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

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7 **Abstract** Preparing a medical school for institutional
8 review can be a challenging undertaking for any institution
9 requiring an understanding of the international standards
10 being used and adequate preparation and planning
11 (MacCarrick et al. in *Med Teach* 32(5):e227–e232, 2010).
12 This series examines each of the nine standards developed
13 by the World Federation for Medical Education (WFME,
14 2003) with practical advice on their use in both self-review
15 and independent accreditation processes. The WFME
16 standards and their purpose are described and the use of
17 these standards to ‘drive’ the quality improvement agenda
18 in undergraduate medical education is also discussed.

19
20 **Keywords** Undergraduate medical education · Quality
21 assurance · World Federation for Medical Education
22 standards

23 **The WFME standards**

24 The Executive Council of the World Federation for Medical
25 Education (WFME) first published a position paper on
26 the topic of international standards in medical education in
27 1998. Subsequently, an international Task Force was
28 established by WFME with the purpose of defining inter-
29 national standards for basic (undergraduate) medical edu-
30 cational programmes. The main purpose of the Task Force
31 was to develop undergraduate medical education standards
32 that could be applied internationally. Key considerations in
33 developing the WFME standards were that the standards

should serve as an impetus for institutional self-evaluation, 34
that the standards should take full account of the many 35
different approaches to medical education in different 36
countries; that the standards should *not* dictate content or 37
inhibit educational innovation and that the standards *not* be 38
used to rank schools. It was acknowledged, however, that 39
the standards might be used as part of a system for national 40
or international accreditation of medical education pro- 41
grammes [2]. The standards have been informed by and 42
further refined based on feedback from international 43
advisors and from a number of conferences around the 44
world. The Standards and Guidelines contained in the 45
WFME’s document *Basic Medical Education: Global 46*
Standards for Quality. A number of jurisdictions including 47
Ireland and Australia have adapted the standards as part of 48
the medical school accreditation process. 49

The WFME standards are structured under nine headings: 50

1. Mission and objectives 51
2. Educational programme 52
3. Assessment of students 53
4. Students 54
5. Academic staff/faculty 55
6. Educational resources 56
7. Programme evaluation 57
8. Governance and administration 58
9. Continuous renewal. 59

In each category, the WFME sets out a Basic Standard 60
and a more testing Quality Standard. 61

Getting underway 62

Commitment to any self-review process requires top-level 63
support from within the medical school. Once the decision 64

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Timeline and Milestones

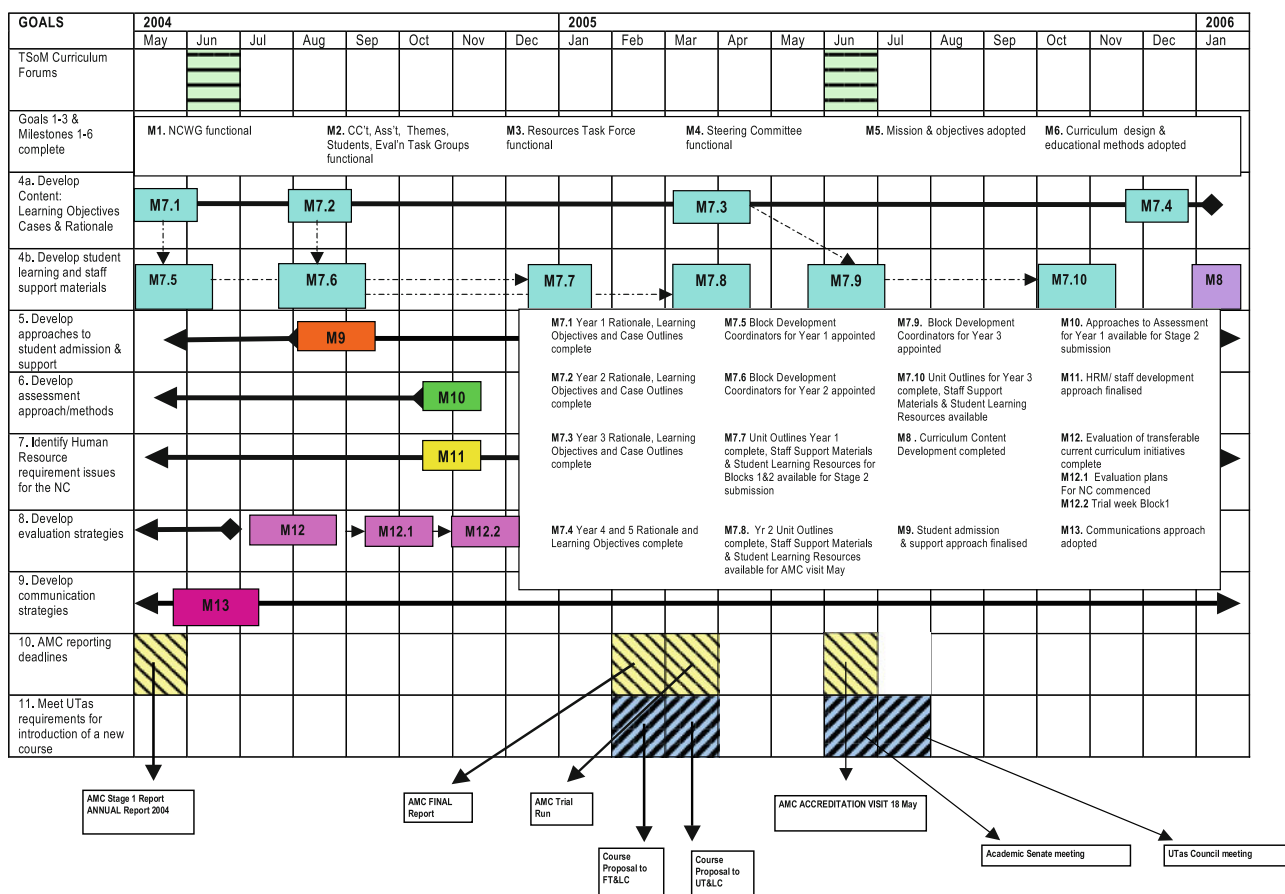


Fig. 1 Typical Gantt Chart identifying key milestones of the medical school quality assurance process

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

76 WFME 1: mission and objectives

77 The first standard articulated by the WFME is the need for
 78 each medical school to define its mission and objectives
 79 and make them known to its constituency. The basic stan-
 80 dard would be deemed to have been met if the school has a
 81 clearly defined and description of the outcomes and the
 82 educational process leading to a competent doctor fit to

practice at a basic level, i.e. internship. The quality stan- 83
 standard would be deemed to have been met if the school has 84
 a robust set of institutional objectives, which address aspects 85
 such as social responsibility, research skills and community 86
 engagement and if these have been defined in consultation 87
 with relevant stakeholders. 88

Statements of the medical school mission are an 89
 important way to express a medical schools' educational 90
 philosophy and focus and a means to help the school dif- 91
 ferentiate itself from other programmes. The mission of the 92
 medical school encapsulates what it is that the medical 93
 school wants to achieve now but also defining the school's 94
 aspirations for the future, i.e. where the school sees itself in 95
 10–15 years from now. Making the medical school mission 96
 as succinct as possible such that it is capable of being 97
 shared and understood by faculty and making it distinctive 98
 and unique to the particular medical school are all impor- 99
 tant considerations. Most accreditation teams will enquire 100
 at some stage during their visit about the mission of the 101
 school and what it means to individual members of staff. 102
 Mission statements for medical education programmes 103

104 typically describe excellence in teaching (such as innova- 154
105 tion) and/or research (such as key research programmes). 155
106 Some schools point to course delivery methods such as 156
107 problem based or case based learning and others to the 157
108 specific context in which student learning will take place 158
109 (such as rural and remote settings): 159

110 Building on our heritage in surgery, we will enhance 160
111 human health through endeavour, innovation and 161
112 collaboration in education, research and service [3]. 162

113 As one of the Asia Pacific region's most highly rated 164
114 education and research institutions, Sydney Medical 165
115 School offers unparalleled opportunities to study 166
116 medicine in Australia. ...Our world class research 167
117 includes programmes in diseases, which affect 168
118 millions of lives, such as cancer, obesity, chronic 169
119 disease [4]. 170

120 The Faculty places a high priority on maintaining and 171
121 strengthening its current areas of excellence and high 172
122 quality in teaching and research, and its strong 173
123 emphasis on rural and remote health, in doing so 174
124 making the most of our unique island state [5]. 175

125 The medical school's underlying pedagogy can also be 176
126 incorporated into the schools mission statement. Out- 177
127 comes-based education has influenced many modern day 178
128 medical curricula as a means of making explicit to students 179
129 what specific knowledge, attitudes and skills they will 180
130 acquire by the end of training and by the end of each unit of 181
131 study. Using an 'outcomes focussed' approach ensures the 182
132 learning journey is signposted for students and staff. 183
133 Students can more readily make links between the desired 184
134 knowledge skills and attitudes and the teaching, learning 185
135 and assessment strategies used. The term used is "con- 186
136 structive alignment" [6-9]. Accreditation team will often 187
137 seek evidence of this alignment between the stated mission 188
138 and objectives and course delivery and assessment:

139 In aligned teaching, there is maximum consistency 189
140 throughout the system. The curriculum is stated in the 190
141 form of clear objectives, which state the level of 191
142 understanding required rather than simply a list of 192
143 topics to be covered. The teaching methods are 193
144 chosen that are likely to realise these objectives...the 194
145 assessment tasks address the objectives... students 195
146 are "entrapped" in this web of consistency. 196

147 In defining new curriculum objectives or revising 197
148 existing objectives it is critical that these are derived in 198
149 consultation with relevant stakeholders [10] and that they 199
150 are cognizant of the various health care settings in which 200
151 the school's graduates will work. These objectives help 201
152 define the end point of the learning process which is a 202
153 critical part of the quality improvement process. Some 203

154 medical schools use this exercise to re-evaluate the medical 155
156 school's educational philosophy and prevailing pedagogy. 157

158 Key to the success of this endeavour is a dedicated task 159
160 force with sufficient authority to examine the medical 160
161 school curriculum outcomes and determine how the 161
162 curriculum is being delivered and assessed. In addition, 162
163 such a review will identify the presence of necessary 163
164 linkage between outcomes and assessment and help iden- 164
165 tify possible duplication of teaching effort. There are many 165
166 published international competency frameworks to inform 166
167 this process such as CanMEDS [11]; "Tomorrows 167
168 Doctors" [12] and "The Scottish Doctor" [13] upon which 168
169 to base a review of the completeness of the stated outcomes 169
170 of the medical schools' curriculum. 170

171 Many schools group the listed educational outcomes or 171
172 the 'profile' of the ideal medical graduate under "themes" 172
173 or "domains" which provide a framework to organise the 173
174 content and delivery of the curriculum as well as student 174
175 assessment. The use of *themes* to group related curriculum 175
176 objectives can also be used to reflect a shift away from the 176
177 traditional discipline based course to a more integrated 177
178 approach to medical undergraduate teaching. Key cham- 178
179 pions of reform can be selected from faculty to advocate 179
180 for particular themes and ensure balance is maintained 180
181 across the curriculum. In addition, the weighting of 181
182 assessment across themes can be similarly monitored by 182
183 theme champions. For example the themes of the medical 183
184 programme at the Royal College of Surgeons in Ireland 184
185 (RCSI) are shown diagrammatically here as five interwo- 185
186 ven themes: Biomedical Science and Research; Clinical 186
187 Medicine, Clinical Competence, Population and Interna- 187
188 tional Health and Personal and Professional Development 188

189 Similarly, the four themes, which are the foundation of 189
190 the University of Sydney Medical Program are Basic and 190

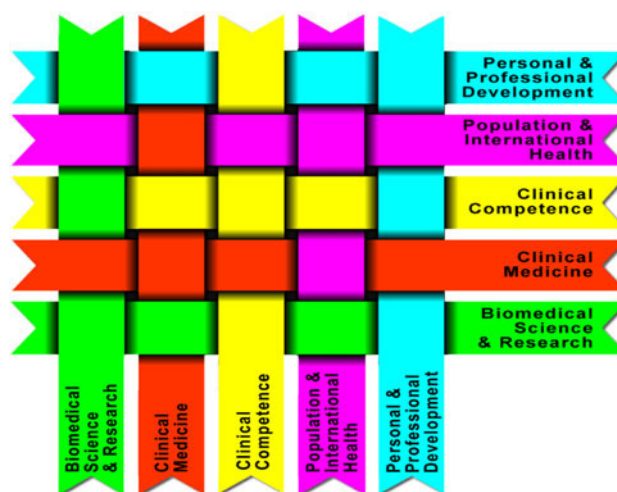


Fig. 2 The five themes of the RCSI medical program 2010

189 Clinical Science (BCS), Patient and Doctor (PD), Com-
 190 munity and Doctor (CD) and Personal and Professional
 191 Development (PPD). The use of themes provides a
 192 framework for the entire programme including assessment.
 193 Typically students must demonstrate satisfactory perfor-
 194 mance in all theme areas to graduate.

195 Once formulated, revised educational outcomes can be
 196 circulated for comment to principal stakeholders. The
 197 feedback process should ideally include current students
 198 through class representatives, faculty, alumni including in
 199 particular recent graduates, patient advocacy groups and
 200 employers of medical school graduates. School accredita-
 201 tion teams are particularly seeking evidence of a compre-
 202 hensive consultation process as it attests to the extent to
 203 which the school values and is prepared to respond to
 204 stakeholder concerns.

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

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

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

225 The next paper will examine the second WFME Stan-
 226 dard *Educational programme*.

227 Appendix

228 Practice points

- 229 • The WFME standards provide a useful framework to
 230 consider all quality assurance activities in undergrad-
 231 uate medical education.
- 232 • Statements of the medical school mission are an
 233 important way to express a medical schools' educa-
 234 tional philosophy and focus and a means to help the
 235 school differentiate itself from other programmes.
- 236 • Defining the end point of the learning process is a critical
 237 first step in the quality improvement process. The

238 medical school's mission and objectives will inform all
 239 subsequent aspects of the quality assurance process.

- 240 • The medical school objectives should be derived in
 241 close consultation with all stakeholders and need to
 242 be cognizant of the various health care settings in
 243 which the medical school's graduates will work. There
 244 are several published international competency frame-
 245 works, which can inform the process of defining
 246 curriculum objectives.
- 247 • A careful examination of the school's curriculum using
 248 an electronic database can yield important information
 249 about the necessary linkages between stated objectives,
 250 delivery methods and assessment as well as helping to
 251 identify possible duplication of teaching effort.

252 References

- 253 1. Maccarrick G, Kelly G et al (2010) Preparing for an institutional
 254 self review using the WFME standards—an international medical
 255 school case study. *Med Teach* 32(5):e227–e232
- 256 2. Grant J, Marshall J et al (2003) Final report: quality improvement
 257 in basic medical education evaluation of the implementation in
 258 pilot sites of the World Federation for Medical Education's
 259 International Standards
- 260 3. Royal College of Surgeons in Ireland (2010) Mission statement.
 261 <http://www.rcsi.ie/>. Accessed June 2010
- 262 4. Sydney Medical School (2010) Mission statement. <http://sydney.edu.au/medicine/>. Accessed June 2010
- 263 5. University of Tasmania, School of Medicine (2010) Deans welcome.
 264 <http://www.healthsci.utas.edu.au/welcome.html>. Accessed June 2010
- 265 6. Biggs J (2003) Teaching for quality learning at university. Open
 266 University Press, Philadelphia
- 267 7. Harden RM (2007) Learning outcomes as a tool to assess pro-
 268 gression. *Med Teach* 29(7):678–682
- 269 8. Harden RM (2007) Outcome-based education—the ostrich, the
 270 peacock and the beaver. *Med Teach* 29(7):666–671
- 271 9. Harden RM (2007) Outcome-based education: the future is today.
 272 *Med Teach* 29(7):625–629
- 273 10. Kassebaum DG, Eaglen RH et al (1997) The objectives of
 274 medical education: reflections in the accreditation looking glass.
 275 *Acad Med* 72(7):648–656
- 276 11. CanMEDS (1996) Canadian medical education directions for
 277 specialists. <http://rcpsc.medical.org/canmeds>
- 278 12. General Medical Council, G. (2009). Tomorrow's Doctors out-
 279 comes and standards for undergraduate medical education. http://www.gmc-uk.org/education/undergraduate/tomorrows_doctors_2003.asp
- 280 13. The Scottish Deans' Medical Curriculum Group (2007). The
 281 Scottish Doctor learning outcomes for the medical undergraduate
 282 in Scotland: a foundation for competent and reflective practition-
 283 ers. <http://www.scottishdoctor.org/>
- 284 14. Mac Carrick G, Winzenberg T, Holloway G, Hemmings L, Ikin R,
 285 Abbott D (2005) Preparedness for hospital practice—maintaining
 286 strengths in an MBBS curriculum in the midst of change. *Focus
 287 Health Prof Edu Multidiscip J* 6(3):9–11
- 288 15. MacCarrick G, Bradford S et al (2007) Preparing our interns for
 289 hospital practice—what makes for success in medical education?
 290 *Focus Health Prof Edu Multidiscip J* 9(1):1–7
- 291 292
 293
 294
 295