Value and Quality Innovations in Acute and Emergency Care

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Foreword: Delivery System Reform – License to Innovate

Brendan G. Carr

There is no question that we are in the midst of a once in a generation change in the way that healthcare is delivered. The decade started with the passage of a landmark healthcare bill[1] with the lofty goals of increasing the number of Americans with health insurance and fundamentally changing the way that healthcare is delivered in the United States. Though the numbers are always in flux, about 17 million previously uninsured Americans now have coverage, and the uninsured rate is at an all-time low.[1] In January of 2015, the secretary of Health and Human Services outlined ambitious goals for how the Centers for Medicare and Medicaid Services (CMS) would create fundamental changes in payment that would dramatically transform healthcare delivery in the United States.[2] A few months later, Congress passed the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA).[3] MACRA reinforces efforts to pay for care through alternative payment models (APM) (e.g., Accountable Care Organizations) and consolidates the many existing quality reporting structures into a single merit-based incentive payment system (MIPS). One way or another, providers will be motivated to deliver care differently in the future. Expenditures by CMS account for about a third of the $3 trillion spent annually on healthcare in the United States,[1] and the secretary plans for fully half of all spending to use these novel payments and their associated delivery models (e.g., not fee for service) by 2018.

The dramatic shift in how healthcare is paid for has created substantial disruption in the healthcare industry. Many of the efforts to date have been focused on cost reduction through efficient management of high-cost chronic conditions. Health insurance exchanges, Medicaid expansion, hospital readmissions penalties, Accountable Care Organizations, and the precision medicine initiative[4] have dominated headlines over the last 5 years. A central focus moving forward will be on not just how healthcare is paid for but what innovators will do to improve the experience of healthcare. If the future is uncertain in the broader healthcare delivery market, how acute and emergency care will fit into the emerging payment and delivery structures is almost entirely uncharted.[5] With care delivery untethered from payment, market forces, consumer preferences, and lessons learned from industry will allow the United States to translate advances in precision medicine to the population on the whole. This new field – the field of precision delivery – is the next frontier; the delivery system reform initiative sparked by payment change gives healthcare license to innovate.

This book gives us a glimpse into some of the most forward-leaning approaches to date for reinventing acute and emergency care delivery. Americans made over 130 million visits to emergency departments (EDs) and 160 million to urgent care centers in 2012.[6] Retail pharmacies have entered the healthcare space, community paramedics are reinventing the house call, and telemedicine is expected to grow to a $30 billion industry by 2020.[7] In the book's introductory chapters, Easter offers an exceptional review of where emergency care came from, and Harish and Pines paint a vision of the future path toward

payment reforms in acute and emergency care. The book offers almost two dozen case-based examples that drive home its central focus: emergency medicine evolved out of the public's need for acute care, and it has never stopped evolving. In some cases, the evolution is about system performance and this is highlighted in chapters examining the United Kingdom's 4-hour rule, the US Veterans Administration's application of discrete event simulation to their access challenges, and the movement of palliative care to the front line. Innovations focused on the ED experience include the elimination of the waiting room at the University of Colorado, the creation of a specialty geriatric ED, and a focus on the patient experience. Still others examine alternatives to acute and emergent care including urgent care centers, telehealth, and the use of community health workers to connect patients to community-based services. The practice of emergency care has always been broad, but the pages that follow are really a glimpse into the future of emergency care practice. Over the last half century, the ED has transformed from a variably staffed "room" where life and limb threats were managed to a safety net for a crumbling health system. The role of the emergency physician continues to evolve to fill the needs of the health system. Practitioners may find themselves staffing the emergency department, the urgent care center, or the observation service; they may be providing on-demand telehealth or medical command support for out of hospital responders to 911 calls; they may be visiting high utilizers or patients recently discharged from the hospital. The next step in the evolution of emergency medicine has recently been referred to as the creation of the "available-ist."

Not all change is readily embraced. Two stories from the recent medical literature come to mind. Despite the fact that Kodak invented digital technology, the company did not readily adopt it as they were concerned that it would erode film sales. Over the course of the next decade, the value of the company plummeted until it declared bankruptcy (after 131 years) in 2012. An editorial in the *New England Journal of Medicine* commented that "Kodak was late to recognize that it was not in the film and camera business: it was in the imaging business." In a second example, a recent editorial offered advice based on the lessons learned from the entry of Uber into the transportation marketplace, explaining that healthcare providers, like taxi drivers have three choices: "ignore innovators and hope for the best; call for increasing regulation to make it harder for innovators to enter the market; or compete on quality and efficiency, disruptive though that might be." Change is here and leaders are emerging. Referencing Kodak's collapse, Asch wrote: "Doctors and hospitals who pay attention to the business they are actually in – defined by the outcomes their 'customers' seek – will leave the doctors and hospitals who don't behind." The pages that follow offer an early lens into the future of emergency care delivery from innovators in the field.

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Preface

Acute and emergency care plays a critical role in improving population health. These services include diagnostic testing and treatments delivered to people when they are ill and injured. Such care can be delivered in a variety of settings including accident and emergency (A&E) departments in the United Kingdom or emergency departments (EDs) in the United States, hospitals, doctors' offices, urgent care centers, retail clinics, mobile clinics, and by telemedicine. Despite the variety of locations, delivery of this care at the local systems level can be quite challenging. Moreover, while acute and emergency care plays a central role in medicine, its provision comes at considerable cost. In the United States, there has been increased scrutiny on healthcare costs, which are changing the regulations that govern acute and emergency care quality measurement and payment. Exploring how acute and emergency care can become more efficient and cost-effective is an issue of increasing global importance. The critical question is this: "How can acute and emergency care become more efficient, cost-effective, and better designed to meet the needs of patients?"

This book describes the current quality and value movement in acute and emergency care and presents 20 case studies of both US-based and international acute care delivery innovations with expert commentaries. Included in the examples are descriptions of innovations in telehealth, observation medicine, ways to improve patient experience, high utilizer programs, and using informatics to improve clinical decision support. This book is ideal for:

- Stakeholders who are interested in innovation and who want to learn how to improve care while reducing costs and improving quality by following international models that inform global innovation.
- Administrators who want to improve operations and patient flow, particularly in acute and emergency care settings.
- Policymakers who want to better understand the levers for creating positive change in acute and emergency care.