Non-emergency angioplasty costs higher in hospitals without back-up surgery

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Angioplasty costs were higher in hospitals not equipped with emergency back-up heart surgery, compared to those hospitals that are, according to late-breaking clinical trial research presented at the American Heart Association's Scientific Sessions 2012.

During angioplasty, a catheter with a small balloon, often deploying a metal mesh tube, called a stent, is inserted into a narrowed artery to open it, increase blood flow and reduce symptoms like chest pain. The Cardiovascular Patient Outcomes Research Outcomes of Percutaneous Team (C-PORT-E) clinical trial found that elective angioplasty performed in hospitals without heart surgery capabilities had similar safety and efficacy as those performed at hospitals with on-site cardiac surgery. That finding shifted the focus to whether non-surgery hospitals can perform these procedures at a similar cost.

Increasingly, hospitals without on-site cardiac surgery are opting to offer elective angioplasty in house, rather than transferring patients to hospitals with surgical back-up. To compare cost-effectiveness, this first large, multi-center study of its kind analyzed the expenses associated with non-emergency angioplasty in hospitals with and without cardiac surgery.

Investigators analyzed billing data from 18,273 patients (average age 64, 79 percent white and 63 percent male) treated in 59 hospitals in 10 states.
Nine months after treatment, investigators found that average cumulative medical costs were $23,991 in surgery-equipped hospitals, versus $25,460 in non-surgery hospitals. Two factors contributed to this difference—the study protocol required non-surgery hospitals to use intensive care units for post-angioplasty care and patients treated at these hospitals were more likely than those receiving angioplasty at cardiac equipped hospitals to be readmitted nine months after treatment.

"Our findings have relevance for healthcare policymakers and providers," said Eric L. Eisenstein, D.B.A., lead author of the study and assistant professor of medicine, and community and family medicine at Duke University School of Medicine in Durham, N.C. "These results should provide caution for hospitals without cardiac surgery back-up considering the implementation of non-primary, or non-emergency, angioplasty services. There is no guarantee that a community hospital can provide angioplasty services at costs comparable with those of major hospitals with on-site cardiac surgery."

According to the American Heart Association, more than 1 million coronary artery opening procedures are performed each year.

Hospitals considering the addition of non-primary angioplasty services should make sure they will have sufficient patient volume to cover the fixed costs of establishing and operating these facilities, Eisenstein said.

More information:
newsroom.heart.org/pr/aha/document/DISCLOSURES.pdf

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