



Federaal Kenniscentrum voor de Gezondheidszorg
Centre Fédéral d'Expertise des Soins de Santé
Belgian Health Care Knowledge Centre

KCE & KCE Trials

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Senior Researcher, KCE

Gent, 17 oktober 2018



Belgian Health Care Knowledge Centre



Semi-governmental institution since 2004

50 researchers

medicine, economics,
statistics, sociology, law

> 300 studies

clinical practice guidelines

health services research - HSR

health technology assessment - HTA

KCE Trials since 2016

Policy recommendations, no decisions



Composition of KCE Board

Members

President

Gillet Pierre

Assigned by the Minister of Public Health

Mores Benoit

NN

Assigned by the Minister of Social Affairs

Winnen Bert

De Haes Johan

President of the Ministry of Public Health

Auwers Tom

President of the Ministry of Social Security

Van Massenhove Frank

General Manager of the National Institute for Health and Disability Insurance
(RIZIV/INAMI)

De Cock Jo (Vice-Président)

General Manager of the Federal Agency for Medicinal and Health Products
(FAGG/AFMPS)

De Cuyper Xavier

Representatives of the Intermutualist Agency (IMA)

Callens Michiel
Verertbruggen Patrick

Ceuppens Ann

Representatives of the Council of Ministers

Godin Jean-Noël
van Sloten Fabienne

Representatives of the association of hospitals

Praet Jean-Claude

Geboers Marc

Representatives of the physician's professional organisations

Moens Marc

De Munck Paul

Representatives of the social partners

De Gauquier Kristel

Panneels Anne

Representatives of the nurses' professional organisations

de Wandeler Ellen

Fortemps Martin

Representatives of the patients

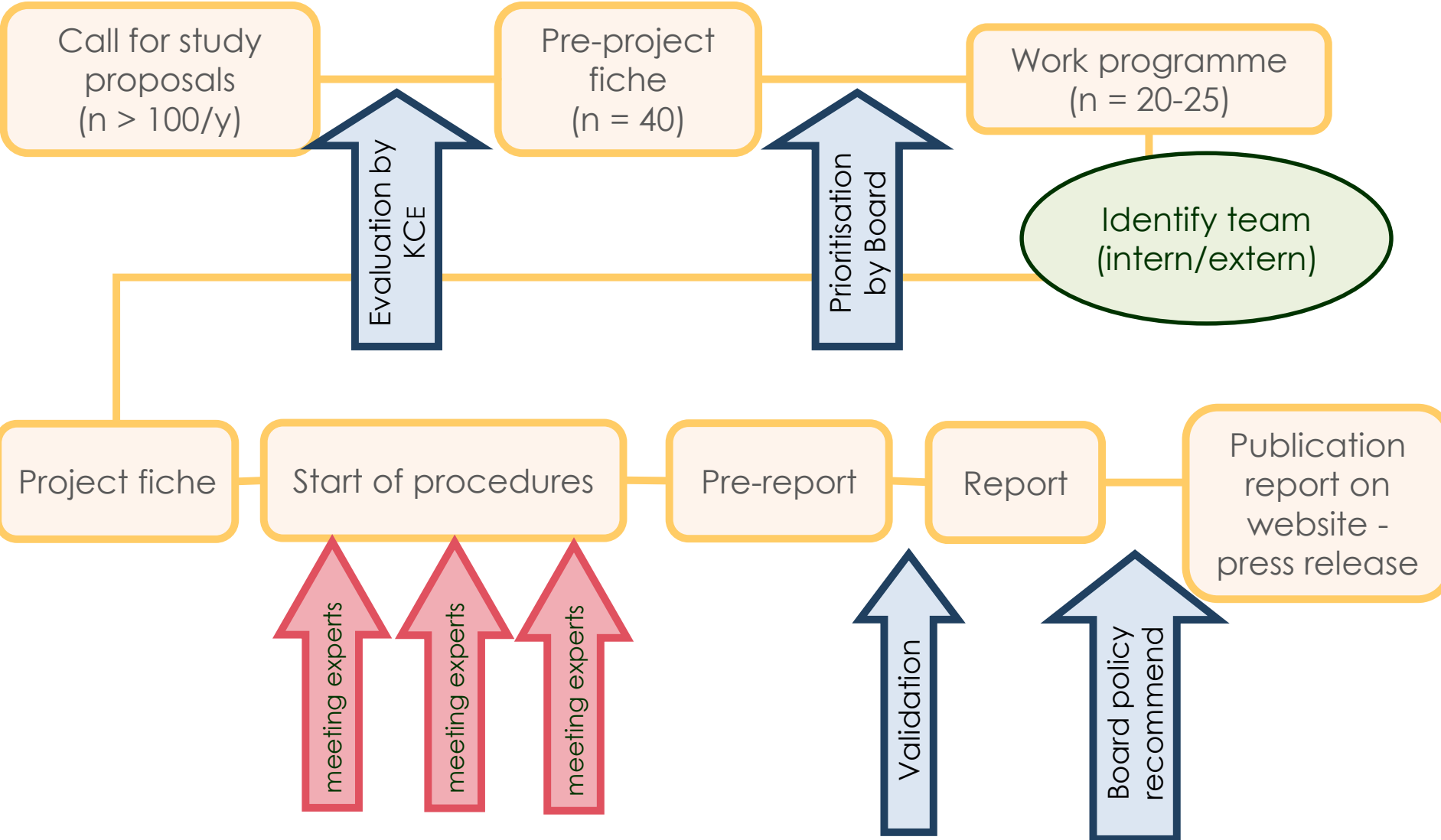
Wermeester Stéphanie

Weeghmans Ilse

Representative of the Chamber of Representatives

Muylle Nathalie

From proposal to published KCE report



KCE domains and methods

- Clinical practice guidelines
- Health Services Research
- Health technology assessment

KCE process book

- KCE Trials

KCE trials procedures



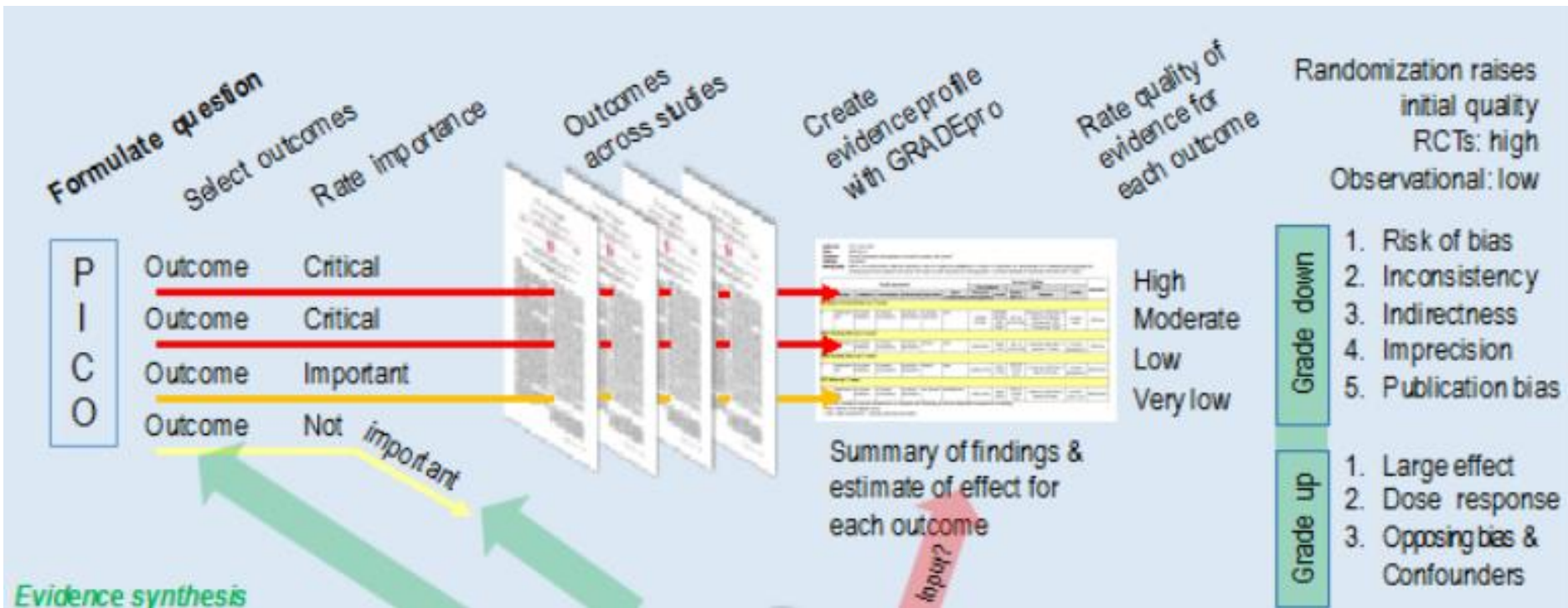
Clinical practice guidelines

Beoordeling via AGREE instrument

- | | |
|---------|---|
| AGREE4 | De leden van de werkgroep die de richtlijn heeft ontwikkeld komen uit alle relevante beroepsgroepen |
| AGREE7 | Er zijn systematische methoden gebruikt voor het zoeken naar wetenschappelijk bewijsmateriaal |
| AGREE8 | De criteria voor het selecteren van het wetenschappelijk bewijsmateriaal zijn duidelijk beschreven |
| AGREE9 | De sterke punten en beperkingen van het wetenschappelijk bewijs zijn beschreven |
| AGREE10 | De gebruikte methoden om de aanbevelingen op te stellen, zijn duidelijk beschreven |
| AGREE11 | Gezondheidswinst, bijwerkingen en risico's zijn overwogen bij het opstellen van de aanbevelingen |



Developing practice guidelines



GRADE the evidence level

GRADE



GRADE

- **Niveau van bewijskracht:**
hoog, matig, laag, zeer laag

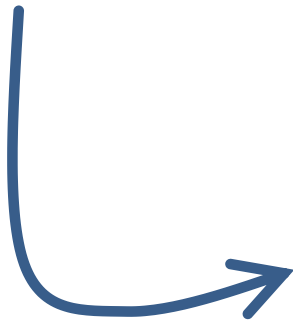
GDG

- **Sterkte van de aanbeveling:**
sterk (“doe het”),
zwak (“overweeg het”)



Health Services Research (HSR)

- How to organize and finance the healthcare?
- How to keep healthcare affordable?
- How to keep it accessible?
- Were objectives reached?



- Complex subjects
- Multidisciplinary teams
- Multiple research strategies



International comparison

3.2 ADAPT THE “SET-UP” OF THE INTERNATIONAL COMPARISON TO THE PROBLEM YOU WANT TO ADDRESS

3.2.1 Preparatory work

3.2.2 Selection of countries

3.2.3 Collecting the evidence

3.2.4 Data extraction and presentation

3.2.5 Validation

To be consulted at:

<http://processbook.kce.fgov.be/node/46>

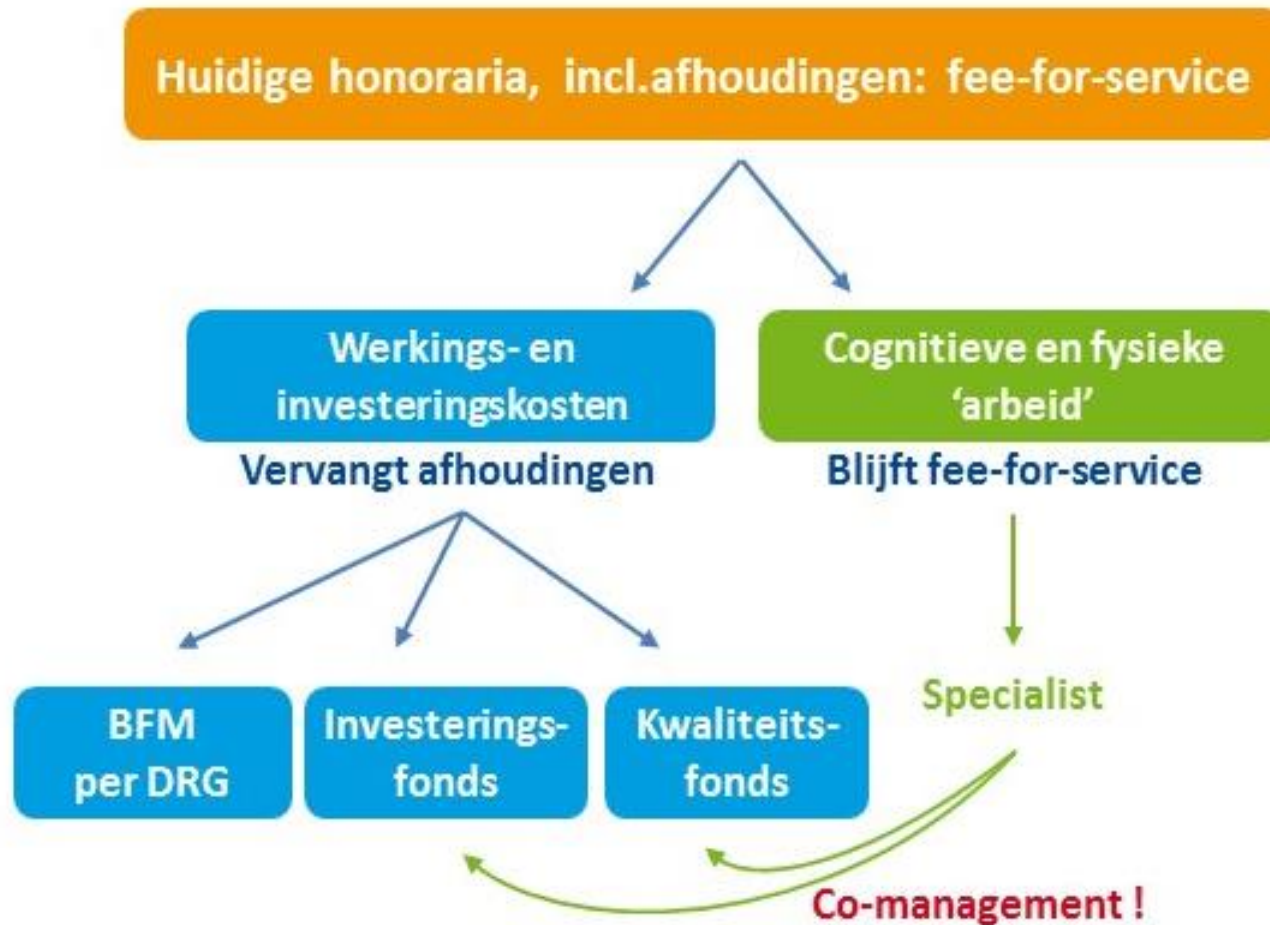


Reform of the hospital landscape and payment system (cf. reform plans of minister De Block)

- Conceptual framework for the reform of the Belgian hospital payment system (N 229)
- Proposals for a further expansion of day surgery in Belgium (N 282)
- Towards an inclusive system for major trauma (N 281)
- Governance models for hospital collaborations (N 277)
- Required hospital capacity in 2025 and criteria for rationalisation of complex cancer surgery, radiotherapy and maternity services (N 289)

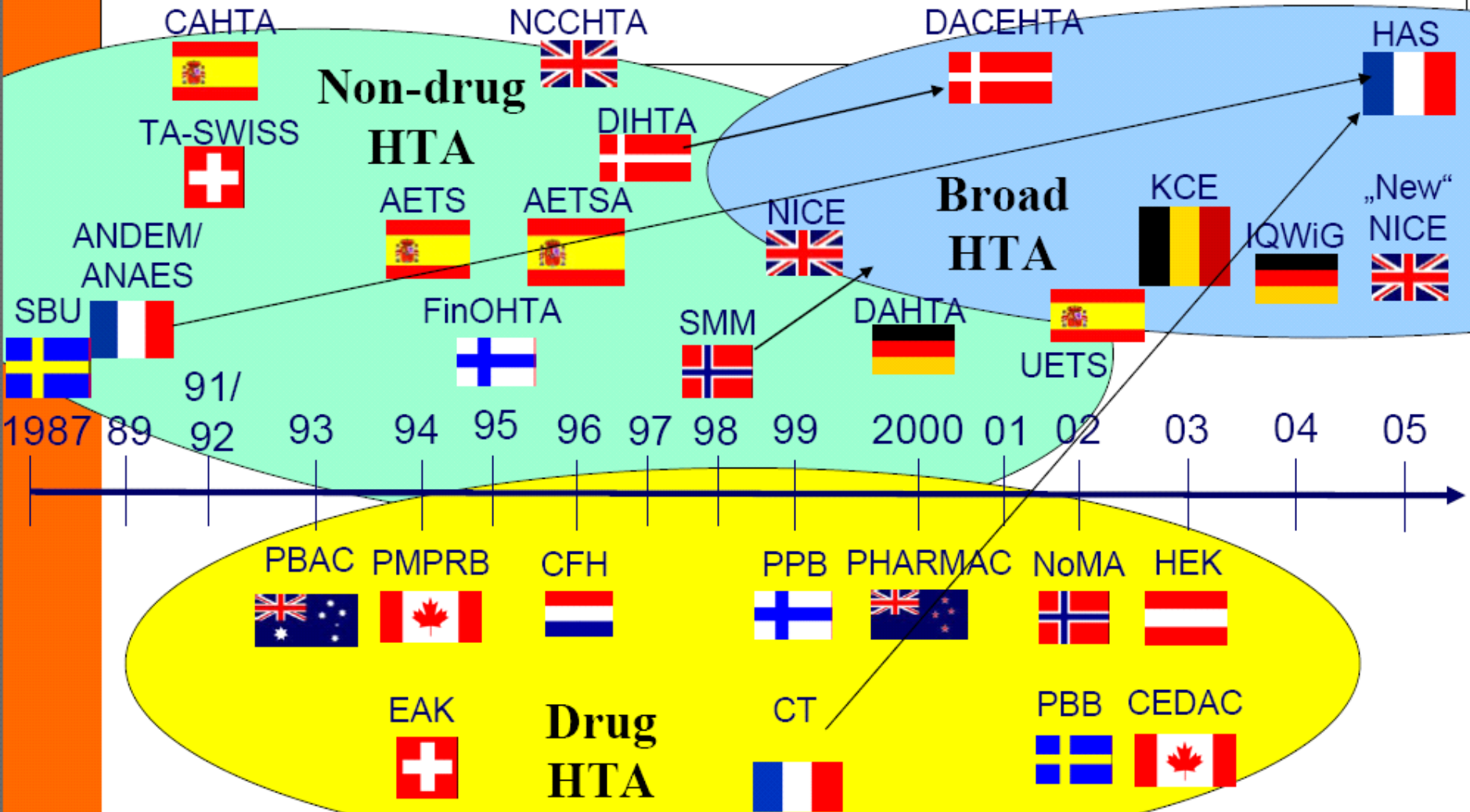


Voorgestelde hervorming van de fee-for-service honorering van artsen



Health technology assessment

HTA Institutions



What is innovation in healthcare?

technical innovator

HTA

new pathway

technical breakthrough

*clinical
development*



patient benefit

routine practice

the evidence gap

MIND THE GAP



Clinical development and HTA

Clinical development

Exploratory trials

Confirmatory trials (RCTs)

Health Technology Assessment

- internal validity
- safety
- efficacy

- external validity
- comparative effectiveness
- cost-effectiveness
- budget impact



The split in governance & the evidence gap

One government?

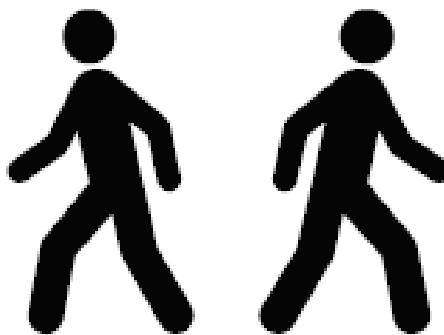
Regulator

EMA/FAGG

- Drug efficacy/safety

Notified bodies/FAGG

- Device performance
- Device safety



HTA/payer

- National/regional
- Added therapeutic benefit versus standard of care
- Value for money



How aligned are the perspectives of EU regulators and HTA bodies? A comparative analysis of regulatory-HTA parallel scientific advice

G. Tafuri et al.

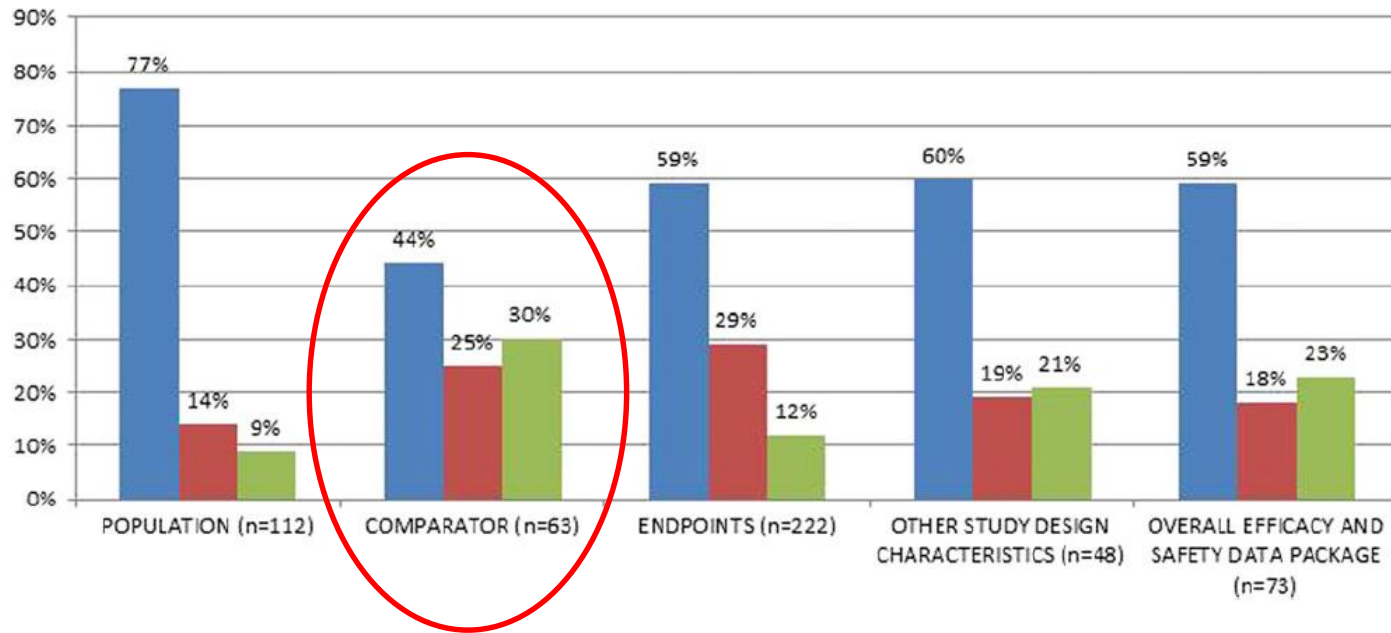


Figure 3

Level of agreement for each domain: Health Technology Assessment bodies (HTABs) vs. regulators (based on 31 procedures). *n* represents the total number of HTABs expressing an opinion for each domain. ■ full agreement ■ partial agreement ■ disagreement

[Br J Clin Pharmacol.](#) 2016 Oct;82(4):965-73

How to fill the evidence gap?

- Align evidentiary requirements of regulators and payers.
 - Added therapeutic value
- Perform the missing comparative trial
 - Post-marketing: industry support is unlikely
 - Publicly-funded, role of payers



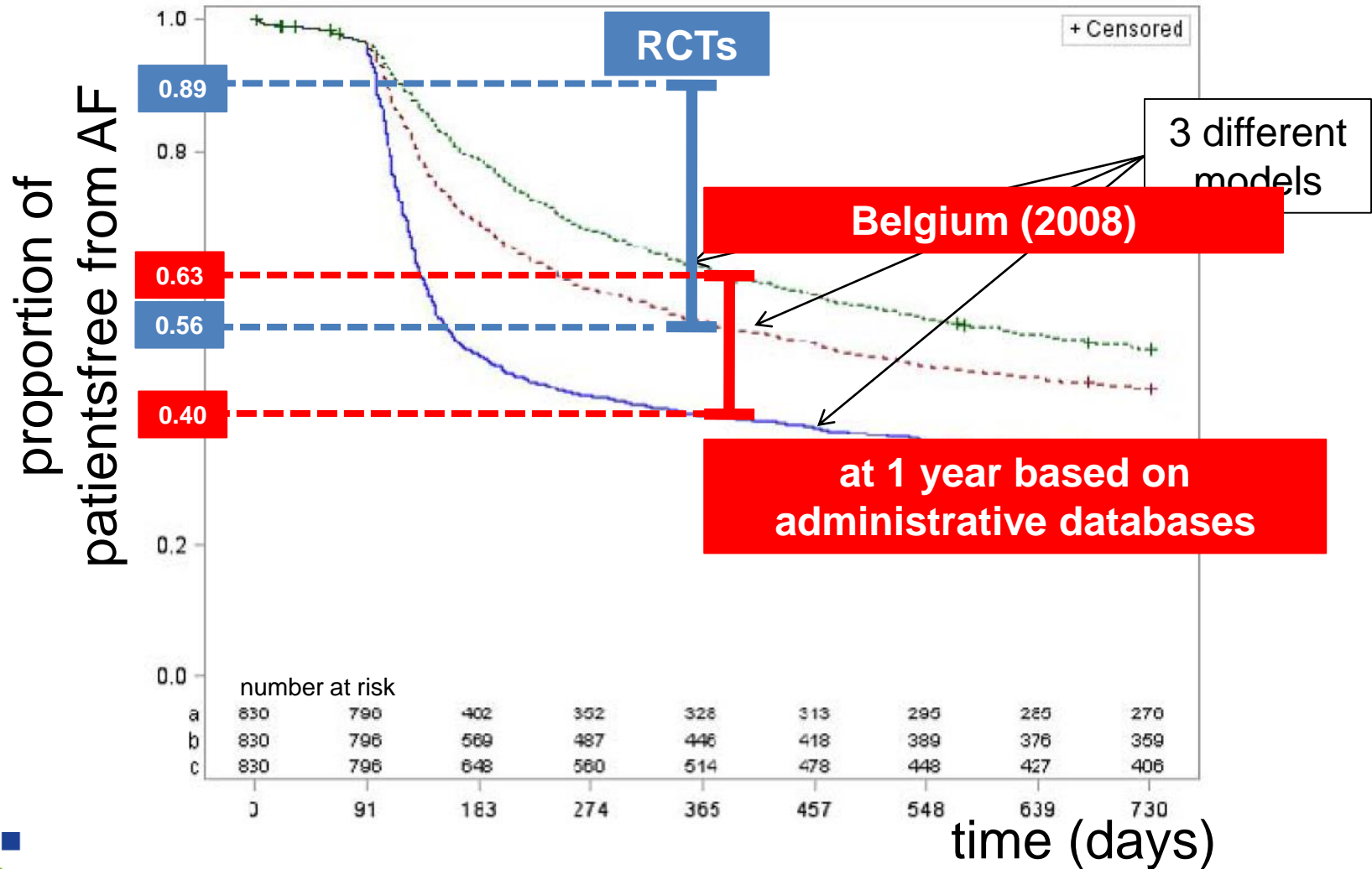
Randomised trials balance for the unknown

Real-world data are not sufficient

- EU HTA report:
 - “renal denervation using the Symplicity® system appears to decrease blood pressure, whereas the effects of other systems on blood pressure are uncertain.”
 - Reimbursed in 13 countries in Europe, and in most cases regardless of the type of device.
- The same day: RCT for FDA: NO EFFICACY, all trials put on hold.

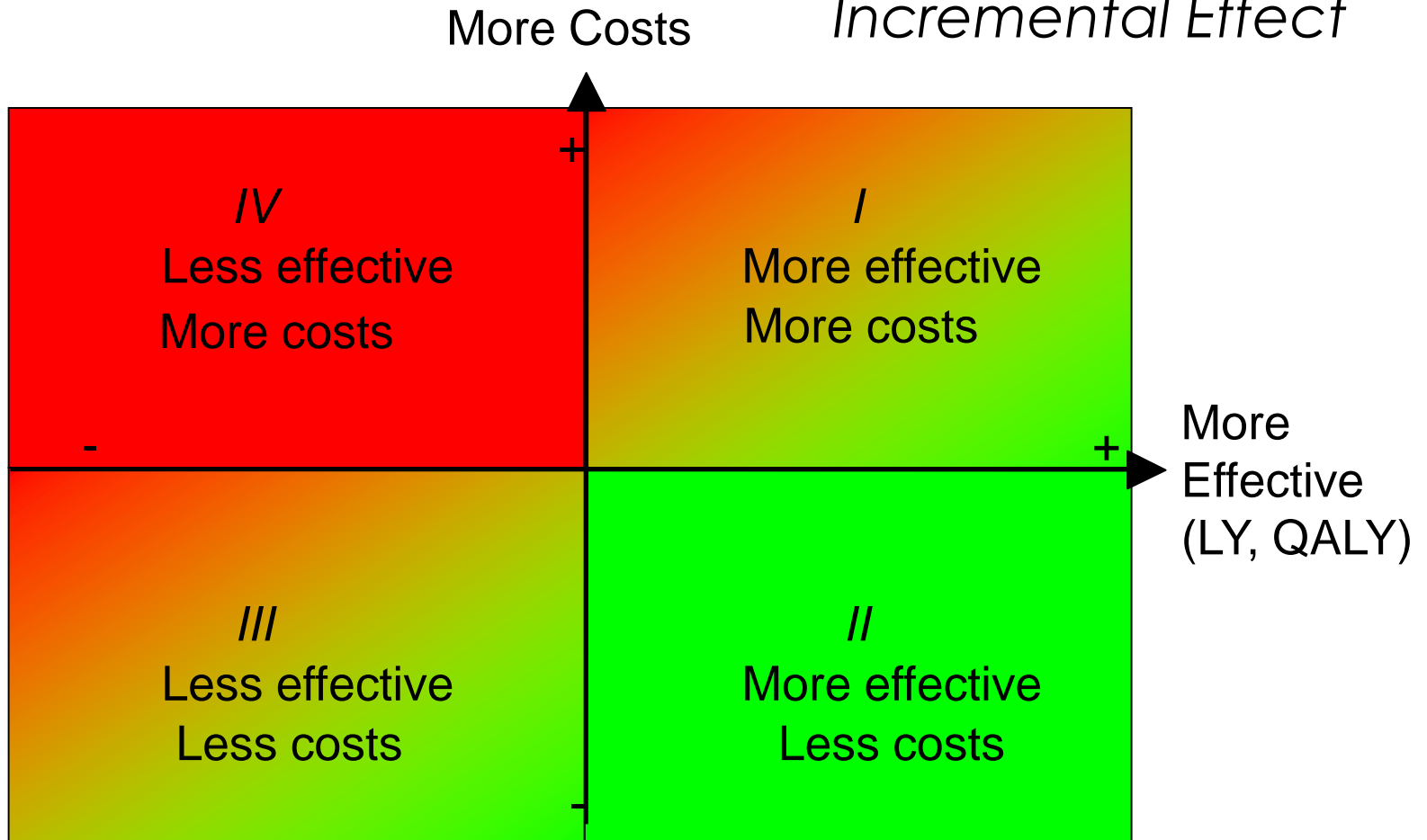


Freedom from atrial fibrillation after catheter ablation

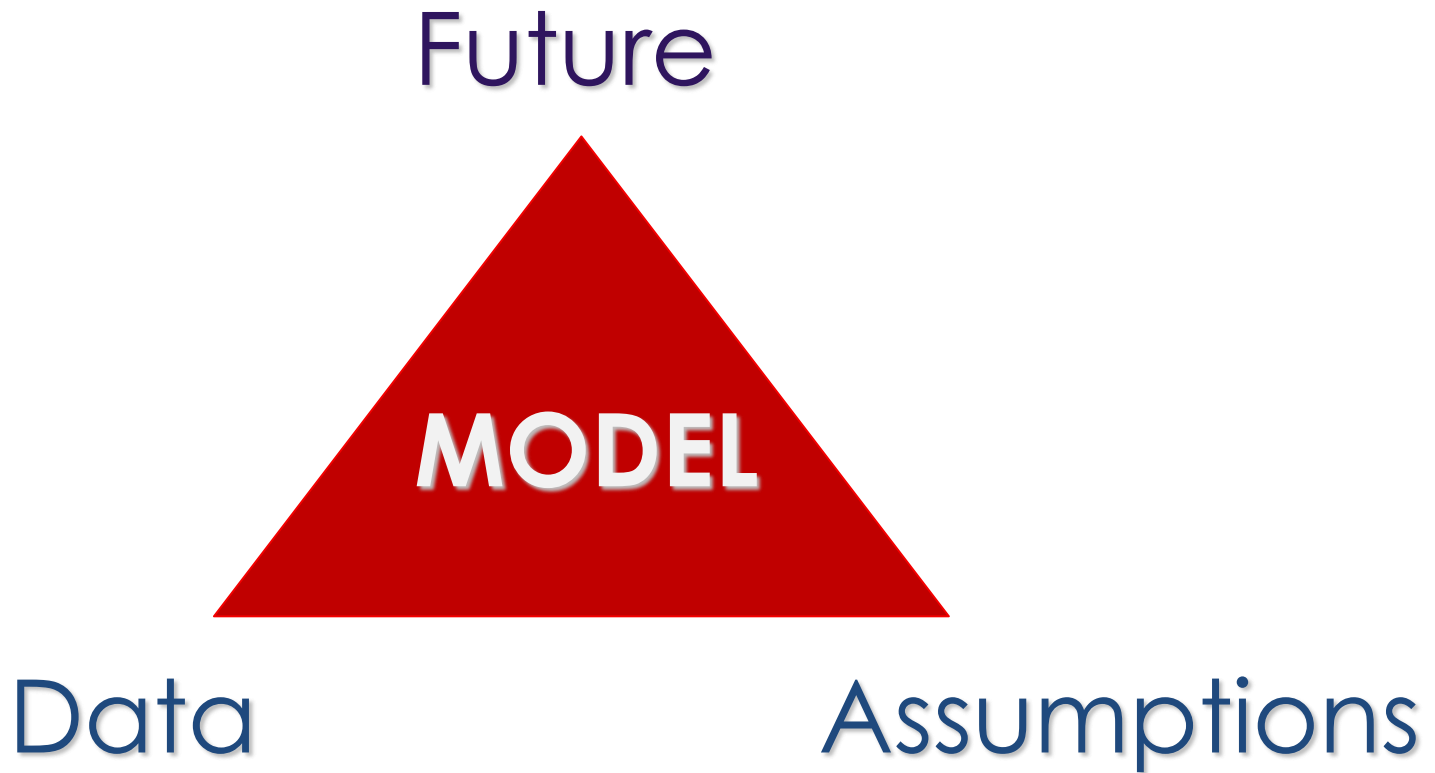


Incremental Cost-Effectiveness Ratio ICER

$$\frac{\text{Incremental Cost}}{\text{Incremental Effect}}$$



How to estimate an ICER?



Data and models

- **Can systematic reviews be comprehensive?**

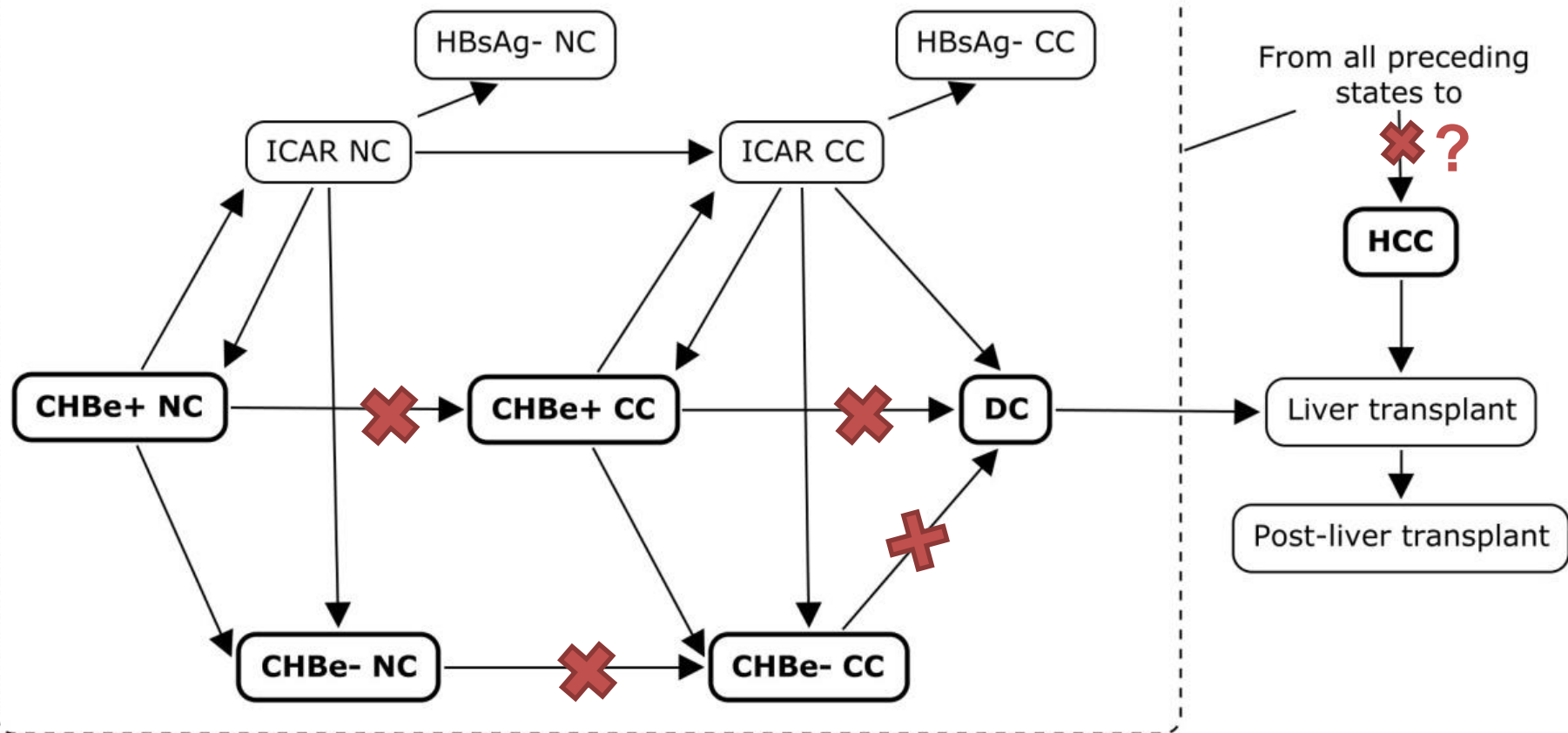


Reporting bias in medical research - a narrative review.

McGauran et al., IQWiG. Trials 2010

- **Access to all study reports for HTA agencies?**
- **Meanwhile: trial registries, FDA/CDC website, ...**





Antiviral effect

Treated states are in bold; ICAR= inactive carrier; CHB= chronic hepatitis B; NC= no cirrhosis; CC= compensated cirrhosis; DC= decompensated cirrhosis; HCC= hepatocellular carcinoma

Critical determinants of ICER

	Literature Lower ICER	KCE Higher ICER
QoL improvement if low DNA or e seroconversion	Yes (assumption)	No (measured)
Duration of treatment in CHBe- patients	Stop if low DNA	Continue (= guidelines)
Natural progression rate to cirrhosis	Uniform 5% to 9% (not compatible with survey results)	1%, 2%, 5% age dependent (measured)
Assumed reduction of HCC under treatment	Based on untreated cohort (REVEAL)	50% reduction, highly uncertain





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KCE Trials Update

Frank Hulstaert, Marianne Devis, Jilly Harrison,
Rasma Kass, Hilde Nevens, Leen Verleye, France Vrijens

KCE Trials Team, trials@kce.fgov.be



Impact of KCE Report no 246

June 2015

“In addition to patient benefit, publicly funded trials can provide a positive return on investment”

2016 €5m

2017 €5m

2018 €10m per year

ROI

PUBLICLY FUNDED PRACTICE-ORIENTED CLINICAL TRIALS



2016 challenge: first patient in trial

End 2016 first patient in VINCA trial



2015

www.kce.fgov.be

.be

Comparative Effectiveness

Comparator

best
active

active

placebo

none

pragmatic practice-
oriented trial

Endpoints

- *Quality of Life (EQ-5D)*
- *Survival*

placebo-
controlled trial

narrow
(efficacy)

broad
(effectiveness)

Study
population



KCE Trials programme

Pragmatic &
practice-
oriented

Comparative
effectiveness

Commissioned
&
investigator-led

Patients &
policy makers

National &
international

Clinical trials
units (CTU)

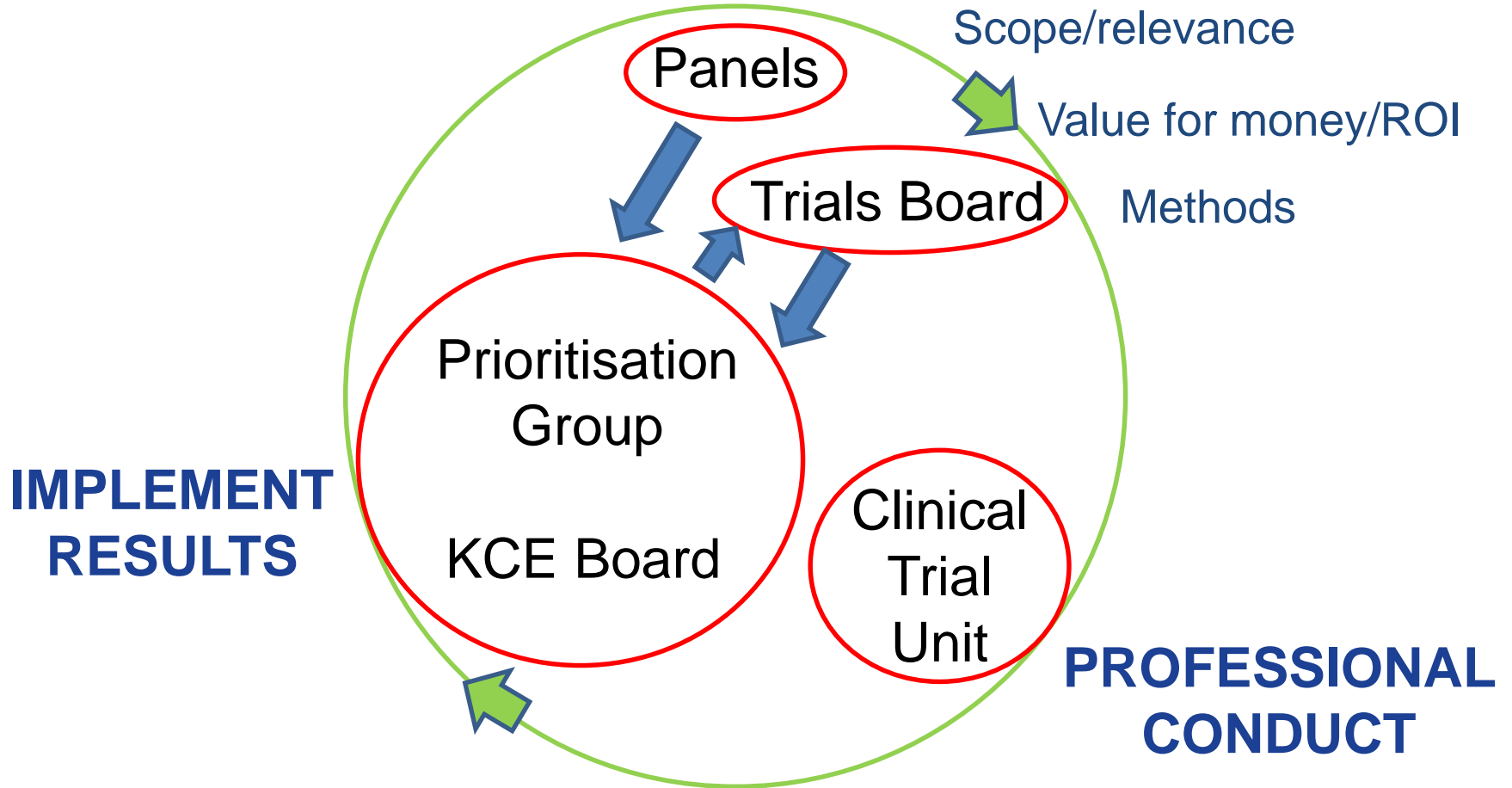
Funder

Non-
commercial
sponsor

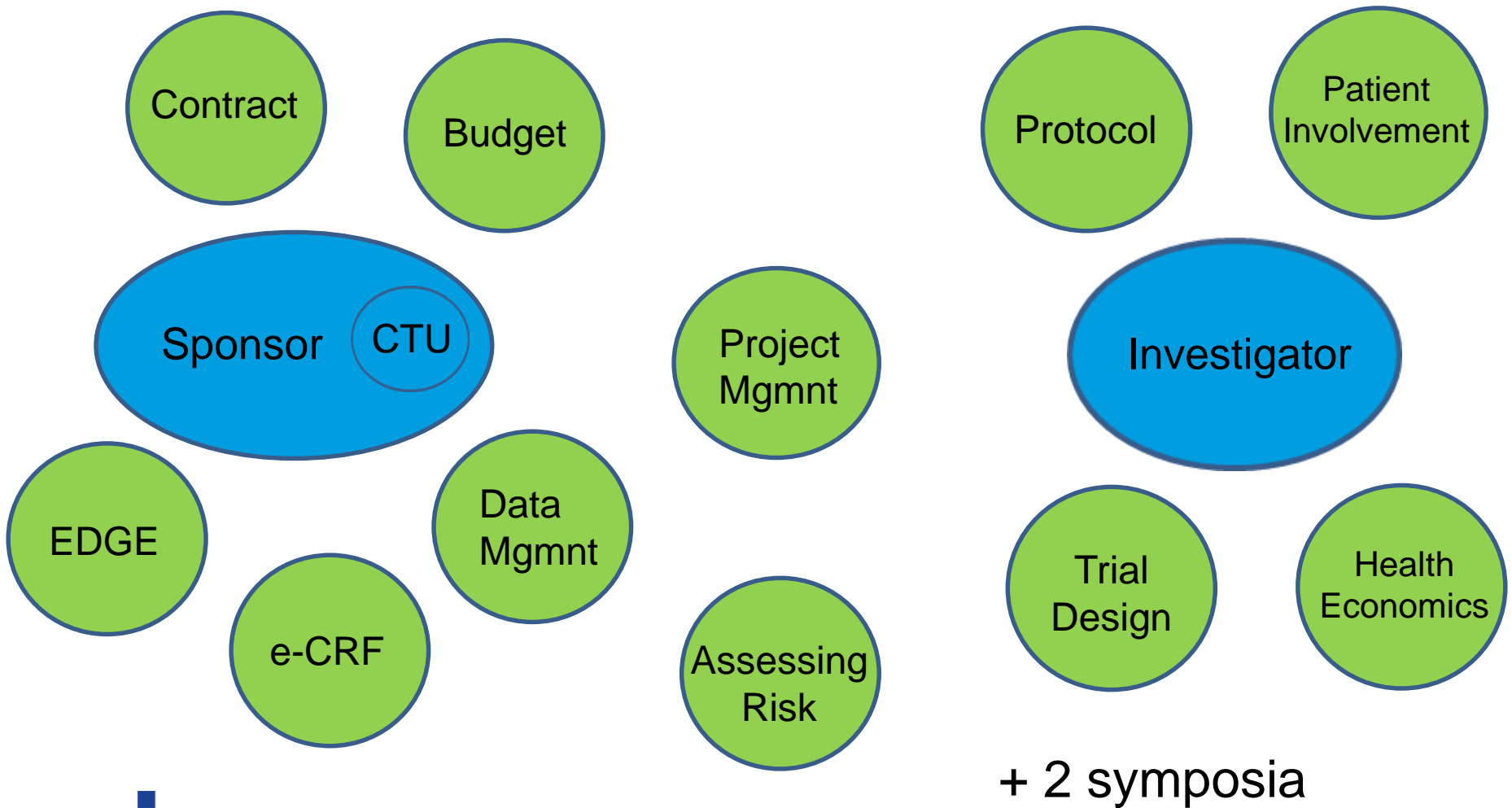
Data sharing

Key success factors for publicly funded trials

SELECTION CRITERIA



KCE Trials workshops & trainings



Tips for applicants



Consult a trial statistician



Build a multi-site team in time (FR/NL)



Collect input from patients on endpoints
and feasibility



Identify other expertise needed and
work with a CTU

