Kwaliteit zal u redden?

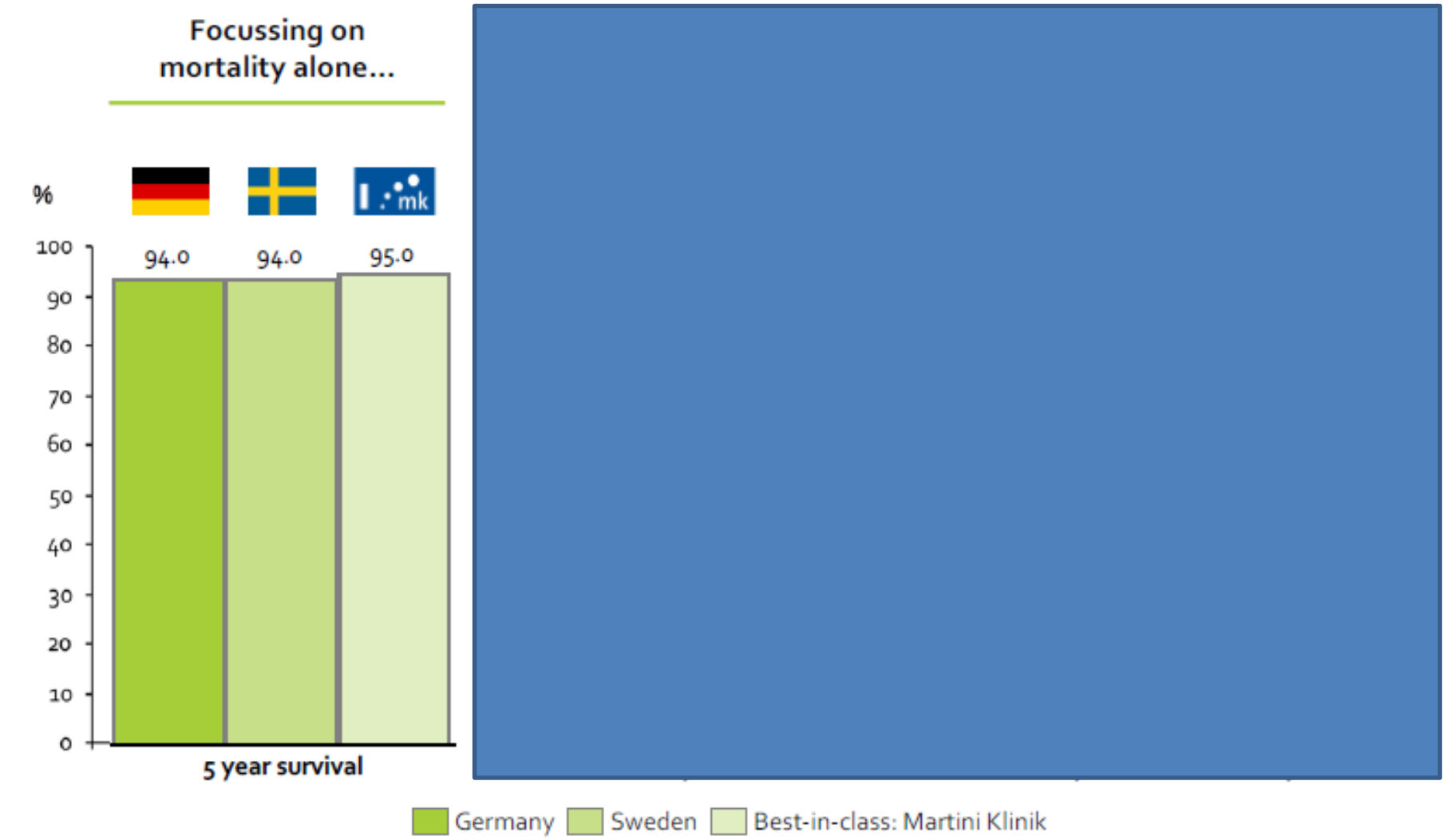
W. Van Biesen

Justifiable Healthcare project

Understanding the Shift from Fee-for-Volume to Fee-for-Value

Fee-for-Volume (Old World)	Fee-for-Value (New World)
Providers make money by negotiating higher rates and performing as many services as possible	Providers make money by not only providing services, but other results valued by the industry, such as quality, efficiency, wellness, care coordination, and prevention
Payers see providers as vendors	Payers begin to see providers as partners
Providers see every touch as revenue	Providers see every touch as an expense to be managed
Most providers have little regard for evidence-based medicine.	Providers care a great deal about evidence based medicine
Payers primarily pay providers based on claims	Payers pay providers based on claims plus many other inputs (few of which are automated)

This is why measuring and reporting meaningful outcomes matters Comparing outcomes of prostate cancer care



Swedish data rough estimates from graphs; Source: National quality report for the year of diagnosis 2012 from the National Prostate Cancer Register (NPCR) Sweden, Martini Klinik, BARMER GEK Report Krankenhaus 2012, Patient-reported outcomes (EORTC-PSM), 1 year after treatment, 2010

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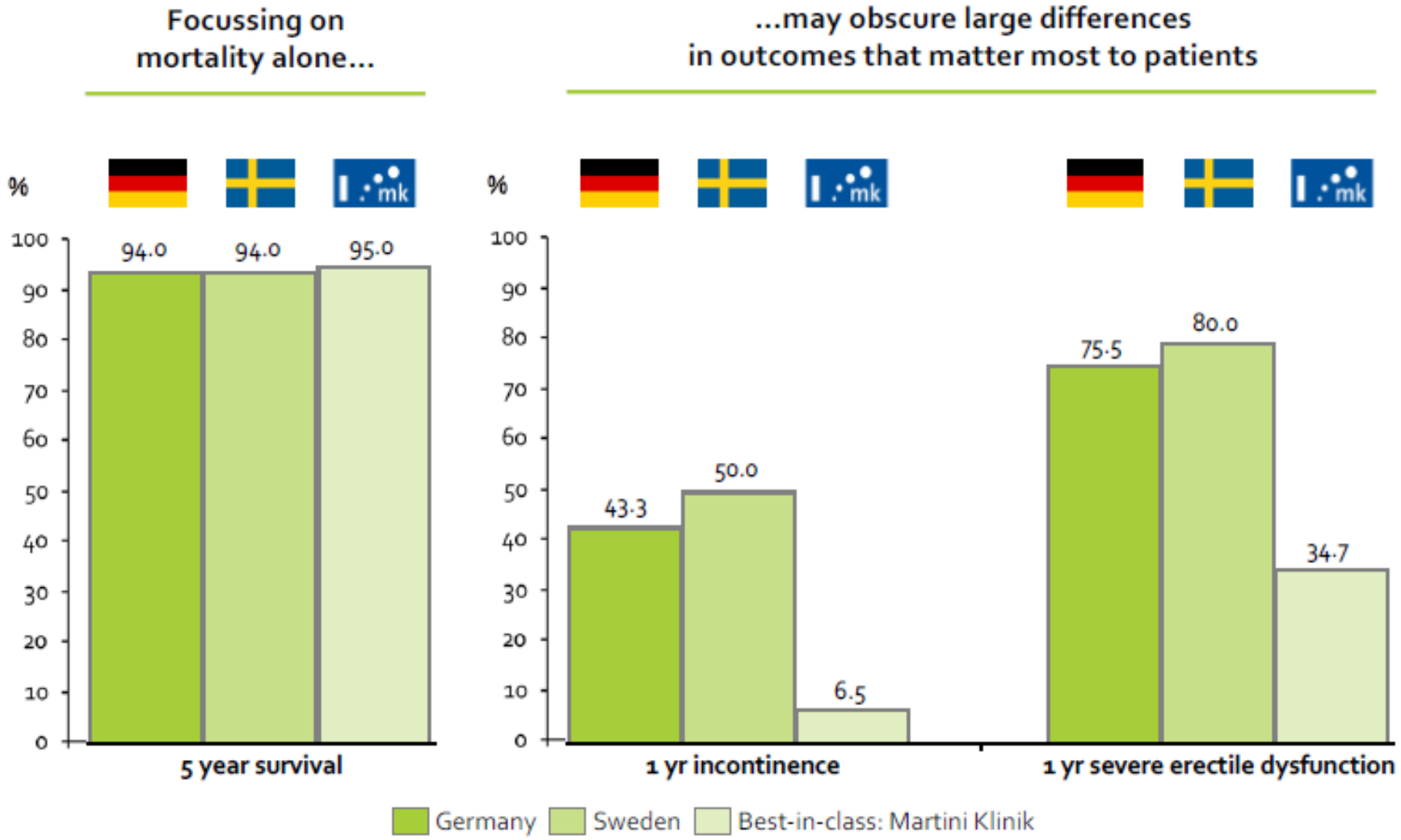

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Changing culture of care
to
focus on patient experience

What we can learn from a DIY knitted sweater…….

- Done with the best intentions, and with great skill
- “Producer” happy: (thinks) she has done something useful for me
- Voice of recipient not heard or asked….
- For me it is sufficient to know she CARES for me, I do not want a sweater….

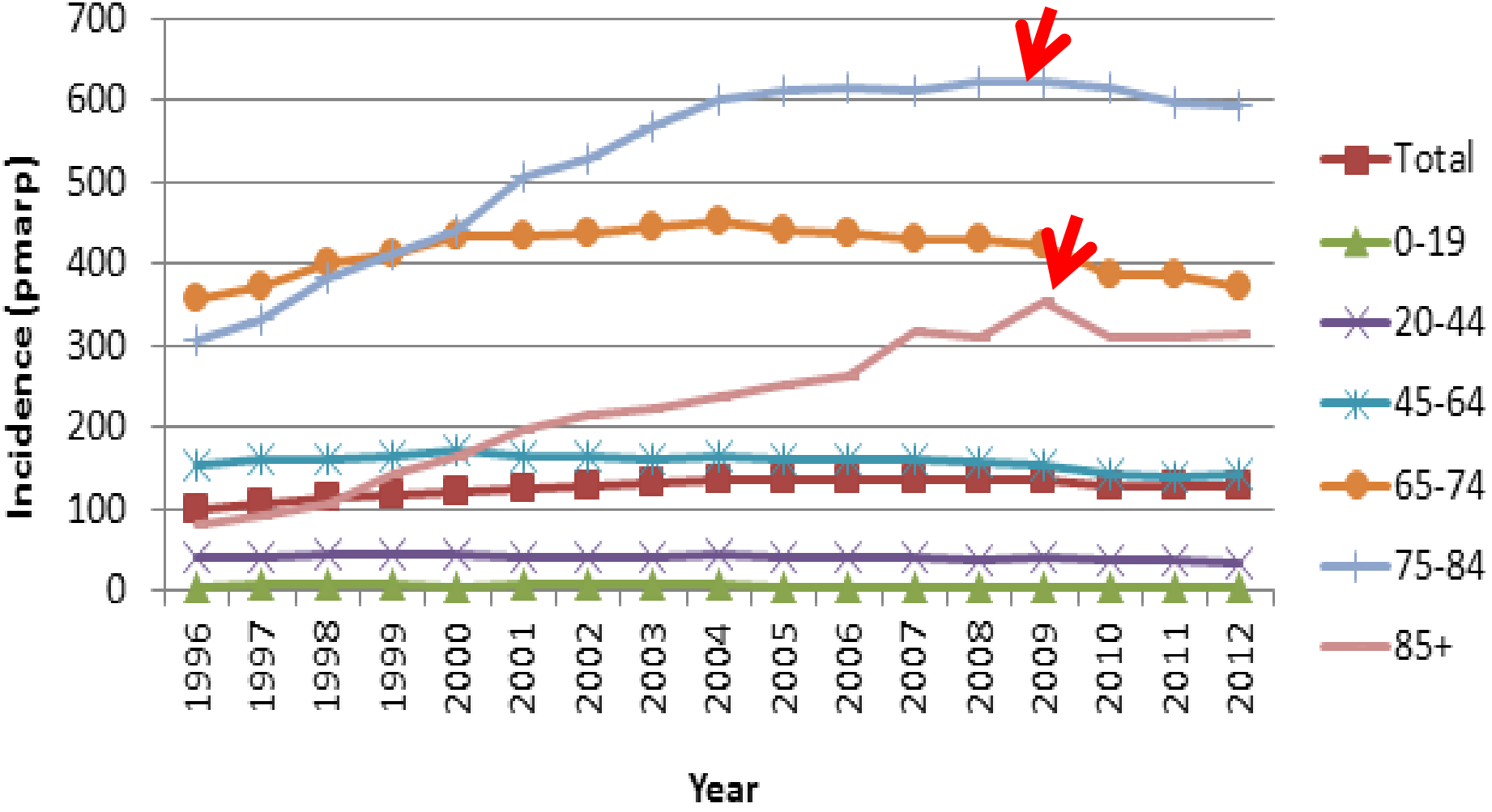
What we can learn from a DIY knitted sweater…….

- Compare to our care for elderly with advanced CKD:
  - We provide technical cure for everybody, and often with best of intentions

What we can learn from a DIY knitted sweater…….

- Compare to our care for elderly with advanced CKD:
  - We provide technical cure for everybody, and often with best of intentions
  - Physician (and family) very satisfied that “everything is done”

Incidence of dialysis per age category, per million population



ERBP

Table 2. Withdrawals per 100 patient-years of dialysis and withdrawal as a cause of death

Year	Total Withdrawals (*n*)	Withdrawal Rate per 100 Patient-Years of Dialysis (%)	Withdrawal as Cause of Death (%)[a]
2001	233	1.5	7.9
2002	303	1.8	9.9
2003	376	2.2	11.8
2004	441	2.4	13.8
2005	543	2.8	16.1
2006	538	2.7	15.4
2007	657	3.2	18.4
2008	660	3.1	18.3
2009	667	3.0	19.5

[a]Date of death not available in 25% of patients who withdrew from dialysis.

Elwood et al, cJASN, 2013

What we can learn from a DIY knitted sweater…….

- Compare to our care for elderly with advanced CKD:
  - We provide technical cure for everybody, and often with best of intentions
  - Physician (and family) very satisfied that “everything is done”
  - Opinion of patient not heard (mostly not even asked)

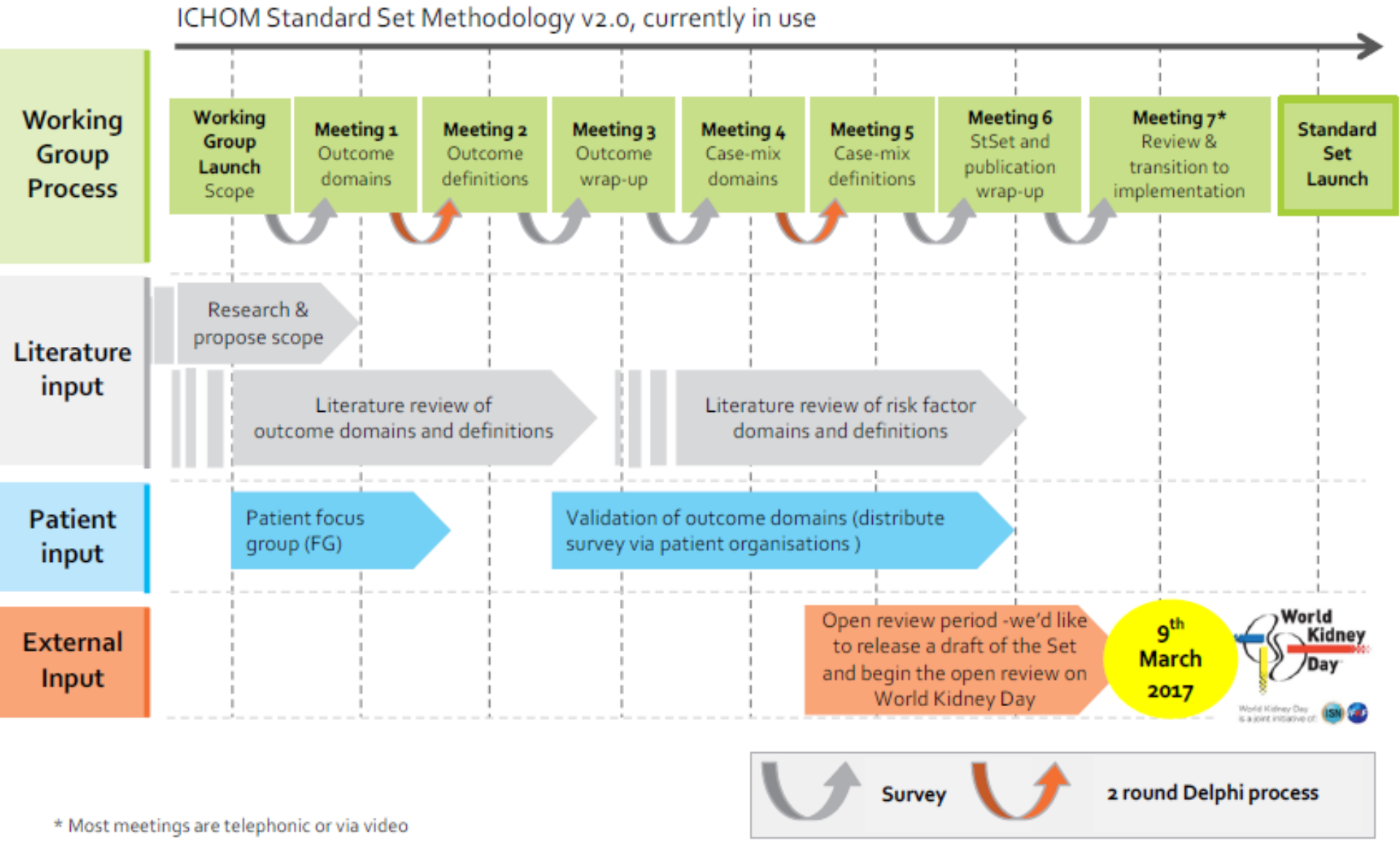

Opportunity!!

We need to take into account what patients want

We need to take into account what patients want

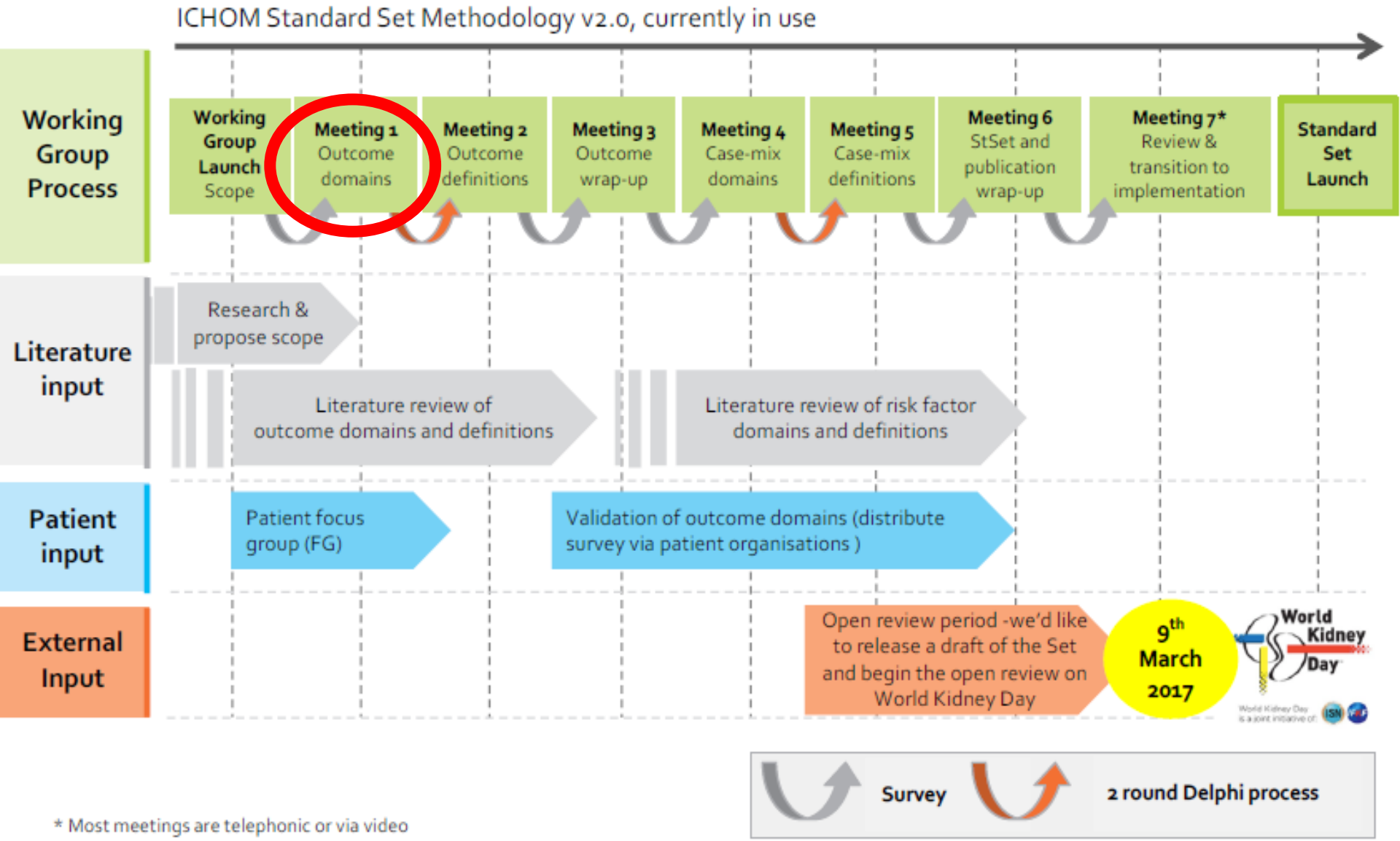
If we want to improve quality

A Standard Set is defined through series of teleconference calls, supported by research and patient input



* Most meetings are telephonic or via video

A Standard Set is defined through series of teleconference calls, supported by research and patient input



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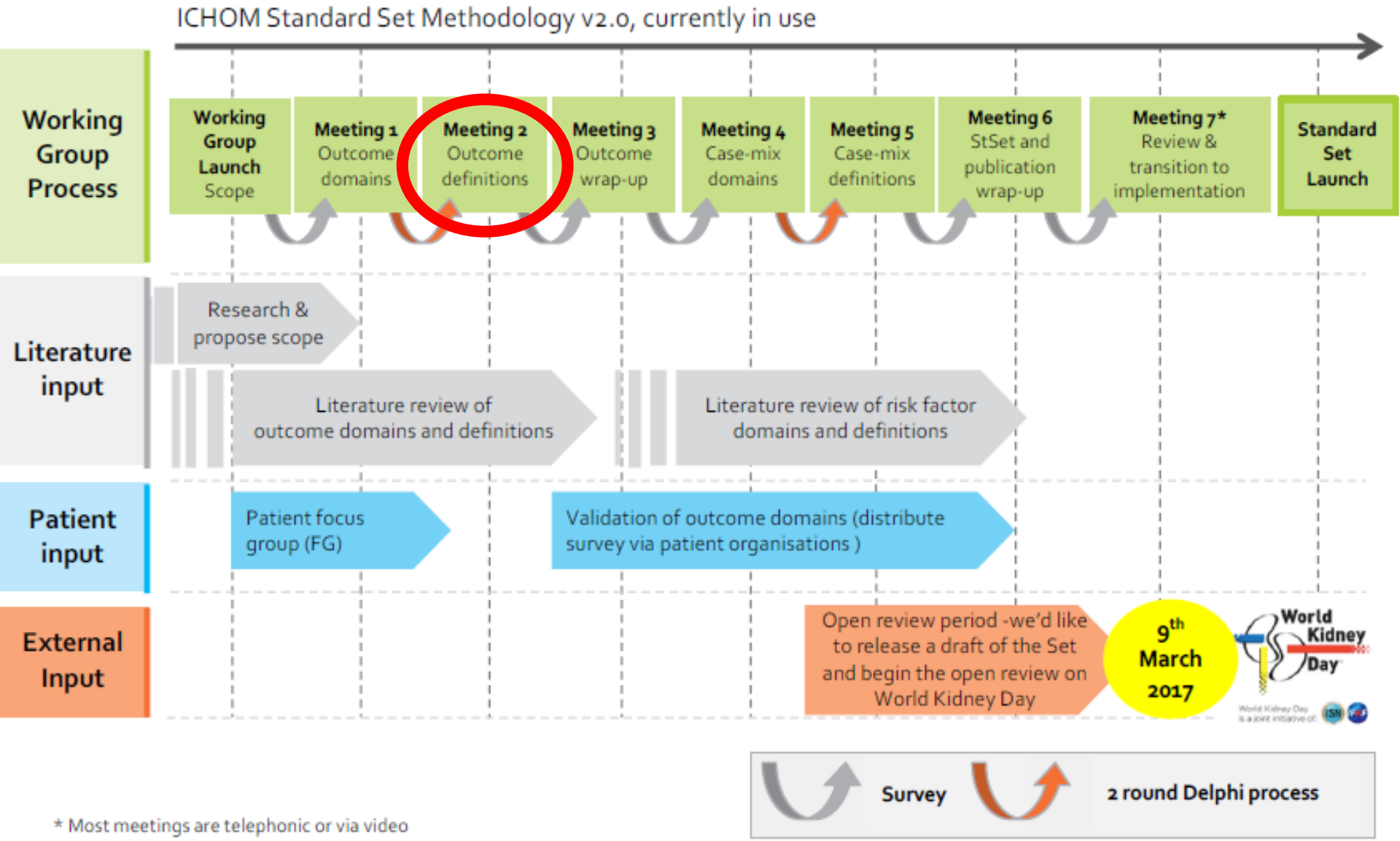

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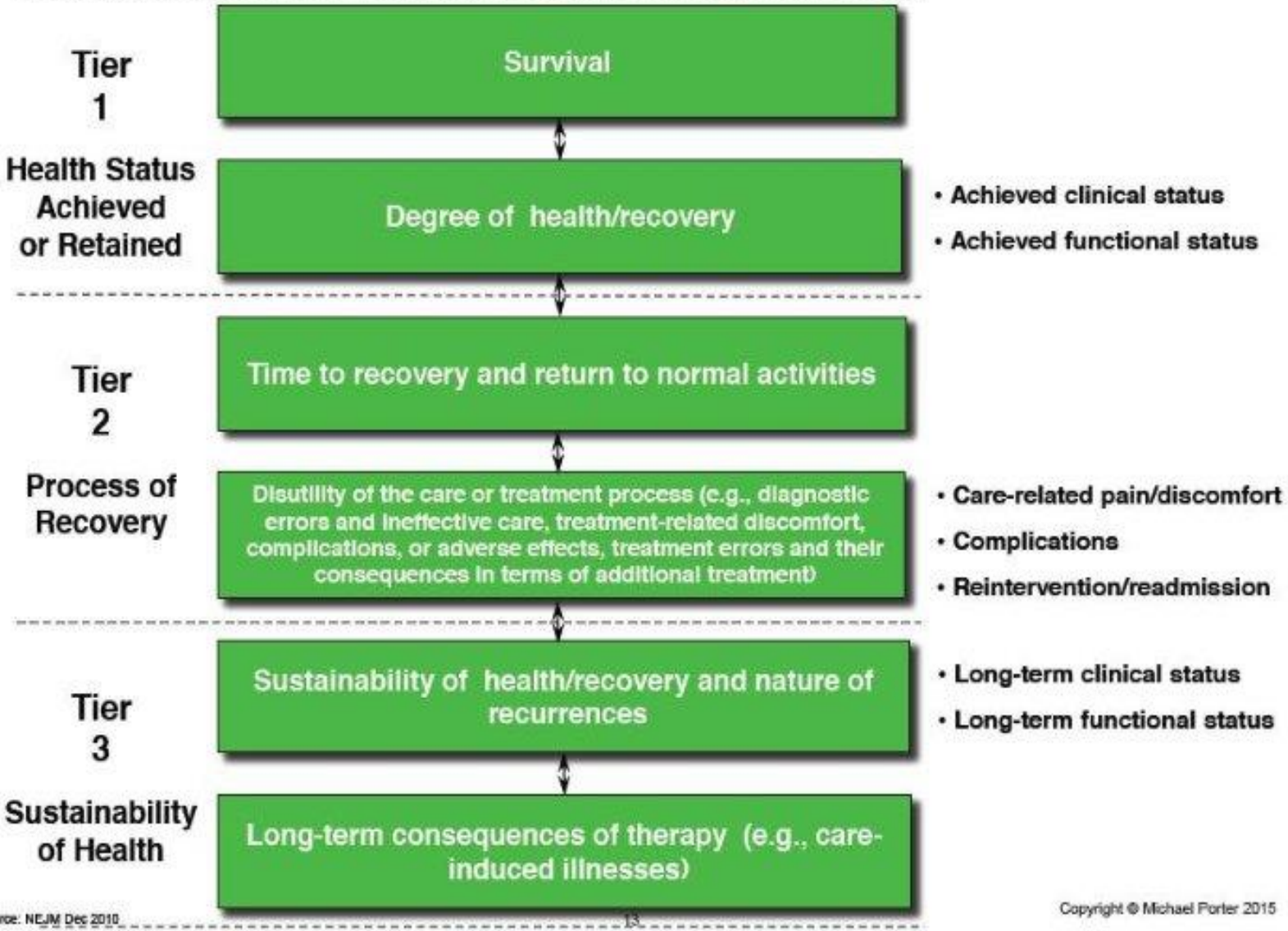
The Outcome Measures Hierarchy



Source: NEJM Dec 2010

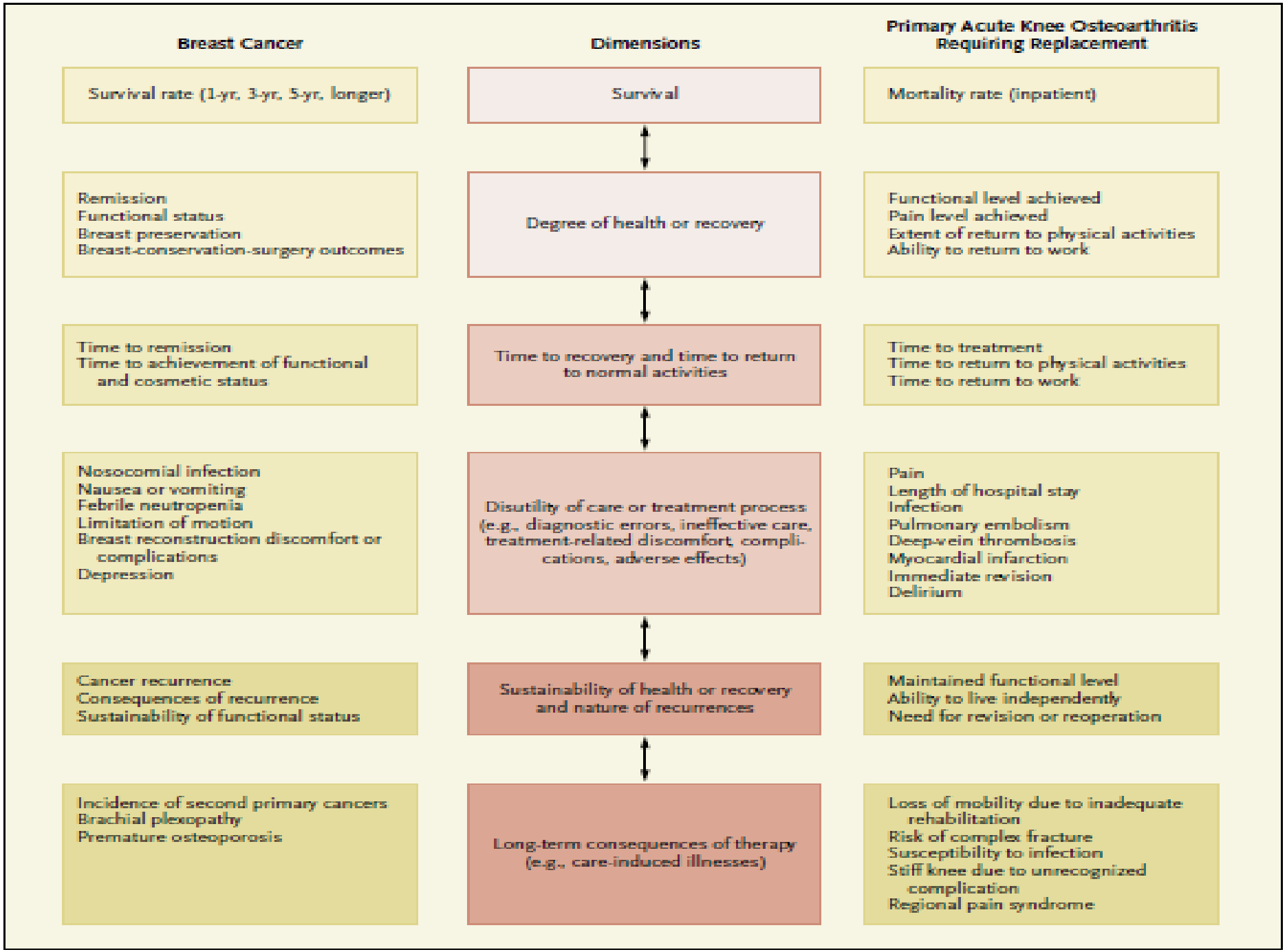


Figure 2. Outcome Hierarchies for Breast Cancer and Knee Osteoarthritis.

To measure is my pleasure…

Measuring quality

* Measures vs indicators

Some representation that reflects another entity

Direct measuring of a physical concept eg body weight

Indicator categories

Structure

Characteristics of the health care setting
Example: have a nutritional counsellling programme, how many nurses/patien, is there a CT scan etc

Process

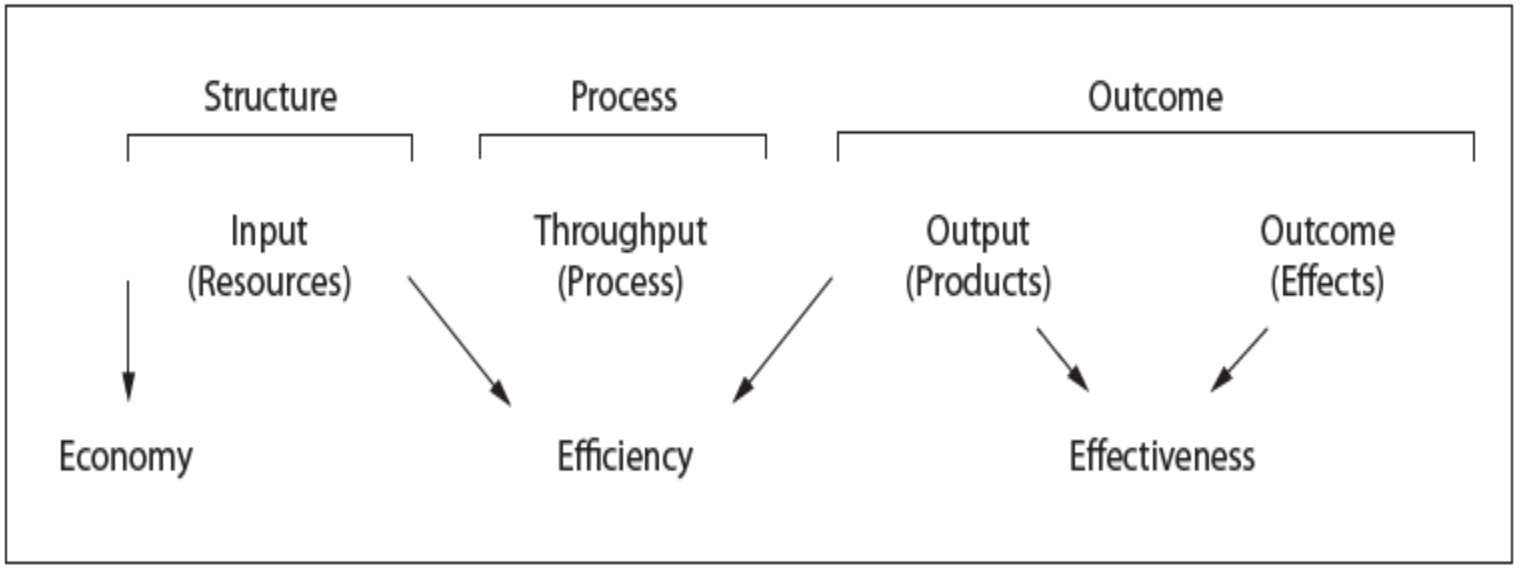
Care is actually being delivered
Example: hepatitis B vaccination in seronegative patients, % follows handwashing protocol, % prescription of statin

Outcome

Patients' ultimate health status or ocurrence of adverse events after having received treatment
Examples: CV death in ESRD patients (observed); quality of life after transplantation (patient-reported) (Type of outcomes: clinical outcomes, Clinical correlates, surrogate markers

From Donabedian, 1966 Milbank Quarterly

2000



2014

Year	Structures	Process	Outcome
2002	Availability of jointcare program (orthopedics)	-	-
2005	Specialisation surgeon	Waiting time for TKA	-
2009	-	Pre-operative antibiotics	Wound infections (not publicly available)
2011	-	Volume	Δ Oxford hip score - PROM
2014			Value = Quality Costs

Figuur 1. Van structuur naar outcome en waarde

How to balance the advantages of different indicator categories against the disadvantages depends on why you measure them. What is the aim of your measurement initiative?

Calculating an indicator (an example)

Numerator

How many times is preferred care provided

Denominator

The number of patients eligible

Calculating an indicator (an example)

Vascular access data of centre X	All ages	Age <80
All incident HD patients	536	429
Screened for fistula suitability at least once before start HD	418	364
Functioning AV fistula at start HD	171	156
Functioning AV fistula at day 91 of HD	240	227

Indicator A

Numerator All patients with AVF at start HD **171**

Denominator All incident HD patients **536**

= **32%**

Calculating an indicator (an example)

Vascular access data of centre X	All ages	Age <80
All incident HD patients	536	429
Screened for fistula suitability at least once before start HD	418	364
Functioning AV fistula at start HD	171	156
Functioning AV fistula at day 91 of HD	240	227

Indicator B

Numerator: All patients with AVF at day 91 of HD — **240**

Denominator: All incident HD patients — **536**

$$\frac{240}{536} = 45\%$$

Calculating an indicator (an example)

Vascular access data of centre X	All ages	Age <80
All incident HD patients	536	429
Screened for fistula suitability at least once before start HD	418	364
Functioning AV fistula at start HD	171	156
Functioning AV fistula at day 91 of HD	240	227

Indicator C

Numerator All patients with AVF at day 91 of HD **227**

Denominator All incident HD patients <80 years **429**

= **53%**

Calculating an indicator (an example)

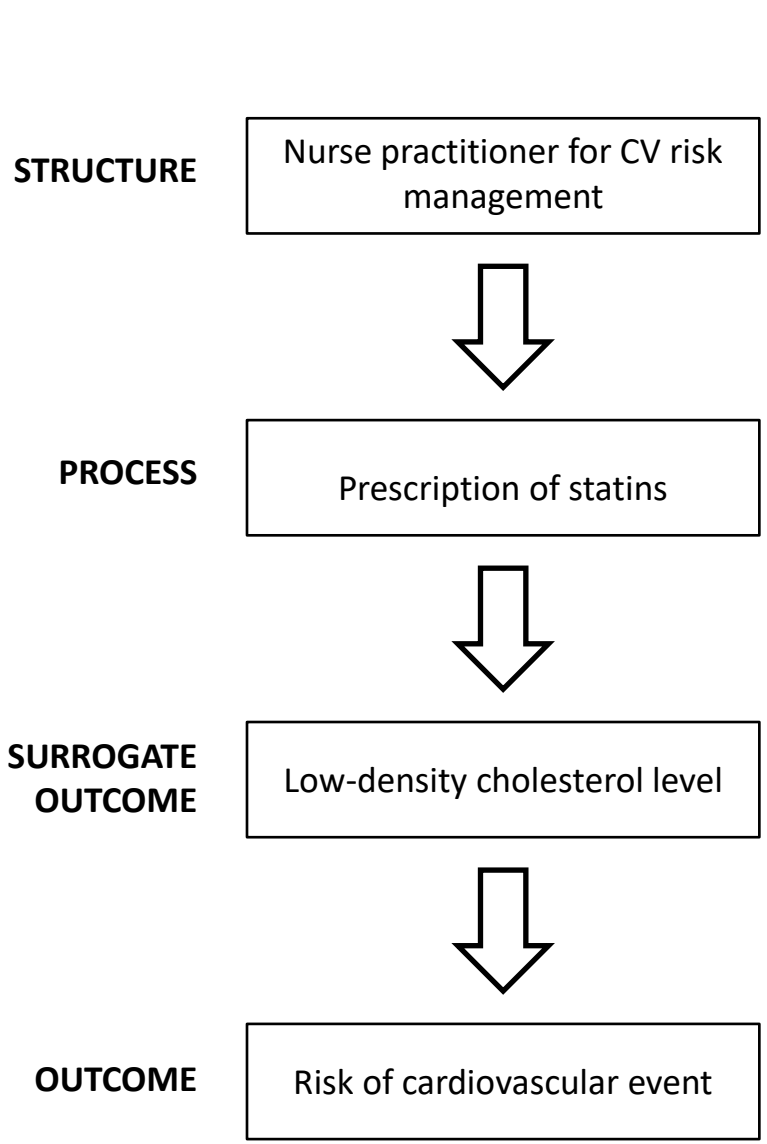
Vascular access data of centre X	All ages	Age <80
All incident HD patients	536	429
Screened for fistula suitability at least once before start HD	418	364
Functioning AV fistula at start HD	171	156
Functioning AV fistula at day 91 of HD	240	227

Indicator D

$$\textit{Numerator}: \text{Screened for AVF suitability} \geq 1 \text{ before start HD} \quad \textit{Denominator}: \text{All incident HD patients}$$

$$\frac{\textbf{418}}{\textbf{536}} = \boxed{\textbf{78\%}}$$

Composing an indicator set



Examples of potential indicators

Having an allocated nurse practitioner responsible for monitoring and improving compliance to lifestyle modifications for at least 6 months in the last year (yes/no)

% CKD patients aged ≥ 18 years (stages 1-5, not on dialysis) who were prescribed statins in the last year

% calendar months within the last year during which CKD patients aged ≥ 18 years (stages 1-5, not on dialysis) had a LDL cholesterol level <2.6 mmol/L

% CKD patients aged ≥ 18 years (stages 1-5, not on dialysis) who had a (non-)fatal myocardial infarction and/or a (non) fatal non-hemorrhagic stroke and/or an arterial revascularisation procedure in the last year

Opportunity Cost

Scarcity & Opportunity Cost

I have a scarcity of money. I only have $20. What will I buy?

The thing I don't buy is an opportunity I won't have.

Opportunity Cost

- **Monetary cost of the basket ball = 20 dollar**
- **opportunity cost= the ticket**

Opportunity cost in health care: the cost of the loss of alternative actions that cannot be done because of the chosen intervention

How much does Herceptin cost?

How much does Herceptin cost?

How much does Herceptin cost?

Table 1 Cost and potential benefits of adjuvant cancer treatments in Norfolk and Norwich University Hospital Trust

Treatment	No of patients given treatment	Drug cost (£000)	Proven benefit	Potential benefit at our hospital	Cost per patient cured (£000)
Adjuvant chemotherapy for lung cancer	15	23	5-15% improved 5 year overall survival[w3]	1 extra patient cured	23
Oxaliplatin as adjuvant therapy for colon cancer compared with fluorouracil alone	20	137	5% improved 3 year disease-free survival; no benefit to overall survival[w4]	1 extra patient without recurrence at 3 years	137
Neoadjuvant chemotherapy for oesophageal cancer	25	8	9% improved 5 year survival[w5]	3 extra patients cured	2.67
Rituximab in addition to CHOP for non-Hodgkin lymphoma in patients over 60	25	215	13% improved 2 year overall survival[w6]	3 extra patients cured	71.67
Adjuvant aromatase inhibitors in postmenopausal breast cancer	270	120	3.7% improved disease-free survival compared with tamoxifen; no benefit to overall survival[w7]	8 extra patients without recurrence at 5 years	15
Total	355	503		16 extra patients cured	
Herceptin for early stage breast cancer	75	1940	0-4% improved 4 year overall survival[w1 w2]	3 extra patients cured	650

CHOP=cyclophosphamide, doxorubicin, vincristine, and prednisolone.

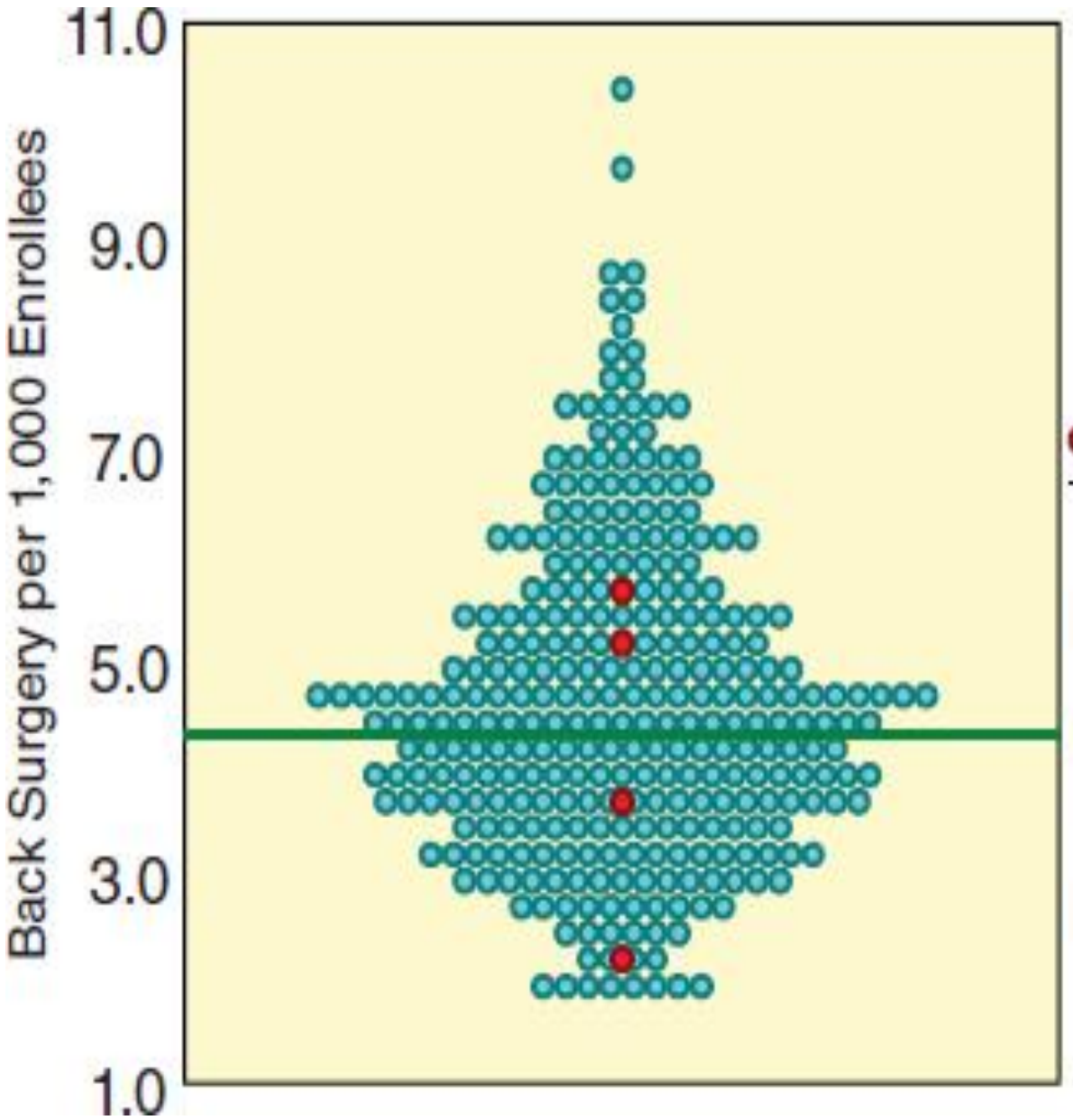
Barett et al, BMJ, 2006

We need to take into account what patients want

We will need to prioritise

If we want to improve quality

Understanding Variability

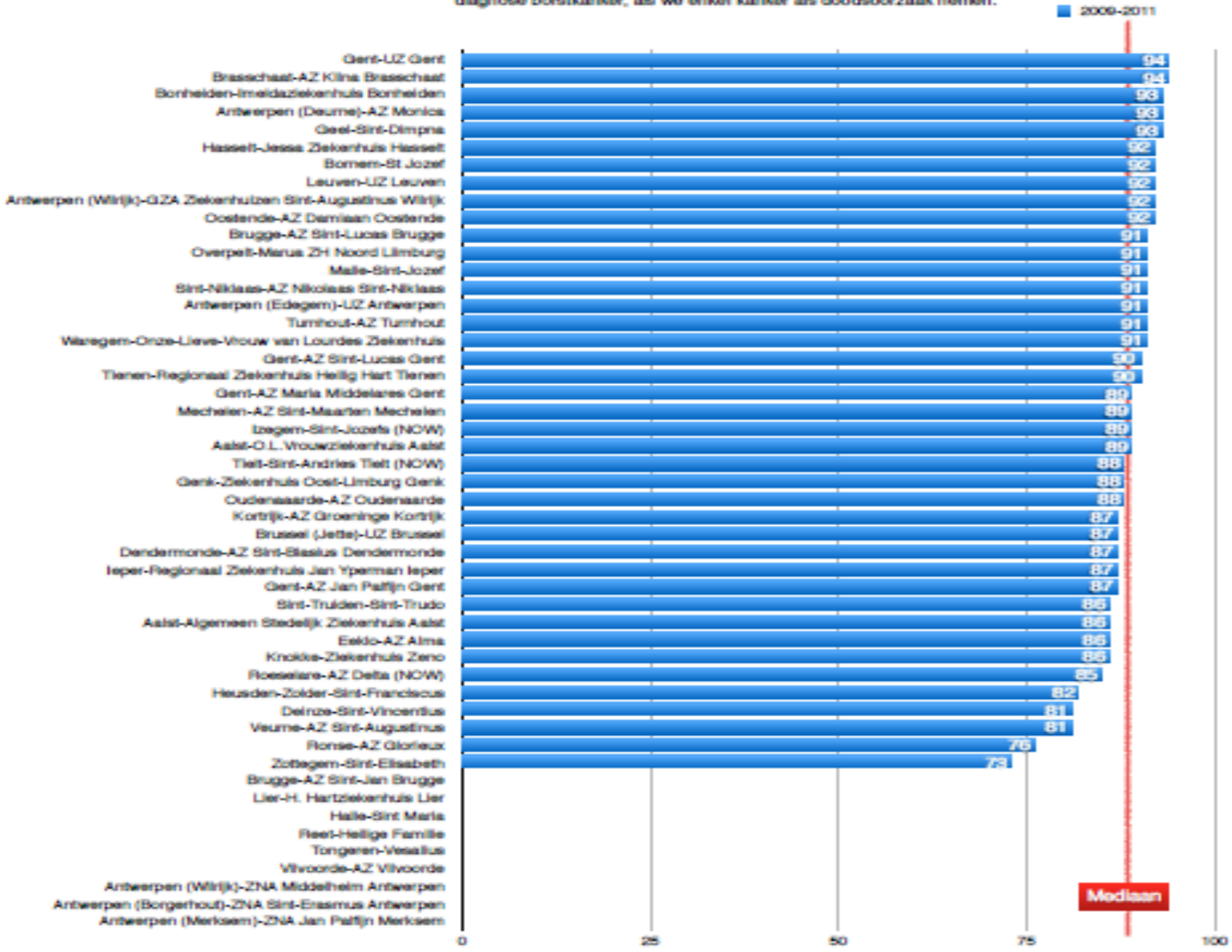


Academic Center	Rate of Surgery
Salt Lake City, UT (Intermountain)	5.64
Danville, PA (Geisinger)	5.24
United States average	4.28
Rochester, MN (Mayo)	3.63
Lebanon, NH (Dartmouth)	2.26

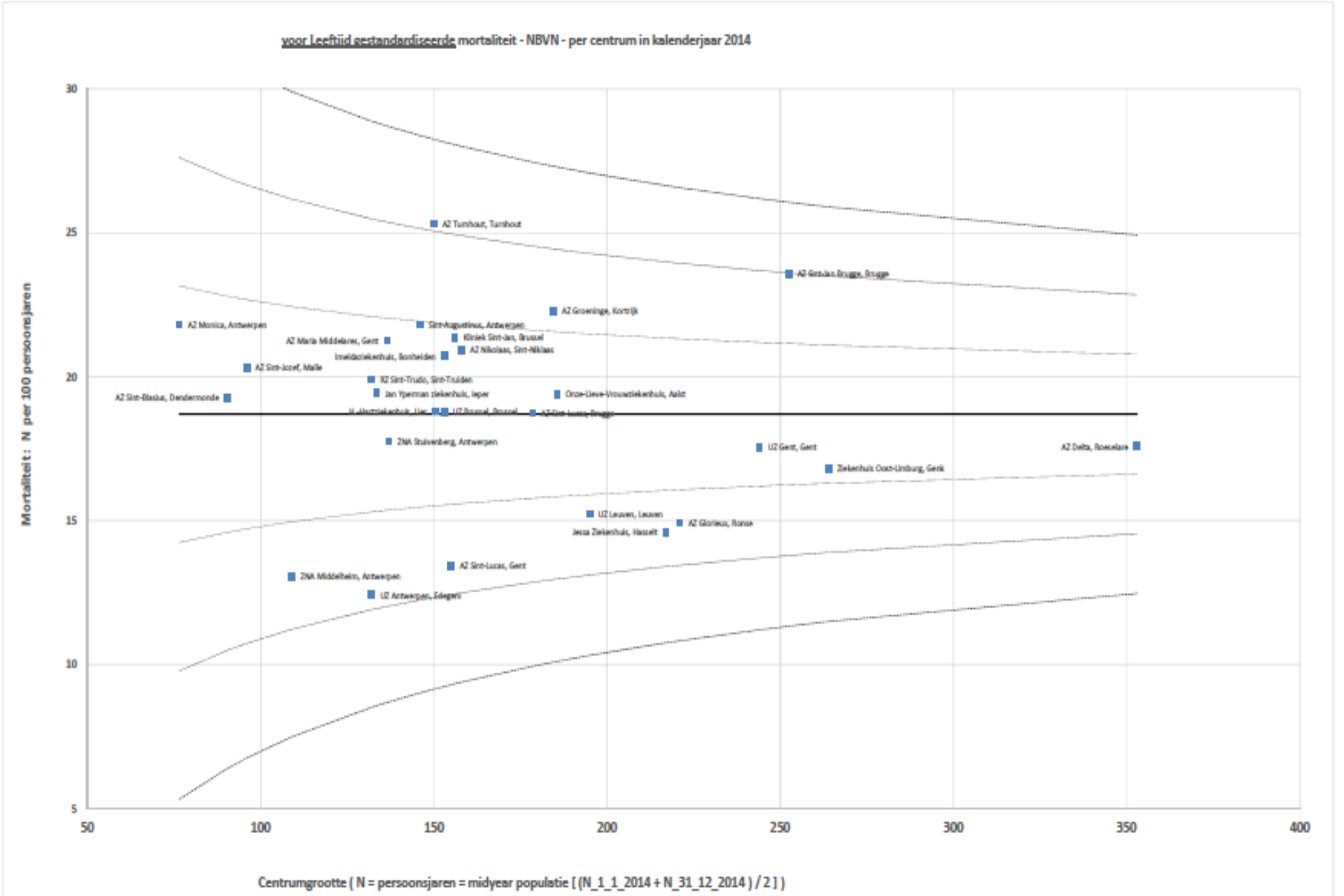
sanconet

RANKING VLAAMSE ZIEKENHUIZEN OP BASIS VAN DE RELATIEVE VIJFJAARSOVERLEVING BORSTKANKER BIJ VROUWEN

Dit is een schatting van het percentage patiënten dat nog in leven is vijf jaar na de diagnose borstkanker, als we enkel kanker als doodsoorzaak nemen.



Aangezien de ziekenhuizen regelmatig nieuwe resultaten publiceren, moet je steeds naar de laatste versie kijken die online staat. De gegevens zijn gebaseerd op vrijwillig gepubliceerde resultaten. sanconet kan niet aansprakelijk gesteld worden voor mogelijke fouten. Laatst bijgewerkt op: 6 juni 2015.


voor Leeftijd gestandardiseerde mortaliteit - NBVN - per centrum in kalenderjaar 2014
Mortaliteit : N per 100 persoonsjaren
Centrumgrootte (N = persoonsjaren = midyear populatie [(N_1_1_2014 + N_31_12_2014) / 2])
30
25
20
15
10
5
50
100
150
200
250
300
350
400
AZ Turnhout, Turnhout
AZ Groeninge, Kortrijk
AZ Monica, Antwerpen
Sint-Augustinus, Antwerpen
AZ Maria Middelares, Gent
Kliniek Sint-Jan, Brussel
AZ Nikolaas, Sint-Niklaas
AZ Sint-Jozef, Malle
RZ Sint-Trudo, Sint-Truiden
AZ Sint-Blasius, Dendermonde
Jan Yperman ziekenhuis, Ieper
ZNA Stuivenberg, Antwerpen
UZ Gent, Gent
AZ Delta, Roeselare
Ziekenhuis Oost-Limburg, Genk
UZ Leuven, Leuven
AZ Glorieux, Ronse
Jessa Ziekenhuis, Hasselt
AZ Sint-Lucas, Gent
ZNA Middelheim, Antwerpen
UZ Antwerpen, Edegem

Adjusting for patient characteristics

- The case mix fallacy: unknown and unmeasured case-mix factors hampering complete risk adjustment.

  From Lilford, 2004 Lancet

- Registration of risk factors (such as comorbidities) may differ between health care providers. *From Collier, 2011 NDT*

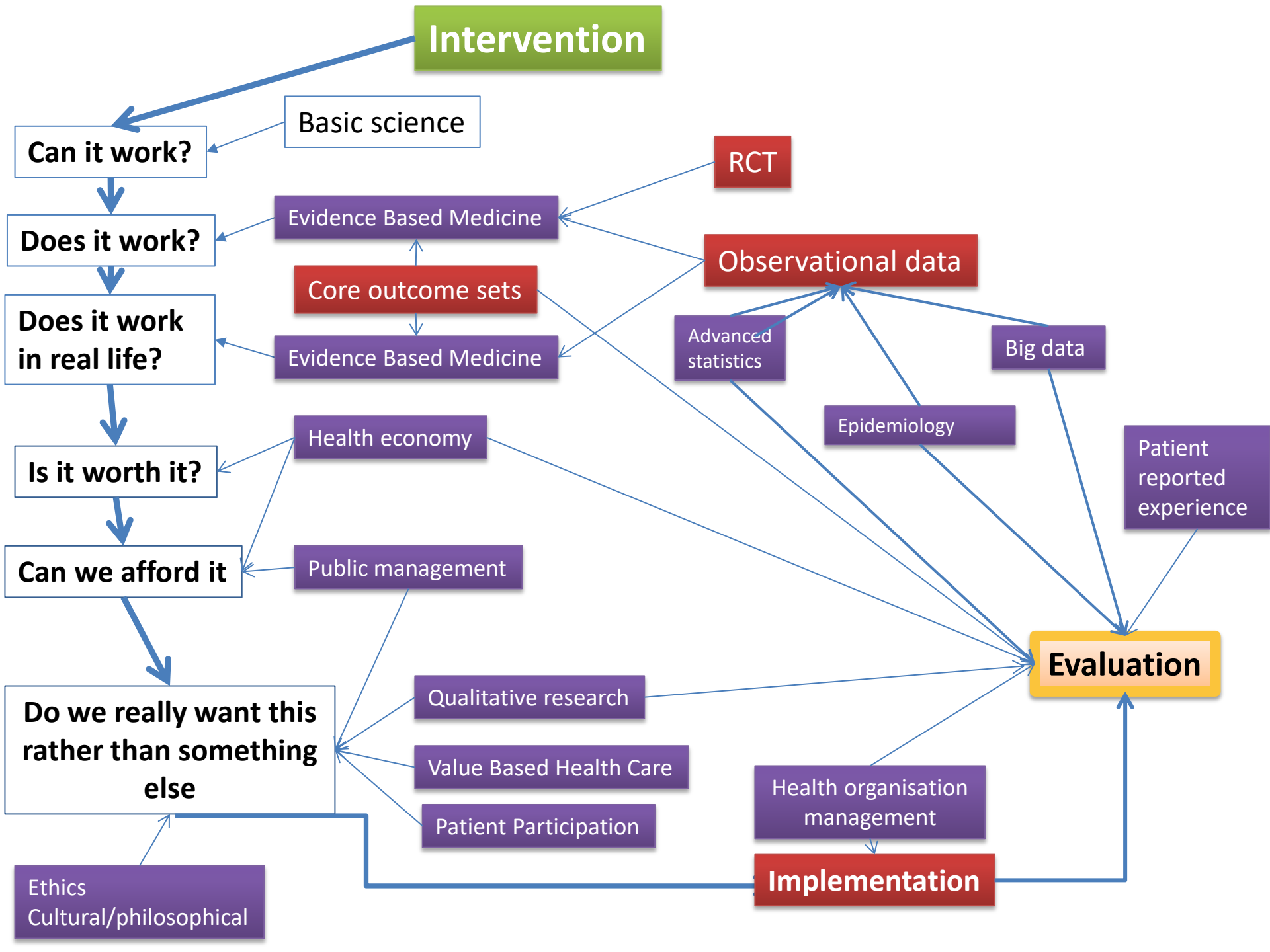
- Not only (surrogate) outcome indicators, but also process indicators should be adjusted for patient factors:
  - sicker patients need more complex care
  - influence of patient preference

We need to take into account what patients want

We will need to prioritise

We will need to register (meaningful) outcomes adjusted for case mix

If we want to improve quality


Intervention
Basic science
Can it work?
Does it work?
Does it work in real life?
Is it worth it?
Can we afford it
Do we really want this rather than something else
RCT
Evidence Based Medicine
Observational data
Core outcome sets
Evidence Based Medicine
Advanced statistics
Big data
Epidemiology
Health economy
Patient reported experience
Public management
Evaluation
Qualitative research
Value Based Health Care
Patient Participation
Health organisation management
Implementation
Ethics
Cultural/philosophical