

## INSTRUCTIONAL DESIGN AND ASSESSMENT

### A Learning and Teaching Resource on Patient Self-Management of Chronic Pain

Lorraine Smith, PhD, Lin Brown, MEd, Anita Bundy, PhD, Sue Ronaldson, PhD, Heather McKenzie, PhD, Peter Lewis, PhD Candidate, and Sinthia Bosnic-Anticevich, PhD

Faculty of Pharmacy, The University of Sydney, Camperdown, NSW, Australia

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**Objective.** To develop, pilot test, and evaluate an instructional module on patient self-management for undergraduate pharmacy students in an Australian university.

**Design.** Learning outcomes and associated content and assessment tasks were developed, featuring lecture and readings, in-class discussions, and online delivery of in-depth interviews with patients who were living with chronic pain.

**Assessment.** Students completed a premodule and postmodule questionnaire and were further assessed by multiple-choice questions following completion of the module and again at the end of the semester. Positive changes were identified in the students' discourse surrounding patient self-management of chronic pain. Responses to multiple-choice questions showed that knowledge was sustained over the course of the semester.

**Conclusions.** Completion of a comprehensive module on patient self-management increased undergraduate pharmacy students' understanding and knowledge of patients experiencing chronic pain. The module could be implemented across other healthcare disciplines.

**Keywords:** online learning, curriculum patient interviews, patient self-management, student perceptions, assessment

## INTRODUCTION

Patient self-management can be defined as "patient attitudes, behaviors and skills directed toward managing the impact of the condition(s) on all aspects of living."<sup>1</sup> It is thus recognized that patients are capable of active participation in their own care and, in so doing, may have a positive impact on their health.<sup>2-4</sup> Patient self-management of chronic conditions is acknowledged as a primary goal of healthcare delivery and has been identified by the Australian Commonwealth Government in its Chronic Disease Strategy as an area requiring urgent attention.<sup>1,5</sup> Consequently, patient self-management is considered a critical component of modern healthcare delivery whereby healthcare professionals have the requisite knowledge, skills, and behaviors to facilitate and support patient self-management activities.<sup>6</sup> To successfully facilitate patient self-management, healthcare professionals require an understanding of not only the theoretical concepts and technical skills pertaining to patient self-management but also the relationships among these theoretical concepts, clinical

practice, and the personal, real-world experience of patients. Bridging this theory-practice gap has long been a challenge for educators and students alike. The problem is exacerbated by curricula that, from a content perspective, have failed to address the evolving approaches to healthcare delivery, and from a practical perspective, have failed to provide students with adequate practical experience.

Because of the decline in patient length of hospital stay combined with increasing healthcare student enrollment, students have fewer opportunities to gain experience working with patients who have a chronic condition or to develop an empathic understanding of patient perspectives. Research conducted into higher education has for a long time highlighted the critical role of student-centered learning and teaching.<sup>7</sup> Students enrolled in professional healthcare programs require real-world experiences that will equip them with patient-centered practices, such as showing empathy, understanding patient perspectives, and empowering patients to self-manage their conditions. To address this issue, the current study sought to provide authentic patient self-management learning content to support students before they entered their next phase of student participation in their professional education, ie, the commencement of clinical placements.

**Corresponding Author:** Dr. Lorraine Smith, Senior Lecturer, Faculty of Pharmacy, Building A15, The University of Sydney, NSW, 2006. Tel: +61-2-9036-7079. Fax: +61-2-9351-4391. E-mail: lorraine.smith@sydney.edu.au

The usage and integration of the Internet and other digital technologies into the daily lives of higher-education students is dramatically escalating, prompting changes in both learning and teaching.<sup>8,9</sup> As the first generation of learners to have grown up with the Internet, university students currently studying health care have a familiar, seamless relationship with digital technologies. However, as healthcare students, their relative youth denies many of them the life experience necessary to be empathic regarding other people's difficulties.<sup>8</sup> For example, they may not understand the challenges of living with and managing a chronic condition or possess the knowledge and skills to facilitate patients' participation in their own health care.

With respect to patient self-management and higher-level healthcare education in Australia, an Australia-wide investigation (the "Flinders Report") of the extent to which self-management is integrated into higher-level healthcare curricula revealed a fundamental gap in student learning.<sup>10</sup> Content and learning outcomes explicitly related to patient self-management were found to be lacking across the range of health professions, including medicine, nursing, pharmacy, and other allied health professions. The report also found that the self-management content that was evident in healthcare courses lacked constructive alignment among learning outcomes, learning activities, and assessment tasks.<sup>10</sup> An earlier study showed that pharmacy students who are self-reflective in their learning environments and have skills in collaborative learning are best equipped to *construct* and *apply* knowledge, rather than simply to accumulate and reproduce it.<sup>11,12</sup> We sought to address the lack of relevant patient self-management curriculum content, multimedia-focused students, and the need to ensure knowledge acquisition and construction by developing a patient-focused learning module incorporating online lectures and readings, video-recorded interviews of patient accounts, and classroom-based discussions.

The curriculum innovation described in this article sought to address a recognized shortcoming in the teaching of patient self-management to Australian undergraduate allied healthcare students by developing, piloting, and evaluating a novel module of study on patient self-management.<sup>10</sup> The activities and resources of this project were developed with 2 main purposes in mind. The first was to assist pharmacy students in understanding and critically engaging with the cultural changes taking place in healthcare delivery. Because of this shift, patients/consumers are positioned at the center of the healthcare team as experts with respect to their own situation and experience and thus are centrally involved in decision-making processes.<sup>13</sup> The second goal was to respond to the

changes taking place in higher education, wherein digital technologies are increasingly assuming a key role in educational design. This report presents the results of a trial and evaluation of a module for patient self-management for a cohort of students in their second year of a 4-year undergraduate bachelor of pharmacy curriculum in an Australian university.

This curriculum innovation aligns with criteria specified by the Accreditation Council for Pharmacy Education,<sup>14,15</sup> the Center for the Advancement of Pharmaceutical Education,<sup>15</sup> and the Pharmaceutical Society of Australia,<sup>11</sup> each of which requires standards and competencies for pharmacy practice. A core competency reflected in all 3 organizations' standards requires pharmacists to effectively deliver patient-centered care. A further competency, also aligning with The University of Sydney's learning and teaching strategic goals, relates to the development of critical thinking and problem-solving skills through the application of active-learning strategies.

The goals of this project were to develop, integrate, and evaluate educationally sound and relevant patient self-management content into the undergraduate pharmacy curriculum at The University of Sydney. We addressed these goals by developing and testing a series of flexible-mode student activities and resources to enhance pharmacy students' theoretical understandings and knowledge regarding patient self-management and delivering these modules in a contemporary learning environment that fostered students' construction of knowledge. We aimed to enhance pharmacy student engagement through the use of patient perspectives in which patients have a voice and wherein patient self-management is promoted beyond the current practices of simply educating the patient.

## DESIGN

The design process began with a review of learning outcomes of all existing units of study in the bachelor of pharmacy curriculum. The review was undertaken by conducting keyword searches of the syllabus pertaining to each unit of study, followed by consultations with unit coordinators to confirm the extent to which patient self-management was a feature of student learning and teaching. Patient self-management was found to be featured explicitly (ie, evidence of learning outcomes, content, and assessment tasks) in 1 unit of study, a first-year foundation unit (Social Pharmacy), and implicitly (ie, referred to by teaching staff in lectures and classroom activities) in 3 other units spread across the 4-year undergraduate curriculum (ie, Pharmacy Practice; Pharmacy Practice Advanced 4A; Integrated Pharmacy Practice).

Learning outcomes relating to patient self-management identified in these units of study were mapped to the guiding principles of patient self-management, as outlined in the Flinders Reports.<sup>5,7</sup> A set of learning outcomes designed to describe the knowledge and understandings to be achieved by the end of the module was then developed for the current project. These outcomes were based on the findings of the review of the existing units of study, the recommended learning outcomes emanating from the Flinders Reports,<sup>5,7</sup> discussion among team members who were experienced in teaching academics in 3 healthcare disciplines (pharmacy, nursing, and occupational therapy), and consultation with an expert advisory panel formed for the purposes of the patient self-management project. The advisory panel was comprised of team members, student representatives, patient consumers with a chronic condition, and leaders in the field of higher education learning and teaching. Four learning outcomes resulted from this collaborative process (Appendix 1).

At the beginning of the semester, students were briefed on all content and related assessment tasks they would be undertaking; this is a standard educational practice among the faculty members. The module was comprised of a questionnaire, video-recorded patient interviews, class discussion, readings and a lecture podcast, and a multiple-choice test. The classroom component consisted of several tasks. During class time, students completed a questionnaire containing 6 open-ended questions reflecting the established learning outcomes (Appendix 2) and viewed a 30-minute video-recording of a patient discussing self-management issues relating to his/her chronic condition (chronic pain), followed by an instructor-facilitated discussion of the content of the video (Appendix 3). Three weeks later, following completion of the required online activities, students completed the same questionnaire and a 7-item multiple-choice test. The multiple-choice questions were repeated in the students' end-of-year examination 9 weeks later. The module's

self-directed learning resources, which were uploaded to the faculty's e-learning site, consisted of a 50-minute synchronized audio/Microsoft Powerpoint slide lecture (podcast) on models of patient self-management recorded by the lead researcher, 2 journal readings of qualitative research into patient experiences of chronic pain,<sup>17,18</sup> and a 60-minute customized video-recording of 5 patients' accounts of living with chronic pain. This last resource was developed specifically for the project and involved conducting in-depth, narrative-style individual video- and audio-recorded interviews by an experienced qualitative interviewer. Interview questions (Appendix 4) were devised to ensure that information relating to the learning outcomes written for the patient self-management module was gathered during the interviews. Each interview lasted approximately 1 hour. Using the interview transcripts and reviewing the video-recorded interviews, relevant clips (unedited) pertaining to the specific learning outcomes were selected and cut from the full-length interviews and packaged to form the customized recording. Students were required to undertake the self-directed learning activities, which were made available through the faculty's student online learning portal, Blackboard (Blackboard Inc, Washington, DC) during the week immediately following the classroom activities. The implementation flowchart is presented in Figure 1. All learning resources remained on the school's e-learning site for the duration of the semester.

The patient self-management module was tested in the second half of a second-year unit of study (Pharmacy Practice) in the bachelor of pharmacy 4-year degree program at the Faculty of Pharmacy at The University of Sydney, Australia. The second-year student cohort included 275 students. This cohort of students was selected because they had undertaken foundational studies the year before in chronic disease and models of disease-state management, the Australian healthcare system, and basic grounding in patient self-management, but had not yet undertaken any clinical placements, which occur in the

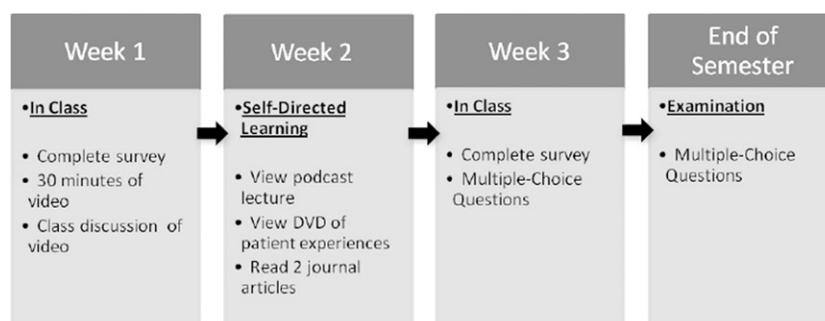


Figure 1. Flowchart of Module Implementation

third and fourth years of the curriculum. The time required for the implementation of the module was 2 hours of classroom time and approximately 3.5 hours of self-directed learning using online resources. Testing of the module was approved by the University of Sydney Human Ethics Committee.

## EVALUATION AND ASSESSMENT

To evaluate the impact of this new learning module on student knowledge and understanding of patient self-management, we conducted an analysis of students' written responses to the questionnaire items prior to (baseline) and following completion of the module (week 3). Results of the analyses conducted on 4 of the 6 survey questions (questions 3-6) are reported herein. The 2 remaining questions were not included because question 1 was assessed in the multiple-choice questions, and question 2 was unrelated to the learning outcomes. The analysis procedures involved entering students' responses into a Microsoft Excel spreadsheet for each data collection point, categorizing responses into themes, and examining the language used by students in their responses. This process was repeated for data collected at the conclusion of the module, and the responses were compared qualitatively before and after completion of the module. We adopted this approach not only to determine changes regarding the extent of students' knowledge acquisition but also to examine changes that may have occurred with respect to knowledge construction and empathic understanding of patient experiences of living with a chronic condition. We also examined students' scores on the multiple-choice questions conducted at week 3 of the course following completion of the module and in the end-of-semester examination 12 weeks later by conducting descriptive statistics and a paired-samples *t* test to determine whether knowledge was sustained.

The results of the thematic analysis of students' survey responses are described below. To the question, "What do you think are some of the challenges that people living with a chronic condition face?" on the premodule survey instrument, student responses were of a general nature and tended to focus on concerns regarding miscommunication and misunderstandings between the patient and healthcare professional. In contrast, student responses at the completion of the module articulated more specific qualities or skills and reflected a stronger appreciation of the role the healthcare professional may play in the difficulties that can arise for patients living with a chronic condition (Table 1).

Baseline student responses to question 4, "What strategies do you believe people with a chronic condition rely on to overcome these barriers?" reflected a preoccupation

with what the pharmacist must do (eg, reminding patients to take their medications) and educating patients about what changes they must make to their personal lifestyles and habits. Whereas the students' tone and language were directive and authoritarian, students positioned patients as if they were passive observers, reflecting a perception that patients are powerless in gaining a measure of personal control over their conditions. Postmodule responses to the same question, however, reflected a repositioning of the patient to the center of care. Communication, acknowledgement that not "one size fits all," trust, and collaboration were featured in the students' responses. Beliefs related to patient attributes and personal autonomy also emerged following completion of the module (Table 1).

Prior to the module, students' responses to question 5, "What skills do you think health professionals need to help patients self-manage a chronic condition?" were of a general nature, focusing on pharmacist traits or personal communication styles. Although these responses were positive and suggested personal qualities of the individual health professional, they did not demonstrate an understanding of the transactional and dynamic process inherent in facilitating patient self-management (Table 1). In contrast, postmodule student responses placed the patient firmly at the center of a collaborative relationship and suggested preferred attitudes and behaviors on the part of the health professional. Respect for the patient and recognition of the "person" rather than the "disease" also emerged (Table 1).

Responses to the question, "What might be some of the challenges for the healthcare professional as he/she assists patients to self-manage?" showed attitudes suggestive of blaming the patient and viewing the patient as the source of difficulties for the pharmacist. Respondents also expressed a desire to keep up to date with advancements in treatment. Following completion of the module, there was a marked difference in student perceptions, suggesting a more reflective and interactive approach to the challenges facing health professionals in their work with patients who have chronic conditions. Student comments reflected a more empathic view and recognition that pharmacists may have different points of view than those of patients. After completing the module, students positioned patients more firmly as experts in the self-management of their conditions and described treatment in more patient-focused terms (Table 1).

Table 2 shows the percentage of correct answers to the multiple-choice questions at week 3 of the class immediately following completion of the module and compares them to the end-of-semester examination 12 weeks later. Six of the 7 questions were answered correctly by more than 70% of students (range, 70%-85%) immediately after

Table 1. Comparison of Student Written Responses on the Pre- and Post-Module Questionnaires

<b>Pre-Module Response Examples</b>	<b>Post-Module Response Examples</b>
<p>Question 3 – Patients’ challenges</p> <p>Difficulty contacting healthcare professional; ineffective communication with healthcare professional; miscommunication between patient and healthcare professional; misunderstandings with healthcare professional.</p>	<p>Patients not being heard by healthcare professional; finding a good healthcare professional who listens; having a healthcare professional who understands their needs; not wanting to be told what to do by healthcare professional; healthcare professional assumptions they know better.</p>
<p>Question 4 – Patients’ strategies</p> <p>Patients need to develop habits that keep them in-line and not suffer from the condition; patients’ strategies are adjusting, changing and altering their lifestyle and habits; developing systematic approaches to treatment eg, webster packing<sup>a</sup> and making memo-notes; having a timetable or notes to remind them of what to do in response to a particular symptom; patients endure the pain; learning to live with it; many of the barriers cannot be overcome and thus must be accepted.</p>	<p>Patients attempt trial and error to find out what works for them; patients may rely on healthcare professional to work hand-in-hand together; having good communication with healthcare professional to work out a suitable plan to tackle the chronic condition; healthcare professional listening and taking what they say seriously to help develop a plan with them.; patients need to be assertive to gain more active role in therapy self-determination; resilience; strength and perseverance.</p>
<p>Question 5 – Healthcare professional s’ skills</p> <p>Easy approach; friendly manner; calm; patient; caring; desire to help people; approachable; understanding; very good people skills, showing empathy; alertness; good at counselling; positive advice and feedback; encouraging and motivating.</p>	<p>Appreciating that the patient knows themselves best is imperative in allowing them to manage their condition; being sympathetic and compromising; being able to accept feedback and negotiating and open to opinion of others; accepting the patient as human; treat the patient as a human not just as another technical case; people are not just a disease to be managed; showing respect for patient as human being/not just scientific project.</p>
<p>Question 6 – healthcare professional s’ challenges</p> <p>Cranky patients; patients resistant to change; patients that were emotional; disbelieving / disillusioned; patients not being co-operative; not adhering to the self-management regime given; patients not adhering to healthcare professional advice; patients blaming healthcare professional for not solving their problems; keep up to date with latest research; keeping track of drugs in co-morbid patients; trying to personalise management strategies.</p>	<p>Lack of understanding as healthcare professional may not feel what the patient feels; able to accept that they don’t know everything and be willing to grow and learn; having to accept the patient’s ability to manage their disease; accept patient knows their own disease best; sometimes it’s hard for healthcare professional to understand the patients’ needs because they don’t feel what the patients’ feel (pain); getting the whole picture and adopting a patient-centred approach; reach an agreement together; cater to the individual’s requirements; there is too much emphasis on medical treatment (not on social or psychological issues); have treatments that fit lifestyle; involve the patient in decision making process; tailoring treatment to patient; keeping track of the patients and how they are managing with their condition: different strategies suited for each patient.</p>

<sup>a</sup> A dose administration aid setting out all tablets and capsules that need to be taken at particular time of the day for a week.

completion of the module. Overall, more of the real-world, practice-related, multiple-choice items (questions 5-7) were answered correctly than were the more theoretically based items (questions 1-4). A paired samples *t* test showed no significant differences between students’ scores at week 3 and week 12, ( $p > 0.05$ ), indicating that

the knowledge acquired as a result of the module was sustained over the course of the semester.

## **DISCUSSION**

This study aimed to develop, implement, and evaluate a novel learning and teaching patient self-management

Table 2. Undergraduate Pharmacy Students' Performance on a Multiple-Choice Test Before and After Completing a Module on Patient Self-Management of Chronic Pain

<b>Multiple-Choice Question Topics</b>	<b>% Correct Answers, Week 3<sup>a,b</sup></b>	<b>% Correct Answers, Week 12<sup>c,d</sup></b>
Definition of patient self-management	70	61
Understandings of a theoretical model of self-regulation of illness behavior	80	74
Application of the theoretical model of self-regulation to Human Behavior	40	43
Relationship between self-regulation and self-management	74	65
Impact of the effect of patient self-management on health outcomes	81	89
Integration of self-management principles into pharmacy practice	85	89
Understanding of the active role of the patient in self-management	81	86

<sup>a</sup> Mean number (SD) of correct responses at week 3 (immediately postmodule)=5.1 (1.3)

<sup>b</sup> Number of students enrolled in the class who completed the multiple-choice questionnaire at week 3 of the course=256

<sup>c</sup> Mean number (SD) of correct responses to multiple-choice questions at week 12 of the course=5.0 (1.3)

<sup>d</sup> Number of students enrolled at the end of semester who completed the final examination (including multiple-choice questions)=263

module in a second-year undergraduate pharmacy curriculum. Studies in the literature involving undergraduate healthcare students engaged with virtual or real-life scenarios (using actors) in their study programs are predominantly grounded in simulation-based education<sup>19,20</sup> and in conjunction with interprofessional learning,<sup>21-23</sup> and patient safety units.<sup>24,25</sup> The current study offers new insights for teaching patient self-management through the use of in-depth interviews connecting students with the experiences of real patients living with chronic pain.

Outcomes of this pilot study showed a marked maturity in students' ideas over the course of the module, increased knowledge of patient self-management, and empathic understandings regarding patient experiences in managing a chronic condition. In particular, analysis of the survey questions showed encouraging changes in pharmacy students' perceptions regarding patient self-management, reflecting a shift from paternalistic attitudes, positioning pharmacists as the experts, and a focus on educating the patient toward recognition of the collaborative process of self-management, which positions patients at the center of care and recognizes them as knowledgeable about their respective conditions. Responses also indicated that the pharmacy students were developing an awareness that patients have the capacity and personal resources to draw on for managing their chronic conditions, with variations from individual to individual. There was evidence that students gained an appreciation of the positive role of partnerships between healthcare professionals and patients and that educating the patient is not the only pathway to the delivery of pharmaceutical care. Studies exploring issues of patient self-management generally have been conducted in community pharmacies with recommendations that continuing pharmacy education is warranted.<sup>26,27</sup> This research indicates that patient self-management in pharmacy education can begin at the undergraduate level.

Student responses postmodule reflected an awareness of the benefits of having skills that enable students to enter a partnership with their patients and encouraging patient engagement and participation. The responses also suggested an acquired understanding of the realities of providing patient-centred care, with students acknowledging the need to develop individualized care plans, the potential for ineffective care plans, and the benefit of healthcare professionals and patients reaching consensus regarding the care plan. Given the aforementioned shortcomings in Australian higher-education patient self-management curricula, and that patient self-management of chronic illness is now recognized as a primary goal of healthcare delivery in Australia,<sup>5</sup> the results of this study suggest that there is strong potential for further development and testing of this educational resource.

The results of the multiple-choice questionnaire analyses indicate that students' knowledge reflected a better understanding of the practical, real-world issues compared with theoretical aspects. This difference may be attributable to the range and number of resources in the module relating to these aspects of patient self-management, such as the video-recorded interviews, class discussion, and readings, compared with the theoretical component (1 online lecture). These results also may indicate pharmacy students' preference for adopting an application-directed approach to their studies,<sup>11,12</sup> which suggests a vocational orientation to their learning and a belief that learning is the use of knowledge. The results of the multiple-choice questions assessed at the conclusion of the module show that student knowledge was sustained over the course of the semester.

This resource was designed to enhance pharmacy student understandings of and knowledge construction around patient self-management of chronic conditions to deliver learning in a flexible and technologically

attractive fashion and to prepare them for clinical practice in the years ahead. Thus, integrating patient accounts of their personal experience coping with a chronic condition was a critical component of this resource, and careful consideration was paid to ensuring coherence among learning outcomes, student learning resources, and assessment during the design of this project. Nonetheless, the project team encountered some challenges, including quarantining subject content to make room for testing the resource and the time-intensive task of viewing all video-recorded interviews and reading transcripts in order to identify and include relevant recorded segments from the interviews. These activities were also associated with an initial cost for researcher time as well as technical expertise in editing the video clips and packaging them in a coherent and attractive manner.

Because of the pilot nature of this study, the development and initial implementation of the project had some limitations. These included the small number of interviews (5) that were conducted with chronic pain patients and the lack of formal evaluation of teacher feedback. Teacher evaluations are expected to be conducted when the resource is further tested in the nursing discipline. The relative contributions of each of the components of the supporting learning and teaching materials to student learning and teacher satisfaction in using the resource are unknown at this stage. Continued use of the resource with feedback from students and teachers is expected to provide some indication of the usefulness of its components, including video-recorded interviews, online readings and lecture podcast, class discussion, and assessment materials. This innovation is currently being developed for full integration as an online learning and teaching resource and with additional features such as cross-disciplinary online collaboration, home-based access by students, and online “barrier” quizzes to ensure student completion of required tasks. Further trials planned for the disciplines of nursing and occupational therapy will include the addition of an interprofessional group task to enhance student understanding of the importance of different healthcare professionals working together in caring for people with chronic pain. Evaluation of the module from the teacher perspective also will be undertaken. Another module for type II diabetes has already been completed and will form part of a suite of patient self-management teaching materials across the university’s healthcare disciplines.

## CONCLUSION

This patient-focused self-management learning and teaching module contributed positively to bachelor of pharmacy student learning about this important aspect

of healthcare delivery. A strength of this patient self-management teaching module is its potential for extension to a wide range of chronic conditions.

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#### Appendix 1. Learning Outcomes of the Patient Self-Management Module

“Following completion of the module, pharmacy students will be able to demonstrate knowledge and understandings regarding:

Learning Outcome 1: The challenges that face both patient and healthcare professional in regard to patient self-management

Learning Outcome 2: Patient-related beliefs and attitudes, emotions, and behaviors contributing to self-management of chronic conditions

Learning Outcome 3: Healthcare professional skills to promote patient self-management of chronic conditions

Learning Outcome 4: Theory/models of self-management of chronic conditions

#### Appendix 2. Student Self-Reflection Questionnaire

What do you understand the term “patient self-management of chronic conditions” to mean?

Where or how did you come across this term?

What do you think are some of the challenges that people living with a chronic condition face?

What strategies do you believe people with a chronic condition rely on to overcome these barriers?

What skills do you think healthcare professionals need to help patients self-manage a chronic condition?

What might be some of the challenges for the healthcare professional as he/she assists patients to self-manage?

#### Appendix 3. Instructor Notes for Class Discussion of Patient Self-Management

Over the next 3 weeks you will be given an opportunity to observe video-recorded interviews of 5 people who live with chronic pain. They talk about how their pain affects their life and what they do to manage their pain on a daily basis. Today you will be introduced to Jo, who lives with Osteogenesis Imperfecta (OI) or brittle bones. We will watch the video for around 30 minutes in two parts (or one if you choose this option) and then discuss some of the issues she raises.

##### *Questions for Class Discussion:*

Jo has had OI all her life. What strategies has she found most useful in managing her pain?

What role did her parents play in helping her develop cognitive strategies to manage her pain?

How are Jo’s self-management strategies different from what she has experienced as the medical professions “standard practice”?

Why does Jo believe Panadol to be the most appropriate pain medication for her?

Jo has an excellent orthopedic specialist and an osteopath chiropractor. What are the qualities she most values in these two healthcare professionals?

Appendix 4. Interview Questions for Patients with Chronic Pain

Many people are living with chronic pain and each person's experience is unique. We are interested in your personal experience. Can you tell me what it has been like for you?

I'd imagine there have been times when managing your pain have been very difficult. Can you tell me about the last time it was harder for you?

How would you describe your involvement with the people looking after you? Does it feel like you have a team of people helping you?

Can you give me an example of a really good interaction with a healthcare professional? What made it so good?

Can you give me an example of one that was less good? What made it so?

Do you have a health care plan in place to help you manage your pain? Could you describe it for me?

How easy or hard is it for you to keep to that plan? Why?

Just to finish off then, what have you learnt from living with chronic pain? About yourself? About friends and family?