Family Medicine in the Undergraduate Curriculum
Preparing medical students to work in evolving health care systems

Edited by Val Wass and Victor Ng
endorsed by the World Organization of Family Doctors (WONCA)
Family Medicine in the Undergraduate Curriculum

It has been recognised by governments and healthcare organisations worldwide that for Universal Healthcare in pursuit of Health for All under the Sustainable Development Goals to be achieved, effective primary care that is integrated, accessible, and affordable for everyone is essential.

This practical guide is the first designed specifically to support those planning and conducting family medicine/primary care education within medical schools around the world. It offers medical educators a collection of concise easy to follow chapters, guiding the reader through the curriculum requirements with key references for further detail. Plain English and practical, deliverable advice, adaptable to different contexts, ensures the content is accessible to those educating medical students in any country, while the structure within sections ensures that family medicine doctors and educators can dip into chapters relevant to their roles, for example curriculum design for academic educators or teaching methods for those educating in clinical practice.

Key Features

- The first “how-to” guide dedicated to effective integration of family medicine teaching into medical school curricula
- Offers a strong evidence-based framework for integrating family medicine into medical schools
- Wide in scope, for academics and educationalists at all levels and in all geographies, reflecting and embracing the experience and variation in family medicine across the globe to produce pragmatic and effective information on which medical schools can base change
- Step-by-step introduction to the processes of literature review (establishing the existing knowledge base), choosing a topic, research questions, and methodology, conducting research, and disseminating results
- Supported by the WONCA Working Party on Education

The book is edited and authored by members of the World Organization of Family Doctors (WONCA) Working Party on Education, which is ideally placed to offer a strong platform for medical schools to integrate family medicine whatever the local context, enabling all future doctors, whatever their career aspiration, to understand the importance of family medicine to health systems and holistic medicine and encourage family medicine doctors to inspire students to consider a career in the field.
Series: WONCA Family Medicine

About the Series
The WONCA Family Medicine series is a collection of books written by world-wide experts and practitioners of family medicine, in collaboration with the World Organization of Family Doctors (WONCA).

WONCA is a not-for-profit organization and was founded in 1972 by member organisations in 18 countries. It now has 118 Member Organisations in 131 countries and territories with membership of about 500,000 family doctors and more than 90 per cent of the world’s population.

Family Practice in the Eastern Mediterranean Region: Universal Health Coverage and Quality Primary Care
Hassan Salah, Michael Kidd

Primary Health Care Around the World: Recommendations for International Policy and Development
Chris van Weel, Amanda Howe

How To Do Primary Care Research
Felicity Goodyear-Smith, Bob Mash

Every Doctor: Healthier Doctors = Healthier Patients
Leanne Rowe, Michael Kidd

Family Medicine: The Classic Papers
Michael Kidd, Iona Heath, Amanda Howe

International Perspectives on Primary Care Research
Felicity Goodyear-Smith, Bob Mash

The Contribution of Family Medicine to Improving Health Systems: A Guidebook from the World Organization of Family Doctors
Michael Kidd

How To Do Primary Care Educational Research: A Practical Guide
Mehmet Akman, Valerie Wass, Felicity Goodyear-Smith

ICPC-3 International Classification of Primary Care
Kees van Boven and Huib Ten Napel

Family Medicine in the Undergraduate Curriculum: Preparing Medical Students to Work in Evolving Health Care Systems
Val Wass and Victor Ng

For more information about this series please visit: https://www.crcpress.com/WONCA-Family-Medicine/book-series/WONCA
Family Medicine in the Undergraduate Curriculum
Preparing medical students to work in evolving health care systems

Edited by
Val Wass OBE, FRCP, FRCP, MHPE, PhD
Professor of Medical Education in Primary Care, Aberdeen University
Emeritus Professor of Medical Education, Faculty of Medicine & Health, Keele University, UK
Former Chair, WONCA Working Party on Education

Victor Ng MD, CCFP(EM), MHPE, FCFP, ICD.D
Assistant Dean, Schulich School of Medicine and Dentistry, Western University, Canada
Associate Director, The College of Family Physicians of Canada
Chair, WONCA Working Party on Education

CRC Press
Taylor & Francis Group
Boca Raton London New York
CRC Press is an imprint of the Taylor & Francis Group, an informa business
## Contents

*Foreword*  
*Preface*  
*Acknowledgements*  
*Editors*  
*Contributors*  

**Section I - Integrating FM into the UG curriculum:**  
**Seizing the opportunity**  

1  
**Changing healthcare: Building the evidence for generalism**  
*C. Ruth Wilson and Shastri Motilal*  
- Introduction 3  
- What is generalism? 3  
- The relationship between generalism and family medicine 5  
- Evolution of generalism 5  
- Why is generalism necessary? 6  
- Challenges of generalism 6  
- The role of medical education 7  
- Practical aspects of building the case for generalism: How to approach your dean 8  
- Conclusion 8  
- References 8  

2  
**Defining family medicine**  
*Nagwa Nashat Hegazy and Anna Stavdal*  
- Introduction 10  
- Defining family medicine: The terminology 11  
- Principles of family medicine 11  
- Global challenges 12  
- The definition of family medicine 13
Role modelling FM values 14
Family medicine’s role in society and health systems 15
Conclusion 15
References 16

3 Social accountability
Maham Stanyon, Leilanie Nicodemus, and Robin Ramsay
The need for social accountability in health professions education 17
What is social accountability? 18
Transferring socially accountable principles globally across healthcare systems 19
Priorities for adapting social accountability to your context 20
Conclusion 24
Key documents 24
Tools 24
References 25

4 Developing an appropriate workforce for the future
Archna Gupta and Raman Kumar
Healthcare workforce 27
The primary healthcare system and its workforce 28
Primary care and its workforce 28
Family medicine and its relationship to primary care and primary healthcare 29
Supporting undergraduate family medicine training 30
The importance of exposure to family medicine in medical schools 30
Countries where FM is emerging 31
Ensuring a sustainable workforce for the future 32
References 33

5 Academic primary care: The importance of family medicine leaders and role models
Chris van Weel and Ryuki Kassai
Why academic family medicine is important 35
A Japan case study 38
Conclusion 41
References 42

6 Barriers for change and how to overcome these
Marietjie van Rooyen, Jannie Hugo, and Anselme Derese
Introduction 43
Influencing ministry and governing bodies on the importance of family medicine 44
Working collaboratively with the health system (context of care) 45
The role of the university and faculty in facilitating change 47
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The medical school curriculum</td>
<td>48</td>
</tr>
<tr>
<td>The FM faculty and the students</td>
<td>49</td>
</tr>
<tr>
<td>Conclusion</td>
<td>50</td>
</tr>
<tr>
<td>References</td>
<td>50</td>
</tr>
<tr>
<td>7 Humanism in family medicine</td>
<td>52</td>
</tr>
<tr>
<td><em>Martina Kelly and Chandramani Thuraisingham</em></td>
<td></td>
</tr>
<tr>
<td>What is humanism?</td>
<td>52</td>
</tr>
<tr>
<td>Why is humanism important?</td>
<td>54</td>
</tr>
<tr>
<td>Why is humanism best acquired in family medicine in the undergraduate curriculum?</td>
<td>54</td>
</tr>
<tr>
<td>Nurturing humanism in family medicine</td>
<td>54</td>
</tr>
<tr>
<td>How is humanism currently understood in Asian medical schools?</td>
<td>55</td>
</tr>
<tr>
<td>Conclusion</td>
<td>57</td>
</tr>
<tr>
<td>References</td>
<td>58</td>
</tr>
<tr>
<td>Section II - What to aim for: Principles of curriculum design</td>
<td>59</td>
</tr>
<tr>
<td>8 Addressing population needs</td>
<td>61</td>
</tr>
<tr>
<td><em>Hassan Salah, Saeed Soliman, and Marie Andrades</em></td>
<td></td>
</tr>
<tr>
<td>Outlining the population needs of the country</td>
<td>61</td>
</tr>
<tr>
<td>The need for community-oriented primary care physicians</td>
<td>62</td>
</tr>
<tr>
<td>Population needs–based curricula: The role of PC education</td>
<td>63</td>
</tr>
<tr>
<td>Exploring medical school undergraduate and postgraduate curricula for their responsiveness to community needs</td>
<td>63</td>
</tr>
<tr>
<td>Addressing students’ learning needs</td>
<td>64</td>
</tr>
<tr>
<td>Faculty development</td>
<td>64</td>
</tr>
<tr>
<td>Tips for incorporating population needs into the curriculum</td>
<td>66</td>
</tr>
<tr>
<td>Conclusion</td>
<td>67</td>
</tr>
<tr>
<td>References</td>
<td>67</td>
</tr>
<tr>
<td>9 Addressing patient and family needs</td>
<td>69</td>
</tr>
<tr>
<td><em>Maria Sofia Cuba-Fuentes and Carmen Cabezas Escobar</em></td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>69</td>
</tr>
<tr>
<td>Learning to be person-centred</td>
<td>70</td>
</tr>
<tr>
<td>Patient-centred clinical method</td>
<td>70</td>
</tr>
<tr>
<td>Addressing illness, disease, and health</td>
<td>71</td>
</tr>
<tr>
<td>Addressing families in the clinical encounter</td>
<td>72</td>
</tr>
<tr>
<td>Shared decision-making</td>
<td>73</td>
</tr>
<tr>
<td>Conclusion</td>
<td>74</td>
</tr>
<tr>
<td>References</td>
<td>74</td>
</tr>
<tr>
<td>10 Competency-based curricula</td>
<td>76</td>
</tr>
<tr>
<td><em>Maria Michelle Hubinette and Marcelo Garcia-Diequez</em></td>
<td></td>
</tr>
<tr>
<td>Defining competency-based education</td>
<td>76</td>
</tr>
<tr>
<td>Competency-based curricula</td>
<td>77</td>
</tr>
<tr>
<td>The added value of FM and generalism</td>
<td>79</td>
</tr>
</tbody>
</table>
Operationalising a family medicine competency-based curriculum  81
Conclusion  81
References  81

11 Designing an integrated curriculum  84
Saima Iqbal and Val Wass

Introduction  84
The challenge of changing traditional medical education  85
Curriculum integration  85
What are the benefits of integrated learning?  89
How to do it  89
The family physician as a role model  90
References  91

12 Values-based education: Integrating professionalism into the curriculum  92
Kay Mohanna and Dinusha Perera

Defining professionalism  92
Defining values  93
Nurturing professionalism  94
Values-based practice  94
Exploring global values  95
Teaching professionalism  96
Conclusion  97
References  97

13 The formal, informal, and hidden curricula  98
Hilary Neve and Richard Nduwayezu

The formal curriculum  98
The informal curriculum  100
The hidden curriculum  101
Addressing the informal and hidden curricula  103
Conclusion  103
References  104

Section III - Integrating FM into the curriculum: How to achieve this  105

14 Selecting for medical school entry: Nature or nurture?  107
Sandra Nicholson and Tim J. Wilkinson

Introduction and background  107
Current challenges to medical school selection  108
Ensuring best selection practice: What criteria should be used?  109
Ensuring best selection practice: How should we assess?  110
Ensuring best selection practice for FM values-based recruitment (VBR)  112
Conclusion and areas for future research  113
Five tips for global recruitment  113
References  113
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Author</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Early exposure to family medicine</td>
<td>Victor Loh and Innocent Besigye</td>
<td>115</td>
</tr>
<tr>
<td></td>
<td>Introduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Early family medicine exposure</td>
<td></td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>Socialisation of medical students</td>
<td></td>
<td>117</td>
</tr>
<tr>
<td></td>
<td>Contextualisation of classroom learning</td>
<td></td>
<td>117</td>
</tr>
<tr>
<td></td>
<td>Humanisation of medical care</td>
<td></td>
<td>118</td>
</tr>
<tr>
<td></td>
<td>Implementing early FM exposure in medical school</td>
<td></td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
<td></td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>16</td>
<td>Family medicine placements: Apprenticeship learning</td>
<td>Elizabeth I. Lamb, Abdulaziz Al-Mahrezi, and Hugh Alberiti</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>Apprenticeship learning in FM</td>
<td></td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>Benefits of apprenticeship learning</td>
<td></td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>Challenges of apprenticeship learning</td>
<td></td>
<td>124</td>
</tr>
<tr>
<td></td>
<td>Cognitive apprenticeship learning in FM placements</td>
<td></td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>Active learning in FM placements</td>
<td></td>
<td>126</td>
</tr>
<tr>
<td></td>
<td>Role modelling</td>
<td></td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
<td></td>
<td>128</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td></td>
<td>129</td>
</tr>
<tr>
<td>17</td>
<td>Longitudinal integrated clerkships</td>
<td>Jill Konkin and Shrijana Shrestha</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>What are longitudinal integrated clerkships?</td>
<td></td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>Establishing an LIC</td>
<td></td>
<td>133</td>
</tr>
<tr>
<td></td>
<td>Enablers and challenges</td>
<td></td>
<td>133</td>
</tr>
<tr>
<td></td>
<td>Conclusion: Why is this important for family medicine and primary care?</td>
<td></td>
<td>134</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td></td>
<td>135</td>
</tr>
<tr>
<td>18</td>
<td>Interprofessional learning</td>
<td>Nynke Scherpbier and Carmen Ka Man Wong</td>
<td>137</td>
</tr>
<tr>
<td></td>
<td>Defining interprofessional learning</td>
<td></td>
<td>137</td>
</tr>
<tr>
<td></td>
<td>Challenges to interprofessional learning and collaborative practice</td>
<td></td>
<td>138</td>
</tr>
<tr>
<td></td>
<td>Approaches to interprofessional learning</td>
<td></td>
<td>139</td>
</tr>
<tr>
<td></td>
<td>Implementation and evaluation</td>
<td></td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>Change management</td>
<td></td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>Advocacy and leadership in family medicine</td>
<td></td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
<td></td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td></td>
<td>143</td>
</tr>
<tr>
<td>19</td>
<td>Experiential learning for undergraduate medical students</td>
<td>Thandaza Cyril Nkabinde and Julia Blitz</td>
<td>147</td>
</tr>
<tr>
<td></td>
<td>Defining experiential learning</td>
<td></td>
<td>147</td>
</tr>
<tr>
<td></td>
<td>Kolb’s experiential learning theory</td>
<td></td>
<td>148</td>
</tr>
</tbody>
</table>

**Section IV - Teaching and learning: Methodologies**

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Author</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Experiential learning for undergraduate medical students</td>
<td>Thandaza Cyril Nkabinde and Julia Blitz</td>
<td>147</td>
</tr>
<tr>
<td></td>
<td>Defining experiential learning</td>
<td></td>
<td>147</td>
</tr>
<tr>
<td></td>
<td>Kolb’s experiential learning theory</td>
<td></td>
<td>148</td>
</tr>
</tbody>
</table>
How can you encourage reflective practice? 148
Cultural humility: Orientating students to understand community culture 150
Active participation in learning: Communities of practice 151
Conclusion 153
References 154

20 Blended learning
Pramendra Prasad Gupta and Deborah R. Erlach
Defining blended learning 155
What is the difference between “online” and “blended learning”? 156
Types of blended learning 156
Benefits and challenges of blended learning 157
Guidelines for designing blended online courses: Ten tips 159
Blending learning as we emerge from COVID-19 160
Conclusion 161
References 161

21 Clinical reasoning
Simon Gay
What can family medicine offer the development of clinical reasoning? 163
Definitions of clinical reasoning 164
What to prioritise for each learner? 165
Application of best evidence 165
Clinical reasoning development techniques 166
Conclusion 169
Acknowledgements 169
References 169
Other resources 170

22 Communication skills
Mora Claramita and Jillian Benson
Introduction 171
The structure of the patient-centred communication style:
The greet–invite–discuss 172
The therapeutic relationship 174
Multimorbidity 175
Uncertainty 175
The cultural influence within the FM context 176
Conclusion 177
References 178

23 Clinical and procedural skills
Eric Wong and Krishna Suvarnabhumi
What are clinical and procedural skills? 179
Why teach clinical and procedural skills? 180
What physical examination skills and procedural skills should we teach? 181
### How to teach physical examination skills and procedural skills

182

### How to assess physical examination skills and procedural skills

183

### Conclusion

184

### Teaching resources

184

### References

184

#### 24 Handling risk, uncertainty, and complexity

*Helen Reid, Jenny Johnston, and Amanda Barnard*

- The challenge and opportunity of uncertainty 186
- Defining uncertainty 187
- Undifferentiated illness 189
- Complexity 189
- Risk 191
- Clinical courage 191
- Equipping FM learners to navigate risk and foster clinical courage 192
- Conclusion 193
- References 193

#### 25 Well-being

*Pramendra Prasad Gupta and Shelly B. Rodrigues*

- Defining the problem 195
- What is meant by well-being? 196
- Addressing well-being in undergraduate education 197
- Conclusion 200
- References 201

#### 26 Supervision, mentorship, and coaching

*Oluseyi Akinola and David Keegan*

- Definitions 202
- The roles 203
- Global differences 204
- Supervision: Setting up 205
- Supervising the learner at work: Directing and assessing activities 205
- Mentorship 206
- The benefits of mentorship 207
- Conclusion 209
- References 209

### Section V - Assessment

#### 27 Assessing clinical competency

*Mohamed Hany Shehata and Marwa Mostafa Ahmed*

- Competency-based medical education 213
- Alignment of assessment with family medicine training 214
- Comprehensive competency-based assessment 215
- Assessing clinical competency 215
28 The principles of feedback  
*Chris Harrison and Hashmet Parveen*

- Defining feedback 221
- The importance of observation 222
- Is there a magic formula to help you give feedback? 222
- Problems with feedback 223
- Avoid grades, be specific, and use narrative 224
- Avoid information overload 224
- Respect the individuality of the learner 225
- The importance of the learning environment 225
- Practical feedback tips 226
- Conclusion 227
- References 227

29 Principles of assessment and assessment tools  
*Ching-wa Chung and Saniya Sabzwari*

- Introduction 228
- The role of FM doctors 229
- Key concepts in assessment 229
- Reflective practice and constructive feedback 230
- Levels of competency 231
- Knows 231
- Knows how 232
- Shows how 232
- Does 234
- Barriers to involving FM doctors in assessment 235
- Conclusion 235
- References 236

30 Struggling students and fitness to practise  
*Allyn Walsh and Zorayda Leopando*

- The importance of assisting struggling medical students 237
- The multifaceted nature of medical student struggles 238
- Knowledge and skill deficits 238
- Professionalism and behavioural deficits 241
- Personal and health issues 241
- Multifaceted approach 242
- When remediation is insufficient 243
- Conclusion 244
- References 244
Section VI - Evaluating teaching and learning across the curriculum 245

31 Quality improvement and evaluation 247
   Esther M. Johnston and Akye Essuman
   - Principles of programme evaluation and quality improvement 247
   - Conducting programme evaluation 249
   - Mechanisms for quality improvement 251
   - Programme evaluation as a tool to ensure effective placement of FM in the undergraduate curriculum 252
   - Conclusion 253
   - References 253

32 Evidence-based practice: Medical education research 255
   Eliot Rees and Samar Abdelazim Ahmed
   - Introduction 255
   - What is research? 256
   - Who needs research? 256
   - Why produce research? 256
   - Identifying a topic to research 257
   - Constructing a research question 257
   - Approaches to research 259
   - Ethical approval 260
   - Dissemination 261
   - Conclusion 261
   - References 261

33 Faculty development and continuous professional development 262
   Laura Goldman and Nguyễn Minh Tâm
   - Background 262
   - Developing a faculty development programme for community tutors 263
   - Needs assessment, goals, and outcomes 264
   - Implementation 265
   - Content 265
   - Educational strategy 265
   - Logistics 265
   - Evaluation 266
   - Key features of successful FD initiatives in family medicine 266
   - Building an academic FM department through faculty development in a low-resource country 267
   - References 268

Index 270
Family Medicine in the Undergraduate Curriculum: Preparing Medical Students to Work in Evolving Health Care Systems is a much needed publication from the World Organization of Family Doctors (WONCA) Working Party on Education.

Editors, Prof Val Wass (UK) and Dr Victor Ng (Canada), as the Working Party’s past chair and current chair, respectively, have brought together a diverse range of authors from 34 different countries to contribute their knowledge.

The book aims to offer a strong evidence-based framework for integrating the teaching of family medicine in medical schools. It will meet the needs of an international audience from a large variety of country contexts and address situations in high-, middle-, and low-income countries.

As early as Chapter 1, C. Ruth Wilson and Shastri Motilal write: “The remit of this book is not to simply promote generalism or create more generalists, but rather to highlight its place in medical education and healthcare delivery.”

The 33 chapters ensure a comprehensive coverage of the topic and its many facets. It is comprehensive in addressing the integration of family medicine into the curriculum (Section III). However, the book also deals with important topics discussed worldwide such as faculty development (Chapter 33), assessment (Section V), workforce development (Chapter 4), and interprofessional learning (Chapter 18), to name but a few.

Undergraduate educators and family doctors, hoping to influence university curricula, will discover an informative reference book to refer to on many occasions, as they progress the various stages of integration of family medicine into undergraduate curricula. The book provides bureaucrats, university administrators, and faculty with a sound understanding of the importance of the teaching of family medicine to medical students and the importance of family doctors (GPs/family physicians) serving as faculty in universities, and teachers within their own clinics.

This book will contribute to improving health systems throughout the world by strengthening and guiding the teaching of family medicine at the undergraduate level. This in turn will no doubt improve health outcomes and better achieve “Health for All”.

Associate Professor Karen M. Flegg
Australian National University Rural Clinical School
WONCA President-Elect
The Astana Declaration\(^1\) in 2018 stated that, if Universal Health Care is to be achieved by 2030, strong primary care should underpin healthcare delivery across the world. Yet family medicine (FM) remains in various stages of development globally. The *Lancet* report\(^2\) on “Health Professionals for a New Century” emphasises the need for education to adapt to produce an appropriate skill mix for changing healthcare needs. This means shifting the focus of training to ensure all future doctors have a balanced understanding of generalism and specialism. There is strong evidence to suggest that the more medical students are exposed to primary care, the more they consider a career in FM. Medical schools have a crucial role in preparing all graduates for evolving healthcare systems.

Yet medical schools globally have been slow to change. Undergraduate medical education remains secondary care dominated, and hospital focused. WONCA members have been asking how to bring the necessary change into their medical schools and how advice can be adapted to accommodate the significant differences in FM delivery across high- to low-income countries. Much of the published work is based on Western healthcare and medical education systems.

So, we decided to take up the challenge! The book aims to offer a strong evidence-based framework for integrating FM into medical schools whatever the local context and to enable all future doctors, whatever their career aspiration, to understand the importance of FM to health systems and holistic medicine. We felt we should embrace, not ignore, the experience and variation in FM across the globe. All chapters have at least two invited co-authors to include a high- and low-middle income country perspective.

We chose an approach relevant to both academic FM doctors involved in undergraduate curriculum development and FM doctors who teach medical students in their practices or would like to do so. The chapters guide the reader across the UG

\(^1\) Declaration of Astana. https://www.who.int/docs/default-source/primary-health/declaration/gcphc-declaration.pdf

\(^2\) Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. https://www.thelancet.com/article/S0140-6736(10)61854-5/fulltext
curriculum, are short and easy to follow, and offer practical deliverable advice adaptable to different contexts. Key references have been selected for further detail.

One challenge was the global range in terminology for family medicine doctors and the need to distinguish between general practitioners (GPs) who in some countries are fully trained in FM but in others can become GPs with no training at all. Therefore, the term FM doctor is used consistently throughout the book.

We thank members of the WONCA education executive for their support and all the authors who worked so hard and enthusiastically to contribute.

Val Wass

Victor Ng
Acknowledgements

Our thanks to members of the WONCA Working Party in Education Executive for their support in the design and delivery of this book:

- **Marie Andrades** (Pakistan), South Asia
- **Carmen Elena Cabezas-Escobar** (Ecuador), Iberoamericana-CIMF
- **Nagwa Hegazy Nashat** (Egypt), East Mediterranean
- **Njeri Nyanja** (Kenya), Africa
- **Robin Ramsay** (UK), Europe
- **Chandramani Thuraisingham** (Malaysia), Asia Pacific
Val Wass throughout her UK career progressively combined clinical work as a family medicine doctor with medical education. The International Masters in Health Profession Education (MHPE) and PhD at Maastricht University built a strong platform for academic appointments in UK medical schools, including head of a new innovative medical school and editor of the journal *Education in Primary Care*. She has worked as a consultant in undergraduate and postgraduate education in over 45 countries, and her published research is widely cited. She holds several awards for an outstanding contribution to medical education, including the UK Royal College of General Practitioners’ Williams Pickles and International President’s medals, the Association for the Study of Medical Education’s Gold Medal, and, in the 2015 UK New Year’s Honours, an OBE.

Victor Ng is the Assistant Dean, Distributed Education and Associate Professor at the Schulich School of Medicine and Dentistry in Canada and a consultant physician in family and emergency medicine. He has held successive leadership positions in leading healthcare organisations and is currently Associate Director at the College of Family Physicians of Canada. He is Chair of the World Organization of Family Doctors (WONCA) Working Party on Education. Dr Ng completed his Master of Health Professions Education at Maastricht University and is a sought-after speaker on medical education globally. He has over 40 peer-reviewed publications and has sat on editorial boards of several influential international medical journals. He has been recognised for his contribution to medical education leadership and awarded the degree of fellowship by the College of Family Physicians of Canada.
Contributors

Marwa Mostafa Ahmed  
Department of Family Medicine  
Faculty of Medicine  
Cairo University  
Cairo, Egypt

Samar Abdelazim Ahmed  
Dubai Medical College  
for Girls  
Dubai, United Arab Emirates

Oluseyi Akinola  
Department of Family Medicine  
Cumming School of Medicine  
University of Calgary  
Calgary, Alberta, Canada

Abdulaziz Al-Mahrezi  
Department of Family Medicine & Public Health  
College of Medicine & Health Sciences  
Sultan Qaboos University  
Muscat, Sultanate of Oman

Hugh Alberti  
School of Medicine  
Newcastle University, Newcastle, UK

Marie Andrades  
Institute of Family Medicine  
Jinnah Sindh Medical University  
Karachi, Pakistan

Amanda Barnard  
School of Medicine and Psychology  
College of Health & Medicine  
The Australian National University  
Acton, Australia

Jillian Benson  
Department of General Practice  
Adelaide Medical School  
and  
Faculty of Health and Medical Sciences  
University of Adelaide  
Adelaide, Australia

Innocent Besigye  
Department of Family Medicine  
School of Medicine  
Makerere University Kampala  
Kampala, Uganda
Julia Blitz  
Department of Family Medicine  
Centre for Health Professions Education  
Stellenbosch University  
Stellenbosch, South Africa

Ching-wa Chung  
School of Medicine, Medical Sciences and Nutrition  
University of Aberdeen  
Aberdeen, Scotland, UK

Mora Claramita  
Department of Medical Education & Bioethics  
and  
Department of Family & Community Medicine  
Faculty of Medicine Public Health and Nursing  
Universitas Gadjah Mada  
Yogyakarta, Indonesia

Maria Sofia Cuba-Fuentes  
Center for Research in Primary Care  
Cayetano Heredia University  
Lima, Peru

Anselme Derese  
Department of Public Health and Primary Care  
Ghent University  
Ghent, Belgium

Deborah R. Erlich  
Department of Family Medicine  
Tufts University School of Medicine, Boston, MA, USA

Carmen Cabezas Escobar  
Medicine School  
Pontifical Catholic University of Ecuador  
Quito, Ecuador

Akye Essuman  
Department of Internal Medicine  
School of Medicine  
University of Health and Allied Sciences  
Ho, Volta Region, Ghana  
and  
Faculty of Family Medicine  
Ghana College of Physicians and Surgeons  
Accra, Ghana

Marcelo Garcia-Dieguez  
Departamento de Ciencias de la Salud  
Universidad Nacional del Sur  
Bahia Blanca, Argentina

Simon Gay  
School of Medicine  
University of Leicester  
Leicestershire, UK

Laura Goldman  
Department of Family Medicine  
Boston University Chobanian & Avedisian School of Medicine  
Boston, MA, USA

Archna Gupta  
Department of Family and Community Medicine  
Unity Health Toronto  
University of Toronto  
Toronto, Canada

Pramendra Prasad Gupta  
Department of General Practice and Emergency Medicine  
B.P. Koirala Institute of Health Sciences  
Sunsari, Nepal, India

Chris Harrison  
University of Central Lancashire School of Medicine  
University of Central Lancashire  
Preston, Lancashire, UK
Nagwa Nashat Hegazy  
Department of Family Medicine  
Faculty of Medicine  
Menoufia University  
Cairo, Egypt

Maria Michelle Hubinette  
Faculty of Medicine  
Department of Family Practice  
The University of British Columbia  
Vancouver British Columbia, Canada

Jannie Hugo  
Department of Family Medicine  
University of Pretoria  
Pretoria, South Africa

Saima Iqbal  
Department of Family Medicine  
Shifa College of Medicine  
Shifa Tameer-e-Millat University  
Islamabad, Pakistan

Esther M. Johnston  
The Wright Center National Family Medicine Residency Programme at HealthPoint  
Seattle, WA, USA  
and  
The A.T. Still University School of Osteopathic Medicine  
Renton, WA, USA

Jenny Johnston  
Centre for Medical Education  
School of Medicine, Dentistry and Biomedical Science  
Queen’s University Belfast  
Belfast, Northern Ireland, UK

Ryuki Kassai  
Department of Community and Family Medicine  
Fukushima Medical University  
Fukushima, Japan

David Keegan  
Department of Family Medicine  
Cumming School of Medicine  
University of Calgary  
Calgary, Alberta, Canada

Martina Kelly  
Department of Family Medicine  
Cumming School of Medicine  
University of Calgary  
Calgary, Alberta, Canada

Jill Konkin  
Faculty of Medicine & Dentistry  
University of Alberta  
Edmonton, Alberta, Canada

Raman Kumar  
Institute of Family Medicine and Primary Care (iFMPC)  
Greater Noida West, Gautam Buddha Nagar  
Uttar Pradesh, India

Elizabeth I. Lamb  
School of Medicine  
Newcastle University  
Newcastle, UK

Zorayda Leopando  
Department of Family and Community Medicine  
and  
Department of Family Medicine and Community Health College of Medicine  
College of Medicine  
Our Lady of Fatima University  
Manila, Philippines

Victor Loh  
Department of Family Medicine  
National University Health System  
and  
Yong Loo Lin School of Medicine  
National University of Singapore  
Singapore
Kay Mohanna  
Three Counties Medical School  
University of Worcester  
Worcester, UK

Shastri Motilal  
Unit of Public Health and Primary Care  
Department of Paraclinical Sciences  
University of the West Indies, St. Augustine Campus  
Trinidad and Tobago, West Indies

Richard Nduwayezu  
School of Medicine and Pharmacy  
College of Medicine and Health Sciences  
University of Rwanda  
Kigali, Rwanda

Hilary Neve  
University of Plymouth Peninsula Medical School  
Plymouth, UK

Sandra Nicholson  
Three Counties Medical School  
University of Worcester  
Worcester, UK

Leilanie Nicodemus  
Department of Family and Community Medicine  
University of the Philippines—Philippine General Hospital  
Manila, Philippines

Thandaza Cyril Nkabinde  
Department of Family Medicine  
University of KwaZulu Natal  
Durban, South Africa

Hashmet Parveen  
PAPRPSB Institute of Health Sciences  
Brunei Darussalam

Dinusha Perera  
Faculty of Medicine  
University of Kelaniya  
Kelaniya, Sri Lanka

Robin Ramsay  
Usher Institute  
University of Edinburgh  
Edinburgh, Scotland, UK

Eliot Rees  
Research Department of Primary Care and Population Health  
University College London  
London, UK  
and  
School of Medicine  
Keele University  
Newcastle under Lyme, UK

Helen Reid  
Centre for Medical Education  
School of Medicine, Dentistry and Biomedical Science  
Queen’s University Belfast  
Belfast, Northern Ireland, UK

Shelly B. Rodrigues  
Mosaica Solutions, LLC  
Kansas City, MO, USA

Saniya Sabzwari  
Department of Family Medicine  
Aga Khan University  
Karachi, Pakistan

Hassan Salah  
Primary and Community Health Care  
Department of UHC, Health Systems  
World Health Organisation Eastern Mediterranean Region
Nynke Scherpber
Department of General Practice and
Elderly Care Medicine
University of Groningen
Groningen, The Netherlands

Mohamed Hany Shehata
Department of Family and
Community Medicine
College of Medicine and Medical
Sciences
Arabian Gulf University
Manama, Bahrain

Shrijana Shrestha
Patan Academy of Health Sciences
Kathmandu, Nepal

Saeed Soliman
Department of Family Medicine
Cairo University
Cairo, Egypt
and
Primary and Community Health Care
Department of UHC, Health Systems
World Health Organisation
Eastern Mediterranean Region

Maham Stanyon
Centre for Medical Education and
Professional Development
Department of Community and
Family Medicine
Fukushima Medical University
Fukushima, Japan

Anna Stavdal
Department of General Practice
University of Oslo
Oslo, Norway

Krishna Suvarnabhumi
Department of Family and
Preventive Medicine
Faculty of Medicine
Prince of Songkhla University
Hat Yai, Songkhla, Thailand

Nguyễn Minh Tam
Hue University of Medicine and
Pharmacy
Hue Family Medicine Center
Hue, Vietnam

Chandramani Thuraisingh
Department of Family Medicine
International Medical University
Kuala Lumpur, Malaysia

Marietjie van Rooyen
Department Family Medicine
University of Pretoria
Pretoria, South Africa

Chris van Weel
Department Family Medicine/
General Practice
Radboud University Nijmegen
Nijmegen, The Netherlands

Allyn Walsh
Department of Family
Medicine
McMaster University
Hamilton, Ontario, Canada

Val Wass
General Practice and Community
Medicine Team
The School of Medicine,
Medical Sciences and
Nutrition
University of Aberdeen
Aberdeen, Scotland, UK

Tim J. Wilkinson
Department of Medicine
University of Otago
Christchurch, New Zealand

C. Ruth Wilson
Department of Family
Medicine
Queen’s University
Kingston, Canada
Carmen Ka Man Wong
JC School of Public Health and Primary Care
and
Faculty of Medicine
The Chinese University of Hong Kong
Hong Kong SAR, China

Eric Wong
Department of Family Medicine
Schulich School of Medicine & Dentistry
Western University
London, Ontario, Canada
SECTION

I

Integrating FM into the UG curriculum

Seizing the opportunity

Education is the most powerful weapon you can use to change the world.

Nelson Mandela
Introduction

Although family practice takes a generalist approach to patient care, generalism is not the priority of this group of physicians alone. All physicians, and their patients, will benefit from understanding the generalist approach to health. This chapter will provide a rationale for including generalism in the undergraduate medical curriculum and describe the contribution FM can make to a generalist curriculum.

What is generalism?

Persons seeking caring, curing, and healing will benefit from a skilled physician who will see them as a whole person, situated in their own family and community context. Family physicians would agree with the motto attributed to the Latin
C. Ruth Wilson and Shastri Motilal

scholar Terence, and revived by Maya Angelou, “I am human, and nothing human is alien to me”. For a physician, this orientation is displayed as curiosity to understand the influences on the health of persons and communities. This manifests in a broad range of competencies which are placed at the service of the patient. Generalism in medicine can be defined as “a broad-based discipline dedicated to contextualising care to the person and the person’s social and physical environment”.

A generalist will have some knowledge of all the relevant factors affecting a patient, from the pathophysiology of various organ systems to the impact of the social determinants of health on a community’s and an individual’s well-being. The generalist may have skills or interests in several domains of knowledge, often generated by the needs of their patient population or community. A specialist, in contrast, may have some understanding of some areas of pathophysiology but will be expected to have an in-depth expertise in their own field. The key aspects of generalism are illustrated in Figure 1.1.

Generalism is a broad-based discipline dedicated to contextualising care to the person and the person’s social and physical environment.

![Generalism framework: Key elements of medical generalism.](image)

**FIGURE 1.1** Generalism framework: Key elements of medical generalism.
The relationship between generalism and family medicine

Several of the core values of family practice align perfectly with a generalist approach. Family physicians put the doctor–patient relationship at the centre of the care they give. Their commitment is to the person first before the diagnosis or problem may be evident. Generalist physicians are equipped to provide care to all age groups, including the very start and end of life, birth, and death. This allows family physicians to be of value to communities, as their skills can adapt to the medical and health needs of their population and the community context in which they are situated. Family physicians can span the continuum of medicine, from prevention to curative medicine, rehabilitation, and palliative care. They provide a key link between population and public health, on the one hand, and primary and community care, on the other.

Along with this comprehensive set of skills, the hallmarks of FM are to be the first contact for patients and to offer continuity of care. Family physicians value communication skills and often have particular expertise in this area. These additional attributes are important for cost-effective person-centred primary care but are not synonymous with generalism. A generalist starts with the person seeking care by aiming to understand what they value in preserving their health, to learn about their illness experience, and to evaluate the limits of their knowledge. They can then advise or intervene and, if required, make effective use of specialists and their skills. This humane generalist approach is badly needed in medicine.

Evolution of generalism

Hippocrates (460–377 BC), who is considered the father of modern-day medicine, filled many roles as an astute physician with high ethical standards, an epidemiologist, a medical educator, and a scholar. Hippocrates’ practice of medicine, at his time, therefore epitomised generalism. Until the 19th century, in America and Europe, the majority of medical practitioners were general practitioners practising medicine, surgery, and obstetrics. While such practice may have been appropriate—given the knowledge, tools, and nature of diseases at that time—by the early 20th century, specialism had taken prominence. This was accompanied by a decline in generalists as lack of postgraduate training and the reduced prestige of general medicine gave way to other specialties. The pendulum swung back in favour of generalism by the latter half of the 20th century as FM became a defined specialty. The factors that motivated these shifts were multiple, including the changing needs of the population, containment of rising healthcare costs, scientific advancements, and the move to consolidate general medicine as a specialty in its own right.