

Contact: Patrice Sayre

**UNIVERSITY OF IOWA EQUIPMENT PURCHASES**

**Action Requested:** Consider approval for the University of Iowa to purchase the following:

- ◆ Siemens 1.5 Tesla Magnetom Avanto Magnetic Resonance Imaging (TMA MRI) System – total \$1,517,793; and
- ◆ Siemens 128-Slice Computed Tomography (CT) Scanner System – total \$1,752,000.

**Executive Summary:** The University of Iowa requests approval to proceed with the purchase of a Siemens TMA MRI System and a Siemens CT Scanner System.

**SIEMENS TESLA MAGNETOM AVANTO MAGNETIC RESONANCE IMAGING (TMA MRI) SYSTEM**

**Description of Equipment**

The Siemens TMA MRI System will:

- ◆ Expand capacity for providing musculoskeletal imaging for patients with orthopedic injuries and diseases; and
- ◆ Be located in the new Institute for Orthopedics, Sports Medicine and Rehabilitation (IOSMR), which will be near the Hawkeye Hall of Fame at the University of Iowa.

**Justification of Need for Equipment**

Magnetic resonance imaging has become a standard diagnostic tool for the orthopedic surgeon to evaluate soft tissue, ligament, and tendon injuries. As medical practices have moved to environments that provide more convenient access and delivery of service to the patient, the ability to provide the full range of diagnostic services in one location has become the gold standard. By maintaining the existing complement of MRI units, utilization of the total service should remain high with greater throughput from the newer machines.

The new IOSMR facility is convenient for the patient; efficient for the physician and staff; and frees existing space on the overly-crowded campus, making existing services available to University of Iowa Hospitals and Clinics (UIHC) inpatients and other non-orthopedic services remaining on the UIHC main campus.

With Johnson County MRI volumes projected to grow in excess of 80% from 2007 to 2017 (*The Advisory Board*), the MRI capacity gained at the UIHC main campus will be fully utilized.

**Any Known Alternatives to the Equipment Proposed**

The University reports that UIHC has standardized on Siemens equipment due to the advantages gained in equipment pricing, maintenance, and training.

**Estimated Cost and Source of Funding**

The final cost for the new Siemens TMA MRI System is \$1,517,793, after a \$210,000 reduction from the trade in of a Symphony MRI unit purchased in 2003. Pricing is based on the Strategic Alliance Purchasing Agreement between Siemens Medical Solutions USA, Inc. and the University of Iowa. The source of funding is UIHC capital equipment funds.

## **SIEMENS 128-SLICE COMPUTED TOMOGRAPHY (CT) SCANNER SYSTEM**

### Description of Equipment

The Siemens 128-Slice CT Scanner System will:

- ◆ Replace an existing 4-slice Toshiba CT scanner purchased in June 2000;
- ◆ Perform more complex procedures in less time because of faster processing and the ability to perform multiple functions concurrently;
- ◆ Scan head and neuro-injury related patients that are most common in the Emergency Treatment Center (ETC);
- ◆ Support additional CT volume growth; and
- ◆ Be located in the ETC, on the first level of Carver Pavilion.

### Justification of Need for Equipment

UIHC has experienced significant volume growth in the ETC and related CT scanning needs. This trend is expected to continue, based on national trends for CT utilization.

The current system: (1) is fully depreciated and has reached the end of its useful life from a technological standpoint; (2) does not have the ability to perform advanced imaging studies needed as part of a state-of-the-art diagnosis and treatment process as are possible with newer scanning technology; and (3) requires the technologist to complete all scanning before proceeding with image processing; the new CT scanner performs image processing functions while scanning is in progress.

### Any Known Alternatives to the Equipment Proposed

The University reports that UIHC has standardized on Siemens equipment due to the advantages gained in equipment pricing, maintenance, and training.

### Estimated Cost and Source of Funding

The cost for the new Siemens 128-Slice CT Scanner System is \$1,752,000. Pricing is based on the Strategic Alliance Purchasing Agreement between Siemens Medical Solutions USA, Inc. and the University of Iowa. The source of funding is UIHC capital equipment funds.

**Board Policy:** Chapter 7.06B(12) of the Regent Policy Manual requires that:

- ◆ Equipment costing more than \$1,000,000 must be submitted to the Board for approval; and
- ◆ Requests submitted to the Board Office for approval must include the following information:
  - ◆ Description of the equipment;
  - ◆ Justification of the need for the equipment;
  - ◆ Any known alternatives to the equipment proposed; and
  - ◆ Estimated cost and source of funding.