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## Remuneration and organization in general practice: Do GPs prefer private practice or salaried positions?

December 2012, Vol. 30, No. 4, Pages 229-233 (doi:10.3109/02813432.2012.711191)

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### ABSTRACT

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**Objective.** In Norway the default payment option for general practice is a patient list system based on private practice, but other options exist. This study aimed to explore whether general practitioners (GPs) prefer private practice or salaried positions. **Design.** Cross-sectional online survey (QuestBack). **Setting.** General practice in Norway. **Intervention.** Participants were asked whether their current practice was based on (1) private practice in which the GP holds office space, equipment, and employs the staff, (2) private practice in which the GPs hire office space, equipment, or staff from the municipality, (3) salary with bonus arrangements, or (4) salary without bonus arrangement. Furthermore, they were asked which of these options they would prefer if they could choose. **Subjects.** GPs in Norway (n = 3270). **Main outcome measures.** Proportion of GPs who preferred private practice. **Results.** Responses were obtained from 1304 GPs (40%). Among these, 75% were currently in private practice, 18% in private practice with some services provided by the municipality, 4% had a fixed salary plus a proportion of service fees, whereas 3% had salary only. Corresponding figures for the preferred option were 52%, 26%, 16%, and 6%, respectively. In multivariate logistic regression analysis, size of municipality, specialty attainment, and number of patients listed were associated with preference for private practice. **Conclusion.** The majority of Norwegian GPs had and preferred private practice, but a significant minority would prefer a salaried position. The current private practice based system in Norway seems best suited to the preferences of experienced GPs in urban communities.

**Keywords:** [Capitation](#), [fee for service](#), [general practice](#), [Norway](#), [private practice](#), [remuneration](#)

- In Norway most GPs are on an activity-based remuneration system of capitation and service fees, where the practices by default are run as private businesses, but other options exist.
- In a survey of Norwegian GPs (n=1300) 52% preferred the default option, and 26% preferred a modified version in which the municipality provides office space and equipment and/or employs staff for negotiated financial compensation, whereas 22%

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### Authors



preferred salaried positions.

- GPs with specialty attainment, large patient lists, and location in large municipalities were more likely to prefer private practice.

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## Introduction

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In June 2001, a list-patient system was implemented for general practice in Norway [1]. Since then private practice with a combination of capitation (30% of gross income) and service fees (70%) has been the default organization and remuneration system for Norwegian general practitioners (GPs). This implies that the GPs are self-employed, employ staff, and own their medical equipment. Office space can either be owned by the GPs or rented in the private market. Other options include salaried position with or without bonus and a modified version of private practice, in which the GPs hire staff, equipment, and/or office space from the municipality for negotiated compensation. These supplementary options tended to be implemented in rural or remote communities.

How organization and reimbursement may impact on GPs' practice is likely to depend on what motivates their decisions, and there are different theories about work motivation. In economic theory, it is assumed that individuals aim to maximize their utility (welfare, well-being, etc.) [2], which for GPs may depend on factors such as income [3], work autonomy [4], and professional ethics [3,5], to name a few. Psychological theories of work motivation emphasize factors such as individual needs, values, personality, self-efficacy, goals, and incentives as well as job characteristics and distributive and procedural justice of organization policies [6,7]. Given this complexity of motivating factors, it is difficult to predict how organization and remuneration systems may influence GPs' practice. Although many empirical studies indicate that fee-for-service remuneration is associated with a higher number of patient contacts and services than salary [8–10], systematic reviews point out that the impact of remuneration schemes on physician behaviour may be small, and that evidence from randomized studies is sparse [10–13]. Previous studies, however, suggest that GPs self-select into different remuneration systems according to their preferences [8,14]. Such self-selection may confound any observed association between remuneration scheme and physician behaviour [8,13]. Also, the impact of financial incentives is likely to vary across countries [15] and even within countries [16]. Furthermore, concerns have been raised that the current private practice system discourages young physicians from entering general practice, particularly in rural and remote areas. Based on data from Scotland, Wordsworth et al. concluded that one general remuneration scheme could fail to cater for all GPs [17]. Consequently, how physicians would like to be paid is an important issue for health policy.

The aim of the present study was to explore Norwegian GPs' preferences for organization and remuneration schemes eight years after the implementation of the private practice based list patient system. We investigated whether the GPs' current contracts were in accordance with their preferences, and hypothesized that these preferences may vary by age, sex, specialty attainment, length of patient lists, and rural versus urban location.

## Material and methods

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In December 2009, 3270 GPs registered with the Norwegian Medical Association in Norway were e-mailed and asked to participate in an online survey pertinent to a forthcoming health care reform, i.e. the Coordination Reform. We aimed to include all GPs in Norway ( $n = 4049$ , see Table I), but GPs engaged in another survey at the time were excluded. Thus 81% of all Norwegian GPs were invited. The online questionnaire was administered by the Research Institute of the Norwegian Medical Association (NMA). The front screen gave a short presentation of the Coordination Reform and stated that knowledge concerning the GPs' views on core issues pertaining to the reform was needed. We informed the GPs that respondents would be enrolled in a lottery in which three winners would be offered free participation at the 17th Nordic Congress of General Practice to be held in Tromsø in June 2011.

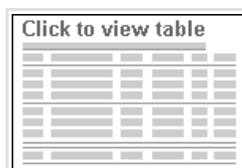


Table I. Respondent characteristics.

The GPs were asked how their current practice was organized and remunerated, and how they would like their practice to be organized and remunerated if they were free to choose. For other

purposes (not reported here) we asked to what extent the GPs found certain job tasks of general practice meaningful, and about decisions on statin therapy for a hypothetical patient with an unfavourable cardiovascular risk profile. We also asked the GPs to choose between hypothetical practices in which they would have to make tradeoffs between different job characteristics. These hypothetical choices raised some discussion and criticism in an internet forum for Norwegian GPs.

Our main outcomes of interest were the GPs' current and preferred organization and remuneration schemes. Mutually exclusive response options were (1) private practice in which the GP holds office space, equipment, and employs the staff, (2) private practice in which the GPs hire office space, equipment, and/or staff from the municipality, (3) fixed salary with bonus arrangement, or (4) fixed salary only. In the further analyses we dichotomized the responses, so that options (1) and (2) counted as "private practice" whereas options (3) and (4) counted as "salaried position". We included the GPs' age, sex, specialty attainment, patient list size, and number of inhabitants in the GPs' practice municipality as independent variables possibly associated with the GPs' preferences. Differences between groups were assessed using bivariate and multivariate logistic regression analyses. STATA version 9.2 (Stata Corp., College Station, Texas) was used for data analysis. P-values < 0.05 were considered as statistically significant. The study was approved by the Norwegian Social Science Data Services, which is the privacy ombudsman for all Norwegian universities as well as the Research Institute of the NMA. The funding source had no involvement in the conception and design of the study, the drafting of the manuscript, or the decision to submit the article for publication.

## Results

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We obtained responses from 1304 GPs for a response rate of 40%. The proportion of specialists in general practice was slightly higher among the respondents (66%, 95% CI 63–68%) compared with all Norwegian GPs (55%). Otherwise the respondents were representative of Norwegian GPs with regard to age, sex, number of patients listed, and size of practice municipality (Table I).

Among the respondents 75% currently were in private practice, 18% in private practice which was partly hired from the municipality, 4% had a fixed salary with a bonus arrangement, whereas 3% had a fixed salary only. Corresponding figures for the preferred option were 52%, 26%, 16%, and 6%, respectively. The proportion with a preference for private practice was higher among men, specialists in general practice, GPs with long patient lists, and GPs working in large municipalities (Table II). The proportion preferring private practice was lowest in the low and high age groups and peaked among GPs in their fifties. In multivariate logistic regression analysis specialty attainment, number of patients listed and working in a large municipality were positively associated with preference for private practice (Table II).

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Table II. Proportions and odds ratios (OR) for preferring private practice.

Among 1294 GPs who answered both the questions about current and preferred practice, 872 (67%) reported a preferred practice in accordance with their current one. About 17% would prefer to switch from a privately owned practice to a private practice hired from the municipality, whereas 17% would switch from a privately owned or hired practice to a salaried position (for absolute numbers see Table III). Nine out of 92 respondents indicated that they would switch from a salaried position to a private practice. Interestingly, among those currently in private practice the proportion preferring salary did not differ significantly between large and small municipalities; adjusted OR for linear trend across the five categories of municipality size was 1.0, 95% CI 0.9–1.2.

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Table III. Current and preferred practice organization and remuneration among Norwegian GPs.

## Discussion

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Almost four in five Norwegian GPs preferred private practice over salaried positions and two out of

three GPs currently had a practice organization and remuneration scheme in accordance with their preferences. Among those who did not have a practice in accordance with their preferences, more than 50% would prefer salaried positions. Specialty attainment, number of patients listed, and practice location in a large municipality were associated with stated preference for private practice.

Previous studies in Norway [14] and abroad [8,18–23] have found that GPs who prefer different remuneration schemes differ in systematic ways. For example young GPs, GPs with a preference for teaching [8], outside work interests [8,14], or public health tasks [14] were more likely to prefer salaried contracts. Several studies have shown that female GPs tend to prefer salaried positions [8,14,18,19], which may be attributable to a greater preference for public health commitments as well as outside work interests [14]. Other studies suggest that salaried positions may attract GPs who do not like administrative responsibilities [20], paperwork [21], or “bureaucracy” [22]. We found that GPs in small municipalities were more likely to prefer salaried positions. Specialty attainment and large patient lists, which in our study were associated with preference for private practice, may be harder to achieve in rural than urban municipalities [23]. Other studies indicate that salaried contracts and establishment of rural educational pathways may be important for recruitment and retention in rural general practice [20,23,24]. However, in our study GPs who currently had private practice in small municipalities were no more likely to prefer salaried positions than others. Perhaps offering GPs greater freedom to choose contract type might be important for recruitment and retention in urban as well as rural municipalities. This may be of particular importance for young doctors about to choose their career pathway, since the most prominent alternative to general practice is a hospital career, in which salary is the rule.

Arguably, the choice between private practice and a salaried position is likely to be influenced by expected outcomes. Assuming that GPs aim to maximize their utility, as predicted by economic theory [2], a crucial issue is what factors or “arguments” there are in GPs’ utility function. Income and leisure are obviously there, but status, intellectual satisfaction, and characteristics of the work (e.g. busy versus relaxed work speed) may also play a role. Most important, however, may be patients’ needs whether caused by altruism [5] or legal regulations or induced by ethical imperatives [25]. Specialty attainment and long patient lists are associated with a substantially higher income within the current default scheme for general practice. Our findings might therefore to some extent reflect self-selection into different practice schemes depending on expected income. However, preferences for private practice might also reflect prevailing values among GPs such as professional autonomy [4] and continuity of care [26].

The main strength of this study is the large sample size; although the response rate (40%) was modest, our sample encompassed 32% of all Norwegian GPs and was representative with regard to age, gender, and geographical distribution. Our response rate is comparable to other online surveys, and may be as good as it gets among busy clinicians [27]. There are, however, several limitations. Unfortunately, our questionnaire did not include space for free comments, which could provide important nuances and qualifications from the respondents. Furthermore, although we believe the response options for the GPs’ preferences were mutually exclusive these were perhaps not strictly defined, so that misclassifications may have occurred. Our survey evoked discussions and criticisms on an internet forum for GPs. On their website and in a letter to all Norwegian GPs the NMA raised doubts about the premises in some of our questions during the data-collection period. This may have contributed to the modest response rate and introduced selection bias that we have been unable to adjust for. Finally, we cannot know to what extent our findings are representative of GPs’ preferences in other countries; in economic terms there may be cross-country variation in physicians’ utility functions [15,16].

Notwithstanding these limitations we conclude that the majority of Norwegian GPs preferred private practice, but that about one in three GPs would prefer another form of practice organization and remuneration scheme than they actually had. Our findings suggest that the current default scheme is best suited to the preferences of experienced GPs in urban communities. To the extent that recruitment and retention in general practice are important policy goals, our findings would indicate that health authorities may do well in offering more diversity in organization and remuneration schemes [28].

#### Acknowledgements

The authors would like to thank Olaf Gjerløw Aasland, Ivar Sønnebø Kristiansen, Jan Abel Olsen, Per Stensland, and Birgit Abelsen for their valuable comments and suggestions on the design of the study and/or interpretation of the results.

#### Funding

The costs of data collection were covered by a grant from the Norwegian Research Council.

## Declaration of interest

The authors report no conflict of interest. The authors alone are responsible for the content and writing of the paper.

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