Telemedicine Technology & Legislation

KAAP Progress in Pediatrics, Fall CME
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Disclosure

- I have no relevant financial relationships with the manufacturers(s) of any commercial products(s) and/or provider of commercial services discussed in this CME activity.
- I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation. Proprietary systems may be discussed, but I am not recommending these systems over others.
Objectives

• What is Telemedicine?
• Demonstrate the utility of Telemedicine with outpatient clinic flow
• Learn the technical differences between a facilitated and non-facilitated visit
• How to gain support from individual providers to use Telemedicine to triage patients into clinic workflow and educate when to be seen
• Understand the importance of HIPPA compliance and encryption with your platform
• Telemedicine Legislation

Why Telemedicine?

• Improved efficient access to care, with decreased burden of travel and saves time and expense.
• Better technology and information transmission
• "a picture is worth a thousand words."
• **Originating Site**: Patient Location
• **Distant Site**: Provider Location
• **Store and forward/asynchronous**: non-real-time data transfer
Telehealth vs Telemedicine

- **Telehealth**: broad range of remote services
  - Improve patient care, surveillance, health promotion, and healthcare delivery.
  - Also includes non-clinical services:
    - Provider training, Patient education
    - Administrative and Division meetings
    - Continuing medical education/Patient Care Education/ maybe future KAAP CME meeting opportunities
- **Telemedicine**: electronic communications and software to provide remote clinical services to patients without an in-person visit.
  - Follow-up visits
  - Management of chronic conditions (Asthma, Rheumatology, Congenital Heart Disease, Type 1 DM, IBD, Seizure Disorder)
  - Medication management and device education
  - Specialist consultation in Inpatient and Outpatient settings, ability for Private Practice to triage better whom needs to be seen and where

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**Telemedicine is kind of a big deal**

- In 2014, 87% of healthcare providers did not expect their patients to be using Telemedicine
- In 2018, 76% of healthcare providers offer or plan to offer Telemedicine
The Future of Healthcare

Healthcare consumers are cost-conscious, tech savvy, and convenience driven.

According to IHS (Information Handling Services) Telemedicine revenue in U.S. expected to reach $1.9 billion by 2018, up from $240 million in 2013.

Telemedicine improves workflow, communication, offering engaging and innovative ways to provide quality care.

Proliferation of non-pediatric Urgent Care clinics/DTC highlight desire for convenience over quality, how can a private practice survive the competition?

How the Affordable Care Act is changing how we provide care

Our health system is changing from volume driven to value driven care

Encouraging use of technology and Telemedicine to provide Triple Aim

Telemedicine has new innovative and creative meaningful uses in how we care for patients. It provide real time access and expertise for Quality, Safe, and Efficient Care
Telemedicine Improves Access

Build Trust, Deliver care, Strengthen Relationships in a Convenient, cost effective manner

Telemedicine Improves Provider Workflow and Access, and saves travel time for Patients and Providers

Workflow
The Threat of Urgent Care

- Busy parents and patients want convenience, and efficiency even over quality.
- Urgent care visits are less expensive than an emergency room visit, and can be more efficient than waiting in your office.

The Threat of Direct to Consumer Telemedicine

- Some DTC companies encourage prescribing antibiotics without adequate testing, or a full exam creating a risk of misdiagnosis and poor antibiotic stewardship. Less of a threat, as medical devices become more affordable.
The Traditional Waiting Room

"Where Fun Goes to Die"
The longer patient's wait to see a provider the more complicated the visit becomes (actual 11-year-old patient list written while waiting, none at time of visit):

1. Cough head hurts.
2. Stomach hurts.
4. Feet hurts and legs legs when running
5. backache
6. pops from foot when I walk.
7. Headace all over
8. Nose gets clogged when going to sleep.
9. chest hurts when running
10. Side is hurting.
11. Knees hurt.
12. dizzy

How do we meet the demand?

Creative scheduling

Define what visits need to be seen but not in person e.g. Minor medical complaints and symptoms

Minimize workflow interruptions (pharmaceutical samples/Phone Calls could be via Telemedicine and scheduled into clinic)

MA to get vitals and keep track of workflow, inform when behind

Children's Mercy
KANSAS CITY
Advantages of Telemedicine
Non-facilitated exam

- Can communicate and educate anywhere (home), with ability to offer continuity with convenience.
- Offer practice the ability to efficiently triage, whom needs to be seen in the office for more detailed exam and studies, where to be seen, and when.
- Able to see patient's appearance and work of breathing and provide anticipatory guidance and education, and refer if in trouble sooner
- ADD initial pre-evaluation Vanderbilt questionnaire, Behavioral issues

Minor Medical Illnesses Often seen by Telemedicine

- Pink eye, Otitis Externa, PET drainage, Stye/Chalazion
- Allergic Rhinitis, Postnasal Drip, URI, Cough, Headache
- Impetigo, Tinea Corporis, Candida Diaper Rash, Eczema, Insect Bites
- Abrasion vs Laceration (stitches or no stitches)
- Triage High Risk Patients with Influenza, AGE, Vomiting, Diarrhea
- Constipation
- Croup  KEY IS PROVIDING ANTICIPATORY GUIDANCE, mandated in KS of WHEN TO RETURN if not improving, worsening and email copy of Barton Schmitt handout or Kids Health guidance & note
Behavioral Health is becoming one of the most common pediatric office visits

- Mental health access, can be easier, and less stigmatized with treatment in a virtual setting.
- Chronic illnesses in children often are found to have medical behavioral comorbidity, such as anxiety and depression.
- Telemedicine can serve as a venue to review Vanderbilt questionnaires with parents whom Home/School previously filled out survey, would be a candidate for medication. This can save time on initial visit, provide education for meds, and schedule for rx, BP, wt

Tips for ADD initial visits

- Have Vanderbilt Assessment Tools available online, and have parent(s) and teacher(s) fill out and return to office in person, or secure patient portal.
- Score Vanderbilt Assessment and if meets criteria for possible medication at home and school, schedule Telemedicine (15 minute) meeting to review results, provide education to parent regarding symptoms, discuss how medications work, side effects and need for frequent monitoring (sleep, anxiety, HA, stomach ache, HTN, ECG). Bill for Telehealth visit (typically will be reimbursed $40 by most insurance companies).
- Schedule initial appt with patient for height, weight, BP, and ADD rx, and introduce role of medication to help with focus to patient.
Quality Outcomes

Allow ability to triage effectively which patients need to be seen, when and where

Strengthens the medical home by encouraging continuity, trust and convenience

"If I know I can access my provider, receive education and ask questions, and understand when and why to come in for further testing. I may be more compliant, and be less frustrated."

Improves Market Share

- Keep up in an increasing competitive market
- Provide work life balance for patient and provider
- Build trust and better triage for patient
- Creative scheduling, integrate into clinic flow
- Decrease no show rate
Delivers Value

Patient satisfaction averages 98% positive using Telemedicine

Improves Performance

TOP 5 Specialties
- Pulmonology: 98
- Allergy, Asthma, & Immunology: 95
- Gastroenterology: 35
- Neurology: 17
- Endocrinology: 17

Location Distribution
What is the difference from Facilitated and Non-facilitated

Facilitated Visit involves the use of a camera, USB port stethoscope, Otoscope, typically used in Inpatient and Outpatient Settings with RN/parent facilitating on patient side and provider seeing Patient via Telemedicine at a separate location.

Non-Facilitated Visit may include Direct to Consumer using Smartphone Technology and Platform to provide guidance and education to patients.

KCA Direct to Consumer

1. Caregiver signs up for Platform and has Internet and Smartphone technology
2. Caregiver describes symptoms and waits in virtual waiting room to be seen by provider 5-10 pm daily
3. Provider, caregiver, and patient connect
4. Provider asks questions, exams patient and develops diagnostic assessment and care plan.
5. If full facilitated exam needed a referral to PCP next day is made a priority by care manager. EMR documented, and email copy sent to caregiver with discharge instructions and Anticipatory guidance. HIPAA compliant, no charge to patient.
Potential for Future Escalation of Care

- As platforms become more affordable, interchangeable, foresee ability to consult specialty expertise to the clinic bedside. Future guidance while awaiting transport.

Regional TH Outreach

Joplin, Missouri
St Joseph, Missouri
Junction City, Kansas
Wichita, KS

125 subspecialty providers in 29 Clinical Specialties:
- Allergy/Immunology, Beacon Complex Care, Behavior and Development (Psychology/Psychiatry), BMT, Hem/Onc, Cardiology, Dermatology, Child Abuse (SCAN), Down Syndrome Clinic, Endocrinology, ENT, Hospital Medicine, Genetics, GI, Hepatology, ID, NICU, Nephrology, Neurology, Ophthalmology, Orthopedic Surgery, Pain Management (RAPS), Plastic Surgery, Pulmonology, Sleep, Rehabilitation Medicine, Rheumatology, General Surgery, Teen Clinic, Toxicology, Urology, and Weight Management.
1. Patient arrives at distant site, checks in with TH RN facilitator whom obtains vitals
2. Rooms patient, asks clinical history
3. Texts subspecialty provider at originating site that patient is ready
4. Completes consult history and physical
5. Reviews assessment and plan with anticipatory guidance for return precautions
6. Writes note in TH encounter in EMR
7. RN Facilitator prints out discharge instructions and education and reviews
8. Family arranges next TH follow-up appointment.

Current Applications

- Provide Regional Outreach at four locations for subspecialty clinics to reduce travel for patient and provider.
- [Link to Video](http://link.brightcove.com/services/player/bcpid1427450020001?bckey=AQ~~,AAAAEH3J5KE~,qz5kW1OHgCEyPpHiH59-RRGSJlmJy1G5&bctid=4713932125001)
Legislation/Medical Legal

2018 Kansas passed legislation HB2028 effective 1/2019 mandating coverage by private insurers and no limit to provider location. Bill GT modifier Originating site=where patient located, Distant site=MD/DO, PA, APRN Kansas Medicaid does not limit reimbursement based on patient location, and allows reimbursement for home-based Telehealth, payment same as face to face, and can bill facility fee.
Currently very few lawsuits so minimal legal precedent
In-person Standard of Care=Telemedicine Standard of Care
Policymakers seek to reduce healthcare delivery shortages, contain cost, improve care coordination and doubled Telemedicine parity laws in the last five years. Must have flu guidance, and HIPPA compliance.

Data from Heartland Telehealth Resource Center

Reimbursement

Reimbursement is State and Payer Dependent
Parity=reimbursement same via Telemedicine and in-person (>32 states have full parity, including KS 1/2019)
Hidden benefits-increased patient satisfaction, increased referrals, may be less likely to go to UCC or ER
Most insurance companies will reimburse $40 for 15-minute visit
Provider must have KS license, no additional malpractice or credentialing
Consider cost reductions (able to see more patients more efficiently will less overhead/less time traveling to appt/waiting in waiting room, and decreased time getting to room to be seen, and time in each room)
Reimbursements improving each year
Important to promote and advocate as hesitations overcome with education
Technology/HIPPA

- HIPPA requires same rules as face-to-face encounter for privacy/security.
- See ATA website for Pediatric Care Guidelines
- High speed Internet required as well as bi-directional tech compatibility with iPad, laptop with webcam/speakers with login at both sites
- Several vendors offer USB stethoscope, otoscope for facilitated visit. If storing picture data becomes electronic protected health information and security rule must be followed.

REX THE ROBOT

- REX is deployed to the outside world when patients need to stay inside the hospital.
- REX has been to graduations, weddings, funerals, sporting events and even CMH Child Life Prom
BE THE CHANGE

- Innovate and originate
- Develop clinical workflow strategy
- Engage and learn
- Embrace technology and Telemedicine

Questions?