

# Rural Individuals' Telehealth Practices: An Overview

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## What Is the Issue?

More than traditional medical delivery systems, telehealth—i.e., health services and activities conducted via the Internet—allows people to actively participate in their health care and also facilitates more timely and convenient monitoring of ongoing conditions. These benefits may be greater in rural areas, where remoteness and provider shortages may complicate access to health care for rural residents. Despite the potential benefits telehealth holds for rural communities, little is known about telehealth's use and the factors that may affect that use from the consumer's perspective.

This report analyzes three telehealth activities as practiced by consumers 15 years of age or older: (1) online health research; (2) online health maintenance (i.e., contacting providers, maintaining records, and paying bills); and (3) online health monitoring (the transmission of data gathered by remote medical devices to medical personnel). Most of the existing studies come from the perspective of the health service provider, but this study focuses on the individual.

## What Did the Study Find?

Rural residents were less likely than urban residents to take part in any of three fundamental telehealth activities, which are detailed below.

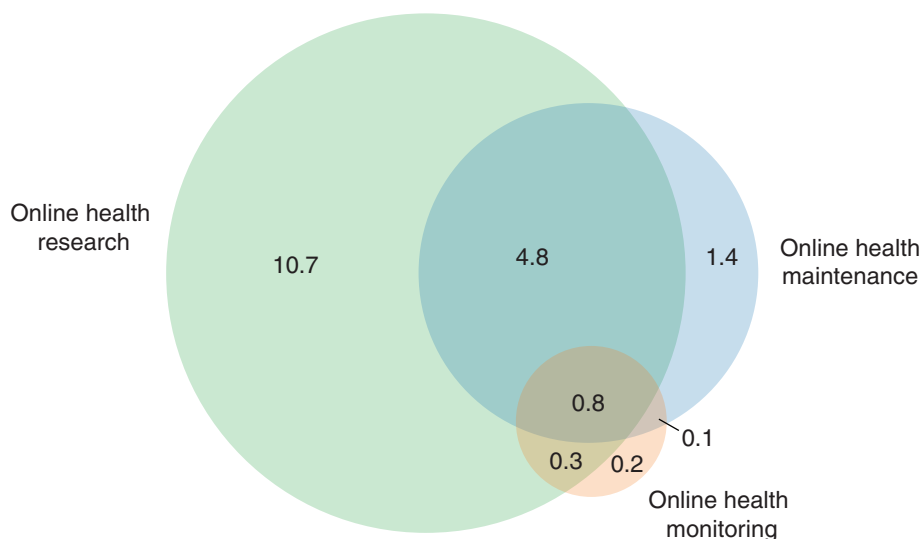
### *Findings by Telehealth Activity*

- **Online health research.** Of all survey respondents, 19 percent (including 17 percent of rural residents and 20 percent of urban residents) conducted health research online in 2015. Educational attainment had a large influence: 29 percent of college-educated respondents conducted online research (versus 13 percent with a high school diploma). Income was not a factor in online health research (unlike the other two telehealth activities).
- **Online health maintenance.** Of rural residents, 7 percent conducted online health maintenance (i.e., maintained records, paid medical bills, and communicated with their health providers) versus 11 percent of urban residents. Survey respondents with higher income and more education were more likely than those with lower income and less education to conduct online health maintenance.

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

- **Online health monitoring.** Of rural residents, 1.3 percent used health monitoring devices (versus 2.5 percent of urban residents). Available devices range from simple automated medical alert devices to implants that connect wirelessly to the Internet for constant monitoring of such issues as heart conditions. The devices can allow individuals to stay home rather than at a hospital, hospice, retirement home, or some other health facility. Rates of online health monitoring increased substantially as income increased.

### Rural residents' participation rates in telehealth activities in 2015 (percent)



Note: All shares are for persons 15 years of age or older. Due to rounding, displayed numbers do not add to actual estimates.

Source: USDA, Economic Research Service calculations based on data from the U.S. Department of Commerce, Census Bureau, 2015 Current Population Survey.

### Access to Internet Technology

- Although smartphones are more common than personal computers (PCs) in the general population, PCs are more commonly used by rural residents who conduct telehealth activities. Seventy-five to 79 percent of rural people conducting health practices had smartphones, while 83-89 percent of rural people conducting health practices had a PC.
- Lack of Internet service in the home, whether by choice or due to lack of availability, did not deter everyone from conducting online health research: 13 percent of rural residents and 16 percent of urban residents who did not own a desktop computer still conducted online health research.
- Telehealth users will likely require high-quality broadband service to fully access all telehealth services in the future, because health providers continue to improve their telehealth offerings and the new services (such as virtual patient visits) require high-quality broadband service.

### How Was the Study Conducted?

The study used data from a supplement to the July 2015 Current Population Survey that included a series of questions about telecommunication use, along with eHealth questions. The original survey consisted of over 50,000 households constituting over 130,000 individuals. The weights used were developed by the U.S. Department of Commerce, Economics and Statistics Administration. The observations represent a population of roughly 255 million people age 15 or older, of which 37 million reside in rural households. All data presented emerge from analysis of that data set. The terms “rural” and “nonmetro,” as well as “urban” and “metro,” are used interchangeably in the study. The definition of nonmetro is the same as that of the 2013 Office of Management and Budget (OMB) directive.