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Chronic Condition Self-Management Support: Proposed competencies for medical students

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Abstract 209 words

**Objective**
Governments and the medical profession are concerned that there continues to be less than optimal health outcomes despite escalating expenditure on health services from the effect of the ageing population with chronic illnesses. In this context, doctors will need to have knowledge and skills in effective Chronic Condition Management (CCM) and Chronic Condition Self-Management (CCSM).

**Method**
A national workshop of representatives of eight medical schools from the CCSM Special Interest Group (SIG) of the Australian and New Zealand Association on Medical Education (ANZAME) met in September 2004, to consider curriculum content in CCM and CCSM.

**Results**
The workshop recommended that the Committee of Deans of Australian Medical Schools (CDAMS) and the Commonwealth Department of Health and Ageing (DoHA) consider the identification and possible development of a specific curriculum for CCM and CCSM within the curricula of Australian Medical Schools.

**Discussion**
Consideration needs to be given to the changing nature of medical practice and that as part of this; doctors of the future will need skills in team participation, continuity of care, self-management support and patient-centered collaborative care planning. Doctors will also need
skills to assist patients to better adhere to medical management, lifestyle behaviour change and risk factor reduction, if optimal health outcomes are to be achieved and costs are to be contained.

**Key words:** chronic condition management, self-management, medical curriculum, chronic illness.
Introduction

Current and future medical practitioners will need the knowledge and skills to initiate programs that address the developing crisis in chronic condition prevention and management. This paper describes the background and outcomes of a chronic condition self-management (CCSM) Special Interest Group (SIG) meeting of the Australian and New Zealand Association on Medical Education (ANZAME) which aimed to determine the current status of chronic condition self-management support (CCSMS) teaching in Australian medical schools and make recommendations regarding the desired CCSMS competencies for Australian medical graduates.

Chronic conditions will account for 80% of global disease burden by the year 2020[1]. The increasing demand on health services from chronic conditions requires a shift from managing acute conditions to prevention of disease and maintaining a healthy life for people with chronic conditions[2]. In Australia, healthcare systems are under substantial pressure from rising medical costs that are outstripping the capacity to afford them. In addition, in Australia, the proportion of the population aged over 65 years will rise from 12% in 2002 to 26 per cent by 2051 [3]. As nearly half of lifetime healthcare system expenditure is incurred during the senior years[4], health care costs will more than double over the next four decades. As a consequence all countries are seeking alternative responses to this increasing demand for healthcare[5]. These developments have major implications for the education of doctors and other health professionals.

As a way forward, the World Health Organisation (WHO)[5] report provides a chronic conditions framework [please note “chronic conditions” is used throughout this paper instead of ‘chronic disease’ as per the WHO Report], an expansion of the evidence based Chronic Care Model (CCM)[6]. Patient chronic condition self-management (CCSM) and self-management support by
Clinicians and organizations are essential components of all chronic care programs[5]. Self-management by patients with chronic conditions requires adherence to medication use, behavioural risk factor reduction, to monitor symptoms, and to manage the impacts of the condition(s). This requires a lot from patients and there is substantial evidence that whilst adherence[7-9] and self-monitoring[10, 11] by patients occur less frequently than is desirable, there is also clear evidence that with education and support, such skills[12, 13] and behaviour changes [14, 15] can be achieved.

In Australia, the Commonwealth Department of Health and Ageing (DoHA) has been addressing the need for change in chronic illness care over the last decade. An emphasis on a shift from hospital-based care to preventative and primary healthcare led to the first and second round coordinated care trials[16, 17], and capacity building in General Practice through the Enhanced Primary Care (EPC) program[18]. DoHA has facilitated the engagement of non government organizations with the primary healthcare sector through the National Sharing Health Care initiative[19] with the aim of developing self-management models of care. Commonwealth, State and Territory governments through the Australian Better Health Initiative[20] are implementing policies which aim to engage consumers and carers as genuine partners in their own healthcare, together with an increased focus on the need for teamwork, patient-centred care, longitudinal care planning and bridging communication gaps that hamper “seamless integrated care”[21]. In spite of these initiatives, most services remain primarily focussed on acute care.

The patient-centred approach is recognised as being fundamental to all patient care[5]. In the United Kingdom, the National Health Service has established the “Expert Patient” program[22], a national initiative to educate patients with chronic conditions in self-management using the
Stanford peer led group model[12]. In the United States numerous initiatives including the Institute for Healthcare Improvement has conducted Breakthrough Series Collaboratives [23] to effect systemic changes incorporating self-management support[24-26], medical school education[27] and similar initiatives have been started in Australia[28, 29].

Is there a need for education and training for future medical practitioners in CCSM?

Whilst there have been substantial investments in Australia in care planning, incentives such as Medicare Plus and the computerisation of medical practice, there remains a considerable gap in the skill base of the health care workforce in these areas[30]. It is recognised that medical curricula are already overloaded, nevertheless future practitioners will be confronted with these issues and challenges. Universities have been responsive to the needs of changing demands in clinical practice. It is argued that there is a need for curriculum development at this time so that future medical practitioners will be able to take appropriate leadership and team roles in the management of chronic illness. A high level of skills in CCSM support will be required. This paper reports the deliberations by representatives from eight medical schools who met to consider this issue in September 2004.

Method

As part of the National Sharing Health Care initiative, the Flinders University Human Behaviour and Health Research Unit (FHBHRU) was contracted to provide training in chronic condition self-management support to more than 1300 medical practitioners and health workers between 2001 -2004 [31]. After the formation of a special interest group (SIG) in CCSM at the National Conference of ANZAME in June 2004, DoHA invited the FHBHRU to conduct a workshop to explore the need for curriculum development in this area by inviting the Committee of Deans of
Australian Medical Schools (CDAMS) to send one representative from each medical school to attend the workshop. The workshop explored current CCM curricula in medical schools, initiatives in CCM and CCSM and proposed core CCSM competencies. Implementation and evaluation issues were discussed. An international perspective was provided by Prof Martha Regan-Smith of the Dartmouth Medical School, United States who has focused on the use of the clinical micro system as the unit for health care improvement and clinical teaching in CCSM. The proceedings of the day were recorded and summarised, with the summary being provided to the participants for comment and modification.

**Workshop outcomes**

*CCM and CCSM content in current curricula*

There was significant attention paid to the needs of patients with chronic conditions and there were a number of common approaches, mostly recent additions to curricula across the medical schools represented. Some examples were:

- An experiential learning strategy where students are asked to reflect on their own health risk factors and to effect some change over time.
- Students are required to talk to patients about their experiences of chronic illness, and/or are required to journey with patients over an extended period and reflect on these experiences.
- Mentorship by senior clinicians as a way of reflecting on patient’s experiences of illness.
- Specific teaching about chronic illness, often in psycho-geriatrics, rehabilitation, in general practice and in dealing with conditions such as renal failure.
- Problem Based Learning cases where issues of chronic illness management become a focus.
• Patient-centred care is a universal focus.

The development of a possible CCM and CCSM curriculum for medical students

Presentations by authors of this paper on the Flinders Model of clinician self-management education using a semi-structured cognitive behavioural approach (MB), use of a micro-systems approach to teaching of trainee specialists (MR-S)[32] and self-management curriculum development at Flinders University (RP) facilitated discussion and the identification of a number of issues.

*Implicit versus the explicit need for skills*

It was identified that while elements of CCM and CCSM were implicit in curricula, there is a need for an explicit focus on this area. It was considered that students needed to be engaged to focus on the importance of CCM and CCSM and that it has to be obvious to students that as disease progresses, it is important for new skills to be used and new management strategies to be adopted.

*The evidence base shows the need for a different educational response*

It was agreed that the need to focus on chronic illness care should be based on evidence for example:

• The failure of adherence to medication regimes by patients with chronic conditions[33, 34].

• The failure of patients to adhere to necessary life style changes[35].

• The failure of clinicians to adhere to evidence based guidelines in the management of patients with chronic illness, leading to poor health outcomes[26].

• That risk factors for chronic conditions are part of a longitudinal perspective to be seen as the first stage of the management of chronic conditions[36, 37].
This evidence shows that current approaches to CCM and CCSM are less than what is required to respond to the chronic diseases epidemic.

**Fragmentation of medical care requires advanced communication skills for doctors**

Communication with patients, carers, the broader health system and the community was seen as central to learning about managing chronic conditions.

**Initiation and maintenance of behavioural change is complex and central to better outcomes in CCM and CCSM**

Students need to be aware of the difficulty for anyone to change their behaviour successfully over time. Patients may not want to participate in the medical care plan in the way that doctors suggest and will need to be assessed for their levels of motivation, readiness for change and self-management capacity. Experiential learning by students in their own behavioural change such as stress management could be a powerful educational tool.

In response to these issues a core set of competencies were identified which were stated as follows: “At the completion of a core CCSM curriculum medical students will:

(a) Know:

- The differences between acute and chronic condition processes and the implications that this has for the behaviour and roles of the patient, doctor and significant others.
- The evidence base for the need to improve adherence to medication, medical care plans and adherence to lifestyle changes by patients.
- The evidence base indicating the efficacy of self-management and the objective achievement of better health outcomes and quality of life.
• The significant handicaps that chronic illness imposes on patients and their carers in their everyday lives, that interfere with the achievement of optimum health outcomes and quality of life.
• The importance of understanding these handicaps and their effects within the context of the culture and language of patients, families and their community.
• The effect that the burden of chronic illness places on society at the micro, meso and macro levels.

(b) Have the following Attitudes:
• See and respect patients and significant others as their own principal health carers and that their active, informed partnership is required to achieve optimum health outcomes and quality of life for patients.
• See patients and their families as equal partners with doctors and other health professionals in the management of chronic conditions.
• Respect a patient’s right to refuse specifically recommended medical care.
• See self help groups, self-management skill training and community support programs as integral to standard care for patients with chronic conditions.

(c) Skills:
• The ability to conduct a formal assessment of self-management ability of patients and collaborative management ability of carers at any given point in time.
• The ability to motivate and activate patients, incorporating them into the health care team.
• The development of shared care plans which includes:
• A patient problem formulation to identify self-management tasks that are required for achieving personal and medical goals
• A written, realistic, patient driven goals and action plan.
• The longitudinal monitoring of CCSM care plans.

• Communicating across various sections of the health system
• Communication with carers and significant others
• Record keeping and the integration of a variety of data sources and maintaining currency of the care plans.”

(SIG recommendations to Committee of Deans of Australian Medical Schools 21 November 2004).

Delivery

Such a curriculum should be emphasised in general practice, primary health care and in rural attachments. Assessment with care planning for chronic care management provides an ideal avenue for interdisciplinary teaching. Within the general hospital setting students should see chronic conditions as presenting with an acute exacerbation of a chronic condition and the care planning for discharge should reflect this. There should be consistency of CCSM across the years leading to clinical competency in later years. CCSM concepts should be covered in assessment, clinical management, research, professional behaviour and modules on health service delivery.

A new approach to teaching clinical skills for CCM and CCSM may be required. This includes the location of teaching in the community as well as the teaching hospital and general practice. A clinical skills laboratory using a clinical instruction model with a bank of patient volunteers,
standardised patients and the use of a bank of patient videotapes could teach specific skills such as self-management assessment, care planning, motivational interviewing, symptom monitoring and behavioural reinforcement.

**Recommendations**

The principal recommendation was that self-management of chronic conditions should be an integral and defined part of the learning of all medical students. It was recommended that an audit of all Australian medical schools for current CCM and CCSM curricula content should occur using the recommended competencies as a framework to determine if further curriculum development was required.

**Discussion**

There was consensus that there is a need for better continuity of care for patients suffering from chronic conditions and that improved patient adherence to medical treatment and advice will make significant differences to health outcomes. The central question is can we teach medical students how to do this better? Certainly, this group of medical educators considered that it would be a worthwhile exercise to pursue such an objective.

As a result of this project, FHBHRU was funded by the DoHA to conduct an audit of CCSM support education in Australian medical schools and extended this to nursing and allied health undergraduate and professional entry courses. These audits confirmed that whilst CCMS support was implicit in many courses there was little explicit education, little skill training or assessment in CCSM support knowledge or skills. In 2006 The Council of Australian governments, consisting of the Prime Minister and Premiers of each state and territory, agreed to implement the
National Chronic Disease Strategy by establishing the Australian Better Health Initiative [20] Of this $500 million 4 year initiative, $34 million was allocated to support patients in their self-management of chronic conditions through the development of training and education programs for the future and current primary care workforce. In two related projects FHBHRU and its consortium partners have recently conducted a national consultation to develop a curriculum framework for undergraduate and professional entry nursing, allied health and medical schools in chronic condition self-management support and recommendations for the skills required of the primary care workforce in prevention and self-management of chronic conditions. The competencies recommended in this meeting of medical school representatives formed a basis for the consultation process and the recommended skill set.

There is a need for the whole Australian health system to rethink the way that CCM and CCSM are being conducted at this time. Workforce changes are necessary [38] and the need for new approaches in undergraduate and postgraduate education were highlighted by the workshop participants. The work of Wagner et al [39], the WHO [5], and ‘collaboratives’ which aim to bring about system change in chronic illness care [28, 29, 40]all point in the direction of the health systems of the future. The curriculum competencies recommended by this group of medical educators provide a direction for developing the skills needed by doctors who will be working in this changing system.

Conclusions

A workshop of representatives of eight Australian medical schools recommended that in medical curricula, there should be an explicit focus on chronic condition self-management support, based on a set of core competencies. There should be explicit expectations that students learn
behaviours that facilitate patient engagement in their own care. To achieve this, skills in effecting behaviour change in patients with chronic illness will require more determined endeavours by medical practitioners if better health outcomes are to be achieved. Better education and training in CCM and CCSM for medical students will contribute to this.
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