



Importance of Triple Aim outcome measures: do patients, partners, professionals, payers and policy makers differ in opinion?

Maureen Rutten-van Mölken, Willemijn Looman, Maaïke Hoedemakers, Milad Karimi

Erasmus School of Health Policy & Management

Erasmus University Rotterdam

Erasmus School of
Health Policy
& Management



Aim

✿ To investigate if different stakeholders think differently about the importance of outcomes used to measure the impact of integrated care.

✿ Patients with multi-morbidity

✿ Partners (informal caregivers)

✿ Professionals

✿ Payers

✿ Policy makers





Sustainable intEgrated chronic care modeLS for **multi-morbidity**: delivery, Financing, and performance

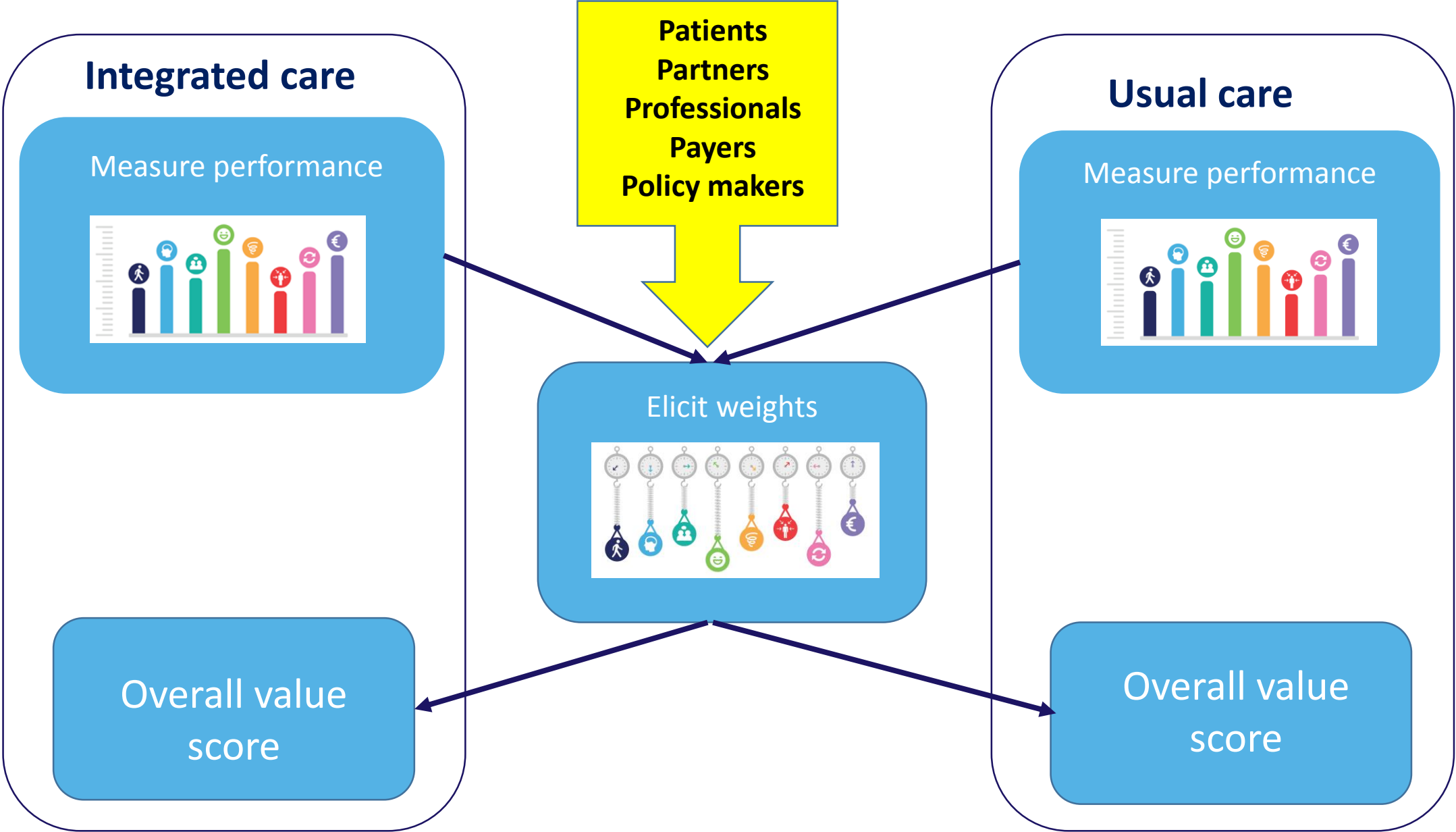
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 634288. The content of this presentation reflects only the SELFIE groups' views and the European Commission is not liable for any use that may be made of the information contained herein.



Why were we interested in the importance of outcome measures?

- ✿ **17 Multi-Criteria Decision Analyses (MCDA) in 8 countries**
- ✿ MCDA = method to aid decision-making that makes the impact that multiple criteria have on a decision, and their relative importance, explicit
- ✿ Suited for complex interventions where multiple, sometimes conflicting, criteria play a role
- ✿ Better evidence-informed decision making on reimbursement, continuation, extension and/or wider implementation of the IC programmes. MCDA can improve transparency, consistency and accountability of decisions.

Value-based method of MCDA



Core set of outcomes covering the Triple Aim

-  Physical functioning
-  Psychological well-being
-  Social relationships & participation
-  Enjoyment of life
-  Resilience
-  Person-centeredness
-  Continuity of care
-  Total health- and social care costs

Programme-specific outcomes

| | Programme-type specific outcomes | |
|---------------------|--|--|
| | Population health management | |
| Health & well-being | Activation & engagement | |
| | | |
| Experience | | |
| Costs | Ambulatory care sensitive hospital admission | |
| | Hospital re-admissions | |

Programme-specific outcomes

| | Programme-type specific outcomes | |
|---------------------|--|--------------------------------------|
| | Population health management | Frail elderly |
| Health & well-being | Activation & engagement | Autonomy |
| | | |
| Experience | | Burden of medication |
| | | Burden of informal caregiving |
| | | |
| Costs | Ambulatory care sensitive hospital admission | Long-term institution admissions |
| | Hospital re-admissions | Falls leading to hospital admissions |

Programme-specific outcomes

| | Programme-type specific outcomes | | |
|---------------------|--|--------------------------------------|-------------------------------|
| | Population health management | Frail elderly | Palliative and oncology |
| Health & well-being | Activation & engagement | Autonomy | Mortality |
| | | | Pain and other symptoms |
| Experience | | Burden of medication | Compassionate care |
| | | Burden of informal caregiving | Timely access to care |
| | | | Preferred place of death |
| | | | Burden of informal caregiving |
| Costs | Ambulatory care sensitive hospital admission | Long-term institution admissions | |
| | Hospital re-admissions | Falls leading to hospital admissions | |

Programme-specific outcomes

| | Programme-type specific outcomes | | | |
|---------------------|--|--------------------------------------|-------------------------------|-----------------------------------|
| | Population health management | Frail elderly | Palliative and oncology | Problems in multiple life domains |
| Health & well-being | Activation & engagement | Autonomy | Mortality | Financial independence |
| | | | Pain and other symptoms | |
| Experience | | Burden of medication | Compassionate care | |
| | | Burden of informal caregiving | Timely access to care | |
| | | | Preferred place of death | |
| | | | Burden of informal caregiving | |
| Costs | Ambulatory care sensitive hospital admission | Long-term institution admissions | | Contacts with the justice system |
| | Hospital re-admissions | Falls leading to hospital admissions | | |

Discrete Choice Experiment to elicit weights for core set of outcomes

Care programme A

Care programme B

Physical functioning

Severely limited in physical functioning

Severely limited in physical

Care programme A

Care programme B

Physical functioning

Severely limited in physical functioning

Severely limited in physical

Care programme A

Care programme B

Physical functioning

Severely limited in physical functioning and activities of daily living

Severely limited in physical functioning and activities of daily living

Psychological well-being

Seldom or never being stressed, worried, listless, anxious, and down

Always or mostly being stressed, worried, listless, anxious, and down

Social relationships & participation

Having a lot of meaningful connections with others

Having some meaningful connections with others

Enjoyment of life

Having some pleasure and happiness in life

Having some pleasure and happiness in life

Resilience

Fair ability to recover, adjust, and restore equilibrium

Fair ability to recover, adjust, and restore equilibrium

Person-centeredness

Not or barely person-centred

Somewhat person-centred

Continuity of care

Fair collaboration, transitions, and timeliness

Fair collaboration, transitions, and timeliness

Total health- and social care costs

8500 euros per participant per year

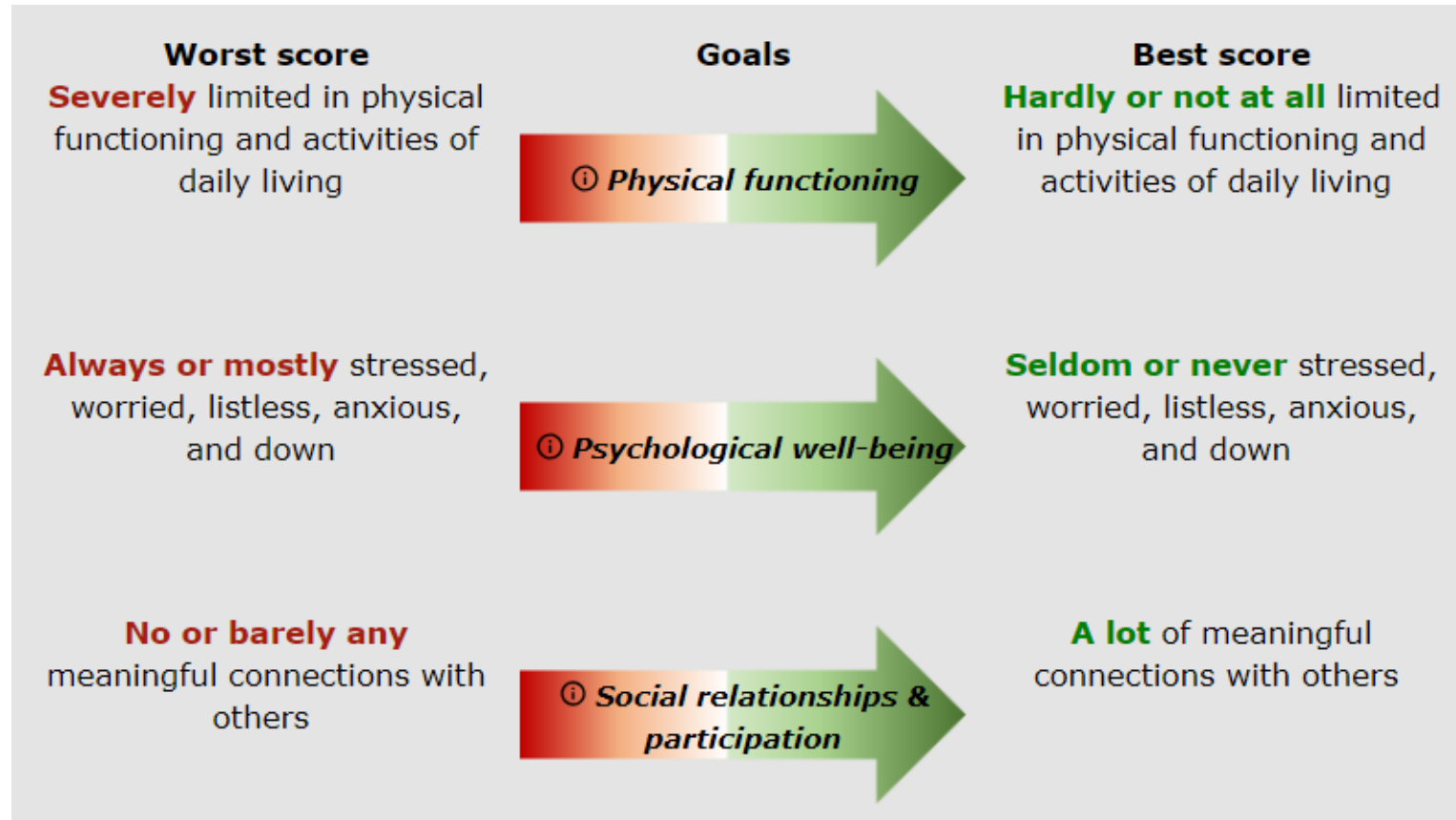
5000 euros per participant per year

Which care programme do you prefer?



Swing weighting to elicit weights for core + programme-specific outcomes

- ✿ “If you could change one outcome from worst to best, which would that be?”



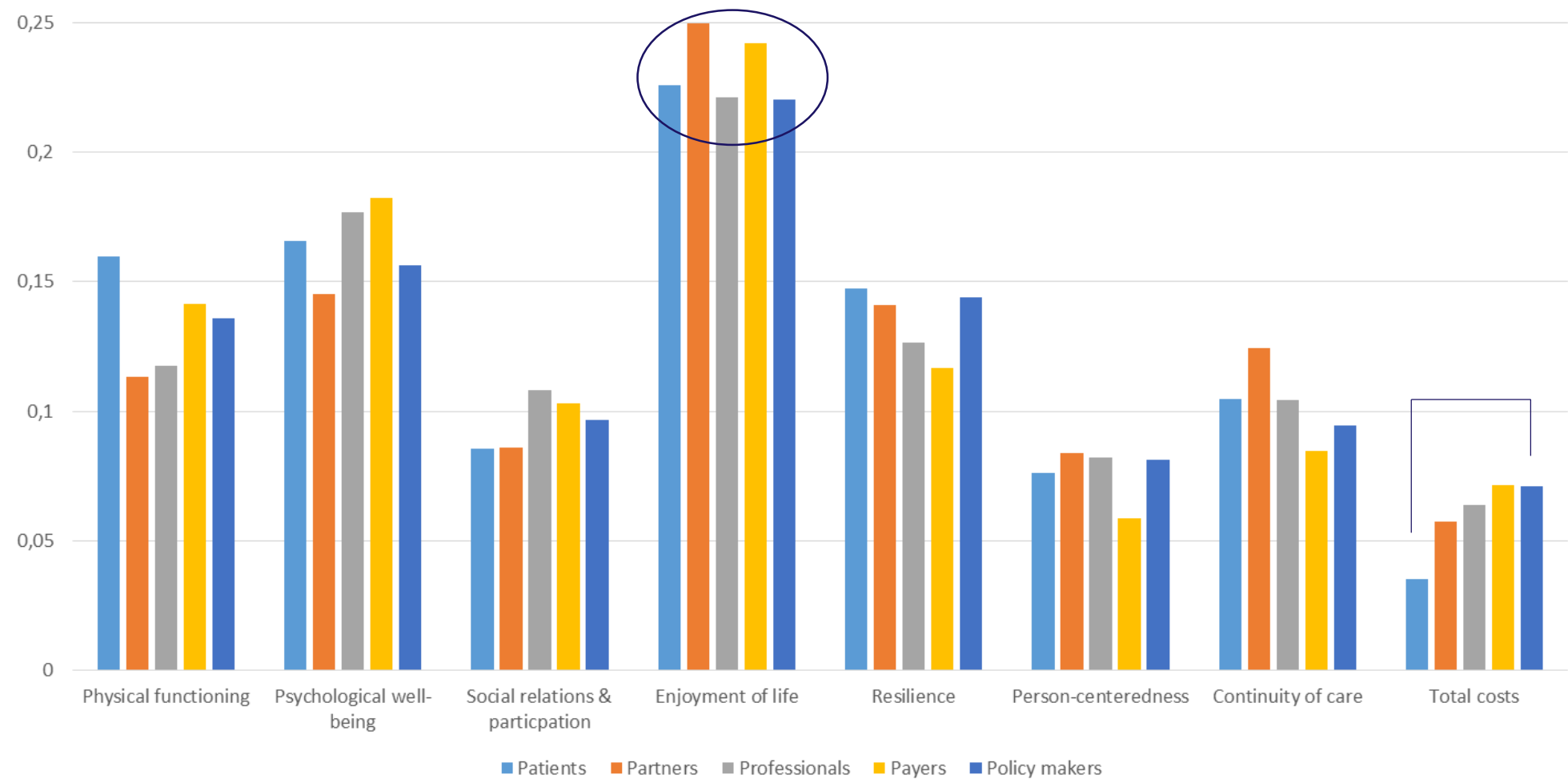
- ✿ Continue doing so for all outcomes, until none are left
- ✿ In essence a ranking that takes range into account

Response online DCE questionnaire currently analysed

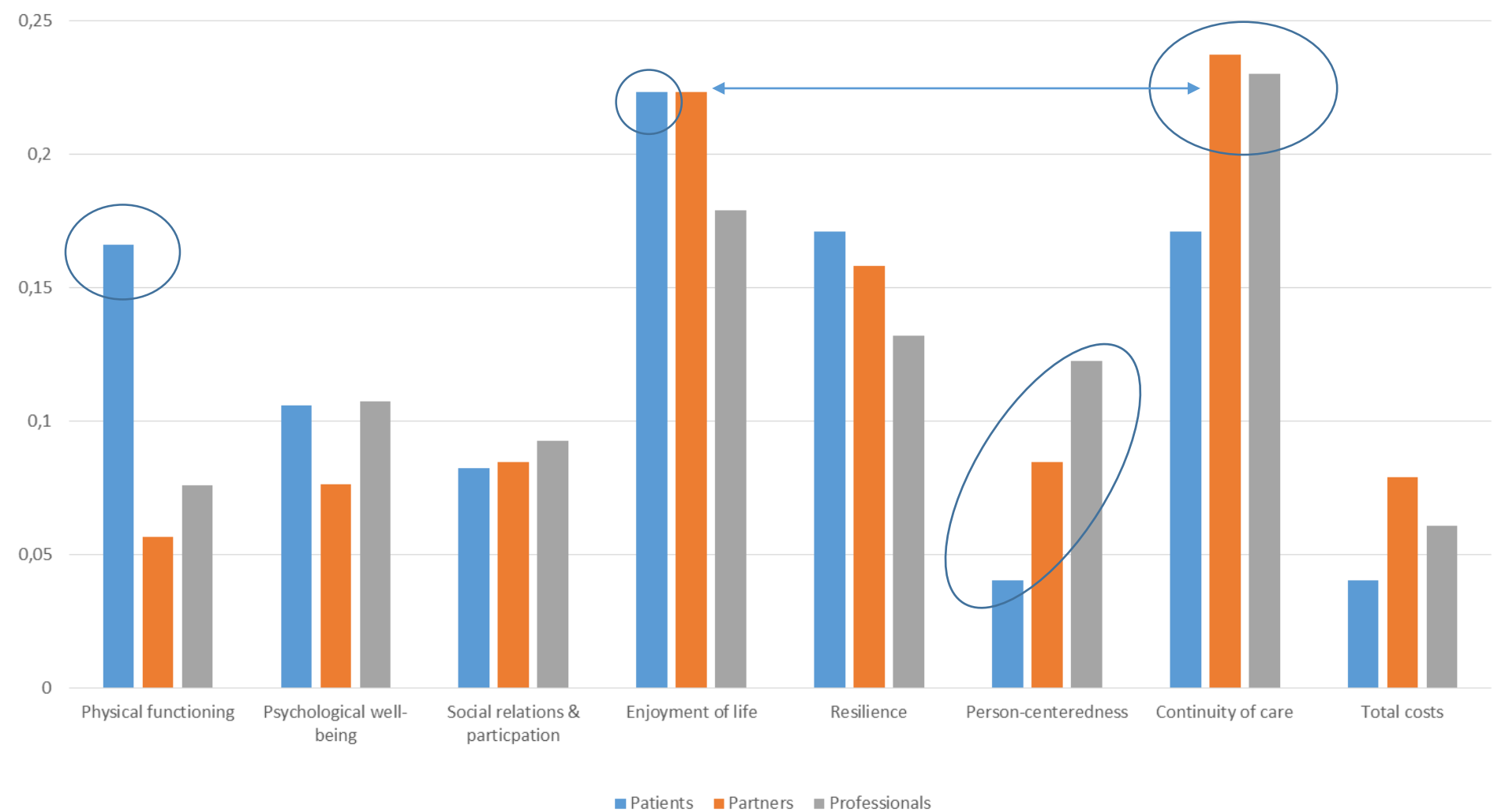
| | Patients | Partners | Professionals | Payers | Policy makers |
|-----------------|----------|----------|---------------|--------|---------------|
| Austria | 168 | 188 | 142 | ... | ... |
| Croatia | 173 | 172 | ... | ... | ... |
| Germany | 166 | 215 | 179 | ... | ... |
| Hungary | 192 | 166 | 168 | ... | ... |
| The Netherlands | 159 | 161 | 156 | 100 | 151 |
| Norway | 158 | 161 | 91 | 122 | 185 |
| Spain | 150 | 151 | ... | ... | ... |
| United Kingdom | 164 | 235 | 161 | 181 | ... |



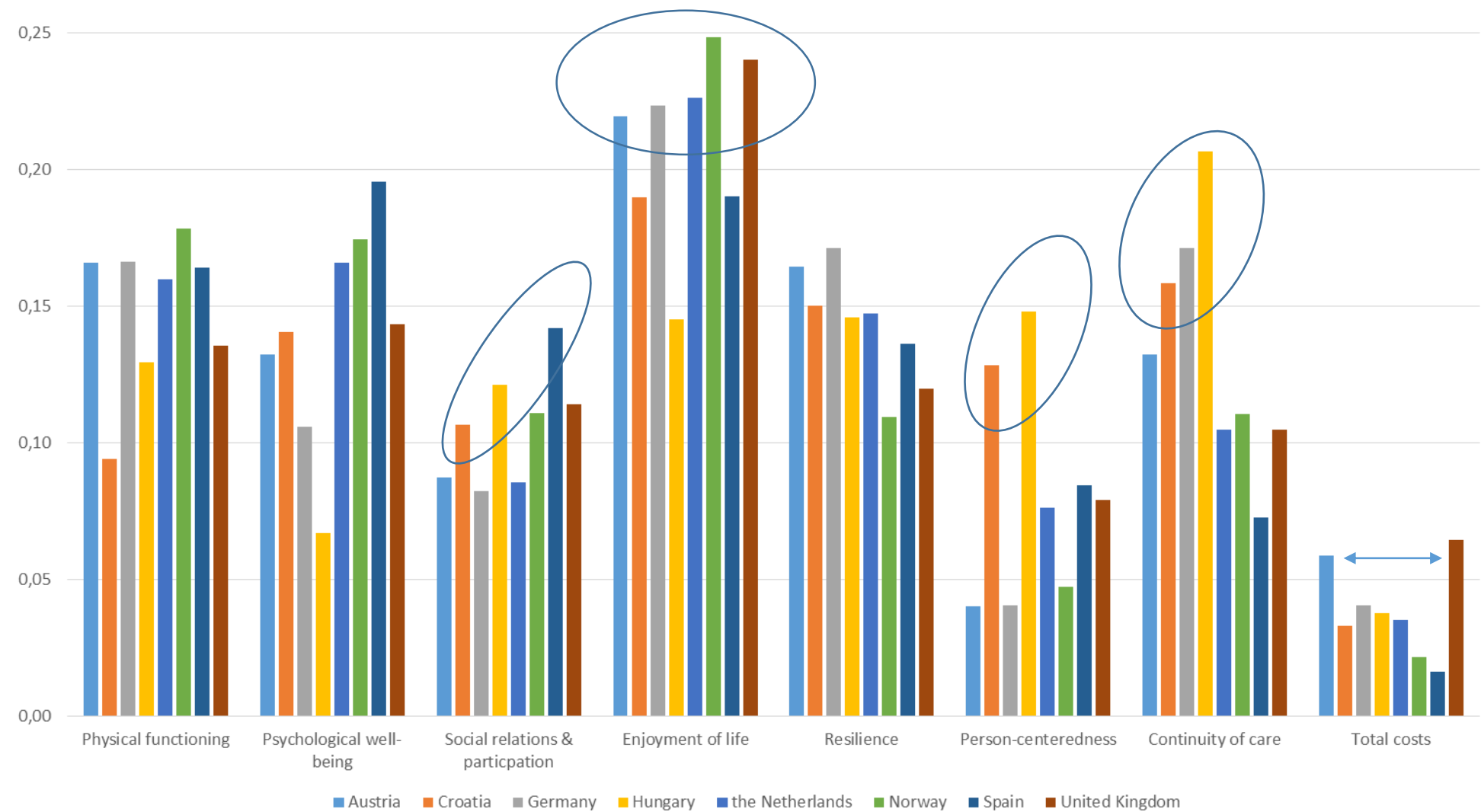
Comparing relative DCE weights between Dutch stakeholders



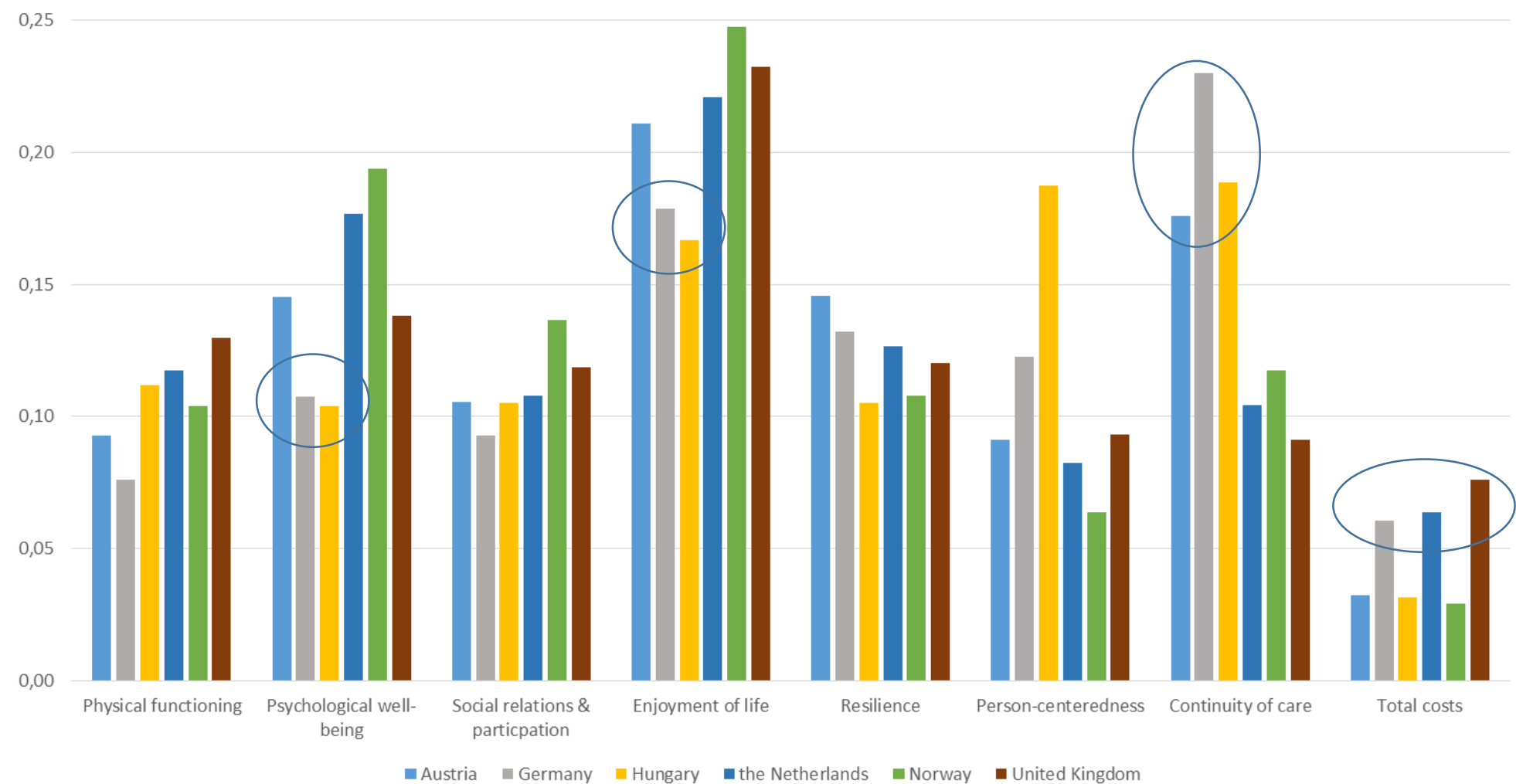
Comparing relative DCE weights between German stakeholders



Comparing weights of Patients between countries



Comparing weights of Professionals between countries?



DCE vs SW Patients Croatia

| DCE | | SW |
|----------------------------------|----|----------------------------------|
| Enjoyment of life | 1 | Physical functioning |
| Continuity of care | 2 | Autonomy |
| Resilience | 3 | Psychological well-being |
| Psychological well-being | 4 | Pain and other symptoms |
| Person-centeredness | 5 | Enjoyment of life |
| Social relations & participation | 6 | Resilience |
| Physical functioning | 7 | Timely access to care |
| Total costs | 8 | Person-centeredness |
| | 9 | Social relations & participation |
| | 10 | Continuity of care |
| | 11 | Burden of medication |
| | 12 | Compassionate care |
| | 13 | Informal caregiver burden |
| | 14 | Total costs |
| | 15 | Long-term institution admissions |
| | 16 | Preferred place of death |
| | 17 | Falls |

Core set criterion outside top 8

Programme-type specific criterion in top 8



DCE vs SW Patients Germany

| DCE | | SW |
|----------------------------------|----|----------------------------------|
| Enjoyment of life | 1 | Physical functioning |
| Resilience | 2 | Autonomy |
| Continuity of care | 3 | Psychological well-being |
| Physical functioning | 4 | Enjoyment of life |
| Psychological well-being | 5 | Activation & engagement |
| Social relations & participation | 6 | Resilience |
| Person-centeredness | 7 | Social relations & participation |
| Total costs | 8 | Burden of medication |
| | 9 | Continuity of care |
| | 10 | Informal caregiver burden |
| | 11 | Person-centeredness |
| | 12 | Avoidable hospital admissions |
| | 13 | Hospital re-admissions |
| | 14 | Long-term institution admissions |
| | 15 | Falls |
| | 16 | Total costs |

Core set criterion outside top 8

Programme-type specific criterion in top 8



Top 3 Patient preferences across countries: DCE vs SW



| | AU | | DE | | HR | | HU | | NL | | NO | | ES | | UK | |
|--------------------------------------|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|
| | DCE | SW | DCE | SW | DCE | SW | DCE | SW | DCE | SW | DCE | SW | DCE | SW | DCE | SW |
| Physical functioning | 2 | 1 | | 1 | | 1 | | 2 | 3 | 1 | 2 | 1 | 3 | 3 | 3 | 1 |
| Psychological well-being | | 2 | | 3 | | 3 | | | 2 | 3 | 3 | | 1 | 2 | 2 | 2 |
| Social relationships & participation | | | | | | | | | | | | | | | | |
| Enjoyment of life | 1 | 3 | 1 | | 1 | | | | 1 | 2 | 1 | 3 | 2 | | 1 | 3 |
| Resilience | 3 | | 2 | | 3 | | 3 | | | | | | | | | |
| Person-centeredness | | | | | | | 2 | | | | | | | | | |
| Continuity of care | | | 3 | | 2 | | 1 | | | | | | | | | |
| Total costs | | | | | | | | | | | | | | | | |
| Autonomy | | | | 2 | | 2 | | | | | | 2 | | 1 | | |
| Pain and other symptoms | | | | | | | | 1 | | | | | | | | |
| Life expectancy | | | | | | | | 3 | | | | | | | | |

Conclusions and implications

- ✿ Most stakeholders valued enjoyment of life as very important and costs as much less important
- ✿ More than 2-fold difference in weights between stakeholders in some outcomes (e.g. costs in NL, patient-centeredness in Germany)

Underlines relevance MCDA from different perspectives to explicate the impact of these differences on the overall value scores of Integrated Care and Usual Care

- ✿ In most countries the patients' top-3 in the DCE usually includes enjoyment of life, physical functioning and either resilience or psychological wellbeing
- ✿ In Croatia, Germany, and Hungary continuity of care enters the patients' top-3
- ✿ Of the programme-specific outcomes, autonomy, was in the patients' top 3 of most important outcomes in 2 of the 3 countries that included it in the weight-elicitation study

Programmes that improve these outcomes get a higher value score



Thanks for your attention!

Questions?

E: m.rutten@eshpm.eur.nl

W: www.selfie2020.eu





Core set of outcomes

| Health/wellbeing |
|--|
| Physical functioning: <i>Acceptable physical health and being able to do daily activities without needing assistance</i> |
| Psychological wellbeing: <i>Absence of stress, worrying, listlessness, anxiety, and feeling down</i> |
| Social relationships & participation: <i>Having meaningful connections with others as desired</i> |
| Enjoyment of life: <i>Having pleasure and happiness in life</i> |
| Resilience: <i>The ability to recover from or adjust to difficulties and to restore ones equilibrium</i> |
| Experience with care |
| Person centeredness: <i>Care that matches an individual's needs, capabilities, and preferences and jointly making informed decisions</i> |
| Continuity of care: <i>Good collaboration, smooth transitions between caregivers, and no waste of time</i> |
| Costs |
| Total health and social care costs: <i>per participant</i> |