Guideline for e-Quality Standards and Processes

V.1.1, March 2014

1 Objective

The objective of this document is:

- To identify quality issues related to e-learning and e-course delivery.
- To outline quality standards and processes related to e-course delivery, based on best practices.
- To serve as guideline for a set of e-quality criteria to be added to the current PharmaTrain quality criteria.

2 Scope

The scope includes guidance on how to assure that diversity in e-courses and processes can be applied with comparable high quality, and that the same e-delivery always provides the same high-quality end-product on different platforms.

The standards include a set of criteria (additional to current cross-project quality standards) and general technical principles related to e-course delivery practices.

3 Background

PharmaTrain implemented a quality management system by a team of industry and academia partners that first established and now oversees and manages the new quality standards. These are applied to all programmes in PharmaTrain at all levels: participating students, faculty members, courses, training sites, university sites and overall conduct of training programmes.

The existing nine cross-project quality standards and the general principles on which they are based also apply to e-course settings. However, to our knowledge, no specific e-delivery guidance currently exists for international post-graduate and CPD training and education in pharmaceutical medicine and medicines development. There is thus an unmet need to develop best practice-based quality standards, additional to the existing nine cross-project quality standards.

Experience of assessing e-learning provider Hibernia College and review of the Hibernia College QA Manual, (2nd Edition, 2010), as well as experience from internet-based learning for health professions (Acad Med. 2010; 85:909-922) has been utilised to inform the development.

4 Current Cross Project Quality Criteria

The current set of quality criteria is based on the following principles:

a. Trainees are supported to acquire the necessary knowledge and skills.
b. Course structures encourage exchange and multidisciplinarity.
c. Facilities, infrastructure, leadership and competences adequate to deliver the approved curriculum.
d. Equality principles.
e. Teaching methods appropriate to the goals of the course.
f. Transparency regarding potential conflicts of interest.

A formalised and transparent QA/QC policy that includes the following:

1. University accreditation OR a suitable system for approving, monitoring and reviewing the training offered.
2. A system for quality assurance of teaching staff.
3. Regular review of the QA/QC process and demonstration that the training is further developed in light of this review.

A set of documented criteria for individual modules, courses or course programmes that include the following:

I.   Defined and transparent admission criteria.
II.   A predefined set of teaching objectives, leading to defined learning outcomes.
III. The facilities, infrastructure, leadership and competences available for the support of learning should be adequate, appropriate and up to date for the training offered.
IV.   Assessment of the students' achievement of learning outcomes for the training offered.
V.   A system for collecting, assessing and addressing feedback from learners, teachers, technical/administrative staff and programme/course/module managers.
VI.   Adequate reference material.

The assessment process of these cross-project shared quality standards for new and adapted PharmaTrain programmes is anchored in WP8 SOP 11.1.

5 Additional e-Quality Standards

5.1 e-learning outcomes-enabling criteria:

Learning outcomes are an essential attribute of the PharmaTrain courses. The following aspects relating to the use of e-learning, most of which are already included in the current quality standards, are encouraged, as they have been shown to improve learning outcomes (knowledge, skills or behaviours). (Acad Med. 2010; 85:909-922):

1. Blended levels of interactivity to be available. This can be either face-to-face combined with internet-based, or internet-based with integrated live activity.
2. System in place for online practice exercises.
3. Archiving policy to be defined to allow repeated viewings and/or spreading modules over time.
4. System in place for obtaining feedback in conjunction with self-assessment questions (e.g. tutor availability to review questions after assessment is completed).
5. Standards for tutorial activities (responsibilities, organisation and implementation).

5.2 Technical aspects of e-quality principles:
a. Platform independent.
b. Ease of use – requiring minimal training for students.
c. Speed of access.
d. Reliability.
e. Security.
f. Firewall policy.
g. Real-time virtual classroom.

6 The PharmaTrain e-Quality Management System (e-QMS)

The PharmaTrain e-QMS is the development and implementation of additional quality criteria to the existing quality assurance procedures for face-to-face learning provision.

They form an appendix to the PharmaTrain Manual.