Is regionalization of care associated with improved care and outcomes for patients with complex cancers?

Yes, according to an article about the subject in *JAMA Surgery*. Multidisciplinary assessment is recommended for complex cancers, such as hepatopancreaticobiliary (HPB) malignancies; however, treatment coordination is challenging and can lead to substandard care. Further, the appropriate infrastructure and expertise to provide adequate care are not available at every institution. Regionalization of care for complex cancers to high-volume centers is a strategy to improve outcomes (Cancer Care Ontario 2006). There is limited data, however, on the impact of a regional, multidisciplinary HPB center on surgical outcomes and the quality of the process of care.

Daniel A. Anaya, M.D., and colleagues conducted a study to evaluate the effect of developing an HPB surgical program (HPB-SP) on regionalization of care, and its impact on outcomes and the process of care. Regionalization of care for complex cancers to high-volume centers is a strategy to improve outcomes (Cancer Care Ontario 2006). There is limited data, however, on the impact of a regional, multidisciplinary HPB center on surgical outcomes and the quality of the process of care.

Daniel A. Anaya, M.D., and colleagues conducted a study to evaluate the effect of developing an HPB surgical program (HPB-SP) on regionalization of care, and its impact on outcomes and the process of care (JAMA Surgery 2014). The HPB-SP was developed in the Michael E. DeBakey VA Medical Center to provide specialized, multidisciplinary care for HPB patients across a regional network within the VA system. Its implementation resulted in regionalization of HPB care (a 2.5-fold increase in referrals, a fourfold increase in monthly clinic visits and a threefold increase in quarterly procedures) (JAMA Surgery 2014).

It has been previously noted that an inverse relationship between procedure-specific hospital volume and mortality exists for a number of complex surgical operations. Complex procedures, including pancreatic and liver surgeries, are most likely to show better outcomes in high-volume compared to low-volume hospitals (N Engl J Med 2002). Similarly, the regionalization of care caused by the HPB-SP was associated with lower odds of mortality, severe complications and reoperations after liver and pancreatic procedures performed at the MEDVAMC HPB-SP (JAMA Surgery 2014). Additionally, the program was associated with higher rates of complete resections, a quality indicator for cancer surgery.

Cancer care beyond surgery requires appropriate coordination of care within multidisciplinary teams. There is limited data focused on the impact that regionalization has on this process of care. In this study, care through the HPB-SP resulted in higher rates of adherence to evidence-based treatment and multidisciplinary evaluation, with patients having a 2.1-fold increased likelihood of completing comprehensive multidisciplinary assessment (JAMA Surgery 2014).

A critical aspect of regionalized care is the ability to provide easy access to specialized programs within a given region. In addition to using established regional networks within the VA system, in the cited study the authors relied on a virtual tumor board program to provide access to multidisciplinary care to distant facilities, using telemedicine. Telemedicine applications can facilitate and support regional networks focused on improving overall care for patients with complex cancer across large geographic areas with variable resources and expertise.

In summary, the findings demonstrate that regionalization of care improves the processes of care for patients with complex cancers and positively impacts outcomes in these patients (JAMA Surgery 2014). Because of their impact on the process of care, successful regional programs can have an immediate effect on patient care and outcomes. The success of the regionalization of care is dependent on organized regional networks of care that can be facilitated by telemedicine applications. In such settings, the HPB-SP can serve as a blueprint to implement regionalization efforts across the nation.

*Cancer Care Ontario. 2006, June 14: 17-2.*

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HEALTH POLICY research presents a summary of findings on current health policy issues. It is provided by Vivian Ho, Ph.D., James A. Baker III Institute Chair in Health Economics and director of the Health Policy Forum at Rice University’s Baker Institute for Public Policy, in collaboration with Laura Petersen, M.D., M.P.H., chief of the Section of Health Services Research in the Department of Medicine at Baylor College of Medicine.

This publication aims to make research results accessible to regional and national health policymakers. The views expressed herein are those of the study authors and do not necessarily represent those of the Baker Institute or of Baylor College of Medicine.

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For further information about the program, please contact:
Rice University MS-40
Baker Institute Health Policy Forum
P.O. Box 1892
Houston, Texas 77251-1892
phone: 713.348.2735
email: healthecon@rice.edu

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