



DEPARTMENT OF THE NAVY

OFFICE OF THE SECRETARY
1000 NAVY PENTAGON
WASHINGTON DC 20350-1000

9 June 2002

The Honorable Bob Stump
Chairman, Committee on
Armed Services
House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

As directed by the Fiscal Year 2002 National Defense Authorization Act 107-194, the enclosed report addresses Telemedicine for Minimally Invasive Surgery.

Specifically, the report discusses the strategy of E-Health for Minimally Invasive Surgery and E-Health pilot project.

Please let me know if I can be of further assistance. A copy of the Navy report is also being provided to Chairmen Levin, Inouye, and Lewis.

Sincerely,



Gordon R. England
Secretary of the Navy

Enclosure

Copy to:
The Honorable Ike Skelton
Ranking Minority Member

HOUSE COMMITTEE ON

OS 70013 BW P:21

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E-Health for Minimally Invasive Surgery Information Paper

Background:

The term “telesurgery” is applied to various applications of technology to perform, assist, or simulate surgical procedures:

- 1) Remote telesurgery: The surgeon and patient are in geographically separate locations. This technology is applicable to remote or isolated duty stations (ex. a ship at sea.)
- 2) Local (robotic) telesurgery: The surgeon and patient are located in the same operating room (OR). This technology would be applicable to the Navy’s three medical centers (National Naval Medical Center (NNMC), Bethesda, MD, Naval Medical Center (NMC), Portsmouth, VA, and NMC San Diego.)
- 3) VTC telesurgery: The surgeon and patient are in the same room. Another surgeon in a geographically separate location uses video and voice connectivity to monitor/mentor/supervise the operating surgeon.
- 4) Simulator telesurgery: This technology allows students to train in surgical techniques using simulator modules. Although not operating on human subjects, this is a valuable training tool that can pave the way for other robotic surgical capabilities.

Discussion:

There are opportunities for Navy Medicine to participate in local telesurgery. Contract Cardio-Thoracic (CT) surgeons from Fairfax-Inova Hospital currently perform surgery at the National Naval Medical Center, Bethesda, MD. Two of these surgeons are trained in robotic surgery and use the *da Vinci* system at Fairfax-Inova Hospital. Navy CT surgeons at NNMC are interested in introducing this technology for the benefit of military health care beneficiaries.

There is an opportunity to participate in simulator telesurgery. The Uniformed Services University of the Health Sciences (USUHS) currently uses this technology and they are interested in enhancing or expanding this capability.

There are limited opportunities for participation in a pilot program for minimally invasive surgical procedures for remote telesurgery or video teleconference (VTC) telesurgery. The lack of dedicated and uninterrupted transmissions severely hinders development of these programs. These technologies are too immature for deployment in the foreseeable future; however, an investment in local robotic telesurgery combined with an investment in research and development for exploring remote telesurgery technologies can help to mature this capability.

Enclosure