Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company’s public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Preface

Rural Surgery: Then, Now, and Beyond

Tyler G. Hughes, MD, FACS
Editor

This issue of Surgical Clinics was in the process of editing when the great pandemic of 2020 swept over the world. As of this writing, how the events of that historic event will change the practice of surgery in multiple venues remains enigmatic. Osler wisely said, “In order to solve a problem one must first understand the problem.” Knowing the prime issues of rural surgery before the pandemic without doubt is part of understanding its problems and future.

While the venue in which surgery is practiced varies, the goal of operating remains unchanged: to perform at one’s highest level to treat the sick and injured. The problem of how to provide the best care for a patient regardless of place is more pressing than ever in rural surgery today. In the United States, the training paradigm for surgeons still reflects the demographic of the times in which it was developed. The Halstedian model of training was developed in an agrarian nation just coming into the industrial age. During the first two-thirds of the twentieth century, the world in general and the United States in particular became a much more urbanized and industrial economy. As these changes altered the environment in which surgery was practiced, a natural process of specialization has changed the role of the general surgeon.

The infrastructure of medicine as well as its payment system radically changed over the twentieth century, and such changes continue in the twenty-first century. Most of the hospitals in existence for surgeons practicing in rural areas were founded post-World War II. These general hospitals were meant to supply a full continuum of care to a community, and surgical services were largely provided by surgeons working independently of the hospital itself.

By the dawn of the first decade of the twenty-first century, the previously adequate solutions were becoming out-of-date. Visionaries in surgical leadership, like J. David Richardson, Brent Eastman, and Patricia Numann, accurately identified these shortcomings and connected with their rural counterparts to pursue solutions for a new
era. The results of their leadership can be seen on the pages herein. For the last 20 years, there has been an increasing movement to face the moral imperative of providing high-quality surgical care to the vast regions of the world that are rural. Close to 40% of the world’s population live in rural or austere environments. As urban medicine advances in its application of technology and sophisticated big data-driven evidence, the rural world must find ways to provide the best care closest to home for their teeming masses, which are older, sicker, and less well funded than their urban cohorts.

This journal is yet another iteration of this movement, addressing the needs unique to rural surgery along with solutions being developed by those in major medical centers and isolated rural locations. In this issue, we discuss the real economic issues causing loss of surgical access, the demographics of the changing rural population (demographics are destiny), the scope of practice of the modern rural surgeon, the training challenges for those going into this “new” specialty, tools for research that apply to rural surgery, the status of the rural surgery workforce, patient-transfer issues, developing substantive quality improvement processes even in the smallest of facilities, and much more.

The medical and economic events caused by the pandemic have further exposed the critical nature and differences between care delivery in a rural versus urban environment. In these pages, you will find some of those reasons and an understanding of the problem overall, which existed before and will persist after the coronavirus becomes part of the history of medicine in the twenty-first century.

I am expressly grateful to each of the authors, each of whom is a true expert living and working in the rural world. There are great obstacles ahead for rural surgery. In these pages, we continue the work of solving what at times feels like impossible problems. After all, isn’t that the *raison d’être* of surgery in all venues?

Tyler G. Hughes, MD, FACS
University of Kansas School of Medicine
Salina Campus
138 North Santa Fe Avenue
Salina, KS 67601, USA

*E-mail address:*
Thughes55@kumc.edu