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Telehealth Services Analysis, CO All Payer Claims Database Overview and Methodology

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Overview

The public Telehealth Services Analysis available at civhc.org provides important information about the utilization of telehealth services and payments made for telehealth services in Colorado. The analysis includes all public and private health insurance payers submitting data to the Colorado All Payer Claims Database (CO APCD), which represents the majority of covered lives (70% of medically insured) in the state. The CO APCD does not include roughly half of the self-insured employer covered lives and does not include federal programs such as Tricare, Indian Health Services and the VA.

This analysis tracks telehealth based largely on Governor Jared Polis' expanded definition in Colorado statute C.R.S. § 10-16-123(4)(e)(I)).

The intent of this analysis is to provide information related to the use of telehealth services across the state prior to, during, and after the onset of the COVID-19 pandemic.

This analysis helps answer several key questions about telehealth services pre- and post-onset of COVID-19:

- How has telehealth use changed as a result of the pandemic?
- Have the types of telehealth services patients are accessing changed?
- Are different providers now delivering telehealth services?
- How does the of use telehealth differ between counties across the state?
- How much are we spending on telehealth per person and as a state?
- What are the top behavioral health conditions being treated via telehealth?
- What are the trends in telehealth use post-pandemic?

Defining Telehealth and Telemedicine

This analysis includes both telehealth and telemedicine services. Users have the ability to filter results in the report to include both telehealth and telemedicine services together, or telehealth individually or telemedicine individually. in general, telemedicine refers specifically to remote clinical services, while telehealth refers to remote clinical services and also includes non-clinical services, such as provider training, administrative meetings, and continuing medical education, in addition to clinical services. Detailed definitions of both types of remote health care services are included below.

Telehealth: Telehealth is a way to provide health care service through telecommunications systems to facilitate assessment, diagnosis, consultation, treatment, education, care management, or self-management while the patient is located remotely from their provider.

Telehealth Includes:

- Synchronous interactions (both parties are present and interacting at the same time),

- Asynchronous interactions, or those not occurring at the same time (messages, images, or data communicated at one point in time and interpreted or responded to later, i.e. results of lab tests are shared and discussed between the patient and provider through a patient portal),
- Services provided through HIPAA-compliant interactive audio-visual communication or the use of a HIPAA compliant application via a cellular telephone, and
- Voice-only telephone communication (recently added with expansion of definition due to the COVID-19 pandemic).

This analysis expands the traditional definition of telehealth to also include:

- Remote monitoring – electronic transmission of patient physiologic parameters (e.g., weight, blood pressure, pulse oximetry, respiratory flow rate) from a distance to a health care provider, and
- Transitional care management provided through telehealth (per Centers for Medicare & Medicaid Services (CMS) inclusion).

Telehealth services in this analysis do NOT include services delivered by:

- Facsimile machine,
- Email, or
- Text messages.

Telehealth and Telemedicine Procedure Categories and Codes

Telehealth services were identified in the CO APCD through a combination of locating 1) CPT-4 and HCPCS procedure codes for services that can be provided in-person or via telecommunications, and 2) CPT-4 and HCPCS procedure codes that specifically describe telehealth services. In the first case, the service is identified as telehealth because the place of service or a modifier 95 (synchronous telemedicine via real-time interactive audio and video telecommunication systems) or GT (interactive audio and video telecommunication systems) used to specify it as a telehealth service. The 95 modifier is mostly used by private payers and GT by Medicare and Medicaid.

Telemedicine claims include a large number of subcategories as listed in the table below.

Telehealth/Telemedicine Codes

The following is a list of the CPT-4 and HCPCS procedure codes used to define what was included in telehealth and telemedicine. Codes with an asterisk (*) are those that specifically describe telehealth services.

Telehealth/Telemedicine Procedure Categories & Codes	
Telehealth (Asynchronous Communications, Remote Monitoring and Transitional Care Management)	**CPT-4 Procedure Codes**
Other Telehealth: Transitional Care Evaluation and Management Services	99495, 99496
Other Telehealth: Remote Monitoring	99444*, 99453-4*, 99457-8*,99091
Other Telehealth: Asynchronous Communication	99421-3*, 98969-72*, G2061-3*
Telemedicine (Synchronous Communication)	**CPT-4 Procedure Codes**

Telephone Services – Established Patient	• 99441-3*, 98966-8*
Office or Other Outpatient E&M Visits – New Patient	• 99201 - 99205
Office or Other Outpatient E&M Visits – Established Patient	• 99211 - 99215
Psychiatry Services and Procedures	• 90785 - 90899, G0177, G0410, G0444, G8510
Education and Training for Patient Self-Management	• 98960 - 98962
Health and Behavior Assessment/Intervention Procedures	• 96150 - 96171, 96127, G0445, H0032, H0004
Facility Telehealth Services	• Q3014*
Physical Medicine and Rehabilitation	• 97100 - 97799, G8978-80, 97010-97039
Special Ear, Nose, and Throat Services and Procedures. This category includes Speech Language Pathology.	• 92502 - 92700
Other	• All other procedures billed with a telehealth POS/modifier
Consultation Services	• 99241 - 99255, T1017
Virtual Provider-Patient Communication	• G2010*, G2012*, 99444 - 99458, 98969 - 98972
Virtual Provider-Patient Communication Federally Qualified Health Centers (FQHC), Rural Health Centers (RHC)	• G0071*, G2025*
Preventive Medicine Services	• 99381 - 99429
Nursing Facility Services	• 99304 - 99318
Hospital Inpatient Services	• 99221 - 99239; G0406-8*; G0459*
Prolonged Services	• 99354 - 99360, 99415-99417
Genetic Counseling	• 96040
Medical Nutrition Therapy Procedures	• 97802 - 97804
Emergency Department Services	• 99281 - 99288; G0425-7*
Critical Care Services	• 99291 - 99292; G0508*

These classification systems rely on different types of codes, Revenue Codes, Place of Service Codes, CPT/HCPCS, Pharmacy Claims, to identify behavioral health claims.

Definitions for Diagnoses

The Telehealth Services Analysis also provides information on the types of diagnoses that are most common for people accessing telehealth services. Below is a list of diagnosis categories that are available in the report and what is included in each category. CIVHC uses AHRQ Clinical Classification Software to group diagnoses in the CO APCD claims data.

Mental health conditions: Mental health conditions includes a wide range of mental health-related diagnoses that that can affect mood, thinking and behavior. Examples of mental health conditions include depression, anxiety disorders, schizophrenia, eating disorders and addictive behavior.

Endocrine/Nutritional conditions: An endocrine disorder results from the improper function of the endocrine system, which includes the glands that secrete hormones, the receptors that respond to hormones and the organs that are directly impacted by hormones. At any one of these points,

dysfunction can occur and cause wide-ranging effects on the body. Endocrine conditions include hyperthyroidism, diabetes, and Cushing's disease. Nutritional conditions also include hereditary metabolic disorders that respond to dietary treatment and deficiencies or excesses in the diet. Such conditions include obesity, iron deficiency anemia and other disorders of vitamin absorption.

Nervous system conditions: Nervous system conditions include infections, such as meningitis, encephalitis, polio, and epidural abscess. Additionally, structural disorders, such as brain or spinal cord injury, Bell's palsy, cervical spondylosis, carpal tunnel syndrome, brain or spinal cord tumors, peripheral neuropathy, and Guillain-Barré syndrome, are considered nervous system conditions.

Musculoskeletal conditions: Musculoskeletal conditions are typically characterized by pain (often persistent) and limitations in mobility and dexterity, reducing a person's ability to work and participate in society. Pain experienced in musculoskeletal structures is the most common form of non-cancer pain. Musculoskeletal conditions include osteoarthritis, rheumatoid arthritis, tendonitis, bone fractures and fibromyalgia.

Diseases of the respiratory system: Diseases of the respiratory system affects the lungs and other parts of the respiratory system. Respiratory diseases may be caused by infection, by smoking tobacco, or by breathing in secondhand tobacco smoke, radon, asbestos, or other forms of air pollution. Respiratory diseases include asthma, chronic obstructive pulmonary disease (COPD), pulmonary fibrosis, pneumonia, and lung cancer.

Diseases of the circulatory system: Circulatory system diseases are any conditions that affect the heart or blood vessels including blood pressure conditions, high cholesterol, and arrythmias. The circulatory system, also called the cardiovascular system, keeps blood moving in the body. Diseases of the circulatory system include high cholesterol, high blood pressure, heart attacks, stroke and atherosclerosis.

Diseases of the digestive system: Common digestive disorders include gastroesophageal reflux disease, cancer, irritable bowel syndrome, lactose intolerance and hiatal hernia. The most common symptoms of digestive disorders include bleeding, bloating, constipation, diarrhea, heartburn, pain, nausea and vomiting.

Diseases of the genitourinary system: Genitourinary diseases are primarily urologic conditions, including urinary tract infections, kidney stones, bladder control problems, and prostate problems.

Additional Methods

Utilization and Spending

Cost and utilization associated with claims were defined as:

Cost: Total allowed amount (health plan and patient responsibility) from all telehealth/telemedicine claim lines. This measure is displayed as a per person per year (PPPY) dollar amount.

Utilization: A telehealth /telemedicine service is defined as a unique combination of claim service line (whether facility or professional-based), member and service date. This measure is displayed as a rate of number of telehealth services per 1,000 people.

Method Used to Define Diagnosis Categories
The principal diagnosis for each telehealth/telemedicine service was classified into summary and detailed categories using AHRQ Clinical Classification Software. Summary level information is based on the classification of diagnoses to the body system involved (e.g., respiratory conditions, musculoskeletal conditions, digestive conditions, etc.).

Method Used to Define Provider Type
Service providers are classified to their National Plan & Provider Enumeration System (NPPES) taxonomy. An aggregation of NPPES categories was also created to identify and provide a summary of key types of providers – primary care, behavioral health, OB-GYN, internal medicine subspecialties, surgery.

Federally Qualified Health Centers (FQHC) and Rural Health Centers (RHC) are displayed as a separate Provider Type (Provide Taxonomy: '261QF0400X' and '261QR1300X'). We are only capturing FQHC and RHC claims when they are billing under their facility taxonomy, if a service provider at a FQHC or RHC facility bills under a different taxonomy our current methodology does not capture that nuance. For example, if a provider at an FQHC bills as a "primary care" provider they will be included in the primary care provider category, as opposed to an FQHC.

The primary care and behavioral health categories were based largely on provider taxonomies in the definition of primary care that was established for the Colorado Primary Care Payment Reform Collaborative.

Race and Ethnicity
Race and ethnicity data is collected in the CO APCD following the Office of Management and Budget (OMB) guidelines. All categories are based on self-identification. OMB requires a minimum of five race categories: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White. OMB's minimum categories for ethnicity are: Hispanic or Latino and Not Hispanic or Latino. Only race and Hispanic ethnicity indicators are required for submission by a payer under CIVHC's Data Submission Guidelines (DSG). Any other parameters are voluntary.

Please note that the data does not yet fully represent the race/ethnicity distribution in the CO APCD as all payers (public and private) are working on improving their data collection and submission. CIVHC continues to work with payers to improve these fields.

Behavioral Health
Behavioral health services is an umbrella term for behavioral factors that can impact health, including mental health conditions, stress-linked physical conditions, and substance abuse conditions. Behavioral health is defined by the Agency for Healthcare Research and Quality (AHRQ) as a term that addresses any behavioral problems bearing on health, including mental health and substance abuse conditions, stress-linked physical symptoms, patient activation and health behaviors, including those that may contribute to chronic conditions such as obesity.

Claims for behavioral health services are identified in the CO APCD through admitting, principal or diagnoses and procedure codes on claims. "Behavioral Health" is not a designated category of claims in the CO APCD but rather a subset of medical claims. However, CIVHC is able to conduct analysis of behavioral health claims by using diagnosis and procedure codes as defined by the following sources:

- Health Care Cost and Utilization Project (HCUP) - Clinical Classification Software (CCS) tables - diagnosis and procedure codes grouped by clinical categories
- HEDIS measures - behavioral health codes sets

Data Vintage

This report is based off claims data in the CO APCD data warehouse refresh on July, 2022. For more information about number of claims in the CO APCD during a particular reporting year and data discovery information regarding payer submissions, please visit our website at civhc.org or contact us at info@civhc.org.

For more information or additional questions, feel free to contact us at info@civhc.org.