



# ***Development of the AHRQ Medical Office Survey on Patient Safety Culture***

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# *Objectives*



- Describe the development of the AHRQ Medical Office Survey on Patient Safety Culture (Medical Office SOPS)
- Discuss the pilot test of the survey with staff and providers in outpatient medical offices in the U.S.

# *Background*



- Hospital Survey on Patient Safety Culture (HSOPS) released November 2004  
[www.ahrq.gov/qual/patientsafetyculture/](http://www.ahrq.gov/qual/patientsafetyculture/)
- Developed by Westat, funded by AHRQ
- Medical office survey released January 2009
  - Developed in response to need for a patient safety culture survey for outpatient medical offices

# Medical Office SOPS



- Same development steps as the hospital survey
  - Reviewed literature & existing surveys
  - Conducted background interviews with medical office providers and staff
    - *Staff less familiar with term “patient safety”*
  - Identified key areas of safety culture in the medical office setting
  - Developed survey items
  - Conducted cognitive testing of survey items
  - Obtained input from over two dozen researchers & stakeholders
  - Pilot tested the survey, analyzed data & finalized the survey

# *Goals of the Survey*



To enable medical offices to:

- Raise staff awareness about patient safety
- Assess the current status of patient safety culture
- Use for internal patient safety and quality improvement
- Evaluate the impact of patient safety and quality improvement initiatives
- Track patient safety culture change over time

# *Hospital SOPS Dimensions*



- 42 items assess 12 dimensions of patient safety culture
    1. Communication openness
    2. Feedback & communication about error
    3. Frequency of event reporting
    4. Handoffs & transitions
    5. Management support for patient safety
    6. Nonpunitive response to error
    7. Organizational learning--continuous improvement
    8. Overall perceptions of patient safety
    9. Staffing
    10. Supervisor/manager expectations & actions promoting patient safety
    11. Teamwork across units
    12. Teamwork within units
  
  - Patient safety “grade” (Excellent to Poor)
  - Number of events reported in past 12 months
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# *Medical Office SOPS Dimensions*



- Different from the hospital survey—  
dimensions specific to medical offices
  1. Patient safety and quality issues
    - Access to care
    - Charts/medical records
    - Medical equipment
    - Medication
    - Diagnostics & Tests
  2. Information exchange with other settings
  3. Office processes and standardization
  4. Work pressure and pace
  5. Patient care tracking/follow-up
  6. Staff training

# *Medical Office SOPS Dimensions*



- Dimensions similar to the hospital survey—
  7. Teamwork
  8. Organizational learning
  9. Overall perceptions of patient safety & quality
  10. Owner/managing partner/leadership support for patient safety
  11. Communication about error
  12. Communication openness



# *Medical Office Pilot Test*



- Pilot tested in 182 medical offices with 4,174 provider & staff respondents
- Worked with partners:
  - John Hickner, MD—Cleveland Clinic
  - AAFP National Research Network
  - AAP Pediatric Research in Office Settings
  - MGMA
  - Allina Hospitals and Clinics
  - Baylor Health Care System—HealthTexas Provider Network
  - Cleveland Clinic
  - Michigan State University Health Team
  - Other health system



# *Pilot Test Medical Office Characteristics*

- 63% single specialty / 37% multispecialty
- 37% family practice/family medicine  
27% pediatrics  
23% internal medicine  
10% OB/GYN or GYN
- Office Sizes (# of providers & staff)
  - 3 to 10                      15%
  - 11 to 20                     30%
  - 21 to 30                    20%
  - 31 or more                 35%

# *Pilot Test Medical Office Characteristics*



- 69% had only one office location
- Ownership
  - 59% - a hospital or health care system
  - 25% - physicians or providers, or both
  - 14% - a university, or academic medical institute
- Use of electronic tools
  - 21% fully implemented electronic ordering of meds
    - 45% in the process of implementing
  - 32% fully implemented electronic medical records
    - 37% in the process of implementing

# *Pilot Test Survey Administration*



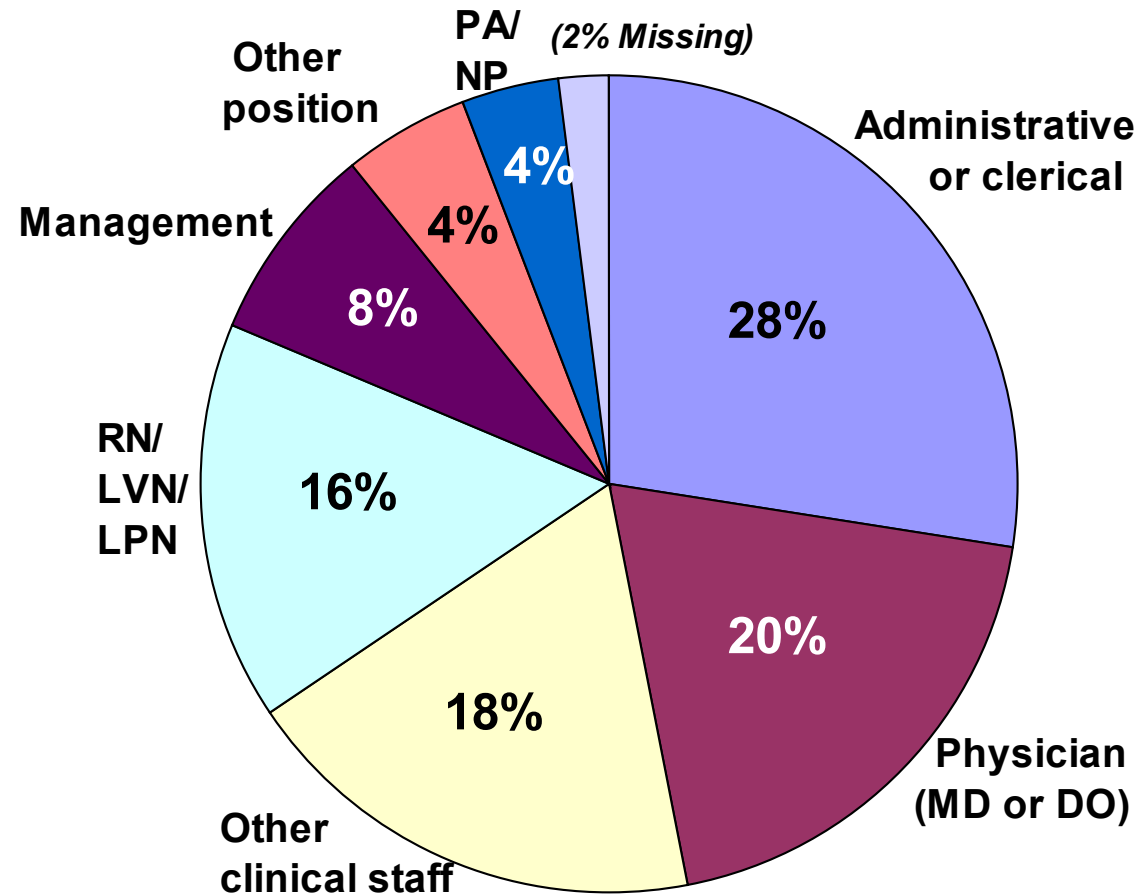
- Administered to all providers and staff
- 71% used paper surveys; 29% used Web surveys
  - One health system had experience with web-based employee surveys
  - *Recommend paper survey administration for high response rate (unless office has previous positive experience with web surveys)*



# *Pilot Test Response Rates and Number of Respondents*

- Overall response rate = 70% (4,174 / 5,931)
- Paper response rate = 78% vs. Web = 65%
- Average number of respondents per office = 23 (range: 5 to 92)
- Average office response rate = 74% (range: 33% to 100%)

# Staff Positions of Respondents



# *Statistical Analysis of Pilot Results*



- Pilot data used to conduct psychometric analyses
  - Examined factor structure of survey dimensions
  - Calculated reliabilities (Cronbach's alpha ranged from .75 to .86)
- Poor-performing items were dropped
- Survey was finalized and released by AHRQ in 2009
- A Spanish version will be released in Summer 2011