UPPER MIDWEST TELEHEALTH RESOURCE CENTER

A BRIEF HISTORY OF

TELEHEALTH AND TELEMEDICINE

500 BCE

Historical recordings show the Greek and Romans used fires and light signals to send messages about the spread of plagues

1924

Radio News Magazine depicts the future of healthcare

Radio began to change the way communication is done and Radio News Magazine depicted the idea of a doctor attending to a patient via video call long before televisions were common and video communication was possible.

1948

The first radiological images are sent via telephone

The telephone was shown to not only be useful for connecting households across the country, but also allowed doctors to use this new technology to send radiological images to other specialists, which helped to speed up data transfer.

1959

University of Nebraska transmits neurological examinations with telehealth

This was the first recorded use of the telephone by healthcare workers to send medical documents back and forth with each other across the country.

Nebraska Psychiatry Institute performs psychiatric consultations with a closed-circuit TV

The television, much like the radio and telephone, was changing the ways people send and receive information. The Nebraska Psychiatry Institute become the first to perform what is now known as a telemedicine appointment using the television. Broadcasting live, psychiatrists were able to interact with patients while they were a long distance from each other.

1960s

1961

NASA becomes a major pioneer in moving forward the research and development of telehealth in the 60s and 70s

1967

University and local fire services partner to provide emergency medical assistance.

The University of Miami School of Medicine teamed up with the local fire department to transmit electrocardiographic rhythms over radio to Jackson Memorial Hospital in rescue situations.

1970s

Space Technology Applied to Rural Papago Advanced Health Care (STARPAHC)

Indian Health Services, with NASA, developed the STARPAHC project, which aimed to provide better medical care access to local Native Americans in Arizona on the Papago Reservation, and the astronauts NASA sends to space. Various forms of medical information including electrocardiographs and X-rays were sent back and forth with the Public Health Service hospital by way of microwaves. This project and many others similar in nature, designed by NASA, generated interest and sparked more research in the area of health care communication and medical engineering. This began the foundation for telehealth that would be expanded upon by numerous entities over the next several decades.

THE FATHERS OF TELEMEDICINE

Dr. Rashid Bashshur

Received a PhD from and was a professor at the University of Michigan until 2016. Organized the first two conferences on Telemedicine and published the conferences in 1975. He was also a co-founder of the Telemedicne Journal in 1994 and served two years as president of the American Telemedicnie Association at the turn of the century. He has received numerous awards and honors recognizing his work and served as senior editor on three telemedicine reports sent to congress.

Dr. Jay Sanders

Received a doctorate from Harvard and in 1970 went on to form the first division of general medicine in the country at the University of Miami. Served as Chief of Medicine at Jackson Memorial Hospital. In 1991 he developed the first statewide telemedicine system in the state of Georgia. Also created the first correctional telemedicine program and the first tele-homecare technology that was named "The Electronic House Call." Founder of the American Telemedicine Association and served as president for three years. Has worked as a consultant for NASA and the DOD and is currently the CEO of The Global Telemedicine Group.

1983

The Internet is Born: Computer networks establish a universal communication standard

American Telemedicine Association (ATA) is founded.

In 2006 OAT funded the National and Regional Telehealth Resource Center (TRCs) Program - tasked with providing technical assistance, training and resources to health systems, organizations, providers, academic institutes, policy makers and others to improve health access and outcomes via telehealth, the TRCs serve all 50 states, D.C., Pacific Basin, Puerto Rico and U.S. Virgin Islands.

1993

2006

DHHS establishes The Office for the Advancement of Telehealth (OAT)

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2009

American Recovery and Reinvestment Act promotes and leads to greater connection online across medical technologies

Following the recession in 2008, the government aimed to stimulate growth and economic stability with the American Recovery and Reinvestment Act. This act allocated an exuberant amount of funds into healthcare with the bill directing over $25 billion for advancements in digital healthcare and technology for improving health. Telehealth faced the challenge of inter-technology communication between health systems and providers. The bill also helped to establish more universal and easier connectivity.

2010

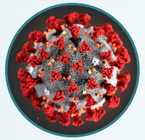
Centers for Medicare and Medicaid Services (CMS) determines what are meaningful uses of electronic health records

After the ARRA was passed, the CMS issued a ruling on what could be considered proper and meaningful ways to use electronic health records (EHR), or electronic medical records (EMR). The reasoning was to increase and maintain the privacy of patient records in the modern era of technology. Meaningfulness was defined as "the use of certified EHR technology in a meaningful manner, such as prescribing medication and improving the quality of care."

2016

The Health Resources and Services Administration Receives Funding to Expand the Use of Telehealth in Rural Areas

HRSA received and distributed $16 million to expand rural access to healthcare through the use of telehealth. It has been shown that one of the populations that benefit the most from telehealth is the rural community. Finding ways to serve the rural community and undeserved communities is a driver of healthcare, and telehealth looks to fill these voids.



2020

Global outbreak: COVID-19 spreading across boarders leads to increased utilization of telehealth

2023

The COVID-19 Federal Public Health Emergency Ends

On May 11th, 2023 the federal COVID-19 Public Health Emergency (PHE) ended, also bringing an end to some flexibilities allowing telehealth to be practiced with fewer restrictions. Other flexibilities extended beyond the end of the PHE to be reassessed in 2024 and 2025.

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