Outpatient Parenteral Antimicrobial Therapy in the Time of COVID-19: The Urgent Need for Better Insurance Coverage

Omar Mansour,1,2 Sara Keller,3,4,5,6 Morgan Katz,3 and Jennifer L. Townsend6,2

1Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA, 2Center for Drug Safety and Effectiveness, Johns Hopkins University, Baltimore, Maryland, USA, 3Division of Infectious Diseases, Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA, 4Department of Health Policy and Management, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA, 5Armstrong Institute of Patient Safety and Quality, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA, and 6Division of Infectious Diseases, Johns Hopkins Bayview Medical Center, Baltimore, Maryland, USA

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and the disease it causes, coronavirus disease 2019 (COVID-19), are placing unprecedented pressure on every health care system. Patients who require weeks of intravenous antibiotic therapy after hospital discharge due to severe bacterial infections, generally referred to as outpatient parenteral antibiotic therapy (OPAT), are at increased risk for contracting and/or transmitting COVID-19 due to extensive contact with the health care system. To reduce the risk of COVID-19 among this vulnerable patient population, providers overseeing OPAT care need to consider the relative safety of the different OPAT sites of care. Home-based OPAT should be emphasized to minimize hospital stays and prevent skilled nursing facility admissions. Medicare reimbursement policies need to urgently change to provide comprehensive coverage of home infusion services.

Keywords. coronavirus; home infusion; infection prevention; nursing homes; pandemic.

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and the disease it causes, coronavirus disease 2019 (COVID-19), is one of the most pressing public health challenges in recent decades. As we contemplate the ramifications of this rapidly evolving pandemic, the need for comprehensive containment and mitigation strategies is clear. One group that may be at increased risk for contracting and transmitting COVID-19 due to extensive contact with the health care system is the outpatient parenteral antimicrobial therapy (OPAT) population, which has serious infections that typically require longer than average hospital stays to evaluate and control, followed by 2–6 weeks of intravenous antimicrobial therapy postdischarge. OPAT can be completed at different sites of care, including at home, skilled nursing facilities (SNFs), outpatient infusion centers, and dialysis centers. Providers overseeing OPAT care need to consider the relative safety of these options in the setting of the COVID-19 pandemic (Table 1).

Nationally, home infusion–based OPAT is the most common method of OPAT delivery [1] and is arguably the safest option during COVID-19. Home infusion is typically delivered by the patient and family, with support from a single nurse who may visit weekly for the duration of the course. While home nursing interactions carry similar risks as other health care encounters, including nursing time pressures, contact with numerous patients daily, and imperfect usage of protective equipment, the interactions are much less frequent than SNF interactions (i.e., weekly vs multiple times daily). The home setting is also not subject to the crowding and transmission risks inherent in SNFs and hospitals. OPAT patients receiving care at home are better able to comply with social distancing measures. They also can spend more time with their families than patients in hospitals and SNFs, many of which have implemented a no-visitors policy to prevent COVID-19 transmission. Patients at home also have better access to the technologies necessary for telemedicine encounters than residents of SNFs. Other benefits of home infusion may include increased satisfaction, improved outcomes, and lower cost to the health care system [2].

Outpatient infusion centers and dialysis centers are also common sites of OPAT care, but likely represent higher-risk care settings than home infusion due to a high volume of health care delivery with equipment and staff shared among numerous patients throughout the day. Also, patients are required to travel outside their home and enter public spaces multiple times per week, which carries risk of exposure to persons and surfaces contaminated with the coronavirus. Some
Medicare coverage for home infusion has a long history and has come under scrutiny in recent years. Before 2015, Medicare coverage for home infusion services such as OPAT did not fall under any 1 part of Medicare [6]. The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) revised certain Medicare reimbursement policies to allow payment for home infusion services, but only on the day when the nurse is in the home (once weekly on average). Hamad and colleagues recently summarized the coverage gaps for OPAT services [7]. Medicare part A covers home nursing only for homebound patients. Medicare part B covers <10% of intravenous antimicrobials. Medicare part D, while covering drugs, does not cover the needed supplies or nursing. Excepting patients with Medicare Advantage plans, OPAT patients face prohibitively high out-of-pocket expenses for daily medications and supplies and hence are discharged to SNFs in large numbers.

Medicare has a window of opportunity to save lives during the pandemic by revising and improving its coverage regarding OPAT. Medicare should be applauded for rapidly expanding coverage for telemedicine services, which has dramatically decreased the risk of COVID-19 acquisition for patients and providers during face-to-face encounters. In a similar manner, Medicare should include daily allowances for home infusion medications and supplies in order to facilitate safe OPAT at home, which in turn will reduce patient contact with health care settings. As previous analyses have shown, expanding home infusion coverage for OPAT patients will save Medicare money [8] that could be redirected toward fighting the pandemic in other arenas. The cost of home infusion should not fall on patients or hospitals in this time of unprecedented stress on individuals.
and health systems. Funding home infusion for OPAT patients is a win-win for Medicare and patients, especially under the threat of COVID-19.

Acknowledgments

Financial support. The authors received no financial support for the research, authorship, and/or publication of this article.

Potential conflicts of interest. The authors report no conflicts of interest related to this work. The authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

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