



The Impact of Health Disparities and Inequities on Healthcare-Associated Infections: A Call to Action

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Background

According to the World Health Organization (WHO), social determinants of health (SDOH) are nonmedical factors that impact health outcomes.¹ These factors are the social and economic conditions in the environments where people are born, grow, work, live, and age.² These various forces and systems shape the conditions in people's daily lives. For example, access to healthy foods is a critical SDOH. Communities lacking grocery stores that offer fresh, nutritious options are often described as food deserts. People living in these environments have increased risks of certain health conditions, such as heart disease, diabetes, and obesity, compared to those who do have access to healthy food options. There is growing literature on the association between SDOH and healthcare outcomes, with research estimating that medical care accounts for only 10-20% of health outcomes. Research estimates that SDOH accounts for 80% of health outcomes³, highlighting the need to address these factors for meaningful health improvements.

Achieving health equity will require addressing broader social development and well-being beyond the healthcare system. Healthy equity is defined as a state in which every person has the opportunity to attain their highest level of health.¹ Addressing the differences in SDOH factors can improve and accelerate progress toward health equity. To help close the gaps, the Office of Disease Prevention and Health Promotion in the Department of Health and Human Services (DHHS) has prioritized SDOH, health equity, and health literacy as the three core objectives of Healthy People 2030.² Achieving these national data-driven objectives for Healthy People 2030 will lead to improved patient outcomes, increased access to care, and, ideally, reduced healthcare costs.² However, it remains challenging to implement actions to address the differences in SDOH. Further research is necessary to understand which interventions drive progress and how best to disseminate these practices effectively to promote meaningful change.

When examining the healthcare system's contributions to health outcomes, healthcare-associated infections (HAIs) represent a significant concern. HAIs adversely impact morbidity, mortality, and quality of life while occurring across all healthcare settings, including hospitals, outpatient clinics, and long-term care facilities.⁴ While many HAIs are preventable through infection prevention and control (IPC) measures, some infections are not preventable by intervention in healthcare settings.⁵ Patient-level factors, such as race, income, comorbidities, disability, geographic location, and poverty, play a significant role in the development of HAIs but are frequently overlooked by standard IPC practices.⁶ Sociodemographic and psychosocial risks are additional patient-level factors rarely assessed in depth for individual patients and are often excluded in prevention strategies.⁷ Adopting a health equity lens to address disparities in HAI outcomes can enhance the effectiveness and inclusivity of prevention strategies. By identifying and addressing these infections' social and structural drivers, healthcare systems can implement more comprehensive strategies to reduce HAIs and improve patient outcomes.

Executive Summary

Addressing health equity issues requires a tailored approach, as the challenges vary significantly depending on multiple factors. To create effective interventions, it is essential to understand how SDOH, such as income, education, housing, and access to care, contribute to health disparities. This understanding provides a foundation for identifying systemic inequities and their downstream impacts. For example, geographic location, care settings, and the scope of available healthcare services provided can heavily influence patient outcomes. By examining these contextual factors, healthcare systems can uncover valuable insights that better inform strategies to meet the unique needs of their patient populations, ultimately creating the groundwork for meaningful progress toward health equity. Infection Preventionists (IPs) are vital in addressing these challenges, as they operate across a wide range of healthcare settings. This paper aims to describe the perspective and needs of IPs from various healthcare settings, including acute care hospitals, long-term care facilities, Veterans Affairs healthcare facilities, public health settings, tribal and territory settings, and outpatient/ambulatory settings, using focus groups and surveys. Additionally, this paper examines data from the focus groups and surveys centered around health equity, the impact of SDOH factors on HAIs, and the barriers and challenges IPs face in addressing these disparities.

Recent data suggest significant racial and ethnic disparities in the occurrence of HAIs across diverse patient populations.⁸⁻¹⁰ Despite advancements in IPC interventions, disparities in the incidence and outcomes of HAIs continue to persist, disproportionately impacting marginalized and vulnerable populations.⁸⁻¹⁰ Furthermore, there is limited discussion on how IPC practice guidance often does not address health inequities in healthcare delivery at the patient level, leaving critical gaps in ensuring equitable outcomes.¹¹ The Health Equity Committee (HEC) of the Association for Professionals in Infection Control & Epidemiology (APIC) sought to explore the relationship between health equity and IPC. The HEC evaluated the IPs' knowledge and perceptions of health equity, examining how disparities might influence the occurrence of HAIs and impact overall healthcare outcomes.¹² This evaluation is crucial for developing targeted interventions to reduce health disparities and improve IPC practices for all patients.

Addressing health disparities in HAIs requires a multifaceted approach that integrates enhanced data collection, strategic interdisciplinary partnerships, focused research, policy development, community involvement, and comprehensive training on health equity. By recognizing and integrating these factors, healthcare systems can move towards more equitable health outcomes for all patients, particularly those from vulnerable or high-risk patient populations, such as oncology patients. This paper outlines the key issues related to health equity in HAIs and IPC, identifies the SDOH contributing to these disparities, and proposes actionable strategies to address these inequities in healthcare delivery.

Introduction

HAIs remain a significant public health challenge, as 1 in 31 hospital patients develop an HAI while being treated in a healthcare facility.⁵ Most studies that were reviewed in the literature suggest that disadvantaged minority groups experience higher rates of HAIs.^{8,13,14} IPC programs in various healthcare settings may provide insight into prevention efforts to minimize health inequities. However, to bridge this gap, considerations should be given to under-resourced facilities that may not have the tools or organizational culture for IPs to address these disparities in their scope of work adequately. IP staffing ratios per bed size and scope of practice in healthcare settings vary, and assessing these facilities'

geographical distances and types is essential. Key issues that remain unresolved with addressing disparities in HAI incidence and outcomes include the following:

CONTRIBUTING FACTORS:

- **SDOH:** Factors like income, education, employment, housing, and access to healthcare significantly influence the risk of acquiring an HAI. Economically disadvantaged living situations, limited access to preventive care, and inadequate health literacy contribute to increased vulnerability.
- **Healthcare Access and Quality:** Disparities in access to high-quality healthcare services, including IPC resources and timely treatment, exacerbate the risk of HAIs among disadvantaged populations.
- **Institutional Biases and Discrimination:** Implicit biases and systemic discrimination within healthcare institutions can lead to unequal treatment, impacting IPC practice and patient outcomes.

Methodology

When determining the current landscape of IPs' perceptions and understandings surrounding health disparities and the development of HAIs, the HEC of APIC first hosted seven focus groups virtually with IPs across various healthcare settings, including acute care hospitals, long-term care facilities, Veterans Affairs healthcare facilities, public health settings, tribal and territory settings, and outpatient/ambulatory settings.¹² Following the focused groups and one in-person panel presentation at the APIC Annual Conference on June 5, 2024, a seven-question survey was conducted to assess the current priorities related to health equity and IPC in their particular healthcare setting, which included health literacy programs including patient education via handouts, audiovisual media, online resources, educational software programs, web-based educational applications, and social support resources; health equity education and training programs for healthcare personnel; demographic data collection for HAIs; or some other topic. IPs were asked to rank what specific needs or educational products, reference materials, or resources related to health equity and IPC/HAIs that they would find the most beneficial to advance health equity in their healthcare setting ([see Figure 1](#)), along with being asked to rank specific policies and procedures related to health equity and IPC/HAIs ([see Figure 2](#)) based on how effective the respondents think each would be in their practice setting. The survey was disseminated via Microsoft Forms from February 5 to June 5, 2024, with a total of 168 IPs who completed the survey. The focus groups, survey, assessment of other professional organizations' efforts in advancing health equity, and a literature review of the current state of science in health disparities and HAIs were used to assess key themes and needs of IPs across all healthcare settings.¹³

Results

The focus groups had 47 participants who were separated into groups by type of healthcare setting. Each focus group had less than 10 participants to elicit a more open and intimate discussion on health equity.¹² The post-focus group and panel discussion survey yielded 168 responses, with most of the participants from the acute care setting. [Table 1](#) outlines the breakdown of the type of healthcare

setting and facility location where IPs worked (suburban, urban, rural). For IPs whose roles required them to operate across multiple locations, an additional category of multiple locations was created to identify those who worked in more than one location.

Table 1: Demographic Characteristics of Survey Participants

(N= 168)

Healthcare Setting (%)	Acute Care	57.1% (96)
	Long-Term Care	7.1% (12)
	Public Health	14% (24)
	Rural/Critical Access	4.8% (8)
	Ambulatory/Outpatient	8.3% (14)
	Veterans Affairs	4.2% (7)
	Tribal/Territory	4.2% (7)
Location of Employer (%)	Suburban	25% (42)
	Urban	39.9% (67)
	Rural	20.2% (34)
	Multiple Locations (>1 location)	14.9% (25)

The participating IPs shared their experiences and perceptions of health equity based on their healthcare setting. Many IPs noted that their workplace setting plays a role in influencing or being impacted by health equity issues. Factors such as geographic location, resource allocation for IP staff, organizational structure for data collection, and the type of healthcare setting, particularly those not associated with Centers for Medicare and Medicaid Services (CMS) reimbursement, contribute to these challenges. The following section describes the key themes gathered during the focus groups.

Key Themes

PATIENT-CENTERED CARE, EQUITY, AND EQUALITY

A significant theme that surfaced during the focus groups was the critical distinction between patient-centered care, equity, and equality in healthcare.¹² IPs underscored the importance of recognizing that these concepts, while often used interchangeably, are distinct yet require a nuanced understanding, particularly within the framework of IPC. The focus groups emphasized that patient-centered care must be approached with a lens of equity, ensuring interventions are tailored to address individual patient needs and disparities rather than assuming equal treatment leads to equitable outcomes for all patients. This differentiation is essential for advancing IPC practices and broader goals for health equity. Patient-centered care focuses on providing care that is respectful of and responsive

to individual patient preferences, needs, and values. Equity involves ensuring everyone has a fair and just opportunity to be as healthy as possible, which may require providing additional resources to those with more significant needs.¹⁵ Equality, on the other hand, means providing the same resources to everyone, regardless of their circumstances. IPs highlighted that there are often gaps in patient care management and education that do not consider the unique needs of the specific patient. IPs discussed how resource availability impacts how health equity initiatives can be implemented and how often equitable care depends on the systems operationalizing the resources.¹⁶

SOCIAL DETERMINANTS OF HEALTH

IPs consistently highlighted a strong connection between health equity and the SDOH, underscoring key factors such as socioeconomic status, education, neighborhood conditions, employment, and social support systems.¹² Among these, housing instability emerged as impactful, notably influencing the risk of HAIs. IPs observed that individuals residing in shelters or experiencing homelessness face significant obstacles in accessing and/or storing essential medications and adhering to postoperative care, making them more vulnerable to the development of surgical site infections (SSIs). The absence of stable housing hinders adherence to infection prevention recommendations. It complicates access to healthcare services, including transportation to appointments, coordination with public health authorities, and the challenges of obtaining safe drinking water and healthy food.^{17,18}

Education is another critical determinant, as limited health literacy can hinder the ability of patients to understand medical instructions in their care plan, particularly complex post-discharge care instructions. Patient education materials are intended to help educate the patients on their health conditions and promote informed decision-making based on the most current and updated clinical evidence to guide care.¹⁹ IPs discussed how limited educational attainment or language barriers can hinder a patient's understanding of critical healthcare practices. One participant described when patients struggle with concepts like proper hygiene, wound care, or the importance of completing a full course of antibiotics, their vulnerability to infections like catheter-associated urinary tract infections (CAUTIs) or central line-associated bloodstream infections (CLABSIs) can increase significantly. Without clear comprehension, these patients may unknowingly place themselves at higher risk, underscoring the need for tailored, accessible communication and education to support their health.

Addressing SDOH is pivotal for advancing health equity within IPC efforts. Barriers such as limited access to transportation, lack of insurance, and workforce shortages can severely disrupt care, resulting in missed follow-ups, delayed treatment, and fragmented care coordination.²⁰ This breakdown in continuity of care places patients at greater risk of prolonged hospital stays, readmission, and exposure to HAIs.²¹ Furthermore, social isolation or the absence of caregiving support at home makes it difficult for patients to adhere to infection prevention strategies, particularly those managing chronic conditions or recovering from surgery, increasing their vulnerability to infections.

IPs have an integral role in advancing health equity by collaborating with community health partners, supporting integrated care models, and contributing to policies to reduce disparities. The efforts of IPs extend beyond the traditional staffing model. By proactively addressing these SDOH factors, collaborative efforts can help uncover barriers, such as transportation issues or food insecurity, that affect patient outcomes and adherence to infection control practices.

Barriers and Challenges

RESOURCE AVAILABILITY AND OPERATIONALIZATION

The availability of resources significantly influences a facility's capacity to implement health equity initiatives.²² While data is essential for guiding interventions, IPs in under-resourced settings—such as long-term care, tribal settings, outpatient and ambulatory care, and rural hospitals often lack the funding, resource access to educational materials, and sufficient staffing needed to operationalize these efforts.¹² This challenge is particularly pronounced in ambulatory and outpatient care, where limited resources hinder tailored strategies to address the needs of vulnerable populations, exacerbating health inequities. Patient education gaps, particularly in addressing the diverse needs of the patient population, exacerbate the inequities in HAI outcomes. These patient education constraints lead to generic programs that fail to address language, cultural nuances, and health literacy levels. This limits the effectiveness of patient-centered care and widens the gap in equitable outcomes. IPs struggle to implement health equity initiatives due to the lack of tailored resources and educational materials, which are crucial for facilitating equitable care. Organizational support is critical in this mission, and IPs can be a change agent when starting these conversations in their organization.

Limited staffing resources significantly affect healthcare systems' ability to address health equity.²³ With insufficient staffing, IPs face challenges in implementing targeted interventions to address SDOH factors that disproportionately affect vulnerable populations and increase community involvement. Insufficient financial resources are the driving factor behind resource constraints that limit the ability of IPs to address health disparities.²⁴ Without adequate funding and resources prioritizing IPC practices, healthcare facilities face challenges in dedicating the necessary number of staff to implement comprehensive IPC programs and develop patient education materials tailored to diverse populations. A recent staffing study has linked a significant correlation between having higher staffing levels for IPs and having lower HAI rates.²⁵

DATA LIMITATIONS

IPs across various settings, especially in long-term care, rural health, tribal territories, and outpatient/ambulatory settings, expressed challenges with data collection related to race, ethnicity, language, sex, and age. Accurate and comprehensive data is necessary to help identify disparities and shape targeted interventions. However, limitations in a facility's infrastructure to collect and report data pose significant obstacles to obtaining that information.

Inconsistent and incomplete data collection impedes the identification of health disparities and the development of targeted interventions for reducing HAIs.²⁶ Data limitations are concerning when in settings with limited data infrastructure and diverse patient populations. Healthcare facilities that lack comprehensive data collection systems struggle to capture information on race, ethnicity, language, sex, and age. These factors are crucial for understanding the SDOH factors contributing to disparities in HAI outcomes. Without these data points, IPs face challenges in tailoring interventions that address the specific needs of vulnerable populations, making it difficult to ensure equitable care. Equitable care often depends on how systems and current infrastructures operationalize resources, and efforts to reduce disparities are significantly delayed without adequate data collection.

Settings that do not use electronic medical records (EMRs) for surveillance and other essential IPC practices face the greatest challenge with data collection, relying heavily on paper-based systems. IPs in tribal settings highlighted this barrier in the focus groups.¹² This reliance limits data accuracy and creates barriers to efficient analysis and reporting of the data. IPs in these settings often have

difficulties tracking demographic data and infection rates, making it harder to identify trends and target at-risk populations. Additionally, facilities that do not participate in HAI national reporting systems face even greater challenges in addressing health equity, as competing organizational priorities often take precedence over comprehensive data collection and reporting. Without consistent participation in national surveillance programs, these facilities lack the comparative data to benchmark their performance against broader healthcare trends, further limiting their ability to address disparities. Regulatory variability also complicates data reporting. IPs in facilities that receive funding from the Centers for Medicare & Medicaid Services (CMS) must report certain data to federal and state agencies. However, the requirements for data reporting can vary widely, making it difficult for some facilities to align their data collection practices with regulatory expectations. This variability can create gaps in data, as not all facilities are equally equipped to meet reporting standards.²⁶

Financial challenges further exacerbate data collection limitations. Facilities with constrained budgets often lack the resources to invest in comprehensive data infrastructure, training, or staff dedicated to managing and analyzing data. This makes it difficult to gather the detailed information necessary to identify and address health disparities effectively and efficiently.

Unconscious Bias

Unconscious bias was identified as a significant factor influencing HAIs in various healthcare settings.¹² IPs provided examples of differential care for patients in isolation versus those not in isolation and patients avoiding care due to fear of discriminatory treatment. Biases, whether rooted in race, ethnicity, socioeconomic status, or other social determinants, can manifest in subtle ways, leading to disparities in the care provided to different patient populations. These biases often occur unintentionally but can nonetheless influence critical clinical decisions, patient interactions, and adherence to infection prevention protocols.

In IPC, unconscious bias may shape clinicians' assumptions about patients' ability or willingness to follow preventive measures. For example, a healthcare provider might unconsciously perceive a patient from a marginalized background as less likely to adhere to hand hygiene or wound care instructions, reducing time spent on education or guidance for that individual. This underinvestment in patient education could result in improper adherence to care plans, increasing the risk of infections such as SSIs or CLABSI. Furthermore, bias in pain management or wound care assessments might result in delayed or inadequate treatment, further escalating the risk of infection.²⁷ Studies have shown that unconscious bias among healthcare professionals toward racial and ethnic minority patients may result in lower quality of care delivered to these patients compared to White patients.²⁸

Bias can also contribute to disparities in the provision of infection prevention resources. Patients seen as having a lower socioeconomic status may receive fewer resources, such as postoperative care supplies or home health support, assuming they are less likely to use these tools effectively. This unequal allocation of resources creates additional barriers to preventing infections, compounding the risk for vulnerable populations.

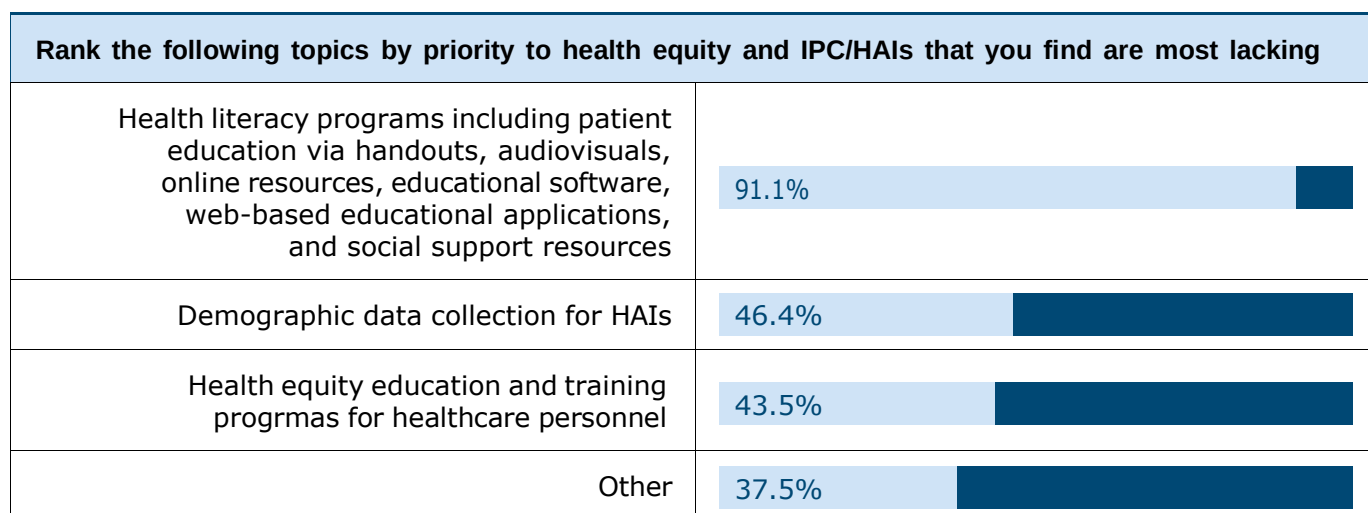
Moreover, unconscious bias can diminish the patient-clinician relationship, fostering mistrust and reducing patient engagement. Patients from marginalized groups may experience bias in their interactions, which could lead to lower levels of adherence to treatment plans, missed follow-up appointments, or reluctance to seek care altogether. These behaviors increase the likelihood of

developing HAIs. Unconscious bias perpetuates health inequities by influencing the quality of care, communication, and resource allocation in infection prevention. Addressing these biases through targeted education, training, and systemic changes is crucial for achieving equitable infection prevention outcomes and reducing HAIs across all patient populations.

Discussion of the Barriers

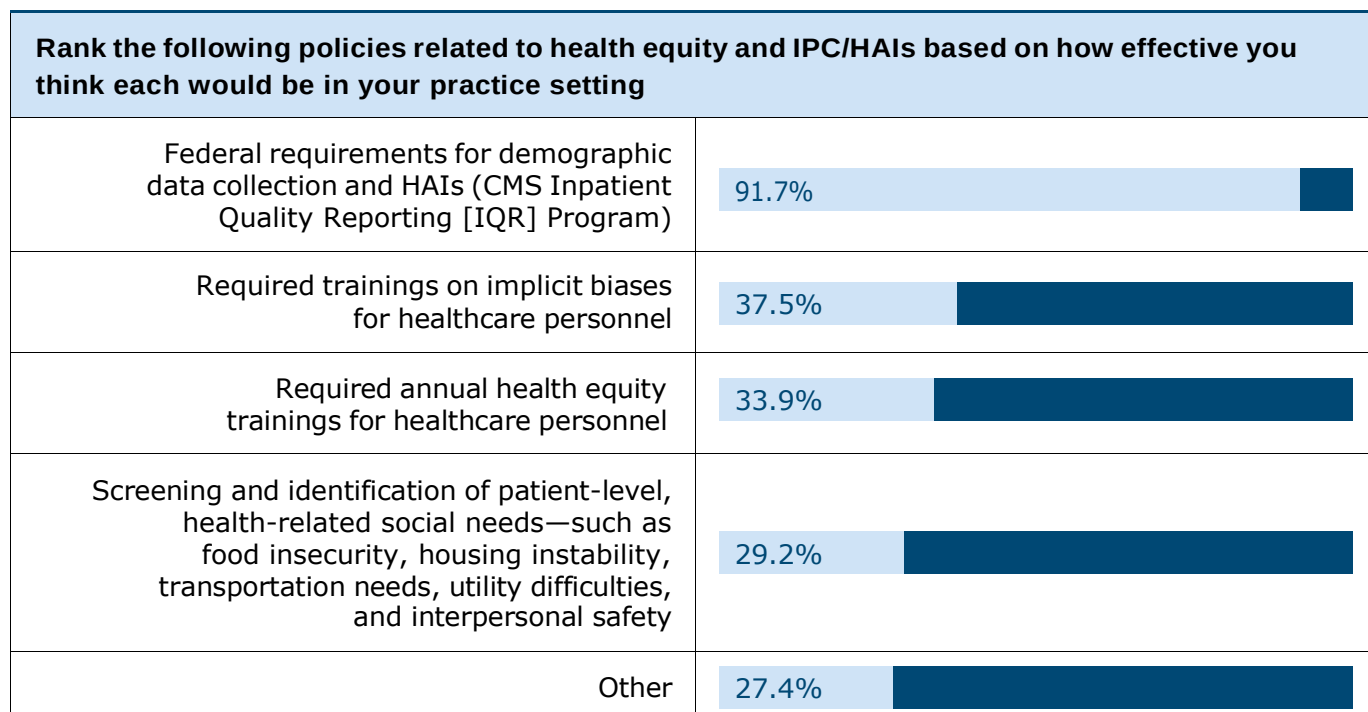
The barriers and challenges described by IPs provided key insights for proposed actions. In the post-survey results, participants were asked to rank the top priorities related to health equity that were the most lacking in their healthcare setting. An overwhelming 91% of participants identified the absence of health literacy programs for patients as a significant gap, emphasizing its importance for advancing health equity and reducing HAIs. This was followed by the need for standardized demographic data collection for HAIs at 46.4% and the educational and training programs for healthcare personnel on health equity at 43.5%. [See Figure 1.](#)

Figure 1: Top priorities that are the most lacking related to health equity and IPC



In discussions about policies and procedures to address health equity in their practice settings, IPs identified key areas for improvement. The survey asked IPs to rank proposed policies related to health equity and IPC/HAI reduction based on the effectiveness as a reduction strategy in their place of work. The results revealed that 91.7 % of IPs ranked the need for federal mandates to require demographic data collection and HAIs based on the CMS Inpatient Quality Reporting Program (IQR). [See Figure 2.](#)

Figure 2: Top policies based on effectiveness in advancing health equity and IPC/HAI reduction



Further, IPs emphasized the need for implementation tools to advance health equity in their practice settings and resources to address the inequities in the communities they serve. Leading organizations, such as the American Medical Association (AMA) and the Centers for Disease Control and Prevention (CDC), advocate for policies to reduce health disparities, focus on inclusivity and anti-racism, and ensure equitable access to care.^{29,30} Shaping healthcare policies to incorporate health equity reflects a commitment to long-term, systemic change.

Proposed Strategies and Recommendations

Addressing health equity and the SDOH factors is essential for preventing HAIs and improving patient outcomes. The insights from IPs across various practice settings underscore the need for comprehensive strategies that include adequate resources, robust data collection, and education on unconscious bias. APIC recommends that healthcare organizations prioritize the following areas to reduce disparities and ensure all patients receive high-quality, equitable care.

DEDICATED RESOURCES AND TOOLKITS

Providing dedicated resources and educational toolkits can empower IPs to address health disparities. These toolkits should include guidance on data collection and analysis, strategies for communicating with administrators, and best practices for integrating health equity into IPC programs. Tailored resources are essential for identifying and addressing disparities in HAI prevention, as traditional IPC tools do not address issues such as access to care, health-related social needs, or language barriers.

Educational resources for IPs and stakeholders should go beyond standard guidelines by incorporating equity enhancements, such as health equity risk assessments that identify vulnerabilities or weaknesses

in process improvement solutions or interventions.³¹ A comprehensive disparity calculator tool could help IPs focus data collection and evaluate existing data for disparities. In addition, addressing gaps in understanding the causal pathways between social risk and healthcare outcomes requires improved data systems and adherence to causal inference principles in research, which is largely systemic and would require a greater effort beyond the IP's sphere of influence. IPs require ongoing education and training to use existing and new resources. This will require updating existing IPC competency roadmaps and training guides. Since disparities in HAIs may stem from health-related social needs or individual, unique patient factors, it is critical to develop a framework that assesses current programs, plans, and interventions through an equity lens. This is a competency and skillset that IPs should be able to demonstrate.

PARTNERSHIPS AND COLLABORATION

Developing and fostering partnerships is essential for enhancing IPC efforts and achieving health equity. Collaboration with community organizations, local APIC chapters, public health agencies, and other key stakeholders provides valuable resources and support to address SDOH factors within the communities served by IPs. Internal and external partnerships are crucial in expanding the reach of IPC practices, ensuring a holistic approach to care, and meeting the evolving needs of public health.

While equity is inherent to healthcare quality and, by extension, to infection prevention—the role of IPs must evolve to include competencies in understanding SDOH, health disparities, and cultural humility. Incorporating public health principles and leveraging advanced data analytics are essential strategies for identifying and addressing inequities. To be effective, IPs must extend their influence beyond traditional hospital settings, engaging new and diverse stakeholders. Building diverse process improvement teams and collaborating with experts across disciplines will enhance efforts to promote equitable health outcomes.

Traditionally, health equity efforts have focused on the work of social workers and case managers, who address patient discharge planning and remove barriers to care. These teams are a natural starting point for IPs seeking to familiarize themselves with existing data on SDOH, screening processes, and community initiatives. With updated CMS standards requiring screening for SDOH—such as housing, transportation, utilities, interpersonal safety, and food insecurity—partnerships with these professionals can inform IPC strategies.³² For example, reviewing patients with SSIs who reported transportation or housing challenges within six months of surgery can uncover barriers to adherence to infection prevention protocols, thereby identifying new opportunities for intervention.³³

Developing partnerships between the IP and the diversity, equity, and inclusion (DEI) leaders within their organizations, where available, to align IPC efforts with broader institutional equity initiatives. DEI leaders can provide valuable insight into organizational priorities related to diversity, inclusion, and belonging. Similarly, collaboration with patient experience teams offers additional access to demographic data and patient feedback. Data gathered from patient surveys can provide meaningful insights into patients' perceptions of safety and help IPC teams identify areas for improvement.

To further enhance IPC efforts, engagement with registration and operations staff is essential to understand how demographic data is collected from patients during registration. This collaboration enables IPs to assess the accuracy of their data collection and partner with informatics teams to build dashboards that stratify infection outcomes by demographics, helping to uncover patterns and disparities in HAIs. Even in cases where disparities in HAI outcomes are not yet fully understood, working with community-based organizations—particularly those serving minority and underserved

populations—can offer valuable insights into community needs. These organizations can also co-create customized IPC resources, ensuring practices are tailored to the unique cultural and social contexts of the populations served.

Patient and family engagement is another key component of equitable IPC practices. Recognizing cosmovision—the patients’ and families’ cultural worldview and understanding of health and illness—can provide deeper insights into their needs and expectations. Involving patients and families in safety discussions through advisory councils or including them in HAI investigations can reveal barriers to care, such as the need for education in a patient’s preferred language or more accessible training materials. These insights can shape patient-centered IPC strategies that improve engagement and patient outcomes.

Finally, partnerships with educational institutions, professional organizations, and advocacy groups are essential for driving the future of health equity in IPC. These collaborations will advance research, inform policies, and promote regulations that support health equity efforts, such as the requirement to report demographic data for HAIs submitted to the National Healthcare Safety Network (NHSN).

As healthcare evolves, partnerships across disciplines and with community stakeholders will remain vital in addressing health disparities, minimizing HAIs, and fostering more equitable healthcare environments. Through these collaborative efforts, IPs can transform health equity initiatives and ensure that every patient receives high-quality, inclusive care.

EDUCATION AND AWARENESS

Numerous studies have underscored the far-reaching effects of implicit bias within healthcare organizations, revealing its impact on patient outcomes, follow-up care, and overall trust in the healthcare system.³⁴ These findings have catalyzed the implementation of implicit bias training for healthcare professionals to address these disparities. Educational programs to raise awareness about unconscious bias and establish its impact on HAIs are crucial. A lack of trust, often driven by these biases, contributes to lower quality of care and has been closely linked to the importance of racial concordance between patients and clinicians.³⁵ As the patient population in the United States has grown increasingly diverse, the need for a culturally competent and inclusive clinician workforce has become paramount in ensuring equitable care for all.²⁹ Training healthcare personnel on equitable care practices can help mitigate the effects of bias and improve patient outcomes.

Cultural humility is a foundational approach to advancing equitable care and is vital in IPC efforts. It emphasizes continuous self-reflection, mutual respect, and openness to learning from patients, acknowledging them as experts in the social and cultural contexts of their lives. IPs can leverage these skills to inform and guide patient engagement, strengthen care delivery, and address health disparities within diverse populations by fostering person-centered care through introspection and awareness of implicit and explicit biases.³⁶ Many organizations, such as the Society for Healthcare Epidemiology of America (SHEA) and the Institute for Healthcare Improvement (IHI), emphasize training integrating SDOH factors and health equity principles into healthcare practices. For IPs, educational awareness and access to tools to advance equitable patient care are essential in IPC practices.

IPs are at the forefront of ensuring that IPC strategies develop using evidence-based practices and are equitable. There are two parts to education and awareness for IPs: (1) receiving their own education and training on bias and cultural competence and (2) providing education and coaching to other healthcare personnel. IPs must be comfortable and competent in health equity principles to

accomplish this. With this expanded competency, IPs can assist in identifying disparities in infection outcomes among different patient populations, assess how health-related social needs impact infection risks, and advocate for processes and policies that address these inequities. By incorporating SDOH considerations into infection prevention-led education, IPs can help healthcare teams understand the root causes of disparities in infection risks and develop more targeted interventions. While the organization's culture and strategic priorities determine the success of health equity and health disparities work, well-educated IPs can still help identify vulnerabilities impactful to infection prevention efforts.

IPs are critical in promoting collaboration between clinical staff and public health personnel to address broader community-level factors influencing infection prevention. For example, IPs may help establish programs that assist patients in acquiring pre-operative bathing supplies or coordinating transportation if access is a concern. These efforts can reduce the likelihood of HAIs by ensuring that patients, particularly those from vulnerable populations, have the support and resources needed to adhere to infection control measures.

IPs can advocate for IPC processes that stratify outcomes and process measures by patient population, ensuring that data collection and monitoring efforts consider unique patient situations and needs. This can help identify trends where specific populations may be disproportionately affected by HAIs, prompting system-wide changes that benefit all patients. By understanding and addressing the impact of SDOH, reducing unconscious bias, and promoting culturally competent care, healthcare teams can ensure that infection prevention efforts are equitable and effective across diverse patient populations. As critical advocates and educators, IPs are instrumental in leading this change and ensuring that all patients receive the highest standards of IPC, regardless of their background or circumstances. Table 2 highlights the key themes uncovered by IPs and possible solutions.¹² These efforts aim to raise awareness and equip healthcare professionals with the necessary skills to address inequities in care delivery.

Table 2: Focus Group Key Themes, IP Highlights, and Possible Actions

Theme	Systemic Issues	Possible Actions for IPs
Patient-Centered Care, Equity, and Equality	• Discrimination and lack of trust between healthcare providers and patients • Health literacy	• Tailor patient education to account for cultural and language differences • Advocate for resources to support equity in IPC practices • Recommend unconscious bias training for all IPs
Social Determinants of Health (SDOH)	• Healthcare access • Homelessness & housing instability	• Incorporate SDOH assessments into annual risk evaluations • Collaborate with community organizations to address social needs impacting IPC • Promote awareness of dental care as part of overall infection prevention
Data Collection Challenges	• Healthcare resourcing, including financial and staffing limitations • Incomplete surveillance or EHR systems that don't capture variables needed to address health disparities	• Advocate for improved data infrastructure in underserved settings • Partner with national organizations to support data standardization • Train IPs on effective data collection and analysis for health equity
Resource Availability	• Underfunded healthcare systems	• Request allocation of dedicated resources for health equity-focused IPC • Collaborate with internal teams, such as social workers, to support patient discharge planning • Develop educational materials in multiple languages to bridge communication gaps
Unconscious Bias	• Discrimination and trust between healthcare providers and patients	• Implement unconscious bias and diversity training in all IPC programs • Create awareness around bias impact on HAIs and health outcomes Develop partnerships with DEI departments to promote equitable care

Conclusion

Achieving health equity in the prevention and management of HAIs requires a comprehensive, collaborative approach that directly addresses the SDOH, ensures equitable access to high-quality care, and actively works to dismantle institutional biases. While systemic challenges like discrimination, homelessness, and limited access to healthcare require long-term solutions, IPs can take actionable steps by focusing on their sphere of influence in targeting disparities in infection outcomes among diverse patient populations. Although health equity is heavily shaped by organizational culture and priorities, skilled IPs are uniquely positioned to identify and address critical vulnerabilities that impact infection prevention outcomes and initiatives.

By implementing targeted interventions, leveraging data-driven strategies, and advocating for equitable healthcare policies, IPC professionals, healthcare providers, and public health leaders can work together to close gaps in care, improve patient outcomes, and foster a healthcare system that serves all communities equitably. Addressing these disparities not only promotes the well-being of underserved populations but also strengthens the overall effectiveness, resilience, and sustainability of healthcare systems.

APIC believes advancing health equity requires intentional collaboration across all healthcare settings, bringing together public health professionals, policymakers, and community stakeholders to share the responsibility for a meaningful and lasting change. APIC is committed to supporting IPs in this endeavor and advocating for safe, equitable, and patient-centered care for all.

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