### Chapter 13

### Got Skills?

# A New Era of Developing and Assessing Clinical Skills in the Remote Environment

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#### **ABSTRACT**

Health professional education is designed to help learners gain the knowledge, skills, and attitudes needed for practice. There has been extensive reform in health professional curriculums to emphasize the teaching, development, and assessment of clinical skills. As medical education continues to evolve due to changes in healthcare, and with the ever-increasing growth of technology, it is important to ensure that health professional students are ready to practice successfully. Many curriculums have incorporated clinical skills laboratories to provide learners a safe and protected environment to practice those skills necessary for their profession. Thus, students must acquire, maintain, and enhance their clinical skills techniques as they progress in their education and be properly assessed before they approach real patients. The emergence of the COVID-19 pandemic required educational transition to a remote platform, providing both challenges and opportunities for health education. This chapter reviews how remote skills-based courses can teach and assess clinical skills effectively.

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#### INTRODUCTION

Building interprofessional relationships and clinical skills are integral components of core curricula in health profession's education. With the increasing technology utilized in education during the global pandemic, academicians are at an inflection point maintaining a need to reexamine pedagogical methods in order to teach and assess both basic and complex clinical skills. The transference in both course delivery and assessment methods from traditional, in-person methods to the remote or online environment has created opportunities for healthcare educators to explore innovative and unique ways of effectively developing students' interprofessional and clinical skills. Additionally, this transformation has required educators to adjust their teaching methodology to ensure that future healthcare workers are well equipped with the changing landscape of health delivery.

In response to the global pandemic, educators have been forced to adapt to the new teaching environment, investigating and exploring new as well as innovative methods through technology to instruct; they must also continue to assess health professional students, thus ensuring the ultimate clinical competence to perform specific professional activities and responsibilities. In this chapter, wisdom obtained via experiences and lessons learned across various schools of pharmacy focusing on the weathering of interprofessional and clinical skills development during this transition period will be discussed. We will explore and examine digital tools that have been used in skills development, determining how these tools could be applied to other health professional education programs. With the newer widespread use of technology, we will delve further into potential strategies and best practices, aiming to elucidate what these novel approaches may mean to the future of healthcare education.

#### **BACKGROUND**

Traditionally, many programs taught interprofessional and clinical skills conventionally, in-person, at a dedicated practice laboratory or through experiential clerkships (Hao et al., 2002). The global pandemic, with its institutional and state-mandated public health restrictions, forced educators to emergently identify and learn new ways and technologies to deliver, teach, and assess clinical skill performance in this newly developed remote environment. Due to the social distancing requirements during the pandemic, many of the clinical skills that were traditionally learned and performed with standardized or simulated patients had to become virtual encounters (Agu et al., 2021). This has required educators to make it a priority to incorporate the appropriate tools for effective student learning. To optimize clinical skills development for learners, in the remote or online environment, the use of virtual simulation and other platforms such as videoconferencing or telehealth had to be explored and examined (Lara et al., 2020). Designed to assess clinical and theoretical knowledge, one of the most common forms of assessment for clinical skills and professional competence is the Objective Structured Clinical Examination (OSCE) (Harden et al., 1975). This has been used throughout medical education to ensure that the learners are achieving the necessary clinical milestones at various points within their curriculum. During the pandemic, the traditional OSCE has been adapted to a high-stakes virtual OSCE and its success has been documented in the literature (Lara et al., 2020). Several studies have delved into the use of software and digital tools with which to deliver course content, and assessing interprofessional and clinical skills. (Johnson et al, 2021; Watari et al., 2020) For example, some of the simulated educational and learning platforms used

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