Unannounced surveys: a cheaper and better facilitator for the quality improvement work at hospitals but not a more valid instrument

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Background

- In 2014, Denmark had a unique accreditation system covering all Danish health care institutions in one single quality model with announced accreditation surveys starting with the first hospital in 2009.
 - The Danish Institute for Quality and Accreditation in Healthcare (IKAS) was planning a new version of The Danish Healthcare Quality Program (DDKM) version 3 contemplating unannounced surveys
- In 2015, hospital accreditation was abandoned by the Danish Government

The Danish unannounced hospital study (UHS)

- PURPOSE:
- To help decision-makers decide whether or not to implement unannounced hospital surveys in the Danish Quality Model (DDKM) version 3. (The study was conducted in August-Dec 2014)
- Problem: only limited evidence regarding UHS. According to Hinchcliff et al., 2017 two studies indicate an effect on hospital quality (mortality/survey outcomes)

The Danish study comprised:

- 1. a randomized controlled trial (RCT) investigating the effect of unannounced compared to announced hospitals surveys (AHS) in Danish hospitals, and
- a questionnaire investigating the attitudes of health care professionals and surveyors towards accreditation and the possibility of introducing unannounced hospitals surveys.

Prior publications from the study

- Ehlers LH, Simonsen KB, Jensen MB, Rasmussen GS, Olesen AV.
 Unannounced versus announced hospital surveys: a nationwide cluster-randomized controlled trial. International Journal for Quality in Health Care, 2017, 29(3), 406–411
- Ehlers LH, Jensen MB, Simonsen KB, Rasmussen GS, Braithwaite J. Attitudes towards accreditation among hospital employees in Denmark: a cross-sectional survey. International Journal for Quality in Health Care, 2017, 1–6 (Reizenstein Award for best paper 2017)
- In this study we combine results from the Danish studies and look at the perceived and actual measurement system in hospital accreditation (UHS versus AHS)

The external survey measurement system in DDKM 2.v. for Danish hospitals

- On the basis of observation, documentation, and interviews
- Standards and indicators
 - 82 accreditation standards for hospitals (39 organizational, 40 general, 3 disease specific standards)
 - Each standard can have a number of indicators for each level 1-4 corresponding to PlanDoStudyAct
- Tracer methodology
 - A Tracer is the tracking of a patients' care throughout the entire organization, using patient medical record as a guide
 - Trained surveyors conduct 2 types of tracers: Individual/Patient Tracers: Follow the treatment path of an individual patient at the hospital, System Tracers: Follow a process in the hospital from beginning to end
- (for the RCT we developed an abbreviated version of the measurement system for both UHS and AHS)

Hypotheses about unannounced hospital surveys (UHS)

- UHS would detect more quality problems (RCT)
- UHS will give a more accurate picture of the current quality on the hospital/ward than AHS (questionnaire)
- UHS would better support the daily work with quality than AHS (UHS require constant managements focus on quality rather than "putting up a show" for AHS) (questionnaire)
- UHS require fewer resources than AHS (questionnaire)
- UHS may be difficult in practice and take more time because several professions are extremely busy during daily operations and hence are difficult to contact during an UHS (RCT/questionnaire)
- UHS will lead disturbances in the patient treatment (questionnaire)

The RCT

- We invited all thirty public hospitals in Denmark.
- Twenty-three (77%) (3 university hospitals, 5 psychiatric hospitals, and 15 general hospitals) agreed to participate in the trial.
- We randomized the hospitals to one of the two trial arms. Participation in the trial was voluntary and the results from the survey at each hospital were, contrary to normal practice, not revealed in public.
- We surveyed the included hospital wards according to an abbreviated set of the national accreditation standards from the DDKM version 2.
- The main outcome measure was the surveyors' assessment of the hospitals' level of compliance with accreditation standards and their performance indicators.
- We analyzed compliance with performance indicators using binomial regression analysis with bootstrapped robust standard errors.
- We hypothesized that hospitals receiving unannounced surveys were less successful than hospitals receiving announced surveys, defined as meeting less compliance with accreditation standards.

The Questionnaire

- A survey invitation to 17,646 unique email addresses covering a representative sample of doctors, nurses, hospital managers, quality staff, and surveyors located at all 30 public hospitals in Denmark.
- 5.055 respondents (approximately 29% / 85% response rate)
- Focus on the attitudes of health care professionals and surveyors towards accreditation, DDKM and the possibility of using UHS
- The questionnaire was administered in SurveyXact and covered background information of the respondent, multiple choice questions, closed-end questions using a 7 point Likert scale from 1 "strongly disagree" to 7 "strongly agree", and a single open-ended questions for free comments.
- Statistical analyses in STATA/v15.

Results

- We found no support that UHS detects more quality breaches
- But most clinicians believe UHS is more effective in detecting quality breaches
- We found no support that practical problems can make UHS difficult
- But most employees believe there will be some practical problems with UHS (especially getting in touch with hospital management team)
- We found support that AHS have credibility problems ("putting up a show")
- And most employees believe UHS will have less credibility problems
- Most employees believe UHS will be cheaper

Conclusion

- Unannounced surveys:
 - Did not detect more errors compared to AHS, but was expected to detect more errors compared to AHS
 - Was seen as a better facilitator for the quality improvement work at hospitals compared to AHS
 - Was expected to lead to a lower resource consumption compared to AHS