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Implementation of Peer Messengers to Deliver Feedback: An Observational Study to Promote Professionalism in Nursing

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Background: The Co-Worker Observation System (CORS) is a tool and a process to address disrespectful behavior through feedback from trained peer messengers. First used by physicians and advanced practice providers (APPs), CORS has been shown to decrease instances of unprofessional behaviors among physicians and APPs. The research team assessed the feasibility and fidelity of implementing CORS for staff nurses.

Methods: CORS was implemented at three academic medical centers using a project bundle with 10 essential implementation elements. Reports of unprofessional behavior among staff nurses that were submitted through the institution's electronic reporting system were screened through natural language processing software, coded by trained CORS coders using the Martinez taxonomy, and referred to a trained peer messenger to share the observations with the nurse. A mixed methods, observational design assessed feasibility and fidelity.

Results: A total of 590 reports from three sites were identified by the Center for Patient and Professional Advocacy from September 1, 2019, through August 31, 2021. Most reports included more than one problematic behavior, each of which was coded. Of the peer messages, 76.5% were successfully documented using the debriefing survey as complete, 2.2% as awaiting messenger feedback, and 0.2% as awaiting messenger assignments (total of 78.9 % considered delivered). A total of 21.1% were not shared; 4.7% of reports were intentionally not shared because the issue stemmed from a new system or policy implementation (4.0%) or because of known factors affecting the nurse (0.7%).

Conclusion: CORS can be implemented with staff nurses efficiently when nursing infrastructure is adequate.

Highly reliable patient care requires well-designed systems and professional accountability that support teamwork, trust, and respect.[1–4] Health care team members are well positioned to observe disrespectful and unsafe conduct—behaviors known to undermine team function.[5–8] In a safety culture, individuals who have concerns should ideally speak directly with each other.[9,10] There are many reasons an individual may choose not to speak up in the moment about behavior, thus mechanisms such as event reporting software are needed to promote a culture of safety.[11–13] In a *just culture*, the act of reporting builds trust, transparency, care quality, and patient safety while promoting organizational learning through acceptance that mistakes will happen, creating accountability by identifying behaviors that inherently expose organizations to risk, and building resilience.[14] Martinez et al.[15] first described categories of unprofessional behavior observed in interactions among health care coworkers to include poor or disrespectful communication, irresponsible behavior, inappropriate care, and professional integrity.

In 2013 the Center for Patient and Professional Advocacy (CPPA) at Vanderbilt University Medical Center developed the Co-Worker Observation System (CORS) as a tool and a process to address observations of unprofessional behavior. CORS promotes addressing unprofessional behavior in the moment. When that does not happen, coworkers use electronic reporting systems to document the observation. The tool is a running three-year analysis of unsolicited coworker complaint data using a coding taxonomy[15] and a proprietary algorithm that weighs complaints by amount, severity, and recency to generate a CORS risk score for every professional participating in the program. CPPA then processes the report through a seven-step review method to determine fidelity. The use of peer messengers—the process—promotes self- and group regulation and pro-

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fessional accountability while supporting a culture of safety and respect.[1,3,16–19]

Professions are required to govern themselves in the best interest of those they serve, evidenced by standards of knowledge, education, practice, competency, ethics, behavior, discipline, and licensure.[20] Ownership and accountability for professional standards and practices belong to the members of the profession. Nursing as a professional group is empowered by a shared governance model. Organizations that support nursing autonomy and self-regulation support the following principles to affirm and validate the presence of professional governance and practice: (1) Professional governance is grounded in practicing nurse accountability; (2) Structures are built around professional accountability and clinical decision-making; and (3) Professional governance structures reflect distributive decision-making.[20]

CPPA has found that use of a project bundle[1,17,21] with 10 essential elements supports the implementation and ongoing sustainability of CORS within organizations and increases fidelity of interventions. The bundle was first used in a program that included trained peer messengers sharing patient complaints with physicians, resulting in decreased complaints and malpractice risk.[1–3] The bundle was also successfully used to implement CORS for physicians and advanced practice providers (APPs).[17] To date, more than 73,351 medical professionals have been enrolled in the CORS program. Organizations implementing CORS to address unprofessional behavior of physicians and APPs have had 84% fewer coworker concerns in the following 12 months by simply having a trained peer alert individuals whose behavior was observed and reported. By reducing incidents of unprofessional behavior through peer messaging and self-reflection, CORS contributes to a supportive culture of patient safety and quality.[1–4,6,17–19,22,23] Just culture is also supported by sharing and addressing behaviors that undermine teamwork by promoting collaboration, accountability, self-evaluation, and decency to help solve system issues and create a blame-free error reporting system that supports peer feedback without punitive measures.[14]

A systematic review and meta-analysis of 204 full-text articles found a consistently positive association between culture and patient outcomes across multiple studies, settings, and countries.[24] Perceived disrespectful behavior in a clinical setting has been associated with increased surgical complications[22,23] and decreased communication, teamwork, productivity, and engagement.[7,8,12,25] A long covert history of nursing "eating their young" affects patient outcomes,[26] personal well-being, turnover, and cost to organizations,[27,28] with the prevalence of incivility reported to be 55.1% in nursing environments.[25] Up to 40% of nurse departures from organizations and departments are attributed to unprofessional behavior.[29] Nursing turnover is associated with negative patient satisfaction and outcomes, poor employee engagement and satisfaction, and missed nursing care.[24,30] Magnet recognition of nursing practice in organizations strives to address the global issues identified in nursing and health care through five components.[31] The Magnet framework and foundation support *structural empowerment* by fostering collaboration to create a culture of shared decision-making. *Exemplary professional practice* promotes the nursing model of autonomy, personal development through self-evaluation and awareness, and nurse retention rates. *Transformational leadership* supports the empowerment of staff by engaging them in a culture of governance and commitment, while the foundation of *new knowledge* and *empirical outcomes* supports data collection to improve positive patient outcomes.[14] Therefore, applying the CORS process to nursing should support an organization's pursuit of Magnet, high reliability, and quality nursing outcomes while promoting self-governance, self-evaluation, and a culture of safety and respect.

Health care organizations must have a well-planned and supportive infrastructure of people, organizations, and systems to promote professionalism and professional accountability.[1,17,21] *People* infrastructure requires leadership commitment, key persons to drive the process, and personnel (messengers) willing and trained to provide feedback. *Organizational* infrastructure includes defined values and policies to support the peer-to-peer process, resources, and a model for guiding interventions. *System* resources include technology for safe reporting mechanisms for coworkers, dependable event reporting/analysis, multilevel training for leadership and peer messengers, and systems to address the needs of those professionals who are unable or unwilling to change. These elements are part of the project bundle[1,17,21] and are used to monitor progress and fidelity.

Our study aimed to assess the feasibility and monitor the fidelity of implementing[32] CORS for nurse professionals at three institutions: Keck Medicine of the University of Southern California (USC), University of Iowa Health Care, and Vanderbilt University Medical Center (VUMC) Adult Hospital.

Our research questions included three questions related to feasibility and one related to fidelity:

1. Are the current 10 essential elements of CPPA's project bundle[1,17,21] effective to implement CORS for nursing?
2. Is the historical coding taxonomy[15] for CORS sufficient to adequately describe coworker observations about nurses, or do new themes emerge?
3. Will the reporting process be adopted and disseminated by the organizations?[33]
4. Will nurse peer messengers share reports?[17]

METHODS

Ethics Review

The Institutional Review Boards at each site reviewed the study before data collection. The study qualified as exempt under 45 CFR 46.104 because it posed minimal risk to par-

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ticipants and analyses were only performed on de-identified data.

Targeted Participants

Staff nurses who held an RN license, were employed at the site, and were not awarded privileges through the medical staff process were included in the study. Each of the three sites had a shared governance structure to support the profession of nursing autonomy and self-governance (Table 1).

Study Design and Implementation

Design. The study period started with the implementation of the CORS program for staff nurses at each site. Our implementation times vary based on organizational readiness and accordance with the 10 essential elements in the project bundle.[1,17,21] A mixed methods, observational design was used to assess the feasibility and fidelity. Feasibility measured the extent to which each organization was successful at implementing CORS for staff nursing by using all 10 elements of the project bundle[1,17,21] and adopting the reporting process.[33] CPPA measures the application of the Martinez coding taxonomy,[15] screening for any new emerging themes. Fidelity was determined by the percentage of messages successfully delivered to peers.[17–19]

Selection and Training of Peer Messengers. We used the following criteria to nominate the peer messengers: effective communicator, empathetic listener, and adherence to organizational policies and procedures. The nominees also exhibited a diverse selection of gender, ethnicity, tenure, clinical competence, and work schedules to represent the nursing practice.

Peer messenger training includes attending a 90-minute training session conducted by CPPA faculty. Guiding principles of training include sharing a single observation of perceived unprofessional behavior by being nonjudgmental and nondirective, maintaining the privacy of the reporter and recipient, and asking the recipient to reflect and respond differently if they find themselves in a similar situation. The recipient is defined as the staff nurse the report is referencing. Case scenarios are used, and there is an opportunity for simulated practice of skills and training on addressing predictable pushback, which may include dismissal of the reported observation, deflecting the cause of the behavior onto other individuals or systems, or using distraction to shift the focus onto other issues. We encouraged all nursing leaders to attend training to develop their skill set and support the peer messengers. The number of peer messengers required for successful implementation is based on the number of reports received at an organization. CPPA recommends only one to two CORS assignments per messenger per month.

Communication and Messaging of the CORS Process. We created messaging about the CORS timeline and process and communicated it via e-mail, newsletters, marketing, and bulletin boards to all MDs, APPs, RNs, leadership, and staff. We worked with nursing to link behavior expectations to our organizational values and Magnet foundation. Our education promoted sharing in the moment if disrespectful behavior was observed; if this did not occur, we then encouraged reporting as another method to give feedback. Table 2 [34] illustrates the project bundle with the implementation strategies used to incorporate CORS for nursing.

Intervention

The CORS Process. Reports of unprofessional behavior submitted through the institution's electronic reporting system and associated with staff nurses were included in the data analyses. Our site's information technology (IT) departments worked to securely upload and transfer the data to the CORS database within CPPA. Our sites determined the frequency of data transfer to CPPA and which RN roles would use CORS for feedback. See Table 1 for transfer frequency and nurse role selection.

When a report is received by CPPA, it is run through natural language processing software to identify reports of concern that may include mandated or potentially egregious behavior. CPPA–trained CORS coders review the reported behavior and assign observations to the Martinez taxonomy.[15] Association of a coworker concern requires evidence of both the first and last name of the person who was perceived as demonstrating unprofessional behavior. A report is then sent for validation and consensus to a trained CORS program manager and faculty reviewer. The consensus of the CORS staff is required for all reports. Inter-rater reliability for CPPA CORS staff (coders, program managers, and faculty) is assessed annually using methods described previously.[15]

Reports are taken at face value and de-identified for the reporter and other employees listed before they are returned to the organization. Our study sites receive the coded report and use the Promoting Professionalism Pyramid[2,4,17] to determine the course of action. Our sites previously implemented CORS for physicians and APPs using the pyramid as a structured process that helps determine the level of intervention to best address behaviors. The pyramid guides organizations to allow for the initial observations and apparent patterns to be shared by a trained peer messenger. Inclusion of a leader (or an authority-guided conversation) does not occur until there is a persistent pattern, thus a leader is brought in only for the small proportion of individuals who do not respond to peer interventions. CORS chair(s) of our Professionalism Committee at each organization can choose to escalate an intervention up the pyramid based on patterns or content of any report. Members of our Professionalism Committee consist of staff nurses, nursing leaders, and trained CORS peer messengers. Any behavior that may fall into an egregious category such as

Table 1. Site Study Characteristics

Study Site	Attending MDs	Advanced Practice Providers	Total RNs	RNs in study	Data to Transfer for reports to CPPA	CORS Process Applications for RN Roles	Magnet Designation	Collective Bargaining Contract	Study Time Frame
Keck Medicine of USC: Keck Hospital, Norris Cancer Hospital, and Verdugo Hills Hospital*	1,226	279	1,785	1,785	Weekly	Any RN	Yes*	Yes	9/1/2019–8/31/2021
University of Iowa Health Care	1,106	411	3,131	2,523	Daily	Only staff RN	Yes	Yes	11/1/2019–8/31/2021
Vanderbilt University Medical Center–Adult Hospital	1,952	1,299	6,710	2,421	Daily	Only staff RN at the Adult Hospital	Yes	No	9/1/2020–8/31/2021

* VHH and Norris do not hold Magnet designation at the time of publication.
CPPA, Center for Patient and Professional Advocacy; CORS, Co-Worker Observation System; USC, University of Southern California.

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Table 2. Nursing Project Bundle and Implementation Activities[34]

People	Nursing Project Bundle Elements	Implementation Activity
Nursing Leadership*	• Connect with key system leadership and establish support. • Promote transparency of the program with wins, opportunities, and timelines. • Provide thoughtful consideration of CORS definitions: behavior vs. competency vs. education. • Create a thorough communication plan for all nurses, staff, MDs, and APPs about the program, timeline, and start date. Include references.	• Attend key meetings and discuss the CORS process; solicit feedback and discuss barriers at one-on-one meetings. • Review current MD and APP process at site and emulate workflow and committee structure. • Develop a timeline for implementation. • Establish a CORS escalation process based on aggregated data and integrate it into HR policies. • Use internal e-mail, bulletin boards, newsletters, storyboards, and meetings to communicate CORS structure, process, implementation, and timeline.
Human Resources† (HR)	• Partner with HR. • Connect and communicate with the Collective Bargaining Unit (CBU) representatives early and often.	• Review and revise the current progressive disciplinary policy. • Outline CORS process and integration into current HR workflow with CBU. • Solicit feedback; provided research references and local de-identified outcomes regarding MD and APP data with CBU.
Directors and Managers†	• Train, communicate, and support directors and managers about the tool and the process. • Allow time for the message to be delivered.	• Attend and discuss the CORS process; solicit feedback and discuss barriers at one-on-one meetings concerning reporting software and workflow. • Create a one-page summary of the CORS program for communication with staff RNs. • Discuss and adopt messenger requirements and recruitment strategies.
Champions*	• Select champions who have a positive peer influence to promote adoption and coordinate day-to-day operations. • RNs/APRNs, who may or may not be formal leaders • Connect with messengers to support and coach. • Reinforce that the process is nonpunitive. • CORS creates empathy for peers.	• Establish an internal structure and support for messengers.
Implementation Team*	• Very organized person(s) to oversee the daily duties • Review and prioritize current FTE duties to incorporate CORS daily activities.	• Summary includes receipt of CORS report from CPPA, committee review of the report, messenger assignment/reassignment, and tracking of completion.
Messenger Selection†	• Select a variety of nurses who represent diverse units, tenure, race, gender, and work shifts. • Remind that being a peer was essential to hearing the message. • Recruit equal level messengers (staff nurse to staff nurse, nurse leader to nurse leaders). • Reinforce that the process is nonpunitive and does not provide a fix.	• Use a nomination process by unit/department management for messenger selection. • Discuss and educate how the CORS process is incorporated into HR workflow when appropriate.
Organization Values*	• Align with organizational values. • Highlight consistency of having MDs, APRNs, and RNs all held to the same standards and process.	• Create messaging via e-mail, newsletters, marketing, and bulletin board memos to all MDs, APPs, RNs, managers, and leadership for CORS timeline for nursing linking to organizational values; promote sharing in the moment; include education on how to report if necessary.

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Table 2. (*continued*)

People	Nursing Project Bundle Elements	Implementation Activity
Magnet[†]	• Link CORS to Magnet or other standards of excellence that support and align with the organization's mission and vision. • Promotes nursing as a profession.	• All messaging and meetings incorporated language to support the Magnet journey, safety culture, and organizational values.
Policies[*]	• Link program with merit award criteria, employment policies, and code of conduct or professionalism behavior policies.	• Incorporate professionalism qualities and/or organizational values into an annual performance review.
Sufficient Resources[*]	• Ensure that a dedicated person facilitates messengers to connect with the recipient by getting their schedules, contact information, and work location. • Establish communication preference with messengers. • Allow for virtual and in-person message delivery.	• Revise access for champion to allow visualization of RN scheduled shifts to communicate to messengers. • Create templated letters for messengers to use when connecting with report recipients. An e-mail was the preferred method. • Work with unit managers to establish a private location for virtual meetings.
Tiered Intervention Model[*]	• Ensure fidelity to the Promoting Professionalism Pyramid. • Leverage recipients' receptiveness to the tools and process.	• Data allowed sites to discuss the escalation of intervention based on the Promoting Professionalism Pyramid due to content or frequency. • Optimize link to messenger survey and automated reminders to complete the survey to promote fidelity. • Discussed CORS process at unit meetings and in newsletters.
Systems		
Tools, Data, and Metrics[*†]	• Measure reporting from a quantity and quality perspective. • Categorize types of reports to understand behaviors. • Monitor distribution of reports and reporters. • Track the progress of messenger delivery and completion of the secure survey. • Optimize electronic reporting software. • Configure report routing based on the type of report.	• Quarterly review of data: number of reports; coding category distribution • Review summary of messenger completion of the survey, comments about messenger experience, and receptiveness of recipient. • Sites optimize reporting software by creating a Professionalism button, adding professionalism criteria, and facilitating routing to appropriate departments such as risk. • Establish a workflow for uploads for daily or weekly professionalism reports to CPPA.
Report Review[*]	• Establish a review team. • Create a review schedule to meet early and often. • Consider using a leadership huddle for mandated or potentially egregious reports.	• Summary of data allowed sites to discuss the escalation of intervention based on the Promoting Professionalism Pyramid due to content or frequency. • Create a template and process for mandated or potentially egregious reports and define those terms.
Training[*]	• Provide support for managers and directors regarding new processes; discussing issues with their staff was ingrained into their everyday work. • Provide formal messenger training for nonjudgmental and nondirective delivery.	• Encourage directors, managers, and senior leadership to attend 90-minute messenger training. • All messengers attended 90-minute messenger training conducted by CPPA faculty. • Provided coaching and support for messengers and leaders as needed. • Booster training as needed • Materials distributed with the reports provide a final reminder about the importance of taking an approach that was nondirective and nonjudgmental.

* The initial 10 essential elements of the CPPA project bundle (see references 1, 17, and 21).
† Additional elements for the implementation of CORS with nursing.
CORS, Co-Worker Observation System; APP, advanced practice provider; APRN, advanced practice registered nurse; FTE, full-time equivalent; CPPA, Center for Patient and Professional Advocacy.

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assault or another criminal act[9] follows an internal policy and human resources process and not the peer conversation process. Criteria for action at all pyramid levels have been described in detail elsewhere.[2,4,17]

Based on additional factors influencing the work environment, there were times when the committee chose messages to be shared by a leader instead of by a peer. Factors that influenced this decision included the following themes:

- Safety issues: The Professionalism Committee felt that the message would be better shared by a manager if safety issues were included in a report.
- Resource gap: The behavior was reported; however, there was no identified acceptable peer to share the observation.
- Timing: Managers shared the message as a necessity due to scheduling; or it took too long for the messenger to connect with their peer due to rotating shifts, paid time off, or work location.
- Routing of reports: By design, safety reports are received by an identified leader of the unit or department in which they occur. At times, our leaders provided feedback to staff RNs before the peer messenger contacted the recipient. Sharing of feedback by a leader was not discouraged.

Messengers have the final authority to determine if the report is suitable to be shared and are responsible for contacting the recipient. After a time and place is mutually agreed upon, messengers share a summary of the reported behavior and allow time for the recipient to respond and ask questions. Messengers acknowledge that there are two sides to every story, that our leaders commit to sharing all reports, and that the behavior reported was perceived as inconsistent with the organizational core values. Messengers are encouraged to not take a copy of the report with them. Recipients are asked to reflect and to respond differently in a comparable situation. Recipients are reminded to not contact anyone they suspect of reporting, as this may be construed as retaliation. The actual time of message delivery varies based on individual reactions, need for clarification, and supportive discussion, but is as close to the date of the reported behavior as is optimal. Figure 1 depicts the CORS process. If a messenger decides the report may need further evaluation, the report is returned to the professionalism chair(s) at the institution for further discussion and dissemination.

Peer Messenger Debriefing. Messengers are asked to complete a debriefing survey using a secure system following delivery of their CORS message. Completion of message delivery, recipient response, and anything noteworthy about the discussion is captured. Completion of the survey also serves as documentation of the organization addressing unprofessional behavior for regulatory requirements.[9] Table 3 provides examples of comments from messengers.

Evaluation

Data Collection. Data collected included the date and location of the observation, the first and last name of the intended recipient, a narrative of the behavior, and the name of the reporter, if present. The debriefing surveys are linked to the associated observation and site and subsequently de-identified to facilitate analysis of CORS message delivery and themes. Data are held on a secure, password-protected server at CPPA under the terms of a business associate agreement with each site. CORS data were de-identified and then aggregated for statistical analysis.

Data Analysis by CPPA. Qualitatively coded reports were categorized using the Martinez complaint categories.[15] Peer messenger debriefing surveys were tabulated for completion of the messaging process and used to summarize the messenger experience. Quantitative percentiles were calculated, and simple counts were used for the frequency of reports.

RESULTS

A total of 590 reports from our three sites were identified by CPPA from September 1, 2019, to August 31, 2021, as observations appropriate for a peer message to a staff nurse.

Experience with Implementation (Feasibility)

Application of the project bundle[1,17,21] for successful implementation for each site of the pilot was established and evaluated using the 10 essential elements. However, nuances to the program as it applied to nursing were identified. CPPA uses a checklist and set of best practices to evaluate the progression and completion of the elements present in the bundle. Table 2 highlights concepts that were unique to implementing and operationalizing CORS for nursing practice. Five additional elements were identified during implementation:

1. CORS needed to be in congruence and alignment with our commitment to being a Magnet organization that promotes nursing as a profession.
2. The nurse schedule of 24/7/365 rotating days, nights, and weekend shifts required thoughtful consideration when selecting a messenger for delivery of the observation, as nurses do not have dedicated clinic or office time. Nurses hold varied positions in an organization, and at times a peer was not available to deliver a message.
3. Submission, notification, and routing of unprofessional conduct reports via electronic software required reconfiguration of the routing scheme to support the peer-to-peer process. The routing scheme of safety reports is designed to support nursing governance.
4. Education and ongoing support to local managers and leaders helped the peer process to occur. For example, the local managers are responsible for resolution of reports that occur in their unit and giving feedback about

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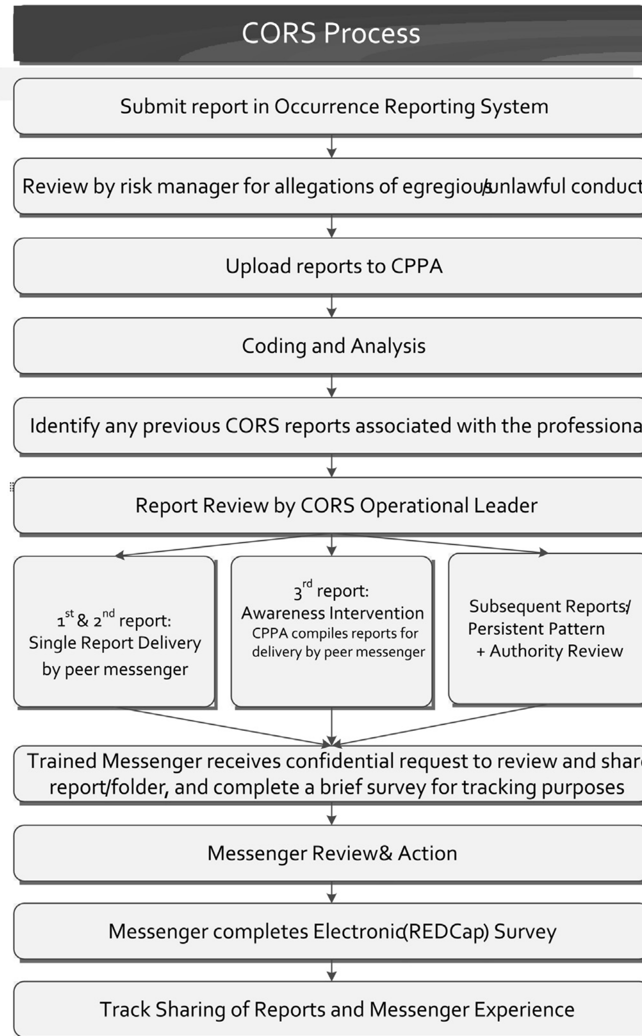

Figure 1: This diagram depicts the Co-Worker Observation Reporting System (CORS) procedure. Adapted from Webb et al. (see reference 17). CPPA, Center for Patient and Professional Advocacy; REDCap, Research Electronic Data Capture.

Table 3. Peer Messenger Feedback

Peer Messenger Comments from an Electronic Survey
XX was very receptive to the feedback and even stated that it was a very appropriate use of the CORS program.
XX was extremely receptive to the report. She expressed she took many of her frustrations out on this individual rather than on the system as a whole and feels extremely regretful for doing this. . . . Overall, this was a very positive interaction with XX and will be beneficial for the future.
She was upset that her coworker wrote her up instead of talking. She did thank me and said she appreciated my role as the messenger.
After weeks of communicating with XX. . . . He at one point stopped responding to my emails and text messages. It was decided that it would be best just to email the report to him. Stating that if he had any questions about it that he could email me back.
Conversation went well. States understanding regarding self-reflection for this observation report. When discussing resources—she plans to talk with her manager. . . , Had ideas to share with her manager about process improvement for this.
She understood the intent of the Cup of Coffee session even though the session was provided to her by her direct supervisor instead of a peer. She suggested there would be more educational opportunities for staff to be able to learn to address concerns with people directly instead of being "written up."
I received pushback (deflection) from this nurse repeatedly during our conversation. Despite my responses to remind, reinforce, and especially, reflect letting her know that it may be helpful to know how it appears to have been perceived by others.
XX was receptive and did not remember the incident. He stated appreciation for bringing this to his attention.

CORS, Co-Worker Observation System

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Table 4. Percentage of Reports by Coding Taxonomy*†

Category of Observation	Definition of Category	Example of Reported Observations from a Pilot Study	Percentage of Reported Observation by Category During the Study
Clear and Respectful Communication	Communication is unclear, conflicting, disrespectful, and aggressive, along with failure to communicate.	"Nurse . . . yelled down the hallway: 'I told you I'm not ready for pt.' Multiple rude and unnecessary comments. . . . Pt and staff uncomfortable. . . . [RN] made us wait outside . . . in the hallway . . . behavior was very inappropriate and embarrassing."	48.8
Responsibility	Completing or complying with role-related tasks or policies, access and availability, and failure to accept feedback	"The room was a mess. . . . XX left to take the drug tray back instead of helping. . . . When he came back, he grabbed his scrub coat and started walking out of the room. I stated that he needed to stay and help. He didn't say anything, he just walked out."	33.3
Appropriate Medical Care	An observation about cognitive and technical aspects of medical care, along with the scope of practice	"XX arrived in the unit and walked directly into the pt.'s room without proper hand hygiene . . . disregard to clear signage posted outside the room w closed door, nor donned proper PPE before entering the room."	6.8
Professional Integrity	False statements or documentation, breach of confidentiality, conflict of interest, discrimination, and lying	"XX . . . was in the dayroom speaking about a patient. She implied what unit. . . . She also spoke about the patient's history and name. Also mentioned one of our patients who came back last night. Behavior does not seem to fit our mission, Magnet philosophy, and more."	5.9
Report of Concern/Possibly Egregious	Mandated by law or policy to warrant immediate investigation	"RN is continuously bringing up politics unprovoked and becoming hostile/arguing with other staff members; tonight it was excessive. Patients have complained. Also used the term 'XX,' which is extremely offensive. I am uncomfortable"	5.2

* Adapted from Martinez et al. (see reference 15).
† *N* = 590 reports coded.
Pt, patient; PPE, personal protective equipment.

unprofessional behavior to staff, so this was a different process for them.

5. Nurses are employed by the organization, whereas physicians and APPs are credentialed and privileged. Collective Bargaining Unit and HR representatives were engaged early and often to ensure collegial dialogue, and alignment with contracts, policies, and desired outcomes.

Coding Taxonomy (Feasibility)

All 590 CORS reports were coded using the Martinez taxonomy.[15] A total of 1,367 unprofessional behaviors were successfully mapped to an existing CORS category of clear and respectful communication (48.8%), responsibility (33.3%), appropriate medical care (6.8%), and professional integrity (5.9%) (Table 4). Of the reports, 5.2% described behavior that was considered by law or policy to warrant immediate investigation. The local risk management team at our sites reviews all reports submitted electronically per their workflow. For reports outside the scope of CORS that meet the requirement for immediate investigation, CPPA highlights and expedites their return to the organization as a backup method to our internal risk process. The use of the 4 main categories and 22 subcategories of the coding taxonomy[15] allowed the CPPA staff to further delineate the type of behavior observed supporting fidelity. Most reports included more than one coded observation. For example, a report about a nurse refusing to redraw a lab specimen because they were too busy and raising their voice to lab personnel would include a coded observation about effective communication and role-related responsibility.

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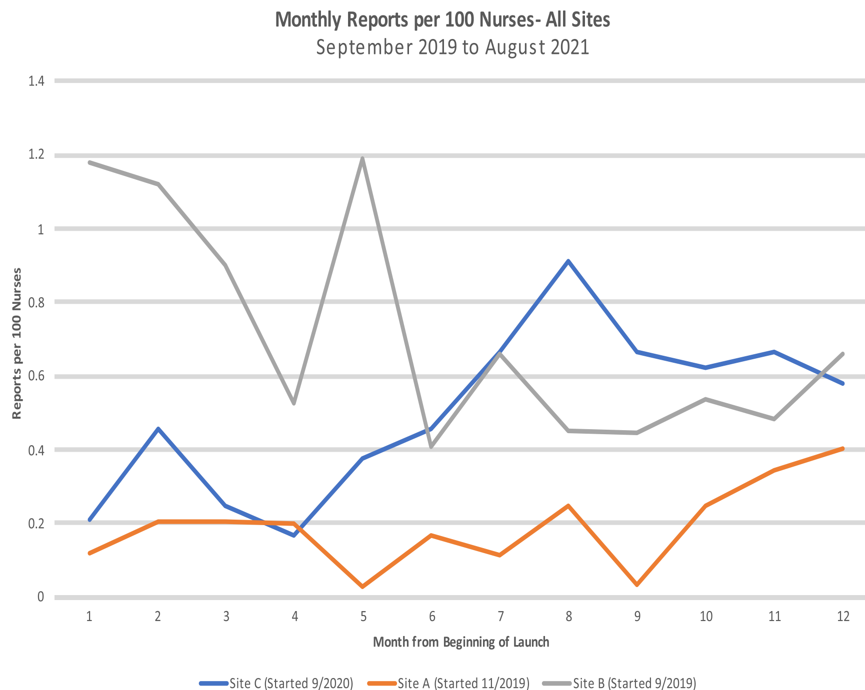

Figure 2: This graph shows that the patterns of reporting varied by organization, trending toward a similar frequency within the first 12 months of the program. The trend of increased reporting suggests the adoption and dissemination of the procedure for reporting.

Reporting Process Adoption and Dissemination of Reporting (Feasibility)

Figure 2 shows that the patterns of reporting varied by organization, trending toward a similar frequency within the first 12 months of the program. During the implementation of the CORS program and process, our Professionalism Committee chair(s) encouraged addressing behavior at the time it occurs. If the behavior was not addressed at the time, we shared and disseminated to all nurses at each organization the process of reporting unprofessional behavior and the rationale and research behind the theory. The graph shows a trend of increased reporting, which suggests the adoption and dissemination of the procedure for reporting. This trend may also indicate the dissemination of the organization's commitment to addressing behaviors that undermine a culture of safety and respect. CPPA shares report frequency with the organizations quarterly to monitor dissemination.

Rate of Peer Messenger Sharing Reports (Fidelity)

Of the peer messages, 76.5% were successfully documented using the debriefing survey as complete, 2.2% awaiting messenger feedback, and 0.2% awaiting messenger assignments, for a total of 78.9 % considered delivered. Of the 21.1% unshared reports, 0.7 % were pulled from delivery due to organizational insight into factors affecting the nurse, 4.0% were chosen to not be shared by the organization based on issues stemming from a new system or policy implementation identified within the reports, and 16.4 % had a delivery status of unknown. For reports in the latter category, CPPA and our sites were unable to determine if the report was shared, as the debriefing survey was not filled out.

DISCUSSION

Overall, the implementation study demonstrated feasibility and fidelity to the CORS process as described by Webb et al.[17]

The project bundle[1,17,21] was effective for implementing CORS for nursing. Special considerations need to be incorporated for this professional population due to differences in employment structure, contracts, policies, scheduling, and uniqueness of identifying nursing peers, as RNs hold various roles in an organization.

The coding taxonomy[15] currently used in CORS is effective for not only physicians and APPs but also nursing. At this time, no additional categories were added to the taxonomy to fit nursing practice.

Each report is considered at face value. The observation reported may differ from the recipient's recollection of the event. However, in a safe and just culture, all event reports are shared. The use of electronic reporting software and trained peer messengers is essential to providing nonjudgmental and nonpunitive feedback if just-in-time feedback cannot occur. In previously reported studies,[17] reduction of reported unprofessional behavior did occur after delivery of messages by peers. The current software capability at each site allowed for effective data collection.

Nurses will deliver a message to a peer. The 78.9 % message delivery rate over a 12- to 24-month time frame is just

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slightly lower than the previously reported delivery rate for physicians and APPs (84% rate over 36 months).[17] Our sites and CPPA implemented automatic reminders for messengers to fill out the survey after delivery of a message and incorporated methods to track report delivery. We anticipate an increase in percentage rates of delivered messages with these processes. CPPA and our sites established either a weekly or monthly communication mechanism for updating message delivery status to ensure fidelity.

We identified early on that some messages about behavior had been shared by managers before the peer had a chance to connect. It was not the intent of CORS to supplant the manager's ability to provide coaching and direction to employees when they became aware of performance challenges related to professionalism. Rather, CORS provides an alternative approach in which a peer delivers the message. If a manager delivers the message, we considered the report shared. Our sites worked with risk management and local leadership to provide a solution within the reporting software that supported the sharing of messages by a peer.

During the study time frame, 95.5% of nurses did not receive a report, 3.5% of nurses received one report, and less than 1% received more than one report, compared to the previously published reporting frequency of 15% of physicians and 4% of APPs receiving at least one report over a three-year time frame.[17] CPPA has seen an increase in report frequency, professionals in the database, and professionals receiving at least one report as CORS programs mature. We anticipate this will be demonstrated with nursing as the program continues.

Opportunities to compare outcome data of RNs vs. physicians and APPs[17] related to improvement rate and frequency of reports over a three-year time frame have been identified for future discussion.

A majority of the study implementation occurred during the COVID-19 pandemic; however, all three organizations chose to continue the pursuit of sharing observations of unprofessional behavior. In one study site, these factors caused a delay in the start and scaling back to only one of the system's five hospitals and only 12 months of data collection, and at another site suspension of message delivery for 6 months. The authors are unsure of the effect, if any, of COVID-19 or situational crisis management on the pilot.

One of the sites was in collective bargaining negotiations during the pilot. CPPA and this site agreed that all unprofessional behavior reports related to or written about collective bargaining actions or negotiations were excluded from the study.

CONCLUSIONS AND IMPLICATIONS FOR NURSING

The use of a project bundle that includes people, organizations, and systems and the current coding taxonomy is essential for the feasibility of CORS implementation. Nurses will deliver a message to a peer. Using an intervention model and consideration of the lessons learned during CORS implementation for nursing guides how other health care organizations may reproduce a peer feedback tool and process. Aligning organizational visions to adopt just culture's reporting creates transparency and learning. Using Magnet foundational principles strengthens nursing professional development and shared governance.[14] Incorporating CORS with these practices to provide feedback could assist an organization in creating a culture of patient safety and respect.

As the largest group, by number, of health care professionals, nurses must be included in programs that promote professional accountability. This study demonstrated that CORS, a proven tool and process used by physicians and APPs, can be implemented with staff nursing when nursing infrastructure is considered.

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