Brief Report

Aligning the SaudiMED framework with the National Commission for Academic Accreditation and Assessment domains

Ara S. Tekian, PhD, MHPE,
Mahmoud S. Al Ahwal, MBChB, FRCPC.

The SaudiMED framework was created in light of a shift toward competency-based medical education in Saudi Arabia.[1] It represents a national standard for Saudi medical graduates, and are intended to ensure that they have attained the competencies necessary to be a successful physician. The framework was developed in 3 phases. Phase I, which was completed in 2011, concentrated on the main domains of medical practice that would encompass activities and obligations of physicians. During Phase II, competencies for the domains were created. Results of phase II were released in January 2015.[2] It entailed 6 competencies including: scientific approach to practice, patient care, community-oriented practice, communication and collaboration, professionalism, and research and scholarship. Within these are 17 sub-competencies and 80 specific learning outcomes that should be achieved by the medical student at the time of graduation. During Phase III, learning outcomes that reflect the achievement of the competencies will be developed, and has yet to be conducted (**Table 1**).

The National Commission for Academic Accreditation and Assessment (NCAAA) of the Kingdom of Saudi Arabia (KSA) is the national body that evaluates the quality of post-secondary programs.[3] Its mission is to ensure the quality and consistency of post-secondary education, and maintain its equivalence with international standards. The NCAAA requires post-secondary programs to have the following 5 domains integrated into their course of study: knowledge, cognitive skills, interpersonal skills and responsibility, communication, and psychomotor skills.[2] Given the emergence of the SaudiMED competencies as a national standard in medical education, there is an imminent need to examine how the SaudiMED fits within the existing NCAAA domains. As such, the objective of this brief report is to provide a platform to align the SaudiMED with NCAAA domains, which could yield a meaningful link between the 2

frameworks. For clarification, we use "domains" to refer to components of the NCAAA domains; moreover, we use "competencies" and "sub-competencies" to refer to components of the SaudiMED framework.

The first domain is knowledge, which involves a list of topics the student must understand to complete the course of the study. The SaudiMED reflects the idea that a competent physician must be knowledgeable in all areas related to medicine. The framework requires that the physician demonstrate a high level of critical thinking to provide appropriate care for patients. Physicians must also develop a rich understanding of the structure and function of the organ systems, and be able to explain the pathogenesis of various diseases. Physicians should also be aware of the policies and procedures of the KSA health care system, as well as the prevalence of common diseases within defined populations.

The second domain required by the NCAAA is instruction and assessment of cognitive skills. This includes development and refinement of thinking and problem solving, and the ability to use analytic and conceptual tool. Similar to knowledge, this domain is covered by most domains of the SaudiMED framework. Physicians must be capable of applying their scientific knowledge to medical practice. This includes the ability to explain clinical presentations of the disease, and understand the evidence base of medicine. Physicians must also demonstrate the ability to prioritize patient's problems, and to create an appropriate assessment and treatment plan. Physicians must also see beyond the individual patient to understand current health policies, and to recognize global health issues that need to be further addressed.

The third domain is instruction and assessment of interpersonal skills and responsibility. Teaching strategies must incorporate ways for the medical student to be involved in self-learning, participate in teams, exhibit professionalism, and abide by ethical standards. Saudi medical graduates demonstrate attainment of this competency by effectively managing common medical problems. This includes establishing partnerships with patients, appropriately managing patient problems, and offering effective counseling. Physicians must have the ability to interact with other health professionals to optimize patient care. Physicians must also be active voices in their communities to identify global health issues, and provide all Saudi citizens equal access to healthcare.

The fourth domain is the development of communication, information technology, and numerical skills. The SaudiMED framework dedicates an entire domain to communication and collaboration,

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Table 1 - Six competencies and 17 sub-competencies of the SaudiMED framework.

Competencies	Sub-competencies
I. Scientific Approach to Practice	1. Integration of basic, clinical, behavioral and social sciences in medical practice
	2. Delivery of evidence-based health care
II. Patient care	3. Demonstration of essential clinical skills
	4. Demonstration of clinical reasoning, decision making, and problem solving skills
	5. Management of life-threatening medical conditions
	6. Management of common medical problems
	7. Placing patients' needs and safety at the center of the care process
III. Community oriented practice	8. Understand the healthcare system in Saudi Arabia
	9. Advocacy of health promotion and disease prevention
IV. Communication and collaboration	10. Effectively communicate with patients, colleagues, and other health professionals
	11. Teamwork and inter-professional collaboration
	12. Application of medical informatics in healthcare system
V. Professionalism	13. Adherence to professional attitudes and behaviors of physicians
	14. Application of Islamic, legal, and ethical principle of professional practice
	15. Commitment to personal and professional development
VI. Research and scholarship	16. Demonstration of basic research skills
	17. Demonstration of scholarly pursuits
Within the competencies lie 80 specific learning outcomes that must be completed by medical students	

to ensure that physicians have the capacity to effectively interact with patients, and other health professionals to optimize care. Physicians must recognize the importance of teamwork and demonstrate the ability to prevent and solve inter-professional team conflicts. They must exhibit efficient oral communication through the ability to handle sensitive information and understand the sometimes-challenging circumstances of patients. Physicians must also demonstrate evidence of ability to effectively communicate in writing, which includes appropriate use of patient charts and prescriptions.

The final domain is psychomotor skills, which covers clinical skills and procedures. A competent Saudi physician must have exceptional clinical and procedural skills to provide optimal patient care. Physicians must take accurate medical histories and perform appropriate physical examinations. They must demonstrate the capacity to approach, serious or life-threatening conditions, and generate effective problem solving and strategy to manage patients.

The SaudiMED framework is a necessary step to address the movement toward competency-based education, and improve the overall quality of health care in Saudi Arabia. Furthermore, the committee has made a significant effort in ensuring that the framework aligns with the goals of the NCAAA. Together, the framework can facilitate the development of competent physicians capable of providing medical care into the future. This will fulfill one of the important unstated goals of Saudi Arabia as well - that of preparing leaders and scholars in medical education.[4] It should be noted that an advantage of the framework is its comparability with others developed internationally. This will allow future Saudi physicians for easy transition to other areas of medicine worldwide, and promote a sense of camaraderie with international physicians. Finally, the SaudiMED framework can be further utilized to improve the curriculum and assessment of medical schools to ensure that the new competencies can be achieved.

References

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