Implementing Potentially Better Practices for Multidisciplinary Team Building: Creating a Neonatal Intensive Care Unit Culture of Collaboration

Mark S. Brown, MD, MSPH*; Judy Ohlinger, RN, MSN‡; Connie Rusk, RN, NNP*; Paula Delmore, RN, MSN§; and Patricia Ittmann, DO‖ on Behalf of the CARE Group

ABSTRACT. *Objective.* **Part of the process of deriving and refining the CARE (communication, accountability, respect, empowerment) focus group's potentially better practices (PBPs) for multidisciplinary teamwork was to evaluate and experience the PBPs through implementation.**

Methods. **The 4 neonatal intensive care units (NICUs) in the CARE focus group each worked with implementation of the PBPs. The choice of initial PBP and method of implementation was left up to each NICU's core team.**

Results. **The experience of each of the PBPs that is reported was selected from only 1 of the NICUs. These are summarized and described in a plan-do-study-act type of format.**

Conclusions. **There was no ideal PBP with which to start. The intertwined nature of all of the PBPs provided additional opportunities to implement other PBPs. A change seemed to be a matter first of vocabulary, then of tentative acceptance, followed by gradual integration into the culture. Change was facilitated when there was acknowledgment of a need to do things differently by the NICU leadership. Although the validity of the PBPs and their importance in cultural change have yet to be confirmed, once there was a persisting intent to change, the makeup of the NICU culture moved to embrace change as part of its culture.** *Pediatrics* **2003;111:e482–e488. URL: http://www.pediatrics.org/cgi/content/full/111/4/e482;** ***neonatal intensive care units, organizational culture, interprofessional relations, collaborative quality improvement, NIC/Q 2000.***

ABBREVIATIONS. PBPs, potential better practices; NICU, neonatal intensive care unit; CARE, communication, accountability, respect, empowerment; PDSA, plan-do-study-act.

KEY POINTS OF ARTICLE

- Potentially better practices (PBPs) for multidisciplinary teamwork rarely stand alone and are an integral part of how the neonatal intensive care unit (NICU) community accomplishes its work.
- The NICU community needs to openly commit to shared purpose, goals, and values and to utilize them in daily practice.
- Communicating at multiple levels and in multiple directions is essential to carryout effectively the activities of the NICU community.
- Trust and respect between all team members is essential for a collaborative NICU environment.
- Changing a unit's culture with regard to multidisciplinary teamwork is a long-term process.
- The process of culture change begins with intent to change, is followed by speaking and acting differently, and ends only when new attitudes and behaviors become the natural ways of working.

APPLYING LESSONS LEARNED TO PRACTICE

- The CARE Group has come to learn that better practices often do not stand alone but are part and parcel of how the NICU community accomplishes its work.
- A key responsibility of NICU leaders is the development of leadership and collaboration skills in others.
- A collaborative NICU environment cannot exist without trust and respect among and between all team members.
- Competent and committed team members need clinical, operational, and organizational education and support.
- Disagreement and differences in opinion can serve as the catalyst for improvements and therefore are worth learning to manage.

The culture of an organization is the way that it functions and gets its business done. Culture is fundamentally intangible. To measure or change culture, one has to rely on expressions of how the particular culture works.[1] It is important to understand culture to know 1) what the critical elements of culture are, 2) how to measure them, 3) how to change effectively the critical elements, and 4) how to measure change in critical elements and, ultimately, in the culture.

A description of the elements of culture as they apply to NICUs is found in the article by Ohlinger et al[2] in this supplement. The key elements identified led to the development of 7 PBPs (Table 1). The process of honing culture down to these 7 key elements was lengthy and comprehensive and included self-inventories, literature review, and benchmarking with NICUs that had predominantly developmental or group cultures.[3] This article describes the

From the *Presbyterian St Luke's Medical Center, Denver, Colorado; ‡Children's Hospital Medical Center of Akron, Akron, Ohio; §Wesley Medical Center, Wichita, Kansas; and ‖Rockford Memorial Hospital, Rockford, Illinois.

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Reprint requests to (M.S.B.) 1601 E 19th Ave, Ste 5300, Denver, CO 80218. E-mail: marksbrown@compuserve.com

TABLE 1. PBPs for Building a Collaborative Culture

Clear, shared goals and values
Communication among and between team members
Lead by example— "walk the talk"
Nurture collaboration with trust and respect
Live principled standards of conduct and excellence
Competent and committed team members
Commitment to conflict management

refinement of the 7 PBPs through implementation within our own NICU cultures.

The examples of implementation given below each offer a snapshot of an approach taken by 1 of the participating NICUs to implement 1 of the PBPs. Implementation of the 7 PBPs is presented using the framework of the plan-do-study-act (PDSA) quality improvement process.[3] The PDSA format for these examples is summarized here for brevity and to enhance their understanding. This is not a script for making a cultural shift. The way that each of the PBPs can best be implemented is very specific to the particular health care setting, the individuals involved, the existing culture, and the opportunities that present themselves. Furthermore, all of the PBPs are inextricably intertwined. Implementation of a single PBP is a starting point for introducing vocabulary about culture, and it eventually needs to be supported by implementing or enhancing the other PBPs. The PBPs thus become a package.

METHODS: IMPLEMENTATION OF PBPs

PBP 1: Clear, Shared Purpose, Goals, and Values

Rationale

A statement of purpose provides a unifying effect to the work effort and enhances the commitment of team members. A common vision forms the framework for all team functions and helps to bridge the gap between different disciplines. Without a unifying purpose, each discipline may see its role as more valuable than another person's role. Identifying the goals that a diverse group hopes to achieve improves their ability to work in a coordinated and collaborative manner.

Potential Benefits

The potential benefits of having a clear purpose are numerous. Job satisfaction may be enhanced because staff more clearly understand the nature of the day-to-day work they do and how it contributes to the collective goals. The focus is less on individual achievement and more on the collective and collaborative effort. This may be especially important in removing the traditional hierarchical barriers between nurses and physicians. It is also of value in the hiring and orientation of new staff because expectations are clearly defined and universal.

Potential Risks

There are also risks to having a clear purpose and goals. Some team members may self-select out of the group if they disagree with the goals or values. Also, if the team does not regularly reevaluate their purpose and goals, then the team may not be able to adapt to changes in the larger organization or society. A purpose statement and goals that are not the result of unit-wide involvement will not be internalized if they do not reflect the values of the majority of the staff.

Operationalization

Clear, Shared Purpose, Goals, and Values

Aim

Develop a purpose statement reflecting the values and goals of all NICU staff.

Plan

1. Organize a task force to formulate ideas.
2. Develop consensus with broad participation of NICU staff.
3. Invite all staff to attend a development session.
4. Conduct multiple facilitated sessions representing all disciplines to solicit ideas for inclusion in our purpose statement.

Do

1. Invitations were sent and the goal of the sessions and the importance of input from all were explained.
2. A sign-up sheet was posted with spaces for each discipline.
3. Times were spread over a week from 7 AM to 11 PM for a total of 9 sessions.
4. Nonsalaried employees received pay for attending, but attendance was voluntary.
5. The same person, who was not an NICU employee, facilitated each session.
6. An overview of the ground rules and goals of the session was presented.
7. Each person answered the following questions:
   - What do we need to accomplish in the NICU?
   - What do our families say we need to accomplish?
   - What would we like to say we accomplished?
   - What do we want others to say about us?
   - What do we want to say about us?
8. The collated answers were put into a draft that was presented to all staff at a regular staff meeting for validation.
9. Suggestions were made, a new draft was made, and the draft was again presented to all staff and was accepted.
10. The purpose statement was then placed on a banner and voluntarily signed by staff members.
11. The banner was displayed in the NICU. The facilitator met with all NICU standing committees and task forces to discuss how to incorporate the purpose statement into goals for the year.
12. A guideline was developed for all decisions made in the collaborative practice council.

Study

Measurement for this type of intervention was difficult. One obvious measure was whether the purpose statement was written. Many NICUs already have some form of purpose statement, but they may need to validate that it is actually part of the culture of the NICU and represents the values and goals of the entire unit. One measure might be a survey of staff to see how many know what is in the statement and whether it is relevant to their daily work. Attendance was measured at sessions, as well as counting the numbers signing the banner. A survey of staff annually will verify that the statement still reflects their values and goals. It may be useful to ask staff to describe how their work contributes to the common purpose and goals.

Act

If the statement is to have meaning, it should also be used to evaluate new team members for suitability, based on their ability to commit to and internalize the collective mission. Evidence of commitment to the collaborative purpose can also be used in performance evaluations of current staff. To maintain their relevance, purpose statements and goals need to be frequently evaluated and revised to reflect changes in the composition and values of the team.

PBP 2: Effective Communication Among and Between Teams and Team Members

Rationale

Communication is vital to any team, unit, and organization that is committed to improving clinical, operational, and organizational outcomes. This is the only way to know what needs to be improved and how improvement will be accomplished. When communication goes well, the chances for success improve. Effective communication is a shared responsibility. It is not uncommon to find that when employees of a NICU are asked whether they believe that they know "what's going on around here," they do not know. This occurs despite that managers believe that they communicate all necessary information to the staff to keep them

apprised of changes and unit activities. Effective and efficient communication with large and diverse groups of people is difficult.

Potential Benefits

Effective organizational communication is critical to team success. Success depends on how well team members communicate what they are doing, not only among themselves but also to anyone else who is likely to be affected by or interested in their activities. Effective communication focuses on "connecting the dots" of how all plans, actions, and decisions are connected—to link all individual and unit-based activities to the big picture and show how each member contributes to the overall functioning of the unit.

Potential Risks

The literature about teamwork emphasizes open and frequent sharing of information that can be different from what management has traditionally been taught. Effective organizational communication requires substantial commitment of time and resources. It is most successful when a multidisciplinary group shares the commitment and burden, not just a few individuals. This presents significant challenges to effectiveness and efficiency.

Operationalization

Effective Communication Among and Between Teams and Team Members

Aim

Historically, this unit had difficulty disseminating information in a timely and effective manner. Traditional methods were used—memos, meeting minutes, notices on bulletin boards, doorways, walls, bathroom stalls, and staff and management meetings. No tool or method was in place to communicate consistently among the NICU staff or to the larger organization. It was felt that a regular newsletter might remedy this situation.

Plan

The NICU nursing leadership committed to create and maintain a successful, regular publication—'The Newborn Crier.' One person volunteered to coordinate newsletter publication. This commitment seemed to be key.

Do

The first few issues were written with contributions from only a very few people. With encouragement and solicitation, contributions came from larger numbers of NICU and NICU-related staff. Now, for example, each committee and improvement group designates someone from their team to convey information about their decisions, plans, and activities. These are not "meeting minutes." To foster the human aspects of working relationships, staff members are asked to contribute information about their personal and professional lives such as graduations, births, vacations, conference attendance, recipes, work-related parties and showers, and so forth. Some staff members have had parents contribute articles about their personal experiences in our unit. Though the traditional communication methods are still used, the newsletter augments and reinforces them.

This is how the process currently works. Signs are posted in and around the unit and e-mails are sent calling for articles and the date when they are due to the newsletter coordinator. A word-processing program enhances compiling the newsletter for consistency and visual appeal. The coordinator to the unit's nurse manager submits the draft to the Director of Public Relations for editing suggestions.

The time involved in producing each issue is considerable and yet widely dispersed so that the investment of each individual is minimized. Commitment is key. With a small amount of consistent vigilance and encouragement, the newsletter continues to be the major conveyor of information in and around the NICU.

Study

There were several indicators of success of the newsletter. The last page of the fifth issue was a survey requesting information about length and frequency of the newsletter, what people would like to see more or less of, whether the respondent was a NICU staff member or from another department, and what suggestions they could offer for improvement. Though the response was only 20%, it was overwhelmingly positive. Verbal and written thanks and indications of helpfulness continue to be received from internal as well as external staff.

Act

The current process is continuing. There have been significant improvements in the ability to keep the NICU staff abreast of the activities occurring in the unit.

PBP 3: Lead by Example—Walk the Talk

Rationale

Leaders may embrace a variety of "leadership strategies," but there is 1 thing that all effective leaders have in common: congruence between their words and actions. Integrity or, perhaps more important, credibility comes from doing what one says one is going to do. Leaders who want to build trust recognize the critical nature of their behavior. It is not always an easy thing to do, but if leaders do not want words to ring hollow, then "walking the talk" is essential.

Potential Benefits

Teamwork is more successful when decision making is visible and participative. Leaders who display high integrity and strive for participation can easily influence movement away from the status quo. Trustful relationships are developed. This allows the talents of each team member to shine and bring out leadership qualities. Team members flourish with this approach and willingly accept the responsibility and accountability to take a project to its conclusion.

Potential Risks

Before leaders can "walk the talk," they must accept their faults and limitations and be willing to acknowledge their part of the process. This self-acceptance may place the leader in a vulnerable position with a team that is in transition. However, if a leader can model the behavior of self-acceptance, then mutual acceptance is fostered, which enhances the capability for team growth. It is often difficult to give up the belief that judgment is more sound at the leader's level. If care is not taken to provide the team with autonomy, then a leader can be in the position of second-guessing team decisions. This creates a climate of risk aversion, hesitation, and indecision and undermines staff confidence.

Operationalization

Lead by Example—Walk the Talk

Aim

Explore leadership in all of its dimensions, with a focus on learning about the servant leadership model.

Plan

1. Assess the perception of leadership about the current status regarding leadership from the organizational survey.
2. Read and discuss "The Servant: A Simple Story About the True Essence of Leadership."

Do

1. Shared all learning with top administration and medical leadership.
2. Held an educational session with physicians and leadership staff on the "Art of Caring" by bringing in guest speaker Dr Bowen White.
3. Made the conferences user-friendly for physicians: noontime, central conference space, and free food.

Study

The leadership survey revealed that:

1. A hierarchical administrative structure was the current administrative model.
2. Not everyone would "buy-in" to leadership development.

3. There were committee people who were loyal to the medical center.
4. People were committed to their personal ideals.
5. People were passionate about the work, but numbers seemed to be dropping because of the fatigue factor.
6. There were varying levels of accountability within the institution.
7. Leaders wanted to grow.
8. Some leaders were in a survival mode or "retired while on active duty."
9. Rewards were given for being a manager, not a leader.
10. Internal wisdom did not appear to be rewarded as much as external wisdom.
11. The current model of leadership was that of "player/coach."

Committment to exploration of leadership in all of its dimensions has allowed our institution to honestly assess its weaknesses, communicate those to the staff, and develop a plan to address these weaknesses. That movement in and of itself suggested success. The energy seen in the leadership staff radiates throughout the organization.

Act

As a result of the team's work, employee feedback is now taken with a commitment for improvement.

1. All feedback is reviewed and shared with individual departments.
2. Department teams identify their top priorities for action, time frames are established, and repeat feedback is used to measure improvement.

PBP 4: Nurture a Collaborative Environment With Trust and Respect

Rationale

The extent to which team members are successful at communicating openly, disclosing problems, and working collectively to solve those problems is dependent on the collaborative nature of the environment within which they function. Only in the presence of trust will collaboration flourish. Trust is possible in an environment that embraces honesty, openness, consistency, and respect. When present, trust allows team members to stay problem focused, promotes more efficient communication and coordination, improves the quality of collaborative outcomes, and leads to a broader understanding and exhibition of shared accountability.

Potential Benefits

High levels of trust and respect enable team members to function well together and realize their true potential. Individual team members benefit by bringing self-identity and self-purpose to the work being done. Diversity becomes valued because all voices are truly heard. Sharing negative feedback does not impair working relationships. As a result, an implementation plan developed in a climate of trust and respect is more likely to be attained and sustained.

Potential Risks

Trust is fragile. If any element of trust is breached, then a relationship may be compromised. This compromise can affect other team members and distract the group from their focus. Diversity can become a double-edged sword. Although diversity benefits the team by broadening inputs, behavioral demonstrations of trust may differ so much from person to person that more time is spent validating perceptions than working on the task at hand.

Operationalization

Nurture a Collaborative Environment With Trust and Respect

Aim

Opportunities to improve the processes of care were being lost because of the feeling that the error reporting process was punitive. An attempt was made to incorporate elements that produce trust into the review process.

Plan

1. Revise the error-reporting process to make it more user-friendly.
2. Focus on the potential cause of the error, not the person involved in the error.
3. Classify errors as stemming from a skill or knowledge deficit, a problem with the system within which the error was made, human error, or a behavior or attitude problem.
4. Commit to address mistakes accordingly:

Problem—Solutions
Skill or knowledge deficit—Teach/train
A system issue—Improve the system, create a needed system, and reinforce correct use
Human error—Acknowledge that there was no skill or knowledge deficit, and no system issue, forgive the mistake
Behavior or attitude problem—Requires leadership intervention and performance plan

Do

1. Staff were educated about the philosophy of a nonpunitive approach to dealing with mistakes
2. Posted worksheets described the categories and potential solutions for review.
3. A copy of the worksheet was stapled to the error form.
4. This approach was used for 60 days. The number of opportunities for teaching and system improvement that could be acted on was recorded.

Study

Twelve errors were reported. Three were related to a skill or knowledge deficit, and 9 were the result of a system issue. Discussion focused on the event and was phrased within the context of the elements of trust. Appropriate solutions were planned. When a system improvement was needed, the staff member was empowered to lead the initiative for change. All who participated in the test of this new approach verbalized that the experience was positive.

Act

Categorization of mistakes will continue to be used as well as problem-solving as a part of error-reporting.

PBP 5: Live Principled Standards of Conduct and of Excellence

Rationale

Principled standards of conduct and excellence are rooted in common values, are part of the fabric of the culture, and are another facet to a functional culture. High standards need to be consciously adopted, lived, and woven into the unit culture.

Potential Benefits

Clear and principled standards of conduct and excellence in a NICU enhance commitment, motivation, and self-esteem among its members. They define how people treat each other in all aspects of the workplace. They recognize the value and diversity of each member and create a supportive environment. The focus on the goal of the team is emphasized and balanced by the value of each individual.

Potential Risks

Standards of excellence are hard to maintain and easy to ignore in day-to-day work, especially during times of stress. If all members do not "buy-in," then there can be erosion of the standards of conduct. There is always the risk of slippage whereby an individual elevates his or her importance above the group's and undermines the ability for the group collective to reach potential.

Operationalization

Live Principled Standards of Conduct and of Excellence

Aim

The organizational survey confirmed that the unit and staff had low morale and needed a clearer sense of what was expected of

them. When several of the unit's interest groups formed a single group, it was an opportunity to set up common values of excellence and mutual expectations for how to treat each other.

Plan

Unit team members took the initiative to establish a multidisciplinary committee that would serve as the clearinghouse for efforts toward family-centered care and infant behavior issues. The intention of the committee was to provide a safe environment where staff members could present concerns and desires involving the NICU. The focus was to be on individual responsibility. The plan included:

1. Eliciting buy-in that common values and meeting expectations would be important to the function of the group.
2. Collecting a variety of examples of such standards of conduct and excellence and use them to develop the group's own consensus standards.
3. Discussing meeting etiquette and expectations for getting the work done within a set time.

Do

The committee agreed to meet once a month and the chairperson responsibility would rotate on a semi-annual basis. Staff requested that the chairperson be an active staff member rather than management.

Meeting agendas and forum to conduct business was discussed and established. The list of standards was reviewed, members separately indicated what was important to them, and these collated results were reviewed with adoption of standards and written commitment.

Study

Participation in the committee was tracked and a pre- and postintervention survey for assessment of attitudes about openness was done. There was improvement in feelings of acceptance. As consultants to the committee, an effort was made to be "true to our word" in providing feedback in a timely and respectful way.

Act

A recognition program was initiated to openly recognize an individual's performance and progress by co-workers to emphasize the commitment to excellence. This was associated with anything about the nursery that exemplified excellence in caring for babies and their families. The articulated principled standards of conduct remained in place and have been incorporated into everyday interactions.

PBP 6: Competent and Committed Team Members

Rationale

For a NICU to function at its best, unit members need to be committed to effective and efficient teamwork. The development of both competent and committed team members is a growth process. The members have to grow and mature to recognize the difference between personal goals and team goals and when to expend energy on each. Competent and committed team members are the mortar that holds the team together and allows for new members to be effectively incorporated.

Potential Benefits

Embracing teamwork skills supports staff members to reach out and take risks with change. It promotes and encourages willingness to change, values diversity, and leads to creativity. Problem resolution is a shared responsibility, not an individual effort, because the whole is a sum of its parts. Competent and committed teamwork generates learning opportunities for everyone involved. Understanding of roles, responsibilities, and expectations of each other is maximized.

Potential Risks

The training needed to develop the ability to collaborate skillfully can be time consuming and costly. It is time consuming to develop interpersonal working relationships and often difficult to match schedules of very busy team members. Using the team approach to create problem solving takes more time up front, although once developed saves time.

Operationalization

Competent and Committed Team Members

Aim

The intent was to coordinate a multidisciplinary committee of experienced and committed members and to serve as a resource for improvement. These team members could set the example for commitment and eventually mentor other staff formally or informally.

Plan

A multidisciplinary teamwork committee was formed from other groups that were all working with behavioral and family-centered themes. These groups had separately formed over several years for different reasons and their continued independent functioning contributed to fragmentation of improvement efforts.

1. Establish consensus that a joint effort was more productive than separate efforts.
2. Establish common ground rules and an overall mission.
3. Establish how things should work, including leadership and dissemination of information.

Do

A multidisciplinary committee was established with an emphasis on safety where staff members could voice their concerns and desires for change in the NICU. The committee was composed of staff members from every discipline involved in neonatal care. Administration was invited and encouraged to attend committee meetings, but was not responsible for conducting the agenda. The committee was an open forum for all team members, and committee members committed to a minimum "term" of 6 months. Ground rules were established, accepted, and incorporated into each meeting. The committee's role was then expanded to become responsible for coordinating the unit's quality improvement projects.

Study

The staff successfully ran the committee for approximately 9 months. This became the springboard for the hospital-wide quality improvement staff to become responsible for clerical and tracking functions of the NICU quality improvement activities. Thus, the committee changed hands and changed names. This had the positive effect of coalescence of improvement efforts to build resources and link common interests and the negative effect of some of the original group members feeling disenfranchised.

Act

Staff participation in the quality improvement committee continues to be encouraged. Minutes are posted and circulated, and each effort is tracked with coordination to other efforts and resources developed to remove barriers.

PBP 7: Commit to Conflict Management

Rationale

In any team that is really working toward its goals, conflicts are inevitable. Conflicts should not always be considered negative. On the one hand, unmanaged conflicts can sabotage team progress, resulting in tensions and disagreements that are difficult to unravel. On the other hand, there are constructive ways of managing conflict so that people are able to express and work through their differences without the risk or necessity of damaging one another.

Potential Benefits

Open and candid discussions result in a broadening of information and more available alternatives. This can lead to more trusting and healthy relationships among people who must work together whether they like each other or not.

Potential Risks

Conflicts are often emotional, making it difficult to focus on facts and behaviors instead of feelings and personalities. Resolution is rarely easy or fast. It requires time, thought, patience, and a great deal of practice. A successful team is one whose leaders and members all make a commitment to and take responsibility for managing conflict.

Operationalization

Commit to Conflict Management

Aim

Based on the unit's internal analysis questionnaire from the CARE group, it was felt that one of the first priorities would be to improve conflict management skills in staff. This needed to start with the medical and nursing leadership staff.

Plan

The Director of Training and Development was asked to develop a tailor-made "Conflict Management for Leaders" course. The main purpose of the course was to give all who attended a common knowledge base and language for conflict management discussions and skills.

Do

The course was divided into 2 parts, which were each 3 hours. Each part was offered 3 different times. A formal commitment was obtained from the medical and nursing leadership staff to attend both parts. The CARE Group took responsibility for advertising and scheduling the classes and attendees. It was deliberately decided to make attendance voluntary. These were repeated for staff.

Study

Though commitment to participate was obtained from all, there was still difficulty getting everyone to schedule attendance. Several people needed encouragement, and some rescheduling of classes was required. Evaluation of the classes indicated that the course was enjoyable and beneficial for all.

The second round of classes was attended by approximately 50% of the full-time and part-time nursing staff.

A third round of the 2-hour course sessions was targeted to other departments and individuals who interacted with the NICU staff on a regular basis. These people were mostly respiratory therapists and members of the Infant Therapy Team. Approximately 50% of those invited attended, with the same results and evaluations as in the earlier sessions.

Act

The most problematic issue was getting people to put into everyday practice the knowledge and skills they learned in the classes. Old habits of conflict avoidance are difficult to change, both collectively and individually. The improvement process required a core group of individuals who are committed to healthy resolution of conflict. There is a plan to offer a refresher course and to remeasure these attitudes and skills after 1 to 1.5 years of "practice."

DISCUSSION

The starting point for cultural change is an acknowledgment by managers and leaders that a change is needed in how business is done and how the NICU functions. The process of changing a culture is slow and difficult. It is much more difficult to change ideas, feelings, attitudes, and beliefs than to change specific clinical practices. It is easier to change what to do for a short time than it is to change how to do it for the longer term. One of the key ingredients in cultural change is recognition by the stakeholders that it is necessary and important.

In a number of instances, using an outside consultant was an important way to catalyze change. This openly signaled that there were problems and that there was a commitment by management to make it better. The internal review process and organizational survey were eye openers to the need for change. Change in culture needs to be embraced from the top down in the organizational hierarchy because an end run is difficult, if not futile. Change requires awareness of "dysfunctional" working relationships and a commitment to improve these relationships. Obstacles to this awareness and commitment exist at all levels. In a NICU, these changes are far easier to accomplish and more likely to endure when they include the medical and nursing leadership.

It was realized that moving from the current culture to one that was more team based would require substantial attitude changes. To change attitudes, a different vocabulary needed to be used. When the culture changes, the results might not be suited to all individuals who were part of the original culture and some people may want or need to leave. However, little information was available about the extent of this problem or how best to deal with and it varied among the CARE Group NICUs. It was helpful to keep a long-term focus on the commitment that any cultural change should provide a more stable base on which to build effective and long-lasting quality improvement for the NICU.

There was no ideal PBP with which to start. It was discovered that an effective strategy for implementing the PBPs was to seize any opportunity that presented itself to champion 1 of the practices, such as rewriting a mission statement or establishing effective communication channels or setting up shared expectations of behavior for meetings. The intertwined nature of all of the PBPs provided subsequent opportunities to implement or enhance the others. After 1 of the PBPs was implemented, the change process over time required reevaluation of the application of the PBP, changing some of its elements and perhaps moving on to other forms of the PBP, as well as placing more focus on another of the PBPs. This might be with reviewing the appropriateness of the mission statement, meeting formats, communication tools and needs, or conflict resolution skills. As the culture changes and evolves, so does the appearance of the PBPs.

It was sometimes difficult to find measures of cultural change. Short-term measures of cultural change included brief attitudinal surveys, short "bump-in" surveys, turnover, absenteeism, and a modified staff pain scale. An indirect result of the team's work on culture seemed to be an increase in the number of quality improvement projects and the number of staff who were involved in them, although this has not been documented. Overall, to demonstrate an actual shift in culture using measures from the original organizational survey may take several years.

The validity of the PBPs for collaborative culture is based on background work done on collaborative culture in other settings, internal observations, extensive readings, and external observations of group and developmental NICU cultures. The preceding pages have described implementation of the PBPs to

build a culture of collaboration in NICUs. It is difficult to demonstrate that in conjunction with the implementation process, the desired changes in NICU culture occurred. It has not been shown that if there was a change, it was a direct result of implementing these PBPs.

Changing the culture of an organization may depend on being able to identify and change key tangible elements or expressions of the culture, in the expectation that these changes will affect a change in the culture. In reality, it may not necessarily be a change in the key elements that change the culture but that there is a consistent and persistent intent to change. This ultimately should create a culture of change that establishes a flexible, adaptable, and viable culture that can incorporate effective quality improvement.

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Implementing Potentially Better Practices for Multidisciplinary Team Building: Creating a Neonatal Intensive Care Unit Culture of Collaboration

Mark S. Brown, Judy Ohlinger, Connie Rusk, Paula Delmore and Patricia Ittmann

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