Draft - Work in progress

Paper presented to the Health Economists Study Group, Newcastle, 5-7th January 2000

Evaluation of salaried payment for general practitioners in Scotland

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Abstract

The aim of this paper is to report preliminary results of a study examining salaried payment for GPs in Scotland. The study examines 'paragraph 52' salaried payment. This was a separate piece of legislation from the 1997 Primary Care Act, with different objectives. The paper extends the usual economic framework for analysing financial incentives by viewing funding changes as communication mechanisms that can be (mis)interpreted in different ways by different stakeholders. These different interpretations can then influence whether responses to funding changes were what was intended by the policy maker. This approach requires qualitative research. The paper reports preliminary results of semi-structured interviews with individuals at each health board, and at several general practices who have a salaried GP. The paper also presents quantitative data about the nature of the salaried contracts and presents a comparison of practices with a salaried GP with other practices in Scotland. The final results will have implications for the further development of a salaried option for GPs.

Acknowledgements.
This study was funded by Tayside and Borders Health Boards. The Health Economics Research Unit is funded by the Chief Scientist Office of the Scottish Executive Health Department.

Introduction

Issues of low morale and recruitment and retention problems have led to many changes in the way General Practice is organised in the UK. As well as major changes to out of hours care in 1995, there are many new contractual options for GPs offering more flexible working patterns and levels of commitment. Unlike the 1990 GP Contract, these more recent changes have been designed to improve professional working lives rather than to change behaviour in specific directions. However, these changes may have unintended effects on GPs' behaviour. Salaried payment may lead to lower 'effort', at least compared to fee-for service payment (Gosden *et al*., 1999). However, there have been no studies comparing a mixed system of payment (eg capitation and FFS) to salaried payment. The incentive effects of salaried payment in UK General Practice may therefore be different to other published studies.

Salaried GPs in the NHS were introduced under two separate pieces of legislation. The first was the 1997 Primary Care Act, which allowed GPs to opt out of the national GP Contract and be employed directly by the General Practice or Hospital Trust, or the whole practice could contract directly with the health authority or health board. The second piece of legislation made an amendment to paragraph 52 of the Statement of Fees and Allowances which allowed practices to employ GPs as practice staff, with reimbursement from the health board from GMS cash limited funds. This scheme began in England and Scotland in April 1998.

The aim of this paper is to present some preliminary work that examines the 'paragraph 52' scheme in Scotland. This includes a quantitative comparison of practices with and without a salaried GP, and also reports results from semi-structured interviews with Health Board managers, lead GPs, and salaried GPs. Given the qualitative nature of the study, some research questions will be generated by the study itself. Other questions that we sought to investigate were descriptive and evaluative.

Descriptive:

1. What are the differences between practices with and without a salaried GP?
2. Under what circumstances has a salaried GP been employed?
3. What is the nature of the salaried contract?

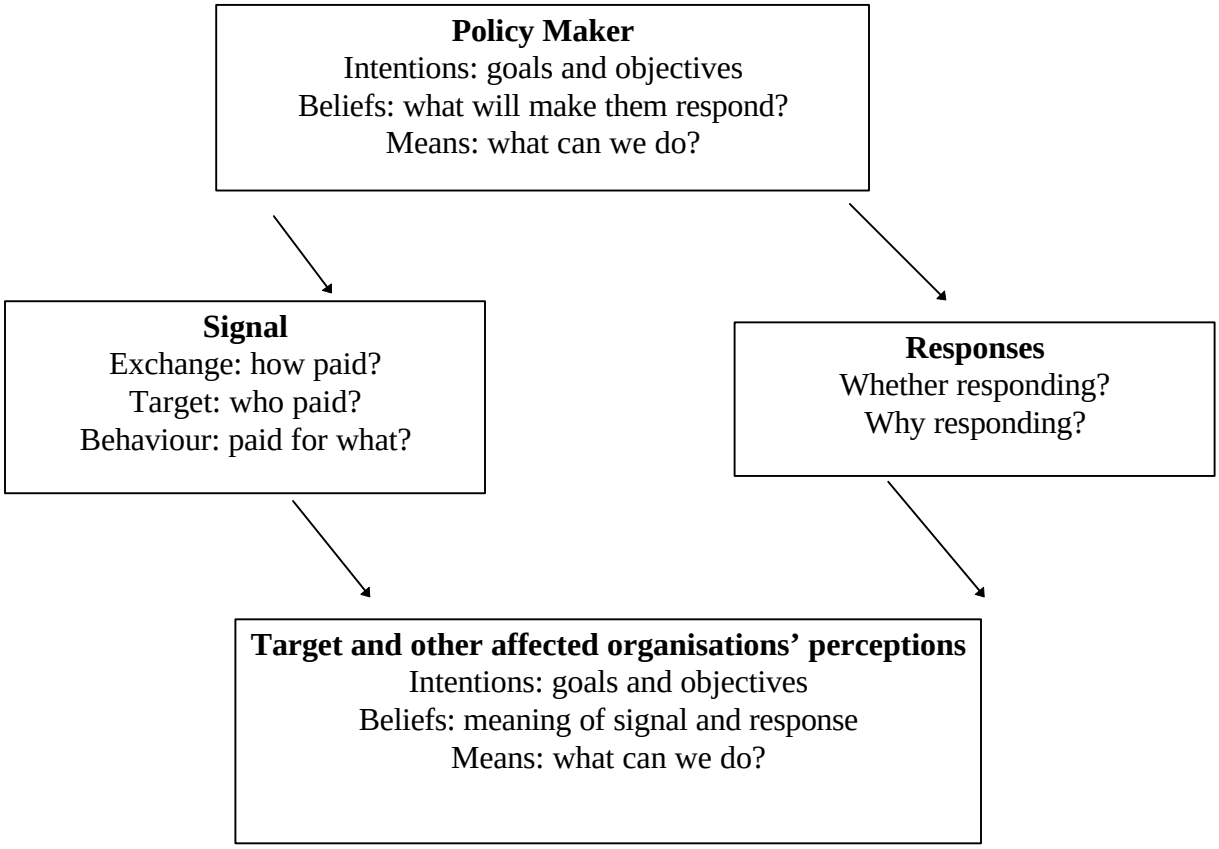
Evaluative:

4. What are the important issues to examine in a larger study?
5. Is the scheme meeting its intended objectives?
6. Are there any potential incentive effects of the salaried payment scheme?
7. What are the potential effects on patients of the salaried scheme?

Theoretical framework

The analysis in this paper is based on a conceptual framework that views funding changes and resultant financial incentives as a communication process (Giacomini *et al.*, 1996; Giacomini and Goldsmith, 1996). This framework questions the usual economic framework of financial incentives (and price signals more generally) acting as 'stimuli-response' rewards and penalties. For example, there are some widely accepted economic hypotheses about the effect of payment systems on behaviour, some of which have been confirmed by empirical evidence (Gosden et al., 1999; Krasnik et al., 1999). However, there is a need to broaden this framework. Economic analysis assumes that people will respond to financial incentives, given their objectives and constraints, but does not provide any insight into *why* people do and do not respond, or whether it could work again or in a different situation. These reasons include the social and institutional context of the incentive, differences in interpretation by various stakeholders, and the existence of other objectives of stakeholders unrelated to income. The communication framework views funding changes as carrying messages that are open to some interpretation. This can then influence the effectiveness of the funding change in meeting its intended objectives. This framework is illustrated in Figure 1 and discussed below.

Figure 1. Viewing funding changes as communication mechanisms



Source: Giacomini *et al.*, 1996

The first part of the model proposed by Giacomini is that the policy maker, on the basis of their own goals, objectives, beliefs and means, initiates a funding change. This 'signal' then carries a message about what behaviour is valued (what is being paid for), who is expected to comply (who is paid), and the terms of financial exchange (how payments are made). The second part is how the affected organisations perceive the funding change. These organisations use their own environment, goals and beliefs to help reconstruct what the policy signal means in their own context. They may interpret funding changes as messages about their value as institutions and about the value of their work. The actual financial incentive is constructed based on the affected organisations' perceptions of the funding change. This can deviate from what the policy maker intended. The incentive properties of a funding change then depend on the context, and so the financial incentive is

not necessarily inherent in the funding structure. The third part of the model is the affected organisations' response to the funding change, which may differ from the policy maker's intentions. This response is perceived by the policy maker, who may misinterpret the affected organisations' response.

This framework leads to several research questions when evaluating a funding change:

1. What is the contingent behaviour (what is paid for)? Organisations can be paid for their identity (i.e. rewarded for who they are), their output, or their responsibilities (e.g. serving a defined population)?
2. Who is the target of the funding change (who is paid)? This can include the organisation itself, a larger organisation with other organisations within it, or individuals within the organisation?
3. What is the nature of the financial exchange (how payments are made)? This includes the quantity of the payment, the direction of the payment (i.e. whether it is interpreted as a reward or penalty), the timing of the payment (prospective or retrospective, and the length of the 'contract'), and the calculation of the payment (e.g. the unit of payment, its accuracy and its transparency).
4. What are the differences in interpretation between stakeholders of the objectives of the funding change?
5. What are the differences in beliefs between stakeholders about what can work and normative beliefs about what is 'right'?
6. Are the perceived objectives and nature of the funding change compatible with the objectives of the target organisation and/or individuals within it?
7. What are the intentions of stakeholders with respect to their reaction to the funding change?

In applying this framework to case studies of seven funding changes in the Canadian health care system, Giacomini conclude:

"….idiosyncrasy seems to be the norm in financial incentive policies: the policies themselves vary subtly or blatantly from the ideal types they spring from, competing policy objectives often obscure the message, and its meanings are further multiplied across the variety of interpretations by affected organisations." (Giacomini and Goldsmith, 1996)

This type of framework therefore builds upon the more traditional economic methods of analysing the effects of financial incentives on specific behaviours.

Methods

There are two parts to this study. The first is to gather quantitative data about the extent of the 'paragraph 52' salaried scheme in Scotland. This involved contacting each Health Board to obtain the details of each practice who employed a salaried GP, and to obtain any documentation. Descriptive information about each of these practices, and all other practices in Scotland were also obtained, and used to compare practices with and without a paragraph 52 salaried GP.

The second part is to use the framework of Giacomini to gather information about the current operation of the salaried scheme. This was based on the research questions outlined above and in the introduction. Information on the scheme was obtained from the policy documents at health board and national level. Documentation that specified each practice's bid to the health board and copies of salaried contracts were also obtained, where possible. Five case studies were also conducted, each case study representing one general practice that employed a salaried GP. Within each case study, we conducted separate semi-structured interviews with a representative of the health board, the lead GP in the practice and the salaried GP employed by the practice. These represent the main stakeholders involved in the funding change. Each interview was taped and transcribed.

The interview schedules asked each interviewee questions in four areas, all based on the Giacomini framework:

i) perceptions of the history and set up of the scheme;

ii) perceptions of the objectives, advantages and disadvantages of the scheme;

iii) issues about the level of payment and nature of the contract (including process of negotiation, working patterns and likely effects on patients);

iv) the future of the scheme.

The aim is to compare the perceptions of stakeholders within and across each case study site. Comparisons within each case study site will be used to examine whether the objectives held by the health board had been met, or at least to identify differences in perceptions between the three stakeholders. Comparisons across case study sites will be used to identify the differences in the way the salaried scheme is operating, and also variation in the perceptions of the scheme's objectives. Both sets of comparisons were used to generate hypotheses and further questions about the scheme that could be tested in any future evaluation of the scheme. This includes any likely incentive effects of the scheme and the likely effects on patients.

Analysis

Quantitative data comparing practice characteristics were analysed in SPSS. For the purposes of this paper, interview transcriptions were read by AS. Interviews were conducted by GJ and interpreted by AS. GJ will also comment in detail on the interpretation by AS (investigator triangulation). Once all interviews have been transcribed, NUDIST software will be used to aid analysis. Quantitative and qualitative data sources will be analysed in conjunction with other written documentation about the policy and each case study (data source and methodological triangulation) (Stake, 1995).

Results

National policy documents

In Scotland, details of the scheme were set out in NHS circular PCA(M)(1998). These were to:

- help GPs improve the quality of GMS provision by tapping into a currently under-utilised pool of qualified doctors;
- improve career opportunities for GPs who would prefer not to work as principals, in either the short or longer term, such as newly qualified GPs, or parents of young children;
- give health boards additional flexibility to influence and support local GMS workforce developments;
- help to solve any difficulties experienced by GPs in the provision of out of hours services in remote areas.

Further details refer to 'additional medical support in providing GMS services', improving access to female doctors, providing for specific population needs, inability to fill vacancies, and 'build up' practices to be able to take on a partner in the future. The salaried doctor "will normally" be required to perform the full range of GMS duties. The scheme provides for payment, at the Health Boards discretion, of all or part of the expense of a principal employing a salaried doctor. An uplift of £6m in cash limited funding for 1997/8 and for 1998/9 was made available for this and other primary care initiatives. Proposals and criteria for assessing them will be determined annually by the Health Board and Area Medical Committee. However, the circular also set out some criteria including health needs of the population, demands these place on GPs, and availability and prioritisation of cash limited funding. Each health board therefore had limited funds for the scheme, and had discretion as to whether funds were used for the salaried scheme or other primary care developments.

This policy implies a variety of different reasons why a practice would want to employ a salaried doctor. It is not only recruitment and retention or out of hours cover. One could argue that the policy is deliberately vague to encourage local flexibility as to how health boards use the scheme. If this is the intention of this policy and each Health Board implemented it correctly, then it could be hypothesised that there would be few differences between practices with a salaried GP and practices without a salaried GP in terms of measurable practice characteristics. The scheme should be being used by a variety of different types of practice.

Responses from Health Boards

The responses from health boards, approximately 18 months after the introduction of the scheme, are shown in Table 1. This shows that were 17 'first wave' salaried GPs already set up in Tayside, Borders and Grampian, with others just started or about to start in Ayrshire and Arran. Those in Lothian and Western isles were short term only. The uptake is low compared to the potential demand, but this is determined at the discretion of each health board. For example, Highland wanted to focus on developing out of hours services in remote and rural areas. The reasons given were those in the letters we received from each health board – some did not give any reasons. This would be interesting to follow up.

Table 1. Responses from health boards (August-September 1999)

Health Board	Whether any paragraph 52 salaried GPs	Reason for no salaried GPs	Number of practices expressing interest	Number of practices chosen
Argyll and Clyde	No	No funding available	0	0
Lanarkshire	No	None given	Unsure	0
Highland	No	Focusing on developing out of hours care in remote and rural areas	14	0
Orkney	No	None given	0	0
Shetland	No	None given	0	0
Fife	No	None given	0	0
Ayrshire and Arran	Yes	n.a.	Unsure	1 (another 3 to start)
Tayside	Yes	n.a.	40	7
Borders	Yes	n.a.	?	2
Grampian	Yes	n.a.	?	8
Greater Glasgow	No	None given	?	0
Lothian	Yes	n.a.	10	1 (for 3 months only)
Western Isles	Yes	To cover sick leave	?	1 with 4 to start
Forth Valley	?	?	?	?
Dumfries and Galloway	?	?	?	?

Quantitative analysis of practice characteristics

Table 2 presents a comparison of practices with a paragraph 52 salaried GP to those practices with no paragraph 52 GP. The data is for the financial year ending April 1998, the time when most practices applied for a salaried GP. The salaried GPs were those in post in September 1999, and included the 17 from Tayside, Borders and Grampian Health Boards.

There seem to be few statistically significant differences between each type of practice. Practices with salaried GPs have a larger list size, but similar numbers of partners and workload (list size per GP). Practices with salaried GPs are more likely to have been fundholders and be a training practice, although other indicators of innovation were similar. There were also few differences related to geography or patient characteristics.

From this data, it can be concluded that practices with a salaried GP may be better organised than other practices, since they were more likely to have been fundholders and training practices. However, there were few other statistically significant differences, suggesting that, to date, practices with a salaried GP have been set up for a variety of purposes unrelated to measurable practice characteristics. This broadly confirms the intended policy, where the salaried scheme was set up to be used for a range of different reasons.

Table 2. Comparison of practice characteristics

	Practices with a salaried GP n=17	Practices without a salaried GP n=1054	p-value
Practice size			
List size (median)	7300	4495	0.08[b]
Number of partners (median)	5	3	0.13[b]
Number of WTE partners (median)	5	3	0.10[b]
List size per WTE GP	1613	1497	0.25[c]
Total GMS income per WTE GP	£63,396	£61,790	0.39[c]
Factors related to innovation			
Previously a fundholding practice (%)	71%	48%	0.07[a]
Practice received an improvement grant (%)	24%	16%	0.37[a]
Training practice (%)	53%	26%	0.01[a]
Income from practice staff salaries per 1000 population (median)	£11,274	£11,253	0.68[b]
No. of claims for minor surgery per 1000 population (median)	7.18	6.84	0.14[b]
% of eligible population receiving a smear test (median)	0.82	0.79	0.14[b]
No. of night visit claims per 1000 population (median)	33	34	0.09[b]
No. of pre-school boosters per eligible patient (median)	0.94	0.94	0.60[b]
No. of primary childhood immunisations per eligible patient (median)	3.8	3.82	0.79[b]
Factors related to geography and patient characteristics			
Practices receiving rural practice payments (%)	47%	44%	0.76[a]
Rural practice payments per 1000 population (mean)	£1390	£2129	0.92[b]
Over 75 capitation payments as % of total capitation payments (mean)	0.17	0.16	0.09[c]
Income for high deprivation patients per 1000 population (median)	£96	£54	0.89[b]

Notes a = Pearson chi-squared test; b = Mann-Whitney non-parametric test; c = independent samples t-test

Qualitative results- Comparisons within each case study

The tables below show results from one case study. The other four case studies have yet to be analysed. This is to demonstrate the type of information we have gathered, and to begin to highlight the types of issues that the final analysis is likely to raise. For example, although the health board do not want the scheme to be used as a "cheap pair of hands", the GPs wanted to reduce locum expenses, but also were interested in freeing up partners' time to develop and innovate (Table 3). It is difficult to find out which objective dominates (ie income or benefits to patients from practice developments). It also begins to suggest something about the incentive effects of this particular scheme, in that any observed increase in referral rates by the salaried GP may be because they do not know patients (Table 5). Referral rates may decline over time, depending on the length of the contract, as the salaried GP builds up her own clientele. A practice that regurlarly uses locums may therefore have higher referral (and prescribing) rates than a practice with a salaried GP, and so referral rates may fall as a result of a salaried GP. To develop this into a testable hypothesis for the effect of the salaried scheme overall, would require a similar context in the other salaried practices.

Furthermore, the main effects on patients would seem to be in terms of continuity of care, since the salaried GP was a more permanent substitute for a locum GP (Tables 4 and 5). We may find that other case studies generate different incentive effects and patient outcomes depending on the context.

Table 3. History and set up

Health Board Manager	GP Principal	Salaried GP
Criteria drew up by HB and GP sub-committee. Did not want practices applying for a cheap pair of hands. All practices chosen were ex-fundholders, although this was not a criteria for selection. All practices also currently innovating in various ways, although again this was not a stated criteria. Only one practice was a rural practice. Did not want it to be used to boost up out of hours. Thought there would be more interest from rural practices.	Practice increasingly using locum cover for other commitments of partners – looking for ways to reduce locum expenses. Also important to have more of a permanent face for patients. Practice also accepted on the retainer scheme, but cost implications were too great compared to salaried option, although may need retainer scheme in future due to forthcoming maternity leave. Salaried scheme suited practice's needs at the time.	List size increasing and practice was needing more help on the ground. Heard about it on grapevine. Previously doing an extra 6 months as a GP registrar, after doing 4 years in obs and gynae. Still has to complete MRCGP

Table 4 Objectives, advantages, disadvantages

Health Board Manager	GP Principal	Salaried GP
Wanted to see development, innovation, new services and research. Also to deal with disadvantaged groups of patients, but also other patient groups (eg chronic disease). As long as practices demonstrated a need and had firm ideas. Allowed GPs an 'inbetween' period to get more experience between training and a partnership. Disadvantage – potential to be used by practices as a cheap pair of hands.	To reduce locum costs and increase continuity of care. Also trying to develop practice - area of population growth and large elderly population. Salaried GP would free a partner to develop services and develop themselves individually.	Its less of a commitment to the practice. Don't do medicals or insurance forms etc. Do the job and go home. Have been treated like a partner and included in everything – nothing but positive things to say.

Table 5 Nature of the contract and work

Health Board Manager	GP Principal	Salaried GP
No negotiation over the contract – HB and GP-sub decided. Will reimburse costs up to the level of a 4th year Associate GP (£31,450) plus on costs. 85% of salary reimbursed so practices also had to make some commitment. Practices will have to re-apply annually, even though length of contracts vary.	Level of salary determined by HB, who provided a basic contract. 19.5 hrs per week. Salary plus annual increments proportional to the annual increment in the practice. Asked to undertake GMS – same as other partners. Initially saw a lot of acute medicine, but now that is changing as patients are returning. Performs home visits and beginning to develop her own clientele. Offered protected self development time one session per week, but also some flexibility to cover other partner's attendance of meetings etc. No involvement in major partnership issues, but is involved in practice meetings.	Work 3 days a week salaried and 2 days locum work. Included surgeries and house calls. Practice very flexible with respect number of sessions worked. Just out of registrar year and good to do 'nuts and bolts' work. Covered for other partners while they are developing their own interests. Self development time used to do video for MRCGP exam – also done a couple of projects in the practice – would also like to get some urology hospital clinic sessions. Initially saw a lot of acute case, but beginning to get own patients returning – advantage over locum work. Having a 2 year contract also influences continuity of care. Also offered a dermatology job with a much larger salary – happy to do current job because of lower level of responsibility. Also made an decision to become a GP, rather than hospital doctor. Initially regarded job as a stepping stone to a partnership, but now getting quite settled and enjoying it. Maybe referring more often because don't know the patients as well as other partners.

Table 6 Future

Health Board Manager	GP Principal	Salaried GP
Would like to see it continue if it is working as intended – ie not a cheap pair of hands. Provides good flexibility for younger GPs, who don't feel pressurised into a partnership.	Would love to see the scheme continuing as the practice is continuing to grow. Did not consider the maternity aspects when they set up the contract	Would like to use self-development time to do urology hospital clinic sessions. Probably still a stepping stone – would like to have a partnership and be more settled, and earn more money. Have now fallen pregnant and practice don't get maternity cover. Had a very positive experience here.

Discussion.

This study has attempted to use both quantitative and qualitative research to initiate research into the paragraph 52 salaried payment scheme for GPs in Scotland. The results suggested that practices with a salaried GP were more likely to be ex-fundholders and training practices, suggesting that these practices are better organised than practices without a salaried GP. Previous work has found that practices that innovate are more likely to be in affluent areas and areas of population growth, i.e. areas with perhaps the least 'need' for innovation. This may serve to increase the inequality between practices. Further analysis of data in this study will provide evidence about this in the context of contractual options for GPs. Documentation and qualitative data will be analysed in conjunction with quantitative data to establish how the scheme is currently being used within Scotland, and whether this meets the objectives of the scheme as outlined by policy makers.

We also demonstrated the use of the 'communication' framework of Giacomini *et al*. (1996) for analysing the effects of funding changes. This gives a more detailed perspective on how financial incentives are constructed by the perceptions of affected organisations. As is the case with paragraph 52 salaried payment, this may be important when the objectives of the policy change are vague, or the policy suggests many different uses for the funding change. Examining some of the (unintended) behavioural consequences of the funding change is therefore important. This framework is a useful adjunct to the more usual quantitative type of economic analysis, and may help explain why 'incentives' work for some and not for others, or in one context rather than another.

This framework also involves the use of qualitative research methods, which are being used increasingly in health economics (at least in the UK!). When they are used as a precursor to a larger study, or used in conjunction with quantitative data and descriptive information, they can provide potentially crucial information that could influence hypotheses, data collection, results and conclusions of quantitative analyses.

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