



## An Overview of Value Based Healthcare



# Agenda

---

- **Why Value Based Healthcare is needed**
- **Porter's Model of VBHC**

# WHY IS VALUE BASED HEALTHCARE IMPORTANT?

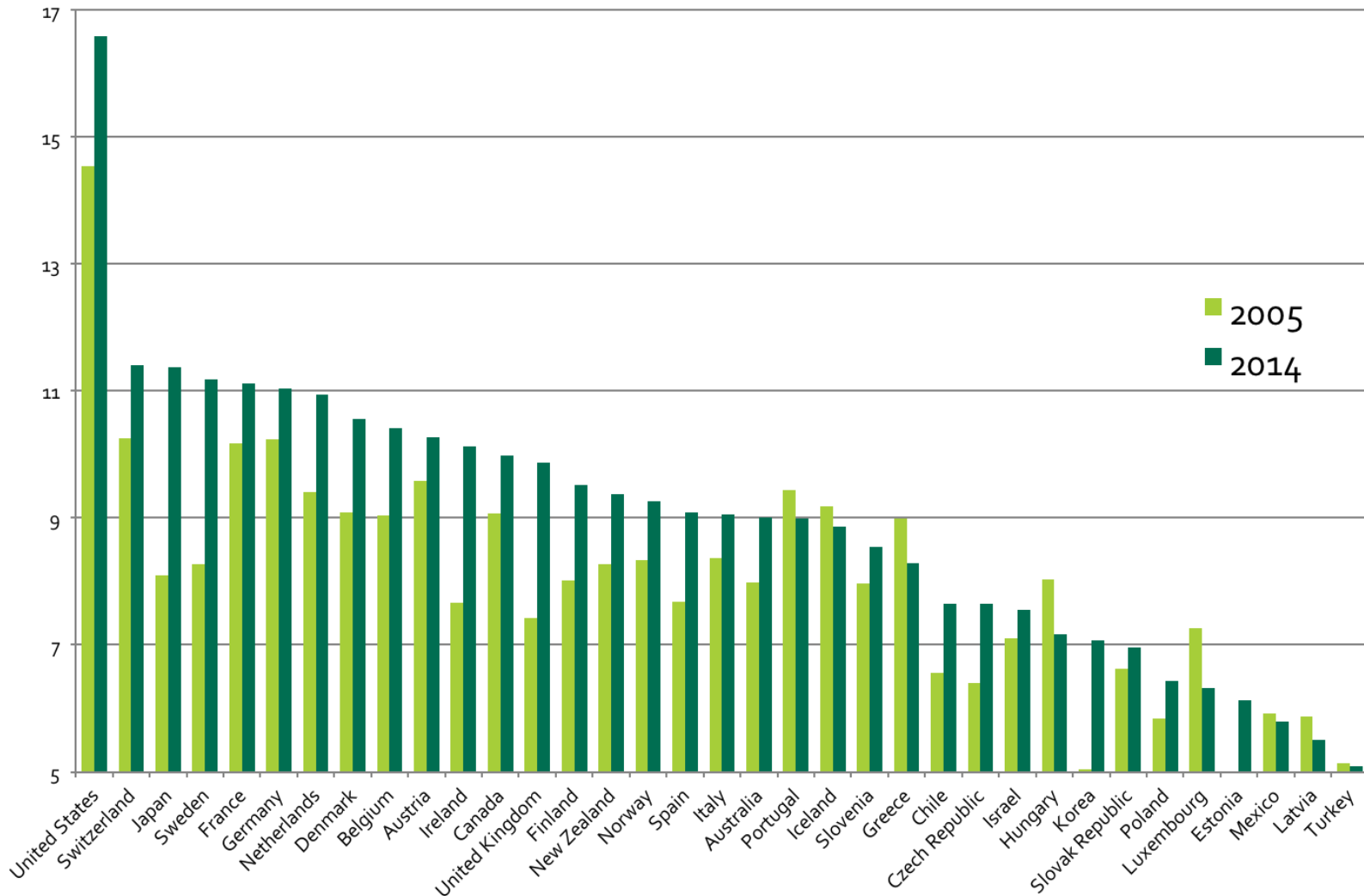
---

## There is a global need for VBHC

- Global healthcare spend continues to outpace growth in GDP
- Variable health outcomes are delivered across OECD countries
- Reimbursement remains tied primarily to volume in countries across the world
- This need has been recognised by patients, providers, payers, suppliers and governments alike








# Healthcare spending is growing in an unsustainable fashion



# Variation in health outcomes is a worldwide problem

---

- 2x** variation in 30-day mortality rate from heart attack in US hospitals 
- 4x** variation in bypass surgery mortality in the UK hospitals 
- 9x** variation in complication rates from radical prostatectomies in the Dutch hospitals 
- 18x** variation in reoperation rates after hip surgery in German hospitals 
- 36x** variation in capsule complications after cataract surgery in Swedish hospitals 

# VBHC: The Solution



Improving value is the only real **solution** to reforming health care:

preventing **cost shifting to patients, restructuring services, or reducing provider compensation**

# Agenda

---

- Why Value Based Healthcare is needed
- Porter's Model of VBHC

# Principles of Value Based Healthcare

## Value

- Value is the outcomes achieved over the costs of care delivery

## Outcomes

- “Outcomes are the results **people care about most** when seeking treatment, including functional improvement and the ability to live normal productive lives “

## Costs

- Costs are the **total costs of care for a patient’s condition** over the full care cycle



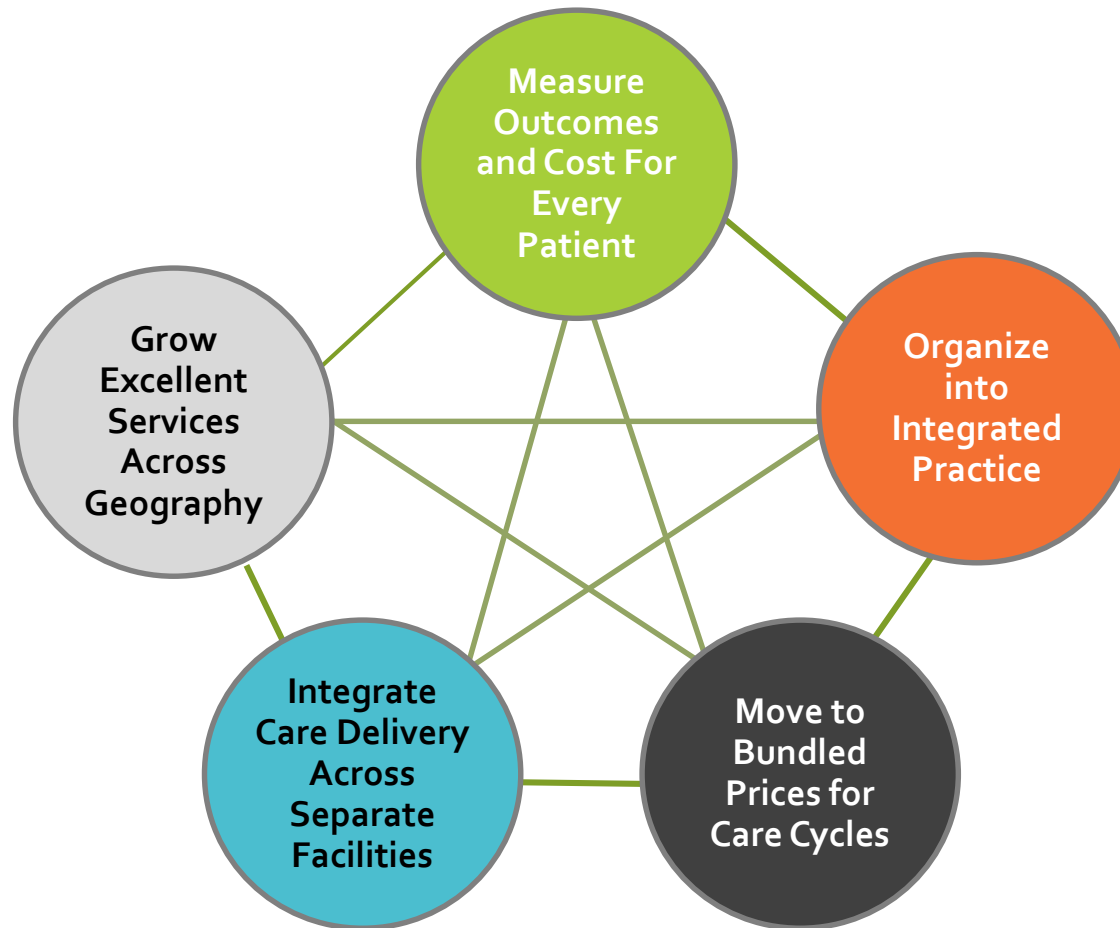
## Value

- Value is measured for the **care of a patient’s medical condition** over the full cycle of care



# ICHOM's work is grounded in Michael Porter's Framework of Value-Based Healthcare

---



**Build an Enabling IT Platform**

# Measure outcomes for a patient's medical condition

---

- Measurement of value should focus on:
  - how well the care delivered meets individual patients' needs
  - the full cycle of care
  - the patient's health status after care is completed
- Cost is the actual expense of patient care, not price and should be aggregated over the full cycle of care for their medical condition
- Cost depends on the actual use of resources involved in a patient's care process (personnel, facilities, supplies):
  - The time devoted to each patient by these resources,
  - The capacity cost of each resource and
  - The support costs required for each patient-facing resource

# Examples

## The Mayo Clinic



The Mayo Clinic in the US has implemented ICHOM Standard Sets for various different diseases in over 50,000 patients.

They have written a paper on the barriers and enablers to outcomes measurement. Nordan et al 2018.

## MD Anderson

MD Anderson Cancer Centre in Texas has integrated outcomes measurement into standardized care. They have integrated PROMs questionnaire into their EHR and used these results to guide their consultations with patients and improve the care they provide

## Time Driven Activity Based Costing

TDABC is a method developed by Prof Kaplan at the Harvard Business School.

It uses process mapping to understand the time devoted to patients and to identify areas of potential inefficiency.

## The Boston Children's Hospital

BCH has used TDBAC to optimize their care pathways for plagiocephaly, Neoplasm and Craniosynostosis



# IPUs

---

- Organized around the patient medical condition or set of closely related conditions
  - **Responsibility for the full cycle of care for the condition**
- See large volumes of patients
- **Dedicated, multidisciplinary team**
  - Providers involved are members/affiliated with a common organizational unit
  - Care is led by a physician team captain and a care manager who oversee each patient's care process
  - Providers function as a team, meeting formally and informally on a regular basis to discuss patients, processes and results
- Utilizes a **single administrative and scheduling structure**
- **Incorporates patient education, engagement, and follow-up** as integral to care
- Measures outcomes, costs, and processes for each patient using a common information platform

# Examples

## The Martini Clinic



The Martini Clinic was established in 2005 as a centre dedicated solely to prostate cancer care. By 2011 they were seeing over 5,000 prostate cancer patient per year.

The specialization that Martini Klinik has achieved, has allowed them to improve outcomes for patients and show significantly better rates of incontinence and erectile dysfunction that other hospitals in Germany.

They work as a team to review the outcomes they deliver and improve their practices.

## Medronic's Diabeter (NL)

Medtronic's Diabeter is effectively an IPU for Type-1 Diabetes.

In this centre, care is facilitated by an MDT, including **diabetes specialists, nurses, dieticians, psychologists and care managers**. This group provides dedicated, integrated care for type 1 diabetes.

It's services are hosed within a single facility, with an overarching VCare IT platform



# Bundled Payments

---

1. A bundled reimbursement payment covers all the treatments and interventions performed over a full care cycle for an acute medical condition.
2. Such bundled payments create benefits for all the principal players:
  - **Patients** receive proven and effective care for their medical conditions.
  - **Providers** earn a positive margin for efficiently treating patients and producing good outcomes.
  - **Suppliers** of drugs, devices, and diagnostic tests that improve outcomes and/or lower total costs will find their products incorporated into the treatments used by effective and efficient providers.
  - **Payers** will reduce their spending for treating medical conditions and providing primary and preventive care for population segments.

# Examples

## Menzis



Menzis together with the Dutch Heart Registry have been developing bundled payments for the purchase of cardiac care.

With this model, the quality of care rather than the number of treatments will be reimbursed. Hospital that score well on indicators such as survival, low complications and patient satisfaction are financially rewarded for this.

This is not without controversy, but is pathing the way for Value-based payment systems

## MD Anderson Cancer Centre

MD Anderson has recently trialed bundled payments for head and neck cancer with positive results.

Dr Thomas Feeley, Head of the Institute for Cancer Care Innovations: “bundled pricing is the way all of healthcare should be paid for”

## United Healthcare

Between 2009 and 2012 UH piloted single fee payment, instead of margins on drugs used for breast cancer care.

This effectively reduced the total cost of care by more than 1/3



# Integrate Care Delivery

---

- Concentrate **volume** of patients by condition in **fewer locations** to improve outcomes and efficiency
  - Avoid doing everything for everybody in every location
- Perform the **right services** in the **right locations** based on resource fit, and the benefits of patient convenience for repetitive services
  - Move **less complex surgeries** out of tertiary hospitals to smaller facilities and outpatient surgery centers
- Integrate the care cycle **across sites** via an **IPU structure**
  - Common **scheduling**
  - **Digital services** and **telemedicine** can help tie together the care cycle
-



# IT Platforms

---

Build and  
enabling IT  
platform

A value-enhancing IT platform has essential elements:

1. It is patient-centric
  2. Establishes common data definitions to improve reporting and measurement
  3. Comines all types of data (e.g.notes, images, PROMs) for a patients
  4. Enables access and communication among all staff involved in the care cycle (including patients)
  5. Standardised templates for medical conditions to improve usability and highlight most important information
  6. Enables easy extraction of information
  7. Adopt interoperability standards enabling communication among different providers and payors
- Leverages **mobile technology** for scheduling, PROMs collection, secure patient communication and monitoring, virtual visits, access to clinical notes, and patient education

# Agenda

---

- **Why Value Based Healthcare is needed**
- **Porter's Model of VBHC**