POLICY CONTEXT AND BACKGROUND

Australia's health system is under pressure from challenges posed by an ageing population, the increasing prevalence of chronic disease, increasing consumerism and new technologies. The health workforce itself compounds these challenges as it ages, and there remain shortages in key disciplines. Workforce shortages in the primary health care sector must be addressed for the health system to deliver good outcomes. Education and training are key components of strategies to address workforce shortages and to equip that workforce to meet future needs of chronic disease management in general practice settings.

Several strategies potentially relieve pressure on the general practice and primary health care workforce and operate on the “supply side” or “demand side” in seeking to ease workforce shortages. Education and training activities are fundamental in these potential strategic responses to the workforce shortages and in equipping that workforce for chronic disease management roles.

KEY FINDINGS

Competency-based education (CBE) programs focus on outcomes, rather than acquisition of knowledge. They contrast with structure and process-based educational programs in emphasising student and teacher responsibility for program content, ideally take place in actual work contexts, are criterion referenced, stress formative assessment and can be completed in variable time frames. An outcomes focus is a common goal in many health-related domains, including education. It can enhance transparency, efficiency, effectiveness, quality, public accountability and this is part of the reason for the appeal of outcomes-orientated educational approaches.

CBE has been championed as the way forward in both health professional and other vocational educational and training settings for more than two decades. Three factors have contributed to the slow uptake of CBE: confusion of terminology, tension between atomistic and holistic views of competencies, and the human and financial resources necessary to create a program.
For CBE to lead to improved workforce and chronic disease management outcomes, five different issues need careful consideration. Designers of these programs must:

- Clearly align the objectives of the educational activities with the chronic disease or workforce related outcomes of interest;
- Design sound educational programs;
- Identify educational programs across the system targeting the same outcomes and seek to maximise synergies between programs;
- Be fully aware of and work within the existing complexity of the training environment; and
- Actively manage the process of change.

**POLICY OPTIONS**

The possible options include options that can be implemented with educational policy interventions alone, and options that in additional to the educational policy interventions, require regulatory changes to be made. Adequate financing is essential.

Increase the focus on chronic disease management in general practice settings in both undergraduate medical and nursing curriculum, including early exposure to people with chronic disease in these settings.

Use CBE methodology to improve selection of trainees into general practice and practice nursing training programs.

Design CBE programs that focus on relevant aspects of chronic disease management. In addition to programs focussed on particular chronic diseases these include:

- analysis and planning;
- behaviour modification and patient education;
- clinical audits;
- clinical practice guidelines and clinical pathways;
- communication skills;
- critical appraisal;
- cross cultural issues;
- disease registers;
- generalism;
- informatics and computer knowledge;
- leadership;
- patient self-management;
- prescribing;
- prevention, screening and early intervention;
- quality improvement; and
- team work.

Begin with topics that are less likely to be contentious. A program focusing on informatics and computer knowledge will be less contentious than one focusing on nurse prescribing.

Increase the focus on interdisciplinary programs. General practice vocational training and continuing professional development programs provide opportunities for interdisciplinary programs with GPs and practice nurses.

Trial and evaluate new programs in limited settings before widespread roll out. Include in the evaluation an assessment of the costs associated with the program. Regional Training Providers (RTPs) within the Australian General Practice Training environment are ideal platforms.

Consider barriers and facilitators to implementation of CBE. It is only a part of the complex interventions needed to address both the workforce shortage and improve chronic disease management in general practice.
Barriers

- Adequate numbers of individual patients to allow valid and reliable assessment of performance to be made;
- Complex environment including multiple players with competing agendas;
- Complex nature of multifaceted interventions;
- Cost;
- Determination of levels of performance for defined competencies, including range of deviation at different stages of training;
- Dynamic nature of knowledge;
- Key participants are not engaged
- Lack of evidence supporting effectiveness of CBE;
- Patient factors (e.g. socio economic status) may impact on trainee performance;
- Representativeness of the competencies selected for assessment of the larger professional role; and
- Uncertainty about the best type of chronic disease model.

Facilitators (from Carraccio)

- Engaging faculty and other stakeholders in the program;
- Making competency-based curriculum an integral part of the organisation's strategic plan;
- Using accreditation requirements to facilitate change;
- Administrative support for developing, managing and assessing the curriculum;
- Assurance that the planning process is clearly linked to an assessment plan;
- Development of a suite of assessment tools that incorporate observations taken in many situations including the actual work place;
- Keeping faculty close to the assessment process; and
- Designing a competency-based curricular review process.

The potential for entrepreneurs (including RTPs) to play a role in proposing and developing innovative solutions should be encouraged.

Trial some programs involving changes in the regulatory framework. A variation on the physician assistant could be developed and implemented in Australia, with a specific focus on chronic disease management. This would require appropriate regulations and a training and certification program to be developed.

METHOD

Systematic review of the literature using a narrative review approach, identification of key grey literature and iteration of options.