IMPROVING THE WORK ENVIRONMENT TO IMPROVE CLINICIAN WELL-BEING AND REDUCE BURNOUT

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WHAT IS THE WORK ENVIRONMENT?

The eight hallmarks are:

• manifest a philosophy of clinical care emphasizing quality, safety, interdisciplinary collaboration, continuity of care, and professional accountability;

• recognize contributions of nurses’ knowledge and expertise to clinical care quality and outcomes;

• promote executive-level nursing leadership;

• empower nurses’ participation in clinical and organizational decisions;

• maintain clinical advancement programs based on education, certification, and advanced preparation;

• support professional development;

• create collaborative relationships within the health care provider team; and

• use technological advances and information systems to improve clinical care with input from direct care providers at the interface.

**What is the Work Environment**

<table>
<thead>
<tr>
<th><strong>Nurses</strong></th>
<th><strong>Physicians</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>“Improvements in nurse work environments over time are associated with declines in the rates of nurse burnout”</td>
<td>“Drivers of this epidemic [physician burnout] are largely rooted within healthcare organizations and systems”</td>
</tr>
<tr>
<td>• inadequate staffing and resources</td>
<td>• excessive workloads</td>
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<tr>
<td>• inefficient operational failures and bureaucracy interfere with good care</td>
<td>• inefficient work processes &amp; clerical burdens</td>
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<tr>
<td>• lack of autonomy and authority to exercise professional judgment</td>
<td>• work–home conflicts</td>
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<td>• limited participation in hospital affairs</td>
<td>• lack of input or control for physicians with respect to issues affecting their work lives</td>
</tr>
<tr>
<td>• management doesn’t support nurses’ actions and decision-making</td>
<td>• organizational support structures and leadership culture.</td>
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<tr>
<td>• poor nurse–physician relations</td>
<td></td>
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<tr>
<td>• the culture of the organization does not value the professional contribution of nurses to high quality care.</td>
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</table>
Work environments vary significantly across hospitals.
Burnout also varies significantly.
**Why focus on the work environment to reduce burnout?**

Is the work environment specific to hospitals?

**Percentage of burned out nurses by quality of the home health agency work environment**

Nurse practitioners (NPs) were more likely to be satisfied with their jobs and less likely to report intent to leave practices with better work environments in terms of:

- supportive of NP practice
- greater autonomy
- good relations with physicians and administration
- clear role visibility

With every unit increase in each standardized subscale score, the odds of **job satisfaction increased about 20% whereas the odds of intention of turnover decreased about 20%**.
IS THE PROBLEM OF BURNOUT AND THE POTENTIAL OF IMPROVED WORK ENVIRONMENTS UNIQUE TO THE U.S.?

Across 12 EU countries and the US, nurses significantly less likely to be burned out in hospitals with better staffing and work environments -- *BMJ*, 2016

**Table 6** | Effects of nurse staffing and practice environment on nurse outcomes in study countries

<table>
<thead>
<tr>
<th>Nurse outcome</th>
<th>Europe</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unadjusted odds ratio (95% CI)</td>
<td>Adjusted odds ratio (95% CI)</td>
</tr>
<tr>
<td>Practice environment</td>
<td>0.69 (0.63 to 0.76)</td>
<td>0.67 (0.61 to 0.73)</td>
</tr>
<tr>
<td>Staffing</td>
<td>1.06 (1.04 to 1.08)</td>
<td>1.05 (1.02 to 1.08)</td>
</tr>
</tbody>
</table>

**Similar studies from**: Canada, UK, Germany, Switzerland, Sweden, New Zealand, Japan, China, South Africa, South Korea, Australia, Chile, Thailand
Can we erase burnout with better wages alone?

An SD improvement in work environment associated with 23% lower odds of burnout even after accounting for wage*


*also accounting for staffing, sex, education level, unit type, years of experience, and hospital characteristics including market competition with the Herfindahl-Hirschman index, teaching status, number of beds, technology level, ownership, state, and urban–rural location.
Changes in Nurse Reports of Patient Safety and Related Measures, in Hospitals in which Work Environments Worsened, Remained the Same, or Improved

**Quality of patient care is excellent**
- Worsened: 16%
- Remained the Same: 19%
- Improved: 9%

**Favorable grade on patient safety (A-B)**
- Worsened: 15%
- Remained the Same: 15%
- Improved: 2%

**Staff do not feel like mistakes are held against them**
- Worsened: -10%
- Remained the Same: -9%
- Improved: 1%

**Important information is not lost during shift changes**
- Worsened: -26%
- Remained the Same: 19%
- Improved: 1%

**Things do not fall between the cracks**
- Worsened: -19%
- Remained the Same: -20%
- Improved: -15%

**Staff feel free to question authority**
- Worsened: -13%
- Remained the Same: 7%
- Improved: 16%

**Patient safety is a top priority**
- Worsened: -25%
- Remained the Same: -8%
- Improved: -9%

**Job satisfaction**
- Worsened: 12%
- Remained the Same: 6%
- Improved: 1%

**Low burnout**
- Worsened: 16%
- Remained the Same: 32%
- Improved: 12%

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DO PATIENTS CARE ABOUT CLINICIAN BURNOUT?

The percentage of patients who would definitely recommend the hospital to friends or family decreased by about 2 percent for every 10 percent of burned out nurses.


Patients on units with higher than average burnout among nurses are only half as likely as those on units with lower than average burnout to be highly satisfied with their care.


Similar physician evidence.
What about other outcomes?

Burnout explains the relationship observed between staffing and hospital-acquired infection.


<table>
<thead>
<tr>
<th>Physician burnout and patient outcomes including satisfaction &amp; medical errors</th>
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</thead>
</table>
What can we do?
IOM [NAM]: 8 RECOMMENDATIONS

1. Creating governing boards that focus on safety [burnout];

2. leadership and evidence-based management structures and processes;

3. effective leadership;

4. adequate staffing;

5. organizational support for ongoing learning and decision support;

6. mechanisms that promote interprofessional collaboration;

7. work design that promotes safety [burnout]; and

8. an organizational culture that continuously strengthens patient safety [burnout].
Magnet hospital nurses **13% less likely to report high burnout.**  


From 1999-2006, Pennsylvania hospitals that achieved Magnet recognition saw the average % of burned out nurses go from **39%-29%**—A reduction of over **7 percentage points** more than in non-Magnet hospitals.

ENGAGEMENT AND SHARED GOVERNANCE

Percentage of burned out nurses by level of engagement of the hospital

Most engaged  |  Moderately engaged  |  Somewhat engaged  |  Least engaged
---|---|---|---

Each additional patient-per-nurse associated with **23% higher odds of emotional exhaustion** [MBI subscale]

<table>
<thead>
<tr>
<th>Nurse outcomes</th>
<th>Unadjusted</th>
<th>P Value</th>
<th>Adjusted for Nurse or Patient Characteristics</th>
<th>P Value</th>
<th>Adjusted for Nurse or Patient and Hospital Characteristics</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High emotional exhaustion</td>
<td>1.17 (1.10-1.26)</td>
<td>&lt;.001</td>
<td>1.17 (1.10-1.26)</td>
<td>&lt;.001</td>
<td>1.23 (1.13-1.34)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Job dissatisfaction</td>
<td>1.11 (1.03-1.19)</td>
<td>.004</td>
<td>1.12 (1.04-1.19)</td>
<td>.001</td>
<td>1.15 (1.07-1.25)</td>
<td>&lt;.001</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Patient outcomes</th>
<th>Unadjusted</th>
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<td>Mortality</td>
<td>1.14 (1.08-1.19)</td>
<td>&lt;.001</td>
<td>1.09 (1.04-1.13)</td>
<td>&lt;.001</td>
<td>1.07 (1.03-1.12)</td>
<td>&lt;.001</td>
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<tr>
<td>Failure-to-rescue</td>
<td>1.11 (1.06-1.17)</td>
<td>.004</td>
<td>1.09 (1.04-1.13)</td>
<td>.001</td>
<td>1.07 (1.02-1.11)</td>
<td>&lt;.001</td>
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*Odds ratios, indicating the risk associated with an increase of 1 patient per nurse, and confidence intervals were derived from robust logistic regression models that accounted for the clustering (and lack of independence) of observations within hospitals. Nurse characteristics were adjusted for sex, experience (years worked as a nurse), type of degree, and type of unit. Patient characteristics were adjusted for the patient’s Diagnosis Related Groups, comorbidities, and significant interactions between them. Hospital characteristics were adjusted for high technology, teaching status, and size (number of beds).*

Autonomy

Ongoing study of over 600 hospitals -- A standard deviation improvement in professional autonomy associated with 26% lower odds of burnout.

Autonomy based on:

- support for new and innovative ideas about patient care;
- nursing controls its own practice;
- freedom to make important patient care and work decisions;
- not being placed in a position of having to do things that are against nursing judgement;
- involvement of staff nurses in the internal governance of the hospital.
**Measurement and Public Reporting**

We have empirical measures to assess progress on burnout and the work environment that could be added to the Hospital Compare public reporting system:

**Burnout:**
- Maslach Burnout Inventory (well-established in healthcare)

**Work Environment:**
- Practice Environment Scale of the Nursing Work Index (NQF endorsed and part of NDNQI)
- Nurse staffing and skill mix (NQF endorsed; some states already publicly report this)
- Engagement surveys
DOUBLE BENEFIT OF FOCUSING ON SYSTEM FACTORS: GOOD FOR THE CLINICIAN, GOOD FOR THE PATIENT

Aspects of the work environment linked with burnout also linked with patient outcomes

- Mortality
- Failure to rescue
- Readmissions survival from in-hospital cardiac arrest
- Hospital-acquired infection
- Sepsis
- Patient experience
TAKE-AWAY MESSAGES

NAM’s important contribution to improving patient safety was recognition that safety is a property of health care organizations; this committee has the opportunity to do the same.

Although there are minor role/setting differences, fundamental aspects of a good work environment are universal across settings/clinician roles.

Work environments can be changed.

Avoid the “shiny new toy syndrome”; individually-focused interventions must take place in fundamentally good work environments.

Make clinician burnout part of every hospital’s dashboard – must be measured consistently to gauge improvement.

Support research on clinician burnout, it’s impact on patients, and system-level interventions to reduce it.