

Interpreting Survey Results & Action Planning: Involving Physicians and Disseminating Results to the Unit Level

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Objectives

- Discuss experiences and lessons learned from the conduct of SOPS at MGH, a large, tertiary care medical center
- Approach to assessing culture at the unit level
 - Identifying unit staff
 - Focusing respondents on a specific unit
- Including physicians in survey
 - Many but not all physicians can be assigned to a single unit
 - Methods of increasing response rates
- Implications for survey administration and data feedback

Background and Rationale

- Culture is measurable using safety culture surveys
- Data from surveys on culture are reliable, responsive to interventions, and predictive of clinical and operational outcomes
- Physicians contribute to and have a perspective on beliefs and behaviors
 - Approximately 1,600 “core” physicians at MGH
- Culture is local
 - Culture varies across hospitals; we posited that it also varies within our hospital by unit

Who we surveyed

- Patient Care Services (PCS)
 - Staff who worked 20 or more hours/week
 - Nursing
 - RNs and NPs
 - Patient Care Assistants
 - Unit operations staff
 - Therapists
 - Respiratory
 - Occupational
 - Physical
 - Social Work
 - Chaplaincy

Who we surveyed--Physicians

- Physicians
 - Attending physicians on staff at MGH
 - Did not survey residents/trainees
 - Logistics
 - Limited exposure to specific units
 - Included only those who were considered “core” clinical physicians
 - Minimum number of RVU’s in previous year
 - Call schedules or attending staff (ICU’s, Same Day Surgery Unit, Cardiac Cath Lab)

Who we surveyed—Operations, Pharmacy, and Leadership

- Operations
 - 20 or more hours per week
 - Many but not all are non-clinical but directly involved in support of clinical mission (nutrition services, environmental services)
- Pharmacy
 - 20 or more hours per week
 - Pharmacists and pharmacy techs
- Hospital leadership
 - Senior leadership (Division Chiefs, Department Chairs, Quality Committee Members)
 - Most also captured in one of the other “buckets” (e.g. PCS, Physician)

Getting respondents to think locally— assigning staff to units

- Physician and nurse respondents asked to complete the survey with a specific patient care unit in mind
- Which unit? Options:
 - Assign based on administrative data (e.g. cost center, discharge volume from unit): objective but not possible for all respondents.
 - Self-assign: self-assignment, particularly by physicians, could have led to bias and reduced likelihood that all units would have respondents
 - Assigned by unit level person (e.g. nurse manager or unit director): potential bias, incomplete list, overlap, logistically more complicated.

Assignments based on administrative data

- Nurses and unit based ancillary and operational staff
 - Assignments largely straightforward
 - Done on the basis of a cost center which corresponded with a specific patient care unit (e.g. MICU)
- Therapists
 - Asked to think about their work in their area throughout hospital as their “unit”
- Physician
 - Assignments more complicated--physicians not organized by patient care units

Challenges to assigning physicians to specific patient care units

- Most identify themselves as members of specific department rather than a specific unit
- Many spend time in multiple units and don't think of any one as "their" unit
 - Admit to multiple inpatient units
 - Spend time in OR as well as surgical floors
 - Consult on patients on both medical and surgical units
- May have limited exposure even to their "core" unit, particularly at an academic medical center

MGH Approach: Focusing Physicians on Specific Units

- Physicians were assigned as follows:
 - Based on identification through specific unit's call schedule or list of attending staff (e.g. MICU call schedule, cardiac cath lab staff list)
 - Based on numbers of patients discharged from a unit in previous year
 - Physicians with 12 or more discharges from a single unit were considered part of that unit's core
 - Surgeons not assigned to a specific unit based on above were asked to complete the survey thinking about the OR as their unit
 - Physicians not assigned could self assign if worked predominately in a single unit
- Overall about 50% of physicians were assigned to a specific inpatient or procedural area; remainder told to think of their work area as their unit

Focusing Respondents on Units

- **Cover letter referred to their assigned unit**

“While you may spend time in different clinical areas of the hospital, you have been identified as someone who has participated in the care of patients on 11C. We would like you to complete sections A through E of the enclosed survey based upon your experiences on 11C, referred to hereafter and on the survey as your “unit.” Please indicate that unit on the first page of the survey (Section A). Later sections of the survey will ask about your division or department and about the hospital as a whole. Please follow directions carefully and respond at the level requested.”

Survey asked them to restate their specific unit

Please fill in the answer that best applies to you:

- ☐ I was assigned a work area/unit in the cover letter (please write that unit in the box below)**
- ☐ I was not assigned a work area/unit and spend most or all of my time in a single unit (the unit may be inpatient or outpatient; please write that unit in the box below)**
- ☐ I was not assigned a work area/unit and spend my time in multiple areas of the hospital (please identify, among those areas, the inpatient or outpatient unit in which you have spent the most time over the past year and write it in the box below)**
- ☐ I was assigned a work area/unit but I have not spent any time in this unit over the past year (please pick a unit in which you have worked over the past year and write it in the box below)**

• Work Area/Unit _____

Fielding of the survey

- Anonymous
 - Coding on served indicated department and, where applicable, unit
 - Survey results not linked to individual names or identification numbers
- Two waves of emails with web link for online completion
- Non-respondents or those without an email address received a paper survey through hospital mail

Fielding Survey: Further Considerations

- Chose not to have surveys distributed by designated point persons in each unit/department
 - Increased logistical complexity
 - Concerns about potential for pressuring respondents
- Did not hand out in person or at staff meetings
 - Logistics

Insuring a representative response rate

- Goal response rate of >50-55%
 - Lower response rate risks bias
 - Low response rate has potential to decrease comparability of future survey results
- Strategies
 - Explicit, visible leadership support
 - Newsletters, CEO's email post to all staff, Department Chair emails to all staff
 - Multiple waves (non respondents received given multiple opportunities)
 - Mixed methods (e.g. could respond via email or paper)
 - Incentives (respondents eligible for raffle of gift cards and iPOD)
 - Timed not to overlap with other surveys

Maximizing the physician response rate

- Physicians have historically responded to surveys at lower rates thus...
- Senior physician leadership involved from the outset
- Department chairs and division chiefs briefed and encouraged to emphasize importance of survey
- Restricted survey to “core” physicians
 - Eliminated physicians who had little exposure/investment.
- Unit focus
 - Helped to make immediacy of issues greater (many physicians asked not about the hospital in general but a specific unit in particular)
- Follow-up as needed for selected departments based on response rate

Response rate

- Conducted at MGH between March and May, 2008
- Overall response rate was 58% (5,557 returned surveys)
 - Physicians N=875 (57%)
 - PCS N=2,556 (70%)
 - Operations/Other N=1,709 (47%)

Results

- Display of results
 - Composite results for each of the domains
 - Individual items within the domains
- Levels of analyses
 - Hospital overall
 - Staff category (e.g. Physicians, PCS, Operations, Pharmacy, and Leadership)
 - Department and division
 - Aggregation of responses for all respondents in that department
 - While responses were “rolled up” at the department level, items were often answered at the unit level
 - Unit

Dissemination of Results

- Potential target audiences
 - Hospital Board of Trustees
 - Executive Council
 - Chiefs Council
 - Nursing Directors
 - Individual units and departments
- Methods
 - Slide presentations given to hospital board and hospital leadership groups
 - Electronic and hard copies of specific area results to nurse managers/nursing directors and Department chairs

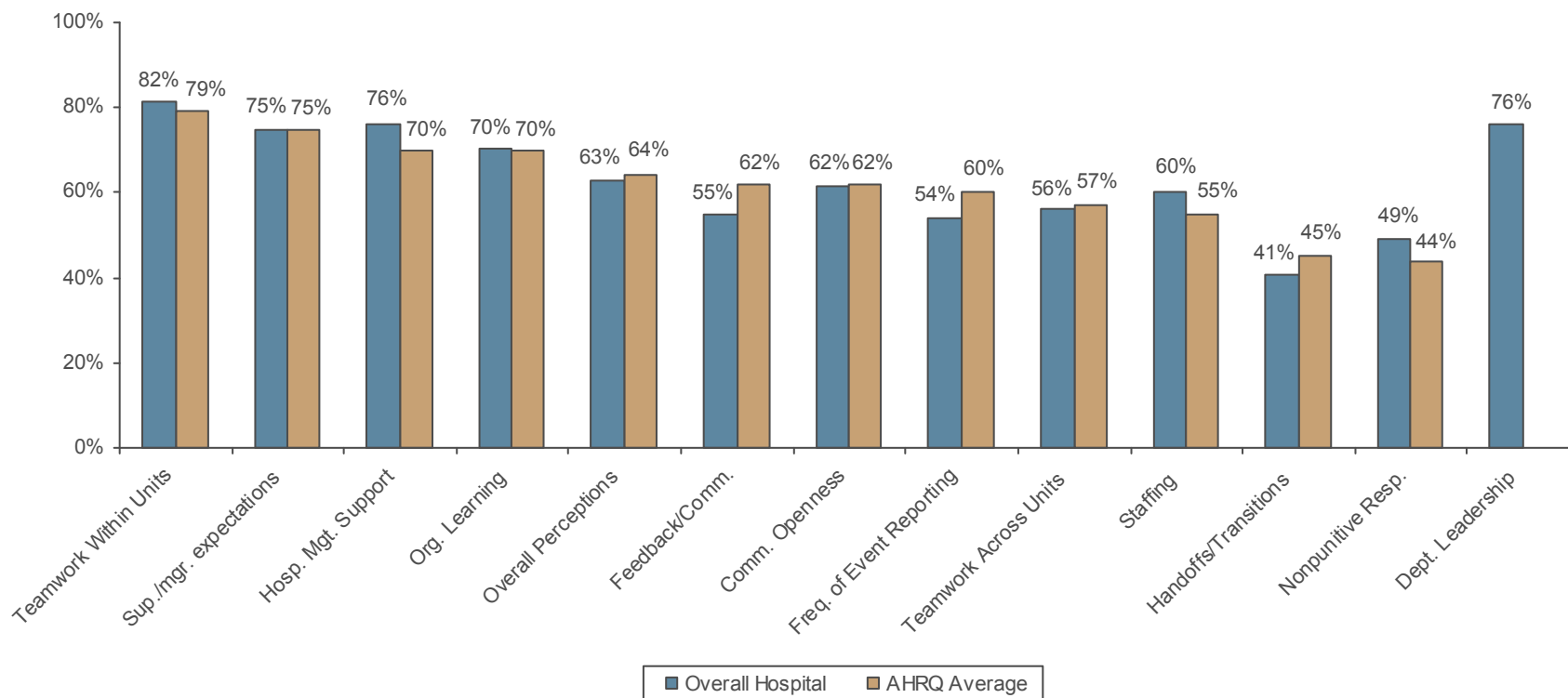


Hospital Level Composite Measures

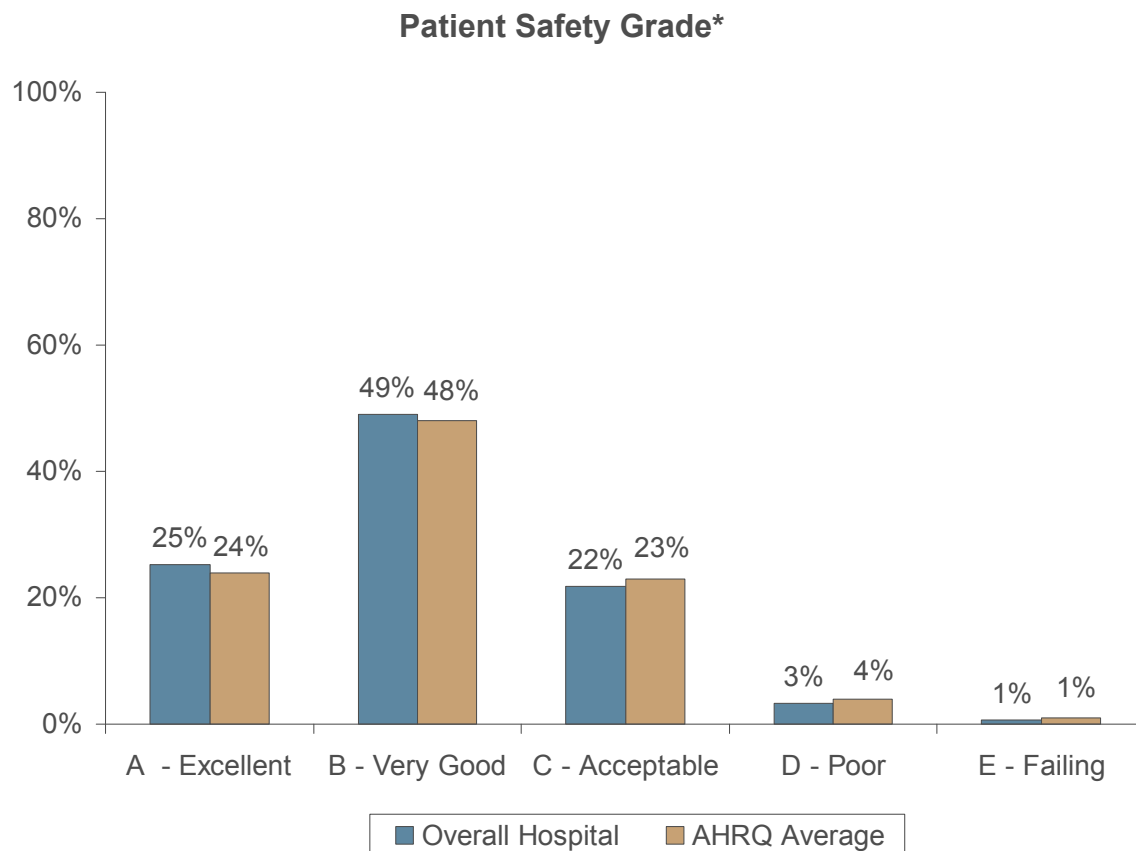
Hospital Level Composite Results

Overall Hospital Results

Composite Score - % Positive



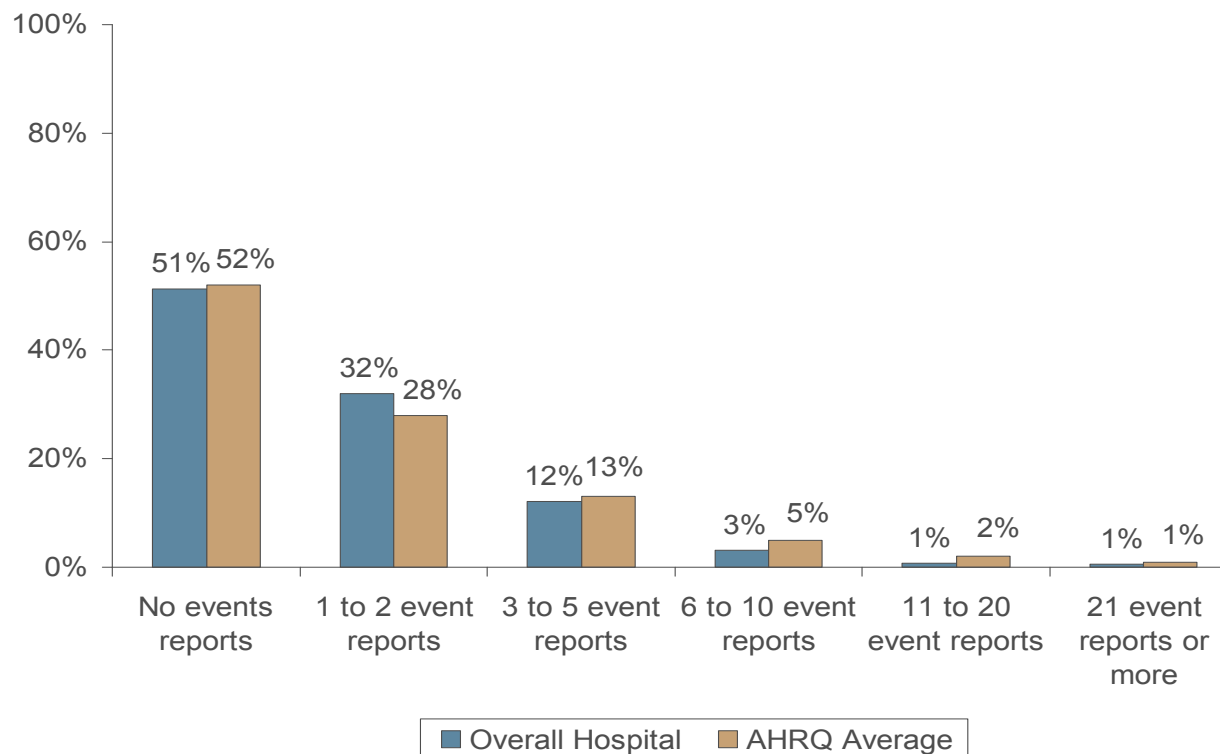
Hospital Level Composite Results



*Question: Please give your work area/unit in this hospital an overall grade on patient safety.

Hospital Level Composite Results

Number of Events Reported*



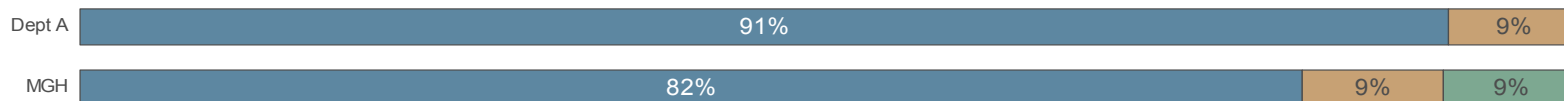
*Question: In the past 12 months, how many event reports have you filled out and submitted?



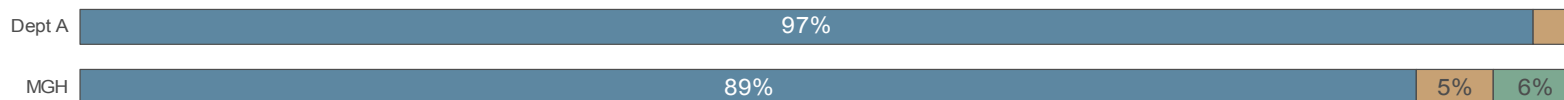
Department Level Reports

Teamwork Within Hospital Units

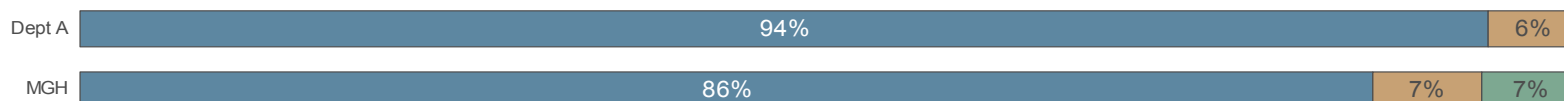
Composite Teamwork Within Hospital Units



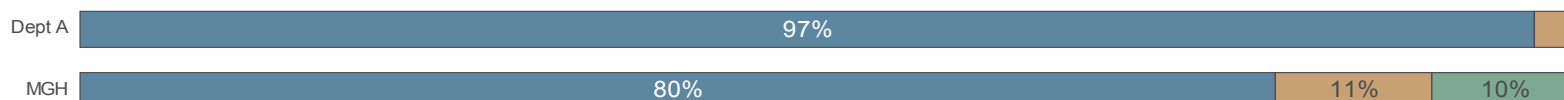
A1. People support one another in this unit.



A3. When a lot of work needs to be done quickly, we work together as a team to get the work done.



A4. In this unit, people treat each other with respect.



A11. When one area in this unit gets really busy, others help out.



■ % Positive

■ % Neutral

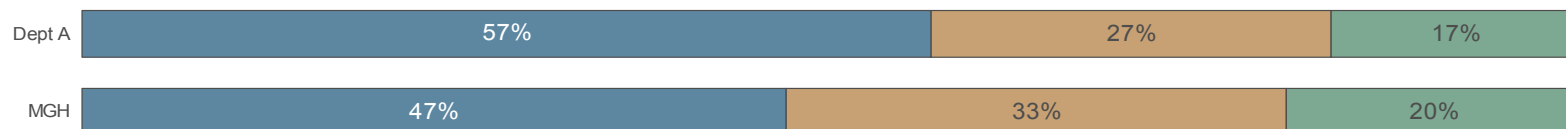
■ % Negative

Feedback and Communication About Error

Composite Feedback and Communication About Error



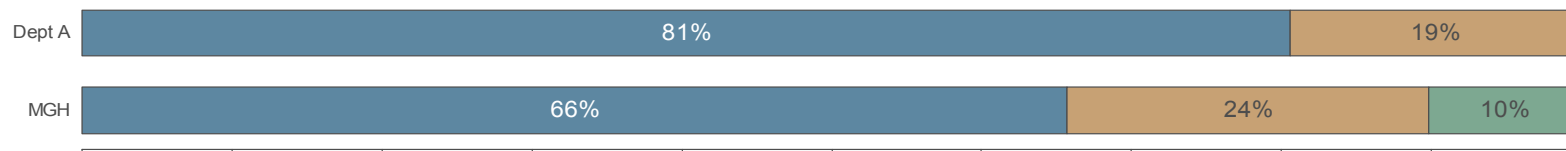
B1. We are given feedback about changes put into place based on event reports.



B3. We are informed about errors that happen in this unit.



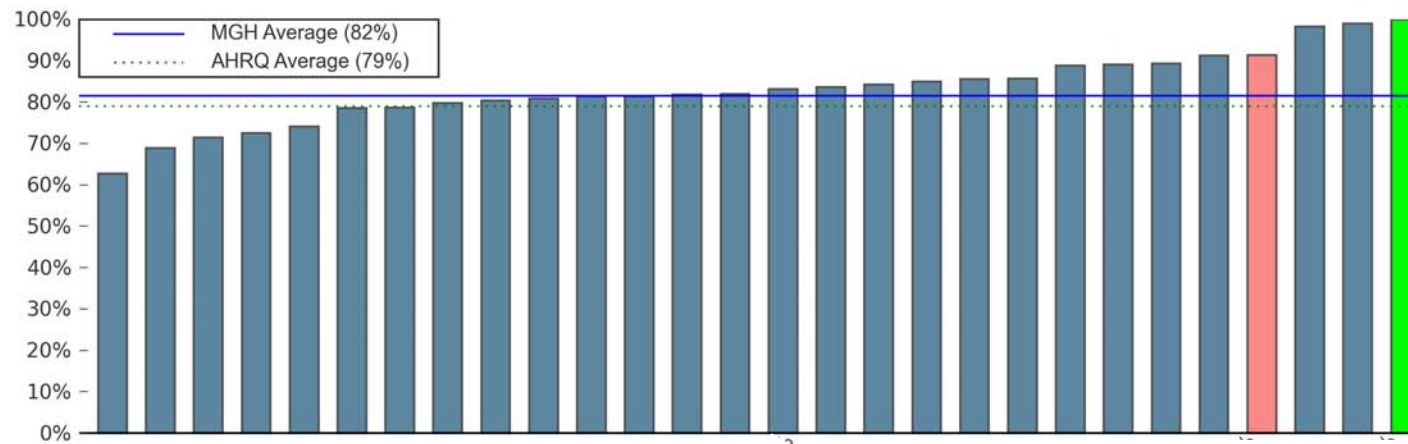
B5. In this unit, we discuss ways to prevent errors from happening again.



■ % Positive ■ % Neutral ■ % Negative

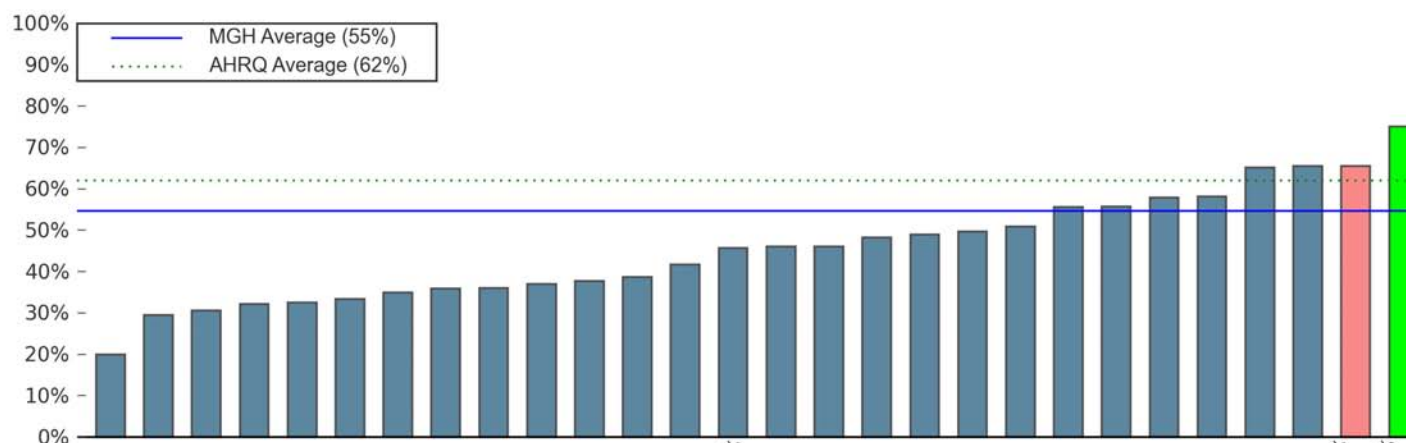
Safety Climate Dimensions

Teamwork Within Hospital Units
% Positive



Safety Climate Dimensions

Feedback and Communication About Error *% Positive*

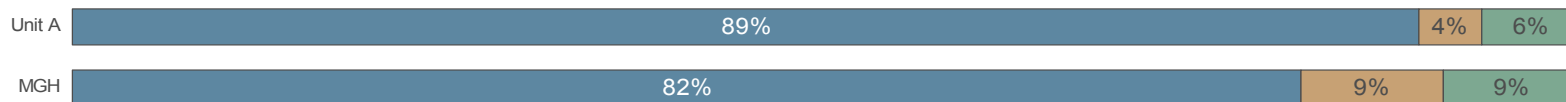




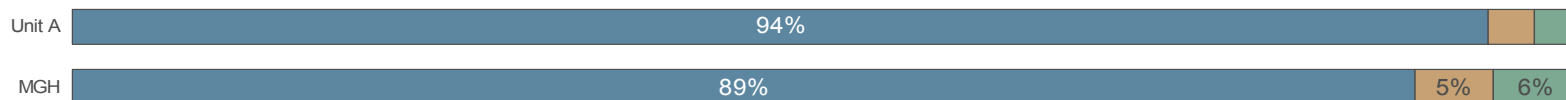
Unit Level Reports

Teamwork Within Hospital Units—Unit Level

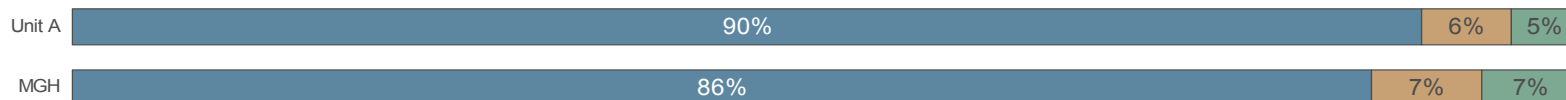
Composite Teamwork Within Hospital Units



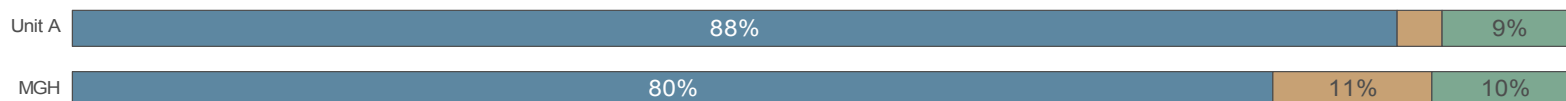
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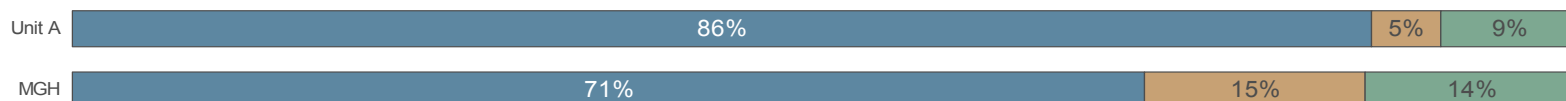
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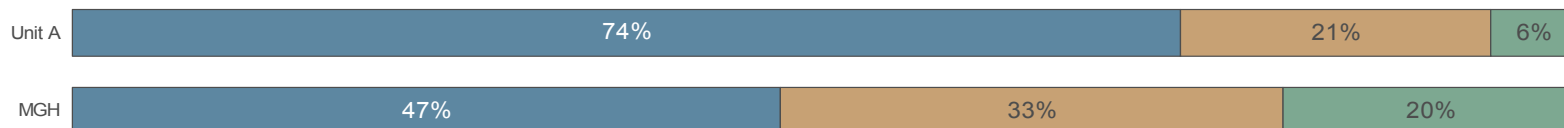
■ % Positive ■ % Neutral ■ % Negative

Feedback and Communication About Error—Unit Level

Composite Feedback and Communication About Error



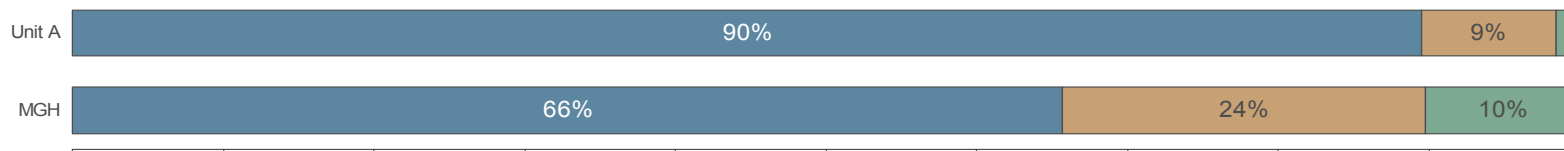
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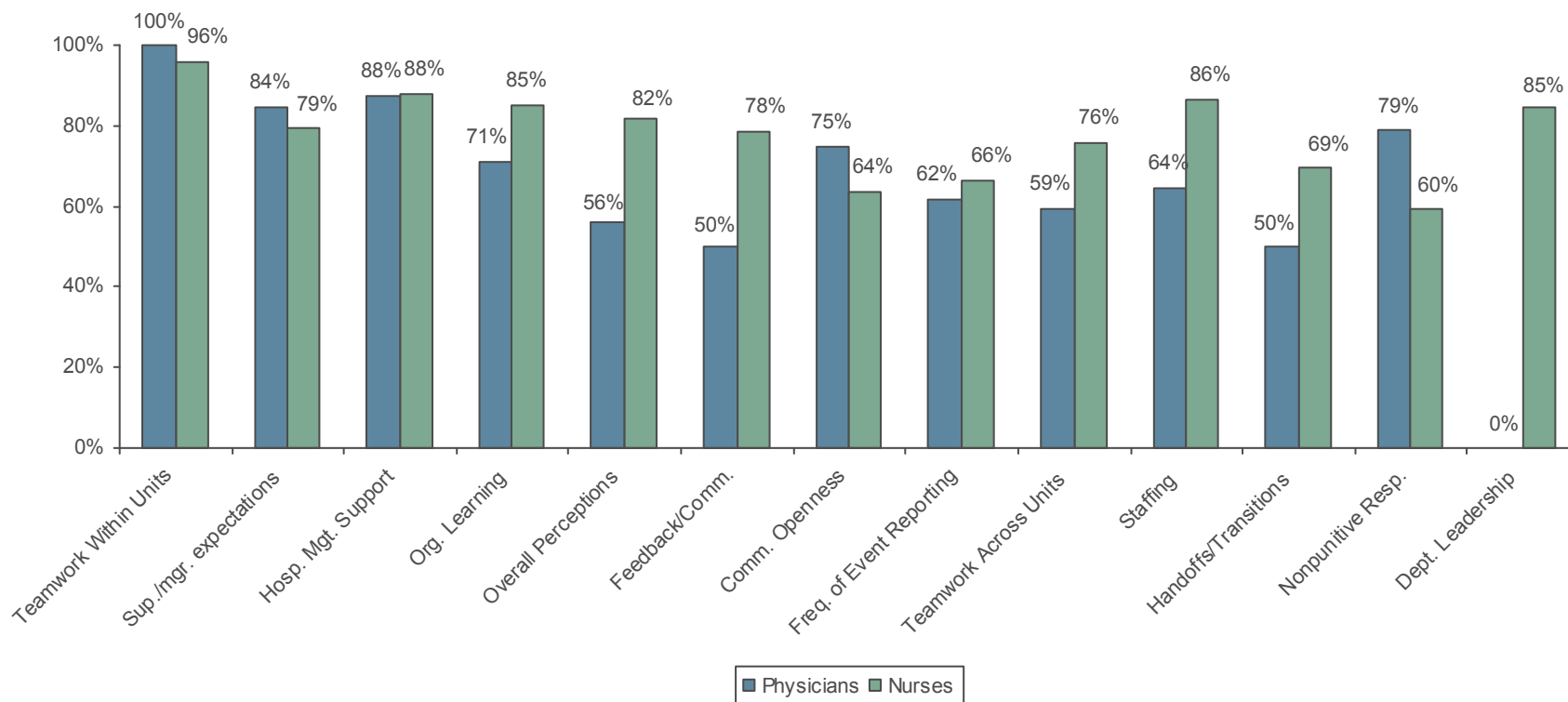
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■ % Positive ■ % Neutral ■ % Negative

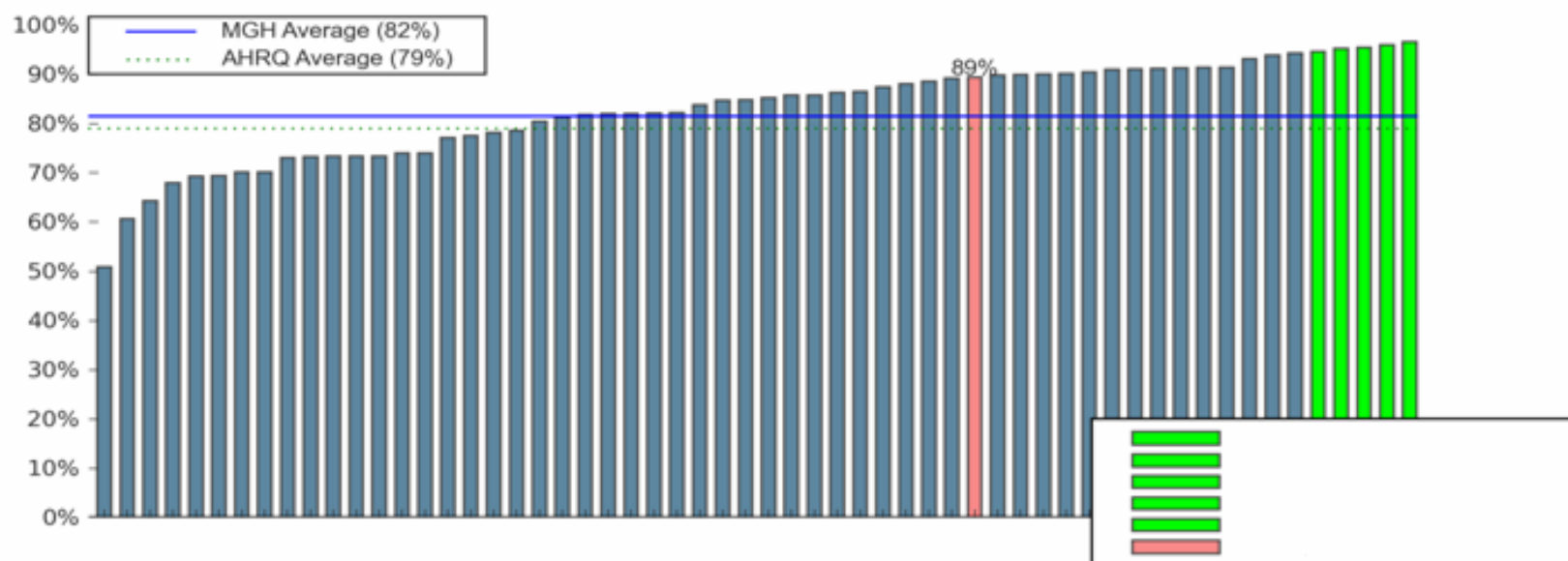
Composite Results by Staff Category—Unit Level

Composite Score - % Positive



Safety Climate Dimensions

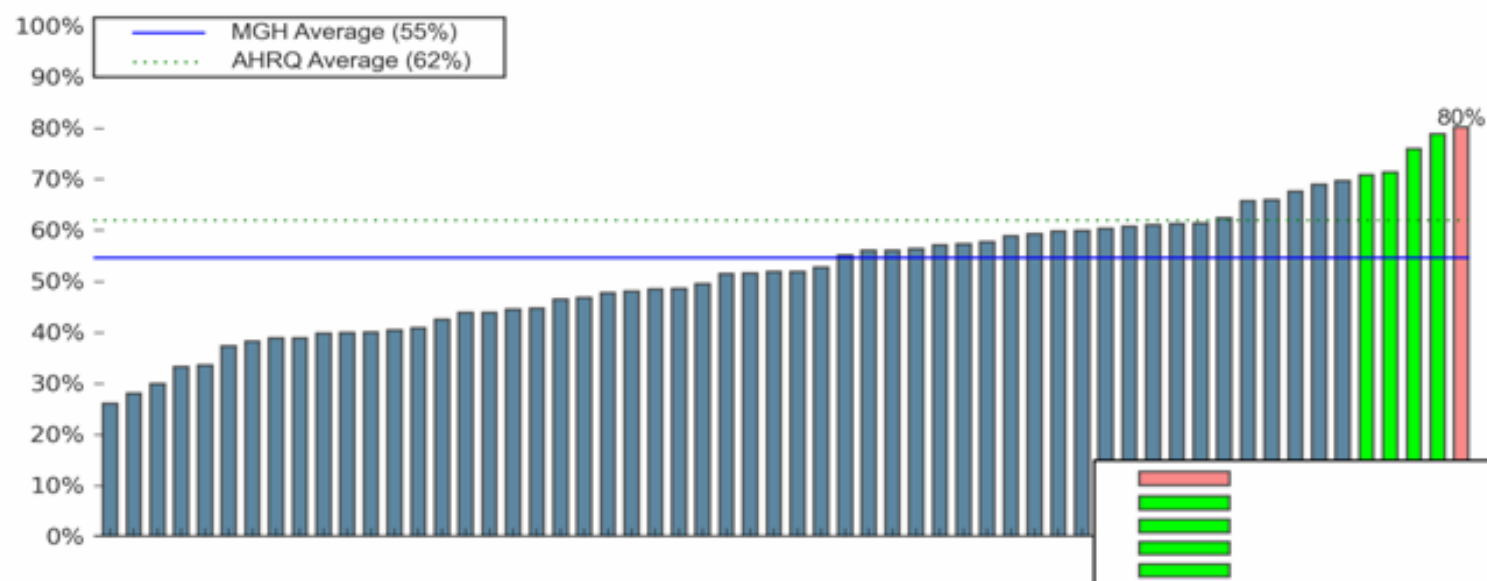
Teamwork Within Hospital Units
% Positive



* n-sizes below 30 should be interpreted with caution

Safety Climate Dimensions

Feedback and Communication About Error *% Positive*



* n-sizes below 30 should be interpreted with caution

Summary—Unit Level Feedback

- Unit level feedback
 - Assessing culture at the unit level revealed marked variation in culture across the hospital units
 - Identified units that may serve as role models and sources of best practices
 - Allows the establishment of priorities—units that are in particular need of improvement
 - Results fed back at the unit level resonate with staff because the data feel more relevant

Considerations--Unit Level feedback

- Greater likelihood of push back from unit leadership—investment is greater and can feel judgmental
- Unit leaders concerned about comparability of results across unit types (e.g. ED vs oncology unit)
- Increased need for assistance in feedback, interpretation, and development of action plans
- Lack of physician directors for many of the units; can lead to lack of physician ownership of results

Summary—Physician Involvement

- Physician involvement
 - Physicians can be engaged and participate with high response rates
 - Physician responses may differ from those of nurses, even in units with a relatively positive safety culture
 - Differences in perceptions
 - Physician's responses about unit may reflect beliefs and behaviors in their department

Considerations—Physician Involvement

- Many physicians practice in multiple units; difficult to tie them to a single unit
- Limited number of physician respondents per unit; prevented us from providing physician results to some units
- Mechanisms for improvements around safety exist, for physicians, at department level as well as unit level; difficult to capture both

Considerations--General

- Recognize potential for low response rate and survey “fatigue” given competing surveys, busy clinical environment; undertake strategies to maximize response rates
- Comparability of results across hospitals and units contingent upon comparability of methods
- Survey is often the starting point; need for further assessments to understand etiology of culture results

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