

Digital Health: Managing your Patients in Clinical Practice

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Disclosures

- None

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Objectives

After completion of this session the participants will be able to:

- Understand the basics of telemedicine including common terminology, benefits and challenges.
- Evaluate patient relations, privacy, and security concerns when considering telemedicine as an option for patient care.
- Identify ways to improve patient access to care using digital technology.
- Integrate required documentation and billing for reimbursement when considering telemedicine.

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Telemedicine Defined

- “The use of technology to deliver health care, health information or health education at a distance.”
- The AMA expands this definition to include “face-to-face evaluations, either in person or virtually through real-time audio and video technology”.
- The Federation of State Medical Boards states, “generally telemedicine is not an audio-only telephone conversation...it typically involves the application of secure videoconferencing or store-and-forward technology to provide or support healthcare delivery by replicating the interaction of a traditional encounter in person between a provider and a patient”

Elliot, T. et al. (2017). ACAAI Position Paper on the Use of Telemedicine for Allergists. Annals of allergy, asthma & immunology, 119(6), 512-517.

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Experience with Telemedicine

- Asthma protocol (provider/nurse facilitated)
- Cash pay (follow-up or new patient)
- Tornado
- Covid-19
- Current practice
- Rhinogram
- Patient Portal

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Benefits of Telemedicine

- Increase access to care
- Decrease travel costs (time and money)
- Decrease wait time to see a specialist (median 39-76 days)
- Continued care during Covid-19 pandemic
- Ability to care for ill patients without exposing clinic (patients/staff) to illness
- Allows continued patient care despite staffing shortages
- May reduce provider burnout (flexible schedule)

Elliot, T. et al. (2017). ACAAI Position Paper on the Use of Telemedicine for Allergists. Annals of allergy, asthma & immunology, 119(6), 512-517.
Hare, N. et al. (2020). Work Group Report: COVID-19: Unmasking telemedicine. The journal allergy clinical immunology in practice, 8(8), 2461-2473.e3.

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Benefits of Telemedicine

- Portnoy et al (2016) showed comparable asthma control and parent satisfaction with telemedicine vs in person visits
- May decrease costs to practices/providers for missed appointments which is estimated to cost \$150 billion to U.S. healthcare system
- Patient satisfaction: 95-100% satisfaction with telemedicine when compared to in person visits

Portnoy, J. M., Waller, M., De Lurgio S., & Dinakar C. (2016). Telemedicine is as Effective as In-person Visits for Patients with Asthma. *Annals of allergy, asthma, immunology: official publication of the American College of Allergy, Asthma & Immunology*, 117(3), 241-245.
 Portnoy, J. M., Pandya, A., Waller, M. & Elliot, T. (2020). Telemedicine and Emerging Technologies for Health Care in Allergy/Immunology. *The journal of allergy clinical immunology*, 145(2), 445-454.

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Physician Survey Telemedicine

- 93% - "improves patients' access to care"
- 77% - "it contributes to more efficient use of time for doctors and patients"
- 71% - "helps to reduce healthcare costs"

Portnoy, J. M., Pandya, A., Waller, M. & Elliot, T. (2020). Telemedicine and Emerging Technologies for Health Care in Allergy/Immunology. *The journal of allergy clinical immunology*, 145(2), 445-454.

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Telemedicine and Covid-19

- 2016 AMA study showed 15% of specialty practices utilized telemedicine; only 6% of allergy/immunology practices used telemedicine which was the lowest rate among all specialties
- Increase in use of telemedicine in 2020
- Data suggest practices average 23 months to implement digital solutions. This happened in a matter of weeks during PHE
- Telemedicine transitioned from optional to necessary or at times the only option for care.
- Federal and state guidelines lifted
 - Requirement for state licensing
 - Lifted restrictions on originating and distant sites
 - Allowed audio only
 - Allowed for non-HIPPA compliant platforms
- Limited patient direct contact
- Reduced PPE usage in clinics

Haro, N. et al. (2020). Work Group Report: COVID-19: Unmasking telemedicine. *The journal allergy clinical immunology in practice*, 8(8), 2461-2473.e3.
 Pernaad, Y. K. & Portnoy, J. M. (2021). Ten Rules for Implementation of a Telemedicine Program to Care for Patients with Asthma. *The journal of allergy clinical immunology in practice*, 9(1), 13-21.

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Ten Rules for Implementation of Telemedicine

1. Understand the types of telemedicine and use appropriate ones to treat your patients.
2. Stay current with state and federal guidelines
3. Choose a platform
4. Build the infrastructure
5. Market/schedule appointments
6. Obtain informed consent
7. Prepare for the visit
8. Patient visit/encounter
9. Perform physical examination
10. Bill for the encounter

Persaud, Y. K. & Portnoy, J. M. (2021). Ten Rules for Implementation of a Telemedicine Program to Care for Patients with Asthma. The Journal of allergy clinical immunology in practice, 9(1), 13-21.

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Telemedicine Types

- **Synchronous**
 - Uses video-conferencing to connect the physician and patient
 - Direct-to-consumer (DTC)
 - Facilitated virtual visits (FVVs)
- **Asynchronous** – “communicating with a patient that is separated by distance and time”
 - Remote patient monitoring (RPM)
 - E-consults
 - Patient portals
 - Use of mobile health

Elliot, T. et al. (2017). ACAAI Position Paper on the Use of Telemedicine for Allergists. Annals of allergy, asthma & immunology, 119(6), 512-517.
Persaud, Y. K. (2022). Using Telemedicine to Care for the Asthma Patient. Current allergy and asthma reports, 22(4), 43-52.

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Synchronous Telemedicine

- **DTC**
 - Most commonly used
 - Patient at home, school or other location.
 - Provider at a distant site (hospital, office, clinic, home)
- **FVV**
 - Uses a tele presenter/facilitator
 - Specific room with necessary equipment
 - Facilitator is trained to complete standardized questionnaires, spirometry, use of digital stethoscope/otoscope

Persaud, Y. K. (2022). Using Telemedicine to Care for the Asthma Patient. Current allergy and asthma reports, 22(4), 43-52.
Hare, N. et al. (2020). Work Group Report: COVID-19: Unmasking telemedicine. The journal allergy clinical immunology in practice, 8(9), 2461-2475.e3.

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Benefits of Synchronous TM

- **Detecting and educating on avoidance of asthma triggers**
 - Pets
 - Molds
 - Dusts
 - Cigarette smoke
 - Perfumes/candles
- **Observation of inhaler technique, expiration dates & monitoring use**
- **Monitoring and educating on self injection of asthma biologics**
- **Multi-presence option** (parent at work/child at school)
- **Screensharing** (reviewing labs/imaging)

Persaud, Y. K. (2022). Using Telemedicine to Care for the Asthma Patient. Current allergy and asthma reports, 22(4), 43-52.

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Limitations of Synchronous TM

- **DTC**
 - Patient must have necessary equipment and connectivity.
 - Physical exam limitations
- **FVV**
 - Presenter and provider must discuss visit prior to completion.
 - Patient travel to the site

Persaud, Y. K. (2022). Using Telemedicine to Care for the Asthma Patient. Current allergy and asthma reports, 22(4), 43-52.

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Asynchronous Telemedicine

- **Remote Patient Monitoring (RPM)**
 - Monitor adherence to treatment
 - Peak flow/home spirometry readings uploaded to patient portals
 - Apps – Kiss my asthma, Asthma MD
 - Digihaler technology (TEVA®)
- **E-Consults**
 - Provider connects with a specialist
 - PCP writes a written request or question and specialist will provide feedback within 72 hours
 - Store and forward (spirometry, ACT, peak flow diaries)
 - Text message
 - Patient portal

Persaud, Y. K. (2022). Using Telemedicine to Care for the Asthma Patient. Current allergy and asthma reports, 22(4), 43-52.

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Benefits of Asynchronous TM

- Reduction of unnecessary referrals to specialists
- Builds relationship between primary care providers and specialists
- Enables specialist and PCP to build relationship and potential knowledge gains by PCP regarding asthma management.
- Patient and provider do not have to be available at the same time.
- Communicate lab results

Persaud, Y. K. (2022). Using Telemedicine to Care for the Asthma Patient. Current allergy and asthma reports, 22(4), 43-52.

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Limitations of Asynchronous TM

- Many apps created without FDA regulation or guidance from medical community
- Require dedicated staff to monitor incoming data

Persaud, Y. K. (2022). Using Telemedicine to Care for the Asthma Patient. Current allergy and asthma reports, 22(4), 43-52.

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Telemedicine Guidelines

- State
- Federal
- Malpractice insurance
- Interstate Medical Licensure Compact (IMLC) allows physician to practice in a state not licensed if part of the compact

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Choosing a Platform

- HIPPA-compliant
 - AMD
 - AmericanWell
 - Zoom for HealthCare
 - Doxy.me
 - Teladoc
 - GoToMeeting

Persaud, Y. K. & Portnoy, J. M. (2021). Ten Rules for Implementation of a Telemedicine Program to Care for Patients with Asthma. The journal of allergy clinical immunology in practice, 9(1), 13-21.

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Choosing a Platform

- **Integrated platforms**
 - American Well
 - Intouch Health/Teladoc Solo
 - AMD Connect and Care
- **Stand alone platforms**
 - Zoom
 - Citrix
 - GoToMeeting
 - Doximity
 - Polycom RealPresence
 - Doxy.me

Persaud, Y. K. & Portnoy, J. M. (2021). Ten Rules for Implementation of a Telemedicine Program to Care for Patients with Asthma. The journal of allergy clinical immunology in practice, 9(1), 13-21.

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Choosing a Platform

- Tech support ?
- Does it support increased users?
- Pay per seat on platform or total for entire practice?
- Steps required for patient to access?
- Automatically send email or text links to patient?

Persaud, Y. K. & Portnoy, J. M. (2021). Ten Rules for Implementation of a Telemedicine Program to Care for Patients with Asthma. The journal of allergy clinical immunology in practice, 9(1), 13-21.

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Infrastructure

- Training on platform/troubleshooting
- Ensure proper equipment
- Clear guidelines to scheduler/front office staff regarding patient type
- Incorporation into schedule with in-office patients
- Build schedule templates
- Train clinic staff

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Visit Types

- New patients
- Consults
- Routine follow-up
- Sick visits
- Covid + patients
- Education visits
- Home evaluations

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Informed Consent

- Written or verbal consent
 - Explain telemedicine
 - Expected benefits and possible risks
 - Given option to decline telemedicine visit
- Sample informed consent
 - <https://telehealthresourcecenter.org/resources/toolkits/sample-telehealth-consent-form/>

Persaud, Y. K. & Portnoy, J. M. (2021). Ten Rules for Implementation of a Telemedicine Program to Care for Patients with Asthma. The journal of allergy clinical immunology in practice, 9(1), 13-21.

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Prepare for the Visit

- Flexibility with technology issues
- Send link (email or text)
- Review chart, labs, imaging etc.
- Office/room HIPPA compliant
- Headset
- Clinic staff contacts patient
 - Confirms location at time of visit
 - Triage patient (medication list, ROS, ACT)
 - Educates patient on how to connect

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Performing Telemedicine

- **HIPAA compliant platform and fashion**
- **Verify identity**
- **Obtain consent**
- **Originating Site/Distant Site**
- **Perform Telemedicine visit**
 - Chief complaint
 - HPI
 - Review medication usage and dosages
 - Physical Exam
 - Review labs/imaging
 - Plan (upload to portal)
 - Prescriptions

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Physical Examination

- Patient performed VS: temp, weight BP, HR, O2 sat (smart watch), peak flow reading
- Ear exam and lung sounds – digital stethoscope/otoscope
- Sinus tenderness patient assisted
- Oropharynx – patient’s flashlight
- Abdominal – self palpation
- Extremities – clubbing/cyanosis

Hare, N. et al. (2020). Work Group Report: COVID-19: Unmasking telemedicine. The journal allergy clinical immunology in practice, 8(8), 2461-2473.e3.

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Physical Examination

TABLE IV. Example telemedicine physical examination with E/M billing guidance

Example physical examination:
 VS: T 98.5 F Wt. 180 pounds BP 126/75 HR 65
 Constitutional: Appears healthy, alert, cooperative, oriented, and in no acute distress
 Head: Normocephalic and atraumatic
 Eyes: Conjunctivae/corneas clear, without redness or drainage
 Nose: External nose normal, no drainage
 Pulmonary/chest: No tachypnea, no retractions, no cyanosis
 Neurological: Grossly normal without focal findings based on what could be seen
 Skin: Skin color normal. No rashes or lesions visible
 Psychiatric: Normal mood and affect. Behavior is normal

Hare, N. et al. (2020). Work Group Report: COVID-19: Unmasking telemedicine. The journal allergy clinical immunology in practice, 8(8), 2461-2473.e3.

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Physical Examination

- Digital stethoscope - <https://youtu.be/w2A2GMpN0D8>.
- Digital otoscope - <https://www.telemedicinesupply.com/products/firefly-global-bluetooth-otoscope>.

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Billing/Reimbursement

- “Telemedicine coverage and reimbursement not federally regulated.”
- “...inconsistent coverage and reimbursement policies among the various insurers can lead to confusion, incorrect coding and billing, and denied claims”
- Coverage Parity
 - Requirement that telemedicine be covered any time in-person visits are covered.
- Payment Parity
 - Requirement that the amount of reimbursement be the same as in-person visits.
- Cash pay options for convenience \$50/\$100
- Some platforms allow provider to request a payment at beginning of visit

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 Hare, N. et al. (2020). Work Group Report: COVID-19: Unmasking telemedicine. The journal allergy clinical immunology in practice, 8(8), 2461-2473.e3.

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Billing

TABLE VII. Coding and billing telehealth visits by time: telemedicine visits (audio and video, synchronous)

New patient CPT code	Total face-to-face time (min)	Outpatient consultation CPT code	Total face-to-face time (min)	Established patient CPT code	Total face-to-face time (min)
99201	10	99241	15	99211	5
99202	20	99242	30	99212	10
99203	30	99243	40	99213	15
99204	45	99244	60	99214	25
99205	60	99245	80	99215	40

CPT, Current procedural terminology.

Hare, N, et al. (2020). Work Group Report: COVID-19: Unmasking telemedicine. The journal allergy clinical immunology in practice, 8(8), 2461-2473.e3.

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Billing

Telephone Visits (Audio Only)

CPT code	Total visit time (min)
99441	5-10 min
99442	11-20 min
99443	21-30 min

Remote Patient Monitoring

CPT code	Description
98975	Initial set-up/patient education
98976	Daily recordings to monitor respiratory system for 30 days
98980	Monitoring during calendar month w/ at least one interactive communication w/ patient, first 20 mins
98981	Additional 20 mins

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Resources

- <https://www.cchpca.org/telehealth-resource-centers/>
- <https://www.cms.gov/newsroom/fact-sheets/medicare-telemedicine-health-care-provider-fact-sheet>
- <https://www.fsmb.org/siteassets/advocacy/pdf/states-waiving-licensure-requirements-for-telehealth-in-response-to-covid-19.pdf>
- <http://www.americantelemed.org/ata-accreditation>

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References

- Elliot, T. et al. (2017). ACAA1 Position Paper on the Use of Telemedicine for Allergists. *Annals of allergy, asthma & immunology*, 119(6), 512-517.
- Persaud, Y. K. (2022). Using Telemedicine to Care for the Asthma Patient. *Current allergy and asthma reports*, 22(4), 43-52.
- Hare, N. et al. (2020). Work Group Report: COVID-19: Unmasking telemedicine. *The journal allergy clinical immunology in practice*, 8(8), 2461-2473.e3.
- Portnoy, J. M., Waller, M., De Lurgio S., & Dinakar C. (2016). Telemedicine is as Effective as In-person Visits for Patients with Asthma. *Annals of allergy, asthma, immunology: official publication of the American College of Allergy, Asthma & Immunology*, 117(2), 241-245.
- Portnoy, J. M. & Wu, A. C. (2019). Is Telemedicine as Effective as Usual Care? *The journal of allergy clinical immunology in practice*, 7(1), 217-218.
- Persaud, Y. K. & Portnoy, J. M. (2021). Ten Rules for Implementation of a Telemedicine Program to Care for Patients with Asthma. *The journal of allergy clinical immunology in practice*, 9(1), 13-21.
- Portnoy, J. M., Pandya, A., Waller, M. & Elliot, T. (2020). Telemedicine and Emerging Technologies for Health Care in Allergy/Immunology. *The journal of allergy clinical immunology*, 145(2), 445-454.
