

facilities and public health entities in collecting this information, the Centers for Disease Control and Prevention (CDC) Division of Healthcare Quality Promotion in collaboration with the Council for Outbreak Response: Healthcare-Associated Infections and Antimicrobial-Resistant Pathogens (CORHA) created a comprehensive list of patient and facility-level variables that can be collected during or following an HAI outbreak investigation (https://www.corha.org/resources-and-products/?filter_cat=data-management). These variables were selected to capture potential health inequities through consultation and collaboration with the CDC and Agency for Toxic Substances and Disease Registry's Social Vulnerability Index team and CDC's National Center for Emerging Zoonotic and Infectious Diseases health equity experts. Existing standards and validated instruments were used to inform the development of the standardized list. We encourage public health entities and healthcare facilities to use and adopt these standardized variables to help enhance our understanding of the epidemiology of outbreaks in terms of person, place, and time to elucidate risk factors for HAI outbreaks, to share findings with surrounding communities for collaborative action, and to address underlying inequities.

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Identifying and addressing social determinants of health in pediatric outpatient parenteral antimicrobial therapy

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To the Editor—Outpatient parenteral antimicrobial therapy (OPAT) improves care and reduces costs by allowing patients to complete prolonged therapy at home.¹ Most pediatric literature related to OPAT² focuses on maximizing intravenous (IV)-to-oral conversion to avoid known catheter-associated complications and antibiotic toxicity. But for cases without oral alternatives, no evidence-based method exists to determine which patients will succeed with OPAT or which social determinants of health (SDOH) drive OPAT outcomes. The current OPAT guidelines of the Infectious Diseases Society of America (IDSA)³ acknowledge a paucity of evidence; thus, guidance lacking on equitable OPAT

use for patients experiencing high social risk. A gap exists in our ability to identify and mitigate the impacts of unconscious bias and systemic racism on OPAT delivery when individual providers must judge which patients are “appropriate” for OPAT.

To examine and learn from the biases inherent in our own pediatric OPAT programs, we describe 2 challenging OPAT cases and propose best practices to identify, evaluate, and address barriers to achieving favorable OPAT outcomes. We identified 2 core questions to examine when considering OPAT: (1) “Is continued hospitalization preferable?” and (2) “What individual SDOH needs must be addressed to support successful OPAT?”

OPAT versus continued hospitalization

Case 1: With first-time parents carrying a remote history of substance use disorder, an infant with bacteremic urinary tract infection was deemed “not appropriate” for OPAT and remained hospitalized for 2 weeks to complete treatment. The provider teams

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discussed the possibility of OPAT but never broached OPAT with the family. Provider assumptions about the family's ability to complete OPAT precluded open conversations to understand the family's support systems, history of drug use, health literacy, and care preferences. The 2004 IDSA guideline and subsequent reference materials^{4,5} outlined the basic components of a successful OPAT plan: OPAT is available, caregivers are willing and can be taught, ID providers can communicate with caregivers during the OPAT course, and the patient will return for follow-up appointments. The differential application of these subjective criteria, whether due to provider biases or lack of information, can lead to preconceived judgments and inequitable access to OPAT.

Social determinants of OPAT outcome

Case 2: The infectious diseases attending physician recommended that a child with epidural empyema receive IV ceftriaxone and oral metronidazole for 4–6 weeks. His mother worked full-time at a check-cashing company and the father stayed home; neither parent had attended college. The family lived 4 hours from our medical center with 2 other school-aged children at home. Endorsing financial strain due to rent increases and hesitancy to take unpaid time off work, the parents were eager to learn how to provide care at home. The primary team initially intended to keep the patient admitted, acknowledging both discomfort at transitioning care to parents whose level of education was perceived to be a barrier to infusion teaching and concerns about their home distance from care. However, upon recognition of the adverse financial and job security ramifications for parents, the primary team worked with the infusion trainers to augment teaching for the family. Both parents received infusion training and practiced their new skills with bedside nursing assistance; the patient completed OPAT successfully.

This case description demonstrates that learning family lived experiences can better inform the decision to pursue OPAT and foster its success. Challenges to OPAT success can arise based on various SDOH factors (Table 1).⁶ These circumstances may require additional resources or creative problem-solving to support families in successfully administering OPAT. Identifying these issues prior to discharge can inform effective mitigation strategies, allow time to secure care coordination resources, and streamline visits for the family.

Communication merits special attention. Along with telephone and/or internet access, availability, and use of interpreters, particularly for families speaking uncommon dialects, are critical to OPAT success, especially with anticipatory guidance regarding line care, laboratory sample collection, and contingency planning for possible complications. Provider–caregiver communications may benefit from the intentional use of trauma-informed care techniques, using the “4 Rs”: (1) realize the impact of trauma on patient populations, (2) recognize the signs of trauma, (3) deploy a system to respond to trauma, and (4) resist retraumatization.⁷

Complex challenges arise when delivering OPAT in a pediatric setting. Framing these challenges within the SDOH context can help providers anticipate and mitigate challenges to OPAT success. To better understand the impact of SDOH, OPAT programs must also build a knowledge base around diversity, equity, and inclusion topics. Programs should consider reviewing institutional resource documents to ensure that equity is achieved and that OPAT criteria are overt rather than unwritten. Absent professional society screening tools specific to OPAT planning and delivery, programs may adapt screening SDOH elements important to OPAT (Table 1).⁸ Each OPAT program should identify institutional partners and

Table 1. Aspects of OPAT Care in Relation to SDOH Domains

SDOH Domain	Connection to OPAT delivery
Economic stability	Balancing employment/childcare responsibilities with OPAT training and administration schedule Identifying risk for food insecurity Ability to pay for housing and utilities needed for OPAT (eg, electricity, water, phone, and Internet bills)
Education access and quality	Caregiver baseline literacy and education level Caregiver learning or developmental disabilities Availability of learning aids for teaching
Healthcare access and quality	Quality of health insurance and prescription drug coverage Physical and remote access to primary care, emergency care, and OPAT provider Caregiver health literacy Availability of translation services and culturally competent care Availability of trauma-informed care
Neighborhood and built environment	Transportation to/location of appointments, laboratory draws and line care, pharmacy Ability to receive deliveries and safely store medications (including refrigeration) Housing stability
Social and community context	Social support system Caregiver and patient mental health School and daycare requirements and restrictions Legal or custody challenges necessitating care in multiple homes by multiple providers

Note. OPAT, outpatient parenteral antimicrobial therapy; SDOH, social determinants of health.

community resources that connect patients with needed support. Although a social work consultation is a valuable initial step, social workers often cannot address all SDOH challenges. Therefore, programs must engage with other stakeholders, including infusion educators, child life specialists, cultural patient navigators, and/or behavioral health providers to support patients and caregivers in navigating their lived experiences during treatment.

In summary, OPAT providers must change their behavior by investigating bias resulting from a lack of uniform OPAT criteria, and by using SDOH screening to prospectively address barriers. By following these strategies, OPAT providers can progress toward offering care that is equitable, accessible, and successful for all patients and families willing to pursue it.

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From a culture of blame to a culture of grace: A letter in reply to Papadakis

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To the Editor—We read Dr Papadakis' article titled "Coronavirus disease 2019 (COVID-19): Faith healing or science? An old-time problem," with great intrigue.¹ Dr Papadakis commendably articulated his perception that patients and their families often, preferentially, attribute positive outcomes "to the supernatural power of God" while holding a "strong tendency to blame healthcare professionals, especially critical care physicians, for negative outcomes."¹ Underpinning this argument is a lament for the negativity that healthcare professionals and the institution of medicine are subjected to, both from within and without. Here, we expand upon this observation by discussing the "culture of blame" found within medicine, with a focus on its relevance to patient safety. To respond to this phenomenon, we advocate for the fostering of an inclusive "culture of grace" in our profession.

The pervasive culture of blame

Prevalent in evidence-based medicine is a "quixotic quest for certainty."² Appeals to medical infallibility and intolerance for error fosters perfectionistic tendencies in medicine.² Perfectionism, fear of punishment, and peer social dynamics can fracture patient safety cultures.² Furthermore, amid the considerable advances of our field is a societal deification of the healthcare professional, which proliferates an unrealistic expectation that there is nothing that the institution of medicine cannot accomplish. The stigmatization of medical errors and negative outcomes contributes to a "culture of blame" within medicine, which we define as an environment that contributes to the proliferation of negative apportionment of blame onto an individual or institution. Symptomatic of this "culture of blame" are the intrinsic and extrinsic expressions of guilt, shame, and isolation that are often felt by healthcare professionals when failures are attributed to them without adequate personal, peer, and administrative support.³

Although the COVID-19 pandemic has superficially united the population, this crisis has accentuated intergroup differentiation across values, virtues, and beliefs.⁴ Divisiveness and negativity bias promotes unhealthy apportionment of blame, which drives society further from unity and healing.⁴ As healthcare professionals have been subjected to high levels of stress during the pandemic,⁵ fostering an alternative, restorative culture that remedies toxic blame and promotes the inclusive service of our stakeholders and ourselves is critical.

Religion, spirituality, and science in the era of evidence-based medicine

Although we share Dr Papadakis' concern for blaming healthcare professionals for negative outcomes, we raise concern with the article's separation of science and faith. Religion and spirituality are essential healthcare partners owing to the high global prevalence of religiosity,⁶ the contribution of religiosity to human flourishing,^{7,8} and the increasing calls for the integration of spiritual care into medicine and public health.⁹

According to the Pew Research Center's 2017 report, "The Changing Global Religious Landscape," religiously affiliated people currently make up 84% of the world's population—a proportion that is projected to increase in the coming decades.⁶ Religious beliefs, directly and indirectly, influence one's health behaviors and healthcare decision making.^{7,8} Furthermore, participation in religious and spiritual communities instills meaning and purpose in one's life, which may provide hope, assist in coping with adversity, and promote the development of healthy behaviors.^{7,8} Studies have demonstrated that religiosity and spirituality are associated with both positive mental and physical health outcomes.^{7,8}

In light of the importance of religion and spirituality to human flourishing,^{7,8} healthcare professionals have been encouraged to holistically assess the biological, psychological, social, and spiritual domains of health.⁹ This comprehensive approach can assist in promoting the provision of excellent, patient-centric healthcare and the implementation of culturally competent interventions.⁹ For instance, the integration of this model during discussions of medical uncertainty and negative outcomes may ameliorate the pain, blame,

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