

De gezondheidseconomische impact van geïntegreerde zorg

Lieven Annemans
Ghent University
Lieven.annemans@ugent.be

Gent 21 april, 2017



Reeves et al. *Globalization and Health* 2012, 8:42
<http://www.globalizationandhealth.com/content/8/1/42>



RESEARCH

Open Access

Does investment in the health sector promote or inhibit economic growth?

Aaron Reeves^{1*}, Sanjay Basu^{2,3}, Martin McKee¹, Christopher Messner⁴ and David Stuckler^{1,3}



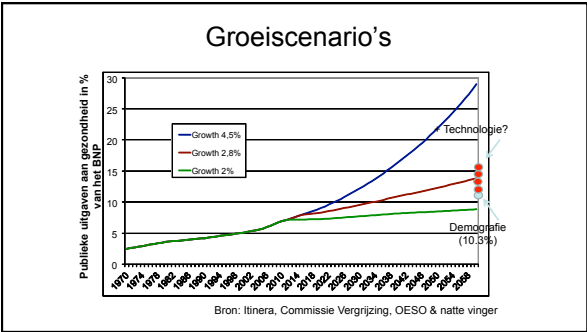
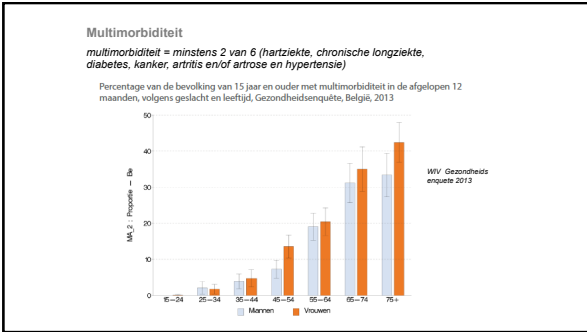
De drie basisprincipes



Exponential technology → exponential cost?



<http://medicalfuturist.com>



- ### Maar ook serieuze problemen
1. Fragmentatie
 2. Overbehandeling
 3. Uitsluiting en onderbehandeling
 4. Te weinig preventie
- 8

De cruciale balans: kosteneffectiviteit



Public Money

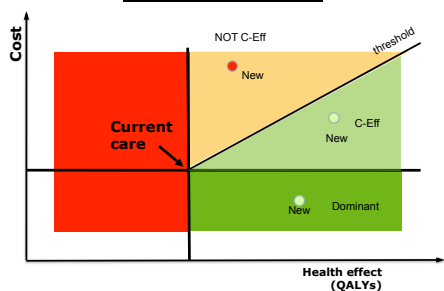
Health Impact

Regerakkoord (2014)

Het zorgaanbod moet permanent getoetst worden aan wetenschappelijk onderbouwde criteria inzake noodzakelijkheid, doelmatigheid en kosteneffectiviteit.



Cost-effectiveness



Waar trekken we de grens?

- At the discretion of the decision maker (England: 30,000€ per QALY)
- EU: 40000 euro
- WHO: **Highly cost-effective** (< GDP per capita); **Cost-effective** (between one and three times GDP per capita); (e.g. Belgium = +/- €37000)

Voorbeelden

Treatment	Cost per QALY gained (€)
Intensive cardiovascular rehabilitation in CHD	dominant
Procoralan Chronic Heart Failure	6,000
Total Hip Replacement	10,000
Brillique Acute Coronary Syndrome	14,000
Prezista HIV	16,000
Sovaldi HCV	18,000
Velcade multiple myeloma	30,000
Tysabri MS	47,000
Annual mammography for women aged 60-70yr	70,000
Annual CT for 60 year-old heavy smokers	130,000

CTG/CRM (RIZIV) (at official prices)

Is integrated care cost-effective?



14

Why integrated care?

Take, for example, care for **patients with low back pain**—one of the most common and expensive causes of disability. In the prevailing approach, patients receive portions of their care from a variety of types of clinicians, usually in several different locations, who function more like a spontaneously assembled “pickup team” than an integrated unit. **One patient might begin care with a primary care physician, while others might start with an orthopedist, a neurologist, or a rheumatologist.** What happens next is unpredictable. Patients might be referred to

Porter & Lee, Harvard Business Review

15

Harvard Business Review

OCTOBER 2012

Strong focus on hospitals

The Strategy That Will Fix Health Care

Providers must lead the way in making value the overarching goal by Michael E. Porter and Thomas H. Lee

16

Creating a Value-Based Health Care Delivery System

1. Re-organize Care into **Integrated Practice Units (IPUs)** around Patient Medical Conditions
2. Measure **Outcomes and Costs** for Every Patient
3. Move to **Bundled Payments** for Care Cycles, accounting for value delivered
4. **Integrate** with other Care Delivery Systems
5. Build an Enabling **Information Technology Platform**

Based on M. Porter and T. Lee, "The Strategy that will Fix Health Care," *Harvard Business Review* (October 2013)

SYSTEMATIC REVIEWS

Economic Impact of Integrated Care Models for Patients with Chronic Diseases: A Systematic Review



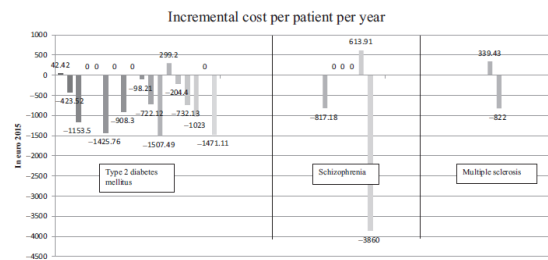
Melissa Desmedt, MSc^{1,*}, Sonja Verriest, MSc¹, Johan Hellings, PhD^{1,2}, Jochen Bergs, MSc¹, Ezra Dessers, PhD³, Patrik Vanrumbelesen, PhD⁴, Hubertus Vrijlkof, PhD^{5,6}, Lieven Annemans, PhD⁷, Nick Verhaeghe, PhD⁷, Mirko Petrovic, PhD⁸, Dominique Vandijck, PhD^{1,11}

VALUE IN HEALTH 19 (2016) 892 – 902

Healthcare perspective

Author (year)	Country	Design	Study period (y)	Usual care (comparator)	Integrated care
Naji (1994) [43]	United States	Type 2 diabetes mellitus RCT	2	Conventional care	Integrated care
Berger et al. (2001) [25]	United States	Before-after study	4		Disease management
Sidorov et al. (2002) [16]	United States	Retrospective study	2		Disease management
Wagner et al. (2001) [44]	United States	RCT	2	Usual care	Chronic care clinic
Berg and Madhwa (2002) [27]	United States	Before-after study	1		Disease management
Snyder et al. (2003) [28]	United States	Before-after study	4		Disease management
Villgas and Ahmed (2004) [29]	United States	Before-after study	1		Disease management
Boyer et al. (2006) [34]	France	Before-after study	3		Managed care
Scanlon et al. (2008) [51]	United States	Retrospective study	1		Team-based care
Stock et al. (2010) [32]	Germany	RCT	4	Routine care	Disease management
Dall et al. (2010) [30]	United States	Prospective study	1		Disease management
Kossovskiy et al. (2010) [33]	United States	Prospective study	1		Disease management
Ko et al. (2011) [44]	China	RCT	2	Usual care	Team-based care
Dinkel et al. (2012) [39]	Germany	Retrospective study	3		Disease management
Dall et al. (2013) [35]	United States	Retrospective study	1		Disease management
Ostermann et al. (2013) [36]	Austria	Retrospective study	3		Disease management
Adegoke et al. (2014) [45]	United States	RCT	1	Usual care	Disease management
Tan et al. (2014) [37]	Singapore	Before-after study	3		Disease management
Keynolds and Smith (2006) [46]	New Zealand	RCT	1	Hospital care	Community care
Wiersma et al. (1995) [47]	The Netherlands	RCT	2		Community care
Burns and Batters (1991) [48]	United Kingdom	RCT	1	Hospital care	Home-based care
Carter et al. (2007) [49]	United Kingdom	RCT	1	Hospital care	Community care
Tseng et al. (2007) [41]	Taiwan	RCT	1	Hospital care	Integrated care
Schmidt-Kroepelin et al. (2009) [50]	Germany	RCT	1	Hospital care	Integrated care
Tan et al. (2010) [38]	United States	Retrospective study	1		Care management
Pozzilli et al. (2002) [42]	Italy	RCT	1	Hospital care	Home-based care

RESULTS



Effect of integrated care for sick listed patients with chronic low back pain: economic evaluation alongside a randomised controlled trial

Ludeke C Lambek, researcher,^{1,2} Judith E Bosmans, senior researcher,³ Barend J Van Royen, professor,^{4,5} Maurits W Van Tulder, professor,³ Willem Van Mechelen, professor,^{2,6} Johannes R Anema, professor^{2,6}

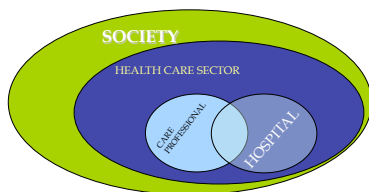
BMJ 2010;341:c6414

Results (12 months follow up)

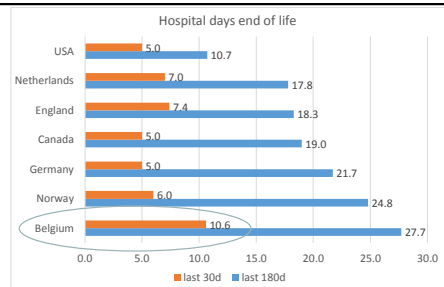
Pooled variables	Mean total effect (SD)		Mean difference (95% CI)
	Integrated care (n=66)	Usual care (n=68)	
Effects			
Mean (SD) total effect:			
Days until sustainable return to work	129 (117)	197 (129)	-68 (-110 to -26)
QALY	0.74 (0.19)	0.65 (0.21)	0.09 (0.01 to 0.16)
Costs			
Mean (SD) total costs (€):			
Total direct costs*	1479 (1133)	1262 (1094)	217 (-131 to 662)
Primary care costs	1251 (700)	857 (758)	395 (131 to 687)
Secondary care costs	124 (416)	247 (425)	-122 (-274 to 43)
Direct non-healthcare costs	104 (225)	159 (325)	-55 (-156 to 98)
Total indirect costs	11 686 (12 353)	17 213 (13 416)	-5527 (-10 160 to -740)
Total costs†	13 165 (13 600)	18 475 (13 616)	-5310 (-10 042 to -991)

*Direct healthcare costs added to direct non-healthcare costs.
†Total direct costs added to indirect costs.

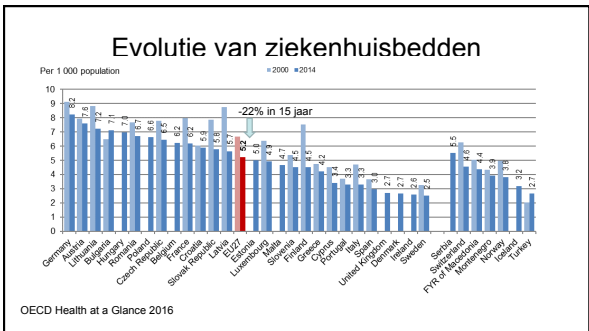
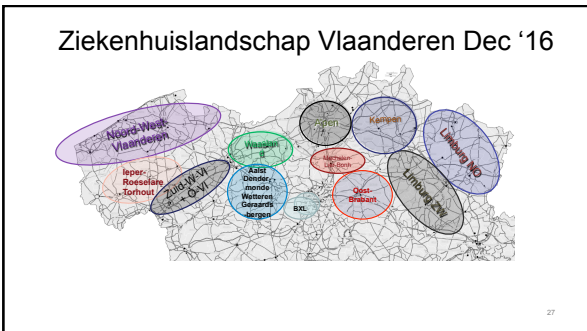
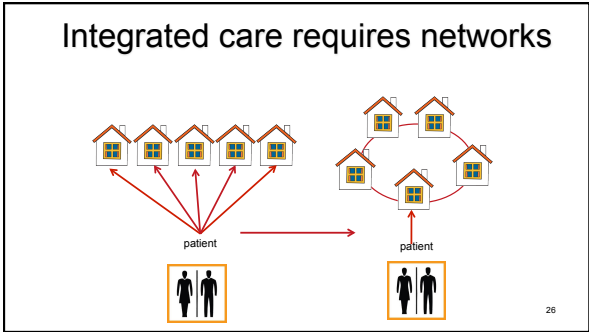
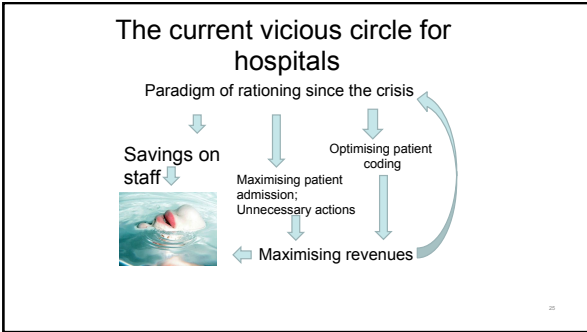
Different perspectives!

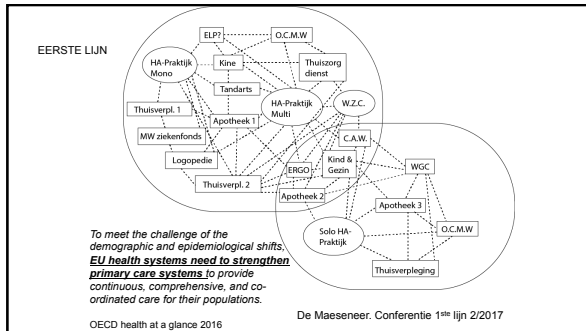


→Need to bring the societal perspective in, and align financial incentives in the system



Bekelman et al. JAMA, January 2016





If you want to go fast,
go alone.

If you want to go far,
go together.

African Proverb



Sowieso een sterkere eerste lijn nodig

Informe SESPAS
Primary care: an increasingly important contributor to effectiveness, equity, and efficiency of health services. SESPAS report 2012
Barbara Starfield*

University Distinguished Professor, Department of Health Policy and Management, Johns Hopkins University, Baltimore, Maryland, USA

ARTICLE INFO

Article history:
Received 15 January 2011
Accepted 25 October 2011
Available online 27 January 2012

ABSTRACT

As of 2005, the literature on the benefits of primary care oriented health systems was consistent in showing greater effectiveness, greater efficiency, and greater equity. In the ensuing five years, nothing changed this conclusion, but there is now greater understanding of the mechanisms by which the benefits of primary care are achieved. We now know that, within certain bounds, neither the wealth

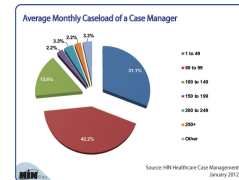
- Less hospital admissions
- Less emergency visits
- Less non-evidence based surgery
- Less readmissions
- More focus on prevention
-

Aanbeveling
**Maak een inschrijving in
 een huisartsenpraktijk
 verplicht**

33

! Casemanager (zorgbeheertiger)

Al honderden papers die de gezondheids-economische aspecten ervan bespreken
 -Voor afgelijnde chronische ziekte
 -Voor multi-morbiditeit
 -Thuis, nursing homes, ziekenhuizen
 -....



34

Integrated care needs
 a change of financial
 incentives!



35

Enkele verhalen

- Dirk – huisarts – Aarzelt soms om patiënten te verwijzen naar specialist
- Eddy – cardioloog – houdt niet van telegeneeskunde
- Maria vliegt uit het ziekenhuis
- Jeanine – sterft aan kanker in het ziekenhuis



Vandaag: vooral betaling per prestatie

"Payment per delivered service"

- + minder wachttijden
- +/- effect op kwaliteit?
- +/- effect op relatie arts-patiënt?
- Overgebruik; verkeerd gebruik; misbruik

KCE Rapport 2009

37

Nieuwe betalingsmechanismen!

Om deze samenwerking mogelijk te maken zal de regering volgende tussendoelen realiseren:

- invoeren van nieuwe vormen van financiering die samenwerking, coördinatie en kwaliteit bevorderen;



Federaal regeerakkoord

38

Meer Pay for Performance?

- 'the systematic and deliberate use of payment incentives that recognize and reward high levels of quality and quality improvement'. (The Institute of Medicine, 2007)

BUT: What is quality? Do we have the data? What types of incentives to provide? What about the confounders?.....

(Annemans et al. KCE report 2009)

39

Werkt P4P?



Ann Intern Med. 2014 Oct 1;201(10):e473-80.
The impact of pay-for-performance on quality of care for minority patients.
Ripstein AM¹, Jha AS², Orszag EJ³.

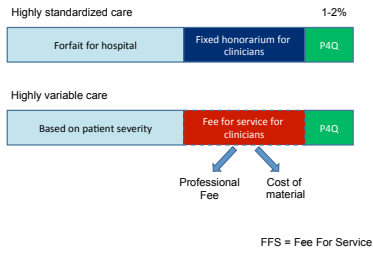
Diabetes Care. 2014 Apr;37(4):1302-8. doi: 10.2337/1403000000000002.
Long-Term and Interactive Effects of Pay-For-Performance Interventions among Diabetic Nephropathy Patients at the Early Chronic Kidney Disease Stage.
Jain PV¹, Liu TX², Wang SC³, Ding MS⁴, Wu JB⁵, Huang ST⁶, Wang EC⁷, Chang HC⁸, Chu CC⁹.

Ann Intern Med. 2014 Apr;160(8):522-9. doi: 10.1093/annern/160.8.522. Epub 2014 Jul 24.
The Effect of Pay for Performance in the Emergency Department on Patient Waiting Times and Quality of Care in Ontario, Canada: A Difference-in-Differences Analysis.
Vermeulen MJ¹, Dubaut TP², Anagnostis AS³, Gullmann AP⁴, Smail MJ⁵.

PLoS One. 2014;9(12):e115946. doi: 10.1371/journal.pone.0115946.
Association between the Value-Based Purchasing pay for performance program and patient mortality in US hospitals: observational study.
Hendrick JF¹, Tomlinson GJ², Scalet J³, Cox EJ⁴, Jha RR⁵.

40

→ new hospital financing: key elements



Chronische patiënten: 'bundled payments'

- Vast bedrag per patiënt per episode van zorg ("forfaitaire honoraria") of per vaste periode
 - + minder overgebruik
 - + betere toegang
 - + meer focus op preventie
 - + "patient empowerment"
 - *onderbehandeling?*
 - *kosten afschuiven?*

42

Voorbeelden (per maand per patiënt)

-GMD



-Zuurstof-patiënten



-Diabetes



Mogelijke nieuwe voorbeelden

-Telemonitoring (bv Corneel)



-Psychiater opvolgen patiënt na ontslag



43

Naar nieuw betalingsstelsel voor alle zorgverleners?



44

The fundament: eHealth

“ If you do not have
all information for **all** the patients , **all** the time
you are wasting your money ”

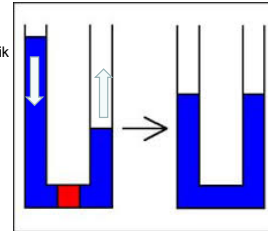


George Halvorson,
CEO, Kaiser Permanente

45

Herinvesteren in gezondheid!

Overgebruik
Verdwaasd
geld
misbruik



Meer geld
voor
innovatie,
kwaliteit,
gelijke
toegang, én
preventie

Hervormen om te kunnen behouden

Tweede druk
19,95€
Verkrijgbaar in de boekhandel

