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The impact of financial incentives on physician empathy: A study from the perspective of patients with private and statutory health insurance☆

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ABSTRACT

Objective: We hypothesized that patients' ratings of physician empathy (PE) would be higher among those with private health insurance (PHI, referring to financial incentive) than among patients with statutory health insurance (SHI).
Methods: A postal survey was administered to 710 cancer patients. PE was assessed using the Consultation-and-Relational-Empathy measure. *T*-tests were conducted to analyse whether PHI and SHI-patients differ in their ratings of PE and variables relating to contact time with the physician. Structural-equation-modelling (SEM) verified mediating effects.
Results: PHI-patients rated physician empathy higher. SEM revealed that PHI-status has a strong significant effect on frequency of talking with the physician, which has a strong significant effect (1) on PE and (2) has a moderate effect on patients' perception of medical staff stress, thereby also affecting patients' ratings of PE.
Conclusions: Our findings suggest that PHI-status is one necessary precondition for physicians spending more time with the patient. Spending more time with the PHI-patient has two major effects: it results in a more positive perception of PE and positively impacts PHI-patients' perception of medical staff stress, which in turn, again influences PE.
Practical implications: Health policy should discuss these findings in terms of equality in receiving high-quality care.

1. Introduction

One essential prerequisite for successful patient-centred consultation [1] in clinical settings is the physician's empathy [e.g. 2–11]. One definition of physician empathy is the "*socio-emotional competence of a physician to be able to understand the patient's situation, perspective and feelings, to communicate that understanding and check its accuracy, and to act on that understanding with the patient in a helpful (therapeutic) way*" [12, p. S1].

Although physician empathy is assumed to improve physical [13] and psychosocial health outcomes [9–11], little is known about how to motivate physicians to be empathic [11]. As financial incentives are a fundamental staff motivator [14,15], we aim to explore their contribution in clinical settings; namely, whether financial incentives can modify physicians' empathic behaviour. Financial incentives referred to treating patients with private health insurance (abbreviated as PHI; equivalent to "fee-for-service"), as physicians can charge more for benefits and/or higher

☆ We confirm that all patient/personal identifiers have been removed or disguised to ensure anonymity of all patients/persons described.

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fees in PHI than in statutory health insurance (abbreviated as SHI, equivalent to "capitation") (compare Section 1.3).

Hence, the aim of this inquiry was to study the influence of health insurance type on physicians' empathic behaviour from the patients' perspective; in particular, if variables relating to contact time with the physician might play a mediating role in this relationship.

1.1. Theoretical background

The theoretical background of our inquiry draws closely on the "*Conceptual framework of influences on health worker motivation*" developed by Franco et al. [15] (see Fig. 1). In their in-depth research into health worker motivation [15,16] they assumed that work motivation is not an individual or organisational attribute, but results from the interaction between individuals and their work environment. Thus, local organisational and broader sector policies can potentially affect health workers' motivation, either positively or negatively [16]. Consequently, we can assume a relationship between current health policies and health worker motivation. Namely, provider payment mechanisms (e.g. PHI or SHI) can have intended and unintended effects on health worker motivation [15,16].

Moreover, economic theory and common sense both suggest that payment methods can affect people's working patterns [17,18].

1.2. Empirical background

Empirical background for this study is previous research, which found that patients are more satisfied with healthcare in private practice [19–24]. Further, PHI-patients' perceptions of their relationship and communication with physicians were better than SHI-patients [25–27]. Likewise, Kao et al. [28] showed that patients reported greater trust in their physician in private health plans. Sturm et al. [29] showed that patients with current depressive disorders in prepaid plans switched providers or ended relationships with their providers significantly earlier than patients in fee-for-service plans.

Conversely, a Dutch study comparing fee-for-service with fixed salary plans found that physicians on fixed salaries provided longer visits, more information and advice, and greater empathy [30]. Gosden et al. [31] also showed salary payment to be associated with longer consultations and more preventive care. However, fee-for-service resulted in greater continuity of care [31,32].

1.3. Study context: reimbursement of German hospitals and the role of health insurance in the German hospital sector

Due to the regulatory framework of health insurance in Germany, reimbursement schemes of hospitals differ by insurance type. PHI is available only to some segments of the population (ca. 20%), namely civil servants, the self-employed, and individuals with an annual income above 48.150€. However, only 10% choose this option. About >89% are covered by compulsory SHI [33]. Both types of insurance cover hospital fees. Nevertheless, hospitals can generate additional remuneration by treating PHI-holders. These are "hotel-benefits" (private rooms), costlier treatment by the chief physician, and access to innovative and costly treatment methods not available in basic SHI. However, SHI-holders have the option to purchase **p**rivate **s**upplementary **h**ealth **i**nsurance (PSHI) to cover "hotel-benefits" and treatment by the chief physician. Conversely, access to innovative and costly treatment methods are not covered by PSHI. Currently 5.1 million (7.1%) of those with SHI chose this option [33].

In 2006, all additional remuneration for these private elective services amounted to 2.5 billion euro or 4% of the total hospital revenues. On average, approximately 47% of the inpatient services are dependent on insurance status leading to higher revenues for PHI-patients compared to SHI-patients. Thus, a clear financial incentive exists to privilege PHI-holders over SHI-holders.

This financial incentive to privilege PHI-holders is strengthened by two further aspects: first, PHI-holders are more sensitive towards high-quality treatment than SHI-holders [34,35]. Second, the way German hospitals settle fees differentiates between both insurance types: for SHI-holders, hospitals charge for diagnostic tests, treatment and drugs directly through the insurance provider.

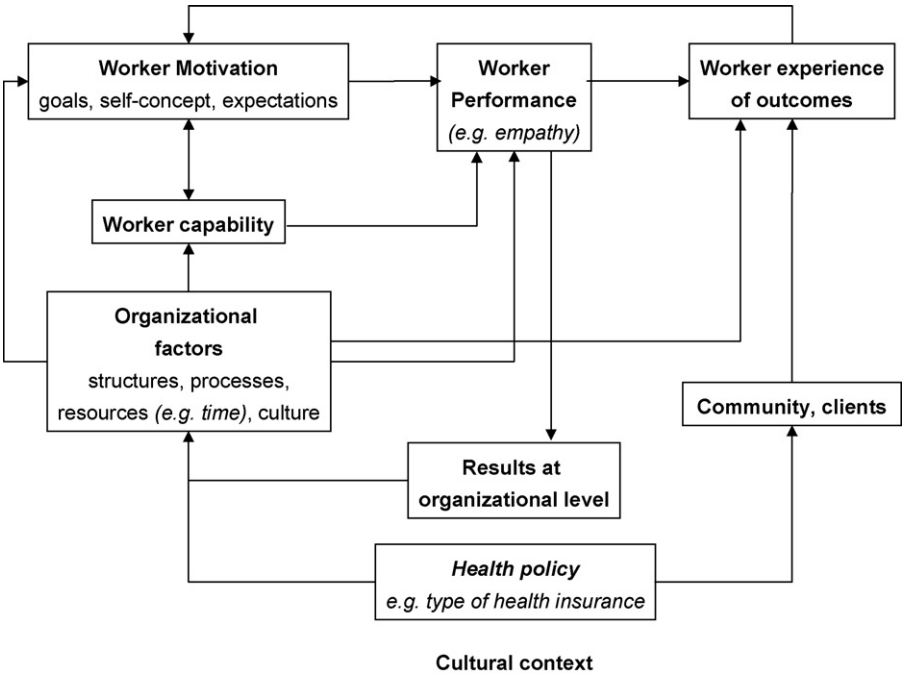

Fig. 1. Conceptual framework of health worker motivation (drawing closely on Franco et al. [15]; words in italics were changed or added; the term in the original was "Health Sector Reform" instead of "Health policy").