CALIFORNIA HEALTHCARE FOUNDATION

Working in Concert: A How-To Guide to Reducing Unwarranted Variations in Care

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About the Foundation

The **California HealthCare Foundation** (CHCF) works as a catalyst to fulfill the promise of better health care for all Californians. We support ideas and innovations that improve quality, increase efficiency, and lower the costs of care. For more information, visit www.chcf.org.

About California Improvement Network

The California Improvement Network (CIN) is a community of health care professionals sharing techniques to improve the patient experience and the health of populations while lowering the cost of care.

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Introduction

This guide is a collection of lessons from experts in the field — clinicians and organizational staff members who have addressed practice and practitioner variation within their own organizations. This guide is intended to help organizations get started in their work to identify and reduce unwarranted variations in care.

Action Groups Background

Recognizing the historically slow diffusion of innovation within the health care provider community, the California HealthCare Foundation established the California Improvement Network (CIN) to bring public and private health care organizations together to share good, better, and best practices in chronic disease care. CIN's webinars, workshops, and quarterly meetings are focused on techniques to improve the patient experience and the health of populations while lowering the cost of health care.

CIN's action groups are made up of individuals interested in collaborating to solve specific care improvement challenges. These small groups allow participants to have deep discussions and share case studies, best practices, and suggested resources and tools with one another. Between meetings, action group members can network with one another and gain access to field experts as needed. The aim is for the group's participants to develop and enact solutions within their organizations while sharing what they learn along the way with colleagues from other organizations. The intent is to share lessons learned broadly with the California practice community.

CIN's first action group focused on variations in care. Group participants were actively involved in identifying and reducing unwarranted variations in care in health care organizations in California. Participants met monthly via a facilitated conference call between September 2013 and March 2014. They also met in a one-day face-to-face session to help construct this guide — an overview of the thoughtful, practical exploration of variations in care work conducted by the group. Individual participants are listed as authors, and a description of sponsoring organizations is provided in Appendix A. Resources and tools recommended by the group are included in Appendix B.

Make the Case

Variation in care is defined as the spectrum of approaches used by a defined group of practitioners to address a specific medical condition. These approaches broadly include deciding whether and how to implement an evaluation or treatment such as a lab test, procedure, medication, or medical device; choosing where to deliver care; and deciding to refer a patient to a colleague.

The purpose of variation reduction is to determine the appropriate level of care and to ensure that all patients receive care that is needed — no more and no less. Addressing variations in care supports a triple bottom line — improved quality, increased efficiency, and a better patient experience.

Unnecessary variation in care causes a number of problems. Some practitioners may be underusing needed services, while others overuse unwarranted services. Practices on both ends of the spectrum result in a lower standard of care with significant cost consequences. Overusing an unnecessary service that does not improve health outcomes represents wasted dollars. An unnecessary service could result in a negative outcome, such as a false positive test result, complication of a procedure, or a hospital-acquired infection, subsequently worsening the patient's health and increasing costs. Underuse, on the other hand, means that patients are being denied needed services, which could also lead to worse health outcomes and increased costs.

The purpose of variation reduction is to determine the appropriate level of care and to ensure that all patients receive care that is needed — no more and no less. Addressing variations in care supports a triple bottom line — improved quality, increased efficiency, and a better patient experience. Organizations will have different reasons for addressing variations in care and will seek outcomes specific to their work.

Addressing variation may be unfamiliar to organizational leaders, including executives, board members, and respected thought leaders in primary and specialty care. To gain the support of leadership so that they provide the resources necessary to make the variation reduction work possible, your team will need to set the stage. To ensure that leaders understand the purpose of addressing variation, your team will need to:

- **Explain how addressing variation aligns with your organization's mission.** For example, reducing unnecessary back surgeries saves dollars and prevents potential adverse outcomes for patients.
- **Choose those areas of value to the organization to address first.** For its first project, one organization decided to improve the availability of decision support for practitioners. Proceeds from a project to reduce variation in prescribing branded proton pump inhibitors are now helping to fund additional decision support tools.
- **Start in the settings that are likely to be most successful.** For example, to ensure the greatest chance for success, for its first project, an organization targeted a specialty group with which it already had a productive working relationship.
- **Share evidence that connects the project to measurable quality and financial benefits.** This puts the needed investment in perspective. For example, for a project to reduce the frequency of spinal injections, one group highlighted recent literature demonstrating a lack of benefit of the procedure.
- **Align organizational goals with practitioner goals;** motivate busy practitioners to spend time on a proposed project. For example, to avoid overuse of upper gastrointestinal (GI) endoscopies (EGD), a procedure to view the GI tract, one organization reported rates of referral to gastroenterology for EGDs for patients with gastroesophageal reflux disease (GERD) and focused on educating practitioners about the American College of Physicians recommended indications for the procedure.

Physicians are some of the most effective proponents of addressing variation. As the passionate voice about doing what's best for the patient, clinicians can convince the organization's CFOs and other senior leaders to fund variation reduction programs. These senior leaders in turn will advocate for active participation from practitioners throughout the organization.

Examples of Variation Reduction Projects

This is a list of selected variation reduction projects for which a standard of care was developed based on evidence and clinical input and that have led to savings at the Palo Alto Medical Foundation. The projects addressed variation in:

- Number of skin tests in the evaluation of allergic rhinitis
- Use of nasal endoscopy for the evaluation of chronic sinusitis
- Interval between initial normal colonoscopy and follow-up colonoscopy
- Time interval for pap smear for cervical cancer screening
- Criteria for patients who receive immunomodulating medications for multiple sclerosis
- Use of G-CSF (granulocyte-colony stimulating factor) in the treatment of patients with stage II breast cancer
- Use of red cell stimulators to treat anemia in patients with end-stage renal disease
- Number of epidural injections for low back pain
- Size of ureteral stones treated by lithotripsy
- Laboratory monitoring intervals in patients receiving nonbiologic disease-modifying antirheumatic drugs (DMARDs)

Source: Palo Alto Medical Foundation variation reduction team.

Create a Core Team

At the heart of any effort to address variation in care is a dedicated core team of content experts, facilitators, and support staff. This team crafts the approach for engaging leadership and providers, and for securing their support either directly or behind the scenes via champions. From there, the core team identifies areas within the organization that are good candidates for variation reduction work, initiates conversations with leaders in these areas, and provides the counsel and logistical support for the physicians engaged in variation conversations.

Core team members are responsible for creating a blame-free environment that supports a diversity of opinion, respect for the involvement of multiple disciplines, and a commitment to quality improvement — the infrastructure for success.

Involve the Right People

Members of the core team should understand the value of addressing variation and be able to articulate this to organizational leaders. Team members must also be able to provide on-the-ground support to participating physicians and other staff.

The core team may include the following roles:

- **Program director** to lead the strategy for leadership engagement, physician recruitment, and communication with organizational leadership.
- **Facilitator** to manage the conversations and meetings with departments. A program director may also serve in this role. The facilitator ensures that the core values of the project are incorporated into project work, and addresses process issues within and outside the group with the project manager.
- **Project manager** to provide administrative support, track schedules and project plans, and manage meeting logistics.
- **Champion** to promote group's principles and recommendations to practitioners. A respected leader from the targeted specialty group or department, this person attends selected meetings.
- **Analytics staff member** to help create reports, help define specifications for analytics, and respond to data requests from the team and from practitioners.

The time commitment for each role and the number of individuals serving in these roles will change over time as the program grows.

Establish Team Communication Ground Rules

As the heart of the effort in an organization, members of the core team should:

- Use a bottom-up approach that values the input of people from all levels of the organization.
- Speak with a unified voice to leadership and physician participants.
- Maintain open communications with other teams within the organization.
- Provide honest, constructive feedback.
- Avoid judgmental terms like "outlier" and "extreme."

Provide Support to the Core Team

- **Offer ways for core team members to learn** while they are participating. For example, analytics staff members may be interested in hearing patient perspectives, even though this is not a usual part of their work. A medical director may want to be more involved in data analysis. Encouraging team members to learn new skills and explore new approaches can help increase motivation and enthusiasm for the work.
- **Invite an experienced facilitator to provide support** to the core team. Mentors skilled in facilitation and communication can train core team members in how to react to practitioners' emotions and how to respond nonjudgmentally to practitioners' questions and concerns. An outside perspective can offer new insights into tough situations.

Case Study

— Ann Marie Giusto, RN, director of clinical transformation, Sutter Medical Network

When the Sutter Health network launched its system-wide variation reduction program in 2007, the network asked a well-respected clinician and trained facilitator within the organization to lead the program.

Accountable and collaborative team members

After experimenting with varying models, we learned that a successful variation reduction program requires one accountable leader and depending upon the size of the program, one to several team members with very specific skills:

- **Data analytics expert.** Sutter Health relies on the unique skills of these vital staff members who understand SQL coding and how to operate large data sets.
- **Project manager.** With equally strong data analysis skills, dedicated project managers act as the glue between practicing clinicians and the raw data collected by data analytics experts.
- **Trained coach/facilitator.** Specially trained facilitators collaborate with practicing clinicians and efficiently guide them through the data analysis process so that variation reduction projects are identified and launched.

A black belt in facilitation

Sutter Health credits part of the success of its program to structured and facilitated group meetings with physicians. Always held in person, initial meetings bring together doctors interested in variation reduction work by the specialty so they can partner on common projects of interest. Over time, as groups become more comfortable with the work, our variation reduction team members participate in joint department meetings to address potential projects that cross specialties. For example, ob/gyn and family medicine clinicians came together to explore data and to have a discussion regarding cervical cancer screening and together, reached variation reduction standards.

Over the years, Sutter has learned that a skilled and trained facilitator is most successful addressing variation reduction during department meetings. An effective facilitator gains interest and engagement from potentially ambivalent physicians. For example, a skeptical physician may say to a facilitator, "All you care about is money." The appropriate response by a facilitator would be to ask, "What does the rest of the group think of that?" Effective facilitators learn to steer the conversation away from themselves and toward the goals of the group. The facilitator also ensures that clinicians identify and start a specific variation reduction project.

In Sutter Health's current model, three trained facilitators travel across the network to facilitate variation reduction meetings.

Recruiting clinician project leads

Recruitment of and collaboration with clinician project leads is another important ingredient to a successful variation reduction program.

To prepare for an initial meeting with clinicians, members from our variation reduction team work closely with a lead, typically a department chair or another key clinician leader, to explore nuances in care practice. For example, we will ask the following questions:

- Where do you think there is variation?
- Why are we seeing these codes in the data?
- What are alternatives to those drugs?

Sutter Health has successfully established relationships with clinician leaders across multiple specialties and disparate geographic locations as project leads because this role requires minimal time but brings great reward.

Building skills and improving the team

Sutter Health looks for continued opportunities to grow and improve its variation reduction program. The team debriefs after every meeting to provide feedback to each other, and asks for comments from practicing clinicians to further improve the model and process.

What makes our team gel are the project managers that manage our variation reduction process from start to finish. While they may not have clinical training, each manager has worked in the health care environment in an analytic capacity. Our project managers take volumes of raw data and make sense of it. They coordinate meetings and collaborate directly with the practicing clinicians as well as with our analysts.

Over my career, I have been able to participate in courses from the Institute for Healthcare Improvement, and in various trainings specific to group facilitation, leadership, and communication. But it all comes down to the same things: respectfully bringing stakeholders together, managing people's expectations with honesty, and being able to effectively communicate. As the facilitator, it is never about me. It's easy when it becomes about the patient. We are very lucky to spend every day trying to make this a better place.

Work with Clinicians

A bottom-up, physician-led approach is key to creating a robust, meaningful, and sustainable variation reduction effort. A clinician's motivation to participate is strongly influenced by the degree to which the clinician feels involved in selecting areas on which to focus attention, the provision of accurate peer-comparison data, and the freedom to develop approaches to improve outcomes. The more clinicians are told what to do and how to do it, the less interested and invested they will be in the process and results. Successful approaches to working with clinicians stay true to the values of transparency, respect, and autonomy.

For example, after being shown data that demonstrated significant variation in the selection of noninvasive cardiac tests, a group of cardiologists chose to make this an area of focus. The specialists met to decide what the standard of care should be and how best to encourage those care decisions among their peers. They were eager to see the three-, six-, and nine-month post-intervention utilization data. If this group had been directed to order one type of test over another, they would likely not have responded as favorably.

Conduct Initial Outreach Thoughtfully

- **When first contacting a department, service line, practice, or individual physician, do it in person.** Face-to-face meetings allow you to establish relationships and address initial concerns in a more intimate setting than an initial large group meeting.
- **Invite all team members to participate** in the initial meeting. Opening the group meeting to all practice staff sends the message that the process is not intended to be confrontational, and is intended to be collaborative, respectful, and collegial.
- **Meet at the practice site** rather than having clinicians come to you.
- **Send organizational information** about the purpose of the variation reduction program in advance of the meeting.
- **Bring food.** This goodwill offering helps break down barriers and sets a collegial tone for meetings.

Give Physicians Reasons to Participate

- **Physicians often do not have access to data** on the quality and frequency of the services they provide, and they rarely have access to specific information about their own practice patterns. Having this personalized, comparative information neutrally presented is often incentive enough for many physicians to participate in variation reduction efforts and to change their behaviors.
- **Many physicians appreciate the professional collegiality** and the chance to talk about how to approach specific cases that this work offers.
- **Many physicians appreciate the opportunity to define their own standards of care**, which can be tailored to their specific situations while incorporating national guidelines and the supporting evidence base.
- **Financial incentives that support appropriate care decisions reinforce the organization's commitment to delivering high quality, affordable care.** Examples of successful financial include sharing in savings achieved, payments for hitting targets, payments for active participation in committees, and yearly increases tied to achievement of targets. These incentives should always be presented in the context of doing the right thing for patients.

Let Physicians Reach Their Own Conclusions

- Simply distributing variation charts among physicians can be enough to stimulate physicians to change.
- Present the variation data to a physician and ask, "What is your reaction?"
- Wait for the practitioners to discuss what they can, might, or should do, or what others are using as indications for the service in question.
- Encourage physicians to share their variation data with others and discuss differences in approaches.

Address Concerns

Physicians may have concerns about discussing variation at first. Anticipate those concerns and be prepared to address them. (See Table 1.)

Table 1. Addressing Physician's Concerns about Variation Reduction Work

Concern	Response
This is just about reducing cost.	Variation reduction is about care: providing the most appropriate care, improving care for all patients, and making care more affordable. (If the variation reduction work is portrayed as being about cost alone, physicians may reject the approach because of the possibility that quality could decrease.)
This is one more task taking me away from patient time.	This investment of time will result in more appropriate and improved care for patients and our success as an organization. Let's talk about how the work can be done differently in the same amount of time.
The process will lower my income.	With the provision of more efficient and appropriate care, we will spend less on unnecessary services which will ultimately save patients and the organization money — savings that can be shared with providers and staff.
The data might be inaccurate or make me look bad.	The data are for discussion purposes only. They will help stimulate discussion about finding the most effective, efficient ways to practice, and ultimately help promote quality improvement. The data are presented to encourage reflection about the necessity of each clinical decision. We evaluate the behavior, not the clinician.
Waiting until reimbursement rules change is better than starting now.	Payment reform is coming. Acting now will give us the time to craft thoughtful responses so that when changes come, the group will be able to maximize value from the start.
I just want to do what's best for my patients. I'm doing everything I can already.	These conversations inject comparative data into everyone's assessment of what they do. The goal is to help everyone learn from each other and to improve the entire team's performance.

Case Study

— Michael van Duren, vice president of clinical transformation, Sutter Medical Network

Start from the bottom up

At Sutter Health, a variation reduction project begins when a group of clinicians in a medical practice shows interest in the concept of variation reduction and invites the variation reduction team to their meeting. In the early days, this was a voluntary process, where we waited for invitations from groups who had heard about this work through word of mouth. We also started telling stories about the work at larger, all-group meetings and would end the presentation with a request for invitations to come to local groups. But now that the work is more established, the leaders have set the expectation that all practices should be participating.

The first meeting

The unique culture of each medical practice helps dictate the structure of the first group meeting. Our trained facilitators may approach the meeting in a variety of ways.

- **A blank slate**. Facilitators ask, "What do you need? What are you interested in? Let's go exploring with the data." This approach may not result in a specific project after one 45-minute meeting. Facilitators may then attend subsequent department meetings to further engage physicians and help them identify a variation reduction project. This approach typically works best among practices that meet monthly.
- **A guided tour.** For departments that meet once a quarter or every six months, a trained facilitator must make the most of the meeting time. In those cases, we will ask the department chair for suggestions on where to begin, or if someone in the department can help identify areas of opportunity. In this second approach, we bring a menu of several suggestions, as well as examples of what other groups have worked on. However, the emphasis is still on the autonomy of the local group, and we emphasize that they are free to work on anything they choose.

We approach first meetings with no set agenda but with data, which have been prepared by the team's data analytics expert and project manager or both, that help stimulate conversation. We have found that conversation led by the physician participants results in stronger engagement, greater collaboration, and more successful projects. Trained facilitators are vital to this process — they guide discussion around what the physicians want to talk about.

For example, a group of urgent care doctors, who were familiar with Sutter Health's variation reduction work, requested a meeting with the variation reduction team. We first consulted with the urgent care doctor in charge of quality, who suggested that the group focus on urinary tract infections (UTIs) and the ordering of cultures. However, when our variation reduction team collected and reviewed the data on UTIs, there just wasn't significant variation and so not much of

Case Study — Michael van Duren, vice president of clinical transformation, Sutter Medical Network *(cont)*

an opportunity to improve quality or reduce costs. The team decided to instead prepare a half-dozen other topics, where data showed more variation and opportunity for improvement. At the first meeting, the team showed the group data on UTIs and also asked for permission to review the other topics. The doctors agreed, and Sutter's trained facilitator asked the group to identify which topics were most important to them.

The group decided to work on abdominal pain. Each doctor had at least 300 cases, and the data showed a five-fold variation in costs. Among the biggest drivers of variation was the ordering of CT scans. The data showed that one doctor ordered CT scans for patients with abdominal pain 35% of the time, most doctors ordered CT scans at a rate of 10%-15%, and a few doctors ordered CT scans as low as 1%-2% of the time. The doctors at the low end of the spectrum had as many patients as the doctors at the high end.

Unblinded data

During the meeting, the facilitator projected a graph visualizing this variation and waited for the group of physicians to react. The graph included doctors' names, and they had powerful reactions to the displayed data. There is the potential for doctors at the extreme ends of the spectrum to feel disappointed, angry, attacked, or criticized, but Sutter's trained facilitators sensitively helped physicians work through their strong emotions and guided the group in an important conversation about how to change this variation by changing physician behavior.

Sutter Health has learned that unblinding data, or attaching names to the data, is necessary to reducing variation in care, as this transparency helps drive changes in behavior. If a group cannot accept unblinded data, then they are not ready for the concept of variation reduction.

We assure doctors that the data shared at these meetings are confidential — they won't be shared with the public or go into a physician file or be shared with an administrator. The data are only displayed for this group to stimulate discussion.

Setting the tone of the meeting

Physicians often have varying levels of knowledge about variation reduction. To help ensure effective conversation, our team may begin a meeting by asking, "You've heard about variation reduction. You've heard that it's about data and comparing people to each other. Let's pause right there and go around the room and share not what you think about that, but what your gut is telling you right now." We might say, "This is not your typical business meeting. The whole process is very emotional, and I want to create a safe space to talk."

Usually, at least one physician will raise objections such as, "You only care about money. You are trying to force us into standard practice." We will use this opportunity to guide a discussion about the physicians' goals with variation reduction and how the information offered in the meeting can help achieve the group's collective goals. Facilitators will assure doctors that the variation reduction process is rooted in respect for the art of medicine and the physicians' medical judgment about patient care quality.

Learning from each other

When unblinded data are shared with a group of doctors at the first meeting, the facilitator typically starts by asking physicians on the low end of the spectrum about how they practice.

Using the earlier example of urgent care doctors ordering CT scans for patients experiencing abdominal pain, the facilitator may say, "It looks like you only use CT scans 1% of the time. How do you manage that?" These doctors may even worry about the infrequency of their use of these treatments. So a good follow-up question might be: "Do some of your patients end up in the ER with a ruptured appendix?" If the doctors answer no, then the response stimulates group conversation. Doctors may ask each other: "How do you manage to order so few CT scans? What is the acuity of your patients?" Ultimately, our variation reduction team hopes that the group will acknowledge that the data show opportunity for improvement and declare the topic a variation reduction project.

Getting results

Successful variation reduction projects hinge on collaborative conversations among doctors. While physicians often consult with each other about complicated cases, they do not typically discuss more common care practices. By creating a safe place to share unblinded data, our team helps doctors learn from each other in a collegial setting. Through facilitated discussion, doctors identify ways to change behavior to reduce variation in care practices.

Change happens quickly when doctors partner on variation reduction projects. For example, one of our urgent care doctors, who ordered large numbers of CT scans for patients experiencing abdominal pain, immediately reduced his use following a meeting during which unblinded data were shared. Even physicians with average use of CT scans ordered fewer scans.

At Sutter Health, we share performance measures monthly with doctors working on variation reduction projects. Physicians use the data to continually reduce care variation.

Facilitate Effective Meetings

Thoughtful meeting facilitation helps create a safe space for physicians and other clinical staff to discuss their role in variation reduction. The facilitator's role is to keep the meeting participants focused on the data, stimulate a discussion on why the differences exist, and move the group to a decision on an aspect of their practice that would benefit from appropriate variation reduction.

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When meeting with practitioners, anticipate one meeting to introduce the variation work, a second meeting to address concerns and to offer assistance in making changes, and follow-up visits to share data until meaningful change in behavior has occurred and is maintained. The intermediate outcome for these meetings is the creation of a plan to change behavior. The long-term goal is to review results and celebrate improvement.

Establish Trust at the Start

Create a safe space.

Establishing an atmosphere of trust and participant collaboration is essential. If participants feel compelled to defend their reputation and decisions, they will not be able to participate meaningfully. Facilitators can create a respectful, nonjudgmental meeting environment by using the following tactics:

- **Meet in person** the first time the group comes together — trust is more easily achieved face-to-face.
- **Set ground rules** to promote honest discussion about why practitioner behavior differs. For example: "No assumptions about reasons for observed behaviors."
- **Avoid using words like "outlier," "bad," and "wrong,"** which may make participants feel judged and defensive.
- **Establish a level of discomfort** that is "just right" to drive change. The facilitator should be comfortable with participant discomfort, which can be introduced by asking questions like, "Why do you think there is so much variation between physicians?"
- **Wait for participants to respond** to hard, provocative questions. Quietly waiting for a response heightens discomfort without judgment.
- **Keep meetings collegial** by incorporating personal stories and examples.
- **Bring food** to meetings to help create a comfortable, nurturing atmosphere.

Make sure meetings make good use of participants' time.

- **Prepare an agenda,** share it ahead of the meeting, and stick to it.
- **Plan meetings so that they last no longer than 45 minutes,** and schedule them during times that are convenient to busy physicians — for example, before practice starts, during lunch, or after practice ends.
- **Debrief with participants** at the end of the meeting. Ask participants to share what went well and what could have gone better. Either ask for volunteers, or go around the room and ask everyone to say one thing.

Create meeting environments that encourage interaction.

- **Arrange rooms** to minimize physical barriers to communicating openly.
- **Begin by checking in** — ask everyone how they are doing and if there is anything they would like to share before beginning. This process helps build rapport and trust within the group, demonstrates interest in participants as people, and gives participants the chance to mention something important to them, either positive or negative, that might cause their behavior to be misinterpreted.
- **Demonstrate that conversations are to stimulate curiosity and collaboration** by listening carefully to practitioner's responses to questions, summarizing what they said, and asking them to expand on their suggestion so you can fully understand their perspective.

Case Study

— Wendi Knapp, MD, hospitalist, Palo Alto Medical Foundation

Meeting facilitation is part art and part skill. We teach our facilitators the skills. We use a relatively regimented training process that involves role playing and coaching. Facilitators learn to prepare for meetings by researching participants. We have facilitators look at photos and do background research to familiarize themselves with participants before the first meeting. The art of facilitation comes from experience.

Initiating work and communication challenges

The first meetings with any specialty group require a good understanding of how communication happens within the organization. Our organization is very flat — not hierarchical. We are made up of four medical specialty groups that merged over seven years. Decisions are made by consensus across 1,000 physicians. That makes it very challenging to start a new program. There isn't one central person who disseminates information to everyone else. On top of this, physicians communicate by different methods: email, staff messages in the electronic health record, voicemail, and word of mouth. We've found it impossible to use only one way to disseminate information.

We faced these communications challenges when we started working with our obstetricians and gynecologists, who are located at different sites throughout all of our regions. In the beginning, I was driving hundreds of miles to every site to talk with them. Eventually, we devised a simple solution. We held regional meetings that everyone would attend three times a year. From that large meeting, the obstetricians and gynecologists developed committees to work with us on variation reduction and to be responsible for disseminating information to the rest of their peers.

Handling resistance

The first meetings can be sticky. You may have to address resistance. Because we are driven by fee-for-service, many people will question how variation reduction work will affect their bottom line. Even though they support affordability and quality, they have underlying doubts.

When I started working with one department, I introduced the idea of affordability and how it was affecting our accountable care organization contract negotiations. I didn't foresee how inflammatory this would be. The doctors erupted in anger, and one stormed out of the room. They said, "We're not going to let insurance companies tell us how to practice!"

I felt like I had failed as a facilitator. I had wanted them to understand that for us to keep and take care of our patients, we needed to be conscious of affordability and quality. It was a disastrous meeting. The physicians were so angry. I followed up with each one of them one-on-one. Interestingly, after the meeting, multiple people expressed their support. They said, "We have opportunities in affordability. I'm concerned about my friends who come to PAMF, and I want to be responsible with their resources." I also realized that it wasn't about me. It was just too soon for the group to start thinking about these things.

Groups go through an engagement cycle. They can be very resistant at the beginning. They don't want to talk about transparency, practice patterns, or charges. They are very self-conscious and afraid to examine their own costs.

That group ended up working on variation reduction on their own. They discussed the issues that had initially made them so uncomfortable, but they did it in private. Now that they are going to be held responsible for quality metrics by the Centers for Medicare & Medicaid Services, they realize that they need to learn how to become transparent about their pricing and charges, and about the contracting process.

Evolution from first meeting

When we started working with the urology group, they were very cooperative, and they liked getting together. They were suspicious of the data, though. When I showed the group their data on transurethral resection of the prostate (TURP, a common procedure), their response was: "The data are wrong. Look at Dr. X, he's got a little bar up there, but we know he's the busiest." The data were sent to Dr. X, we had a discussion about how he was coding differently, and we revised the data. Physicians sometimes have a workaround, and you have to communicate with them to figure that out.

This group has gone from allowing us only 20 minutes on their meeting agendas, to now spending whole meetings on variation reduction. At one meeting, they had a two-hour conversation about their data and came up with four standards. I just sat back and listened. At another meeting, they got into a controversial topic and couldn't come to common ground. They turned to the variation reduction team and asked, "What are we supposed to do now?"

Our role as facilitators is to carry data to the meetings, to leave the meeting when they don't need us, and to know when to step back in when facilitation is needed again.

Keep Open Conversation Flowing

Seek facilitation training and mentorship as needed.

Facilitation is a skill. The ideal meeting facilitator is patient, nonjudgmental, and able to elicit conversation. The facilitator can be a staff member who is already skilled at facilitating and who is comfortable seeking help to be more effective. Facilitator tips include:

- Practice responding to anticipated questions.
- Base expectations on what is achievable. Have the group work on something easily achievable at first and establish success, even though you may prefer that the group dive into a more complicated topic.
- Research participant backgrounds and other relevant information before the first meeting to understand the makeup of the group.
- Consider meeting with team members individually before the team assembles to get a better sense of individual wants and needs, and to demonstrate an interest in participants as people.
- Refrain from using the authority of the chair to dominate communication when facilitating. This can be difficult for clinician facilitators. At least initially, bring along a colleague to observe your facilitation skills and offer feedback about what was successful and what could be improved.
- Consider facilitating as a pair (for example, clinician and QI/outreach staff member).

Use data as talking points.

- **Use data to spark conversations,** not dominate them. While physicians may question data, there is no need to be defensive when showing it. Remind participants that data are used to help discover areas where practice variation exists and to pave the way for understanding that variation. The goal is creating a common set of indications and contraindications together, and knowing where the baseline is serves as the first step.
- **Ask for examples to humanize data.** Ask participants: "Has a patient come to you about this?" Case studies and stories help personalize discussions and bring the data to life.
- **Communicate visually** by providing charts and illustrations that synthesize the data and make it easily understood. If physicians can see variations, it will be easier to broach topics with each other without the facilitator having to prompt the group.

When participants talk, the facilitator should be quiet.

Aha moments will occur naturally and will have more meaning if participants arrive at them on their own.

Use Data Judiciously

The purpose of data is to stimulate conversation about differences in practice patterns that might contribute to variation. Having physicians view the data, and learn about each other's practice patterns from those within the organization, will facilitate the discovery that will ultimately lead to developing internal standards to which they will hold themselves accountable.

Don't overwhelm participants with too many data charts. Bring only what's necessary. The less you bring with you, the more you seem interested in understanding the practitioners' perspectives about why they do what they do.

Be visual with the data.

- Create simple, easy-to-read graphs so physicians get the takeaways quickly.
- Tell a story with the data presentations.
- Make sure the visuals are self-explanatory. Conversation will be sparked quickly if the graphics don't require explanation.

Physicians may be confrontational about the data . . . at first.

- Physicians may object to the data because they feel as if their reputation is at stake. Rather than defending the data, facilitate "no shame, no blame" conversations about what to do about what the data show.
- The data are not intended to judge the overall quality of a clinician's care, but the clinician may see it that way. The data are meant to help the group focus on a specific behavior or decision the clinician is making.
- Note the resistance and ask, "Is this making you uncomfortable?" Or say, "I sense some defensiveness. We are looking at the data to focus on how we can more effectively take care of our patients."
- Remind the physicians that the data are a tool to facilitate discovery.
- Reveal data at the same time to all practitioners so that they are reacting to it together.
- Address physicians' concerns about the data (see Table 2.):

Table 2. Addressing Physicians' Concerns about the Data

Concern	Response
Data are inaccurate.	How can we make the data better? Be prepared to talk about the source of the data and how it was collected or manipulated.
These data aren't real.	Share unblinded data with practitioner approval to stimulate sharing of best practices, but do not share data publicly outside of the meeting without agreement from the involved practitioners.
The data might be inaccurate or make them look bad.	These data are not shared outside of the group and are presented for the purpose of discovery, learning, and continuous improvement. We won't use the data for incentives until we are confident of their accuracy and validity, and until you have time to respond to the data.

Strike a balance between standardization and flexibility.

Avoid spending time on specific cases that don't fit the appropriateness criteria. Focus instead on the percentage of all cases that receive the service in question. For example, a practitioner might bring up a case where it was felt that spinal injections were believed to be the most appropriate treatment. The fact that 60% of this practitioner's patients receive these injections, far more than most referring PCPs, should be the focus of the conversation. Focus on consistent patterns that suggest overuse rather than discuss uncommon cases for which the service was appropriate.

- **Data are never perfect,** but it is important that attribution at the provider level is as robust as possible and that definitions are shared.
- **Physicians may ask for data to be manipulated in a certain way.** Acknowledge then explore the request. If the request proves to be too time-consuming, share what would be involved to get the answer, and ask if the data are good enough to continue the conversation.
- **Explain that the recommendations are not intended to fit all patients but should fit most.** There are always appropriate clinical exceptions — patients who require the service in question; that is why the clinician is so important. The target is not 100% adherence to the recommendations.

Case Study

— Christine Castano, MD, medical director of utilization management, HealthCare Partners Medical Group

At HealthCare Partners we have a long tradition of sharing performance metrics. For example, we conduct quarterly patient satisfaction surveys, and every provider's results are presented for all to see. This approach can work well with some groups to drive variation reduction, but in other specialty groups, neither the data nor the culture will support this kind of work.

We use Optum's ETG (Episode of Treatment Group) tool to support our variation reduction efforts. This tool combines related services for a given diagnosis then assigns the total cost to an attributed managing physician. All of the services a patient got for her rheumatoid arthritis, for example, are included: she was on medications, went to the physical therapist, had labs done, had so many office visits, and needed a cane and a power wheelchair. You start to get a better picture of overall costs at the patient level for an episode of care.

Transparency

Rheumatology was the first group we worked with. A doctor emailed me: "We've noticed that rheumatologists that came from one section of the company see patients more frequently than the ones that come from the other section. Is this something we can use that tool to sort out?"

Using the ETG tool, we discovered that the main driver of cost for rheumatology was not the number of visits but the prescription of biologics. We got the rheumatologists together in a room to discuss the findings. We generated bar graphs so everyone could see the average cost for a rheumatoid arthritis patient for each of the doctors. We shared unblinded data. Although most of the doctors had never met one another before, they were excited to be in a room together and very interested in seeing the data.

One of the older doctors, who had practiced the majority of his career before biologics were invented, was pleased to be on the low-cost end of curve. Well-known and well-respected, he was a living example of getting great outcomes without high costs.

Incomplete data and group dynamics

Our work with the obstetrician/gynecologist group has evolved more slowly. There are some inherent challenges in working with ob/gyn groups: Someone needs to stay

Case Study — Christine Castano, MD, medical director of utilization management, HealthCare Partners Medical Group *(cont)*

available for deliveries, so all members of a practice cannot attend meetings together. This creates a lack of cohesion within the group. Some of our physicians practice in very small groups, and others are in larger coalitions, so there are different alliances and practice patterns among them. Plus the data are challenging, since they are based on claims: The management of abnormal bleeding is vastly different in a 22-year-old and a 68-year-old, yet the data can be difficult to separate, since they may all be based on the same set of ICD-9 codes.

For this specialty, we elected to present blinded data to the group, while allowing individual physicians to locate themselves on the spreadsheet. Driving toward a common practice pattern has been more difficult in this specialty than in others. One reason is new advances in surgical techniques. There may be better techniques that some providers have not been trained to do. Conversely, some providers may have invested in training for techniques without strong evidence supporting their use. As a system, we do not feel this practice is in keeping with high-value patient care.

One solution is to have those providers who are trained in new techniques act as the local go-to provider for that procedure. Patients, however, may not wish to see to see a provider who is not their usual physician. There are also issues that can develop in the practice group around compensation and productivity as providers diverge in their abilities. At the same time, the go-to doctor for a particular procedure will appear in data analyses to be overusing that procedure if the intra-practice referral patterns are not taken into account. These are some of the challenges that a group must face as it tries to bring greater value to the care provided to their patients. How do you address each provider's question of "what's in it for me?"

Data as a starting point

Our ultimate goal is to establish a culture of transparent sharing of accurate data that will drive providers toward agreed-upon best practices.

We preview the data and present the information with the understanding that the doctors will know the local circumstances, and that they may notice things that are out of whack that point to data errors. We always expect surprises and have trained ourselves to not react defensively.

We let the data speak for themselves, and allow the group to have a discussion about the data. Sometimes we will offer guiding comments, such as, "I'm a PCP, and I don't know about this particular issue. Let's say in the course of a couple months, I have three young women with swollen joints, and it looks like RA. I send one to you, one to you, and one to you, and each patient comes back to me with a different treatment plan. Can you please explain to me why?" Often doctors don't realize that they are each doing different things. When you put it this way, no one is singled out, and you are recognizing that each doctor is using their best judgment.

Even if the meeting doesn't end in a consensus, individual doctors often end up making changes on their own. When a doctor realizes that their clinical decisions are different than their peers', they might go home and think, *Maybe I should do this differently.*

Measure Value

Value is the balance between quality and affordability. To measure value, plan to track both from the outset. Increasing quality means improving access to care, improving clinical outcomes, making sure the most appropriate care is delivered, and improving the patient's experience of care. To increase affordability — or reduce costs — organizations need to eliminate unnecessary patient and payer expenses. Reducing unwarranted variation in practice — decreasing underuse and overuse of services — can improve both the quality and cost elements of care. In other words, variation reduction will increase the value of care to the patient.

Define Value for Your Organization

- **Identify the quality and cost elements** that will be measured for each project.
- **Define the scope of analysis.** What question are you trying to address? Is it best to evaluate value for a single variation project at a time, or does the organization have the capacity to measure value for multiple projects simultaneously?
- **Establish parameters.** Set a timeframe for the data being analyzed, and define a comparison group either prospectively or retrospectively.

- **Define the value proposition** (e.g., better outcomes, lower cost, or both). If cost is the main focus, make sure that there are quality measures attached to assure that cost is not being reduced at the expense of quality. Define outcomes or appropriate behaviors that support the value proposition.
- **Share projects with both staff and patients.** Transparency helps engage staff and patients as partners in the process.

Address Misperceptions

Be prepared for the initial perception that work on clinical variation reduction is lost revenue.

- Increasing affordability may result in some revenue loss early on in variation reduction work, especially for fee-for-service patients, but in the intermediate term, the cost per case should go down. Lowering costs will also gain the attention of payers and potentially increase your market share. For example, payers prefer to refer patients to organizations that can demonstrate that they provide high-value services.
- Define value for each component of your organization, show how your team will evaluate the value of services to the patient, demonstrate a plan to quantify value, and share your results.

Blend cost and quality measures to determine a return on investment.

When return on investment (ROI) needs to be defined in terms of both value and dollars, it can be hard to measure. However, organizations can blend the quality portion of value measurements and cost calculations to make a single value measurement that is useful to the organization.

- First, define value by setting the quality and cost components that will be measured.
- Second, consider how traditional ROI calculations might be incorporated into the development of cost measures.
- Third, measure value creation and report the data from a blended perspective.

Tailor Discussions to Your Audience

How you talk about creating value may be different depending on your target audience (see Table 3.):

Table 3. Talking about Value with Different Audiences

Audience	Message
Clinicians	Doctors, physician assistants, nurse practitioners, and other clinicians will understand clinical quality improvement measurements. When it comes to defining value projects, you may need to spend time introducing the concept of appropriate reduction of cost to the patient and the elimination of waste in the medical system.
Data analysts	While analytics professionals spend much of their time working with clinical performance data, they are not clinicians and may not have a full understanding of clinical terms and codes. Data analysts should work closely with clinicians and should be trained in quality improvement methods.
Managed care staff	Any clinical overuse project can easily be used to create value measures, since objective outcomes and the resultant costs can be measured directly. Managed care departments tend to support value creation projects, as their goals and those of the project are frequently aligned.
Finance staff	An organization's financial professionals focus primarily on the cost side of the equation. They may not see the importance of linking cost to quality measurement. Demonstrating the risk of reducing cost at the expense of quality should be stressed with finance department personnel. A challenge is the realization that creating value means initially investing in practice redesign, which may temporarily reduce revenues. Justifying this approach involves working with the finance department to create an overall business plan including a prediction of the project's return on investment.

Blending traditional ROI thought process into value measurement: an example from geriatric medicine

An organization's geriatrics team was concerned about patients who were discharged from skilled nursing facilities (SNFs). Their data showed notable variation in the percentage of recently discharged patients who had timely primary care follow-up appointments. The geriatrics team decided to reduce this variation by starting a transitional care phone call program.

Measureable quality elements included:

- How often a transitional care phone call from the geriatric specialist occurred to help the patient coordinate follow-up care with a PCP.
- How many SNF patients were seen by a PCP within one week of discharge.
- Rate of emergency department (ED) visits and hospital readmissions among patients recently discharged from a SNF.

Cost measures included:

- Cost of the transitional care phone call by the geriatrician (added cost).
- Cost of the follow-up appointment with the PCP (expected cost).
- Cost of any repeat ED visits or hospital readmissions within one month of discharge (preventable cost).

This clinical variation reduction project incorporated traditional ROI thinking. If the geriatricians are paid additional fees for making the transitional care phone call, this cost would be passed to the patient, reducing the value of the service to the patient. If this additional cost increases the rate of patient follow-up with the PCP, however, the improved quality would increase the value of the service provided. Finally, if the transitional care phone call prevented high-cost repeat ED visits and hospitalizations, the overall cost to the patient would decrease significantly, thereby increasing the value of the service to the patient and increasing ROI.

In this case, cost and quality need to be measured to show that the process of transitioning patients from a SNF to their home is creating more value to the patient overall even though there is a predictable increase in up-front operational costs. A small cost investment for the transitional phone call, approximately $200, could result in an ROI savings of $25,000 per patient per hospitalization prevented. Determining the decrease in readmissions to the hospital or ED, both of which are cost and quality measures, is a necessary component of the ROI calculation. For patients who belong to a capitated or HMO insurance plan, the ROI would be clear to finance professionals, and the quality improvement aspects of better follow-up and transitional care would be clear to clinicians.

Case Study

— Veko Vahamaki, DO, medical director for diagnostic coding, Palo Alto Medical Foundation

I use the equation *value = quality / cost.* Quality is the more complicated variable because it can be divided into all sorts of things. There are objective quality measures, like how many units of blood were lost, and subjective measures, like patient pain levels. There are also challenging quality elements such as patient satisfaction, medical record quality, access to care, and appropriateness of services. Each of these can have their own particular unit of measurement, complicating data analytics. Fortunately, cost is easy to measure. The unit is universal, and regardless of the currency, you can convert it.

The innovative concept that clinical variation reduction efforts help to emphasize is measuring total value — not cost or quality alone.

In the beginning, it may easier to think in terms of "tiers."

Tier 1: Only one variable

Tier 1 projects measure only one variable in the value equation. For example, you could measure cost and assume that quality stays the same, based on what experts are telling you. Alternatively, you could measure a quality variable and assume that cost is constant. I

Case Study

— Veko Vahamaki, DO, medical director for diagnostic coding, Palo Alto Medical Foundation *(cont)*

consider this a weak value creation project, because you are measuring only half of the equation, depending on expert opinion to make an assumption that the other half is constant.

Early on, we conducted a Tier 1 project to improve the quality of our electronic health record. I got a group of people together from family medicine, internal medicine, endocrinology, and bariatric surgery who were interested in weight loss. They said that first, we should increase the number of obesity codes on the medical record. Few charts showed that patients were obese even though height and weight measurements were evidence that patients were obese. The first step to treat these patients was to identify that they were obese. We identified BMI based on vital signs and asked primary care doctors to add those data to the medical record. Sure enough, the number of obesity codes on the charts went up by thousands. The quality of the medical record was improved with not much added cost as result of the project. In this case, value was measured by demonstrating an increase in quality and assuming that cost was held constant.

Tier 2: Cost and quality measures together

Tier 2 projects measure both cost and quality at the same time. I consider this a "standard" value creation project, because it measures at least one of each variable.

We conducted a Tier 2 project with our oncologists who were looking at the use of colony-stimulating factor (CSF) drugs with breast cancer patients. These drugs, which are used to increase white blood cells to protect patients against infections and fevers, cost thousands of dollars per dose. A national study, however, showed that CSF drugs don't improve patient outcomes. Our oncologists looked at their data and found that some were using the CSF treatment and some were not. The variation reduction team also showed cost data to the oncologists. They noted that those specialists that were not using the CSF treatment had significantly lower costs overall. The group decided to create a clinical standard and discontinued use of CSF drugs in a specific group of cancer patients. We measured the incidence of infection and fever, and it was on par with the national level. In one year, the total amount of charges to the patient was $3 million less. Amazingly, a few months after they enacted this breast cancer standard, costs in lung cancer went down too. We realized the oncologists had spread their CSF clinical standard to a different cancer. Now they were applying principles of variation reduction on their own. They were rapidly driving down costs, and at the same time measuring quality outcomes variables so they'd know that they were not hurting patients. Value was again measured by studying both quality and cost data.

Tier 3: Multiple variables

Tier 3 projects are the holy grail of value measurement. I consider this tier "strong" evidence of value creation. These involve multiple variables on both sides of the equation — you might measure 3-5 quality elements and 3-5 cost elements.

What happens is that a Tier 1 project eventually becomes a Tier 2 project as a variable is added, and then multiple Tier 2 projects become a Tier 3 project if they are related to the same medical condition or service. Those are system-level projects that sometimes involve multiple specialties and complex data. You may also be dealing with subjective (opinion-based) and objective (clinical) data together, and it can get complicated. Ultimately, however, if the Tier 1 and Tier 2 variation reduction projects are well designed, the larger Tier 3 projects can be used to measure total value of care for even the most complex medical services.

Variation reduction is more than quality improvement

How is variation reduction different from quality improvement? Quality improvement often ignores cost. Variation reduction creates value. When you tell most quality departments that diabetes patients need a test, they may follow through with no accountability of cost. That medical director can use resources at any cost within the given budget to achieve that quality measure. For variation reduction, cost is just as important as improved quality. That's value. We're measuring both so we can tell the patient, "I can prove to you that we improved quality without driving up cost."

Appendix A: Contributing Participants

DaVita HealthCare Partners

DaVita and HealthCare Partners joined forces to form DaVita HealthCare Partners. DaVita has 1,912 outpatient dialysis centers in 43 states, serving approximately 150,000 patients, and 24 centers in five countries outside of the US that serve approximately 1,000 patients. HealthCare Partners, a division of DaVita HealthCare Partners, serves 745,000 managed care patients across California, Florida, Nevada, and New Mexico, and is the largest operator of medical groups and physician networks in the country.

HealthCare Partners has initiated variation reduction work in both primary and specialty care. They have found that conversations among specialists, which rarely occurred before these variation reduction project meetings, were an additional benefit of the work. HealthCare Partners is now including employed and contracted specialists in these specialty meetings as well.

Humboldt–Del Norte IPA and Foundation for Medical Care

Humboldt–Del Norte IPA and Foundation for Medical Care provides administrative, medical management, and care coordination services for health plans and local self-funded employers. The foundation is part of the California Foundation for Medical Care. Together, they serve approximately 15,000 patients in Humboldt County.

The IPA/foundation is currently engaged in a long-evolving effort to address variations in care. It faces the challenge of small practice sizes and partial access to practice data. Their current approach to variation reduction includes reducing the number of measures followed, limiting work to include only those practices that use electronic health records, and exploring different sources of data such as PPO claims and Medi-Cal Managed Care.

Palo Alto Medical Foundation

Palo Alto Medical Foundation, part of the Sutter Health network, is a nonprofit HMO serving more than 800,000 patients. Its 1,200 physicians and 4,300 employees are at 40 locations across Alameda, San Mateo, Santa Clara, and Santa Cruz Counties.

Palo Alto Medical Foundation has been addressing variations of care since the early 2000s. Today, variation reduction is one of two major cost-reduction strategies for the medical group. The approach is bottom-up, with departments deciding what variations need to be addressed. Eighty-five variation reduction projects are projected to result in $56 million in savings to the patient over five years. Five physician champions, a full-time analyst, a medical director, and a half-time project director are supporting the implementation of standards that are reducing variations in care and cost.

Sutter Health

Sutter Health, a nonprofit HMO, is a network of physician organizations, nonprofit hospitals, outpatient centers, home health, and other medical services that care for 3 million patients in more than 100 Northern California cities and towns.

Variation reduction is a robust initiative across Sutter Health that was started in the Palo Alto Medical Foundation in the late 2000s. Soon after, variation reduction was initiated across Sutter using episode grouping and analysis. Today, over 400 projects have been implemented across the continuum of care, and that number is increasing on a weekly basis.

Sutter has standardized the work flow and deployment model so that data analytics are done across the organization. Progress has been made leveraging data directly from EPIC both on the ambulatory and the inpatient settings, and therefore variation can be explored within the local region as well as across the organization. This also helps projects spread across the organization. While data are important, the key to success is discussion with providers. Sutter has trained facilitators that support variation reduction, and these skilled facilitators are one of the reasons so many clinicians eagerly request support from the variation reduction team. Sutter continues to preserve a bottom-up approach, and clinicians across almost all specialties are actively participating in variation reduction work. Variation reduction has not only improved the delivery of care, but it has also decreased costs and increased collaboration among providers.

UCLA Health System

UCLA Health System provides services to most major HMOs and patients enrolled in PPOs. With more than 2,000 physicians, UCLA serves more than 300,000 people at four hospitals and at primary care and specialty offices throughout the Los Angeles region.

UCLA Health System started addressing variations in care in 2013. Their variation reduction team engages specialists at the department level to define outcome measures for procedures and conditions, and to identify the path to achieving those measures. UCLA is quickly scaling up its efforts throughout the system.