Medical student elective in robotic surgery: Can medical students gain proficiency in robotics as easily as residents?

Smith, H., Stadsvold, B., Worthey, A., Hilton, R.

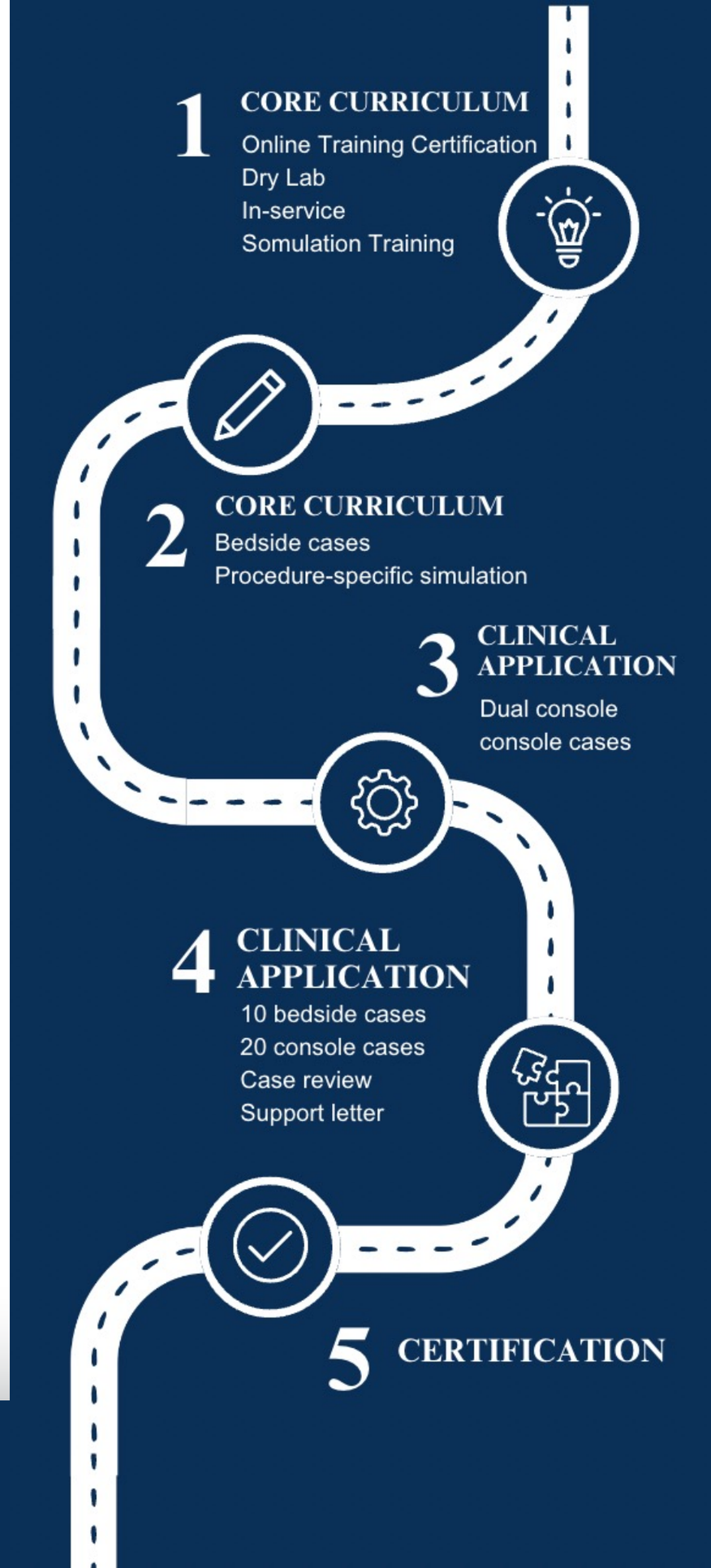
Objective: To delineate a student curriculum for robotic surgery certification given the rapid increase in prevalence of robotic assisted surgeries and lack of training at the medical student and resident levels.

Background: Resident and medical student involvement in robotic assisted surgical cases has been difficult to achieve due to the steep learning curve and paucity of robot assisted surgical training programs throughout the country.

Methods: Fourth-year medical student completion of online training modules, in-service training, simulation curriculum and completion of 10 bedside cases.

Results: During a month-long surgical sub-internship, a fourth-year medical student elected to complete the Core Curriculum for Fundamentals of Robotic Surgery with Intuitive da Vinci robotic surgical systems. This pilot study demonstrated feasibility of a medical student curriculum in robotic surgery at our institution. The student not only completed the core curriculum but also moved into clinical application and operated at the console with direct supervision.

Conclusions: Earlier involvement in robotic assisted laparoscopic surgery enriches student learning and prepares them for the steep learning curve during residency training. At our institution, the curriculum committee just approved a four-week elective for fourth-year medical students that will begin in January 2023. Further studies can be done to assess the amount of student participation, completion, and preparedness for residency in the surgical field using the robotics curriculum.



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