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HOSPITAL BOARD COMPOSITION EFFECT ON HEALTH EQUITY

BY

Derrick Mitchell

A doctoral project submitted to the faculty of the Medical University of South Carolina in partial fulfillment of the requirements for the degree

Doctor of Health Administration
in the College of Health Professions

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CHAPTER I INTRODUCTION

1.1 Background and Need

As the population of the United States expands, the diversity of individuals using the healthcare system is also increasing. According to The Census Bureau (2021), the Diversity Index calculation from 2010 to 2020 shows that the racial and ethnic diversity in the United States has increased from 54.9% of the population to 61.1% within 10 years. Such changes significantly impact the strategy on the quality of patient care needed in the healthcare system due to increased healthcare disparities for various demographics. As a result, hospitals must be equipped with the appropriate tools and resources to address the unique needs of their diverse patients due to the increase in diversity of the population. Unfortunately, the growth of the United States population has resulted in various health inequities for individuals in minority communities. Churchwell et al. (2022) acknowledge the impact structural racism plays in normalizing policies, laws, and procedures that result in health disparities for people of color.

The impact of health inequities was showcased by the Centers for Medicare and Medicaid Services in June 2020 when they published data on the coronavirus disease from 2019 (Adashi et al., 2021). This information was critical in helping organizations see how structural racism impacted underserved and minority communities unable to obtain routine testing and vaccines and helped slow the spread of the virus. However, the issue is further complicated by the lack of Value-Based Payment (VBP) structures that would help reduce disparities and address payment concerns for the provider, payer, and patient (Sandhu et al., 2020). In addition, insurance companies, underserved communities, providers, and hospital staff are directly impacted by the readmission rates and chronic conditions that result from not

addressing health inequities in the United States. As a result, the financial burden on the United States healthcare system in 2022 is estimated at a \$135 billion loss due to racial disparities in healthcare (Tuck, 2022).

The Patient Protection and Affordable Care Act (ACA) was created to assist states with improving the health status of racial and ethnic minority populations through community service interventions, expanded health insurance coverage, and policies addressing delivery system reform (Hanlon and Giles, 2021). With health disparities being a major concern, the ACA should prove beneficial in addressing the needs of low-income and rural communities. Furthering these efforts, the Biden administration has made health equity one of its top priorities and dedicated \$25 million to the Centers for Medicare and Medicaid Services (CMS) to address such health crises as the COVID-19 pandemic disproportionally impacting communities of color (Mills-Gregg, 2021). Traditionally, CMS collaborates with various stakeholders to address raising awareness and understanding the cause of health disparities and developing and implementing solutions through sustainable actions (James, 2019). One of those actions is the creation of the CMS Equity Plan for Improving Quality in Medicare.

When addressing health disparities, a primary concern arises when discussing minority populations seeking healthcare, especially in rural communities. Over 54 million people seek healthcare services from rural hospitals (Bae, 2015). However, due to these communities' reliance on forestry, fishing, agriculture, and mining as the dominant part of their economy, these occupational practices have led to major health threats. For example, pesticides used in agriculture, hazardous conditions during mining, and trauma caused by fishing and forestry combined accounted for 12.5% of injuries and 4.2% of emergency room visits in 1997 (Ricketts, 2000). These are results of overexertion, shrapnel cuts, and injuries during transportation which

are common in such communities. However, a major concern is the lack of resources available to treat individuals in low-income communities.

In many low-income communities, mental health is another significant concern. Rural communities, in particular, are close-knit and are known to resist acknowledging perceptions of mental illness and depression that are either genetic or caused by substance abuse (Ricketts, 2000). Such a mindset leads to delayed treatment or even a lack of seeking medical attention to address severe acute or chronic conditions. Individuals in these communities are also less likely to have health insurance or a safety net to afford medical treatment. CMS has assisted rural hospitals by offering adjusted Medicare payments; however, these payments are lower than in urban areas due to fee adjustments to align with the lower wages of individuals in rural communities. However, as anchor providers, rural and safety net hospitals continue to serve their communities by adopting new approaches to health delivery and utilizing information technology to provide reliable patient care (Ricketts, 2000).

1.2 Problem Statement

As healthcare organizations begin addressing health inequities, the board, and executive leadership composition significantly impact the focus of their mission and healthcare strategies (Herrin et al., 2018). Health equity-focused boards center their mission on delivering quality patient care that addresses the needs of diverse individuals in their communities. Organizations such as the National Institute on Minority Health and Health Disparities (NIMHD), and CMS have even created frameworks that health organizations can use to help address patient disparities (Brown et al., 2019). While a framework helps identify

tactics to address patient needs, including diverse individuals in key decision-making positions is necessary to ensure equity of resources and strategy.

1.3 Research Questions and Research Hypotheses

A 2015 survey by the AHA and a 2008 survey of nonprofit organizations found that organizations with higher board diversity ratios reported significant incentives to address health disparities and improve company performance (Herrin et al., 2018; Harris, 2014). This study will examine the relationship between board diversity and health equity strategies among for-profit and not-for-profit Illinois hospitals. The following research questions will be examined:

- 1. What health equity strategies did Illinois hospitals commit to in 2020?
- 2. What is the diversity composition of Illinois hospital boards in 2021?
- 3. What categories of health equity initiatives were implemented in Illinois hospitals with low versus high diversity hospital boards?
- 4. Do more diverse boards prioritize strategic initiatives related to social needs and community social determinants of health?

With the correct board composition, the diversity of experience, influence and expertise are instrumental in creating a strategic plan centered around health equity. Therefore, it is hypothesized that hospitals with a more diverse board will have strategically focused programs that address social needs and community social determinants of health, compared to hospitals with less board diversity.

CHAPTER II SCOPING LITERATURE REVIEW

As health systems develop in their health equity journey, the need to establish a strategically driven mission is significant. The strategic development of mission, vision, and values resonates from the top, which usually begins with the board of directors.

Demographically diverse health equity-focused boards are unique in that they can center their mission on delivering quality patient care that addresses the diverse needs of the individuals in the community (Doherty et al., 2022). A literature review used topics such as healthcare equity, health disparities, governance structure, board diversity demographics, strategic planning, health policy, and healthcare regulations to review current information on this topic.

Using a systematic review process, relevant sources were collected from Google Scholar, PubMed, ProQuest, and Scopus. Given the limited information on and explorative nature of this topic, a timeframe was not set to capture the full breadth of research collected from each search engine. Primary searches were focused solely on the United States but were further expanded internationally to increase awareness across other healthcare organizations for comparison purposes. This level of detail is instrumental in understanding current information available in addressing the impact of board diversity on health equity strategies within hospitals and health systems.

Health Disparities and Healthcare Equity

According to the 2021 National Healthcare Quality and Disparities Report, for each quality measure, worse care is seen among Black (43%), Asian and Pacific Islanders (40%), and Hispanic (36%) populations compared to Whites (HHS, 2021). These results are staggering, considering in 2020, health spending accounted for 19.7% of the United States GDP (\$4.1)

trillion) at roughly \$12,530 per person (CMS, 2021) which is greater than other developed nations. However, it is clear from the data that the care received for each individual is inequitable. The NIH (2017) defines the variety in patient care as a health disparity, differences among specific populations in achieving their full potential of health measured by the degree of incidence, mortality, or other adverse health conditions. This term is not limited to racial groups but can expand across different demographic dimensions such as age, disability, gender, sexual orientation, and geographic location. The historical context of health disparities stems from inequitable care withheld from specific individuals due to systemic and institutional practices stemming from racism, sexism, classism, and homophobia.

The desire to achieve health equity is acknowledged across the healthcare industry. However, strategies to achieve this goal have not always been a top priority. Chin (2016) states that a significant barrier to achieving this goal is the lack of financial incentives coupled with the lack of a strong business case for the cause. As the United States becomes more diverse, with the non-White population losing its minority status, the quality of care needed to address the needs of the population changes. However, the exuberant cost of addressing health disparities has resulted in a lack of coordinated funding and incentives to treat underrepresented and uninsured patients (Chin, 2016).

A significant concern for health disparities is found within populations of low-income and rural areas. Since the 1990s, rural health care has rapidly transformed as it seeks to integrate into professional systems and networks (Ricketts, 2000). However, funding for rural areas complicates the drive toward achieving health equity. For example, according to Hart et al. (2002), populations in rural areas are 20% more uninsured than their urban counterparts.

Furthermore, distance to the hospital, decreased population density, and high patient overhead pose additional problems when managing hospitals in a rural environment.

A 2013 Centers for Disease Control and Prevention Health Disparities and Inequalities Report showcases a variety of racial, ethnic, and socioeconomic disparities prevalent in the United States (Dreachslin et al., 2017). The study reported such instances as African Americans, Hispanics, and Asian Americans experiencing difficulty communicating with their physicians; Asian Americans reporting physicians did not understand their culture and values; and non-Hispanic White inpatients receiving better care at hospitals than minority patients. Dreachslin et al. (2017) state that organizational policies and procedures are essential when evaluating the impact of causes for health disparities and decreasing patient perception of quality.

Health Disparities in Illinois

In 2000, the Illinois Department of Public Health released its 2011-2015 Health
Disparities Report for Illinois and Illinois Counties. The data showed that Black residents had the
highest poverty and unemployment rates and obtained less education than all other races and
ethnic groups (IDPH, 2020). This information is important as Illinois hospitals seek to address
social determinants of health (economic stability, quality education, health care access, safe
community environment, housing) which may impact how individuals manage their health
conditions (Healthy People 2030, 2021). However, as shown in Table 1, health inequities exist
across all races in Illinois (IDPH, 2020).

Table 1. Health Inequity Summary Table: Change in Health Inequity over Time, By Race, and Ethnicity in Illinois, 2009 and 2015

	Indicators	Black	All Other Races	Hispanic/Latino
	Social Determinants			
!	Children at or below federal poverty level, % Unemployment rate, %	↓	↓ ↑	↓
	Educational Attainment <high %<="" school,="" td=""><td>V</td><td>V</td><td>^</td></high>	V	V	^
	Health Status, Behaviors, Healthcare Access	Black	All Other Races	Hispanic/Latino
	Self-reported fair/poor health, %	V	1	V
3	Unhealthy physical days for 8-30 days in past month, %	V	^	V
5	Unhealthy mental days for 8-30 days in past month, %	V	^	^
	Obesity prevalence, %	^	↓	^
	Tobacco use-current smoker, %	↓	V	V
	Tobacco use during pregnancy-current smoker, %	^	•	^
	Percent without health insurance	→	^	^
	Morbidity and Mortality	Black	All Other Races	Hispanic/Latino
	Heart disease mortality rate, per 100,000	V	V	^
	Diabetes prevalence, %	V	\leftrightarrow	V
	All-cancer mortality rate, per 100,000	^	V	^
	Gonorrhea incidence, per 100,000	V	V	^
	HIV infection rate, per 100,000	V	T	^
	Homicide mortality rate, per 100,000	^	^	↑
	Opioid overdose deaths, per 100,000	↑	1	^
	Accident Death rate, per 100,000	→	V	^
	Infant Mortality Rate	Black	All Other Races	Hispanic/Latino
	Infant Mortality Rate	^	↑	^

Source: IDPH, 2020

Board Structure

A key factor addressed in the literature is the structure of the board within the organization. For example, Thiel et al. (2018) suggest there are four theories to describe the governing authority of a hospital board within its organizational structure:

1. **Agency Theory** in which the board serves a supervisory role to help ensure the separation between the organization's financial risk and any agency which may put the organization at a disadvantage. In this capacity, the board's primary function is to monitor the management of decisions.

- Stewardship Theory, in which managers and directors equally contribute to the successful organization. In this capacity, the board contributes to strategic decisionmaking.
- 3. **Resource Dependence Theory** in which the organization needs external support. In this capacity, the board facilitates access to advice and support for strategic decisions.
- 4. **Stakeholder Theory,** in which managers build and maintain good relationships with the board. In this capacity, the board is a shareholder in all decisions relating to the organization.

After determining the board's function within the organization, the next question is how to diversify the board successfully. According to Thiel et al. (2018), the diverse composition of teams is found to have more excellent problem-solving and networking abilities and are likely to increase the decision-making perspectives of the board. Bernstein and Bilimoria (2013) also examine practices and behaviors that lead to including minorities on boards and how to integrate individuals into a traditionally non-inclusive culture. Their results show the importance of such diversity in its ability to identify action items to align with the organization's diversity, inclusion, or health equity strategic goals. Such a structure works when each board member has an equal or fair voice at the table when addressing critical issues. In contrast, boards that include diverse members to serve as "token minorities" are less likely to gain full inclusion of members' insights and expertise (Bernstein and Bilimoria, 2013). While the demographic representation of the board is necessary, the lack of inclusion and ability to represent the community the member serves fails to meet the overall objective of a hospital's health equity-centered mission.

Doherty et al. (2022) state that a successful health equity-focused governance structure is designed to bolster an organization's focus and accountability by integrating its efforts across the entire division and within individual departments. Through interviews with executives, this study found that many organizations differed in their strategy toward health equity resulting in varying outcomes for the community. While many organizations engage their board of directors in developing goals and plans, some rely on a siloed department led by a full-time employee to advance the health equity efforts of the organization. Successful organizations established a health equity committee consisting of medical divisions, QI, nursing, administration leaders, and one of its major community health centers to assist with the strategic process (Doherty et al., 2022). Another successful model created a center for health equity which utilized a research department and health equity steering committee to set the strategic direction for the organizational enterprise.

While advancements in health equity have increased, a qualitative study by Doherty et al. (2022) acknowledged the lack of examples in the literature prioritizing health equity within hospital mission statements. This study did, however, identify core competencies an organization should implement to sustain organizational change when addressing health disparities: committed and engaged leadership, integrated organizational structure, commitment to quality improvement (QI) and patient safety, ongoing training and education, effective data collection and analytics, and board engagement and collaboration. Further results from their study suggest that organizations that limit equity-focused work to a designated department often fail to foster a broader culture of equity throughout the organization. To implement an enterprise-wide organizational change, offices focused on diversity, equity and inclusion should be accountable

for activities embedded across the organization's fabric and not work in silos to increase collaboration.

Board Composition and Selection

A hospital board's composition may depend on state corporate law, which may dictate the minimum number of directors, especially for a nonprofit organization. According to the Center for Healthcare Governance (2009), the ideal hospital board ranges from 11 to 15 individuals. In most cases, nonprofit boards tend to be smaller than for-profit. In addition, board members typically serve more than one staggered term to allow for the continual placement of new individuals to refresh the expertise and perspective on the board each year. While there are recommendations within the literature, best practices vary depending on hospital type, state law, and the board's critical priorities.

According to the AHA's 2014 National Health Care Governance Survey Report, hospitals often report difficulty in finding diverse candidates to serve on their boards (Totten, 2015). As a result, board demographics from the 2011 to 2014 survey displayed minimal advancement in the percentage of women, the number of individuals under 50, and racial diversity. These results showed a lack of change from 2010 when the United States population was 35% minorities, yet under 12% of hospital board members were non-white (Greene, 2011).

Results from the Illinois Department of Public Health 2021 Diversity in Health Care Task Force Annual Report showcased that minorities staffed 16% of C-suite positions, 81% of board members were White, and 65% of board members were male (IDPH, 2022). When asked about strategies to diversify leadership positions, more than half responded with no plans to diversify the board and one-third without a system to address gaps in the C-suite. Organizations such as the National Association of Health Services Executives, the Center for Healthcare Governance,

and The Leverage Network each aim to increase the presence of underrepresented minorities on healthcare boards. However, significant gaps in the demographic makeup of hospital board and C-suite positions still exist.

Board Diversity Demographics

While there is an emphasis on the word diversity when describing the types of individuals to place on a board strategically, Gazley et al. (2010) suggest that representation is the word that should be used. Representation refers to the degree an organization's board reflects key characteristics of operations to that of the community. In this sense, hospital boards should seek to strategically select board members that mirror the needs of the populations they serve. A study by Herrin et al. (2018) explored the impact of health initiatives from hospital boards that are racially and ethnically diverse. Using the Institute for Diversity and Health Equity Survey, 1,088 hospitals responded to 78 questions regarding Leadership and Strategic Planning, Workforce, Data Collection, and Reducing Disparities. After collecting themes, the study was analyzed using Cronbach's alpha to test collinearity and chi-square tests of independence. The study found that hospital boards with greater race, ethnic, and gender diversity had a significantly higher score for pursuing initiatives across all four domains.

Holden et al. (2016) further support board diversity by recommending a community coalition board composed of local stakeholders residing in the community who understand the public health needs of individuals within a given population. Bylaws of this board state that members must be comprised of individuals representing the community and its priorities. The outputs of both studies exhibit the effectiveness of having various dimensions of diversity and provide a blueprint of how to structure hospital boards to allow for the most significant impact

on health initiatives. Another factor to consider is the makeup of areas of interest and specialties of the hospital board. For example, Reimold et al. (2021) study highlights the importance of physicians' presence and leadership on hospital boards, as results show a strong positive correlation between physicians' voices and hospital quality performance. This information is impactful in that board composition can determine the field expertise around the table to address various health equity concerns of the community.

A critical factor in the literature was the emphasis on diversity and inclusion training necessary for hospital board members. Doherty et al. (2022) found that training exercises help board members understand how to develop strategic goals that deliver culturally competent care and engage members in discussions regarding sensitive topics related to health equity. In the absence of training, the study found that board members had difficulty connecting to clinicians and healthcare staff when dealing with implicit bias and systemic concerns regarding health disparities. Through formal education, board members could understand and acknowledge the historical context of systemic and institutionalized policies and work together to identify efforts to create a culture of openness and change. In addition, organizations expressed significant support for diversity and inclusion education conducted as an iterative and continual part of the culture rather than episodic. This approach accomplishes two goals: (a) to initiate an internal dialogue about how the organization is working to advance equity for their patients and identify opportunities for improvement, and (b) to understand better how well the organization is serving the community (Doherty et al., 2022).

Health Policy and Regulations

In 1979, the federal government released the Healthy People initiative, public health

strategy exploring goals and objectives for disease prevention and health promotion (Doherty et al., 2022). In 1990, the initiative was retitled Health People 2000 and addressed a plan to reduce health disparities as one of its key goals. While federal policymakers seek ways to address medical costs, it is difficult to financially calculate the diversity found in most minority communities to implement a law that will adequately manage each individual's health concerns. The Robert Wood Johnson Foundation (RWJF) sought to address allocating resources to support financial and reimbursement models by developing the Finding Answers: Solving Disparities through Payment and Delivery System Reform program (DeMeester et al., 2017). By exploring intrinsic and extrinsic motivators that directly impact eliminating disparities, this program aims at providing tools for healthcare administrators and providers.

In 2015, the CMS Equity Plan for Improving Quality in Medicare also sought to address a payment lever to reduce disparities by developing a coalition between the American Hospital Association and the Joint Commission (Chin, 2017). At a 2016 Health Equity Forum, the business case for achieving health equity was presented, which provides recommendations on health equity measures, payment to reward achievements, and Medicare beneficiary improved outcomes. In addition to the recommendations from CMS, the Affordable Care Act (ACA) was implemented in 2015, which added health insurance to 16.9 million people and increased Medicaid enrollment by over 9.6 million (Kaufman et al., 2016). However, this has not fully increased insurance coverage for all, especially in low-income and rural communities.

There is also an associated cost increase for services provided to Medicaid patients as access to Medicaid becomes more available, shifting the cost of care expenses to rural hospitals (Kaufman et al., 2016). This means that the impact of the expansion for rural hospitals is different than in urban areas resulting in rural critical access hospitals depending on Medicare

reimbursement to ensure essential services within the community. As Bae (2015) states, CMS policies add financial constraints to hospitals with limited organizational or human resource support. She further suggests that quality indicators favor urban hospitals over rural hospitals, which experience higher rates of chronic illnesses and poor health behaviors among rural populations.

Under the ACA, states can apply for waivers granted by the secretary of the HHS under section 1332 (Meacham, 2021). This federal policy assists states in shifting how Medicaid can work in their favor. Unfortunately, most aid fails to address the needs of rural or low-income communities within a given state. There is also a concern for diversity among physicians in these communities. In most cases, Medicare and Medicaid reimbursement represents half of an institution's revenue. However, the lack of certainty in receiving payments creates a financially hostile environment compared to physicians in urban areas (Hart et al., 2002). As a result, discounted payments, negotiations, and less-than-ideal staffing are how a rural physician finds ways to manage patient care within the hospital. This leads to fewer physicians seeking to work in rural or low-income areas, which also impacts the diversity of staff within the hospital. Without leadership diversity and lived experiences, many health inequities within the community are not identified and therefore fail to be addressed by the medical community.

Potential Impact of Diverse Boards

Various methods have been used to research the correlation between board diversity and strategic outcomes. Thiel et al. (2018) state that there is a lack of information in the literature on how hospital governing boards describe and classify strategic objectives. As a result, finding research designs to align with this study was challenging. However, a study by

Bernstein and Bilimoria (2013) used the Vital Voices survey, conducted by Board Source, to analyze responses from 403 nonprofit board members of racial or ethnic minority groups to obtain data using quantitative and qualitative analysis. The study used partial least squares to detail their experience and analyzed the responses using SPSS principal axis factoring and Promax. The data was then rotated to identify groups or clusters of variables to form a theme. Results indicated that boards that adopt a diverse culture where all members are equally included and encouraged to voice their opinions are more successful (Bernstein and Bilimoria, 2013).

Another study by Chatjuthamard et al. (2021) explored board diversity and the impact of gender. The study used the Institutional Shareholder Services (ISS), COMPUSTAT, and vega (which measure the change in managers' wealth and its impact on behavior) data to evaluate the board of directors' gender diversity on executive risk-taking incentives. Results found that board gender diversity was associated with greater risk-taking. The study also furthered its effects through instrumental-variable analysis (IV) to mitigate bias and unobserved heterogeneity in how the board was selected based on non-gender demographic factors (Chatjuthamard et al., 2021). This method helped isolate factors such as age, tenure, the board size, and initiative ROI, showcasing a significant correlation between composition diversity and outcomes. A similar study by Ben-Amar et al. (2015) used instrumental-variable analysis (IV) from the 2008-2014 Canadian Spencer Stuart Board Index corporate governance data to show a positive correlation between the percentage of women serving on nonprofit boards and the promotion of proactive strategies to respond to stakeholder demands.

CHAPTER III METHODOLOGY

Objective

The primary objective of this study is to examine the correlation between a hospital board's demographic makeup and health equity initiatives implementation.

1.4 Research Design or Method/ Sample Selection

The study used a dataset from the 2020 American Hospital Annual and the 2021 American Hospital Association National Governance surveys. Performance measures from the annual survey collected in 2020 were compared to subsequent data collected in 2021 from the governance survey which is reported bi-annually. Inclusion criteria for this study was the significant completion of 80% of both surveys within this timeframe.

1.5 Instrumentation

Questions from the 2020 American Hospital Annual and the 2021 American Hospital Association National Governance surveys were selected based on their relevance to key demographics and information indicating health equity initiatives and outcomes.

The complete survey can be found in Appendices A & B.

1.6 Data Set Description

Data from the 2020 American Hospital Annual and the 2021 American Hospital Association National Governance surveys were given permission by the American Hospital Association with an understanding that hospital names and locations will be de-identified. American Hospital Association survey data was collected from United States hospitals and associated areas with an 83% response rate (CDC, 2022).

1.7 Independent and Dependent Variables

The following variables in Tables 1 and 2 will be included in the study

Table 1: 2020 AHA Survey Items

Item Number	Survey Item Description	Response Choices		
B1	Organizational Control	Categorical (government, nonprofit, forprofit)		
B2	Service Type	Categorical (e.g., general medical and surgical, psychiatric)		
E1	Beds and Utilization	Numerical bed numbers		
F1	What social needs of patients/social determinants of	a. Housingb. Food insecurity or hunger		
	health do the hospital have	c. Utility needs		
	programs to address (check all that	d. Interpersonal violence		
	apply)	e. Transportation		
		f. Employment and income		
		g. Education		
		h. Social isolation (lack of family		
		and social support)		
		i. Health behaviors		
		j. Other, please describe:		
F2	SDoH Screening	a. Yes, for all patients		
		b. Yes, for some patients		
		c. No		
F2a	If Yes to F2, indicate	a. Housing		
		b. Food insecurity or hunger		
		c. Utility needs		
		d. Interpersonal violence		
		e. Transportation		
		f. Employment and income		
		g. Education		
		h. Social isolation (lack of family		
		and social support)		
		i. Health behaviors		
F3	Utilize Outcome Measures	j. Other, please describe: a. Yes		
1,2	Offize Outcome Weasures	a. Yes b. No		
F4	SDoH and Patient Social Needs	a. Better health outcomes for		
17	Data Collection	patients		
	Data Concetion	b. Decreased utilization of hospital		
		or health system services		
		c. Decreased healthcare costs		

		d.	Improved community health
			status
F5	Partnerships for Population and/or	a.	Healthcare providers outside your
	Community Health Initiatives		system
		b.	Health insurance providers
			outside of your system
		c.	Local or state public health
			departments/organizations
		d.	Other local or state government
			agencies or social service
			organizations
		e.	Faith-based organizations
		f.	Local organizations addressing
			food insecurity
		g.	Local organizations addressing
			housing insecurity
		h.	Local organizations addressing
			transportation needs
		i.	Local organizations providing
			legal assistance for individuals
		j.	Other community nonprofit
			organizations
		k.	K-12 schools
		1.	Colleges or universities
		m.	Local businesses or chambers of
			commerce
		n.	Law enforcement/safety forces

Table 2: 2021 National Healthcare Governance Survey

Item Number	Survey Item Description	Response Choices
1	Member of the Board	a. Voting
2	D 1D 1'	b. Non-Voting
3	Board Demographics	a. Race/Ethnicity
		b. Gender
		c. Age
4	Di i D IM I	d. Clinical Background
4	Physician Board Members	a. Voting
	Dec D	b. Non-Voting
7	Efforts to Engage Millennials	a. Established a millennial
	(individuals between the ages of 24-40)	council that can help
		identify potential board
		candidates
		b. Specifically targeted
		millennials when seeking
		new board members
		c. Included millennials as
		outside (non-board)
		members on board
		committees
		d. Other, please specify:
0	D IA I' '	e. None of the above
8	Board Age Limit	a. Yes
0	D Im I''	b. No
9	Board Term Limits	a. Yes
10	I 1 CD 1 T	b. No
10	Length of Board Terms	
11	Maximum Number of Consecutive Terms a	
	Board Member May Serve	
12	Board Compensation	a. Yes
		b. No

13	Poord Standing Committees	o Ouglity
13	Board Standing Committees	a. Quality b. Finance
		c. Audit/Compliance
		d. Governance/ Nominating
		e. Community
		Benefit/Mission
		f. Diversity, Equity, and Inclusion
		g. Executive
		h. Strategic Planning
		 Executive Compensation
		j. Fundraising/Development
		k. Advocacy/Government
		Relations
		l. Workforce
		m. Innovation
		n. Enterprise Risk
		Management
		o. Cybersecurity
		p. Other, please specify:
20	Board Selection Skills and Competencies	a. Yes, for all board
	Used	members.
		b. Yes, for board chairs.
		c. Yes, for committee
		chairs.
		d. Yes, for committee
		members.
		e. No
23	Efforts to Recruit Millennials	a. 5 – extreme effort
		b. 4
		c. 3
		d. 2
		e. 1 – little effort
24	Efforts to Recruit Diverse Members (age,	a. 5 – extreme effort
	race, gender, ethnicity, skill set)	b. 4
		c. 3
		d. 2
		e. 1 – little effort
25	Organizations' Interest in Board Diversity	a. Yes
23	organizations interest in Board Britishty	105

54	Items Discussed at Board's Executive	a. Executive performance
	Sessions	evaluation
		b. Executive compensation
		c. Board performance
		evaluation
		d. Board member
		performance evaluation
		e. Board recruitment and
		selection
		f. Board development
		g. Financial performance of
		the health
		system/hospital(s)
		h. Clinical or quality
		performance measures
		i. General strategic
		issues/planning
		j. Other, please specify
55	Percentage of Board Meeting Time Used for	a. Greater than 0% but less
	Active Discussion or Debates	than or equal to 25%
		b. Greater than 25% but less
		than or equal to 50%
		c. Greater than 50% but less
		than or equal to 75%
		d. Greater than 75% and up
		to and including 100%

1.8 Data Analysis

Variables of the study focused on the correlation between each board's diversity score and their selected health equity initiatives. To determine the diversity score, the composition of gender and non-white members of each board were compared to each hospital's respective county. Using number of females on the board compared to the % of females in each county, the hospital scored 3 if the number of females board members was 100-75%, scored 2 if the number was 74-50%, and scored 1 if the number was 49-0%. The same criteria were used for non-white board members compared to the number of non-white populations within each county. The

hospital scored 3 if the number of non-white board members was 100-75%, scored 2 if the number was 74-50%, and scored 1 if the number was 49-0%.

To calculate the overall diversity score, the score for female and non-white board members of each hospital was added. Using a composite score, the diversity of each hospital was calculated using the following scales 6-5 (high) 4-3 (medium) 2-1 (low) representing the degree of diversity of the hospital board compared to their respective county.

1.9 Statistical Analysis

Descriptive analysis was used to examine the board characteristics. Fishers exact test was used to test the correlation between the board diversity score and survey items related to effort to develop a diverse board, and the selection of initiatives related to social determinants of health.

Data was analyzed using Stata/MP 17.0 software.

CHAPTERS 4 and 5 ACHE JOURNAL SUBMISSION

ABSTRACT/SUMMARY

Goal: As the diversity of the United States population increases, hospitals must be equipped with the appropriate tools and resources to address the unique needs of their diverse patients. The goal of this study was to examine if there is a correlation between a hospital board's demographic makeup and health equity initiatives implementation.

Methods: Using dataset from the American Hospital Association's 2020 Annual Survey and the 2021 National Governance Survey, we performed a quantitative analysis of Illinois forprofit and not for profit hospitals evaluating the types of health equity initiatives implemented

versus their board demographic. Hospitals were excluded if they did not complete both surveys. Using a composite score of gender and racial diversity, each hospital board was placed into a diversity category of high, medium, or low. Data was calculated using Stata/MP 17.0 software for correlation using fishers' exact.

Principle Findings: Of the 209 hospitals in Illinois, 30 (14.4%) completed both surveys and qualified for inclusion in the study. Results showcased that those hospitals with high board diversity did not have a significant difference in the implementation of health equity initiatives highlighted in the surveys compared to those with medium or low diversity.

Practical Applications: As health equity policy and regulations expand, hospitals are making conscious efforts to implement tactics that address the needs of underrepresented and historically marginalized patients. Results from this study suggest that hospital boards with high diversity composition focus on streamlined health equity initiatives which will have the greatest impact on the community. However, boards with low or medium diversity composition implement a variety of initiatives which may dilute overall impact. While boards may influence the development of health equity strategies, successful implementation results from an organization's mission and vision which define strategic alignment and individual accountability of patient outcomes across the organization.

INTRODUCTION

As the population of the United States expands, the diversity of individuals using the healthcare system increases. According to The Census Bureau (2021), the Diversity Index calculation from 2010 to 2020 shows that racial and ethnic diversity in the United States has increased from 54.9% to 61.1%. Such changes significantly impact the strategy on the quality of

patient care needed in the healthcare system due to increased healthcare disparities for various demographics. As a result, hospitals must be equipped with the appropriate tools and resources to address the unique needs of their diverse patients due to the population increase. Unfortunately, the growth of the United States population has resulted in various health inequities for individuals in minority communities. Churchwell et al. (2022) acknowledge the impact structural racism plays in normalizing policies, laws, and procedures that result in health disparities for people of color.

According to the 2021 National Healthcare Quality and Disparities Report, for each quality measure, worse care is seen among Black (43%), Asian and Pacific Islanders (40%), and Hispanic (36%) populations compared to Whites (HHS, 2021). These results are staggering, considering in 2020, health spending accounted for 19.7% of the United States GDP (\$4.1 trillion) at roughly \$12,530 per person (CMS, 2021). However, it is clear from the data that the care received for each individual is inequitable. The NIH (2017) defines the variation in patient care as a health disparity, differences among specific populations in achieving their full potential of health measured by the degree of incidence, mortality, or other adverse health conditions. This term is not limited to racial groups but can expand across different demographic dimensions such as age, disability, gender, sexual orientation, and geographic location. The historical context of health disparities results from inequitable care withheld from specific individuals due to systemic and institutional practices stemming from racism, sexism, classism, and homophobia.

The impact of health inequities was showcased by the Centers for Medicare and Medicaid Services in June 2020 when they published data on the coronavirus disease (Adashi et al., 2021). This information was critical in helping organizations see how structural racism impacted underserved and minority communities unable to obtain routine testing and vaccines

and helped slow the spread of the virus. However, the issue is further complicated by the lack of Value-Based Payment (VBP) structures that would help reduce disparities and address payment concerns for the provider, payer, and patient (Sandhu et al., 2020). In addition, insurance companies, underserved communities, providers, and hospital staff are directly impacted by the readmission rates and chronic conditions that result from not addressing health inequities in the United States. As a result, the financial burden on the United States healthcare system in 2022 is estimated at a \$135 billion loss due to racial disparities in healthcare (Tuck, 2022).

A 2013 Centers for Disease Control and Prevention Health Disparities and Inequalities Report showcases a variety of racial, ethnic, and socioeconomic disparities prevalent in the United States (Dreachslin et al., 2017). The study reported such instances as African Americans, Hispanics, and Asian Americans experiencing difficulty communicating with their physicians; Asian Americans reporting physicians did not understand their culture and values; and non-Hispanic White inpatients receiving better care at hospitals than minority patients. Dreachslin et al. (2017) state that organizational policies and procedures are essential when evaluating the impact of causes for health disparities and decreasing patient perception of quality.

The Patient Protection and Affordable Care Act (ACA) was created to assist states with improving the health status of racial and ethnic minority populations through community service interventions, expanded health insurance coverage, and policies addressing delivery system reform (Hanlon and Giles, 2021). With health disparities being a major concern, the ACA should prove beneficial in addressing the needs of low-income and rural communities. Furthering these efforts, the Biden administration has made health equity one of its top priorities and dedicated \$25 million to the Centers for Medicare and Medicaid Services (CMS) to address such health

crises as the COVID-19 pandemic disproportionally impacting communities of color (Mills-Gregg, 2021).

When addressing health disparities, a primary concern arises when discussing minority populations seeking healthcare, especially in rural and low-income communities. As health systems develop in their health equity journey, the need to establish a strategically driven mission is significant. The strategic development of mission, vision, and values resonates from the top, which usually begins with the board of directors. Demographically diverse health equityfocused boards are unique in that they can center their mission on delivering quality patient care that addresses the diverse needs of the individuals in the community (Doherty et al., 2022). According to Thiel et al. (2018), the diverse composition of teams is found to have more excellent problem-solving and networking abilities and are likely to increase the decisionmaking perspectives of the board. Bernstein and Bilimoria (2013) also examine practices and behaviors that lead to including minorities on boards and how to integrate individuals into a traditionally non-inclusive culture. Their results show the importance of such diversity in its ability to identify action items to align with the organization's diversity, inclusion, or health equity strategic goals. In contrast, boards that include diverse members to serve as "token minorities" are less likely to gain full inclusion of members' insights and expertise (Bernstein and Bilimoria, 2013).

Holden et al. (2016) further support board diversity by recommending a community coalition board composed of local stakeholders residing in the community who understand the public health needs of individuals within a given population. Bylaws of this board state that members must be comprised of individuals representing the community and its priorities. The outputs of both studies exhibit the effectiveness of having various dimensions of diversity and

provide a blueprint of how to structure hospital boards to allow for the most significant impact on health initiatives. Another factor to consider is the makeup of areas of interest and specialties of the hospital board. For example, Reimold et al. (2021) study highlights the importance of physicians' presence and leadership on hospital boards, as results show a strong positive correlation between physicians' voices and hospital quality performance. This information is impactful in that board composition can determine the field expertise around the table to address various health equity concerns of the community.

With the correct board composition, the diversity of experience, influence and expertise are instrumental in creating a strategic plan centered around health equity. Therefore, we hypothesized that hospitals with a more diverse board will have more strategic initiatives focused on social needs and community social determinants of health, compared to hospitals with less board diversity.

METHODS

The primary objective of this study was to examine the correlation between hospital board demographic makeup and health equity initiatives implementation within the state of Illinois. The following research questions were explored:

- 1. What health equity strategies did Illinois hospitals commit to in 2020?
- 2. What is the diversity composition of Illinois hospital boards in 2021?
- 3. What categories of health equity initiatives were implemented in Illinois hospitals with low versus high diversity hospital boards?
- 4. Do more diverse boards prioritize strategic initiatives related to social needs and community social determinants of health?

Data Collection

The study used a dataset from the 2020 American Hospital Annual and the 2021

American Hospital Association National Governance surveys. Performance measures from the annual survey collected in 2020 were compared to subsequent data collected in 2021 from the governance survey which is reported bi-annually. Inclusion criteria for this study was the significant completion of both surveys within this timeframe. Data was provided with permission by the American Hospital Association with an understanding that hospital names and locations will be de-identified.

Questions from both surveys were selected based on their relevance to key board composition demographics and responses specifying health equity initiatives and outcomes. Of the 209 state of Illinois hospitals, 30 (14.4%) qualified for this study. We excluded hospitals that did not complete the targeted questions from both the 2020 American Hospital Annual and 2021 American Hospital Association National Governance surveys.

Data Analysis

Variables of the study focused on the correlation between each board's diversity score and their selected health equity initiatives. The board diversity score is a composite, comparing the board's racial and gender membership to the county census data. To determine the diversity score, the composition of gender and non-white members of each board were compared to each hospital's respective county. Using the percentage of females on the board compared to the % of females in each county, the hospital scored 3 if the percentage of female board members was 100-75% of the county make-up, a 2 if the number was within 74-50% of the county and scored 1 if the board membership was less than 50% of the county population. For example, if a Board had 50% female membership, and the county was 50% female, that hospital would receive a

score of three for gender diversity. The same criteria were used for non-white board members compared to the number of non-white populations within each county. The hospital scored 3 if the number of non-white board members was 100-75%, scored 2 if the number was 74-50%, and scored 1 if the number was 49-0% of the county's racial population.

To calculate the overall diversity score, the score for female and non-white board members of each hospital was added. Using a composite score, the diversity of each hospital was calculated using the following scales 6-5 (high) 4-3 (medium) 2-1 (low) representing the degree of diversity of the hospital board compared to their respective county. As a sensitivity test, a board diversity score of high (4-6) and low (1-3) was also tested, but there were no differences in results in using the binomial rating. The three-category rating scale was used for further analysis, to allow for more variation in board types.

Statistical Analysis

Descriptive analysis was used to examine the board characteristics. Fishers exact test was used to test the correlation between the board diversity score and survey items related to effort to develop a diverse board, and the selection of initiatives related to social determinants of health.

Data was analyzed using Stata/MP 17.0 software.

RESULTS

Thirty Illinois hospitals were included in this study (Table 1). The most common type of participating hospital was a freestanding hospital board 12 (40%), and the average bed size ranged from 25-499. Table 2 summarizes the board demographics. The hospitals reported 355 voting board members across the 30 hospitals, with most individuals identifying as white 296 (83.4%) white, male 215 (60.6%), and between 51-70 year of age 210 (59.2%).

Table 1. Baseline Characteristics of Hospitals			
Characteristic	Hospitals (N=30)		
Organization Type	No. (%)		
Government, federal	0 (0%)		
Government, nonfederal	2 (6.7%)		
Nongovernment, not-for-profit (NFP)	28 (93.3%)		
Service Type			
Freestanding hospital board	12 (40.0%)		
System board	8 (26.7%)		
Hospital board within a system	10 (33.3%)		
Bed Size Total Facility			
<25 (Critical Access)	1 (3.3%)		
25-100 (Small)	14 (46.7%)		
101-499 (Medium)	14 (46.7%)		
>499 (Large)	1 (3.3%)		

Characteristic	Board Members (N=355)
Race	No. (%)
American Indian or Alaska Native	3 (0.8%)
Asian	8 (2.3%)
Black or African American	36 (10.1%)
Hispanic or Latino	8 (2.3%)
Native Hawaiian or Other Pacific Islander	1 (0.3%)
White	296 (83.4%)
Other	3 (0.8%)
Gender	
Female	140 (39.4%)
Male	215 (60.6%)
Age	
35 or younger	9 (2.5%)
36-50	96 (27.0%)

51-70	210 (59.2%)
71 or older	43 (12.1%)
Clinical Background	
Nurse	23 (6.5%)
Physician	57 (16.1%)
Other clinician (e.g., pharmacist, therapist)	8 (2.3%)
None	267 (75.2%)

Hospital board diversity composition compared to their respective counties resulted in 5 hospitals receiving a high board diversity score, 10 hospitals in the medium category, and 13 in the low. Evaluation of the relationship between board diversity score and the intention to recruit diverse demographics for board positions showed that there was no significant difference between high, medium, and low diversity boards (Table 3). However, most low and medium hospitals indicated putting extreme efforts towards targeted recruitment of millennials (p=0.505) and demographically diverse members (p=0.768). Interest in engaging board members of diverse race, age, gender, and disability characteristics were also of high priority among the boards (p=0.808). Of note, four hospitals from the low and medium board diversity indicated no interest in engaging members from diverse backgrounds. Only one hospital reported having a Diversity, Equity and Inclusion standing committee on the board (p=0.172).

Table 3. Diversity Efforts	Low (n=13)	Medium (n=10)	High (n=5)	P value
Compared to other age cohorts, on a scale of 1-5, how much effort is required to recruit millennials to your board?				p=0.505
1 - Little	1 (7.7%)	1 (10%)	0 (0%)	
2	0 (0%)	0 (0%)	0 (0%)	
3	3 (23.1%)	2 (20%)	3 (60%)	
4	4 (30.8%)	2 (20%)	2 (40%)	
5 - Extreme	5 (38.5%)	5 (50%)	0 (0%)	

How much effort is required to recruit diverse members (age, race, gender ethnicity, skill set) on your board?				p=0.768
1 - Little	1 (7.69%)	1 (10%)	1 (20%)	
2	0 (0%)	0 (0%)	0 (0%)	
3	3 (23.1%)	2 (20%)	1 (20%)	
4	6 (46.2%)	3 (30%)	3 (60%)	
5 - Extreme	3 (23.1%)	4 (40%)	0 (0%)	
Is your hospital or health system interested in identifying and engaging individuals on the board who represent diverse characteristics including race/ethnicity, age, gender, and disability				p=0.808
Yes	12 (85.7%)	8 (80%)	5 (100%)	
No	2 (14.3%)	2 (20%)	0 (0%)	
Does your board have a standing DEI Committee				p=0.172
Yes	0 (0%)	0 (0%)	1 (20%)	
No	13 (100%)	10 (100%)	4 (80%)	

Table 4 highlights the types of data collection sought to address social determinants of health within the community. Hospital board diversity did not show a significant difference in the intent to screen patients for social needs (p=0.166). While also not significant, patient health outcomes data (p=1.00) and improved community health status (p=0.416) were prioritized in most hospitals.

Table 4. Patient screening and outcomes	Low (n=13)	Medium (n=10)	High (n=4)	P value
Does your hospital or health system screen patients for social needs?				p=0.166
No	6 (46.2%)	1 (10%)	1 (25%)	
Yes	7 (53.9%)	9 (90%)	3 (75%)	

Has your hospital or health system been able to gather data indicating that activities used to address the social determinants of health and patient social needs have resulted in any of the following?				
Better patient health outcomes	5 (83.33%)	3 (100%)	2 (100%)	p=1.00
Decreased utilization of services	6 (100%)	3 (100%)	1 (50%)	p=0.182
Decreased health care costs	6 (100%)	2 (66.7%)	1 (50%)	p=0.182
Improved community health status	2 (33.3%	2 (66.7%)	2 (100%)	p=0.416

Table 5 examines the SDOH strategies that hospitals reported having a focus on. Low and medium diversity hospitals reported a larger number of strategies, with low diversity hospitals averaging 5.8 strategies. Medium diversity hospitals reported an average of 7.1 strategies. And high diversity hospitals reported focusing on an average of 3.3 strategies per hospital. Of the nine social determinants of health programs provided in the Annual Survey, patients experiencing social isolation (p=0.046) was the only strategy with a significant difference between hospital board diversity categories. Significantly more low diversity hospitals reported focusing on social isolation.. However, transportation (p=1.000), while not significant, was highly prioritized across all hospitals. Other programs of non-significance, yet highly prioritized across all hospitals, were health behaviors (p=0.326) and housing (p=0.566).

Table 5. SDOH Strategies				
	Low (n=11)	Medium (n=10)	High (n=4)	P value
Housing	5 (45.5%)	7 (70%)	2 (50%)	p=0.566
Food insecurity	7 (63.6%)	9 (90%)	2 (50%)	p=0.243
Utility needs	5 (45.5%)	6 (60%)	0 (0%)	p=0.172
Interpersonal violence	6 (54.6%)	5 (50%)	0 (0%)	p=0.198
Transportation	9 (81.8%)	9 (90%)	4 (100%)	p=1.000
Income	5 (45.6%)	8 (80%)	2 (50%)	p=0.273

Education	7 (63.6%)	8 (80%)	1 (25%)	p=0.187
Social isolation	9 (72.7%)	7 (70%)	0 (0%)	p=0.046
Health behaviors	9 (81.8%)	9 (90%)	2 (50%)	p=0.326
Other	2 (18.2%)	3 (30%)	0 (0%)	p=0.647

Note: Check all that apply response, totals do not add up to 100%

DISCUSSION

This study provides insight on the role of hospital boards in assisting an organizations health equity strategy. Our findings highlight hospitals use of various tactics to diversify the demographic composition of their boards. According to the AHA's 2014 National Health Care Governance Survey Report, hospitals often report difficulty in finding diverse candidates to serve on their boards (Totten, 2015). As a result, board demographics from 2011 to 2014 displayed minimal advancement in the percentage of women, the number of individuals under 50, and racial diversity, showing minimal change from 2010, when under 12% of hospital board members were minorities (Greene, 2011). Our results suggest that the majority of low and medium diverse Illinois hospital boards have an increased focus on the recruitment of individuals of diverse age, gender, and racial characteristics. This finding supports Bernstein and Bilimoria's (2013) claim that demographic representation of the board is necessary, and that lack of inclusion and representation of the community fail to meet the overall objective of a hospital's health equity-centered mission.

A study from the Illinois Department of Public Health 2021 Diversity in Health Care

Task Force Annual Report reports that 16% of hospital C-suite positions were minorities, 81% of
board members were White, and 65% of board members were male (IDPH, 2022). When asked
about strategies to diversify leadership positions, more than half responded with no plans to
diversify the board and one-third do not plan to implement a system to address gaps in the C-

suite. Our results further showcase this finding as some low and medium diverse boards indicate lack of interest in increasing their board diversity composition.

While many organizations engage their board of directors in developing goals and plans, some rely on a siloed department led by a full-time employee to advance the health equity efforts of the organization. Successful organizations established a health equity committee consisting of medical divisions, QI, nursing, administration leaders, and one of its major community health centers to assist with the strategic process (Doherty et al., 2022). Another successful model created a center for health equity which utilized a research department and health equity steering committee to set the strategic direction for the organizational enterprise. Our results indicate that initial health equity strategy development was only present in one of the high board diversity hospitals as they are the only organization with a dedicated board committee focused on diversity, equity, and inclusion.

Doherty et al. (2022) also suggest that education and training are crucial in assisting board members with the development of health equity strategic priorities. In the absence of foundational health equity knowledge, board members have difficulty understanding the context of systemic and institutionalized policies impacting marginalized and historically underrepresented minorities. This approach accomplishes two goals: (a) to initiate an internal dialogue about how the organization is working to advance equity for their patients and identify opportunities for improvement, and (b) to better understand how well the organization is serving the community (Doherty et al., 2022). Our study suggests that in the absence of a dedicated board committee centered on health equity, hospital boards would benefit from required training to assist in the development of targeted strategies that address the needs of the community.

Regardless of their diversity composition, hospital boards indicated various approaches to addressing social determinants of health within their counties. High diversity boards each indicated a streamlined focus on strategies that support advancements in patient transportation and access. They also emphasized screening patients for social needs and gathered data to address better patient health outcomes and improved community health status. However, low, and medium diverse boards implemented programs across each of the nine categories and indicate using data to decrease patient healthcare cost and utilization of services. With a concern of decreased cost and service utilization among these hospital boards, targeted implementation of one or two health equity strategies would decrease the use of organizational resources and likely result in a greater impact for marginalized and historically underrepresented patients in their counties.

Study Limitations

Our findings should be interpreted with several limitations. First, although results were used from the American Hospital Association's surveys, the sample size may not represent the state of Illinois hospitals as a whole. Second, options of health equity initiatives were limited to the choices provided within the survey. Therefore, hospital boards may have additional initiatives which were not captured in the provided dataset. To our knowledge, this is the first study to categorize board diversity based on this survey, therefore further validation of the board diversity score is warranted. Finally, while the study reported the hospitals strategy for health equity initiatives, the measured impact of the implementation of each strategy within the patient population from each hospital is unknown.

CONCLUSION

A successful health equity-focused governance structure is designed to bolster an organization's focus and accountability by integrating its efforts across the entire division and within individual departments (Doherty et al.,2022). While there is an emphasis on the word diversity when describing the types of individuals to place on a board strategically, Gazley et al. (2010) suggest that representation is the word that should be used. Representation refers to the degree an organization's board reflects key characteristics of operations to that of the community. In this sense, hospital boards should seek to strategically select board members that mirror the representative needs of the populations they serve.

Furthermore, while hospital boards may influence the development of health equity strategies, successful implementation results from an organization's mission and vision which define strategic alignment and individual accountability of patient outcomes across the organization. To implement an enterprise-wide organizational change, offices focused on diversity, equity and inclusion should be accountable for activities embedded across the organization's fabric and not work in silos to increase collaboration. Future research should explore the correlation of expanded board demographic characteristics to include language, sexual orientation, and physical ability with health equity strategy implementation and impact.

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Appendix A: 2020 AHA Annual Survey

B. ORGANIZATIONAL STRUCTURE

1.	. CONTROL Indicate the type of organization that is responsible for establishing policy for overall operation of your hospital. CHECK ONLY ONE:					
	Government, nonfederal 12 State 13 County 14 City 15 City-County 16 Hospital district or authority	Nongovernment, not-for-profit ☐ 21 Church-operated ☐ 23 Other not-for-profit (inclu				
2.	Investor-owned, for-profit 31 Individual 32 Partnership 33 Corporation	Government, federal 40 Department of Defense 44 Public Health Service 45 Veterans' Affairs	☐ 46 Federal other than 40-45 or 47-48 ☐ 47 PHS Indian Service ☐ 48 Department of Justice			
		nospital, college infirmary) ns with intellectual disabilities	vice it provides to the MAJORITY of patients: 46 Rehabilitation 47 Orthopedic 48 Chronic disease 62 Intellectual disabilities 80 Acute long-term care hospital 82 Substance use disorder 49 Other - specify treatment area:			

D. INSURANCE AND ALTERNATIVE PAYMENT MODELS INSURANCE Yes No 🔲 1. Does your hospital own or jointly own a health plan? a. If yes, in what states? States: 2. Does your system own or jointly own a health plan? Yes No 🔲 a. If yes, in what states? States: 3. Does your hospital/system have a significant partnership with an insurer or an insurance Yes No 🔲 company/health plan? a. If yes, in what states? States: 4. If yes to 1, 2 and/or 3 above, please indicate the insurance products and the total medical enrollment. (Check all that apply) Medical Do not know New Insurance Products Hospital System J۷ Enrollment Product a. Medicare Advantage Medicaid Managed Care Health Insurance Marketplace ("exchange") d. Other Individual Market Small Group П f. Large Group a. Other If you have answered 'no' to all parts of questions 1, 2 and 3, please skip to question 8. 5. Does your health plan make capitated payments to physicians either within or outside of your network for specific groups or enrollees? Yes No Do not know D a. Physicians within your network b. Physicians outside your network Yes ☐ No ☐ Do not know ☐ c. If yes, which specialties?_ 6. Does your health plan make bundled payments to providers in your network or to outside providers? Yes No Do not know a. Providers within your network Yes No Do not know D b. Providers outside your network c. If yes, which specialties? 7. Does your health plan offer other shared risk contracts to either providers in your network or to outside providers? (i.e., other than capitation or bundled payment.) Yes No Do not know D a. Providers within your network Yes No Do not know D b. Providers outside your network c. If yes, which specialties?

8. Does your hospital or health system fund the health benefits for your employees?

a. If yes, does the hospital or health system also administer the benefits (as opposed to contracting with a third party administrator)? Yes No No

Yes No No

E. TUTAL FACILITY BEDS, UTILIZATION, FINANCES, AND STAFFING

Please report beds, utilization, financial, and staffing data for the 12-month period that is consistent with the period reported on page 1. Report financial data for reporting period only. Include within your operations all activities that are wholly owned by the hospital, including subsidiary corporations regardless of where the activity is physically located. Please do not include within your operations distinct and separate divisions that may be owned by your hospital's parent corporation. If final figures are not available, please estimate. Round to the nearest dollar. Report all personnel who were on the payroll and whose payroll expenses are reported in E3f. (Please refer to specific definitions on pages 32-34.)

Fill out column (2) if hospital owns and operates a nursing home type unit/facility. Column (1) should be the combined total of hospital plus nursing home unit/facility.

1.	BEDS AND UTILIZATION	(1) Total Facility	(2) Nursing Home Unit/Facility
a.	Total licensed beds		
b.	Beds set up and staffed for use at the end of the reporting period		
c.	Bassinets set up and staffed for use at the end of the reporting period		
d.	Births (exclude fetal deaths)		
е.	Admissions (exclude newborns; include neonatal & swing admissions)		
f.	Inpatient days (exclude newborns; include neonatal & swing days)		
g.	Emergency department visits		
h.	Total outpatient visits (include emergency department visits & outpatient surgeries)		
i.	Inpatient surgical operations		
j.	Number of operating rooms		
k.	Outpatient surgical operations		
2.	MEDICARE/MEDICAID UTILIZATION	(1) Total Facility	(2) Nursing Home Unit/Facility
a1	. Total Medicare (Title XVIII) inpatient discharges (including Medicare Managed Care)		
a2	. How many Medicare inpatient discharges were Medicare Managed Care?		
b1	. Total Medicare (Title XVIII) inpatient days (including Medicare Managed Care)		
b2	. How many Medicare inpatient days were Medicare Managed Care?		
c1	. Total Medicaid (Title XIX) inpatient discharges (including Medicaid Managed Care)		
c2	. How many Medicaid inpatient discharges were Medicaid Managed Care?		
d1	. Total Medicaid (Title XIX) inpatient days (including Medicaid Managed Care)		
d2	. How many Medicaid inpatient days were Medicaid Managed Care?		

F. ADDRESSING PATIENT SOCIAL NEEDS AND COMMUNITY SOCIAL DETERMINANTS OF HEALTH 1. Which social needs of patients/social determinants of health in communities does your hospital or health system have programs or strategies to address? (Check all that apply) a. Housing (instability, quality, financing) b. Food insecurity or hunger c. Utility needs d. Interpersonal violence e. Transportation f. Employment and income g. Education h. Social isolation (lack of family and social support) i. Health behaviors j. Other, please describe: _ 2. Does your hospital or health system screen patients for social needs? Yes, for all patients Yes, for some patients ■ No (skip to question 3) 2a. If yes, please indicate which social needs are assessed. (Check all that apply) 1. Housing (instability, quality, financing) 2. Food insecurity or hunger 3. Utility needs 4. Interpersonal violence 5. Transportation 6. Employment and income 7. Education 8. Social isolation (lack of family and social support) 9. Health behaviors 10. Other, please describe: _ 2b. If yes, does your hospital or health system record the social needs screening results in your electronic health Yes No 🔲 3. Does your hospital or health system utilize outcome measures (for example, cost of care or readmission rates) to assess the effectiveness of the interventions to address patients' social needs? No 🔲 Yes 4. Has your hospital or health system been able to gather data indicating that activities used to address the social determinants of health and patient social needs have resulted in any of the following? (Check all that apply) a. Better health outcomes for patients b. Decreased utilization of hospital or health system services

c. Decreased health care costs
d. Improved community health status

F. ADDRESSING PATIENT SOCIAL NEEDS AND COMMUNITY SOCIAL DETERMINANTS OF HEALTH (continued)

5. Please indicate the extent of your hospital's current partnerships with external partners for population and/or community health initiatives. Which types of organizations do you currently partner with in each of the following activities? (Check all that apply)

	Not involved	Work together to meet patient social needs (e.g., referral arrangement or case management)	Participates in our Community Health Needs Assessment process	Work together to implement community-level initiatives to address social determinants of health
a. Health care providers outside your system				
 b. Health insurance providers outside of your system 				
 c. Local or state public health departments/ organizations 				
 d. Other local or state government agencies or social service organizations 				
e. Faith-based organizations				
f. Local organizations addressing food insecurity				
g. Local organizations addressing housing insecurity				
 Local organizations addressing transportation needs 				
 Local organizations providing legal assistance for individuals 				
j. Other community non-profit organizations				
k. K-12 schools				
I. Colleges or universities				
m. Local businesses or chambers of commerce				
n. Law enforcement/safety forces				

Appendix B: 2021 National Health Care Governance Survey

Except where a specific time frame is stated, please respond with information regarding your board's composition and practices today.

For purposes of responding to this survey, what type of board are you describing?

SECTION I: BOARD COMPOSITION AND THE COMMUNITY

a. □Freestanding	hospital board						
 b. System board (i.e., parent board or board with ultimate accountable authority within a system) 							
c. ☐Hospital board	l within a system						
d. Other, pleas	e specify:						
How many individuals se a. Voting	b. Non-Voting						
•	members from outside your organization's service area who of sponsoring organizations or other system entities?						

 ${\bf 3.}$ Please indicate how many of your ${\bf voting}$ board members fit into the following demographic categories:

Demographic Categories		Number of Current Board Members
Race/Ethnicity		
 American Indian or Alaska Native 		
2. Asian		
3. Black or African American		
4. Hispanic or Latino		
5. Native Hawaiian or Other Pacific	Islander	
6. White		
7. Other		
B. Gender		
1. Male		
2. Female		
3. Other		
C. Ages		
1. 35 or younger		
2 . 36-50		
3 . 51-70		
4. 71 or older		
D. Clinical Background		
1. Nurse		
2. Physician		
3. Other clinician (e.g., pharmacist,	therapist)	
4. If there are physicians on your board, how mar	ıy are:	
	a. Voting	b. Non-Voting
1. Employed by your hospital/system		
2. Not employed by your hospital/system		<u> </u>

2.

5. Is your organization's CEO a voting member of the board?							
a. \square Yes b. \square No							
6. Does your board include emeritus members?							
a. ☐ Yes b. ☐ No (skip to question 7)							
6a. If your board includes emeritus members, please indicate their voting status. (Check all that apply)							
1. They can vote in board meetings.							
2. They can vote in committee meetings.							
3. \square They cannot vote in board or committee meetings.							
7. What efforts, if any, has your board/organization undertaken to engage millennials (individuals between the ages of 24-40) in governance? (Check all that apply)							
 a.							
b. \square Specifically targeted millennials when seeking new board members.							
c. Included millennials as outside (non-board) members on board committees.							
d. Other, please specify:							
e. None of the above							
8. Does your board have an age limit?							
a. □ Yes b. □ No (skip to question 9)							
8a. If yes, what is the maximum age?							
1. □ > 75 years old							
2 . □ < 75 years old							

SECTION II: BOARD STRUCTURE

9.	Does your board have term	n limits?				
	a. \square Yes b.	☐ No (skip to	question 12)			
10	. What is the length of a ten	m for board se	rvice? ye	ears		
11.	. What is the maximum nun	nber of consec	utive terms a board	I member may serve?		
	. Do you compensate boar penses?	d members ex	cluding reimbursen	nent for out-of-pocket		
	a. 🗆 Yes b. 🗆 No	(skip to questi	ion 12b)			
	12a. If yes, how are they	compensated	?			
		Board Member \$	Board Chair \$	Committee Chair \$		
	 a. Annual fee b. Per-meeting fee 					
	c. Other					
	12b. If no, are you currer considered it in the		board compensat	ion or have you		
	a. 🗆 Yes	b . □ No				
13	. Which of the following star	nding committe	es does your boar	d have? (Check all that		
	a. Quality					
	b. Finance					
	c. Audit/Compliance					
	d. Governance/ Nom	inating				
	e. Community Benef	it/Mission				
	f. Diversity, Equity a	and Inclusion				
	g. Executive					
	h. Strategic Planning					
	i. Executive Compe	nsation				
	j. Fundraising/Deve	lopment				
	k. Advocacy/Govern	ment Relations	S			
	I. Workforce					
	m. Innovation					

p. — Outor, produce spectry.
14. If your board does not have a separate Diversity, Equity and Inclusion Committee, where do discussions reside on these issues?
a. In another committee, please specify:
b. We do not discuss diversity and equity in a committee, but rather at the full board level.
c. We do not discuss diversity and equity issues.
d. ☐ Not applicable
23. Compared to other age cohorts, on a scale of 1-5, how much effort is required to recruit millennials to your board?
a. 5 – extreme effort
b.
c. 🗆 3
d. 🗌 2
e. □ 1 – little effort
24. On a scale of 1-5, how much effort is required to recruit diverse members (age, race, gender ethnicity, skill set) on your board?
a. 5 – extreme effort
b. 🗆 4
c. 🗆 3
d. 2
e.
25. Is your hospital or health system interested in identifying and engaging individuals on the board who represent diverse characteristics including race/ethnicity, age, gender and disability? a
D. 🗆 140

54. To the best of your knowledge, what type(s) of business would normally be discussed at your board's executive sessions? *(Check all that apply)*

		 CEO Present 	CEO Not Present				
a.	Executive performance evaluation						
b.	Executive compensation						
c.	Board performance evaluation						
d.	Board member performance evaluation						
e.	Board recruitment and selection						
f.	Board development						
g.	Financial performance of the health system/h	nospital(s)					
h.	Clinical or quality performance measures						
i.	General strategic issues/planning						
j.	Other, please specify:						
55. Approximately what percentage of board meeting time does your board normally spend in active discussion, deliberation and debate at each board meeting?							
a. Greater than 0% but less than or equal to 25%							
	b. \square Greater than 25% but less than or	equal to 50%					
	c. \square Greater than 50% but less than or	equal to 75%					
	d. Greater than 75% and up to and in	cluding 100%					

SECTION III: BOARD SELECTION

q. Relationship Building

r. Strategic Orientation (Understands forces 57

	following? (Check all that apply)		
	 Yes, for all board members. 		
	b. Yes, for board chairs.		
	c. Yes, for committee chairs.		
	d. Yes, for committee members.		
	e. No (skip to question 21)		
:	20a. Indicate below the top five essential knowle competencies you used most recently when board chairs.		
	Areas of Competency	1. Board Member Selection Competencies	2. Board Chair Selection Competencies
a.	Accountability		
b.	Achievement Orientation (Assures high standards, sets goals and priorities)		
C.	Change Leadership (Perceives and utilizes new information/technology)		
d.	Collaboration		
е.	Community Orientation (Understands community needs and health)		
	Areas of Competency	1. Board Member Selection	2. Board Chair Selection
_			
f.		Selection	Selection
	Complexity Management (Balances tradeoffs,	Selection	Selection
g.	Complexity Management (Balances tradeoffs, competing interests and contradictions)	Selection	Selection
g.	Complexity Management (Balances tradeoffs, competing interests and contradictions) Impact and Influence	Selection	Selection
g. h.	Complexity Management (Balances tradeoffs, competing interests and contradictions) Impact and Influence Information Seeking Innovative Thinking	Selection Competencies	Selection
g. h. i. j.	Complexity Management (Balances tradeoffs, competing interests and contradictions) Impact and Influence Information Seeking Innovative Thinking	Selection Competencies	Selection
g. h. j. k.	Complexity Management (Balances tradeoffs, competing interests and contradictions) Impact and Influence Information Seeking Innovative Thinking Knowledge of Business and Finance Knowledge of Health Care Delivery and Performance Knowledge of Human Resources Development	Selection Competencies	Selection
g. h. j. k.	Complexity Management (Balances tradeoffs, competing interests and contradictions) Impact and Influence Information Seeking Innovative Thinking Knowledge of Business and Finance Knowledge of Health Care Delivery and Performance Knowledge of Human Resources	Selection Competencies	Selection
g. h. j. k. I.	Complexity Management (Balances tradeoffs, competing interests and contradictions) Impact and Influence Information Seeking Innovative Thinking Knowledge of Business and Finance Knowledge of Health Care Delivery and Performance Knowledge of Human Resources Development Organizational Awareness (Familiar with expectations, priorities and values of health	Selection Competencies	Selection
g. h. i. j. k. l. m.	Complexity Management (Balances tradeoffs, competing interests and contradictions) Impact and Influence Information Seeking Innovative Thinking Knowledge of Business and Finance Knowledge of Health Care Delivery and Performance Knowledge of Human Resources Development Organizational Awareness (Familiar with expectations, priorities and values of health care stakeholders)	Selection Competencies	Selection

20. Does your board or board's selection committee use a set of approved knowledge, skills and behavioral competencies (see below for examples) for selecting the