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Incentivising effort in governance of public hospitals: Development of a delegation-based alternative to activity-based remuneration

Rikke Søgaard [a,b,c,*], Søren Rud Kristensen [d], Mickael Bech [e]

[a] Department of Public Health, Bartholins Alle 2, Aarhus University, 8000 Aarhus, Denmark
[b] Department of Clinical Medicine, Palle Juul-Jensens Boulevard 82, Aarhus University, 8200 Aarhus N, Denmark
[c] Health Economics, CFK - Public Health and Quality Improvement, Oluf Palmes Alle 15, Central Denmark Region, 8200 Aarhus N, Denmark
[d] Manchester Centre for Health Economics, Institute of Population Health, University of Manchester, Oxford Road, M13 9PL Manchester, UK
[e] COHERE - Centre for Health Economic Research, Department of Business and Economics, University of Southern Denmark, Campusvej 55, 5230 Odense, Denmark

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ABSTRACT

This paper is a first examination of the development of an alternative to activity-based remuneration in public hospitals, which is currently being tested at nine hospital departments in a Danish region. The objective is to examine the process of delegating the authority of designing new incentive schemes from the principal (the regional government) to the agents (the hospital departments). We adopt a theoretical framework where, when deciding about delegation, the principal should trade off an initiative effect against the potential cost of loss of control. The initiative effect is evaluated by studying the development process and the resulting incentive schemes for each of the departments. Similarly, the potential cost of loss of control is evaluated by assessing the congruence between focus of the new incentive schemes and the principal's objectives. We observe a high impact of the effort incentive in the form of innovative and ambitious selection of projects by the agents, leading to nine very different solutions across departments. However, we also observe some incongruence between the principal's stated objectives and the revealed private interests of the agents. Although this is a baseline study involving high uncertainty about the future, the findings point at some issues with the delegation approach that could lead to inefficient outcomes.

1. Introduction

Activity-based reimbursement (ABR) of hospitals on the basis of case mix tariffs was introduced in many countries in the late 1990s and early 2000s [1]. Although still being the general model of reimbursement in most of these countries, there has been a debate about its appropriateness [2,3].

In the Danish context, the model has been criticised for being a barrier to new initiatives such as telemedicine, provision of all procedures in one day and collaboration between primary and secondary health-care sectors. In addition, the lack of a direct incentive for quality and in some cases even the existence of perverse incentives such

* Corresponding author at: Department of Public Health, Bartholins Alle 2, 8000 Aarhus, Aarhus University, Denmark. Tel.: +45 28991387.
E-mail addresses: rs@ph.au.dk (R. Søgaard), soren.kristensen@manchester.ac.uk (S.R. Kristensen), mbe@sam.sdu.dk (M. Bech).

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as higher payment for patients that acquire infections during admissions, as opposed to those who do not, have been highlighted. The Danish government thus formed a 'committee on better incentives in health care' in 2012. The committee recently announced its overall conclusion, which was that an updated governance model is desirable and that broader instruments than merely financial incentives should be considered [4].

Public governance through incentive schemes is known to be a complex matter creating intended as well as unintended organisational and behavioural responses, including 'creaming', 'tunnel vision' and complex dynamics between indicators, effects and outcomes. In addition, more than one level of principal–agent relationships often coexists. In the Danish context, the coexisting actors are the central government (the Department of Health), the regional governments, the local hospital managements and the hospital department managements. Incentivising quality of care in hospital governance models thus presents a major challenge to health policy and research [5].

On this background, a trial has been launched in one of the Danish regions. The regional government, which has the responsibility for the regional health-care system, states that its new objective is inspired by The Triple Aim [6]—a simultaneous focus on cost containment, patient-experienced quality and population health—in order to allow for a stronger focus on quality than what has been implied by the ABR-based model. During the trial, Diagnosis-Related Grouping (DRG)-based productivity measurement is suspended and replaced by global payment in combination with local incentive schemes at the individual hospital department level. Uniquely, the designing of these new incentive schemes has been delegated to the hospital departments. This paper is the first to present and discuss this new approach for hospital governance.

The objective of the study is to analyse the hospital departments' (the agents') behaviour when they are delegated the authority to develop their own performance indicators and targets by the regional government (the principal). The paper proceeds with a brief background on the context of the study in Section 2, a brief presentation of the proposed theoretical framework in Section 3 and a methods description in Section 4, including the premises for this new mode of governance. In Section 5, we focus on departments' motivation for engaging in the trial, their behaviour during the development process and on the resulting incentive schemes in terms of innovativeness, usefulness as a basis for performance management and congruence with the principal's objectives. Based on this, we then discuss our expectations for delegation as a novel approach for hospital governance in the Danish context in Section 6.

2. Background and Context

The study was conducted in Central Denmark Region, which serves a population of about 1.1 million inhabitants by five somatic hospital units. The funding of the region's hospitals is based on around 77% prospective global payment and around 23% from ABR based on per case tariffs named DK-DRG [7]. The combination of global and per case payment is similar to models used in, e.g., Sweden, Germany, United Kingdom and Switzerland, whereas the relative weight of ABR is amongst the lowest in Europe together with those of, e.g., the Netherlands and the Czech Republic.

The national and the regional governments negotiate an overall financial agreement annually and Central Denmark Region endeavours to pass on the conditions directly to its hospitals. In 2014 and 2015, this has in practice meant extrapolation of last year's budget plus productivity increases of 2.4%, which is referred to as the baseline. Performance on the baseline as well as a number of other targets that are not directly linked to payment (listed in Appendix 1) are evaluated 4–6 times per year and discussed at dialogue meetings between the regional government and its hospitals. In the case of underperformance, hospitals pay back 50% of the DRG-based production value, whereas no additional payment is made for extra activity. At the hospital level, the baseline is typically translated into internal baselines for individual departments.

3. Analytical Framework

3.1. Hospital Contracts and Delegation

As a framework for analysis, we adopt the literature on authority and delegation developed by Aghion and Tirole [8]. This is a subliterature of the broader framework of incomplete contracts [9] focusing on within-firm decentralisation decisions as opposed to vertical integration of independent firms, which is thus well suited for the study of public organisations. Aighon and Tirole's model is focussed on the relation between delegation of authority and effort incentive at the stage of project selection, as opposed to the stage of project completion, which is treated by, e.g., Bester and Krähmer [10]. For the present study, we define the *project* as the focus of performance management, which creates the effort incentive and, which is reflected in choice of performance indicators and targets.

In the framework by Aghion and Tirole [8], a principal employs an agent to solve a task. By definition, the principal has the formal authority to decide which projects the agent should spend time on but the principal can also delegate that decision to the agent. When deciding about delegation, the principal faces a trade-off between the expected benefit from the *initiative effect* and the expected *cost of loss of control*.

The initiative effect is due to delegation of authority giving the agent an incentive to invest more effort in information collection in relation to selecting the projects (and reducing the principal's need to do so) that will most likely lead to goal achievement. A key premise thus is that the agent is better informed about which behaviour supports the objective function and, accordingly, more efficient in defining the project than the principal is.

The possible cost of loss of control is due to the principal losing the opportunity to decide which projects the agent selects, because only the right to select is contractible (and not the resulting selection). This may result in the agent selecting projects with a high private benefit,