

A cross-sectional comparative study to measure gaps in knowledge and patient safety culture dimensions

Amongst doctors, nurses, technicians and administration

By: Sehr Durrani
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Institute of Health Management Research, Jaipur

Research questions

- To assess the gaps in knowledge related to patient safety amongst doctors, nurses, technicians and administrative staff?
- To assess and diagnose the overall patient safety culture in hospital from both the clinicians and non-clinicians perspectives?
- To identify areas of strengths and weaknesses?

Objectives

- Diagnose and assess the current status of patient safety culture.
- Identify strengths and areas for patient safety culture improvement.

Methodology

A total of 100 hospital staff respondents. Response rate- 93 percentage

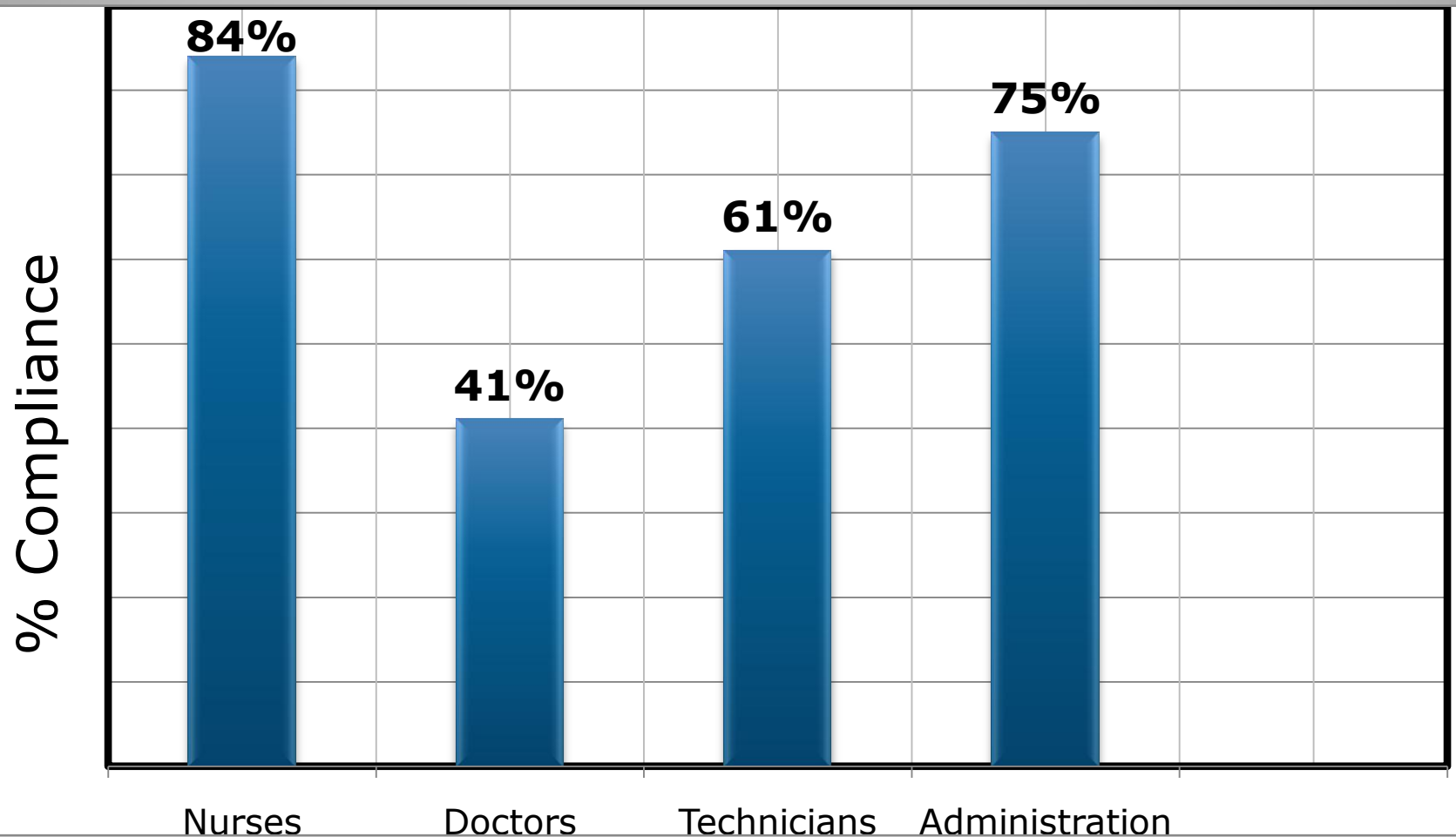
The four staff positions of respondents:

- Nurses(45)
- Doctors(22)
- Technicians(19)
- Administration(14)

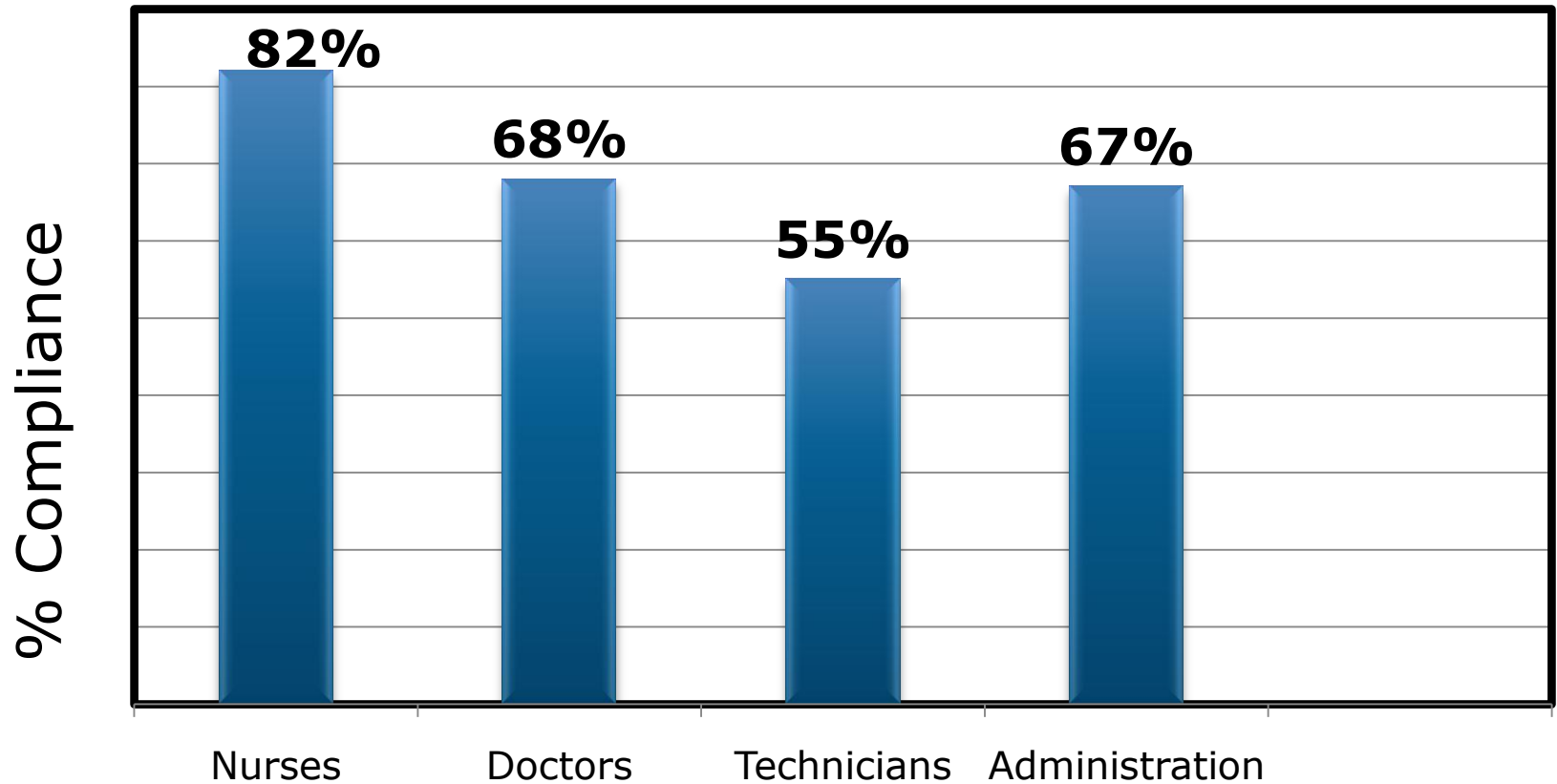
Tool – A six pages questionnaire comprising of section A and B(close-ended questions)

- Support from the ethical committee of the hospital

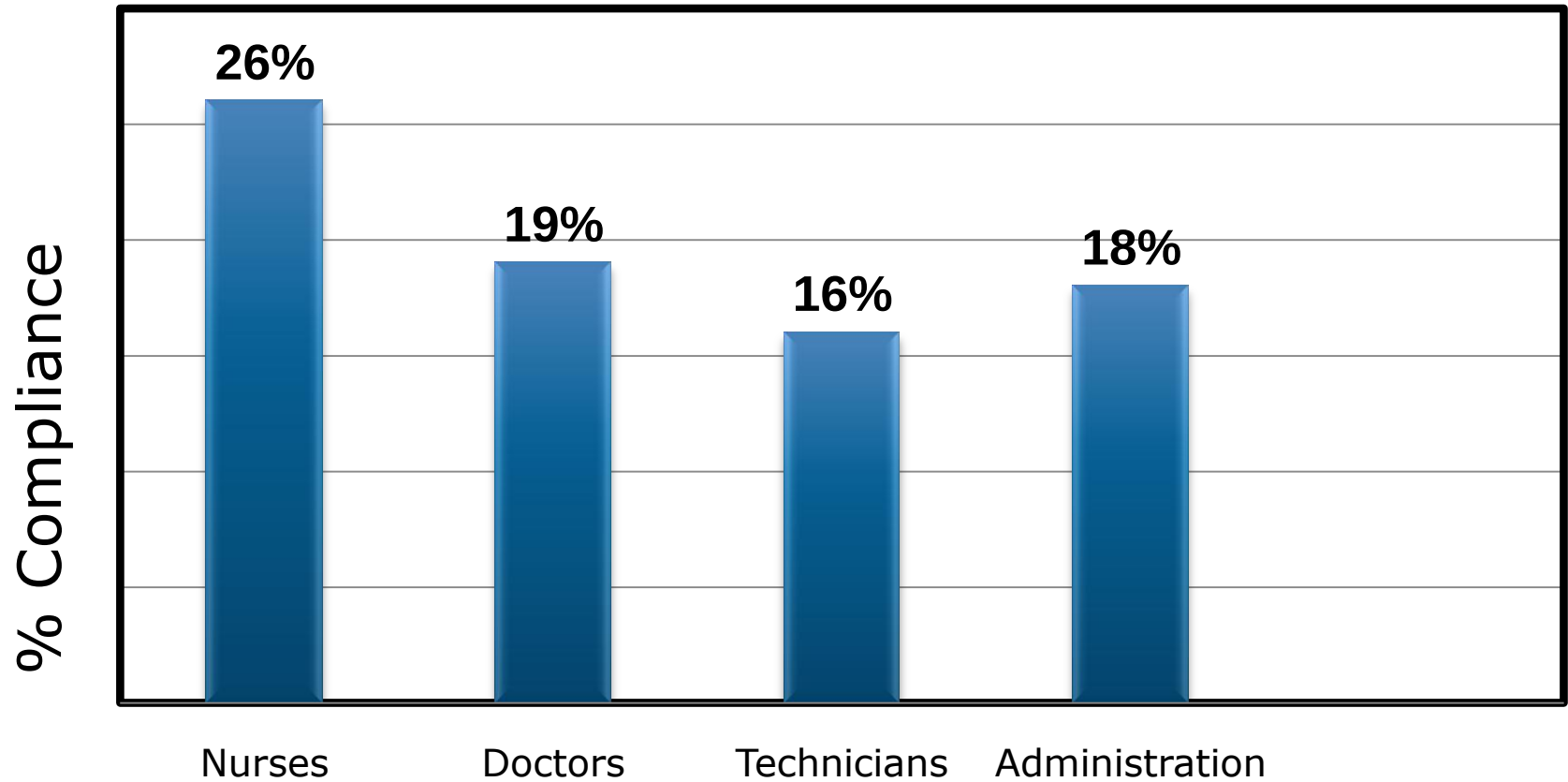
International Patient Safety Goals



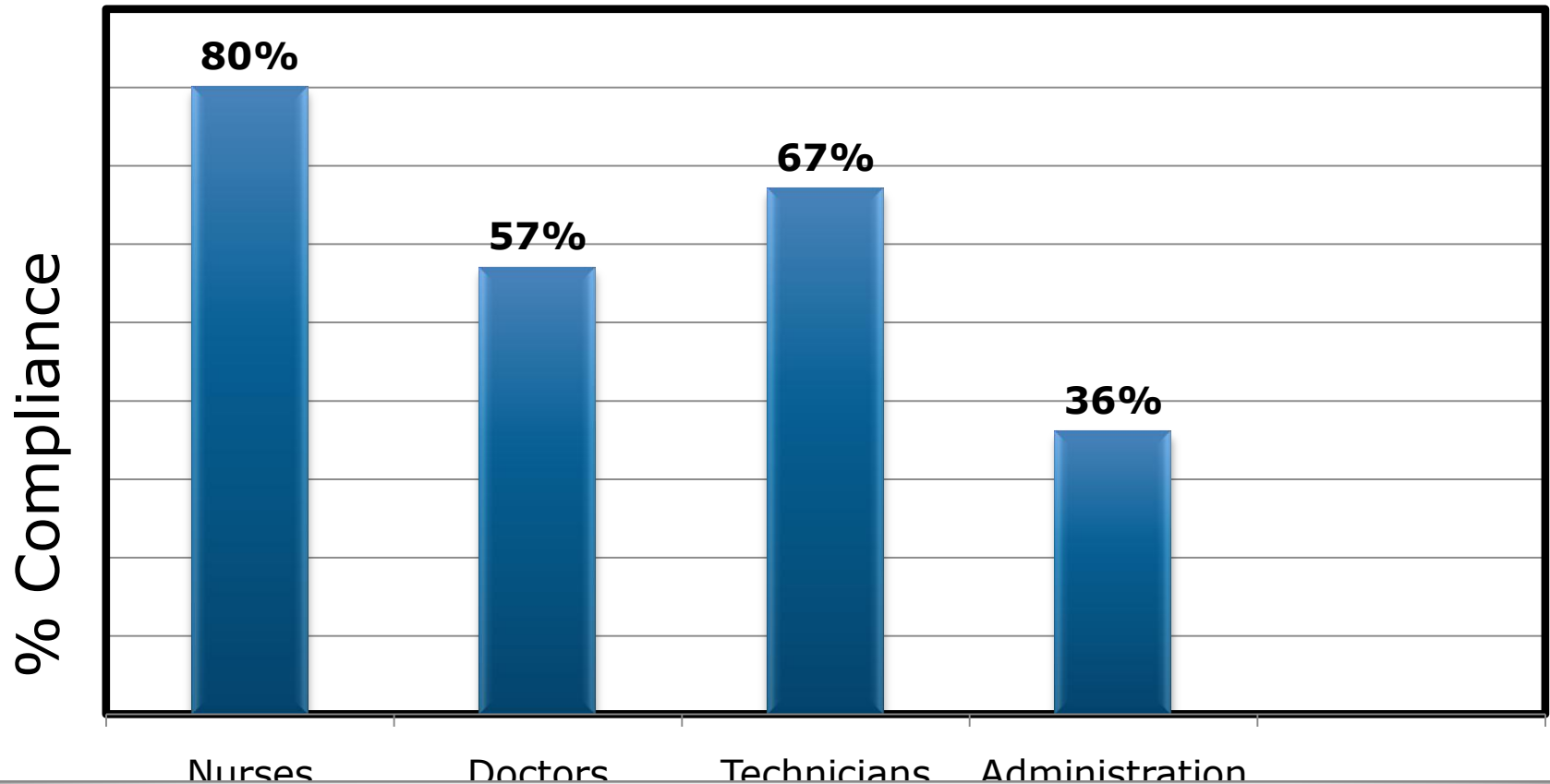
Patient Identifiers



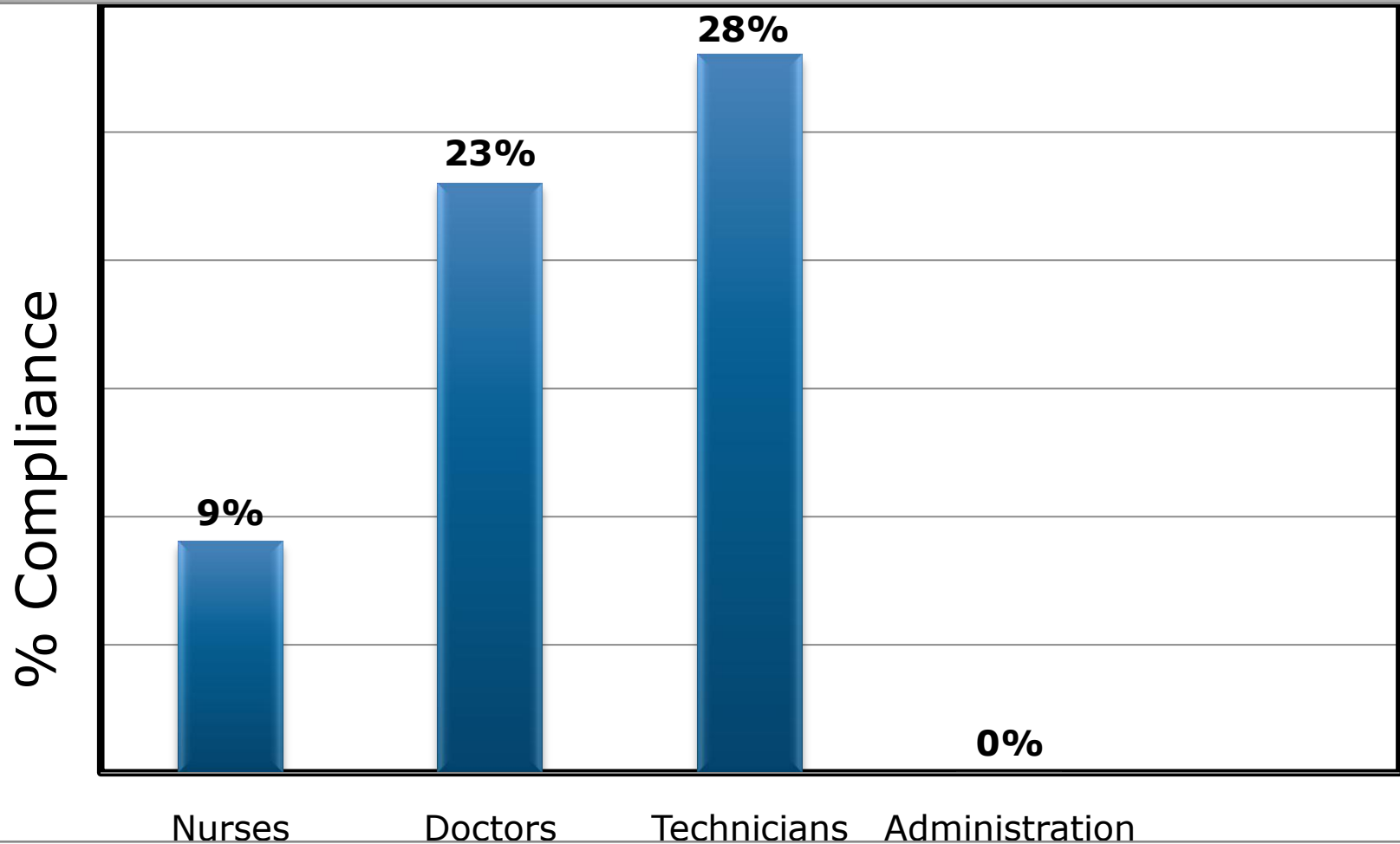
Early signs of pressure ulcers



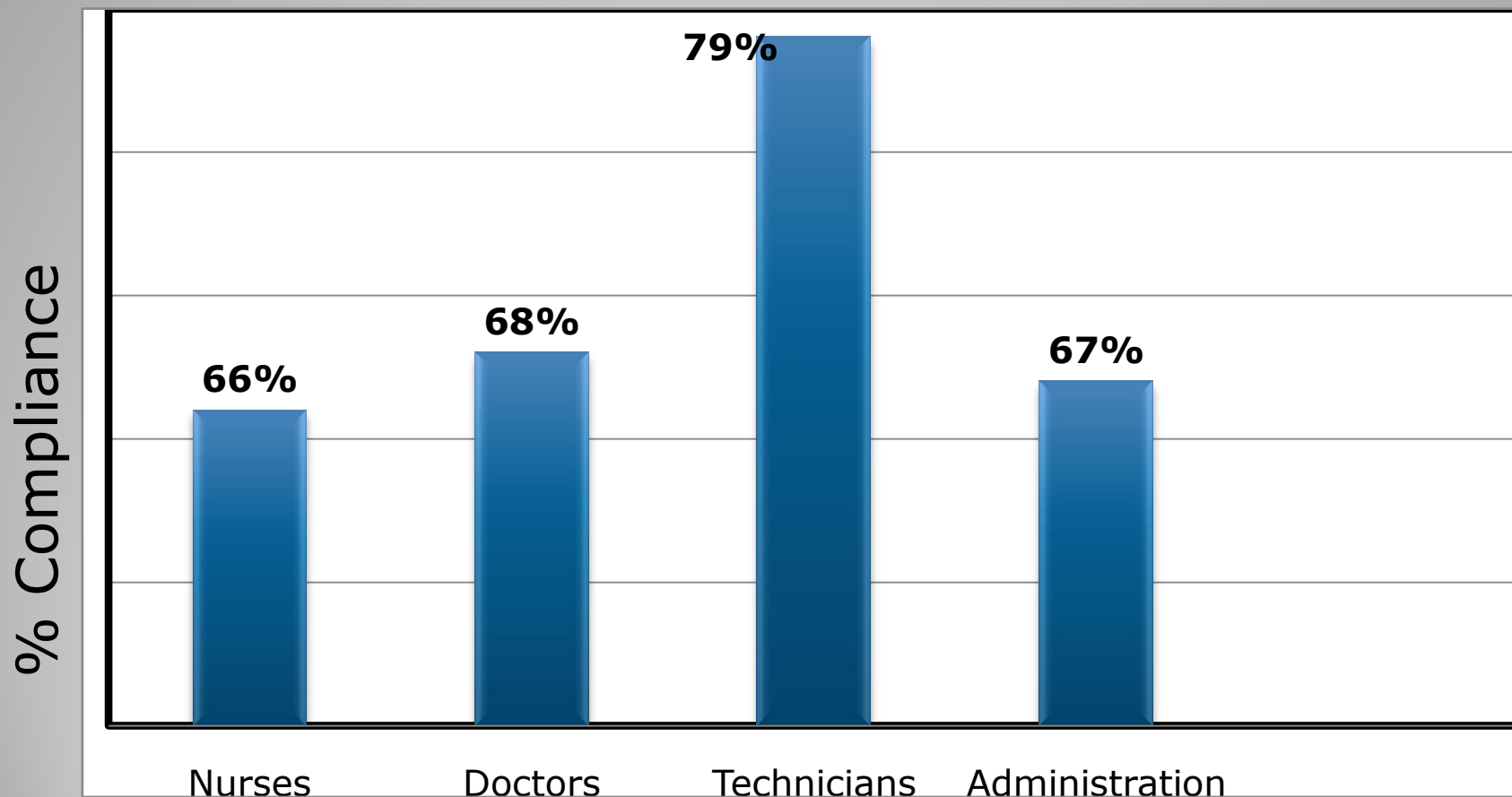
Chest compressions to ventilation ratio



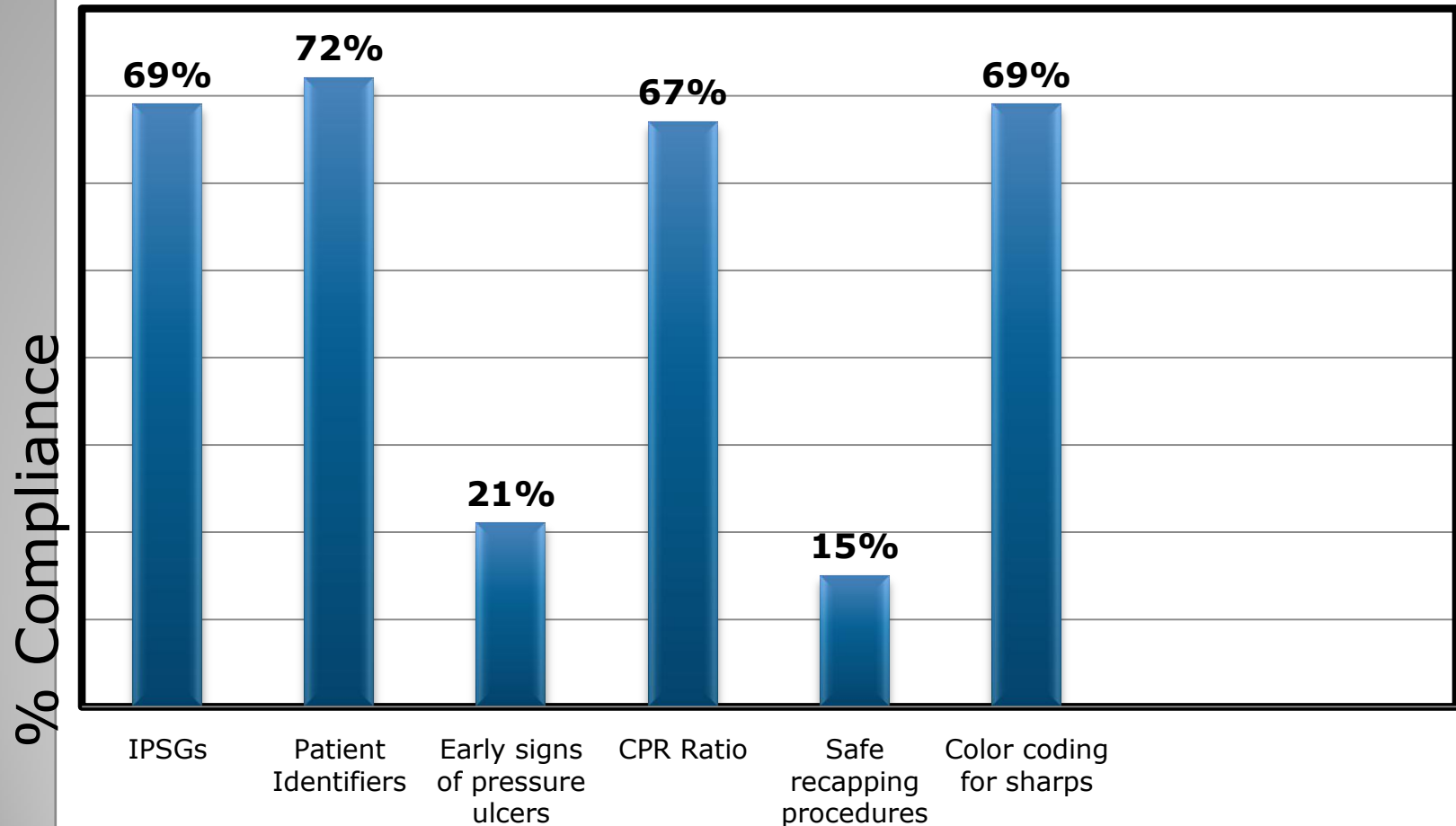
Safe recapping procedures of used needles



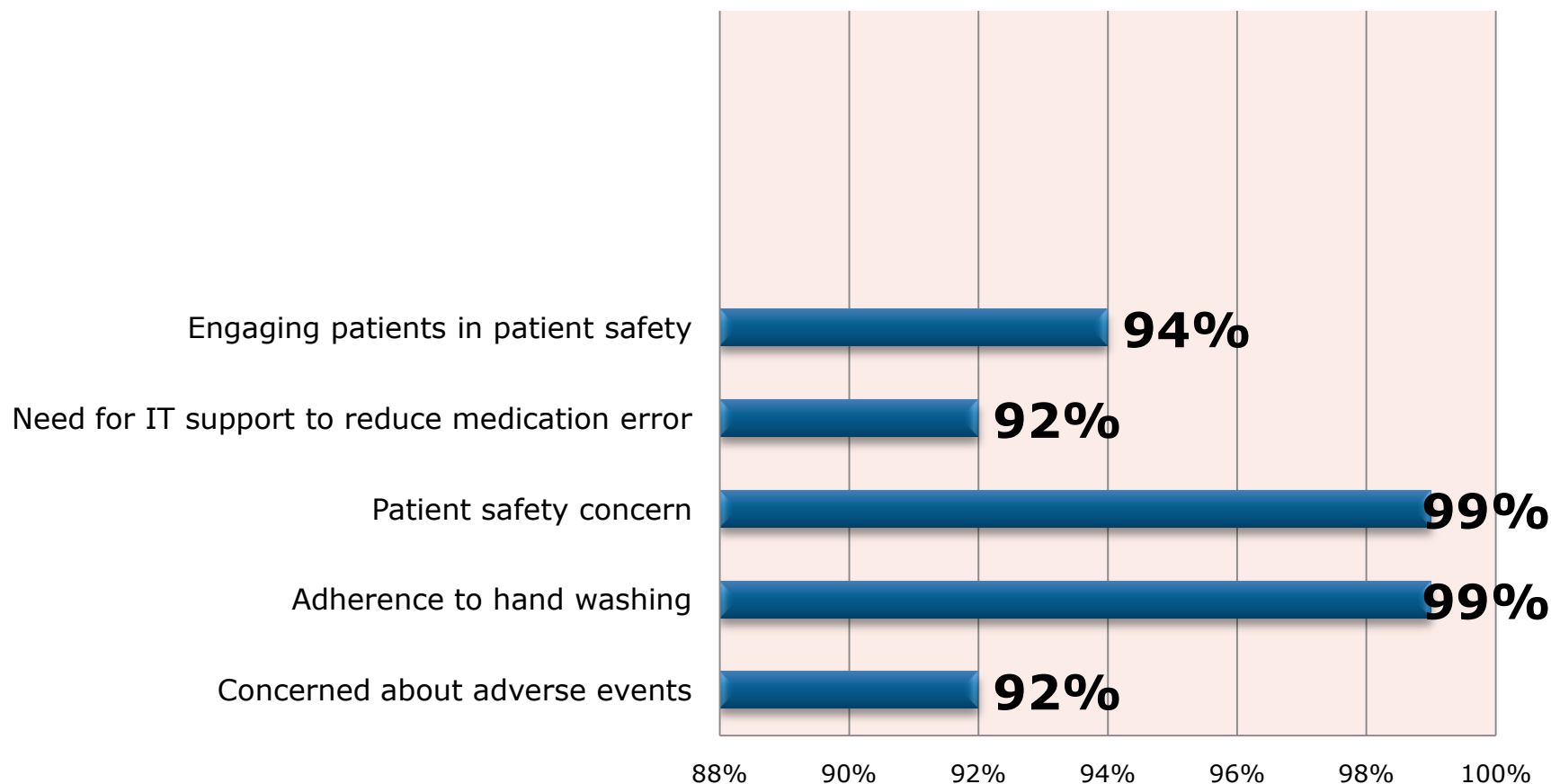
Color coding for sharps disposal



The Overall Summary of Results



Overall Compliance with the following ideas/concerns



Findings- Section A

- In general, on an average the nurses gave more correct responses.
- Interestingly, technicians scored the highest in safe recapping procedures of used needles and color coding for sharps disposal.
- Overall, early signs of pressure ulcer and safe recapping procedures got the lowest scores.

Continued...

A high degree of consensus regarding the key attributes of patient-centered care.

- Engaging patients in patient safety
- Need for IT support to reduce medication error
- Adherence to hand washing
- Concerned about adverse events

Patient safety culture

Definition- The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of an organization's health and safety management.

Organizations with a positive safety culture are characterized by communications founded on mutual trust by shared perceptions of the importance of safety and by confidence in the efficacy of preventative measures

Health and Safety Commission (of Great Britain). Sudbury, England

Patient Safety Culture Dimensions

Outcome measures

- Patient safety grade
- Overall perceptions of safety
- Frequency of event reporting

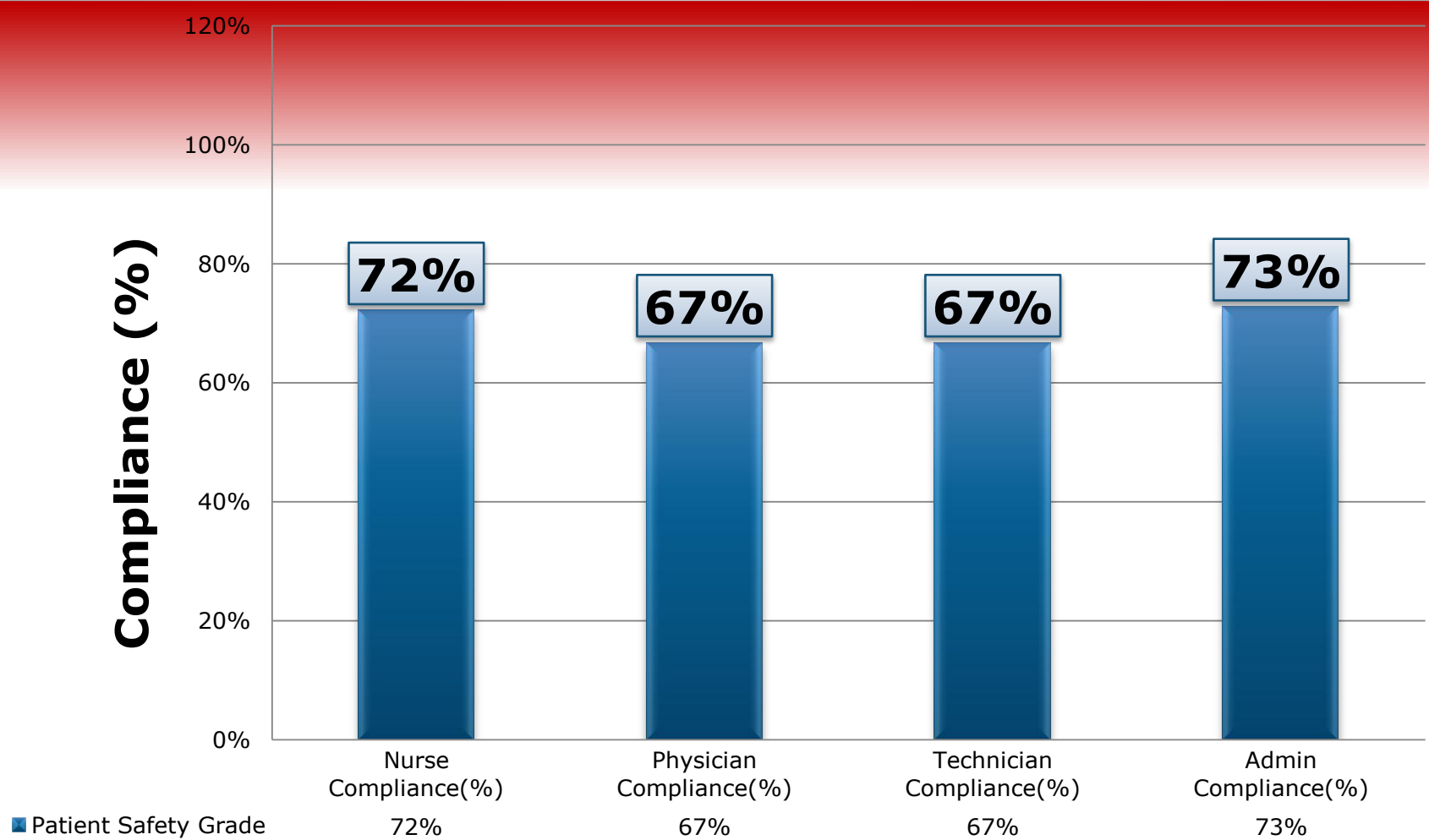
Unit level

- Manager/Supervisor promoting safety
- Organization learning
- Teamwork within units
- Communication openness
- Feedback and communication to error
- Non punitive response to error
- Staffing

Hospital level

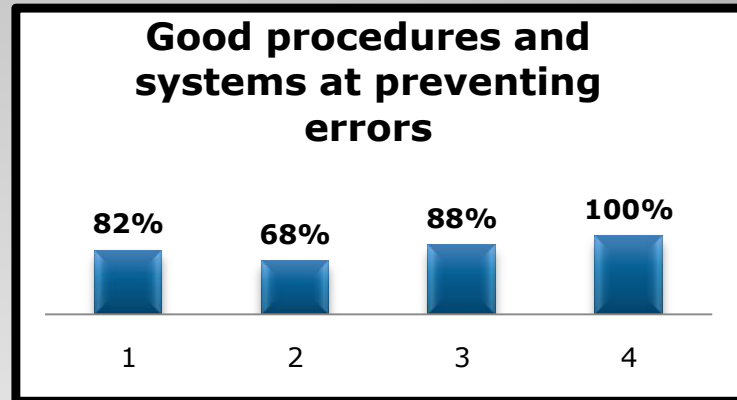
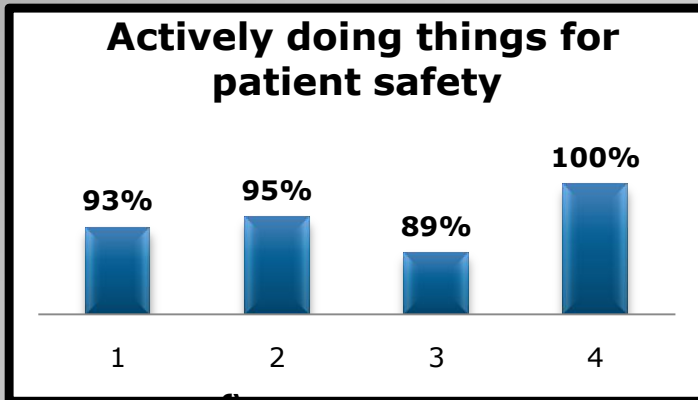
- Hospital management support
- Teamwork across hospital units
- Hospital handoffs and transitions

Patient Safety Grade

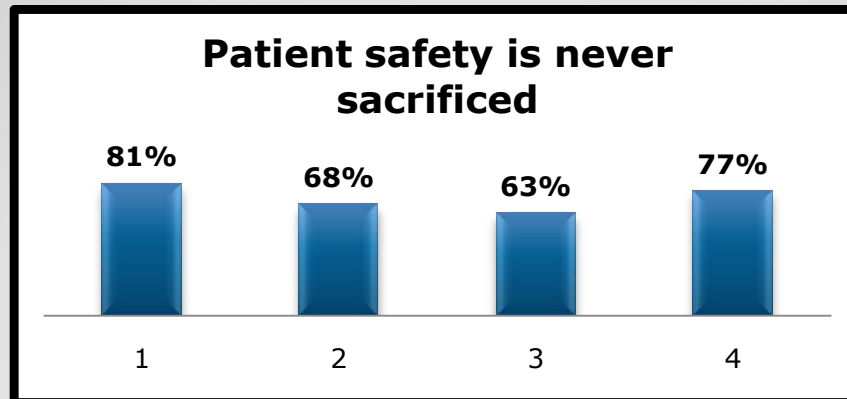


Overall perception of patient safety(5 items) 83 percent average positive for positively worded statements

% Average positive response



% Average positive response

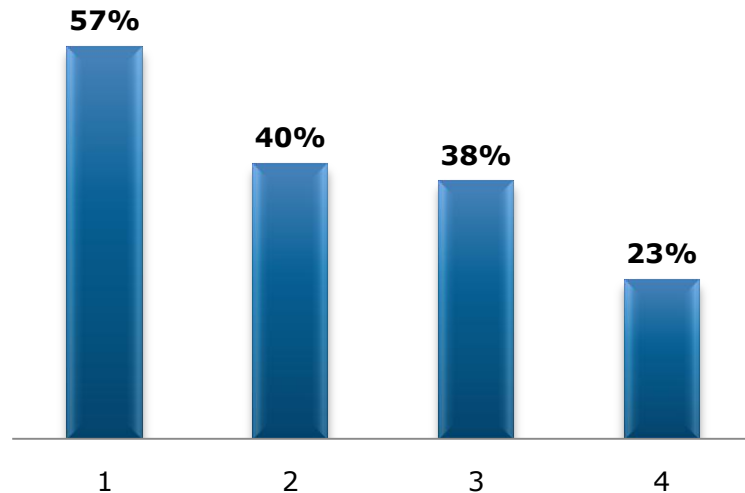


1.Nurses 2.Doctors 3.Technicians 4.Administration

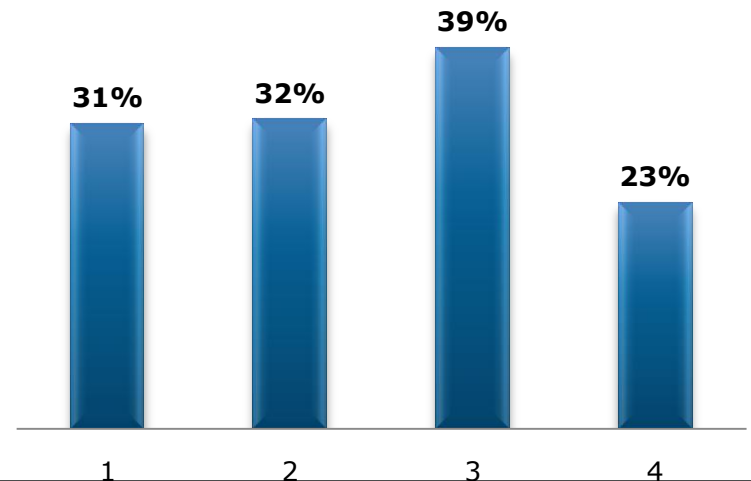
35 percent average positive response for negatively worded statements

% Average positive response

Just by chance that serious mistakes don't happen here



We have patient safety problems in the unit

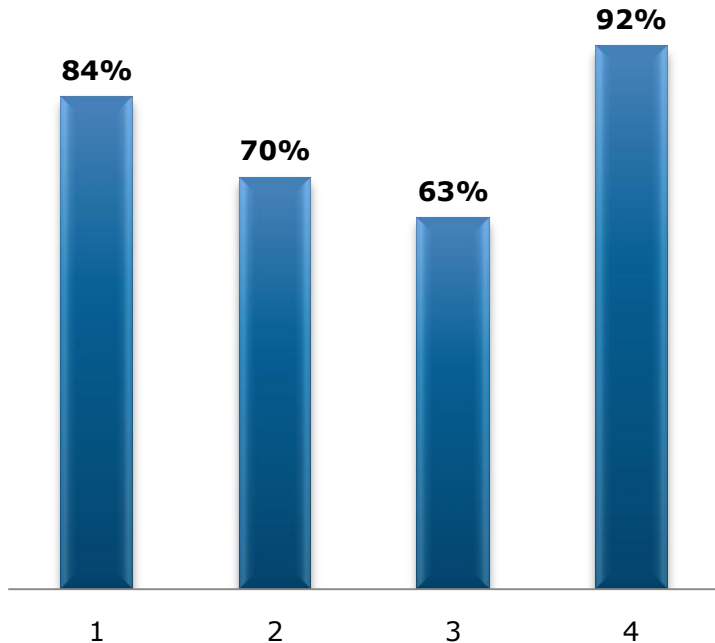


1.Nurses 2.Doctors 3.Technicians 4.Administration

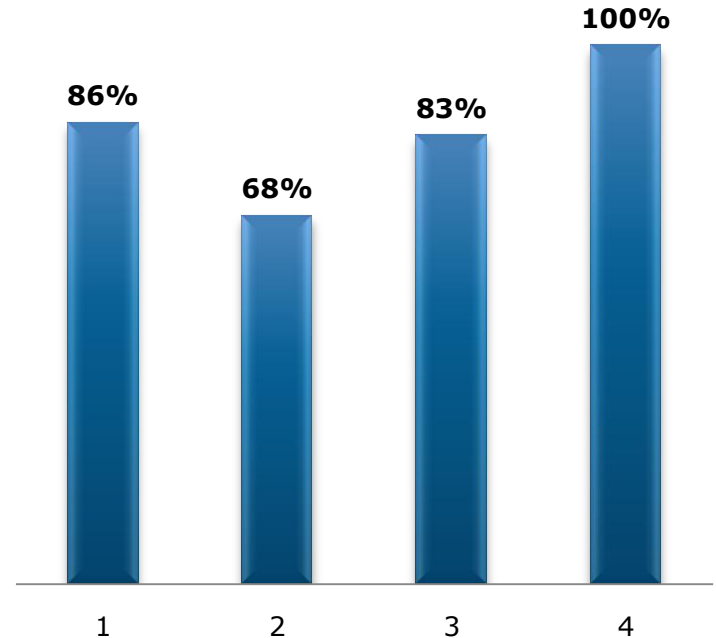
Organizational learning(2 items)

% Average positive response

Mistakes have led to positive changes



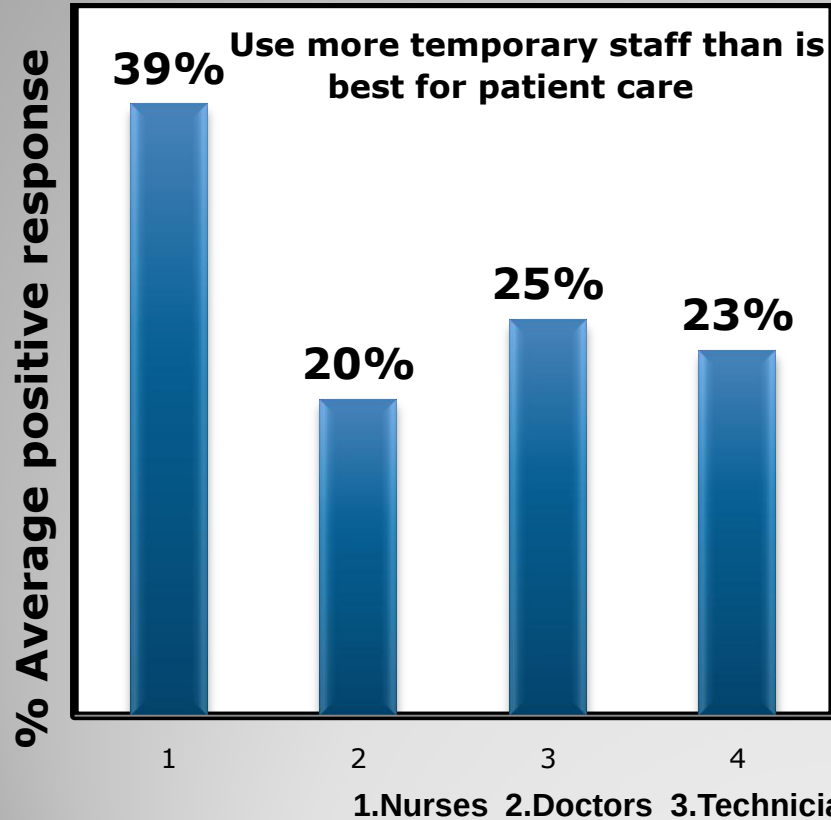
Evaluation of effectiveness



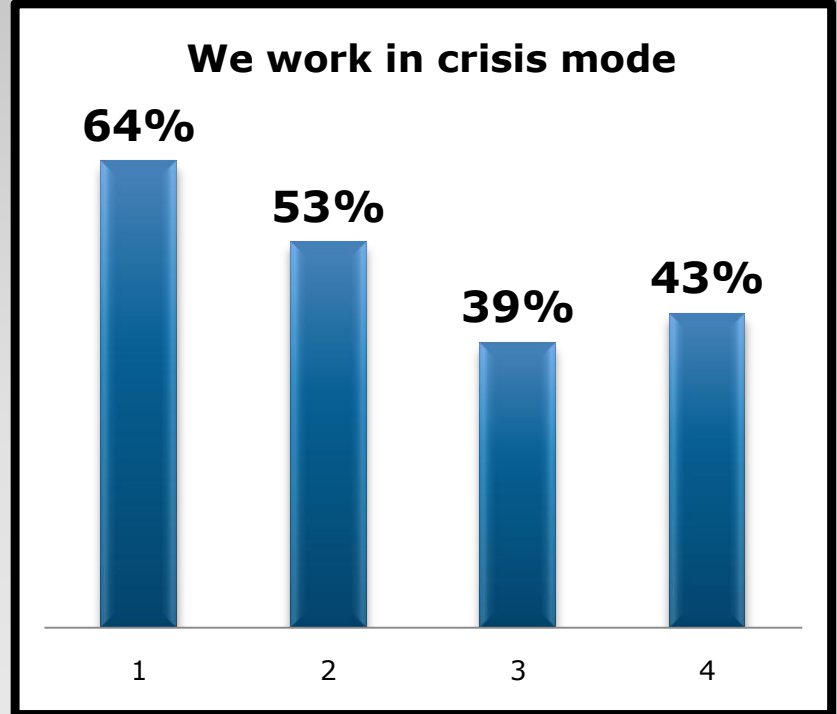
81 average percent positive response

1.Nurses 2.Doctors 3.Technicians 4.Administration

Staffing(2 items)

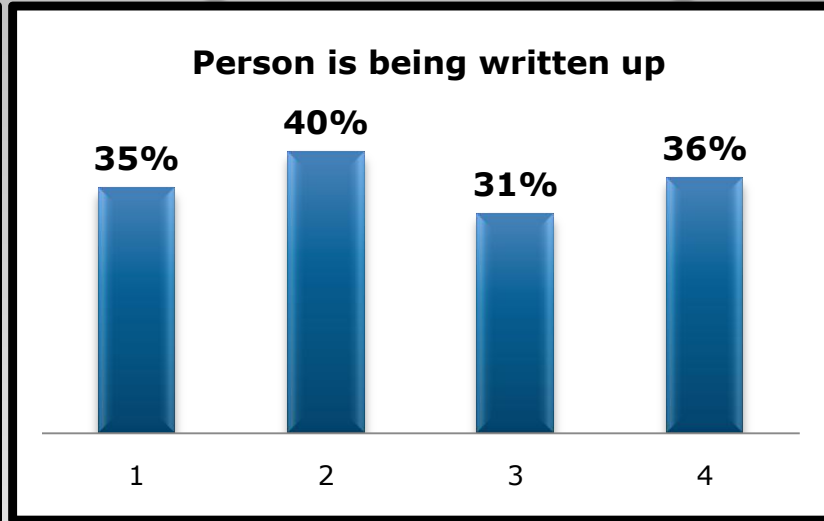


39 % average positive response

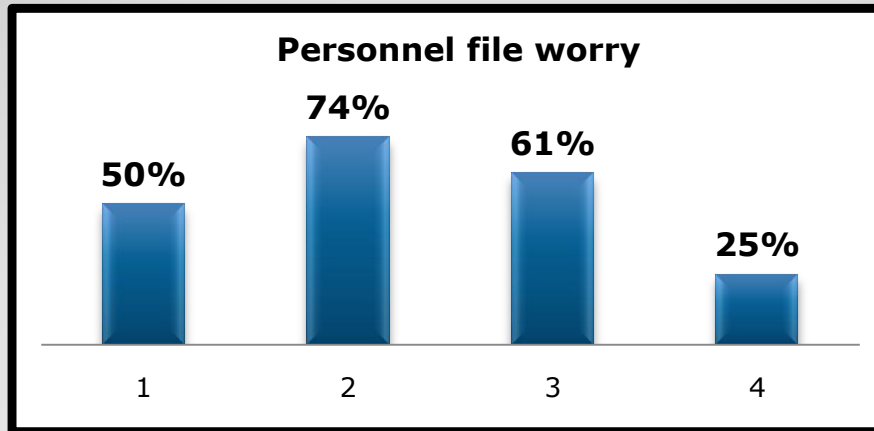


Punitive response(3 items)

% Average positive response



% Average positive response



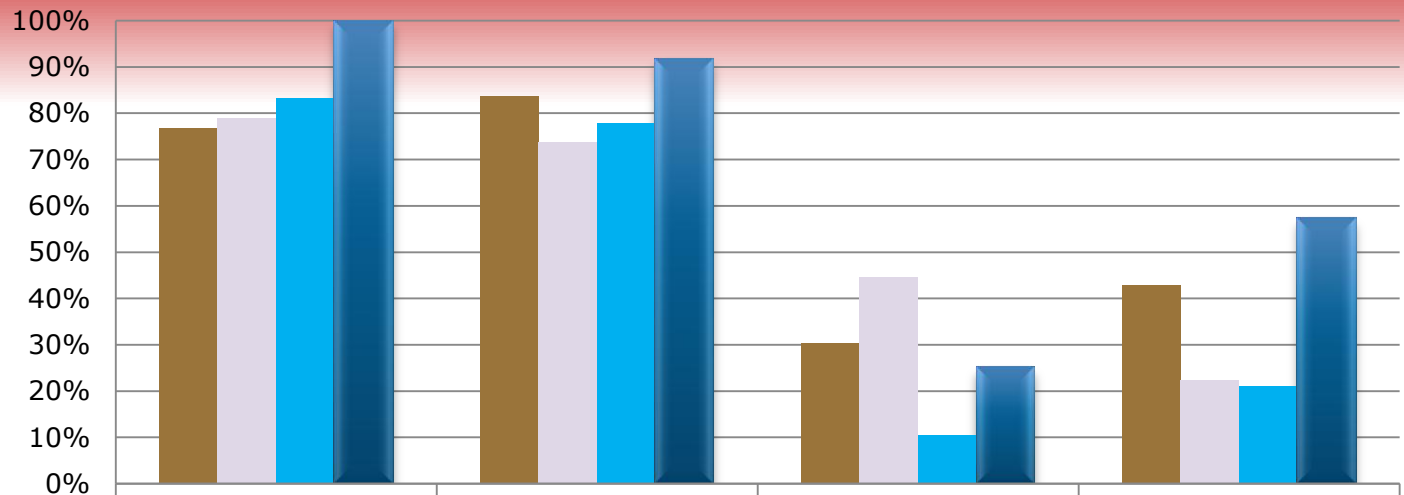
40 % average positive response

1.Nurses 2.Doctors 3.Technicians 4.Administration

Manager/Supervisor promoting safety (4 items)

Chart Title

% Average Positive Response



Manager concerned about patient

Manager takes staff suggestions

When pressure builds up

Manager overlooks patient safety problems

Nurse Compliance(%)

77%

84%

30%

43%

Physician Compliance(%)

79%

74%

44%

22%

Technician Compliance(%)

83%

78%

11%

21%

Admin Compliance(%)

100%

92%

25%

57%

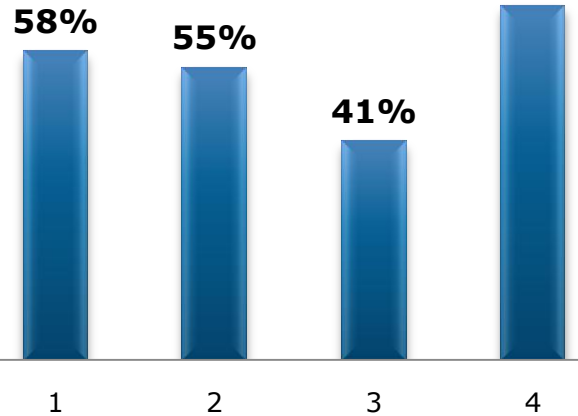
**84% average percent
positive-positively worded**

**32 % average positive
response-negatively worded**

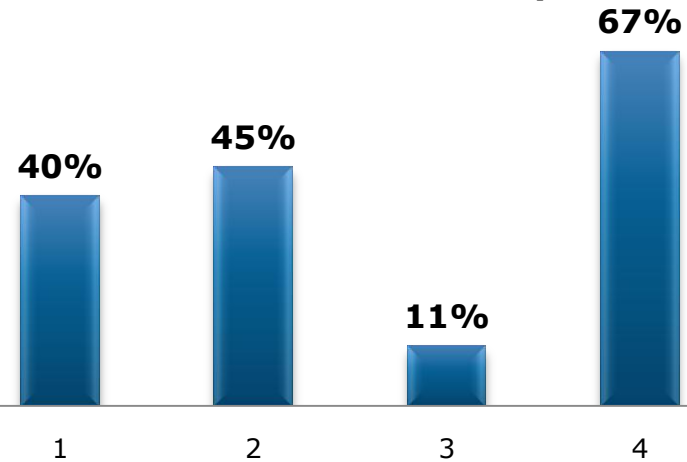
Communication to openness(3 items)

% Average positive response

Staff don't speak up for negative patient care

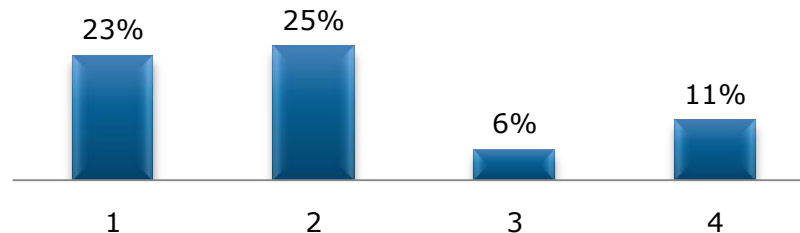


Staff do not feel free to questions the actions of authority



% Average positive response

Staff are afraid to ask questions when something does not seem right



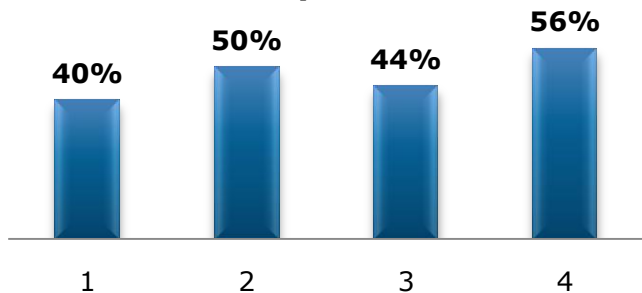
37 % average positive response

1.Nurses 2.Doctors 3.Technicians 4.Administration

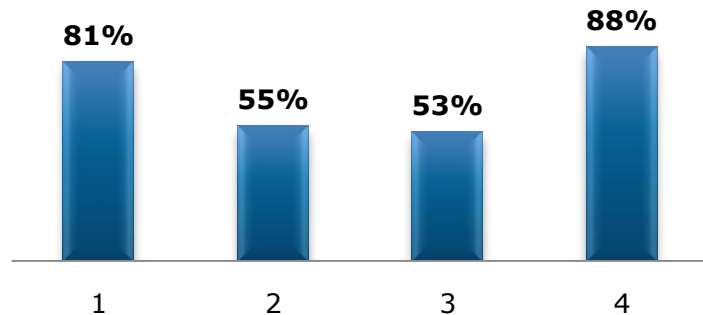
Feedback to error(3 items)

% Average positive response

Feedback based on event reports

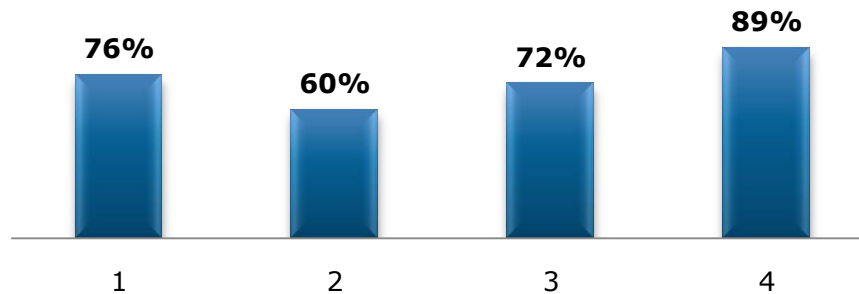


Informed about errors



% Average positive response

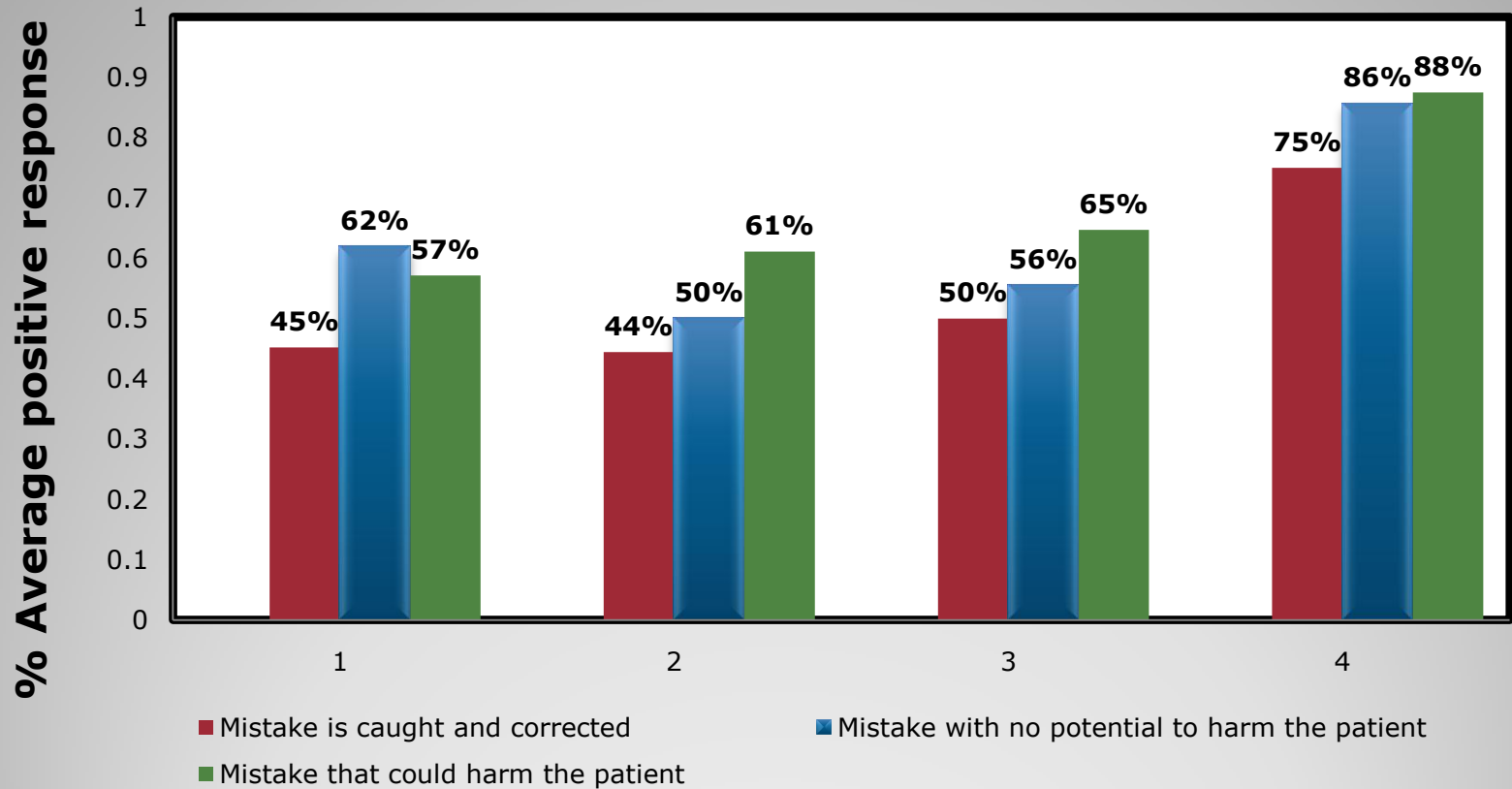
Discuss ways to prevent errors



63% average positive response

1.Nurses 2.Doctors 3.Technicians 4.Administration

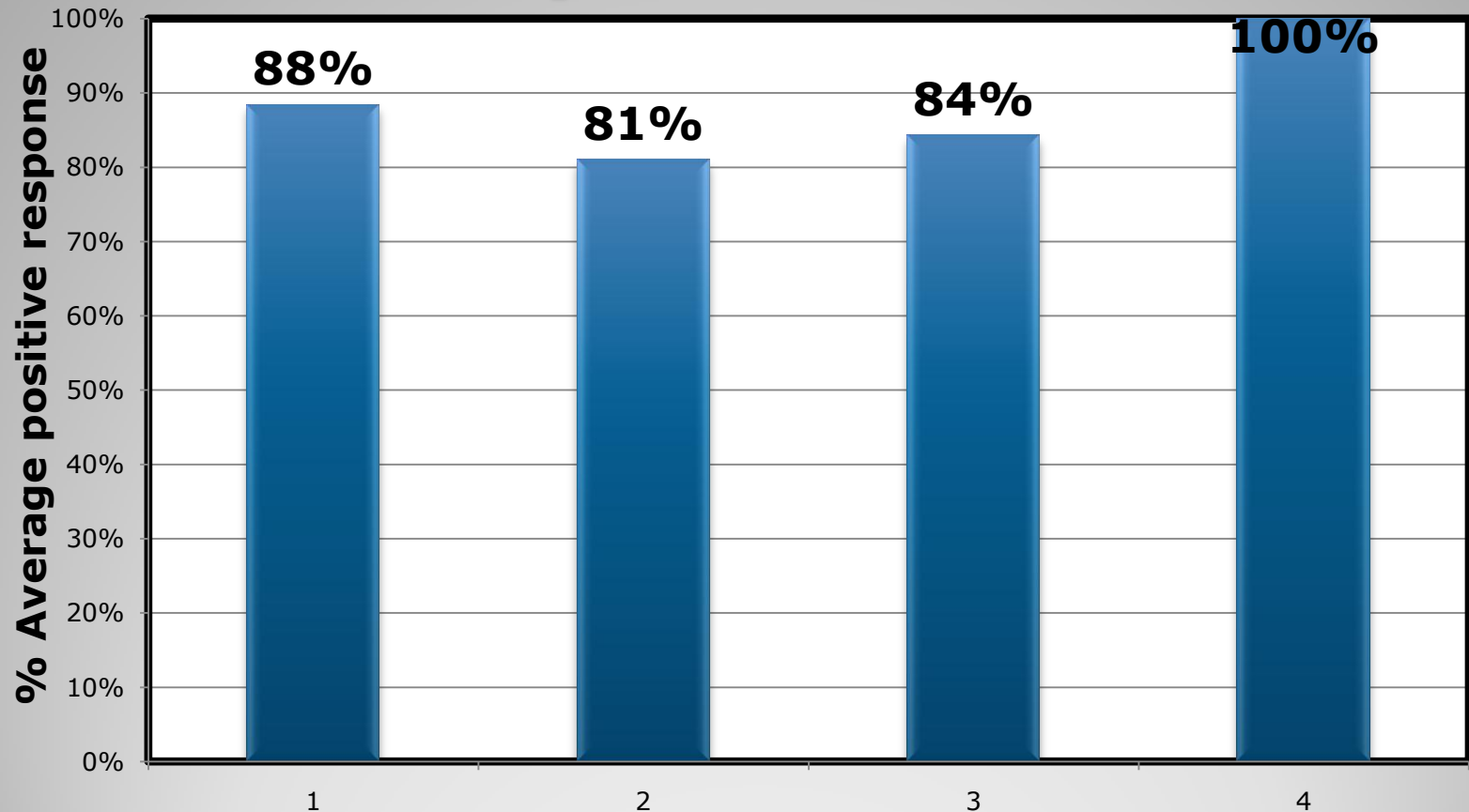
Frequency of events reported(3 potentials)



62% average positive response

1.Nurses 2.Doctors 3.Technicians 4.Administration

Hospital management promotes patient safety



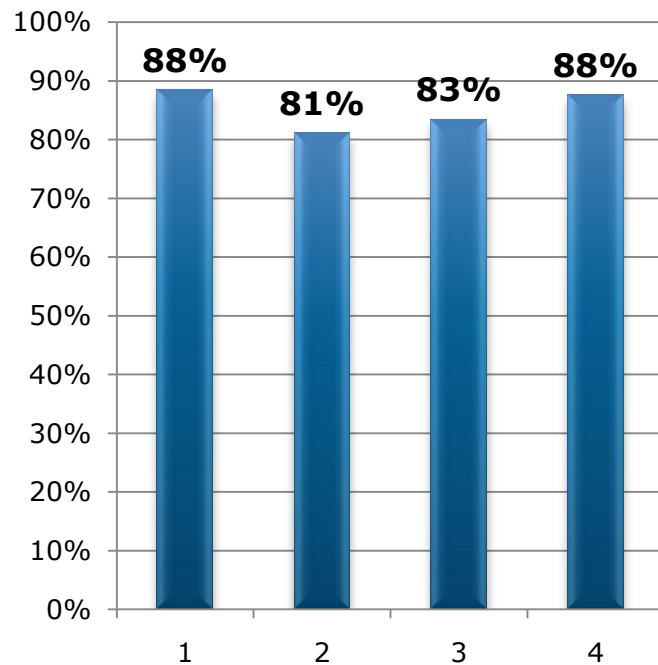
88% average positive response

1.Nurses 2.Doctors 3.Technicians 4.Administration

Team work(Two items)

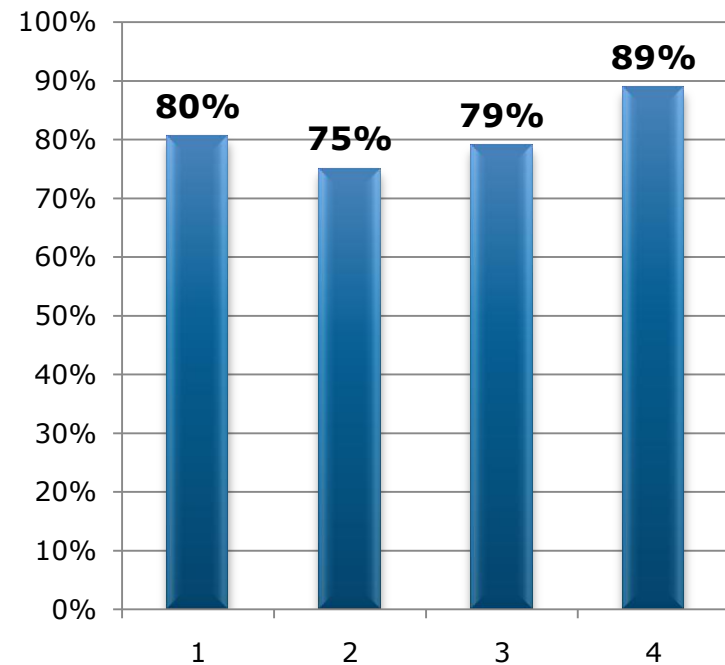
% Average positive response

Within units



85 % average positive response

Across units



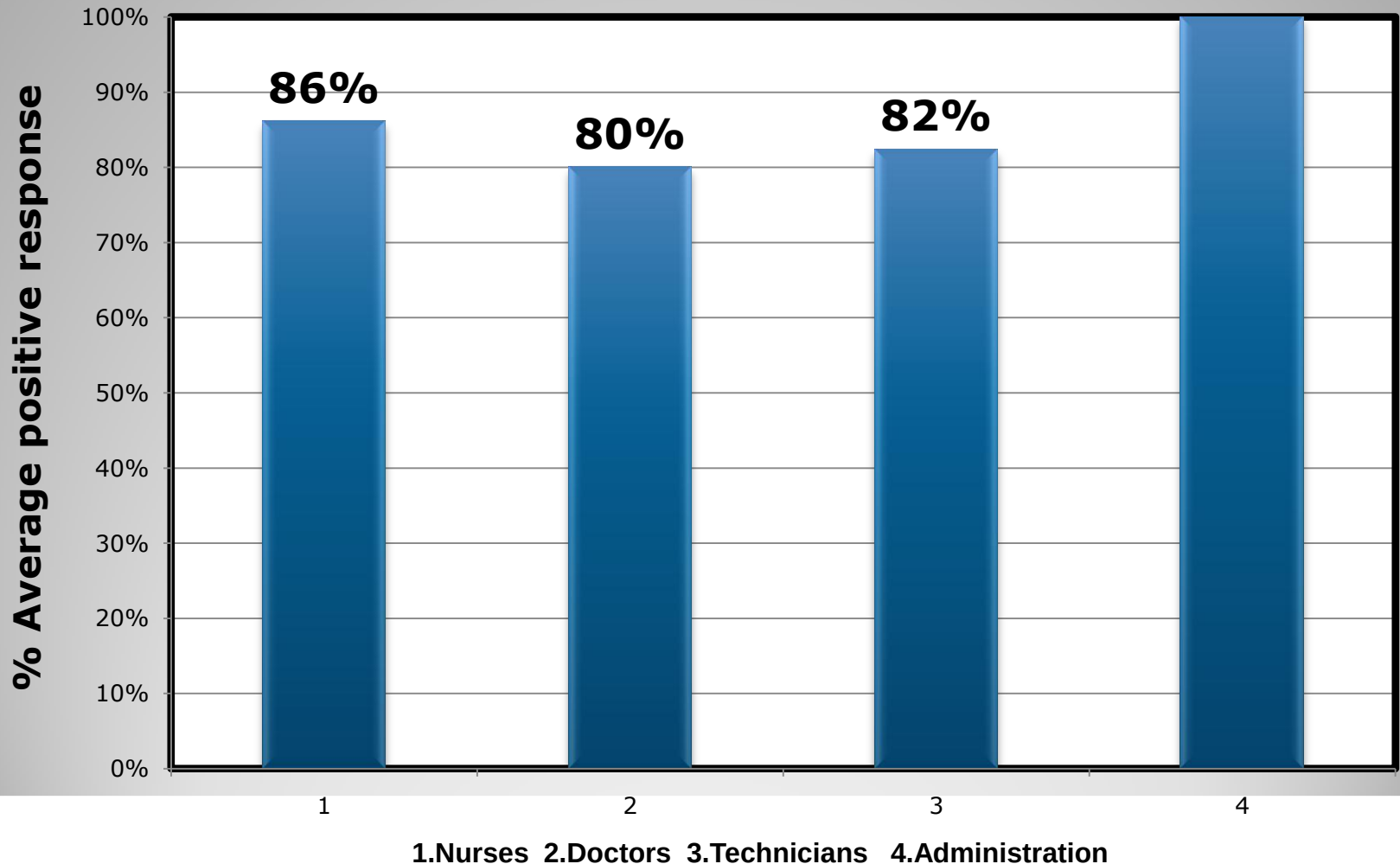
81 % average positive response

1.Nurses 2.Doctors 3.Technicians 4.Administration

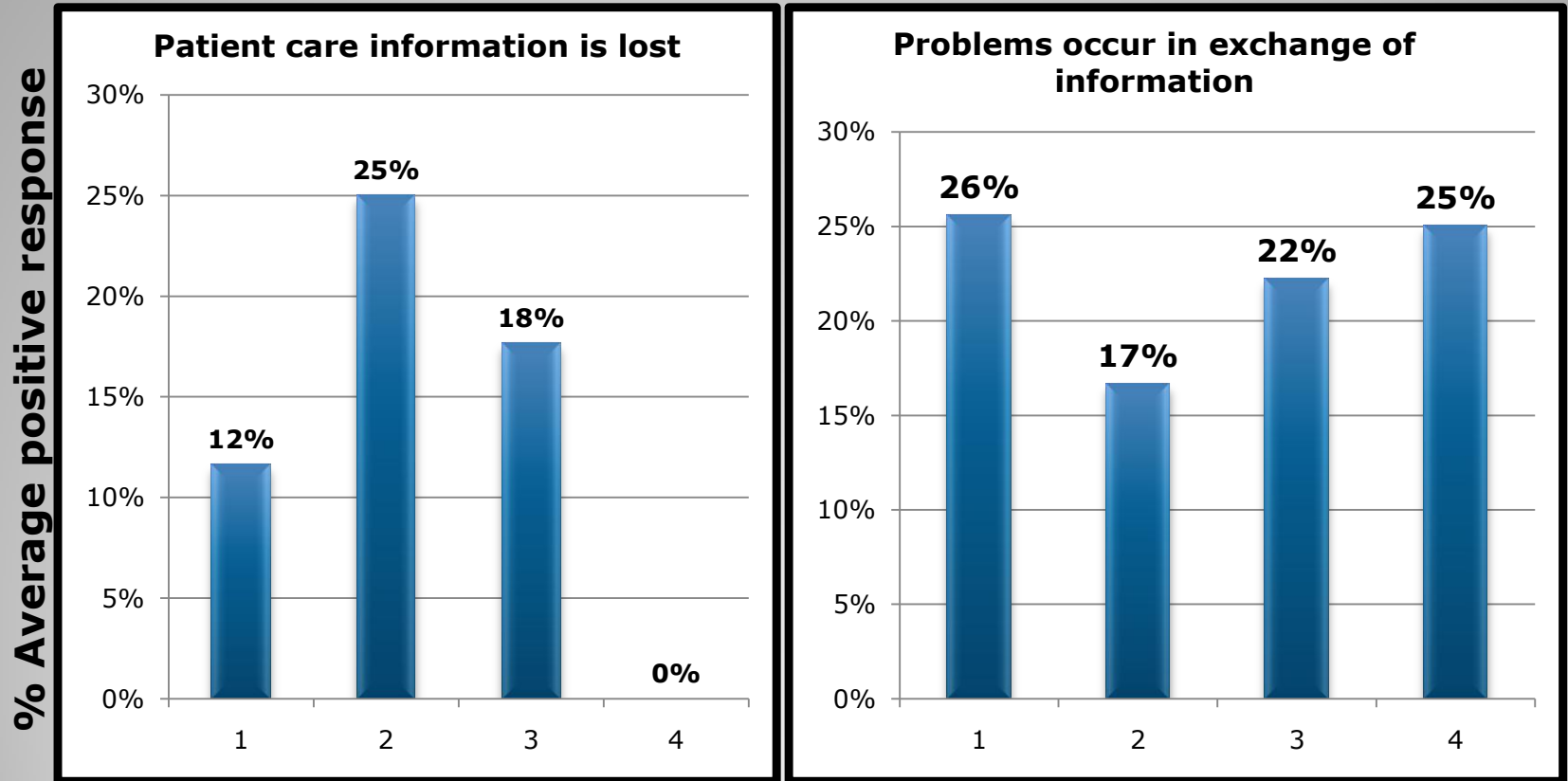
Hospital management supports patient safety

87 % average positive response

Hospital-patient safety top priority 100%



Handoffs(4 items)

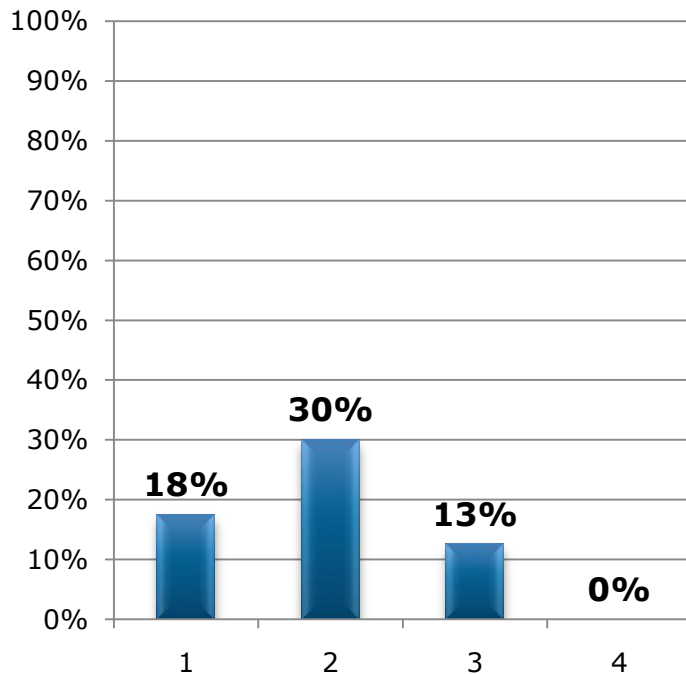


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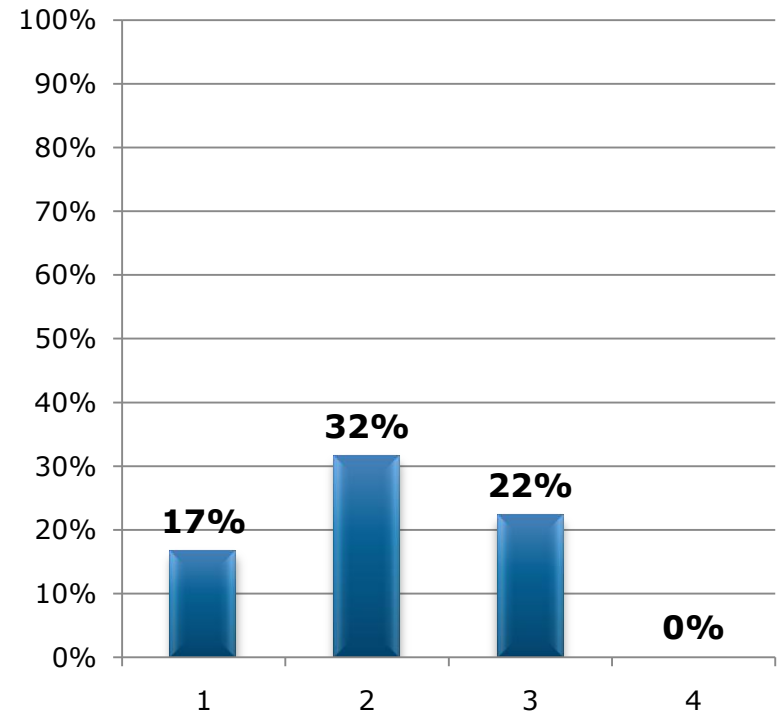
Handoffs and Transitions

% Average positive response

Things "fall between the cracks"



Problematic shift changes



17 % average positive response

1.Nurses 2.Doctors 3.Technicians 4.Administration

Areas of strength

The five areas of strength or composites with the highest average percent positive responses were:

1. **Teamwork Within Units (85 percent positive response)**—the extent to which staff support each other, treat each other with respect, and work together as a team.
2. **Teamwork across units (81 percent positive response).**
3. **Supervisor/Manager Expectations and Actions Promoting Patient Safety (84 percent positive response)**—the extent to which supervisors/managers consider staff suggestions for improving patient safety, praise staff for following patient safety procedures.
4. **Organizational Learning—Continuous Improvement (81 percent positive response)**—the extent to which mistakes have led to positive changes and changes are evaluated for effectiveness.

Areas of strength continued...

4. Hospital management promotes patient safety(88 % positive response).

5. The actions of hospital management show that patient safety is a top priority(87 % positive response).

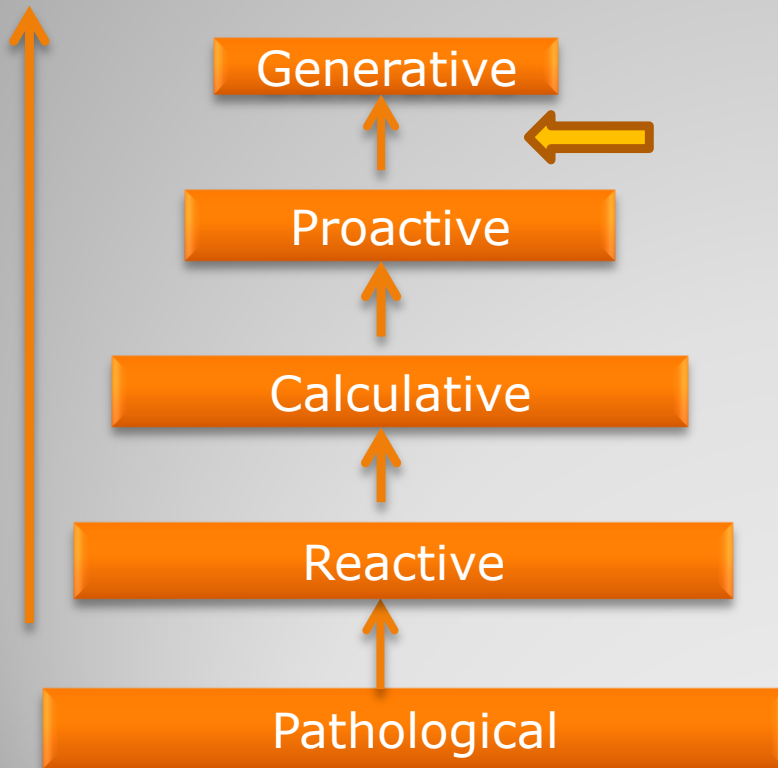
Areas with potential for improvement

The six areas that showed potential for improvement, or with the lowest average percent positive responses, were:

1. **Punitive Response to Error (40 percent positive response)**—the extent to which staff feel that their mistakes and event reports are held against them and that mistakes are kept in their personnel file.
2. **Handoffs and Transitions (17 percent positive response)**—the extent to which important patient care information is transferred across hospital units and during shift changes.
3. **Staffing (39 percent positive response)**—the extent to which there are not enough staff to handle the workload and work hours are appropriate to provide the best care for patients.
4. **Frequency of events reported (62 percent positive response).**
5. **Communication to openness (37 percent positive response).**
6. **Feedback to error (63 percent positive response).**

Patient safety Culture

Patient Safety Maturity Levels



The five levels describe five distinct safety cultures, from least (pathological) to most mature (generative) in terms of the perceived attitude to safety issues.

Safety is an integral part of everything that they do. In a generative organisation, safety is truly in the hearts and minds of everyone, from senior managers to frontline staff.

Actively invest in continuous safety improvements and reward staff who raise safety related issues.

System/paper-based and safety involves ticking boxes to prove to auditors and assessors that they are focused on safety.

Organisations that only think about safety after an incident has occurred

Lack of patient safety culture

Risk management

**Manchester patient safety culture
assessment tool, 2010**

Thank you