



# Building relationships through multi-disciplinary education in the North West Tasmania Rural Palliative Care Project

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## Abstract

### Background

This paper reports a multi-disciplinary educational intervention developed to improve palliative care delivery in a rural and remote area. The North West Rural Palliative Care Project commenced in 2004 on the North West Coast of Tasmania as a result of an innovative three-way partnership between the North West Tasmania Division of General Practice, Palliative Care Service North West and the University of Tasmania's Rural Clinical School. The program was funded by the National Palliative Care Strategy under the Rural Palliative Care Program.

As occurs in many rural communities, the majority of palliative care delivery in this region is by GPs based in small, dispersed towns. A specialist palliative care service, including a medical specialist, services the region. However, while this assistance is available it is not fully utilised by GPs because of issues relating to distance and role delineation, among others.

### Method

An action research project examined how provision of multi-disciplinary learning opportunities might improve working relationships and knowledge among palliative care providers from all disciplines. Focus groups were used to audit the current situation and identify areas for improvement. An education needs assessment revealed similar learning needs among palliative care providers from a wide range of disciplines. This information was used to design a range of interventions, including the provision of resource materials, multi-disciplinary educational forums, and GP-led multi-disciplinary pilot sites, specifically designed to meet the needs of this rural primary care community.

### Results

Evaluation of these interventions reveals significant improvements in knowledge and working relationships. Positive feedback was obtained from members of the GP-led multi-disciplinary pilot sites, including community nurses, the palliative care social worker, medical specialist and nurses, the volunteer co-ordinator and GP practice nurses. Benefits included better communication, clear understanding of roles and responsibilities, enhanced clinical knowledge and skills and improved relationships, especially between GPs and the specialist service. Increased knowledge and understanding of the role of the specialist palliative care service led to an unexpected higher number of GP referrals to the service.

### Conclusions

The regional application of this multi-disciplinary education-based model has shown that more benefits are emerging for participants than was originally envisaged, including local and regional attitudinal change and improved communication, understanding and professional respect between the palliative care providers of the region. The research demonstrated an effective process for increasing collaboration and knowledge among dispersed rural palliative care providers.

## Introduction

This paper demonstrates the effectiveness of and benefits associated with a general practitioner (GP)-led multi-disciplinary model of education provision developed to improve palliative care delivery in rural and remote North West Tasmania.

Tasmania currently has the second oldest and fastest ageing population in Australia with the North West coast experiencing the highest incidences of cancer and heart disease in the State.<sup>(1)</sup> This suggests an increased need for palliative care in the future for the State and the North West in particular.

The Cradle Coast region covers an area of 22 492 square km made up of nine local government areas.<sup>(2)</sup> It comprises numerous geographically dispersed small to medium-sized rural and urban population centres, however more than 75% of the population is located in the coastal strip along the North West coast. A GP population consisting of approximately 100 part-time and full-time practitioners, and other primary care providers, predominantly based in the larger centres, provide primary health care services to the region. The specialist palliative care service, consisting of medical, nursing and social work professionals, is responsible for the entire region and is centrally located. There is a regional hospital with two campuses and three small district hospitals.

Analysis of current palliative care delivery highlights that on average, GPs on the North West Coast see 8–12 palliative patients per annum, in comparison to the national average of 5–6 patients.<sup>(3)</sup>

The geographical disposition discussed above, accompanied by the independent and autonomous nature of the role of rural and remote GPs<sup>(19)</sup> may have impeded quality co-ordinated palliative care delivery on the North West Coast. This is evidenced by the low numbers of GP referrals to the specialist palliative care service and GPs' reluctance to learn in a multi-disciplinary environment prior to the project's implementation. Additionally, impaired communication and conflicting views of the roles and responsibilities of the service providers on the NW Coast are identified as key barriers to effective service delivery and working relationships between palliative care providers, as described previously.<sup>(4)</sup>

The literature supports the notion that patient outcomes would improve when GPs and specialist palliative care teams communicate well and work together collaboratively,<sup>(3, 5)</sup> however GP involvement is often hard to obtain.<sup>(6, 7)</sup>

In order to address these issues and plan for sustainable service provision in the future, a partnership between the North West Tasmania Division of General Practice, Palliative Care Service North West and the University of Tasmania's Rural Clinical School was formed and successfully obtained funding to implement the North West Rural Palliative Care Project in 2004.

The North West Rural Palliative Care Project was one of eight regional projects funded under the National Palliative Care Strategy's Rural Palliative Care Program to trial models of palliative care which are appropriate to the needs of rural communities. The National program is being co-ordinated by the Australian Divisions of General Practice and evaluated by the University of Wollongong's Centre for Health Services Development.

The aim of the project was to improve access to quality, co-ordinated palliative care services for the people of the North West region. The project impacted on and hoped to create better health outcomes at three levels of regional health services delivery:

- to consumers by improving access to quality, co-ordinated palliative care services for patients, carers and the community;
- to all primary palliative care providers by providing quality education and professional development opportunities; and
- to the wider palliative care system.



A key objective of the project was to support GPs delivering primary health palliative care by maximising their roles within multi/interdisciplinary teams.

Capacity building activities were integral to the project, which trialled an action research model of care delivery in identifying key leader GPs with specialist palliative care knowledge and skills and enabling interactive, multi-disciplinary learning opportunities for the primary palliative care skills network, with the aim of improving palliative care delivery.

Traditional forms of education delivery, such as the didactic and non-multi-disciplinary method historically employed by the North West Tasmania Division of General Practice, have been shown to be not as effective in changing clinical behaviour as interactive, case based and individualised learning<sup>(3,8-10)</sup>, particularly when it is based on a well conducted needs assessment.<sup>(11-13)</sup> Additionally, the literature supports the provision of multi-disciplinary learning opportunities as a means of encouraging team work, networking and recognition and clarification of roles and responsibilities and their importance in collaborative approaches to care provision.<sup>(14, 15)</sup> Considering this, the provision of interactive, multi-disciplinary learning opportunities and development of a two-tiered model of palliative care education were seen to be critical in achieving the project's primary aim. This two tiered model comprised large generic educational events for all regional palliative care providers and localised pilot site activities involving key GPs with a particular interest in palliative care.

This paper describes an effective mechanism for education provision which promotes multi-disciplinary activity in the primary care-based palliative care setting.

## Method

### Needs assessment

A thorough needs assessment was conducted with two aims. Firstly, work was undertaken to investigate the current situation for palliative care providers, including discussion of strategies to overcome perceived barriers or issues related to palliative care delivery. Secondly, the views and ideas of GPs and primary palliative care providers were sought in the identification of topics and delivery methods for a targeted education program.

At the commencement of the program the program officer and palliative care medical specialist visited all GPs on the NW Coast to introduce the project and the concept of working together. Following this, expressions of interests were invited. Interested health professionals were required to acknowledge the following selection criteria:

- an eagerness to be a key leader GP who is a resource and provider of support to other GPs and members of the multi-disciplinary team,
- an interest in developing additional knowledge and specific skills in primary palliative care provision, and
- a willingness to work and meet as a member of a multi-disciplinary team.

Interested primary providers participated in independently-facilitated focus groups: two involving GPs and two involving nursing and allied health providers. The aims of the focus groups were to ascertain the current situation on the NW Coast and to identify a model of care provision and education delivery specific to the needs of primary providers at the two regional pilot sites.

A written questionnaire developed by the University of Wollongong was completed by 130 health professionals to further identify educational needs of palliative care providers.

## Interventions

As a preliminary capacity building activity and gesture of good will, all primary and specialist palliative care providers in the region received a complimentary copy of the Therapeutic Guidelines text: palliative care. Approximately 300 copies were distributed to primary and specialist palliative care providers on the North West Coast.

A flexible education program was developed and delivered via the two tiered model with large regional education events open to all primary palliative care providers and localised pilot site activities involving key leader GPs and primary health care professionals. Additional presentations were facilitated in remote locations. The format was an interactive case study discussed in small groups to improve communication and reflect the nature of day to day community best practice. All sessions were evaluated on completion using a written questionnaire. Continuing professional development (CPD) points were allocated to GPs through the Royal Australian College of General Practice (RACGP) CPD program.

A pilot site framework was progressively implemented and developed around a number of identified general practices in a localised area. Expressions of interest were invited from all GPs, resulting in the identification of a small number of GPs at each site with a particular interest in palliative care and working as a member of a multi-disciplinary team. Pilot site one consisted of five GPs drawn from three neighbouring towns, while the second pilot site's 10 GPs were all based in the one town. Other participants were drawn from community and practice nursing, the specialist palliative care team and medical students. The project officer attended all meetings as facilitator. Information was provided to all pilot site GP practices, community nursing centres and the specialist palliative care service outlining the project and the extended care services available in the community.

Monthly breakfast meetings were held over twelve months. Meetings followed a structured format with agendas circulated, minutes taken, business arising and new issues discussed. Discussion centred on the presentation of a case study by a nominated GP, with the palliative care medical specialist providing mentoring and education. The latter also facilitated group discussion during visits by guest speakers such as radiation oncologists, department of emergency medicine staff and grief and bereavement professionals. Participating GPs received 30 CPD points for attending at least eight meetings.

Evaluation of the effectiveness of these groups included tracking trends in referral rates to the specialist palliative care service. At the half-way and endpoint of the twelve month small group learning cycle, a one page feedback survey sought to elucidate participants' satisfaction with the format, rapport amongst group members, clinical relevance of topics and ideas for future participation. Both pilot sites have completed two full twelve month cycles, with the first electing to undertake a second cycle due to the worthwhile outcomes.

## Results

### Needs assessment

A total of five GPs and 15 other health professionals (community, renal and acute-care nurses, physiotherapists and social workers) attended the focus groups. Participants acknowledged lack of time, co-ordination and communication as major barriers to their ability to provide high quality, co-ordinated care, and optimistically identified solutions for addressing these issues. Solutions included clearer role delineation between professionals involved in palliative care, a common patient file or a patient hand held record which accompanies the patient to appointments, and the development and implementation of collaborative care plans.

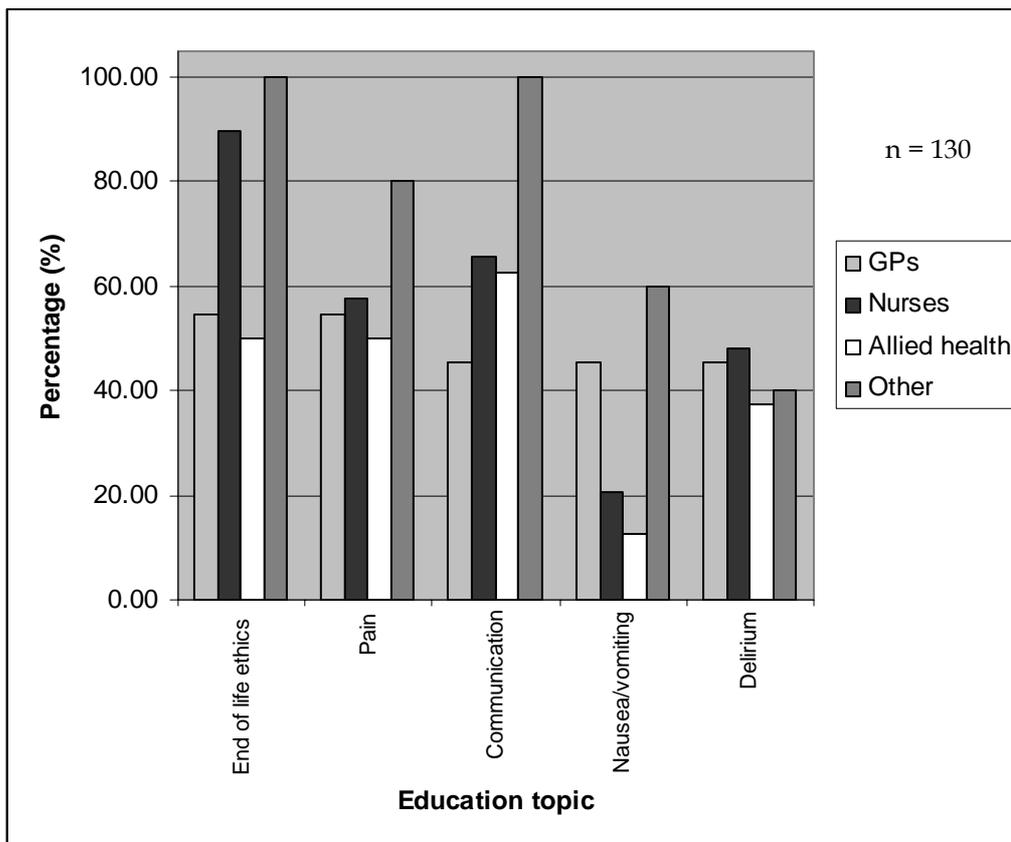
The benefits of a multi-disciplinary approach were mentioned in relation to three areas. Particular interest was shown in participating in multi-disciplinary education, both GPs and community health nurses recognising it as valuable. One GP commented that the multi-disciplinary approach to education was seen as "good for team building". The need for a team based approach to the care of patients (i.e. medical specialist, GP, palliative care nurses, community health nurses and allied health



practitioners) was also acknowledged as important by participating GPs. Within this team the GP was perceived as the central practitioner for palliative patients because the GP often has a deeper knowledge of the person and their situation than other service providers and has known them before the person is diagnosed with a life limiting illness. Whilst it was acknowledged that multi-disciplinary case conferences can be effective, GPs reported difficulty in finding the time to organise and implement these resulting in limited participation.

The results of the educational needs survey and feedback from the focus groups informed the content of the education program for both the pilot sites and the regional education events. Education topics identified were comparable across disciplines, demonstrating commonality of the educational needs across the palliative care provider population (see Figure 1).

**Figure 1 Results of needs assessment**



GPs prioritised all the topics mentioned in the survey equally (46–54% interested per topic) and in the focus groups expressed a particular interest in symptom control, pain management, current pharmacological therapy and radiotherapy treatments and techniques.

GPs involved in the pilot sites suggested a rolling program of education sessions or a short course focusing on case study analysis by the multi-disciplinary team as an effective method of delivery. In addition the inclusion of 3–4 high quality CPD events each year with multi-disciplinary participation from all palliative care providers was recommended. The opportunity to learn alongside the medical specialist in interactive case-based settings was recognised as beneficial and would be welcomed.

In the needs survey almost 90% of nurses indicated end of life ethics as an area of interest. Many of the nurses (66%) and allied health professionals (62%) were interested in generic communications training. The “other” group consisted of medical students, volunteers, pharmacists and a chaplain, and demonstrated a very high need for end of life ethics and communications education (100% each). About 80% requested pain management knowledge and 60% asked for further information about controlling nausea and vomiting.

## Interventions

The provision of the Therapeutic Guidelines text generated positive feedback amongst recipients and was perceived as a useful resource. It was “well-received” by community health nurses, with one nurse commenting “all community health nurses should have one in the car to refer to if required”. GPs believed the text was a “useful tool”, particularly for “keeping abreast of recent developments in palliative care” and thought the book format was good for taking out to homes. It was seen as reassuring for some patients to see the recommendations written in a book. In response to the positive feedback to the provision of this text, the second edition was also made available to providers in 2006.

Following feedback from the first regional event which attracted 130 participants, numbers were limited to 40 to facilitate learning opportunities. In the evaluation of the initial regional education event, a GP commented that smaller learning groups and a less didactic presentation format would have been preferred. Other comments questioned the effectiveness of education for such a large group with diverse learning needs. Feedback from subsequent events was more positive. Comments included “good format and great mix of people” and “more sessions please”.

A total of fifteen GPs attended regular multi-disciplinary breakfast meetings. Both pilot sites have completed two cycles of twelve monthly meetings and of particular significance was the keenness of participants in pilot site one to continue after the first 12 months. It is interesting to note a comment made by a community nurse at pilot site two after the program had been running for only six months:

Definitely makes our care more multi-faceted as we are all often saying the same thing to the patient as GPs, specialists, palliative care nurses and community health nurses and we are now all informed of lines of treatment. There is no confusion.

Additional positive comments made at the completion of the small group learning cycle by a GP were “a very effective way of enhancing communication between different disciplines” and an “excellent opportunity to see other professionals we often never see”.

## Unexpected results

Prior to the project’s implementation GP-initiated referrals to the specialist palliative care service had been low. An issue identified at pilot site one’s first breakfast meeting as a contributing factor to low GP initiated referrals was the difficulty for GPs in introducing palliative care to their patients. Strategies identified by pilot site one to enhance GP ability to discuss palliative care included the development of a poster, provision of information resources and professional development opportunities in enhanced communication for GPs.

The number of GP-initiated referrals to the palliative care service following the commencement of the project increased markedly (see Figure 2 and Table 1). Each peak in the graph appears to coincide with significant events over the life of the project. It is not possible to analyse a longer time frame due to the inability to source additional statistics from the palliative care service.



Figure 2 Referrals by GPs to the Palliative Care Service (PCS) North West

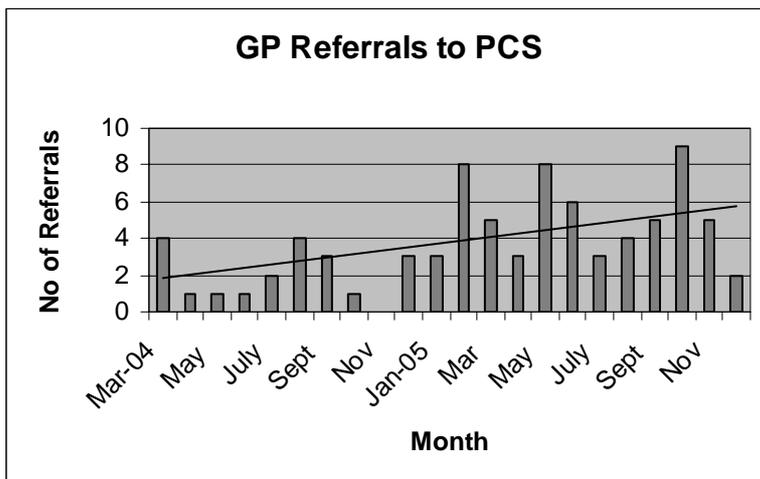


Table 1 Significant project events

March 04	Introductory visits to all GPs by Medical Specialist and project officer
Sept and Oct 04	Focus group implementation and initial pilot site one planning meetings
January 05	Commencement of pilot site one breakfast meetings
February 05	First generic education session
March and April 05	Focus groups and planning meetings for pilot site two
May 05	Second generic education session
June 05	Commencement of pilot site two breakfast meetings
December 05	Health professional and partner retreat with David Currow re: self care and team work

## Discussion

The adoption of an action research approach to the project was appropriate as it allowed the direction of the interventions to be guided by the current situation as it developed and changed over time. Appraisal of the existing situation on the NW Coast through the independently-facilitated focus groups was an important step in determining the objectives of the project and allowed the direction of the project to be guided by the palliative care practitioners of the region. This 'ownership' of the project was beneficial in attracting and retaining involvement of rural practitioners already struggling with time constraints.

An important factor in the project's acceptance by GPs was the involvement of the Division of General Practice, the representative body for GPs, as was the allocation of CPD points. Notwithstanding, the project would not have succeeded as it did without the ongoing close facilitation by the project officer and members of the Executive Committee (drawn from the three partner organisations). Distribution of the complimentary copies of the Therapeutic Guidelines text in palliative care was also important in building confidence in the project among the palliative care community.

The targeted education interventions implemented make it possible to meet the increased demands for palliative care in the future for the NW Coast. Given the dispersed nature of the region's population, the enhanced ability of GPs to provide palliative care takes pressure off the specialist Palliative Care Service, especially as GPs on the NW Coast see more palliative patients than the national average.<sup>(3)</sup> Now that roles and responsibilities have been more openly considered and GPs knowledge increased, they feel more confident in referring patients to the specialist service.

Feedback about the advantages of learning in a multi-disciplinary environment was extremely positive from both the regional education events and the smaller pilot sites, as demonstrated elsewhere.<sup>(6)</sup>

Taking advice from the focus group participants on preferred education delivery methods proved to be advantageous. Providers from all disciplines appreciated the benefits of getting to know other providers and understand their actions, thus clarifying roles and responsibilities for each other and being able to collaborate and complement each other's care. An added bonus was the provision of catering, creating the opportunity for attendees to socialise and network with each other. They subsequently reported that this enhanced their working relationships.

When the first regional education event drew 130 participants and was consequently a more didactic presentation than intended, the feedback received backed up the findings in the literature related to the ineffectiveness of this form of education delivery.<sup>(9)</sup> The smaller, interactive, case-based sessions which followed were seen as highly beneficial and relevant to community-based practice by participants. All events were well-attended by a range of disciplines due to the common relevance of the education topics to all. The presentations conducted in remote regions were especially appreciated by attendees who rarely have such learning opportunities in their local community.

Evaluation at the end of each 12 month cycle in the pilot study groups showed the benefits of conducting an initial needs assessment, with participant approval of the relevance of the topics covered. The format of the breakfast meetings allowed for valuable input from the Medical Specialist and other group members with the presentation of current case studies by GPs. This successful up skilling of GPs to take on a central role in the provision of palliative care services supports similar findings by others.<sup>(8, 16, 17)</sup> Close facilitation by the project officer and palliative care medical specialist was important in achieving the aims of each session.

At the outset of the project it was expected that increased GP knowledge and confidence regarding palliative care provision would ease the workload of the specialist Palliative Care Service. However, an unexpected outcome of enhanced multi-disciplinary co-operation and understanding was an increase in the number of referrals by GPs to the Service. The results shown in Figure 2 indicate a peak in GP referrals following each significant event in the project. A limitation of the data is that the number of referrals for GPs at the pilot sites is not specified, only the total number of referrals. However there may have been other factors impacting on rate of GP referral to the palliative care service.

## Conclusion

This GP-led multi-disciplinary education model provided excellent outcomes relating to local and regional attitudinal change, enhanced communication, understanding and professional respect between the palliative care providers in this rural and remote region. This was achieved by addressing the sensitive and individual needs and circumstances which exist within the region.

The regional application of the model has shown that more benefits are emerging for participants than was originally foreseen. The research methodology demonstrated an effective process for increasing collaboration and knowledge among dispersed rural palliative care providers.

Current demographic data indicates an increased requirement for high quality, co-ordinated palliative care services in the future. The positive outcomes and suggested model successfully demonstrated through the North West Rural Palliative Care Project provide an important foundation for consideration in the planning and implementation of future palliative care service delivery on the North West Coast, Tasmania and rural and remote centres in Australia.<sup>(18)</sup>

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## Competing interests

There were no competing interests in the completion of this work.

## References

1. 2005 census of Tasmanian general practitioners: GP census report of preliminary results: Tasmanian Divisions of General Practice; 2005.
2. Department of Transport and Regional Services. A regional profile: Cradle Coast Region Tasmania; 2003 September 2003.
3. Mitchell GK. How well do general practitioners deliver palliative care? A systematic review. *Palliative Medicine* 2002;16:457-464.
4. Mitchell GK, Reymond EJ, McGrath BPM. Palliative care: promoting general practice participation. *Medical Journal of Australia* 2004;180:207-208.
5. Shipman C, Addington-Hall J, Barclay S, Briggs J, Cox I, Daniels L, et al. How and why do GPs use specialist palliative care services? *Palliative Medicine* 2002;16:241-246.
6. Buikstra E, Pearce S, Hegney D, Fallon T. SEAM – improving the quality of palliative care in regional Toowoomba, Australia: lessons learned. *Rural and Remote Health* 2006;6:415.
7. Brenneis C, Bruera E. The interaction between family physicians and palliative care consultants in the delivery of palliative care: Clinical and educational issues. *Journal of Palliative Care* 1998;14(3):58-61.
8. Reymond L, Charles M, Israel F, Read T, Treston P. A strategy to increase the palliative care capacity of rural primary health care providers. *Australian Journal of Rural Health* 2005;13:156-161.
9. Bloom BS. Effects of continuing medical education on improving physician clinical care and patient health: A review of systematic reviews. *International Journal of Technology Assessment in Health Care* 2005;21(3):380-385.
10. Mazmanian PE, Davis DA. Continuing medical education and the physician as a learner: Guide to the evidence. *JAMA* 2002;288(9):1057-1060.
11. Norman GR, Shannon SI, Marrin ML. The need for needs assessment in continuing medical education. *British Medical Journal* 2004;328:999-1001.
12. Cantillon P, Jones R. Does continuing medical education in general practice make a difference? *British Medical Journal* 1999;318:1276-1279.
13. Shipman C, Addington-Hall J, Barclay S, Briggs J, Cox I, Daniels L, et al. Educational opportunities in palliative care: what do general practitioners want? *Palliative Medicine* 2001;15:191-196.
14. Kelley ML, Habjan S, Aegard J. Building capacity to provide palliative care in rural and remote communities: Does education make a difference? *Journal of Palliative Care* 2004;20(4):308-15.
15. McPherson K, Headrick L, Moss F. Working and learning together: good quality care depends on it, but how can we achieve it? *Quality in Health Care* 2001;10(Suppl II):ii46-ii53.
16. Mitchell G, Price J. Developing palliative care services in regional areas: The Ipswich Palliative Care Network model. *Australian Family Physician* 2001;30(1):59-62.
17. Boakes J, Gardner D, Yuen K, Doyle S. General practitioner training in palliative care: an experiential approach. *Journal of Palliative Care* 2000;16(2):11-19.
18. Evans R, Stone D, Elwyn G. Organizing palliative care for rural populations: a systematic review of the evidence. *Family Practice* 2003;20(3):304-310.
19. Kenny, A. 2004, 'Medical dominance and power: a rural perspective', *Health Sociology Review*, 13(2):158-165.

## Presenters

**Judi Walker** holds the inaugural Chair of Rural Health at the University of Tasmania, which recognises the significant contribution she has made since 1997 to the development of academic rural health in Australia. Professor Walker's background and achievements exemplify the interdisciplinary and multi-professional nature of academic rural health and her track record strengths are reflected in the innovative nature of her work as a change agent. Professor Walker has overall responsibility for the Faculty of Health Science's academic rural health portfolio. She is Chief Executive of the University's Rural Clinical School – a conjoint appointment with the Tasmanian Department of Health and Human Services. Professor Walker is also the Faculty's Deputy Dean and Associate Dean (Teaching and Learning). Professor Walker is recognised for scholarship in the application of open and distance learning to rural health, primary health care and medical/health professional education, particularly innovation in health service delivery and health care workforce.

**Heidi Behrens** commenced as a Junior Research Fellow with the University of Tasmania's Rural Clinical School in February 2004. In this role she is involved with research and evaluation projects relating to rural health services in the north-west of Tasmania, such as rural palliative care, service provision for older people in rural areas and undergraduate training for medical and other health students. Heidi was born and raised on the north-west coast of Tasmania. After obtaining a Bachelor of Science degree with Honours from the University of Tasmania in 1997 she returned to the relaxed lifestyle and green pastures of the north-west coast, taking up employment in the food industry in the area of quality assurance. This position included managing the quality management system for a leading dairy manufacturer and further developed her interest in evaluation and data management.

**Anita Dow** commenced as a Project Officer with the North-West Tasmania Division of General Practice in March 2004. In this role she is responsible for the development and facilitation of the North-West Rural Palliative Care Project, a federally-funded initiative through the National Palliative Care Strategy. Anita was born and raised on the north-west coast of Tasmania. After obtaining a Bachelor of Nursing degree from the Australian Catholic University in Ballarat, Victoria, in 1999 she returned to Tasmania and completed a graduate year at the Royal Hobart Hospital. Anita then returned to the north-west coast of Tasmania and worked with the Tasmanian Palliative Care Service as a clinical nurse until 2003, followed by a period as a pharmaceutical representative with Merck Sharpe & Dohme. Currently Anita is continuing her passion for palliative care and the provision of quality GP education and training, with dual roles as Project Officer and also Professional Development Co-ordinator for the Tasmanian Palliative Care Service.