

Rice U. study: Texans are no better off in one city versus another for cancer treatment

HOUSTON – (July 25, 2016) – Regions in Texas differ widely in adherence to recommended cancer treatment for elderly patients, according to a study by researchers at Rice University and the University of Texas MD Anderson Cancer Center.

These differences are not due to the availability of treatment specialists or the presence of teaching hospitals, the study found. The absence of consistent explanations for these treatment differences suggests that variations like these are likely to occur elsewhere nationwide.



“Texans are no better off in one city versus another in terms of treatment across a broad range of cancers,” said [Vivian Ho](#), the chair in health economics at Rice’s Baker Institute for Public Policy and director of the institute’s Center for Health and Biosciences, who co-authored the study. “One might have expected Houston residents to receive better treatment because of MD Anderson’s presence, but any beneficial effects could be offset by a large number of elderly in Houston not being treated there.” The research findings were published in the journal BMC Health Services Research.

Previous literature that the study’s authors reviewed indicated seven recommended courses of treatment for colorectal, pancreatic and prostate cancer. The authors analyzed Texas Cancer Registry data linked with Medicare claims for the years 2004 to 2007 to study patients at least 65 years of age with these cancers. They tested for unadjusted and adjusted differences in treatment rates across 22 Texas [hospital referral regions](#) (HRRs), regional health care markets for advanced medical care. They also tested whether variation in the local supply of specialists treating each cancer was an important determinant of treatment.

The authors found significant differences in adjusted treatment rates across regions. For removal and examination of 12 or more lymph nodes with colon cancer resection, 13 of the 22 HRRs had

rates significantly different from the median region. For adjuvant chemotherapy for regional colon cancer, five HRRs differed significantly from the median. For prostate cancer treatment with a favorable diagnosis, nine HRRs differed from the median HRR. Of the seven treatments, the local availability of surgeons was an important determinant only for the removal of lymph nodes in colon cancer patients.

The authors pointed out that regions with high rates of success in treating one type of cancer cannot be assumed to excel in treatment of other types of cancers. Moreover, previous studies that label regions as high-use or low-use based on an area's average medical spending may mask important differences within areas with respect to adherence to treatment guidelines.

The authors said other researchers suggest that more emphasis should be placed on continuing medical-education programming that disseminates recent guideline changes to physicians. "With the dissemination and improvement in electronic health records, more quality monitoring at the physician level could help to raise overall levels of adherence for all HRRs," the authors wrote. A particularly promising model for Texas may be Michigan's Oncology Quality Consortium, the authors said. This group represents a consortium of 40 physician organizations from across Michigan who received funding from Blue Cross Blue Shield of Michigan to collect patient data to track their quality of care.

"The information has allowed the organization to design quality and process improvement interventions," the authors wrote. "Physicians may have more success obtaining financial support from private insurers to improve cancer care at the state level, because insurers can attract more customers if they can demonstrate higher quality care in their network of providers. Adherence to guidelines may also lower the costs of cancer care for insurers."

["Regional Differences in Recommended Cancer Treatment for the Elderly"](#) was co-authored by Ho, who is also a professor of economics at Rice and a professor of medicine at Baylor College of Medicine; Meei-Hsiang Ku-Goto, research programmer at the Baker Institute; Hui Zhao, assistant professor in MD Anderson's Department of Health Services Research; Karen Hoffman, associate professor in MD Anderson's Department of Radiation Oncology; Benjamin Smith, associate professor in MD Anderson's Department of Radiation Oncology; and Sharon Giordano, professor of medicine and chair of MD Anderson's Department of Health Services Research.

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For more information or to schedule an interview with Ho, contact Jeff Falk, associate director of national media relations at Rice, at jfalk@rice.edu or 713-348-6775.

Related materials:

Study: <http://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-016-1534-z>.

Ho bio: <http://bakerinstitute.org/experts/vivian-ho>. Photo credit: shutterstock.com/Rice University.

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