



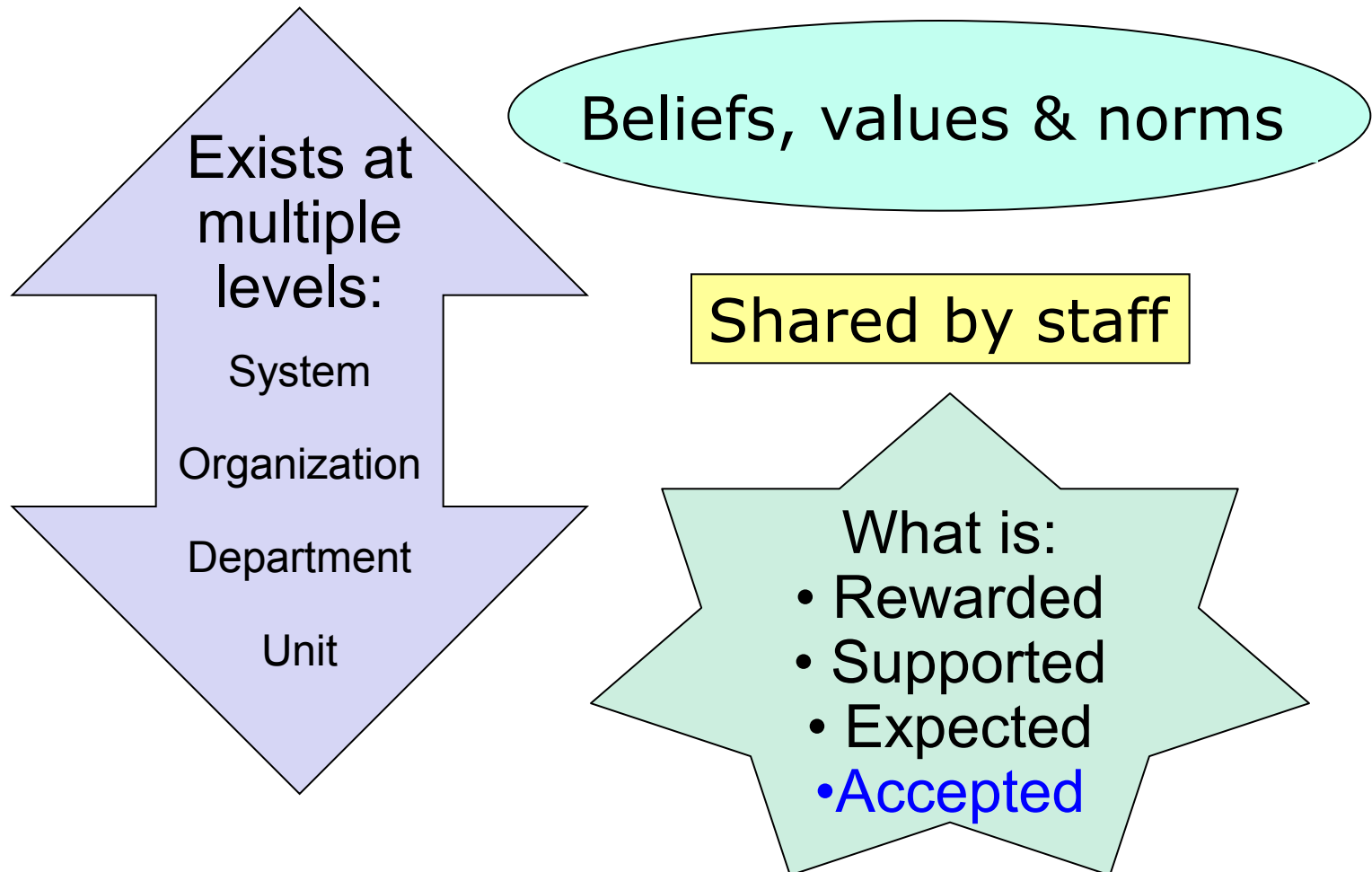
# *Development of the AHRQ Pharmacy Survey on Patient Safety Culture*

**Joann Sorra, PhD  
Project Director  
CAHPS and SOPS User Network  
Westat**

# What is Patient Safety Culture?



"The way we do things around here"



# *Survey Development Process*



- Reviewed literature & existing surveys
- Interviewed experts and pharmacy staff
- Identified key areas of patient safety culture
- Developed survey items & pretested them
- Obtained input from Technical Expert Panel (TEP)
- Piloted the survey in 55 pharmacies with 479 staff
- Conducted psychometric analyses
- Consulted with AHRQ and TEP to finalize survey
- Developed toolkit materials

# Pharmacy SOPS

## Patient Safety Culture Dimensions



36 items assess 11 dimensions of patient safety culture

1. Patient counseling
2. Communication openness
3. Overall perceptions of patient safety
4. Organizational learning—continuous improvement
5. Teamwork
6. Communication about prescriptions across shifts
7. Communication about mistakes
8. Response to mistakes
9. Staff training and skills
10. Physical space and environment
11. Staffing, work pressure & pace
12. Compliance with pharmacy procedures
13. Documenting mistakes

Patient safety “grade” (Excellent to Poor)

# Pharmacy Pilot Test



Pharmacy Type	Number	Percent
Mass merchant/discount retailer	19	35%
Supermarket	18	33%
Independent	8	15%
Integrated health system	10	19%
Chain drugstore (local, regional, national)	2	4%
Total	55	100%

- Overall response rate: 75% (479 out of 635)
- Average number of respondents per pharmacy
  - 9 respondents (range 5 to 20)

# Pharmacy Characteristics



Number of locations	Number	Percent
1 store	5	9%
2 to 9	7	12%
10 to 24	0	0%
25 to 99	10	19%
100 or more	33	60%
Total	55	100%

- 56% had 1,500 prescriptions per week or less
- 33% had a drive-through window

# Staff Characteristics



Staff Position	Number	Percent
Pharmacy Technician	234	52%
Pharmacist	141	31%
Clerk	37	8%
Student intern/extern	25	6%
Other position	13	3%
Total	450	100%

- 85% had at least 1 year experience in the pharmacy
- 69% worked at least 32 hours per week

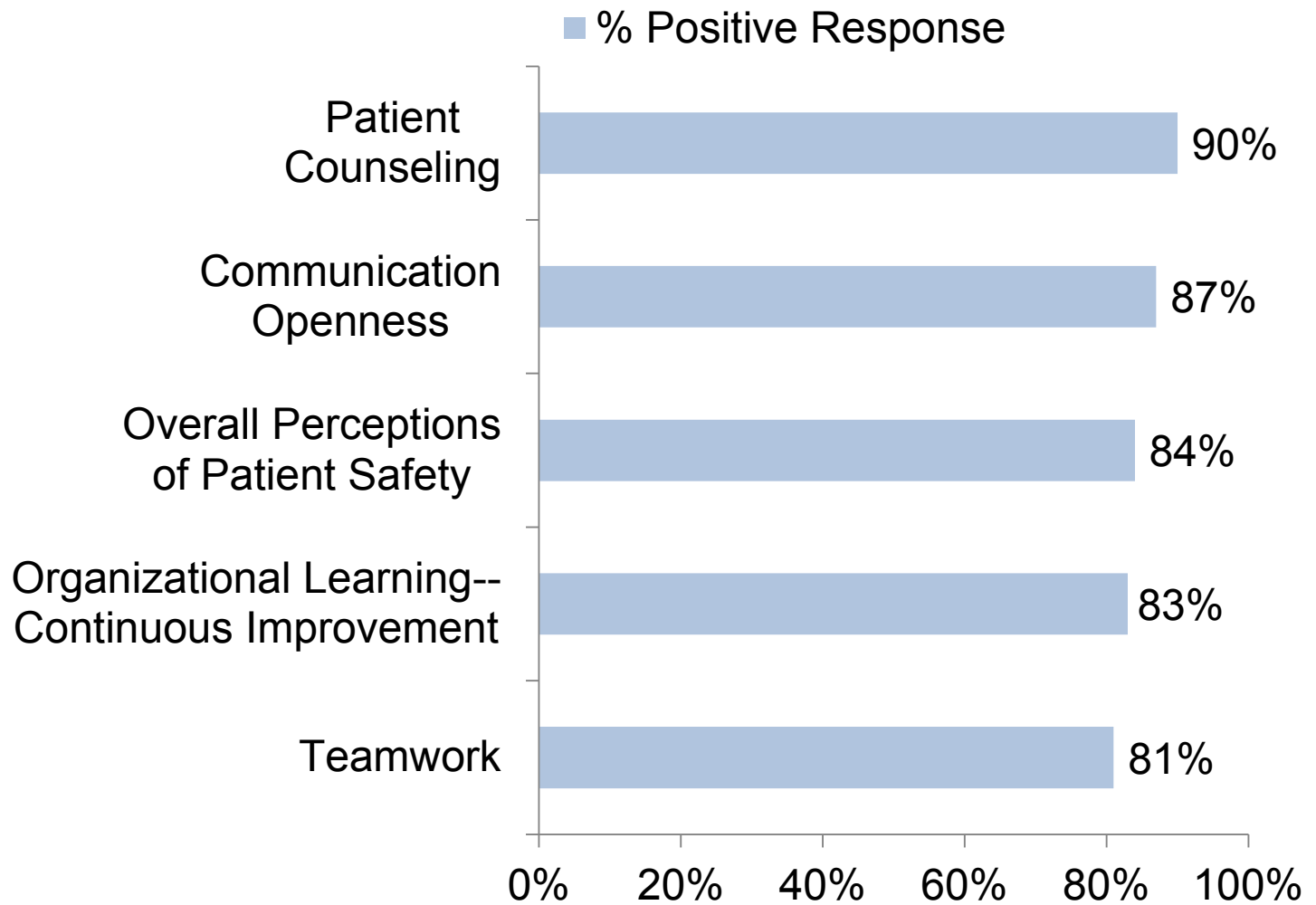
# *Psychometric Analysis*



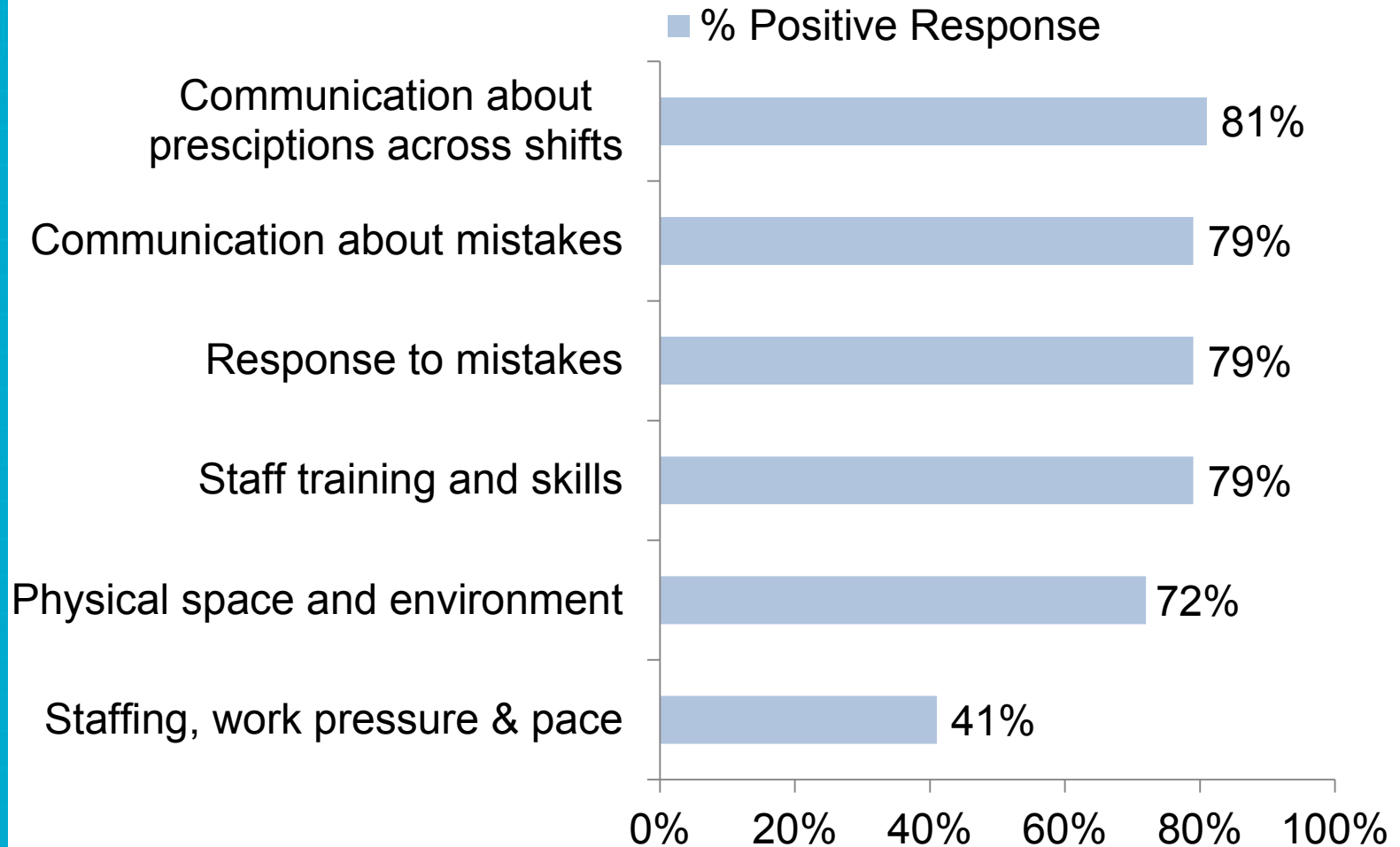
- Item Analysis
- Individual & Multilevel Confirmatory Factor Analysis
- Reliability Analysis
- Technical Expert Panel Input



# Pharmacy SOPS Strengths & Areas for Improvement



# Pharmacy SOPS Strengths & Areas for Improvement



# Comments



- Patient counseling

- *Pharmacists feel strongly about effective consultation with all patients as a tool to prevent errors.*
- *Patient education is a strength of this pharmacy. Customers are encouraged to ask questions and interact with our staff.*
- *We know a lot of the patients, and speak to them like they're friends.*

# Comments



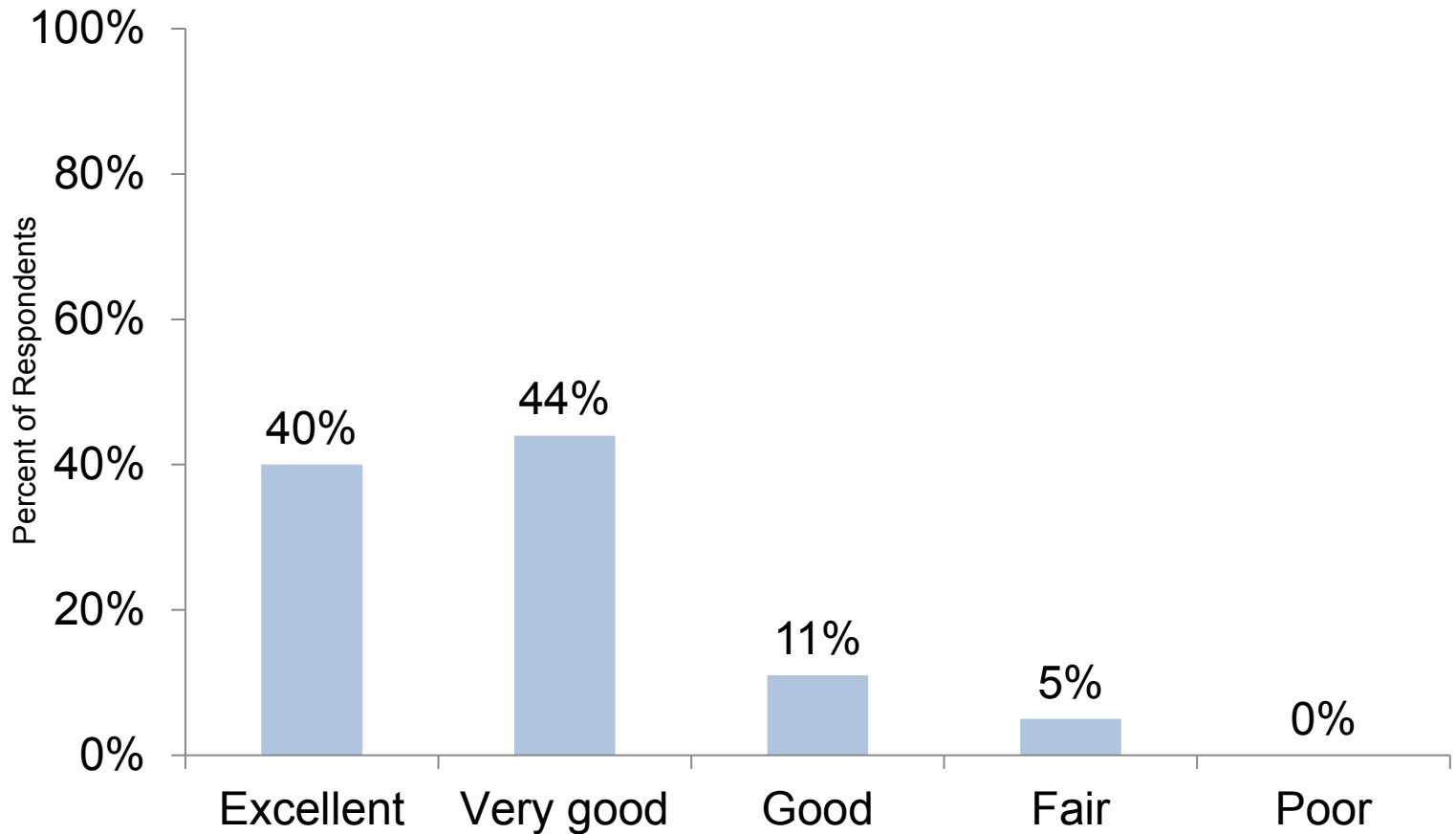
- Physical space and environment
  - *Our pharmacy is way too small for the volume of prescriptions we fill.*
  - *When they remodeled our pharmacy, they should have made us bigger but we work in a small environment. We are always bumping into each other and tripping over things.*

# Comments

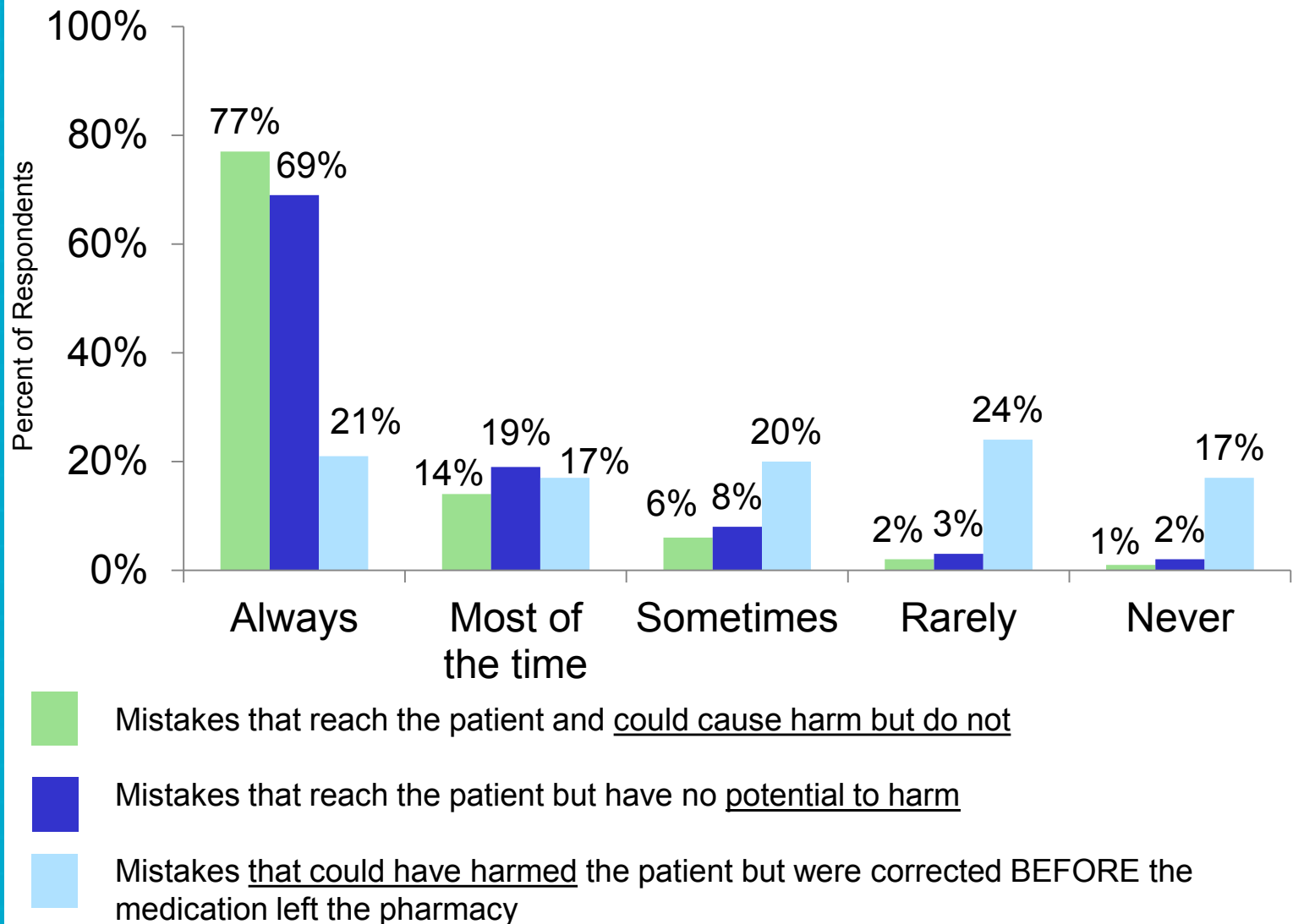


- Staffing, work pressure & pace
  - *Often the pharmacy is short-staffed and the pace is very quick which I feel is conducive to mistakes.*
  - *Pharmacy is placing too much emphasis on sales and customer service, not enough on support, staffing and safety.*
  - *Telling multiple walk-in patients and drive thru customers that they can have their prescriptions in 15 minutes is not in the best interests of the patient or staff.*

# Overall Rating on Patient Safety



# Frequency of Documenting Mistakes



# Results by Pharmacy Characteristics



- Overall, there were few differences between pharmacies based on number of Rx's filled per week
- Largest differences on % positive response:
  - **Physical space and environment**  
1,500 or fewer Rx's were more positive 77% vs.  
1,501 or more Rx's 66%
  - **Response to mistakes**  
1,500 or fewer Rx's were more positive 83% vs.  
1,501 or more Rx's 74%



# Results by Staff Position



- Pharmacists were more positive than technicians on 10 of 11 composites
- Largest differences:
  - **Organizational learning-continuous improvement**  
Pharmacists 93% vs. Pharmacy technicians 81%
  - **Communication about prescriptions across shifts**  
Pharmacists 87% vs. Pharmacy technicians 78%

# *Relationships Between Composites*



- All of the patient safety culture composites are significantly related to one another
  - The strongest correlation is between Organizational Learning—Continuous Improvement and Response to Mistakes (0.72)
- All of the patient safety culture composites are significantly related to Overall Rating on Patient Safety
  - The strongest correlation is with Overall Perceptions of Patient Safety (0.74)

# AHRQ Support



- Toolkit materials
  - Final survey
  - Data Entry and Analysis Tool
  - Pilot study preliminary comparative results
  - Technical assistance
- Comparative Database
  - Voluntary data submission Fall 2014
  - Report available early 2015