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*Original Research*

# Advancing Equity: Lean Leader Practices and a Path Forward

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**Policy Points:**

- This study highlights health care leaders' use of lean management practices to advance equity and scale initiatives supporting the delivery of high-quality care for all patients.
- As a next step in this work, there is a need to develop new measurement systems with clearly defined performance metrics that ensure accountability to equity standards.
- Standards can be reinforced by government agencies, professional associations, and accrediting bodies. Examples include building equity-specific metrics into Centers for Medicare and Medicaid Services' Medicare Advantage STAR ratings, American Medical Group Association and America's Physician Groups recognition programs, National Committee for Quality Assurance certification criteria for health plans, and Joint Commission accreditation for hospitals.

**Context:** Lean management is a sociotechnical approach to quality improvement that aims for consistency in work processes and outcomes. This can be leveraged to reduce inequities by ensuring delivery of high-quality care to meet the needs of patients with diverse backgrounds. Despite recent efforts in the field, there is limited study on how managers implement health equity and workforce diversity goals as strategies to improve patient care. Given the important role of leadership in fostering workplace culture, we examined leader activities and specifically their use of lean management practices to support equity initiatives in health care.

**Methods:** We conducted in-depth interviews with 67 leaders ranging from C-suite executives to frontline managers in five US hospital–health systems. Interview transcripts were analyzed

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and validated via parallel coding, yielding an interrater agreement of 92.6%. We identified cross-cutting themes on how leaders use lean methods to promote equity in care settings, and elicited insights regarding barriers, facilitators, and recommendations for continuous improvement.

**Findings:** Leaders highlighted the lean daily management system (DMS) as a robust platform to introduce and scale systemwide equity initiatives. The DMS consists of standardized practices including tiered huddles, leader rounding, and problem-solving that enable employees to accomplish daily tasks in alignment with organizational priorities. Humble inquiry was also cited as an effective way to address patient safety issues while fostering cultural humility and learning. Leaders strongly recommend integrating equity into other strategic goals (quality, affordability, patient/employee experience) and stratifying data to inform key performance indicators. Recommendations to strengthen accountability include setting equity goals and building them into performance evaluations, clearly communicating cultural norms and expectations, and creating equity-focused data reporting systems as the next step or evolution in this work.

**Conclusions:** Health care leaders can use lean management to advance equity by reducing variation in care processes and improving measurement of outcomes across diverse populations.

**Keywords:** lean management, quality/process improvement, health care leadership, health equity, workforce diversity, work culture/environment, hospital/health systems, qualitative research.

Recent global events, such as the COVID-19 pandemic and Black Lives Matter movement, have brought health equity and structural racism to the forefront of public attention. Despite efforts to support diversity, equity, and inclusion (DEI) in the United States, the disproportionate effects of illness and lived experience among communities of color remain unaddressed. Acknowledging the connection between health equity and population health, the US Public Health Service's Healthy People 2030 outlines a national priority of eliminating disparities and creating equitable opportunities for people to live healthy lives.[1] This improvement agenda represents a timely call for action to address important issues impacting the health and well-being of underserved communities.

The call for action also highlights a key interventional role that provider organizations can play in reducing health inequities.[2,3] Care delivered in physician practices and community hospitals, followed by stratification of outcomes by patient demographics or other categories, is increasingly linked to provider performance on quality measures. Effective care delivery that leads to positive results across patient groups has, thus, become a top priority in many health care organizations. To enhance the provision of safe, culturally appropriate care, system leaders are encouraging a more diverse clinical staff to better reflect and serve patient populations. Such efforts

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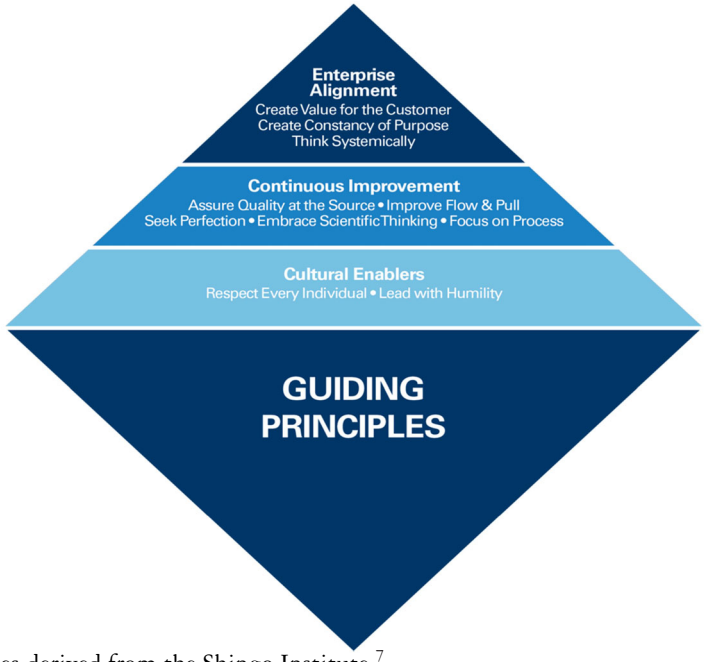
**Figure 1.** Shingo: Guiding Principles of a Lean Organization




Principles derived from the Shingo Institute.[7]

recognize that representative teams of health professionals are essential to address care gaps by providing services that meet the unique needs of patients with diverse backgrounds.[4]

Lean is a process and quality improvement (QI) methodology that is synergistic with efforts to ensure high standards of care across patient populations. A lean operating system seeks to achieve consistency in both process and outcome by eliminating waste and unwarranted variability, including those related to social determinants of health.[5,6] Originating in manufacturing and service industries, a conceptual framework known as the Shingo model articulates a set of principles that guide a lean operating system (Figure 1).[7] These principles applied to health care include the following: creating value for patients as customers, ensuring quality at the point of service, optimizing care processes that precede health outcomes, and thinking systematically about the interconnectedness of the delivery system including relationships among managers, care teams, and support staff. Foundationally, lean-based improvement stems from an organizational culture rooted in humble leadership and respect

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for every individual. This culture empowers leaders to align with enterprise commitments to create value for both patients and the providers who care for them.

As health care leaders increasingly recognize equity as a quality indicator, there are concerted efforts to build care environments that support achievement of such values and performance objectives. Despite recent initiatives in the field, limited empirical study exists of how managers implement organizational goals for health equity and workforce diversity as strategies to improve patient care. Given the important role of leadership in building a workplace culture, we examine managerial activities that foster equity and inclusion among staff while ensuring the delivery of safe, culturally sensitive patient care. Our research contributes knowledge about daily leader behaviors and specifically their use of lean management practices to advance equity in health care.

## Methods

This study used qualitative research methods to explore how leaders apply lean principles to foster health equity and workforce diversity in care delivery settings. We conducted in-depth interviews with leaders in five US hospital–health systems participating in a Lean Action Research Learning Collaborative (LARLC) convened by the Center for Lean Engagement and Research at the University of California, Berkeley. Table 1 describes all LARLC member organizations participating in the collaborative at the time of study.

Based on a purposive sampling technique, representatives from each organization provided the research team with a list of individuals to participate as key informants in interviews. These participants were recruited internally based on their familiarity with lean methods and occupation of a leadership position at any level or unit within their organization. The research team conducted semistructured interviews from June to November 2023 with 67 leaders, including 22 C-suite executives, 16 senior administrative and clinical leaders, 19 regional site and clinic directors, and ten frontline nurse or unit managers. A series of interview questions was designed by the research team in collaboration with LARLC representatives, many of whom were enterprise leaders with deep knowledge of their organization's strategic priorities. Questions on the interview guide involved topics of workforce engagement including how leaders employ lean tools and management practices to foster equity among staff, use of humble inquiry to address issues of patient safety as well as workforce diversity, and leader experiences supporting DEI as a focal priority within the organization. We also elicited insights from leaders regarding common facilitators, barriers, and recommendations for continuous improvement.

We conducted all interviews via Zoom conference calls led by a primary researcher who was accompanied by a second researcher to assist with follow-up questions

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Table 1. **Description of LARLC Member Organizations**

| Organization | Description | Commitment to Equity |
|---|---|---|
| ZSFG Hospital and Trauma Center | Public health and academic safety net providing inpatient, outpatient, emergency, diagnostic, and behavioral health services to vulnerable populations | ZSFG demonstrates commitment through its Advancing Equity Strategic Plan to reduce patient health disparities, ensure workforce equity, and foster an antiracist and inclusive culture. An Equity Council advises leadership and promotes accountability for equity goals. |
| Legacy Health | Locally owned nonprofit six-hospital–health system with >70 primary care, specialty and urgent care clinics serving the Portland, OR and Vancouver, WA metro areas | Legacy integrates equity into its core mission and acknowledges systemic racism by implementing initiatives across all operations, including formation of a Diversity Advisory Council, providing trauma-informed care training, and conducting Accountable Health Communities Surveys to understand patient inequities. |
| JMH | Not-for-profit integrated system of physicians, hospitals, and behavioral services located in the San Francisco East Bay Area | JMH hosts an Office of Belonging and Equity, Employee Resource Groups, and inclusive leadership training for leaders. Additionally, data on patient outcomes are collected and analyzed to inform ongoing improvement efforts. |

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Table 1. (Continued)

| Organization | Description | Commitment to Equity |
|---|---|---|
| IU Health | Academic health center based in Indianapolis consisting of 17 hospitals and multiple ambulatory clinics located statewide | IU Health is committed to creating a culture of acceptance and inclusion, aiming to equitably improve the health of all via education, representation in occupational roles, and Employee Resource Groups to support diverse team members. |
| UCSF Health | Large health care enterprise closely affiliated with an academic medical center serving as both a tertiary and quaternary referral center and community hospital | UCSF Health programs include: an Antiracism Initiative to foster equity in climate, decision making, leadership, and research; Health Equity Council to address disparities through education and strategic interventions; diversity training for all personnel; DEI Champion Training for clinical educators; and the Differences Matter Initiative, integrating anti-oppression principles into medical education and community partnerships. |

Abbreviations: DEI, diversity, equity, and inclusion; IU, Indiana University; JMH, John Muir Health; LARLC, Lean Action Research Learning Collaborative; OR, Oregon; UCSF, University of California at San Francisco; WA, Washington; ZSFG, Zuckerberg San Francisco General.

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and meeting notes. Each interview lasted 45 to 60 minutes and was recorded with participant consent. Interviews were transcribed and then analyzed deductively using a codebook constructed from topics based on the interview guide. To ensure reliability, we engaged in independent parallel coding of a random sample of interviews where each transcript was analyzed independently by another member of the research team.[8] Approximately one-quarter of all interviews were parallel coded during this validation stage, yielding an interrater agreement of 92.6%. We grouped analytic codes into common themes identified across study organizations, which produced an aggregate understanding of how leaders support equity goals using lean methods for process improvement.

## Findings

Several themes emerged on how leaders apply lean principles and management practices to advance equity. Common examples included use of a lean daily management system (DMS) to introduce, standardize, and scale local equity projects to align with system priorities; incorporation of equity as a regular topic on employee status sheets to facilitate discussion and continued progress; leader rounding to build trust and psychological safety among all team members; use of humble inquiry to increase patient safety and support effective problem-solving; and integration of equity with True North pillars to fully embed this concept in strategic goals, including quality/safety, affordability, and patient or staff experience. Interviewees also discussed several barriers, facilitators, and opportunities for improvement as described below.

### *Lean as a Vehicle for Advancing Equity*

Leaders highlighted the lean DMS as a robust platform that they actively use to implement systemwide goals related to equity. A DMS consists of standardized practices that enable employees to accomplish daily work tasks in alignment with organizational priorities. Typical components of a DMS include: tiered huddles, which are regular team meetings occurring within and across tiers of the organizational hierarchy; leader "standard work" or routine activities performed on a daily or weekly cadence, such as gemba walks (i.e., regular visits made by leaders to hospital units, clinics, or other workspaces to observe and coach staff); use of A3 problem-solving and visual management tools to view progress on goals; and rapid cycle plan-do-study-act (PDSA) improvement projects. Table 2 lists examples of common DMS tools, traditional uses, and new applications to advance equity. Embedding equity into leader standard work was noted as a particularly important way to set organizational expectations. One manager stated the following:

> I'd like to think about where we are in our DMS…How can equity be included as a component of that as we continue to do lean and leader trainings and onboarding?

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**Table 2.** Examples of Lean DMS Tools and New Applications to Advance Equity

| DMS Tool | Traditional Purpose | Equity Applications |
|---|---|---|
| Tiered huddles | Daily or weekly meetings to plan activities, identify potential issues, and decide as a team how to resolve problems | • Gather diverse staff input to create more well-rounded plans<br>• Foster psychological safety in a group setting<br>• Use as a regular venue to discuss equity topics<br>• Invite and encourage discussion of problems and ideas related to potential disparities or inequities<br>• Encourage or deploy equity metrics for unit-huddle tracking and problem-solving (e.g., unit-level % influenza vaccination rates, stratified by race) |
| Status sheet | Routine one-to-one session with one-up to support coaching, problem-solving, and operations | • Include standardized leader equity questions: "What potential equity problems might we have today?" |
| Gemba walks (i.e., leader rounding) | Frequent visits made by leaders to the clinic, hospital unit, or other workspace to observe processes, coach and develop frontline staff | • Build trust and personal connections with diverse staff members<br>• Engage in informal, sensitive discussions related to equity<br>• Intentionally expand the settings and questions incorporated into leader rounds to include diverse opinions and experiences |

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**Table 2.** (Continued)

| DMS Tool | Traditional Purpose | Equity Applications |
|---|---|---|
| PDSA | Rapid cycle experiments that test potential solutions to problems for continuous improvement | • Encourage experiments to make improvements that include equity across subgroups (e.g., SMART-IE goals)<br>• Encourage improvement opportunities to adjust specific countermeasures for target populations where goals have not been achieved<br>• Examples of PDSA topics:<br>• Nurse credentialing and hiring practices<br>• Inclusive leadership opportunities<br>• Language translation services<br>• Palliative care for patients who are underrepresented<br>• Patient experience surveys<br>• Inclusion of patient pronouns in EHR |
| A3 thinking (often used with PDSA above) | 11.7 × 16.5-in size paper used for high-level definition of a problem or priority/goal, including tasks and timelines for addressing issues | • Create institutional DEI/antiracism agenda<br>• Develop plans for equity resourcing commitments<br>• Understand barriers to engagement among underrepresented staff<br>• Foster staff development and communication about equity issues |

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Table 2. (Continued)

| DMS Tool | Traditional Purpose | Equity Applications |
|---|---|---|
| RCA | Techniques (e.g., five why's, Fishbone analysis) used to uncover the core issue of a problem and eliminate causes through process improvement | • Incorporate standardized questions into RCA or fishbone analyses re: potential for individual bias or systems failures related to patient race, language, etc.<br>• Explore how upstream social determinants of health may lead to disparities in health barriers or needs and require different levels of countermeasures to achieve equitable outcomes |
| Standard work | Specific tasks or steps of a work process for which the content, assigned roles, sequence, and timing have been determined to achieve consistent outcomes | • Invite staff to develop standard work as a method for workflow standardization where there may be risk of individual "bias"<br>• Invite opportunities to adapt or adjust standards as needed to achieve equity |
| Visual management | Use of tools to visually display and monitor progress (e.g., posters, routinely presented reports) | • Share best practices on an Equity Learning Board<br>• Display metrics for specific initiatives (e.g., % use of interpreter service among consenting patients; no-show rates in underserved community)<br>• Stratify progress on systemwide KPIs (e.g., patient experience scores, access measures, clinical indicators/benchmarks) |

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**Table 2.** (Continued)

| DMS Tool | Traditional Purpose | Equity Applications |
|---|---|---|
| Data collection and data analysis/scorecards | Gathering of structured information for the purpose of analyzing and reporting | • Collect and stratify data by relevant subgroups (e.g., patient harm events, patient satisfaction, quality process metrics)<br>• Collect, validate and analyze data on social determinants of health |
| Strategic planning and governance | Charting course and determining high-level goals that are implemented and monitored through formal policies and procedures | • Incorporate equity as part of mission, vision, True North goals, or QI planning<br>• Incorporate equity goals across strategies, and ensure diverse input and follow-up<br>• Normalize analysis for disparities and reporting of improvements in quality or performance improvement policies and activities |

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Table 2. (Continued)

| DMS Tool | Traditional Purpose | Equity Applications |
|---|---|---|
| Value stream mapping | Method of displaying and analyzing all critical steps in a work process to understand the flow of time, materials, and information at each stage | • Incorporate diverse perspectives; stratify data by relevant subgroups<br>• Identify risk points in processes and procedures for individual or systemic bias/variability in value streams or processes |
| Patient voice/community engagement | Values, input, and needs of patients as customers with active feedback and contributions from the community | • Include outreach and participation from diverse racial or language groups<br>• Analyze and identify equity challenges in patient grievance or patient satisfaction data<br>• Understand reasons for low satisfaction scores among diverse patient populations |
| Staff and leader engagement | Deliberate, ongoing involvement of frontline staff and leaders to accomplish daily tasks in alignment with organizational priorities | • Identify opportunities to improve through staff perspectives on equity in the workplace and organizational culture<br>• Provide forum for underrepresented staff feedback and engagement<br>• Consider opportunities for local equity champions, equity councils, or equity leadership roles, and encourage their training in lean management and improvement tools |

Abbreviations: DEI, diversity, equity, and inclusion; DMS, daily management system; EHR, electronic health records; KPI, key performance indicator; PDSA, plan-do-study-act; QI, quality improvement; RCA, root cause analysis; SMART-IE, specific, measurable, achievable, relevant, time bound-inclusive, equitable.

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> How do we set the standard when someone comes into the organization? Educating them [on] what's expected from an equity lens?

Leaders noted that the lean guiding principles of respect for people and humble leadership are well-aligned with DEI values and particularly suited for supporting equity goals. Furthermore, the open and innovative mindset of lean continuous improvement was considered necessary to expand perceptions of diversity and inclusion in the workplace. This was described by an executive director of performance improvement:

> When you start talking about DEI work, it challenges individual thinking, individual behavior, it forces reflection. We think that by pushing out lean first, it actually creates pathways for DEI to travel on. Because once you talk about respect for all people…if you approach that right off the bat from a DEI lens, that's going to challenge people, conventions, how they were raised, how they've been thinking; that's a harder nut to crack. Starting out with lean and talking about the respectful development of people—of all people—it opens the door.

## *Strategies for Engaging a Diverse Workforce*

*Seeking Input and Coaching as Standard Work.* Leaders are mindful to solicit input from staff to reflect a wide range of viewpoints. During meetings and gemba walks, they proactively seek diverse feedback to inform decision making. This may involve extending beyond typical purveyors of information within an organization. A site director elaborated on this approach:

> Bringing as many people together as possible, not just relying on the management leadership team of that department. I actually go a bit further and interact with the different staff…They will be called, quote-unquote, the "Support Services Division:" EVS [Environmental Services], Imaging, would be classified as support services. Historically in our organization, that's where a lot of our diverse employees rest. So I'm mindful and thoughtful about that, making sure I'm really engaging all the different team members to get a holistic view of challenges and barriers that departments are facing day-to-day.

Building DEI concepts into leader standard work is also useful when conducting status reviews or progress updates and coaching staff. Managers may incorporate direct questions about equity on status sheets that are used to facilitate such reviews. These discussions with staff create key opportunities for coaching, as leaders help team members understand how equity relates to their own daily work and scope of responsibility. According to one director, "One of the things I do [with] my status sheet is I always ask a question about equity…'What's your conception of equity? How do you see the connection with equity in your work?'" Another director stated, "The main principle here is to standardize: whether it's in our status sheet questions,

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which are one-on-one, day-to-day questions…what questions are we asking related to equity?"

*Challenges to Promoting Diversity.* In interviews, leaders often cited the hiring process as an opportunity to create a more equitable and inclusive workforce. This was described as bringing balance to the team while also reflecting patient populations. However, leaders cited inherent difficulties or misalignment between certain job criteria and candidate experiences, resulting in a workforce that is not representative. The issue is made more challenging as hiring rules particularly in the public sector may be at odds with diversity goals. Examples include requiring written tests in English as a prerequisite for hiring or requiring certain years of tenure in civil service. Some alternative ways that leaders work with human resources departments include conducting recruitment efforts among community volunteers or diverse student bodies of local universities. These new protocols are designed using lean-based process mapping and rapid cycle improvement events.

Perhaps foremost among challenges to an organization's diversity goals is the need for staff to be sufficiently informed, trained, and comfortable discussing issues that may arise. Participants highlighted the importance of using standard work with employee training, toolkits, and external facilitators to help team members develop a shared language. This is especially needed as discussion of equity issues can be controversial with team members reluctant to express their thoughts owing to fears of misspeaking or being misinterpreted. One administrator explained the following:

> There's always the need to better train people to have these conversations…Our organization needs more people who have the skills to facilitate these kinds of conversations. Because there are some people that are just great communicators and they're great facilitators on all subjects, but especially about DEI which can be a charged topic.

Leaders also noted the importance of having standards or "ground rules" for how members interact with each other. One manager suggested that routinizing processes and providing tangible resources, such as informational slides or laminated cards, can help reduce variation in understanding certain concepts. Other facilitators include identifying champions for diversity among organizational leaders, creating an Equity Council, using trained coaches, and making frequent visits to gemba or clinical workspaces. These actions help build the trust needed for employees to feel psychologically safe while contributing positively toward equity goals.

## *Using Humble Inquiry to Advance Equity*

*Tool to Foster Cultural Humility.* We asked leaders about their use of humble inquiry, a management approach defined by Edgar Schein[9] as both an art and an attitude. According to Schein, humble inquiry is the "fine art of drawing someone out,

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of asking questions to which you do not already know the answer, and of building a relationship based on curiosity and interest in the other person." Consistent with this definition, leaders understood humble inquiry as a useful way to engage staff by asking open-ended questions rather than telling staff what to do. They reported multiple ways in which humble inquiry is used to address equity in their organization, including to foster cultural humility and learning. One manager shared the following perspective:

> Humble inquiry is a great tool when it comes to these [equity] problems because I can take the tactic of, "I don't know and I am coming to this as an inexperienced learner." It's really easy to be humble when you don't know anything. So humble inquiry is a tool that definitely lends itself to these conversations.

Similarly, other interviewees described humble inquiry as helpful in creating safe conditions for engaging with others. One leader explained how a humble approach can facilitate more meaningful interactions with a diverse staff:

> As part of the inclusive leadership training, we are saying, "Look, we've all had our experiences growing up, life experiences. And that doesn't inform us about every culture and every cultural component that's out there. So, it's OK to admit ignorance, and in fact, if you admit ignorance up front before you ask a question, you're creating a safer space in which to engage with somebody."

*Problem-Solving in Patient Care.* Creating safe spaces is particularly valuable when responding to conflict situations. One director reported that humble inquiry helps them first understand the context surrounding conflicts that can arise when providing care in order to have respectful conversations about it:

> Sometimes it's [used in] getting briefed in kind of a "lay of the land," having a conversation with a unit manager to understand, "Hey, was this a traumatic event? Are people on edge? Do we need to take a time out before we start investigating the problem?" Sometimes the emotions of the event, particularly violence in the workplace issues, you have to meet people where they are. Humble inquiry always starts with that. It's the respect for the person you're talking with and who you are trying to get information from.

From a workflow perspective, leaders also mentioned the value of humble inquiry in empowering teams to solve complex, systemic problems with an equity lens. One quality manager described using humble inquiry to address patient safety concerns:

> I [try] to understand how deep biases and all the different layers that can be there unconsciously may lead to an adverse event. Because I know when we put in any work process: are they doing something different to a person of color or a non-English speaking patient than to someone else?

*Challenges to Humble Inquiry.* Leaders acknowledged that humble inquiry is not easy and requires practice. They highlighted the reality of being a manager who wants to intervene but must instead learn to ask the right questions and help others come to

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their own conclusions. In this process, phrasing questions to understand the unique experience of others can be difficult. One executive explained the following:

> Sometimes not knowing exactly how to phrase something or how it may come across to someone can be a very scary moment. Sometimes those conversations can be hard. Sometimes asking a certain question might be culturally offensive. So really thinking about how to phrase something in a way that is supportive.

Leaders also shared that humble inquiry does not always take into consideration the lived experiences on the part of staff members or even leaders themselves. Not everyone is comfortable answering or asking certain questions, particularly those involving race. One director remarked, "I don't feel as comfortable asking questions all the time because in some instances you're met with defensiveness." This was elaborated on by an administrator:

> If you're dealing with a DEI issue and approaching it from humble inquiry, the person who's had a negative experience [feeling] judged or treated differently by a patient or another staff because they're in an underrepresented group or gender or any different category, it could feel to them that you are putting it back on them to solve the problem. Maybe it isn't the [time] to be drawing things out. It's more of a time to just be present and to hear them, as opposed to problem-solving.

## *Supporting Equity as an Organizational Goal*

*Integration With Strategic Goals.* Leaders recommended that equity, in addition to being one of the True North pillars of an organization, should be integrated into all strategic goals rather than viewed as a separate "call-out" initiative. Because siloing is common in health care settings, leaders recommended that organizations include equity in other prioritized areas to increase its relevance as well as awareness among employees. One executive describes, "Even though equity is its own pillar, it's also embedded in all our other pillars as well. Really making sure [as] we think about quality, safety and staff experience…[it] should be embedded and thought about in each of those respective areas."

Integrating equity with other strategic goals requires understanding how certain data elements intersect with operational assessments and key performance indicators (KPIs). Beyond basic stratifications of clinical data by patient demographics, as now required by accrediting agencies, there is need to understand the implications for equity in the context of a range of important metrics. One director explained the following:

> For a long time we've looked at equity very surface-level; I shared some of our requirements around just stratifying [patient demographics]. But now we're looking deeper at what that means, what are some of the disparities coming forth? And what are the data telling us? So our retention rates, our turnover, our staff experience survey, our patient experience survey, when patients provide feedback

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> about certain staff…I think equity is one of those things in an organization where it touches upon intersectionality. It's about safety. It's about care experience. It's about quality of care. It's about a lot of the organizational goals, not just one.

*Performance Visibility and Measurement Challenges.* We asked how leaders demonstrate performance on equity work and how this is made visible across the organization. Some reported using huddle boards in conjunction with True North metrics to visually display and review progress on institution-wide goals. Other tools included status sheets and operational reports to track progress on KPIs or other metrics. Leaders expressed the importance of creating systemwide mechanisms for elevating issues involving diversity or other potentially inequitable outcomes, and suggested clearer communication about expectations to ensure that goals are translated into terms that all leaders can understand. One medical director summarized the following:

> "Understanding what [DEI] means, what do I need to do? Considering DEI to mean diverse, equitable, and inclusive, which is so broad; no one really knows what that means. Instead, give me a sense of where we want to go: What is our goal? What's my North Star? That gives me a gap I can start to try and close."

A manager similarly stated, "We know [equity] is a priority, but it is really hard to measure something if it's not clearly defined…We are trying to figure out how we can measure where we really are, so we can truly cascade down goals to the organization."

## *Strengthening Leader Accountability*

*Transparent Goal Setting and Leader Training.* Relevant to making work visible, we asked how leaders are held accountable to equity as an institutional priority. Many agreed this is crucial for success, but difficult to operationalize. Interviewees cited visibility and consistency as two key factors needed to build stronger accountability structures. These factors must be preceded by transparent goal setting along with agreement that the goals are fair. As examples of how this is currently done, a nurse manager and executive administrator, respectively, described setting targets for themselves individually and for departments. The nurse manager explained the following: "The expectation from the institution is that I have goals. I choose them in collaboration with my supervisor, and a lot of the goals I have are actually in collaboration with the Equity Committee." The executive administrator stated, "We're trying to develop a more accountable approach amongst our leaders by starting the [equity] training with the understanding that everyone will have a goal by next month…every unit will have an equity-related driver or an equity-related PDSA improvement project at the very least in the next year."

Although leaders mentioned specific tools such as status sheets to facilitate accountability, they emphasized the importance of building equity into expectations upstream, followed by regular assessments downstream to ensure progress is being

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made: "Getting [equity] baked into our own goals and performance evaluations, some metrics that we measure ourselves personally on an annual basis…that's an important next step."

Other recommendations for strengthening accountability included awareness training as an important way to reinforce leader accountabilities. In some organizations, just as there are expectations for individuals or departments to engage in equity work, there are institutional requirements to educate leaders as well. One executive described the following:

> We have a lot of teaching and coaching around awareness. So we are heavily invested in diversity and equity training as a leadership team. We spend probably 8 hours a month on team building and doing things around DEI, having real conversations, sharing stories…we're accountable to having conversations with the leaders around that.

*Accountability Challenges.* Despite these efforts, leaders cited challenges indicating a need for continued growth in this area. Main challenges included lack of formal accountability structures and measurable outcomes to enforce behavioral expectations. Leaders expressed a need for clearly conveying cultural norms and creating supportive measurement systems as a next step or evolution of this work. One executive shared a common sentiment in many organizations:

> There aren't necessarily explicit outcomes where people are expecting accountability or where there's a structure of accountability…{It]'s not like someone stated, "Here is the goal and here's what we're expecting you as a leader to do. And here's how we're going to hold [you] accountable around diversity and inclusion."…I'd love to see us having a system [with] some more accountable metrics and standards for leaders attached to it.

Nearly all interviewees expressed a need for more assistance in the form of relevant data, clear expectations and performance measures, and standard tools that leaders could use to address instances of inequity in the workplace.

## Discussion

Organizational initiatives to advance equity are increasingly implemented alongside QI programs, including lean as a sociotechnical approach to process improvement.[6] This presents a synergistic opportunity to integrate broad equity concepts with practical lean methods that aim to achieve consistent outcomes by reducing variation and bias. The sociotechnical nature of a lean management philosophy and corresponding toolset are well-aligned with efforts to promote equity in health care settings.[10] Specifically, foundational lean principles of humble leadership and respect for individuals are complementary to workforce and patient health equity goals, both

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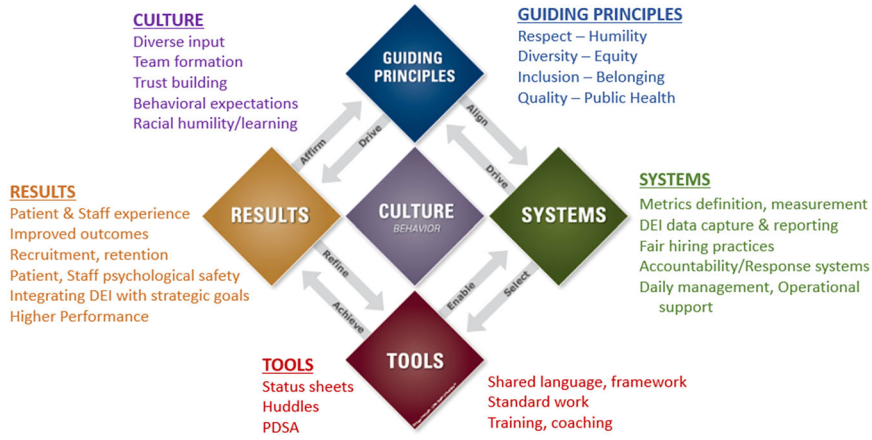
**Figure 2.** Summary of Study Findings
Findings presented using the Shingo Model™ as an organizing framework.[7]




of which can be implemented via interconnected components of a lean framework (Figure 2). At the core of this framework, organizations seeking to foster these values in the workplace culture can do so by integrating new activities into the established DMS, tools, principles, and target results, all of which can be coordinated to reinforce desired behaviors.

By embedding equity into daily work, leaders can create high-functioning environments while improving processes by which patients with diverse backgrounds are served. For example, managers' use of humble inquiry provides team members with a safe space to express challenges by encouraging open, two-way communication and transparency. This creates psychological safety and a sense among staff that the workplace is fair and nonpunitive, which is critical for addressing patient safety issues. Such leader practices not only foster trust and collaboration among staff, but improve organizational effectiveness through better problem-solving, ultimately leading to improved care quality and patient outcomes.[11–12] By creating environments where individuals are empowered to express themselves, take risks in pointing out workflow problems, and share ideas without fear of judgment or reprisal, more constructive conflict resolution and care innovation can follow.

Equity-focused QI must also be accompanied by efforts to build trust and partnership with families, engage them in activities, and collaborate with organizations in affected communities. Such engagement aligns interventions with unique needs to maximize equitable outcomes among patients as well as clinical team members

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who care for them.[13–14] To ensure meaningful change, QI efforts including lean process redesign can first seek to understand existing disparities by examining patient or employee characteristics such as race and ethnicity, language, socioeconomic status, and other social determinants of health.[14] Equity goals can then be appropriately integrated throughout program design, implementation, and evaluation stages, actively involving diverse stakeholders and employing data-driven strategies to achieve desired results.[13–15]

According to our interviews, an outstanding challenge is the need for more standardized language, shared frameworks, and investment in equity training. Barriers stemming from differences in cultural backgrounds and individual communication styles can impede work processes in delivering culturally sensitive care. Moreover, the absence of shared language can exacerbate feelings of exclusion and marginalization among certain individuals or groups.[16] Addressing these challenges requires continued support in the form of communication coaching or facilitation, standardized tools to foster cultural competence, and inclusive practices that accommodate diverse backgrounds.[4,9,17,18] Notably, a lean organization is continuously seeking to develop its workforce and provide needed support for both clinical and operational improvements. There is therefore an opportunity to integrate activities, such as leader equity training, into other ongoing initiatives while facilitating the practice of newly acquired skills. In this way, equity can be reinforced and sustained as an integral part of an organization's improvement culture.

Consistent with our findings, recent reviews highlight barriers to successful equity-focused QI programs, including inadequate training, time constraints, and system-level barriers (e.g., insufficient funding, infrastructural support).[15] Building equity into core operations with a focus on sustainability and organizational resilience is critical to progress.[19,20] To support such efforts, the leaders we interviewed strongly recommend integrating equity into all strategic goals, ranging from quality, safety, and affordability to workforce satisfaction and patient experience. Moreover, leader accountability to this work will require a multifaceted approach.[21] Here, leadership plays an important role in organizational transformation where there is an implicit understanding that equity and inclusion are not temporary trends in strategic priorities but an inherent part of daily work among all members. By leveraging lean management systems to create formal accountability structures, behavioral expectations can be integrated with performance standards to further embed values of equity into the fabric of an organization.

## Conclusion

National efforts to promote health equity and workforce diversity have received attention in a wide range of forms, spanning public health and policy agendas to private

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sector initiatives. These are important factors in delivering safe, high-quality care that is culturally appropriate and effective for patients. By creating daily management support structures, safe spaces for communication, performance visibility with clear expectations, and concrete measurement with accountability to standards, leaders can play a key role in fostering equitable work environments that empower teams to deliver care that meets the needs of patient populations. Given the limitations of our qualitative research methods, further study is warranted using quantitative or mixed methods to assess the effectiveness of leader activities in creating such workplace cultures. Identification of key management strategies will be important to guide future efforts that embrace and embody equity among patients and staff. Additionally, study of lean management practices combined with other targeted frameworks (e.g., High Equity Reliability Organizations) may provide insight into their respective strengths and potential synergies, yielding new knowledge to advance the field.

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