# Hospitals serving disadvantaged patients can meet requirements for use of sophisticated technology

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Penn researchers writing in the journal *Health Affairs* have found that a restrictive federal reimbursement policy did not reduce opportunities for disadvantaged Medicare populations to benefit from an innovative device that keeps clogged arteries open. The policy was aimed at limiting the adoption of the technology by hospitals that weren?t well prepared to provide it while still maintaining equitable availability of the technology. This approach might hold promise for future decisions aimed at improving the quality of care received by Medicare beneficiaries.

The Centers for Medicare and Medicaid Services (CMS) reimburses hospitals using the stents in Medicare patients only if the hospitals has met a series of quality-of-care requirements. These included substantial prior experience with the devices, comprehensive emergency management ability, and certification that practitioners are qualified to insert the stents. This was the first time that CMS had required hospitals to show they were competent for a specific procedure as a prerequisite for reimbursement.

Data show that health care disparities can be partially explained by the slow adoption of new technologies at hospitals serving large racial and ethnic minority populations. Concerns were therefore raised that CMS's restricted carotid stent policy could have disproportionately reduced the availability of this technology for minority, low-income, and rural patients. Such patients are often served by hospitals that are less able to

meet increasingly stringent quality requirements.

The Penn team, however, led by Peter W. Groeneveld, a physician-investigator at the Philadelphia Veterans Affairs Medical Center and an Assistant Professor of Medicine at the University of Pennsylvania School of Medicine, discovered that although 21-38 percent fewer hospitals offered stents than offered other types of interventional cardiovascular procedures, such as heart bypass grafts and implantable cardioverter-defibrillators, stents were no less available in localities with substantial poor, black, or rural populations than they were in other areas. It is possible that the restrictive coverage policy made stenting more available to patients who were more likely to receive care in high-volume or academic hospitals. Those hospital characteristics were the strongest predictors of carotid stent use.

“Our study provides important evidence that the carotid stent coverage policy met its goal of ensuring that the technology was only used by hospitals that were well qualified to use it—while still making it accessible to disadvantaged patients,” said Groeneveld. “These results might become the basis for the CMS to make similar decisions when equally sophisticated technologies become available. Our findings show that we can protect patients in two ways: by ensuring that they receive high-level care only from experienced institutions, and that they indeed will receive the opportunity to benefit from new and promising biomedical developments.”

“It’s important to note that this study was not designed to compare clinical outcomes between the use of carotid stents and other therapies,” continued Groeneveld. “We were solely concerned with the question of access of historically disadvantaged populations to a promising new technology. Although preliminary work has already been done, further comparison of the clinical effectiveness of the various options presents a vital area for future research.”