

# HERU Briefing Paper

HEALTH ECONOMICS RESEARCH UNIT

Briefing paper

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## WHO WANTS TO PROVIDE OUT-OF-HOURS CARE NOW?

### ECONOMIC INFLUENCES ON GPs' DECISIONS TO PROVIDE OUT-OF-HOURS CARE IN SCOTLAND.

## Background

The introduction of a new General Medical Services (GMS) contract offered UK general practices the option to discontinue providing out-of-hours (OOH) care. This aimed to improve GP recruitment and retention through offering better work-life balance.

Responsibility for delivering OOH services was transferred to Primary Care Organisations (NHS Boards in Scotland) by December 2004. This put the Primary Care Organisations (PCOs) under new pressure to ensure sustainable delivery of these services.

The national telephone service NHS24 became the main point of access to OOH care with the Scottish

Ambulance Service also supporting PCOs in providing OOH care [1]. Most GP co-operatives were absorbed into local PCOs. OOH centres and minor illness units have formed within existing hospitals or community health centres and are staffed by GPs, other doctors, nurses or pharmaceutical staff. [2] The organisation of OOH varies across PCOs, who are free to choose how to provide this service but must ensure that professional medical care is provided while controlling costs. Many PCOs arranged this by re-purchasing provision from individual GPs. They can directly employ GPs or other healthcare professionals, pay GPs on a fee-per-hour basis for re-providing OOH services or contract locum agencies.

1. The new GMS contract allowed general practices to opt out of responsibility for out-of-hours (OOH) care for their registered patients.
2. The majority of practices have opted out, with some individual GPs re-providing OOH services to the Primary Care Organisations (PCOs) with whom responsibility now lies.
3. This study has shown that individuals' income-expenditure situations are one of the main influences on their decision to re-provide OOH services, suggesting the new contract achieved its aim of increasing flexibility, though opportunities to participate vary substantially across PCOs.

Key Messages



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# Out-of-hours under the new contract

Audit Scotland's review [1] showed that most PCOs rely on GP re-provision to sustain their OOH services. However, GPs' willingness to re-provide OOH services was thought to have declined since 2004/5. PCOs have freedom to set fees locally to reflect 'market forces', but concern was expressed that rising GP incomes had exacerbated problems filling rotas. Employment of other healthcare professionals in extended roles and better integration with other service providers were recommended to alleviate these problems.

## Aim of this study

It is not known how decisions to re-provide OOH services reflect personal characteristics, family circumstances, existing time commitments and financial rewards. It is therefore difficult to see how PCOs can take these decisions into consideration when planning OOH provision.

We investigate which factors determine a GP's decision to provide OOH services when their practice has opted out. This indicates the ways in which GPs have responded to this new flexibility in their work commitments and can provide valuable information for PCOs on service planning.

## Method

We conducted a survey of all GPs working in the NHS in Scotland at 30 September 2005. After sending two reminders the final response rate for the survey was 52% (2380/4605). [3]

Respondents were asked to indicate whether their practice had opted out of OOH care, and whether they personally provided OOH services (see table 1).

**Table 1: Practice and individual GP participation in out-of-hours service provision**

Has your practice opted out of out-of-hours work?	Do you personally do out-of-hours work?		Total
	Yes	No	
Yes	692	1,015	1,707
No	106	126	232
Not applicable	77	55	132
Total	875	1,196	2,071

Table 2 reports the breakdown of OOH provision by PCO. Participation rates were highest in rural PCOs but also showed considerable variation between neighbouring PCOs.

**Table 2: GP participation in out-of-hours provision by Primary Care Organisation**

PCO (NHS Health Board)	Proportion in sample (%)	Weighted proportion providing out-of-hours care (%)
<b>All PCOs</b>	<b>100</b>	<b>40.6</b>
Lanarkshire	7.0	16.7
Lothian	18.6	26.3
Borders	2.4	29.8
Forth Valley	6.1	38.2
Greater Glasgow and Clyde	16.2	37.7
Argyll & Clyde	7.5	47.3
Fife	6.2	40.5
Dumfries and Galloway	3.2	43.6
Tayside	7.2	46.3
Grampian	12.1	50.4
Ayrshire and Arran	6.4	59.8
Highland	6.3	64.3
Islands (Orkney, Western Isles, Shetland)	0.9	74.7

Using multivariate logistic regression, we analysed factors that determined an individual GP's decision to provide OOH care. We expected the decision to re-provide OOH services to depend on: 1. personal and family characteristics, 2. work and non-work time commitments, 3. alternative sources of income, 4. the PCO the practice is contracting with.

## Results

The main influencing factor for re-provision was the PCO in which the GP's practice was located relative to the largest PCO "Greater Glasgow and Clyde".

Male GPs with children were significantly more likely to provide OOH care compared to their male and female

colleagues without children. GPs, who had higher household income from other sources were significantly less likely to work OOH. This effect was reinforced if GPs had spouses who were also GPs.

Of the four indicators for own income, only weighted list size per GP was significant but, as expected, higher numbers of weighted patients per GP, indicating higher income, decreased the odds of OOH participation.

GPs, holding additional medical posts were significantly more likely to opt into OOH re-provision, as were GPs who provided training to registrars or were involved in undergraduate teaching. This suggests variations in job attachment between respondents rather than potential substitution between additional responsibilities.

**Table 3: Logistic regression models of GP participation in OOH provision**

Variable	Odds Ratio	(95% C.I.)	
Male GP 40-44 yrs	1.149	(0.693,	1.907)
Male GP 45-49 yrs	1.264	(0.737,	2.166)
Male GP 50-54 yrs	0.950	(0.541,	1.668)
Male GP 55 yrs or more	0.536	(0.298,	0.966)
Female GP under 40 yrs	1.486	(0.795,	2.776)
Female GP 40-44 yrs	1.193	(0.610,	2.331)
Female GP 45-49 yrs	1.096	(0.547,	2.196)
Female GP 50-54 yrs	1.127	(0.548,	2.318)
Female GP 55 yrs or more	0.736	(0.329,	1.643)
Female GP child < 5 yrs	0.958	(0.551,	1.666)
Female GP child 5-14 yrs	1.128	(0.685,	1.856)
Female GP child 15-18 yrs	1.149	(0.562,	2.347)
Male GP child < 5 yrs	2.444	(1.358,	4.396)
Male GP child 5-14 yrs	1.553	(0.968,	2.489)
Male GP child 15-18 yrs	1.890	(1.121,	3.187)
Hours worked (ex on-call)	1.012	(1.000,	1.025)
GP's spouse/partner is GP	0.519	(0.366,	0.736)
Spouse/partner's income	0.989	(0.983,	0.994)
Practice weighted listsize per GP	0.767	(0.614,	0.958)
Additional medical post	1.384	(1.092,	1.754)
Training/teaching responsibilities	1.364	(1.085,	1.713)
NHS Lanarkshire	1.324	(0.842,	2.080)
NHS Lothian	2.516	(1.539,	4.113)
NHS Borders	0.508	(0.218,	1.182)
NHS Forth Valley	1.062	(0.565,	1.997)
NHS Fife	0.997	(0.607,	1.638)
NHS Dumfries & Galloway	0.858	(0.505,	1.458)
NHS Tayside	1.655	(1.087,	2.520)
NHS Argyll & Clyde	2.422	(1.428,	4.108)
NHS Grampian	0.282	(0.154,	0.516)
NHS Ayrshire & Arran	0.504	(0.340,	0.747)
NHS Highland	1.214	(0.745,	1.976)
Islands PCOs	3.590	(1.371,	9.401)
Number of observations	1.621		
Log pseudo-likelihood	-949.06		
Pseudo R2	0.1332		

# Discussion

## Summary of main findings

Of those GPs whose practice had opted-out of this responsibility, around two-fifths participated in the provision of OOH services.

An individual GP's decision whether to re-provide OOH care appeared to be sensitive to household expenditure requirements and other sources of income. Participation was higher for males than females. However, the analysis suggested that these patterns were driven by increasing participation of men when there were children's expenditure needs to support. This suggests that re-provision can be used as a flexible method, like overtime, for GPs to raise additional income when they most need it.

## Strengths and limitations of this study

Our study is large and contains rich information on characteristics and work commitments of GPs and their other income sources but, being cross-sectional, does not offer the opportunity to analyse how individual GPs responded to the introduction of the new contract. The response rate was 52% which, while comparable to similar studies [4], varies by GP gender, age and geographical area. We corrected for this differential response using non-response weights but cannot be certain that non-respondents did not differ from respondents in other ways.

The clinical and organisational nature of OOH care differs from the services GPs provide "in-hours" in terms of location and availability of support staff. We did not collect this information and are therefore unable to examine the effects. Other factors that we have not measured and have therefore omitted are GPs' professionalism and duty to patient care. These are important factors for future research.

## Implications for future research

PCO variations suggest that there is a substantial 'margin' for PCOs to influence GP participation in re-providing OOH services. In one semi-urban PCO we found that 60% of GPs re-provided OOH services, suggesting a substantial potential source of labour supply to be explored in other PCOs with lower participation rates. Research into whether this is the most efficient means of providing OOH services is required, but our analysis suggests that moving to alternative types of provision should not be driven by a belief that this model is necessarily unsustainable.

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For further information about HERU please visit our website at <http://www.abdn.ac.uk/heru>.

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