

911 Emergency Services

Nationwide access to a trauma response system and other emergency services via a three-digit phone number became available in the United States in 1968.

Through the 1960s, the US landscape for emergency medical services (EMS) was bleak. Where ambulance services existed, they seldom included medical attention en route. And few communities had any system for dispatching ambulances, nor a designated trauma center to send them to. In 1972, a National Academy of Sciences report estimated that 90,000 of the 115,000 people killed each year in accidents could have been saved by more efficient and effective emergency medical services.

Less than a decade later, most regions of the country had made significant progress toward establishing coordinated regional trauma care and more than a quarter of Americans could call a single emergency phone number (9-1-1). Today this service is virtually universal across the country.

What led to widespread EMS? A number of pioneers began grappling with the problem of improving emergency trauma care in the late 1960s, laying the foundation for change. One pioneer was David Boyd, a Chicago surgeon who went on to run the federal government's EMS program. He created a proof point in Cook County Hospital, following the model of a mobile surgical army hospital to coordinate rapid treatment of gunshot and wound victims, and save more lives. Shortly thereafter,

This case study is part of a series that accompanies The Bridgespan Group article “Audacious Philanthropy: Lessons from 15 World-Changing Initiatives” (*Harvard Business Review*, Sept/Oct 2017). See below for [15 stories of social movements](#) that defied the odds and learn how philanthropy played a role in achieving their life-changing results.

- [The Anti-Apartheid Movement](#)
- [Aravind Eye Hospital](#)
- [Car Seats](#)
- [CPR Training](#)
- [The Fair Food Program](#)
- [Hospice and Palliative Care](#)
- [Marriage Equality](#)
- [Motorcycle Helmets in Vietnam](#)
- [The National School Lunch Program](#)
- [911 Emergency Services](#)
- [Oral Rehydration](#)
- [Polio Eradication](#)
- [Public Libraries](#)
- [Sesame Street](#)
- [Tobacco Control](#)

the governor of Illinois asked Boyd to expand the approach across the state. At the same time, other pioneers in the states of Washington, Louisiana, Florida, and Connecticut joined Boyd in pushing forward local EMS/trauma systems and research. The medical establishment also began to grapple publicly with the problem.

In addition, in 1968, AT&T—which at the time provided phone service for most of the country—began work to create a single, standardized communications channel to request EMS by designating 9-1-1 as a universal emergency number. AT&T and state authorities devised a sustainable funding model to support this system, using surcharges on phone bills and some general tax dollars to cover 9-1-1's costs. Demand for EMS continued to increase. In 1972, President Richard Nixon addressed the need for effective EMS in his State of the Union address, and a new TV show "*Emergency!*" brought first responders into American homes, creating heroes of the 12 paramedic units that then existed in the country.

In order to realize the potential of the system, states and communities needed to meet a key challenge: building their capacity to effectively respond to EMS requests. In April 1973, philanthropy made a big bet to help with this. The newly formed Robert Wood Johnson Foundation (RWJF) announced a \$15 million (\$85 million in 2017 dollars) grant-making program focused on improving EMS communications—between ambulances and dispatchers, and among the various agencies that needed to coordinate—and made awards in 32 states. In addition, that November, Congress passed the Emergency Medical Services Systems Act, authorizing \$185 million (\$1 billion in 2017 dollars) and eventually spending more than twice that to create incentives for the development of coordinated, regionalized trauma care in nearly every region of the country.

Before the RWJF and government push, only 11 percent of the population in the RWJF grant regions could call a single emergency telephone number for dispatch. Afterward, 95 percent could. Moreover, roughly a quarter of Americans could specifically call 9-1-1—a number that hadn't existed a decade earlier. Ultimately, 80 percent of the federal grant regions showed enough progress toward implementing their goals that they received additional tiers of funding. The RWJF and federal grants wound down in the late 1970s, but policy makers remained committed, regional EMS continued to develop and evolve, and AT&T continued to upgrade 9-1-1 technology. Today, EMS is just a 9-1-1 call away for most Americans.

Philanthropy's Role in Large-Scale Change

Our research shows that breakthrough social initiatives share a set of [five practical approaches to large-scale change](#). In the case of EMS, philanthropy played a critical role in one of them:

- **Design for massive scale at the outset:** Both RWJF and the federal government designed their grants to provide significant incentives for local first responders and other agencies (police, firefighters, hospitals, health departments) to collaborate and adopt a regionally coordinated emergency medical system—a model that Dr. David Boyd had proved could save lives in Illinois. These grants also served as startup funding—designed to jumpstart a system with a sustainable long-term funding model that relied upon telephone subscriber fees and funding from municipalities and states.

Researched and written by Consultant Andrew Flamang of The Bridgespan Group, based on a Bridgespan interview with David Boyd, former head of the Division of Emergency Medical Services at the Department of Health, Education and Welfare, as well as selected secondary sources.

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