



## Information Note 3

### Evaluation of the WHO Patient Safety Curriculum Guide: Multi-professional Edition

The World Health Organization (WHO) has developed the Multi-professional Patient Safety Curriculum Guide for patient safety education in the fields of dentistry, medicine, midwifery, nursing and pharmacy. The Curriculum Guide is intended to achieve the following aims:

1. support patient safety education by creating and disseminating Curriculum Guide resources to facilitate training of health-care students and prepare them for safe practice in the workplace;
2. provide a Curriculum Guide that can be easily adapted to suit the educational needs in patient safety of health-care students and educators;
3. empower health-care schools and universities to build capacity in teaching patient safety;
4. ensure the Curriculum Guide is at all times culturally sensitive to the needs of all countries and applicable to different health education systems;
5. raise awareness and engage commitment regarding the need for patient safety teaching and learning.

#### Pilot testing the Multi-professional Patient Safety Curriculum Guide

Pilot testing of the Patient Safety Curriculum Guide for Medical Schools was completed in 2010. The evaluation study of the Multi-professional Patient Safety Curriculum Guide will assess its effectiveness as a resource for teaching patient safety to undergraduate and graduate university students in the fields of dentistry, midwifery, nursing and pharmacy. An evaluation performed as part of the pilot testing addresses the following questions:

- a. Does the Curriculum Guide contain sufficient information and topics to allow its effective use in the undergraduate training of health professionals?
- b. What is the impact on student learning of the inclusion of patient safety teaching in the Curriculum Guide?
- c. In what ways can this Curriculum Guide be used to support the widespread implementation of explicit patient safety education globally?
- d. How could the Curriculum Guide be modified in the future to best support teaching of patient safety to students in different environments?

The evaluation will inform all the following specific aspects of use of the Multi-professional Patient Safety Curriculum Guide:

- The introduction and acceptability of the Curriculum Guide to universities and schools teaching dentistry, nursing, midwifery and pharmacy.

- The usability of the Curriculum Guide as an education tool for health education in universities and schools.
- The value of the Curriculum Guide to students.
- The impact/effect of the Curriculum Guide on students' knowledge of patient safety.
- Successes and challenges experienced by the schools in testing the Curriculum Guide.
- Differences in experiences with the Curriculum Guide related to economic or cultural factors.
- Any improvements that could be made to the Curriculum Guide from both students and staff perspectives.

A total of 12 pilot sites have been selected to participate in the testing of the Curriculum Guide, two from each of the six WHO regions. Of these sites, three will be nursing schools, three will be midwifery schools, three will be dentistry schools, and three will be pharmacy schools. At each participating university/school, data collection begins in the first week of course(s) and ends two to three weeks after the end of course(s), as described below.

This evaluation is designed to collect data from each of the following four groups.

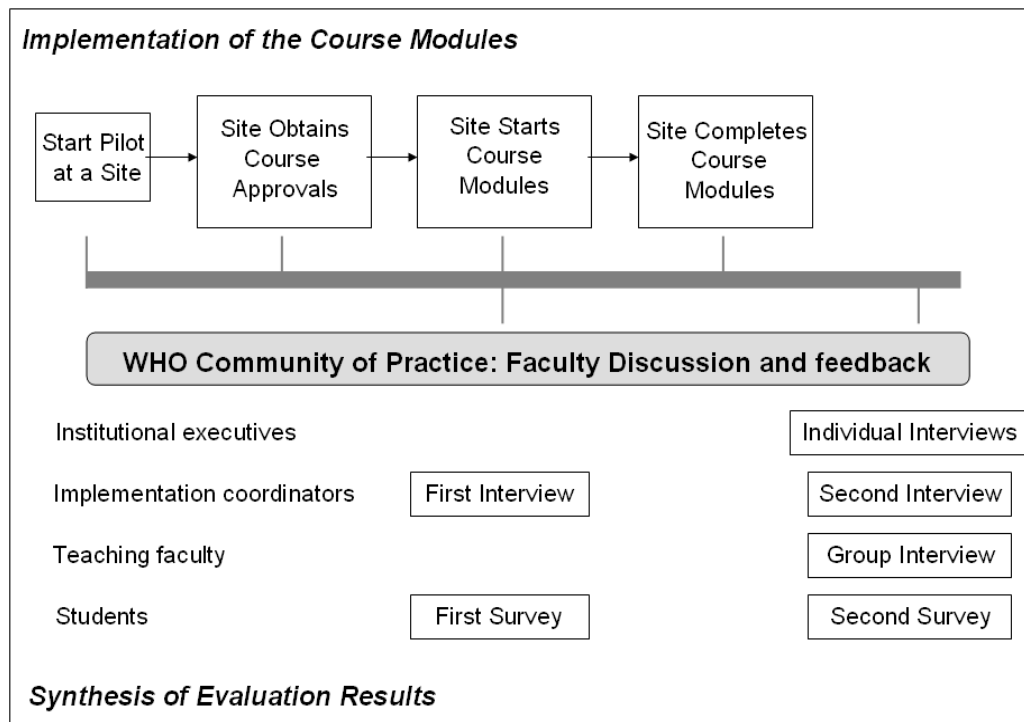
1. Institutional executives: in the schools of dentistry, midwifery, nursing and pharmacy;
2. Implementation coordinators: university staff/educators who coordinate the introduction and implementation of students' curricula;
3. Teaching faculty: educators who teach the curriculum topics;
4. Students: who take the courses.

**WHO Community of Practice.** The faculty members agreeing to teach topics from the Multi-professional Patient Safety Curriculum Guide at the participating universities/schools are invited to join a WHO Community of Practice to discuss use of the Curriculum Guide among themselves and provide feedback for the evaluation, which will also be a support mechanism for them. These discussions will be documented in a real-time database on faculty experiences with the Curriculum Guide.

**Formative Evaluation.** The experiences in teaching patient safety using the Curriculum Guide will be assessed to identify implementation issues and suggestions for improvements, as well as to generate guidance for other schools that could be using the Curriculum Guide in the future. Two phone interviews will be conducted with points of contact at each school, one in the first week of introducing the Curriculum Guide topics-based course(s) to the students, and the other one in the second week after the completion of the course(s).

**Summative Evaluation.** The effectiveness of the Curriculum Guide will be assessed through a four-part analysis. At the end of the courses using topics from the Curriculum Guide, individual interviews will be conducted with executives at each participating university/school. Group interviews will also be conducted with faculty who taught the courses. In addition, two surveys will be conducted with students being taught topics from the Curriculum Guide, one on the first day of the course and the other in the last week of course. The before-and-after knowledge questions on student surveys will allow assessment of how much they have learned about patient safety.

The evaluation components and schedule are shown graphically in the following diagram. On the top row of the diagram, above the timeline, are the steps involved in carrying out the pilot implementation of the selected topics from the Curriculum Guide at the participating universities/schools. Below the timeline, the data collection schedules for the evaluation are shown. This includes operation of the Community of Practice, as well as the individual and group interviews and the student surveys.



## Pilot Site Toolkit

- The Pilot Site Toolkit consists of a suite of information and evaluation materials and the Patient Safety Curriculum Guide: Multi-professional Edition. The toolkit aims to inform and support the implementation of selected topics from the Curriculum Guide, as well as its evaluation during two distinct phases: before the introduction of patient safety courses and upon completion of the courses.
- The actual Curriculum Guide:
  - Part A is aimed at health-care educators. It offers background information on how to select and teach each curriculum topic, makes suggestions on assessing institutional capacity to integrate patient safety teachings, and provides techniques to explore how this subject can best fit into the institution's existing curricula. Part A also highlights the educational principles that are essential to patient safety teaching and learning and proposes approaches for student assessment, as well as evaluation of the current patient safety curricula.
  - Part B addresses health-care educators and students. Each of the 11 patient safety topics (see above) is self-contained, can be introduced individually into the existing university curricula and is designed to feature a variety of methods and suggestions for teaching and assessing students' learning.
- Sets of PowerPoint 'teaching slides' for each of the topics addressed in Part B of the Curriculum Guide.
- Four Information Notes providing summaries of the 11 Patient Safety topics, how to implement the Curriculum Guide and suggestions on how to design its evaluation.
- Evaluation tools, including questionnaires, which can be used before the introduction of the patient safety courses and after completion of courses.

## Commitment to the Evaluation by Universities/Schools

As part of its interest to participate as a pilot site, a university/school will agree to participate fully in the evaluation, to enable collection of the data needed to effectively evaluate the Multi-professional Patient Safety Curriculum Guide. This commitment includes fulfillment of the following activities:

1. Obtain necessary national/local approvals (ethics approvals and others) for participation as subjects of the evaluation.
2. Obtain necessary 'Informed Consent' from the subjects participating in the evaluation study. The 'Informed Consent' forms are part of the WHO Ethics Review process and will be distributed to the sites by WHO evaluation team.
3. Designate a contact person, the '*Implementation coordinator*' to serve as liaison with the WHO evaluation team, in order to facilitate and coordinate the introduction and implementation of the Curriculum Guide at the university/school.
4. The '*Implementation coordinator*', will facilitate enrolment and participation by relevant faculty in the WHO Community of Practice that will be established by WHO as part of the pilot testing.
5. The '*Implementation coordinator*', will participate in 2 one-hour interviews with the WHO team to share his/her views on the experiences involved in introducing and using the Curriculum Guide, one early in the implementation period and the second at the end of courses.
6. At the end of the courses, the WHO evaluation team will conduct individual interviews on the Curriculum Guide (each 30-45 minutes in length). The interviews will be with one or two key '*Institutional executives*', as well as a group interview (1 to 1.5 hours in length) with '*Teaching faculty*' who taught the courses. The '*Implementation coordinator*' will assist the evaluation team in making appointments for these interviews.
7. The '*Implementation coordinator*' will serve as liaison with faculty members to administer the student surveys at the start and end of each Curriculum Guide course. The WHO evaluation team will develop the questionnaires and provide copies of them to the school for the surveys. The '*Implementation coordinator*' will work with the '*Teaching faculty*' to distribute the paper surveys to students for completion and collect the completed surveys. Surveys will be administered on the first day of each course and again on the last day of course.

Timeline	April 2011	Jan 2012	June 2012	May 2012	Oct 2012	Dec 2012	Jan 2013	March 2013
Phases	Phase 1 →	Phase 2 →				Phase 3 →		Phase 4
	WHO-HQ Preparatory phase: ○ Evaluation design ○ Development of instruments ○ ERC approval for global study	Initiation of first Pilot site: * ○ Explore necessity of local ethics approvals	Initiation of last Pilot site: * ○ Explore necessity of local ethics approvals	Completion of data collection from first Pilot site	Completion of data collection from last Pilot site	○ Compilation of data from all pilot sites. ○ Initiation of data analysis.	Synthesis of data	Final report

\* It is not expected that all 12 pilot sites will start testing the Curriculum Guide at the same time, but rather over a period of 4 months.

Link: <http://www.who.int/patientsafety/education/curriculum/en/index.html>