# Video Visits for Home Health Patients with Chronic Obstructive Pulmonary Disease

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## Background
- Chronic Obstructive Pulmonary Disease (COPD) is a leading cause of morbidity and mortality.
- COPD patients have high rates of emergency department visits and hospital readmissions both nationally and locally.
- A local home health agency is interested in using video visits to complement their skilled nursing in-home visits as an additional way to support patients with COPD in their homes and efficiently utilize their clinical staff.

## Context
- Full-service, not-for-profit Visiting Nurse Association.
- About 225 employees including registered nurses, physical, speech, and occupational therapists, LNAs, social workers, a bereavement coordinator, a chaplain, and administrative staff.
- Average of 759 patients on service daily.
- Established telemonitoring program overseen by telehealth nurse.
- Better Breathing Program.
- Project leader from outside the organization.

## Interventions
- Review of existing telehealth resources.
- Chart review of COPD patients enrolled at agency from October 1, 2016 to March 31, 2017 (6 month period).
- Gather stakeholder input through interviews with patients and staff.
- Compilation of video visit guidelines.
- Creation of staff education module with survey to assess clarity and effectiveness of module.

## Methods

### Literature/Telehealth Resources
- Stakeholder Input
- Chart/Review

### Draft Guidelines
- Education Module
- Module Feedback

### Completed Guidelines
- The guidelines cover informed consent, inclusion and exclusion criteria, privacy, safety, communication best practices, patient assessment, ideas for rolling out a program, and tools for evaluating program success.
- Living Well with COPD curriculum added to guidelines.

### Education Module
- As of 2/23/18 4 RNs and 1 LPN had viewed module.

### Available Knowledge
- Research reports patients and clinicians satisfied with clinical staff with COPD in their homes and efficiently utilize their home visits as an additional way to support patients.
- Better Breathing Program.
- Video visits to compliment their skilled nursing department visits and hospital readmissions both leading cause of morbidity and mortality.

### Measures
- Stakeholder input to inform guidelines.
- Feedback from administration regarding draft guidelines.
- Qualitative and quantitative education module survey results.

## Results

### Chart review

<table>
<thead>
<tr>
<th>Patient Saw Case Manager</th>
<th>1st visit 43%</th>
<th>2nd visit 37%</th>
<th>3rd visit 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of SN Visits In First 7 Days</td>
<td>1 visit 35%</td>
<td>2 visits 45%</td>
<td>3 visits 20%</td>
</tr>
</tbody>
</table>

### Discussion of Findings
- Specific aims achieved.
- Data from chart review showed need for improvement of frontloading to achieved VNA Blueprint for Excellence recommendations (2-3 consecutive skilled nursing visits with same RN post hospital discharge).
- Clinicians and patients had mixed responses to the idea of video visits, from hesitation to enthusiasm.
- Initial feedback regarding education module suggests effectiveness at increasing participant awareness of video visit benefits.
- Incorporation of video visits into workflow and scheduling remains a question.
- Agency not ready to begin video visit program, primarily due to budget concerns.

## Limitations
- Small sample size of chart review.
- Small number of module participants and survey response rate.
- Insights and interpretations as an agency outsider may be different from staff members.
- Utility of materials will become evident only with implementation of a video visit program.

## Next Steps
- Seek staff champion to take over a small pilot program, generate staff buy-in, and build video visit program over the course of years.
- Explore grant opportunities for pilot program.
- Periodic review and revision of the guidelines as the agency learns from experience or as new best practices come to light.

## Conclusion
- COPD patient population is an important target for additional interventions.
- Video visits are a means to provide additional interventions.
- Building a video visit program requires significant preparation.

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