UNIVERSITY OF IOWA EQUIPMENT PURCHASE

Action Requested: Consider approval for the purchase of a Siemens SOMATOM Definition Dual Energy Source Computed Tomography scanner system (DDESCTss); total = $2,218,330.

Executive Summary: The University of Iowa requests approval to proceed with the purchase of a Siemens SOMATOM DDESCTss.

Description of Equipment
The DDESCTss will provide patient evaluation tools that are not currently available at the University of Iowa Hospitals and Clinics (UIHC). Because of DDESCTss’ design, it provides cardiac imaging without the use of beta blockers which can be crucial to patient evaluation in the Emergency Treatment Center (ETC).

The machine is designed with a larger bore (78 cm versus 70 cm) and a substantially higher maximum patient table weight limit (660 lbs versus 450 lbs), which allows imaging of obese patients who comprise an increasing portion of the UIHC patient population and for which UIHC is recognized by Wellmark as a bariatric patient Center of Excellence.

The machine provides superior imaging abilities for kidney stone identification, lung perfusion analysis, virtual non-contrast liver studies, as well as improved traditional imaging.

Because of the machine's rapid scan time over existing 64-slice machines, up to a 50% reduction in radiation dose exposure is expected.

Justification of Need for Equipment
UIHC is experiencing stable volume growth in computed tomography (CT) activity. Procedure volumes over the past five years have leveled some, but a 5-8% annual growth is still projected. Based on national trends for CT utilization, this trend is expected to continue.

The new DDESCTss would replace a 4-slice scanner installed in 2000. It will support additional CT volume growth, but more importantly, provide clinical capabilities that are not possible today.

The DDESCTss will be installed in the newly renovated ETC, while the scanner being replaced will be decommissioned from the CT imaging center located on the third floor of John W. Colloton Pavilion; it is fully depreciated and has reached the end of its useful life from a technological standpoint.

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. Pricing is based on the Strategic Alliance Purchasing Agreement between Siemens Medical Solutions USA, Inc. and The University of Iowa.

Estimated Cost and Source of Funding
The cost for the Siemens SOMATOM Definition Dual Energy Source CT scanner system is $2,218,330. The source of funding is UIHC capital equipment funds.
Board Policy:

Chapter 7.05B(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.