Monitoring risk avoidance while implementing a bundled payment model





Pilot

Goals:

- Improving outcomes of cardiac care
- Developing a payment model for CABG and PCI, which rewards quality instead of volume

Community: 10 hospital, quality insurance Menzis, NHR as third party



Outcome-based payment model

- Outcomes are aligned with ICHOM set
- Predicted outcome: prediction model with relevant patient characteristics
- Observed outcome
- α = 0,05
- Limited financial impact

PCI

30-day mortality

1-year mortality

Urgent CABG

Myocardial infarction \leq 30 days

 $TVR \leq$ 1 year

CABG

120-day mortality

1-year mortality

Surgical reexplortation \leq 120 days

Deep sternum wound infection ≤120 days

 $\text{CVA} \leq 72 \text{ hours}$

Myocardial infarction \leq 1 year

Coronary artery reintervention \leq 1 year



Transition to bundled payment model



Diagnostics



Intervention

Aftercare

Follow-up



Clinical outcomes related to healthcare delivery activities • Urgent CABG, TVR, MI, CVA etc.

Clinical outcomes not related to healthcare delivery activities

• Mortality, quality of care



Healthcare delivery activities related to patiënt relevant 'proces indicators'

• Readmission, presentation at emergency department, length of stay at ICU



"Standard" healthcare delivery activities

- The index procedure
- Common healthcare delivery activities in the patients follow-up



Monitoring side effects

Some Enquête waardegedreven zorginko

5 De waardegerichte zorginkoop-afspraken die het ziekenhuis en Menzis hebben gemaakt in samenwerking met de NHR

	Sterk mee oneens	Oneens	Neutraal	Eens	Sterk mee eens	Geen antwoord
leveren een bijdrage aan het verbeteren van de kwaliteit van zorg	0	0	0	0	0	0
leiden ertoe dat hoogrisico patiënten in het hartteam uitgebreider worden besproken	0	0	0	0	0	0
leiden tot conservatiever beleid voor hoogrisico patiënten	0	0	0	0	0	0

Questionnaire



Data monitoring

Questionnaire

- Cardiologists and cardiothoracic surgeons
- Send at baseline and after the first application of the model
- 17 items questionnaire
 - Impact on treatment decisions
 - Impact on organization of care
 - Physicians vision on the model
- 5-point likert scale: strongly agree strongly disagree

In collaboration with Prof. Dr. W. Groot, Maastricht University



Questionnaire - example

As a consequence of the bundled payment agreement between my hospital and the health insurance company

- ... outcomes get more attention within my department
- ... improvement of outcomes gets more attention within my hospital
- ... high risk patients in my hospital do receive more often a conservative treatment
- ... high risk patients in my hospital do not receive the medical care they need



Data monitoring

Method:

Trend in risk profile pilot centres vs non-pilot centres

- Individual patient characteristics
- EuroSCORE (CABG)
- NHR risk score
- NHR risk score highest decile



Data monitoring - example



Conclusion

- Good practices have been succesfully shared within the community
- Model is officially applied for the first time
- No signals of risk avoidance
- Important to repeat the questionnaire and case-mix analyses on a yearly basis

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