ASPR TRACIE Technical Assistance Request

Request Receipt Date (by ASPR TRACIE): 23 March 2020
Response Date: 26 March 2020; updated 18 February 2025
Type of TA Request: Standard

Request:

The requestor asked for resources specific to telehealth, particularly how it can be used by healthcare professionals to support the management of patients with infectious diseases while helping other patients avoid exposure.

Response:

The ASPR TRACIE Team reviewed existing resources, including those on our Infectious Disease Resource Page and in the Coronaviruses, Influenza Epidemic/Pandemic, and Virtual Medical Care Topic Collections. We also conducted a search online for relevant materials. Resources gathered can be located under the following headers in this document:

I. Federal Resources
II. Telehealth Plans, Tools, and Templates
III. Telemedicine Resources: Call Centers and Triage Lines
IV. Other Select Telehealth Resources

Considerations and lessons learned from these materials are gathered and provided as points for consideration in this document. **NOTE**: These considerations were developed in March 2020 when this document was initially created and are being preserved for historical purposes.

Considerations and Lessons Learned

- According to the Congressional Research Service's Telehealth and Telemedicine: Frequently Asked Questions, **telehealth** is defined as, "a health care provider's use of information and communication technology (ICT) in the delivery of clinical and nonclinical health care services; while t**elemedicine** refers to "a health care provider's use of ICTs in the delivery of only clinical health care services."
- Telehealth service can be provided via four common modalities: 1) clinical video telehealth or live video, 2) mobile health, 3) remote patient monitoring, and 4) store-and-forward technology. Other telehealth modalities include the use of the telephone and facsimile (fax) machine. **NOTE**: Refer to the Congressional Research Service's Telehealth and Telemedicine: Frequently Asked Questions document for more information.

- Healthcare providers who are in quarantine have used their organization's established telehealth programs to continue to treat patients virtually, ensuring the safety of both parties, while continuing to utilize the healthcare workforce that would be in shortage.
    - At institutions with emergency department (ED) tele-intake or direct-to-consumer care, physicians who are quarantined can cover those services in order to free up other physicians to perform in-person care. Office-based practices can also employ quarantined physicians to care for patients remotely.
- During the 2009 H1N1 influenza pandemic, toll-free call centers or "nurse triage lines" were established by many state and local health departments. Trained nurses staffed the phone lines and followed standard clinical protocols to: triage callers, provide advice on whether to seek in-person care, and support home management of illness.
- Telehealth can:
    - Improve access to prescriptions for antiviral medications.
    - Direct ill persons to appropriate in-person care, if needed.
    - Reduce unnecessary emergency department (ED), clinic, and provider visits (minimize surge).
    - Provide information to patients (home care, antivirals, infection control at home, when/where to seek care, outbreak information).
    - Reduce transmission of infection in healthcare facility waiting room areas.
    - Can be conducted from home to implement social distancing practices during a pandemic.
- Legal questions for each state to consider when implementing telehealth include, but are not limited to, the following:
    - Can a Registered Nurse (RN), Physician's Assistant (PA), or other healthcare provider conduct triage virtually?
    - Can RNs and PAs provide prescriptions for medications (specifically antivirals) over the phone?
    - Can an emergency declaration temporarily expand RN/PA scope of practice?
    - Can RNs, PAs, and other healthcare professionals from other states work in the base state without being licensed in the base state?
- Stakeholders to consider partnering with on telehealth include, but are not limited to, the following: emergency response organizations, public health agencies, poison control centers, health insurers, physician and nursing professional societies, and a private-sector technology vendor.
- Health systems have developed automated logic flows (bots) that refer moderate-to-high-risk patients to nurse triage lines but also allow patients to schedule video visits with established or on-demand providers, to avoid travel to in-person care sites.
- Healthcare office practices should not routinely refer patients to EDs, urgent care centers, or other healthcare settings, which could risk exposure of other patients and healthcare providers.
- Patients coming into an ambulatory care setting that may be positive for an infectious disease can be isolated in an exam room, and a telehealth visit can be conducted without exposing staff by using commercial systems.

- Electronic intensive care unit (e-ICU) monitoring programs allow nurses and physicians to remotely monitor the status of patients (60 to 100 patients in ICUs in multiple hospitals across the U.S.).

I. Federal Resources

Centers for Medicare & Medicaid Services. (2020). ESRD Provider Telehealth and Telemedicine Tool Kit.

This resource, for End Stage Renal Disease providers, includes information on the policy changes specific to Medicare telehealth services in 2020.

Centers for Medicare & Medicaid Services. (2020). General Provider Telehealth and Telemedicine Tool Kit.

This resource, for general healthcare providers, includes information on the policy changes specific to Medicare telehealth services in 2020.

Centers for Medicare & Medicaid Services. (2025). List of Telehealth Services.

This resource provides the list of services payable under the Medicare Physician Fee Schedule when furnished via telehealth for various coverage years.

Congressional Research Service. (2020). Telehealth and Telemedicine: Frequently Asked Questions.

This report provides responses to frequently asked questions about telehealth and telemedicine. It also provides the legislative background pertaining to the question, as applicable.

U.S. Department of Health and Human Services. (2009). Pandemic and All-Hazards Preparedness Act (Public Law 109-417) Telehealth Report to Congress.

This report to Congress discusses telehealth and its potential uses during public health emergencies and disaster medical responses. Payment and reimbursement considerations, as well as pertinent legal issues, are included.

II. Telehealth Plans, Tools, and Templates

American Medical Association. (2022). Telehealth Implementation Playbook.

During a pandemic, healthcare facilities may need telehealth/medicine capabilities. Telehealth policies help to prevent potential exposure in the workplace, thus limiting the

impact to the health of the healthcare workforce. This guide is a resource for administrators to initiate those capabilities.

Association of State and Territorial Health Officers. (2017). Telehealth Resource Guide.

This guide includes background information on telehealth and its different modalities, telehealth legislation and regulation at the federal and state level, and considerations for developing a telehealth pilot. Case studies on how several states are using telehealth to improve health outcomes in their jurisdictions are included.

Centers for Disease Control and Prevention. (2023). Assist in Medical Office Telephone Evaluation of Patients with Possible Influenza for Health Care Settings. U.S. Department of Health and Human Services.

This flowchart can aid medical staff in triaging calls. The tool may identify high-risk patients for consideration of initiation of antiviral treatment prior to an office visit.

Evisit. (2016). Telemedicine Guide.

This vendor's guide provides overviews of 19 categories under telemedicine (e.g., pros and cons, telemedicine and clinical guidelines, telemedicine and Medicaid, and HIPAA and telemedicine).

Healthcare Ready. (2019). Telehealth's Applications for Preparedness and Response.

This 22-page brief highlights how telehealth is being used in disaster preparedness and response and summarizes the challenges and potential solutions associated with this mechanism of healthcare delivery.

National Association of County and City Health Officials. (2017). The Flu on Call® Infographic.

This infographic reviews the Flu on Call® triage process. Free log-in to the NACCHO toolbox is required.

Substance Abuse and Mental Health Services Administration. (2015). TIP 60: Using Technology-Based Therapeutic Tools in Behavioral Health Services. U.S. Department of Health and Human Services.

This manual can help healthcare providers use technology-based care in the delivery of behavioral health treatment services.

Telligen and gpTRAC. (2014). Telehealth Start-Up and Resource Guide: Version 1.1.

This collaborative resource was created "to provide an overview and framework for implementing telehealth in critical access hospitals and rural areas." It includes a listing of research related to telehealth and outcomes, and lessons learned and best practices from organizations that successfully implemented telehealth programs and contributed to this document.

III. Telemedicine Resources: Call Centers and Triage Lines

Bogdan, G., Scherger, D., Seroka, A., et al. (2007). Adapting Community Call Centers for Crisis Support: A Model for Home-Based Care and Monitoring. U.S. Department of Health and Human Services.

The authors explain the development, testing, and implementation of a model to enable community health call centers (e.g., poison control centers, nurse advice lines) to support home-management and shelter-in-place approaches in certain mass casualty or health emergency events. The report includes a matrix with possible call center capabilities aligned with National Planning Scenarios and other guidance that can be tailored by call centers.

Kelly, M. (2018). DC's New 911 Nurse Triage Program. Annals of Emergency Medicine. 72(4): A15–A17.

This article discusses the successes and challenges experienced by Washington DC since integrating triage nurses into its 911 Call Center in April 2018. Logistical, medical, and financial (including insurance) considerations are presented, and may assist other jurisdictions in developing a similar model, which could support disaster response and recovery through efficient management of ambulance services.

Koonin, L., and Hanfling, D. (2013). Broadening Access to Medical Care During a Severe Influenza Pandemic: The CDC Nurse Triage Line Project. Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science. 11(1): 75-80.

The authors describe the Centers for Disease Control and Prevention's Nurse Triage Line Project and its goals of using a coordinated network of nurse triage telephone lines during a pandemic to assess the health status of callers, help callers determine the most appropriate site for care, disseminate information, provide clinical advice, and provide access to antiviral medications for ill people, if appropriate.

National Council of State Boards of Nursing. (2012). Nurse Triage Lines: Improving Access, Informing the Public.

This presentation discusses how Nurse Triage Lines (NTLs) may be used during disasters and includes an assessment of laws and regulations that impact the ability to set up NTLs in each state. Minnesota's experience during H1N1, and the CDC's Nurse Triage Line Project, are also discussed.

Russi, C.S., Beuning, A.J., Powell, R.S. et al. (2018). The Impact on Emergency Department Visits With a Telemedicine Program Interfacing With a Nurse Triage Call Line. Annals of Emergency Medicine. 72(4): S116–S117.

The authors discuss a 3-week observational study they conducted to determine outcomes from a triage protocol that had an emergency medicine physician consult with a triage line nurse, or with a patient directly, when the triage line nurse determined from call line disposition algorithms that a patient should be seen in the ED. They concluded that this model could safely mitigate some unnecessary ED usage.

Spaulding, A., Radi, D., Macleod, H., et al. (2012). Design and Implementation of a Statewide Influenza Nurse Triage Line in Response to Pandemic H1N1 Influenza. Public Health Reports. 127(5): 532–540.

The authors present the rationale behind the Minnesota Flu Line and describe its implementation during the 2009 H1N1 influenza pandemic.

Spaulding, A.B., Radi, D., Macleod H., et al. (2013). Satisfaction and Public Health Cost of a Statewide Influenza Nurse Triage Line in Response to Pandemic H1N1 Influenzav. Plos One. 8(1):e50492.

The authors describe the successful use of a telephone NTL set up by the Minnesota Department of Health for evaluating individuals with influenza-like illness and tele-prescribing of anti-virals. The NTL diverted callers from acute care visits at low cost and had a high rate of satisfaction among callers.

The University of New Mexico School of Medicine. (2016). Project ECHO.

The Extension for Community Health Outcomes (known as Project ECHO) was created to help healthcare providers in rural and underserved areas with information they need to treat conditions such as Hepatitis C, chronic pain, and behavioral health disorders. In the event of a disaster, one or more of ECHO's "hubs" could assist with virtual healthcare delivery.

Yeager, V. (2009). Emergency Response, Public Health and Poison Control: Logical Linkages for Successful Risk Communication and Improved Disaster and Mass Incident Response. Homeland Security Affairs. 5:Article 2.

The author proposes bringing together the expertise of emergency response organizations, public health agencies, and poison control centers to institute call centers and/or triage lines to disseminate information to the public during emergencies, and answer questions and concerns to keep concerned individuals from flooding local emergency rooms. Real-world examples of successful collaborations from Canada, Great Britain, and the U.S. are included.