



The AUA Curriculum for Medical Students: Current Resources and Developments

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Abstract

Purpose of Review To summarize the advancements and offerings of the American Urological Association's (AUA) Medical Student Education Committee (MSEC).

Recent Findings The AUA MSEC is focused on advocating for urologic education in medical schools by promoting core principles and practices in urology. The origins of the MSEC go back to 2008. With comprehensive support from the AUA Office of Education, the MSEC continues to refine and expand the resources available for medical students through the AUA Medical Student Curriculum website.

Summary The AUA Medical Student Curriculum website offers a repository of resources for medical students. This information is meant to serve as a foundational curriculum for undergraduate medical student education in urology.

Keywords Medical education · Medical student · Urology · Didactics · Curriculum

Abbreviations

AUA	American Urological Association
MSEC	Medical Student Education Committee
MOOC	Massive open online course

Introduction

The AUA Board of Directors oversees several councils, including the Education Council. Within the Education Council, there are many content-specific committees with education-focused missions. This includes target audience-specific content, such as the Advanced Practice Providers Education Committee and the Medical Student Education Committee (MSEC). The MSEC is focused on advocating for urologic

education in medical schools by promoting core principles and practices in urology. It is comprised of a multitude of volunteers, working closely with AUA staff to develop, mature, and disseminate educational materials appropriate for medical students. The origins of the MSEC go back to 2008.

In 2008, Loughlin's review of the current status of medical student urological education in the USA identified alarming trends of reduced exposure for medical students to urology, including 65% of responding urology residency program directors queried noting that medical students could graduate from their schools without any clinical exposure to urology [1]. This echoed similar concerns presented by Kerfoot et al in a review in 2006 [2]. In an editorial to Loughlin's 2008 review, Dr. Elspeth McDougall, announced that with the assistance of Drs. Paul Turek and B. Price Kerfoot, the AUA's Office of Education was developing a medical student website and urology curriculum for medical students. Drs. Turek and Kerfoot surveyed a wide swath of (over 1800) stakeholders in medical student education, setting the foundation to develop standardized materials to improve medical student education in core urological topics [3]. Since that time period, the AUA Medical Student Curriculum website has continued to mature with the input and efforts of dozens of volunteers, now formalized as the previously mentioned AUA MSEC.

This article is part of the Topical Collection on *Education*

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Continued Evolution of the AUA Medical Student Curriculum

The challenges to ensuring undergraduate medical students receive exposure to urological knowledge remain. When examining the current state of resources available for medical student urological education, exposure to this knowledge set is extremely variable across medical schools. Undergraduate medical student education, from school to school, is not consistent in exposure to core urological concepts, including anatomy, disease state, and patient care. In 2018, Sam et al conducted a literature review, finding a lack of research examining implementation and outcomes of formal urological curricula [4•]. The authors' analysis also expounded upon the continued minimal exposure many undergraduate medical students receive to a urology curriculum during their training, despite the available AUA resource. The article challenged urology medical student education to incorporate teaching core concepts; it noted that the AUA's available online medical student curriculum provided a resource for such formal undergraduate medical education [5••].

Now, more than ever before, online resources can equalize dissemination of knowledge among learners. The online platform provides an easily available resource for undergraduate medical students to access at any time. In Europe, recent efforts by the Karolinska Institutet put forth KIurologyX, the first urology massive open online course (MOOC), at no cost and with no pre-requisites, to reach a global audience of medical and health care students [6]. The reported study found that using an MOOC, basic clinical urology can be taught online to diverse populations of medical and health care students, and non-health care populations, including patients.

The AUA MSEC, with robust support from the AUA Office of Education, continues to expand and refine the resources available on the website. The MSEC mission statement is the ethos by which the committee's efforts are guided: "The Committee will identify important subjects and content and provide a variety of resources to enhance Medical Student Education in Urology, including educational outlines, multimedia materials, and mentoring tools. The Committee will also ensure that these materials are promoted as effectively as possible to medical students." In its current state, the AUA Medical Student Curriculum website provides descriptions of the field of urology, in addition to clinical education on core concepts in the form of topic vignettes, and didactic videos describing genitourinary physical exams. The clinical content, including topics ranging from "acute scrotum" to "kidney stones" to "urological emergencies" to "bladder drainage," and beyond, undergoes a formal review based on a set timeline by the AUA MSEC, to ensure that it reflects the most up-to-date clinical guidelines set forth by the AUA.

Webinars have been an effective tool to disseminate knowledge regarding the specialty of urology, including the

diversity of the those in the subspecialty and the wide array of care provided through urologists, such as transgender medicine. These webinars are archived and available on the AUA Medical Student Curriculum website and are consistently viewed. More webinars continue to be developed. The website will provide additional information regarding the application process to residency training programs, should medical students want to formally pursue urology as a career. In the near future, the website will also have links to a medical student track for the AUA annual meeting. The medical student track will provide avenues to maximize the comprehensive educational opportunities at the AUA annual meetings. When formalized, it will have recommendations for plenary sessions and presentations that may be most impactful for medical students attending.

The AUA Medical Student Curriculum website and its resources are meant to serve all medical students, including those with no aspirations to actually become urologists. It remains somewhat elusive why some medical schools continually send more undergraduate medical students into urology, and this is likely multifactorial [7]. While certainly, the website is meant to provide exposure to and an explanation of urology as a subspecialty, in addition to providing information about the application process to urology residency programs, the website is also meant to serve as repository of accessible knowledge for medical students endeavoring into family medicine, internal medicine, physiatry, psychiatry, etc. Some of the most utilized content by students on the website are the online video tutorials regarding the male and female genitourinary exams. The website will continue to incorporate didactic videos, with the future goal of providing instructional videos regarding simple urological procedures such as placement of a urethral catheter or catheter irrigation, which will be useful for all undergraduate medical students caring for patients with urological needs. It should be noted that the content on the website is free for all medical students; some of the linked content does require the medical student to join the AUA as a student member, but once again, this is at no cost.

Conclusion

In conclusion, the AUA Medical Student Curriculum website, since its inception in 2008, continues to be refined, offering a repository of resources for medical students. It is meant to serve as a foundational curriculum for undergraduate medical student education in urology. It provides medical schools essentially a packaged educational tool by which to provide their medical students exposure to urology; this is exposure they might not otherwise receive at many institutions.

Compliance with Ethical Standards

Conflict of Interest Seth A. Cohen declares no potential conflicts of interest.

Human and Animal Rights and Informed Consent This article does not contain any studies with human or animal subjects performed by any of the authors.

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- Of importance
- Of major importance

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