PRACTICE MANAGEMENT MATTERS:

Telehealth

Synopsis with Hyperlinks

(Click on green text to read more about each topic)

Situation:

During the COVID pandemic, Cook physicians acted quickly to learn the basics of and provide medical care through telehealth. However, as the world returned to "normal," many of us fell back to all or mostly in-person, pre-pandemic workflows. This report is a dive into the subject of telehealth as it applies to our organization—to see who among us is using it versus who is avoiding it (and why), to fully understand the benefits of telehealth, to assure our decisions are informed and not fearful ones, and to illustrate and ascertain that our organization is doing all it can to support the use of this technology in a way that contributes to Cook Children's superb standard of care.

Background:

1. History of telemedicine - including the Australian Flying Doctors and the Nebraska Psychiatric Institute
2. Benefits of telemedicine – there are many!
3. Drivers toward more telemedicine - many of which tie in directly with strategic goals of our organization
4. Cook departments using the most outpatient telemedicine - Top 10 (spoiler alert): 1) Urgent Care, 2) General Pediatrics, 3) Psychiatry, 4) Neurology, 5) Genetics, 6) Endocrine, 7) Developmental Pediatrics, 8) Urology, 9) GI, and 10) Pulmonary
5. Telemedicine as compared to in-person volumes - Spoiler Alert—telehealth is only 3-5% of total
6. The local geographic impact of Cook's telemedicine
7. Positive mindset about telemedicine within PM Committee
8. Shared input from some of our early and enthusiastic physician adopters within Cook, including their preparation and communication with participating patients/caretakers to lay the groundwork for success
9. Cook's infrastructure for telehealth - robust and ready to use, which includes EPIC automation for insurance clearance, step-by-step scheduling help for caretakers, tech help line, tip sheets, and billing/coding vigilance
10. Learning pearls from Cook's Virtual Urgent Care, a well-oiled machine
11. Cook Children's Experience Team's affirmation - families/caregivers seem to like telemedicine

Assessment:

There is room for telemedicine within the larger scope of the medical care we provide at Cook Children's. Telehealth can help us to serve children living far away or in underserved areas and also children nearby with logistical hurdles. It can help us combat the looming shortage of pediatric specialists and staff. Convenient for families, it may also add flexibility to physicians' lives, offering hope for greater physician wellness. Cook Children's has a telehealth infrastructure already in place—let us spread the word of the benefits of telehealth, learn ways to utilize and customize these tools to our individual needs, and not be afraid to dig in deeper.

R: Recommendations

1. Apply scheduling strategies
2. Help caretakers to prepare and establish expectations for the visit
3. Prioritize good communication at and around the time of the visit
4. Have a plan for technological challenges
5. Be familiar with and refine your webside manner, somewhat different from in –person bedside manner
6. Have a plan for labs and pharmacies
7. Make use of after visit summary to append notes and handouts

Ready to Get Started?

Let us help you! Contact the Virtual Health team at VirtualConnect@cookchildrens.org to get started!

PRACTICE MANAGEMENT MATTERS

Telehealth

S: Situation (and relevance of the topic)

- During the COVID pandemic with its need for social distancing, Cook physicians acted quickly to learn and offer medical care through telehealth.
- However, as the world returned to "normal," many of us returned to all or mostly in-person, pre-pandemic workflows.
- This report is a dive into the subject as it applies to our organization—to see who among us is using telehealth versus who is avoiding it (and why), to fully understand the pros and cons of telehealth, to make sure that our decisions to use it or not are well- informed and not fearful ones, and to make sure our organization is doing all it can to support clinicians' decisions and use of this technology in a way that upholds Cook Children's superb standard of care.

> "Access to good healthcare shouldn't depend on where you live."
>
> – Victoria Beckham

B: Background

What is the History of Telemedicine?

- **Hello, Telephone and Radio Communication**: Early telehealth started with the invention of the radio (1895, Guglielmo Marconi) and the telephone (1896, Alexander Graham Bell). Physicians could provide medical advice remotely, particularly during emergencies. Onshore doctors could guide the medical care of crews on ships.

- **The Australian Royal Flying Doctor Service, the "Flying Doctors"**
  - Rev. John Flynn journeyed through Australia reporting on the medical needs of those in the Outback.
  - He established the Australian Inland Mission in 1912 (clinics).
  - For more funding and support, Flynn told motivating stories like that of patient Ruby Plains, who through his pain journeyed to his nearest postal station, where the postman--the only person trained in First Aid for miles around-- received help from medical experts via telegraph in Morse code and performed surgery on his office table with their help.
  - A WWI fighter Clifford Peel (who died in battle, sadly) gave Rev. Flynn the idea of using planes to carry medical teams to patients in need, and the Flying Doctors was formed in 1928
  - The telegraph was a central part of their care and communication, then Radio

- **Nebraska Psychiatric Institute, Mass General, and Telepsychiatry**
  - Nebraska Psychiatric Institute (NPI) in **1959** started earliest videoconferencing to provide long-term group therapy and specialist consultations to patients at state mental hospital 112 miles away
  - NPI influenced others such as Mass General Hospital, which started video psychiatric consultations in 1969 at their Logan International airport clinic, expanding to middle schools, VAs, and prisons
  - Between 1970s-90s, these services spread, research began about its closing of distance challenges, and practice guidelines began to be made. Telepyschiatry was seen as equivalent to in-person care in diagnostic accuracy, treatment effectiveness and patient satisfaction

Nebraska Psychiatric Institute

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- **NASA**
  - In the **1960s** with the prioritization of the space program, NASA developed ways to monitor and manage the health of astronauts remotely
  - They devised physiologic monitoring systems to track vital signs in real time
  - In the Mercury and Gemini programs in the early 1960s, sensors were attached to astronauts' bodies and transmitted to monitoring stations and ground-based medical teams
  - Devices which could function in the unique environment of space were integrated into space suits.
  - Some of the portable devices became models for portable cardiac monitors used today
  - Telehealth to Alaska and Canada and other remote areas expanded in the 1970s and 1980s
  - As part of NASA's ATS-6 Satellite Project (1971-5), satellite technology, including 2-way audio and visional communication, connected city physicians with healthcare teams in remote Alaskan villages
- The **US Military** adopted telehealth to help care for troops in remote areas starting in the1990s, among them:
  - US Army established TATRC (Telemedicine and Advanced Technology Research Center) in 1991 to develop telehealth applications and to research teleradiology and telepathology's impact. Mobile telemed units allowed for real-time communication with medical specialists from the field.
  - US Dept of Defense (DoD) ran test projects for telemed consultations across the US and also asynchronously with military stations in the Pacific (PATH Network, Pacific Asynchronous Telehealth)
  - Navy established the Shipboard Telemedicine Program, which led to broader adoption in both military and commercial maritime situations
- **Modern Telehealth Era**
  - Advancements in EHRs, mobile devices, home/remote monitoring devices, and telehealth platforms have led to more and more telehealth usage
  - Regulatory and reimbursement policies have evolved to make way for further use of telehealth
  - COVID-19 Pandemic created the necessity for telehealth and a boom in its use due to lockdowns and social distancing as well as an overburdened healthcare system
- **Future of Telehealth** – Integration with AI and machine learning. Dax Copilot is here at Cook!
  - Ongoing integration of AI into telehealth platforms will provide predictive analytics and help with arriving at a differential diagnosis and personalized treatment plans, and assist in patient education.
  - Telehealth is expected to expand further into remote robotic surgeries, augmented reality for training healthcare providers and virtual reality as part of treatment plans

What are the Benefits of Telemedicine?

- **Improved access to health care, better continuity of care and specialty care**
  - Care at or close to home, shorter travel time and wait time
  - Bringing together multispecialty care teams (even geographically distant ones)
  - Fewer no shows (assuming digital literacy and good prep) means more patients can be seen
  - Clinician gets a look at home environment, helpful insights into social determinants of health
- **Reduction in health care cost**
  - Timely ongoing care of complex pts can mean fewer complications, sick visits, and hospitalizations
  - Prevention of unnecessary and costly emergency department visits

  - Possibility of staying in rural/local hospital without need for transfer
  - Medical offices/groups may be able to reduce overhead due to reduced need for staffing, utilities, size of office space, and supplies
- **Convenience and time-savings**
  - Without the need for patients and their caretakers to travel from home, there is saved time
  - Without the need travel or wait in a waiting room, there is less disruption (even if there is a wait, families can be doing things around the house, etc).
  - There is an option for more flexible hours/scheduling (whole staff/building not needed)
- **Addressing Physician/Nursing/Staffing Shortages (projected to worsen) through streamlining**
  - Greater efficiency, fewer staff needed, and they can be physically distant
  - Fewer no shows
  - Staff can be scaled up perhaps more quickly than in-person in a health emergency/epidemic
- **Improved clinical outcomes**
  - Collaboration with specialists for management of pts at higher acuity level (ie NICU partnership)
  - More timely care of earlier symptoms
  - May allow for more frequent check-ins to be sure medicine is being taken appropriately and to more readily address complications/side effects/questions
- **Increased patient and provider satisfaction**- people like CONVENIENCE and in most cases appreciate greater, more frequent engagement
- **Better infection control**
  - Reduced risk of spreading COVID, flu, and other infectious diseases
  - Reduced risk for immunocompromised or high-risk patients, who can avoid exposure
- **The possibility of greater convenience/flexibility for clinicians**
  - Option of working from home, on days or at hours which fall more into the clinician's life-style
- **Improved health equity**-- reducing disparities (this point may seem redundant, as it incorporates many of the prior, but it is a very important goal in itself)
  - Expansion of medical home AND specialized care to underserved, under-resourced and remote areas
  - Lowered costs, including less expense toward transportation and unnecessary emergency room visits, makes healthcare more accessible
  - Increased accessibility for people with disabilities, reducing challenges in mobility and allowing for accessibility features like screen readers, captioning, and ESL
  - Better management of chronic diseases, pregnancy, post-surgical care, and mental health issues through more regular (more frequent), remote check-ins
  - More regular preventative care through regular check-ups and risk screenings
  - Culturally competent care- options for meeting the cultural and linguistic needs of patients
  - **CAVEAT**: There are many ways telehealth contributes to health equity, but there are challenges that must be overcome to maximize the benefits.
    - We must work to lessen the **digital divide**. We must decrease gaps in digital literacy, device accessibility, and internet connectivity
    - Reimbursement policies and regulations should support equitable telehealth access for all

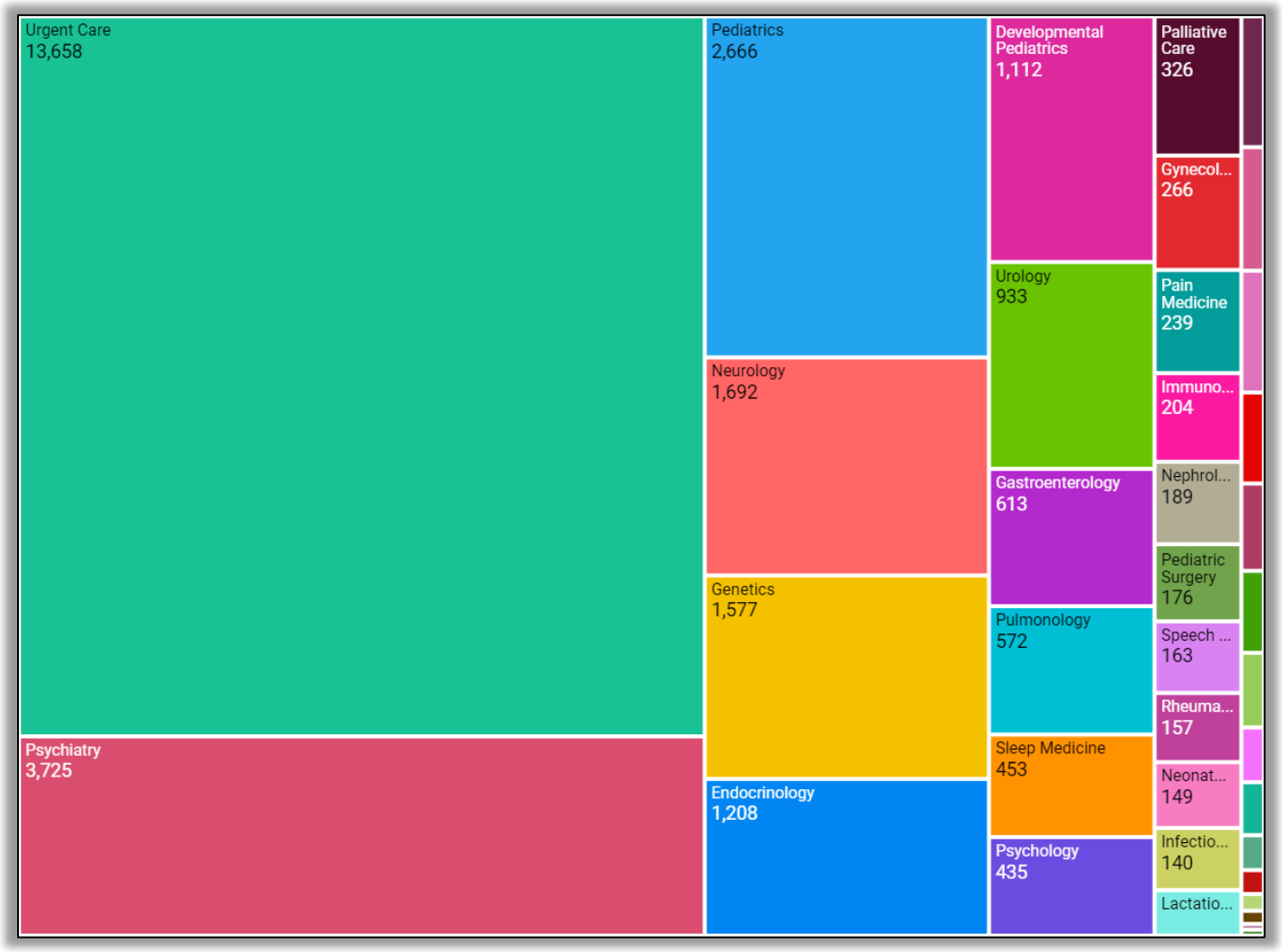
What are the Factors of Necessity Driving Telehealth?

**Note how many of these points relate to system initiative and priorities.

- **Global Pandemics and the like**—COVID-19 gave us a firm push, but other local outbreaks or epidemics—such as measles, flu, Mpox, or whatever is next-- could have a similar impact. We at Cook strive to be leaders and proactive collaborators in the care of patients across North Texas in any event.
- **An identification of inequities** in pediatric health care, such as distance to health care, problems with transportation, combined with a desire to do better. **Health Equity** is a priority of Cook Children's.
- **Healthcare Shortages** of medical care clinicians, including pediatric generalists and specialists, APPs, and nurses, and a shortage of staff. There are concerns that shortages will worsen over the next few years--Cook is determined to stay ahead of the trend and equip itself with outstanding physicians.
  - Cook clinics have faced falling nurse and MA staff availability over the last several years, with shortages especially concerning during the COVID-19 pandemic. Cook Children's continues to increase wage offerings as needed to stay competitive.
  - The Pediatric Residency Match saw an unprecedented number of unfilled positions in spring 2024 -- 252 positions were unfilled, an increase of 164 from 2023. The percentage of spots filled went from 97% in 2023 to 92% in 2024. There is concern for what this will mean for not just the number of pediatricians but also the number of pediatric specialists in the coming years. Shortfalls are expected.
  - Compensation across the nation for pediatric specialists is often shown to be the same or slightly less than general pediatricians, making it increasingly difficult to draw pediatric residents to pursue specialty training. In addition, the compensations for all pediatric specialists and generalists is less than comparable physicians caring for adult patients. This needs to change.
- **A broad service area**: patients living far away (and even many living nearby but with difficult scheduling and transportation challenges) can be seen more easily and with less planning if there is a virtual option. Cook Children's is caring for an ever widening geographic area of North Texas and must be open to ways to best cater to the patients under our umbrella of care.
- **Crisis in pediatric mental health care.** Since even before the pandemic but even more so during and after it, Cook Children's, like other children's hospital around the United States, has been caring for an unprecedented number of pediatric and adolescent patients with anxiety, depression, suicidality, and other mental health disorders. The Cook Emergency Department has seen a surge in visits for mental health emergencies. Cook Children's is committed to combatting the mental health crisis and to helping the heartbreaking numbers of children and teens in need of support. Forward-thinking and ambitious, Cook provides extensive Behavioral Health offerings, REACH training for its primary care clinicians, the Joy Campaign and Raising JOY podcast, in-primary care office mental health specialists, and plans for more. Telehealth also falls into the toolbox, as it can allow for more frequent, more convenient medical visits for patients with mental health concerns over a larger area. And the comfort of staying at home can increase the likelihood that a child with mental health issues such as social anxiety will get help.
- **Patients are demanding it** – if not from us, then whom? Cook's Customer Service imperative--including our sincere concern for our patient families and our hope that they will have a high "Likelihood to Recommend" us—makes it important to consider patient/caretaker satisfiers.

Which Groups are Using Telemedicine the Most within Cook Children's?

Cook Telemedicine Visits by Group 10/1/23-5/13/24



Above: **Top 10 Departments using Telehealth within Cook:** 1) Urgent Care, 2) General Pediatrics, 3) Psychiatry, 4) Neurology, 5) Genetics, 6) Endocrine, 7) Developmental Pediatrics, 8) Urology, 9) GI, and 10) Pulmonary.

Next page: **Top 5 Primary Care Groups using Telehealth within Cook**: 1) STM (school-based medicine, a 100% virtual service line), 2) CCPC (Collin County), 3) FPPC (Forest Park), LFPC (Lake Forest), and SWPPC (Southwest FWP)

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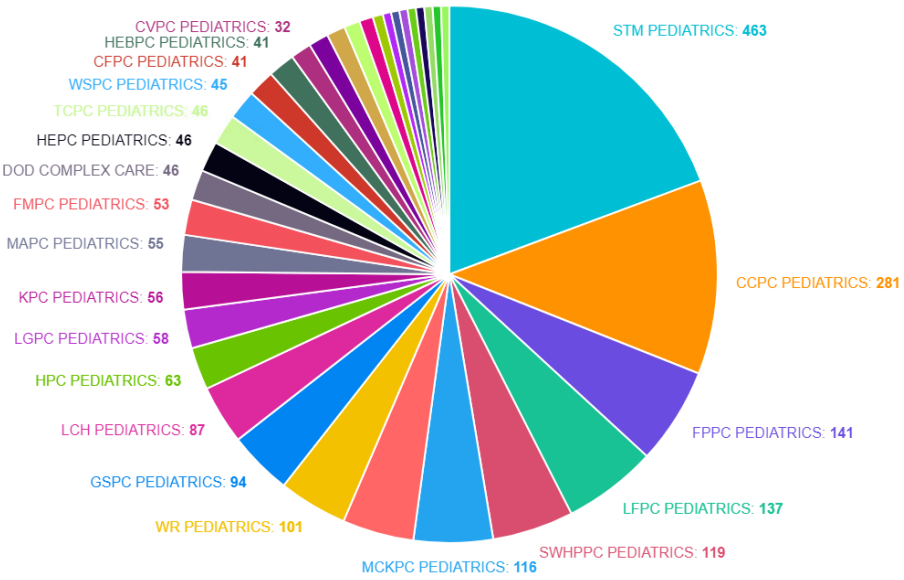
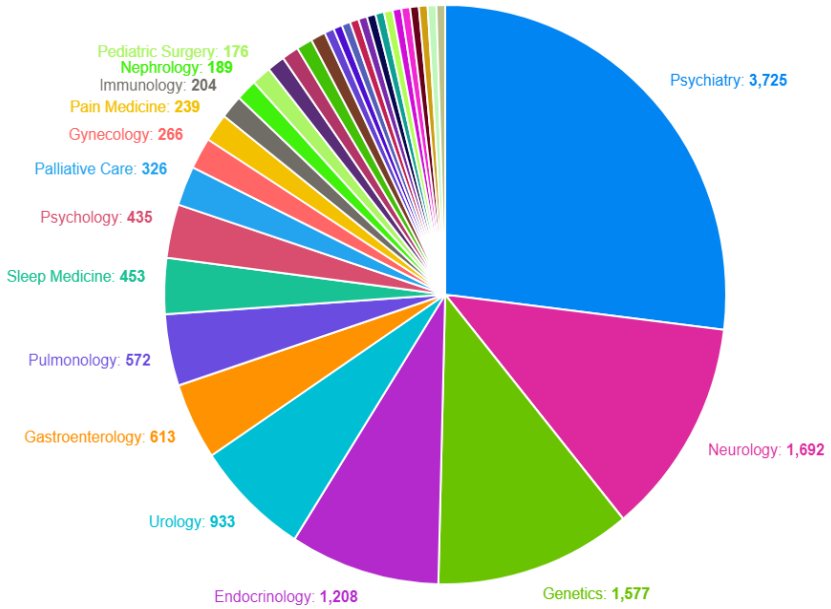
A Breakdown of Primary Care and Specialty Care Use of Telemedicine 10/1/23 – 5/13/24

Primary Care



Specialty Care



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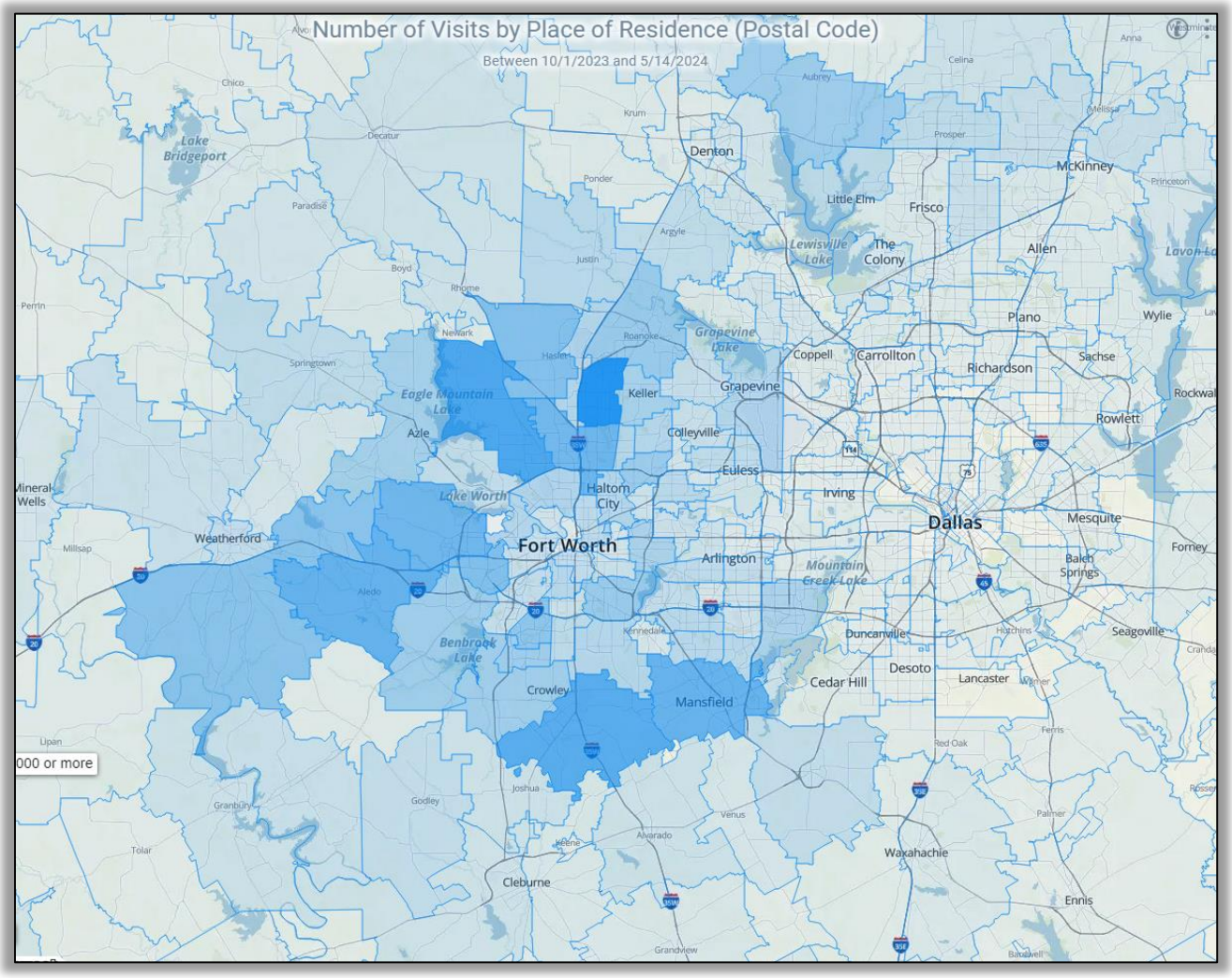
How Much Telemedicine are we Using Compared to In-Person Visits?

- **ANSWER:** Overall, virtual visits make up **3-5% of TOTAL CCPN Ambulatory visits.**
- Considering only **Cook Urgent Care**, Virtual UC makes up **6.8-13.2%** of all Urgent Care visits.
- Considering just **Specialty Ambulatory**, virtual makes up **5-11%** of visits.
- Considering just **Primary Care**, virtual makes up **0.5-2.5%** of visits.
- During the pandemic, we used telehealth quickly and heavily out of necessity. Due to a change in dashboards, we cannot provide a percentage of visits. But see the raw numbers below:
    - In **Feb 2020** (just before the pandemic began to disrupt functioning of businesses, school, and hospital systems, cook saw only **300 virtual visits system-wide**
    - In **April of 2020** (just after the pandemic hit), Cook saw **16, 900 virtual visits**.

Which of our Geographic Groups Are Most Using Telemedicine?



This is a sliding scale from WHITE to darker and darker BLUE, with darkest blue 1,000+ visits from that zip code.

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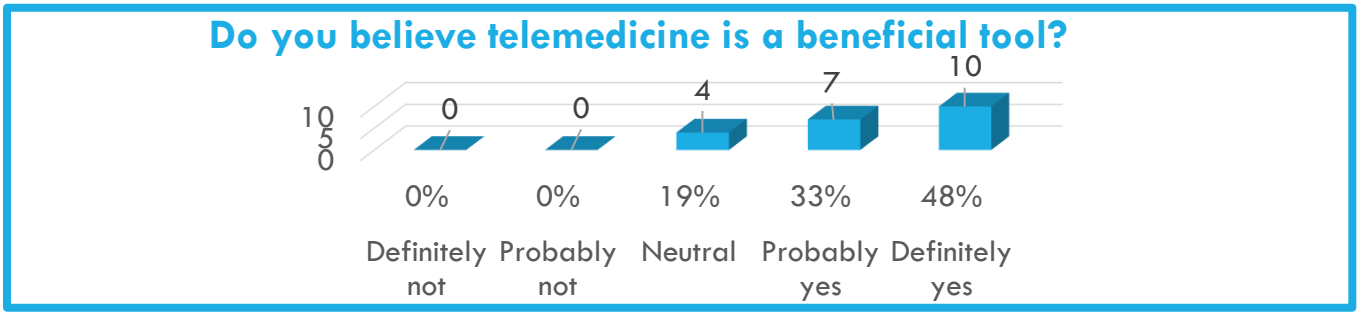
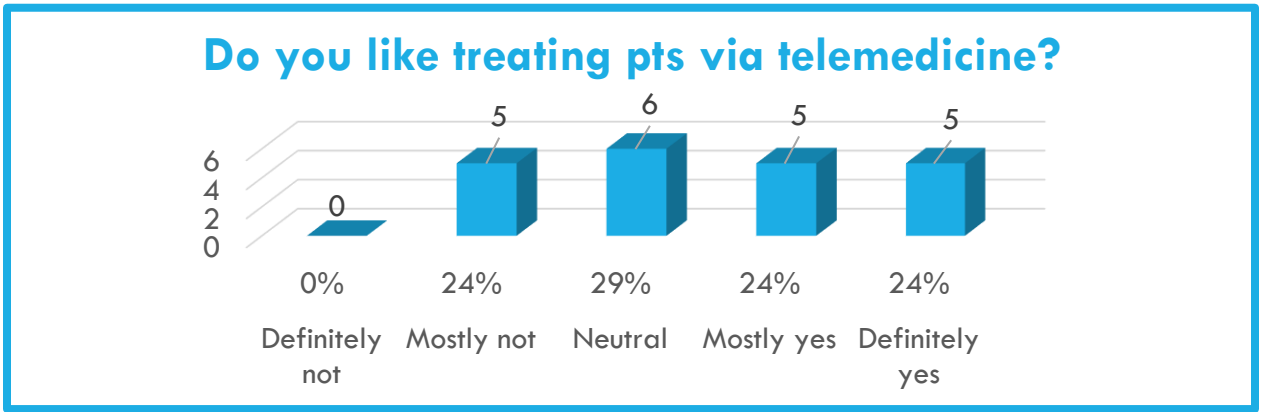
What Does our Practice Management Committee Think about Telehealth?

The Cook telehealth group surveyed our Practice Management Committee about attitudes toward telehealth. Respondents included 15 physicians, 1 nurse practitioner, 1 practice manager, and 4 practice directors.

The answers reflected **positivity about telehealth**





What are our Telehealth Users Saying?

Dr. Justin Smith, Medical Director of Primary Care and Head of Virtual Urgent Care, was an early adopter and promoter of telehealth for Cook.

- **Pros:**
  - It provides a good interpersonal experience, similar to in-person
  - It is a big satisfier with families, especially those who can't get in on a certain day and who therefore appreciate the convenience
  - It has gotten easier and easier to use—"In my view, it is about as easy as it can be"
- **Cons:**
  - There is a limited niche for telehealth's usefulness, better for certain topics or fields than others. And even within the scope of primary care, for example, "there is a tight list of problems for which it is better than a portal message but doesn't merit an in-person visit."
  - Consequently, there can be a learning curve during which "you have to figure out when you can and can't use it." At this point, some of the bread and butter of general pediatrics such as ear concerns or sore throat are not good options for virtual care.

  - The technology is quite good overall and easy to use, but it is still lagging in some ways. For example, there was hope that families would be able to equip themselves with gadgets to allow physicians to look into children's ears with the help of their iPhone. However iPhones changed quickly, and—with each new model—attachments and molds became unusable and outdated.
- **Scheduling:**
  - All sick appointment slots in his day can be scheduled as in-person or telehealth, so the option is there all the time
  - However, Dr. Smith has noted that in his personal practice only about 1-5 caregivers per week opt to schedule their children as telehealth rather than in person. "Demand has really fallen off," he says, "They rarely choose the portal."
  - Dr. Smith does, however, acknowledge how busy the Virtual Urgent Care is and the excellent service it provides to patient families
- **Troubleshooting:**
  - Staff usually complete check-in for families and reach out to families if not logged on after appointment time; Dr. Smith himself does not open the visit unless the family is there.
  - There are a couple of staff members—and Dr. Smith says there really should always be 1-2 per each office—who know how to trouble-shoot most problems logging in. While there is a tech help number, he feels it is unrealistic to think that families will willingly go that extra step.
- **Hurdles relating to technology:**
  - As stated above, there are some common problems logging in for which there should be a well-informed staff member
- **Hopes for the future**:
  - New tech solutions to help in doing ear and cardiac exams remotely

Urologist Dr. Jeff Pugach, in addition to his MD, has his Master's degree in Healthcare Informatics and has been an early adopter of telehealth, also encouraging his department to make use of it.

- **Pros:**
  - He enjoys offering the option of telehealth to those patients who travel from far away, even from Waco and Tyler. "Families love it and appreciate not having to take the time to come in physically."
  - He enjoys the accessibility to more than one family member who might be in different places, for example the parents may be in separate workplaces while the teen may be at school, able to access the visit from there and not having to miss as much class
  - He finds it an excellent way to review imaging studies with families, as he can share his screen and go over the studies in the same way he would in the office, while sparing families the experience of taking off work, driving in and parking, waiting in the waiting room, etc.
- **Scheduling:** He has telemed visits mixed in with his other in–person visits and just enters an empty clinic room to connect with telemed patients. Although numbers vary greatly day to day, he estimates that out of 26-27 patients, he may see 2-4 via telehealth.
- **Troubleshooting:** His nurse and staff have become accustomed to his use of telehealth, and his nurse checks in with families who may be waiting for a telehealth visit. Dr. Pugach feels he does not have to concern himself with troubleshooting technology, as his team does this. He can focus on medicine.
- **Hurdles related to technology:** there can be limitations related to access to broadband, though during COVID there were grants within the state of Texas to help people attain broadband
- **Hopes for the future:**

- That it were even easier than it is—"It is not yet FaceTime-easy," he says, "and I wish it were because families are used to FaceTime and expect something similar."
- "That I and other physicians can eventually designate larger blocks of time or even full days to telehealth and experience some of the convenience it can offer not just for patients and their families but for the clinicians themselves." He sets the scene, "imagine a physician's being able to wear their comfy house slippers and sip their own coffee at their own home while seeing patients via telehealth, taking a brief break to catch their child's school play performance (which they otherwise would have missed), and then returning to see more patients."

Clinical Genetics' Dr. Diana Carrasco has found the Genetics specialty to be a good fit for telehealth as well as a good solution to service patients who live far from a genetics specialist.

- **Pros:**
  - Access for those living far away in underserved areas or for those living anywhere (near or far) with transportation difficulties
  - Very well-suited to the field of genetics
  - Addresses the discrepancy in supply vs demand for geneticists, as the number of geneticists is not increasing along with the increased patient load
  - Increased flexibility for physicians and other clinicians—ability to work from home or elsewhere, as long as there is a private, quiet, appropriate setting
- **Cons:**
  - Sometimes families are not in an ideal setting for a meaningful and private visit—they may be in a car or even in a public place such as a store
  - Tech issues can pose a challenge
- **Scheduling:**
  - She does a telehealth-only day on Fridays and also offers many patients follow-up appointments through telehealth on any day/time
  - Patients of the genetics team cannot book their own appointments, and new patients are not told of the option of a telehealth visit for their first visit. In this way, they softly guide first visits to being in-person. If a caretaker should ask about the option of telehealth, however, their situation is considered on an individual basis. Sometimes, if families live >2 hours away AND if they have been told that telehealth comes with some limitations which might make a subsequent inpatient visit necessary, they can be seen even first time via telehealth. A visit to rule out Marfan syndrome, for example, should be in person because of the physical exam criteria required for diagnosis.
  - Genetics dept discussed the indications for in-person vs telehealth visits and concluded it would not be feasible to require front staff to review this list when scheduling. Direction comes from physicians.
- **Troubleshooting:**
  - Clinic staff helps patients trouble-shoot, and—from her experience—it is very infrequent that the troubles are so great as to require rescheduling
- **Customer service:**
  - Physicians notify clinic staff if running late so that staff can reach out to family to let them know
  - The concern in some other departments of labs needing to be done which cannot be done via telemedicine is not something which worries Dr. Carrasco. She explains that a majority of patients get cheek swabs done which arrive to caretakers' homes by mail, whether the initial genetics visit is in person or via telehealth. For other labs, she can recommend that a patient's PCP order them locally.

Behavioral Health's Dr. Kristen Pyrc has made use of telehealth within her department for the lasts 4 years.

- **Pros:**
  - Increased access to mental health services, with a reduction of drive time for family, as some patients come from over an hour away
  - More frequent follow-up: they can come in once yearly and then can do telehealth the rest of the time. Telehealth "saves the time parents and kids spend in traffic getting to the office and miss less work and school, and "the lessened burden helps them come consistently."
  - Reduction of drive-time for clinicians, helped work-life balance
- **Cons:**
  - "Only minor complaints," she says—families trying to do a telehealth visit for their child while doing something else like seeing their own doctor or going through a drive-thru line or shopping, sometimes signing on without their child present. In those cases, there needs to be "a little redirection or coaching, and it's fixed."
- **Scheduling:** She says the psych group has designated days for in office versus telehealth visits, and families can use online scheduling to book established patient telehealth appointments. Consolidating telehealth for a certain day means that the doctor does not need to drive to Fort Worth on that day, and this has helped burnout.
- **Troubleshooting:** Since their department has been using this method for years already, they encounter fewer and fewer technological issues. However, when families have trouble signing on, the BH front desk assists them and notifies the physician through TEAMS messaging of any delay.
- **Customer Service:** Staff will notify families if physicians are running late, but there is not a check-in welcome communication/interaction.
- **Errors in visit type:** Not relevant to behavioral health, since all established patient visits are of one type.
- **Hurdles related to technology:** they have the technology (phone or tablet) but sometimes have trouble navigating the portal. Some—like some older caretakers or grandparents-- may choose in person visits.

Gynecologist Dr. Shanna Combs has found a way to incorporate telehealth into her daily schedule well.

- **Pros**:
  - Greater patient access to healthcare: she sees many patients from throughout Texas
- **Cons:**
  - Need for good broadband access (but sometimes families with smart phones can park outside a school and have access that way), sometimes confusion about audio
- **Scheduling:** telehealth visits at beginning of the morning and afternoon, not mixed in. Staff does the booking, not the families themselves.
- **Troubleshooting/Prevention of problems:** When scheduled, caretakers are told to have MyCC active, to check that it is working, and to remember their password. This preparation prevents some of the issues. They are advised they need their Zoom app and should check in 15 minutes prior to appointment. The biggest issue is that they have not been given Zoom permission to use their microphone and cannot connect to audio until physician signs in. Clinician may have to message through the chat that they need to connect to audio. Click here to see an example email that the clinic sends to the patient's guardian prior to the visit.

- **Customer Service:** Family checks in. They receive instructions from staff as above. If they clinician gets way behind, staff will contact the family. Before the visit, however, families are warned that they will likely have to wait in the same way that they wait in a waiting room. The physician may run a little late.
- **Visit types:** New and established patients are welcome, as long as a physical exam is not required. If concern is history-based, often counseling and discussion can proceed without a physical.
- **Labs:** She finds out their preferred labs, orders the labs, prints the lab order to be scanned, and sends a Cook message with the order attached (For Labcorp, Quest and Cook the lab should be seen in the system, but she also provides a copy).

Neurologist Dr. Dave Shahani has been using telehealth regularly with positive results.

- **Pros:**
  - The flexibility for the physician, including the ability to work from home
  - The flexibility for the families—"Initially the hope was to help families living far away, but even local families love it," he says.
  - No-show rate is very low
- **Cons:**
  - Tech issues
  - Designing the schedule can be challenging, especially on days when there are both in-person and telehealth visits, as telehealth visits in theory start with the physician at the assigned time whereas in person involve nurse vital signs, etc
- **Scheduling:**
  - He does a half day of video visits twice monthly from home, and—even though he says he doesn't get other work done and is focused on his patients—there is a comfort in being at his own home
  - When not considering his half days of telemedicine, he has 1-4 telehealth visits mixed in with in-person visits
  - He offers telehealth to all patients not needing neuro exam
  - He has a rule that patients can have at most 2 telehealth visits in a row before needing to come in person
- **Troubleshooting:**
  - The microphone is the source of most issues and can take a while to load
  - Telehealth sometimes requires patience when it comes to productivity
  - Sometimes if struggles continued, the visit has to be completed as a phone visit
  - Prevention of Issues: Dr. Shahani's Neuro group has a list of instructions to help get onto the portal and Zoom, as well as steps to start the visit. It is under the SmartPhrase .MDMYCHARTINSTRUCTIONS
- **Customer Service:**
  - Families do get some preparation for telemedicine. Click here to see an example email that the clinic sends to the patient's guardian prior to the visit.

What is our Current Infrastructure for Telehealth?

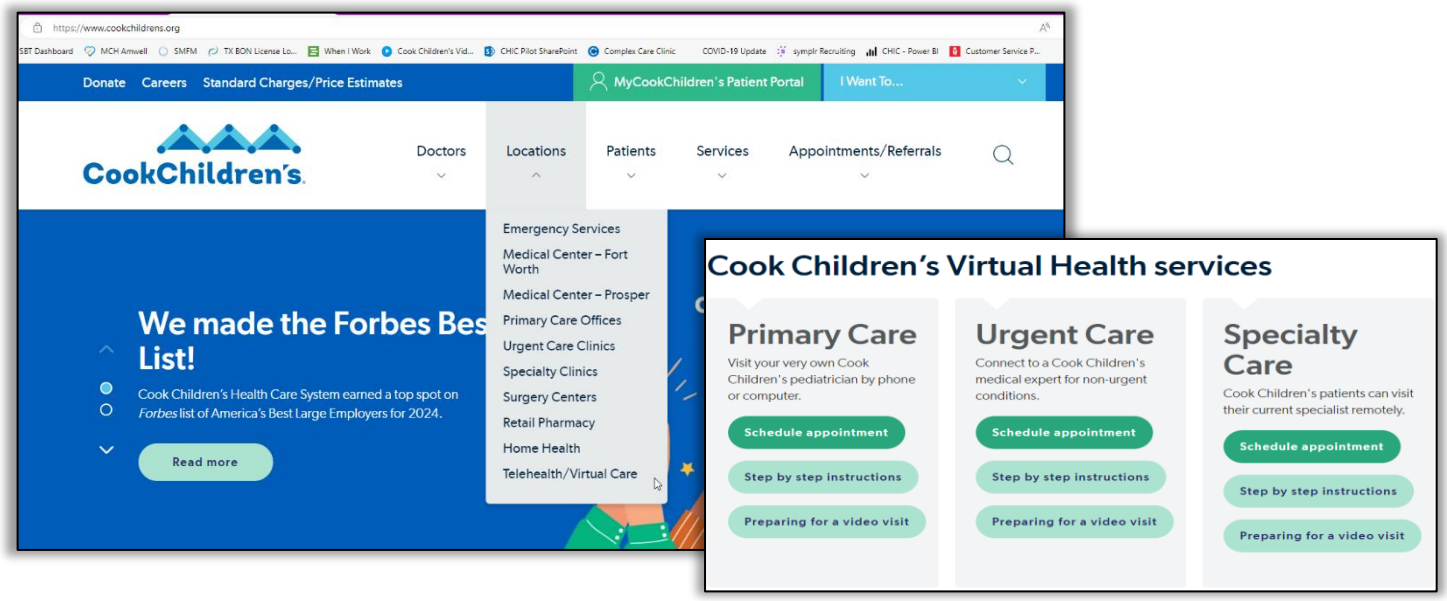
Cook has already built a sturdy framework within which its clinicians can practice medicine via telehealth.

Cook Children's Telehealth Infrastructure: A Summary

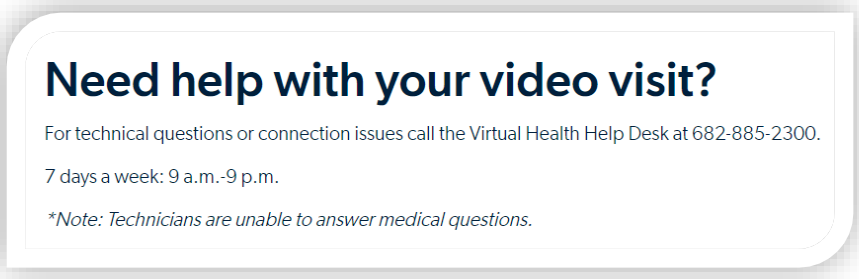
- Virtual health capability via Zoom, paid for and ready for use, complete with HIPAA Compliance and Consent to Treat
- Scheduling options: online caregiver scheduling and staff scheduling
  - A step-by-step log-on process laid out for caregivers scheduling on-line
  - Epic automation to ensure insurance coverage for telehealth is checked prior to booking the appointment
- A Tech Help line (for families and staff)
- A Telehealth Team, complete with the ability to further train willing Clinicians and Staff and providing tip sheets in Epic
- Billing, coding, and reimbursement awareness and tracking
- Language Translation, including ASL options
- A Virtual Urgent Care that runs smoothly and can serve as a model

Parent and Patient Resources

Caregivers can go to www.cookchildrens.org and under Locations can select Telehealth:



We also have a 7 day-a-week Help Line: **Help with Video Visit: 682-303-4367**



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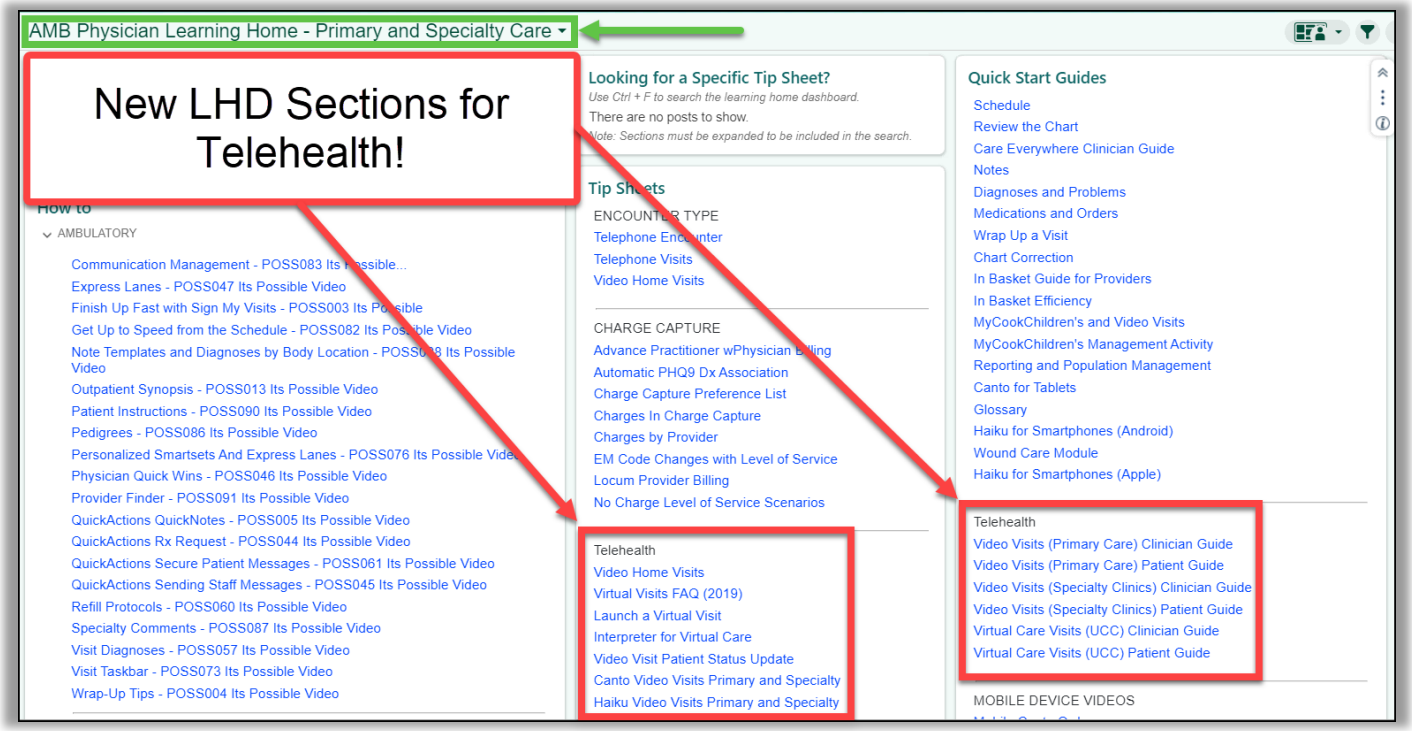
There are also instructions on the site guiding parents to sign up for a MyCookChildren's (MyChart) account:

Staff Resources

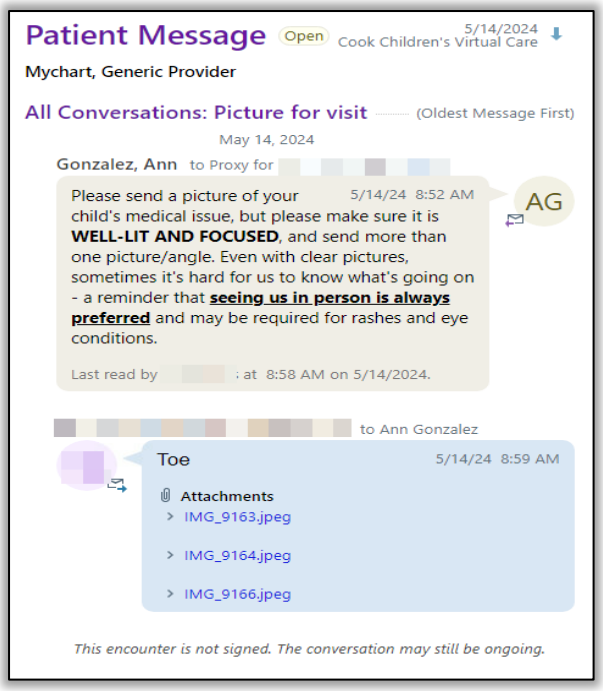
Epic Tip sheets can be found in our **AMB Physician Learning Home Dashboard (LHD)** – there are tips sheets for adding an interpreter, using Canto and Haiku, and more!



How does our Cook Children's Virtual Urgent Care do it?

- The Virtual Urgent Care has a **Medical Receptionist** opening every telehealth visit, serving as a **GATEKEEPER** and then as a helpful aide for the visit. The medical receptionist (who is a front staff person rather than a medical person) does the following:
  - Enters visit first
  - Verifies caretaker and patient are present and are in Texas
  - Tests audio/video connection and troubleshoots with caretaker
  - Helps with eCheck-in
  - Validates pharmacy choice and provides help with midnight/24 pharmacies if needed

  - Messages family through portal if pictures would be helpful
  - Updates family on wait times
- As part of the above responsibilities, the Medical Receptionist can leverage PatientEXP, which includes the capability of sending text messages to caretakers. This process will be changing soon with the implementation of **Hello World**, but the concept is the same.
  Medical receptionist can make use of portal messaging (shown to the right) and can then pull any pictures provided by the family into the clinician's note even before the clinician joins visit. Pictures can be better visuals than the view over the computer's/phone's camera during the telehealth visit.
- The Medical receptionist can track the status of the visit under the schedule tab of Epic.
- The medical receptionist and clinician can make use of translation capabilities, including ASL.



What does our Cook Children's Patient Experience Team Say?

- The Cook Children's Patient Experience Team has received this feedback, to handpick a few:
  - Endocrine: "Dr. Thornton switched to a telehealth visit, which saved me several hours of travel, and all my questions were answered. It was much easier than going to the clinic because I live out of town" and, per another, "Telehealth was easy to use and convenient."
  - Urology, "Thank you for being able to make our appointment a virtual one so that we were able to stay home and warm in the crazy winter weather!"
  - Urgent Care, "There was a very short window to wait from the time I logged in to request the virtual appointment, and I truly appreciate the detailed time she took to go over everything with me."
  - GI: "Excellent virtual bedside manner- the experience was fantastic!"

A: Assessment

1. The COVID-19 pandemic served as a launching pad for Cook Children's clinicians to quickly learn and make use of telehealth capabilities within our system.
2. However, although our learning curve was steep under the circumstances, many returned to in-person medical practice after the pandemic. We as an organization at this point still provide only a small portion of patient care via telemedicine.

"Telemedicine has turned out to be much more than a stopgap measure—it's a robust component of the modern clinical palate."

– Dr. Danielle Ofri, physician and author, NYC

3. Still, there are individual Cook clinicians and departments continuing to incorporate telehealth into their day-in and day-out practice of medicine. They have found a way to integrate telehealth into the larger spectrum of care they provide and have found an overall positive impact of the telehealth technology.
4. Cook's early telehealth adopters have learning pearls for the rest of us and words of hope about the way in which we might expand our use of telehealth for our patients' benefit as well as our own.

R: Recommendations

1. **Apply Scheduling Strategies**
    - With regard to clinicians' busy schedules and how best to insert telehealth into the mix, clinicians must consider their own workflows and try GROUPING telehealth visits:
        - Designated days or half-days
        - First slots of the morning and first slots of the afternoon.
    - Consider allowing for online caretaker scheduling, as this automatically assures that patient families are on the portal before attempting a video visit.
2. **Have a plan for which kind of visits you are willing to see via telemedicine**
    - Cook Virtual Urgent Care makes clear that they cannot see broken bones or do x-rays, school physicals, annual well checks, immunizations, or med refills. They also do not do behavioral health assessments, though telehealth can be effective for behavioral health visits per Cook's behavioral health specialists and primary care providers.
3. **Help Caretakers to Prepare and Establish Expectations for the Visit**

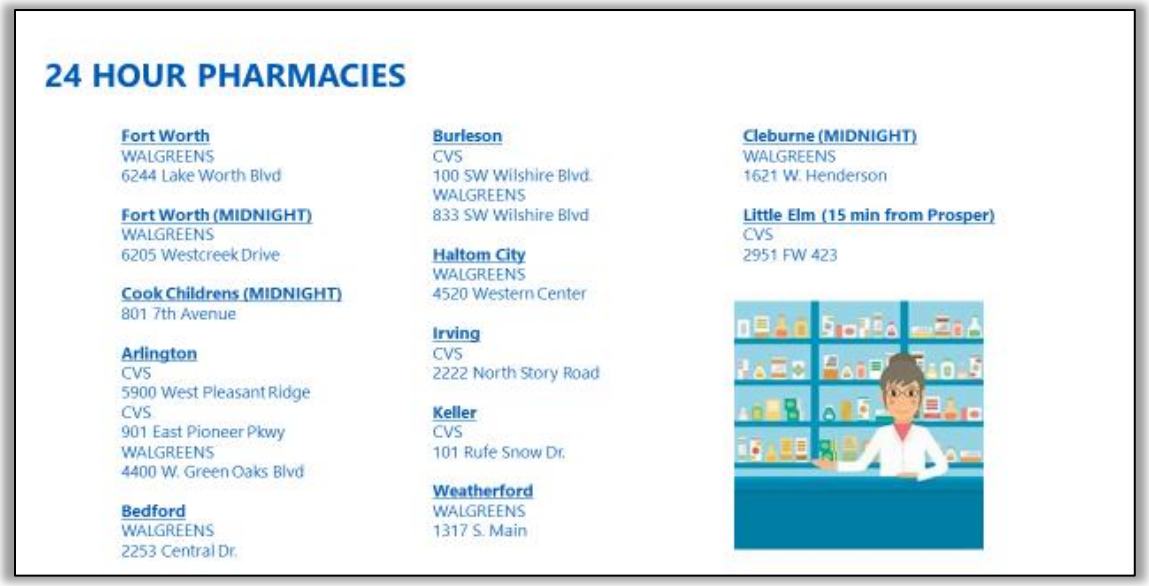
    - Requiring online caregiver scheduling of virtual health visits ensures caretakers already will have established themselves on the portal. This is a good first step to telehealth success.
    - Consider having a staff member review with the family some key points (via phone or message). See the examples of messaging to patient caretakers prior to a telemed visit from Cook gynecology and neurology.

        - That they will need to e-check-in before their visit time-slot
        - That they will most likely need to wait a bit for the clinician to be available, just as they might in an in-person office visit
        - That, should their child's issue involve a notable physical finding, they can help by sending pictures taken close up with good lighting to supplement what the clinician will see on video

- That they—if possible—should be in a quiet place allowing for the family to have privacy and for the family to give attention to the visit (preferably not in a moving car that the caretaker is actively driving)
- That they will need to turn on audio. They will not be able to do this until the clinician has started the visit
- That there is a number for tech help that they should have on hand and be ready to call-- 682-303-4367--should they run into difficulties
- That some visits end up needing conversion to an in-person visit, depending on the nature of the concerns

4. **Prioritize Good Communication at and Around the Time of the Visit**
    - Consider your staff's support structure. For example, consider a workflow in which a staff person/nurse communicates with family at check-in, either through a phone call or texting/portal messaging.
    - Remember that there are messaging tools available through **PatientEXP** (soon changing to **Hello World**) for front staff to inform families that they need to check-in or that the provider is running behind.
    - There is value in staff's verifying pharmacy and allergies prior to the visit, just as they might do before an in-person visit. This is another reason to consider another staff-person helping a clinician at the start of a visit.
5. **Have a Plan for Technological Challenges**
    - Be aware of some of the common glitches, such as audio issues
    - Be ready to call or to provide the number for tech assistance, **682-3030-4367**
      Know that the visit—in the case of tech hurdles-- may need be completed creatively, such as with the help of a phone or may have to be completed as a phone visit
6. **Be Familiar with and Refine Your Webside Manner, Which is Not Completely the Same as In – Person Bedside Manner**
    - Explain to patients and their caregivers what you are doing if you look away from the camera, such as to review or update the chart
    - Consider using more enthusiasm and more gestures than usual, since the visual element of in-person communication is altered.
    - Our Experience Team has added modules to U Learn to help us in this area. These videos from Practicing Excellence are short and helpful: Virtual Caring, Respect, Rapport, and Respect.
    - The AAP also has resources available for Telemedicine.

7. **Have a Plan for Labs and Pharmacies**
   - Know nearby lab and pharmacy hours of operation
   - Consider the value of home-testing, although at this point know that Cook UCC has decided not to rely on at home tests due to variable reliability



8. **Make Use of After Visit Summary to Append Notes and Handouts**

Ready to Get Started?

1. Contact the Virtual Health team at VirtualConnect@cookchildrens.org— they are eager to help!
2. Consider where in your schedule you will put the telehealth appointment option—decide whether to have blocks of telehealth or have them interspersed with in-person visits
3. Consider where (which physical space) you will designate for telehealth—whether from home or at work, and if at work whether in an exam room or in your personal office
4. Consider if you will allow for online-patient scheduling of virtual visits
5. Consider which diagnoses you will allow to be telehealth
6. Review the tip sheets available and choose which to provide to your families, also consider the examples of advice messages from our Neurology and Gynecology services (see addendum)
7. Review this report again for tweaks and tips once you begin to delve into these options
8. GO!

THANK YOU

Document written/compiled by Daphne Nizza Shaw, MD, Chair of Practice Management Committee 2022-2024, and Kari Lipscomb, Cook Director of Virtual Health and Practice Operations, with extensive editing and beautifying by Jennifer Hammontree, MSN, MBA and Epic Principal Trainer for Cook. Thanks, too, to the rest of our Cook Telehealth Team, including Nicole Yowell, John Barbul, and Tyler Westrich and to Teresa Baker for this topic suggestion. Many thanks to Dr. Justin Smith, physician Director of Primary Care and the Cook Virtual Urgent Care, whose perspectives as leader of that clinic and telehealth guru helped tremendously. Much appreciation also to the other early adopters of telehealth, who have generously shared their advice: Drs. Jeff Pugach, Dave Shahani, Diana Carrasco, Kristen Pyrc, and Shanna Combs.

A shower of thanks to Cook's talented and ever-patient videographer Tom Reihm for working so hard on the video preview. Video script written by Dr. Shaw and edited by Jennifer Hammontree. We had no idea how complex it can be to make a professional video out of a skit like the one we put together and appreciate Tom so much for elevating our attempts to act into this playful take on the topic. Oscar-winning performances by Kari Lipscomb, Jennifer Hammontree, Dr. Jeff Pugach, Dr. Shanna Combs, and Dr. Diane Arnout — hooray for being good sports and for helping to spread encouragement for telehealth!

Thanks to the Practice Management Committee for being a sounding board.

Thanks to the Experience Team, including Missy Staben for looking into videos for help with webside manner, and to Dr. Amit Singh for taking an interest in this topic as well (we hand off the baton to you, should you want it).

Thanks to Dr. Anu Partap for being a part of our committee discussion on this topic. Your contributions and insights with regard to health equity are always very helpful.

Last but certainly not least, thanks to my husband Dr. Carl Shaw of Cook's ED, for being a helpful editor and support for me always. He read every word even though the ED doesn't use telemed (yet)!

Resources

Video Visit Email Instructions (from Cook Children's Gynecology Department)

This email is an overview on how to virtually connect for your child's telehealth visit with Dr. Combs/Jaime Jordan, WHNP on 07/02/2024. Please ensure that you have **myCookChildren's** capabilities on your smartphone, tablet, or computer. Also, please ensure that the **Zoom** app is downloaded to your device. When your appointment time approaches, please follow the prompts in **myCookChildren's** to check in for your visit.

- **Confirm the appointment and eCheck-in**- confirm and verify personal information.
- **Verify insurance**- Confirm or update health insurance coverage
- **Consents**- Sign Financial Disclosure and Physician Consent for Treatment (required one time per year, no each visit).
- **Confirm personal and medical information**- confirm or update personal and medical information

Once **eCheck-in** is complete, the **Begin Video Visit** will become active. When you click the **Begin Video Visit**, it will then direct you to the Zoom app. Once Dr. Combs/ Jaime Jordan, WHNP has initiated the meeting on our end, it should connect you together.

Please do not log in and then log back out. This sometimes causes issues when trying to log back in.

Similar to in-office visits, Dr. Combs/Jaime Jordan *may not arrive exactly at scheduled time*. Please remain logged in and she will be with you for your visit as soon as possible.

If you are having difficulties, please reply to this message for guidance or contact our office!

Video Visit Email Instructions (from Cook Children's Neurology Department)

Cook Neurology Department Video Visit Instructions for Families:

MYCHART SIGN UP INSTRUCTIONS

Once you have successfully registered for your *MyCookChildren's Online Portal*, please complete the following steps.

1. Download the *MyCookChildren's* and *ZOOM* app from your Google Play or Apple App Store.
   Make sure that BOTH apps are downloaded onto the same device if you are using a *phone* or *tablet*.

   If you are using a *desktop,* you will need to have *https://zoom.us/ and* *https://www.cookchildrens.org/mychart/Pages/default.aspx* open at the same time in your browser.

2. ZOOM- Sign up for a *ZOOM* account through the app or the ZOOM website *https://zoom.us/*.
3. *MyCookChildren's* – If you are using the app on your phone or tablet, enter the user name and password that you created when initially signing up, into the app.

TO BEGIN THE VIDEO VISIT

4. 30 minutes before your appointment with your Provider, log into your *MyCookChildren's Portal.*
5. Go into your/ your child's profile (circles at the top of page with your name and child's name, click on your child). If you are on computer click on visits, then appointment/visits. If you are on phone in App click on Appointments. Their appointment should say *" E-check in."*

Click on the link and fill out the information. Once you have completed the e-check in go back to appointment desk.

6. You will see a button that says *"Begin video visit"* (do not click on it just yet).

5 minutes before your scheduled appointment time you will be able to click the button to get connected to your Provider.

A screen will appear that should say waiting on host. Once the Provider joins you will join meeting and audio for your visit.

MYCHART SIGN UP INSTRUCTIONS

Once you have successfully registered for your *MyCookChildren's Online Portal*, please complete the following steps:

7. Download the *MyCookChildren's* and *ZOOM* app from your Google Play or Apple App Store.
   Make sure that BOTH apps are downloaded onto the same device if you are using a *phone* or *tablet*. If you are using a *desktop,* you will need to have *https://zoom.us/ and https://www.cookchildrens.org/mychart/Pages/default.aspx* open at the same time in your browser.
8. ZOOM- Sign up for a *ZOOM* account through the app or the ZOOM website *https://zoom.us/*.
9. *MyCookChildren's* – If you are using the app on your phone or tablet, enter the user name and password that you created when initially signing up, into the app.

TO BEGIN THE VIDEO VISIT

10. 30 minutes before your appointment with your Provider, log into your *MyCookChildren's Portal.*
11. Go into your/ your child's profile (circles at the top of page with your name and child's name, click on your child). If you are on computer click on visits, then appointment/visits. If you are on phone in App click on Appointments. Their appointment should say *" E-check in."* Click on the link and fill out the information. Once you have completed the e-check in go back to you/ your child's appointment desk.
12. You will see a button that says *"Begin video visit"* (do not click on it just yet). 5 minutes before your scheduled appointment time you will be able to click the button to get connected to your Provider. A screen will appear that should say waiting on host. Once the Provider joins you will join meeting and audio for your visit.

If you experience technical issues or need help logging in the *MyCookChildren's* help desk is available to assist you. Please contact their customer service at *(682)303-4367*.

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