Safety Culture

Using Coworker Observations to Promote Accountability for Disrespectful and Unsafe Behaviors by Physicians and Advanced Practice Professionals

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A case of noncompliance with a perioperative bundle, as summarized in the following scenario, illustrates the persistence of disrespectful and unsafe behaviors by physicians and advanced practice professionals (APPs)—and their coworkers' willingness to report:

A medical center's Quality and Safety Department observes higher than expected postoperative infection rates for a surgical specialty. An interprofessional team is charged to create a plan to address these infection rates. The team reviews evidence-based best practices and develops a plan based on input from all professional groups whose work might be affected by the changes. The planning team gains leaders' approval and implements a resulting "bundle" of perioperative procedures to promote standardization and safety. One bundle element includes changing gown and gloves at key points during surgery. Following implementation, a nurse submits a report through the institution's occurrence reporting system: "Dr. XX was performing [a procedure covered by the bundle]. At the appropriate point in surgery, a team member reminded Dr. XX, 'it's time to regown and [re]glove.' Dr. XX replied, 'I don't agree. It's not necessary, and I'm not stopping now.' Dr. XX continued with the procedure.'

Achieving safe and high-quality medical care requires well-designed systems and well-functioning teams. Efforts to improve outcomes by establishing best practices and designing care protocols¹⁻⁷ have achieved a measure of success but not to the degree anticipated.⁸⁻¹⁵ One explanation is that efforts to improve systems and implement best practices require leaders to hold staff accountable. For example, hand hygiene's value is well established, but getting people to comply requires substantial effort.¹⁶

Relationships between medical malpractice litigation and patient concerns about their health care professionals' disrespectful and unsafe behavior are well established, 17-23 and we and our colleagues at Vanderbilt University Medical Center (VUMC; Nashville, Tennessee) have substantial experience 20,21,24-26 with established methods for using peer feedback to promote physician behavior change. 27-32 Our process for sharing aggregated patient complaints 24 has been successfully adopted and fully implemented with excellent fidelity by more than 135 collaborat-

Article-at-a-Glance

Background: Health care team members are well positioned to observe disrespectful and unsafe conduct—behaviors known to undermine team function. Based on experience in sharing patient complaints with physicians who subsequently achieved decreased complaints and malpractice risk, Vanderbilt University Medical Center developed and assessed the feasibility of the Co-Worker Observation Reporting SystemSM (CORSSM) for addressing coworkers' reported concerns.

Methods: VUMC leaders used a "Project Bundle" readiness assessment, which entailed identification and development of key people, organizational supports, and systems. Methods involved gaining leadership buy-in, recruiting and training key individuals, aligning the project with organizational values and policies, promoting reporting, monitoring reports, and employing a tiered intervention process to address reported coworker concerns.

Results: Peer messengers shared coworker reports with the physicians and advanced practice professionals associated with at least one report 84% of the time. Since CORS inception, 3% of the medical staff was associated with a pattern of CORS reports, and 71% of recipients of pattern-related interventions were not named in any subsequent reports in a one-year follow-up period.

Conclusions: Systematic monitoring of documented coworker observations about unprofessional conduct and sharing that information with involved professionals are feasible. Feasibility requires organizationwide implementation; coworkers willing and able to share respectful, nonjudgmental, timely feedback designed initially to encourage self-reflection; and leadership committed to be more directive if needed. Follow-up surveillance indicates that the majority of professionals "self-regulate" after receiving CORS data.

ing medical centers and medical groups. Patients' perceptions are important and valuable, but so are those of colleagues and coworkers. 33-36 Without addressing behaviors and performance that can undermine team function, improved systems alone do not optimize safety. Unprofessional behaviors and performance (for example, ambiguous and/or disrespectful communication, not answering pages, refusing to respect adopted best practices such as use of the surgical checklist) interfere with (disrupt) others' work and adversely affect teamwork and clinical outcomes. 33,34,37-44 Such disrespectful conduct impairs or destroys trust, contributing to withdrawal and diminished performance, erosion of joy and meaning in one's work, and potentially resulting in employee burnout and retention issues. 45-48 Doctor XX's refusal to regown and reglove illustrates how projects may fail to achieve intended goals and be unsustainable if organizations are not prepared to quickly and fairly address what appears to be noncompliance with an established plan or best practice.

VUMC sought to build on its experience in obtaining, aggregating and sharing patients' concerns by developing an analogous process to further promote accountability by capturing and sharing coworker concerns, a "Co-Worker Observation Reporting SystemSM" ("CORSSM"). The CORS project's aims are to encourage collegial respect and accountability and to couple safe, contemporaneous reporting with consistent, timely delivery of the captured stories. In this article, we discuss our experience in assessing the feasibility, monitoring the fidelity, and examining both the reproducibility of CORS-supported interventions and unintended consequences. We present data on the frequency of coworker reports associated with medical group members and first-year results of the fully implemented CORS program, as well as lessons learned. Equally important for VUMC and other health care organizations considering ways to share coworker concerns, we discuss the extensive prelaunch efforts employed to increase the likelihood of CORS acceptance and impact.

Methods

SETTING

VUMC encompasses three hospitals, plus primary care and specialty clinics. The hospitals (Vanderbilt University, Monroe Carell Jr. Children's, and Vanderbilt Psychiatric) include 1,025 beds. For fiscal year 2014 (July 2013–June 2014), VUMC reported 59,000 admissions and 1.8 million ambulatory patient visits provided by 1,352 physicians (excluding residents) and 674 APPs. APPs include but are not limited to, nurse practitioners, certified nurse midwives, and physician assistants. All professionals are potential subjects of a CORS report.

Co-Worker Observation Reporting System Project Planning: The Project Bundle

The CORS project was not undertaken lightly, as coworker reporting is hardly a given for any medical center, and relatively few such initiatives have been reported. 44,49,50 Therefore, from late 2007 through 2011, a project team composed of Quality, Safety and Risk Prevention (QSRP) [R.R.D., G.B.H.] and Center for Patient and Professional Advocacy (CPPA) [L.E.W., T.F.C., W.O.C.] leaders met to develop the CORS concept and draft a process to address coworker concerns, adapting and drawing from CPPA's patient complaint experience. 20,21,24 The iterative nature of the CORS program efforts and the length of time required to affect culture change are reflected in Sidebar 1 (pages 151–152).

VUMC leaders utilized a prelaunch "Project Bundle" 51,52 to guide development efforts and assessments of launch readiness (Table 1, page 153). The bundle organizes three domains of factors that can influence the success of proposed organizational initiatives: Key People, Organizational Supports, and Systems. As first described,⁵¹ the Project Bundle reminds program developers of essential readiness-related elements that sometimes may be overlooked or forgotten. It also poses questions that developers can use to assess their project's launch readiness. The questions prompt developers to consider—and, as appropriate, rate readiness or progress in ensuring organizational strengths, commitments, and the robustness of each element. For example, questions guide consideration of key issues, such as how one assesses leadership commitment to the project, project champion and implementation team qualifications, alignment with organizational goals and incentives, availability of critical resources, milestones for internal reporting, training needs, and measures and metrics for tracking progress.⁵² Actions undertaken to ensure adequacy of VUMC infrastructure elements are described in Table 2 (page 154); the VUMC Credo is provided in Sidebar 2 (page 155).

Intervention Process

The CORS process (Figure 1, page 155) begins when a coworker submits a report describing a professional colleague's conduct that the coworker perceives to be unsafe or disrespectful via VUMC's online occurrence reporting system. Alternatively, reports may be made by telephoning a VUMC risk manager who creates the online report. All reports are reviewed within two hours by a risk manager both for potential liability and for allegations of egregious or unlawful conduct. If egregious or unlawful conduct is alleged, the report is referred to officials in charge of investigating and taking action in response

Sidebar 1. Using Coworker Observations to Promote Accountability for Disrespectful and Unsafe Behaviors by Physicians and Advanced Practice Professionals

Co-Worker Observation Reporting SystemSM (CORSSM) Program Planning Events Procedures Time Line

The Project Bundle helps planners exercise a discipline for identifying readiness of plan elements prior to launch and to problem-solve how to remedy deficiencies. The Project Bundle can be conceptualized as three clusters of related elements that support implementation tasks: People, Organization, and Systems. Gaps within any cluster may pose barriers to success. 1.2 The Plan-Do-Study-Act (PDSA)3 process was used to assess and strengthen each cluster. High-priority projects require substantial planning and development time, and this project was no different, illustrated by the project development time line below. Vanderbilt University Medical Center (VUMC) and Center for Patient and Professional Advocacy (CPPA) leadership evaluated and addressed program-specific elements considered critical to adopting and maximizing CORS program benefits. Face-to-face meetings.

frequent conference calls, information-gathering sessions, and discussions with all levels of leadership and participants were used to ensure sufficient presence of each element prior to launching the CORS program.

References

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February 2007	Planning Events New Occurrence Reporting software implemented by Risk Management	Corresponding Project Bundle Element(s) 1. Leadership commitment	
·	New Occurrence Reporting software implemented by Risk Management	1 Leadership commitment	
March 2000		7. Risk management and information technology (IT) resources 8. Measurement tool	
March 2009– June 2011	Review & revise relevant policies, examine alignment of process with organizational goals, recruit and train champions and initial four-member implementation team, adapt Promoting Professionalism Pyramid model based on PDSA cycles with initial bundle elements	4. Goals, values5. Policy review2. Initial champion recruited3. Initial implementation team6. Intervention model10. Initial training	
July 2011–August 2013	August Executive Director of Risk Prevention distributes single reports of unprofessional conduct to one of four designated VUMC leaders to share with an associated physician. Database of coworker reports grows. 2. Champions 3. Implementation team 8. Ongoing measurement 9. Review process assessed and revis		
February 2013	Senior Executive Vice President (VP) for Quality, Safety and Risk Prevention and VUMC leaders discuss volume of professionalism reports and consider whether sharing is important, and if so, who should share, and what number of reports would signify an apparent pattern	Leadership commitment Goals, values Review process endorsed Intervention model adopted	
February–August 2013	Senior Executive VP for QSRP presents information about initiative for sharing reports of unprofessional conduct to expanded leader groups	Leadership commitment Goals, values	
March-June 2013	CPPA team for managing program logistics and production needs assembled and trained	7. Resources for production/ implementation	
June 2013	Risk Management commences transferring reports associated with unprofessional conduct to CPPA	Risk management and IT resources Measurement tool	
July 2013	CPPA implementation team performs Project Bundle gap analysis, develops framework for CORS coding, aggregating, analyzing, distributing, and sharing single and aggregated reports	Intervention model implemented Process/procedures developed and assessed	
July 2013	Department-based quality and patient safety officers begin "Professional Accountability" presentations to faculty	2, 3. Expansion of champions and implementation team 10. Leader and implementation team training	
October 2013	Senior Executive VP for QSRP presents cumulative report volume data to clinical leaders and uses an electronic audience response system to seek consensus on process for sharing reports, identifying patterns, and implementing graduated interventions	Leadership commitment Measurement yields compelling comparative data Review process	
November 2013	Initial professionals identified with three or more CORS reports and eligible for "Awareness" interventions; CPPA prepares intervention folders, and department chairs conduct interventions	2, 3. Engaged champions and implementation team 6. Intervention model applied 7. Resources applied 8. Comparative data created	

Sidebar 1. Using Coworker Observations to Promote Accountability for Disrespectful and Unsafe Behaviors by Physicians and Advanced Practice Professionals (continued)						
Program Planning Events and Time Line, February 2007–January 2015						
	Planning Events	Corresponding Project Bundle Element(s)				
January 2014	Update on the CORS project to VUMC senior leaders	Sustain leadership commitment Review process				
August 2014	CPPA assumes responsibility for tracking delivery and sharing of single reports 3, 7. Committed production as C program team resource 8. Data tracking					
December 2014	Follow-up analysis for report recipients 12 months postintervention 9. Process for reviewing CORS					
January 2015	Trained messengers expand to 119 through extensive training program	3, 10. Implementation team expansion and training				

to such reports. All CORS reports are uploaded to CPPA for coding and analysis.

The database identifies how many previous CORS reports, if any, have indicated unsafe or disrespectful conduct associated with the professional, and all reports are reviewed by CPPA's operational leader for appropriate and timely next steps. Specifically, in collaboration with CORS faculty champions, previously trained departmental "messengers" (other physicians or APPs) are identified to receive first and second reports associated with a named professional. Third and subsequent reports are compiled for delivery by designated authorities.

Single-Report Sharing. The designated peer "messenger" receives the report within one business day of its online submission and is asked to review the report and share it with the associated professional. These "cup of coffee conversations" 25,26,53–56 are intended to be private (whenever possible, in the clinician's office or work space), timely (within five working days of receipt), respectful, and collegial. When sharing with a colleague that a coworker had perceived behavior or performance inconsistent with professional standards, messengers were trained to remain nonjudgmental, acknowledge other potential perspectives, and ask the professional to consider the content and self-reflect. The goal was to offer an opportunity for "self-regulation." Messengers were asked to return a secure online survey to confirm whether the report was shared and, if not, the rationale for not sharing.

Sharing Multiple Reports—Awareness Interventions (Level 1). On the basis of evidence that peer feedback changes physicians' behavior, ^{24,25,27–30} the developers expected that although most professionals would respond positively, in some cases reports would continue to accumulate. Therefore, a second process aggregated CORS reports to identify individuals with "apparent" patterns. Department chairs and nurse leaders voted and agreed on the criteria for escalating to "Awareness" (Level 1)

feedback (Figure 2, page 156) and the nonpunitive aim for recipients to pause, reflect, and self-regulate. CORS data folders were prepared to support data delivery. The folders contained both individualized and peer-based comparative report data (Sidebar 3, page 156).

After reviewing its content, the relevant messenger (Associate Nursing Officer for Advanced Practice Professionals, department chair, or their delegee) met to share the folder with the professional at the professional's preferred location. The Senior Associate Dean for Faculty Affairs also received a copy. The department chair, unit director, nursing leader, and Senior Associate Dean for Faculty Affairs reviewed any subsequent CORS reports linked to the professional.

Messengers must be prepared to deliver a coworker report, handle recipient responses, and conclude the brief session with some encouragement; one such conversation is outlined in the following:

Following receipt of the report about the refusal to regown and reglove, a messenger met with Dr. XX within 24 hours and shared the reporter's perception that a safety protocol was disregarded. Dr. XX replied by saying he felt the literature on impacts of gown/glove changes was equivocal. The messenger agreed that the evidence for each bundle element may vary, but referred to the consensus-building process that led to agreement to employ them all. The messenger said he regarded Dr. XX as a key contributor to the department and a model for others, expressed confidence that Dr. XX would reflect on why the concern was reported, and asked him to reconsider his position on regowning and regloving in support of what the messenger knew was Dr. XX's commitment to his patients.

Advanced Interventions: Level 2 and Beyond. Professionals identified in new coworker reports following Level 1 interventions ("nonresponders"), are escalated by VUMC policy to "Guided Intervention by Authority" (Level 2) (see Figure 2), which include written plans designed to address the behaviors or performance. The plan, for example, might direct a professional to seek a medical and behavioral health evaluation before

Table 1. Co-Worker Observation Reporting SystemSM (CORSSM) Characteristics Associated with Successful Initiatives for Improving Safety and Quality¹

Does this project have sufficient levels* of

- Committed leadership prepared to address reports of behaviors that undermine a culture of safety?
- 2. Project champion(s) entrusted with key data, and have a history of persevering and inspiring others to overcome barriers to achieving aims?
- 3. An engaged implementation team of leaders with clinical practices similar to those of recipient professionals, and who are willing to undergo a half day of training, able to communicate potentially distressing information nonjudgmentally and confidentially?
- 4. Clearly articulated organizational values and goals (mission and values statements, and professional conduct policies) that are aligned with program intent?
- Enforceable policies that address expectations for professional conduct and professional accountability?
- 6. Model for tiered interventions (Figure 2, page 156) for sharing coworker concerns and addressing patterns?
- 7. Resources appropriate and sufficient to create, improve, and sustain best-practice processes for collecting, reviewing, aggregating, and sharing concerns (for example, software, personnel, training), plus wellness and assistance for both the professionals who are the subjects of reports and those who are witnesses and victims of reported events?
- 8. Measurement and surveillance tools for capturing, reviewing, coding, analyzing, and tracking data?
- 9. Reliable processes for reviewing and delivering data, ensuring including timely review and delivery, individualized and peer-based comparative data analyses, and trending?
- 10. Multilevel training for leaders and other professionals, including unprofessional behaviors' impact on safety, evidence base, skills practice and feedback, and how to implement, manage, and sustain?
- * Organized by domain of factors that can influence the success of proposed organizational initiatives: Key People, Organizational Supports, and Systems. Perfection is not required, but willingness and commitment to improve current practices and sustain best practices are essential.

Reference

1. Hickson GB, et al. Balancing systems and individual accountability in a safety culture. In *From Front Office to Front Line: Essential Issues for Health Care Leaders*, 2nd ed. Oak Brook, IL: Joint Commission Resources, 2012, 1–35.

determining additional actions. Written plans are submitted for approval by the Senior Associate Dean for Faculty Affairs. Making a senior leader aware of concerns from any source permits triangulation of multiple data points. For example, physicians with multiple patient complaints and other concerning data have been diagnosed with and referred for treatment of serious medical illness, cognitive impairment, or psychiatric illness.²⁴ In other cases, professionals who remain unwilling or unable to make appropriate changes would be referred for possible correc-

tive/disciplinary institutional action (Level 3).51,53,54

DATA COLLECTION AND ANALYSIS

Data were collected to monitor initial CORS feasibility and fidelity to intended processes. Descriptive statistics are reported for coworker concerns recorded about physicians and APPs since February 2007. Data about other team members are beyond the scope of this article.

In July 2011, the Executive Director of Risk Prevention commenced initial physician-to-physician sharing of individual reports. These pre-CORS-launch experiences served to test the intervention process and delineate the process for distributing reports, types of concerns, and common responses, resulting in continuous refinements during a time of growth in coworker reporting (Figure 3, page 156). Routine report sharing began in September 2011. Program development continued until report-related statistics demonstrated compelling differences between recipients of multiple coworker concerns and those who had few or none.

Beginning in late November 2013 and continuing on a rolling basis, three-year "look-back" aggregated audits were conducted in an attempt to identify professionals with apparent patterns of coworker reports and eligibility for Awareness interventions. Beginning in September 2014, messengers who shared single reports completed an online survey to confirm that the report was delivered or, if not, why.

Results

By addressing readiness via the Project Bundle elements, the CORS process launched and continues. Practical lessons learned during implementation are summarized in Table 3 (page 157). In brief, leaders' commitment was critical, as leaders supported and modeled VUMC goals and values when disrespectful and unsafe behavior were reported. In addition, our tiered intervention process worked and continues to guide intervention-related decisions, processes, and messenger delivery of CORS reports. Fidelity to the intervention process as taught during training is strong. Leaders are continually updated and remain committed to the process of professional accountability embodied by the CORS program. Specific results follow.

COWORKER REPORTING

Pre- and post-CORS-introduction trends in coworker reporting were calculated; trend lines were computed using the least squares method (Figure 3). The onset of CORS program interventions appeared to be associated with increases in the numbers and rate of coworker reporting.

	Table 2. Actions and Activities Undertaken During the Co-Worker Observation Reporting System SM (CORS SM)						
	Down the Element		nch Development*				
	Bundle Element	Actions	Activities				
People (Sidebar)	Leadership engagement	Nurtured commitment of executive leaders Facilitated senior leaders' (for example, deans, department chairs) shared ownership	Discussed coworker concerns data and embedded threats to safety in one-to-one meetings Shared proposed steps, solicited and incorporated feedback in group meetings Reviewed aggregate data and defined triggers for each level of the tiered intervention pyramid				
	Dedicated project champion	Identified champion	Recruited champions based on reputation for fairness, commitment to confidentiality, and existing clinical practice Developed roles and expectations Identified and trained initial group of peer messengers to share information with professionals				
	Implementation team	Identified implementation team members ("messengers")	Created, iteratively tested, and implemented initial process Senior leaders designated selected department/division members to review and deliver individual reports				
Systems Organization	Aligned values, policies, goals	Reviewed VUMC stated values, policies, and safety goals	Met with general counsel, risk managers, and human resources to review VUMC Credo (Sidebar 2, page 155),¹ professional conduct policy, and faculty manual to assess need for changes; none were required				
	Tiered intervention model	Assessed, modified existing intervention model ²	Examined the intervention model's applicability to CORS, modified for leadership-defined escalation triggers				
	Resources	Modified or developed reporting and coding systems Identified assistive resources	Customized vendor's online reporting system to include conduct-related concerns Created codes related to Medical Care, Communication, Personal Responsibility, Professional Integrity [†] Identified VUMC Physician and Faculty Wellness ^{3–5} for assistance				
	Data review and delivery processes	Established multilevel reviews	Defined egregious, mandated (unlawful) allegations for immediate escalation Defined allegations to be shared without further investigation Established procedures for delivering first and second individual reports and aggregated data based on multiple reports upon escalation				
	Multilevel training	Developed, implemented three levels of training	Raised general awareness of all clinicians of behaviors that undermine safety Used simulation exercises to train peer messengers and department leaders Provided PRN coaching for messengers and leaders				

VUMC, Vanderbilt University Medical Center; PRN, as needed.

People: Achieve consensus about implementation—high-level organizational leaders, frontline implementation team members, and project champions must make critical decisions for most programs to be successful.

Organization: Establish supportive infrastructure—organizations need reliable processes supported by aspirational values, actionable policies, a model for guiding conduct-related interventions, and resources sufficient for both task completion and addressing human factors.

Systems: Achieve robust reporting, data analysis, and feedback sharing—successful improvement programs require reliably implemented systems for reporting concerns, reviewing and analyzing reports, and making aware the professionals associated with coworker concerns.

 † Interrater reliability across domains was 80%–100% (Kappa statistics ranged from 0.52 to 1.00, mean Kappa = 0.83).

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PHYSICIANS AND ADVANCED PRACTICE PROFESSIONALS ASSOCIATED WITH CORS REPORTS

From January 1, 2012, through December 31, 2014 (36 months), coworkers recorded 372 CORS reports about physicians and APPs. Physicians were associated with 344 reports, and

APPs with 28. Most physicians (85%) and APPs (96%) were associated with no reports; 164 physicians (12%) were associated with 1 or 2 reports; and 34 (3%) were associated with 3 or more (Figure 4, page 158). Of 674 APPs, 26 (4%) had 1 or 2 reports. No APP had 3 or more.

^{*} Goals for the three domains of factors that can influence the success of proposed organizational initiatives:

Sidebar 2. The Vanderbilt University Medical Center Credo

We provide excellence in health care, research and education. We treat others as we wish to be treated.

We continuously evaluate and improve our performance.

Credo Behaviors

I make those I serve my highest priority.

I respect privacy and confidentiality.

I communicate effectively.

I conduct myself professionally.

I have a sense of ownership.

I am committed to my colleagues.

VUMC's Credo is a statement of the values shared by professionals and staff concerning their commitment to patients, coworkers, and others. All new personnel are made aware of and acknowledge the Credo during orientation, and the Credo elements are reinforced during annual reviews. Co-Worker Observation Reporting SystemSM (CORSSM) reports frequently refer to observed behaviors as "inconsistent with our Credo" or "non-Credo behavior," evidence that VUMC personnel acknowledge the Credo as a set of professionalism standards. The Credo also helps frame the conversation with the professional with whom feedback is shared.

Source: Govern P. Professional conduct standards take shape. *Reporter*, Vanderbilt University Medical Center, Jul 8, 2005.

TRACKING SINGLE-REPORT SHARING

CPPA used a secure electronic survey to track report sharing and sent reminders to return surveys after one, two, and three weeks if necessary. During the first five months of CORS operation, we sought to learn whether and why reports were not "shared." We discovered that during this period, 59 (84%) of 70 reports were shared. Messengers indicated three reasons for not sharing a report, as follows:

- Assessment that the report contained internal inconsistencies or the reporter unfairly attributed responsibility
 - Belief that the concern was "too petty" or "too vague"
- Awareness of a contributory systems issue being actively addressed

By reporting delivery rates to messengers, overall rates have progressively increased over time.

THE "AWARENESS" INTERVENTION EXPERIENCE

Following review of the distribution across time of coworker reports associated with medical group members, VUMC leaders reached consensus that three reports within a rolling three-year audit period constituted an apparent pattern (Appendix 1, available in online article). From late October 2011 through December 31, 2014 (39 months), 37 individuals (3% of all faculty physicians, but no APPs) met threshold criteria for Aware-

Co-Worker Observation Reporting SystemSM (CORSSM) Procedure Diagram

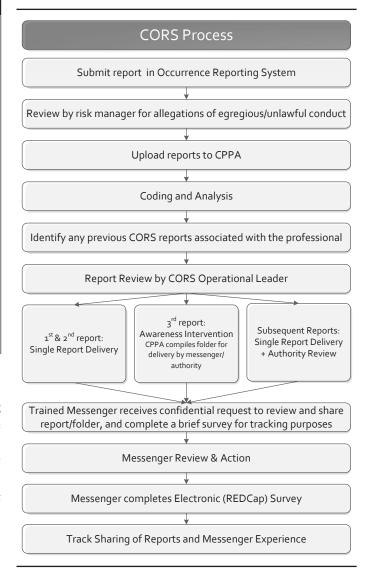


Figure 1. This diagram depicts the CORS process, which begins when a coworker submits a report describing a professional colleague's conduct that the coworker perceives to be unsafe or disrespectful. CPPA, Center for Patient and Professional Advocacy.

ness interventions. These 37 physicians were associated with 42% of all physician CORS reports. Two of these 37 did not receive an Awareness intervention because other institutional data had already prompted advanced interventions (see page 156).

VUMC leaders continued to share new reports with professionals who had received an Awareness intervention. By December 31, 2014, 17 physicians had at least 12 months of post–Awareness intervention surveillance, of whom 12 (71%) had received no further reports, 2 (12%) had received a single

Promoting Professionalism Pyramid for Graduated Interventions and Number of Professionals Receiving Each Level of Intervention

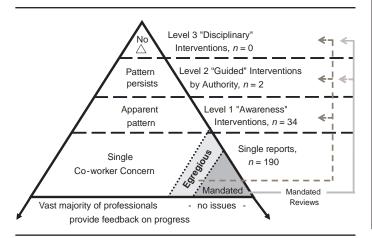


Figure 2. The pyramid illustrates the process of tiered interventions ("Awareness," "Guided Interventions by Authority," and "Disciplinary") and related conversations for promoting reliability and accountability. Adapted (with inclusion of the number of professionals receiving each level of intervention) from Hickson GB, et al. A complementary approach to promoting professionalism: Identifying, measuring, and addressing unprofessional behaviors. Acad Med. 2007;82:1040–1048. Used with permission.

additional report, and 3 (18%) had received two or more reports. One author [L.E.W.] conducted structured interviews with four key physician leaders from large clinical departments, as well as leaders of VUMC's APPs (accounting for more than 85% of professionals in the system) regarding their Awareness intervention experiences. The leaders reported that recipients' responses included blaming systems and other people, asserting inaccurate reporting, minimizing their behavior's impact, expressing disbelief that three reports over three years constituted a pattern, focusing on who might have reported, and offering to "apologize" (Appendix 1, available in online article). Reported "pushback" was similar in many respects to responses from professionals receiving interventions for a pattern of patient complaints (Appendix 2, available in online article).²⁴

THE ADVANCED INTERVENTION EXPERIENCE

Decisions to escalate to Level 2 "Guided Interventions by Authority" or Level 3 "Disciplinary Interventions"^{25,53–56} (Figure 2) lie within the authority of department chairs and the Senior Associate Dean for Faculty Affairs. Advanced interventions occurred in two cases during the year following CORS program initiation.

Sidebar 3. The Items in the Awareness Intervention Folder

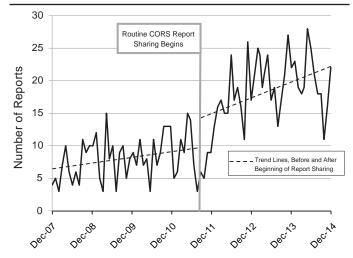
For professionals with apparent patterns of reports, an intervention folder was prepared to provide consistent information, designed to promote awareness for the professional. The folder contained the following items:

- A memorandum describing the Co-Worker Observation Reporting SystemSM (CORSSM) program
- A copy of Vanderbilt University Medical Center (VUMC's) Professional Conduct Policy
- Information about the number of CORS reports for the individual compared to peer professionals
- A graph depicting the number of reports compared to the total number of VUMC peer physicians or advanced practice professionals
- Text from each professionalism concern report with patient/staff names redacted
- Excerpts from reports categorized under four major domains: Medical Care, Communication, Responsibility, and Professional Integrity

Discussion

Despite private³⁷ and public^{57,58} regulatory standards that reinforce the need for behavior-related accountability, many organizations lack a reliable process for identifying and addressing

Number of Monthly Co-Worker Observation Reporting SystemSM (CORSSM) Reports Associated with VUMC Physicians and Advanced Practice Professionals*



* Routine feedback of all single reports initiated September 2011. Trend lines calculated by least squares method.

Figure 3. Trend lines in this figure were computed using the least squares method. The onset of CORSSM program interventions (September 2011) appeared to be associated with increases in the numbers and rate of coworker reporting.

Table 3. Lessons Learned Using the Project Bundle to Develop the Co-Worker Observation Reporting SystemSM (CORSSM) Program

- Health care improvement projects require strong and consistent commitment by titled leaders (for example, Chief Medical Officer, Chief of Staff, department chairs) and influential physicians whose opinions shape what happens at all levels of the organization.
- Project champions will work hard to build support and must have influence (or have a strong leader's unwavering support).
- "Messenger" leaders are willing to respectfully address physicians and advanced practice professionals who are associated with coworker observation reports or who develop an apparent pattern of concerning behavior/performance.
- · Implementation team members are critical because projects require efforts of many others. Among these are the following:
- Professionals and support staff who are willing to report concerns in good faith
- A cadre of trained peers to deliver uncomfortable messages to colleagues
- Health care administrators and supervisors who promote professionalism among professionals and support staff by setting clear expectations for professional behavior, including engaging in collegial "cup of coffee" conversations with others and/or reporting threats to teamwork and safety
- Peer professionals will readily engage in sharing observations with colleagues when supported by strong leadership commitment and the
 appropriate infrastructure.
- · Leaders' authority over the project is reinforced by aligning improvement projects with organizational values and goals.
- A single professional conduct policy should apply to everyone within the organization, even if processes for addressing deviations from
 expected behavior/performance fall under different administrative models (for example, Medical Center Medical Board oversight versus
 Human Resources).
- The organization's offices of general counsel and risk management are key partners to ensure that policies and procedures support CORS, including graduated, tiered interventions, and that all CORS—related materials adhere to state peer review and/or quality improvement statutes to optimize protection from discovery.
- Risk managers who practice proactive risk prevention are essential to help design a process that can allow designated parties to review coworker concerns and deliver data derived from those reports to physicians and advanced practice professionals.
- The organization must invest in an online occurrence-reporting system to support reporting.
- The organization must have, adopt, or adapt a model for tiered interventions.
- Leaders are willing to recruit the number of messengers sufficient to ensure availability for prompt delivery of concerns reports and to invest in training for addressing coworker complaints.
- Before embarking on the project, the organization should have in place a set of wellness and assistive programs to aid the professionals who are the subjects of reports as well as the individuals who are the witnesses and victims of the reported events.
- Creating standardized tools for data management, analysis, and report delivery required substantial investment of time but proved essential for producing reliable metrics and measures.
- Fidelity to program processes varied during initial piloting but improved as people, organization, and systems elements were refined
- Monitoring for evidence of unanticipated consequences is essential, including retaliation against reporters, biased reporting, and effects on teamwork.
- The CORS process and data support and extend Vanderbilt University Medical Center leaders' existing efforts to promote patient safety and professional accountability.

human threats to teamwork, care, and safety. 14,15,39,40,59,60 VUMC, having recognized the need for such a process, planned and implemented the Co-Worker Observation Reporting System, a systematic, progressive approach for supporting a culture of safety and respect. Results over its first three years of implementation, including at least 12 months of follow-up for the first 17 recipients of Awareness interventions, demonstrated that the CORS process for monitoring and addressing perceptions of colleagues' disrespectful and unsafe conduct is feasible with leadership endorsement and the support of a robust and reliably implemented infrastructure. Fidelity to intended CORS processes was good. We did learn, however, that we need

to continue to learn and address reasons why CORS messengers chose not to share reports and continue monitoring for retaliation and other unintended consequences. In addition, we will assess reporter and messenger experiences to learn how CORS processes can be further improved.

How was reliable implementation achieved? We used a Project Bundle^{51,52} to guide the team's prelaunch actions and activities for planning, implementing, troubleshooting, and promoting sustainability, which required a considerable investment of time and effort. The bundle proved a helpful tool for assessing whether and when the critical elements for success were sufficiently robust for the project to proceed. Leaders' commitment

Distribution of Co-Worker Observation Reporting SystemSM (CORSSM) Reports Associated with Vanderbilt University Medical Center Faculty Physicians, January 1, 2012–December 31, 2014

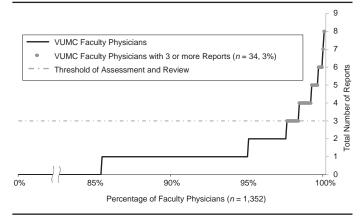


Figure 4. From January 1, 2012, through December 31, 2014 (36 months), coworkers recorded 372 CORS reports about physicians (344) and advanced practice professionals (28). Of the 1,352 faculty physicians, 34 (3%) were associated with 146 (42%) of the 344 behavior/performance reports.

and engagement, in combination with a well-developed organizational infrastructure (that is, compelling data and multilevel training programs and reliable systems for collecting, reviewing, and sharing data) were crucial to project launch. From this experience, project planners learned important lessons (Table 3) about people, organization, and systems that may generalize when launching other improvement projects.

Relatively few professionals were associated with multiple coworker concerns, which is similar to the findings regarding patient complaints^{18,19,22–24}—that is, the vast majority of professionals had none. Peer messengers shared coworker reports with the 15% of physicians and 4% of APPs associated with at least one report. In a three-year period, only 34 physicians (3% of medical staff) and no APPs were associated with three or more reports. The process of collecting, coding, and analyzing reports turned observations of unprofessional behavior or performance into actionable data. Lack of response to peer-delivered messages predictably led to escalation up the pyramid, thereby providing VUMC with a systematic method for addressing conduct-related threats to teamwork and patient safety.

Although coworker observations of disrespectful and unsafe conduct are important resources for pursuing enhanced reliability and patient safety, the concerns that are reported likely represent a fraction of experienced or witnessed breaches of professionalism. Studies make clear that most professionals have witnessed or have been the target of unprofessional behavior. 33,34,39–44,61 However, the same studies reveal that asymmetry within professional relationships may inhibit reporting threats to safety even when policies require or encourage staff to do so. Nevertheless, VUMC clinicians and staff appeared to value the reporting system, as evidenced by increasing numbers of documented coworker reports; increased reporting is anticipated with ongoing project efforts. More research is needed to clarify when health care professionals report concerns and the types of concerns they do and do not report. 62,63

Reporting behavior is potentially subject to challenges such as concerns about consequences for reporters and reporter bias. Furthermore, introducing feedback about coworker concerns may have unintended consequences ranging from increases in unprofessional conduct and retaliatory reporting to negative effects on team cohesion and a culture that emphasizes reporting over colleague-to-colleague conversations about concerns. CPPA reviewers monitor CORS reports for evidence of retaliation and potential bad-faith reporting. Retaliation or attempted retaliation against a reporter is considered egregious and addressed rapidly by an authority in accordance with VUMC policy. Physician retaliation was reported and addressed immediately in two instances. To date, we are aware of no evidence that bad-faith reporting has occurred.

Messengers did not always deliver single reports, a challenge to program fidelity. Reasons included competing priorities or assessment that the report was not sufficiently credible, understandable, or significant. With the awareness that exercising discretion regarding whether to share reports risks CORS program reliability and integrity, project leaders are monitoring whether professionals whose leaders declined to share continue to accumulate reports.

IMPLICATIONS

The CORS process demonstrated that systematic monitoring for coworker observations about unprofessional conduct and sharing that information with involved professionals can be done. On the basis of VUMC's experience, the following observations should be considered when implementing similar programs at other organizations:

- Implementation should occur throughout the organization and apply to all physicians and advanced practice professionals.
- In general, timely, nonpunitive initial feedback should be provided without conducting traditional, time-consuming investigations. Exceptions exist, however, when reports assert behaviors that meet criteria for a mandated review (for example, assertions of discrimination or a criminal act) or are of an egre-

gious nature. Such reports are promptly referred to specified offices or authorities charged to investigate them.

- VUMC's approach to addressing reports of unprofessional conduct may help explain why the number of recorded reports continued to increase. Possible reasons may be that team members gained confidence that speaking up was safe, they would be "heard," the organization would take action, professionals would be held accountable, and action led to observable positive behavior change.
- Department chairs and leaders can use CORS data in concert with other information, such as patient complaint data, clinical outcomes, and compliance metrics, to choose appropriate courses of action for professionals who appear to be associated with problematic performance.
- The CORS process offers an approach to identifying and addressing professionals who resist adoption and inhibit sustainability of safety initiatives. For example, effects of introducing surgical checklists have been disappointing despite their promise. Such initiatives are likely to achieve better results when accompanied by leadership commitment to quickly and reliably address noncompliance.
- The CORS process may be applicable to other health care professionals, including nurses, residents, and allied health professionals.
- Ongoing monitoring for evidence of retaliation against reporters, bad-faith reporting, and trends in reporting is essential for rapid identification and attention to issues that threaten program integrity.

LIMITATIONS

This study has a number of limitations. First, the results of interventions are based on a short-term follow-up period. Nevertheless, 71% of the initial Awareness intervention recipients had no subsequent reports for one year. Second, the planning, initial implementation, and early results may not generalize beyond VUMC. However, the success of patient complaint monitoring and intervention programs at more than 135 geographically and structurally diverse health care organizations hospitals and medical groups—with which VUMC collaborates suggests that they and others could also successfully undertake and implement CORS-type projects.²⁴ These organizations demonstrate highest-level leadership commitment to modeling and promoting professional accountability, have organizational values and policies to support decision making and action, and employ data-and-review systems as outlined in Table 1. In addition, they all have developed and improved various infrastructure elements over time, demonstrating ability to implement a

feedback program in support of professionalism and professional accountability. Organizations unwilling or unable to develop a robust infrastructure have less opportunity to successfully implement such programs. Third, although VUMC CORS reporting has grown substantially, how much more unprofessional conduct remains unreported, and therefore unaddressed, is unknown. Many health care professionals and staff hesitate to report observations of unprofessional conduct, whether from fear of retaliation or other repercussions or from lack of appreciation of the presence of a "normalization of deviance" in their work (that is, accepting or condoning nonstandard or unacceptable behavior and standards). 33,34,39-43,64 Vanderbilt coworkers' continuous increase in reporting is encouraging, which suggests that efforts to communicate the message "we want to hear from you" are addressing and reducing barriers to coworker sharing and reporting, thereby revealing ever more behavior-related safety threats. These efforts include the following:

- Policy-based reassurances regarding safety for good-faith reporting and intolerance for retaliation
- Leaders' public statements that reports will be taken seriously and reliably addressed
- Immediate electronic feedback to individual reporters: confirmation that their report was received, including appreciation for submitting it; a stated commitment to use the information in a confidential, nonpunitive way to improve the quality and safety of patient care; contact information for those to contact should questions about the report arise; and a file number for future reference
- Periodic aggregated reporting of results to administrative and clinical leadership

Perhaps as a result, more health care professionals appear to have reduced tolerance for "non-Credo behavior," as many event reports specifically describe some concerning behaviors as not consistent with the VUMC Credo.

Conclusion

Maintaining well-functioning health care teams and pursuing a culture of safety and respect require professionals who behave and perform professionally. At VUMC, a small percentage of medical and advanced practice professional group members are associated with a disproportionate number of reported coworker concerns. VUMC was able to successfully use the Project Bundle readiness assessment to develop and launch the CORS process for identifying and addressing professionals who are associated with coworker reports of concerns about behavior or performance. Our experience with the CORS program suggests that well-trained, well-supported peers and leaders will share

concerns-related feedback. Follow-up surveillance to date indicates that the majority of professionals self-regulate after receiving CORS data. Prelaunch readiness of all Project Bundle elements (People, Organization, Systems) proved time-consuming but essential to institutionalizing the effort.

The authors acknowledge the contributions of Vanderbilt University Medical Center (VUMC) Offices of Risk and Insurance Management, Quality, Safety and Risk Prevention, and General Counsel; VUMC leaders; and many faculty contributors to CORSSM program development, testing, and ongoing implementation.

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Appendix 1. People: Process for Leadership Engagement

Appendix 2. Systems: Training Leaders and Messengers to Deliver Co-Worker Observation Reporting SystemSM (CORSSM) Data

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Appendix 1. People: Process for Leadership Engagement

Leadership engagement was a critical step in designing and implementing the Co-Worker Observation Reporting SystemSM (CORSSM). Engagement was built via individual and group meetings to ensure that leaders had sufficient information to guide decisions and to identify concerns that could be addressed in program development.

Through the meetings, the leaders began to assume shared ownership with the project team. The group addressed potential barriers to success. One barrier, for example, involved preconceived ideas about what might result from increasing awareness of the availability of reporting. Some leaders were concerned that every professional would be the subject of coworker reports, or that there might be team members who would file repeatedly ("super-reporters"). Data were therefore presented showing no evidence of "super-reporting," that more than 80% of professionals were never named in a coworker concern and that only a small percentage were associated with three or more reports over a 36-month audit period, thus allaying concerns. Examples of concerns, as follows, reported by physicians, nurses, and other staff also demonstrated the types of issues that Vanderbilt University Medical Center personnel raise in their reports:

I asked the doctor a second time for the [required documentation], whereupon [s/he] tossed it under the OR [operating room] table. . . . I had to crawl underneath . . . this was demeaning.

The patient had deteriorated, so we called a rapid response. The attending arrived at the rapid response and announced, "I am the attending. No one will call a rapid response on my patient. Do you understand me?"

Dr. X entered the myelosuppression unit without washing his hands. I asked him three times to foam in and he just looked at me

We were ready to start the case and I began reviewing the preop checklist to ensure we were following all of the steps for the operative bundle. Dr. Y yelled out, "I don't have time for this. Hand me the scalpel and let's get going."

Seeing firsthand what professionals and other staff observed and reported helped leaders better understand how these experiences might impact patient safety and teamwork.

A meeting of department chairs was held to give them an opportunity to participate in critical program decisions, which included, but were not limited to, the following:

- Should individual CORS reports be shared with physicians and advanced practice professionals?
- If so, who (peer, mid-level group leader, high-level leader) should share the reports?
- When do department chairs want to be involved in the sharing process?
- What number of reports over what period of time constitutes a "pattern"?

Following introduction of the meeting agenda, the department chairs were anonymously polled on these questions using an electronic audience response system. Polling preceded discussion, and results were revealed only after all responses had been made. The group agreed that the results would become binding on all departments. This approach prevented inordinate influence of any single individual, supporting unbiased and collective decision making.

The results indicated commitment to establish a system for sharing both individual and aggregated patterns of coworker concerns reports associated with physicians and advanced practice professionals. Ninety percent (90%) of 20 key leaders (including department chairs) agreed or strongly agreed with the need, and the group proceeded to vote on criteria for conducting graduated interventions. Department chairs voted to remain involved in the process for sharing coworker concerns, either personally or through their delegates (Figure 1, page AP2). In particular, they decided that they wished to be involved when a physician or advanced practice professional was the subject of three reports within a three-year period.

These meetings were essential for obtaining public commitment (via polling data) and for medical center leaders to declare a goal of designing and implementing a formal process for monitoring, sharing, and trending coworker concerns. Polling data were also presented to other key stakeholders in order to demonstrate leaders' decisions and commitment. The project team continues to foster leadership support by providing regular progress reports.

(continued on page AP2)

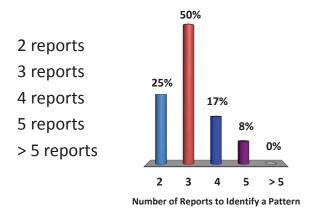
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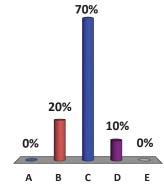
Appendix 1. People: Process for Leadership Engagement (continued)

Figure 1. Anonymous Polling Results of Vanderbilt University Medical Center Department Chairs When Asked:

- a. How many non-mandated reports over 36 months suggest a need for Chair review and an "Awareness" intervention with an individual physician?
- b. Do you want to see and deliver complaints vs. delegate a trusted colleague to review and deliver?
 - a. How many reports? The Chairs responded. . . .



- b. Do you want to see and deliver complaints vs. delegate a trusted colleague to review and deliver?
 - A. Just me
 - B. Both trusted colleague and me (shared model)
 - C. Trusted colleague who shows me any report felt to be "special"
 - D. Just trusted colleague unless there's a pattern
 - E. Something else



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Appendix 2. Systems: Training Leaders and Messengers to Deliver Co-Worker Observation Reporting SystemSM (CORSSM) Data

To promote fidelity to the CORS process for the delivery of single reports and aggregated data, Center for Patient and Professional Advocacy faculty provided training sessions for all department chairs, vice chairs, division chiefs, other leaders, and departmentassigned "messengers." Training was based on a "flipped classroom" approach in which participants receive and review content provided electronically prior to small-group sessions. 1,2 Initial content included orientation to the Vanderbilt University Medical Center (VUMC) policies and principles underlying the CORS program and procedures, the pyramid of tiered interventions, and video-recorded demonstrations of associated conversations.

Skills training also included how to recognize behaviors that undermine a culture of safety and respect, expectations for reporting or addressing such behaviors, and the goals and techniques for providing collegial feedback.3 Thus, the training emphasized that while aggressive behavior such as yelling is easily recognizable, passive (for example, not returning phone calls) and passive-aggressive (for example, agreeing to do what was requested but slipping in negative comments about team members) behaviors also may be destructive to teamwork and safety.4-8

One important training principle is that investigating facts asserted in a report adds little value.9 for two primary reasons. First, when multiple perspectives exist, determining "the truth" is challenging. The point of sharing the information is instead to share an observation, express trust that the professional will reflect and make adjustments

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("self-regulate"). Second, because the organization has a reliable system for data collection and regular review, the accumulation of data helps identify emerging patterns.

Leaders who conduct Awareness interventions are taught to initiate by sending or personally delivering a letter that describes VUMC's CORS program to the professional. During a face-to-face meeting, the leader explains the data collection process and then presents the professional with his or her individualized and peer-based comparative data in a folder (Sidebar 3, page 156). Leaders aim to minimize discussion about the merit or lack of merit of individual reports. The purpose is not to debate any individual report but rather to encourage the professional to review the aggregate data and ask, "Why do I have more than my share?" Accumulated data identify professionals who prove unable to "self-regulate," that is, those for whom a pattern of reports becomes evident.

Training participants gather in scheduled small-group sessions to practice sharing reports and address recipients' common responses ("pushback") during intervention meetings (see "Sample Potential Recipient Responses," below). During training session practice exercises, participants receive feedback on how they delivered CORS materials and responded to recipients' reactions. Participants have ample time to discuss questions and concerns. Postintervention discussions identify common issues raised by Awareness intervention recipients. Training is modified and updated in response.

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Sample Potential Recipient Responses to Coworker Observation Reports

- 1. Questioning validity of reported concern(s): "... not what happened." "... nurses are ganging up on me." Report reviews include assessment for evidence of "unprofessional, bad-faith reporting" or evidence of "ganging up." To date, no unprofessional reporting has been identified.
- 2. Misattribution: "This is not about me . . . it's the system, and no one is addressing." "I may have said something, but what XX did is much more serious, and that's what started this whole situation. The real issue here is. . . . " Some empathy for systems failures may be warranted, but all must respond professionally. Individuals are reminded that others in the same or similar systems are not associated with coworker concerns.
- 3. Minimizing: "blown out of proportion . . . overreacted." ". . . only three reports in three years . . . what's the big deal?" Leaders respond

- with reference to the graph showing how few physicians in the group have that many reports.
- 4. Desire to know reporter's identity: "... so I can discuss perceptions ... apologize ... make it right." Leaders respond that the best response is to refrain from the behavior/performance that resulted in the report and to model professional conduct. Leaders may express appreciation for a desire to apologize/discuss further, but then suggest that sometimes such conversations may not be perceived the way they are intended, and may be interpreted as threatening, in which case the leader would need to have a more directive conversation about nonretaliation.
- 5. Acceptance: "Thank you for making me aware . . . not my intent, but I can see how it came across . . . will be more aware next time. . . . ' "I am under a lot of stress . . . and I am embarrassed and I am sorry."