Abstract

IMPORTANCE Diversifying the health care workforce remains a critical goal for health care organizations focused on reducing disparities in care. However, it remains unknown what factors create inclusive health system environments and help organizations retain a diverse workforce.

OBJECTIVE To understand from members of the health care workforce what factors contribute to inclusive work and learning environments and what can be done to improve inclusion within health care organizations.

DESIGN, SETTING, AND PARTICIPANTS A qualitative narrative analysis of responses to a weekly email call for narratives within health care organizations sent June 1, 8, 15, and 22, 2016. The email contained an anonymous link to 2 open-ended stimulus questions asking for stories reflecting inclusion or lack thereof within participants’ work environments as well as demographic questions. The study took place at 6 hospitals, including a free-standing children’s hospital and a Veterans Affairs medical center, 4 health sciences schools (Medicine, Nursing, Dental, and Social Policy and Practice), and outpatient facilities within a university-based health care system in Pennsylvania. There were 315 completed narratives submitted from health care system executives (n = 3), staff (n = 113), academic faculty (n = 97), trainees or students (n = 99), and 3 who declined to specify their positions.

MAIN OUTCOMES AND MEASURES Workplace experiences with inclusivity, implications of these experiences, and recommendations to improve inclusion within environments.

RESULTS Of 315 narratives submitted from members of the health care system, in 188 (59.7%) the writer self-identified as female; in 10 (3.2%), as transgender/queer; in 38 (12.1%), as non-Hispanic black; in 152 (48.3%), as non-Christian; in 31 (9.8%), as having a language other than English as their primary language; and in 14 (4.4%), as having a disability. Analysis of the narratives revealed 6 broad factors that affected inclusion within health care organizations: (1) the presence of discrimination; (2) the silent witness; (3) the interplay of hierarchy, recognition, and civility; (4) the effectiveness of organizational leadership and mentors; (5) support for work-life balance; and (6) perceptions of exclusion from inclusion efforts. Challenges with inclusion had negative effects on job performance and well-being, with reports of stress, anxiety, and feelings of hopelessness. Most respondents referenced a systemic culture that influenced their interpersonal dynamics and provided specific strategies to improve organizational culture that focused on leadership training and expanding collegial networks.
CONCLUSIONS AND RELEVANCE  This narrative analysis provides a taxonomy of factors that health care organizations can use to assess inclusion within their learning and work environments as well as strategies to improve inclusion and retain a diverse health care workforce.

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Introduction

Diversifying the health care workforce remains a critical goal for many health care organizations focused on improving clinician education and reducing disparities in access and care.\(^1\)\(^-\)\(^7\) Populations with equal access to care experience disparities in treatment despite well-intentioned efforts because of the structural bias ingrained in our health care systems and health care professionals' implicit biases.\(^8\)\(^-\)\(^1\)\(^1\) Prior evidence demonstrates that the engagement of a diverse workforce reduces such biases and improves the cultural competencies of nonminority and minority health care professionals alike.\(^1\)\(^,\)\(^8\)\(^,\)\(^2\)\(^2\) Enhancing diversity brings together distinct minds with varying perspectives, backgrounds, and experiences, improving the way we generate medical knowledge and deliver care.\(^8\)\(^,\)\(^1\)\(^3\)\(^-\)\(^1\)\(^5\) Prior solutions for a diverse workforce have centered on recruitment and not retention,\(^2\)\(^,\)\(^1\)\(^6\) despite evidence of greater attrition among women and minorities.\(^1\)\(^7\)\(^-\)\(^2\)\(^0\) Organizational efforts that focus on creating an inclusive environment may promote greater retention of a diverse workforce, reduce the costs related to attrition, and ultimately affect patient satisfaction and care quality.\(^2\)\(^1\) However, there is a paucity of research on how health care organizations create a culture that promotes inclusive environments to achieve these goals. Prior work has conceptualized inclusion as a set of social processes that influence an individual's access to information, sense of belonging and job security, and social support system.\(^2\)\(^2\) Health organizations lack sufficient understanding of the operational definition of inclusion to guide their efforts to improve culture. To address this gap, we conducted a narrative analysis to understand from members of the health care workforce what factors affect perceptions of inclusion in a health care system.

Methods

Data Collection

To conduct this narrative analysis, we used a culturally diverse study team that included 3 student researchers, a research coordinator, and 3 faculty members. We solicited anonymous narratives from employees, faculty, and students about their experiences with inclusion at 6 hospitals, including a free-standing children's hospital and a Veterans Affairs medical center, and 4 health schools (Medicine, Nursing, Dental, and Social Policy and Practice) within a university-based health system. Administrators sent a weekly email call for narratives on June 1, 8, 15, and 22, 2016, to listservs representing different constituents within and across organizations affiliated with the academic health system. This email contained an anonymous link to an inquiry using REDCap,\(^2\)\(^3\) consisting of demographic questions and 2 open-ended stimulus questions designed to evaluate participant interpretations of inclusion:

1. Think about a time when you witnessed or participated in a situation where you or a colleague/member of [this organization] was treated in a manner that made you/them feel either included, valued, and welcome OR excluded, devalued, and unwelcome as a member of this [organization].

2. Please comment on your perception of the general climate at the [organization] with regards to inclusion and respect.

Respondents were instructed to avoid use of personal identifiers and were promised anonymity. We flagged and redacted any narratives with identifiable information. Some initiated a narrative but did not submit (n = 1270), and others submitted incomplete narratives (n = 47). All data from the responses were stored in REDCap with access limited to the study team. The University of
Pennsylvania Institutional Review Board approved our study protocol and the recruitment language that detailed public use of only deidentified narratives. Participants consented for public use of their anonymized data by submitting a response, as indicated in the instructions given in the email. We followed Standards for Reporting Qualitative Research (SRQR) reporting guidelines in reporting this study.

Data Analysis
We analyzed data from all submitted narratives with completed responses to both open-ended questions (n = 315). We evaluated the narratives with a focus on both structure and content, using the Labov and Waletzky model for narrative analysis. We coded core features of each narrative (introduction, presenting problem, complicating factors, resolution, moral or meaning, characteristics of persons involved) to facilitate comparisons across narratives. We jointly analyzed a subset of narratives (n = 30) to identify emerging patterns in the data and develop a codebook, with explicit definitions and examples to ensure coding accuracy and facilitate intercoder reliability. Three research assistants independently coded the remaining narratives (n = 285), with each member coding an unique sample (n = 84) as well as a shared sample (n = 33) to assess intercoder reliability. All coding discrepancies were resolved by group consensus. We used NVivo 11 for all data management and coding. Our intercoder reliability using the κ coefficient revealed acceptable agreement among coders (mean [range] κ, 0.93 [0.76-1.00]). We organized codes into themes and subcoded further to characterize dimensions of themes by participant attributes and level of interaction (individual and/or interpersonal, group, and system).

Results
Of the 315 completed narratives submitted, 3 (1.0%) were from health care system executives, 113 (35.9%) from staff, 97 (30.8%) from academic faculty, 99 (31.4%) from trainees or students, and 3 (1.0%) from participants who declined to specify their positions. Only 48 participants (15.2%) reported being at the institution for less than 1 year, compared with 91 (28.9%) who reported being at the institution for 1 to 5 years, 64 (20.3%) for 5 to 10 years, and 107 (34%) for more than 10 years. More than 90% of participants provided their demographic information, and 188 (59.7%) self-identified as female, 10 (3.2%) as transgender/queer, 38 (12.1%) as non-Hispanic black, and 152 (48.3%) as non-Christian. Also, 31 (9.8%) reported a primary language other than English and 14 (4.4%) reported having a disability (Table 1).

Narrative Structure
The submitted narratives varied in content but were similar in structure. Most responses detailed a presenting event, reactions, and conclusions. The median (interquartile range) character count of narratives submitted in response to stimulus question 1 was 377 (600); for question 2 it was 66 (90). Despite an online process with assurances of anonymity, some responded that they feared sharing their story, while others often sandwiched their negative experiences with positive statements. Both positive and negative examples of inclusion and lack of inclusion supported the themes we present in the following sections. We aimed to provide quotes most representative of the theme, irrespective of valence.

Theme 1: A Taxonomy for Characterizing Inclusion
Six broad factors emerged from our analysis to form the basis of a taxonomy that characterizes perceptions of inclusion or lack thereof within health care systems: (1) presence of discrimination; (2) silent witness; (3) interplay among hierarchy, recognition, and civility; (4) effectiveness of leadership and mentors; (5) support for work-life balance; and (6) perceptions of exclusion from inclusion efforts. Regardless of the factor, the underlying thread among these 6 factors was the need to belong.
Table 1. Respondent Characteristics

| Characteristic                          | No. (%) |
|----------------------------------------|---------|
| Gender identity                        |         |
| Male                                   | 108 (34.3) |
| Female                                 | 188 (59.7) |
| Transgender/queer*                     | 10 (3.2) |
| Declined to answer*                    | 9 (2.9)  |
| Sexual orientation                     |         |
| Heterosexual                           | 238 (75.6) |
| Lesbian/gay/homosexual/bisexual*       | 49 (15.6) |
| Decline to answer                      | 28 (8.9)  |
| Race/ethnicity                         |         |
| Non-Hispanic white                     | 159 (50.5) |
| Asian                                  | 47 (14.9) |
| Non-Hispanic black                     | 38 (12.1) |
| Other*                                 | 28 (8.9)  |
| Hispanic                               | 21 (6.7)  |
| Multi                                  | 11 (3.5)  |
| Declined to answer                     | 11 (3.5)  |
| Belief system                          |         |
| Non-Christian*                         | 152 (48.3) |
| Christian                              | 151 (47.9) |
| Declined to answer                     | 12 (3.8)  |
| Primary language                       |         |
| English                                | 275 (87.3) |
| Non-English                            | 31 (9.8)  |
| Declined to answer                     | 9 (2.9)   |
| Disability                             |         |
| Yes                                    | 14 (4.4)  |
| No                                     | 269 (85.4) |
| Declined to answer                     | 32 (10.2) |
| Length of time at institution, y       |         |
| <1                                     | 48 (15.2)  |
| 1-5                                    | 91 (28.9)  |
| 5-10                                   | 64 (20.3)  |
| ≥10                                    | 107 (34.0) |
| Declined to answer                     | 5 (1.6)   |
| Position                               |         |
| Staff*                                 | 113 (35.9) |
| Faculty or physician                   | 97 (30.8)  |
| Trainee or graduate student*           | 86 (27.3)  |
| Undergraduate student                  | 13 (4.1)   |
| Executive                              | 3 (1.0)    |
| Declined to answer                     | 3 (1.0)    |
| Primary site                           |         |
| School of medicine                     | 126 (40.0) |
| University-affiliated hospitals*        | 103 (32.7) |
| Free-standing pediatric hospital       | 21 (6.7)   |
| School of nursing                      | 15 (4.8)   |
| Dental school                          | 13 (4.1)   |
| Outpatient clinics and facilities      | 9 (2.9)    |
| Research facilities                    | 6 (1.9)    |
| School of social policy and practice   | 2 (0.6)    |
| Administrative sites                   | 2 (0.6)    |
| Other                                  | 11 (3.5)   |
| Declined to answer                     | 7 (2.2)    |

* Includes “Transgender,” “Other,” and “Do not identify.”

b Declined to answer includes both refused and/or missing responses.

c Includes “Other.”

d Includes Native American/American Indian, Pacific Islander, and "Other (unspecified)."

* Includes all other religious categories.

f Includes “Staff” and “Staff-Manager Level.”

g Includes “Resident/Fellow/Intern/Postdoc” and “Graduate Student.”

h Includes the Veterans Affairs hospital and all other adult care hospitals.
and feel recognized and valued. Table 2 summarizes the key factors of an inclusive environment. These factors are also detailed in the following paragraphs with representative quotes.

**Presence of Discrimination**

Reported discrimination cut across all demographic characteristics and ranged from harassment and bullying to nepotism. Two commonly cited manifestations included microaggressions, defined as casual degradations of any marginalized group, and unequal performance expectations, with males and nonminority groups, often referred to as “the old white boys club,” reportedly benefiting from this inequality. Minorities and women consistently reported being held to stricter standards and needing to work harder to advance within the organization.

**Silent Witness**

Many narratives were submitted by witnesses to discrimination. Witness narratives displayed the impact of discrimination on all parties involved, including fostering anxiety and hindering job performance. Most bystanders disclosed worrying about their own job security and well-being. As one stated, “Some of us whispered about how the [program leader] has done it to other people of color. ‘But do you know how powerful s/he is at [this institution].’ We learned to be silent.”

**Effectiveness of Organizational Leadership and Mentors**

The integral role of leadership and mentorship in fostering discriminatory practices vs promoting inclusion was a common theme. A common perception was that “leadership, the faculty, all hold on to positions of power and promote and protect their own.” Many lamented the lack of mentorship, stating, “people hire and mentor those that have similar demographics.”

**Interplay of Hierarchy, Recognition, and Civility**

Respondents reported differences in treatment and their perceived value based on their status within the organization. Examples of differential treatment varied in degree, from not holding a door

| Table 2. Taxonomy of Factors That Foster Inclusion |
|---------------------------------------------------|
| **Key Factors** | **Representative Quotes** |
| The presence of discrimination | “There are some examples but they are subtle yet apparent. One thing I have noticed is that my residents of color seem to get criticized for things that the majority do not, even if they do the same things. There is this microscope that is applied to them (and I feel myself) which again, is subtle, yet present.” |
| | “[This institution] like many institutions also has a culture of nepotism and favoritism in the hiring process, which also fosters exclusion. I’ve had fellow white colleagues nonchalantly mention they were ‘approached’ for promotions. As a woman of color, I’ve never been ‘approached.’ I’ve had to ‘request’ and self-promote my requests for additional compensation and equal recognition.” |
| The silent witness | “Though my [department leader] was present for the comment [an insensitive statement relating to sexuality], nothing was said to address the comment that had been made.” |
| | “I have witnessed a few instances where women or nonwhite students or employees were treated in a disrespectful or discriminatory manner, and I conclude that, despite the rules and policies, it all depends on the particular individuals you end up dealing with.” |
| The interplay between hierarchy, recognition, and civility | “I sometimes feel that administration sticks to themselves and only interacts with those they view as important people, other professors, or guest speakers. It meant a lot to me that a stranger of a high ranking within the school took the time to get to know someone new who was obviously a trainee, and not directly linked to them or introduced to them.” |
| | “The only issue I have always had is the feeling of entitlement and rudeness from staff in higher positions that are absolutely rude to staff. When staff members greet certain people they walk by as if nothing was said or just issues with general courtesy—not holding a door when someone is walking in behind you or not holding an elevator door.” |
| The effectiveness of leadership and mentors | “I have experienced and witnessed leadership in our division systematically do this across ethnic lines, where minorities and outsiders have to work much harder to prove themselves and be treated with respect.” |
| | “[A mentor] really helped me feel at home here...and gave me an assurance that it would be possible to be able to finish my first year here successfully (which I did, with the help of him and other mentors).” |
| Support for work-life balance | “[A male colleague] stated that I was not included as an author on a paper to which I contributed before my leave because I ‘made it clear that I was not available to work during my [maternal] leave.’ I have never felt so devalued.” |
| | “Now having a family of my own, I have asked for time off during my own religious holidays. This has been met with polite ignorance; an unconscious devaluation of non–Judeo-Christian traditions. So I stopped asking.” |
| Perceptions of exclusion by inclusion efforts | “I’m guessing the inclusion you are speaking of has to do with LGBTQ sorts of issues. I would also imagine that [our institution] does a decent job with this. No firsthand experience.” |
| | “My one concern about [this institution’s] climate of inclusion is that often, racial and ethnic groups on campus tend to stick together. Unfortunately, these communities often separate themselves from the rest of campus, which creates a conflict between ‘us’ and ‘them’ sometimes.” |
or being greeted to perceptions of inadequate compensation, evaluation, or promotion. Narratives characterized status in many ways, including type of position (e.g., faculty vs staff, tenure vs nontenure, clinician vs clinician investigator, specialist vs generalist, postdoctoral student vs principal investigator), level of education, gender, and seniority and/or rank.

Support for Work-Life Balance
Respondents highlighted how unwritten rules often overshadowed policies put in place to support employees and faculty. Many reported inappropriate comments and/or devaluation of their work on returning from maternity leave or leave for medical reasons. Others praised the supportive actions of their supervisors as examples of an inclusive culture. As one wrote, “He went above and beyond including dedicating space in our center for lactation as well as flexibility to work from home when needed.”

Perceptions of Exclusion From Inclusion Efforts
There were many who reported feeling excluded specifically because they were not female or a minority and many others who assumed asking about inclusion must apply only to select groups. Comments ranged from narrow interpretations of inclusion, such as “I suppose, what you mean is in terms of the race and demographics. Then, my comments would not be what your office is seeking” to sentiments such as, “Oh to be a black female and gay! Being none of those things, not only have I been excluded, but I have been intimately involved in processes that required excluding others who are not those things.”

Theme 2: Inclusion Is Integral to Workforce Wellness and Engagement
Respondents noted how the lack of inclusion they experienced or witnessed affected their well-being and caused stress, anxiety, and feelings of hopelessness, social isolation, and expendability. As one bystander expressed about the department’s approach to an injured colleague, “It left me worried about how I would be treated if I were disabled.” Table 3 further summarizes the effects of noninclusive workplace culture with illustrative quotes.

Narratives often described how microaggressions and favoritism eroded participants’ sense of value and thereby limited their engagement and contributions to the organization. As one narrator noted, “Needless to say, I felt exceptionally excluded and no longer want to be engaged in [this

| Table 3. The Effects of Organizational Culture on Workforce Wellness and Engagement |
|----------------------------------|-----------------------------------------------|
| **Key Theme**                          | **Representative Quotes**                        |
| Fear of repercussions                  | “The culture of intimidation is such that individual physicians and staff will not report incidents for fear of reprisal and jeopardizing their careers and the expectation that nothing will change.” |
| Feelings of hopelessness                | “Things like this survey will not help because the people in charge of them don’t actually have any power to change the climate.” |
| Feeling expendable                      | “Only research is valued and respected. Those of us who teach full time are seen as dispensable and not deserving in decision-making processes, including curriculum.” |
|                                       | “Not only is there little interest on the part of the [principal investigators] to mentor their trainees, but they keep their interactions to a minimum so that it does not feel as though one is contributing—often extremely long hours—to advancing knowledge and the standing of the [principal investigator’s] lab. They may as well have robots doing the work.” |
| Feelings of social isolation            | “Given the incredibly low number of URM students [at this organization], I feel like we stick out like sore thumbs… I don’t feel welcomed here… I felt the pressure to be ‘white’ and not allowed to feel comfortable in my own skin/language/culture. I do not feel included.” |
|                                       | “Unfortunately, this is an experience of exclusion. Over the last several years, within my research group, I have experienced routine isolation and regular condescension, and periodically I have observed my ideas to be ignored until other individuals suggest those ideas.” |
| Anxiety, stress, depression             | “[Shares examples of hyper critical environment that involve public bashing of employees’ errors] First of all, it made me extremely fearful and anxious in my position of making even the most minor mistake and also, what will be said of me by others when I was out of earshot. In all of my years of working, I have never been part of an environment where everyone seems to be so fearful of making mistakes. I’m sad that has been my experience.” |
|                                       | “Over time, the once bubbly assistant became (what seemed to be) clinically depressed, and so fearful of the director that she literally froze in place whenever she passed by her cubicle. After looking for nearly a year, she secured a new position at [the University], and left the department [...] She is currently being treated for PTSD from the experience, while in her new position.” |
| Lack of engagement                      | “[After receiving two unsolicited negative comments from a male colleague and a faculty member] Feeling very attacked and degraded by the conversation, I disengaged.” |
|                                       | “I feel like my career would not prosper [here] due to microaggressions leading to an inability to have my work recognized and my career promoted appropriately. I do not intend to stay at [this institution] after my residency training for these reasons.” |
health] system. If this is how they treat new people, then it’s not worth my time investing my energy and ideas into the system. I felt very unwelcomed and it still bothers me to this day.”

**Theme 3: Barriers to Challenging Workplace Culture**
A common theme that emerged was the lack of effectiveness of formal channels, such as going to human resources, leadership, supervisors, or an ombudsman, to address challenges with workplace culture and interactions. As one witness noted, “The [individual] reported the bullying to HR as well as his/her director’s immediate boss—to no avail. S/He was told s/he was being ‘too sensitive’ when his/her boss made comments about his/her weight.”

Many attempts to confront microaggressions proved futile, as one related, “If I raise a concern [about inappropriate racial/ethnic or sexist comments], they [colleagues] say something sarcastic like ‘sorry I’m not being [politically correct];’ or ‘humor is our way of coping with having to work with very sick people every day.’” Many described self-accommodating behaviors, such as, “my other friends in the office invited [the individual who makes insensitive jokes about ethnicity/race] to lunch, so I started wearing noise canceling headphones and eating alone.” In addition, others referenced resignation and/or transferring as the only solution to their experiences within work environments that lacked inclusion. As one wrote, “Using the words ‘unwelcome’ and ‘devalued’ to describe how I felt [when being pushed off a team after taking family leave] would be understatements. Fortunately, I have found employment elsewhere and will be leaving the [institution’s name] community.”

**Theme 4: Participants’ Recommendations for Fostering Inclusion**
Strategies for fostering an inclusive organizational culture emerged from the narratives in the form of direct recommendations and positive examples of inclusion. We found most respondents referenced a systemic culture that influenced their group and interpersonal dynamics. Therefore, recommendations centered on system-level interventions. **Table 4** details the respondent-proposed solutions described in the following sections with representative quotes.

| Key Theme | Representative Quotes |
|-----------|-----------------------|
| **Examine Leadership** | |
| Leadership and faculty training | “I believe all professors, male and female, should receive unconscious bias training and learn how to interact with diverse students.”
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| | “I believe mandatory education for faculty on how to accept that they have implicit biases and combat these biases...would be a huge asset to the [institution’s name] community.” |
| Increase diversity | “Each division or department is different. Mine has explicitly tried to recruit [underrepresented minorities] trainees and faculty. While not [an underrepresented minority] myself, this still creates the kind of environment that I prefer and I think benefits all of us.”
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| | “Men, and white people, need to recognize that diversity in science and higher ed is ESSENTIAL for them as well.” |
| **Revisit Organizational Policies** | |
| Increase accountability | “There are many respectful people at [this institution]. What is lacking is a robust mechanism to appropriately deal with those who are disrespectful.”
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| | “One of the reasons for coming to work at [this institution] was the benefit program already in place for domestic partners. I also noticed I didn’t have to hide who I was as a person around my coworkers or boss.”
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| | “A few months ago, when I received an email offering free yoga and massages to female graduate students only that kind of pissed me off. I definitely felt excluded then.” |
| **Advocacy Campaigns** | |
| Promote bystander advocacy | “Older generation attendings do not handle racist/sexist interactions appropriately when they see it—it’s not enough to not be racist/sexist yourself—you have to stand up for other colleagues when patients or coworkers make such comments.”
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| Promote civility | “However, there are times when exclusion or devaluation is sensed (by me or a colleague) as a result of individuals’ negative disposition and/or heavy tongue/demeanor. It would benefit such individuals as well as those whom they may impact to take a deep breath, lighten up, and ask themselves, ‘what can I do to make someone else’s life better/easier/more pleasant.’”
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| Expand collegial networks | “There is little recognition that perspectives and experiences different than one’s own is what we need to be stronger. This requires a cultivated humility that is somewhat antithetical to the environment.”
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| | “The environment is generally inclusive, but there is still a tendency of individuals to form insular cliques based on superficial similarities, like shared language. Time will tell if this insularity fades away and opens people to interactions across group regardless of race/ethnic background.”
Examining Leadership
Narratives raise the importance of examining leadership, noting, for example, that the institution “needs to educate and strengthen its chairman to change this culture.” Many proposed instituting “mandatory education . . . on how to accept that they have implicit biases and combat these biases,” starting with leaders and mentors within the organization. Many narratives discussed the importance of diversifying leadership as this quote illustrates: “I am confident we could be a stronger, more resilient and ultimately successful institution if there was authentic engagement of more women at the higher levels of leadership.”

Revisit Organizational Policies
Our findings highlighted the strategic need for all health care organizations to examine existing policies, such as family leave or observed religious holidays, to ensure they best meet the needs of a diverse workforce. For example, one respondent noted, “Adoptive parents are not offered any kind of paid parental leave. This makes nontraditional families like mine feel devalued and excluded.”

Advocacy Campaigns
A common theme centered on creating a culture and a structure that supports advocacy from those who witness discrimination and/or incivility. Personal narratives routinely stressed the need for bystanders to speak up against discriminatory behaviors rather than remaining silent. For example, one participant stated, “it’s not enough to not be racist/sexist yourself—you have to stand up for other colleagues when patients or coworkers make such comments.” Narratives illustrated the success of bystanders speaking up, as in this example: “I told the patient this [patient requested a student from a certain race/ethnicity to leave the room] was unacceptable and either all of us were going to take care of him/her or none of us. It was [his/her] choice. [Patient] apologized and moved on.”

Expand Collegial Networks
Respondents emphasized the importance of interacting with different individuals within the organization to gain new perspectives and foster a sense of community by expanding collegial networks. Many respondents, irrespective of position, described the benefits of mentorship on their confidence and ability to manage stressful situations. Some suggested “having mentors and support groups where they discuss interpersonal issues and how to adapt” and proposed pairing employees with mentors who may serve as advocates, role models, and resources when concerns arise.

Secondary Analyses
When comparing participants grouped by a single attribute, such as race/ethnicity, themes were strikingly consistent across all comparisons. We found minimal differences by position, except for executive leadership, who were underrepresented in our sample. Participants at the institution for less than a year related more positive instances of feeling recognized and fewer events of discrimination, as compared with those who were there longer.

Discussion
Evaluating and addressing inclusion within health care environments is a new and evolving field. The diversity engagement survey, endorsed by the Association of American Medical Colleges, aims to capture the aspects of institutional culture and social dynamics that sustain an inclusive culture and support the retention of a diverse workforce.22 Our narrative analysis augments this survey’s findings22 with a deeper understanding and taxonomy of what contributes to an inclusive culture within health care organizations.

Our analysis identified 6 concrete contributors to an inclusive culture that guide tangible strategies to improve inclusivity. This taxonomy is consistent with prior investigations. There is
evidence that discrimination manifesting most commonly as unequal expectations and microaggressions for both women and minorities in medical fields leads to social isolation, disengagement, and burnout not just for those who experience discrimination but for bystanders as well. We see similar findings in other marginalized populations, including non–US-born international medical graduates or health care professionals and workers with disabilities. Prior studies also reveal that despite policies in place, persistent challenges in work-life balance hinder female faculty advancement and sense of value within the organization. However, our narrative approach was able to provide a nuanced understanding of the concept of inclusion and ways that institutional policies fail to adequately address the problems they attempt to mitigate.

Is Inclusion a Zero-sum Game?
Inclusion is defined as the “the action or state of including or of being included within a group or structure.” There is no mention of the act of including some at the expense of excluding others. However, our analysis revealed that some perceived that inclusion efforts threaten gains for those who have traditionally thrived in the organization. This sixth factor in our proposed taxonomy for inclusion aligns with prior work. The word inclusion appeared to invoke the same perceptions of exclusion or reverse discrimination among the majority culture seen in other efforts to promote diversity. For health care organizations and affiliated schools to move forward with inclusion efforts, we need ongoing research on how to design programs that affirm the benefits for all members while providing education to dispel the notion that such efforts are zero-sum.

Implications for the Health Care Workforce
We found that a lack of inclusive culture within health care organizations relates to job performance and emotional wellness. With ongoing efforts to address the wellness of our health care workforce, it is important to understand this interplay between an inclusive environment and the wellness of employees, trainees, and students. How we treat each other and how we allow patients to treat us is as important as how we treat patients. Our wellness efforts should reflect this understanding and consider how policy adjustments and training in topics such as cultural humility and implicit biases may assist health care employees, faculty, and students with how they interact with each other as well as address situations where patients may make discriminatory remarks.

Understanding Inclusion
Achieving inclusion starts with effective ways of understanding what predicts it within our health care learning and work environments. Building on surveys that assess culture within health care institutions, our targeted online narrative analysis of solicited responses from employees and students provides an effective and innovative method of conducting an audit of organizational inclusion. The need to preserve anonymity and individual voice, avoid social desirability bias, and ensure impunity for members of the workforce and student body makes qualitative assessments using focus groups or semistructured interviews challenging. Our study demonstrates that targeted online narrative analysis overcomes the challenges seen with other qualitative methods and provides an anonymous and effective method for conducting ongoing assessments of organizational inclusion. Ongoing assessments of inclusion allow for health care organizations to adapt to evolving workplace cultures.

Limitations and Strengths
Our study has some limitations. Our findings from a regionally limited set of hospitals and health science schools may not be nationally generalizable. However, prior work in other disciplines supports our results, suggesting that our taxonomy for an inclusive organizational culture may be widely applicable. Our email call for narratives sent out by administrators to their constituencies may
be subject to selection bias. We know that executive leadership as well as individuals who self-identified as heteronormative Christian non-Hispanic white males were underrepresented in our sample. However, this narrative analysis by design aims to intentionally capture meaningful qualitative data from individuals within organizations motivated to share their stories.61 This study also has some notable strengths. While we reached thematic saturation with a substantially smaller sample size, we still analyzed all completed narratives.62 This qualitative assessment of more than 300 stories of inclusion within health care organizations captures experiences from health care professionals, staff, administrators, students, and trainees.

Achieving Inclusion
Addressing organizational culture is an emerging science in medicine, and we can learn from other disciplines about how to design system-level interventions to achieve inclusion.63,64 Consistent with prior work in education, our findings support interventions that expand collegial networks to foster a sense of belonging and community, especially among women and minorities.65 Our findings echo the importance of effective leaders and mentors.66,67 In addition to diversifying leadership, existing administrators, leaders, and mentors should receive implicit bias training and inclusive leadership skills that include how to be reflective and responsive to feedback.68-70 Leaders should foster general civility, encourage everyone to speak up against discriminatory acts, and promote policies that advocate for all members of their organization.69 A key factor in creating and sustaining an inclusive environment is to empower bystanders and victims alike to speak up against acts of discrimination or incivility.71,72 A system for accountability must couple such efforts with policies that support individuals subject to discrimination. Lastly, all health care professionals should possess a working understanding of how unconscious biases may influence daily interactions with colleagues and patients.73

Conclusions
Growing evidence reveals a complex and delicate interplay among how health care professionals treat each other, the wellness and engagement of a diverse workforce, and the care provided to all patients irrespective of their cultural background or personal characteristics.8,68 This study provides health care organizations with a novel and effective method for assessing inclusion within health care organizations along with a set of key factors to guide their efforts to operationalize inclusivity. Moreover, our findings underscore the implications of inclusion on wellness and retention of the health care workforce and student body. A focus on factors that promote retention and advancement of a diverse workforce only enhances recruitment efforts of groups underrepresented currently in our workforce.74 How we approach both evaluating and addressing inclusion within health care learning and work environments will shape the complex dynamics between the diversity of our health care workforce, the wellness of that workforce, and the care we provide to diverse patient populations.
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**REFERENCES**

1. Saha S, Guiton G, Wimmers PF, Wilkerson L. Student body racial and ethnic composition and diversity-related outcomes in US medical schools. *JAMA*. 2008;300(10):1135-1145. doi: 10.1001/jama.300.10.1135

2. Iglehart JK. Diversity dynamics—challenges to a representative U.S. medical workforce. *N Engl J Med*. 2014;371(16):1471-1474. doi:10.1056/NEJMp1408647

3. Marrast LM, Zallman L, Woolhandler S, Bor DH, McCormick D. Minority physicians’ role in the care of underserved patients: diversifying the physician workforce may be key in addressing health disparities. *JAMA Intern Med*. 2014;174(2):289-291. doi:10.1001/jamainternmed.2013.12756

4. Saha S. Taking diversity seriously: the merits of increasing minority representation in medicine. *JAMA Intern Med*. 2014;174(2):291-292. doi:10.1001/jamainternmed.2013.12736

5. Deville C, Hwang WT, Burgos R, Chapman CH, Both S, Thomas CR Jr. Diversity in graduate medical education in the United States by race, ethnicity, and sex, 2012. *JAMA Intern Med*. 2015;175(10):1706-1708. doi:10.1001/jamainternmed.2015.4324

6. Betancourt JR, King RK. Diversity in health care: expanding our perspectives. *Arch Pediatr Adolesc Med*. 2000;154(9):871-872. doi:10.1001/archpedi.154.9.871

7. Obedin-Maliver J, Goldsmith ES, Stewart L, et al. Lesbian, gay, bisexual, and transgender-related content in undergraduate medical education. *JAMA*. 2011;306(9):971-977. doi:10.1001/jama.2011.1255

8. Smedley BD, Stith AY, Nelson AR, eds. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington, DC: National Academies Press; 2002.

9. Chapman EN, Kaatz A, Carnes M. Physicians and implicit bias: how doctors may unwittingly perpetuate health care disparities. *J Gen Intern Med*. 2013;28(11):1504-1510. doi:10.1007/s11606-013-2441-1

10. Green AR, Carney DR, Pallin DJ, et al. Implicit bias among physicians and its prediction of thrombolysis decisions for black and white patients. *J Gen Intern Med*. 2007;22(9):1231-1238. doi:10.1007/s11606-007-0258-5

11. Williams DR, Rucker TD. Understanding and addressing racial disparities in health care. *Health Care Financ Rev*. 2000;21(4):75-90.

12. Hung R, McClendon J, Henderson A, Evans Y, Colquitt R, Saha S. Student perspectives on diversity and the cultural climate at a U.S. medical school. *Acad Med*. 2007;82(2):184-192. doi:10.1097/ACM.0b013e31802d936a

13. Steinbrook R. Diversity in medicine. *N Engl J Med*. 1996;334(20):1327-1328. doi:10.1056/NEJM199605163342011

14. Avery DR, Thomas KM. Blending content and contact: the roles of diversity curriculum and campus heterogeneity in fostering diversity management competency. *Acad Manag Learn Educ*. 2004;3(4):380-396. doi:10.5465/amle.2004.15112544
15. Ely RJ, Thomas DA. Cultural diversity at work: the effects of diversity perspectives on work group processes and outcomes. *Adm Sci Q.* 2001;46(2):229-273. doi:10.2307/2667087

16. Cohen JJ, Gabriel BA, Terrell C. The case for diversity in the health care workforce. *Health Aff (Millwood).* 2002;21(5):90-102. doi:10.1377/hlthaff.21.5.90

17. Renfrow JJ, Rodríguez A, Liu A, et al. Positive trends in neurosurgery enrollment and attrition: analysis of the 2000-2009 female neurosurgery resident cohort. *J Neurosurg.* 2016;124(3):834-839. doi:10.3171/2015.3.JNS142313

18. Cropsey KL, Maslo SW, Shiang R, Sikk V, Kornstein SG, Hampton CL; Committee on the Status of Women and Minorities, Virginia Commonwealth University School of Medicine, Medical College of Virginia Campus. Why do faculty leave? Reasons for attrition of women and minority faculty from a medical school: four-year results. *J Womens Health (Larchmt).* 2008;17(7):1111-1118. doi:10.1089/jwh.2007.0582

19. Childs G, Jones R, Nugent KE, Cook P. Retention of African-American students in baccalaureate nursing programs: are we doing enough? *J Prof Nurs.* 2004;20(2):129-133. doi:10.1016/j.profnurs.2004.03.002

20. Evans DB. Examining the influence of noncognitive variables on the intention of minority baccalaureate nursing students to complete their program of study. *J Prof Nurs.* 2013;29(3):148-154. doi:10.1016/j.profnurs.2012.04.016

21. Shore LM, Randle AE, Chung BG, Dean MA, Ehrhart KH, Singh G. Inclusion and diversity in work groups: A review and model for future research. *J Manage.* 2011;37(4):1262-1289. doi:10.1177/0149206310385943

22. Person SD, Jordan CG, Allison JJ, et al. Measuring diversity and inclusion in academic medicine: the Diversity Engagement Survey. *Acad Med.* 2015;90(12):1675-1683. doi:10.1097/ACM.0000000000000921

23. Harris PA, Taylor R, Thielle R, Payne J, Gonzalez N, Conde JG. Research electronic data capture (REDCap)—a metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inform.* 2009;42(2):377-381. doi:10.1016/j.jbi.2008.08.010

24. Elliott J. *Using Narrative in Social Research: Qualitative and Quantitative Approaches.* Thousand Oaks, CA: Sage Publications; 2005. doi:10.4135/9780857020246

25. Guest G, MacQueen K, Namey E. Validity and reliability (credibility and dependability) in qualitative research and data analysis. In: *Applied Thematic Analysis.* Thousand Oaks, CA: Sage Publications; 2012:79-106. doi:10.4135/9781483384436.n4

26. *NVivo Qualitative Data Analysis Software* [computer program]. Version 11. Melbourne, Australia: QSR International Pty Ltd; 2015.

27. Viera AJ, Garrett JM. Understanding interobserver agreement: the kappa statistic. *Fam Med.* 2005;37(5):360-363.

28. Carr PL, Ash AS, Friedman RH, et al. Faculty perceptions of gender discrimination and sexual harassment in academic medicine. *Ann Intern Med.* 2000;132(11):889-896. doi:10.7326/0003-4819-132-11-200006060-00007

29. Edmunds LD, Ovseiko PV, Shepperd S, et al. Why do women choose or reject careers in academic medicine? a narrative review of empirical evidence. *Lancet.* 2016;388(10062):2948-2958. doi:10.1016/S0140-6736(15)01091-0

30. Babaria P, Bernheim S, Nunez-Smith M. Gender and the pre-clinical experiences of female medical students: a taxonomy. *Med Educ.* 2011;45(3):249-260. doi:10.1111/j.1365-2923.2010.03856.x

31. Babaria P, Abedin S, Nunez-Smith M. The effect of gender on the clinical clerkship experiences of female medical students: results from a qualitative study. *Acad Med.* 2009;84(7):859-866. doi:10.1097/ACM.0b013e3181a1830c

32. Babaria P, Abedin S, Berg D, Nunez-Smith M. “I’m too used to it”: a longitudinal qualitative study of third year female medical students’ experiences of gendered encounters in medical education. *Soc Sci Med.* 2012;74(7):1013-1020. doi:10.1016/j.socscimed.2011.11.043

33. Villablanca AC, Li Y, Beckett LA, Howell LP. Evaluating a medical school's climate for women's success: outcomes for faculty recruitment, retention, and promotion. *J Womens Health (Larchmt).* 2017;26(5):530-539. doi:10.1089/jwh.2016.6018

34. Dyrbye LN, Thomas MR, Eacker A, et al. Race, ethnicity, and medical student well-being in the United States. *Arch Intern Med.* 2007;167(19):2103-2109. doi:10.1001/archinte.16719.2103

35. Nunez-Smith M, Ciareligio MM, Sandolfo-Schaefer T, et al. Institutional variation in the promotion of racial/ethnic minority faculty at US medical schools. *Am J Public Health.* 2012;102(5):852-858. doi:10.2105/AJPH.2011.300552
36. Peterson NB, Friedman RH, Ash AS, Franco S, Carr PL. Faculty self-reported experience with racial and ethnic discrimination in academic medicine. *J Gen Intern Med*. 2004;19(3):259-265. doi:10.1111/j.1525-1497.2004.20409.x

37. Truong KA, Museus SD, McGuire KM. Vicarious racism: a qualitative analysis of experiences with secondhand racism in graduate education. *Int J Qual Stud Educ*. 2016;29(2):224-247. doi:10.1080/09518398.2015.1023234

38. Williams MS, Brown Burnett TJ, Carroll TK, Harris CJ. Mentoring, managing, and helping: a critical race analysis of socialization in doctoral education [published online July 13, 2016]. *J Coll Stud Retent*. doi:10.1177/1521025116657834

39. Chen PG-C, Curry LA, Bernheim SM, Berg D, Gozu A, Nunez-Smith M. Professional challenges of non–U.S.-born international medical graduates and recommendations for support during residency training. *Acad Med*. 2011;86(11):1383-1388. doi:10.1097/ACM.0b013e31823035e1

40. Neal-Boylan L, Hopkins A, Skeete R, Hartmann SB, Iezzoni LI, Nunez-Smith M. The career trajectories of health care professionals practicing with permanent disabilities. *Acad Med*. 2012;87(2):172-178. doi:10.1097/ACM.0b013e31823e1e1c

41. Westring AF, Speck RM, Sammel MD, et al. A culture conducive to women's academic success: development of a measure. *Acad Med*. 2012;87(11):1622-1631. doi:10.1097/ACM.0b013e31826dbfd1

42. Kohli AR. Capsule commentary on Pololi et al., assessing the culture of residency using the C-Change Resident Survey: validity evidence in 34 US residency programs. *J Gen Intern Med*. 2017;32(7):799. doi:10.1007/s11606-017-4056-4

43. Rochon PA, Davidoff F, Levinson W. Women in academic medicine leadership: has anything changed in 25 years? *Acad Med*. 2016;91(8):1053-1056. doi:10.1097/ACM.00000000000001281

44. Norton MI, Sommers SR. Whites see racism as a zero-sum game that they are now losing. *Perspect Psychol Sci*. 2011;6(3):215-218. doi:10.1177/1745691611406922

45. Bauman CW, Trawalter S, Unzueta MM. Diverse according to whom? racial group membership and concerns about discrimination shape diversity judgments. *Pers Soc Psychol Bull*. 2014;40(10):1354-1372. doi:10.1177/0146167214543881

46. Plaut VC, Garnett FG, Buffardi LE, Sanchez-Burks J. “What about me?” perceptions of exclusion and whites’ reactions to multiculturalism. *J Pers Soc Psychol*. 2011;101(2):337-353. doi:10.1037/a0022832

47. Stevens FG, Plaut VC, Sanchez-Burks J. Unlocking the benefits of diversity. *J Appl Behav Sci*. 2008;44(1):116-133. doi:10.1177/0021886308314460

48. Plaut VC. Diversity science: why and how difference makes a difference. *Psychol Inq*. 2010;21(2):77-99. doi:10.1080/10478401003676501

49. Carvour ML, Ayyar BK, Chien KS, Ramirez NC, Yamamoto H. A patient-centered approach to postgraduate trainee health and wellness: an applied review and health care delivery model. *Acad Med*. 2016;91(9):1205-1210. doi:10.1097/ACM.00000000000001301

50. Blackwelder R, Watson KH, Freedy JR. Physician wellness across the professional spectrum. *Prim Care*. 2016;43(2):355-361. doi:10.1016/j.pop.2016.01.004

51. West CP, Dyrbuye LN, Rabatin JT, et al. Intervention to promote physician well-being, job satisfaction, and professionalism: a randomized clinical trial. *JAMA Intern Med*. 2014;174(4):527-533. doi:10.1001/jamainternmed.2013.14387

52. Ross HJ. *Everyday Bias: Identifying and Navigating Unconscious Judgments in Our Daily Lives*. Lanham, MD: Rowman & Littlefield; 2014.

53. Finas N, Soobiah C, Chen MH, et al. Harassment and discrimination in medical training: a systematic review and meta-analysis. *Acad Med*. 2014;89(5):817-827. doi:10.1097/ACM.0000000000000200

54. Whitgob EE, Blankenburg RL, Bogetz AL. The discriminatory patient and family: strategies to address discrimination towards trainees. *Acad Med*. 2016;91(11 Association of American Medical Colleges Learn Serve Lead: Proceedings of the 59th Annual Research in Medical Education Sessions):S64-S69. doi:10.1097/ACM.0000000000001357

55. Paul-Emile K, Smith AK, Lo B, Fernández A. Dealing with racist patients. *N Engl J Med*. 2016;374(8):708-711. doi:10.1056/NEJMp1514939

56. Pololi LH, Evans AT, Civian JT, Shea S, Brennan RT. Assessing the culture of residency using the C-Change Resident Survey: validity evidence in 34 US residency programs. *J Gen Intern Med*. 2017;32(7):783-789. doi:10.1007/s11606-017-4038-6
57. Pololi LH, Krupat E, Schnell ER, Kern DE. Preparing culture change agents for academic medicine in a multi-institutional consortium: the C-Change Learning Action Network. J Contin Educ Health Prof. 2013;33(4):244-257. doi:10.1002/chp.21189

58. Morse JM, ed. Critical Issues in Qualitative Research Methods. Thousand Oaks, CA: Sage Publications; 1994.

59. Condie J. Beyond rationalisations: improving interview data quality. Qual Res Account Manag. 2012;9(2):168-193. doi:10.1108/11766091211240379

60. Tilley L, Woodthorpe K. Is it the end for anonymity as we know it? a critical examination of the ethical principle of anonymity in the context of 21st century demands on the qualitative researcher. Qual Res. 2011;11(2):197-212. doi:10.1177/1468794110394073

61. Webster L, Mertova P. Using Narrative Inquiry as a Research Method: An Introduction to Using Critical Event Narrative Analysis in Research on Learning and Teaching. Abingdon, UK: Routledge; 2007.

62. Fugard AJB, Potts HWW. Supporting thinking on sample sizes for thematic analyses: a quantitative tool. Int J Soc Res Methodol. 2015;18(6):669-684. doi:10.1080/13645579.2015.1005453

63. Frost S. The Inclusion Imperative: How Real Inclusion Creates Better Business and Builds Better Societies. London, UK: Kogan Page Publishers; 2014.

64. Ainscow M, Booth T, Dyson A. Improving Schools, Developing Inclusion. Abingdon, UK: Routledge; 2006.

65. Walton GM, Cohen GL. A brief social-belonging intervention improves academic and health outcomes of minority students. Science. 2011;331(6023):1447-1451. doi:10.1126/science.1198364

66. Wuffli PA. Introduction: a framework for inclusive leadership. In: Inclusive Leadership. Cham: Switzerland. Springer; 2016:1-7. doi:10.1007/978-3-319-23561-5_1

67. Pololi LH, Evans AT, Civian JT, et al. Mentoring faculty: a US national survey of its adequacy and linkage to culture in academic health centers. J Contin Educ Health Prof. 2015;35(3):176-184. doi:10.1002/chp.21294

68. Higginbotham EJ. Inclusion as a core competence of professionalism in the twenty-first century. Phoros Alpha Omega Alpha Honor Med Soc. 2015;78(4):6-9.

69. Laschinger HK, Wong CA, Cummings GG, Grau AL. Resonant leadership and workplace empowerment: the value of positive organizational cultures in reducing workplace incivility. Nurs Econ. 2014;32(1):5-15.

70. Clark CM, Kensing D. Promoting civility in the OR: an ethical imperative. AORN J. 2017;105(1):60-66. doi:10.1016/j.aorn.2016.10.019

71. Antman K. Building on #metoo to enhance the learning environment for us medical schools. JAMA. 2018;319 (17):1759-1760. doi:10.1001/jama.2018.3812

72. Chaney KE, Sanchez DT. The endurance of interpersonal confrontations as a prejudice reduction strategy. Pers Soc Psychol Bull. 2018;44(3):418-429. doi:10.1177/0146167217741344

73. Williams A. Unconscious Bias in the Workplace–What Is It and What Role Is It Playing in the Inability of Organisations to Drive Forward on Diversity. Sydney, Australia: Johnson Partners; 2011.

74. Price EG, Gozu A, Kern DE, et al. The role of cultural diversity climate in recruitment, promotion, and retention of faculty in academic medicine. J Gen Intern Med. 2005;20(7):565-571. doi:10.1111/j.1525-1497.2005.0127x