

# INNOV Care

Innovative Patient-Centred Approach for Social Care Provision to Complex Conditions

## Evaluation of the economic impact of the INNOV Care pilot

Vibeke Sparring

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# Why health economics?

- Limited resources in society
- Prioritisation
- Opportunity costs
- Rational decision-making
- Helps us make transparent, explicit choices

# Costs

- Direct costs
  - Health care costs
    - Hospital, medication, primary care etc
  - Direct costs outside health care
    - Transportation
- Indirect costs
  - Costs due to lost production

# Strategies when estimating costs

- Top-down
  - published data on aggregate figures on consumption related to diagnosis
  - only data that has a certain disease, e.g. diabetes, registered as main diagnosis
- Bottom-up
  - cost estimates derived from an investigation of a sample of people with a rare disease
  - more comprehensive inventory of utilisation and costs of care
  - easier to analyse the impact of socio-demographic factors

# Economic evaluation

- A comparative analysis of two (or more) options in terms of both costs and benefits
- Aims to determine if an interventions provides good value for money
  - Cheaper than existing alternatives, while maintaining health
  - More expensive, but adding more health

# Costs and consequences

- Resources consumed in the programme
  - Health care sector
  - Other sectors
  - Patient/family
  - Production losses
- Consequences of the programme
  - Health improvements
  - Resource savings

# Relevant perspective for the analysis

- Clinic/primary care unit
- Hospital
- Budget, e.g., pharmaceutical
- County council/region
- Health care system
- Societal
  - Otherwise risk for suboptimisation
  - The consequences for different actors may be presented separately

# Economic evaluation methods

**Method**

*"Cost-of-illness"*

**Description of health outcome**

*Includes only costs, no comparison with other treatment alternatives*

Cost-minimisation analysis

Includes only costs, health outcomes assumed identical in the alternatives

Cost-effectiveness analysis

Health outcomes are a one-dimensional, physical measure such as life years

Cost-utility analysis

Incorporates length and quality of life into one measure, e.g. QALYs

Cost-benefit analysis

Health outcomes expresses in monetary terms (money)



# Use of economic evaluations

- Increasing interest among decision-makers for economic evaluation as an aid for decision making
- Drug reimbursement decisions - whether to subsidise new drugs
- Resource allocation within health care the NHS

# Problems when care is not integrated

- Increased costs
  - Increased risk that patients have to take unnecessary tests or tell their story again and again => increased costs and less good resource use
  - Suboptimal outcomes
- Negative impact on the quality of patient care
- Negative impact on health or patient satisfaction outcomes

# Economic impact of integrated care

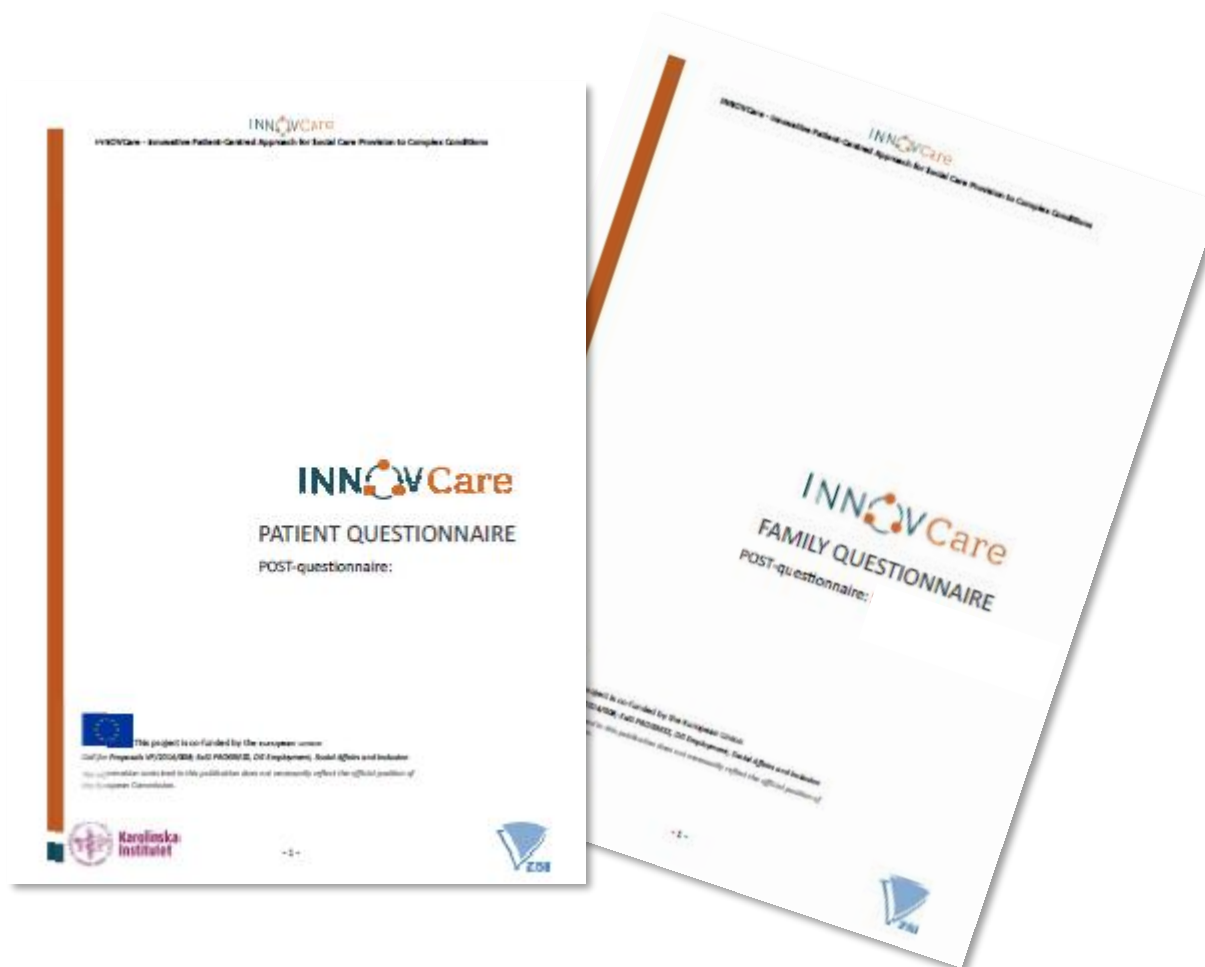
- Utilization and cost were the most common economic outcomes
  - focused on hospital utilization; (re)admission rates, length of stay or admission days and emergency department visits
  - cost and/or expenditure data in some form most frequently in relation to hospital costs
- Evidence of cost–effectiveness of selected integrated care approaches but the evidence base remains weak
  - integrated care an intervention or a complex strategy to innovate and implement long-lasting change in the way services in the health and social-care sectors are being delivered

*Nolte (2014) What is the evidence of the economic impacts of integrated care?*

# Literature review – challenges

- Integrated care, coordinated care, person-centred care, ...
  - Vertical vs horizontal integration
  - Children, adolescents, adults, elderly
- Rare diseases, complex conditions, chronic disease
- Close to 3000 abstracts => 64 full-text articles

# Our parts in the questionnaires



# Generic instruments

- Clinical studies and population studies
- Makes it possible to compare different disease groups, areas and interventions
- Less sensitive
- Understood and used by non-professionals

## *Examples of generic instruments:*

- EQ-5D, SF-36, HUI, QWB, SIP...

# Condition-specific instruments

- Used for a specific disease or condition
- Sensitive
- Intuitively appealing to clinicians
- Two types
  - Clinical
  - Experiential
- Prohibiting comparisons across groups

# Measuring HRQoL of patients with a RD

## Children

- PedsQL inventory
- KINDL
- Patient Global Assessment 5-point scale (perceived by parents)
- **EQ-5D-Y**

## Adults

- EQ-5D
- SF-36, SF-12, SF-6D
- Beck Depression Inventory (BDI)
- State Trait Anxiety Inventory (STAI)
- St George's Respiratory Questionnaire (SGRQ)
- **Barthel Index** (level of disability)
- WHO-5 Well-being Index modified version



# Measuring HRQoL of caregivers

- SF-36
- **EQ-5D**
- **Zarit Caregiver burden scale**
- Family Strain Questionnaire
- General Health Questionnaire (depression/anxiety)
- ULQIE (quality of life of parents of chronically ill children)

# Costs for and impact on patients

- Health care
  - Admitted to hospital
  - Emergency care
  - Visit to physicians or other healthcare professionals
  - Respite care
- Community and other services
  - Personal assistant, home aid, etc
  - Transportation services
- Healthcare insurance and cost-sharing
  - Insurance coverage
  - Out-of-pocket expenses for healthcare visits, tests, medicines or medical devices
- Health and well-being
  - EQ-5D-Y
- Socio-economic differences
  - Level of education
  - Marital status
  - Employment status
  - Income

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  - EQ-5D-5L
  - Zarit Caregiver Burden
- Socio-economic differences
  - Level of education
  - Marital status
  - Employment status
  - Sick leave
  - Income

# Challenges with the evaluation

- A variation of rare conditions
- Patients are both children, adolescents and adults
- Many of the patients have cognitive challenges
- Focusing on measures that can be affected by the intervention

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## Thank you

Vibeke Sparring | [vibeke.sparring@ki.se](mailto:vibeke.sparring@ki.se)

Ersida Mansoory | [ersida.mansoory@ki.se](mailto:ersida.mansoory@ki.se)

Peter Lindgren | [peter.lindgren@ki.se](mailto:peter.lindgren@ki.se)

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