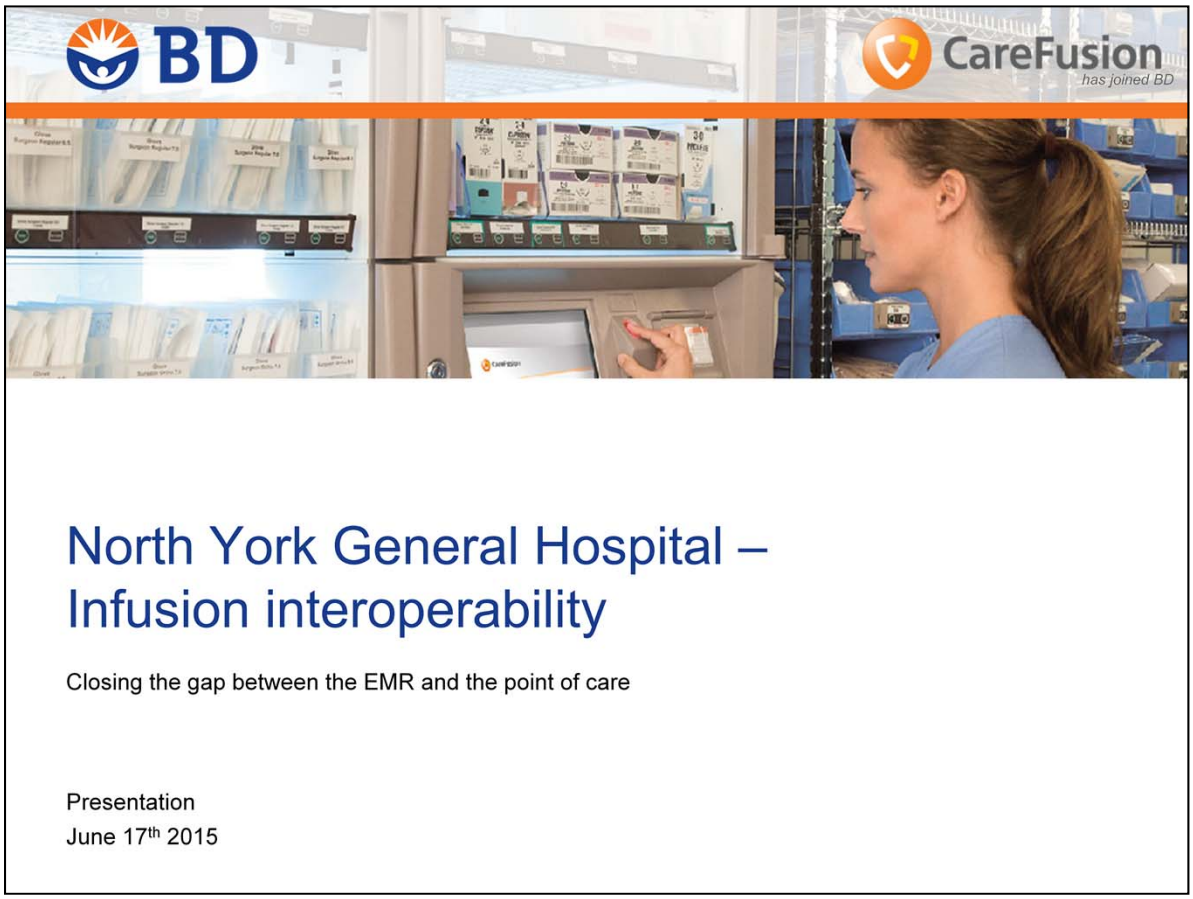
- The Christie
  - 90% of oncology drugs prepared by BAXTER
  - Pharmacists can spend more time with patients
  - $800K savings a year (waste management)
  - Reduced patient wait time (95% of product is delivered in less than 2.5hrs)

- 19 year relationship
- Baxter as preferred provider
- 88K doses a year

Ownership of the Supply Chain

- One in five doses of Roche's breast cancer drug Herceptin is Baxter compounded (UK market)

- NHS cannot afford to invest in its own high tech compounding capability
- Baxter provides NHS with mAb's with extended stability data (37days vs. 24hrs) driving significant savings (eliminating waste)
- Baxter becomes the preferred partner for compounding mAbs (Branded or BioSimilars)



Background on Interoperability:

Infusion Interoperability is the ability of a smart pump infusion device to receive and transmit information in near real-time. Specifically, to receive patient medication orders and their parameters to automatically program the infusion pump. The pump can then send back infusion status and history back upstream.

The benefits are clear – pump pre-programming removes the potential for entry errors by the nurse during programming. Documentation is also more precise and communicates the entire flow of the infusion, not simply start and stop times. This allows for events like titrations (adjusting rate/volume of administration during the infusion), pauses and alarms to be sent back, giving better data for long-term analytics

CareFusion currently partners with two EMR vendors for interop – Cerner and Epic. While agreements exist with other vendors, such as Meditech, they are currently not supported.

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Finding a solution

A main concern for NYGH leaders were Canadian ADE rates, representing 7.5% of acute care admissions and potentially causing 9.250 to 23,750 preventable death each year. They also needed to enhance care compliance to new internal workflow, including order sets.

- NYGH launched their eCare program in 2007, with CPOE implementation in 2010.
- They now required an advanced infusion platform to complete a vision of a fully integrated system. CareFusion's Alaris pump was the only one that met their needs.
- NYGH also requires precise data as a research leader, notably for diabetes and chronic disease research.
- Interoperability contributes greatly to meet these goals.

SOURCE: Source

1

NYGH's eCare program was launched to enhance patient safety via the movement of documentation into electronic form. This also included efforts to standardize care and drive compliance rates within their teams. Hospital leaders were keenly aware of ADE impact on patients and needed to drive down these rates.

Another aspect of NYGH's needs were linked to documentation, as they are strongly leveraging their EMR to gather data for diabetes and chronic disease research. Manual documentation provides imperfect, incomplete data at best.

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Closing the gap – the last 100 feet

Investment in Electronic Medical Record (EMR) systems is growing and implementation of these systems is now a reality or part of the near-term vision for many hospitals

- Canadian hospitals have invested more than $10 billion on EMR systems in the past 15 years[1]
- Implementation of Computerized Physician Order Entry (CPOE) and Barcode Medication Administration (BCMA) is now a reality for larger urban acute care centers

While gains in efficiency and patient safety are measured, the gap is still present between these systems and the point of care, specifically for infusion devices

- 67.7% of medication errors occur at the administration phase[2]
- Medication errors affect 1.5 million patients and cost $3.5 billion annually to treat[3]

Another gap is linked to documentation of the administration, an increasing part of a nurse's day

- 35% of a nurse's time daily is spent on documentation[4]

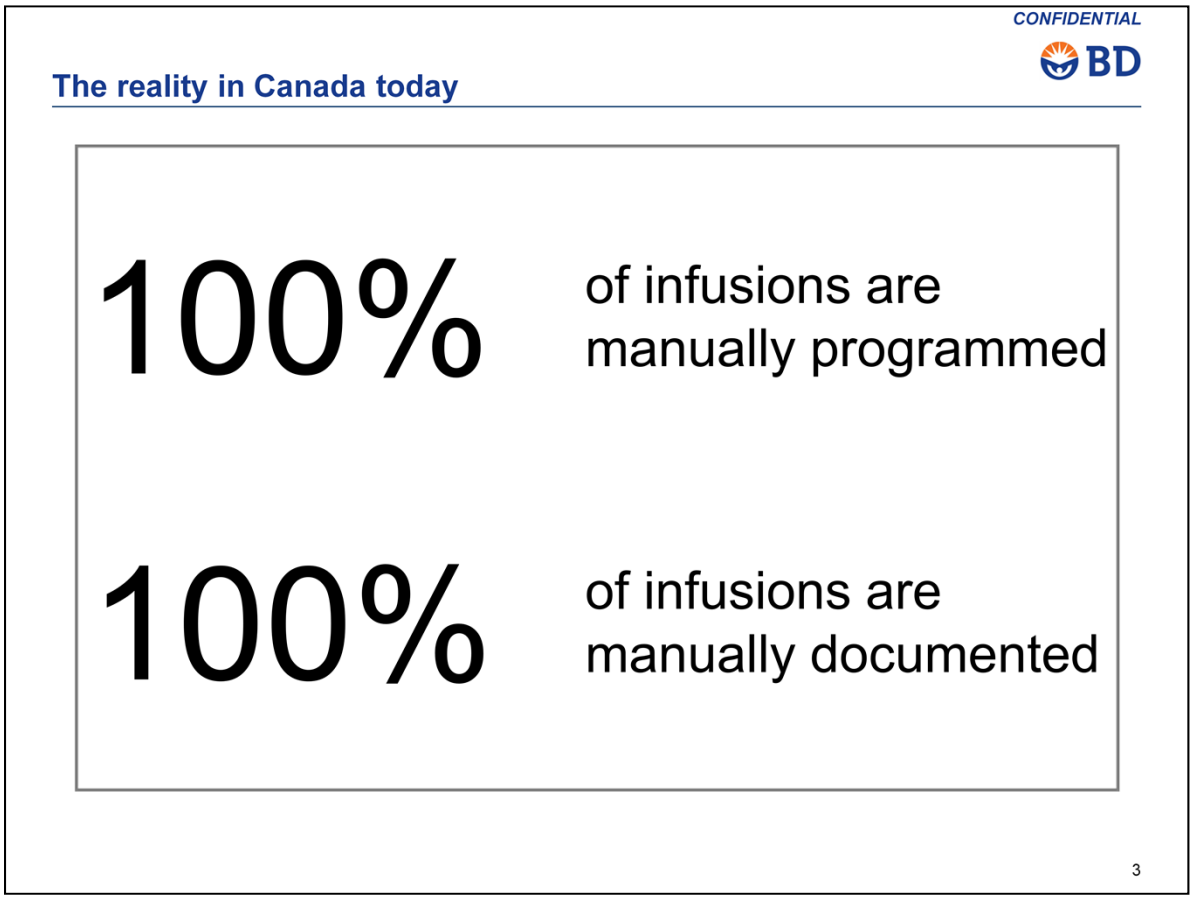
SOURCE:
[1]Canada Office of the Auditor General. 2010. "Electronic Health Records in Canada – An Overview of Federal and Provincial Audit Reports."
[2]Charlotte Huber, RN, MSN; Barbara Rebold, RN, MS; Cynthia Wallace; and Karen P. Zimmer, MD, MPH. ECRI Institute PSO Deep Dive™ Analyzes Medication Events. Patient Safety and Quality Healthcare. www.psqh.com September/October 2012.
[3]Arnold, J. W. (2012). Cost of hiring new nurses. Advance for nurses. Retrieved from: http://nursing.advanceweb.com
[4]Gurses, A.P., and, Carayon, P. (2007). Performance Obstacles of intensive care nurses (Abstract). Nursing Research; 56(3):185-94

2

Infusion smart pumps help address some of these concerns, but can also introduce new types of errors. Nurses need to understand the pump's interface and programming. One possible error during programming is called a "tenfold" error, or missing a decimal point during programming. The difference between **1.5** ml/hr and **15**ml/hr can be drastic.

Another feature of smart pumps is the use of DERS (Drug Error Reduction Systems), a set of drug limits that can warn and alarm a user if programming the dose rate is under or exceeds limits set by pharmacy. However, it is a "high and low" system, addressing the outliers but not addressing the precision of the actual order.

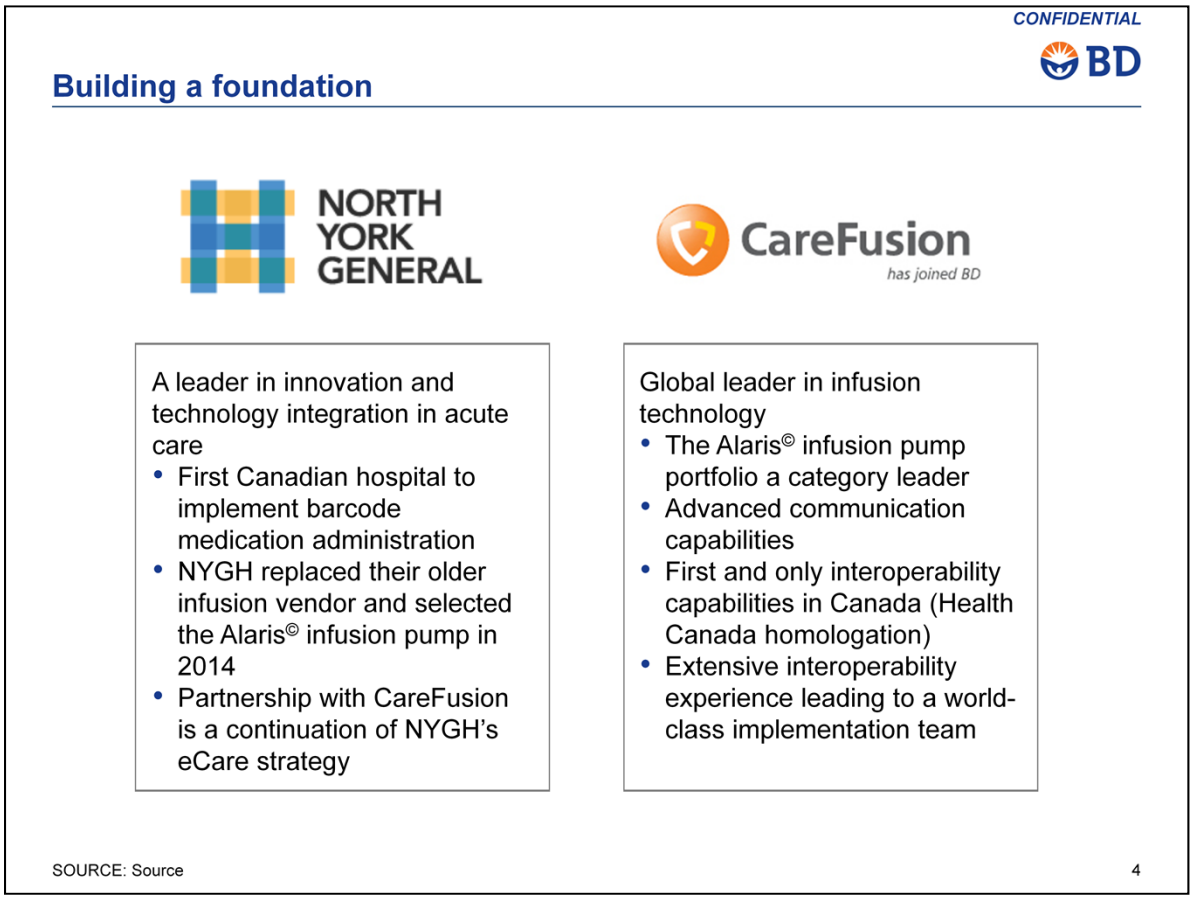
Industry statistics are mostly US-based, but a great paper out of UHN (Toronto) by Trbovich, Jeon and Easty in 2009 highlighted the great benefits of smart pump technology but also the need to move towards integration with Electronic Medical Record systems (EMR) to unlock greater benefits. Interoperability is key.



This statistics calls back to the reality of today's smart pump use in Canada. Despite the investment in electronic medical record systems and smart pump technology, the fact remains that this is still a vast gap between these systems. At the bedside, the nurse would review the order on the EMR's system, typically a "WOW", or workstation-on-wheels or increasingly a handheld platform. She would then have to turn around and enter the order manually at the pump.

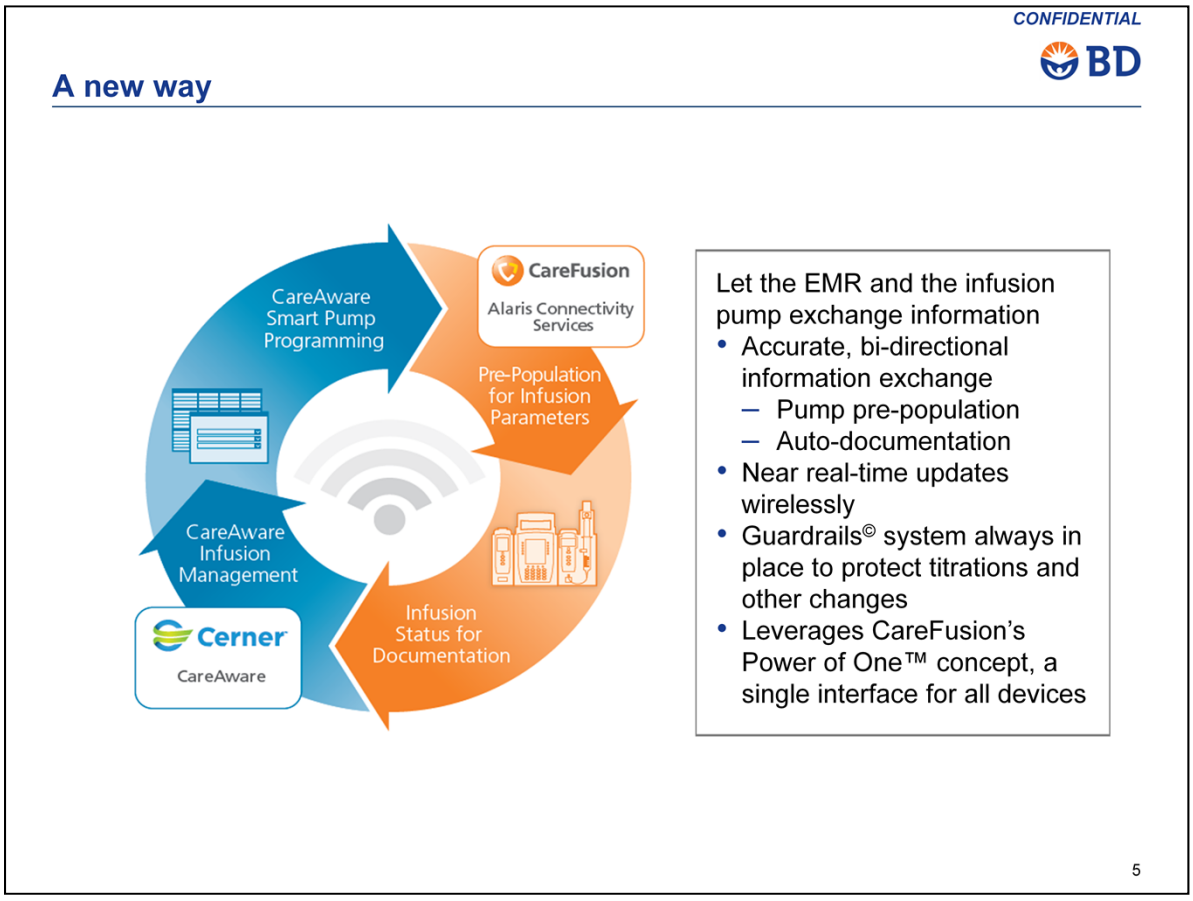
The key concept – all this technology, all this investment, and yet a human hand still has to move information from one side to the other, with all the risks of errors involved.

The flipside is also true. Nurses often document infusion start and stops on pieces of paper, on scrubs or on gloves. They then transfer to the EMR at the end of their shift.



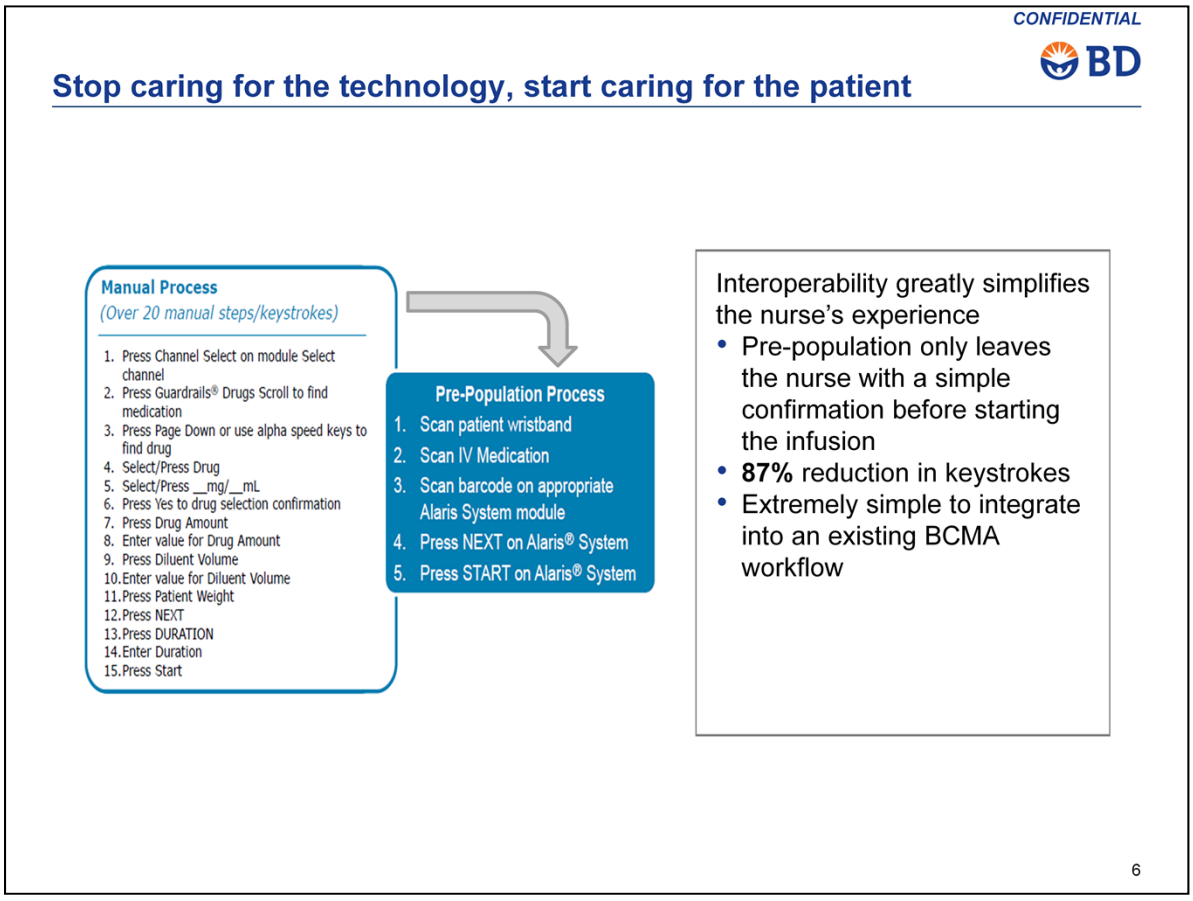
North York General's goal is a continuation of their **eCare** program, launched in 2009. This program aims to leverage technology to enhance patient safety, a core tenant of their Patient Values. They immediately recognized the value in interoperability.

They selected the Alaris pump in part due to its existing capabilities (fully wireless, server-managed) but also to the vision that CareFusion and NYGH shared, which is bridging that gap between the EMR and the point of care. They loved that the Alaris system not only provides a great platform today, but will also help them grow and continue to unlock value as their systems mature – interoperability is a great example of this.



This slide gives a quick view of the flow of information between the Cerner EMR (which NYGH uses) and the infusion pump. Quickly:

- The doctor enters the order in Cerner's CPOE (order entry) system. It becomes an accurate piece of information
- This order then moves to Pharmacy for checking. The pharmacist verifies, approves and then order then moves down the line to the nurse
- At the bedside, the nurse pulls up the order on their workstation or handheld. She hangs her bag to be ready for infusion. She will then start a process commonly called Barcode Medication Administration, or BCMA. BCMA aims to accurately cover a safety concept called the Five Rights – **Right Patient, Right Med, Right Dose, Right Route, Right Time (see next slide notes)**
- Using a barcode scanner attached, the nurse can then scan her badge, scan the patient's wristband ID, scan the drug and then scan the pump. This ties in all information required for administration.
- Once launched, the pump then sends information back to the EMR for accurate recording of the infusion.

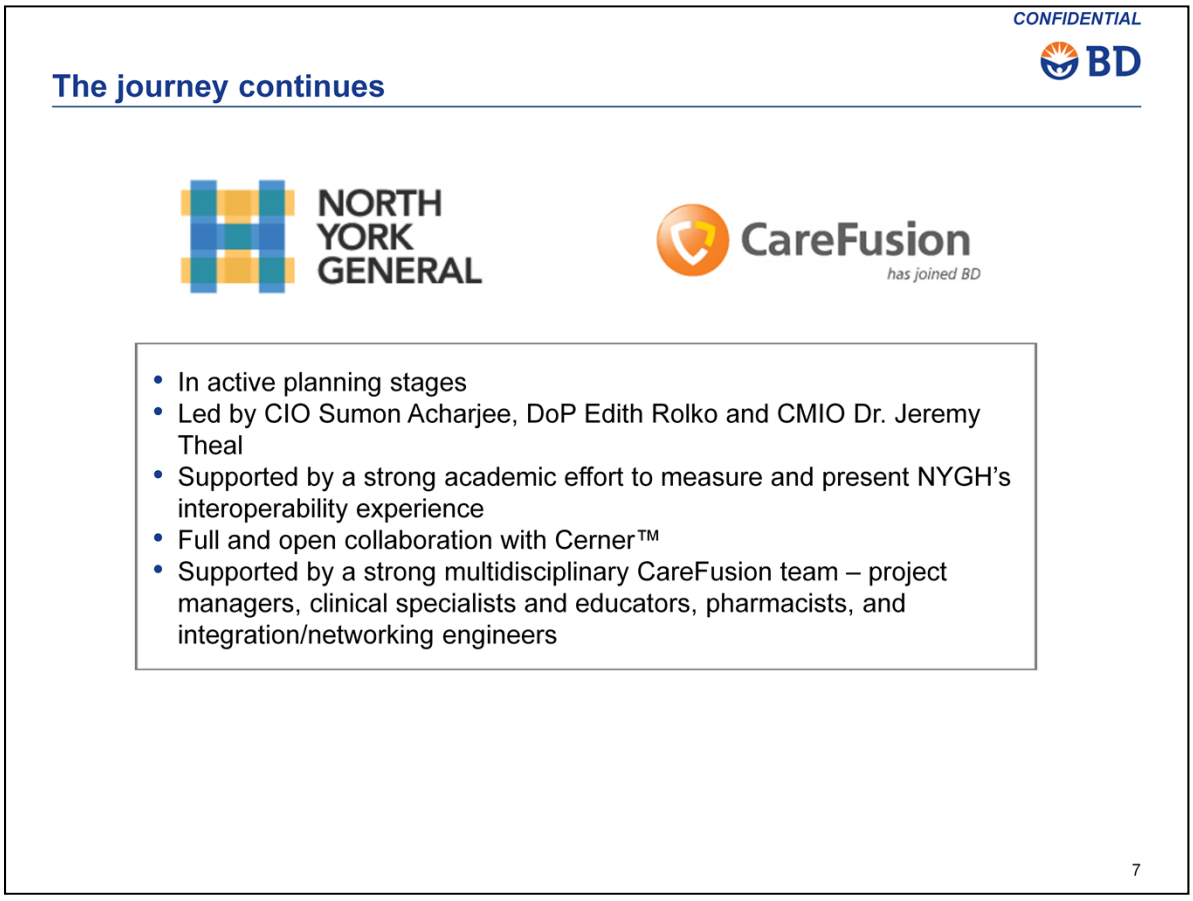


This slide illustrates the vast difference between manual programming and the new interoperability workflow. In a nutshell, you move from anywhere between 10 and 20 keystrokes to a smooth barcode-driven 5-step process, with the only keys being pressed to confirm the programming and launch the infusion.

A question may arise to how this workflow compares to "traditional" barcode medication administration (BCMA). Interoperability adds a single extra step to the process. Typically, BCMA entails this:

- Nurse scans her badge
- Nurse scans the patient's wristband
- Nurse scans the barcode on the medication (syringe, IV bag, etc.)
- We simply add ONE extra steps – scan the pump.

That one extra step is all it takes for the EMR to know the specific infusion channel used for the medication administration, and send the order to that specific pump.



The project is currently in planning phases.

CareFusion has supported NYGH's effort to get provincial money to support this project – specifically for the Ontario Centres of Excellence "AdvancingHealth" grant process. This grant also includes monies specifically for academic effort. NYGH's Office of Research and Innovation, led by Michael Wood and NYGH's Chief Medical Informatics Officer, Dr. Jeremy Theal, will drive the effort to analyze NYGH's interop. journey and present. CareFusion will support them as required to make it happen.

Integrated Innovations are Generating Efficiency & Savings Throughout the Hospital

PIONEERING DIAGNOSTICS

BIOMÉRIEUX

Blood Stream Infection: Historical approach

Sample → Identification → Antibiogram → Results

BacTAlert

18 hours

6-8 hours

Vitek 2

It takes longer than 24 hours to obtain initial results

Blood Stream Infection: Significant Innovation with Mass Spectrometry

Sample → Identification → Antibiogram → Results

BacTAlert

<1 hour

Vitek MS

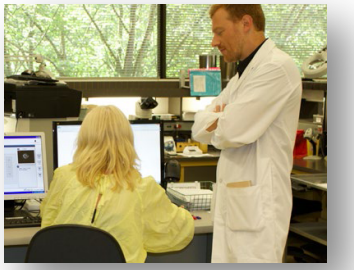
Dr Marc Romney, St Paul's Hospital, Vancouver:

"It allows us to identify bacteria in a matter of minutes instead of days"

Now technology is delivering results in minutes

St Paul's Hospital

St Paul's Hospital, Vancouver B.C. has integrated Mass Spectrometry



- Lab is providing results 24/7

- Infection Control Physician and/or Pharmacist are reviewing the ID (identification) results in order to adjust antibiotic therapy as required

- ICU department is therefore able to immediately adjust the antibiotic therapy as required

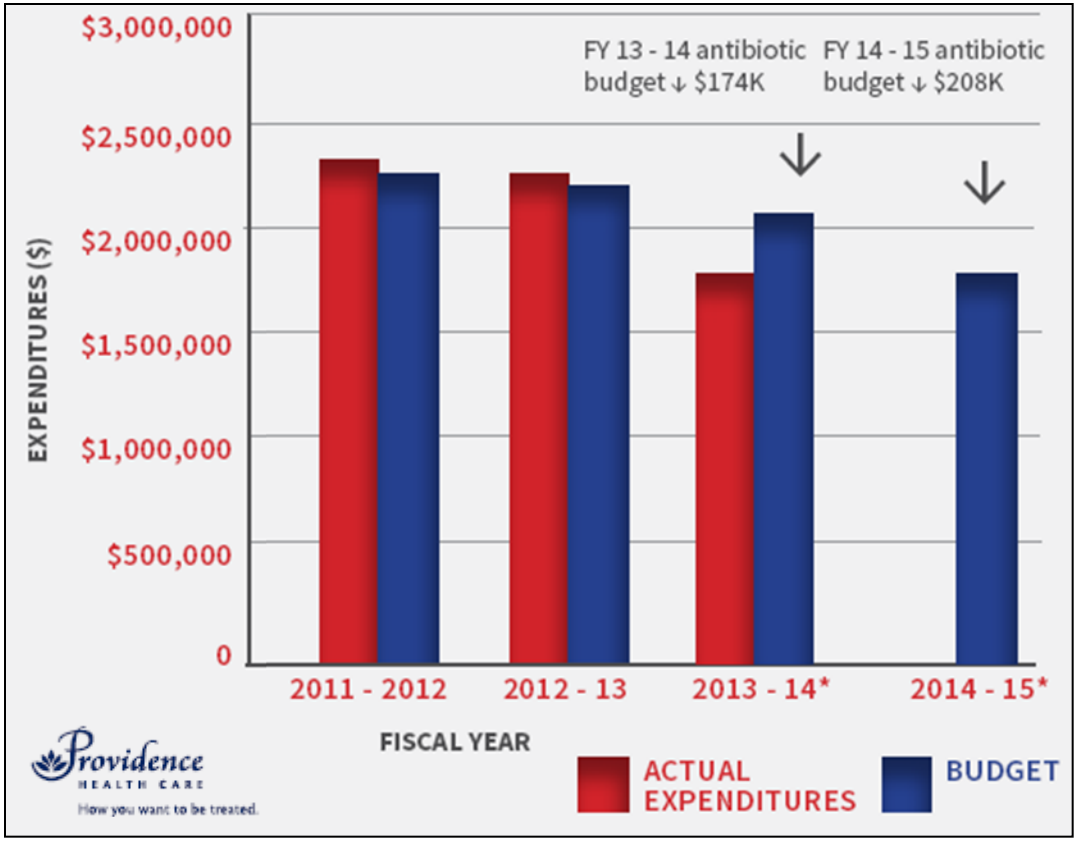
Hospital protocols have to be adapted to realize the significant value of this innovative approach

Value Delivered by Innovation

- Laboratory: less work and quicker turnaround time
- Physicians: increases efficacy AND efficiency by adjusting to the correct antibiotic treatment sooner (improves the Antibiotic Stewardship Program considerably)
- Pharmacy: delivers the most appropriate antibiotic. Perfect fit for the Antibiotic Stewardship Program
- Patient: speeds up recovery by having the right treatment sooner

500,000$ yearly savings in Antibiotics thanks to the successful implementation and adoption of the innovation

The Power of Integration



Antimicrobial Stewardship Program Annual Report 2013/14

Proposed Future Collaboration with SCN & AHS

- Improving Sepsis Management with Procalcitonin (PCT)
  - Voluminous/Exhaustive body of published clinical studies outside Canada (i.e. globally embraced)
  - 6 months verification with one hospital
    - Early sepsis diagnosis
    - Immediate and appropriate adjustment of antibiotic therapy absolutely drives better survival rates
- Improves management of pediatrics with urgent and severe respiratory symptoms
  - Syndromic approach: capable of testing for 30 bacterial and viral infections within an hour, this detection ensures immediate and correct diagnostic treatment
  - 6 months verification within a pediatric hospital during the flu season would be sufficient to prove efficacy and savings

m-CARDS Mobile Cardiac Arrhythmia Diagnostic Service

Centralized Distribution

Mobile Technology

Centralized Data Centre

Centralized Cardiac Techs

m-health SOLUTIONS

m-CARDS Mobile Cardiac Arrhythmia Diagnostic Service

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 JUNE 26, 2014 VOL. 370 NO. 26

Atrial Fibrillation in Patients with Cryptogenic Stroke

David J. Gladstone, M.D., Ph.D., Melanie Spring, M.D., Paul Dorian, M.D., Val Panzov, M.D., Kevin E. Thorpe, M.Math., Judith Hall, M.Sc., Haris Vaid, B.Sc., Martin O'Donnell, M.B., Ph.D., Andreas Laupacis, M.D., Robert Côté, M.D., Mukul Sharma, M.D., John A. Blakely, M.D., Ashfaq Shuaib, M.D., Vladimir Hachinski, M.D., D.Sc., Shelagh B. Coutts, M.B., Ch.B., M.D., Demetrios J. Sahlas, M.D., Phil Teal, M.D., Samuel Yip, M.D., J. David Spence, M.D., Brian Buck, M.D., Steve Verreault, M.D., Leanne K. Casaubon, M.D., Andrew Penn, M.D., Daniel Selchen, M.D., Albert Jin, M.D., David Howse, M.D., Manu Mehdiratta, M.D., Karl Boyle, M.B., B.Ch., Richard Aviv, M.B., Ch.B., Moira K. Kapral, M.D., and Muhammad Mamdani, Pharm.D., M.P.H., for the EMBRACE Investigators and Coordinators*

m-health SOLUTIONS

m-CARDS Mobile Cardiac Arrhythmia Diagnostic Service

The AdvancingHealth program, is a partnership between the Ontario Centres of Excellence (OCE) and Ontario's Ministry of Government and Consumer Services

Implementing and Evaluating an Innovative Mobile Technology Cardiac Arrhythmia Diagnostic Service in 6 Ontario LHINS

Industry Partner: m-Health Solutions

Academic Partner: David Gladstone MD, PhD; Director, Sunnybrook Regional Stroke Prevention Clinic and Scientist, Sunnybrook Research Institute, University of Toronto

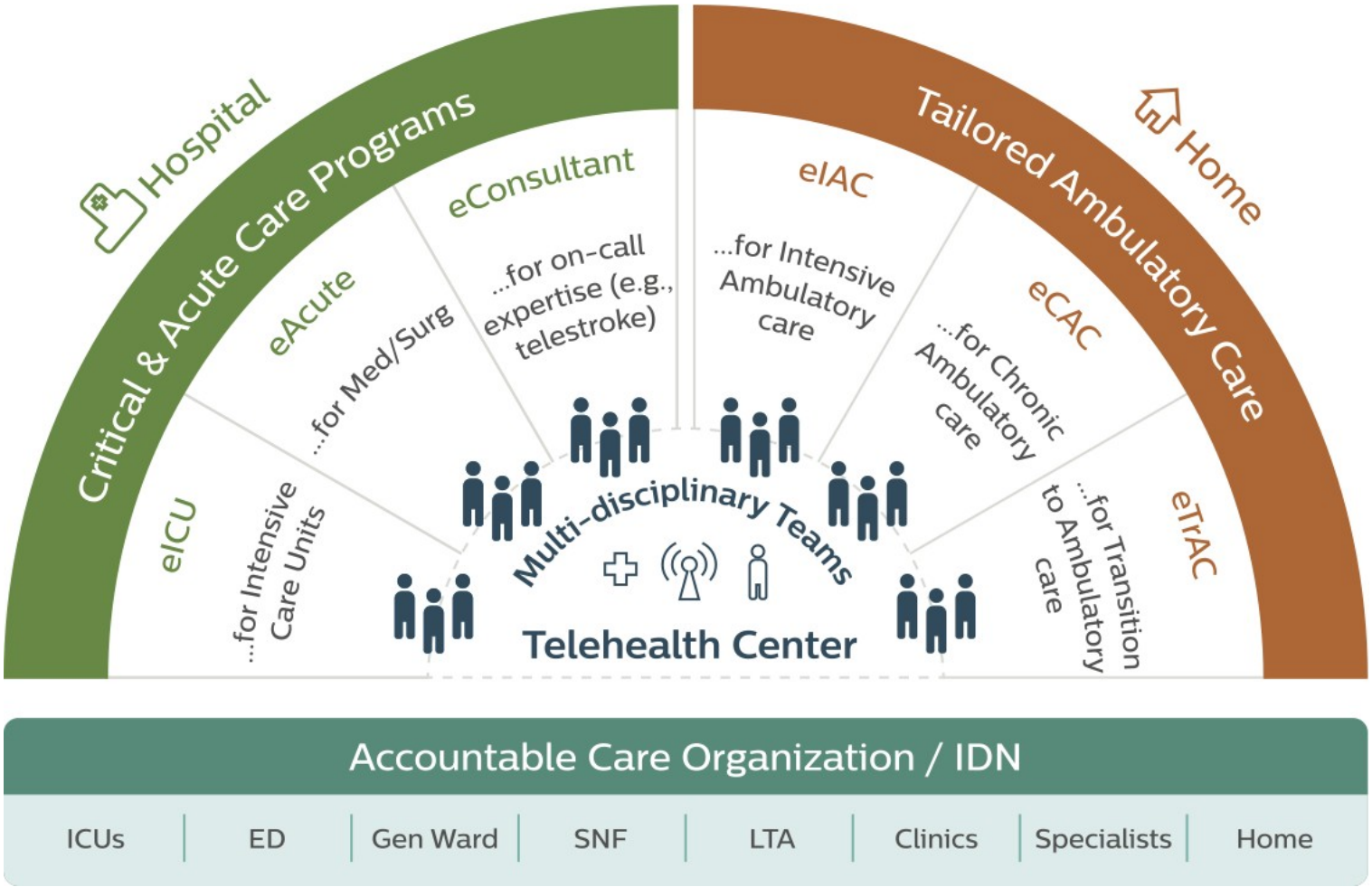
Healthcare Partners: Medtronic Canada Ltd, Hamilton Health Sciences, Trillium Health Partners – West GTA Regional Stroke Centre, William Osler Brampton Civic Hospital, The Scarborough Hospital, Thunder Bay Regional Health Sciences Centre, Sunnybrook Regional Stroke Centre

m-health SOLUTIONS

Hospital to Home

PHILIPS

Broad Range of Capabilities



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Hospital to Home – Targeted Solutions

High Risk – Chronic Patient

eIAC

Medium Risk – Ambulatory Patient

eTrAC

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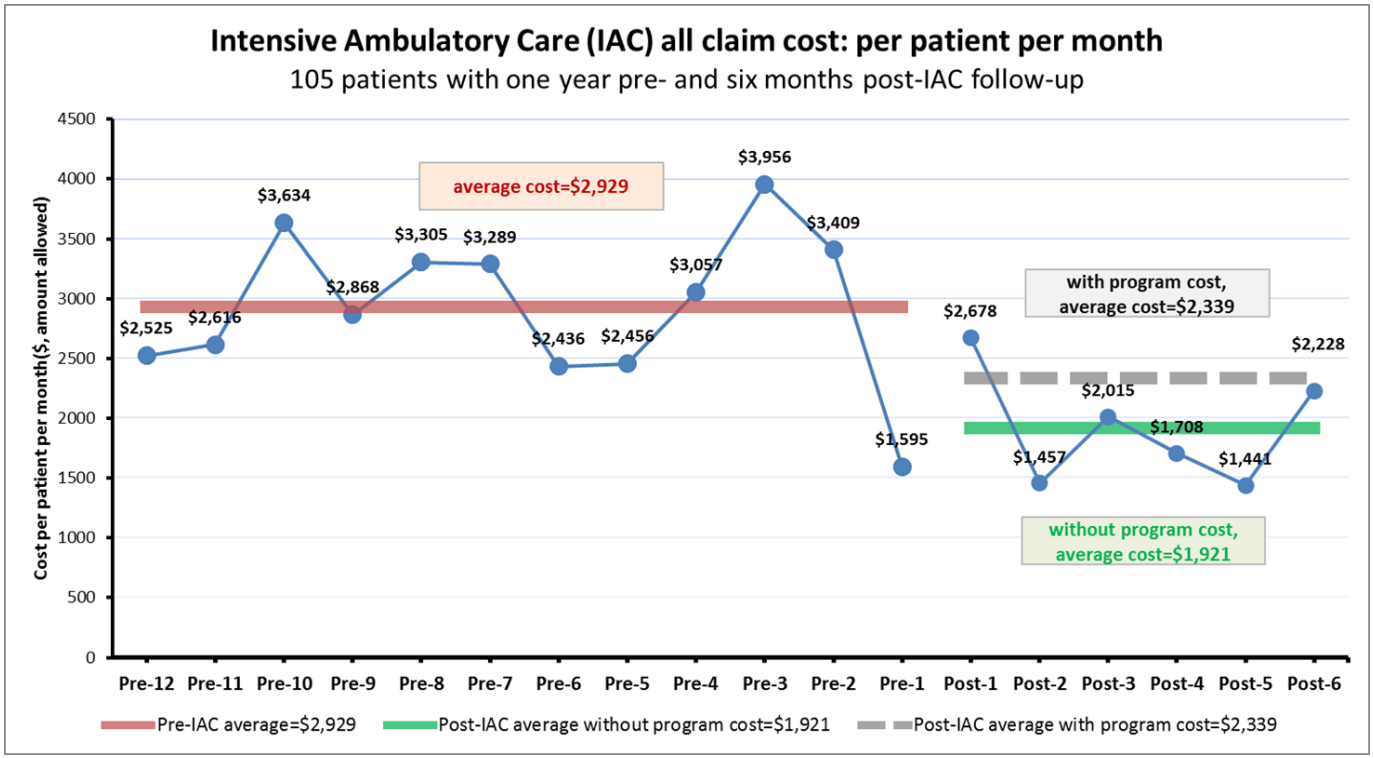
High Risk – Chronic Patient Population

eIAC



>20% Savings in Overall Cost of Care

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Transition to Ambulatory Care

eTrAC

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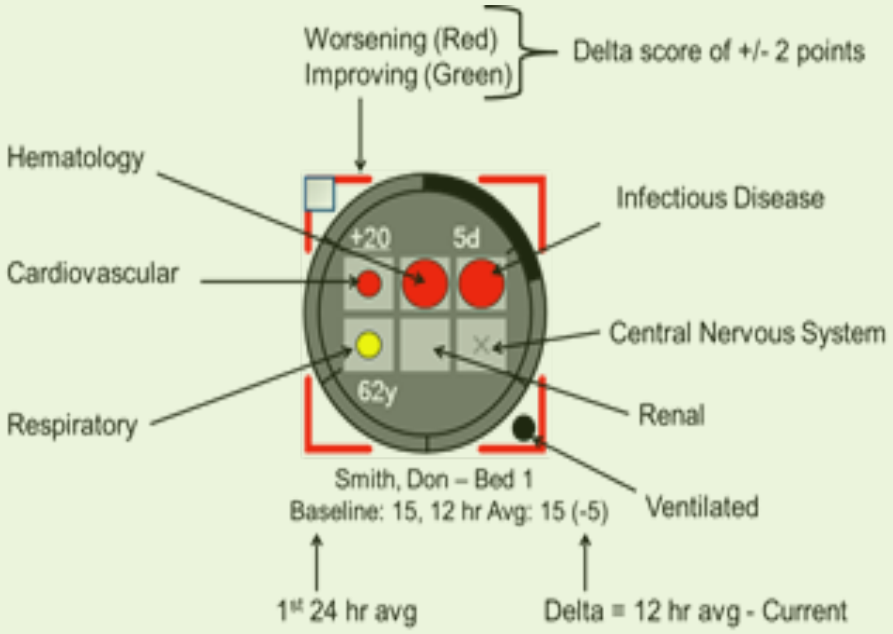
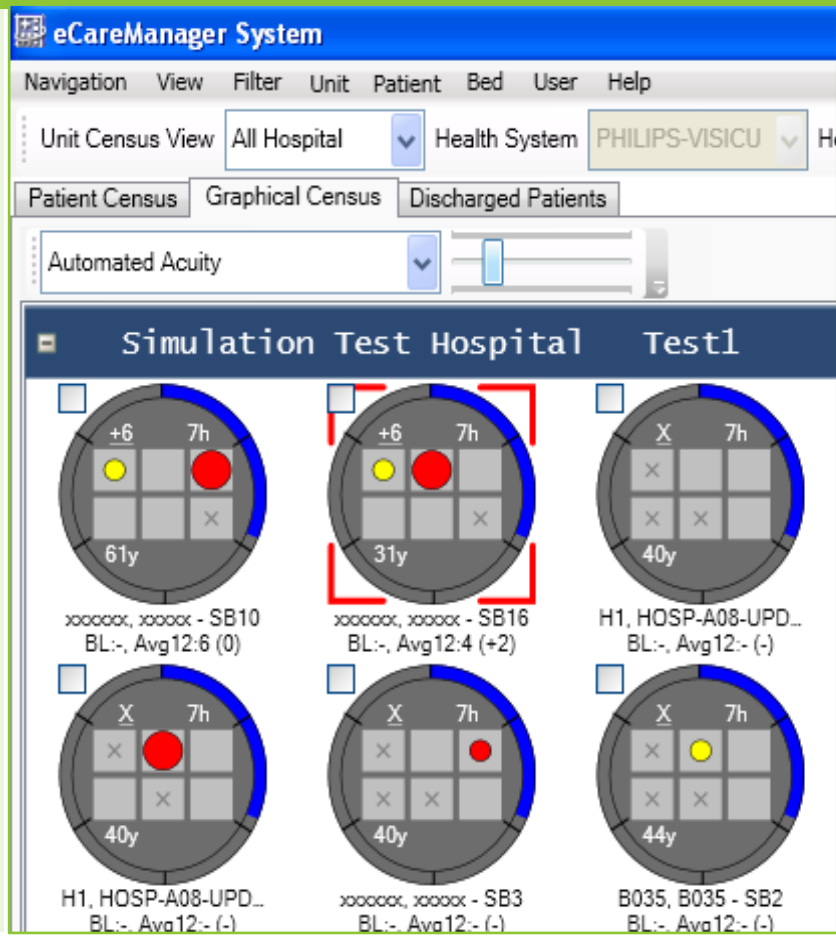
Differentiating technology

Though leadership in population management

orb

A new paradigm





Delivering Results – From H2H

Average Patient Age – 79

Multiple Comorbidities

ED 'Frequent Fliers'

….all with VERY HIGH Patient Satisfaction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PROCUREMENT BEST PRACTICES, BARRIERS & SOLUTIONS

Jitendra Prasad
Chief Program Officer
Contracting, Procurement & Supply Management

Procurement Governance

- Trade Legislation
  - AIT (National)
  - NWTPA (Alberta, Saskatchewan, BC)
- Best Practices (Other Jurisdictions)
  - Ontario Buys Public Sector Directives
- Policies
  - AHS (Contracting, Procurement Business Practice Policy)
  - GOA
- Focus is on an open, competitive, transparent, non-discriminatory process for procurement
- “Innovative Procurement” versus “Procurement of Innovation”

Principles for Engaging Vendors

- Use a fair, open, transparent and defensible process in choosing a strategic business partner.
- Conflict of interest policies will apply throughout the selection process and throughout the term of the innovative business arrangement.
- The business arrangement will uphold the reputation and support AHS vision and values.
- The business arrangement must be of positive benefit to the organization, within an acceptable level of risk.

Principles (cont'd)

- The arrangement offers continuous value within the public sector environment.
- Implementation of the business arrangements will be coordinated with key milestones associated with capital project design and related decisions.
- There should be a central point of entry for the vendor community
- Relationships and partnerships should be based on AHS priorities – not always industry initiated.
- Engagement must be done in compliance with legislation and policies

Past Experience

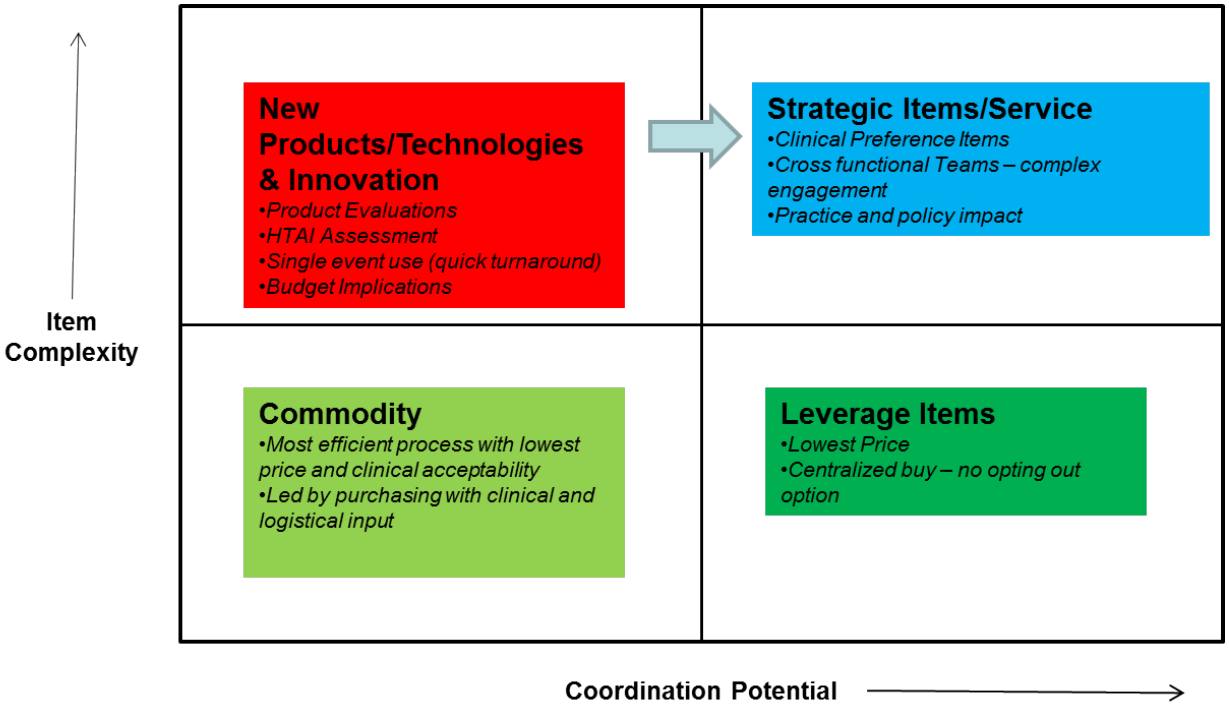
- Former RHA (Capital Health) initiated a study with U of A School of Business which resulted in a report "Innovation in Health" and one of the major recommendation was to establish a single point of entry through the establishment of a Office for Health Innovation (OHI) which was launched in 2003
- Establishment of a single access point – "Biz Worx" – which channeled 60+ access points into a single call center
- Focus on industry partnerships, access point for innovation (local and national), coordination of HTAI initiatives, commercialization initiatives
- Strategic Alliances with vendors – Philips, J&J, and local vendors
- RFEOI for Innovation – open and transparent process for identifying partners for innovation and commercialization

Framing Procurement Services with Quality

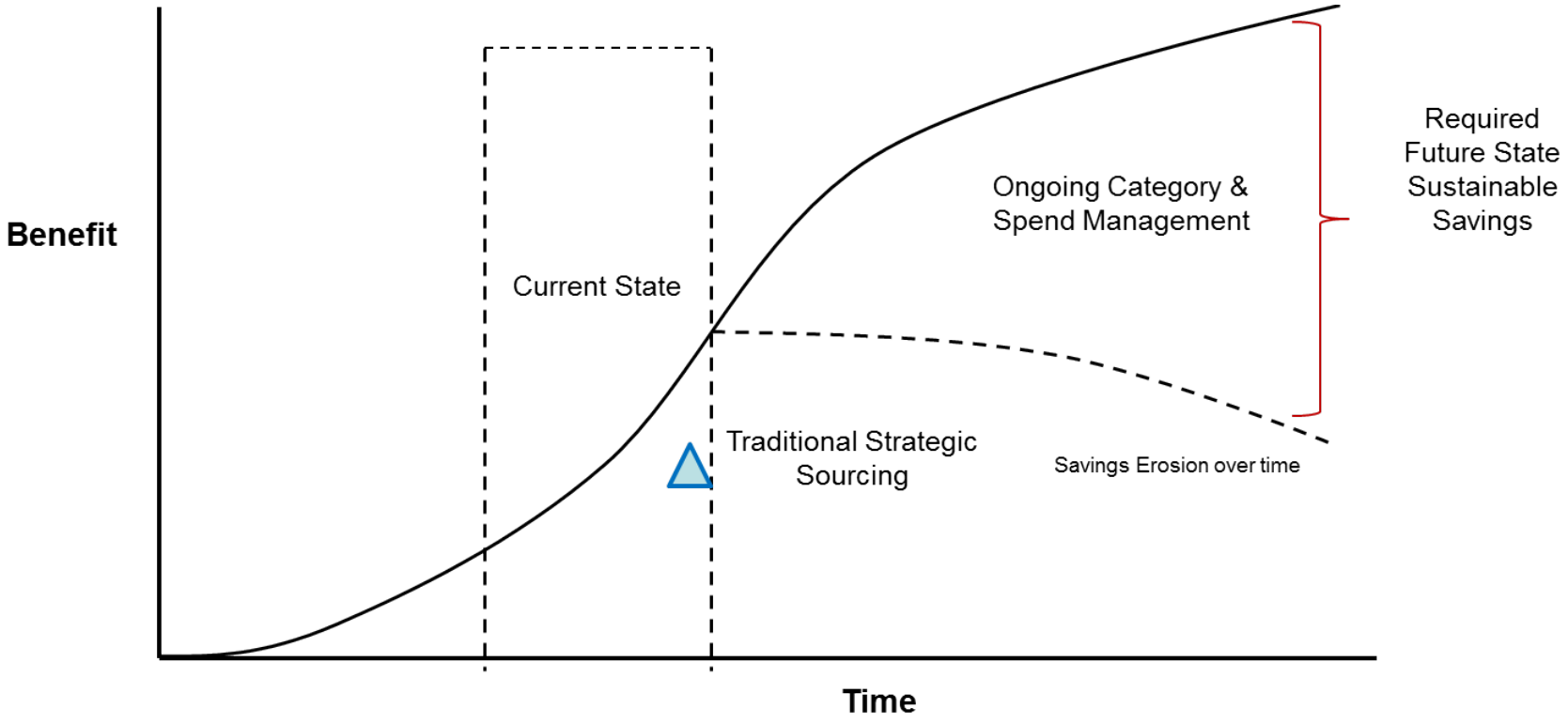
- **Acceptability - Health services need to be respectful and responsive to patients and communities.**
- **Accessibility - Health services must be obtained in the most suitable setting, in a reasonable time and distance.**
- **Appropriateness - Health services are relevant to patient/community needs, and based on accepted/best practice.**
- **Effectiveness - Health services are provided based on scientific knowledge to achieve desired outcomes.**
- **Efficiency – Resources are optimally used in achieving desired outcomes.**
- **Safety - Risks are mitigated to avoid unintended or harmful results.**

- Every CPSM function and service either directly or indirectly impacts the provision of patient care in the five (5) Areas of Need, as defined in the Alberta Quality Matrix for Health —Being Healthy, Getting Better, Living with Illness or Disability, and End of Life.
- This allows us to look at Procurement as an opportunity for change and innovation – ***its not just about buying!***

Categorization of Products



What Happens in Procurement Today?



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Best Practice –Effective Engagement!

Clinical Engagement Framework Hierarchy

Engagement Type	Typical Relationships		Purpose of Relationship
	Clinical	CPSM	
Zone Customer Relationship Management	Zone Customer Relationship Committee	Zone Leads/COE	Overall relationship management, KPI, Metrics, CPSM Plans, service levels, capacity assessments , channel strategy and identification of stakeholders for standardization and commodity specific engagements
RFP Specific/ Standardization	Zone-Based Committees	RFP/Standardization Lead	Participate, collaborate, engage clinical experts in evaluating RFPs, standardization opportunities, channel strategies, add/delete to inventories, etc.
Clinical Preference	Program Based Specialist/Physician Committees	Sourcing Executive Lead/CPSM Lead	Define, implement and manage an appropriate procurement strategy for the designated category (specialty) e.g. Endoscopes, radiology equipment, pacemakers, implants, etc,.
Administrative and Leadership	Zone Leadership, COEC and ELT	CPSM Leadership	Ensures strategic clinical objectives and stated benefits (financial and operational) are achieved and CPSM initiatives are supported.

Challenges for AHS Procurement

- Large organization – 100,000 staff – how do you effectively engage to get best outcomes and identify innovation pathways and entry points?
- Capacity and capability for change – leading a provincial organization is very different from leading a smaller organization – building this capability is essential as part of the journey
- Exploring options for innovation and engagement with vendors – how do ideas get communicated?
- Recognition of Procurement as an integral part of health care and as an economic enabler – how do we retain and build this capability when competing against the private sector due to budget challenges
- Constant focus on generating short-term savings, which takes away from innovative approaches to procurement innovation
- Partnership with Strategic Clinical Networks as enablers of Procurement Innovation

Procurement Best Practices to Promote Innovation

- Procurement for solutions as opposed to products
- Market segmentation based on supplier potential – local versus national versus international?
- Encourage innovation through pre-market assessment and commitment
- Potential to explore forward commitment procurement
- Procurement for an unmet need or service
- Procurement based on AHS priorities
- Engagement with clinical decision makers, researchers, SCN to deliver solutions that enhances care

Barriers

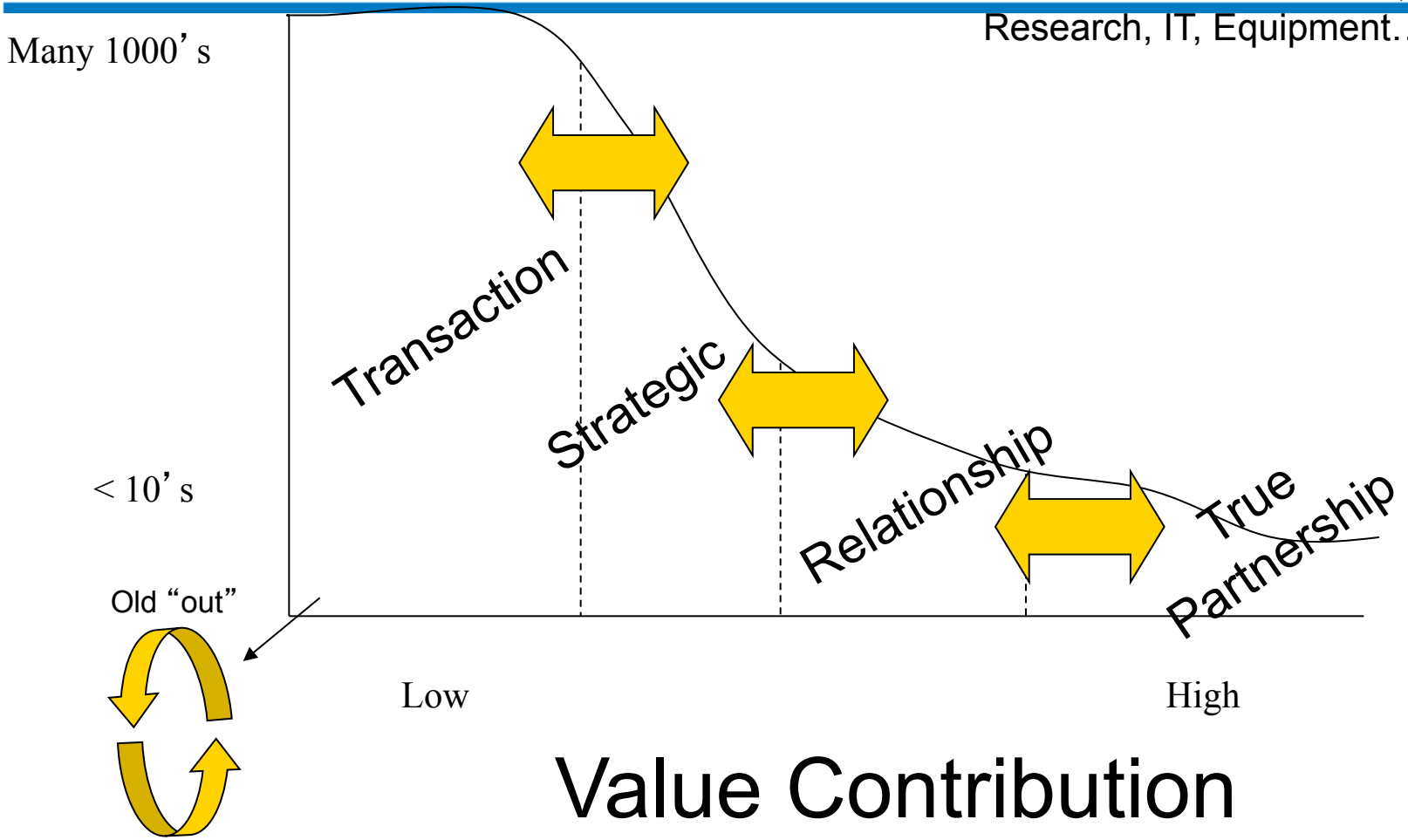
- What are some of the barriers:
  - Legal framework
  - Policy
  - Operational
  - Lack of Expertise
  - Supply and Demand Equation
  - Engagement potential
  - Organizational capacity to accept change
- Are there really barriers or are these created because we are risk averse?

Some Ideas for Discussion

- Outcome/Solution based procurement
- Risk sharing agreements
- Strategic partnerships – developed through regular process but once in place use to incubate innovation
- “Call for Ideas of Innovation” – and then based on benefit to patient care and health care sustainability forward commit. How will this work with SCN?
- Identify need through SCN – then do a call for interested proponents to partner – “bake off” concept
- Segment organization – routine and innovative procurement

Vendor Relationships

Vendors: Pharmaceutical, Research, IT, Equipment…etc



Working Together - Individual Strengths

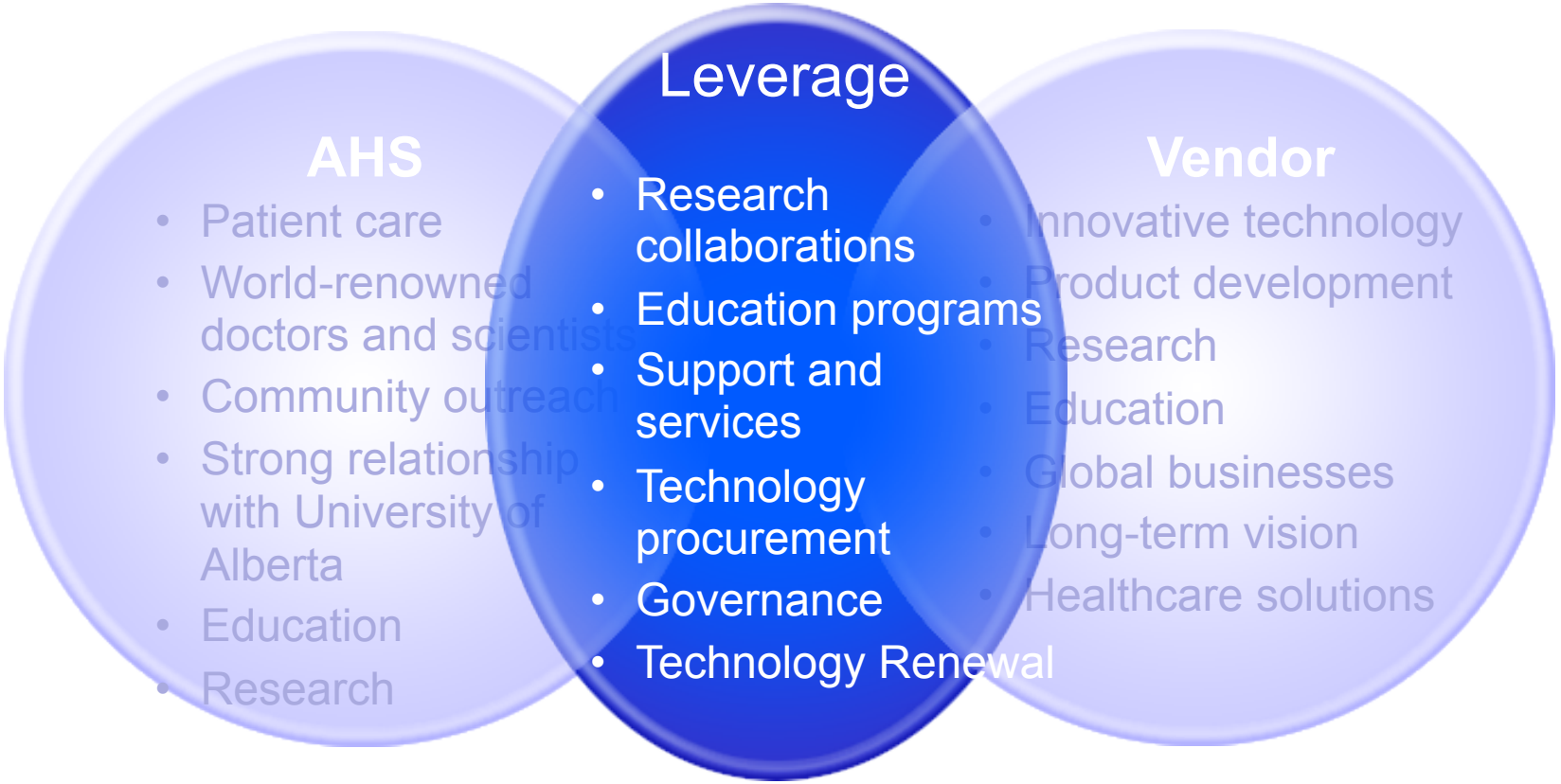
AHS

- Patient care
- World-renowned doctors and scientists
- Community outreach
- Strong academic relationship
- Education
- Research

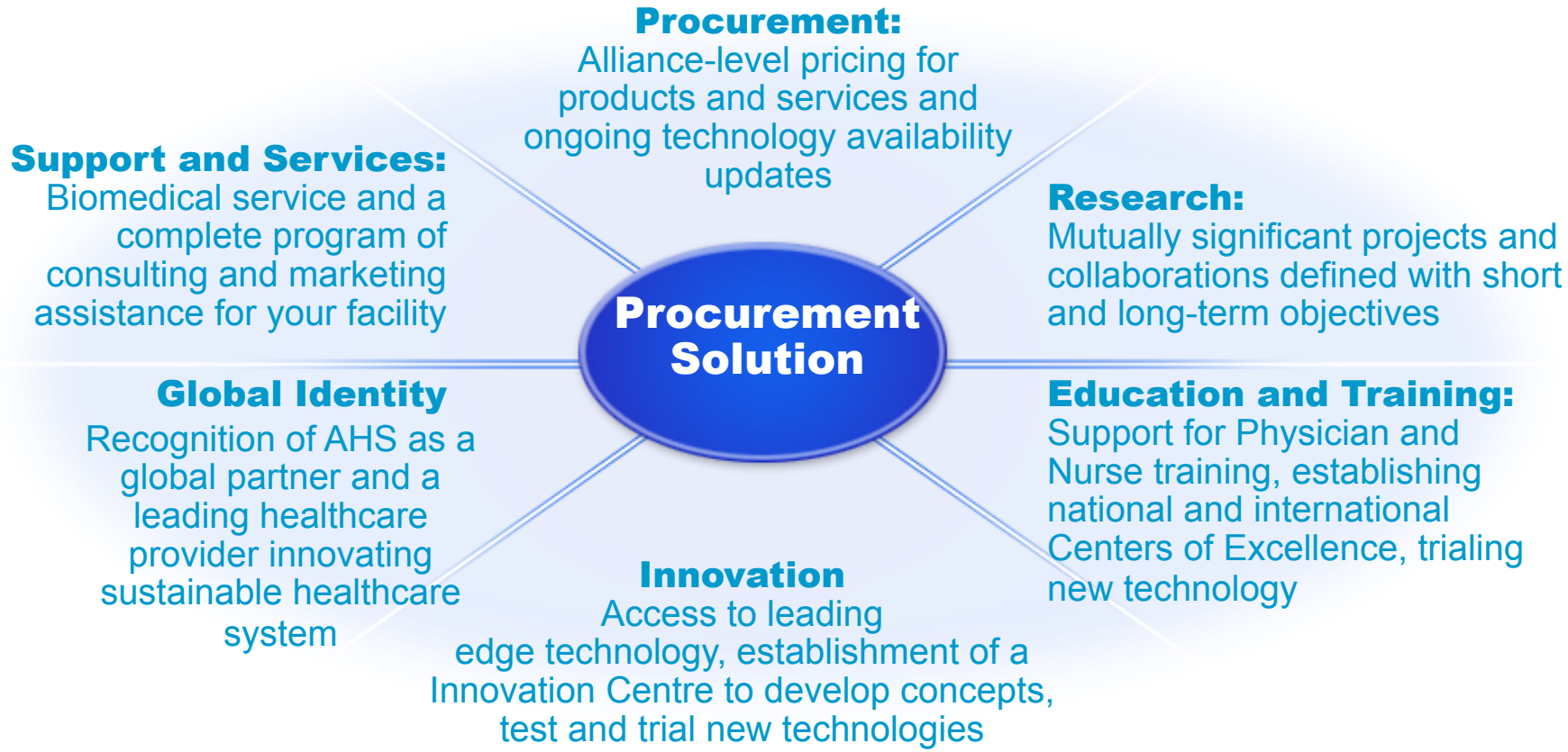
Vendor

- Innovative technology
- Product development
- Research
- Education
- Global businesses
- Long-term vision
- Healthcare solutions

Leveraged Strength - Relationship Benefits



Complete Procurement Solution



Critical Success Factors

- Involve Procurement early and often – when developing strategy or incubating ideas
- Clinical leadership for effective engagement
- Partnership with SCN
- Innovation based on AHS priorities through a single point of entry
- Working within the trade legislation and AHS policies
- Proactive development of market strategies
- Ability to retain expertise for complex procurement
- Focus on long term strategic initiatives as opposed to quick win savings

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Questions?