

CRS Insights

Treating Ebola Patients in the United States: Health Care Delivery Implications
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On September 30, 2014, the Centers for Disease Control and Prevention (CDC) confirmed the first case of Ebola diagnosed [in the United States](#). This patient was the first in the United States to be treated for Ebola outside of a specialty hospital with a biocontainment unit. Shortly after this diagnosis, CDC Director Thomas Frieden [expressed his confidence in the U.S. health care system](#), stating that we will "stop Ebola in its tracks." Despite the assurances, two nurses who cared for the patient were diagnosed with and have since recovered from Ebola. In the wake of these additional cases, Dr. Frieden stated that the agency has had to [reconsider its approach to containing the disease](#). In addition, the hospital where the patient received his care, Texas Health Presbyterian Hospital, has stated that it [may have done things differently](#).

While the U.S. health care system has the resources to effectively identify and treat Ebola cases, a situation that is novel, emergent, and resource-intensive may test the system's ability to effectively mobilize those resources. The care of the initial U.S. patient highlighted several system delivery issues, including (1) inefficient use of finite healthcare resources due, at least in part, to gaps in preparation; (2) challenges in coordination between local, state, and federal public health systems and the health care delivery system, including in basic infection control procedures; and (3) care coordination issues. This Insight focuses only on the first issue.

All components of the health care system are actively responding to these issues by identifying, learning from, and disseminating lessons learned. The adaptability of the system may be tested in the coming months, as [experts predict that additional Ebola cases are possible as long as the outbreak persists in West Africa](#).

Resource Use or Diversion

Care for the first U.S. Ebola case—and subsequent care for suspected or confirmed cases—highlighted issues around the use and diversion of health system resources. Decisions about resource use and diversion may affect the system's ability to ensure access to care that is not related to Ebola, and may impact both patient care and protection for health care providers.

Facility and Unit Closures. Texas Health put its Emergency Department (ED) on [diversion status](#) after having treated the patient, as he was initially treated in the ED (diversion status means emergent cases arriving by ambulance are diverted to other EDs). Subsequently, he was [treated in a 24-bed ICU](#) that was converted into an isolation unit, thus taking 23 ICU beds out of use.

In several cases where Ebola has not subsequently been diagnosed, suspected cases have resulted in the [temporary closure of health care facilities](#); in addition, Bellevue Hospital in New York City has [transferred some ICU patients](#) to an alternate hospital to facilitate treatment of a confirmed Ebola case.

Health Care Provider Staffing. The Texas Department of State Health Services has had to monitor [about 170 people, mostly health care workers](#), who came into contact with the patient during his illness or the course of his care. The ambulance used to transport the patient was taken out of circulation temporarily for decontamination, and [three paramedics were taken off duty](#) for three weeks.

As workers are taken off the job for monitoring, [it creates staffing issues for the facility](#), and possible subsequent access issues for patients. In addition, the use of so many health care workers in the care of a single patient increases the possibility of exposure as well as the burden of contact tracing.

Policy Considerations

Consolidating screening (where possible) and provision of care for suspected and confirmed Ebola cases—for example, by providing care primarily at designated regional or specialized national facilities, using a core staff at each facility—may facilitate the health care system's ability to efficiently mobilize resources. Such an approach could involve the regionalization of care—specialized care delivery concentrated with certain regional providers—similar [to how trauma care is](#) organized. Recognizing that screening may occur at any entry point to the health care system despite efforts to direct suspected cases to specific facilities, especially among those patients who self-present, all providers would need to be prepared to identify, isolate, and appropriately triage suspected cases (e.g., small hospitals, primary care offices, urgent care facility).

This type of approach may serve multiple purposes, including to (1) maximize finite resources; (2) decrease the risk of unintentional exposure; (3) decrease the burden of contact tracing; (4) preserve access to other care for the community; (5) streamline provision of supplies, such as personal protective equipment; (6) facilitate oversight efforts at the state and federal levels; and (7) facilitate staff training in care delivery and infection control procedures.

Specific steps could include those listed below, among others, and could be assisted and supported at the federal level, with state and local entities responsible for implementation:

- Designating specific medical facilities as preferred entry points for suspected cases ([as has been done in New York](#)); an entry point to each facility other than the ED may be considered to minimize disruption to other care.
- Educating the public, primary care providers, Emergency Medical Services (EMS), and others about where to seek care or send suspected cases.
- Identifying a limited, well-trained core staff at each of these facilities to provide screening, evaluation, and treatment.
- Referring confirmed Ebola cases, when needed, to one of [four specialized hospitals](#) that have biocontainment units (Emory University Hospital, Nebraska Medical Center, the National Institutes of Health, and St. Patrick Hospital).

The dissemination of best practices could be facilitated at the federal level; for example, as the four specialized hospitals gain experience treating Ebola patients, and they identify best practices, CDC (or another agency, e.g., Agency for Healthcare Research and Quality) could disseminate them and/or provide technical assistance to other large regional hospitals for their implementation. This could potentially expand the number of facilities equipped to treat confirmed Ebola cases or future disease outbreaks.