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Original Research Article

Pay for performance of Estonian family doctors and impact of different practice- and patient-related characteristics on a good outcome: A quantitative assessment

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ABSTRACT

Background and objective: Several practice- and patient-related characteristics are reported to have an influence on a good quality outcome. Estonia started the pay-for-performance (P4P) system for family doctors (FDs) in 2006. Every year the number of FDs participating in P4P has increased, but only half of the FDs achieved good outcome. The aim of this study was to find out which practice- and patient-related characteristics could have an impact on a good outcome.

Materials and methods: The study was conducted using the database from the Estonian Health Insurance Fund. All working FDs were divided into two groups (with ''good'' and ''poor'' outcomes) according their achievements in P4P. We chose characteristics which described structure (practice list size, number of doctors, composition of FDs list: age, number of chronically ill patients) during the observation period 2006–2012.

Results: During the observation period 2006–2012, the number of FDs with a good outcome in P4P increased from 6% (2006) to 53% (2012). The high number of FDs in primary care teams, longer experience of participation in P4P and the smaller number of patients on FDs' lists all have an impact on a good outcome. The number of chronically ill patients in FDs lists has no significant effect on an outcome, but P4P increases the number of disease-diagnosed patients.

Conclusions: Different practice and patient-related characteristics have an impact on a good outcome. As workload increases, smaller lists of FDs patients or increased staff levels are needed in order to maintain a good outcome.

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1. Introduction

Several practice and patient-related indicators (list size, composition of practice, age of patients), and indicators of workload (contact rates, length of consultations, number of primary care team members) describe the functioning of primary care [1,2]. In addition, important factors, such as job satisfaction, quality of work and financial incentives affect organizational performance [3,4].

Financial incentives have most often been used as part of programs to achieve better outcomes [5]. Pay-for-performance (P4P) programs in family practices started in the United Kingdom [6], with the main idea of controlling chronic diseases better and preventing their escalation [7].

Primary care serves as the cornerstone for building a strong health care system that ensures positive health outcomes and health equity [8]. Measuring its performance is important in order to ensure that the whole system works effectively and for the benefit of the patients. It is also important to show what configurations of primary health care are associated with better outcomes [9]. P4P schemes can have an effect on the behavior of physicians and can lead to better clinical management of disease, but that there is cause for concern about the impact on the quality of care [10].

FDs can have different sizes of patients' lists and different structure of diseases of the patients. This means different workloads as well [11].

Estonia started the P4P system for FDs in 2006 [12]. Joining the P4P programis a voluntary process for all FDs, it forms a part of the FDs' contract and there are no sanctions if a doctor is not joined to the P4P.

The Estonian P4P system for FDs contains three major parts: prevention, monitoring of patients with chronic diseases according to national guidelines and professional competency (Table 1).

P4P is a part of the FDs contract, as a reward of excellent outcome, but its influence on the general budget is relatively small in different countries [13] as well as in Estonia (2%–4% of the total budget of the FDs).

As a bonus, FDs joined to the P4P system and FDs achieving a good outcome receive some increase of funds for investigations. From this fund (which constitutes 27%–32% of the per capita payment) all investigations (X-rays, ultrasounds, blood tests, urine tests, ECGs, etc.) should be performed. Since 2012, FDs not joined to the P4P have a fund for investigations equal to 29% of the capitation, but FDs joined to the P4P have 32%. FDs achieving a good outcome will receive an extra 5% for the investigations (up to 37% of the per capita payment).

Coverage targets in P4P are universal to all FDs and are increasing stepwise every year. FDs who achieved these targets earn points. The maximum number of points FDs can achieve in P4P is 640. If the FD has collected more than 75% of the points (480 points), this is considered a good outcome. If FDs collected less than 75% of the points (less than 479 points), this is considered a poor outcome. In a good outcome two different payments are foreseen: FDs who achieved 480–539 points (75%–84.4% of the maximum) will earn 2975 euros as annual payment and FDs with 540–640 points (84.5%–100% of the maximum) will earn 3720 euros. FDs who achieved less than 479 points (less than 75% of the maximum) have no extra payment.

From 2012, 96.6% of FDs are joined to P4P [14] and are motivated to achieve a good outcome. Every year the number of FDs with a good outcome is increased, but only half of FDs achieved a good outcome.

Table 1 – Pay-for-performance indicators in primary care in Estonia.

Indicator	Description
Part 1 (prevention)	
Immunizations	Pertussis, diphtheria, tetanus, poliomyelitis, measles, mumps, rubella, hepatitis B, *Haemophilus influenzae* type b according to immunization plan
Children health controls	In 1, 3, 6, and 12 months old, 2 years old, preschool health control
Cardiovascular disease prevention programme	40–60 years old, blood pressure, glucose, cholesterol with fractions. SCORE calculation
Part 2 (chronic diseases)	
Diabetes mellitus type 2	Register of patients with type 2 diabetes, measuring glucose and HbA1c, cholesterol with fractions, serum creatinine testing, urine tests to detect microalbuminuria, blood pressure measurement, nurse counseling
Hypertension	Register of patients with hypertension, dividing into 3 stages, glucose, cholesterol with fractions, serum creatinine testing, urine tests to detect microalbuminuria, blood pressure measurement, ECG, nurse counseling, treatment with ACE inhibitors
Myocardial infarction	Register of patients with myocardial infarction, cholesterol with fractions, ECG, blood pressure measurement, nurse counseling
Hypothyroidism	Register of patients with hypothyreosis, TSH testing
Part 3 (enhanced services)	
	Observation of pregnancy, PAP smear tests, minor surgery procedures
	Participation in CME courses (at least 60 h/year)
Maximum number of points: 640	
Good outcome: more than 480 points (>75%)	
Poor outcome: less than 479 points (<75%)	