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Lessons Learned from a Home-based Telemedicine Program for Parkinson's Disease

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Background

- Parkinson's disease
  - Course over 10-20 years
  - Affects mobility, cognition, emotions, autonomic function
- 1% of those over age 60
- 7% of those in care facilities
- Growing more rapidly than Alzheimer's disease (AD)
  - "The emerging evidence for a Parkinson's disease pandemic" (Dorsey et al, 2018)
- Cost of care in more advanced stages greater than AD

Legacy Care
A PD palliative care program

- Funded by the Bob and Renee Parsons Foundation in 2017
- Entry criteria:
  - Medicare definition of homebound status
  - Significant caregiver burden
- Components:
  - Multi-disciplinary care clinic
  - Home visits for Maricopa County
  - Telehealth
  - Caregiver intervention research
  - Virtual outreach

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Rationale for telehealth in PD

- PD Medicare patients who don't see a neurologist:
  - 14% more likely to fracture hip
  - 21% more likely to be placed in skilled nursing
  - 22% more likely to die (Willis, 2011)
- PD patients who see movement specialist:
  - Better adherence to quality indicators (Cheng, 2007)
    - 78% for MDS vs. 70% neuro vs 52% non -neuro
  - More satisfied with care (Dorsey, 2010)
  - Do better in hospital (Aslam, 2019)
- In Arizona
  - Movement specialist in city centers (Phoenix, Tucson)
- Preliminary pilot studies show feasibility

Telehealth in 2017

- Email not HIPAA compliant
- Access to technology by patients uncertain
- Broadband access uncertain
- Telehealth largely not covered by insurance
  - Exception rural patients at Medicare originating sites
- Licensing issues for providers

Our model

- Provide in-person visits for those in Maricopa County
- For all else, telehealth:
  - Provided tablet with built in cellular card
  - Software application loaded
  - 1 click to enter the doctor's office

- Sounds easy, right?

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Problems

- In first year, only 50% of visits were successful
  - Charging tablet
  - Turning on tablet
  - Not just 1 click, many steps
  - Patient preparation not happening properly
- Modifications made to protocol
  - Changed vendor for telehealth platform
  - Nurse contact the day before

The numbers

- Year 1 (2017)- 65 people enrolled
  - 24 home visits, no telehealth
  - Minimal remote outreach
- Year 2 (2018)- 144 Enrolled
  - 122 home visits, 43 telehealth
  - 1452 phone calls
  - 839 individuals access virtual programming
    - PD All Star conference, PD 101, 202, support groups
- Year 3 (2019)
  - 230 telehealth visits by previous vendor
  - 15 with new vendor

Impact of COVID-19

- March 17, Medicare announced:
  - Telehealth new and return patients covered at same rate as in-person visit
  - Coverage for brief phone call check-ins (G2012)
  - Coverage for remote evaluation of recorded images/video (G2010)
  - Coverage of digital visits through portal or secure email (99421-3)
  - HIPAA privacy rules waived
- March 25, Ducey mandated covering telehealth in AZ
- March 30, Medicare announced:
  - Coverage for phone calls up to 30 minutes (99441-3)
  - Coverage for total time spent in E/M (not MDM driven)

How have we changed?

- Switched our platform (yet again)
- Now seeing 10-12 virtual patients per day with AV
- Team of 24 providing tech support for clinic 1-2 days prior to visit
- Medical assistants do their part 15 minutes prior to visit
- I spend 15-30 minutes in E/M

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3 Week numbers
March 21-April 9

- Total clinic visits: 1285
- Movement program:
  - 324 visits over 10 minutes
  - 260 visits over 20 minutes
- Average “tech check” time=10 minutes
- Average MA time about 15 minutes

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New issues

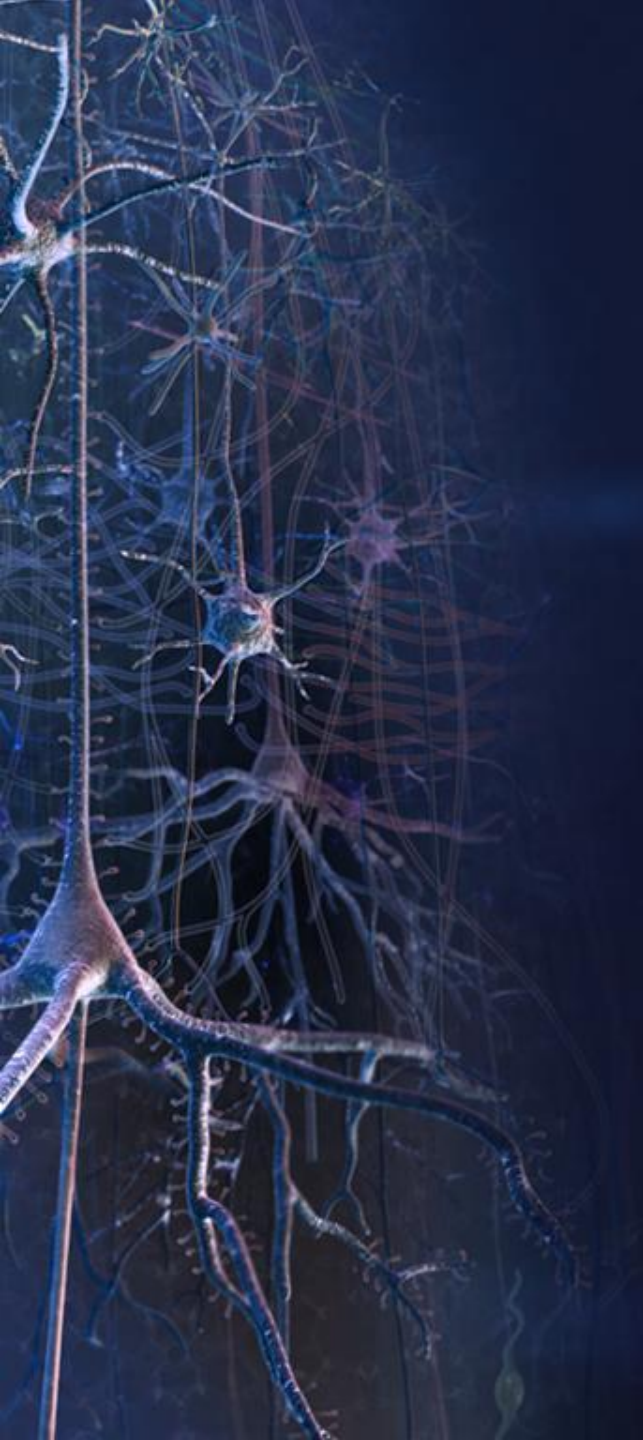
- About 10-15% refuse telehealth
  - Will wait for in-person visit
- 25% don't "pass" tech check
- Outfitting staff with equipment
  - Space, AV equipment, licenses
- Communicating remotely efficiently
  - Using Jabber for instant messaging
- Adding in trainees
  - Residents, fellows, medical students
- How to do visits in facilities?

Lessons learned

- Technology needs to be simple
  - Older population, mobility and cognitive problems
- Sending tablets to patients not sustainable
  - Needs to be email or text
- Training on technology required- should not be done by HCP
- Broadband and technology access still issue
- Patients not that worried about HIPAA
- Reimbursement drives utilization
- Patient satisfaction appears to be high
- Provider satisfaction appears to be high

Recommendations Post COVID-19

- Continue to keep HIPAA relaxed
- Consider hybrid model for reimbursement
  - More than 60 miles away?
  - Medicare Homebound Status?
  - Require annual in person visit?
- Address remote and underserved areas better
  - Utilizing community health centers for technology hubs?
- Consider simplification of platform options
  - Multiple providers means multiple platforms



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Thank you!