2023

LEAN LEADERSHIP TO ADVANCE STRATEGIC GOALS

University of California San Francisco Health

Lean Action Research Learning Collaborative (LARLC)

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BACKGROUND

UCSF Health is a member of the Lean Action Research Learning Collaborative (LARLC) organized by the Center for Lean Engagement and Research (CLEAR) at UC Berkeley. As part of the Collaborative, LARLC members requested an assessment of lean practices used by leaders to advance strategic goals in their organizations. This report summarizes an interview conducted with 28 UCSF Health leaders ranging from C-suite executives to Patient Care and Unit Directors. In total, we spoke with 67 such leaders across five LARLC member health systems. We used qualitative, in-depth interviews to gather information on the following topics:

- Types of lean-based tools or practices that leaders regularly use to engage staff
- Leader behaviors and practice of 'humble inquiry'
- Modeling a problem-solving mindset via PDSA rapid cycle improvement
- How leaders support organizational goals
- Performance visibility, i.e., how leaders demonstrate progress on goals
- Vertical catchball among leaders across the organizational hierarchy
- Accountability as a leader competency.

All interview topics include follow-up questions on experienced challenges/barriers as well as potential solutions for overcoming such barriers, perceived facilitators, and recommendations for success. The information provided by all interviewees offers unique insights that can be leveraged for organizational action and continuous improvement.

As is customary in qualitative research, direct quotes from interviews appear throughout the report to support thematic findings. A description of research methods and interview questions can be found in the Appendix.

1. STAFF ENGAGEMENT

How Leaders Engage Staff

Huddles. The first interview question we asked leaders was, "What types of tools or standard work processes do you use to foster daily engagement with your staff?" Most leaders at UCSF described using huddles that follow a tiered system, with each successive layer comprised of increasingly senior leadership: Tier 1 involves unit managers or unit directors meeting with frontline staff; Tier 2 huddles incorporate unit leaders and their supervisors, for example, patient care or site directors; Tier 3 includes vice presidents and higher-level site executives; Tier 4 includes enterprise leadership at the senior executive level (UCSF Health CEO, CMO, etc.). The huddles are described as occurring either daily or several times a week and are widely viewed by leaders as effective for a variety of reasons, including but not limited to communicating information, identifying problems, and resolving issues. As one director commented:

> *"As far as the structure, the huddle structure is nice. It does allow that of-the- moment resolution for a lot of issues we have. I think it also helps prepare for the day. There's a nice looking back from the day prior allowing us to resolve any issues that may be left over, then moving forward for the day ahead and preplanning for anything that might come up. As someone who's away from clinical care now, it's really helpful. It allows me to stay engaged with the team to kind of pick up on any trends I might be seeing. We can also advocate for our teams a little more effectively."*

According to leaders we interviewed, the way information is conveyed during huddles may vary. While most huddles tend to follow a scripted template containing standard questions or topics, others take on a discussion-centric focus. One unit director describes this:

> *"It's not a structured huddle in the sense that we cover specific topics. I like to do more of a discussion type of huddle. We push out basic information… and then we pass on any policy changes, or information that we need to remind the team of. We do some shout-outs, praise, and then we kind of open the floor for folks to share any other information."*

Leader rounds. Another common tool used to engage staff is leader rounds. Interview participants describe two kinds of leader rounds, individual rounds and True North board rounds. Individual rounds typically involve director-level leaders touching base with unit managers and frontline staff. True North rounds usually occur monthly or weekly and are multidisciplinary, involving various leaders across different organizational levels. These multidisciplinary rounds aim to align leaders toward organizational goals and are commonly viewed as a useful way to report progress toward the True North enterprise-level goals. One director comments on this:

> *"Our frontline teams utilize the six pillars included on the True North board to set enterprise-level goals, and then review how the unit can breakdown that goal into something tangible and related to their scope of work. Then [they] set really clear tactics to problem-solve and improve performance on those given measurements. My teams follow that same process where they will pick a pillar, identify 'Here's the target metric, here's our current state metric, here are some tactics that we want to explore to improve our performance.' Then they run pilots around changing a*

> *process…and report out during True North Board rounds the progress on that particular pillar and goal."*

Barriers to Engaging Staff

Scope of discussion. A current challenge described by leaders is lack of understanding among staff about the right scope of information for discussion in huddles or leader rounds. This problem was highlighted during the COVID-19 pandemic, shifting the focus away from more meaningful engagement with staff. As one executive explains:

> *"When we've seen spikes in COVID, all of a sudden it becomes really important to understand how many of your staff are out on quarantine. If enough people are out that you've got to start rescheduling patients, I need to know about it. If a smaller number of people are out and you can cover it, I don't really need to know. So even if the equipment is broken and we need to take care of the patients, now if you've got a backup one, I don't really need to know about it. But if there's only one or it's broken and we have to reshuffle patients, then we need to escalate. And there's some challenge to finding the right kind of content to be discussing."*

Knowledge of lean processes and integration. Another barrier to engagement is a widespread disconnect between staff exposure to specific lean methodologies and the overall purpose or goal of Lean projects. As one leader describes:

> *"So when we say we're a lean organization, that doesn't mean much to the staff if they have very limited engagement. I was involved in a value stream mapping project and it was a week long, multiple kaizens and gemba walks; so that really got me initiated into the process. I think breaking it up sometimes you lose some of that connectivity with the overall scope. I think that can be tough if people are just doing, for example, kaizens; but not understanding where that fits into the overall value stream mapping. I think that becomes a challenge."*

A similar sentiment is echoed by a clinical leader who discusses the gap between Lean training and true integration of Lean practices into the problem-solving culture of the organization.

> *"That's where it kind of falls flat, right? The training is there, but there's no larger-scale projects that are implemented utilizing Lean practices. So it feels like everyone is kind of working on these initiatives in silos. And then if you are, if you happen to be in one of those silos working on an initiative, there's no mention of Lean. There's no focus on the fundamental theories that are taught in the courses, so I wish that there would be that translation from 'Here's our training,' to 'This is how we as a culture ingrain Lean into everything that we do.' I feel like that's the gap right there. We don't really ingrain it into how we approach problem solving."*

Facilitators of Staff Engagement

Regular check-ins. When we asked what leaders find helpful for engaging staff, some cite the organizational

structure that provides a framework for regular meetings as well as progress reporting on goals. One clinical leader describes this:

> *"We're utilizing the organizational structure so that supervisors are engaging on a daily and weekly basis, and then the leadership team engages in those leader monthly rounds against the goals, where the staff can report out their progress that they've been working on with their supervisors."*

True North goals. Additionally, True North goals are mentioned as a facilitator that engages staff and leaders by creating purpose, alignment and efficiency across the organization:

> *"The increase in focus on True North and everybody in the organization steering in the same direction provides alignment and efficiencies, even [in] conversations with multidisciplinary teams or other units, departments, leaders or people within the organization."*

Staff communication forums. Finally, leaders describe peer-to-peer forums and information sharing as a helpful mechanism for engaging with ideas and communicating solutions across different teams or units:

> *"When a group has a really interesting experiment that they've done and they're really proud of the output, it works well to have forums for them to directly share it with their peers. So we have a team that will conduct ambulatory symposiums and share best practices, and have the folks on the ground who did the work present it. Those are really great experiences for multiple reasons. The outcome of it often is just that awareness and direct line of communication to a team who might be looking to solve the same problem. They realize, 'Oh, somebody else has a solution; they put together a mini toolkit for me to replicate it. I know who to go to if I have questions...' So I think it's really that peer-to-peer information sharing that has the biggest impact on the spread of good ideas."*

Leader Approaches to Engaging Staff

Personal connection. According to our interviews, the most common leadership styles or approaches to engaging staff involve connection and collaboration. Methods to accomplish this range from personal one-on-one conversations to open group discussions. One patient care director explains:

> *"I think all the directors have very different leadership styles. My approach when I do my leader round is very informal.... my goal is to narrow the gap between leadership and frontline staff. … I really want staff to feel they can come to me if they have any concerns and not have to worry about anything at all. I can't say I know everything about their dog and the kids in their house, but there are certain things I will ask them. 'Hey, how how's your new puppy? I heard you have a new baby niece, how is she doing?' Getting personal with some of the staff so I can build a connection, and they will feel more comfortable to escalate things to me that they may not otherwise feel comfortable doing. Like, 'I have a chair that's broken [or] I really don't like this chair. Can you buy me a new chair?' Those are things I want them to feel*

> *comfortable coming forward to escalate. My goal is to reach out to staff at a more personal, informal level to build that trust and relationships so I can engage them in different ways."*

Leading through collaboration. An executive describes leadership through collaboration:

> *"I like to have a collaborative approach to looking at goals, objectives, and tactics. I think that the people doing the work need to come up with the solutions. Sometimes it's hard to engage folks because people are really laser-focused on patient care and feel that's leadership's responsibility to solve the problems. But I really try to engage the team. I do this daily [by] opening the floor for discussion, and then on a monthly basis, I also have team meetings where I do an open forum. So we have general topics and people are free to voice their concerns and their opinions on process, policy, morale... So to answer your question, my approach is collaborative."*

2. HUMBLE INQUIRY

How Leaders Practice Humble Inquiry

Sensitivity to frontline staff. The vast majority of leaders at UCSF Health demonstrate an understanding of humble inquiry, including the definition of it and how to incorporate it into day-to-day interactions with staff. Leaders at the executive level are aware of their position and how that might affect conversations with either frontline staff or lower-level leaders. As one executive puts it:

> *"I definitely use humble inquiry. I'm very aware of my level of position. And so, when I'm asking a question of someone on the front line, I'm very aware of anything I say has the weight of my position behind it. … I don't always guide or query in real time. I'm not that person in the classroom who's like, 'Let me raise my hand. I know, I know, I know!' I tend to be much more reflective. And so, I might come back at a later time and say, tell me more about this issue you're facing or how is your experiment going? And can you tell me a little more about why you came up with it? Is it hard, or that kind of a thing."*

Bridging differences, building relationships. One leader who came into their role more recently describes humble inquiry as a natural way to understand the culture and processes of the organization. As this director shares:

> *"I think as a newer leader here at UCSF, I feel that's where I operate on a daily basis. I'm still trying to learn the culture and I'm still trying to learn the people and processes, but to me [humble inquiry] means really respecting a difference of opinion and respecting different approaches, the relationship, and collaboration process. Because to do that you need to be open and ask questions and remain curious. To me that's what it means. It's really relationship-building more than anything else."*

Increased understanding/mindfulness. Conversely, leaders with clinical backgrounds describe a lengthier, but just as critical, process developing their mastery of humble inquiry. As two clinical leaders explain:

> *"I grew up here very much as a problem solver and kind of 'just do it.' I am an [medical specialty], and I know we all think we know what's best. But that doesn't help my team. So I've been trying to develop that muscle over the last few years. I mean I have good days and bad days. But specifically, when I show up for things like a huddle or True North rounds, or something like that, I try to really focus on that for that time period. I do find that [humble inquiry] is beneficial and it really engages people in the process in a different way than just saying, 'Oh, yeah, I understand. We should just do this.'"*

> *"I historically have much tendency to fix problems. I mean, that's how my mind is wired. I'm a [medical specialty] by training, so understanding what the root cause is of something and then determining the actions to take, I think is an extension of my training. So there's inherency in my approach to that, but I think humble inquiry is the recognition that you don't know the answers necessarily. Because you don't understand the problems as well as the expert."*

How Humble Inquiry Helps Solve Problems

Deeper reflection. Leaders believe the most common benefits of humble inquiry are slowing down the problem-solving process and creating space to carefully think about issues through a more critical lens. Humble inquiry was mentioned several times by leaders as helpful in working on initiatives. As one leader describes:

> *"In regard to larger projects, I think humble inquiry really helps with slowing the [department] down as far as our ideas go, because again, we want to jump right into it. We want to say, 'Okay, we already know our problems; let's jump to our solutions.' I think humble inquiry allows you to slow things down a little bit. When someone's asking, 'Why?' rather than jumping to solutions, it really helps us think a little bit more critically about things."*

Staff development. An executive emphasizes the goal of humble inquiry is to develop staff and their independent decision-making skills, which ultimately expands leadership capacity:

> *"I think the more leadership responsibility you have, while you think it would be easier and quicker just to tell people what to do or to direct people, at the end of the day you're building the capacity and infrastructure of your leadership team to be able to make those decisions on their own."*

Diverse perspectives. Interview participants also describe humble inquiry as a tool to support diversity in teamwork. One director describes this:

> *"And sometimes when [staff] generate action items that you wouldn't have generated on your own, or something you may not have necessarily thought about, that's actually really great because that's the power of the interprofessional team and teaming. It's that everyone brings their own diverse perspectives. If it's only the same people working on the same projects, then you end up with kind of the same responses at the end of the day. So I think that diversity of thought is really important."*

Challenges to Humble Inquiry

Interpersonal approach. One frequently mentioned challenge of humble inquiry is the need to understand relational dynamics in order to frame the conversation. Without properly setting the context, humble inquiry sometimes causes individuals to feel questioned or attacked. A clinical leader shares this:

> *"It just depends on personalities, right? I mean, there are a lot of personalities in [clinical setting]. Strong personalities. And sometimes people almost perceive that as a challenge when you ask the question. You really have to navigate that space carefully and know your audience and know a little bit about the person that you're delivering it to. Also the tone and the timing and all those things are super important, because if you ask someone 'Hey, can you help me understand?'*

> *Sometimes this can be taken as a challenge. So yes, I have encountered that before and then you have to do a little bit of recovery to say, 'No, I really just want to understand, you know, for my knowledge, or for whatever reason behind it.'"*

An executive leader describes a similar experience:

> *"One of the things that I've gotten feedback on is that it can be taken wrong. It could be like, 'Well, why do you keep asking? Why are you drilling me on this?' One of the things I've had to start doing is to frame it all either at the beginning, or if I forget, during it. But I'm not trying to question you or suggest you're not doing something right. This is me trying to learn and educate myself and also allow you to share more of what you understand the problems are. But I think you do need to be careful that it's not taken as, 'Somebody just keeps badgering me, asking the questions of why and why and why.' I think you do need to make sure to frame it, because otherwise people get defensive and that's the opposite [of] what you're trying to accomplish."*

Time constraints. One major challenge to using humble inquiry is limited time, especially in fast-based clinical settings. Staffing shortages are cited as an issue that compounds this challenge. A clinical leader describes this in detail:

> *"It's definitely a work in progress I would say. A lot of us are taxed on time. Humble inquiry takes a little bit more time, obviously, because when you're having casual conversations in the halls or people are coming to you with issues, you don't always have time especially on the floor of the emergency department where we've had a lot of issues with boarding and having a bunch of admitted patients in the hospital.*
>
> *I just think with our current staffing issues, that a lot of times it feels like the barn is burning down. You don't have the time to ask, 'Oh hey, what did you do yesterday?' all the time. I think it's not that it doesn't have a place, but in order for it to have a place [here] I think we would need a lot more staffing, and we're dealing with staffing shortages on a daily basis, on a shift basis. We're having a lot of holes in our schedules…obviously, if we had more staffing and more time, it would definitely be beneficial."*

3. PDSA (PLAN-DO-STUDY-ACT)

How Leaders Use PDSA / Model a Problem-Solving Mindset

Frequency of use. Leaders report varying levels of involvement in PDSA cycles in their own work, depending on their position in the organizational structure. Some report little to no involvement in PDSA cycles, some state occasional involvement, and some report consistent and frequent involvement. Regardless of their own personal involvement with PDSAs, almost every leader reported that PDSA cycles are conducted in the unit or department they oversee. Two executives describe contrasting experiences:

> *"So I function at too high a level to be doing that with the staff, but that is what they typically do or we encourage them to do when they are problem solving. So often at our leader rounds when they're focusing on an area [in which] they're not where they want to be, we have templated tools for PDSA and so they'll say, 'So our plan is to do this or we're going to then study this.'"*

> *"We use PDSA all the time…my team is well versed, we like using them, we know how to measure, we know how to do tactics and process measurements. Our team has really embraced that and we understand what it means."*

PDSA cycles. Within the departments or units they oversee, leaders also describe different volumes and lengths of PDSA cycles. Volumes range from as little as one cycle occurring at a given time, to five or six occurring all at once. PDSA cycles are reported to be as short as two weeks while others have taken as long as 90 days. Several leaders mention the need to teach team members, especially clinicians, that PDSAs should be rapid tests of change for ongoing continuous improvement versus lengthy, in-depth research projects. Clinical leaders and executives reflect this variation in their interviews:

> *"We have I think 5 or 6 PDSA cycles going on and with different [clinical] units and in my own [clinical] unit…one of the things I make sure they do is, if they have any initiative, I need to make sure they follow the PDSA cycle. It cannot be a project that's six months long. You need to be able to measure it and course correct quickly."*

> *"So you're constantly doing it, but I would say one full cycle takes about 2 weeks to do a PDSA and that might be with 100 patients. Say your planned outreach is for 30,000 patients a year; you do your first with 100."*

> *"Well, I think our rapid cycles are 90 days. Because at our level, getting everything to move in a three-week time frame is not possible."*

Challenges of PDSA, According to leaders at UCSF Health, there are several prominent challenges or principles to keep in mind. The first is creating "cycle specificity" to effectively isolate and identify the specific intervention(s) that result in desired outcomes. An executive describes this:

> *"It can be a struggle for leaders who have trouble taking action sometimes, but it can also be a struggle for those people who take too much action. What I mean by*

> *that is, they'll have a problem and those go getters, those you know, active leaders, will come up with, "OK, these are the six things we're going to do to fix it." And so they start one, and then the next week they start two different things. I check back in and hear, 'We're doing all these things to make it better.' And so I'm like, "OK, is it getting better?' 'Yep, everything is working.' But they don't know which of those interventions was the impact, right? And so inherently then, you have to keep doing all six things."*

Another challenge seems to be understanding the timing of the cycle and when to cut it short:

> *"A lot of leaders will have trouble saying it was wrong. When they do their intervention, and they don't get their intended impact or result, they have trouble letting go. With this particular unit director, he'd report out general finds like, 'So this is what we've done. And, unfortunately, we've failed.' And I was like, 'Stop. You didn't fail. You learned something. You had a thought, you asked, you did something. It didn't have the impact you wanted. That's OK, you learned.'*
>
> *The smart thing then is, and the good thing as a leader is to say, 'OK, we're going to stop doing this and we're going to try something different because you've learned from it.' But I think that's a hard piece for leaders to get. Taking a step at a time, doing it for a short period of time, determining if there is directional movement in the way you want, and then be able to say, 'It's OK to stop and try something else.' I think that's a hard thing for a lot of leaders to learn."*

Finally, some leaders report difficulty in documenting activity in PDSA cycles, which limits information transfer and scalability. As summarized by an executive:

> *"Where I have found there to be challenges in PDSA is, I think in general people are pretty good at planning and doing, but the study and act can fall off the radar. Even when the study and act happen, I have definitely been guilty of not documenting clearly what had happened in a rewrite that can be shared with other people in a completely different service line or clinic who may be facing the same general problem, but just caring for a different patient population."*

PDSA Examples

Reducing adverse outcomes. Leaders describe a plethora of situations in which PDSA cycles were utilized to make improvements in a clinical setting. PDSAs have been used to solve problems ranging from emergent inpatient issues to implementation of new technology. One clinical leader describes successful use of PDSA to reduce central line blood stream infection rate (CLABSI rate):

> *"My teams do [PDSAs]. I don't necessarily do it as much with my managers, and it's something that I should be doing more directly. But they do, you know, the smaller tests of change at the unit level. Most recently, we've been having a challenge with CLABSI rates in the hospital. And you know there was this thought, that if we could increase the frontline attention, because we were doing mostly auditing at the*

> *leadership level or the nurse educator level… eventually we were able to reduce the CLABSI rate for that period of time."*

Improving patient experience. Another leader describes PDSAs to improve patient outreach and experiences via new modes of communication:

> *"There's like 100,000 patients in primary care. So let's say we have to outreach to all the patients that are overdue for one or more cancer screenings. We were using a platform where we were using an automated outreach phone call program and we switched it over to SMS texting. And so that team did a ton of PDSAs where they test the script and the technology on a small group of patients, get the feedback, what worked, what didn't, alter the script, do something else, maybe change the timing… We actually asked patients, "How are you liking it? What could we change?"*

Organization-level goals. Additionally, some leaders employ PDSA cycles to support enterprise-level goals based on the True North Board. In the context of describing a PDSA, one executive shares:

> *"We have our True North Board for the [clinical department]. And those goals are developed as a translation of the organizational goals. My leadership partner and I, we get the organization goals and we say, 'OK, how does this link to [our department]. We translate it into goals that our management team will understand and then can take very tactical actions. So we set the goal. For instance, an example would be we want to improve patient satisfaction by X percentile. We then sit down with our next level… [continues to describe PDSA cycle]."*

Using Metrics in PDSAs - Challenges

Lack of resources/infrastructure. When we asked how metrics are incorporated into PDSAs and other improvement initiatives, a common challenge expressed by leaders involves data resourcing and accessibility. A minority of such leaders at the executive level can overcome this limitation with the help of dedicated staff to support their efforts:

> *"I have a big analytics team, so again, I'm really lucky that I have [that] kind of infrastructure. … I have an analytics director and a couple other highly trained implementation specialists who help us think through before we implement what we want to be measuring, so that we're measuring the right things. If something's going off base, I have no problem with that because I have my own team now versus if I was had to rely on the centralized infrastructure."*

At the same time, leaders are aware that this type of infrastructure and resourcing for improvement work is rare at UCSF:

> *"I oversaw a [clinical] department for the last couple of years and I'm not doing it now, but I was and there's just no support for it at that granular level. The nurses have to go and look in charts and count things themselves. You know they're taking care of some of the sickest patients in Northern California, so it's really hard for them*

> *to do it well. We don't have a system-level infrastructure, at least for analytics, to support unless it's an initiative. So unless it's a big initiative through the Lean office, there's not a whole lot of support. It's quite variable; there's no mandate in the way that a manager supports this kind of work."*

Data accessibility. Other leaders describe the limitations regarding data accessibility, particularly long queue times when requesting specific datasets. As two directors put it:

> *"An organization as big as UCSF, we do have some enterprise-wide reporting tools and dashboards that are available to all staff. However, if you have a really specific question that you're trying to develop analytics for, you do oftentimes have to request a specific dataset. That request and the process to get the data back could be a couple weeks, could be a couple months, it really varies. And so depending on the information you're looking for, yes we have a lot of enterprise reporting, but it doesn't always meet the needs of the specific hypothesis you're trying to test.*

> *"I feel like there's this whole movement now I've seen towards people really wanting things like prettier Tableau dashboards and point-and-clicks. And getting the data that you want yourself as well, which is amazing. It allows sharing of complex data across a large organization to be much more efficient and effective. And yet that requires resources, skill, knowledge and time and funding. Not every single clinical area can do it, and the health system probably can't fund enough Tableau dashboard builders and report writers to serve the needs of every single clinical area. I think that it can definitely be a challenge. In my home division, we've actually invested our own resources into something we called [redacted] because, frankly, people got impatient waiting in the health system queue."*

4. ORGANIZATIONAL GOALS

How Leaders Support Strategic Goals

Alignment of goals. We interviewed leaders on how they support UCSF Health's strategic goals. By far and away the most common way leaders did so was by aligning their department, unit, or team goals with the overarching organizational goals, including Tiered goals, True North Board goals, or IAP goals. As two clinical leaders describe:

> *"We take the organization Tier 5 goals and then we align with our Tier 4, Tier 3 tier 2 in [clinical department]. And so there might be an overarching goal and then we'll say, well, how does that apply? How can we support that? We'll try to align; so some things are very obvious, like if a Tier 5 goal is as an organization, we want our patient satisfaction to improve by X. So then we'll look and say, "Oh yes, we can work on that exact goal." And here's how we're going to do it."*

> *"As much as possible, that consistent alignment, and that's one of the benefits to True North boards being on the show is being able to connect the things on the floor with the ultimate organizational goals. You know, patient experience is probably the easiest one for inpatient units because we all have one question, which is changing this fiscal year, but it's basically "How well did the team work together to provide care?" We started fiscal year in July, and every inpatient unit can have a survey. On their surveys they have that question. So it's really easy to align. If this unit improves on that question, the organization is going to improve overall, right?*

Hurdles to Supporting Goals

Department goal alignment. Leaders describe the obstacles they face in supporting UCSF Health's strategic goals. One common hurdle involves trying to translate organization-wide goals in ways that make sense to specific units or departments. As one executive describes:

> *"Some of the Tier 5 goals are very hospital-centric. They're about inpatient things, like CAUDI infections. Or like the EBITDA margin is really in a way esoteric to the frontline. What does that even mean? What's an EBITDA margin? And so I think translating it is one of the challenges."*

Multiple priorities. Another hurdle is a lack of unity in organization-wide initiatives that are due to an excessive number of efforts on the part of the health system as well as turf wars and politics. According to two different executives:

> *"The other issue is there are too many initiatives here [at UCSF Health]. We talk a lot about prioritization and 'What are we going to work on?' And it's really hard to move something off the plate. Really hard.*
>
> *There are a lot of silos in this organization, and that contributes to why working on so many initiatives is very hard, because people are working on sometimes the same*

> *things or similar things. But you wouldn't know it and so you're spending a lot of time trying to get the same data or the same information when somebody already has it, or there's politics. And they don't want to share it, or they don't want to lean in and help solve the problem together because they want to protect what they already have… you have silos around these kinds of things where the implication could be that one person, one group, may lose something: space, people, resources, something."*

Complex organizational structure. A third hurdle is related to the organizational structure, specifically confusion around accessing different resources or implementing new initiatives that have no standard wor . According to a clinical leader:

> *"This is a really complex organization. And coming from a smaller organization, I have honestly experienced the most barriers in terms of understanding the complex structure, and understanding what resources are available and how to access those resources. I think that has been the biggest hurdle for me. I also think that the political and hierarchical structure, it can really impede progress sometimes because things have to go through multiple, multiple, multiple committees before you can actually see a change. I think that is the bigger hurdle here as well."*

Standard work. An executive describes a similar issue:

> *"I will say there isn't standard work as an organization for many things. For example, if we want to explore using a third-party software to help collect outside medical records for our patients and we believe it will help us with efficiency, seeing patients quicker, whatever our thoughts are; there is no checklist, no standard work for: 'How do I move forward? Who approves it? Who doesn't approve it? What are the risk factors? What are the different stakeholders? Is there even anyone or a group that blesses it or doesn't?' That doesn't exist, so you are inventing the wheel if you want to do anything innovative like that here."*

Accessing resources. IT issues are frequently cited by leaders as limiting their ability to support organizational goals. One clinical leader discusses the complexity of accessing IT to facilitate their work:

> *"I think the other challenge is IT. Since you know, we have three IT projects out there in varying states of initial scoping and being told that there's no IT resource, I think that's a huge challenge. And that's just from trying to get the scope of work done, to being connected with certain teams, to the legal hurdles and any kind of downstream effects, before you get to talking about implementation. I think that's a huge barrier for any kind of operational growth or department change because there are so many co-dependencies now."*

IT collaboration. Another leader discusses IT in the context of data collaboration to achieve clinical or operational goals:

> *"The data analytics is huge. I don't think it's a unique to UCSF problem. I think in data*

> *analytics, trying to get people who work with data and IT to link them well to the clinical situations that you're trying to address, there's a translation issue that often happens first. Somebody will ask for some data. It'll go to a data person who knows nothing about operations. And so, they have trouble actually getting the question right and pulling the right data to answer the question correctly."*

Translating into action. One clinical leader called for more concrete action to be taken to address the challenges, both in regard to cultural barriers and lack of unity in structure and standardized processes:

> *"I think there needs to be an assessment of the culture, and we've done a million cultural surveys here in the last year. But what's missing is the action behind it. We know we have cultural issues. We know we have this hierarchical system here, but you take a survey and then nothing's done. So I think that the organization really needs to focus on not only understanding or collecting the data on what's wrong, but actually implementing tangible programs that address the barriers associated with the physician/nurse, structure and communication, because it's real palpable here.*
>
> *And then in terms of the multiple committees, we need to focus on how to bring some of these committees together that are working on 50 things that overlap. How do we bring all of those committees together? And kind of lean, to use the term, "lean out" some of that, so that we can get to what needs to be done a lot faster.*

Addressing the challenge of translating organizational goals to frontline unit- or department-specific goals, one executive suggests the need for greater freedom of staff to suggest and set meaningful goals:

> *"The organization doesn't understand outpatient enough to figure that out. So [name] and I have set [goals] that are meaningful. You have to allow enough latitude for the layers below to set their own goals, as long as it filters up, because it has to be meaningful to them. And if you impose a goal on a clinic, they go, 'Well we don't have a problem with that. But we have a problem with this. And this means a lot to us.'*
>
> *Another example is staff engagement. Many staff were concerned about diversity, equity, inclusion so we just said, 'OK, we need your engagement score to improve. If you want to focus on DEI, that's your choice. That's meaningful to you. If you want to focus entirely on development plans—everyone's got to have a development plan—but if you also want to focus on DEI, you can do that.'"*

Facilitators of Leader Support for Goals

Leader meetings. The ability of leaders to support UCSF Health goals is facilitated by specific meetings that are helpful for understanding enterprise-level metrics, priorities, and motivations. The most frequently mentioned meeting was the monthly managers meeting. As a clinical leader describes:

> *"There's a manager monthly, which is led by our new President. And in that meeting it's really helpful because he talks about what the vision is and what it is that we need to stay solvent as an organization. And really the last few meetings, he hasn't been*

> *here long, but what he's brought home to all of us is that we need to continue to find ways to grow despite the challenges that we have. And the way I look at it is we're kind of like a 20 pound entity sitting in a 10 pound shoebox. And how do we make that work so that we can continue to be productive?*
>
> *How they're helpful and what I'm learning, what I appreciate about it, is that he's actually leading a lot of them and leading discussion around some of the initiatives that are happening. And I find that he's very instructional. He explains the why of what we're doing. Why do we need to grow? What does it mean in terms of the financial report that we're hearing? What does it mean in terms of the different projects that are going on to support? The 'Why' of growth. How does this connect at all with your staff?"*

Patient stories. Speaking to the difficulty of creating change in such a large organization, one clinical leader cites patient experience as a key motivator for staff to continue working toward organizational goals. Hearing direct patient stories is one example:

> *"What [made] things change in our division to re-motivate people to really double down recently was actually our patients. So we have a Patient Family Advisory Council in [department] and it was our patients who told us, 'You guys really need to work on overall hospital flow and throughput because we don't want to stay in the hospital longer than we want to.' And importantly, they all had horror stories of waiting in the ED for hours, sometimes days, waiting for a bed and just how that horribly impacted their overall experience at UCSF.*
>
> *So honestly, when we heard those direct stories from our patients, it reinvigorated all the providers to try to do more and try to do better, not just throw their hands up in the air. But that's an example of sometimes when you are working on a problem, and you own a smallish part of the overall problem, it can be really hard to keep motivated."*

Lean experts. Leaders also cite the presence and availability of Lean experts as facilitating their efforts to support UCSF Health goals. One executive highlights this:

> *"The Lean team really helped this recent project. Pulling in resources like our experts help me refine things and then look over things, and you know, allow you to condense your vision. …You might have a big project, but them coming in allowed it to happen. Before, I think everyone was really tentative. And them coming in, it's like they give permission [for] it to happen. I think sometimes you need that. Sometimes you need that kind of subject matter expert, or that outside influence to come in and say, 'Yeah, this is good.'"*

5. PERFORMANCE VISIBILITY

How Leaders Demonstrate Performance

Dashboards and scorecards. We asked leaders how they demonstrate performance on strategic goals and how this is made visible to the organization. One of the major ways is through dashboards such as the True North Board scorecards. As a clinical leader describes:

> *"We have an overall True North Board scorecard for the enterprise, and we now have one for the [clinical department] and each hospital has their own True North Board scorecard. So it tries to pull together all of the metrics, or many or most of the metrics that we monitor on either a daily, weekly, monthly basis, or however often we launch our quarterly into a scorecard. Very visual. So red is, 'We're not performing well in that area.' Green is, 'We're performing well or above benchmark.'*
>
> *But we don't have that yet at the unit level. And we don't have that yet at the divisional level. So it's only gone down as far as the hospital level. We do have true harm scorecards. If I want to find out current information about harm metrics for my ICUs, for example, there's a dashboard that I can go to pull that information. I also have other information that I need to gather from my managers for our weekly meeting. I have a standard template and they were actually in the process of editing that right now, but they have standard information that they report out to me on a weekly basis. And then I report to my boss."*

Metric visualizations. Software such as Tableau or Apex is cited by leaders as another popular way to visualize performance metrics in tandem with True North Boards. According to a clinical leader:

> *"Apex or Tableau... So in Tableau we measure our nasal decolonization. So that is actually posted and visible for the team to see on our True North Board. The Gallup survey is also posted up there for people to see how we scored on each section, and what percentile we're in. And then we have Apex up there as well to measure turnover time, so that's also visible to the team. Yeah, so we do make those tools visible."*

Portfolio Performance Management (PPM): Awareness and Usage

Lack of accessibility. While a majority of leaders indicated a general awareness of the existence of PPM and its general function, they do not have a positive view of it due to its focus on entity-level metrics as well as its usability. As one Vice President describes:

> *"It's very entity-focused right now, so I think it doesn't really impact me because I only support this system in pockets…I don't know how much the C-suite utilizes it. I'm not utilizing and I'm not required to utilize it.*
>
> *I put my stuff in there and again, this goes back to what I see [in] the leadership: they don't have an organizing philosophy that I see…So I think it's more of a C-suite tool and we put the data in for them to make their decisions. But I don't think it's a tool that is accessible or really useful at the VP level."*

High maintenance system. Other leaders describe a variety of other reasons they do not use PPM as detailed below. According to another VP and two clinical leaders, respectively:

> *"I feel like I don't have time to make the investment in it. It seems to require a lot of maintenance, and it's not integrated with some of the other stuff we've been talking about." It seems like it's very project-oriented as opposed to operations. But I feel like I'd have to hire somebody to maintain it, and if I'm gonna hire another person, I'd rather hire that person to take care of patients. Just getting back to that overhead on it. Also, my boss doesn't use it."*

> *"I know it's out there as a way to try and help organize the organization. I haven't seen a lot of personal benefit to it or what it holds to be able to help leadership manage some of these things. I just don't know enough about it and I haven't seen the benefit of it."*

> *"I try to avoid it at all costs. Probably needs either a better tutorial or easy access to what I need when I need it…probably favorite pages and things along those lines."*

PPM Alternatives

Software to visualize performance. As mentioned earlier, other third-party software such as Tableau or Apex seem to be the most commonly used tools to organize and visualize performance. Some leaders have developed their own tools, as described by an executive below:

> *"I have all these leadership structures and we have a portfolio that we keep all of our ongoing work and it's prioritized. So, I have my own homegrown tool. I find the PPM tool, you know, we started to use it and I think it could be useful. It's just that it's a very complicated tool with a lot of nomenclature that doesn't really translate to everything we do. And since I'm not being made to use it, I don't use it. But if I was made to use it, I would probably use it more."*

6. VERTICAL CATCHBALL (CROSS-LEVEL COLLABORATION)

How Leaders Engage in Vertical Catchball

Organization-wide initiatives. We asked about the extent of leader involvement in "vertical catchball" where ideas for improvement are shared and/or or goals are set by leaders up and down the organizational hierarchy. There were two common responses to this practice, both of which revolved around organizational metrics and performance goals, rather than involving a more collaborative exchange of ideas. Leaders gave the examples of the True North board and Incentive Award program (IAP) goals as common ways for ideas to trickle down from senior leadership to lower-level leaders and staff. As described by an executive and a clinical leader, respectively:

> *"The True North board is certainly supposed to be a vertical catchball: Here's your organizational goal and how can you move that needle based on your department. And then you have your pillars and whatever idea of change you want to do, put in a pillar and make sure it ties back. I think that's probably the biggest thing that that we have organizationally where there's a lot of kind of tentacles into the organization where these ideas [are] put in these buckets, and then we can point that back to the broader goal."*

> *"I can think of one [example]: our IAP goal, reflecting our incentive goal annually. Two different parts: one is organization wide. So for organization wide, we want to work on three different goals. That is coming top down from senior leadership; these are things that we want to work on for throughput, for patient experience and for harm events, and those are pretty typical. This is what we want to get through and get done to achieve for this fiscal year. Then trickle down to a lower level, to my level and my leaders and the unit level; we have reflections of those organization goals. So those are the broader goals that everybody participates in. And then we distill it down to what is meaningful and how do you translate on the unit and that becomes the departmental goal or my universe, my director-level goals. So that's a cascade from the organization wide."*

One-on-one meetings. However, catchball may occur through less formal channels such as one-on-one meetings rather than formal group exchanges, and may not be referred to using this terminology. As explained by a clinical leader:

> *"I know it's happening. I think it may be less formal than, for example, scheduling [a] 'Hey, we're gonna do catchall for an hour on this topic.' I don't think it's necessarily all that formal, although it may be in certain areas. For me and my teams, I have weekly one-on-ones with my direct reports, and we're doing a lot of this where I'm asking questions and problem-solving various things that come up for the team. I think the one-on-one structure is generally a way to do that. However, the group conversations where you have multiple perspectives, those are not going to be on a regular cadence. Those are going to be project- or program-specific. But I will say that UCSF as a whole is very collegiate and very interested in people's perspectives and having a well-balanced understanding of the current and future state.*

> *So I do know that it's happening. It may not be labeled as 'catchball' in all circumstances. But there is a definite focus on a well-rounded perspective and having all the correct stakeholders at the table."*

Strategic planning. As a more interactive process of collaboration across levels of leadership, vertical catchball is perhaps more often used in developing strategic plans at UCSF Health. According to both a VP and another leader at the executive level:

> *"I would say the last time I saw it really put in place in a really good way is when we developed the 2025 strategic plan. We did that back in 2018 and there were lots of stakeholders involved. There were key leaders in each domain. Everybody filtered and then it got socialized with all the appropriate groups. How far it got down to the front line I can't say. I think there were a couple of webinars and things like that, but how much input our frontline professional nursing and physician teams, you know, our professional clinical teams had, I don't know. But I know at least to the manager level, I think there was a lot of opportunity for catchball."*

> *"We use some catchball in our strategic plan. I'm working with the Chief Quality Officer, the Chief Medical officer, my adults CNO, my Pediatrics CNO, and our director of infection prevention to really look at how we're going to decrease our hospital acquired pressure ulcers, decrease our catheter associated UTI's or central line bloodstream infections, our falls with injury, those things that we're looking at and measuring."*

Challenges to Vertical Catchball

Complex organizational structure. One cited challenge bears similarity to that described in other areas of our interviews, e.g., leader support for organizational goals. This challenge involves the complex organizational structure of UCSF Health, sometimes leading to confusion as to who should be involved with the practice of catchball. As one executive describes:

> *"I would say for the organization, it's variable. In some ways we do it really well; other ways I think we really struggle with it. Part of that is our organizational structure with so many dotted and solid lines, and different areas of responsibility and oversight that it can make it challenging to know who the right person is to engage for support. Sometimes you get 3 people and sometimes you have trouble getting anybody. So it's just us becoming a system, I think, and trying to organize ourselves."*

Communication mechanisms. Another challenge is a lack of mechanism for sharing and escalating ideas that may arise from leader rounds. As an executive explains:

> *"What happens today is that each of our individual clinics have these monthly leadership True North board rounds, and a whole host of people are invited to attend. And then we have a debrief every week where the leaders who attended those rounds*

> *come and share what the team is doing, here are the best practices to spread, here are some escalations that we have. It could be that having some kind of middle layer between the leadership rounds and the debrief would help ensure that everything possible gets surfaced from those leadership rounds, instead of just the couple of escalations or couple of best practices to spread.*
>
> *My assumption is that there are good things happening locally that are not getting succinctly communicated up to leadership, to then get spread to the rest of the organization, partially because we may not have the right structure to exhaust all of those best practices that are getting generated.*
>
> *But also because without a group assigned to do that, you're subject to who attended the rounds, and personally I used to be able to attend rounds, but I'm on all of them across the entire [UCSF entity] and I can't do that anymore, so I rely on the debrief which relies on other people who attended and captured the right information to come tell me. So, there's a little bit of an information gap because of structure and because of just attendance and bandwidth issues on the part of leadership to join all of these different sessions."*

Facilitators of Vertical Catchball

True North Boards. The True North Board was a commonly cited facilitator of vertical catchball, more specifically through True North Board leader rounds. According to two clinical leaders:

> *"I think we do it well at the unit or department level with the True North Board leader rounds. So when we have that once a month, I mentioned the rounds we go to, so myself, [redacted list of names], like the four of us will go to all those or some group of that. And I think that allows us to have some of that feedback. Escalate challenges. Or be able to say, "Oh, why don't you talk to so and so." Or "I know this is a similar problem they're dealing with in this unit." So that kind of piece I think is helpful."*

> *"Where I generally see this happening is at leader rounds. So the leaders coming and rounding with the unit directors, the patient care directors, who are also leaders, but like maybe not at the VP or SVP level. And then also having like frontline staff there as well and I think part of True North board rounds. It's definitely formatted."*

7. ACCOUNTABILITY

Accountability as a Leader Competency

When asked to describe their own interpretation of accountability as a leader competency, interview participants shared many insightful personal definitions of accountability, each with a unique focus. The two most common interpretations of accountability took the form of responsibility and ownership as described by an executive and clinical leader, respectively:

> *"I think as a leader, you take on responsibility and responsibility comes with accountability, and sometimes it may not be your fault, but you still own it. I think for anything that happens you can always find a scapegoat, or something to blame. But at the end of the day, if I accept responsibility in this role, then I have to own it and that's totally 100% my accountability."*

> *"As a leadership competency...I want to start by saying, and I forgot where I read this or who coined it…accountability isn't punitive. It's not discipline. I think sometimes when people hear accountability, it has this negative connotation. But to me, accountability is really just doing what you say you're going to do, showing up for who you said you were going to show up for, taking ownership over whatever process or project, and being held to what you promised and your goals. And being held to that doesn't mean it's negative. It just means that's kind of a contract you've entered in with whomever, whether it's your staff or leadership, and really owning it. So for me, accountability is ownership more than anything else."*

Implicit to leadership roles. Based on interviews, there seems to be little formal organizational structure encouraging or maintaining accountability at UCSF Health. Rather, accountability is commonly cited as implicit to the leadership role. According to an executive:

> *"I would say it's implicit in your role as a leader to hold yourself accountable. I think it comes down to leadership style. Is there an accountability structure? A little, I would say. There is a little bit. I think the manager meetings, there is constant review of a data-driven insight of where we are with all our strategic initiatives and making it clear where there's issues. But what isn't there is either feedback on how to solve it, or more of an explicit expectation at your level, and that could be just for me. I'm looking at this through a very special lens where I sit in this very privileged space where I get to do a lot of really cool, modern innovation work. I'm still accountable for achieving certain metrics, and I know what those are. So I guess you could call that an accountability structure."*

Room for improvement. Accountability among UCSF Health leaders is mentioned as an area that has improved, but still has room for growth. According to a clinical leader:

> *"I think there's a culture of assuming that people know what they're accountable for. I think it's clear and in some job descriptions, but do people actually sit down to talk*

> *about it? Like when I bring on a new medical director, am I crystal clear about what their accountability is to the health system? I would say, five years ago, not so much. Much more so now. And I think that's true in other areas as well. I feel when I jumped into this role as a leader, did someone sit down with me and were they crystal clear on, 'These are your areas of accountability?'*
>
> *Now, do I think that new leaders coming in are hearing that? Yes. OK, so I feel like we're moving on the clarification of what folks are accountable for. Do I think that our executive leaders are clear, with all these layers and multiple people and multiple entities, who's accountable for what, and are there overlaps and how those work? No. So I think moving towards the future, at least from my perspective, we just need to be much more direct about what leaders to frontline staff are accountable for."*

Challenges to Accountability

Complex organizational structure. One hurdle to supporting accountability is a complex organizational structure at UCSF Health that results in confusion around reporting and accountability, as described by a clinical leader and an executive, respectively:

> *"It's always good to have a good understanding [of] who is accountable for what. And I think in a big organization like this, sometimes things get unclear like, 'Who is actually responsible for this?'…It's hard in a big organization because things change quickly, and people move on to different roles and that sort of thing. … And I think visibility into an understanding of what are the key metrics for that person, or what are the agreements in place, or that department or division, or whatever that we're measuring is really important."*

> *"Part of the challenge with academic medicine is the abundance of matrix reporting relationships which makes accountability really challenging."*

Strengthening Accountability

Building structures. There were several suggestions offered by various leaders that aimed to strengthen accountability for leaders across the organization. The first was more structured onboarding rather than relying on coworkers, as described by a VP:

> *"Much more formalized onboarding, not just with peers. Making sure that people understand how they're being measured, what they're being measured on. I think the leadership team, you know, I'm going to be communicating that differently than some of my peers might be. And so, are we giving consistent messages to our directors from the VP level, their level of accountability, and how is their accountability different than my accountability, and when, what, where is that rank?"*

Leader mentors. The second suggestion to strengthen accountability at UCSF Health is through mentoring, specifically for leaders in a new position. According to an executive:

> *"I think it's mentoring. It's a very hard organization to come into and learn. You don't have a lot of resources, so a lot of things are pushed down to you, and you kind of have to find it out yourself. Some things are still very much people based, not process based, so if you're not connected with the right people, you might not get what you need to the answers you want. So I think that's tough.*
>
> *I don't think there's a lot of mentoring or coaching, particularly once you reach a new position. They have programs but it's offered to upcoming leaders, but not to the leader there."*

Making Time for Continuous Improvement

Continuous improvement is a critical part of a leader's job, which involves looking for opportunities to enhance their organization and making necessary improvements. In the absence of an accountability metric for this, we asked leaders for their ideas on ways to support continuous improvement. There is general consensus among leaders that creating formal time or structures to engage in continuous improvement is necessary to facilitate it. According to one clinical leader:

> *"We have it really built into our day, where we have different huddles and things built into our day now. You have to schedule time to work through things."*

One executive suggests how the organization could improve time for continuous improvement:

> *"What could the organization do? It would be all leaders truly buying in and changing to that approach. We're doing, we're trying, we're getting there. The Lean boot camp is a good situation. [name redacted] reached out to me two months ago and said, 'I have five open slots,' because she knows I'm a big supporter. And I was like, 'Absolutely, I'll take them all. Let's get these five people.' I picked my leaders, whether new leader or leader that's been here forever. And so that's what we need to continue to do to get more leaders involved in continuous improvement."*

APPENDIX – Methods

Depth Interviews

We conducted qualitative depth interviews using a purposive sample of UCSF Health leaders, including the executive team, senior leaders, and clinical and operational directors. We conducted interviews via Zoom conference call, where a primary interviewer asked participants questions drawn from a semi-structured interview guide (shown below). A secondary interviewer wrote notes on the main points made by participants. All interviews were recorded, transcribed, and reviewed for accuracy. The CLEAR team coded interviews deductively based on major themes outlined in the interview guide. In some cases, we identified new codes and refined the codebook accordingly. All codes were aggregated across interviews and summarized to identify major themes on lean practices and tools used by leaders to advance strategic goals at UCSF Health.

Interview Guide

1. What types of tools or standard work processes do you and other leaders use to foster daily engagement with staff at UCSF Health?
    a. How would you describe your approach to these activities? For example, your underlying values or goals in using these practices, or your method to achieve results.
        - What barriers or facilitators have you encountered along the way?
        - How might these barriers be addressed, or facilitators better supported?

2. What does "humble inquiry" mean to you as a leader or manager? What does this look like practically in your work?
    a. How does humble inquiry help you specifically in solving problems with your staff? What are some examples of this?
    b. Have you experienced challenges to the 'humble inquiry' approach to problem solving, and how might these challenges be overcome if at all?

3. Do you conduct PDSAs with your staff, and if so, how often does this occur?
    a. Can you describe specific examples of problems that required you to engage in a PDSA with your staff?
    b. How are business analytics data & metrics being used, if at all, in PDSAs?

4. What are examples of how you, as a leader, support your organization's strategic goals?
    a. What specific tools or standard work processes do you use to support these goals?
    b. What hurdles or obstacles have you encountered in supporting organizational goals, and what might be done to remove this / those obstacle(s)?

5. How do you typically see and demonstrate progress on work that rolls up to you?
    a. Are you aware of the Project Portfolio Management (or PPM) system?
        i. *[If aware]* How does this system impact your work as a leader?
            - Is there anything that would make PPM more useful to you, so that you could easily see work that rolls-up to you?
        ii. *[If unaware]* What system do you use to demonstrate performance?
            - Is there anything that could help make progress on work that rolls-up to you more visible?

6. Are there instances of "vertical catchball," meaning that ideas for improvement are shared and goals set, by leaders up & down the organizational hierarchy?
    a. *[If yes]* What are some examples of how leaders engage in this process? If relevant, please comment on "What/How Conversations" or other tools.
    b. *[If no]* Do you see opportunities for more cross-level collaboration among leaders, and if so, how might that be realized?
    c. Are there initiatives that you are currently monitoring or measuring in collaboration with other leaders across the organizational hierarchy? If yes, could you please describe this?

7. What is your understanding of accountability as a leader competency?
    a. How has accountability been encouraged among leaders in your organization and supported as an area of development?
        - In what ways might this competency be strengthened for you as a leader or among leaders across your organization?