The Thai–Australian Alliance: Developing a Rural Health Management Curriculum by Participatory Action Research

S. Yanggratoke, Provincial Chief Medical Officer, Nakhonratchasima Provincial Health Office, Thailand

David Briggs, BHA, MHM(Hons), PhD, Senior Lecturer, University of New England, Armidale, New South Wales, Australia

Christian Alexander, Adjunct Senior Lecturer, University of New England, Armidale, New South Wales, Australia

Prawit Taytiwat, MD, MPA(Hons), DHSM, Dean, Faculty of Public Health, Naresuan University, Thailand

Mary Cruickshank, BSc, MEd.Stud, PhD, Professor of Nursing, Charles Darwin University, Darwin, Australia

John Fraser, FRACGP, FACRRM, FAFPHM, Professor & Director, Head, School of Rural Medicine, University of New England, Armidale, New South Wales, Australia

Mary Ditton, MBBS, DPM, MBA, GradCertHEd, DHSM, Lecturer, University of New England, Armidale, New South Wales, Australia

Marianne Gaul, RN, Clinical Nurse Consultant, Hunter New England Area Health Service, New South Wales, Australia

Correspondence may be directed to: Prof. Mary Cruickshank, School of Health Science, Charles Darwin University, Darwin, Northern Territory, Australia. 0909. Tel.: 61 8 8946 6246, Email: mary.cruickshank@cdu.edu.au
The Thai–Australian Alliance: Developing a Rural Health Management Curriculum

Abstract
In 2006, the Thai National Health Security Office and the Ministry of Public Health, through the Nakhonratchasima Provincial Health Office in Thailand, asked the Thai–Australian Health Alliance to identify competencies and skills for a health management curriculum for health professionals working in primary healthcare in rural Thailand. The study was conducted in Nakhonratchasima province, Thailand, utilizing questionnaires, focus group discussions and an intensive 3-day workshop involving a purposive sample of 35 participants drawn from various sectors in the health industry. Findings identified the core curriculum competencies and skills required by rural doctors, nurses and public health officers. Critical issues regarding continuing education for health professionals in primary healthcare were also examined. This study found that a primary healthcare approach should include the principles of sustainability and capacity building, and incorporate team-based, interprofessional and long-term continuous learning.

Introduction
In 2004, the Thai–Australian Alliance was developed between the University of New England, Australia, and Naresuan University and the Ministry of Public Health in Thailand. According to Taytiwat et al. (2006: 1), the purpose of the Alliance is to “improve rural medical workforce recruitment, retention, education and training.” Since 2004, the partnership has been further established and broadened to focus not only on the medical workforce but on healthcare professionals in general. In addition, by 2006 three more Australian organizations had contributed to the Alliance’s work: the Hunter New England Rural Training Unit, New England Area Training Services and the Australian College of Health Service Executives (Taytiwat et al. 2006). The Alliance conducted research studies between 2004 and 2006 to evaluate joint research education and training activities. Overall results indicated that a sustainable relationship between the participating organizations was being achieved. This paper presents another initiative of the Thai–Australian Alliance that was developed, implemented and evaluated in 2006.

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Background to the Study
Wibulpolprasert et al. (2008: 1) stated that “the year 2008 marks the 60th anniversary of the World Health Organization and the 30th anniversary of the Alma-Ata Declaration advocating primary healthcare as the main strategy for achieving health for all by the year 2000.” The primary healthcare approach was viewed as a practical, community-based and participatory model that could address chronic health problems (Tontisirin et al. 2001). According to Boerma (2006), primary healthcare (PHC) has important and global health functions despite its relative weakness politically and its unattractiveness to health professionals. PHC provides treatment for common illnesses and injuries, health promotion, disease prevention and control, and rehabilitation (Wibulpolprasert 2002). From an economic point of view, it can be expected to lower the costs of care (Starfield et al. 2005). PHC refers to first contact, and continuous, comprehensive and coordinated care (Starfield 1994), and it operates at an intersectoral level of healthcare for the individual and for the population. It is the first line of detection and defence for global health challenges such as avian influenza, SARS and HIV/AIDS (Beaglehole 2004; World Health Organization 2003). According to Hanucharunkul (2007: 83), having a regular primary care provider “is one of the best predictors that a person will receive appropriate comprehensive care ranging from health promotion, disease prevention, early detection of illness, management of chronic illness/conditions, and rehabilitation.”
Despite PHC being acknowledged as a key strategy for achieving health for all, its sustainability in developing countries is complex. This is due to the contradictions inherent in the health aid that has been the cornerstone of many programs offered by donor countries. Capacity building, self-reliance and continuity often take second place to immediate needs, dependency and effectiveness (LaFond 1995). However, there has been a call in recent years for renewing primary healthcare. According to the Pan American Health Organization/World Health Organization (PAHO/WHO; 2007), a renewed approach to PHC has been adopted for several major reasons:

- PHC must address the increase in new epidemiologic challenges;
- Widely diverse approaches to PHC that have weaknesses and inconsistencies need to be corrected;
- PHC can capitalize on new tools and best practices;
- PHC is being recognized as an approach to “strengthen society’s ability to reduce inequities in health”; and
- PHC is increasingly being accepted as “a powerful approach to addressing the causes of poor health and inequality” (PAHO/WHO 2007: 1).

The WHO 2008 report (xi–xx) indicates that health systems have focused disproportionately on specialized curative care and that top-down command-and-control approaches have resulted in fragmented service delivery. This report calls for PHC reform based on reforms to universal coverage, service delivery, public policy and leadership.

Thailand is a developing country in the lower-middle income group of the East Asia and Pacific region (World Bank 2006). It has been a beneficiary of donor countries such as Japan and the United States for many decades (Accessible Information on Development Activities [AiDA] 2006). Thailand has seen improvement and continual growth in urban infrastructure development that has assisted national competitiveness and economic well-being. Furthermore, the country has made good progress in mortality and morbidity rates, including a decline in infant mortality rates. Many targets of the Millennium Development Goals are now being achieved (Thailand Human Development Report 2003 Review Board). However, rural development lags behind urban, with problems including roads, utilities, education, healthcare and housing (World Bank 2006).

In 2001 Thailand established universal health coverage (UHC) to provide primary healthcare through its network of more than 9000 primary care units so that healthcare would be accessible for uninsured Thais, including about 40 million rural people. Establishment of UHC meant that medical and hospital treatment cost only 30 baht (approximately $1 US dollars) per episode of care (Wibulpolprasert 2002). Five years later the Thai interim government abolished the 30 baht fee and made the healthcare program completely free.

The Thai health system has large public and private sectors that provide all levels of healthcare. Through health insurance arrangements attached to formal employment, urban, wealthier Thais have been advantaged over the marginalized rural poor, who rely on public health services. As part of market-driven healthcare developments in secondary and tertiary care, PHC in Thailand has not been able to attract medical practitioners to rural areas, in spite of a variety of strategies over the last 40 years (Wibulpolprasert and Pengpaibon 2003). Taytiwat et al. (2006: 1) believe that “the major emphasis has been on hospital-based care,” with few Thai doctors developing programs to address community needs. According to Pachanee and Wibulpolprasert (2006), “one of the main problems of human resources for health in Thailand is the imbalanced distribution in terms of both geographical areas and specialisation,” with an inequitable distribution of health facilities and health professionals, especially doctors, between rural and urban areas. The scope and diversity of rural health practice, and the level of responsibility and skills required, may be partly responsible for the unequal distribution.

Family medicine is poorly developed in Thailand, with an emphasis on hospital-based care (Towse et al. 2004; Williams et al. 2002). According to Williams et al. (2002), in Thailand general practitioners are considered junior doctors who have yet to undertake speciality training. Furthermore,
the present Thai health system lacks a gatekeeper to coordinate care and manage demand. There is scope to undertake specialty training in family medicine (Williams et al. 2002); however, far more doctors specialize in other disciplines. A study conducted by Thamarangsi (2003) found that one of the major factors contributing to the resignation of general practitioners was a lack of opportunity for continuing education; it was also the major reason for newly graduated general practitioners leaving to specialize. Educational programs should focus on the reality of rural healthcare practice and management within a primary healthcare framework, with an emphasis on cross-disciplinary consultation that is needed for PHC to function optimally in rural environments.

The nursing profession in Thailand has also weighed in to the PHC debate, with Hanucharumkul (2007: 83) stating that “nurses are key providers of primary care services, particularly in remote areas and play an important role in improving the health and well-being of the Thai community.” This author goes on to say that some health leaders in Thailand believe that nurses would be the most appropriate healthcare professionals to provide PHC to the community.

The purpose of this study therefore was to develop recommendations for the development of curriculum and continuing education as well as areas requiring further collaborative research for primary healthcare professionals in health management in a rural province of Thailand. The study objectives were to:

- Identify current approaches to the education, training and development of rural healthcare professionals and the relevance and applicability to the Thai health context;
- Engage with a range of Thai healthcare stakeholders to identify appropriate technology and education delivery approaches that would be relevant to the needs of the Thai health system; and
- Identify best practices for the continuing professional development of health managers in the Thai rural health context.

This research study was initiated and funded by the Ministry of Public Health and the National Health Security Office of Thailand in 2006. It was conducted by Australian researchers from the University of New England, Australia, and Thai researchers from Naresuan University and from the Nakhonratchasima Provincial Health Office in Thailand.

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Methods
Research Design
This study utilized Participatory Action Research (PAR) as the research design. PAR is designed to facilitate improvement, evaluation and change within a framework of collaboration and cooperation between researchers, communities and professionals (Burns 1994). It is guided by the adult education theories of Paulo Freire, which seek to create an environment in which local communities are able to empower themselves by drawing on local knowledge and skills, while working in partnership with researchers who facilitate the process and organize external inputs in terms of knowledge and expertise. PAR is an iterative process, whereby the findings and analysis in one stage lead to the next stage, and so on. The research is also participatory in that researchers and participants share ownership of the project. It requires the research team and project participants to engage in ongoing dialogue about the problems under investigation, the data needed to answer them, the method of collecting data and the meaning to be reached through the data analysis (Spence et al. 2002; Spence and Chantrill 2001). According to the literature, PAR has been used effectively as the research design in other similar healthcare projects in developing countries (Julia and Kondrat 2005; Bradley and Igras 2005; Liu et al. 2006).
Setting
This study was conducted in the province of Nakhonratchasima, Thailand, in 2006. This is the largest province in the northeastern region of Thailand, with a population of 2.5 million. Major healthcare concerns in the province according to the Thailand Human Development Report 2003 Review Board (2003) include infant mortality and mortality and first-degree malnutrition under the age of five. Other health-related problems include drug-related crimes, HIV/AIDS and sexually transmitted disease.

Population and Sampling Method
The study population consisted of healthcare professionals from the senior health management ranks of the Nakhonratchasima Provincial Health Office, the Ministry of Public Health and the National Health Security Office. The 35 participants were purposefully selected by the project director in consultation with the research team because of their strategic role in the development and implementation of primary healthcare policy at the district rural level of health services in Thailand. The sample, who had various levels of management training and experience from the disciplines of medicine, nursing and allied health, participated in all stages of the study as discussed in the following section. Table 1 shows that the sample consisted of directors of community hospitals, chiefs of district health offices, heads of health centres or primary care units, academics from public universities, representatives from local government, representatives from the village health volunteers, senior nurse academics and practising nurses from the Thai Nursing Council, the Nakhonratchasima Boromarajonani College of Nursing and the Provincial Health Office.

Table 1. Participant attendance at the 3-day workshop in Nakhonratchasima province, Thailand

<table>
<thead>
<tr>
<th>Number</th>
<th>Participants/organizations (N = 35)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>District health services management group policy makers at the national level (Ministry of Public Health, National Security Office)</td>
</tr>
<tr>
<td>13</td>
<td>Directors of community hospitals, city and military regional hospitals in Nakhonratchasima province; representatives from the Thai Nursing Council and College of Nursing</td>
</tr>
<tr>
<td>5</td>
<td>Chief of district health offices, heads of health centres or primary care units</td>
</tr>
<tr>
<td>4</td>
<td>Representatives from local government and from village health volunteers</td>
</tr>
<tr>
<td>4</td>
<td>Academics and practitioners at primary care units</td>
</tr>
</tbody>
</table>

Data Collection Procedure
Stage One
When conducting such a study, it is important to establish the perceived needs of the participants in their specific context. Therefore, three months prior to the main study, a pre-workshop was conducted to assess participants’ learning and healthcare training needs and to identify the level of training to meet those needs. Findings showed that participants were most interested in building capacity for primary care units, as well as improving patient care using a team-based approach. Participants identified the most important health needs and their most critical professional challenges as well as ways to overcome the challenges. For example, the major health issues they identified included chronic disease, accidents, and alcohol and drug use. The challenges included staff shortages and weaknesses in intersectoral collaboration; improvements in their communication and management skills would help overcome these challenges. Participants hoped that the 3-day workshop would provide knowledge transfer and ideas for developing an appropriate health management curriculum that would assist in building capacity in the primary healthcare environment.
Stage Two
The aims of the main qualitative study were explained at the beginning of the workshop and participants were asked to sign a consent form. Data collection consisted of both quantitative and qualitative aspects. The quantitative component consisted of a specifically designed battery of questionnaires utilized throughout the workshop to complement the qualitative data. The purpose of the questionnaires was to identify the critical issues for the health management practices of the Thai health managers that would help inform specific curriculum topics. The questionnaires were developed following the accreditation standards for health management programs of the Australian Council of Health Services Executives (ACHSE 2005). All information was presented in both Thai and English, and time was taken to ensure that participants understood the questions and concepts included in the questionnaires.

For the qualitative component, two focus group discussions were to be conducted. To facilitate them, a S.W.O.T analysis was conducted to identify strengths, weaknesses, opportunities and threats. Results are shown in Table 2.

Table 2. Results of S.W.O.T analysis

| Strengths | • Primary care units (PCUs) in each district are a good asset
|           | • Primary Care is a national policy
|           | • Nurses in PCUs are close to the people
|           | • Nursing care in PCUs is of high standard
| Weaknesses | • Patient preference for district hospital rather than PCU
|           | • Poor collaboration /communication between district hospital and PCU
|           | • Poor security for PCU staff due to geographical isolation
|           | • Shortage of nurses in PCUs
|           | • Limited multidisciplinary collaboration in PCUs
|           | • Lack of instructors in education programs
|           | • Inefficient use of documented files in PCUs
|           | • Poor PCU facilities including building and infrastructure
|           | • Low salaries in the public health sector
| Opportunities | • Continuing professional development
|               | • Capacity and willingness for improved collaborative communication between staff at district hospitals and PCUs
|               | • Greater recognition of the PCU role within the community
|               | • Identify skills/knowledge needed for medical and nursing primary healthcare curricula.
| Threats | • Increased career choices for school leavers
|          | • Structural conflict between the hospital team, the district health team and the health centre team
|          | • Increasing growth in private health sector

The first focus group discussion consisted of an inter-professional group of all participants to discuss the overall results of the S.W.O.T analysis and to identify crucial points for discussion at the second focus group. The inter-professional group then broke into two discipline-based groups to explore the issues specifically facing their profession. Tables 3 and 4 show participants in each of the two main groups of health managers – rural doctors and registered nurses.
Table 3. Rural doctor attendance at focus group discussion

<table>
<thead>
<tr>
<th>Number</th>
<th>Participants/organizations (N = 19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Chief of district health officers</td>
</tr>
<tr>
<td>6</td>
<td>Community hospital directors</td>
</tr>
<tr>
<td>3</td>
<td>Head of health centres</td>
</tr>
<tr>
<td>8</td>
<td>General practitioners employed in primary care units in Nakhonratchasima province</td>
</tr>
</tbody>
</table>

Table 4. Registered Nurse attendance at focus group discussion

<table>
<thead>
<tr>
<th>Number</th>
<th>Participants/organizations (N = 16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Representatives from Thai nursing council</td>
</tr>
<tr>
<td>2</td>
<td>Nurse academics from Thai universities</td>
</tr>
<tr>
<td>7</td>
<td>Academics from nursing colleges, Ministry of Public Health</td>
</tr>
<tr>
<td>5</td>
<td>Nurse practitioners, head of primary care units, community hospital</td>
</tr>
</tbody>
</table>

A semi-structured interview schedule was used for the two focus group discussions, and the 40 to 50 minute sessions were audiotaped with the participants’ permission. Data-generating questions guided the focus groups, and a recursive interviewing approach was used to collect the data. Ethical approval to conduct this study was obtained from the University of New England Human Research Ethics Committee prior to data collection. Participants were provided with a participant information sheet and a consent form at the commencement of the study. A member of the Thai research team explained the purpose of the research project and participants’ involvement to ensure that everyone understood, and all forms were printed in English and Thai. Participants were informed that any identifying names would be removed from study data prior to data analysis to maintain confidentiality.

**Data Analysis**

The focus group discussions were recorded and transcribed, and content and thematic analyses were used to identify the key concepts and themes in the data. Rigour and trustworthiness of the data was achieved in several ways. First, major findings of the surveys and focus groups were electronically filed and projected on a screen during the workshop for participant validation. Participants were given the opportunity to change, clarify or expand any of the discussion points. Second, the transcribed focus group discussions were translated into English and approved by the Thai participants. Third, two of the researchers conducted separate content analysis of the quantitative data and compared and contrasted their findings to establish inter-rater reliability. This inter-rater reliability process was also followed for the qualitative data, which was then coded and thematically analyzed. The thematic analysis utilized a highlighting approach, as described by van Manen (1997). Significant statements and commonalities were identified and organized into themes that represented important aspects of the participants’ experience of management practices in rural health settings.

Finally, quality and trustworthiness in this participatory action research study was further achieved by utilizing methodological triangulation, whereby both quantitative and qualitative methods were used to collect the data. The qualitative component consisted of data obtained through the focus group discussions, while the questionnaires were used to obtain the quantitative data. According to
Minichiello et al. (1999), triangulation is the process by which the same issue is investigated in a variety of ways so that different types of evidence are produced to support a particular finding. The different results are combined to complement each other and enable a deeper understanding of the complex phenomenon being studied. Our results were also interpreted in relation to the relevant literature.

Results

Overall, the questionnaires showed that participants had a good understanding of the Thai health system, and the policy and planning processes. Not surprisingly, the vast majority (83%) agreed that Thai rural health needs and practices are different from metropolitan health services and therefore require a different understanding and practice. While 52% of participants said they understood information management systems, less than half (45%) said they understood the research process or how to conduct research within the healthcare setting.

A survey instrument was used to assess the importance that participating health managers gave to the standard curriculum content. These content areas cover healthcare systems/policy, health services management, research and evaluation, financial management, law/ethics and information management. Tables 5 and 6 present the results of the questionnaire. As participants were asked not to rank issues they did not deem relevant in the Thai context, the average ranking score is presented. For example, participants perceived “system design and operational issues” as low priority. The score represents that given to each item divided by the number of participants who scored the item. As the highest ranking was coded “1,” topics with the lowest aggregate scores are those that participants nominated as most important. Table 5 shows that the four most important items relating to the curriculum area healthcare systems/policy were the Thai healthcare system (3.5), health systems evaluation and improvement (4.3), priority planning (4.5) and workforce planning and policy development (4.8).

Table 5. Curriculum content area: healthcare systems/policy

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Curriculum content area</th>
<th>Average score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thai healthcare system</td>
<td>3.5</td>
</tr>
<tr>
<td>2</td>
<td>Health systems evaluation and improvement</td>
<td>4.3</td>
</tr>
<tr>
<td>3</td>
<td>Priority planning</td>
<td>4.5</td>
</tr>
<tr>
<td>4</td>
<td>Workforce planning and policy development</td>
<td>4.8</td>
</tr>
<tr>
<td>5</td>
<td>Social analysis of public policy development</td>
<td>5.8</td>
</tr>
<tr>
<td>6</td>
<td>Essential issues identification and ordering</td>
<td>5.9</td>
</tr>
<tr>
<td>7</td>
<td>Economic framework and health</td>
<td>6.1</td>
</tr>
<tr>
<td>8</td>
<td>System design and operational issues</td>
<td>6.1</td>
</tr>
<tr>
<td>9</td>
<td>International healthcare systems</td>
<td>6.5</td>
</tr>
</tbody>
</table>

The most important curriculum content areas in health services management were leadership (2.6), change management (3.7), human resources management (4.4) and emotional intelligence (6.0) (see Table 6).
Table 6. Curriculum content area: health services management

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Curriculum content area</th>
<th>Average score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Leadership</td>
<td>2.6</td>
</tr>
<tr>
<td>2</td>
<td>Change management</td>
<td>3.7</td>
</tr>
<tr>
<td>3</td>
<td>Human resources management</td>
<td>4.4</td>
</tr>
<tr>
<td>4</td>
<td>Emotional intelligence</td>
<td>6.0</td>
</tr>
<tr>
<td>5</td>
<td>Organizational theory</td>
<td>6.3</td>
</tr>
<tr>
<td>6</td>
<td>Judgment</td>
<td>6.6</td>
</tr>
<tr>
<td>6</td>
<td>Organizational behaviour</td>
<td>6.6</td>
</tr>
<tr>
<td>7</td>
<td>Healthcare delivery mechanisms</td>
<td>7.2</td>
</tr>
<tr>
<td>8</td>
<td>Continuous quality and safety improvements</td>
<td>7.7</td>
</tr>
<tr>
<td>9</td>
<td>Negotiation</td>
<td>8.5</td>
</tr>
<tr>
<td>10</td>
<td>Influencing</td>
<td>8.7</td>
</tr>
<tr>
<td>10</td>
<td>Strategic marketing</td>
<td>8.7</td>
</tr>
<tr>
<td>11</td>
<td>Industrial relations</td>
<td>11.7</td>
</tr>
</tbody>
</table>

The most important management competencies identified were leadership, strategic decision making, communication and interpersonal skills. Participants also identified a number of critical management skills. The two most important were system and strategic thinking, followed by analytical and problem-solving skills.

Survey results showed that a number of financial management topics were identified as important for everyday health-management practice. Between 69% and 100% of health managers used a number of critical financial management tools, while other financial management aids, such as monitoring budget performance (77%) and key performance indicators (79%), were used less frequently.

Participants were also asked to nominate their preferred learning styles and learning format. Survey results found that all participants preferred to learn in an inter-professional context, that 86% preferred a team-based learning environment and that 69% would like such learning to be based on a long-term strategy.

Focus group respondents identified a variety of reasons for wanting to work in a rural area, including having had good, enthusiastic teachers who taught them well and who inspired them to work in a rural setting. A number of respondents referred to senior health managers as role models, health professionals whom they could work with and learn from in a rural environment. Other factors that affected recruitment and retention in rural areas related to a government’s initiative that mandates rural placements, and having to fulfill family obligations. Factors that contributed to their remaining in rural practice included being valued as a health professional by patients and colleagues, being a member of a professional team, having strong links to the community, and being satisfied with the nature of their work.

Inter-professional focus group respondents all agreed on what health management programs should cover, including health systems management, information management, financial management, human resources, leadership and the change process. They also believed that the outcome of such programs should result in competencies in leadership, strategic decision making, and effective communication and interpersonal skills. These topics, competencies and skills are congruent with those identified in the survey results.
In the nurses’ focus group discussion, there was consensus that they should have equal access with the other professions to health management education. In addition, respondents raised numerous issues affecting their scope of practice. These included limited scope for effective communication with all stakeholders, a lack of recognition by medical officers and little opportunity for inter-professional education. Respondents emphasized the need to promote the role of primary care nurses (PCNs) at the community level, and they also discussed the workforce shortage, specifically the insufficient number of nurses to undertake home visits. Overall, the group concluded that these factors had the potential to affect the sustainability of PCNs in primary care units.

**Discussion**

As far as health management issues are concerned, participants in this study indicated that their knowledge of information management and research was rather poor and that improvements in financial management, especially developing financial measures, key performance indicators and monitoring budget performance, are required to meet best practice financial accountability and transparency. These health managers were very much aware that they could profit from improving their management competencies in the areas of leadership, strategic decision making and communication and that, in particular, healthcare policy, health service management, information management, research and evaluation are high priority learning areas.

The major challenges respondents face in their role as primary healthcare professionals are developing effective teamwork, having a clear vision, managing the PCU services and personnel effectively, continuing professional development, and recruiting competent and skilled nurses for PHC work. The respondents collectively agreed that these challenges can be overcome by strengthening team-building efforts through inter-professional collaboration, and capacity building at all levels through professional development. The findings in this study in terms of primary healthcare sustainability in rural Thailand are consistent with those of Pachanee and Wibulpolprasert (2006).

The inter-professional focus group sessions throughout the 3-day workshop highlighted several factors in relation to primary care nurses. First, the majority of PCNs prefer to work in rural areas for the job satisfaction, challenges and flexibility that the role offers them. Second, PCNs provide an invaluable contribution to patient-centred care in PCUs and are eager to foster multidisciplinary collaboration to improve patient care outcomes.

Third, they prefer to work in PCUs rather than undertaking home visits, and they would like inter-professional recognition for their scope of practice. Finally, there needs to be flexibility in healthcare delivery, such as different models of care in different PCUs. Participants’ preferred learning context was summarized as inter-professional, team based, long-term, and action oriented. Overall, nurse respondents emphasized the need to acquire management and competency skills in order to build a sustainable and capacity-building environment for primary care units.

Management approaches underpinning an effective implementation of health reforms can be summarized as change management and performance management based on effective leadership. Such leadership requires managers to draw on a number of competencies, including conceptual, participatory and interpersonal competencies. These must, in turn, emanate from a manager’s drive, motivation, integrity, self-confidence and emotional intelligence based on people, communication and hands-on skills. In addition, these management competencies need to be based on the principle of aiming to develop capabilities, that is, a lifelong process of engaging in continuous learning in order to operate effectively and efficiently in an ever-changing and increasingly complex multifaceted health environment. Therefore, the paradigm shift required from health managers and staff comprises three major considerations – moving from managed care to an organized system of care, becoming a high-reliability organization and setting up high-reliability teams (Yanggratoke 2006).

Several recommendations arose from our study findings. First, an integrated strategic direction to ongoing learning and development was proposed, starting with short-course seminar-based learning while formal curriculum was developed and implemented. These initiatives would require greater academic and research capacity in order to develop and deliver the curriculum. A further major
recommendation was that in the development of primary care nursing programs, health management topic areas should be included. Respondents in the nurses’ focus group also believed that skills in effective intersectoral collaboration and stakeholder communication should be included in programs to further develop the primary care nurse’s role.

The authors acknowledge that there were limitations to the study. This qualitative study consisting of a purposive sample of 35 health professionals was limited to one province in Thailand; therefore results cannot be generalized. However, using in-depth interviews and focus groups with a diverse range of health professionals provided rich, valuable data that will greatly assist the Thai–Australian Health Alliance in developing an inter-professional health management curriculum. In addition, the questionnaires used in the quantitative stage of this study were developed specifically for the Thai context but were not pilot tested prior to data collection. Therefore, reliability will need to be established with further use of the questionnaires.

Conclusion
The main challenges in this research study were the inter-cultural nature of the project, the inter-professional group of participants and the need to influence health-professional policy to understand the issues and problems in primary healthcare delivery in rural Thailand. The latter challenge has also been described in the literature by Taytiwat (2008) and Fraser et al. (2008:3 3), who stated that “a barrier to the implementation of many proposed changes was the lack of authority and/or organizational support to influence the development of new policy.”

According to respondents, the most valuable component of the workshop was the space created by the researchers where dialogue that allowed for multiple perspectives was encouraged. Respondents were exposed to a range of critical workforce issues, including recruitment and retention and the need for a health-management curriculum, and they were able to express opinions with each other and the research team.

In an increasingly complex and ever-changing world where healthcare needs must be managed effectively and efficiently, PHC delivery needs to be based on the principles of sustainability. PHC health professionals need to increasingly embrace teamwork, advocate capacity-building strategies, shift from the dominance of curative care to a focus on preventative, promotive and rehabilitative care, and embrace best practice, evidence-based population health and public health principles in order to effectively deal with the complexities of healthcare today and in the future.

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References

Australian College of Health Services Executives (ACHSE). 2005. Management Competency for Health Professionals Assessment Package, Sydney, ACHSE.


