Gynecologic Robotics Credentialing in an Independent Academic Teaching Hospital

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Abstract:
The purpose of this study was to report our experience in credentialing residents in Obstetrics and Gynecology in robotics. The resident must pass a series of didactic training, simulation and proctor exercises in order to become credentialed in robotics.

Methods:
This is a retrospective analysis of our residents’ training in robotics. Three residents were selected to complete the robotic requirements. Didactic training included written and oral presentations. Simulation involved robotic surgery and gynecologic skills using the Intuitive System DaVinci platform. The residents were required to complete 80 robotic simulation stations and 6 robotic cases under supervision of an attending physician for each resident. The residents were also required to complete a technical skills test on a variety of instruments and target.

Results:
Our program had a total of 6 residents in the 2009 graduating class and 2 of them completed the credentialing process. The third resident started to complete the process in the following year. The first resident completed the credentialing process in May 2008. The second resident completed the credentialing process in July 2008. The third resident completed the credentialing process in May 2009. The fourth resident completed the credentialing process in October 2009. The fifth resident completed the credentialing process in May 2010. The sixth resident completed the credentialing process in May 2011.

Conclusions:
Our study reports the experience of our 2009 graduating class with a robotic credentialing program as described by Dr. Andreas.

Introduction:
Robotic surgery was introduced in 1996 and approved for use in gynecology in 2000. The ability for the surgeon to manipulate organs in a minimally invasive manner with improved visualization and dexterity. The da Vinci Surgical System was introduced in 1999 and approved for use in gynecologic surgery in 2005.

Methods:
We developed a comprehensive training program for the residents. The program included didactic lectures, simulation, and proctoring.

Results:
Our program had a total of 6 residents in the 2009 graduating class and 2 of them completed the credentialing process. The third resident started to complete the process in the following year. The first resident completed the credentialing process in May 2008. The second resident completed the credentialing process in July 2008. The third resident completed the credentialing process in May 2009. The fourth resident completed the credentialing process in October 2009. The fifth resident completed the credentialing process in May 2010. The sixth resident completed the credentialing process in May 2011.

Conclusions:
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References:

Robotic Skill Evaluation:

1. Instrumental level: A robotic system is maneuvered with proficiency and speed to achieve the desired surgical outcomes. Scoring: 1 - 4
2. Precision level: The robotic system is manipulated with accuracy and precision to achieve the desired surgical outcomes. Scoring: 1 - 4
3. Coordination level: The robotic system is manipulated with coordination and smoothness to achieve the desired surgical outcomes. Scoring: 1 - 4
4. Consistency level: The robotic system is manipulated consistently and with appropriate technique to achieve the desired surgical outcomes. Scoring: 1 - 4
5. Efficiency level: The robotic system is manipulated efficiently and with optimal use of time to achieve the desired surgical outcomes. Scoring: 1 - 4

Robotic Training and Credentialing:

1. Robotic Simulation: The resident successfully completes the robotic simulation exercises with proficiency and speed to achieve the desired surgical outcomes. Scoring: 1 - 4
2. Robotic Proctoring: The resident successfully completes the robotic proctoring exercises with proficiency and speed to achieve the desired surgical outcomes. Scoring: 1 - 4
3. Robotic Cases: The resident successfully completes the robotic cases with proficiency and speed to achieve the desired surgical outcomes. Scoring: 1 - 4