Developing an Interdisciplinary Model for Telehealth in a NMHC

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Nurse Managed Health Center

• Academic Mission and Vision
• Holistic Model of Healthcare
• Advanced Practice Nurses provide care in collaboration with physician colleagues
Short History

• Open since August 2010 (500 sq./ft.)
• First year of operation open 3 days a week
• September 2011 opened 5 days a week
• Satisfaction reported as exceptional (n=1200)
• New Office – January 2014 (5000 sq. /ft.)
# Building a Foundation

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Clinical Environment

- 6 Nurse Practitioners & 1 Physician
- 1 Registered Nurse
- 1 Practice Analytics Specialist
- Office Manager, Receptionist
- 5,000 sq/ft Office Suite
- 6 Modern Large Exam Rooms
- 1 Cardiac Stress Test Lab
Students

- Undergraduate Nursing Students (n=16)
  - 5 Students Fall & Spring Semester
  - 6 Students Summer Semester
  - Provide 1344 hours of clinical time

- Nurse Practitioner Students (n=15)
  - 5 Students Fall, Spring & Summer
  - Provide 1260 hours of clinical time
Research

- Database of potential research participants available for researchers.
- Provides research support for human subjects screening including physical exams, laboratory analysis, stress testing etc.
Parkinson’s disease (PD) Clinic
Motivation behind the clinic...

“Please help us....”

- Delmarva Parkinson’s Alliance
- Caregivers
- People living with PD
Burden of Parkinson disease

- One million people in the USA have PD
- Estimated 2,000 in Delaware

Motor Symptoms include:
- tremor, rigidity, akinesia and postural instability

Non Motor symptoms include:
- anxiety, depression, difficulty communicating, GI problems, decreased cognition...and the list goes on!
Community Advisory Panel

- People living with PD
- Family caregivers
- Division of Services for Aging and Adults with Physical Disabilities
- BCBS – Highmark
- Local neurology group
- Nurse Practitioners
The community speaks...

PD-Community Advisory Board said:

- Movement disorder specialist - nearby
- Speech and physical therapies
- Exercise opportunities
- Treatment for depression
- Access to research opportunities
- Help with disability, work benefits
- INFORMATION for caregivers...
- Support groups on line....
An idea...for a PD clinic...at UD

Talents we have:
• Dr. Allen Prettyman, expert in chronic disease management
• Dr. Ingrid Pretzer-Aboff – expert scientist in PD
• Nurse practitioners, physical therapy, speech therapy, exercise physiologists

Talents imported:
• Dr. Ray Dorsey- Rochester University
  – Movement Disorder Specialist
  – Director of Rochester PD Clinic, telemedicine expert
• Dr. Roseanne Dobkin – Rutgers -RWJ
  – Psychologist, specialty is PD, telemedicine expert
The PD Clinic - Model

Patient and Family Centered Care

PWPD & family
Movement Disorder Specialist.....

Movement Disorder Specialist

PWPD & family

Nurse Managed Health Center
at the UNIVERSITY of DELAWARE

www.udel.edu/nmhc
Telehealth Cart / Connection

• Secure Point to Point
• High Definition Video
• Highest Internet Connection Speed
• Portable / Mobility
• Stereo Sound
Nurse Practitioners

- Edmond J Safra VNF training
- NP program
- BSN program
- PD nurse experts, UD, JHU, U Penn
Therapy

- UD Physical Therapy (rated 2nd in country)
- Speech Language Pathology
- Occupational Therapy
Exercise...
Mental Health

On Site

Via telemedicine

PWPD & family

Movement Disorder Specialist

Nurse Practitioners

Therapy PT/OT/SLP

Mental Health

Exercise
Research

PWPD & family

Movement Disorder Specialist

Nurse Practitioners

Therapy PT/OT/SLP

Exercise

Mental Health

Research
Parkinson’s Research

— Allen Prettyman, I. Pretzer-Aboff, - Impact of PD telemedicine clinic on health outcomes, satisfaction, cost-effectiveness
— I. Pretzer-Aboff – Longitudinal study looking at the impact of disease on people with PD and their caregivers
— B. Gaynor - Effect of dance therapy in persons with Parkinson’s disease and their caregiver dance partner
— C. Knight – Testing impact of “speed-geezer” exercise protocol on physical function and quality of life.
— I. Pretzer-Aboff, KN Winfree – Effect of PDShoe on Freezing of Gait
Beyond the Theoretical
What a visit looks like...

First:

– Nurse Practitioner for a comprehensive assessment
– Review medical and surgical history
– Physical exam which includes a neurological and function assessment
– Develops a list of healthcare goals
What a visit looks like...

Second:

• Dr. Ray Dorsey is rolled into the room via telehealth technology
• Assessment of PD symptoms and history of PD
  – Initial diagnosis, 2nd opinion, or take over management
• NP is in room
  – Can assist with additional physical exam requirements,
  – Roll Ray into hall to observe patient walking
• Review of current PD medications
• Recommendations for change if necessary
What a visit looks like...

Conclusion of visit:

- Referrals to other clinical experts, education, research protocols
- Lab work, tests are ordered as needed
- Communication with patients local physicians, neurologists
- Follow up with NP in 6-12 weeks as needed

Total time for visit: 2 hours
Status

• **Opened** - March 11, 2014
• See new PD patients once/month
• Follow-ups ~ every 6-12 weeks
• Dr. Roseanne Dobkin – start date: May 1
• Speech Therapy on site – soon
• Pursuing partnership with other regional movement disorder specialists
• Booking into August
Payment Model

- Telehealth reimbursement varies by state
- Nurse Practitioner visit billed to commercial health insurance & Medicare
- Team each bill for their individual services
Sustainability

• Bundled / Capitated Care Model
• Discussions ongoing with Highmark BlueCross
• Foundation Grants and Research Grants
Outcomes & Data

• Provide PD patients local access to a Movement Disorder Specialist via telehealth technology.
• Decrease the wait time for MDS consultation.
• Early accurate diagnosis and appropriate treatment of PD motor and non-motor symptoms.
• Focus on improving the quality of life of the person living with PD and their caregivers.
Thank you!

**Funding**
- UD College of Health Sciences
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- Highmark Blue Prints for Health
- Edmond J Safra Foundation
- Delaware - Division of Services for Aging and Adults with Physical Disabilities

**Team**
- Ingrid Pretzer-Aboff PhD & Allen Prettyman PhD, Kyle Winfree PhD
- Hal Kramer, MD, Ray Dorsey, MD, MBA, Roseanne Dobkin, PhD
- Beatrice Gaynor FNP, Jenny Hughes FNP, Susan Skinner ANP
- Jane Ruggiero, Patti Szwetkowski
- Graduate and undergraduate students
- Community Advisory Committees
- Support group leaders
- All the PD patients and their caregivers!