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These days, teamwork is all the rage in health care. No matter where you look, there is talk of teams. There are interdisciplinary or interprofessional teams, medical teams and nursing teams, patient-centered teams and patients at the center of the team. We constantly hear that there is no “I” in the word “team,” or else we find out how to put it back into the team through leadership. Listen to the buzz and you find that teamwork today isn’t only for elite players—the quarterbacks and pitchers of health care—but is all-inclusive. Housekeepers, transporters, patient care assistants, and elevator operators—everyone is supposedly on the team, and it supposedly takes everyone to deliver patient care and enhance the patient experience.

In 1999, the Institute of Medicine launched the contemporary patient safety movement with To Err Is Human, which reported that each year almost 100,000 people die and 1.5 million are injured because of medical errors. Its subsequent report in 2001, Crossing the Quality Chasm, argued that better teamwork and communication among all those who work in health care could vastly reduce that toll of injuries and deaths. In 2013, the World Health Organization published its “Framework for Interprofessional Education and Collaborative Practice” and the Lancet its “Health Professionals for a New Century: Transforming Education to Strengthen Health Systems in an Interdependent World.”

Given the rhetoric about the importance of teamwork, one would think that health care institutions of every kind would have taken up the challenge to move from the traditional model of parallel play among intimate strangers (known in the trade as “siloed care”) to a genuine teamwork model. One would also think that this paradigm shift in the rhetoric would be reflected in both the facts on the ground and the statistics. When one looks at the statistics, however, there is
barely any positive movement in the number of patients harmed or killed in health care today. In fact, new studies document that the IOM’s original estimate of 98,000 people killed each year from medical errors and injuries was a dramatic underestimation. Recent Medicare data tells us that more than 200,000 patients per year die as a result of avoidable medical harm, and we know one in three patients admitted to a US hospital suffers an adverse event there. Yet another report estimates the number of deaths to be between 220,000 and 440,000. As for the facts on the ground, anecdotal reports reveal that—some pockets of excellent teamwork notwithstanding—teamwork in most health care settings is more of a dream than a reality. What explains this contrast between rhetoric and reality? We believe it’s a failure to understand what teams are, how they are built, how they are led, how members on teams should really behave if genuine teamwork is to be realized, and how they are sustained over time.

There are many theoretical and conceptual books and countless articles that have explored issues of teamwork in general and teamwork in health care in particular. The editors, and many of the authors in this book, have read most, and have even written some of them. To tackle the issue of teamwork, we have, however, taken a different approach. Rather than write a theoretical book about what teamwork is, what it is not, where it exists in health care, what barriers prevent its implementation and how they can be removed, we have chosen instead to address these questions through narratives and reflections that vividly describe good teamwork as well as problems in creating, leading, and working on genuine teams. What we believe is too often lacking in the literature is a clear and compelling picture of what teamwork looks like on the ground, in the institutions where health care work is delivered and where teams play well, or don’t play well, on a daily basis. The question we ask here is thus: What is the state of play in most health care institutions?

To describe the state of play, we have asked clinicians to write what we think of as “where the rubber hits the road” stories or reflections about the nature of teamwork in their own particular work setting. To gather these stories, we talked to many people in different health care disciplines. In the invitation for submissions we wrote the following: “We are seeking short, concise narratives that describe a
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- Concrete example in which you personally have been involved. The idea here is not to focus so much on the individual doctor-patient, nurse-patient, therapist-patient communication but the teamwork that was involved in ensuring that the standard of care was met or exceeded. If the patient or family was involved, so much the better. Stories can deal with interprofessional or intraprofessional teamwork. On balance, we would prefer to have more stories about interprofessional or occupational teamwork. Nonetheless, we recognize that interprofessional work depends on the ability to create teamwork within an occupation or profession. Stories involving support staff, such as housekeepers who spoke up about a patient safety issue, are definitely within the purview of this book. We would also welcome personal reflections that would enhance our understanding of either how to produce genuine teamwork or the obstacles that stand in its way.

When we extended our invitation, we deliberately asked people not to focus exclusively on the dyad of doctor-patient, nurse-patient, PT-patient relationship, which is what so much of the pedagogy on communication in health care has addressed. Although we have included stories by patients, and patients are involved in almost every story, we are convinced that no system of patient-centered care—or that claims it wants to put the patient at the center of the team—can succeed if all the rest of the players are flying solo and there is essentially no team on which the patient can, in fact, play. While good communication and teamwork among different groups, professions, and disciplines does not necessarily assure good communication and teamwork with patients, it is a necessary but insufficient condition for the genuine inclusion of the patient on the team, and, thus, the creation of patient-centered care.

Indeed, we would bet that poor communication and lack of teamwork (particularly what Suzanne Gordon terms "total communication meltdowns," or TCMs) are the foundation of patient harm. Even if such TCMs don't directly involve patients, if you look carefully, you will find that at the sharp end of such poor teamwork and communication is the patient who inevitably suffers from the existence of unresolved conflict, abuse, and other major and minor teamwork failures. Those who work in health care at every level often assert
that their "professionalism" will somehow trump the fact that they have been told off, reamed out, ignored, or otherwise publically or privately disrespected and that they can function at an optimum level in spite of all manner of conflicts and problems. Health care managers and administrators are even more enamored of the myth that health care workers can just suck it up and perform with aplomb in spite of unmanageable workloads, fatigue, lack of support, simmering resentments, and outright conflicts as well as other assorted, unresolved problems.

This is a long-winded way of saying that although this book does not focus squarely on the patient and clinician-patient communication, its every word, comma, and semicolon is dedicated to the proposition that excellent intra- and interprofessional teamwork and communication among those who work in health care is the only avenue for putting the patient first and making health care safer and more cost effective.

People who work in many different areas in health care have written the stories in this book. Even the stories from the point of view of patients are written by patients who have a great deal of experience in health care, either as clinicians or researchers or both. Almost all the authors are identified by name. In one case, in which the author reported on a serious failure of teamwork, the author requested not to be identified, and we decided to include that anonymously written story. We can assure you that this is an expert practitioner who, for reasons that will be obvious when you read the story, worried about being disciplined if identifying details were printed.

We deliberately solicited these very "real world" stories because we wanted to move beyond theory to practice to show—rather than tell—readers what it takes to make a team, lead a team, and be a team member. We also wanted to show, rather than tell, how easy it is for smart people of very good will to defeat—or create—teamwork and thus quality patient care.

All of the essays in this book explore what the great Canadian sociologist Erving Goffman called the "backstage" and private spaces where culture manifests itself and where it is either reinforced or transformed. In Goffman’s theories, front-stage spaces are those in which people present their idealized self or their ideals and the
behaviors to which they aspire. Spectators to front-stage exchanges, such as a speech about the necessity of teamwork, the presentation of a white paper on the need for civility and respect, or a workshop on conflict resolution, often extol, applaud, or assent—sometimes enthusiastically or sometimes grudgingly—to the ideas expressed. It is in backstage and private spaces—the discussions after the presentation that take place in the hallways, the behavior exhibited during the transfer of information (or lack of transfer of information) between putative team members, the way one deals with a suggestion or warning from a so-called subordinate—that we understand what issues need to be targeted or where change is actively occurring. Changing culture as it relates to teams from the front stage to these backstage and private spaces is the challenge in patient safety, interprofessional education, and practice.

Although this book is not a theoretical exploration of teamwork and its lack in health care, we do want to present a few basic definitions of what we consider to be teamwork, team intelligence, and several other key concepts without which teamwork is impossible. These concepts and definitions come to life in the stories we present.

When one asks about the state of play of teamwork—and how collaborative caring is—in health care the question that inevitably arises is “What in fact is a team?” When we looked up the etymology of the word “team” in the dictionary, we found that “team” first appeared in Old English and referred to a group of “draft animals that are yoked together to perform a task.” The operative concept here is coordinated action. To be yoked together means that one can’t move unless one’s teammate cooperates and knows in what direction they’re heading. “Team members” operating in silos are by definition not members of a team. Not only are they ineffective but also they work in a counterproductive manner.

One of the leading theorists and researchers in teamwork, the Harvard sociologist J. Richard Hackman, would call such groupings as teams “in name only.” Hackman articulates five conditions of successful teamwork: “The team must be a real team, rather than a team in name only; it has a compelling direction for its work; it has an enabling structure that facilitates teamwork; it operates within a supportive organizational context; and it has expert teamwork coaching.”
Simply producing a good output (in this case quality patient care), Hackman cautions, is not enough to qualify as an example of successful teamwork. To be effective, a team or work group must satisfy three other requirements: It must produce an output that "meets the standards of quantity, quality, and timeliness of the people who receive, review, and/or use that output"; the process through which that output is produced must enhance "the capability of members to work together interdependently in the future"; and the process through which the team or group works must contribute "to the growth and personal well-being of team members."

As David Feldman has written elsewhere, "Teams achieve competency when there is an optimal outcome and when team members feel good about the work they have done, can repeat the performance, and can teach their performance to others." Scott Reeves and his colleagues have defined the concept of interprofessional teamwork to include the fact that those who work together on teams "don't only learn with and from each other but about the work that different members perform." (We followed this guideline in choosing our stories and rejected several because the authors—say a physician—defined teamwork as handing a patient off to another professional—say a social worker—but could not describe, in their narratives, what, in fact, the social worker did with, or even for, the patient.)

Hackman's conceptualization of teams and teamwork has informed Gordon's notion of what she calls "team intelligence"—whose presence or absence is highlighted in every one of the stories in this book.

Team intelligence is the active capacity of individual members of a team to learn, teach, communicate, reason, and think together, irrespective of their position in any hierarchy, in the service of realizing shared goals and a shared mission. Team intelligence has the following requisites:

- Team members must develop a shared team identity that allows them to articulate a shared mental model, shared language, and shared assumptions.
- Team members must be willing and able to share information, cross monitor, and coach all members of the team, as well as to solicit and take into account their input, no matter their position in the occupational hierarchy.
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• Team members must understand one another's roles and work imperatives and how these mesh so that common goals can best be accomplished.

• Team members must help and support one another so that each individual member can perform his or her job efficiently and effectively.

One of our favorite definitions of teamwork comes from Edgar Schein's book Helping: "We do not typically think of an effective team as being a group of people who really know how to help each other in the performance of a task, yet that is precisely what good teamwork is—successful reciprocal help."\(^\text{12}\) Schein also points out that two conditions must be met for people (and teams) to be receptive to input: first, the feedback must be respectful, so that no one loses face; and second, people must be given very specific advice that they can act on.

Another concept that is key to teamwork and the stories in this book has been well articulated by the cognitive anthropologist Edwin Hutchins—that is, the concept of "distributed cognition." As Hutchins explains:

All divisions of labor, whether the labor is physical or cognitive in nature, require distributed cognition in order to coordinate the activities of the participants. Even a simple system of two men driving a spike with hammers requires some cognition on the part of each to coordinate his own activities with those of the other. When the labor that is distributed is cognitive labor, the system involves the distribution of two kinds of cognitive labor: the cognition that is the task and the cognition that governs the coordination of the elements of the task.\(^\text{13}\)

In other words, you can't have a team and teamwork if you don't know and acknowledge that other people with whom you work—even if they perform what is perceived as lower-level work such as washing a floor or making a bed—know something, are doing something important, and have something to contribute and might actually discover information vital to patient care and safety. Members of a real team need to know not only what they are doing but also what their colleagues are doing, and they can't know this if they think the people they work with or who work around them are doing little of importance. (This means, of course, that they need to think about the people from the other professions and occupations with whom they work as colleagues working together with them to deliver patient
care.) They also need to be mindful of what it takes to coordinate various tasks and activities.

Chris Argyris speaks to the importance of a work environment in which it is safe for workers to speak up, where workers have confidence they will receive feedback and their concerns will be acted on. In the absence of these conditions, he notes, even highly skilled people will arrive at work every day and abdicate responsibility for fixing problems.14

Last, but in this case most definitely not least, teamwork depends on psychological safety. This concept of psychological safety is interwoven into almost every story in this book. It was first described by Edgar H. Schein and Warren B. Bennis in *Personal and Organizational Change through Group Methods* where they argue that organizational and individual learning depends on something they call "unfreezing." To learn new behaviors or ideas and develop curiosity about human behavior and about themselves, people need to "unfreeze." To do this, they must feel psychologically safe within a particular group so that they can "take chances without fear and with sufficient protection." Learning new ideas and behaviors requires the ability to rock the boat, take risks, challenge a higher up, and stop playing it safe. None of this will happen if people are belittled, punished, humiliated, made fun of, ignored, abused, or otherwise disrespected. As Schein and Bennis write, psychologically safe organizations encourage provisional attempts and tolerate "failure without retaliation, renunciation, or guilt."15

Amy Edmondson emphasizes that psychological safety is essential to the creation of the kind of institutional learning that is a non-negotiable requirement of high-reliability organizations: "Psychological safety describes individuals' perceptions about the consequences of interpersonal risks in their work environment. It consists of taken-for-granted beliefs about how others will respond when one puts oneself on the line, such as by asking questions, seeking feedback, reporting a mistake, or proposing a new idea."16

A psychologically safe environment is thus one in which people feel they can ask a "dumb question," stop action when they identify a safety problem, or challenge a superior without fear of retaliation, humiliation, or disregard. This is the very heart of teamwork and
team functioning. Good teamwork and safe care are not possible in the absence of psychological safety.

The stories in this book bring these concepts and many others to life as they are played out in the health care workplace. The word “play” has multiple meanings. One obviously is about enacting. The narratives in this book show how people act out their roles in a real-world context and how, in doing so, they can either transform or reproduce the status quo. Some of these stories describe particular incidents or activities; others are reflections, which are also key to teamwork and a kind of mental replaying that allows us to learn from our mistakes.

“Play” also suggests activity that is repeated over and over again—a sports team *plays* a game, musicians *play* a piece of music, actors *play* a role and rehearse their lines. In order to play well together, however, those who perform the activity together have to be serious enough to devote time to group practice, rehearsal, warm-up, and follow-through. (How often do health care teams do any of this?)

To consider the state of play and whether or not caring is, in fact, collaborative, as this book does, it is also necessary to encompass the varieties of play—parallel, cooperative, competitive—that are common in health care settings today. It must take into account the knowledge that teamwork is dynamic and evolving. In settings where health care is moving toward a new paradigm of collaboration, as we see in most of these stories, we find that patients are safer and those who work in health care more satisfied. In stories in which people work together on true teams, patients are viewed not as abstractions (as in we love the ideal of the patient, just not the patient in front of us) or as objects of medical action but as actual participants in the drama and activity. Where only parallel play rather than actual collaborative teamwork is the norm, resentment and conflicts fester, while patients are overshadowed and seem, in some instances, to be more an afterthought.

To capture the nature of genuine collaborative caring on real teams we have divided the book into eight parts, each of which has a brief introduction that highlights its main take-home messages. Part 1 consists of stories that illustrate excellent teamwork. Each one is almost a textbook illustration of Hackman’s definition of teamwork and of the
cultivation of team intelligence and is grounded in an understanding of distributed cognition as well as the need for psychological safety. Part 2, on poor or nonexistent teamwork, is its antithesis and shows us what happens when the non-negotiables of teamwork and team intelligence are missing. The picture is not a pretty one. Part 3 describes the patient's experience of the nonfunctioning "team." These stories all too often reflect an environment—even in institutions that tout their "patient-centered care"—in which patients are invisible as human beings. This produces a void at the center of patient-centered care. When care is patient centered, as Julia Hallisy, Michael Leonard, and Catherine Skowronsky show in their contributions, it is only because clinicians are deeply reflective and work hard to create the kind of environment in which patients can be included in decisions.

Part 4 builds on our argument about teamwork to document what happens when institutions and individuals create environments that are psychologically safe. Discovering how to create such environments—and what specifically to do or say in dynamic situations often punctuated by crises—is central to unlocking the mysteries of teamwork and building sustainable teams that fulfill the three tenets of teamwork outlined by Hackman. Part 5, similarly, demonstrates that coaching and learning are critical to the dynamics of teamwork and to the constant refinement of team practice. Hospitals and other health care institutions can put staff through TeamSTEPPS and other training programs, but if there are no coaches who can cross monitor and help others develop and refine their team intelligence, little genuine teamwork will result from even the best intentions and efforts.

Part 6 looks at a new approach to patient advocacy. Each profession in health care claims to be doing what is best for the patient. All too often, this excludes working with those in other professions or occupations—or with the patient—to actually plan and coordinate care. In this part, we show what happens when patient advocacy is a collective activity. This understanding of the relationship between collective activity and quality patient care leads us to our penultimate section. Part 7 examines the barriers to teamwork. It is by now commonly accepted that health care professionals and workers function in silos. We would go even further and argue
that the professions have been socialized to define themselves as working in opposition to one another. Their very professional self-definations and identity, their modes of payment, their promotional and other reward structures are part of a larger organizational and cultural universe that discourages interprofessional—and sometimes even intraprofessional—collaboration and cooperation. Toxic hierarchies discourage a physician from attending to concerns from other professionals, such as a nurse, and people who work on the lowest rungs of the socially constructed health care ladder are almost entirely off the radar. The rigid hierarchies that emerge from this kind of professional and occupational infrastructure poison efforts to reconfigure care and must be directly addressed and deconstructed if people across all professions and occupations are to work effectively on teams.

Part 8 ends on the good news that some institutions are struggling valiantly to do precisely that. Stories that describe these beginning or successful and ongoing efforts at culture change illustrate what it really means to engage in the sustained work of transforming how people behave in a department, a large institution, or even an entire system. In these stories we see that the commitment to change must not only be supported at the top but also at the bottom; staff at all levels must lead and support change. The complex interaction between top-level institutional team leaders and frontline team members is well articulated in these stories. Indeed, they illustrate the point that Robert Ginnett has made when discussing the components of the aviation safety model of “crew resource management,” which is that “you are not a leader if you have no followers.”

We believe the stories and reflections in this book will enhance our growing understanding of the problems that must be addressed and solved in health care. Many of the stories we include have been chosen—quite deliberately—because they highlight what happens in backstage and private spaces after enthusiasm for the principles and theories of teamwork and interprofessionalism have been expressed. These stories help us understand how, in those out-of-the-way spaces, teamwork is either enhanced or defeated and help us see the behaviors that need to be enacted if teamwork and patient safety are to become a reality. Although we suggest some of the take-home lessons
from these stories, this book is not a manifesto: we hope to show rather than tell. As you read about other people’s experiences, we hope you will gain insight into the work of those in health care with whom you are less familiar. We also hope some of these stories will help to illuminate the complexities that need to be addressed on the way forward.
Part 1

PLAYING ON A REAL TEAM

It seems almost too obvious to state, but effective teamwork and communication in a collaborative environment is the very foundation of the delivery of safe, high-quality patient care.1 Because so many studies on patient safety make this clear, one would think that genuine teamwork, excellent communication, and collaboration would be the norm in health care; that everyone who works in health care, in any capacity, would already be trained to work on a genuine team either as leader or assertive member; and that showcasing good teamwork in a book like this would be unnecessary.

Unfortunately, there are also many studies that document that teamwork, respect, and civility are more of an aspiration than a reality in the current health care environment. As Francis A. Rosinia recounts in part 8, when Tulane Medical Center asked its staff whether they believed in teamwork and respect, the majority of those surveyed said of course they did. When asked if they felt they were respected in the workplace and worked on real teams, the majority responded in the negative. Tulane is not unique. Those who work in health care have been socialized into an individual-expert model grounded in the expectation that smart, skilled people perform flawlessly and manage risk effectively. According to this way of thinking, people will act rationally in the most stressful circumstances and, if experts, they will rarely make mistakes.

Decades of research in human factors now documents that these assumptions are largely invalid. As the title of the Institute of Medicine's report on medical errors and injuries sums it up, to err is human.2 Effective teamwork is essential, given the complexity of
clinical care and chance for error. Currently, one in three hospital patients has something happen to them that you and I wouldn't want to happen to us, and 6 percent of patients are seriously enough harmed in the hospital that they need to stay longer and go home with a temporary or permanent disability.\(^3\) Skill in the clinical setting does not lead to infallibility, nor does it translate into the kind of team intelligence that allows people to be both effective team leaders and members.

Fortunately, new models of leadership are emerging. These models do not involve expert individuals exerting either command or total control of the work process. As we see in the stories in part 1, high-quality leadership involves utilizing all the information available and making decisions based on the needs and concerns of everyone on the team—including the patient. Although there has been an increasing focus on "emotional intelligence" as a function of effective leadership, this concept is too often interpreted as simply learning to listen. Genuine team leaders, however, do more than listen; they solicit input from those whom they are leading, and they respond to that input, not simply hear it. They establish shared mental models and a shared language, and they clarify roles and assumptions. Perhaps most important, they do not regard the input of "subordinates" as challenges to their status or authority but rather as the expression of legitimate concerns about patient safety and work organization. The kind of mature leaders such as Philip Levitt, whom we see in action here, understand that they are fallible and thus need to work with assertive team members who can be counted on—indeed expected—to do the kind of critical cross monitoring described in his story.\(^4\)

The expectation of cross monitoring is just one of the agreed on behaviors that characterize an effective team; such a team also establishes clear measures that allow team members to know how they are performing. In the TeamSTEPPS program, for example, an entire section is devoted to "mutual support," which is described as "backup behavior" that is "critical to the social and task performance of teams and essentially involves helping other team members perform their tasks."\(^5\) Structured communication models including huddles, briefings, SBAR,\(^6\) and similar techniques provide consistency and predictability
in communication among team members. Good teams also acknowledge that conflict—like making mistakes—is inevitable. Whether they are leaders or members, those who work in real teams have been taught how to deal constructively with such conflict. This does not mean avoiding conflict but rather utilizing it to create learning on an individual and institutional level.\(^7\)

Of course, good teamwork is all about relationships and trust. In the best-case scenario, real teams have been built with intentionality that is reinforced by systematic training and developed over years. In a dynamic health care environment, however, people can't always work in relationships that have been cultivated over months, much less decades. To create both a safe work environment and safe care, mindful team members must practice with people with whom they may have never worked.\(^8\) This is why teamwork skills must be taught at all levels and revisited regularly.

In aviation, as Captain Chesley “Sully” Sullenberger explains, regular teamwork training and practice over an entire career makes it possible for people who have never worked together to quickly form teams capable of astonishing feats:

> Almost paradoxically, it was our training and culture of making the routine predictably reliable, building and leading a team (taking a team of experts and creating an expert team), having well-understood roles and responsibilities to our passengers and to each other, being schooled in the consistent application of best practices, using clear communication with a well-defined vocabulary where a single word (brace) could be rich with meaning and trigger team actions, and managing workload and error that enabled us to successfully handle a sudden challenge of a lifetime. Because aviation has built such a robust and resilient safety system in which we operate, it was a firm foundation on which we could, in 208 seconds, take what we did know, apply it in a new way, and solve a problem we'd never seen before. That, to me, is treating successfully a very “sick” situation full of complexity.\(^9\)

The fact that a group of people, unfamiliar with one another five days earlier, managed to become hyperorganized in a matter of minutes, make a decision to land on the Hudson River, and get everyone off the plane and to safety without serious injury, is testament to the
value of mindful practice. And here we use the word “practice” in the full sense of the term—putting an activity or skill into practice because a group has practiced together that set of activities and skills over and over again. Sometimes people practice with the same group of people; sometimes with different people. Nonetheless, the fact that they have practiced teamwork skills and mastered teamwork concepts means they can form teams quickly, like Sullenberger and his crew did in January 2009. This was a perfect illustration of the phenomenon Hackman describes—that collaborative teamwork not only produces discrete episodes in which people work well together and achieve good outcomes but also each of these discrete episodes is a building block in the larger edifice of ongoing team relationships and intelligence. The next episode of teamwork may include the same cast of characters or it may involve people who have never met before.

Good teamwork thus involves:

- treating everyone with respect;
- creating the kind of psychological safety that allows anyone, at any level, to freely speak up and voice concerns;
- knowing the plan of care for the patient and adjusting it appropriately;
- including the patient and the patient’s family as valuable members of the team;
- learning together from mistakes;
- recognizing the value of voice-to-voice and face-to-face communication;
- refusing to confuse cross-monitoring with insubordination; and
- actively soliciting the concerns of others.

Teams that get all this right consistently deliver great care and fulfill the trust that sick patients and their families place in those who work in the health care system.
Learning to Really Listen

Andrea Jackson

When I was chief resident in obstetrics and gynecology at a teaching hospital in the Northeast, I learned a lesson that has totally transformed my practice. I was covering labor and delivery (L & D) at night. A patient, who was about six months into her pregnancy, was admitted after having a cervical cerclage placed. Her cervix was short and a little bit open, so we put a stitch through her cervix to keep it closed so she would not deliver prematurely. After this procedure we kept her in the hospital for observation to make sure that she recovered well from the procedure and didn’t develop an infection.

Several hours after her admission, her nurse, who had had at least ten years of L & D experience, approached me. She said that she was concerned that the patient was in the very early phases of developing an infection and told me that I needed to remove her cerclage. I was immediately skeptical. The patient had just had her procedure; the physician who placed the cerclage did this routinely; and I didn’t really think she had an infection. But to please the nurse—and really just to get her off my back—I went and evaluated the patient. The patient complained of some discomfort in her uterus and belly, but when I looked at her vital signs they were all normal: no fever, no elevated heart rate, no elevated fetal heart rate. I thought the discomfort was normal postoperative pain—what we would call uterine irritability. I wasn’t concerned.

When I told the nurse what I thought, she became visibly upset. She again told me that the patient was going to develop an infection and insisted that I needed to remove her cerclage. At that point, I was trying to come up with a compromise and said I would come back and check on her in an hour. If she was worse, we could then read­dress removing the cerclage.

At that point the nurse said, “You’re a chief. You need to learn how to make a decision. You need to either shit or get off the pot.”
Once she said that, I walked away because I didn’t want to keep escalating what was clearly becoming a very contentious conversation. I was nonetheless upset because I felt she wasn’t trusting my clinical knowledge. And, although I hate to admit it now, my response was also influenced by the feeling that she was not being sufficiently respectful of the fact that I was the physician and had a lot of medical knowledge.

During this standoff, someone spoke to the charge nurse, who appeared on the scene and suggested that the attending be called in. Fine, I thought, okay, whatever.

The attending quickly arrived. She asked both me and the nurse to explain the clinical situation and then went in to examine the patient herself. When she came out, she said she agreed with me. The patient’s symptoms seemed very vague and “subjective.” There were no hard numbers to quantify her condition and thus unambiguously validate the nurse’s concern. However, the attending agreed with the nurse: something was going on. She specifically asked the nurse why she was so concerned about this patient. The attending physician’s tone was not defensive, and she spoke to her as a colleague and with genuine curiosity.

The nurse quickly explained that over the past month the L & D service had had a rash of patients like this one. They were preterm; they expressed vague subjective complaints; and all of them had developed serious infections that required—at least in some cases—admission to the ICU.

The attending did a great job. She validated my clinical judgment and what I saw, which was that the patient’s symptoms were indeed vague and ambiguous. But she agreed with the nurse. There was a possibility that this patient was developing an infection and that the risks of that outweighed the benefits of keeping the cerclage in. The attending told me to remove the cerclage, which I did.

The patient was kept in the hospital. While she didn’t develop an infection and deliver immediately, over the next day, she developed a fever and tachycardia (her heart rate went up)—objective signs of an infection. The nurse had been right.

What I realized in reflecting on this was that the nurse and I both needed some lessons in communication. For someone with her level of experience, she could certainly have realized that, as an experienced
L & D nurse in a teaching hospital, she could have perhaps stepped into my shoes and understood that I was trying to find my way as a physician learning on the job. At the same time, I came to realize that I didn't help matters much, because in the kind of hierarchical anti-team system I'd been trained in, I quickly became as concerned about my stature and authority as about what we should do for the patient. When the attending came down and spoke to both of us, she managed to uncover both of our points of view, which neither of us had conveyed well to each other. She asked the nurse the question, I should have asked, which was, "Why are you so concerned about this patient?"

Although it took a while, the nurse and I eventually talked about this incident. We both apologized for our actions. In doing so, the nurse reiterated what the attending had uncovered, which was that she had taken care of many patients who had later gotten sick and recognized the writing on the wall. I apologized to her for getting so defensive and not listening to her. I acknowledged that I had started off the whole encounter by not really giving any weight to her concern. I saw the patient just to get the nurse off my back. We ended up working well together over the next year.

That interaction informed more than my relationship with one particular RN. It affected how I interact with nurses in a variety of situations and practice settings. Recently, I was working in a family planning clinic. I had finished a procedure, and one of the nurses was doing an ultrasound on the patient. I thought the procedure had gone well, so I was packing up my instruments and was about to leave the room when I looked back and saw that the nurse was still scanning the patient's abdomen. I knew what she was concerned about: she was worried that the procedure wasn't complete. But I was confident that it was.

For about one moment, I almost left the room and didn't address what I knew was going on. Then I remembered lessons learned and turned around and said, "Kim, are you concerned about something?"

At first she said, "No."

I saw the look on her face and how closely she was concentrating on the ultrasound, so I went back and sat down and said, "Kim, point to the area on the ultrasound that you're worried about." I was very careful to use a tone that was curious, pleasant, and respectful. "It's
okay,” I assured her, “I really want you to tell me if you are concerned about something.”

She showed me what she was concerned about on the ultrasound. She was a new nurse in the clinic and so was clearly a bit worried about her judgment. When she showed me the area of concern, it turned out that it was normal anatomy. I explained to her that this was a normal part of the uterus, but I could tell she was a little hesitant or unclear, so I took a curette and placed it inside the uterus and both of us were able to see on the ultrasound that what she was concerned about was actually on the outside of the uterus. With that, I could tell she was visibly relieved, so I left the room, and the patient was fine.

At the end of the day Kim approached me and told me how much she appreciated my taking her concerns seriously. I again told her that even though, in this instance, I was “right,” I valued her expertise and wanted her to feel comfortable in the future voicing any concerns about patient care to me. “I know there will be a time when I’m not right because it’s happened before and will again,” I told her.

Looking at the ultrasound with Kim took only, at the most, two more minutes. But taking those two minutes was critical. Our goal is to provide excellent patient care. We now know that the only way we can provide excellent patient care is through teamwork, which means recognizing and respecting the expertise each of us brings. Today there’s a lot of lip service to this, but sometimes, in our rush to get things done, we don’t actually do what it takes to make teamwork happen.

Kim and I love working together and always try to get paired up. Taking time to work on teamwork provides many rewards. One, of course, is more satisfying workplace relationships. I am convinced that this working on team dynamics also improves the level of care we provide our patients. We have to have this level of rapport with one another to give high-quality care.

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When I was a neurosurgery resident in the early 1970s, I read *Corporation Man* by Sir Antony Jay. In it Jay tells the story of a period when he was responsible for a live nightly TV news program on the BBC. The entire show was run by a small, insular group that he headed. There were directors, writers, researchers, and news anchors. It was a hectic, high-pressure undertaking. Jay called it the best professional experience of his life. It was special to him because everyone made contributions outside his or her area of expertise. Everyone listened to everyone else. The experts in their fields knew more about and could be creative in their specialties; nonetheless, everyone was allowed to contribute ideas. This was in part because the experts sometimes missed things. The results of listening to others were consistently beneficial to the objective of the group.

Jay compared his team to an imagined primitive human hunting band. Each member had his or her own strengths and skills, and survival was based on the sharing of ideas, shared responsibility, and teamwork. Jay deplored treating one’s subordinates as interchangeable ciphers whose opinions and suggestions were never sought. He knew that in any particular aspect of a project there was likely a group member with greater skill or judgment or a more inspired plan.

The environment I worked in was nothing like Jay’s. I was trained and then practiced in the self-reliant captain-of-the-ship model of neurosurgery. My professor was an autocratic old-school academic leader who got outstanding surgical results. Although he preached cooperation and communication, he was a less-than-perfect role model. He would bawl out a nurse on rounds in front of the residents, patient, and family and would be intolerant of the residents’ raising questions about patient care.

In the community hospitals where I worked after my residency, the patient care paradigm was one private practitioner and one nurse to
each patient. Occasional consultants chipped in with their narrowly crafted advice, staying entirely within their own area of expertise and rarely communicating other than leaving notes in the patient’s chart.

In spring 1998, I returned to caring for patients with severe head injuries after a seven-year hiatus. Two trauma centers in our county had started up during that period. The emergency rooms at my usual hospitals were legally obliged to send all badly head-injured patients to the centers, and I never had to see them. One of the centers was at St. Joe’s where, over the seven years, I had gradually moved my practice. I figured that the four or five twenty-four-hour on-call periods each month would be no big deal, so I signed on. Even though I’d had a seven-year break from treating head injuries, I reckoned, I'm a Bellevue-trained neurosurgeon, and I saw a lot of trauma at my other hospitals until they opened the trauma centers. Getting in and out of a head is the same whether it’s a tumor, an aneurysm, or a traumatic blood clot, so I haven’t had any atrophy of the required skills.

I never could have predicted, however, the ego-deflating episode that occurred one Saturday night, two months after my enlisting. Maybe it’s good to be shaken out of one’s complacency once in a while, but it still hurts when I think how close my patient and I came to disaster.

The patient was fourteen. She had told her mother she was sleeping over at a girlfriend’s house, but at 9 p.m. she was sitting in the rear of a car driven by a nineteen-year-old boy she had just met and his buddy who sat in the front passenger seat. Her girlfriend sat beside her. There were no seatbelts in the rear, and the doors weren’t locked. When the crash occurred she was asleep. She was thrown from the car onto the pavement. She came into the trauma ER unconscious with a blood pressure of zero. A CT of her brain showed a tiny amount of bruising. Her abdomen was full of blood on CT, and the spleen looked ruptured. The on-call trauma doctor, Rick Sanchez, took her right to surgery to open her belly. He had the nurses call me to put an intracranial pressure monitor through the right front part of her skull as she lay intubated on the operating table. The pressure was 5, which is normal. Abnormal pressures are 20 or above.

“You want me to retract for you?” I asked the trauma doctor. I was fifteen years his senior and had not assisted in the OR for ten years. “I once had a surgical internship. I think I can still do it.”
“Sure. If you don’t mind, scrub in.”

I assisted while he took quarts of blood out of her belly and re­moved her ruptured spleen. Her blood pressure started to come up as I was leaving. Sanchez thanked me as I exited.

I went home. It was about 1 a.m. when Sanchez called me about her. “Her intracranial pressure is 25 now on the monitor.”

“That’s high, but her CT was nearly normal. All she had was a small contusion.”

“Wouldn’t you want to get another CT anyway to explain why the pressure became elevated, just to be safe?”

“Sure,” I said sheepishly. What he said made perfect neurosurgical sense.

She had a big epidural hematoma, a massive, expanding, deadly clot compressing her brain. The difference from the earlier CT scan was like day and night. An epidural comes from a torn artery that lies partly within the bone of the skull. A “mere” skull fracture in a bad place does the tearing.

We both had figured out how this had happened. The artery tore when she hit the pavement but didn’t bleed because she had no blood pressure. That is why the initial CT was nearly normal, giving me, at least, a false sense of assurance that her head was not a problem. However, when the trauma doctor restored the blood pressure by taking out her spleen, the open artery in her head began to bleed briskly, and a big clot grew between her skull and her brain. Neither of us had ever seen anything like this before, neither somebody surviving after a BP of zero with a ruptured spleen, nor a delayed appearance on a CT of a big epidural clot. Sanchez assisted me with the craniotomy to remove the clot. She throve.

Two years later it was confession time. I was speaking with a crack­erjack trauma nurse, one of the people who held the whole service together.

I said, “You know Rick saved my career that night. If the medical examiner had found a big epidural clot in that girl I would have been toast. I’ll always be grateful.”

“We would never have let anything like that happen to you, Dr. Levitt.”

Three years later, when I was appointed chief of neurosurgery, I had the opportunity to verbalize in committees what I had learned
from being part of the trauma service. My insight had begun with the night that Rick Sanchez thought of getting the extra CT on the kid with the ruptured spleen. I suspect that everyone got tired of hearing me say my bit. Here is what I would say with a lot of variation, month after month to the nurses, techs, and doctors at the trauma service meeting.

"We have at least two teams of doctors and nurses making rounds on these patients every day. The two most active teams, the trauma doctors and their nurses and the neurosurgeon and the neurosurgery nurse, are present for rounds at the same time every morning in the same ICU. There's an ICU nurse assigned to each patient. That's another set of eyes. The other consultants come in and out and they talk to us. We each check each other's work. I have to look at the vital signs and lab results. The nurses and the trauma docs get the reports and images on the head injury patients, and they let me know if there's something unexpected in the head and what's going on in the rest of the patient's body. I know the pO2 and pCO2 of the patients, and sometimes I'm the first to tell them that something is out of whack with their respiratory function. I tell them what's going on with the brain, and we discuss whether our treatment approaches are compatible. Everybody questions everything. A neurosurgical nurse whom we all know follows me around like Jiminy Cricket. If I can't justify what I'm doing to her, I have to rethink it. The key to running a safe service is redundancy, the more the merrier. But we're not really redundant. All of us are necessary to the survival of such very sick patients. We pick up on each other's mistakes and omissions, and that's why we have good outcomes.

"Also, look around you. There are twenty people sitting at this table; all the chairs against the wall are filled, and there are people standing. We don't get attendance like this for any other committee meeting of the hospital. I think that says a lot about the morale on the trauma service."

Another change occurred in my professional life, in its own way more surprising than the rest. As a result of signing up for the trauma center, I was working with a group of three neurosurgeons who formerly had been my competitors, doctors who saw my mistakes while rendering second opinions while I saw theirs. We reviewed one
another’s charts for the sieve-like peer review committees that were sworn to silence but broadcast our mistakes as juicy bits of physician-to-physician gossip. We heard comments made about one another by patients and other doctors—the good and the bad. There wasn’t much collegiality in our prior state, and there was a lot of resentment and envy, things that are inevitable given human nature and the century-old private practice system we inherited. That mostly changed when we worked together for six years. We meshed beautifully and trusted and liked one another. Most of us retained our private practices, but it was not like before. We were colleagues for the first time. We rotated every twenty-four hours, and two of us signed out to each other at 7 a.m. every morning and got to talk to each other a lot about patient care and our philosophies of approaching difficult problems. Important bits and pieces of our personal lives stole into our conversations.

They had high professional standards. And the nurses and trauma doctors we interacted with were true colleagues. I look back at those six years as the best for me professionally by far. Six years out of thirty-two. I suspect most docs don’t get that much, based on the grim burnout statistics. You have to be lucky. The doctors I enjoyed working with so much had a deep wellspring of good will and democratic idealism. I don’t believe they were taught that in medical school.

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