Information transfer to out-of-hours co-operatives: a survey of general practitioners’ views in relation to palliative patients

Fiona Kiely, Marie Murphy, Tony O’Brien

ABSTRACT

Background In Ireland, weekend and night medical cover for community based patients is largely provided by general practice co-operatives. Doctors working in this service do not have direct access to patients’ medical records which challenges continuity of care.

Objectives This study investigates the opinion of general practitioners (GPs) on the potential value of a formalised method of information transfer regarding their palliative patients to out-of-hours GP co-operatives. The survey was designed to identify the information that is necessary to offer appropriate anticipated end-of-life care.

Methods A questionnaire was sent to all 414 GPs registered in the Irish Medical Directory in the southwest of Ireland. Data were analysed with Microsoft Excel and SPSS V12.0.

Results 52% response rate with exclusion of incomplete questionnaires allowed analysis of 212 data sets. Currently, 82% of GPs do not routinely transfer information pertaining to end-of-life issues to the out-of-hours service. Despite this, 96% would value a standardised way of transferring information. 67% felt they sometimes refer unnecessarily to hospital emergency departments due to lack of information. The most important items of information identified by study participants are as follows:

- Diagnosis (97%)
- Medications (94%)
- Patient insight (91%)
- Patient wishes regarding end-of-life care (90%)
- Anticipated problems and suggested management (90%).

Conclusions A structured format for information transfer regarding end-of-life care is deemed important by GPs when working on-call at night and weekends. Diagnosis, patient preference and management plans are valued.

BACKGROUND

Primary palliative care is regarded as an important and privileged task of the general practitioner (GP) in Ireland. Currently, 90% of the care in the last year of life occurs at home, with over 55% of deaths being home or nursing home based.\(^1\)\(^2\) The advent of Health Service Executive Primary Care Teams in Ireland facilitates the shift of focus of care from the acute hospital setting to the community for advanced progressive disease where appropriate.\(^3\) With an increasing proportion of the palliative care population therefore being managed in the community, it stands to reason that this will lead to rising GP encounters with patients in the terminal phase of illness. End-of-life care needs become even more complex and challenging when the patient is unknown to the attending doctor, as may be the case when working in a GP out-of-hours (OOH) co-operative.

The formation of GP co-operatives in Ireland began in 1999 and provided a basis for a formalised managed approach to the provision of OOH GP services.\(^4\)\(^5\) These co-operatives have arisen out of the need to make increasing OOH demands manageable for GPs and provide an easily accessible service for patients with urgent medical issues that arise outside ‘normal office’ working hours.\(^4\)\(^5\) Co-operatives now provide OOH GP care for 70% (2.9 million people) of the Irish population.\(^4\)\(^6\) A similar shift in the organisation of OOH primary care has taken place across western Europe.\(^7\) Studies have shown this model of care to be safe and efficient.\(^8\) In general, GP co-operatives are viewed positively by GPs and patients alike.\(^4\)\(^9\)\(^10\) While the changing landscape of OOH primary care internationally is moving towards GP co-operatives, they are not without problems. There are gaps in the system which challenge the continuity of care required in end-of-life situations. Schweitzer et al\(^11\) concluded that the rapid development of large scale GP co-operatives can threaten appropriate information transfer and thus continuity of care. A weak area appears to be communication deficits regarding terminally ill patients from primary care to the OOH GP service. At present, this information transfer occurs on an ad hoc basis with variable quantity and quality of information provision. De Bock et al\(^12\) reported that adequate OOH information transfer occurred only in a minority of palliative care patient’s encounters.\(^12\) Several UK and Dutch studies report that few GPs routinely hand over information about their palliative care patients to GP co-operatives, resulting in care that may not be comprehensive, with problems with symptom control and unnecessary hospital admissions.\(^13\)\(^14\)\(^15\) Several qualitative studies reveal it can leave patients and carers confused and inadequately supported.\(^16\)\(^17\) Ciechomski et al\(^18\) explored after hours palliative care service provision in Australia and identified multiple gaps in care, notably communication, care planning and family support. There is a range of relevant policy, governance and research evidence to support the need for safe, efficient and reliable transfer of information regarding palliative care patients.\(^19\)\(^20\)\(^21\)\(^22\)

Inability to access patient records has been cited by Irish GPs as a significant barrier in providing OOH terminal care.\(^23\) In 2010, the National
Primary Care Palliative Care Programme sought to identify initiatives that would support the delivery of palliative care in primary care. The potential introduction of an electronic handover form from GP to OOH co-operatives was rated by community healthcare professionals as one of the most important initiatives. Using electronic patient records has been closely linked with improvements in patient safety at points of care that require handover between teams, enabling accurate information to be passed on at potentially vulnerable transition points. Electronic OOH palliative care summary data transfer is the established practice in Scotland, parts of the UK and the Netherlands.

And so, in line with international best practice, there is a growing need for improved formalised transfer of patient information to the OOH GPs working in co-operatives in Ireland. To date, there has been no evaluation of what information Irish GPs would value.

**Aims**

▸ To assess the views of Irish GPs on the importance of developing a formalised method of information transfer to the OOH GP co-operative regarding palliative care patients.

▸ To assess the type of information deemed necessary for inclusion in this transfer and thereby to conduct an effective end-of-life care consultation OOH.

▸ To describe perceived current barriers to care provision for palliative care patients OOH.

▸ To provide an evidence base to inform development of an electronic Palliative Care Summary.

**Ethical approval**

The research ethics framework within University College Cork is overseen by the Academic Council Research Committee. It comprises the University Research Ethics Board and the three Committees that report to it. One of these committees, the Clinical Research Ethics Committee of the Cork Teaching Hospitals (CREC), deals with clinical research involving human participants, their identifiable data or tissue. Its remit comprises the granting or refusing of permission on ethical grounds for research projects and committee members are appointed by the Head of College, University College Cork Medical School. This committee is recognised by the Department of Health and Children as a nationally competent ethics committee for clinical trials under the European Communities (Clinical Trials on Medicinal Products for Human Use) Regulations. A detailed protocol was submitted to CREC and approved under category ‘exempt and expedited’, a category for research with only minimal risk to human subjects. Full board review was deemed unnecessary.

**METHODS**

A cross-sectional survey was carried out among all GPs (n=414) in the southwest region of Ireland in November 2010, using a postal questionnaire. The GP OOH service in this area is known as ‘SouthDoc’ and serves a population of 500,000. Names and contact details were obtained from the Irish Medical Directory.

For the purpose of this study, end-of-life care refers to that related to patient end-of-life care. The questionnaire was based on a literature review and then underwent a careful development process. A panel of 15 experienced Irish GPs were consulted and the questionnaire subsequently adapted. It was then piloted with 50 randomly selected GPs. Panel and piloting GPs commented and minor amendments were made. A final 15-item questionnaire was prepared.

The questionnaire consisted of multiple-choice questions and allowed free text comment. (online supplementary appendix 1 web only file). The survey was conducted in English.

Data on national GP demographics were obtained from the Economic and Social Research Institute, Dublin, Ireland.

**Procedure**

All registered 414 GPs were sent an anonymised postal questionnaire, which included a stamped addressed envelope for return. One reminder was sent to improve response rate. An open comment section allowed for explanation of non-response.

**Data analyses**

Data were analysed with Microsoft Excel and SPSS 12.0. χ² Tests were used to analyse differences between responding GPs versus

▸ all GPs in Ireland

▸ GPs who stated they did not often transfer information.

Student t test was used for comparing mean age values of sample set to national GP population.

**RESULTS**

The response rate was 52% (n=214). A fully completed questionnaire was returned by 212 respondents. Second questionnaires were excluded from data analysis due to incompleteness. Therefore, a total of 212 questionnaires were analysed.

Of the 200 GPs who did not complete the questionnaire, 44 (22%) gave reasons for non-participation. Of these, 11 (25%) stated they do not participate in an OOH co-operative and so the survey was not relevant to them and 20 (45%) stated they do not routinely respond to postal questionnaires. The remaining 13 (50%) stated they are available personally to their palliative care patients at all times and so felt the questionnaire no different to their situation.

**Demographics**

In all, 63% of respondents were male and 37% female. The mean age was 47 years (SD 11.06). The majority (62%) worked in group practice, 22% worked in a duo-practice and 16% worked in a single-handed practice. Overall, 49% of respondents had a full-time clinical commitment of nine or more sessions per week. The average number of sessions worked was eight per week (four full days). In all, 53% of GPs were in practice for more than or equal to 16 years, 33% had been in practice for between 6 and 15 years inclusive, and 14% for 5 years or less. All respondents had an OOH commitment, the majority, 88%, working between 1 and 5 sessions per month.

The GPs who responded did not differ significantly from the total population of GPs nationally (table 1).

**Transfer of information to the OOH GP service**

In all, 82% of GPs reported that they do not routinely transfer information to colleagues in the GP OOH co-operative. Of those who do transfer information, it is primarily by telephone to the OOH doctor (60%), 40% use fax and 0% electronic transfer.
Table 2 displays the primary reason cited by GPs for not transferring information.

In the category ‘other reasons’, five answered that they leave information at the patient’s home, three answered ‘too much administration’, and two replied that as healthcare professionals doctors should be autonomous in their decision-making and so view such information transfer as unnecessary.

There was no statistically significant difference demographically between GPs responding to the survey and GPs not frequently transferring information.

The vast majority of respondents, 96%, would value and use a template to electronically transfer or fax to the OOH co-operative in relation to their palliative patients’ end-of-life care plans. GPs who would not value such a template were more likely to be male (100%), in full-time practice (88%), age 60 years or older (75%) and in group urban practice (88%). In all, 67% of respondents stated they feel they sometimes refer palliative patients inappropriately to the emergency department due to lack of information while working OOH. There was no statistically significant age, gender or experience difference.

**Perceived barriers to providing end-of-life care OOH**

The leading barrier was that of the inherent difficulty caring for an unknown patient (84%), followed closely by the lack of a formalised information transfer pathway (83%). The absence of an anticipatory plan from primary GP/hospice/hospital was also a prominent barrier (figure 1).

<table>
<thead>
<tr>
<th>Primary reason for not transferring information (n=212)</th>
<th>% GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unforeseen circumstances (sudden deterioration, unexpected discharge home)</td>
<td>38</td>
</tr>
<tr>
<td>No formal pathway of information transfer from GP practice to OOH service</td>
<td>36</td>
</tr>
<tr>
<td>Available themselves</td>
<td>13</td>
</tr>
<tr>
<td>Too busy</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
<tr>
<td>GP, general practitioner; OOH, out-of-hours.</td>
<td></td>
</tr>
</tbody>
</table>

### Information deemed important for inclusion in a template

GPs were asked to give their opinion on whether certain types of patient information were necessary or not for inclusion in a palliative care template for the OOH service to facilitate a comprehensive patient assessment. Respondents had to choose whether various items were important or unimportant. A free text box allowed for individualised recommendations (table 3).

#### 38% Of GPs offered additional suggestions

- Documentation of resuscitation status
- Identification of next of kin and main carer
- Indication of primary GPs willingness to sign death certificate
- Presence of drugs/equipment in the house (eg, syringe driver, subcutaneous medications, non-invasive positive pressure ventilation device).

#### Themes emerging from free text comments

- Importance of maintaining confidentiality
- Leaving patient update in patient’s home to circumvent issue
- GPs with experience of UK system have worked with electronic palliative care summaries and welcome introduction of a similar method in Ireland.
- Concerns over administration burden.

![Figure 1](https://example.com/figure1.png)
GP demographics need to be borne in mind.28 These include significantly more likely to be men aged over 60 years, in full time practice in an urban group practice. This may be reflective of the degree of experience, support and self-sufficiency within this cohort. But shifting trends in national GP demographics need to be borne in mind.28 These include increasing feminisation of the GP workplace, which in turn impacts on the number of GP full time equivalents, and expansion of GP training places available to young trainees to keep pace with retirement and population growth. The needs of these growing sectors also warrant due regard.

Impact on potentially avoidable admissions
Over two-thirds of respondents felt while working OOH, potentially avoidable referrals to hospital emergency departments sometimes occur due to lack of information. Studies have been critical of the long delays for palliative care patients in emergency departments in Ireland.29 The financial, psychological and safety implications of potentially avoidable hospital transfers are not to be underestimated. Lack of information transfer has been linked with unnecessary hospital admissions in several European studies.15-15 Lack of information has also been linked with reluctance on the part of the OOH doctor to contact specialist palliative care services.30 Improvements in information could lead to more appropriate use of secondary and tertiary services. Assessment of the effect of the introduction of an OOH palliative care summary template on patterns of referral and subsequent admissions to these services by means of randomised controlled trials are areas for future research, in addition to quality of service and economic modelling studies.

Perceived existing barriers to providing OOH end-of-life care
Barriers to providing OOH GP care to palliative care patients pertained to difficulty caring for an unknown patient, lack of a formalised method for transferring information and lack of an anticipatory plan from either primary GP and/or hospice or hospital. Lack of clarity as to where to direct a patient in an emergency also featured prominently. These findings are comparable with those found by Schweitzer et al31 in a qualitative GP focus group study. GPs in this study also felt the service was designed for acute medical issues as opposed to palliative care needs. This finding gives insight into the current misperception that the two situations are mutually exclusive. It highlights the need for ongoing professional education and support to facilitate a ‘change of mind and practice’ within the pressured OOH environment that will be more conducive towards an effective OOH palliative philosophy of care. Taubert et al32 reported that OOH doctors lacked confidence in their knowledge of palliative care matters and would value more education. Similar to our study, Taubert32 found that lack of familiarity with palliative patients hindered good OOH care provision. Guided by such findings of professional and patient need, development of palliative care policies and ongoing education within OOH co-operatives are imperative. These are all issues which could be potentially improved if information transfer links were established. Time pressure was also identified as a significant barrier. Being furnished with relevant updated patient information would hopefully reduce time wasted trying to obtain this by alternative means.

Implications of introduction of formalised information transfer
With the potential advent of electronic palliative care summaries, concerns were voiced about administration burden, confidentiality and access to information while in a patient’s house. To address issues regarding administration, any electronic template developed would need to be compatible with all approved GP software packages, allow electronic importing of patient demographics from the practice-held patient file, offer quick to use drop-down boxes as well as free text, and have a lock-out mechanism after a defined period of time to ensure information available to OOH service is up to date and relevant. Rigorous confidentiality measures would have to be taken to ensure data protection. The suggestions relating to leaving patient updates in the patient’s own home also raise confidentiality issues. Access to files while performing house calls or en-route to a patient is currently in operation in parts of the country via durable wireless computers. Either a printout of the information from the OOH base to accompany the GP on a call-out or

**DISCUSSION**

**Main findings of this study**
There is a very obvious gap in information provision to GPs providing OOH service to palliative care patients. In this study, 83% of GPs acknowledge that the absence of a standardised mechanism for doing so is one of the leading barriers to care provision for this vulnerable group. The majority of respondents, (96%), are in favour of using a standardised palliative care template. Details deemed most important to convey included diagnosis, medications, patient insight and preferences regarding end-of-life care. This is in keeping with the strongly held tenet of general practice patient-centred care.

**Minority opposed to formalised information transfer**
The discrepancy between those who acknowledge it as a barrier, yet are not in favour of using a template, is accounted for primarily by those who offer a 24 h, 7 days a week service to their palliative care patients at end-of-life, and to a lesser extent by those who feel that a template challenges the autonomy of a medical practitioner. Notably, all of this group of respondents had OOH commitments. So, while those who offer a ‘round-the-clock’ service to their own palliative care patients have access to pertinent information, there will be encounters with end-of-life care issues in patients unknown to them while working OOH shifts. GPs not in favour of a template were significantly more likely to be men aged over 60 years, in full time practice in an urban group practice. This may be reflective of the degree of experience, support and self-sufficiency within this cohort.

**Table 3** Information valued by general practitioners (GPs) for inclusion on template (n=212)

<table>
<thead>
<tr>
<th>Information</th>
<th>Important (% GPs)</th>
<th>Unimportant (% GPs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis</td>
<td>97</td>
<td>3</td>
</tr>
<tr>
<td>Medications</td>
<td>94</td>
<td>6</td>
</tr>
<tr>
<td>Drug intolerance</td>
<td>91</td>
<td>9</td>
</tr>
<tr>
<td>Patient insight</td>
<td>91</td>
<td>9</td>
</tr>
<tr>
<td>Patient wishes regarding end-of-life care</td>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>Problem list</td>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>Prognosis</td>
<td>89</td>
<td>11</td>
</tr>
<tr>
<td>Anticipatory plan</td>
<td>82</td>
<td>18</td>
</tr>
<tr>
<td>Consultants/hospital/hospice involved in care</td>
<td>68</td>
<td>32</td>
</tr>
<tr>
<td>Contact no. of primary GP</td>
<td>68</td>
<td>32</td>
</tr>
<tr>
<td>Psychosocial context</td>
<td>67</td>
<td>33</td>
</tr>
</tbody>
</table>
use of portable computers are areas that may be explored to address the concern about access while travelling OOH. A version of the template that would be compatible to send as a fax should also be considered for practices that are not fully computerised. Other possible solutions to overcome barriers in information transfer need to be considered. New projects of interest in Canada involve use of a secure provider portal giving healthcare providers real-time access to their patient records via the internet at anytime in any place.32 O'Connor et al33 report on the benefits of a secure, patient information management system in use in Australia that integrates medical and community care information into a single view of the palliative care patient, enabling care providers to optimise the quality of care for their client at the time and point of care. Irrespective of patient location, real-time information regarding the patient can be remotely accessed via a secure web browser and updated conveniently and efficiently. It is recognised as best practice in patient care planning.

Strengths of the study

A good response rate was optimised by sending a reminder to all respondents. The cohort sampled was demographically representative of GPs nationally. The use of a carefully developed questionnaire added strength to this study. The questionnaire had free text boxes to allow comment. This facilitated raising issues deemed important by GPs that may not have appeared as categorical items on the questionnaire. This aspect offered additional insight into concerns GPs have in relation to development of a formalised method of information transfer, as well as useful suggestions in relation to items worth including on a template.

Limitations of the study

The group surveyed were obtained from the Irish Medical Directory. Although all sampled had an OOH commitment, certain GPs who work solely in OOH co-operatives may have been excluded. A listing of GPs registered with the OOH service may have been more comprehensive. This survey was a postal questionnaire. An electronic version may have generated a higher response rate.

CONCLUSIONS

GPs’ view development of a formalised method of information transfer regarding palliative care patients from primary care to the OOH GP co-operative as being important. Lack of information transfer is deemed a primary potential barrier in care delivery to palliative patients. The majority of GPs are willing to utilise a template to facilitate improvements but concerns include administration burden and confidentiality. Information deemed important to conduct an effective palliative care consultation includes diagnosis, medications, patient insight, patient wishes regarding treatment and an anticipatory plan. This study may inform development of a national electronic Palliative Care Summary, so GPs will be able to automatically update OOH providers on any change in care for their palliative patients.

Acknowledgements

All participating general practitioners in the Cork/Kerry region, Ireland.

Contributors

FK designed the research project, designed the data collection tool, distributed questionnaires, monitored data collection, wrote statistical analysis plan, analysed data and drafted and revised the paper. She is the guarantor. T0B and MM monitored data collection and drafted and revised the paper.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests

None.

Ethics approval

The Clinical Research Ethics Committee of Cork Teaching Hospitals, Lancaster Hall, Cork, Ireland.

Provenance and peer review

Not commissioned; externally peer reviewed.

Data sharing statement

Questionnaire available additionally as web only file.

REFERENCES


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BMJ Support Palliat Care published online November 20, 2012
doi: 10.1136/bmjspcare-2012-000281

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