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Macmillan Rural Palliative Care Pharmacist Practitioner Project

Mapping of the Current Service & Quality Improvement Plan

December 2013

Macmillan Rural Palliative Care Pharmacist Practitioner Project

Baseline Report 2013

This work was undertaken by the
Strathclyde Institute of Pharmacy and Biomedical Sciences,
University of Strathclyde, in collaboration with the NHS Highland and Clyde, Macmillan Rural
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1 Introduction

1.1 Palliative Care

Palliative care is defined by the World Health Organization as "an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual". Palliative care is holistic in nature and it focuses on the support of the patient and their family, and not just the disease (1).

Palliative care does not to cure the patient of their disease but aims to make the experience less distressing and more tolerable. The aim of palliative care is to therefore provide the best possible healthcare services to the patient, to positively influence the natural course of the illness, and to offer support to allow them to live as actively as possible until death. Palliative care provides relief from pain and other symptoms, and aims to manage and reduce any adverse side effects of the medications required at that time. It maximises the quality of life for patients and families from the beginning to the end of the disease trajectory.

At present in Scotland, 90% of specialist palliative care is supporting patients with cancer (2). However, other long term conditions such as heart failure, COPD and dementia also incorporate aspects of palliative care in their management (3, 4).

1.2 Scottish Policy

1.2.1 Public Health Policy Context

Audit Scotland's review of palliative care provision in Scotland found a lack of coordinated national strategy for palliative care (5). The key messages from this report included:

- Significant variation exists across Scotland in the availability of specialist palliative care services
- People with a range of conditions need specialist palliative care but it remains primarily cancer-focused
- Generalists need increased skills, confidence and support from specialists to improve the palliative care they give to patients and their families
- Palliative care needs to be better joined up, particularly at night and weekends
- Family and friends caring for someone with palliative care needs also need support but this is not widely available.

Within Scotland, the aim is for services to develop for patients with palliative care needs regardless of their diagnosis, location or care setting as highlighted through the 'Living & Dying Well' initiative (2, 6). The action plan states that NHS Health Boards and Community Health Partnerships (CHPs) should ensure that patients with palliative care needs are included in a palliative care register and

are supported by a multidisciplinary team (MDT). The action plan also emphasises the importance of anticipatory care in order to avoid any unnecessary crises during the out-of-hours period.

1.2.2 Pharmacy Policy Context

'The Right Medicine: A Strategy for Pharmaceutical Care in Scotland' was published in 2002 by the Scottish Government. This policy document proposed better use of pharmacists' professional competence in planning and delivering services, including areas such as cancer and heart disease (7). This resulted in all NHS Scotland Health Boards setting up Community Pharmacy Palliative Care Networks (CPPCN). More importantly, the recently published government policy 'Prescription for Excellence' (8) states that by 2023 all pharmacists will be NHS accredited clinical pharmacist independent prescribers. As well as this increased role in providing clinical care in the community, pharmacists will work in partnership with the medical profession caring for patients with long term conditions. Increasing the involvement of the pharmacist in both primary and secondary care is part of the action plan proposed through this initiative.

Within the NHS Highland, 58 of the 78 pharmacies are currently part of the CPPCN. This means that they should: retain a stock of specific palliative medicines; arrange delivery of urgent prescriptions and medicines to palliative patients when required; attend and declare attendance of on-going palliative training and education sessions; and provide advice and support to patients, carers, pharmacies, GPs and district nurses in relation to palliative care delivery.

1.3 Palliative Care Challenges Faced In the Rural Environment

Rural populations are generally found to consist of an older demographic, have less disposable income and present with diseases at a later stage than urban populations (9, 10). In addition, particular challenges can be faced in terms of planning, delivering and accessing (palliative) care and services due to local geography and the dispersed nature of rural populations.

1.3.1 Geography

The geography associated with rural areas can make it harder to deliver healthcare services as seen in the remote parts of Australia (11). This can be compounded by issues such as poorer quality roads/infrastructure, more expensive fuel and extreme weather conditions (12). However, it has been argued that much of the previous focus of remote palliative care research has been limited in terms of assuming that poor access to services is purely due to the aforementioned geographical limitations (13). Rural communities may need tailored palliative care services operating independently from those in urban settings. Within Scotland, a greater understanding of the needs of rural communities would allow suitable tailor-made services based upon the needs as well as the capabilities of the community.

1.3.2 Confidentiality

Due to the small size of rural populations, healthcare professionals may already be known to patients / carers as neighbours and friends (14-17). These informal networks may be beneficial for

patients receiving palliative care in ensuring that they are not overlooked, particularly if services are limited or stretched. The support of the local community is also helpful, as neighbours may be more receptive to other neighbours' needs unlike bigger communities who may not be as familiar with one another (18). Healthcare professionals also appear to go to great lengths to provide care in rural settings, with many going above and beyond the normal call of duty; sometimes risking their own safety or working around particular rules/ways of working (18). However, specific challenges exist to ensure that a patient's right to confidentiality is enshrined within palliative care.

1.3.3 Communication

Due to the logistical restrictions the geography of a rural area can present (e.g. large distances, sparse population, and long travelling times) regular face-to-face meetings between patients and healthcare professionals are not always possible. Other means of communication and service delivery must be provided. Services may depend on one individual or 'champion' for maintaining the service, which can raise issues around service reliability and sustainability (18).

In Australia, the Caring Communities Programme awarded the Toowoomba Division of General Practices and the Toowoomba Hospice funding for the support, education, assessment and monitoring (SEAM) project, which aimed to improve the quality of palliative care in the community through supporting families, carers and healthcare professionals (11). The project offered good sources of advice and information, and the networking and liaising opportunities for both healthcare professionals and patients were noted. There did seem to be a positive association between the level of awareness of the project and the perceived success of it.

1.4 Pharmacy-Based Palliative Care Services

1.4.1 Community Pharmacy Palliative Care Services

The pharmacist is a core member of the specialist palliative care team (19, 20). While many papers describe the role of the pharmacist within palliative care, only some consider this role within the community setting where the majority of palliative care is delivered (6) and where the majority of pharmacists are located (21). The potential for increasing involvement and developing community pharmacy services in this area is clear (22-33).

It is important to understand how community pharmacists and their skills can be effectively integrated into services for the benefit of patients, their families and the MDT. Tinelli et al (35) identified that patients value the input of the pharmacist. They may however be resistant to changes in the pharmacist role, and any proposed changes will require public support. To meet patient requirements, pharmacists need to have good communication skills, increasing their confidence in delivering palliative pharmaceutical care (28, 36). Barriers to pharmacist involvement in delivering palliative pharmaceutical care have been identified in several countries (36-38). In particular, O'Connor et al (39) highlight the lack of community pharmacy representation within the UK healthcare team, even though pharmaceutical input has previously been identified as integral to the multidisciplinary palliative care team. In the UK, community pharmacists do not have easy access to patients' medical notes or any clinical information, which includes details of diagnosis and may be

unaware that a patient has palliative needs. This is a potential missed opportunity in terms of key aspects of care provision (40, 41). A recent joint statement from the Royal Pharmaceutical Society and Royal College of General Practitioners calls for closer working practices in this area, including the better transfer for patient information between the MDT without compromising confidentiality or safety (42).

1.4.2 Macmillan Project Glasgow: Current Evaluation

In 2012, the University of Strathclyde submitted an evaluation of a 2 year program of work within NHS Greater Glasgow & Clyde (NHS GG&C) entitled the Macmillan Pharmacist Facilitator Project (43). The project was located within four Community Health and Care Partnerships in the health board area and consisted of the University team working closely with the appointed project team to: deliver a baseline needs assessment report; develop a quality improvement program; prepare a summary document on the key activities delivered through the quality improvement program and synthesise a model of care with the aim of supporting effective engagement of community pharmacy in the delivery of palliative care.

The Glasgow project did not explore the remote and rural challenges faced by both community pharmacy professionals and patients/carers, which are the central tenets to the proposed service in NHS Highland.

1.5 Macmillan Rural Palliative Care Pharmacist Practitioner Project

The University of Strathclyde is funded to provide academic input into the NHS Highland project for 2 years (starting February 2013). The project is to be a demonstration project to inform national policy and will have direct relevance to the new proposal on the delivery of pharmacy services within NHS Scotland, 'Prescription for Excellence' (8). This opportunity gives NHS Highland access to the expertise developed through the previous Glasgow program and allows the University team to develop the evidence base for clinical practice within this area, and focus on developing rural pharmaceutical care capacity through the use of a community pharmacy-based practitioner.

The NHS Highland project pilots the role of one full-time Macmillan Rural Palliative Care Pharmacist Practitioner (referred to as Macmillan Rural Pharmacist Practitioner or MRPP) to be located within a community pharmacy in the Skye, Kyle & Lochalsh project area and test the ability of a community based pharmacist to:

- Develop community pharmacy capacity to effectively, efficiently and safely support the needs of those in this rural community with cancer and palliative care needs regardless of care setting
- Improve service provision/co-ordination of services ensuring opportunities are developed for training and peer support
- Provide quality information to support practice.

In response to a development request from NHS Highland, Macmillan Cancer Support agreed to fund an evaluation of this new model of service provision. The Boots Company PLC were awarded the

contract for service provision. It is intended that a positive evaluation would allow the model to be shared with other cancer and palliative care providers across the UK and be promoted as a model for use in rural areas. The aim of the evaluation is to inform the development and demonstrate the effectiveness of the Macmillan Rural Palliative Care Pharmacist Practitioner Project. The evaluation would also assess the impact of communication and co-ordination issues which relate to the provision of palliative pharmaceutical care to patients and carers in this rural community.

The University team agreed the following aims and objectives for the evaluation with Macmillan Cancer Support, Boots PLC and the NHS Highland Project Steering Group.

1.5.1 Evaluation Aim

The aim of the evaluation is to inform the development, and demonstrate the effectiveness of, the Macmillan Rural Palliative Care Pharmacist Practitioner Project.

The proposal is that a pharmacist with enhanced palliative care skills (MRPP) be based within a community pharmacy in the Skye, Kyle & Lochalsh area, to support service resilience and develop an interface role between primary and secondary care services to improve patient palliative pharmaceutical care. This needs a joined-up service approach and consistent service provision through implementing appropriate care planning models and integrating the community pharmacist into the multidisciplinary team.

1.5.2 Evaluation Objectives

In addition to the aims, there are also specific objectives expected to be met over the project's lifespan:

- Improve the support of community pharmacy networks in relation to palliative care
- Ensure opportunities are developed for training and peer support and provide quality information to support practice
- Promote pharmacy engagement in multidisciplinary review meetings within GP practices
- Provide relevant pharmaceutical care support for patients at home alongside the multidisciplinary team and voluntary agencies
- Provide clinical pharmacy support to local community hospitals including medicines management advice and support at service interfaces e.g. admission, discharge to improve continuity of care for patients with palliative care and cancer needs
- Provide pharmaceutical care support to care homes caring for palliative care patients.

This project considers issues relating to equity of service provision within a rural area, providing continuity of care and access to pharmaceutical services as part of multidisciplinary care input. This will be regardless of the setting patients choose for care.

2 Phase 1: Evaluation of Current Palliative Care Pharmacy Service Provision

2.1 Introduction

The MRPP currently in post had previously worked as a Community Pharmacist in the project area, and assumed the role of MRPP from February 2013 and undertook an initial training period of 3 months.

It is anticipated a joined-up service approach and consistent service provision model can be implemented by using appropriate care planning models and integrating the pharmacist into the MDT. Additionally the issues relating to equity of service provision will be tackled regardless of which setting patients choose for care. However, to inform and develop the MRPP's role, it is necessary to first evaluate the current palliative care pharmacy service provision using a mixed methods methodology with consultation of members of the wider multidisciplinary team.

This report forms the first output from the evaluation and focuses on the initial first phase investigation to characterise the community pharmacy service in the project area and identify service gaps and key issues to inform a quality improvement program.

2.1.1 Study Aim

To characterise baseline (current) pharmacy-based palliative care services in the project area, and identify any service gaps and key issues to inform a quality improvement program.

2.2 Study Setting and Participants

2.2.1 Setting

This study is based the Skye, Kyle & Lochalsh area located in NHS Highland. The estimated total population of the project area is 13,238 (44). The Isle of Skye covers 1.6km² and has an estimated population density of 6 people per km² (45).

Tables 1 and 2 provide an overview of the project area population, and health service provision of NHS Highland. It can be seen that approximately 35% of the project area population are between the ages of 45-64 years, and 20% are over the age of 65 years.

Figure 1 presents the geography of the project area in the context of NHS Scotland. The largest General Hospital in NHS Highland is Raigmore Hospital in Inverness. It is located 80 miles (1 hour 50 minutes by car) from Kyle of Lochalsh (the most Easterly main town in the project area) and 114 miles (2 hours 37 minutes by car) from Portree (the most Westerly main town in the project area). The distance between the furthest apart villages in the project area is that between Glendale (South of Dunvegan) and Glenelg, taking over 2 hours and covering almost 84 miles by road.

The greatest distance between villages in the project area is between Glendale (South of Dunvegan) and Glenelg, which is almost 84 miles by road and takes over 2 hours by car. The populations of the towns and villages in the project area are diverse. For example, Broadford Medical Practice has 1,877 registered patients, compared with Glenelg Health Centre's registered patient population of 280 (46).

Table 1- Population Overview Skye, Kyle & Lochalsh Project Area (2012) (46)

	All Age	0-24yrs	25-44yrs	45-64yrs	65-	75-	85yrs+
	Groups				74yrs	84yrs	
Population (total number)	13,148	3,194	2,738	4,566	1,562	746	342

Table 2- Health Services Provision in the Skye, Kyle & Lochalsh Project Area (2013) (47, 48)

Health Services	NHS Highland	Skye, Kyle & Lochalsh Project Area
GP practices	100	7
General Practitioners	392	26
Community Pharmacies	78	3
District Nurse Teams	24	2
Community Hospitals	10	2
Care Homes	17	6 ¹

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¹ During the evaluation period, but after data collection, one care home closed (n=5)



Figure 1- Skye, Kyle & Lochalsh Project Area

2.2.2 Study Participants

Three separate methods were employed to provide triangulation of the findings. Participants included:

Method 1: GPs from dispensing and non-dispensing practices, dispensing practice staff, key

service leads (KSLs), community pharmacy staff and nursing staff

Method 2: Users of the Highland Hospice Phone Log (likely to include healthcare professionals,

patients, carers and members of the public)

Method 3: Various staff members working in the care homes in the project area.

Table 3 provides details of all participants sampled in the study. The job titles of KSLs interviewed have been omitted to ensure anonymity.

Table 3- Full Participant Details

Methods	Participant by Profession (n = total number)	Interviewer / Analyst
Method 1	GP serviced by Community Pharmacy (n=1)	GA
	Key service leads (KSL) (n=8)	GA/RN/EDC
	GP serviced by dispensing practice (n=2)	EDC/RN
	Dispensing practice staff (n=1)	RN
	Pharmacist* (n=3)	EDC
	Nurse* (n=2)	RN
Method 2	GP (n=8)	EDC
	Macmillan Nurse (n=2)	EDC
	Family Carer (n=1)	EDC
	Patient (n=1)*	EDC
Method 3	Registered General Nurse (n=5)	EDC
	Social Carer (n=5)	EDC
	Carer (n=2)	EDC
	Senior Carer (n=2)	EDC
	Night Social Carer (n=2)	EDC
	Senior Social Carer (n=2)	EDC
	Manager (n=2)	EDC
	Deputy Manager (n=1)	EDC
TOTAL Participants	N= 50	NA

^{*}Telephone Interviews Based on Completed Logs

2.3 Ethics

Advice was sought by the NHS project lead from NHS Highland's Clinical Governance Manager and NHS Highland's Research and Development Manager as part of the North of Scotland Research Ethics Service. Ethical review under the terms of the Governance Arrangements for Research Ethics Committees (REC) in the UK was deemed not to be required, because:

- The project was part of a programme of service development in the area of pharmaceutical palliative care and it was a service which was being evaluated
- Participant recruitment was invitational and any data would be irreversibly anonymised to protect identities
- It would not be possible to identify any individual from any direct quotation used in the reporting of the project.

^{**}A total of 11 calls were audited, however the patient (n=1) was present during one call with GP

Furthermore, the University of Strathclyde's Code of Practice on Investigations Involving Human Beings does not apply to work that is part of routine practices in professional contexts, a service evaluation or an audit of an existing service. Consequently, ethical approval was not required for this piece of work. In addition, participants were all service providers and invited by the MRPP and the clinical project lead. All received a full explanation of the study and assurances about confidentiality and anonymity were given.

3 Methodology

Qualitative research aims to study, understand and represent the experiences and perspectives of individuals. It plays a key role in providing insights, explanations and theories of social behaviour and can uncover aspects of sensitive and complex views, beliefs, attitudes and interactions. The use of qualitative research methods has increased in recent years and they are now valuable tools in the methodological tool box of health services and pharmacy practice research. A qualitative approach was considered the most appropriate due to the exploratory nature of this research.

This stage of the project was concerned with defining the indicators of success as well as current service provision. Background discussions with the project lead highlighted areas of work upon which the MRPP should initially focus. This involved mapping the current service and identifying both strengths and gaps in the system, and allowed the University team to propose and develop a program of work for the MRPP over the project period which would affect current service provision.

A single case study methodology, involving multiple healthcare settings within the project area was applied. Various methods were used to maximise data and incorporated semi- structured interviews with observations (when appropriate), completion of activity logs, service audits and questionnaires.

3.1 Method 1: Interviews, Observations & Medicine Issue Logs

Semi-structured Interviews & Observations

The MRPP made contact with the appropriate dispensing staff and GPs within all GP Practices (n=26) in the project area and explained the nature and requirements of the project. The names of those who wished to participate were communicated to a member of the University team. A sampling strategy was adopted, so that GPs as well as trained and untrained dispensing staff were recruited. Semi-structured face-to-face interviews were conducted with the focus on identifying specific medicine-type issues faced by the GP and the dispensing staff as well as identifying potential benefits provided by their service. Additionally, the researchers observed the dispensing process (simulated in order to protect patient identity) in dispensing practices to better understand the process.

A number of key service leads were identified by the project steering group as being knowledgeable or involved in palliative care services in the project. These individuals were contacted by the MRPP

and the names of those who wished to participate were shared with the University team. Telephone or face-to-face interviews were arranged. KSLs came from a number of areas including nursing, general practice, home care, Scottish Ambulance Service and management.

Interview schedules and information sheets used on these occasions can be found in Appendices 1-4. The interviews were digitally recorded. Following each interview the contents of the recording were transcribed verbatim. All participants were provided with an information sheet detailing the aims and nature of the study, and consent forms completed by those taking part. Written or verbal consent was given where appropriate.

Basic demographic data were also collected from all interview participants excluding age and gender. Since the project pursues a broad approach where the profession as a group and not the individual is the unit of the analysis, a purposive convenience sampling strategy was employed. This would identify, select and recruit those individuals who share common experiences of relevance to the study and who would be able to provide in-depth information about study topics (49, 50). Participants were also selected to gain an equal geographical and professional representation where possible.

Logs Detailing 'Medicines-Related Issues'

A diary or 'log' is considered an appropriate method for collecting data over an extended period. This was used by nursing staff and community pharmacy staff to document any pharmacy specific issues which may have presented during the allocated period. The MRPP approached community pharmacy and nursing staff. She provided background information and raised awareness of the Macmillan Rural Palliative Care Pharmacist Practitioner Project. This was followed-up by a member of the University team who telephoned to recruit the staff into the project.

Community pharmacy and nursing staff were asked to record palliative medicine issues in the log designed and provided by the University team. Examples of possible palliative medicine-related issues were given to aide their understanding of what would be considered as an issue and to aid with identifying entries. Staff were asked to complete logs over an initial 4 week period beginning the first week of April 2013, which was extended for a further 4 weeks due to the low volume of incidents. The logs were distributed, collected and returned to the University via the MRPP. Community pharmacy staff were asked to include the pharmacy's name on each log but were asked not to write their own names. Likewise the nurses were asked to write their team name but not their own name on each completed log. The logs were analysed by hand and secured in a locked cabinet in order to maintain participant anonymity.

Once data collection ceased, completed logs were returned to the University team. Follow-up telephone calls were made within 8 weeks to staff by the University research team for more indepth discussions of issues identified in the log. The telephone interviews were used to validate the logs and to provide the staff with the opportunity to freely express any further views not captured in the log. An example of the community pharmacy and community nursing logs can be found in Appendices 5-6.

3.2 Method 2: The Highland Hospice Phone Line Audit

The Highland Hospice Phone Line is accessible to patients, carers and healthcare professionals as a source of advice (clinical and non-clinical) during and out-with office hours. All calls are logged on a predefined form which is completed by the hospice phone line staff, who are mixture of professionals and non-professionals i.e. nurses, support staff. Recorded information consists of: location of the calls; nature / reason for call; and how or if the issue is resolved.

An initial 8 week period was of interest but due to the low number of calls received it was extended to approximately 16 weeks (beginning of March until the end of June 2013). Call details were analysed and if connected to palliative medicine issues, the details were extracted from the hospice log and entered onto a summary document supplied by the University team. The summary document can be found in Appendix 7.

3.3 Method 3: Care Home Questionnaire

NHS GG&C recently completed a survey of care home staff in Inverciyde. A modified version of that questionnaire was used in this study of the Skye, Kyle & Lochalsh project area. The MRPP contacted all care homes (n=7) and requested their participation. The MRPP distributed paper copies of a participant information sheet and the questionnaire to six of the seven care homes (one declined to participate). Copies of the Care Home Information Sheet and the Care Home Questionnaire can be found in Appendix 8.

4 Results 1: Interview, Observation & Log Data Analysis

A content analysis methodology was used to examine the interview data. Content analysis is used frequently in health service research (51-54). Of the three main approaches used, an inductive method was selected, whereby categories or codes are derived completely from the data collected (55). Content analysis works well in cases where little previous theory or literature is present. Since the aim of this research was to map current service and report it at a descriptive level, content analysis was deemed an appropriate approach.

Three researchers contributed towards the coding of data. One interview was selected and all three researchers adopted a peer-to-peer consensus approach to ensure a consistent coding strategy was adopted. This was applied to the remaining interview data to produce the following key findings. Any hesitations made in the interviews have been removed and, where appropriate, words contained in parentheses have been added to clarify meaning or disguise any identifying information. Text that has been removed is represented by ellipses. The participant's job title accompanies each quote in parentheses.

Below are the key findings from interviews with GPs, dispensing practice staff, nurses, Community Pharmacists and key service leads.

4.1 Setting the Scene – Factors Associated with the Environment and Infrastructure

The project area is rural, presenting a number of challenges on a daily basis. There was a general acceptance among participants that there were factors outwith anyone's control, regardless of the resources available.

Environmental Factors

The occurrence of bad weather and how this was overcome was discussed. In many instances staff members went out of their way to deliver services:

"In the winter when the snow was really bad...you couldn't get a pharmacist at their premises, and one of the other pharmacists went across and worked between sort of a couple of the businesses to make sure that services could be delivered, ... they had a four-by-four and took drugs out to people because they couldn't get to them." (KSL7)

Limitations in service delivery were also posed because of the distances involved:

"I think geographically we're disadvantaged in that you know, we cover a huge [area]...it's not like we've got a pharmacy just two minutes down the road or a doctors, you know, there are quite a lot of out-lying areas" (KSL2)

The distances between the towns and villages can pose problems for healthcare professionals in terms of the delivery of medicines from the mainland and between locations in the project area. NHS Highland (and the project area) is large geographically, yet it represents a cohort of patients relatively small in number for its size. One participant commented on the dispersion of population using Glasgow and Edinburgh as examples to demonstrate the distances:

"You could fit Glasgow Royal infirmary and Edinburgh Royal Infirmary both into Skye and Lochalsh. You know they're only thirty five miles apart but our people are spread out all over the place" (KSL6)

Given the small general population in the area, participants commented on how infrequently they see or treat patients with palliative needs. This can make some professionals feel de-skilled in dealing with palliative care medicines. It is likely that building up experience within the speciality will take longer than in an urban area:

"But I haven't got this huge experience of years' and years' working in this field with a whole plethora of stories, you know, anecdotal stories; I don't have that I'm afraid."

(KSL2)

One overriding characteristic that emerged was the strong sense of community spirit. Most participants commented on how close residents were to one another, despite the geographical distances involved, and how everyone's instinct was to help out as much as possible:

"That makes me think that the patient actually gets a better deal up here...because they get dealt with by somebody that they know." (GP from a Dispensing Practice)

This ethos was also fostered from a clinical perspective. Healthcare professionals are seen to go "above and beyond" to make sure that the patient receives the appropriate treatment, particularly as the prompt supply of some medicines, e.g. specials or specific formulations cannot be as timely as desired. Furthermore, during the out-of-hours period getting the right medicines to patients following recognised procedures/ channels can also be challenging. However, every effort is made to ensure that the patient is not left without treatment:

"Obviously when it's to do with one of [the palliative] patients you do all you can." (Pharmacist)

"I mean the problem is, is the reality of clinical practice at 3 o'clock in the morning and the reality of people who make rules, they don't coincide, yeah? You get round it by documenting it so hopefully ... you can demonstrate that it was all done in perhaps not to the rule but certainly to the spirit of things." (KSL6)

Infrastructural Factors

Internet connection and mobile telephone reception was found to be unreliable. Furthermore, some particularly isolated parts of the project area completely lacked telephone reception:

"Mobile phone reception is possible if you're standing on the beach and once you turn away from the beach you've had it" (GP from Dispensing Practice)

Although this could be considered challenging, most people had access to landline telephones. Furthermore, one participant reported that not having had regular access to mobile phone reception over the years has resulted in a lack of reliance on it, therefore other means were often deployed when attempting to contact patients or other healthcare professionals.

Other travel issues were also faced on a daily basis, including the lack of public transport in particularly rural areas, and the sometimes dangerous single-track roads:

"There are a number of elderly people [living here], so I know there's no public transport there unless they ring up and order the bus" (GP from Dispensing Practice)

"It's a really bad road, and the road from here to [village] is quite good but then [the road] is really bad, single track, you know, pretty dodgy, so it could take you forty five minutes to you know, an hour." (KSL2)

Although there are a wide range of environmental and infrastructure factors affecting the project area those interviewed seemed to foster an adaptive and flexible attitude towards such challenges.

4.2 Setting the Scene- Pharmacy Service Provision

Details of the current pharmacy service in relation to palliative care identified the following.

4.2.1 Level of Service

Participants described the current service provision within and outwith working hours. Healthcare professionals made reference to a number of healthcare professionals or resources that they relied on in an out-of-hours situation, including NHS 24, local Community hospitals and GPs. GPs from the dispensing practices mentioned that rather than their palliative patients contacting NHS 24 in the evenings or weekends, they preferred their patients to contact the GP at home via a specific surgery number or to contact the local Community Hospitals. NHS 24 was not seen as an ideal resource for their patients.

"And so at the weekends or overnight, if it was a query before 11 o'clock then we'd say phone Portree hospital, if it's an overnight query just phone Broadford and we'll give them the telephone number so they don't have to go through the pain of phoning NHS24." (GP from a Dispensing Practice)

Participants all provided examples of who they would contact and how during out-of-hours periods. Managing resources and staff members to allow patients to die in the location of their choosing can be difficult due to the geography involved. The current Marie Curie contribution is helpful but it is acknowledged that due to the rural nature of the area, they often face difficulties with recruitment of staff:

"The problem with the rural area is that if people want to die at home, we're not well resourced...we have to kind of think of ways round things and try and get staff to help...we need the over-night care so that families can get a sleep, so we're not well resourced with regard to [Marie Curie] bodies on the ground" (KSL1)

Nurses in the community hospitals were found to be responsible for ordering medication (stock or otherwise). It would appear that pharmacy support in this area, including the provision of advice and information would go some way in improving the current service.

4.2.2 Local and National Networks

The local GPs, care home staff and community pharmacies were all seen as vital in the delivery of care for their patients. GP surgeries, medical centres, care homes, Raigmore Hospital and the Highland Hospice, both based in Inverness, were also mentioned by participants as sources of information/support. Other resources further afield included: NHS 24 Phone Service, the Scottish Government, and hospitals based in Aberdeen, Glasgow & Edinburgh.

The project area includes four dispensing practices which provide medicines where there are no community pharmacies. Dispensing practices are responsible for their own stock ordering and provision. However, they too like community pharmacies can experience difficulties in ordering certain medicines. Patients are further disadvantaged as they will be unable to 'shop around' with

their prescription and get it dispensed elsewhere given the lack of community pharmacies. This suggests that a more formalised link with community pharmacy may be required to provide a practical solution to supply issues.

Participants referred to a wide range of disciplines that they interacted with in providing care. These include: podiatrists, dieticians, physiotherapists, a local handyman (employed by the council and NHS), hospital clinicians, nurses, the Care At Home Officer, occupational therapists, rural practitioners, social workers, cancer specialist, Marie Curie nurses, and nurse specialists. Formal discussions were routinely held, such as Gold Standards Framework meetings, where the MDT meet to discuss individual patients' current needs. Discussions amongst professionals and the wider team also occurred on an ad-hoc basis by telephone or face-to-face:

"It wasn't documented as a gold standards framework meeting... the District Nurse would call in- "oh I've just seen so and so", and we'd have a talk about it so it was a lot more sort of informal" (GP from Dispensing Practice)

Nurses, GPs and other professionals also engage in regular telephone calls. Some participants reported that communication was variable with professionals outside of the project area, but given the small number of professionals in the project area, it was easier for relationships to develop and it is often this familiarity which facilitates effective communication:

"We might find out that somebody's been admitted to hospital because every day we communicate with the hospital at half past one, everyone in social work and that, we have a teleconference so that we discuss clients who've been admitted and then we have discharge meetings on a Tuesday and we have a care plan meeting every

Thursday...so that people are in the loop." (KSL2)

Various examples were given of good MDT interaction resulting in better care. This would be particularly successful when the professional involved not only had a good understanding of palliative care, but also the local geography and the service, including inevitably its limitations. One participant described a situation where a patient in hospital in Inverness wished to die at home in Skye, and the positive and negative aspects of this transfer:

"I think [staff at hospital in Inverness] sort of worked really well at their end, they were able to let us know and get all the stuff together so they came out and gave us enough warning to get everything in place in the house...I mean it takes cooperation, phone calls and thought from people...If they hadn't warned us that he was coming home, would require syringe driver, I wouldn't have been able to get a hold of the District Nurse to get the syringe driver over, so cooperation and thought very much required." (GP from Dispensing Practice)

This demonstrates local understanding of how services, including pharmacy services operate.

4.3 Current Strengths of the Service

4.3.1 Healthcare Professionals Planning

A degree of pre-planning was evident. One KSL described how care home staff would check any new item prescribed for a resident against a list of stock carried by the local community pharmacy before sending a member of staff to collect once dispensed. This was to avoid unnecessary delays in the event that an item may not be in stock:

"When the doctors are prescribing we tend to ring [the pharmacy] to see what they've got in- in case they're writing for Diamorphine 20mg. If they've only got 5mg in, we'll get the doctor to write it out for 5mg, 4 vials. So we tend to check what they've got in first, so that we know that we can get it, 'cause sometimes it can take a few days." (KSL3)

The community pharmacies supply medicines for prescriptions from GP surgeries and care homes in the area. Dispensing practices order their own stock whilst the community hospitals access their medicines as stock from Raigmore Hospital. Most participants gave details on informal methods of addressing medicines issues in more challenging times or when a specialist medicine was needed. The local pharmacies also stock medicines as per the palliative care core drugs list, but some examples were given where doses of certain drugs were prescribed that did not comply with the palliative care core drugs list and hence caused problems with supply:

"The first script that came in for the midazolam, we had the 2ml one and actually the doctor wanted the 5ml [ampule] so actually we had to go back and just get the doctor to change it to the 2ml size [ampule]...the doctor hadn't realised that there's the 2ml strength we would always have in stock but anyway that wasn't a problem, we just went up to the surgery and got him to change it and then sent out the 2ml one...luckily we have the surgery so near to us ... the doctor just wrote the new script out there and then and then we were able to dispense it." (Pharmacist)

The use of Just In Case boxes (JIC) was well documented. These boxes can be distributed to patients with palliative needs and contain small amounts of essential medicines in the event that access to medicines or a healthcare professional is not possible, particularly during out-of-hours periods or during periods of bad weather. Many professional interviewed welcomed the use of these boxes, stating that they had been adopted and used well, and that it was helpful to know that a patient was not without an essential medicine.

4.3.2 Equipment & Medicines

Some participants talked about the availability of syringe pumps/drivers. There are a limited number of these spread over a large geographical area, however, given the generally low incidence of palliative care patients it can result in low demand for them and other specialist equipment:

"I think we've only ever had one episode where we've had two people on syringe drivers and the community will loan us one of theirs if they're not in use so it's quite good like that."

(KSL3)

Overall, participants were generally happy and perceived a good service for accessing medicines. Different strategies appear to be employed by e.g. prescribing an alternative medicine or avoiding a medicines altogether but appeared to generally cope very well in most situations. Furthermore, communications between, for example, dispensing practice and pharmacies mean that efforts are always made to source something locally before ordering it specifically from further afield:

"I'll phone [the pharmacy], if we haven't got such-and-such, "Can you get it?"...sometimes you know stuff's out of stock at Alliance Healthcare, I'll phone up [the pharmacy]- "have you got it, can you get hold of it?" cause they use a different wholesaler." (GP from Dispensing Practice)

Specials² (particularly solutions) were seen as the most difficult items to supply. The majority are especially extemporaneously prepared from a specific manufacturer or hospital production unit, and ordering and supply can take time. Any delay can be further exacerbated due to remoteness and distance. Delay is caused further by some of the authorisation processes demanded by the Health Board. However, the situation can be managed if the patient is kept informed:

"[Unlicensed specials] do take a bit longer and the sort of straightforward specials also take longer than our normal order... we do have to and we do try and make patients aware if they are going to be taking longer." (Pharmacist)

4.3.3 Continuity of Care

There appears to be a high level of continuity of care, perhaps as a consequence of the close-knit nature of the community and the small numbers of staff involved:

"The big strength is that we're still a community. You know, people are still looking after one another, you know nurses and doctors are part of the community and looking after people who are their neighbours...because we're a small service...you're looked after by the same nurses when you're ill getting chemo or when you're terminally ill so that's a great strength of our service." (KSL6)

Furthermore, since there is less demand on palliative services than in an urban setting, doctors' appointments and meetings with nursing staff tend to be less time-dependent. As they have smaller case-loads, healthcare professionals can spend time becoming more familiar with patients' problems and needs, and care can be better tailored:

"If a Care At Home [staff member] is going in to see somebody a couple of times a day, they can pick up on whether somebody's eating, drinking, looking unkempt...all of those little, subtle things that you can't really get in a ten minute doctor's appointment. So they've got an overall picture of how that person lives and what's normal for that person and what's a change for that person...We have meetings with the nurses

² Products which are unlicensed and are specifically prescribed for an individual. A pharmaceutical special is a medicine made to satisfy an individual patient need.

regularly, we have doctors meetings – they can feed that back to their colleague who work back-to-back with them and see if they've noticed anything...it might prevent an acute episode." (KSL2)

4.4 Current Gaps in the Service

4.4.1 Healthcare Professional Educational Needs

Existing Education

Participants mentioned various existing educational opportunities relating to palliative care that they had received, such as using syringe pumps, as well as more general training on palliative care pharmacy. There was also some indication that healthcare professionals could request to attend specific courses if there was an apparent need, and an online learning system was also mentioned:

"We've got various palliative care training via Learnpro, which all of our nurses are strongly advised to undertake...it is part of their PDPs ³ and EKSF⁴s, so that's certainly a number of modules on that, that people are advised to undertake. ..we have had training from the hospice in various areas around palliative care, and we've now set up a quarterly prescribing forum locally as well...they're obviously keen to have that forum going so they're keeping up to speed." (KSL5)

Online distance learning is suitable for a remote community provided that there is a reliable internet connection for users. Furthermore, the emphasis on training courses as part of official educational requirements such as Knowledge and Skills Framework and Continued Professional Development ensures that healthcare professionals are making a conscious effort to develop their skills. Finally, it was encouraging to see an emphasis on updating and refreshing current skills, particularly due to the low number of palliative care patients. The lack of practical experience with dealing with palliative patients is somewhat substituted with regular refresher courses and educational experiences.

Perceived Gaps

There was a general consensus of a need for greater awareness of medicines routinely used in palliative care and how they are used. Particular issues around the legislation for prescriptions for controlled drugs were identified:

"Some GPs maybe just don't quite understand about the writing of the prescription... it did happen last week funnily enough and the pharmacist returned it to the doctor because it wasn't written properly and that does cause delays...they're not maybe handwriting prescriptions for controlled medicines a lot." (KSL4)

Training needs for the whole pharmacy team, including support and counter staff, on various aspects of pharmaceutical palliative care were identified. This included raising awareness of treatment options and alternative formulations so that pharmacy staff feel empowered to deal with situations

PDP- Professional Development Plans
 EKSF- Electronic Knowledge and Skills Framework

when a medicine is not accessible or effective. A situation was described whereby a medicine had been prescribed but was unavailable and was ordered. However, another medication could have been used with equal effect. This suggests that information about different drugs, formulations and alternatives needs to be more widely disseminated to avoid delays in service provision.

The GP was seen as the main authority on medicines information and in the delivery of palliative care. The interview data showed a great dependence on GPs with little input from pharmacy at either a clinical or basic supply level. Some healthcare professionals also commented that GPs are sometimes reluctant to place patients on the palliative care register until the final few months or weeks of life, perhaps indicating a lack of understanding of the term 'palliative':

"I think generally the difficulty in recognising what is palliative care is the single biggest challenge, because we know that GPs struggle with it because they don't recognise when to put people on the palliative care register, what does being palliative care mean?... you know that actually some of these principles and processes are really, really key and it makes such a difference to the patient." (KSL7)

Perhaps the reluctance to place people on the palliative care register is a fear or aversion regarding what labelling someone as 'palliative' might mean for the patient. Comments were made by participants around the close-knit nature of the community and that everyone finds out about each other's personal circumstances:

"But you know up here patient confidentiality is very important for us any way in the ambulance service, but up here you have to be much more let's say aware of it and counteract it as well. Because people by nature, especially up here they're inquisitive."

(KSL8)

The two dispensing practices which were involved in the evaluation identified some service gaps. Caution was raised regarding comparison of dispensing services with formal pharmacy services:

"'Cause the GPs perception is that they're providing pharmaceutical services, but they're not; they're providing dispensing services if they looked at the definitions under the law...there isn't a pharmacist there to oversee, and some of the dispensers are not trained other than by the GPs themselves." (KSL7)

This lack of medication-specific training for dispensing staff in dispensing practices was a concern since these practices tend to be managed as an isolated independent unit. One participant identified a desire for dispensing practices to have better links with community pharmacy in order to improve educational levels as well as increase the level of support currently offered for less trained staff.

4.4.2 Patient Educational Needs

Healthcare professionals identified a number of educational opportunities for patients, the first being around informing patients of the protocols surrounding solutions or specials:

"I mean, we had one the other day and the man isn't that well but he's been on these tablets before and he knew it took a few days before but I think he must have forgotten because he was coming in for them again...you know they just kind of look a bit disappointed and wish that they were there straight away." (Pharmacist)

Raising awareness for patients that specials and possibly other formulations need to be ordered in advance would prevent these issues and would avoid patients waiting for their medication to arrive.

One participant also identified that some patient education around controlled drugs, what they are and what they might mean, could be beneficial:

"[Patients] need to be educated in what [opiates] are and how to use them... I have to spend time talking to people about morphine and the fact that it's not a dangerous thing and it should be used carefully and people should use enough of it and that all takes time... I do find patients who you think should be educated and know about their opiates and they don't quite seem to have grasped it you know? People need to be told things several times." (KSL6)

Not only would this level of education be beneficial in ensuring patients are using their opiates correctly, but may also be useful in dispelling any myths around controlled drugs. This particular participant commented that patients sometime have a negative attitude towards opiates because of the inaccurate association with illegal street drugs and the ill effects these can have on the body.

4.4.3 Suggestions for Defining the MRPP's Role

Participants had a few ideas as to how they would like to see the MRPP role develop within the current service. The following table details the suggestions participants contributed during the interviews.

Table 4- Suggested Roles for Macmillan Rural Pharmacist Practitioner (MRPP)

Suggested Role	Supportive Quote
Provide specialist advice for healthcare professionals on palliative drugs.	"[The MRPP's] got the knowledge for anything to do with palliative drugswe could phone her directly and let her sort it out and she would probably, hopefully have the time to be able to focus on itso think that's going to be a huge bonus." (KSL1)
	"I think it's good to have somebody who has a specialism in that or a real interest in palliative care the families are supported, the clients are supported, the workers are supported and the community's supported so it's really of benefit I think." (KSL2)
Influence and monitor the management of medicines in all settings.	"We would liaise closely with [the MRPP] and if there were any issues with regard to controlled drugs or whatever that we weren't maybe getting, she would influence that with [the community pharmacy] and make sure, that we did have enough." (KSL1)
	"[The MRPP] could have quite a lot of input in the patients' sort of medication [one] care home has quite unskilled workers with the patients and their understanding of medication isn't fantastic." (Pharmacist)
Provide a general pharmacy presence in community hospitals, care homes and dispensing practices.	"The first thing is actually having somebody physically here who will come in and talk and will think about pharmacy issueshaving somebody who is purely focusing on the medication issues is bound to be a source of support and help and improve standards, improve education, improve dissemination of practice from the centre." (KSL6)
Act as a link between healthcare professionals and organisations/resources.	"I think the new role here for the pharmacy here will [link] with some of our charity organisations such as Skye Cancer Care and you know sort of looking at how that charity could perhaps be influential in supporting local initiatives." (KSL7)
Facilitate and/or provide training opportunities for staff.	"I think it's about just ensuring that there is on-going training of all of our staff, that people are up to speed in all the latest developments around palliative care and palliative medicine." (KSL7)
Act as a point of contact and advice directly for patients with palliative needs.	"Dealing with the patients, dealing with the other health professionals around them and sort of being a centre." (KSL8)

4.5 Summary

The project area faces several challenges due to its geography and other unavoidable infrastructural elements, yet healthcare professionals working in the area exhibit good coping behaviours when faced with these challenges. It was apparent that there is no formal pharmacy input in the community hospitals, with the responsibility of checking and maintaining palliative medicine stock

levels falling on nurses. Improved and increased support in this area, provided by community pharmacy services and further helped by the MRPP, would be beneficial.

Healthcare professionals were aware of the various sources of support and information both within and outwith the project area, meaning that although their community is classed as rural they are not completely cut off from services further afield. Participants highlighted a number of areas where excellent planning is in place, for example through the use of Just in Case boxes. Due to the nature of the community, continuity of care was reported because patients would often receive care from the same healthcare professionals throughout the course of their illness. There is also a familiarity between patients and healthcare professionals due to the close-knit nature of the community.

The gaps highlighted in the service revolved mainly around education and training needs. GPs are perceived as the central profession around which the delivery of palliative care revolves. Participants were of the view that GPs require more training and support in awareness and knowledge of medicines used in palliative care but also in the legal requirements for writing prescriptions for controlled drugs. However, given the low number of palliative patients, there is risk that healthcare professionals can become de-skilled over time. Furthermore, staff in dispensing practices expressed a specific desire for more training about medicines. Providing the whole MDT with additional training and education support may alleviate the current pressure on GPs to be the authoritative source of palliative information, care and advice in the project area.

Patient education was of interest also, mainly focusing around providing patients with more information on how best to organise the supply of their medicines. Additionally, the need for patients to have better understanding of opioids and other medicines may encourage a sense of empowerment, perhaps enabling them to discuss their care more freely with a variety of healthcare professionals. This may further ease the current burden placed on GPs.

5 Results 2- Highland Hospice Phone Log Analysis

Below is the analysis of the palliative medicines-related calls received and selected for audit.

5.1 Results 2

Ultimately, 11 telephone enquiries were logged during the eight weeks sampled. The calls came from Portree (n=5), Kyle (n=3) and Dunvegan (n=2), with one caller not specifying their location. Table 3 presents an overview of the Highland Hospice Calls. Interestingly, the majority of calls (72.7%) were made by GPs and were made during working hours (63.6%).

Table 5-Overview of Highland Hospice Calls

Demographic Information	Numbers
Where did the calls come from?	
Portree	5
Kyle	3
Dunvegan	2
Unknown	1
When were the calls made?	
Out-of-hours	4
During Work Hours	7
Who made the calls?	
GP*	8
Macmillan Nurse	2
Relative	1

^{*}During one of these calls, the patient was also present

The research team examined the log and had a telephone discussion with the project lead and the MRPP in order to clarify any points which were not clear. The following account is a combination of the information obtained both from the audit and from these telephone calls. The 11 calls logged are presented in Table 6 as nine individual patient cases, as one patient was the subject of three separate calls.

Table 6- Palliative Medicine-Related Issues Collated on Summary Document from Highland Hospice Phone Log

Case	Time	Caller	Nature of call	Outcome/Advice Given
1	Out-of-Hours	GP	The patient was suffering from headaches and had been prescribed medication with some improvement.	The GP and Hospice discussed spreading the patient's dose throughout the day. The Hospice also recommended that the GP consider prescribing an alternative if use of the current medication caused issues.
2	During Work Hours	Macmillan Nurse	The patient's current pain medication had been increased but the patient had concerns about side effects.	The possibility of reducing the patient's dose gradually while maintaining an adequate level of pain relief was discussed.
3	During Work Hours	GP	The patient could no longer swallow so the GP was looking for advice on an alternative route of administration.	Advice was given about injectable options and the use of a syringe pump.
4	During Work Hours	GP	A patient had been prescribed a pain relief patch and had become toxic.	The Hospice recommended that the GP cut the patch in half as a smaller dose was not available.
5	Time Unknown	GP	A patient was struggling with pain and was unable to swallow.	The Hospice recommended that the patient be admitted to Hospital.
6	During Work Hours	GP	A patient was experiencing unpleasant symptoms. The current medicines were re-evaluated in order to assess what the cause may be.	An alternative medication and dose was recommended in order to control symptoms.
7	Call 1: During Work Hours	GP	The patient had complex pain issues and was on a number of medications. The GP telephoned the Hospice for advice on what to prescribe to control the pain.	The Hospice gave advice on current medications.
	Call 2: During Work Hours	GP & Patient	The patient had requested a stronger form of pain relief.	The Hospice explained that there were other alternatives still available at this point in time.
	Call 3: Time Unknown	Relative of Patient	The patient's pain had increased.	The patient was prescribed the stronger pain medication. The relative telephoned six days later to say there had been some improvement, and that the dose had been increased. The relative agreed to telephone with another update the following day.
8	Time Unknown	Macmillan Nurse	The information in this entry was sparse, but it was assumed that the Macmillan Nurse was enquiring about the feasibility of a blood transfusion for a patient.	No follow-up given.
9	Out-of-Hours	GP	The patient was having draining procedures on a regular basis. The option of fitting a more permanent drain (PleurX) to make it more convenient for the patient was discussed.	The Hospice advised that although conventional draining was feasible, a more permanent solution should be sought if current draining reached 3 to 4 times per week.

5.2 Summary

The Highland Hospice Phone Line appears to be used mainly by GPs and the Macmillan Nurses, with occasional patient/relative use. The calls are a mixture of seeking advice / support for clinical decisions or confirmation for decisions already made. Based on the information given on these calls, the phone line seems to be used mostly during work hours.

6 Results 3: Care Home Questionnaire Analysis

The questionnaire included a number of sections. Section 1 requested demographic information from care home staff; Section 2 included questions around any queries staff may have about medicines; Section 3 contained questions around the specifics of administering palliative care medicines which may require calculation (i.e. liquids); Section 4 asked participants about accessing palliative care medicines; and Section 5 focused on written materials on palliative care, training and support needs.

Below is the analysis of the Care Home Questionnaire data.

6.1 Results

Four care homes (67%) returned 21 questionnaires. Due to the small number of questionnaires returned, detailed analysis was not possible and hence summary descriptive statistics have been reported.

NB Some questions allowed respondents to select more than one answer.

Section 1: Demographic Data

The sample consisted of two main job roles represented in the sample were registered general nurses (RGNs) and social carers. Just over half of the sample was employed full-time. Table 7 displays the full extent of demographic information collected.

Table 7- Care Homes, Job Roles and Working Hours of Respondents (n=21)

Care Homes	N (% ⁵)
Care Home A	2 (10%)
Care Home B	6 (29%)
Care Home C	10 (48%)
Care Home D	3 (14%)
Job Roles of Respondents	
Registered General Nurse	5 (24%)
Social Carer	5 (24%)
Carer	2 (10%)
Senior Carer	2 (10%)
Night Social Carer	2 (10%)
Senior Social Carer	2 (10%)
Manager	2 (10%)
Deputy Manager	1 (5%)
Working Hours of Respondents	
Full-Time	12 (57%)
Part-Time	6 (29%)
Relief Work	2 (10%)
No Response	1 (5%)

Section 2: Queries

The patient's GP tends to be the first port of call during work hours for queries about doses or administration of palliative care medicines. Interestingly, none of the respondents reported contacting their local Community Pharmacist, the Highland Hospice, the Specialist Palliative Care Pharmacist, their local hospice or any other individuals or organisations during work hours. This indicated dependence on the patient's GP for palliative information and advice during work hours. For out-of-hours period, the patient's GP was the second most popular response (n=8), after NHS 24. Some participants reported contacting the GP on-call or specified the GP on-call at the local hospital. It is important to note that the GP on-call may not be the patient's current GP.

Although the Highland Hospice does provide a palliative care-specific telephone advice service (the Highland Hospice Phone Line), only one respondent said that they would use this service out-of-hours. The local Community Pharmacist, Macmillan nurses and the Specialist Palliative Care Pharmacist were not mentioned (Figure 2).

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⁵ All percentages have been rounded to the nearest whole per cent

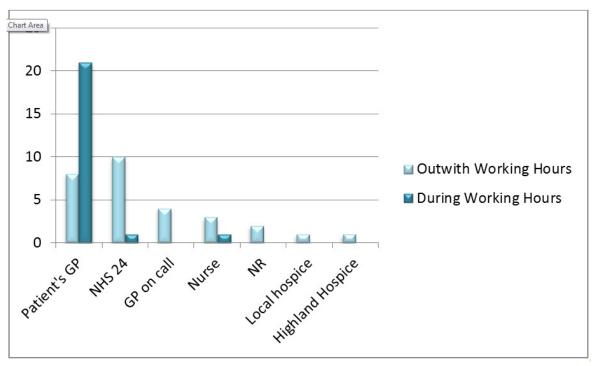


Figure 2: "If you have a query about the **dose** or **administration** of a palliative care medicine who would you contact first?" (Responses, n=29, No Response =2)

The patient's GP was the main source of advice on the availability and access of palliative care drugs for care home staff during work hours. Local community pharmacists were consulted, but only as frequently as the different nurses. NHS 24 was accessed by one respondent. Again, the Specialist Palliative Care Pharmacist and the local hospice were not cited as relevant contacts in this scenario (see Figure 5). These reports suggest that there are few problems in accessing medicines, but they also highlight the reliance on GPs (and nursing staff) for accessing these medicines.

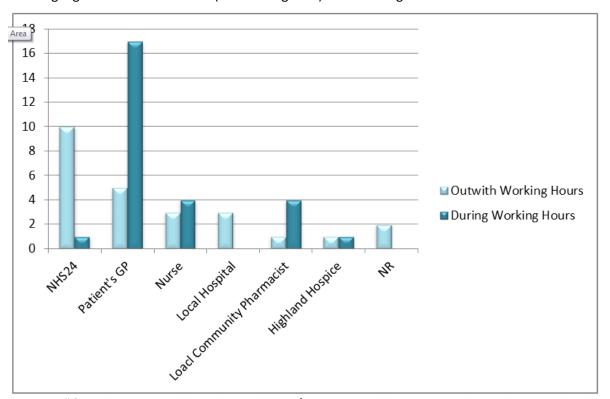


Figure 3: "If you have a query about the **availability / access** to a palliative care medicine during working hours (8am-6:30pm) - Who would you contact first?" (Responses, n= 27, No Response=2)

For out of hours, the most popular choice was NHS 24 (n=10) followed by the patient's own GP. The Specialist Palliative Care Pharmacist and the local hospice were not cited reflecting the lack of formal community pharmacy involvement in other care settings across the project area, as well as a reliance on the GP for information and support.

Section 3: Administering Medicines

Participants were asked about administering medicines that could not be given by spoon or measuring cup. The most common method reported was using an oral syringe (n=18). The participants were also asked if intravenous syringes were used to measure or administer liquid medicines. Of the 17 who responded, 13 reported that this was not an acceptable method, yet four participants responded positively, providing additional comments justifying the use of an intravenous syringe only in very small doses or if the patient has trouble taking medicines orally.

Section 4: Accessing Medicines

Participants were asked various questions about the challenges, successes and circumstances in which they accessed palliative medicines.

A small number of participants provided examples of good practice they experienced when accessing palliative medicines for their residents (n=6). These included: the effective organisation and use of Just In Case boxes; patients' regular assessment; the involvement of care home staff and district nurses about the prescriptions written by GPs for palliative patients; and care home staff being able to request a prescription for palliative medicines from a particular GP and being able to access them right away.

All participants stated that urgent prescriptions for residents were taken to the community pharmacy that the care home regularly used. One participant commented that in rare cases the GP will source medicines from the local hospital. When a prescription was urgent, participants said that face-to-face conversations with community pharmacy staff, nurses or GP surgery staff were the best way to express the urgent nature of the prescription (n=14). When care home staff could not communicate this in person, using the telephone was also used (n=5).

Two participants reported problems in accessing palliative care medicines for residents in the last year. Of these, one was concerned with out-of-hours access to medicines and the other reported general issues with the supply of palliative medicines and concern for their future availability. Therefore, it appeared that in general care home staff did not experience issues in accessing palliative care medicines.

Section 5: Written Materials, Training and Support

This section of the questionnaire was designed to explore the use of named written materials specific to palliative care, as well as to identify current training and support needs of staff. Responses are detailed in Table 3.

Table 8- Responses to Questions on Written Materials, Training and Support (n and %)

Question	Yes	No	NR	NA
Do you regularly consult any written / published information	9	11	1	-
resources on palliative care medicines?	(43%)	(52%)	(5%)	
Do you have easy access to the NATIONAL PATIENT SAFETY	-	13	7	1*
AGENCY- ALERT 19; Promoting safer measurement and		(62%)	(33%)	(5%)
administration of liquid medicines via oral and other enteral routes?				
Do you have access to the NATIONAL PATIENT SAFETY AGENCY -	_	14	6	1*
Rapid Response Report; Reducing Dosing errors with Opioid Medicines?		(67%)	(29%)	(5%)
Do you feel that you are sufficiently trained in calculating doses	5	4	11	1
of any injectable medicines?	(24%)	(19%)	(52%)	(5%)
Is there any further information, education or support you would	16	3	2	-
like to receive in relation to palliative care medication?	(76%)	(14%)	(10%)	

^{*}NA= Not Aware of publication

Less than half of respondents consulted publications on palliative care medicines. No participants reported accessing either of the National Patient Safety Agency documents which might suggest a lack of perceived usefulness of the documents. The majority of participants reported not having easy access to either of the documents. This is concerning as these documents contain important information which would be of use to care home staff when administering medicines and providing more general care for patients with palliative needs.

Most respondents did not answer the question on calculating injectable doses. This suggests a lack of knowledge and an area the MRPP could develop with staff. When asked about further information, education or support needs, most indicated that this was warranted. One participant indicated training around the documents mentioned above. Of those who responded "no", the reason seemed to be that these participants were already undergoing training, with two individuals participating in a palliative care course provided by an external organisation.

6.2 Summary

The Care Home Questionnaire data implies that the patient's GPs and NHS 24 are the most popular choices for staff when needing information about medicines, both during and out of working hours.

The Community Pharmacist is not considered as a source of advice. In addition, the Specialist Palliative Care Pharmacist and Macmillan nurses were also not cited as sources of support.

Technology appears to be is poorly utilised perhaps due to unreliable connections in the area. Staff appear to prefer face-to-face contact with pharmacy staff when explaining the urgency of palliative prescriptions. Informal discussions with the MRPP reveal that most situations are dealt with face-to-face. A desire for better communication is evident. A potential role for the MRPP may be to help reinforce relationships between personnel in the care homes and other staff across the project area.

Participants did not consult the written palliative care resources mentioned. This suggests that these documents were not perceived as relevant for their job role. This coupled with the expressed need for more training suggests care home staff do not feel they are aware of all of the resources or guidelines needed in palliative care. Another factor is that due to the perceived small numbers of palliative patients, there may be times when care homes will possibly not have any residents with palliative needs, and therefore staff can become de-skilled. It is reassuring that some care home staff are currently undergoing palliative care training in order to address these needs.

7 Conclusions

This report is the first output from the evaluation program and focuses on the investigation to characterise the provision of community pharmacy services within the project area, identifying not only service gaps but identifying key issues which can be used to inform a quality improvement program.

In particular, this report can be used to support an action plan to enhance the current service provision, by supporting the wider healthcare team and provide a focus for the evolving role of the MRPP. Since a wide range of healthcare professionals were consulted the findings are a relatively comprehensive mapping of current service provision.

7.1 Strengths of the Evaluation

A wide range of healthcare professionals from across the project area were sampled. Furthermore, differing settings were also explored, such as settings in larger towns and in smaller rural villages. Both professional and patient experiences were intended to be captured via the Highland Hospice Phone Line Audit. Data collection was arranged in a time-efficient manner, utilising both face-to-face and distance methods in order to capture as many experiences as possible. Data collection time was therefore used to its maximum potential. The data collection periods for the Highland Hospice Phone Line Audit and the community pharmacy and nursing logs were initially scheduled to coincide completely to capture the issues experienced in one particular point in time. Due to the low volume of issues captured, these times partially coincided. Complete support was given by all Stakeholders involved, resulting in ease of data collection.

7.2 Limitations of the Evaluation

Through discussions with the steering group, it was realised that some aspects of the service were not explored during this baseline period of work. The perspective of patients and carers was not directly sampled. The original design anticipated that patients' voices would be heard directly through the Highland Hospice Phone Line Audit and indirectly from the frontline healthcare professionals surveyed and interviewed. Additionally, it was identified that nursing staff may not feature as heavily in the baseline report in relation to their central role in service provision. Nursing staff were asked to complete logs of issues around palliative medicine use, and members of the research team contacted them to discuss their reported issues. These logs did not identify a great number of issues, and this may be reflective of minimal issues over the short data collection period and/or the additional burden of documenting this activity for the purpose of the study. It may be that staff asked to complete the logs had difficulty in understanding what the University team meant by 'palliative medicines-related issues', although examples were give. It may be appropriate to undertake further in-depth data collection moving forward.

Below we have outlined existing good practice, current challenges and potential future directions identified from the three studies:

7.3 Current Strengths & Good Practice

- The community within the project area is relatively stable, with little fluctuations in demographics out-with the tourist season. This means that demand for palliative services including medicines can be more predictable than other areas with a higher population turnover⁶
- Healthcare professionals accept the environmental challenges posed by the project area and are able to effectively deal with these
- There is a strong sense of community, whereby healthcare professionals go above and beyond to ensure patients receive the appropriate care
- The current palliative care service is responsive to individual patient needs, both within and out-with working hours
- Access to core medicines for palliative care is relatively easy and generally reliable
- The Highland Hospice Phone Line is available to patients, carers and other healthcare professionals as a source of advice and support 24/7, but is primarily used by GPs.

7.4 Current Challenges

While issues such as weather, geography and population density cannot be controlled, their potential adverse effects can be addressed by resource planning and education / training. On the whole, little if any problematic issues were identified but greater use of formalised contingency planning would be helpful. Additionally, increasing the education provision throughout the MDT

⁶ This characteristic was established through informal discussions with the Steering group.

would improve the knowledge base, acting against a lack of experience due to lack of patients requiring palliative care. While professionals going 'above and beyond' is admirable- and inevitable to an extent- effective forward planning must aim to reduce this to an acceptable minimum.

A number of challenges were identified throughout the course of the evaluation period and can be categorised as follows:

Education & Training

- A lack of recognition amongst practitioners that palliative care applies to all progressive incurable diseases which no longer respond to active treatment. Consequently the term 'palliative' potentially applies to a larger population than currently defined
- Care home staff generally lack awareness of the population of palliative patients in their care homes, and suffer a lack of confidence in their abilities to recognise, support and address patients' needs
- Dispensing staff within dispensing practices are not compelled to undertake any formal medicines training. Training is made available through NHS Highland Health Board funding but there appears to be variable access and uptake. The benefits of undertaking specific training may need to be more acutely demonstrated to dispensing staff
- Knowledge of more specialist palliative medicines such as specials, particular formulations and controlled drugs is rather limited, largely because of the perceived low number of palliative care patients treated at any one time.

Integration of the Pharmacist into the MDT

- There is a lack of understanding amongst the wider MDT of the knowledge, skills and expertise of the Community Pharmacist and the Area Specialist Palliative Care Pharmacist. This often results in an over-reliance on the GP when it comes to advice about palliative care medicines
- The pharmacist should be considered a key resource not only for advice concerning palliative medicine but should also be integral in care planning such as Gold Standard Review meetings
- The community hospitals currently lack access to pharmaceutical input including support with medicines management plus clinical pharmacy advice
- Patients generally lack understanding around the safe and appropriate use of opioids and potentially other medicines. The Community Pharmacist is ideally placed to address this.

Forward Planning

- Many healthcare professionals go above and beyond to deliver care. Although this
 reflects the healthcare professionals' dedication to providing excellent care, it shows
 that there may not be sufficient plans or procedures in place to deal with particular
 situations
- There is large expectation on the GP as source of advice, support and as a care provider.
 This often results in the inappropriate use of the GPs' time, both within and outwith normal working hours

• There need to be suitable mechanisms in place to provide awareness amongst the MDT of current pharmaceutical practice appropriate to their settings.

7.5 Quality Improvement Plan

Based on the challenges identified, and through discussions with the Steering Group, the next section details current service innovations as well as potential areas for further work to address these challenges (illustrated in Figure 4).

patients/carers with palliative needs is in operation. Service users can discuss with the MRPP all Gold Standards Framework The Audit will determine the any issues or questions relating to medicines. The clinic was advertised in most media began meetings in order to facilitate prevalence and nature of operation in September 2013. Data is being collected on: interventions made as a result of the future involvement of the interventions made by community clinic attendance; service user satisfaction; and suggestions around how the service can be community pharmacist in wider pharmacy and dispensing practice improved. MDT activities. Furthermore. staff when presented with a other healthcare professionals prescription for CDs for palliative INTEGRATION OF THE not previously engaged in these care. **EDUCATION & TRAINING** meetings are being encouraged PHARMACIST INTO THE MDT to attend by the MRPP. **Controlled Drugs** The MRPP will devise and Audit disseminate training materials The Steering Group articulated MRPP attendance at for different embers of the that some patients in the **GSF** meetings MDT on various 'pharmacy / project area struggle with medicines-type topics with literacy. The project area also the aim of improving the welcomes visitors from other knowledge of those caring for countries during the tourist Healthcare Professional palliative care patients. season. Ensuring patients Community **Training Support** To date, the MRPP has liaised understand the written Pharmacy with GPs and Nursing staff in information on their medicines Drop-In Clinic developing educational is of importance. The existing materials displaying literature on literacy or Patient Literacy & conversion doses for opioids, language barriers in Medicines anticipatory prescribing guides healthcare will be explored, as Information and guidance on correct CD well as other approaches prescription writing. taken to address this Patient Support on the challenge. The potential use of Safe Use of Opioids alternative information aides will be explored. The possibility of developing Prescribing Clinics where patients could discuss their Community Pharmacy-Based prescriptions and have them reassessed if **Prescribing Clinics** necessary by an independent prescriber A need for patient education within the community pharmacy has been concerning opioid use was identified. explored. This service aims to increase the This involves challenging e the profile of the community pharmacist; misconceptions surrounding opioid use alerting patients to the support that the within the patient and carer pharmacist can offer. population. FORWARD PLANNING

To raise the profile of the MRPP, a fortnightly drop-in clinic within Portree Pharmacy for

Figure 4: Activities Currently in Place and Areas for Further Work

The MRPP is currently attending

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9 Appendices

Appendix 1- Dispensing Practice Staff Interview Schedule

PROMPT: Additional training

1.	How did you get into this job?
	PROMPT: Specific training
2.	Are there any medicine-type issues that you routinely face when presented with a palliative care prescription?
	PROMPT: Patient concerns about community awareness of illness (e.g. attending pharmacy with prescription etc.)
3.	At present how do you resolve the issues?
4.	Do the patients ever discuss any palliative medicine-type issues with you?
	PROMPT: Issues with prescription at pharmacy PROMPT: Out-of-hours
	PROMPT: Security issues around controlled drugs
5.	Do you have any suggestions for improving the current service

Appendix 2- GP Interview Schedule

- 1. Are there any medicine-type issues that you routinely face for these patients?
- 2. Do the patients ever discuss their palliative medicine-type issues with you?

PROMPT: Issues with prescription at pharmacy

PROMPT: Out-of-hours

PROMPT: Security issues around controlled drugs

PROMPT: Patient concerns about community awareness of illness (e.g. attending

pharmacy with prescription etc.)

- 3. The issues we have spoken about, at present how do you resolve these issues?
- 4. Do you have any recommendations for addressing these issues?

Appendix 3- Key Service Lead (KSL) Interview Schedule

1.	Are there any medicine-type issues or problems that routinely occur in your area?
2.	The issues we have spoken about, at present how do you resolve these issues?
3.	What are the strengths and weaknesses of the current service? PROMPT: Resources PROMTP: Geography
4.	What would be your recommendations for improving the service? PROMPT: Local examples of best practice PROMPT: Improve patient care

Appendix 4- Interview Information Sheet, Consent Form and Demographics Sheet







Macmillan Rural Palliative Care Pharmacist (RPCP) Practitioner Project Interview Information Sheet

Please read the following information carefully and ask if there is anything that is not clear or if you would like more information.

Project Background

"Living and Dying Well—Building on Progress" highlights the type of services patients with palliative care needs require regardless of their diagnosis, location or care setting. Workers in this area are likely to come across a range of issues in the delivery of care to palliative patients. However, it is an area that lacks much investigation.

Macmillan Cancer Support and NHS Highland have recently employed a Rural Palliative Care Pharmacist Practitioner within the Skye & Lochalsh area to work between community and secondary care services to help improve pharmacy service delivery for palliative care patients.

What does taking part involve?

As part of this project, researchers from the University of Strathclyde in Glasgow have come up to interview people like you who work with patients who are receiving palliative care. The interview is expected to last between 30 minutes and 1 hour and we are interested in the palliative medicine-type issues/problems that you come across in your work. So that the researcher can give you their full attention, your interview will be audio-recorded and later transcribed. When it is transcribed, all information will be anonymised so you will not be identified.

You will also be asked to give some background information about yourself – i.e. your age, gender, job title etc.

Do I have to take part?

Taking part in this study is entirely voluntary. The study is described in this information sheet, which you can keep for your records. You will be asked to sign a consent form today to show you have understood this explanation and have agreed to take part. You are free to withdraw from the study without giving a reason.

What happens to the interviews?

Information from this interview will be used to inform services that can be offered to meet the needs of your community. The results will be written in a report and submitted to Macmillan Cancer Support, and may also be published in an academic journal.

Your information will be stored in either a locked filing cabinet or on a password protected computer. Your interview data will be destroyed at the end of the research period.

Who is organising and funding this service evaluation?

This study has been funded by Macmillan Cancer Support.







Macmillan Rural Palliative Care Pharmacist (RPCP) Practitioner Project Consent Form

Plea	se initial each box					
1.	I confirm that I have read and understand the participant information					
	Sheet. I have also had the opportunity	to ask questions.				
2.	I understand that my participation is vo	oluntary and that	am free to			
	withdraw from the study without giving	g a reason.				
3.	I understand that the interview will be	audio-recorded a	nd transcribed.			
4.	I understand that the interview will be	anonymised and				
	I will not be identified from the transcri	ipt.				
5.	I understand that the results of this study may be published and any					
	part of this interview used will be anonymised.					
6.	I agree to take part in the interview.					
Nar	ne of Participant	Date	Signature	_		
real	ne or randapane	Date	Signature			
_				_		
Res	earcher	Date	Signature			







Macmillan Rural Palliative Care Pharmacist (RPCP) Practitioner Project Demographics Sheet

About You

Gender:	-
Years since qualified:	
Years in current job role:	

Appendix 5- Community Pharmacy Log







Macmillan Pharmacist Facilitator Project- Community Pharmacy Log

Details of pharmacy:		

Date	Time	Details of issues (Please provide as much detail as possible on anything you feel is relevant, including if issue is presented by patient	Action taken/ Issue Resolved?
		or a health professional)	
		EXAMPLE RESPONSE	
1/4/13	10·30am	65 year old female patient presents at pharmacy very sleepy. Just commenced MST 10mg tabs twice daily with breakthrough dose of oramorph 5mg which she hasn't needed. Previously been on co-codamol 30/500mg two tablets four times daily.	Discovered she is still taking co-codamol as well as MST· Advise to stop co-codamol and use paracetamol· Discouraged driving in meantime· Obtained consent to let GP know advice and gave paracetamol on minor ailments scheme·

Appendix 6- Community Nursing Log







Macmillan Pharmacist Facilitator Project- Community Nursing Log

Details of post:		

Date	Time	Details of issues (Please provide as much detail as possible on anything you feel is relevant, including if issue is presented by patient or a health professional)	Action Taken/ Issue Resolved?					
	EXAMPLE RESPONSE							
2/4/13	2pm	Visited a 66 year old man at home. During discussions he identified that his mouth was a bit sore, like ulcers and he didn't want to bother the doctor. Could you have a look.	No thrush present, small ulcers on tongue: Asked about dentures, cleaning, diet: Suggest choline salicylate gel which would be free under minor ailments scheme- consult community pharmacist					

Appendix 7- Highland Hospice Phone Line Audit Summary Document

		<u>-</u>	
Macmillan Rural Palliative Care Pharmacist			
(RPCP) Practitioner Project			
Highland Hospice Phone Call Summary			
Document			
QUESTIONS			
Log number			
Date log generated			
When was call made?	During the	During the	During the
	Out of Hours	Out of Hours	Out of Hours
What was the role of the person enquiring?	Macmillan	Macmillan	Macmillan
	□ GP	□GP	□GP
	Hospital	Hospital	Hospital
	Community	Community	Community
	Patient	Patient	Patient
	Relative	Relative	Relative
	NHS 24	NHS 24	NHS 24
	Other please	Other please	Other please
Location of patient	Community	Community	Community
-	Hospital	Hospital	Hospital
Diagnosis (briefly)			
Summary of presenting problem			
Any further action taken?	Domicillary	Domicillary	Domicillary
,	□ OPD	□ OPD	□ OPD
	DH review	DH review	DH review
	Admitted	Admitted	Admitted
	Admission	Admission	Admission
	Query	Query	Query
	Other please	Other please	Other please
	1 produc	1 - and product	1
15 0 5 0 1 0 1 0 1 0 1 0			
If there was further contact, please give details			
Is the log complete?	Yes	Yes	Yes
	No	No	No
Any comments from Facilitator?			

Appendix 8- Care Home Information Sheet and Questionnaire







Macmillan Rural Palliative Care Pharmacist (RPCP) Practitioner Project Care Home Questionnaire

Project Background

"Living and Dying Well– Building on Progress" highlights the type of services patients with palliative care needs require regardless of their diagnosis, location or care setting. Care Home staff are likely to experience a range of particular issues in the delivery of care to palliative patients. However, this area has not been explored previously.

Macmillan Cancer Support and NHS Highland have recently employed a Rural Palliative Care Pharmacist Practitioner within the Skye & Lochalsh area to work between community and secondary care services to help improve pharmacy service delivery for palliative care patients.

What do you need to do?

We are asking you to complete a questionnaire about your knowledge and experience of medication issues for palliative care patients. We would also like to know about any medicine-type issues/problems that you may come across on a daily basis. This will enable the Pharmacist Practitioner to see what the main challenges are in your area.

We would like you to complete the Care Home Questionnaire by 3rd May. As well as being asked about your experiences of palliative care and the issues/problems you face, you will also be asked to provide some basic information about yourself in the questionnaire. This information will be kept anonymous and will not be used to identify you. The Pharmacist Practitioner will arrange to pick up the completed questionnaires form your care home by 10th May.

Thank you for your participation. If you require assistance, please contact your

Macmillan RPCP Gill Harrington at 01478 612100



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Macmillan Pharmacist Facilitator Project - Care Home Questionnaire

Section 1: Basic Information					
I. Job Title:					
2. Working hours (Full Time / Part Time):					
3. Care Home Name / Location:					
Section 2: Queries					
4. If you have a query about the dose or administration of a palliative care medicine during working hours (8am-6:30pm) - Who would you contact first?					
□ District / Community Nurse (including Macmillan Nurse)					
□ Patients GP					
□ Local Community Pharmacist					
☐ Specialist Palliative Care Pharmacist					
□ Local Hospice					
☐ Highland Hospice					
□ NHS 24					
Other (please specify)					
 If you have a query about the dose or administration of a palliative care medicine out-of-hours (after 6:30pm or at weekends) - Who would you contact first? 					
□ District / Community Nurse (including Macmillan Nurse)					
□ Patients GP					
□ Local Community Pharmacist					
□ Specialist Palliative Care Pharmacist					
☐ Local Hospice					
☐ Highland Hospice					
□ NHS 24					
Other (please specify)					
 If you have a query about the availability / access to a palliative care medicine during working hours (8am- 6:30pm) - Who would you contact first? 					
□ District / Community Nurse (incl Macmillan Nurse)					
□ Patients GP					
□ Local Community Pharmacist					
☐ Specialist Palliative Care Pharmacist					
□ Local Hospice					
☐ Highland Hospice					
□ NHS 24					
Other (please specify)					

7. If you have a query about the availability / according weekends) - Who would you contact first? District / Community Nurse (incl Macmillan) Patients GP Local Community Pharmacist Specialist Palliative Care Pharmacist Local Hospice Highland Hospice NHS 24 Other (please specify)	Nurse)	at
Section 3: Administering Medicines		
spoon or medicine cup? Please provide details	es to patients, if the dose cannot be accurately measured by a 5m	
Please tick the relevant column as appropriat	Yes Yes	No
details of what you do.	and administer liquid medicines? If yes, please provide	
Section 4: Accessing Medicines		
 In the past 12 months, have you experienced any your residents? If yes, please provide details 	y problems with accessing palliative care medicines for	

	Yes	No
12. If a modication is upgonthy required for a resident,		
If a medication is urgently required for a resident: a. Is the prescription taken to your usual community pharmacy? If no, please provide details		
b. How is the urgency of the prescription communicated to the community pharmacy? Please provide details		
decails		
Section 5: Written Materials, Training and Support		
c. Do you regularly consult any written / published information resources on palliative care medicines? If		
yes, please provide details.		
d. Do you feel that you are sufficiently trained in calculating doses of any injectable medicines? If appropriate, please provide details. (If not applicable to you, please leave blank)		
e. Do you have easy access to the NATIONAL PATIENT SAFETY AGENCY- ALERT 19; Promoting		
safer measurement and administration of liquid medicines via oral and other enteral routes? If appropriate, please provide details		
f.		
g. Do you have access to the NATIONAL PATIENT SAFETY AGENCY -Rapid Response Report;		
Reducing Dosing errors with Opioid Medicines? If appropriate, please provide details		
 Is there any further information, education or support you would like to receive in relation to palliative care medication? Please provide details 		
care medicadom ricase provide detains		
Thank you for completing the questionnaire. Please return it in a sealed envelope to the Macmillan Rural Palliative C	are Phar	macist.