# Supporting patients and their caregivers after-hours at the end of life: the role of telephone support

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## Supporting patients and their caregivers in rural areas at the end of life: the role of after hour's telephone support

#### **Abstract**

Background: Twenty four hour access is widely embraced as a gold standard for palliative care service delivery, yet minimal data exists to justify the cost of this initiative to health care planners and policy makers. Further, there is scant information concerning optimal and efficient methods for delivering after-hours palliative care advice and support, particularly in regional and rural settings. Aim: This article reports on an evaluation of a local after-hour telephone support service in regional Australia. **Method:** A collaborative, iterative process was used to develop a centralised after-hours telephone support service, provided by generalist nurses at a Multipurpose Service in a rural community. A mix-methods evaluation was undertaken after 20 months of operation. Findings: During the period 31 March 2005 until 15 November 2006, 357 patients were registered as part of the Mid North Coast Rural Palliative Care Program. Ten percent of patients or their care givers accessed the After-hours Telephone Support Service; representing 55 occasions of service. The most common reason for contacting the service was for reassurance surrounding medication usage, symptom management, and anxiety. Conclusions: This after-hours telephone support model demonstrates proof of concept that acceptable palliative care advice can be provided by generalist nurses in a cost efficient manner. Common patterns emerged in utilisation that can assist in service planning and staffing formulae. There is a also a need to investigate mechanisms of interfacing with larger scale call centres, to explore the differences within generic and disease specific approaches and assess the appropriateness of after hours telephone support with different cultural groups...

**Key words:** After-hours telephone support services, palliative care, health service evaluation, Australia

#### Introduction

Minimising patient and caregiver distress is a central principle of all palliative care delivery. Being the care giver of someone who has elected to die at home can be a confronting and daunting experience<sup>(1, 2)</sup>. Feelings of isolation and onerous responsibility can be compounded when health care providers are less accessible, particularly, after-hours. No matter how much health care providers endeavour to anticipate their patients' and families' needs, there will often be crises, either real or perceived. Many of these events will occur outside of normal working hours, challenging traditional models of health care delivery<sup>(3)</sup>.

The majority of larger specialist palliative care services are able to deliver 24 hour coverage which ensures that patients and their care givers have ongoing access to information, assistance with decision making, communication and support. Unfortunately, access to this level of service is variable and particularly limited in rural and remote communities<sup>(4)</sup>. A combination of minimal data to convince administrators of the value of 24 hour coverage, limited access to scarce health care resources and workforce issues present numerous challenges for these smaller rural palliative care services<sup>(5)</sup>.

## Meeting the palliative care needs of rural and remote Australia

Australia supports a system of universal health care coverage and there is a mandate to strive for equitable service delivery<sup>(6)</sup>. Despite this stance, people in rural and regional Australia do not have the same level of service provision as their urban counterparts<sup>(7)</sup>. In Australia, the National Palliative Care Strategy provides a framework for palliative care service development, striving to support the delivery of equitable, effective, and high quality palliative care across a range of settings<sup>(8)</sup>. This policy platform recommends that patients and care givers have 24 hour access to palliative care services, regardless of their location<sup>(8)</sup>. Although this standard is also reflected in many local policy documents<sup>(9, 10)</sup>, less than half of all rural services in one state have been able to establish and maintain a 24 hour palliative care service<sup>(9, 11)</sup>

The National Rural Palliative Care Program<sup>(11)</sup> was implemented as part of the National Palliative Care Strategy<sup>(8)</sup> to explore strategies to address this disparity in access and outcomes. This initiative aimed to strengthen community partnerships in eight distinct rural and remote demonstration sites in order to enhance the delivery of palliative care locally. A range of strategies have been undertaken to increase the profile of palliative care in these eight rural Australian communities through: enhancing direct care delivery; strengthening the links between specialist palliative care and generalist health care providers; and developing models of care appropriate to the needs of people living in these diverse rural communities<sup>(11)</sup>.

The New South Wales (NSW) Mid North Coast was one of the eight demonstration sites in the National Rural Palliative Care Program <sup>(11)</sup>. This regional community has a population of 67,000 and a specialist community based palliative care service<sup>(5)</sup>. Prior to this initiative, the palliative care team based at the local community hospital had inadequate workforce resources to provide any level of after hour's palliative care delivery<sup>(5)</sup>. This challenge is not unique to this regional area, as many rural Australian palliative care services struggle to achieve 24 hour coverage. This is primarily due to operating in an environment of scarce financial and human resources and needing to service large but sparsely populated geographical areas<sup>(12)</sup>. The allocating of additional funding, as part of the National Rural Palliative Care Program<sup>(11)</sup>, provided the Mid North Coast community with a unique opportunity to explore creative options to increase after hour's access for palliative care patients and their care givers.

## Literature supporting after-hours palliative care services

Even though providing after-hours care is seen as part of a best practice model<sup>(10)</sup> in palliative care there are little data documenting process and outcomes issues. In Australia, those palliative care services with sufficient resources to provide 24 hour access tend to be part of larger metropolitan academic centres with greater capacity to extend the reach of palliative care<sup>(12, 13)</sup>. The literature suggests that the level of after hour service delivery is quite variable and can range from telephone support<sup>(14, 15)</sup>, home visits in response to a call<sup>(14, 16)</sup>, and/or routine after-hours home visits<sup>(16, 17)</sup>.

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In North America, telephone advice has been accepted as an important part of health care services, with telephone protocols and guidelines developed and evaluated. Phone consultation is also becoming part of the training of hospital staff with many telephone services being staffed largely by registered nurses<sup>(18, 19)</sup>. Telephone triage by registered nurses includes: symptom assessment; home treatment advice; referral; information brokering, and crisis intervention. Nurses with specialised training and experience in decision-making use approved evidence based protocols or guidelines and the nursing process (assess, diagnose, treat and evaluate) to provide information and support. This involves nurses making sound decisions under conditions of uncertainty and often urgency<sup>(20)</sup>.

Both internationally and nationally, health call centres are increasingly recognised as a strategy to provide the community with healthcare information, advice and support without time or geographic restrictions<sup>(21)</sup>. Health call centres are seen as an important strategy to facilitate equitable access to health care advice<sup>(21)</sup>, promoting self-management<sup>(22)</sup>, as well as relieving pressure on acute care services<sup>(23)</sup>. In the United Kingdom as part of a broader information access process, the *NHS Direct* provides the community with access to telephone support on a wide range of health issues<sup>(24)</sup>. The efficacy of telephone interventions on a disease specific basis have been reported in chronic heart failure <sup>(25, 26)</sup>. While Worth and colleagues question whether generic services can meet the complex needs associated with palliative and end-of-life care<sup>(27)</sup>. In addition, Riegel's study<sup>(26)</sup> demonstrates the difficulties of transferring models between cultural groups<sup>(28)</sup>, suggesting that health call centres may not be effective and acceptable for all cultural groups.

## Potential models of after hour's intervention in Australia

The literature suggests that there are two key approaches to after hour palliative care service delivery: (1) the use of access to a health professional via remote telephone support and (2) the use of inpatient facilities as a source of advice and support.. The first model uses a designated on call community based health care worker, usually assigned to a palliative care or community health team. For example, as part of a demonstration project, the Griffith Area Palliative Care Service in regional NSW, provided a 24 hour call service on a weekly rotational basis between project partners in the public and private sectors<sup>(17)</sup>. The 1-800 number was diverted to a mobile

number or the number of the person rostered to be on-call. This person had the capacity to conduct a home visit if required<sup>(17)</sup>. A slightly different model has been adopted in Western Australia (WA), where Silver Chain Hospice Care Service is funded by the State Health Departments to provide a 1-800 number for health care providers throughout the state. This number is diverted to the Palliative Care Clinical Nurse Consultant on duty<sup>(16)</sup>. In addition, doctors throughout the State have access to a separate 1-800 number that provides 24 hour access to an on-call palliative care physician<sup>(16)</sup>. This same community based specialist palliative care service provides palliative care patients and their care givers with 24 hour access to care, with nurses rostered on to respond to provide emergency calls and routine visits in the Perth Metropolitan Area<sup>(16)</sup>.

The second model of after hour's palliative care support utilises an in-patient palliative care unit or ward as the contact point to receive phone calls. These providers either manage the call themselves or refer the caller onto another service<sup>(15, 29)</sup>. In observational studies, telephone support has been found to be a useful resource for families caring for terminally ill family members as it increases their access to support and is thought to reduce unnecessary admissions to hospital<sup>(4, 30)</sup>. An Australian study evaluated an in-patient based after-hour telephone support service where the majority of calls received during the period were managed by three staff members. There was some predictability of call outcome dependent on the identity of the nurse. This raises the issue of the level of training provided to in-patient staff to triage and manage cases over the phone <sup>(15)</sup>.

Developing a local after-hours service delivery model in a regional setting

The Mid North Coast Rural Palliative Care Project Team examined a range of potential models to determine feasibility (Table 1). After considering a range of approaches it was decided to establish the After-hours Telephone Support Service (AHTSS) at a local Multipurpose Service (MPS) for a twenty month trial period from the 31st March 2005 until December 31st 2006. A Multipurpose Service is a initiative to increase small rural and remote communities access to a flexible mix and range of primary health care, acute care, aged care and palliation services<sup>(31)</sup>.

The Western Victorian Division of General Practice Nurse Telephone Triage After-hours Service Delivery Model underpinned the establishment of the local service<sup>(32)</sup>. Although this model was essentially established to reduce general practitioner call out, many elements were applicable to the rural palliative care project, particularly the quality insurance components, flow charts, documentation templates and guiding principles<sup>(32)</sup>.

In addition to contacting a health professional after-hours, there also needs to be a mechanism for accessing appropriate and relevant information to support clinical decision making. This information can range from paper based systems, patient held clinical records, and faxed handover sheets to complex state of the art point of care clinical information systems. As part of the National Rural Palliative Care demonstration project, the Palliative Care Clinical Information System (PalCIS)<sup>(33)</sup> was used. Briefly this system is a secure patient focused electronic health record that has been designed for use by teams of health care providers<sup>(33)</sup>.

Following a process of key stakeholder consultations and the consideration of potential options, a Memorandum of Understanding was developed between the Mid North Coast Division of General Practice and local Multipurpose Service. A comprehensive procedure manual was developed based upon evidence based guidelines<sup>(34)</sup>. The After-hours Telephone Support Service was made available to all palliative care patients registered with the local specialist Palliative Care Team based at a the regional health campus. In addition, Department of Veterans Affairs patients whose palliative care was being managed by a local private home nursing service and who consented to be involved in the Mid North Coast Rural Palliative Care Project were also able to access the After-hours Telephone Support Service. This after hour's telephone service operated for 365 days per year from 1700 until 0830.

Registered Nurses at the Multipurpose Service were provided with structured after-hours telephone support service education, a procedure manual and relevant document templates. At all times the staff at the Multipurpose Service had access to accurate and real time patient information via PalCIS<sup>(33)</sup> which was available on the health Intranet site. Figure 1 provides an overview of the decision making process followed by the After-hours Telephone Support Service.

(Insert Figure 1)

#### Aim

This twenty month trial of the After-hours Telephone Support Service based at a Multipurpose Service in regional Australia sought to:

- Ensure that palliative care patients and their care givers have access to after hour's telephone support that was readily accessible, confidential and provided a reliable source of nursing advice based on best evidence based palliative care standards and practice.
- 2. Provide an opportunity to evaluate the effectiveness of a generic service providing after-hours telephone support service to a defined rural palliative care patient population in Australia.
- 3. Explore the application of a computer based Palliative Care Clinical Information System (PalCIS) to assist with the timely transfer of appropriate patient information between geographically distant health care providers.

#### Method

A final evaluation of the After-hours Telephone Support Service provided by the Multipurpose Service was undertaken in November 2006 using a mixed method design<sup>(35)</sup>. This included: (1) key informant consultation; (2) interviews of specialist palliative care providers; general practitioners; family members and generalist nurses involved in service provision and access; (3) a review of case notes; (4) minutes and documentation of the rural palliative care project meetings; and (5) review of quality activities.

Approval for the study was obtained from a university and area health service human research ethics committees. All participants were provided with verbal and printed information relating to consent, confidentiality and withdrawal from the study before consent was obtained.

#### **Results**

During the period 31st March 2005 until 15th November 2006, 350 patients were registered with the Mid North Coast Rural Palliative Care Project. During this period 35 (10%) of patients and/or their families accessed the After-hours Telephone Support Service representing 55 occasions of service. In 20% (n=7) of cases, the patient accessed the service, while in 80% (n=28), the service was accessed by a care giver. The average duration of the call was  $12.35 \pm 6.33$  minutes. Nurses operating the call centre, estimated the total time for an occasion of service including documentation and follow-up to be 30 minutes. The majority of calls (78%) occurred in the evening between 6pm and midnight. Based on the number of calls and nursing and administrative costs, this after hour's telephone support service cost less than \$3,000.00 per year to operate within an existing service model  $^{(36)}$ .

In the vast majority of cases, issues identified by the patient and their family could be resolved over the phone. Only 2 patients (6%) were referred to the Emergency Department in the absence of an on-call outreach palliative care service. The major reason for accessing the service was for reassurance surrounding medication usage (Figure 2). No adverse events or complaints were reported as a consequence of access to the telephone advice.

## (Insert Figure 2)

A summary of the findings from the key informant interviews, palliative care professionals, general practitioners and care givers are detailed below.

## Palliative care professionals

Palliative care professionals felt than an after hour's service, as being "worthwhile and useful". Not only did these clinicians see this as being "extremely valuable for client's to have", but it also assisted in maximising the specialist teams' capacity to better meet their patients and families needs, minimising their sense of frustration. One staff member commented that the introduction of the after hour's support service allowed "better options" to support patients and their families and that it was "critical to have a point of contact". Staff conveyed their admiration for the after-hour nurses' capacity to problem solve and think laterally to ensure that patient and care givers' needs were effectively addressed. It was suggested that nurses working within a

Multipurpose Service had unique nursing competencies that enabled them to deliver a range of high quality nursing services across a number of specialist areas ranging from emergency care to aged and palliative care. In addition, these nurses have a comprehensive understanding of generalist primary care. It was perceived that this unique skill set enabled these Multipurpose Service generalist nurses to provide effective telephone advice and support to patients and care givers in this regional community setting.

## Multipurpose nurses

The registered nurses providing the after hour's service found that they settled into the role after a period of orientation and adjustment to accessing information via the electronic patient record. They found the "early days were quite difficult" as they shifted to a dimension of telephone triage where they did not know the patient, which contrasted to their usual experience where they had "inside knowledge of people" in their immediate local community. This process of integrating an additional role into their already multifaceted practice was also initially quite stressful for staff. Nurses felt that although they were in the initial stages dependent on the clinical data from PalCIS, as they became more confident they became more focused on using their comprehensive nursing assessment skills to identify issues disclosed by patients and their families. These nurses found that the protocols developed for the after hour's telephone support service were very useful in the provision of relevant nursing advice. One nurse commented: "The protocols are fantastic".

Their responses and attitudes reflected their depth and wide range of clinical skills and knowledge of local resources. For the most part, these nurses considered that patients and their care givers primarily called for reassurance, support and advice. One nurse commented: "They just don't want to go to hospital". Sometimes staff felt frustrated as they felt they could not adequately meet all patients' or families' needs via this remote mode of clinical interaction. However, these perceptions were not reflected in the carer interviews and client feedback.

#### *General practitioners*

The Mid North Coast Division of General Practice considers that having access to a central point of contact is optimal in accessing not only clinical information but also timely and effective support and advice for patients and families. One general practitioner commented that it is "enormously helpful"... "some people will just suffer in silence not wanting to bother the doctor after-hours... this is a great solution."

Participants described that the after hour's telephone support service provided support to general practitioners and assisted them in the management of their patients. This is particularly the case if it facilitates access to advice and services in the absence of general practitioner availability. During the project period there were no complaints from general practitioners related to the advice given by the after-hours telephone support service. The comprehensive policy documents and standardised operating procedures helped mitigate this potential risk and increased the general practitioner's confidence in the viability of the system.

## Care giver

By the time this evaluation was undertaken, all of the patients who had accessed the after hour's telephone service were deceased. Interviews were undertaken with all care givers who could still be contacted at their last known address. Overwhelmingly, the comments from carers accessing the service were complimentary. The only negative comments received in the eight interviews related to a death that subsequently occurred in an acute hospital setting.

Many care givers saw the after-hours telephone service as a vital life line which helped to reduce the sense of isolation experienced at night: "It relieved me to know there was someone to talk to"; and "The nights and the weekends are the scariest...you can feel very alone". For some care givers, the knowledge that this after-hours service was available was an additional and valued form of support: 'They were like family (nurses)....I have no family here"; and another person commented: "As long as that life line was there I felt I could do it (continue caring)".

The advice and support provided by the nurses helped these care givers manage the complex process of caring for a dying family member at home, as depicted in the following excerpts:

"It helped me in a big way. They reassured me"

"You know they tell you everything, you have the information but when you go to do it, it is really scary. It was so good to have someone just telling me I was doing the right thing".

Many carers faced not only the emotional burden of caring for a dying family member but the added responsibility of needing to assume a clinical decision making role, particularly around medication management:

"Well I think we just got the tablets mixed up and my wife <sup>(5)</sup> went hysterical, she was so scared and I just felt awful...we called (the Multipurpose Service) and they sorted it all out...they just talked her down...it was all alright......they called back in half an hour to check up on us...they were wonderful".

Having access to the after hour's telephone information and support service enabled many care givers to provide the care that their family members wanted:

"I would never have chosen to do what I did and I am not sure I would do it again, but that was what Mum wanted... she didn't want to go to hospital, she wanted to die at home...but that was so hard for me...especially afterwards......having someone there was such a relief.....I gave the needle and I think she may have already been dead....it was such a relief to have someone talk me through".

For some carers being able to phone and share with the health care provider that the patient had died was symbolic in terms of acknowledging the person's death:

"When he died, I knew what I had to do...but I felt it was important to let the palliative care service know...you know they were there for us that was important. The service was really wonderful"

Management

Although all people interviewed acknowledged the benefit of the after hour's telephone support service and the excellent job undertaken by the Multipurpose Service, issues were raised as to sustainability and integration in usual care service provision. There was recognition that there are a range of people on call in the Area Health Service and there are potentials for integration of services for greater synergies and efficiencies. It was suggested that there was scope to explore the notion of having a single point of contact for all after-hours palliative care support across the entire Area Health Service and not just restricting it to several local government areas. However, this would require negotiation, appropriate allocation of resources and mapping out of protocols.

The cost effective, proof of concept demonstrated in this project in the delivery of acceptable and effective advice by non-specialist service provides provides confidence for the extrapolation of this model to other conditions. It was considered that the demands for this type of service should be aligned with clinical service development plans across the Area Health Service. Managers would be more reassured with the incorporation of this type of service if they were confident concerning future service demands and expectations, particularly in relation to expanded cancer services.

Several managers saw the sustainability of an automated clinical information system being a barrier to ongoing implementation of the After-hours Telephone Support Service. Of interest, the nurses saw this as less of a barrier as they used their clinical decision making skills, related to the specific issues raised by the caller. In contrast they saw the protocols as being integral and invaluable. Of note many palliative care services use an on call mechanism that does not have access to point of contact clinical information systems. In spite of this the development of electronic health records will clearly be an enabling factor for telephone support services. The provision of effective protocols, clearly defined scope of practice and decision algorithms mitigates the risks associated with the inability to access clinical records.

#### **Discussion**

The trend in this evaluation and other published studies indicate that the majority of after-hours palliative care calls occur between the hours of 6pm and 11pm. This

knowledge needs to be used to facilitate appropriate staffing arrangements for after-hours palliative care services<sup>(15, 29)</sup>. Our findings resonate with other researchers who have found that carers' feelings of uncertainty and anxiety are attenuated after-hours<sup>(37)</sup>, and that providers need to develop and identify process issues in care models<sup>(37, 38)</sup>. Further, there is a need to further develop strategies to promote cross sector communication, particularly between primary and specialist palliative care providers. In addition there is need for ongoing education, support and guidance for the health professional providing the after hour's telephone advice.

The low utilisation rates of the after hour's services and absence of on call costs suggest that the Multipurpose Service Model is an efficient and effective strategy not only in alleviating distress of patients and care givers but also in avoiding hospitalisation and emergency department presentations. These rates are suggestive of effective care planning by the specialist palliative care team and it is potentially unlikely that utilisation rates will increase substantially if this high level of care planning persists.

The increased focus on home based palliative care on the Mid North Coast and introduction of care planning items under the Medical Benefits Scheme<sup>(39)</sup> are suggestive that proactive community based care will likely increase rather than decrease in this community. This trend is amplified by a range of factors, such as consumer based choice demonstrated in this review, policy initiatives and a drive to decrease pressure on the acute care sector.

A range of initiatives are currently being undertaken in Australia to look at the use of telephone support services. The National Health Call Centre Network (NHCCN) will be established as a company jointly owned by the Commonwealth and the States and Territories and is expected to start taking calls by July 2007, with an expectation that national coverage will be achieved within four years<sup>(24)</sup>. Existing State and Territory based health call centres will transition to the NHCCN according to an agreed schedule which will be developed as part of the implementation planning<sup>(24)</sup>. The development of this national initiative has implications for enhancing the coverage of 24 hour palliative care telephone support and advice to regional Australia.

#### Conclusion

On the basis of this evaluation and the extant literature it would appear that access to a palliative care after hour's telephone support service is highly valued, particularly by care givers. Further, in spite of the absence of robust, high level evidence for afterhours services, some common themes emerge to inform service delivery. The majority of after hour's calls occur in the time from 6pm to midnight and caregivers value support and advice given by health professionals. Importantly, it appears that the telephone is a suitable vehicle to provide this type of health care service. However, in order to convince policy makers and administrators of the value of this medium we need high level evidence to make a convincing argument for this approach. Further, there is a need for palliative care providers to investigate mechanisms of interfacing with larger scale telephone support call centres, to explore the differences within generic and disease specific approaches and assess the cultural appropriateness of this model of intervention in culturally diverse groups.

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Table 1

Published studies describing after-hours telephone support

Author	Date	Model	Implications for service development
Hatcliffe, S and Smith, P <sup>(40)</sup> .	1997	"Open all hours": Describes the after-hours service provided by St Christopher's Hospice, UK and argues that: "patients with advanced conditions at home and their families should at all times be able to contact a professional who knows them and their background". Therefore, after-hours call is seen as an essential aspect of the specialist service model. Main issues dealt with were changing symptoms and family anxiety.	75% of calls made between 6pm and midnight. 14% of calls from 6am to 9am. 64% of calls from patients & family. 29% of these calls were due to new or worsening symptoms. 36% of calls from other health professionals. Symptoms prompting use of after-hours call was pain, nausea or vomiting & restlessness.
Aranda, S, Hayman-White, K. (15)	2001	Calls received outside of normal office hours were triaged through an in-patient hospice unit. A total of 629 calls to service in 1996-1997 with most calls occurring between 5pm-11pm. Main issues dealt with related to medication queries, pain, seeking advice from the nurse and anxiety.	The triage nurse successfully handled 30% of the calls. The remaining 70% of calls were transferred to the on-call community palliative care nurse, resulting in 251 home visits. There was some correlation between home visit and identity of triage nurse, suggesting better training of triage nurses is required.
McGrath A. West Victorian Division of General Practice <sup>(32)</sup>	2002	Nurse Telephone Triage Afterhours service delivery provides a edicated 1-800 number, GPs phones are switch through to this number with calls diverted to a trained nurse in the hospital who takes patients details. Agreed evidence based protocols are used to assesses whether the patient needs nursing advice and reassurance, medical advice the next day or immediate medical assessment. If the patient requires medical assessment they are directed to the local Emergency Department. No diagnosis is made over the phone	Essential procedures to assist telephone triage nurses from legal liability include: use of protocols; documentation of calls and actions; and quality assurance checks.
Turner, V, F., Bentley, P,J., et al <sup>(41)</sup>	2002	Telephone triage in Western Australia. Describes the first large scale Australian Medical telephone triage centre using computer generated protocols.	Significant community support. Reduction in phone calls to Emergency Departments
Guigou, D <sup>(42)</sup>	2002	"Palliative Care: only a phone call away" describes the introduction of an after-hours call	A palliative care physician is rostered to be on-call and takes calls

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		system for Healthcare	from carers and relatives.
		Professionals in France. Service	The physician liaises the
		Cost €20 000 /year to operate.	next day with the relevant
			palliative care team.
Lloyd-Williams, M.	2003	An advice line to improve the	This study identified a
Rashid, A <sup>(43)</sup>		provision of out-of-hours	need for continuing
		palliative care to primary care	education on the
		teams. A senior member of	management of
		nursing staff or medical staff	terminally ill patients,
		answered all calls. During the	and improved
		first year of operation, 98 calls	communication between
		were received. The majority of	primary care teams,
		callers were from GPs (55%) and	providers of out-of-hours
		community nurses (34%).	primary care and
		The advice requested was largely	specialist palliative care
		related to management of pain	teams.
		and the use of opiates, e.g.	
		breakthrough dose of opiates and	
		conversion of drugs to syringe	
		drivers.	
Wilkes L, Mohan S, White	2004	Pilot study of a telephone service	Demonstrable benefits
K, Smith H. (44)		in regional NSW. 12 calls	from increased support
it, Simui II.		received during the trial period.	for health professionals
		8 · · · · · · · · · · · · · · · · · · ·	and family members
Baldry, C, & Balmer, S <sup>(29)</sup>	2000	Phone calls and drop-ins at a	Service is point of contact
Baidry, C, & Baillier, 5		hospice ward. 443 calls (drop in	for patients, carers and
		or telephone) received during a	health professionals. 189
		12 month period. 232 (52%)	(90%) of calls were dealt
		occurred between 9am-5pm. 211	with in 15 minutes or less
		(178 phone calls) (48%) occurred	and 144 (67%) of calls
		between 9am-5pm or weekends	were dealt with by
		and public holidays. Reasons for	hospice staff.
		call varied from medication and	nospice suii.
		symptom management advice to	
		bereavement counselling.	
		bereavement counseming.	

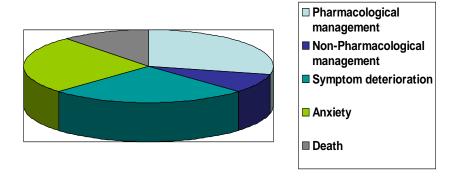
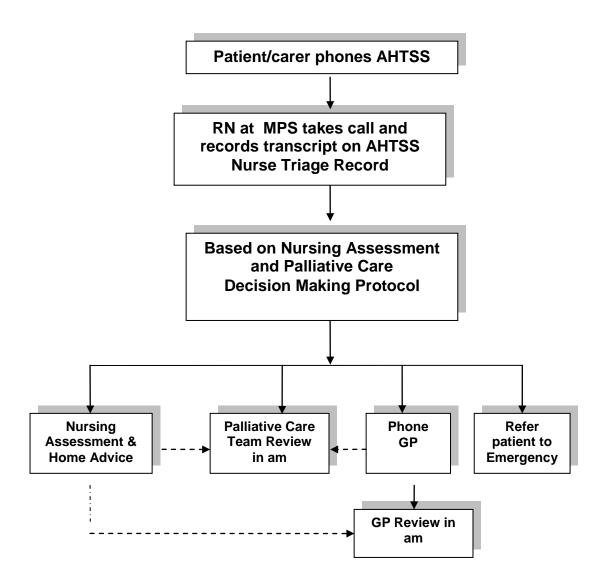


Figure 2: Reasons for accessing After-hours Telephone Support Service



**Figure 1:** Decision making flow chart for After-hours Telephone Support Service **RN**= registered nurse; **GP**= general practitioner; **AHTSS**= After-hours telephone support service