Moving towards sustainable cancer care:

Reducing inefficiencies, improving outcomes

ECCO 2017 – **All.Can** satellite symposium

Sunday, 29th January 2017
Amsterdam

This symposium has been organised with financial support from
Bristol-Myers Squibb (lead sponsor), Amgen and MSD (co-sponsors).

All.Can: launch of the policy report

Improving cancer outcomes, creating efficiency

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ECCO2017 EUROPEAN CANCER CONGRESS 27-30 January Amsterdam, The Netherlands

GENOLIER Clinique

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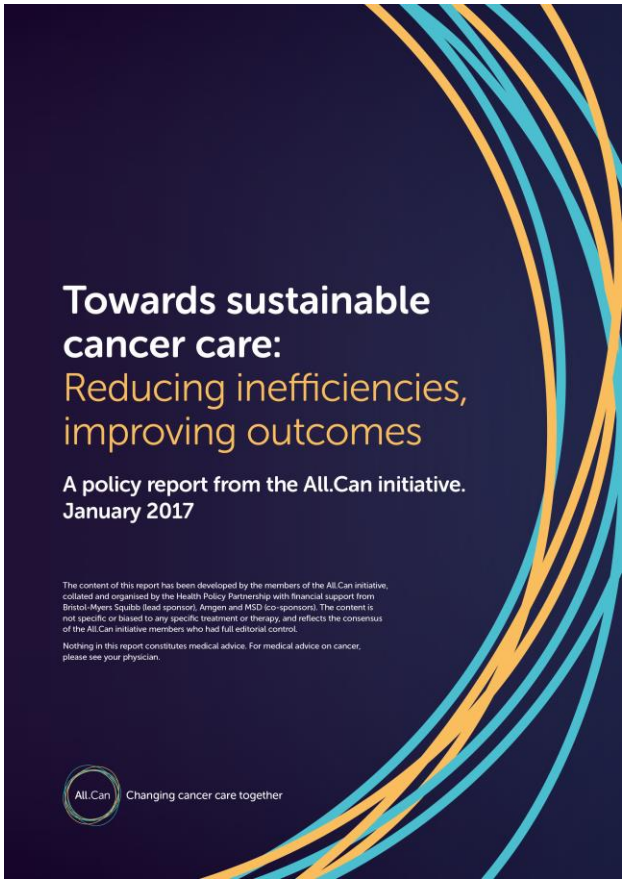
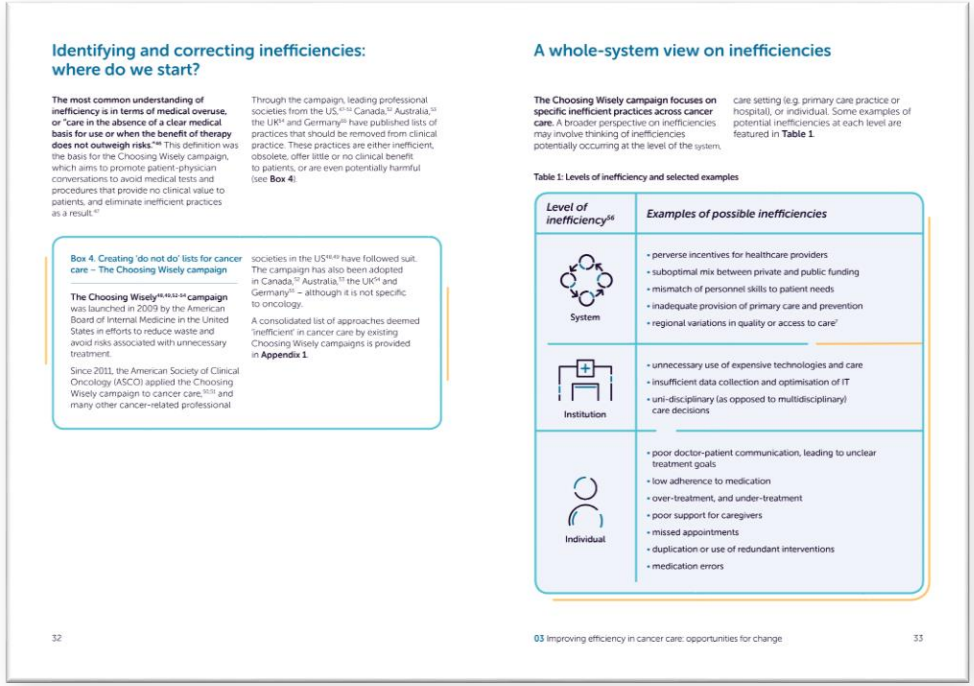
Towards sustainable cancer care: Reducing inefficiencies, improving outcomes





Identifying and correcting inefficiencies: where do we start?

The most common understanding of inefficiency is in terms of medical overuse, or "care in the absence of a clear medical basis for use or when the benefit of therapy does not outweigh risks."[46] This definition was the basis for the Choosing Wisely campaign, which aims to promote patient–physician conversations to avoid medical tests and procedures that provide no clinical value to patients, and eliminate inefficient practices as a result.[47]

Through the campaign, leading professional societies from the US,[47–50] Canada,[51] Australia,[52] the UK[53] and Germany[20] have published lists of practices that should be removed from clinical practice. These practices are either inefficient, obsolete, offer little or no clinical benefit to patients, or are even potentially harmful (see **Box 4**).

Box 4. Creating 'do not do' lists for cancer care – The Choosing Wisely campaign

The Choosing Wisely[18,49,52–54] **campaign** was launched in 2009 by the American Board of Internal Medicine in the United States in efforts to reduce waste and avoid risks associated with unnecessary treatment.

Since 2011, the American Society of Clinical Oncology (ASCO) applied the Choosing Wisely campaign to cancer care,[18,55] and many other cancer-related professional societies in the US[18,47] have followed suit. The campaign has also been adopted in Canada,[52] Australia,[17] the UK[54] and Germany[20] – although it is not specific to oncology.

A consolidated list of approaches deemed 'inefficient' in cancer care by existing Choosing Wisely campaigns is provided in **Appendix 1**.

A whole-system view on inefficiencies

The Choosing Wisely campaign focuses on specific inefficient practices across cancer care. A broader perspective on inefficiencies may involve thinking of inefficiencies potentially occurring at the level of the system, care setting (e.g. primary care practice or hospital), or individual. Some examples of potential inefficiencies at each level are featured in **Table 1**.

Table 1: Levels of inefficiency and selected examples

Level of inefficiency[56]	*Examples of possible inefficiencies*
System	• perverse incentives for healthcare providers • suboptimal mix between private and public funding • mismatch of personnel skills to patient needs • inadequate provision of primary care and prevention • regional variations in quality or access to care[7]
Institution	• unnecessary use of expensive technologies and care • insufficient data collection and optimisation of IT • uni-disciplinary (as opposed to multidisciplinary) care decisions
Individual	• poor doctor-patient communication, leading to unclear treatment goals • low adherence to medication • over-treatment, and under-treatment • poor support for caregivers • missed appointments • duplication or use of redundant interventions • medication errors

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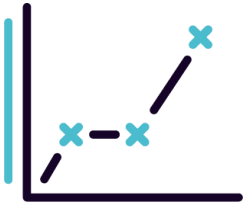
Policy report recommendations

Focus political will

Place patient-relevant outcomes at the heart of everything we do



Invest in data

Create greater accountability

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Growing burden of cancer in Europe

- 2nd highest mortality rate after cardiovascular disease[1]
- 17% of the total disease burden[2]
- 2.5 million new cases & 1.2 million deaths each year[3]

1. World Health Organization. Global Health Estimates Summary Tables: Disease Burden - Estimates for 2000-2012
2. Cole A, Lundqvist A, Lorgelly P, et al. Improving Efficiency and Resource Allocation in Future Cancer Care.
3. De Angelis R, Sant M, Coleman MP, et al. Cancer survival in Europe 1999–2007 by country and age: results of EUROCARE-5 - a population-based study.

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High unmet needs remain

- 5-year survival: <50% overall across Europe[1]
- Survival rates vary widely by cancer type:
  - **Lung (13%)**
  - **Stomach (25.1%)**
  - **Ovarian (37.6%)**
  - **Colon (57.0%)**
  - **Non-Hodgkin lymphoma (59.4%)**
  - **Breast (81.8%)**
  - **Prostate (83.4%)[1]**
- Low survival rates among many rare cancers:
  - **Bladder squamous-cell carcinoma (20.4%)**
  - **Angiosarcoma of liver (6.4%)**
  - **Mesothelioma (4.7%)[2]**

1. De Angelis R, Sant M, Coleman MP, et al. Cancer survival in Europe 1999–2007 by country and age: results of EUROCARE-5 - a population-based study.
2. Gatta G, Ciccolallo L, Kunkler I, et al. Survival from rare cancer in adults: a population-based study.

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Inequalities in access to care

Between and within European countries, there are:

- Gaps in access to cancer surgery[1]
- Gaps in access to radiation therapy[2]
- Gaps in access to medicines,[3] even to the low-cost medicines on the WHO List of Essential Medicines[4]

Cost to society

- Catastrophic out-of-pocket costs for many families[4,5]
- 60% of the costs of cancer are non-healthcare related[5]
- Lost productivity due to cancer: €52 billion across EU[5]

1. Sullivan R, Alatise OI, Anderson BO, et al. Global cancer surgery: delivering safe, affordable, and timely cancer surgery.
2. Datta NR, Samiei M, Bodis S. Radiotherapy infrastructure and human resourcesin Europe - present status and its implications for 2020. Eur J Cancer. 2014
3. Sekulovic LK. More than 5000 patients with metastatic melanoma in Europe per year do not have access to new life-saving drugs
4. Cherny NS, R; Torode, J; Saar, M; Eniu, A. ESMO European Consortium Study on the availability, out-of-pocket costs and accessibility of antineoplastic medicines in Europe.
5. Luengo-Fernandez R, Leal J, Gray A, et al. Economic burden of cancer across the European Union: a population-based cost analysis.

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Why is there an urgent need to improve efficiency in cancer care?

Rising demand, increasing complexity

More spending does not always yield better outcomes[1]

Need to rethink how we allocate resources

> **"We are… at a crossroads where our choices, or refusal to make choices, have clear implications for our ability to provide care in the future."**
>
> Richard Sullivan, the Lancet Commission for Sustainable Cancer Care Commission in High-Income Countries (2011)

1. Soneji S and Yang JW. New Analysis Reexamines The Value Of Cancer Care In The United States Compared To Western Europe.

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Improve efficiency & invest in innovation

It is not about spending *more,* but spending *better*

- Improving efficiency ≠ linear cost-cutting[1]
  - Cost cutting without considering outcomes will create false savings & limit long-term efficiency improvement[1]
- Invest & disinvest with a focus on improving patient outcomes with resources available
- Consider the long-term value of care choices and investments on outcomes and costs, including social costs

1. Porter ME. What Is Value In Health Care?

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All.Can: our goals

Help define better solutions for sustainable cancer care and improve patient outcomes in the future

Create political and public engagement on the need to improve the efficiency of cancer care

Focus first on what matters most to patients and make sure resources are targeted towards achieving these outcomes

1. Porter ME. What Is Value In Health Care?

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Some other ongoing initiatives

Oncology-focused initiatives

- ESO Task Force on Innovation & Obsolescence in Cancer
- World Oncology Forum

European CanCer Organisation

- Improving access to innovation in cancer care (position paper)

European Observatory on Health Systems and Policies

- Health System Efficiency: How to make measurement matter for policy and management

European Commission

- Joint Report on Health Care and Long-Term Care Systems & Fiscal Sustainability (2016)
- Efficiency estimates of health care systems (2015)

Organisation for Economic Co-operation and Development

- Tackling Wasteful Spending on Health (2017)

Right Care Alliance

- The Lancet Right Care series (2017)

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All.Can members (January 2017)

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Rainer Hess
GVG-Committee on Health Goals

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ICHOM

Jason Arora
ICHOM

Vivek Muthu
Marivek Health Consulting

Kathy Oliver
The International Brain Tumour Alliance

Bettina Ryll
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Melanoma Patient Network Europe & Mélanome France

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Alexander Roediger
MSD

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All.Can in 2017 – proposed activities

- Gathering of evidence of waste and inefficiencies in cancer care *from the patient's perspective*
- Development of a Patient Toolkit to help patients discuss how cancer care may be more focused on delivering optimal outcomes
- Pilot study looking at how we can measure efficiency of cancer care in practice and do this systematically across the health care system
- Further exploration of the role of health information in improving the efficiency of cancer care
- European-level policy engagement, through EU mechanisms such as the European Semester
- All.Can summit gathering examples of best practice across Europe

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Delivering the services that patients want

How can we really put the patient at the core of improving cancer care?

Kathy Oliver
The International Brain Tumour Alliance

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The start of a new year…

…a time of reflection, looking back at the past year and anticipating the forthcoming one.

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What do patients value?

Survival	Quality of life
Fewer side effects	Supportive care
Rehabilitation	Palliative care

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In order to give value in healthcare, we need to focus on what positive outcomes we wish to achieve

and those outcomes must be patient-centred

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“We need to eliminate what brings little or no benefit to patients and prioritise interventions that offer the greatest benefit to patients and value to the healthcare system overall.”

All.Can. Towards sustainable cancer care: Reducing inefficiencies, improving outcomes. 2017.

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A focus on outcomes, not just costs

The ultimate goal of healthcare: to improve patient outcomes, and to do it as efficiently as possible

- Past efforts to improve efficiency often solely focused on cost reduction rather than improving patient outcomes
- Care quality metrics guiding investment are often process metrics, for example lab test results or the number of procedure performed, rather than patient-relevant outcomes
- To underpin any efficiency efforts and help guide decisions, we need comprehensive real-world patient data on patient-relevant outcomes

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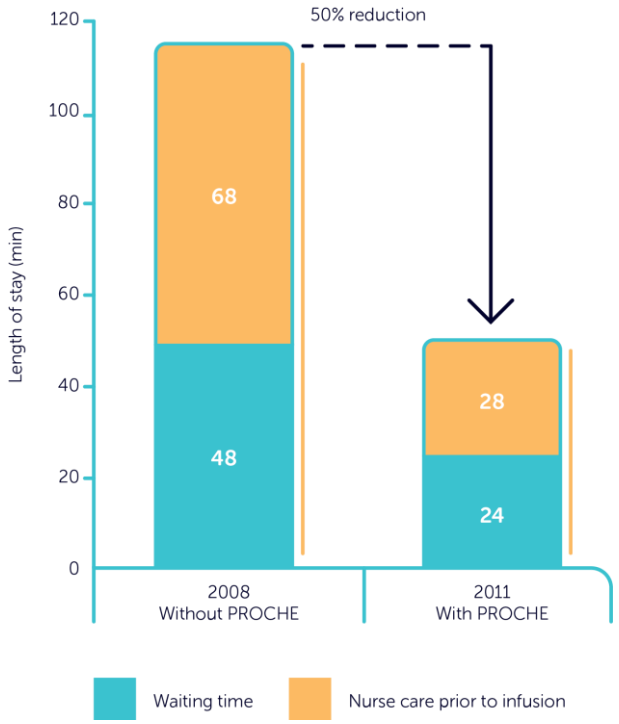
The PROCHE programme: better chemotherapy delivery for patients

- **Problem:** a patient at a chemo appointment is asked on arrival about side effects. Reported side effects may result in having to modify or postpone treatment, causing delays and wasted drugs
- **Solution:** a nurse calls patients **two days ahead of the chemo appointment** to ask about the last side effects in order to adjust treatment plans for the next appointment
- **Result:** treatment delays reduced by half, patients report less pain and fatigue, more patients treated per day, fewer drugs wasted



Adapted from: *A practical approach to improve safety and management in chemotherapy units based on the PROCHE - programme for optimisation of the chemotherapy network monitoring program (2013)*

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Adapting care to paediatric patients

- **Problem:** ~80% of paediatric patients need sedation for imaging tests. Scans must be rescheduled if unable to provide sedation
- **Solution:** GE Healthcare re-painted imaging machines in child-friendly themes. This low-tech innovation changed paediatric patients' perception of the tests
- **Result:** the number of children needing sedation dropped, more patients scanned per day, overall patient satisfaction scores up by 90%

Image source: the Eye, Slate's design blog. www.slate.com/blogs/the_eye/2013/10/18/creative_confidence_a_new_book_from_ideo _s_tom_and_david_kelley.html

Image source: http://medcitynews.com/2012/04/what-do-coral-reefs-have-to-do-with-your-childs-ct-scan-just-ask-ge-healthcare/

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PAPERFUGE – hand-powered centrifuge

- **Problem:** Commercial centrifuges cost thousands; sometimes no electricity/ infrastructure/roads so it is very difficult to treat disease
- **Solution:** Hand-powered paper centrifuge, string and plastic. Costs 20 cents
- **Result:** Spins biological samples at up to 125,000 rpm, separates plasma from blood samples in 90 seconds. It could transform care for diseases like malaria, HIV/AIDS in the poorest of countries

Photo credit: Kurt Hickman /Stanford University/http://www.npr.org/sections/health-shots/2017/01/10/508415046/childrens-whirligig-toy-inspires-a-low-cost-laboratory-test

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We need to ask ourselves

- **Are we genuinely and meaningfully understanding what patients value?**
- **Are we aiming for the outcomes that patients want?**
- **Are we using the limited money we do have for health care in the most efficient way?**
- **Can we achieve better value by thinking differently and more creatively about how we use our resources?**

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And…

- **Are we being collaborative across the whole health care spectrum? Silos are great down on the farm but have no place in healthcare!**
- **How can we stamp out waste and duplication in our health care systems and re-allocate the money which is saved so that we can deliver real and meaningful value?**

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“Better is possible.
It does not take genius.

It takes diligence.
It takes moral clarity.
It takes ingenuity.

And above all, it takes a willingness to try.”

Atul Gawande, **Better: A Surgeon’s Notes on Performance**

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The power of data to drive outcomes-based efficiency

Dr Jason Arora
International Consortium for Health Outcomes Measurement (ICHOM)

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Two examples

1. Martini Klinik

2. Blue Cross Blue Shield of Michigan

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The Martini Klinik use routine outcomes measurement to achieve excellent results in prostate cancer care

Key components of Martini's continuous improvement approach

Martini Klinik's strategy led to the adoption of surgical techniques that improved care rapidly and dramatically

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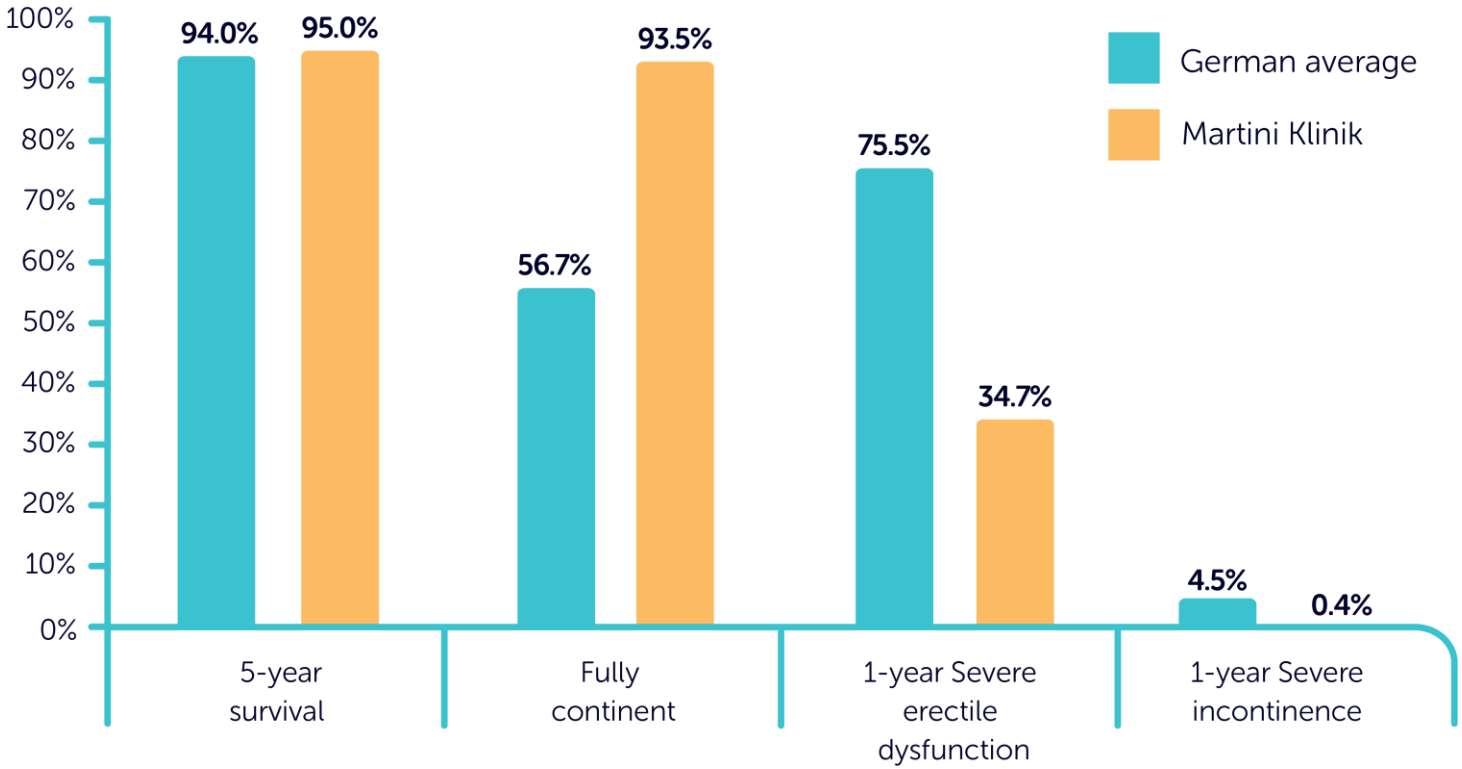
The impact of focus and teamwork



Source: BARMER GEK Hospital Report 2012, Martini-Klinik database

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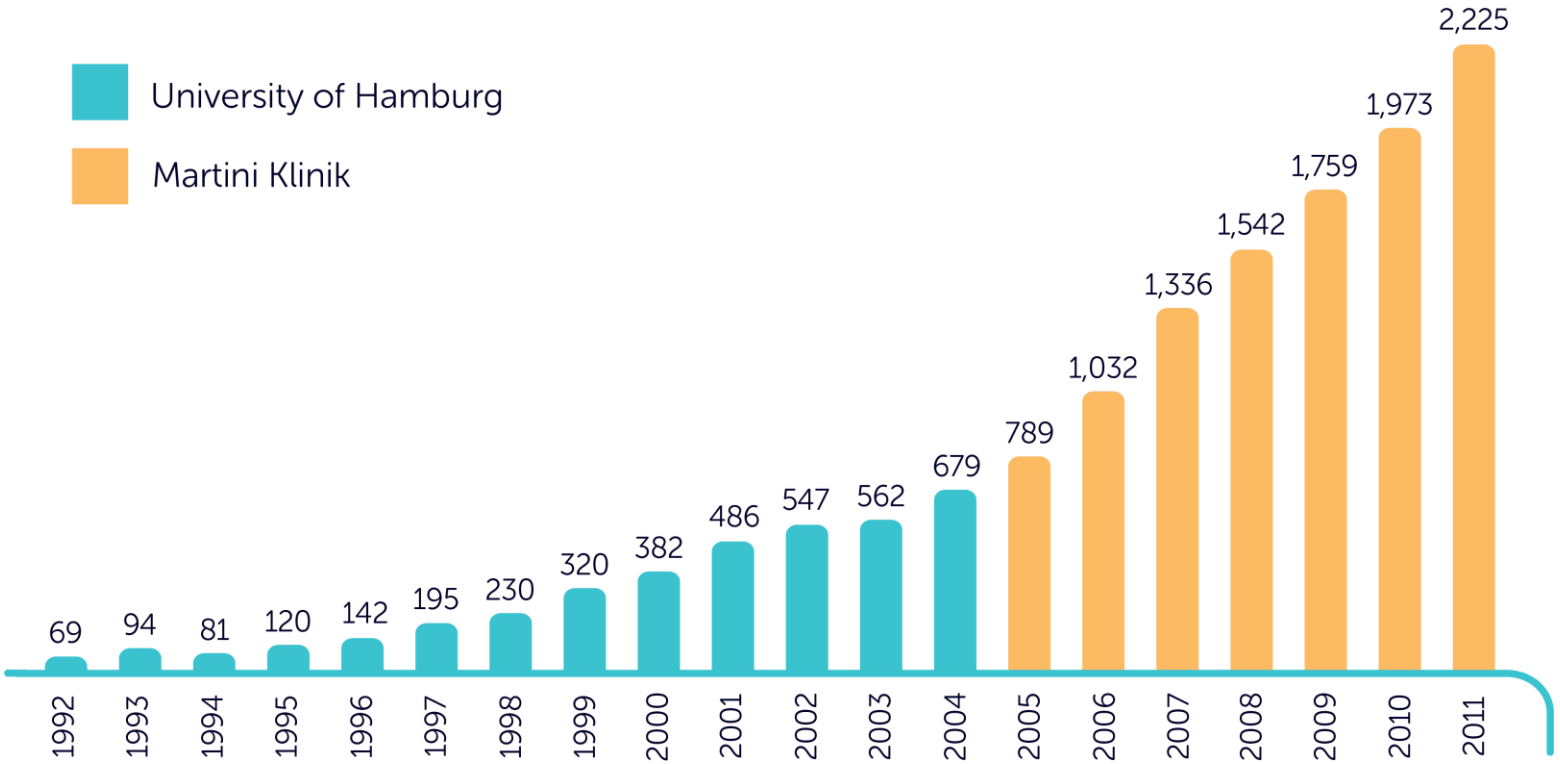
Measurable clinical success led to operational success



Source: Martini Klinik quality report “Kompetenz durch Wissenschaft”; Note: data not available for 2010-2012

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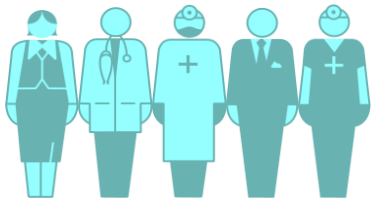
Payers drive value and lower costs through outcomes focus

BCBS of MI shows potential for "win-win-win" by collaborating with providers to improve outcomes

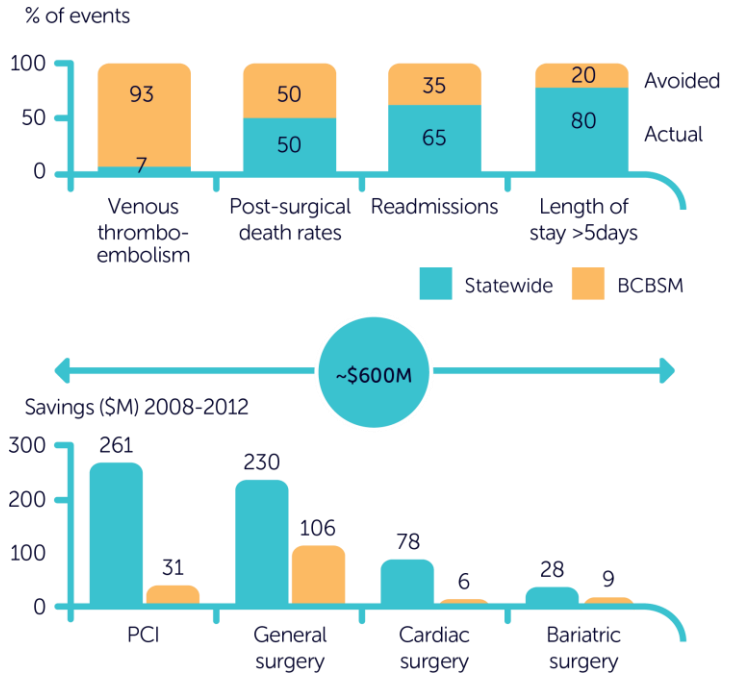
BCBSM funds provider-led Collaborative Quality Initiatives – focus to improve outcomes

- BCBS-funds provider data collection and analysis across 20+ Collaborative Quality Initiatives (CQIs)
- CQI Coordinating Center (U. of MI) evaluates providers' outcomes and reports results to providers
- Clinician-led provider meetings showcase best-in-class care and discuss improvement opportunities
- Patient representatives included in discussion to ensure initiative maintains strong patient focus



CQIs proven to improve outcomes and drive dramatic reduction in costs – $600M in four years

Actual vs. avoided events based on % change 2007-2012 levels – bariatric surgery[1]



* PCI data 2009-2012, card surg 2009-10, gen surg 2008-12, bariatric surg 2008-12

1 http://www.bcbs.com/healthcare-news/plans/bcbsmi-healthcare-quality-efforts-with-hospitals-save-597-million-statewide-over-five-year-period.html

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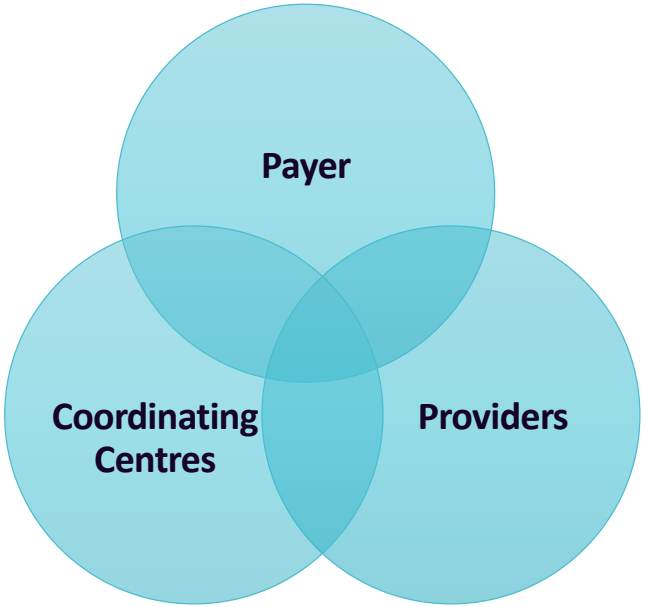
Michigan model involves continuous collaboration between three players: payer, providers, and coordinating center

Identified data is not shared or reported publicly and the payer only sees de-identified data

Coordinating Centre

- Clinical leadership in QI
- Performs the risk-adjustment and comparative performance analysis
- Shares performance with providers, reports de-identified data to payer
- Convenes regular meetings to discuss best practices and progress



Payer

- Funds data collection and coordinating centre infrastructure
- Provides administrative oversight
- Analyses/shares population-level outcomes data publicly

Providers

- Routinely collect/abstract patient data and submit data to registry
- Participate in consortium-wide quality improvement activities

Regularly scheduled collaborative-wide meetings are critical to each initiative's effectiveness and success

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All.Can's potential journey to achieving high-value cancer care for patients across Europe

Contribute to a greater understanding of how we may measure 'efficiency' of cancer care in a systematic way, for example by:

1. Developing standardised, patient-centred Standard Sets to help us measure true success in cancer care
   - ICHOM has developed globally standardised outcome sets (Standard Sets) for Lung, Prostate, Breast and Colorectal cancers, and will soon be developing a core cancer Standard Set
2. Facilitating the measurement of these Standard Sets across health systems to generate high-resolution, patient-centred outcomes data
3. Pooling and analysing the data
4. Using these data to learn how to deliver the best possible patient-centred outcomes at the lowest cost

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Panel discussion

Dr Matti Aapro, Clinique de Genolier, Switzerland

Kathy Oliver, International Brain Tumour Alliance

Dr Jason Arora, International Consortium for Health Outcomes Measurement (ICHOM)

Emmanuel Blin, Chief Strategy Officer, Bristol-Myers Squibb

Herb Riband, VP Value Access and Policy, Amgen

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Many thanks
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