The health of the environments in which registered nurses (RNs) work is critical to nurse job satisfaction and retention and to patient outcomes.

In 2005, the American Association of Critical-Care Nurses (AACN) issued the AACN Standards for Establishing and Sustaining a Healthy Work Environment and was conducted again in 2008. This article reports the results of the third AACN Critical Care Nurse Work Environment Survey conducted in 2013.

BACKGROUND The health of critical care nurse work environments has been shown to affect patient care outcomes as well as the job satisfaction and retention of registered nurses. The American Association of Critical-Care Nurses (AACN) Critical Care Nurse Work Environment Survey was first conducted in 2006 following the release of the AACN Standards for Establishing and Sustaining a Healthy Work Environment and was conducted again in 2008. This article reports the results of the third AACN Critical Care Nurse Work Environment Survey conducted in 2013.

OBJECTIVE To evaluate the current state of critical care nurse work environments.

METHODS A total of 8444 AACN members and constituents responded to an online survey.

RESULTS The overall health of critical care nurses’ work environments has declined since 2008, as have nurses’ perceptions of the quality of care. Respondents rated their overall work environment and factors associated with healthy work environments including quality of patient care, staffing, communication and collaboration, respect, physical and mental safety, moral distress, nursing leadership, support for certification and continuing education, meaningful recognition, job satisfaction, and career plans. Although some factors improved, declines in any factors are a concern.

CONCLUSIONS An increasing body of evidence has shown relationships between healthy nurse work environments and patient outcomes. The results of this 2013 survey identified areas in which the health of critical care nurse work environments needs attention and care, requiring the relentless true collaboration of everyone involved.

(Critical Care Nurse. 2014;34[4]:64-79)
The 6 essential standards—skilled communication, true collaboration, effective decision making, appropriate staffing, meaningful recognition, and authentic leadership—placed a spotlight on systemic behaviors often discounted despite mounting evidence that their absence affects safety, quality of care, and job satisfaction among health professionals. This landmark document underscored the association’s commitment, begun in 2001, to create healthy work environments and foster excellence in patient care. In 2003, AACN President Connie Barden challenged each nurse in AACN’s community of high acuity and critical care nurses to act boldly and personally commit to identifying the most pressing challenge in nurses’ immediate work environment, initiate discussions to find solutions to the challenge, and remain actively involved until the solutions took root.

Impact of Healthy Work Environments

Evidence of the impact of healthy work environments on nurses and patients continues to mount. Aiken et al., in a study of work environments in 9 countries, found that hospitals with poor work environments were associated with negative outcomes for nurses (burnout, job dissatisfaction) and patients (lower-quality care, not prepared for discharge). Another study by Aiken and colleagues, which included data from 655 hospitals and more than 39,000 nurses, showed that the impact of better staffing was greater in hospitals with the best work environments. For example, the researchers reported that decreasing the nurse workload by 1 patient per nurse lowered mortality by 9% in hospitals with the best work environments and by 4% in hospitals with average work environments, but had virtually no effect in hospitals with poor work environments.

Friese and colleagues, in a study of nurse practice environments and outcomes for surgical oncology patients, found that as the practice environment improved so did the 30-day mortality rates, complication rates, and failure to rescue rates. In a 2013 presentation, Aiken concluded the following:

Good nurse staffing levels are necessary, but not sufficient, for excellent patient care outcomes. Indeed, the cost of improving nurse staffing in hospitals with poor work environments is not a good investment relative to improving the work environment.

Medication errors are a major threat to patient safety, and RNs are the key to intercepting errors before they reach patients. Flynn et al. studied the relationships between nurse practice environments and medication error interception in acute care hospitals. Better practice environments were positively and significantly associated with error interception. Kelly and colleagues investigated the relationship between critical care work environments and nurse-reported health care–associated infections (HAIs), using a sample of 3217 critical care nurses in 32 hospitals. There was a significant association between the health of the work environment and the occurrence of HAIs; in better work environments, nurse-reported HAIs were less likely to occur. These findings have major implications for patient safety and for decreasing the financial impact of errors.

The quality of nurses’ work environments also has a significant relationship to all Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores. McHugh et al. found job satisfaction and nurse burnout had a statistically significant effect on patient satisfaction measured by 2 HCAHPS measures—hospital rating and willingness to recommend a hospital. For every 10% of nurses who reported dissatisfaction with their jobs, the percentage of patients who would definitely recommend the hospital decreased by about 2%, even after controlling for the effects of staffing and nurse work environment.

Critical Care Nurse Work Environment Studies

In our first Critical Care Nurse Work Environment Study, during the spring of 2006, we asked AACN
members and constituents about a wide range of work environment issues. More than 4000 nurses responded to the online survey. The second Critical Care Nurse Work Environment Study was conducted in the fall of 2008; more than 5000 nurses responded to this survey. In this article, we compare the results of the current study, conducted in early 2013, with the results of the 2 previous studies.

Context

It is important to consider the contexts in which these studies took place. In 2006, the United States continued to experience one of its most significant nursing shortages. Demand far exceeded supply. As a result of the nationwide recession that began in 2007, some RNs returned to the workforce while others increased their work hours. Hospital vacancy rates declined to the point that new graduate nurses in many job markets could not find work as RNs. Shortly after the 2008 survey was conducted, major changes were made in the federal reimbursement for health care that included nonpayment for “never” events, followed by similar changes from other payors and reimbursement penalties for preventable readmissions.

By the time we conducted this third survey in 2013, there were signs of a general economic turnaround. Unemployment rates in the United States had decreased from peak recession levels. The stock market had recovered, and nurses’ retirement accounts were returning to levels that would allow retirement for those who had deferred it during the recession. At the same time, the Affordable Care Act initiated what could become sea change transitions in American health care. Hospitals experienced new uncertainty as they moved toward integrated care and reimbursement intended to reward the value of care rather than the quantity.

Methods

Survey Instrument

The AACN Critical Care Nurse Work Environment Survey instrument was developed in 2006 based on the AACN Standards for Establishing and Sustaining Healthy Work Environments and previous independent national research about nurses’ work environments. The AACN Critical Care Nurse Work Environment Survey has 3 parts: the Critical Elements of a Healthy Work Environment scale, a series of additional questions to explore work environment elements in more detail, and questions about participant and employing organization demographics. The 2006 survey was pilot tested with a national sample of RNs and no major changes were indicated.

In 2008 and 2013, we modified the additional questions to probe results from the preceding surveys. For example, in 2008, a new open-ended question asked participants to describe the most meaningful recognition they had received. In 2013, we asked if the AACN healthy work environment standards had been implemented in the participants’ work units and employing organizations, and queried about which of the standards was the most challenging to meet in their work unit.

The Critical Elements of a Healthy Work Environment scale is a 32-item survey based specifically on the AACN healthy work environment standards. The scale assesses the manifestation of the healthy work environment standards in a work unit and organization using Likert-type belief statements with 4-point response vectors of strongly disagree (1), disagree (2), agree (3), and strongly agree (4).

A series of 62 questions then explores work environment elements in more detail, including questions about areas such as participant awareness of the AACN healthy work environment standards; perceptions of quality of patient care; frequency of verbal and/or physical abuse, sexual harassment, and discrimination; staffing and work that gets done; job and career satisfaction; and career plans. An additional 29 items collect demographic data about each participant and his or her employing organization. An open-ended question added in 2013, 8 years after the standards were released, invites suggestions for how to improve the healthy work environment standards.

Cronbach α, a measure of inter-item correlations that demonstrate how well a tool functions to target a specific underlying construct, was applied to the 32-item Critical Elements of a Healthy Work Environment scale. Cronbach α for the scale is 0.97 based on a subsample size of 5875. In order to use complete-case data in the analysis, we excluded 2552 responses with at least 1 missing response. Inter-item correlations ranged from a low of 0.200 to a high of 0.906, with a mean inter-item correlation of 0.473. We further divided the scale into subscales that examine the employing organization as a whole and the work unit itself. Cronbach α for the organization subscale is 0.94 (n = 6378) and 0.94 (n = 6049) for the work unit subscale.
The Critical Elements of a Healthy Work Environment scale is a traditional measurement scale that has remained constant across all 3 surveys. The other 2 sections of the AACN Critical Care Nurse Work Environment Survey are survey tools used to elicit participant opinions, report frequency of events of interest related to healthy work environments, and gather demographic information. Because of this distinction among its sections, standard measures of numerical reliability could not be applied to the entire survey.18

Data Collection
All 3 surveys used a convenience sample of AACN members and other individuals in AACN’s database who linked to the online instrument from an invitation e-mail. Each survey included an incentive: participation in a drawing for a complimentary registration to attend the AACN National Teaching Institute & Critical Care Exposition. Completion of the survey implied consent. The 2013 survey was conducted from February 6, 2013, to March 2, 2013.

Analysis
Descriptive statistics (including frequencies, percentages, standard deviations, and means) were determined for all scalar variables. Frequencies, percentages, and modal values were calculated for categorical variables. Responses were cross-tabulated against demographic variables to determine which variables were significantly correlated (\(\alpha<0.05\)). In cross-tabulation procedures, cases were eliminated in a pair-wise fashion so that only respondents with complete information for all target variables were included.

Results
Participant demographics are similar to the 2006 and 2008 surveys. Comparing with membership data obtained from AACN, participants represented all states and the District of Columbia in a geographic pattern similar to that of AACN’s total membership at the time of the survey. The 5 states with the highest percentage of AACN members were the same as the 5 states with the highest percentage of survey participants.19 The percentage of participants who reported working in acute care hospitals (96%) was slightly higher than the proportion of active AACN members who reported the same work setting (88%). Those who indicated they provide direct patient care (72%) were about the same as the percentage of AACN members who report their primary position as a direct care position of bedside/staff nurse, charge nurse, or clinic nurse (70%).

Survey participants were somewhat older than AACN members (46.5 vs 42.7 years). Although 61% of the survey participants reported having specialty or sub-specialty certification, a slightly lower percentage of the survey participants compared with AACN’s general membership held CCRN, CCRN-E, or PCCN certification (49% vs 52%). Compared with the national RN workforce study conducted in 2013 by the National Council of State Boards of Nursing and the Forum of State Nursing Workforce Centers,20 participants had similar ethnicity but were younger on average (46.5 vs 50.0 years), more educated, and included a slightly higher percentage of men (Table 1).

Overall Perception of Work Environment
As in 2006 and 2008, with very minor exceptions, the healthy work environment elements were consistently rated higher in the work unit than in the employing organization (Figure 1).

The highest-rated work unit elements in 2013 were the following:
• Structured processes are in place to ensure the perspectives of patients and their families are incorporated into decisions affecting patient care (mean = 2.90).
• RNs recognize others for the value they bring to the work of the organization (mean = 2.89).
• RNs are as proficient in communication skills as they are in clinical skills (2.87).

The lowest-rated work unit elements in 2013 were the following:
• There are formal processes to evaluate the effect of staffing decisions on patient and system outcomes (mean = 2.37).
• A structured process is provided to resolve disputes among/between members of the health care team (mean = 2.48).

The largest change from 2008 was for the item “RNs are valued and committed partners in making policy, directing and evaluating clinical care, and leading organizational operations.” The mean score decreased from 2.89 in 2008 to 2.69 in 2013 (\(P<.05\)). Details on the means for each item are provided in Table 2.
Table 1  Demographic information for survey respondents in the 2006, 2008, and 2013 surveys

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2008</th>
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<td>89.6</td>
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Note: Because of rounding, percentages may not total 100%.

Figure 1  Work unit environment mean ratings 2006, 2008, and 2013.

Note: The legend abbreviations refer to the Critical Elements of a Healthy Work Environment scale items, which are detailed in Table 2.
Skilled Communication: Nurses must be as proficient in communication skills as they are in clinical skills.

SC1: RNs are as proficient in communication skills as they are in clinical skills.
SC2: All team members are provided with support for and access to education programs that develop communication and collaboration skills.

True Collaboration: Nurses must be relentless in pursuing and fostering true collaboration.

TC1: RNs are relentless in pursuing and fostering true collaboration.
TC2: A structured process is provided to resolve disputes among/between members of the health care team.
TC3: A structured process is provided to resolve disputes among/between members of the health care team and patients and their families.

Effective Decision Making: Nurses must be valued and committed partners in making policy, directing and evaluating clinical care and leading organizational operations.

ED1: RNs are valued and committed partners in making policy, directing and evaluating clinical care, and leading organizational operations.
ED2: Structured processes are in place to ensure that the perspectives of patients and their families are incorporated into decisions affecting patient care.
ED3: RNs are engaged in the selection, adaptation, and evaluation of technologies that increase the effectiveness of nursing care delivery.
ED4: RNs have opportunities to influence decisions that affect the quality of patient care.

Appropriate Staffing: Staffing must ensure the effective match between patient needs and nurse competencies.

AS1: RN staffing ensures the effective match between patient needs and nurse competencies.
AS2: There are formal processes to evaluate the effect of staffing decisions on patient and system outcomes.

Meaningful Recognition: Nurses must be recognized and must recognize others for the value each brings to the work of the organization.

MR1: RNs are recognized for the value each brings to the organization.
MR2: RNs recognize others for the value they bring to the work of the organization.

Authentic Leadership: Nurse leaders must fully embrace the imperative of a healthy work environment, authentically live it and engage others in its achievement.

AL1: Nurse leaders (formal and informal) fully embrace the concept of a HWE.
AL2: Nurse leaders (formal and informal) engage others in achieving a HWE.
AL3: Nurse leaders (formal and informal) receive support for and have access to educational programs to ensure that they develop and enhance their knowledge and abilities.

<table>
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<tr>
<th>Standard/Statement</th>
<th>Work Unit</th>
<th>Organization</th>
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<tr>
<td>Skilled Communication</td>
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<td>2.84</td>
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<td></td>
<td>2.67</td>
<td>2.71</td>
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<td>True Collaboration</td>
<td>2.75</td>
<td>2.80</td>
</tr>
<tr>
<td></td>
<td>2.54</td>
<td>2.54</td>
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<tr>
<td>Effective Decision Making</td>
<td>2.75</td>
<td>2.74</td>
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<td></td>
<td>2.85</td>
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<td>Appropriate Staffing</td>
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<td>2.77</td>
</tr>
<tr>
<td></td>
<td>2.85</td>
<td>2.90</td>
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<tr>
<td>Authentic Leadership</td>
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<td>2.80</td>
</tr>
<tr>
<td></td>
<td>2.70</td>
<td>2.73</td>
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</table>

Note: Number reflects the average level of agreement with the statement with a range from 1 (strongly disagree) to 4 (strongly agree), so a higher score indicates a higher level of agreement with the statement. All changes from 2008-2013 are significant at *P* < .05.
Skilled Communication

Participants were asked to what extent they agreed with the skilled communication standard statement “RNs are as proficient in communication skills as they are in clinical skills.” The mean rating in both the work unit and employing organization increased slightly between 2008 and 2013. However, the mean rating of team members being provided support for and access to educational programs to develop communication and collaboration skills declined between 2008 and 2013.

In addition to asking participants to rate communication based on the AACN healthy work environment standards, we asked them to specifically rate communication between RNs and other RNs, physicians, frontline nurse managers, and administrators on a 4-point scale ranging from excellent to poor. Communication among RNs and between RNs and physicians remained the same between 2008 and 2013, but in 2013, communication was more often reported as poor for RNs and frontline nurse managers (14.3% in 2013 vs 10.9% in 2008); and for RNs and administrators (40.8% in 2013 vs 34.5% in 2008; P<.05; see Table 3).

True Collaboration

With only 1 exception, the mean ratings for items related to the true collaboration standard declined from 2008 to 2013. Declines were noted in the work unit and organization mean ratings for the provision of structured processes to resolve disputes between team members and between the team and patients/families. For the item “RNs are relentless in pursuing and fostering true collaboration,” the mean rating for the work unit declined, but the mean rating for the organization improved.

Participants also rated the quality of collaboration between RNs and other RNs, physicians, frontline nurse managers, and administrators on a 4-point scale ranging from excellent to poor. Collaboration between RNs and other RNs slightly improved and was about the same between RNs and physicians. Like communication, collaboration was more often reported as poor between RNs and frontline nurse managers (15.7% in 2013 vs 11.7% in 2008), and between RNs and administrators (40.4% in 2013 vs 34.0% in 2008; P<.05; see Table 3).

Respect is an integral aspect of collaboration. Participants rated respect for RNs by other RNs, physicians, frontline nurse managers, administrators, and other health care colleagues. Respect between RNs was rated highest, whereas respect for RNs from administrators was rated lowest (29.8% rated it as poor and 34.3% rated it as fair in 2013; see Table 4).

Effective Decision Making

Mean ratings for 3 of the 4 items on the Critical Elements of a Healthy Work Environment scale related to effective decision making declined in the work unit and organization. The exception was the item on having structured processes in place to ensure that the perspectives of patients and their families are incorporated into

<table>
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<th>Communication</th>
<th>Collaboration</th>
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<tr>
<td></td>
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<td>Administrators 2006</td>
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<td>3.7</td>
<td>20.0</td>
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*Because of rounding, percentages may not total 100. All changes from 2008-2013 are significant at P<.05.
decisions affecting patient care. As noted earlier, the largest change between 2008 and 2013 for any item on the Critical Elements of a Healthy Work Environment scale was a decline in the effective decision-making item “RNs are valued and committed partners in making policy, directing and evaluating clinical care, and leading organizational operations.”

Mean ratings also declined for RNs being engaged in the selection, adaptation, and evaluation of technologies and RNs having opportunities to influence decisions that affect the quality of patient care. In addition, participants were asked to rate the skills of their frontline nurse manager and chief nurse executive in effective decision making. Poor ratings for both increased between 2008 and 2013 from 11.2% to 15.2% for frontline nurse managers and from 15.9% to 22.9% for chief nurse executives.

### Appropriate Staffing

The mean rating for ensuring the effective match between patient needs and nurse competencies declined from 2008 to 2013, and was the lowest-rated element in both the work unit and employing organization in 2013. The standard requires staffing that ensures an effective match between patient needs and nurse competencies. We asked, “With regard to staffing in your unit, how often do you have the right number of RN staff with the right knowledge and skills?” Responses in the 2006 and 2008 surveys were consistent, but between 2008 and 2013 our survey found an increase in the percentage of respondents who reported their unit had appropriate staffing less than 50% of the time from 22.1% to 30.2% ($P < .05$). More than 40% of survey respondents said appropriate staffing is the most challenging AACN healthy work environment standard to meet.

Which work gets done is another indicator related to staffing. We asked what percentage of the work gets done on a typical shift, with response options of 0% to 49%, 50% to 74%, 75% to 99%, and 100%. As in previous years, critical thinking and planning activities (ie, comforting/talking, teaching, developing or updating care plans, preparing patients and families for discharge) were completed less often than more task-oriented activities (ie, direct care including medication administration, procedures, and monitoring; skin care; and oral hygiene; see Figure 2).

### Meaningful Recognition

Respondents reported a higher level of RNs recognizing others for the value they bring to the organization and a lower level of RNs being recognized for the value they each bring. The majority of respondents (51.4%) indicated patients and families provide the most meaningful recognition, 21.3% said fellow RNs do, and 11.5% said frontline nurse managers do. In addition, 4763 participants provided descriptions of the most meaningful recognition they had ever received including details of verbal and written recognition from patients, families, colleagues, and managers; awards from the

<table>
<thead>
<tr>
<th>Percentage of respondents to the 2006, 2008, and 2013 surveys who rated respect for registered nurses (RNs) among other RNs, physicians, frontline nurse managers, administrators, and other health care colleagues.a</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
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<td>29.8</td>
</tr>
<tr>
<td>Other health care colleagues 2006</td>
<td>10.4</td>
<td>58.4</td>
<td>26.9</td>
<td>4.2</td>
</tr>
<tr>
<td>Other health care colleagues 2008</td>
<td>11.4</td>
<td>59.8</td>
<td>25.3</td>
<td>3.4</td>
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<tr>
<td>Other health care colleagues 2013</td>
<td>13.1</td>
<td>57.5</td>
<td>24.9</td>
<td>4.4</td>
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</tbody>
</table>

1. Because of rounding, percentages may not total 100. All changes from 2008-2013 are significant at $P < .05$. 

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work unit, organization, and professional associations; and certification.

**Authentic Leadership**

Four items in the Critical Elements of a Healthy Work Environment scale address authentic leadership. The ratings for all 4 declined from 2008 to 2013 in both the work unit and the organization. These items include nurse leaders fully embracing the concept of a healthy work environment and engaging others in achieving it, and nurse leaders receiving support for and access to educational programs to ensure that they develop and enhance their skills and abilities. Of the respondents who identified their role as frontline nurse manager or director/administrator, 69.6% said they were aware of the AACN healthy work environment standards (compared with 45.5% of respondents who identified their role as providing direct patient care). However, only 28.8% and 22.2% of the frontline nurse managers, directors, and administrators said the AACN healthy work environment standards were fully implemented or well on the way to being implemented in their work unit and in their organization, respectively.

Respondents were also asked to rate their frontline nurse managers and chief nurse executives in 7 competencies based on the AACN healthy work environment standards: communication, collaboration, providing staff resources, providing nonhuman resources (supplies, equipment, and other nonhuman resources), effective decision making, recognition of others’ contributions, and leadership. Between 2008 and 2013, ratings in every competency declined for both frontline nurse managers and chief nurse executives, with a notable increase in “poor” ratings ($P < .05$). As in the 2006 and 2008 surveys, the competencies of chief nurse executives consistently were rated lower than those of frontline nurse managers.

**Quality of Patient Care**

We asked participants to rate the quality of care in their work units and organizations, with the response options of excellent, good, fair, and poor. As in 2006 and 2008, the quality of care in the respondents’ work units was rated higher than the quality of care in their organization. Respondents in hospitals that had received the Magnet designation from the American Nurses Credentialing Center or were in the process of applying for Magnet designation, on average, rated the quality of care in their organization higher than those working in hospitals that had not received Magnet designation and were not in the process of applying.
We also asked if the participants perceived any change in the quality of care in their organizations and work units during the past year. Their responses indicate that they believe the quality of care has declined. The percentage of respondents saying the care was much better/somewhat better in their organizations in the past year decreased from 50.6% in 2008 to 42.8% in 2013, and the percentage saying the care was somewhat worse/much worse in the past year increased from 24.3% in 2008 to 32.5% in 2013. The percentage of respondents saying the care in their work units was much better/somewhat better in the past year decreased from 49.4% in 2008 to 43.1% in 2013, and the percentage saying the care was somewhat worse/much worse in the past year increased from 21.9% in 2008 to 30.0% in 2013 ($P < .05$).

**Physical and Mental Safety**

Participants reported that abuse and disrespectful behavior toward RNs are less tolerated than in our earlier surveys. The percentage of respondents reporting that their organizations rarely or not at all tolerate abuse and disrespectful behavior increased from 46.2% in 2008 to 53.9% in 2013 ($P < .05$). As in previous surveys, about 15% of respondents said their organizations do not have a zero tolerance policy against abuse and disrespectful behavior, and 19% did not know whether such a policy exists.

Participants were asked if they had experienced sexual harassment, discrimination, verbal abuse, and/or physical abuse in the last year while working as a nurse. Consistent with the results from 2006 and 2008, sexual harassment most often came from patients. However, in a noticeable change from our previous surveys, the most cited source of discrimination in 2013 was frontline nurse managers. The percentage of respondents reporting verbal and physical abuse in the last year increased in 2013, but the incidence by source of the abuse was the same: 39.3% reported verbal abuse from patients, 33.0% from patients’ families and significant others, 26.6% from physicians, and 19.7% from other RNs. As in our earlier surveys, physical abuse, reported by 23% of respondents, overwhelmingly came from patients.

**Moral Distress**

For the survey, we defined moral distress as occurring when RNs know the appropriate action to take but are unable to act upon it and/or act in a manner contrary to their personal and professional values, undermining their integrity and authenticity. The reported incidence of moral distress decreased from 2006 to 2008, but increased from 2008 to 2013 ($P < .05$). In 2013, 23.3% of the respondents said they experience moral distress frequently, while 9.4% said they experience it very frequently (Table 5).

**Support for Certification and Continuing Education**

We asked a general question about support for certification and also asked about support for specific strategies. Regarding overall support, 26.1% of respondents said their organization’s support is excellent (up from 23.9% in 2008), and 31.2% said it is good.

Specific areas of improvement in certification support from 2008 include the following:

- Pays/reimburses initial exam fee (61.5% in 2013 vs 46.1% in 2008)
- Recognizes nurses who achieve certification (56.8% in 2013 vs 43.0% in 2008)
- Provides salary differential for certification (26.9% in 2013 vs 22.0% in 2008)
- Pays/reimburses for recertification fee (23.1% in 2013 vs 19.8% in 2008)

Support for continuing education, however, has decreased since 2008. Specific decreases include the following items:

- Provides paid time off for continuing education (37.5% in 2013 vs 51.6% in 2008)
- Pays continuing education registration fees (31.4% in 2013 vs 46.2% in 2008)
- Provides time off without pay for continuing education (25.2% in 2013 vs 31.8% in 2008)
- Pays for travel for continuing education programs (14.6% in 2013 vs 26.1% in 2008)

Table 5 Percentage of respondents who reported experiencing moral distress

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2008</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very frequently</td>
<td>6.8</td>
<td>5.6</td>
<td>9.4</td>
</tr>
<tr>
<td>Frequently</td>
<td>19.4</td>
<td>17.6</td>
<td>23.3</td>
</tr>
<tr>
<td>Occasionally</td>
<td>45.6</td>
<td>45.3</td>
<td>42.8</td>
</tr>
<tr>
<td>Very rarely</td>
<td>28.2</td>
<td>31.5</td>
<td>24.5</td>
</tr>
</tbody>
</table>

* Because of rounding, percentages may not total 100. All changes from 2008-2013 are significant at $P < .05$. 

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Job Satisfaction and Career Plans

We asked participants, in separate questions, to indicate their satisfaction with being an RN and their satisfaction with their current position. Similar to the results from 2006 and 2008, satisfaction with being an RN was higher than satisfaction with their current position (Table 6).

The percentage of respondents who indicated they are very satisfied with their current position decreased from 32.0% in 2008 to 25.5% in 2013 ($P$ < .05). Consistent with this decline is a decline in the percentage of respondents who definitely would advise nursing as a career (54.7% in 2008 vs 50.6% in 2013; $P$ < .05). Of those who were dissatisfied with their current position, 35.7% plan to stay in the unit and influence change, 32.3% plan to leave the organization, and 16.5% plan to stay in the organization but leave the work unit. Satisfaction with their current position differed by the Magnet status of the participant’s organization. Given the choices of very satisfied, somewhat satisfied, somewhat dissatisfied, and very dissatisfied, 31.9% of respondents in Magnet-designated hospitals, 30.2% in hospitals in the process of applying for Magnet designation, and 17.5% in hospitals that are neither Magnet-designated or in the process of applying for Magnet designation reported being very satisfied with their current position. Similar to results from our previous surveys, respondents said the main factors that keep them working in their current organization are “people I work with” (top factor), “salary and benefits” (second-highest factor), and “patients I care for” (third-highest factor).

When asked about planning to leave their current position, 21.3% plan to leave in the next 12 months, 29.2% in the next 3 years, and 49.6% have no plans to leave in the next 3 years. Of the respondents who plan to leave in the next 12 months or in the next 3 years, 42.0% plan to take a different position in clinical/patient care nursing, 15.0% plan to return to school, 14.6% plan to take a different position in nonclinical nursing, 10.7% plan to retire, and 5.4% plan to pursue a job in another profession.

For respondents who expressed intent to leave, we also asked what would influence them to reconsider their plans to leave their current position, provided a list of options, and asked them to indicate the likelihood they would be influenced by each option. The options respondents said would very likely influence them to reconsider were better leadership (selected by 51.8%), followed by better staffing (48.1%), more respect from administration (47.6%), and more respect from frontline management (47.4%).

What Do the Results Mean?

The results of the 2013 AACN Critical Care Nurse Work Environment Survey indicate that the health of critical care nurse work environments has declined since 2008. Some factors have improved, but declines in any of the key components of a healthy work environment are a concern. Based on their extensive work on the essentials of nurse work environments, Schmalenberg and Kramer note that “a productive and satisfying work environment is a multidimensional, integrated phenomenon” and further that “an excellent work environment does not evolve from the presence of only a few desired processes. None is optional. All are required.”

Communication, Collaboration, and Respect

Our survey found several areas of concern regarding communication, collaboration, and respect. Lower rates of 30-day mortality have been reported in hospitals with better nurse-physician relationships. Communication,
which can affect patient outcomes and nurse satisfaction, also carries an associated financial cost. Agarwal and colleagues developed a model to quantify the economic burden of poor communication on hospitals. In a quantitative study of hospital communication challenges including 3 categories of waste (physician time, nurse time, and increased length of stay), communication inefficiency among care providers was estimated to result in US hospitals wasting more than $12 billion a year.

Respect is a key factor in successful communication and collaboration and, ultimately, in keeping patients safe. Given the decline in the ratings of respect for RNs by frontline nurse managers and administrators since 2008, our survey found considerable room for improvement. In addition, respondents who plan to leave their job in the next 3 years said more respect from frontline nurse managers and administrators could help change their mind about leaving.

From a safety perspective, Leape and colleagues note that disrespect “is a threat to patient safety because it inhibits collegiality and cooperation essential to teamwork, cuts off communication, undermines morale, and inhibits compliance with and implementation of new practices.” They also note that disrespectful behavior may be rooted in an individual’s characteristics, but it is learned, tolerated, and reinforced in the hospital culture and recommend creating a culture of respect as the essential first step to becoming a safe, high-reliability organization. The process should address proactive components (cultural changes to prevent occurrences of disrespect) and reactive components (responding consistently and transparently).

**Effective Decision Making**

It is concerning that the largest change from 2008 for any item on the Critical Elements of a Healthy Work Environment scale was a decline in the effective decision-making standard item “RNs are valued and committed partners in making policy, directing, and evaluating clinical care, and leading organizational operations.” The need for RN engagement and involvement in decision making was a key message of the 2011 Institute of Medicine report on the future of nursing; not just for the sake of nursing, but for the success of US health care. Of equal or greater concern is the decline in participant perception of RNs having opportunities to influence decisions that affect the quality of patient care.

**Staffing/Work That Gets Done**

Patients suffer when nurses’ work environments are unhealthy. Inappropriate staffing has clear implications for the quality of patient care. A systematic review and meta-analysis of original English language studies conducted from 1990 to 2006 reported an “absolute and relative risk of patient outcomes associated with RN staffing.” The authors concluded that “the available evidence indicates that there is a statistically and clinically significant association between RN staffing and adjusted odds ratio of hospital-related mortality, failure to rescue, and other patient outcomes.”

Aiken et al, in a study on staffing, nurse work environments, and patient outcomes, found the impact of improving nurse staffing is contingent on the quality of nurse work environments and vice versa. In hospitals with poor work environments, better staffing had little effect on patient outcomes, while improved staffing in hospitals with good work environments had a sizable effect.

Stone et al, in a review of studies on nurse staffing and HAIs (most notably bloodstream infections, urinary tract infections [UTIs], and ventilator-associated pneumonia), found statistically significant associations between higher staffing levels and decreased HAIs in the majority of the studies reviewed. Cimiotti et al investigated the association between nurse staffing levels, nurse burnout, and HAIs. Nurse burnout was highly associated with both UTIs and surgical site infections. A 10% increase in burnout among a hospital’s nurses (measured by the Maslach Burnout Inventory subscale of emotional exhaustion) was associated with an increase in UTIs of almost 1 per 1000 patients and an increase in surgical site infections of 2 per 1000 patients. Burnout either decreased or eliminated any benefits of improved staffing. In other words, burnout trumped staffing in its effect on the HAIs studied.

Our findings showing a decline in how often respondents report having appropriate staffing in their work unit are consistent with other reports. In a large multi-year study (197 admissions, 176,696 nursing shifts), Needleman and colleagues found that 19.4% of critical care units had staffing levels below target. The night shift was the most likely to fall below target. Overall, the risk of death increased 2% for each shift below target. High patient turnover on a shift exacerbated the risk of death, leading the researchers to point out the importance of
flexible strategies that consistently match nurse staffing with the needs of patients.

A downstream effect of appropriate staffing is the work that does or does not get done. Our most recent survey found, once again, that critical thinking and planning activities that require the knowledge and expertise of RNs get done less often than task-oriented activities. For example, every patient requires discharge planning, whether he or she is going to another unit or leaving the facility. Almost one-fourth of our respondents indicated that discharge planning gets done less than 50% of the time on a typical shift. With payors penalizing hospitals for preventable readmissions, inadequate discharge planning affects both the patient’s health and the hospital’s financial health. The Medicare Payment Advisory Commission reports that 12.3% of all 2011 Medicare admissions were followed by a potentially preventable readmission. In August 2013, Medicare levied $227 million in fines against 2225 hospitals for excess readmissions. A key tenet of the AACN Synergy Model for Patient Care is the participation of patients in decision making, which is made considerably more difficult if nurses do not have sufficient time to talk with patients, teach them, and help them prepare for discharge.

Meaningful Recognition

Critical care nurses continue to report that recognition is most meaningful when it comes from patients and their families and from other RNs. This response supports the need to have programs and processes that facilitate the recognition of RNs by patients, patients’ families, and other RNs, and validates the nationwide achievements of the DAISY Award program, which offers hospitals a proven low-investment, high-reward plan for meaningful recognition. A study of hospitals randomly selected from 800 health care organizations that present DAISY Awards noted that the meaningful recognition provided by the awards strengthens the workforce; helps nurses recognize the importance of their work; and reinforces behaviors that patients, families, and colleagues find meaningful.

Leadership

Nurse leaders play major roles in creating and maintaining healthy work environments. The results of the 2013 survey indicated a decline in the perception that frontline nurse managers and chief nurse executives fully embrace the concept of a healthy work environment and engage others in achieving and sustaining it—2 key components of the AACN authentic leadership standard. The ratings for specific nurse leader competencies associated with healthy work environments also have declined since 2008. However, it is notable that the mean ratings for nurse leaders receiving support and having access to educational programs to ensure they develop and enhance their knowledge and abilities has also declined.

Leaders set the tone for the organization and the work unit. Kathleen McCauley, a past president of AACN, described authentic leadership as “the glue that holds together a healthy work environment” and Laschinger and Fida noted that “either implicitly or explicitly, leaders communicate the core values that shape the behaviours of employees.” Given the importance of leadership, the perceived declines in the ratings of nurse leader competencies and in the support and education they receive are a cause for concern and indicate the need to make leadership development needs a priority.

Quality of Care

Critical care nurses responding to the 2013 survey reported a decline in the quality of care in the past year and less opportunity to influence decisions that affect the quality. They also reported feeling less recognized for the value they bring to the employing organization. Nurses, by their knowledge, expertise, and time with patients, are best positioned to both recognize quality of care issues and to help develop and implement effective solutions. Understanding this, the Institute of Medicine, in 2 major reports, has called for nurses to be at the table when decisions about patient care are made and for their voices to be heard.

Physical and Mental Safety

A culture of personal safety forms the foundation on which a healthy work environment is created. Our survey found that physical and mental safety continue to be at risk in critical care nurses’ work environments. In addition to its effects on the individual nurse, disruptive behavior has been linked to patient safety through adverse events, medical errors, impaired quality of care, and patient mortality.

Moral Distress

Nurses reported an increase in the frequency of moral distress in the 2013 survey compared to the 200
survey. Moral distress (also called moral stress) can be a predictor of increased employee fatigue, decreased job satisfaction, and increased intention to leave a job.42 It also results in feelings of incompetence, distancing from patients, and a negative impact on quality of care.43 Issues contributing to moral distress include workload, incompetence of self or others leading to inadequate care, witnessing unnecessary suffering, moral compromise, and negative provider judgments about patients and/or their families.37 Appropriate staffing and creating opportunities to discuss, learn from, and resolve morally distressing situations are strategies to limit the problem.

Certification and Continuing Education
The increased support for certification is encouraging. Certification is associated with verification of professional competence, enhancing the quality of care,44-46 increased confidence, more frequent and effective nurse-physician collaboration,44,47,48 and a higher level of competence.49,50 Conversely, the decline in support for continuing education causes great concern. Continued competence requires continuing professional development. Less support is shortsighted and potentially dangerous to safety (for both nurses and patients) and quality of care.

Job Satisfaction and Career Plans
The decline in satisfaction with current nursing positions matches the decline in the health of critical care nurse work environments. However, nursing is not alone in the decline in job satisfaction. It is also important to consider the total environment and data from other professions. For example, a long-term study of teachers reported that, in 2012, teacher satisfaction declined to its lowest rating in 25 years.51 Physicians are also less satisfied. In a 2012 physician survey, 54% of respondents said they would choose medicine again as a career, a decline from 2011, when 69% said they would choose medicine again.51 Overall satisfaction reported by physician specialties ranged from 41% to 64% (emergency medicine 54%, critical care 51%, internal medicine, 44%).51 These declines in the job satisfaction of other professions do not mitigate the need to address the decline in nurse job satisfaction, but may indicate the need to look at additional or coexisting influences.

Limitations
This study has several limitations. The AACN Critical Care Nurse Work Environment Survey is an online survey for which member and nonmember individuals in AACN’s database received e-mail invitations. Because a convenience sample was used, the generalizability of the findings is limited. Although the invitation and the incentive for all 3 surveys were the same, there was no expectation that the same nurses responded to all 3 surveys. However, comparative data indicate the 3 response groups have similar characteristics in most demographics. The most notable difference is that a higher percentage of respondents in the 2013 survey report working in direct patient care positions (Table 2).

A limitation in statistical analysis, as noted earlier, is that standard measures of numerical reliability could only be applied to the Critical Elements of a Healthy Work Environment scale and not to the survey as a whole because of differences among the types of items in each section.

Nursing Implications
The survey’s implications for nursing are complex and multidimensional; yet in many areas, strategies for improvement can be remarkably simple and economical to implement. The strategies, however, do require a willingness to recognize the work environment as it is seen by the nurses who live in it, a commitment to action, prioritizing the health of the work environment, and actively seeking and creating opportunities to improve the health of the environment.

Opportunities for improvement require the commitment and true collaboration of organizations, nurse leaders, and nurses who provide direct patient care. For example, communication, collaboration, and respect represent the interactive framework of clinical practice. All 3 factors must work in tandem to create a high-reliability organization that ensures safety for both nurses and patients. Although it is the organization’s obligation to create a culture of respect, this will only be achieved when nurses who provide direct care believe frontline nurse managers and chief nurse executives embrace and support a healthy work environment.

No one-size-fits-all or cookie-cutter approach will improve the health of every work environment. The awareness of the results of this survey is a starting point for discussions. Improvement begins with a realistic
and holistic assessment that takes into account the culture of the employing organization and/or work unit, and assesses the work environment’s critical elements. Resources to support assessing and improving work environments include AACN’s healthy work environment standards, resource lists, and the free online Healthy Work Environment Assessment Tool to measure a work environment’s current health according to the AACN Standards for Establishing and Sustaining Healthy Work Environment. These resources are all available at www.aacn.org/hwe.

Conclusion

It is a fundamental premise of AACN’s healthy work environment standards that they will lead to excellence only when adopted “from the bedside to the boardroom” by every individual at every level of an organization. This third national study of critical care nurse work environments has identified some areas of improvement since 2008, but identified more areas in which the health of the work environment needs attention and care. Relentless true collaboration among everyone involved is required to ensure safety and optimal outcomes for patients and their families, and a healthy work environment for the nurses who provide their care. Once again, it is time to act boldly. CCN

Financial Disclosures

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References


37. McCauley K. President’s note: all we needed was the glue. AACN News. May 2005;22.2.


