

Patient Selection and Education

(Allison + Zurlo)

There are some fundamental medical and non-medical questions to answer in determining whether a patient is a candidate for OPAT:

- Is the patient clinically ready for discharge to an outpatient setting?
- Is the patient's infection amenable to outpatient treatment?
 - Can the prescribed antibiotic(s) be administered in an outpatient setting?
 If not, are there alternatives?
 - Is the patient (and/or caregiver) physically and mentally able to manage the treatment protocol?
 - Can the patient afford the costs of treatment not covered by insurance?

These and other questions about patient eligibility and education will be addressed in this section or discussed in other sections of this manual.

PATIENT ELIGIBILITY: MEDICAL ISSUES



Fundamentally, the first assessment is whether the patient's infectious disease can be safely and effectively treated outside the hospital setting. Unfortunately there are no comparative trials that have assessed the outcomes of patients with similar infections randomized to receive inpatient care versus OPAT. Moreover, such trials are unlikely to be conducted in the future given the rise of OPAT as a standard care option over the last two decades.

Based on data from large case series, the majority of infections treated by OPAT are bone and joint infections, typically chronic osteomyelitis (including vertebral osteomyelitis/discitis), septic arthritis, and prosthetic joint infections. ¹⁻⁵ Other common infectious diseases treated using OPAT include endocarditis, intra-abdominal infections, Lyme disease, meningitis, pneumonia, and septicemia (for infections amenable to OPAT, see Chapter 3). ⁶⁻⁸ In all cases, patients must first be clinically stabilized and otherwise ready for hospital discharge. Inpatient consultation by an infectious diseases specialist has been shown to facilitate the transition to OPAT and improve patient outcomes. ⁹

Chapter 2

OPAT SETTINGS

Once the patient is medically ready for hospital discharge, the next question is deciding on the out-of-hospital setting that is most appropriate given the individual's medical condition, capabilities, and support systems. However, in many cases, the choice of out-of-hospital venue will be determined by the patient's insurance coverage and his or her ability to pay for uncovered costs associated with treatment (see Chapter 10). The most common options for out-of-hospital antibiotic treatment are listed below.

- Long-term Acute Care (LTAC) Hospital Patients sent to LTACs are those whose medical condition has stabilized in the hospital to some degree but who require ongoing acute medical care. LTACs typically have their own medical staffs who manage ongoing medical problems, including prescribing parenteral antibiotics. Under most circumstances, LTACs are not considered an OPAT setting.
- but not always, require ongoing nursing-level care. The facility takes the responsibility of delivering parenteral antibiotics. SNFs have their own medical providers who will often follow the guidance and treatment plans set up by the discharging OPAT physician. The supervision of SNF patients on OPAT is variably consistent, but very few discharging centers have the resources to provide additional oversight, once care has been handed off to the SNF. However, financial penalties related to readmissions may apply pressure on hospitals to perform more focused post discharge oversight of OPAT patients in SNFs.
- Infusion Center Due to insurance coverage, their own preferences, or because they lack the capability of infusing parenteral antibiotics at home, some patients will receive daily antibiotic infusions at an infusion center. Infusion centers are often managed by a local hospital or physician group. This option is logistically feasible only for patients who live in reasonable proximity to the facility and who are receiving once daily infusion(s) (see Chapter 11). Weekend access must be available.
- Treatment at Home For most OPAT programs, the majority of patients will receive OPAT at home, managed by a combination of a home infusion company and a visiting nurse service under the guidance of the discharging OPAT physician. Patients may administer infusions at home by themselves or with the help of caregivers.

Chapter 2

PATIENT PHYSICAL AND MENTAL ABILITIES



There are no randomized trials that provide guidance regarding the minimum physical and/or mental abilities necessary to successfully manage OPAT at home. The decision to utilize OPAT typically is made by the team of caregivers including physicians, nurses, case managers, physical therapists, and members of the home care service team. In some cases, patients have the physical and mental capabilities to manage OPAT alone. Such patients who self-infuse will need an IV extension that allows for the use of both hands in catheter manipulation and infusion. Among patients who live alone, features which may signal inappropriateness of home OPAT include: visual impairment; significant problems with manual dexterity; dementia or developmental delays; serious uncontrolled mental illness or substance abuse; and a high degree of medical complexity. In many cases, patients can be managed successfully only with the help of a responsible caregiver.

OPAT for the intravenous drug user (IDU)

The decision about whether to employ OPAT in a home setting for an active IDU is both difficult and challenging. The common concern is that active IDU patients will utilize the central line at home for drug injection leading to line-related complications such as septicemia and thrombosis, and the possibility of overdose. While these concerns are real, there are surprisingly little data that have measured outcomes of patients with active IDU receiving OPAT. From the available evidence, along with anecdotal experience, it appears that some of these patients can receive OPAT safely. In one study, 29 active IDU patients received OPAT for a median duration of 18 days with endocarditis being the most frequent reason for antimicrobial treatment.¹⁰ To be eligible, patients were required to have stable housing, simultaneously receive addictions treatment, agree to daily clinic visits, sign a contract for non-use of illicit drugs, and use tamperproof seals over central catheters and infusion equipment. At follow-up 30 days after OPAT completion, only 6 patients (21%) suffered infection or treatment-related complications. There were no deaths and no tamper-proof seals were breached. While items such as tamper-proof seals are not widely available, this study does suggest that OPAT can be safely administered to a select group of IDU patients, in the right setting. Ultimately the decision about whether to proceed with OPAT in the IDU patient should be a joint decision made with all team members participating, including the home nursing agency and health care team who will be managing the patient in the outpatient setting.

Chapter 2 20