

## Telehealth National Scan – Summary of Information Gathered

### Useful Resources

- Contact information for major telehealth resource centers and networks in the U.S.
- Locations of Michigan telehealth hubs, networks, and resource centers
  - Refer to the “Michigan Telehealth” folder for more detailed information
- State Department of Health offices that have telehealth programming or define and describe telehealth on their websites
- List of a variety of telehealth vendors and software
- Sample of telehealth-related conferences

### Hospital Systems & Primary Care

A wide array of telemedicine services are linked to Universities and Colleges of Medicine.

The following health systems are well known in regards to their utilization of telehealth:

- Texas Children’s Hospital and Texas Children’s Health
- UC Davis Children’s Hospital
- The University of Virginia Health System’s Rheuban Center for Telehealth

Services and Focus Areas:

- Consultations for specialties
- Collaborative research
- Education for physicians and other staff
  - Telehealth courses
  - Remote health education and training
  - Case review
- Triage for appointments
- On demand consultations
- Store-and-forward teleconsultations

Sample of specialties engaging in hospital telehealth programming:

- |               |               |
|---------------|---------------|
| ○ Neonatology | ○ Cardiology  |
| ○ General     | ○ GI          |
| ○ Surgery     | ○ Oncology    |
| ○ Nutrition   | ○ Urgent care |
| ○ Dermatology |               |

The Telehealth Model:

- Originating Sites: Community hospitals, suburban health centers, inner-city health clinics, remote hospital ERs, inpatient wards, patient homes, schools, community centers, churches
- Distant Sites: Physicians at hospitals

Funding:

- Foundations and Charitable Trusts
- Grant Programming

Billing Revenue:

- Private Payer Insurance
- Medicaid Managed Care

**Mental Health & Substance Abuse**

Mental health and substance abuse impact areas are often intertwined and utilizes telemedicine services most frequently following primary care/hospital systems.

Services and Focus Areas:

- Psychiatric services (assessments, follow-up and medication management)
- Educational training for faculty and trainees
- Substance abuse treatment
- Intellectual and developmental disabilities services
- Behavioral health services
- Youth alcohol and drug treatment
- Group sessions

The Telehealth Model:

- Originating Sites: Schools in rural areas, remote hospitals, home computers or in-community settings in rural, mountain, and underserved areas, community partners
- Distant Sites: Neuropsychiatric centers, mental health clinics, primary medical care clinics

Funding:

- Endowments
- State Health Authority offices of Health Information Technology
- State Offices of Rural Health
- State Bureaus for Behavioral Health and Health Facilities
- HRSA Office for the Advancement of Telehealth
- Direct Contracts
- Grants

Billing Revenue:

- Medicaid/Medicaid Autism Benefit
- Healthy Michigan Plan
- MICHild
- Private Payer Insurance

**Nutrition**

Utilizes telemedicine services most frequently following primary care/hospital systems and mental health/substance use counseling.

Services and Focus Areas:

- Nutritional Counseling
- Diabetes Management
- Obesity Management

Telehealth Model:

- Originating Sites: Critical access hospitals, health districts, small rural hospitals, community health centers, school-based clinics
- Distant Sites: Hospitals and outpatient facilities

Funding:

- State Telehealth Alliances
- Philanthropic Organizations
- Foundations
- State Departments of Health
  - Offices of Minority Health and Health Equity

**Reproductive Health**

This is a newer impact area and minimal research and programming exists currently.

Services and Focus Areas:

- Reproductive health and life skills topics
- Real-time interactive presentations
- Online portal for students to ask anonymous questions

Telehealth Model:

- Originating Site: Rural high schools
- Distant Site: Academic hospital

Funding:

- Robert C. Byrd Center for Rural Health at Marshall University School of Medicine

**Oral Health**

Services and Focus Areas:

- Dental screenings and diagnostics
- Dental treatment
- Prevention and early intervention services
- Patient education
- Referrals

Telehealth Model:

- Originating Sites: Schools in rural underserved areas, schools in cities, childcare centers
  - Onsite hygienist required and providing preventive services at originating sites
- Distant Sites: Children's hospitals, schools of dentistry, remotely located dentists

Funding:

- Grants From:
  - Telemedicine and eHealth centers
  - USDA office of rural development
  - The National Institute of Dental and Craniofacial Research of the NIH
- State Departments of Health
  - Office of Health Information Technology

**Ophthalmology**

Services and Focus Areas:

- Real-time vision screenings and image transmission
- Store-and-forward exams
- Consultations
- Test interpretations
- Screenings for diabetic retinopathy

The Telehealth Model:

- Originating Sites: Vans with vision screening equipment, local emergency departments
- Distant Sites: Ophthalmology departments at Universities of Medicine

**Education**

Education via telehealth appears in two forms:

1. Training and education regarding how to use telehealth.
2. The creation of connections between community-based clinicians and primary care providers to facilitate an exchange of information regarding specialties and treatment advice (consultative education).

Focus Areas:

- Provider ↔ Provider Education
  - Pediatric sub-specialty providers are connected with community and primary care providers, providing up-to-date information on evidence-based guidelines and support for managing complex pediatric illnesses
- Education for primary care clinicians and community providers regarding specialty care services
  - Includes mentoring and feedback from specialists

- Recurring programming for clinicians to present challenging patient cases
- Treatment advice and education
- Education regarding how to use telemedicine

Telehealth Model:

- Originating Sites: School-based health centers, University Medical Centers, community-based clinics
- Distant Sites: Academic hubs

Funding:

- Grant from the Health Resources and Services Administration at the Virginia Health Workforce Development Authority
- The Weitzman Institute

**Funding**

This tab contains links for additional information regarding some of the traditional options for the funding of telehealth programming.

**Barriers to Telehealth**

- Insurance coverage for telemedicine
- Licensing requirements for professionals who practice across state lines
- Ensuring that patient privacy and confidentiality are maintained at the same level as an in-person visit
- The cost of telemedicine implementation
  - Equipment and installation
  - Rental costs of telecommunication lines
  - Technology maintenance
  - Data transmission costs
  - Service fees
  - Maintaining and upgrading equipment
  - Training and technical support
  - Poor Reimbursement

**Solutions**

- Mobile hotspots can help to improve telehealth connections
- Ensuring strong IT support
- Frequent updating of protocols
  - Implementation of electronic health records or changes in network can present technical issues
- Testing of equipment before providing services
- Providing access to a frequently updated and user-friendly website
- Designated person at a community/school site to coordinate the appointment process
- Ongoing research to study the effectiveness of telemedicine in expanding patients' access to healthcare costs

Telehealth Resource Centers, Print_Area Organizations, & Associations	Michigan-Specific Telehealth	Departments of Health & Telehealth	Telehealth Vendors/Software	Sample of Telehealth-Related Conferences
<b>The American Telemedicine Association</b> <a href="http://www.americantelemed.org">http://www.americantelemed.org</a>	<b>The Marquette General health System/Upper Peninsula Telehealth Network</b> <a href="http://www.mgh.org/our-services/all-services/telehealth">http://www.mgh.org/our-services/all-services/telehealth</a>	<b>US Department of Health and Human Services Federal Office of Rural Health Policy</b> <a href="http://www.hrsa.gov/ruralhealth/telehealth/">www.hrsa.gov/ruralhealth/telehealth/</a>	<b>Fruit Street</b> <a href="http://www.fruitstreet.com/">http://www.fruitstreet.com/</a>	<b>UC Davis Pediatric Telehealth Colloquium</b> <a href="http://www.ucdmc.ucdavis.edu/course_pages/LIMITED/PDT/EL17_pagelink.html">http://www.ucdmc.ucdavis.edu/course_pages/LIMITED/PDT/EL17_pagelink.html</a>
<b>National Telehealth Resource Center</b> <a href="http://www.telehealthresourcecenter.org/">http://www.telehealthresourcecenter.org/</a>	<b>Upper Midwest Telehealth Resource Center</b> <a href="https://www.umtrc.org/">https://www.umtrc.org/</a>	<b>Rhode Island Department of Health</b> <a href="http://www.health.ri.gov/healthcare/about/telemedicine/">http://www.health.ri.gov/healthcare/about/telemedicine/</a>	<b>MedNow</b> <a href="https://www.spectrumhealth.org/patient-care/services-and-treatment-detail-pages/mednow">https://www.spectrumhealth.org/patient-care/services-and-treatment-detail-pages/mednow</a>	<b>American Telemedicine Association Annual Conference and Trade Show: Pediatrics</b> <a href="http://hub.americantelemed.org/ata2016new/schedule/tracks/pediatrics">http://hub.americantelemed.org/ata2016new/schedule/tracks/pediatrics</a>
<b>Center for Rural Health Innovation</b> <a href="http://crhi.org/">http://crhi.org/</a>	<b>Beaver Island Telehealth Project</b>	<b>Pennsylvania Department of Health.</b> PA hospitals are currently locations of both distant site and originating site telemedicine services. <a href="http://www.health.pa.gov/Your-Department-of-Health/innovation/Documents/External%20Plan_Rural%20Health.pdf">http://www.health.pa.gov/Your-Department-of-Health/innovation/Documents/External%20Plan_Rural%20Health.pdf</a>	<b>American Well</b> <a href="https://www.americanwell.com/">https://www.americanwell.com/</a>	<b>Northeast Regional Telehealth Conference</b> <a href="https://conference.netrc.org/">https://conference.netrc.org/</a>
<b>Mid-Atlantic Telehealth Resource Center</b> <a href="http://www.matrc.org/">http://www.matrc.org/</a>	<b>REMEC TeleHealth Network</b>	<b>South Carolina Department of Mental Health</b> <a href="http://www.state.sc.us/dmh/telepsychiatry/">http://www.state.sc.us/dmh/telepsychiatry/</a>	<b>IDocWay</b> <a href="https://www.1docway.com/">https://www.1docway.com/</a>	<b>Telehealth Use in Rural Healthcare Events</b> <a href="https://www.ruralhealthinfo.org/topics/telehealth/events">https://www.ruralhealthinfo.org/topics/telehealth/events</a>
<b>Telehealth Resource Centers</b> <a href="http://www.telehealthresourcecenter.org">www.telehealthresourcecenter.org</a>	<b>Alpena General Hospital Telehealth Network</b> agh.org	<b>California Department of Health Care Services</b> <a href="http://www.dhcs.ca.gov/provgovpart/Pages/Telehealth.aspx">http://www.dhcs.ca.gov/provgovpart/Pages/Telehealth.aspx</a>	<b>AMD Global Telemedicine</b> <a href="https://www.amdtelemedicine.com/">https://www.amdtelemedicine.com/</a>	
<b>Agency for Healthcare Research and Quality</b> <a href="http://healthit.ahrq.gov/key-topics/telehealth">healthit.ahrq.gov/key-topics/telehealth</a>	<b>MidMichigan Health Telehealth Network</b>	<b>Virginia Department of Health</b> <a href="http://www.vdh.virginia.gov/health-equity/telehealth/">http://www.vdh.virginia.gov/health-equity/telehealth/</a>	<b>Avizia</b> <a href="https://www.avizia.com/">https://www.avizia.com/</a>	
<b>Ochsner Telehealth Network</b> <a href="https://www.ochsner.org/careconnect-360/ochsners-telehealth-network">https://www.ochsner.org/careconnect-360/ochsners-telehealth-network</a>	<b>Southwest Michigan Telehealth Network</b> <a href="http://www.borgess.com/">http://www.borgess.com/</a>	<b>Ohio Department of Mental Health and Addiction Services</b> <a href="http://mha.ohio.gov/Default.aspx?tabid=517">http://mha.ohio.gov/Default.aspx?tabid=517</a>	<b>CivicHealth</b> <a href="http://civichealth.com/">http://civichealth.com/</a>	
<b>Pediatric Telehealth Special Interest Group</b> <a href="http://www.americantelemed.org/main/membership/ata-members/ata-signs/pediatric-telehealth-sig">http://www.americantelemed.org/main/membership/ata-members/ata-signs/pediatric-telehealth-sig</a>	<b>HNHS Telehealth</b>	<b>Illinois Department of Healthcare and Family Services</b> <a href="https://www.illinois.gov/hfs/MedicalProviders/behavioral/Pages/Telepsychiatry.aspx">https://www.illinois.gov/hfs/MedicalProviders/behavioral/Pages/Telepsychiatry.aspx</a>	<b>ClairVista LLC</b> <a href="https://www.clairvista.com/">https://www.clairvista.com/</a>	
<b>Marshfield Clinic</b> <a href="https://www.marshfieldclinic.org/#topSpacer">https://www.marshfieldclinic.org/#topSpacer</a>	<b>Telemedicine Resource Center at the University of Michigan</b>	<b>Wisconsin Department of Health Services</b> <a href="https://www.dhs.wisconsin.gov/dcts/memos/201508actionmemo.htm">https://www.dhs.wisconsin.gov/dcts/memos/201508actionmemo.htm</a>	<b>D-EYE</b> <a href="https://www.d-eyecare.com/">https://www.d-eyecare.com/</a>	
<b>Partners in Healthcare</b> <a href="https://connectedhealth.partners.org/">https://connectedhealth.partners.org/</a> (works together with Brigham and Young Children's Hospital and Massachusetts General Hospital)	<b>Northeast Michigan Telemedicine Network</b> sjhsys.org	<b>Georgia Department of Public Health</b> <a href="https://dph.georgia.gov/office-telehealth-telemedicine">https://dph.georgia.gov/office-telehealth-telemedicine</a>	<b>GlobalMed</b> <a href="https://www.globalmed.com/">https://www.globalmed.com/</a>	
<b>California Telehealth Network</b> ( <a href="https://www.caltelehealth.org/">https://www.caltelehealth.org/</a> )	<b>Hospice of Michigan</b> hom.org	<b>Tennessee Department of Mental Health and Substance Abuse Services</b> <a href="https://www.tn.gov/behavioral-health/article/telehealth">https://www.tn.gov/behavioral-health/article/telehealth</a>	<b>GoTelecare</b> <a href="https://www.gotelecare.com/">https://www.gotelecare.com/</a>	
<b>Kansas University Center for Telemedicine and Telehealth</b> <a href="http://www.kumc.edu/community-engagement/ku-center-for-telemedicine-and-telehealth.html">http://www.kumc.edu/community-engagement/ku-center-for-telemedicine-and-telehealth.html</a>	<b>Rural Telehealth Network &amp; Community Education Network</b>	<b>Alabama Department of Health Telehealth</b> <a href="http://www.alabamapublichealth.gov/alphnt/telehealth.html">http://www.alabamapublichealth.gov/alphnt/telehealth.html</a>	<b>Mobile Telemedical</b> <a href="https://production.curaretelehealth.com/admin/login">https://production.curaretelehealth.com/admin/login</a>	
<b>Northwest Telehealth Resource Center</b> <a href="https://www.nrttc.org/">https://www.nrttc.org/</a>	<b>VA Great Lakes Health Care System</b>		<b>TelePharm</b> <a href="https://www.telepharm.io/login">https://www.telepharm.io/login</a>	
<b>Southwest Telehealth Resource Center</b> <a href="http://www.southwesttrc.org/">http://www.southwesttrc.org/</a>			<b>Virtual Care Management Powered by SnapMD</b> <a href="http://snap.md/">http://snap.md/</a>	
<b>Great Plains Telehealth Resource Center</b> <a href="http://www.gptrac.org/">http://www.gptrac.org/</a>			<b>Connected Care</b> <a href="http://www.connectwithcare.org/">http://www.connectwithcare.org/</a>	
<b>California Telehealth Resource Center</b> <a href="http://www.caltrc.org/">http://www.caltrc.org/</a>			<b>RubiconMD</b> <a href="http://www.chcf.org/innovation-fund/new-noteworthy/telehealth-rubiconmd-press-release">http://www.chcf.org/innovation-fund/new-noteworthy/telehealth-rubiconmd-press-release</a> ; <a href="https://rubiconmd.com/">https://rubiconmd.com/</a>	

Agency	Specific Services the Technology is being Used For	Originating and Distant Sites	Funding Sources	Billing Revenue	Barriers	Solutions	Source(s)
Children's National, Washington, DC	Support for inner-city youth programs. Consultations for specialties such as urology, genetics, neonatology, general and surgery. Emphasizes improving education, technology, healthcare staffing to improve the level of health care for children available in North Africa.	Serves community hospitals, suburban health centers, inner-city health clinics, national hospitals, international partners.	North Africa work: Mosaic Foundation. Inner-city youth work: The Quincy Foundation.				<a href="https://childrensnational.org/departments/telemedicine">https://childrensnational.org/departments/telemedicine</a>
Texas Children's Hospital	Clinical telemedicine; education for institutional and partner physicians, patients and other healthcare workers; collaborative research; regionalization of care; business development; support of strategic initiatives and executive leadership; global outreach.						<a href="https://www.texaschildrens.org/about-us/community-benefit-report/education-and-research/center-telehealth">https://www.texaschildrens.org/about-us/community-benefit-report/education-and-research/center-telehealth</a>
Medical University of South Carolina	Pediatric GI, maternal fetal medicine, pediatric urology, school-based care						<a href="http://www.sctehealth.org/muschealth">http://www.sctehealth.org/muschealth</a>
UC Davis Children's Hospital	UC Davis emergency medicine physicians, neonatologists and critical care specialists connect directly to remote hospital emergency departments, newborn nurseries and inpatient wards to provide care and consultation for infants, children and adolescents who experience traumatic injuries, life-threatening infectious diseases or other critical illnesses. Also utilization of mobile telemedicine carts. <b>Many many departments in the hospital are using telehealth!</b>	Providers: Emergency medicine physicians, neonatologists, and critical care specialists at distant site. Originating Site: remote hospital ERs, newborn nurseries, inpatient wards.	US Dept of Health and Human Services Office for the Advancement of Telehealth Telehealth Network Grant Program				<a href="http://www.ucdmc.ucdavis.edu/children/clinical_services/pediatric_telemedicine/">http://www.ucdmc.ucdavis.edu/children/clinical_services/pediatric_telemedicine/</a>
Boston Children's Hospital	Hospital to hospital programs, virtual visits.	Originating Site: Patient home.					<a href="http://www.childrenshospital.org/accelerator/about/telehealth">http://www.childrenshospital.org/accelerator/about/telehealth</a>
NewYork-Presbyterian	Pediatric Urgent Care. Families can see a trained and experienced pediatric emergency physician from their home via NYP OnDemand.						<a href="http://www.nyp.org/news/NYP-Launches-Pediatrics-Urgent-Care-Telehealth-from-NYP-OnDemand">http://www.nyp.org/news/NYP-Launches-Pediatrics-Urgent-Care-Telehealth-from-NYP-OnDemand</a>
Mercy Health System: Mercy Virtual	Virtual care center for the development and delivery of telehealth.						<a href="http://www.mercyvirtual.net/">http://www.mercyvirtual.net/</a>
The Center for Telehealth Service Design, Akron Children's Hospital in Ohio	Aims to develop knowledge and expertise in the design of telehealth service solutions, with an emphasis on pediatrics. The center conducts research studies and pilots and applies the resulting know-how to launch innovative and sustainable health services.						<a href="https://www.akronchildrens.org/cms/center_for_telehealth_service_design/index.html">https://www.akronchildrens.org/cms/center_for_telehealth_service_design/index.html</a>
University of Virginia Health System Rheuban Center for Telehealth	Services for children include developmental disabilities, endocrine and diabetes support, fitness, lactation support, neurology.						<a href="https://uvahealth.com/services/telemedicine-telehealth-services">https://uvahealth.com/services/telemedicine-telehealth-services</a>
Michigan State University Adolescent and Pediatric Hematology/Oncology Clinic	Telemedicine services available for qualifying blood disorder and oncology patients.						<a href="https://www.healthteam.msu.edu/patients/peds-spec-hem_onc.aspx">https://www.healthteam.msu.edu/patients/peds-spec-hem_onc.aspx</a>
The Marquette General Health System	Hub for the 30-site network and provides the support functions among the independent sites for the Upper Peninsula telehealth Network. Support functions include administration of the multipoint control unit, communication and coordination among network members, advocacy for advancements on telehealth policy, technical assistance, educational programming, grant administration and promotion of applications.						<a href="http://www.mgh.org/our-services/all-services/telehealth">http://www.mgh.org/our-services/all-services/telehealth</a>
University of New Mexico Health Sciences Center Child Ready-Virtual Pediatric Emergency Department	Connects hospitals, providers, and patients. Includes telehealth courses for providers and clinical staff regarding pediatric respiratory care, wound management, infectious diseases, pediatric case review, safety and injury prevention, child abuse, nurse competencies for children in ED settings, and including children in a hospital disaster plan.	Originating Sites: clinicians from rural hospitals. Distant Site: UNH Hospital Providers.					<a href="http://emed.unm.edu/pem/programs/child-ready-program/technologies/index.html">http://emed.unm.edu/pem/programs/child-ready-program/technologies/index.html</a>
University of Miami Miller School of Medicine Telehealth Program	Store-and-forward teleconsultations from University of Miami physicians in multiple specialties. Pediatric Specialist Consultations include dermatology, cardiology, endocrinology, nutrition, hematology, and obesity intervention trials. Remote health education and training as well.			Services are provided free of charge			<a href="http://telemedicine.med.miami.edu/">http://telemedicine.med.miami.edu/</a>
University of Rochester Medical Center Golisano Children's Hospital's Health-e-Access Connected Care Model (HeA)	Care delivery via the primary-care-medical home. Enables diagnosis and management of acute and chronic problems among preschool and school-aged children in childcare, schools, and other convenient neighborhood settings, and during workday and after-hours periods.	Originating Site: child and telehealth assistant at a childcare center. Distant Site: Physician or Nurse Practitioner at Golisano Children's Hospital.	Grant from the Agency for Healthcare Research and Quality (AHRQ)	Medicaid Managed Care			<a href="https://www.urmc.rochester.edu/childrens-hospital/health-e-access.aspx">https://www.urmc.rochester.edu/childrens-hospital/health-e-access.aspx</a>

Agency	Specific Services the Technology is being Used For	Originating and Distant Sites	Funding Sources	Billing Revenue	Barriers	Solutions	Source(s)
Children's Health Texas	Enables parents to talk to a physician through a secure website for a virtual appointment, text or video chat with a nurse through the hospital's call center, or have a virtual appointment with a specialist at Children's Health from any location, whether it is the child's school, a community center, church or your child's doctor's office.	Originating Site: Pediatric group outpatient clinics. Distant Site: Children's Health subspecialists throughout the Dallas-Fort Worth Metroplex.	Venture-backed.	Insurance.			<a href="https://www.childrens.com/keeping-families-healthy/community-partners/mobile-health-solutions">https://www.childrens.com/keeping-families-healthy/community-partners/mobile-health-solutions</a>
Ohana Pediatrics in Chicago	Pediatric Virtual Care Platform to help parents assess whether their child needs a doctor's appointment, and to get them a video appointment as soon as possible if they do.						<a href="http://ohanapediatrics.com/">http://ohanapediatrics.com/</a> ; <a href="http://www.builtinchicago.org/2017/02/17/ohana-pediatrics-helps-kids-see-doctor">http://www.builtinchicago.org/2017/02/17/ohana-pediatrics-helps-kids-see-doctor</a>
Rainbow Babies and Children's Hospital Rainbow Care Connection in Ohio	Improves access for children to receive medical care and treatment. A nurse-doctor team delivers care to adolescents and children via a traditional nurse telephone triage, prescriptive therapy based on pre-approved standing orders to treat mild pediatric illnesses, and/or physician-level evaluation when necessary. Rainbow Connection also offers telepsychiatry services with a psychiatric social worker.		Health Care Innovation Grant from the Center for Medicare and Medicaid Innovation	Insurance reimbursement.			<a href="http://www.uhhospitals.org/rainbow/about/rainbow-care-connection/clinical-programs/telehealth">http://www.uhhospitals.org/rainbow/about/rainbow-care-connection/clinical-programs/telehealth</a> ; <a href="http://www.uhhospitals.org/rainbow/about/rainbow-care-connection">http://www.uhhospitals.org/rainbow/about/rainbow-care-connection</a>
Cincinnati Children's Hospital Center for Telehealth	On demand consultations, specialty clinics, and education. Diagnostics, provider telehealth case conferences, telemedicine encounters (video clinics). Child psychiatry, cancer and blood diseases, gastroenterology, cardiology, audiology, human genetics, infectious disease, neurology, ophthalmology, orthopaedics, pediatric surgery, plastic surgery, pulmonary medicine, radiology, rheumatology, sports medicine, urology.	Patients, families, and providers from around the world can interact with Cincinnati Children's physicians.					<a href="https://www.cincinnatichildrens.org/service/c/telehealth">https://www.cincinnatichildrens.org/service/c/telehealth</a>
Children's Hospital Colorado Telehealth	The Barbara Davis Center for Diabetes at the University of Colorado School of Medicine works with youth with type 1 diabetes in Wyoming and Western Colorado.		The Leona M. and Harry B. Helmsley Charitable Trust				<a href="https://www.childrenscolorado.org/doctors-and-departments/departments/telehealth/">https://www.childrenscolorado.org/doctors-and-departments/departments/telehealth/</a>
Spectrum Health, Grand Rapids, MI	Partners with MedNow to provide general diagnostic telehealth services in cardiology, neurology, ophthalmology, and imaging. Family services are also offered through MedNow for children in the hospital.			Insurance reimbursement varies.			<a href="https://www.spectrumhealth.org/">https://www.spectrumhealth.org/</a> Mandy Reed Director, Operations MedNow Spectrum Health   MC 288 444 Michigan St. NE Grand Rapids, MI 49503 cell 616.498.6698 Amanda.Reed@spectrumhealth.org
Child Adolescent Health Center Program (CAHC): School Telehealth Project, MI	Diagnosis and treatment of common medical conditions.	Originating Site: School nurses and students. Distant Site: Primary Care and SBHC settings	Michigan Department of Health and Human Services Child and Adolescent Health Center Program.	Reimbursement facilitation for RNs working under physician standing orders and telehealth origination fees.			<a href="https://www.cahtelehealth.com/">https://www.cahtelehealth.com/</a>



Agency/ Subject Area	Specific Services the Technology is being Used For	Originating and Distant Sites	Funding Sources	Billing Revenue	Barriers	Solutions	Source(s)
Pathways Mental Health Services, LLC, Behavioral Health Clinic in Washington State	The treatment of co-occurring disorders, specifically behavioral/mental health concerns and substance use disorder.	Originating Sites: community partners.		Some insurance companies allow patients to participate in therapy from home or any location determined appropriate by the individual receiving care.			<a href="http://www.pathwaysmhs.org/">http://www.pathwaysmhs.org/</a>
Rural Children with Mental, Behavioral, or Developmental Disorders (MBDDs)				39 states have some form of Medicaid coverage and reimbursement for telemental health services. On the private payer side, thirty-two states and the District of Columbia have private payer policies in place for telehealth, but these policies differ considerably in what services are covered and how much providers are reimbursed. Twenty-three states and the District of Columbia require that payments for telemental health services be equivalent to those received for in-office treatment.	Insurance coverage for telemedicine--there is some evidence that when telemedicine is not reimbursed, or is reimbursed at a lower level than in-person services, doctors may not have sufficient financial incentives to provide telemedicine services. Some evidence suggests that adding licensing requirements for professionals who practice across state lines may slow or limit the expansion of telemedicine technologies by some health care facilities. Ensuring that patient privacy and confidentiality are maintained at the same level as an in-person visit. The cost of telemedicine tech may limit adoption (equipment and installation, rental cost of telecommunication lines, salary and wages, administrative expenses, data transmission costs, service fees, maintaining and upgrading equipment).	47 states and Washington, DC provide some level of Medicaid reimbursement for telemedicine. To increase adoption of general telemedicine services, states could consider adopting private payer parity laws (more research is needed on the effect of parity laws on telemedicine adoption). States have several options for licensing telemedicine practitioners. 8 states accept conditional or telemedicine licenses from out-of-state physicians. 3 states have established registries that permit qualifying out-of-state physicians to practice in the states. Ensure security of data stored and transmitted via telemedicine.	<a href="https://www.cdc.gov/ruralhealth/docs/Rural_Childrens_Mental_Brie.pdf">https://www.cdc.gov/ruralhealth/docs/Rural_Childrens_Mental_Brie.pdf</a>
The Trillium Family Services Telehealth Project serving children and adolescents in rural Oregon	Provides psychiatric services (psychiatric assessments, follow-up and medication management) via video conferencing to youth transitioning from residential treatment to rural community placements and to youth in rural settings receiving school-based mental health services	Originating sites: Schools and community sites	Oregon Health Authority Office of Health Information Technology and the Oregon Office of Rural Health				<a href="http://www.oregon.gov/oha/HPA/OHIT/Pages/Telehealth-Pilots.aspx">http://www.oregon.gov/oha/HPA/OHIT/Pages/Telehealth-Pilots.aspx</a>
South Carolina and North Carolina Statewide Telepsychiatry Networks	Provision of telepsychiatry services to remote hospitals in South Carolina	Originating Sites: Subscribing Hospitals. Distant Site: Providers (master's-level psychologists or social workers) located at Coastal Carolina Neuropsychiatric Center (CCNC) in Jacksonville.	The Duke Endowment		Doctors must be licensed to practice in the states that the patient lives.		<a href="http://www.norcarolinahealthnews.org/2013/08/19/telepsychiatry-project-rolled-out-statewide/">http://www.norcarolinahealthnews.org/2013/08/19/telepsychiatry-project-rolled-out-statewide/</a> ; <a href="http://www.state.sc.us/dmh/telepsychiatry/">http://www.state.sc.us/dmh/telepsychiatry/</a>
West Virginia Rural Telepsychiatry Expansion and Health Monitoring Project	Provides telepsychiatry and mental health services to multiple underserved counties in West Virginia. Services include adult and child psychiatric and addiction psychiatric clinics in addition to educational training for faculty and trainees.		West Virginia DHHR Bureau for Behavioral Health and Health Facilities, Grant H2ARH4768, HRSA Office for the Advancement of Telehealth DHHS 2012-2016, Direct Contract				<a href="http://www.wvcollaborative.wv.gov/lowercost/Documents/Better%20Value%20Presentation_WVU%20Telepsychiatry%20June%202015.pdf">http://www.wvcollaborative.wv.gov/lowercost/Documents/Better%20Value%20Presentation_WVU%20Telepsychiatry%20June%202015.pdf</a>
Centerstone of Indiana	Mental health services, substance abuse treatment, and intellectual and developmental disabilities services in Illinois, Indiana, Kentucky, and Tennessee.						<a href="https://centerstone.org/">https://centerstone.org/</a>
Lifeways of Michigan	Behavioral health services to residents of Jackson and Hillsdale counties with Medicaid, Healthy Michigan Plan, or who are uninsured who also have a diagnosed severe mental illness, intellectual/developmental disability, substance use disorder, or co-occurring disorders. Autism spectrum disorder services as well.			Medicaid, MICHild, Healthy Michigan Plan, Medicaid Autism Benefit			<a href="http://lifewayscmh.org/">http://lifewayscmh.org/</a>
Synergy Substance Abuse Treatment Services for Adolescents in Colorado	Delivery of mental health and substance abuse services to adolescents and their families in rural, mountain, and underserved areas of Colorado and surrounding states	Originating site: home computer or in-community setting	Division of Substance Dependence within the Department of Psychiatry, University of Colorado Denver				<a href="http://www.ucdenver.edu/academics/colleges/medicalschoold/departments/psychiatry/PatientCare/ARTSClinical/ARTSTreatment/Documents/telehealth_services.pdf">http://www.ucdenver.edu/academics/colleges/medicalschoold/departments/psychiatry/PatientCare/ARTSClinical/ARTSTreatment/Documents/telehealth_services.pdf</a>
Tarzana Treatment Centers in California	Teens attend counseling sessions via video conference from home. Parents can also attend family meetings. Group sessions can occur over telemedicine as well. Treatment is for youth alcohol and drug treatment and mental health and substance use disorders.	Originating Site: Patient homes. Distant sites: Primary medical care clinics in the San Fernando Valley, Antelope Valley, Lancaster, Long Beach, Northridge, and Reseda.					<a href="https://www.tarzana.org/telemedicine-uses-teen-alcohol-and-drug-treatment/">https://www.tarzana.org/telemedicine-uses-teen-alcohol-and-drug-treatment/</a>
Michigan Child Collaborative Care Program	Provides psychiatry support to primary care providers in Michigan who are managing patients with mild to moderate behavioral health problems. Patients are children, adolescents, and young adults through age 26, and women who are contemplating pregnancy, pregnant or postpartum with children up to a year. Support is available through "just-in-time" phone consultations to referring providers as well as remote psychiatric evaluation to patients and families through video telepsychiatry.	Originating Site: Participating Primary Care Provider. Distant Site: Behavioral Health Consultant/Psychiatrist at UM					<a href="https://mc3.depressioncenter.org/">https://mc3.depressioncenter.org/</a>

Agency/Field	Specific Services the Technology is being Used For	Originating and Distant Sites	Funding Sources	Billing Revenue	Barriers	Solutions	Source(s)
Nutritional Counseling through "The Virtual Teleconsultation-Outpatient Program" in South Carolina	Nutritional Counseling for Obesity/Weight Management Consultations	Distant Site: Provider must be present at an approved facility (hospital, outpatient facility). Originating Site: Patient must be present at a doctor's office who is affiliated with the South Carolina Telehealth Alliance (SCTA).	The South Carolina Telehealth Alliance--provides equipment and assists with adoption of telehealth practices.	Minimal telehealth coverage from private insurances. GI modifiers must be used for all telemedicine visits when billing.	Patient must be present at a doctor's office who is affiliated with the SCTA. Provider must be present at an approved facility. Facility must take vitals and provide, via telehealth equipment, to telehealth provider. No in-home visits. Not everyone can take advantage of telehealth services (patients without PCP, PCPs who do not have contracts with South Carolina Telehealth Alliance). Reimbursement is poor.	Hospital billing department has to have the capabilities to bill for telemedicine.	<a href="http://eatsmartmovemoresc.org/pdf/2016SummitPresentations/Nutrition_Counseling.pdf">http://eatsmartmovemoresc.org/pdf/2016SummitPresentations/Nutrition_Counseling.pdf</a>
Pediatric Obesity Treatment;The UCLA Fit for Healthy Weight Clinic (Fit Clinic)	Telemedicine Fit Clinic was held once a month at the LAUSD site and twice a month at a VFC site (due to greater community demand). Appointments included informal interviews, participant observation, and narrative field logs.	School-based clinics and pediatric obesity telemedicine care at a children's hospital within the same metropolitan area. Appointments conducted between providers at UCLA Medical Offices and telemedicine patients at Los Angeles Unified School District San Miguel School Clinic (LASUD) and the Venice Family Clinic (VFC). Designated coordinators were present at each site (satellite clinic and medical center).Bilingual coordination staff and/or interpreter for providers for successful coordination of patient care.	California Proposition 1D, the UniHealth Foundation (a non-profit philanthropic organization whose mission is to support and facilitate activities that significantly improve the health and well-being of individuals and communities within a service area).		Implementing telemedicine software at school clinics provided initial challenges (limited connection bandwidth, school firewalls blocked access to telehealth network hub).	Mobile hotspot purchased through a commercial cellular communications company helped to connect to the internet. Ensuring strong IT support and frequent updating of protocols--given that implementation of electronic health records or changes in network presented technical issues. Testing of equipment before providing service. Providing access to a frequently updated and user-friendly website enables appt setup process to be as simple as possible for patients and their families. Designated person at community/school site to coordinate appt process.	<a href="http://journals.sagepub.com.proxy.lib.umich.edu/doi/full/10.1177/000922815594359">http://journals.sagepub.com.proxy.lib.umich.edu/doi/full/10.1177/000922815594359</a>
Virginia Center for Diabetes Prevention and Education (VCDPE)	Diabetes patient self-management tele-education programs to critical access hospitals, health districts, small rural hospitals, community health centers, and facilities for older citizens that are located in areas of the state with a higher-than average risk for diabetes.		Virginia Department of Health, Office of Minority Health and Health Equity		The level and schedule of funding, collection of more accurate demographics and meaningful behavioral outcome data, new site recruitment, site retention, patient attendance, access to functional teleconferencing equipment, and adequate staff and leadership to market and coordinate these programs.		<a href="https://med.virginia.edu/vcdpe/wp-content/uploads/sites/287/2015/09/2013-Tele-education-program-Final-Report.pdf">https://med.virginia.edu/vcdpe/wp-content/uploads/sites/287/2015/09/2013-Tele-education-program-Final-Report.pdf</a> ; <a href="https://med.virginia.edu/vcdpe/diabetes-tele-education-programs/">https://med.virginia.edu/vcdpe/diabetes-tele-education-programs/</a>

Agency	Specific Services the Technology is being Used For	Originating and Distant Sites	Funding Sources	Billing Revenue	Barriers	Solutions	Source(s)
<p><b>2017 Prospective Study: Reproductive Health Education Services and Sexual Health Services for Rural Adolescents in West Virginia</b></p>	<p>Teleconferencing equipment connected rural high schools to a distal academic institution. Telehealth sessions included reproductive health and life skills topics. Real-time, interactive presentations. Online portal present for students to ask anonymous questions of the presenters (answered during the final session)</p>	<p>Expert faculty, residents, or medical students based out of a "distant" academic hospital 3 hours away. Originating site--two teachers from the participating high schools served as program assistants.</p>	<p>Robert C. Byrd Center for Rural Health at Marshall University School of Medicine</p>		<p>State and federal policies that restrict medical providers from practicing telemedicine, Ongoing costs of technology maintenance, Training and technical support costs, issues with licensure and payment.</p>	<p>Ongoing research to study the effectiveness of telemedicine in expanding patients' access to healthcare, reducing healthcare costs, and improving quality of healthcare.</p>	<p><a href="https://www.ahcmedia.com/articles/140636-telehealth-improves-access-to-reproductive-health-education-and-services-for-rural-adolescents">https://www.ahcmedia.com/articles/140636-telehealth-improves-access-to-reproductive-health-education-and-services-for-rural-adolescents</a>; Yoost JL, Starcher RW, King-Mallory RA, et al. The use of telehealth to teach reproductive health to female rural high school students. J Pediatr Adolesc Gynecol 2017;30:193-198.</p>

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Children's Hospital Los Angeles Pediatric Teledentistry Program	Dental screenings, treatment, referrals for underserved children.	Originating Site: Schools in rural underserved areas. Distant Site: Dentists from Childrens Hospital Los Angeles/University of Southern California (USC) School of Dentistry supervise an on-site hygienist, provide remote oral examinations and patient education, and develop a treatment plan for offsite child patients. Providers work in the eHealth Center.	Grant from the California Telemedicine and eHealth Center (CTEC). Grants from the USDA-Rural Development.				<a href="https://www.aucd.org/docs/resources/Childrensdoc.pdf">https://www.aucd.org/docs/resources/Childrensdoc.pdf</a> ; <a href="http://www.kintera.org/site/apps/nlnet/content2.aspx?c=iplINKTOAJSG&amp;b=3793521&amp;ct=4909181">http://www.kintera.org/site/apps/nlnet/content2.aspx?c=iplINKTOAJSG&amp;b=3793521&amp;ct=4909181</a>
University of Rochester Eastman Dental Center	Dental screenings, feedback on the need for dental care.	Originating Sites: Six inner-city elementary schools and seven childcare centers. Distant Site: Eastman Dept of Dentistry at the U of Rochester	Grant from the National Institute of Dental and Craniofacial Research of the National Institutes of Health.				<a href="https://www.aucd.org/docs/resources/Childrensdoc.pdf">https://www.aucd.org/docs/resources/Childrensdoc.pdf</a> ; <a href="https://www.urmc.rochester.edu/news/story/1774/eastman-dental-center-lands-a-532k-grant-for-teledentistry.aspx">https://www.urmc.rochester.edu/news/story/1774/eastman-dental-center-lands-a-532k-grant-for-teledentistry.aspx</a>
Capitol Dental Care in Oregon	Provision of community-based dental diagnostic, prevention and early intervention services to elementary, middle, and high school students	Originating site:expanded practice dentist hygienist and children who have not been receiveing dental care on a regular basis, located at elementary, middle, and high schools. Distant site: remotely located dentist	Oregon Dept of Heath Office of Health Information Technology				<a href="http://www.oregon.gov/oha/HPA/OHIT/Pages/Telehealth-Pilots.aspx">http://www.oregon.gov/oha/HPA/OHIT/Pages/Telehealth-Pilots.aspx</a>

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University of Tennessee Department of Ophthalmology Hamilton Eye Institute	A van with vision screening equipment provides real-time vision screenings to parts of Tennessee and Mississippi. Examinees with vision problems are referred to eye professionals, and the exams that are ambiguous are sent via store-and-forward for a detailed reading, diagnosis, and referral, as necessary						<a href="https://www.aucd.org/docs/resources/Childrensdoc.pdf">https://www.aucd.org/docs/resources/Childrensdoc.pdf</a>
University of Pittsburgh School of Medicine Ophthalmology Telemedicine Services	Real-time image transmission and video display to provide remote ophthalmic consultations, test interpretation capabilities, screenings for diabetic retinopathy.	Originating Site: Local emergency departments. ER provider must take a digital photo of the eye. Distant Site: UPMC.					<a href="http://www.upmc.com/healthcare-professionals/physicians/telemedicine/services/Pages/ophthalmology.aspx">http://www.upmc.com/healthcare-professionals/physicians/telemedicine/services/Pages/ophthalmology.aspx</a>

Agency	Specific Services the Technology is being Used For	Originating and Distant Sites	Funding Sources	Billing Revenue	Barriers	Solutions	Source(s)
Envision New Mexico	Telehealth initiatives at Envision New Mexico connect pediatric sub-specialty providers with community and primary care providers, providing up-to-date information on evidence-based guidelines and support for managing complex pediatric illness along with tools and resources to enhance prevention efforts.	Pediatric sub-specialty providers are connected with community and primary care providers, providing up to date information on evidence-based guidelines and support for managing complex pediatric illnesses along with tools and resources to enhance prevention efforts.					<a href="http://envisionnm.unm.edu/index.php/telehealth/">http://envisionnm.unm.edu/index.php/telehealth/</a> ; <a href="http://envisionnm.unm.edu/index.php/quality-initiatives/community/ahi/">http://envisionnm.unm.edu/index.php/quality-initiatives/community/ahi/</a>
Project Echo (75 Hubs in the US, based in the University of New Mexico School of Medicine)	Echo trains primary care clinicians to provide specialty care services in the United States and Globally via virtual clinics with community providers.	Expert specialist teams at an academic hub are linked with primary care clinicians in local communities. Primary care clinicians receive mentoring and feedback from specialists.					<a href="http://echo.unm.edu/">http://echo.unm.edu/</a>
Community Health Center (CHC) Pediatric Tele-Health Program in Connecticut	Links providers at school-based health centers with specialists. Behavioral health providers from CHC's locations across the state are invited to participate in twice- monthly programming to present challenging patient cases. Treatment advice and education is provided by an expert multidisciplinary faculty team comprised of senior staff from CHC's behavioral health team, school based team, and from the University of Connecticut.		Project ECHO, the Weitzman Institute				<a href="https://www.weitzmaninstitute.org/community-health-center-introduces-pediatric-tele-health-program-linking-providers-school-based">https://www.weitzmaninstitute.org/community-health-center-introduces-pediatric-tele-health-program-linking-providers-school-based</a>
Southside Telehealth Training Academy and Resource center	Teaches PCPs, LPNs, RNs, NPs, CNAs, paramedics, nursing school students, medical school students, social workers, LPCounselors, Pas, IT Specialists, and Health Care Administrators how to use advanced telemedicine systems to perform a telehealth encounter or consult.		Grant T55HP20285 from the Health Resources and Services Administration at the Virginia Health Workforce Development Authority				<a href="http://www.startelehealth.org/">http://www.startelehealth.org/</a>

Agency/Organization	Funding Opportunities	Website	Additional Information
US Dept of Health and Human Services Office for the Advancement of Telehealth	Telehealth Network Grant Program ( <b>TNGP</b> ), Telehealth Resource Center Grant Program ( <b>TRC</b> ), Evidence-Based Tele-Emergency Network Grant Program ( <b>EB TNGP</b> ), Rural Veterans Health Access Program ( <b>RVHAP</b> ), Licensure Portability Grant Program ( <b>LPGP</b> ), Rural Child Poverty Telehealth Network Grant Program ( <b>RCPTNGP</b> )	<a href="https://www.hrsa.gov/ruralhealth/telehealth/">https://www.hrsa.gov/ruralhealth/telehealth/</a>	
Telehealth Resource Centers		<a href="https://www.telehealthresourcecenter.org/reimbursement">https://www.telehealthresourcecenter.org/reimbursement</a>	
Private Payer Law		<a href="https://www.telehealthresourcecenter.org/toolbox-module/private-payer-law">https://www.telehealthresourcecenter.org/toolbox-module/private-payer-law</a>	Blue Cross Blue Shield of Michigan and Blue Care Network: Reimbursements for telemedicine and e-visits. BCBS with telehealth vendor American Well. ( <a href="http://www.valuepartnerships.com/wp-content/uploads/2017/06/2017-Telehealth-Fact-Sheet.pdf">http://www.valuepartnerships.com/wp-content/uploads/2017/06/2017-Telehealth-Fact-Sheet.pdf</a> )
Medicaid Reimbursement		<a href="https://www.telehealthresourcecenter.org/toolbox-module/medicaid-reimbursement">https://www.telehealthresourcecenter.org/toolbox-module/medicaid-reimbursement</a>	
Medicare's Telemedicine/Telehealth Payment Policies		<a href="https://www.telehealthresourcecenter.org/toolbox-module/medicares-telemedicinetelehealth-payment-policies">https://www.telehealthresourcecenter.org/toolbox-module/medicares-telemedicinetelehealth-payment-policies</a>	
State by State Laws and Policies		<a href="http://www.cchpca.org/">http://www.cchpca.org/</a>	

Other Barriers to Telehealth	Sources
Legal and licensing barriers preventing telehealth from crossing state lines	<a href="https://vector.childrenshospital.org/2014/04/teamwork-and-telemedicine-combine-for-lifesaving-rescue/">https://vector.childrenshospital.org/2014/04/teamwork-and-telemedicine-combine-for-lifesaving-rescue/</a>
Lack of access to the internet or smart phones	
The inability of some health care systems and small practices to afford the new telehealth technologies	
Lack of a system of reimbursement (for both the consulting specialist and the primary care team)	
Quality assurance and regulatory concerns	