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A practical guide to using the World Federation for Medical Education (WFME) standards. WFME 1: mission and objectives

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REVIEW ARTICLE

A practical guide to using the World Federation for Medical Education (WFME) standards. WFME 1: mission and objectives

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Abstract Preparing a medical school for institutional review can be a challenging undertaking for any institution requiring an understanding of the international standards being used and adequate preparation and planning (MacCarrick et al. in Med Teach 32(5):e227–e232, 2010). This series examines each of the nine standards developed by the World Federation for Medical Education (WFME, 2003) with practical advice on their use in both self-review and independent accreditation processes. The WFME standards and their purpose are described and the use of these standards to 'drive' the quality improvement agenda in undergraduate medical education is also discussed.

Keywords Undergraduate medical education · Quality assurance · World Federation for Medical Education standards

The WFME standards

The Executive Council of the World Federation for Medical Education (WFME) first published a position paper on the topic of international standards in medical education in 1998. Subsequently, an international Task Force was established by WFME with the purpose of defining international standards for basic (undergraduate) medical educational programmes. The main purpose of the Task Force was to develop undergraduate medical education standards that could be applied internationally. Key considerations in developing the WFME standards were that the standards should serve as an impetus for institutional self-evaluation, that the standards should take full account of the many different approaches to medical education in different countries; that the standards should *not* dictate content or inhibit educational innovation and that the standards *not* be used to rank schools. It was acknowledged, however, that the standards might be used as part of a system for national or international accreditation of medical education programmes [2]. The standards have been informed by and further refined based on feedback from international advisors and from a number of conferences around the world. The Standards and Guidelines contained in the WFME's document *Basic Medical Education: Global Standards for Quality*. A number of jurisdictions including Ireland and Australia have adapted the standards as part of the medical school accreditation process.

The WFME standards are structured under nine headings:

1. Mission and objectives
2. Educational programme
3. Assessment of students
4. Students
5. Academic staff/faculty
6. Educational resources
7. Programme evaluation
8. Governance and administration
9. Continuous renewal.

In each category, the WFME sets out a Basic Standard and a more testing Quality Standard.

Getting underway

Commitment to any self-review process requires top-level support from within the medical school. Once the decision

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Timeline and Milestones

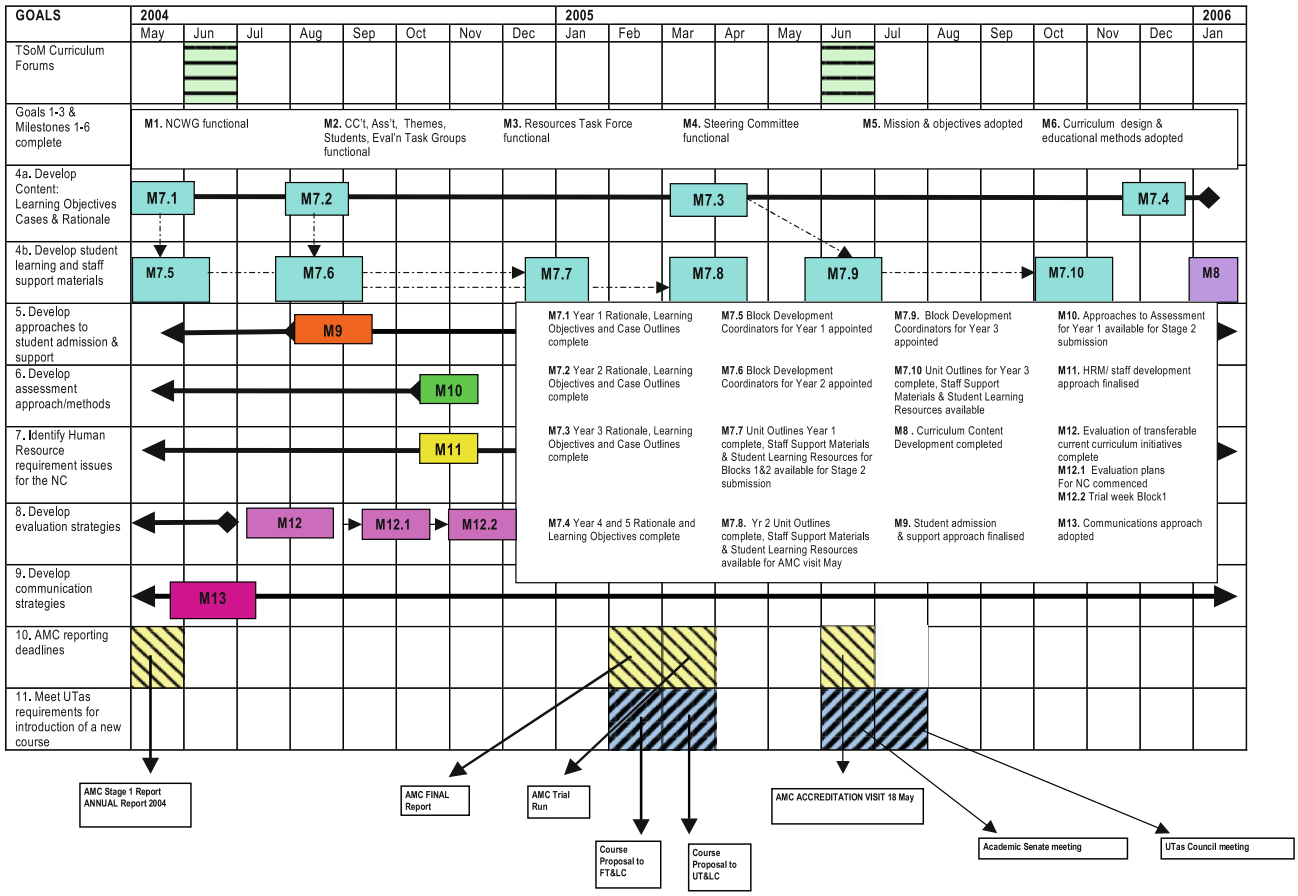

Fig. 1 Typical Gannt Chart identifying key milestones of the medical school quality assurance process

is taken to conduct a review of the curriculum, either as part on a continuous cycle of self-review or in preparation for accreditation, dedicated resources need to be identified to support the activity, which is ideally managed using a project management approach. A comprehensive communication strategy will facilitate engagement of faculty and students and key external stakeholders including regulatory bodies and teaching hospitals. A dedicated newsletter and website provide useful adjuncts to such a strategy, providing regular reports on progress made against each of the WFME standards (Fig. 1).

WFME 1: mission and objectives

The first standard articulated by the WFME is the need for each medical school *to define its mission and objectives and make them known to its constituency.* The basic standard would be deemed to have been met if the school has a clearly defined and description of the outcomes and the educational process leading to a competent doctor fit to practice at a basic level, i.e. internship. The quality standard would be deemed to have been met if the school has a robust set of institutional objectives, which address aspects such as social responsibility, research skills and community engagement and if these have been defined in consultation with relevant stakeholders.

Statements of the medical school mission are an important way to express a medical schools' educational philosophy and focus and a means to help the school differentiate itself from other programmes. The mission of the medical school encapsulates what it is that the medical school wants to achieve now but also defining the school's aspirations for the future, i.e. where the school sees itself in 10–15 years from now. Making the medical school mission as succinct as possible such that it is capable of being shared and understood by faculty and making it distinctive and unique to the particular medical school are all important considerations. Most accreditation teams will enquire at some stage during their visit about the mission of the school and what it means to individual members of staff. Mission statements for medical education programmes

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typically describe excellence in teaching (such as innovation) and/or research (such as key research programmes). Some schools point to course delivery methods such as problem based or case based learning and others to the specific context in which student learning will take place (such as rural and remote settings):

> Building on our heritage in surgery, we will enhance human health through endeavour, innovation and collaboration in education, research and service [3].

> As one of the Asia Pacific region's most highly rated education and research institutions, Sydney Medical School offers unparalleled opportunities to study medicine in Australia. …Our world class research includes programmes in diseases, which affect millions of lives, such as cancer, obesity, chronic disease [4].

> The Faculty places a high priority on maintaining and strengthening its current areas of excellence and high quality in teaching and research, and its strong emphasis on rural and remote health, in doing so making the most of our unique island state [5].

The medical school's underlying pedagogy can also be incorporated into the schools mission statement. Outcomes-based education has influenced many modern day medical curricula as a means of making explicit to students what specific knowledge, attitudes and skills they will acquire by the end of training and by the end of each unit of study. Using an 'outcomes focussed' approach ensures the learning journey is signposted for students and staff. Students can more readily make links between the desired knowledge skills and attitudes and the teaching, learning and assessment strategies used. The term used is ''constructive alignment'' [6–9]. Accreditation team will often seek evidence of this alignment between the stated mission and objectives and course delivery and assessment:

> In aligned teaching, there is maximum consistency throughout the system. The curriculum is stated in the form of clear objectives, which state the level of understanding required rather than simply a list of topics to be covered. The teaching methods are chosen that are likely to realise these objectives…the assessment tasks address the objectives… students are "entrapped" in this web of consistency.

In defining new curriculum objectives or revising existing objectives it is critical that these are derived in consultation with relevant stakeholders [10] and that they are cognizant of the various health care settings in which the school's graduates will work. These objectives help define the end point of the learning process which is a critical part of the quality improvement process. Some medical schools use this exercise to re-evaluate the medical school's educational philosophy and prevailing pedagogy.

Key to the success of this endeavour is a dedicated task force with sufficient authority to examine the medical school curriculum outcomes and determine how the curriculum is being delivered and assessed. In addition, such a review will identify the presence of necessary linkage between outcomes and assessment and help identify possible duplication of teaching effort. There are many published international competency frameworks to inform this process such as CanMEDS [11]; "Tomorrows Doctors" [12] and ''The Scottish Doctor'' [13] upon which to base a review of the completeness of the stated outcomes of the medical schools' curriculum.

Many schools group the listed educational outcomes or the 'profile' of the ideal medical graduate under "themes" or ''domains'' which provide a framework to organise the content and delivery of the curriculum as well as student assessment. The use of *themes* to group related curriculum objectives can also be used to reflect a shift away from the traditional discipline based course to a more integrated approach to medical undergraduate teaching. Key champions of reform can be selected from faculty to advocate for particular themes and ensure balance is maintained across the curriculum. In addition, the weighting of assessment across themes can be similarly monitored by theme champions. For example the themes of the medical programme at the Royal College of Surgeons in Ireland (RCSI) are shown diagrammatically here as five interwoven themes: Biomedical Science and Research; Clinical Medicine, Clinical Competence, Population and International Health and Personal and Professional Development (Fig. 2).

Similarly, the four themes, which are the foundation of the University of Sydney Medical Program are Basic and

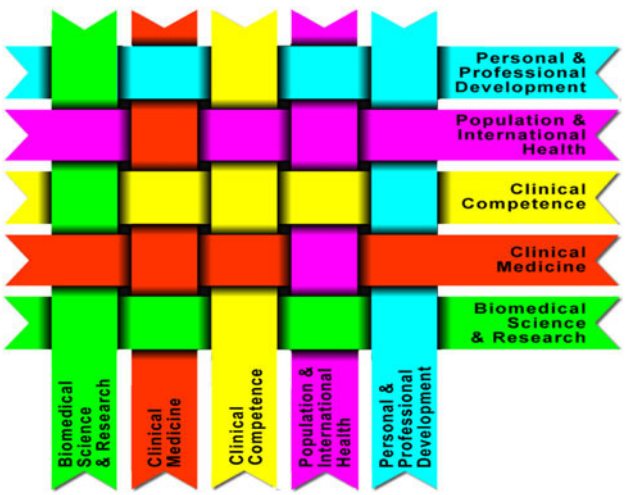

Fig. 2 The five themes of the RCSI medical program 2010

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Clinical Science (BCS), Patient and Doctor (PD), Community and Doctor (CD) and Personal and Professional Development (PPD). The use of themes provides a framework for the entire programme including assessment. Typically students must demonstrate satisfactory performance in all theme areas to graduate.

Once formulated, revised educational outcomes can be circulated for comment to principal stakeholders. The feedback process should ideally include current students through class representatives, faculty, alumni including in particular recent graduates, patient advocacy groups and employers of medical school graduates. School accreditation teams are particularly seeking evidence of a comprehensive consultation process as it attests to the extent to which the school values and is prepared to respond to stakeholder concerns.

Recent graduates and older alumni are a rich source of valuable feedback about the adequacy of the curriculum in preparing graduates for internship and beyond [14, 15].

Formulating curriculum outcomes and matching these to individual module outcomes encourages staff to step back from the existing programme and carefully consider what specific knowledge, attitudes and skills are needed by their graduates at the end of their training to practice safely and importantly to meet the needs of the communities they serve.

Finally, a root and branch analysis of a medical curriculum beginning with a review of the school's mission and objectives is ideally supported by a curriculum database. Electronic curriculum databases are typically organised by theme and also searchable by topics and keywords. Documenting the curriculum in such a format will assist curriculum planners, faculty and students. Such a tool is often requested by accreditation teams to determine the extent to which material has been covered in previous modules and examine the depth, breadth and integration of specific themes/domains.

The next paper will examine the second WFME Standard *Educational programme*.

Appendix

Practice points

- The WFME standards provide a useful framework to consider all quality assurance activities in undergraduate medical education.
- Statements of the medical school mission are an important way to express a medical schools' educational philosophy and focus and a means to help the school differentiate itself from other programmes.
- Defining the end point of the learning process is a critical first step in the quality improvement process. The medical school's mission and objectives will inform all subsequent aspects of the quality assurance process.
- The medical school objectives should be derived in close consultation with all stakeholders and need to be cognizant of the various health care settings in which the medical school's graduates will work. There are several published international competency frameworks, which can inform the process of defining curriculum objectives.
- A careful examination of the school's curriculum using an electronic database can yield important information about the necessary linkages between stated objectives, delivery methods and assessment as well as helping to identify possible duplication of teaching effort.

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