



Preliminary Comparative Results and Analyses from the Medical Office Survey on Patient Safety Culture

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April 2011



Objectives



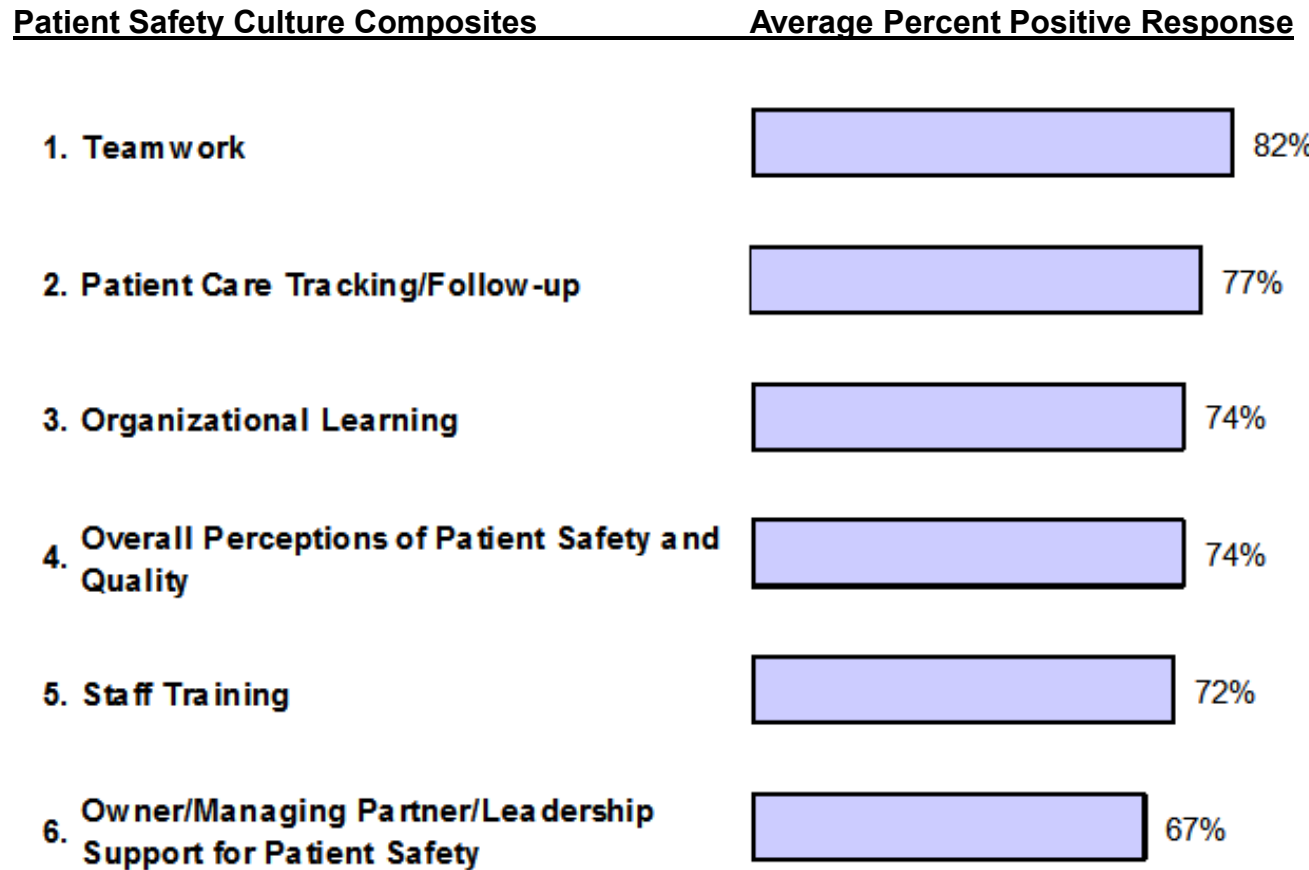
- Present comparative results from Preliminary AHRQ Medical Office SOPS database
 - Full report can be found online:
<http://www.ahrq.gov/qual/mosurvey10/moresults10.htm>
- Present results from analyses linking Medical Office SOPS with:
 - Staff positions, and
 - Medical office characteristics (e.g., size, ownership, specialty)



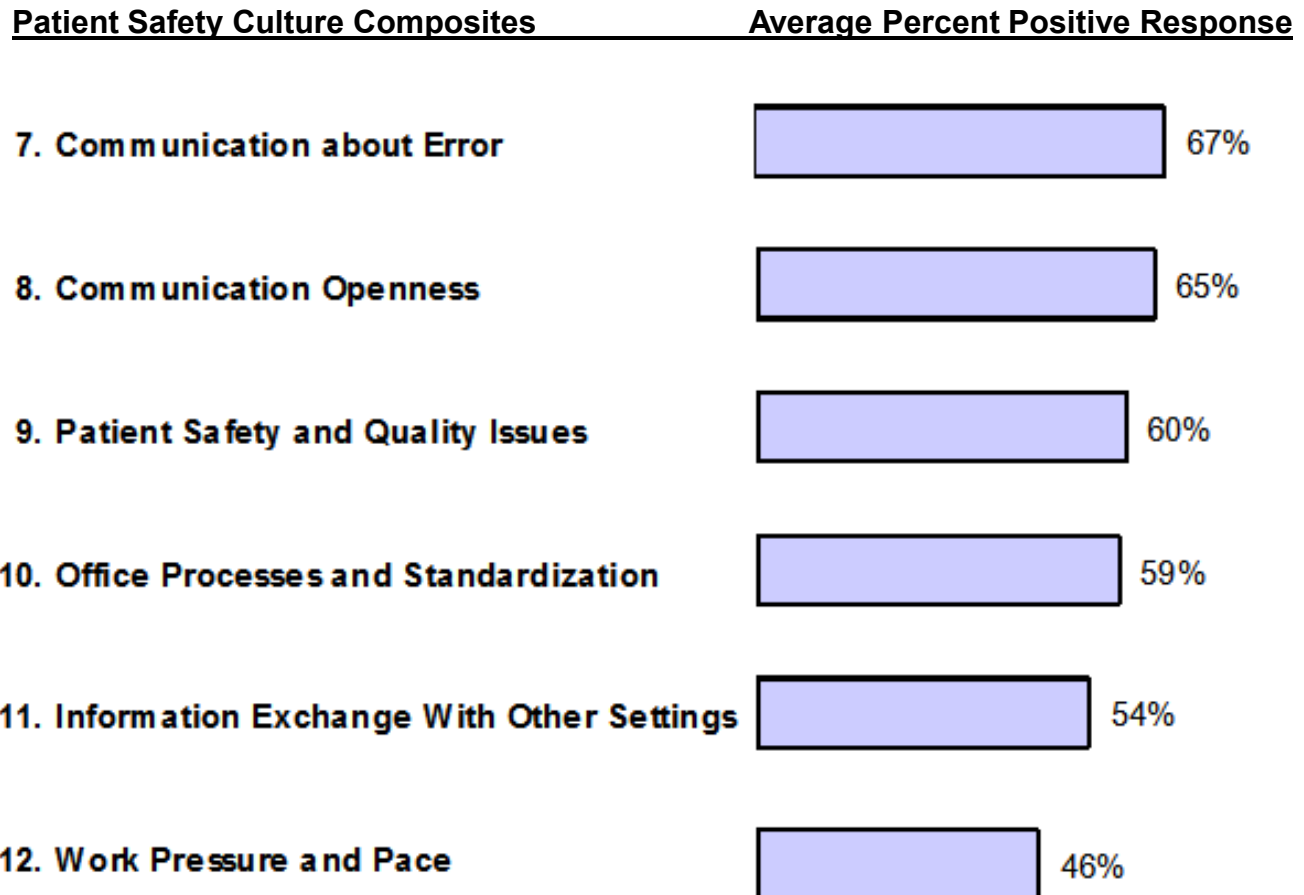
Medical Office SOPS Preliminary Database

- The MO SOPS Database consists of:
 - 470 medical offices
 - 10,567 provider & staff respondents
 - Overall response rate = 73%
(10,567 respondents/14,558 staff asked to respond)
 - Average # of respondents per office = 22
(range: 5 to 192)
 - Average office response rate = 78%
(range: 21% to 100%)
-

Preliminary Results

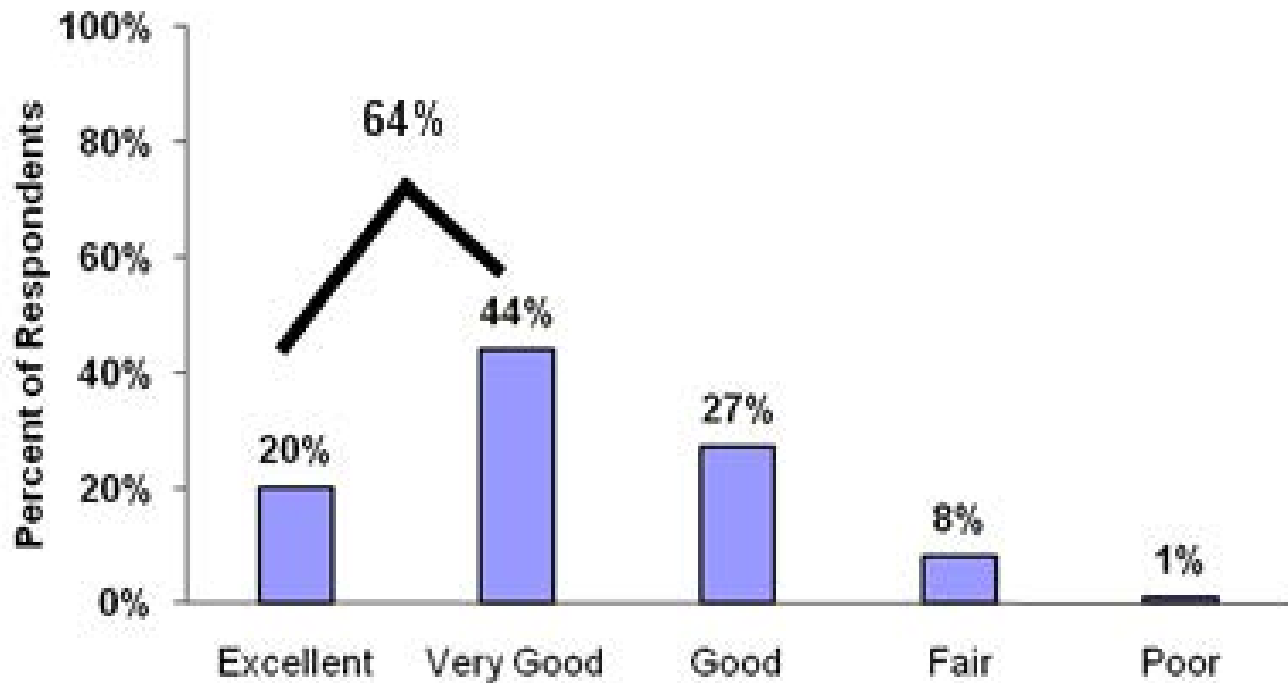


Preliminary Results



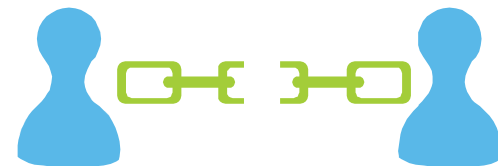


Overall Rating on Patient Safety





Analyses Linking Staff and Medical Office Characteristics with Patient Safety Culture Scores





MO SOPS Analysis Variables

- 15 patient safety culture measures
 - 12 patient safety culture composites
 - Average composite score (across the 12 composites)
 - Average Rating on Quality (across patient-centered, effective, timely, efficient, equitable)
 - Rating on Patient Safety
- All measures calculated at medical office level
 - % positive response within each office



Exploratory Questions

Are there differences in patient safety culture scores by:

1) Staff position?

Medical office characteristics?

2) Office size

3) Ownership

4) Specialty of office

5) Degree of health information technology (HIT) implementation



Analysis 1: Staff Position

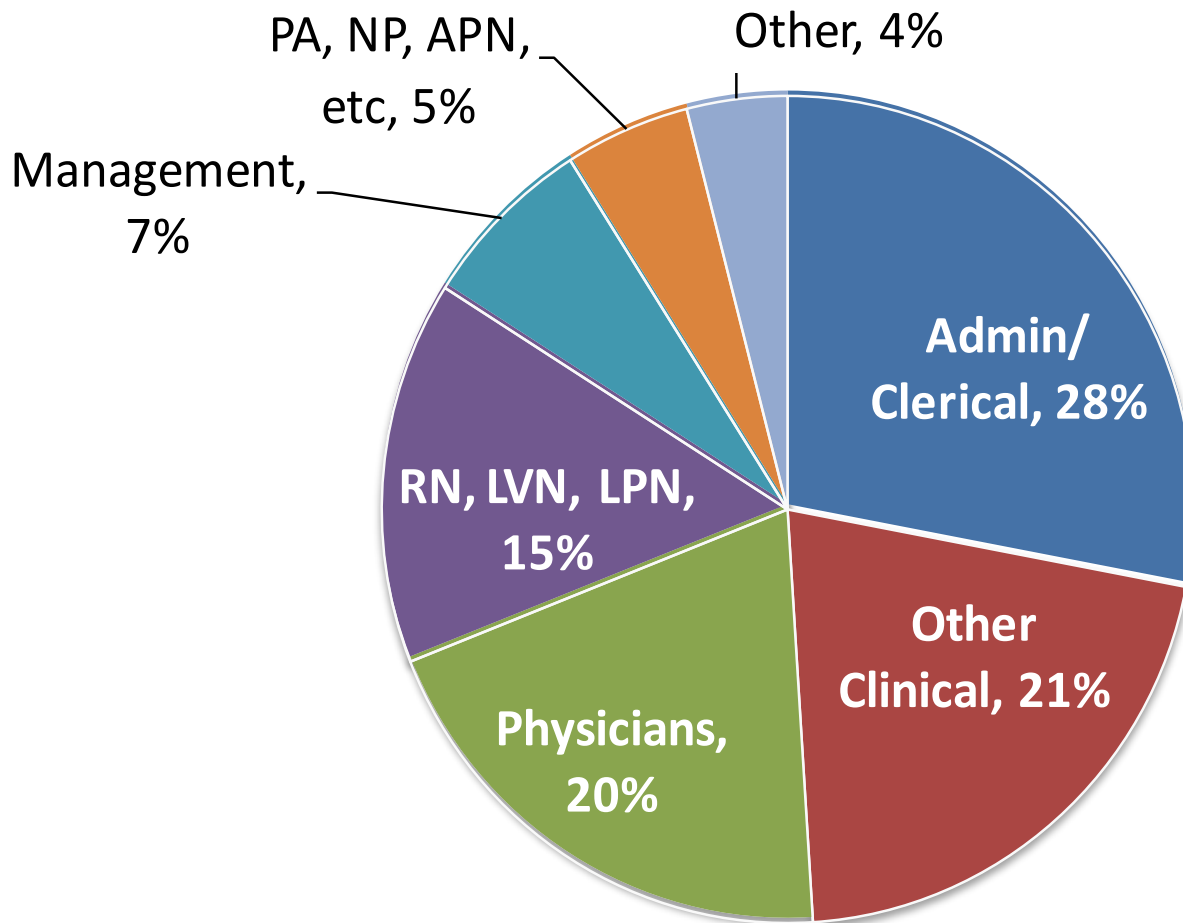
Question: Are there differences in patient safety culture scores by staff position?

Prediction: Physicians will have more positive opinions about patient safety culture in their medical offices than all other staff.





Analysis 1: Staff Position





Analysis 1: Staff Position-Method

- Calculated average % positive scores by staff position at the medical office level



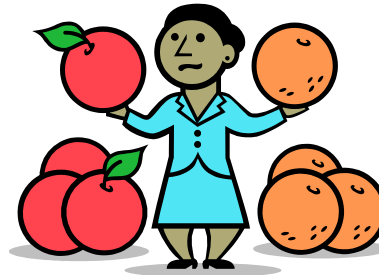
- Conducted one-way analysis of variance (ANOVA) to examine differences in MO SOPS measures across staff positions



Analysis 1: Staff Position

- Management & physicians had similar patient safety culture scores on the measures so we collapsed into two staff categories:

Management/
Physicians



All Others



Analysis 1: Staff Position-Results



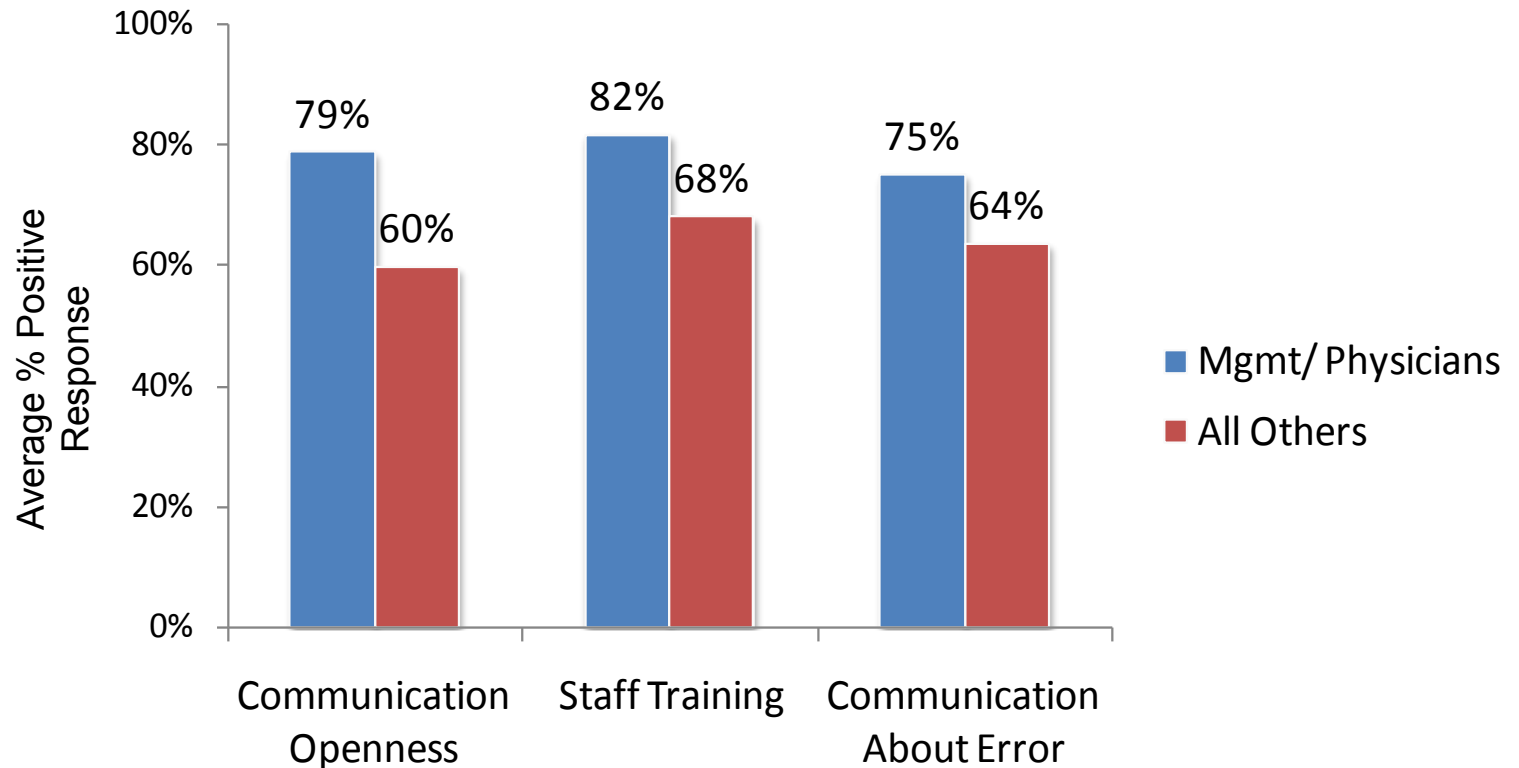
Management & physicians were MORE positive than other staff on 11 of the 15 measures (average difference = 9%, range: 4% - 19%)

MO SOPS Measure	Average % Positive		
	Mgmt/ Physicians	All Others	Difference
Average MO SOPS Composite Score	70%	66%	4%
Average Rating on Quality	73%	62%	11%
Overall Rating on Patient Safety	68%	63%	5%



Analysis 1: Staff Position-Results

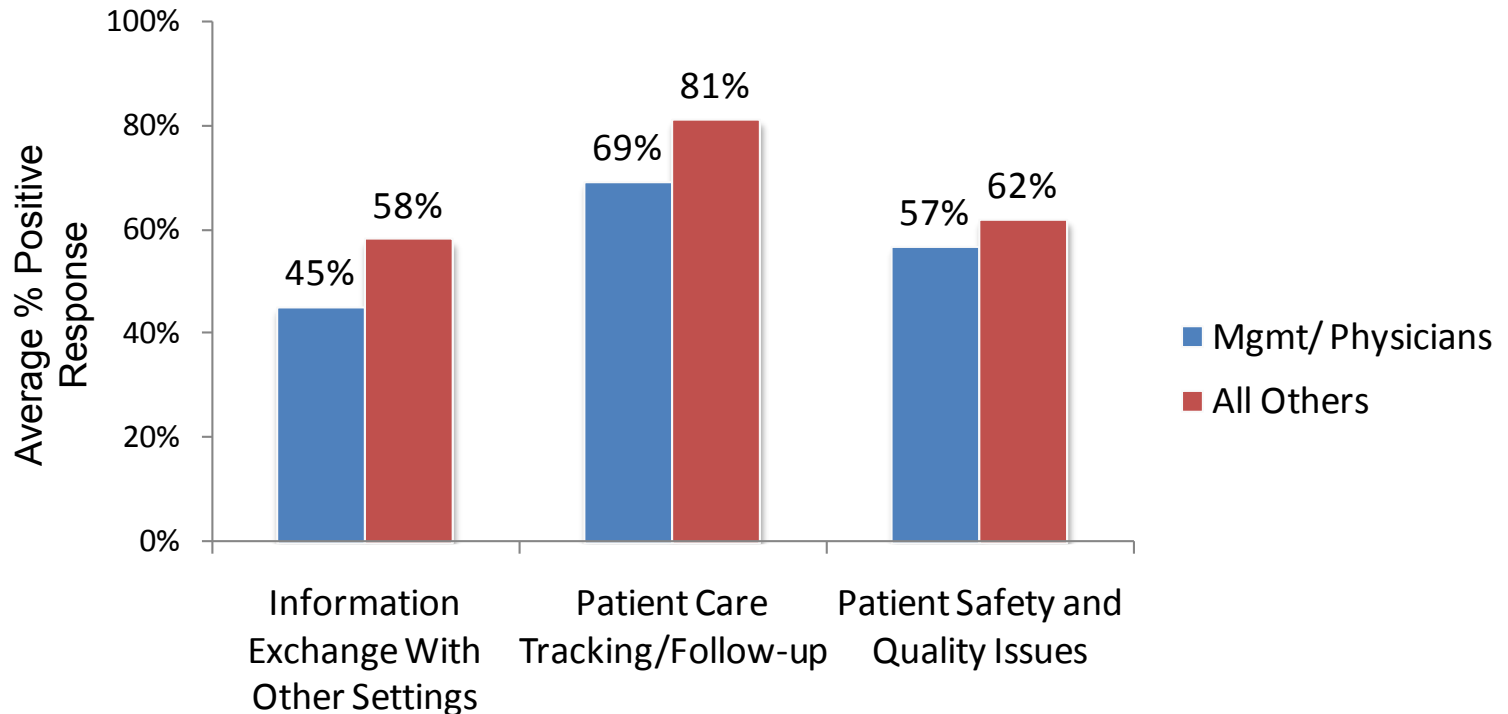
The largest differences between Management & Physicians and All Other staff were:





Analysis 1: Staff Position-Results

Management & physicians were LESS positive than All Other Staff on 3 of the 15 measures (average difference = 10%, range: 5% - 13%)

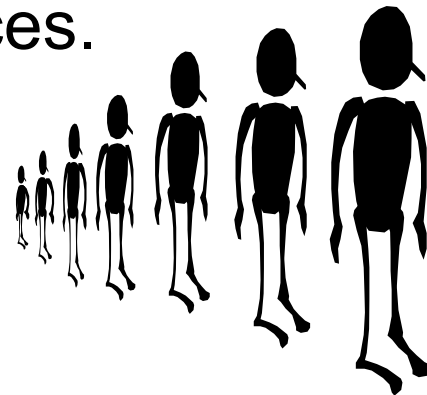




Analysis 2: Office Size

Question: Are there differences in patient safety culture scores by medical office size?

Hypothesis: Smaller medical offices will have more positive patient safety culture scores than larger medical offices.





Analysis 2: Office Size

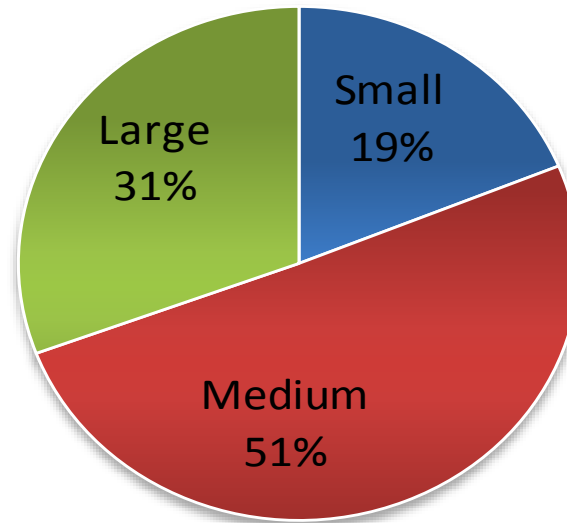
- Examined correlations between medical office size and patient safety culture scores
- Size = # of providers and staff
 - Average # of providers and staff = 27
(range= 5 to 100)



Analysis 2: Office Size

Medical Office Size Categories

- Small offices = 5-10 providers and staff
- Medium offices = 11-30 providers and staff
- Large offices = 31+ providers and staff



Analysis 2: Office Size-Results



Smaller medical offices had slightly more positive patient safety culture scores than larger medical offices on all 15 measures (average correlation = $-.27$; range: $-.14$ to $-.41$)

MO SOPS Measure	Correlation	Average % Positive		
		Small Offices	Medium Offices	Large Offices
Average MO SOPS Composite Score	-0.34	74%	67%	62%
Average Rating on Quality	-0.41	77%	66%	58%
Overall Rating on Patient Safety	-0.30	76%	64%	57%

Analysis 3: Ownership



Question: Are there differences in patient safety culture scores by medical office ownership?

- Physician/provider
- Hospital/health system
- University/academic

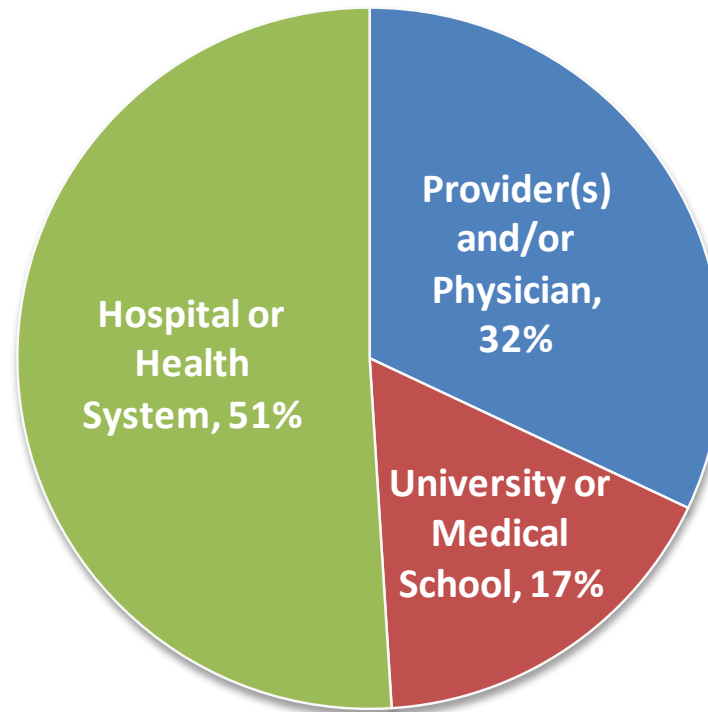


Hypothesis: Physician/provider-owned offices will have more positive patient safety culture scores than other ownership types.



Analysis 3: Ownership

Most medical offices were owned by a Hospital or Health System



Analysis 3: Ownership-Results



Physician/provider-owned offices had more positive scores than **hospital/health system** offices on 10 of the 15 measures (average difference = 7%; range: 4% to 11%)

MO SOPS Measure	Average % Positive		
	Provider/ Physician	University/ Academic	Hospital/ Health System
Average MO SOPS Composite Score	70%	65%	66%
Average Rating on Quality	70%	65%	63%
Overall Rating on Patient Safety	70%	62%	63%

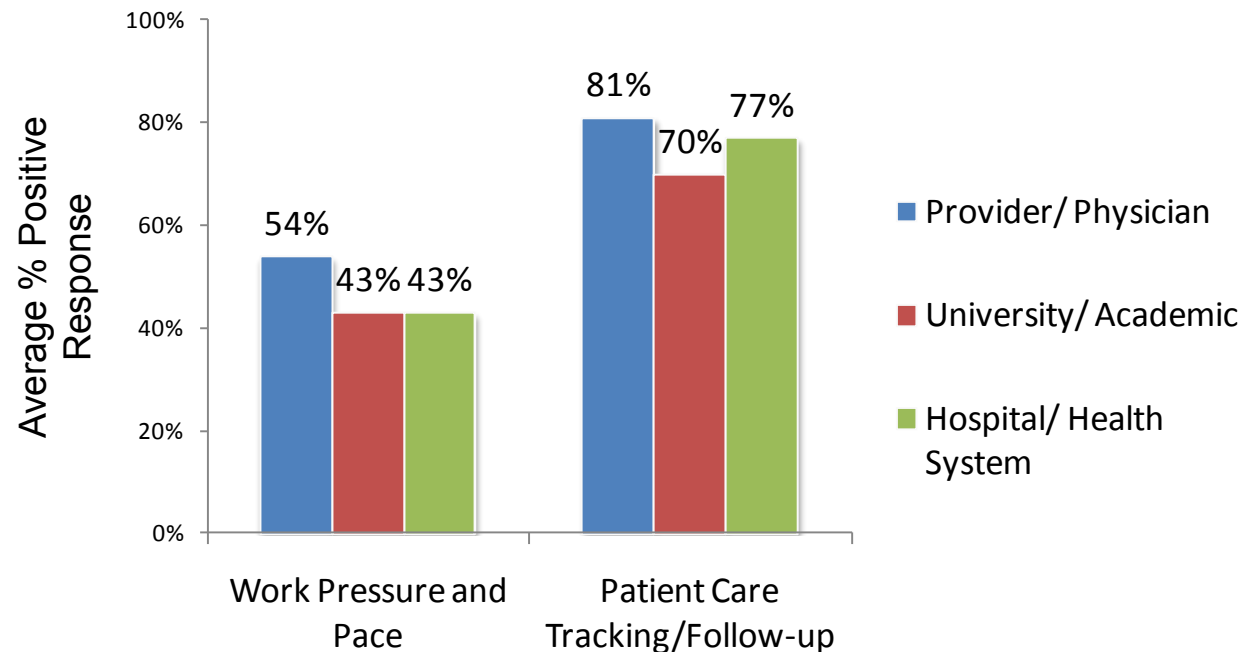
The largest difference (11%) was for Work Pressure and Pace, Provider/Physician = 54% vs. Hospital/Health System = 43%



Analysis 3: Ownership-Results

Physician/provider-owned offices had more positive scores than **University/Academic offices** on 7 of the 15 measures (average difference = 8%; range: 5% to 11%)

- The two largest differences were on:

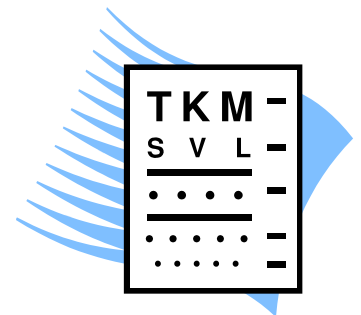
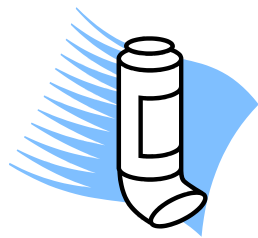




Analysis 4: Specialty

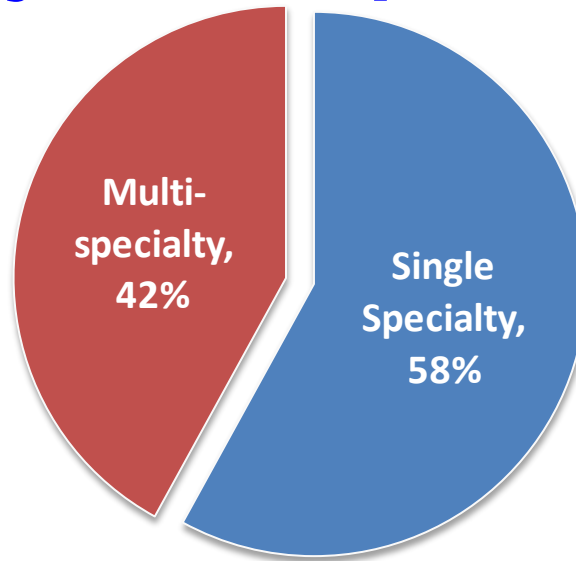
Question: Are there differences in patient safety culture scores between single specialty & multispecialty offices?

Hypothesis: Single specialty offices will have more positive patient safety culture scores than multispecialty offices.





Analysis 4: Specialty



- Most multi-specialty offices (58%) were multispecialty with primary care only.
- Performed partial correlations (controlling for office size) between specialty and patient safety culture scores.



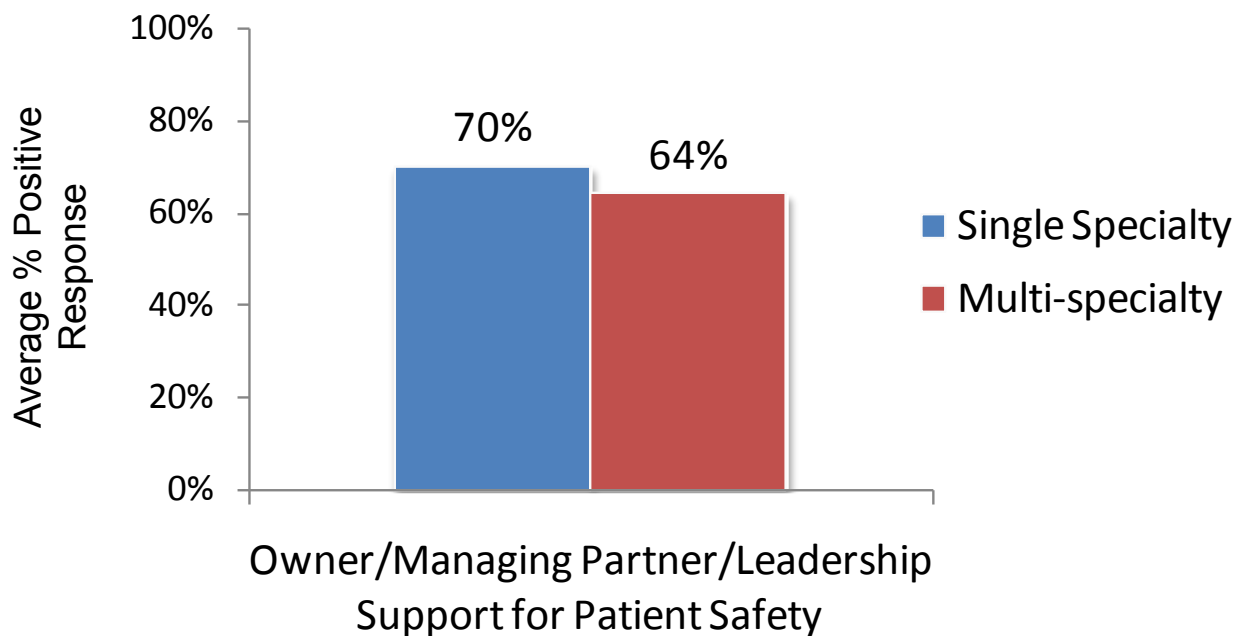
Analysis 4: Specialty

- Single specialty offices tended to have slightly higher SOPS scores on 6 of the 15 measures (Average correlation = .13, range: .10-.18).

MO SOPS Measure	Correlation	Average % Positive	
		Single Specialty	Multi-specialty
Average MO SOPS Composite Score	0.12	68%	64%
Average Rating on Quality	0.12	67%	62%
Overall Rating on Patient Safety	ns	66%	62%

Analysis 4: Specialty

The largest difference, 6%, was for Owner/Managing Partner/ Leadership Support for Patient Safety:





Analysis 5: HIT Implementation

Question: Is HIT implementation related to patient safety culture scores?

Hypothesis: Offices with greater HIT implementation will have more positive patient safety culture scores than those with lesser HIT implementation.





Analysis 5: HIT Implementation-Method

- Partial correlations (controlling for office size) between HIT implementation and MO SOPS scores
- Degree of HIT implementation
 1. Not Implemented & no plans in the next 12 months
 2. Not Implemented but plan to in the next 12 months
 3. Implementation in Process
 4. Fully Implemented



Analysis 5: HIT Implementation

HIT Tool	Not Implemented	In Process	Fully Implemented
Electronic Appt Scheduling	5%	14%	81%
Electronic ordering of medications	30%	29%	42%
Electronic ordering of tests, imaging, procedures	38%	26%	36%
Electronic access to patients' test or imaging results	13%	29%	58%
Electronic medical records (EMR/EHR)	29%	21%	50%



Analysis 5: HIT Implementation

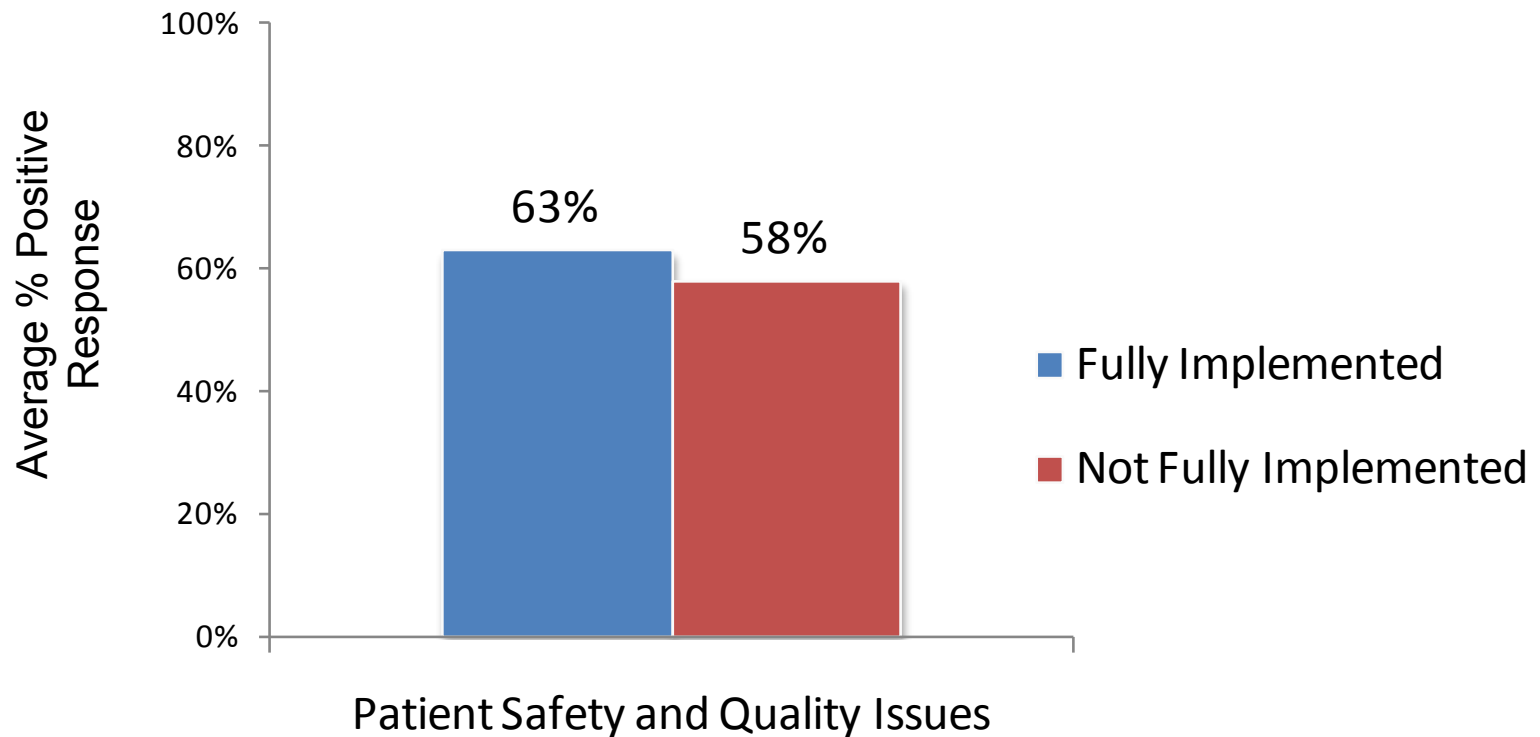
- Offices with greater EMR implementation had slightly higher patient safety culture scores on 11 of the 15 measures (average correlation = .15, range: .10 - .27)

MO SOPS Measure	Correlation	Average % Positive	
		Fully Implemented	Not Fully Implemented
Average MO SOPS Composite Score	0.16	67%	66%
Average Rating on Quality	ns	66%	64%
Overall Rating on Patient Safety	0.13	66%	63%



Analysis 5: HIT Implementation

The largest difference, 5%, was for Patient Safety and Quality Issues:





Conclusions



Staff Position

Overall, management & physicians had more positive patient safety culture scores than other staff, except on:

- Patient safety and quality issues
- Information exchange with other settings, and
- Patient care tracking/follow-up



Office Size

Smaller medical offices had slightly more positive patient safety culture scores than larger medical offices.



Ownership

Physician/provider-owned offices--

- Had more positive patient safety culture scores than hospital/health-system owned offices and university/academic offices



Conclusions

Specialty



Single specialty medical offices had slightly more positive patient safety culture scores than multispecialty offices.

HIT Implementation



Overall HIT implementation was not strongly related to patient safety culture scores, though offices with greater EMR implementation had slightly higher patient safety culture scores.



Questions?

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