One Compact Solution With Many Benefits

Simulation in all forms is an important part of the learning experience for surgical technology. By providing a controlled re-creation of critical steps in instrument control, simulation allows surgeons to practice their skills in a non-clinical environment. Other major benefits of simulation include the ability to:

- Increase familiarity with the da Vinci® System - The Skills Simulator allows surgeons to practice on the da Vinci® System as much as needed to become comfortable with new techniques.
- Provide more learning opportunities - For residents, simulation helps maximize practice time and ensures they get as much technical exposure as possible.
- Measure progress - The Skills Simulator provides a quantitative, tracked environment designed to allow surgeons to see how they've done on a given exercise and track their progress over time.
- Warm-up before surgery - The Skills Simulator can be used immediately before a case to allow surgeons to re-familiarize themselves with the console.

For more information, please visit our website at: http://www.intuitivesurgical.com/products/skills_simulator
Introducing Simulation for the da Vinci® Surgical System

Skills Practice in an Immersive Virtual Environment

Portable. Practical. Powerful. The da Vinci Skills Simulator contains a variety of exercises and scenarios specifically designed to give users the opportunity to improve their proficiency with the da Vinci® Surgeon console controls. The sleek case seamlessly integrates with an existing da Vinci® Si™ or Si-e™ surgicale console,* turning it into a novel practice platform that can be used inside or outside the operating room. No additional system components are required.

• The straightforward set-up allows users to practice unassisted or with supervision, according to their preference.
• Built-in metrics enable users to assess skills, receive real-time feedback and track progress.
• Administrative tools let users structure their own curriculum to fit with other learning activities in their institution.
• The open architecture of the system software allows for future development and incorporation of additional practice modules.

A Variety of Comprehensive Exercises

Developed in collaboration with Ahsna Technologies® and Simbionix™, the Skills Simulator exercises range from basic to advanced and are designed to be relevant to surgeons from any specialty. Each exercise covers at least one of the following skill categories:

• **NEW** Knot tying and Suturing - Being able to tie intracorporeal knots is an important skill for many da Vinci® procedures, so the Skills Simulator includes exercises that demonstrate basic techniques for knot-tying with EndoWrist® instruments.

• **EndoWrist Manipulation** - EndoWrist® instruments are designed to provide surgeons with natural dexterity and a range of motion far greater than the human hand. These exercises are designed to help users gain familiarity with the movement of the instruments.

• **Camera and Clutching** - The three-dimensional, enhanced high-definition vision of the da Vinci® System offers a key clinical advantage in surgery, and these exercises help users improve camera control and learn to use the clutch effectively.

• **Fourth Arm Integration** - For more advanced instrument control skills, some exercises include a fourth instrument arm that must be used. This is designed to promote instrument skill, and encourages users to think strategically about instrument placement during tasks.

• **System Settings** - The surgeon console features a full complement of controls for user settings. Quiz exercises on the Skills Simulator focus on basic setting topics such as icons, ergonomics and instrument scaling.

• **Needle Control and Driving** - These scenarios are designed to help users develop skill when manipulating needles, including a focus on how to effectively hand-off and position needles while practicing with a range of geometries.

• **Energy and Dissection** - The footswitch panel enables users to perform a range of tasks such as swapping between different types of energy instruments. These exercises allow users to gain familiarity with the footswitch panel by applying monopolar and bipolar energy while working on dissection tasks.

* Not compatible with the da Vinci® Si standard da Vinci surgical systems.