



BACKGROUND

Outpatient parenteral antimicrobial therapy (OPAT) is a well-established and effective way of delivering and monitoring patients requiring long-term IV antibiotics¹⁻². OPAT follow-up appointments are typically in-office appointments. There is limited to no data regarding readmission rates and outcomes of OPAT patients that had home audio-visual (AV) telemedicine (TM) follow-up appointments³.

Our OPAT Program began in December 2013 and serves a major academic Level 1 trauma center as well as several smaller community hospitals within our health system. The OPAT team is a multidisciplinary team consisting of ID Physicians, Nurse Practitioners, Pharmacist, Nurses and a Coordinator. Historically, we have evaluated patients in the office within 1-2 weeks of hospital discharge and just prior to antibiotic completion. However, there are several barriers to visit completion including lack of transportation, lack of perceived benefit of appointment by the patient, and other mobility issues. In July 2019, we began a pilot program of offering home AV TM visits to address some of these barriers. Visits were conducted using UPMC Health Plan Telemedicine platform called MyUPMC.

Figure 1. Clinical Outcomes

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RESULTS

13 OPAT patients had a telemedicine video visit. Patient demographics were:

- 8 patients were female.
- 5 patients had Diabetes

4 patients were readmitted, 3 had an ER visit and 1 patient had a PICC line complication (rash). (Figure 1). Half of the readmissions were due to noninfectious causes (OB delivery & pacemaker placement). 2 patients were readmitted due to ongoing infection but only one of these patients had a home TM appointment before their readmission. The other patient's visit occurred after their readmission. Reasons for ER visits were PICC malfunction, dysuria, and syncope.

A Pilot Program to Evaluate Home Telemedicine Visits in an OPAT **Program Prior to COVID**

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The average age of the patients was 54 (range 35-75).

10 of the 13 patients were treated for osteomyelitis or septic arthritis 77%).

9 of the 13 patients received a beta-lactam (69%).

METHODS

We conducted a retrospective chart review of commercially insured OPAT patients discharged to home from UPMC Presbyterian from July 2019 to February 2020 that had home AV TM visits. We evaluated 30-day readmission rates and complication rates.

CONCLUSION

Home Telemedicine video visits could be an alternative to in-office appointments for OPAT patients. More studies should be done to evaluate this visit modality and determine if this is equally efficacious in preventing readmission rates.

References

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