Towards evidence-based government supervision in healthcare

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Introduction

- Evidence-based supervision
- Effect of supervision on quality of care and health outcomes
- Research on highest level of empirical evidence
  - Randomised trial
Effect chain Dutch Healthcare Inspectorate
Introduction

- Integrated diabetes care in care groups
- Quit-smoking counselling in midwifery practice
Research questions

1. What are the effects of these two government supervision programmes on structures and processes of care as well as on health outcomes?

2. In these cases of government supervision, what is the relation between structures and processes of care, and health outcomes?
Effect of supervision: integrated diabetes care

- No evidence for effectiveness of supervision programme

- Improvements over time in both inspected and non-inspected care groups in structures of care
Effect of supervision: quit smoking

- Intervention group provided better quit-smoking counselling than control group
- Large improvement within 2 years in quit-smoking counselling
- Improvements probably partly attributable to supervision programme
Relation indicators: integrated diabetes care

- Diabetes care suboptimal: 28-97% of patients received care according to guideline

- No relation demonstrated between structures and processes of care and health outcomes
Relation indicators: quit smoking

- Quit-smoking counselling suboptimal: in 42% of the pregnant smokers counselling was initiated

- Indications that improved structures and processes of care led to more quit smoking among pregnant women
Research questions

1. What are the effects of these two government supervision programmes on structures and processes of care as well as on health outcomes?

   *1 of the 2 programmes probably effective*

2. In these cases of government supervision, what is the relation between structures and processes of care, and health outcomes?

   *Diabetes care: relation not demonstrated*

   *Quit smoking counselling: only indications for relation*
Researchability

- Experimental research with control group is possible if care providers are separated
- Complexity of supervision programmes reduces researchability: every programme consists of different elements, elements are related
- Structures and processes of care, which are related to the supervision programme and measured at an appropriate moment in time
- Number of care providers under supervision should be large enough to see differences (statistical power)
Researchability: more criteria

- **Effect mechanism**: is the programme not too complex?
- **Control group**: can a control group be created that is sufficiently separated from the intervention group and assigned to no or less supervision?
- **Statistical power**: can a sufficient number of care providers be included in the study to perform the analysis with sufficient statistical power?
- **Effect measures**: Are structures and processes of care measured? Are the effects measures closely related to the aim of the supervision programme? Are the effect measures studied at an appropriate moment in time (not too early to measure an effect, but also not too late because of dilution of the effect)?
Recommendations

1. Use evidence-based guidelines in supervision, if possible
   - Aim supervision: improve population health
   - Non-evidence-based guidelines do not contribute to this aim
     - Limited sanctioning possibilities
Recommendations

2. Analyse potential improvements in quality of care in every supervision project
   - Risk analysis is not sufficient for effectiveness
   - Differences between inspectees?
   - “Low-hanging fruit”
Recommendations

3. Assess quality of care based on structures and processes of care and if possible based on health outcomes

- Health outcomes might not be a good proxy for structures and processes of care
- That structures and processes improve health outcomes may be assumed in the case of evidence-based guidelines
Recommendations

If you want to empirically study the effect of supervision:

4. For research purposes, consider to:
   - Formulate concrete aims
   - Conduct a proper problem analysis
   - Execute well-planned programmes
   - Facilitate data collection
Recommendations

1. Use evidence-based guidelines in supervision, if possible
2. Analyse potential improvements in quality of care in every supervision project
3. Assess quality of care based on structures and processes of care and if possible based on health outcomes
4. For research purposes, consider to:
   - Formulate concrete aims
   - Conduct a proper problem analysis
   - Execute well-planned programmes
   - Facilitate data collection
More information?

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