



- Healthcentric Advisors ■ Qlarant
- Kentucky Hospital Association
- Q3 Health Innovation Partners
- Superior Health Quality Alliance

HQIC

Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES
QUALITY IMPROVEMENT & INNOVATION GROUP

IPRO Hospital Quality Improvement Contractors (HQIC)

Health Equity Considerations

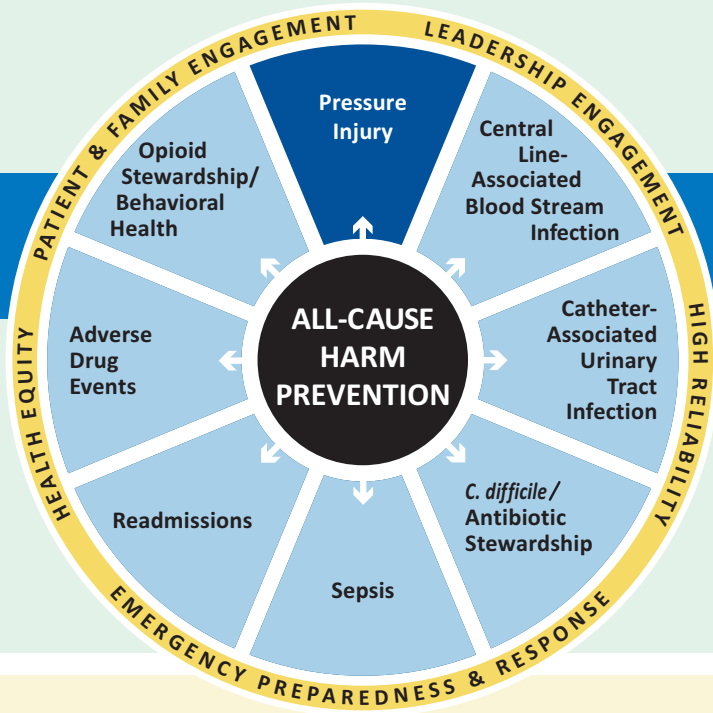
Circle of Safety: All-Cause Harm Prevention Model & Resource Tool
Priority Focus Areas of Harm 2020–2024



Collect data on and stratify by race, ethnicity, language, and other sociodemographic data.

An integrated approach using quality and patient safety best practices to improve care and prevent adverse events that could:

- Cause patients undue harm
- Increase length of stay
- Lead to mortality
- Cause healthcare financial burden



Pressure Injury

EVIDENCE-BASED PROCESSES TO PREVENT THIS HARM

EVIDENCE-BASED DISPARITIES

Individuals with darker skin tones are at increased risk of pressure injury because clinicians do not have resources to accurately identify/differentiate early-stage bruising and erythema. People with darker skin tones are disproportionately affected by more severe pressure ulcers. In the nursing home setting, Black patients are more likely to have non-healing pressure injuries than their White counterparts.

Source:

2021 Fact Sheet: Pressure Injuries in US Healthcare.

npiap.com/resource/resmgr/public_policy_files/npiap_word_fact_sheet_08mar2.pdf

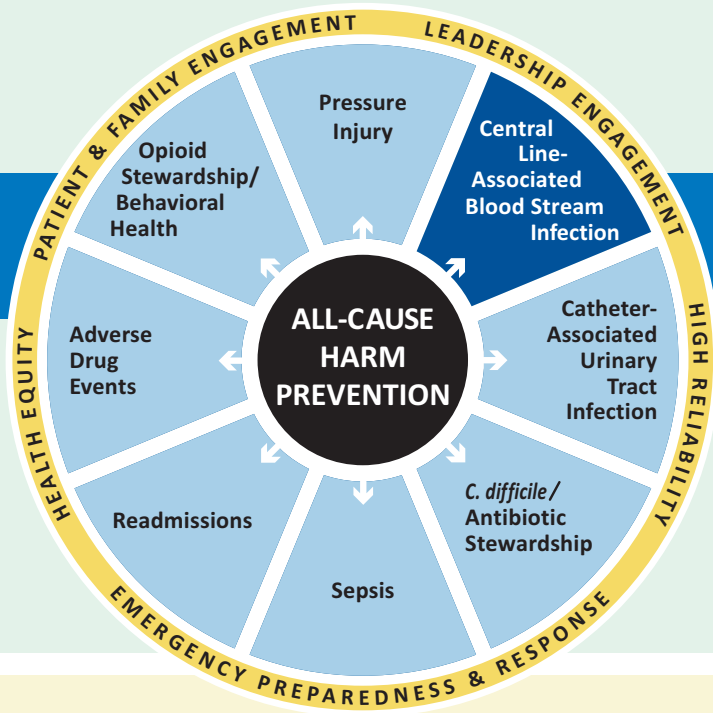
Published 2021. Accessed October 17, 2022.

HEALTH EQUITY CONSIDERATIONS

- Educate staff to be vigilant in checking people of color for pressure ulcers.

CITATIONS AND LINKED RESOURCES

National Pressure Injury Advisory Panel, [2021 Fact Sheet: Pressure Injuries in US Healthcare](#)



Central Line-Associated Blood Stream Infection

EVIDENCE-BASED PROCESSES TO PREVENT THIS HARM

EVIDENCE-BASED DISPARITIES

Non-mucosal barrier injury CLABSI rates are 2.92 per 1,000 central line days for patients identifying as Black and 1.37 per 1,000 central line days for patients that speak a language other than English (LOE), despite an overall non-mucosal barrier injury CLABSI rate of 1.13 per 1,000 central line days.

Source:

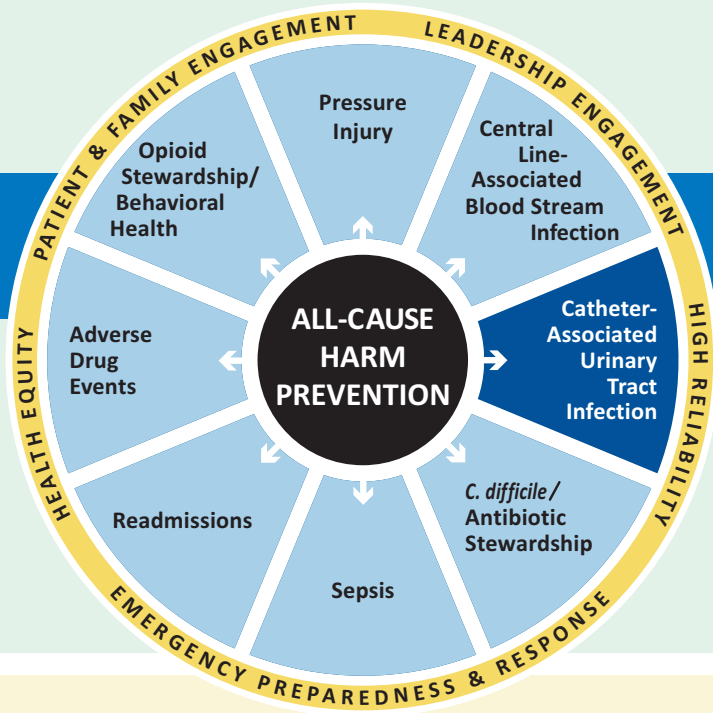
Stimpson MD, Johnson SM, Wood LR, Bettinger B, Sharek PJ, Fryzlewicz B, Zerr DM. Confronting CLABSI Disparities: The Role of REaL Variables, Data Transparency, and Intentional Process Measurement in Achieving Equitable Outcomes. *Pediatr Qual Saf* 2022;7:e606.

HEALTH EQUITY CONSIDERATIONS

- Target prevention campaigns and interventions to include prevention efforts using evidence-based guidelines.

CITATIONS AND LINKED RESOURCES

Agency for Healthcare Research and Quality, [AHRQ's Healthcare Associated Infections Program](#)



Catheter-Associated Urinary Tract Infection

EVIDENCE-BASED PROCESSES TO PREVENT THIS HARM

EVIDENCE-BASED DISPARITIES

Asian and Hispanic patients experience higher rates of CAUTI than non-Hispanic White patients.

Source:

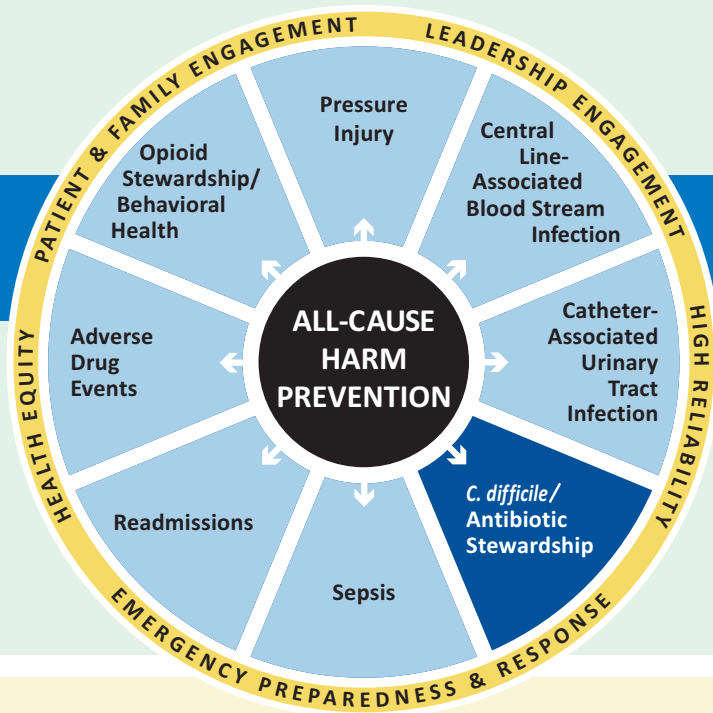
Bakullari A, Metersky M, Wang Y, Eldridge N, Eckenrode S, Pandolfi M, et al. Racial and ethnic disparities in health-care-associated infections in the United States, 2009–2011. *Infect Control Hosp Epidemiol.* 2016;35:S10–6.

HEALTH EQUITY CONSIDERATIONS

- Target prevention campaigns and interventions to include patient participation in prevention efforts using evidence-based guidelines.

CITATIONS AND LINKED RESOURCES

Agency for Healthcare Research and Quality, [Toolkit to Reduce CAUTI and Other HAIs in Long-Term Care Facilities](#)



C.difficile/ Antibiotic Stewardship

EVIDENCE-BASED PROCESSES TO PREVENT THIS HARM

EVIDENCE-BASED DISPARITIES

Multiple studies have found that *C. difficile* infection (CDI) incidence is higher in White patients compared to non-White or Black patients. Despite a lower incidence, Black patients have been found to have poorer health outcomes compared to White patients, including longer hospital length of stays (LOS), higher recurrence rates, and greater risk for severe CDI and mortality.

Black patients had significantly higher mortality rates and incidence of severe CDI compared to White patients, despite White patients having a higher incidence of infection.

Black, Hispanic, and lower-income individuals are at higher-risk for some community-acquired antibiotic resistant infections.

Sources:

Young, E.H.; Strey, K.A.; Lee, G.C.; Carlson, T.J.; Koeller, J.M.; Reveles, K.R. Clostridioides difficile Infection Treatment and Outcome Disparities in a National Sample of United States Hospitals. *Antibiotics* 2022, 11, 1203.

<https://doi.org/10.3390/antibiotics11091203>.

Argamany JR, Delgado A, Reveles KR. Clostridium difficile infection health disparities by race among hospitalized adults in the United States, 2001 to 2010. *BMC Infect Dis.* 2016;16:454. <https://doi.org/10.1186/s12879-016-1788-4>.

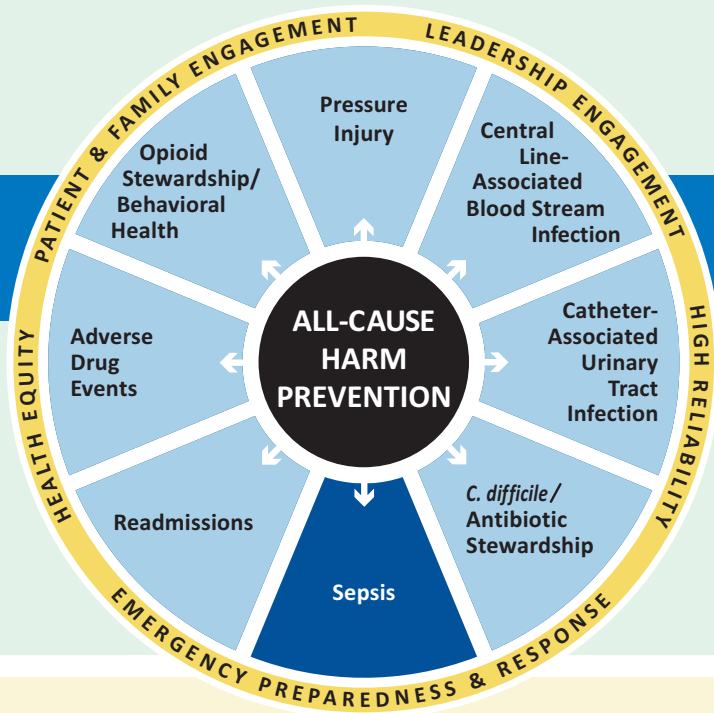
Nadimpalli, M., Chan, C., Doron, S., Jacque, B., & Bascom-Slack, C. (2021). 17157 Racial/ethnic disparities in antibiotic-resistant infections: Knowledge gaps and opportunities for educational interventions. *Journal of Clinical and Translational Science*, 5(S1), 77-77. doi:10.1017/cts.2021.601.

HEALTH EQUITY CONSIDERATIONS

- Provide to minority groups culturally competent education on appropriate antibiotic use.
- Consider how social determinants of health (e.g., living in crowded and/or multigenerational housing) play a role in healthcare-acquired infection inequities by increasing risk for antibiotic resistance transmission.
- Use data to explore how race and ethnicity are associated with provider prescribing practices.

CITATIONS AND LINKED RESOURCES

CDC, [Racial/Ethnic Disparities in Antimicrobial Drug Use, United States, 2014–2015](#).



Sepsis

EVIDENCE-BASED PROCESSES TO PREVENT THIS HARM

EVIDENCE-BASED DISPARITIES

Black and other non-White individuals have nearly twice the incidence of sepsis as Whites (1.89 times the risk for Blacks, and 1.9 times the risk for other Non-White individuals).

The death rate due to sepsis among Blacks, compared with the size of the Black population, is nearly twice the rate of deaths due to sepsis among Whites. The risk of sepsis deaths for AI/AN and Hispanics is also elevated as compared to Whites (1.24 times the risk for AI/AN and 1.14 times the risk for Hispanics).

Limited English proficiency (LEP) is associated with an 80% higher mortality risk among sepsis patients.

Sources:

Sepsis Alliance, [Sepsis and Health Equity Fact Sheet](#)

Sjoding MW, Dickson RP, Iwashyna TJ, Gay SE, Valley TS. Racial bias in pulse oximetry measurement. *N Engl J Med.* 2020;383(25):2477-2478.

HEALTH EQUITY CONSIDERATIONS

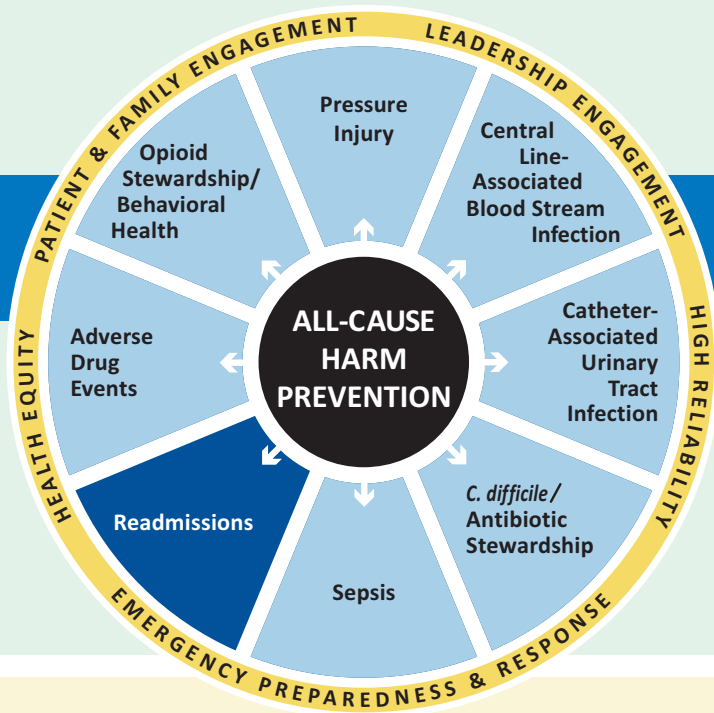
- Provide sepsis care education in multiple languages and consider patients with LEP.
- Train providers on sepsis awareness and disparities as well as culturally responsive care, and include resources related to specific populations impacted by sepsis (e.g., patients with intellectual disabilities), as well as the intersection of sepsis and other areas where disparities exist (e.g., opioid use, maternal health, pediatrics).
- Address how reliance on tools used to evaluate patients with sepsis (e.g., pulse oximetry), may disproportionately lead to inaccurate evaluations in Black patients or patients with darker skintones.

CITATIONS AND LINKED RESOURCES

Sepsis Alliance, [Sepsis and Health Equity Fact Sheet](#).

Sepsis Alliance, [Racial Equity in Sepsis Care Matters](#).

Sepsis Alliance Institute, [Continuing Education Course Library](#).



Readmissions

EVIDENCE-BASED PROCESSES TO PREVENT THIS HARM

EVIDENCE-BASED DISPARITIES

Black Medicare fee-for-service (FFS) patients experience higher 30-day readmission rates, followed by Hispanic patients and Native American patients.

Disease- and procedure-specific readmission rates (e.g., congestive heart failure [CHF], acute myocardial infarction [AMI], pneumonia, chronic obstructive pulmonary disease [COPD], and total hip/knee arthroplasty [THA/TKA]) are higher for Black patients.

Foreign-born patients with LEP have a higher risk of readmission for CHF.

Medicare patients who are Hispanic have higher readmission rates for CHF and AMI.

Source:

Tan-McGrory, [Addressing Disparities in Readmissions](#) (2018)

HEALTH EQUITY CONSIDERATIONS

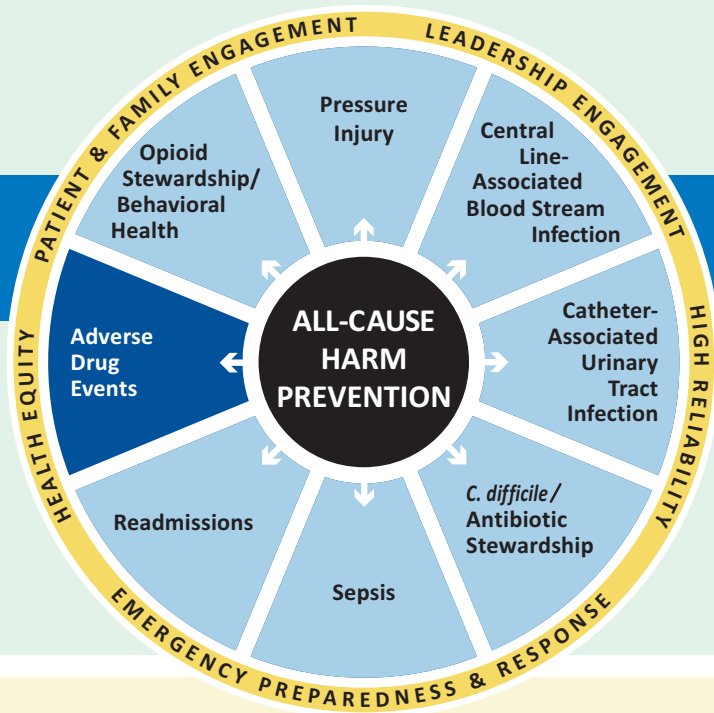
- Identify the root causes linked to readmissions including health-related social needs and other systemic barriers.
- Assess patient risk for readmission appropriately upon admission.
- Consider appropriate translation services to effectively communicate with patients with LEP.
- Explore inclusion of interdisciplinary team members to include navigators, community health workers, and others who are part of the community.
- Provide resources that factor in culturally appropriate strategies.
- Develop community partnerships that can address non-medical factors that can lead to readmissions.

CITATIONS AND LINKED RESOURCES

Centers for Medicare & Medicaid Services (CMS), [Guide to Reducing Disparities in Readmissions](#).

CMS, [Guide to Preventing Readmissions among Racially and Ethnically Diverse Medicare Beneficiaries](#).

Massachusetts General Hospital Disparities Solution Center, [A Framework for Addressing Social Determinants of Health \(SDH\) and Preventing Readmissions](#).



Adverse Drug Events

EVIDENCE-BASED PROCESSES TO PREVENT THIS HARM

EVIDENCE-BASED DISPARITIES

Asians are more at risk for anticoagulant related ADEs, Black patients for antidiabetic agent-related ADEs, and White patients for opioid-related ADEs.

Hospitalized Black patients are at higher risk for ADEs related to anticoagulants and hypoglycemic agents.

Sources:

Baehr A, Peña JC, Hu DJ. Racial and Ethnic Disparities in Adverse Drug Events: A Systematic Review of the Literature. *J Racial Ethn Health Disparities*. 2015 Dec;2(4):527-36. doi: 10.1007/s40615-015-0101-3. Epub 2015 Mar 24. PMID: 26863559.

Metersky ML, Hunt DR, Kliman R, Wang Y, Curry M, Verzier N, Lyder CH, Moy E. Racial disparities in the frequency of patient safety events: results from the National Medicare Patient Safety Monitoring System. *Med Care*. 2011 May;49(5):504-10. doi: 10.1097/MLR.0b013e31820fc218. PMID: 21494115.

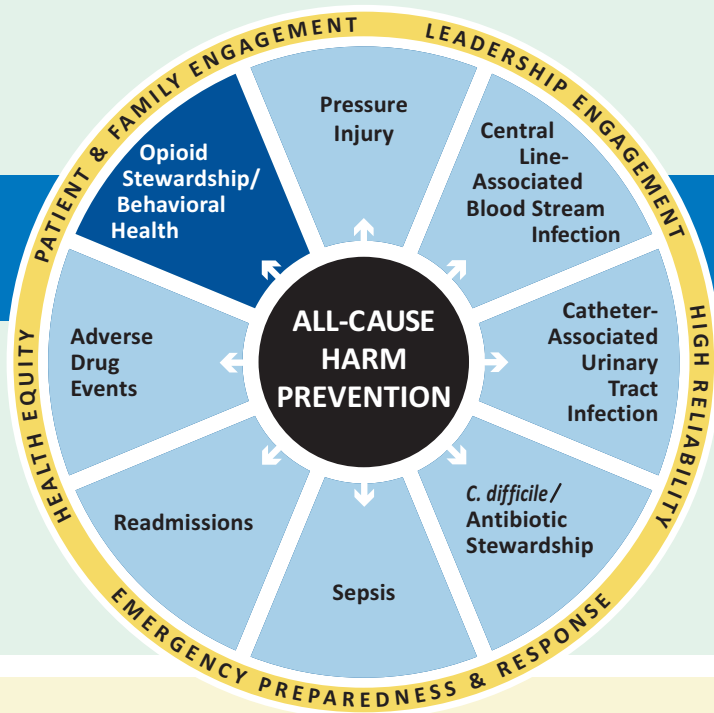
HEALTH EQUITY CONSIDERATIONS

- Target interventions to reduce ADEs for specific populations that may be at increased risk.
- Provide resources that factor in culturally and linguistically appropriate strategies.
- Consider patient's health literacy levels and ways to help increase their knowledge about what they can do to reduce ADEs.

CITATIONS AND LINKED RESOURCES

HHS, [National Action Plan for Adverse Drug Event Prevention](#)

HHS, [National Standards for Culturally and Linguistically Appropriate Services in Health and Healthcare](#)



Opioid Stewardship/ Behavioral Health

EVIDENCE-BASED PROCESSES TO PREVENT THIS HARM

EVIDENCE-BASED DISPARITIES

Black individuals experience a higher rate of opioid overdose deaths compared to other racial and ethnic groups. Opioid mortality due to overdose was higher for people with lower socioeconomic status, people with disabilities, and for American Indians/Alaskan Natives (AI/AN).

Sources:

MR Larochelle, et al. Disparities in opioid overdose death trends by race/ethnicity, 2018-2019, from the HEALing Communities Study. American Journal of Public Health. DOI: 10.2105/AJPH.2021.306431 (2021).

Lippold KM, Jones CM, Olsen EO, Giroir BP. Racial/Ethnic and Age Group Differences in Opioid and Synthetic Opioid–Involved Overdose Deaths Among Adults Aged ≥18 Years in Metropolitan Areas — United States, 2015–2017. MMWR Morb Mortal Wkly Rep 2019;68:967–973. DOI: [http://dx.doi.org/10.15585/mmwr.mm6843a3external icon](http://dx.doi.org/10.15585/mmwr.mm6843a3external%20icon).

Altekruse SF, Cosgrove CM, Altekruse WC, Jenkins RA, Blanco C (2020) Socioeconomic risk factors for fatal opioid overdoses in the United States: Findings from the Mortality Disparities in American Communities Study (MDAC). PLoS ONE 15(1): e0227966. <https://doi.org/10.1371/journal.pone.0227966>.

HEALTH EQUITY CONSIDERATIONS

- Provide access to timely data to inform strategies tailored to communities.
- Partner with community-based organizations on overdose education and naloxone distribution.
- Provide access to culturally specific providers, peer networks, and behavioral health services.
- Consider the use of innovative models to provide community support for opioid overdose education and treatment access (e.g., mobile clinics, harm reduction navigators who are fluent in non-English languages.)

CITATIONS AND LINKED RESOURCES

American Hospital Association, [Stem the Tide: Opioid Stewardship Measurement Implementation Guide](#)



- Healthcentric Advisors ■ Qlarant
- Kentucky Hospital Association
- Q3 Health Innovation Partners
- Superior Health Quality Alliance

HQIC

Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES
QUALITY IMPROVEMENT & INNOVATION GROUP

All-Cause Harm must be inclusive of Patient and Family Engagement (PFE) and Health Equity.

PFE

- Planning Checklists (Admission)
- Planning Checklists (Discharge)
- Shift Change Huddles
- Accountable PFE leader
- Active PFE Committee

HEALTH EQUITY

- Collect Race, Ethnicity and Language (REAL) data (socioeconomic data).
- Stratify quality and safety outcomes data, by REAL (socioeconomic data).
- Identify disparate gaps in care.
- Take action to close those gaps with targeted solutions.

IPRO HQIC Resource Library has many resources to support your All-Cause Harm, PFE and Health Equity, and Emergency Preparedness and Response efforts.

<https://hqic-library.ipro.org>

Does your hospital need additional resources to reduce all-cause harm?

Contact your state-designated IPRO Hospital Quality Improvement Contract (HQIC)

IPRO HQIC STATE CONTACTS

NY	Carla Lisa Rovere-Kistner	crkistner@ipro.org
OH	Becky Van Vorst	rvanvorst@ipro.org
	Robert Shipp	rshipp@haponline.org
	Carla Lisa Rovere-Kistner	crkister@ipro.org
ME, MA	Lynne Chase	lchase@healthcentricadvisors.org
	Gloria Thorington	gthorington@healthcentricadvisors.org
MD, DE	Kelly Arthur	arthurk@qlarant.com
KY	Deborah Campbell	dcampbell@kyha.com
	Melanie Landrum	mlandrum@kyha.com
	Rochelle Beard	rbeard@khya.com
MN	Tracy Radtke	tradtke@mnhospitals.org
	Janelle Shearer	jshearer@stratishealth.org
WI	Jill Lindwall	jlindwall@wha.org
MI	Kristy Shafer	kshafer@mha.org
PA, NJ	Robert Shipp	rshipp@haponline.org