

Infrastructuring for Quality: An Experiment with Performance Measures

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Abstract. Reimbursement and budgeting constitutes a central infrastructural element in most secondary healthcare sectors. In Denmark, Diagnose-Related Groups (DRG) function as the core element for budgeting *and* encouraging increase in activity and effectivity. However, DRG is known to potentially have adverse effects by encouraging hospitals to maximize reimbursement at the expense of patients. To counter this, one Danish region has initiated an experiment involving nine hospital departments whose normal budgeting and reimbursement based on DRG is put on hold. Instead, they have been asked to develop indicators for quality in treatment to guide and govern their performance, in order to investigate whether this may generate a new performance measurement infrastructure that will improve quality of healthcare. The project is entitled: “New governance in the patient’s perspective”.

Introduction

In this paper, we present and discuss a current experimental project in the Danish healthcare sector aimed at developing standards for treatment quality to guide and govern healthcare.

The project aims at optimizing healthcare in accordance with the so-called triple aim strategy: *Improving the patient experience of care, improving the general health of the population while simultaneously lowering the cost per capita* (www.ihl.org). It engages local healthcare professionals (and patients) in developing indicators for what each specific department considers to be ‘good quality’. The prevalent budgeting infrastructure in the Danish Healthcare sector

encourages activity and to some extent productivity, but is considered to have ‘adverse effects’, e.g. to meet budgets, hospitals sometimes cannot afford to provide better quality or more efficiency. Interestingly, the project spurs decentralized organizational changes in which quality of treatment is translated in substantially different ways. Hence, the project enables the study of quality in-the-making and constitutes an example of infrastructure building.

The DRG-based infrastructure

DRG was introduced in Denmark in mid-1990s in order to register activity, but has since then developed to serve several other purposes: planning, budgeting, reimbursement, statistics, monitoring, benchmarking and clinical research. The DRG system is based on two elements: First, a grouping of patients with similar diagnosis and similar resource requirements; second, a set amount allocated to a hospital for each patient recorded with a specific DRG code. In 2011, there were 872 codes in all (Rigsrevisionen 2011, p15). The amount is calculated by the Ministry of Health as a national average of all expenses for such patients.

As any performance measurement infrastructure, DRG entails the risk of ‘creaming’ and ‘tunneling’ (Power 1997), which is well realized by all parties, including clinicians. For example, when hospitals proposed to have different DRG codes for acute and elective admissions, because the former in general stay longer at the hospitals, the Ministry of Health rejected this, since “there is a risk that this will give an economic incentive for more acute admissions...” (Ministeriet 2010, p62). Also, hospitals may subdivide treatments into several visits at the outpatient clinic, since each visit is reimbursed, and this overall generates more income than one visit including all examinations (ibid, 71); or hospitals may admit patients rather than treat them in the outpatient clinic, because DRG reimbursement is higher for admissions (Danske Regioner et al 2013, p86). To counter such strategies, the Ministry monitors for ‘DRG creep’ i.e. an increase in expenses for a DRG code above 1,5% a year (Rigsrevisionen 2011, p27).

In 2013, “Better Incentives in Healthcare”, a joint report made by Danish municipalities, regions, and various ministries concluded that the DRG system despite its merits did encourage a focus on activity, but less on whether treatment was right, resource effective and improved the general state of public health (Danske Regioner et al 2013). The report recommended initiation of local experiments investigating the coupling of economy and quality (ibid, p15), a lessening of the influence of DRG-based reimbursement, and development of the DRG system in order to support hitherto unrecognized activities: telemedicine, consultancy outside hospitals and with relatives (ibid, p170). Following this recommendation one Danish region initiated a project in 2014 entitled “New governance in the patient’s perspective”. The project, which is the focus of this

study, involves nine hospital departments where the DRG system is suspended, and instead the departments have been 'set free' to develop their own indicators by which their performance is to be measured. The authors of this paper were asked to follow and investigate the project without any other obligations than to produce research. Specifically, we are concerned with the practices of establishing and implementing the indicators and with the subsequent intended and non-intended organisational changes at the departments. Theoretically, we draw on organisational and workplace studies and STS, based on qualitatively and ethnographic methods. Our concern is to contribute to the work of the practitioners in developing the infrastructure based on quality assessment of the healthcare practices and treatment. Below, we elucidate some of the challenges faced by the departments when developing indicators based on their own practices.

Quality in the making

While one thing is to define what quality in treatment might mean, a whole other issue is to invent ways of rendering quality measurable and governable via indicators. We have found that all of the departments to various degrees and for reasons of efficiency developed indicators that are already recorded in their electronic patient records or in established databases for quality assessment: New infrastructures most often build upon already installed infrastructures (Bowker & Star 2000). For instance, in relation to knee surgery an indicator states that less than 5% of patients who have had surgery should be re-admitted for re-surgery in less than 2 years. Data for this indicator are already recorded in a knee surgery database. What is added is simply the 5% threshold for patient re-admission. Another example, from a diagnostic medical department, is an indicator according to which at least 80% of patients should be diagnosed at their first visit. This indicator is also based on existing data to which the 80% threshold is added.

While indicators seem straightforward to define, when they build upon already collected data, it has proven particularly challenging to actually retrieve the data from the different databases. Data-availability does not imply data-retrievability, it turns out, and new ways of processing data and querying the databases have to be invented and installed by technical personnel. Furthermore, what may seem a trivial indicator to establish easily turns out to open up to a greater complexity. For instance, one department considered a decrease in surgery cancellations to be an obvious improvement of both quality and performance. However, when taking a closer look at recorded data, it turned out that some cancellations had counter-intuitively helped to increase quality and performance, since the cancellations were due to planned surgeries having been moved ahead, thereby reducing waiting time for patients.

A general focus for the departments is how to assess and improve patient satisfaction. This has proven to be challenging, since concerns about how, when and whom to ask quickly arise. So does concerns with what patient satisfaction might actually entail and whether patient satisfaction is actually an ideal to strive for. Treatment and caring for the body of a patient, might involve pain, suffering and grief and will not necessarily result in a 'satisfied' patient (Mol 2008). Despite this complexity, the departments attempt to develop indicators and means by which to measure patient experience of treatment. Some departments directly ask patients about their experiences in surveys, others take subtle approaches by including patients in workshops and seminars concerning treatment and care. Still others attempt to define patient satisfaction 'objectively' as they phrase it. For instance, in relation to back surgery, one department argues that patient satisfaction can be translated into "the patient being able to return to work in less than a year". Arguably, posing such criteria as good indicators for patient satisfaction might be controversial, but this seems to be the case for all attempts to translate practice into indicators for quality. The fact that quality and patient satisfaction are abstract and airy requires some sort of concretization. Critiques of attempts at translating practice into indicators risk falling short by implicitly assuming that ideal indicators can and should be found that correspond fully with the practice they seek to represent and govern (Timmermans & Berg 1997).

Overall we find the project and its bottom-up approach to indicator development interesting as it represents endeavours to address and overcome well known issues of performance measurement often encountered in New Public Management. In particular, as STS-scholars we find the project to hold great potential for studying how such new governance initiatives in health care are given shape in a process of 'infrastructuring for quality' where quality is translated back and forth between practice, already established infrastructures and novel attempts at representing and 'capturing' quality. In time, the study will also investigate how governing by means of quality indicators is practised.

References

- Bowker, G. & Star, Susan L. (2000) *Sorting Things out: Classification and Its Consequences*. Cambridge Mass.: MIT.
- Danske Regioner, KL, Økonomi- og Indenrigsministeriet, Finansministeriet, Ministeriet for Sundhed og Forebyggelse (2013) *Bedre incitamenter i sundhedsvæsenet* [Better incentives in Healthcare]
- Ministeriet for Sundhed og Forebyggelse (2010) *Effektiv styring på sygehusområdet*
- Mol, Annemarie (2008) *The Logic of Care: Health and the Problem of Patient Choice*. Routledge.
- Power, Michael (1997) *The Audit Society: Rituals of Verification*, Oxford University Press
- Rigsrevisionen (2011) *Beretning til Statsrevisorerne om DRG-systemet*
- Timmermans, S., & Berg M., (1997) *Standardization in Action: Achieving Local Universality through Medical Protocols*, *Social Studies of Science* 27 (2): 273–305.