The Implementation of Telehealth for Disease Management at a Patient-centered Medical Home

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BACKGROUND

Telehealth have been shown to:
- Provides clinical and economic benefits in treatment of patients at highest risk of serious outcomes
- Improve control of blood glucose in patients with DM
- Have a positive impact on quality of life and reduces ED visits and hospitalizations for patients with COPD
- Have similar outcomes as face-to-face or telephone delivery of care in the management of patients with heart failure
- Enables self-care of patients with heart failure
- Reduce risk of admission to hospital for patients with asthma
- Improves medication adherence
- Resulted in cost savings reported in some studies (more work is needed)

RATIONALE

The use of TH has an enormous potential to improve health care performance if used as an intervention that enables shared decision-making and individualized care
This type of care would change the way of current disease management when patients seek care after symptoms exacerbation to a proactive stance where at-risk patients are identified early and supported to avoid symptom exacerbation or multiple encounters within health care organization
TH is practical and cost-effective means of caring for population of patients with chronic disease that is acceptable to patients and providers

PURPOSE AND AIMS

- Implement telehealth/video conferencing as an effective way of communication
- Create a protocol
- Create teaching module for patient and providers
- Develop informed consent and other supportive documentation
- Create a way to track patient and provider satisfaction

METHODS - CONTEXT

- Adult ambulatory care,
- Nurse Practitioner faculty practice
- Long-standing primary care office firmly embedded in a local community
- 4000 patients and 7855 visits in 2016
- Affiliated with the UVM CNHS

INTERVENTIONS

- Acquire of equipment and create an account with VTConnect
- Development of protocol, and provider/patient educational module

ANALYSIS

- Observing the function of TH equipment
- The acceptance of proposed protocol and teaching module.
- The evaluation of provider knowledge related to TH
- Suggestions for improvement were analyzed and used to improve protocol, and equipment functioning
- Tools to measure patient and provider satisfaction were developed

ETHICAL CONSIDERATIONS

- Patient privacy and confidentiality was respected by:
  - following federal and state requirements and
  - use of HIPAA compliant video conferencing software with adequate encryption provided by VTConnect
- On 5/23/2017 the IRB board has determined that this project did not require IRB research review

RESULTS/KEY FINDINGS

- Optimal functioning of equipment
  - tested in rural and urban environments with younger and older adults
  - minor technical difficulties that were easily resolved
- Protocol accepted and pilot program completed
- Patient reported:
  - Satisfaction with privacy concerns and quality of connection and equipment
  - increased confidence in providers, self-management
  - comfort in using TH equipment
  - willingness to recommend this type of communication to family and friends

LIMITATIONS

- This project is limited to small nurse practitioner run clinic, affiliated with UVM
- Selection of equipment and HIPPA internet provider
- Although providers viewed an educational video, they were reluctant to complete TH Knowledge Survey. Probably due to timing (holiday season) and increased workload after return to work. Video had 22 viewing (more than one viewing per provider), and 30% of providers completed TH survey and demonstrated TH related knowledge

CONCLUSIONS

- Clinic has the equipment and already established protocol making it easy for them to offer this type of services whenever they feel ready
- The clinic would need to purchase subscription for HIPPA approved service provider
- Great potential to expand to other contexts of health care delivery
- More focused EBP projects focusing on specific aspects of chronic illnesses
- Monthly additional support could be provided by RN staff (99490)

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