

Hospital Survey on Patient Safety Culture in 5 SPDC-Supported Health Facilities in the Niger Delta Region of Nigeria.

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Definitions

- Safety culture :
- The beliefs, values and attitudes shared by all members of the organisation, and this is reflected in the day to day operations of the organization”¹³.

Definitions 2

- Patient Safety:
- Patient safety is defined as ‘the prevention of harm caused by errors of commission and omission’ ¹.

Definitions 3

- **Patient Safety Culture:**
- ‘This is an integrated pattern of individual and organisational behaviour, based on a system of shared beliefs and values, that continuously seeks to minimise patient harm that may result from the process of care delivery.’¹³

Introduction cont'd

- Safety culture key component in improving patient safety.
- Patient safety in absence of safety culture not possible.
- Only when leaders understand importance of patient safety.

Introduction cont'd

- Health care often attended by preventable harm.
- In the US 247 die daily from healthcare-associated infections ³
- In the UK, about 25,000 die annually from preventable patient safety incidents ⁸.
- No research evidence in Africa, but millions may be suffering from patient safety incidents ¹⁰

Introduction cont'd

- Avoiding errors part of health care.
- Medical and nursing students are taught “First, do no harm” ¹⁴ , and to
- Take personal responsibility for patient safety.
- Error a failure of individual health care provider ¹⁵.
- Who is assumed to be incompetent, careless, and deserve punishment ¹⁶.

Introduction cont'd

- Blame culture discourages error-reporting ¹⁹
- Does little to reduce the chance of future errors ¹⁵.
- Paradigm shift views error as a system problem ¹⁵.
- Recognizes that people make mistakes,
- Personal vigilance cannot prevent errors in poorly-designed systems.

Introduction cont'd

- Systems to be resistant to human error.
- Prevent and manage busy periods and fatigue
- Errors and near-errors welcomed as learning opportunities ¹⁶
- Victims of error treated with respect sympathy, and told the truth ²⁴.
- Culture of medicine must change to increase reporting of errors

Uses of Patient Safety Culture study

- Raises staff awareness about patient safety.
- Assesses current status of patient safety culture.
- Identifies strengths & areas for improvement.
- Examines trends in patient safety culture over time.
- Evaluates impact of patient safety initiatives & interventions.
- Allows hospitals to compare their result

General Objective

- To conduct a baseline assessment of the culture of safety in SPDC supported facilities using the AHRQ Hospital Survey on Patient Safety Culture (HSPSC) questionnaire.

Specific Objectives

- To determine the patient safety culture mean positive response scores in the 5 SPDC-supported health facilities
- To compare the patient safety culture positive response mean scores with the benchmark score of US hospitals with 6-24 beds.
- To establish a baseline for assessing future improvement efforts.

Methodology

- **Survey instrument**
- The Hospital Survey of Patient Safety Culture questionnaire
- Measures safety culture on 12 dimensions and 42 Items
- 12 dimensions or composites include 10 safety and 2 outcome dimensions

Methodology Cont'd

- 7 hospitals randomly selected, 5 reported on.
- Heads of facilities oriented on purpose of study, content of questionnaire
- 225 health workers interviewed
- Questionnaire self administered
- Data collection lasted 3 weeks
- Data analysed using SPSS version 17

Result: characteristics of respondents

- **Age and Sex Distribution**
- The age range of respondents was 36 (21 to 57 years).
- Mean age was 37.5 ± 8.6 years.
- 66 (54.5%) respondents were females
- 42 (34.7%) were males;
- 13 (10.8%) respondents did not disclose their sex.

A 2: Respondents' Work area/unit

Work area/unit	Number	Percentage
Many different hospital units/no specific unit	31	25.5
Pharmacy	14	11.6
Laboratory	10	8.3
Immunisation	5	4.1
Labour Ward/Delivery services	5	4.1
Adult outpatient / Family Planning clinic	4	3.3
Theatre/Surgery	4	3.3
Post Natal Ward	4	3.3
Other	4	3.3
Under 5 Out-Patient Clinic	3	2.5
Ante Natal Clinic	3	2.5
Intensive Care Unit	2	1.7
No response	32	26.4

A 3: Professional group of respondents

Staff Position	Frequency	Percentage
Registered Nurse/Midwife	58	47.9
Medical Doctor	13	10.7
Pharmacist	6	5.0
Laboratory Scientist	6	5.0
Pharmacy technician	6	5.0
Comm. Health Extension Worker	6	5.0
Community Health Officer	5	4.1
Laboratory technician	4	3.3
No Response	17	14.0
TOTAL	121	100

A 4: Respondents' Hours of work per week

Number of Hours of work/ week	Frequency	Percentage
<20 hours	9	7.4
20 -39 hours	21	17.4
40 -59 hours	45	37.2
60 - 79 hours	10	8.3
80 – 99Hours	9	7.4
100 hours or more	18	14.9
No Response	9	7.4
Total	121	100

A 5. Respondents' work experience 1 (How long have you worked in your current specialty?):

Name of Facility	Lsss than 1 year	1 to 5 years	6 to 10 years	11 to 15 years	16 to 20 years	> 20 years	No Respon se	Total
Otuase ga	4	19	5	4	4	3	7	46
Obio	3	11	5	0	3	3	1	26
Owaza	5	10	2	2	2	3	1	25
Umueb ulu	2	1	2	2	0	3	1	11
Nembe	2	4	2	2	1	2	0	13
Total	16	45	16	10	10	14	10	121

A 6. Respondents' Work Experience 2 (How long have you worked in this hospital?):

Name of Hospital	< 1 yr	1-5 yrs	6-10 yrs	11-15 yrs	16-20 yrs	>21 yrs	No Response	Total
Otuasega	6	31	1	4	0	1	3	46
Obio	9	17	0	0	0	0	0	26
Owaza	5	15	2	3	0	0	0	25
Umuebulu	3	5	2	0	0	0	1	11
Nembe	1	11	1	0	0	0	0	13
Total	24 (19.8)	79 (65.3)	6 (4.9)	7 (5.8)	0 (0)	1 (0.8)	4 (3.3)	121

A 7. Respondents' Work Experience 3 (How long have you worked in your work area/unit?):

Name of Hosp	< 1 yr	1-5 yrs	6-10 yrs	11-15 yrs	16-20 yrs	>21 yrs	No Response	Total
Otuasega	9	29	2	2	0	1	3	46
Obio	12	14	0	0	0	0	0	26
Owaza	7	13	3	1	0	1	0	25
Umuebulu	3	5	2	0	0	0	1	11
Nembe	1	8	2	0	0	1	1	13
Total	32 (26.5)	69 (57.0)	9 (7.4)	3 (2.5)	0 (0)	3 (2.5)	5 (4.1)	121

A 8. Distribution of respondents who make direct contact with patients

Do you typically make contact with patients in your current work situation?	Freq	%
Yes, typically make direct contact with patients	109	90.1
No, typically do not make contact with patients	2	1.7
No Response	10	8.2

B. Characteristics of participating hospitals

B 1. Location, Ownership/Control and number of beds in participating hospitals

B 2. Distribution of respondents in the hospitals

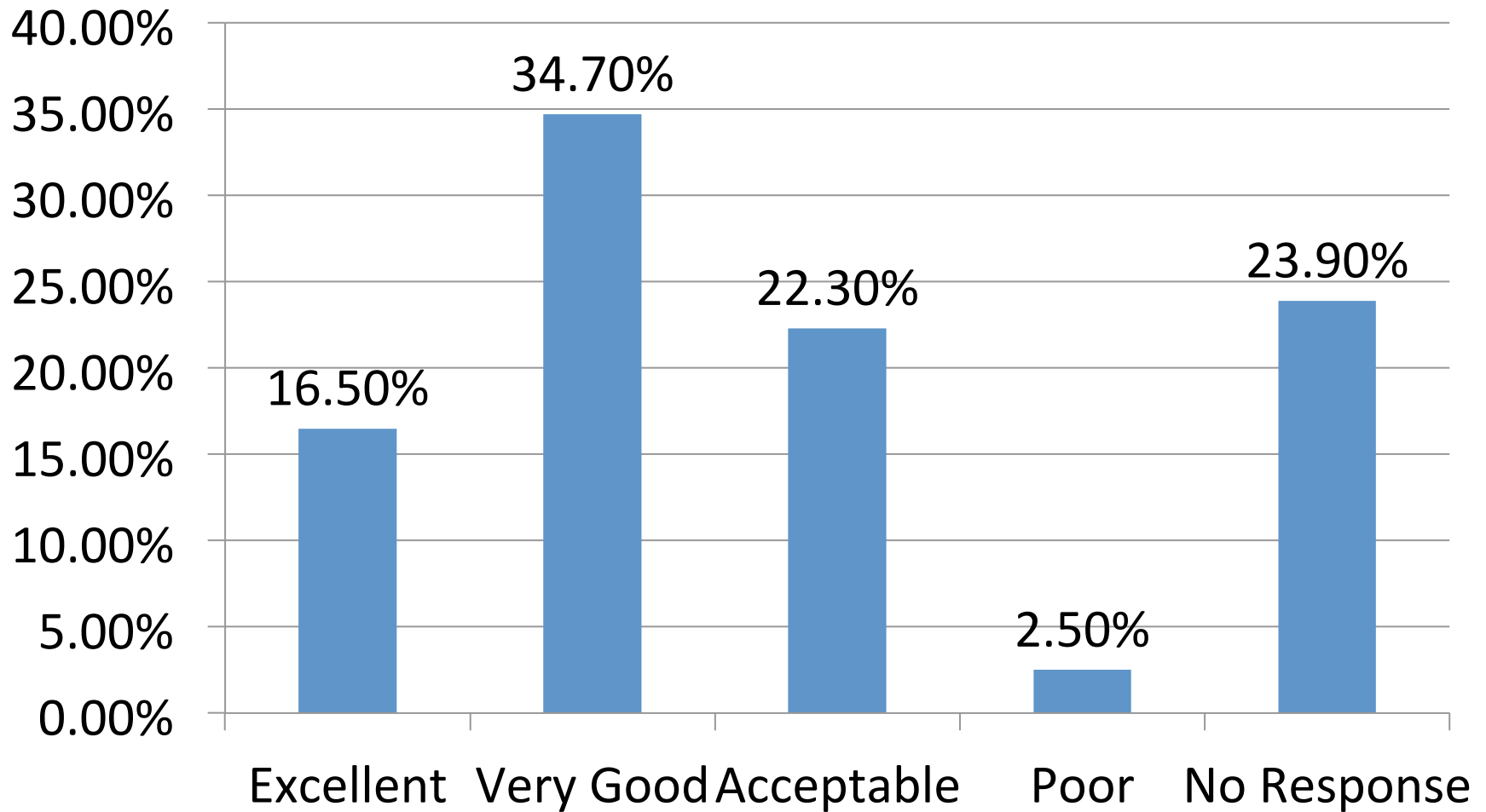
B 1: Location, ownership/Control and Number of beds in participating hospitals

Name of Hospital	Zone of location	State Location	Ownership/Control	Number of Beds
Otuasega Cott Hosp	South-south	Bayelsa	State PHCDB	25
Obio Cott Hosp	South-south	Rivers	State PHCDB	40
Owaza Cott Hosp	South-east	Abia	State PHCDB	26
Umuebulu Cott Hosp	South-south	Rivers	State PHCDB	8
Nembe Gen. Hosp	South-south	Bayelsa	State HM Board	30

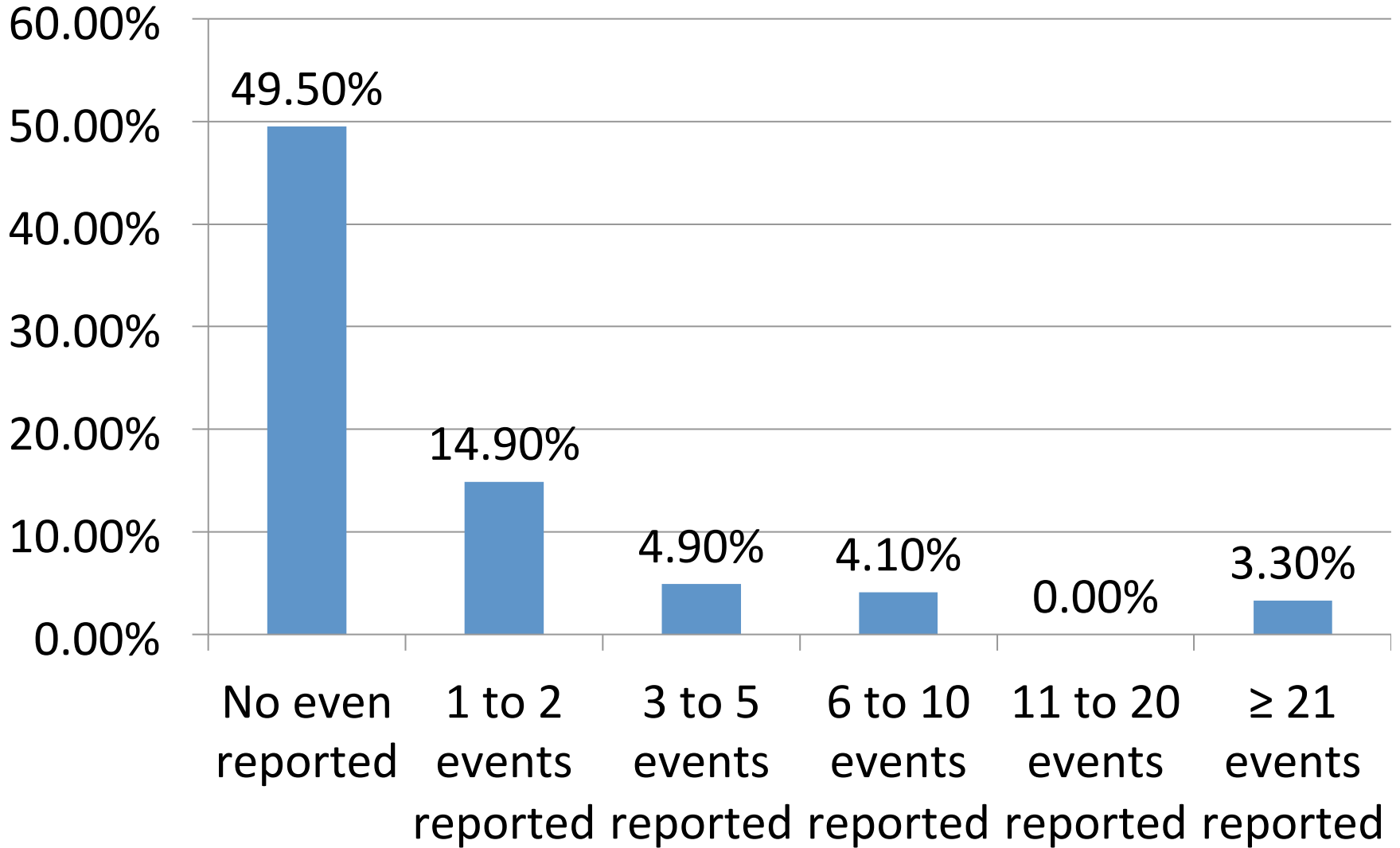
B 2: Distribution of respondents in the participating hospitals

Name of Hosp	CHEW	CHO	Nurse / Midwife	Lab Technician	Pharm. Tech	Lab. Scientist	Pharmacist	Med. Doctor	Not Specified	Total (%)
Otuasega	0	2	28	0	2	0	1	2	11	46 (38)
Obio	1	0	14	0	0	1	3	5	2	26 (21.5)
Owaza	5	3	3	2	3	3	1	3	2	25 (20.7)
Umuebulu	0	0	7	0	0	2	0	1	1	11 (9.1)
Nembe	0	0	6	2	1	0	1	2	1	13 (10.7)

C 1: Respondents' Overall Grade of Safety of work area/unit



C 2: Number of events reported in the past 12 Months



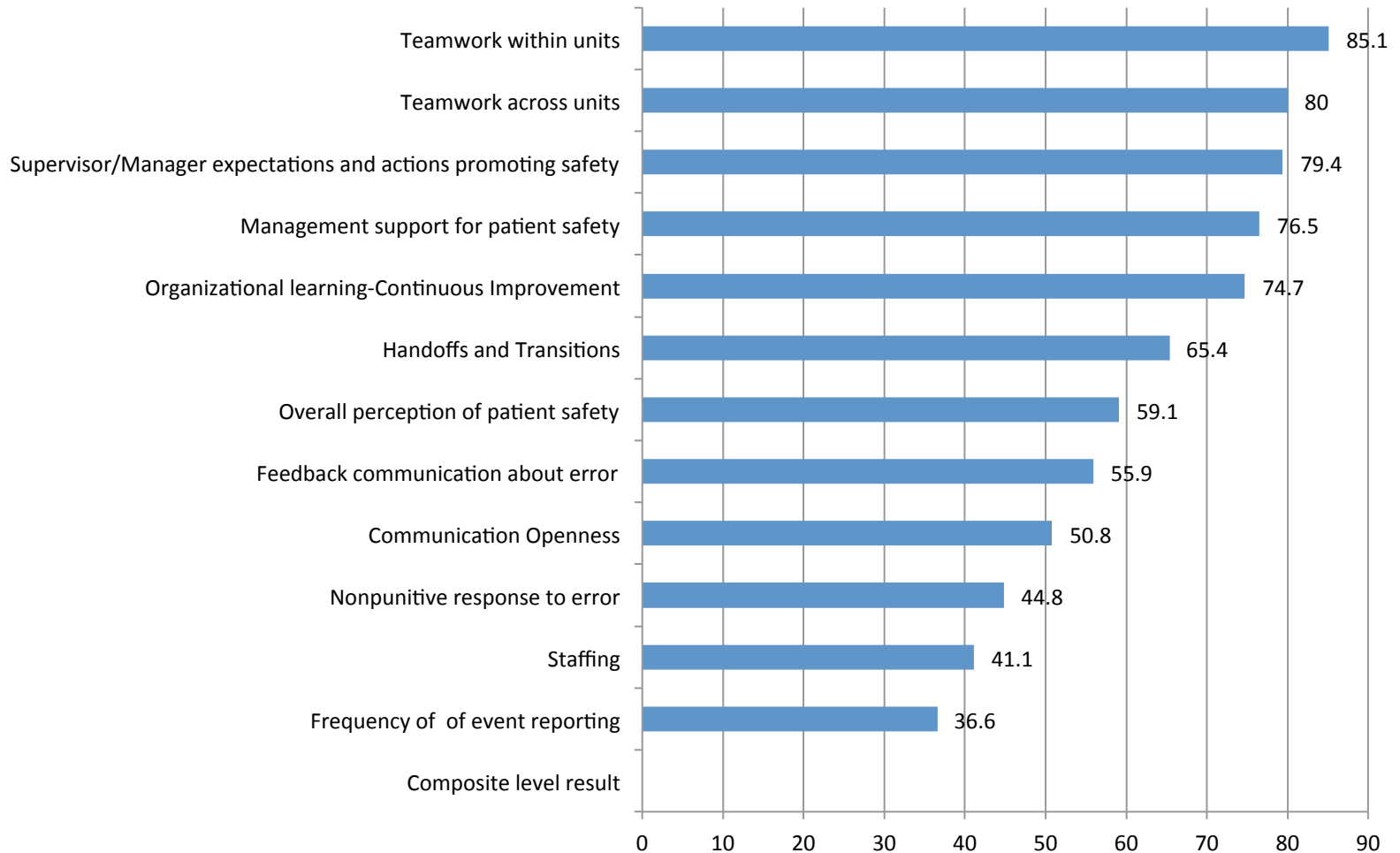
D. Main Findings

- D 1 Composite and Item level Average percentage positive score charts
- D 2 Composite and Item level areas of strength ($\geq 75\%$)
- D 3 Composite and Item level areas with greatest potential for improvement (50-74.9%)
- D 4 Composite and Item level areas of weakness ($< 50\%$)

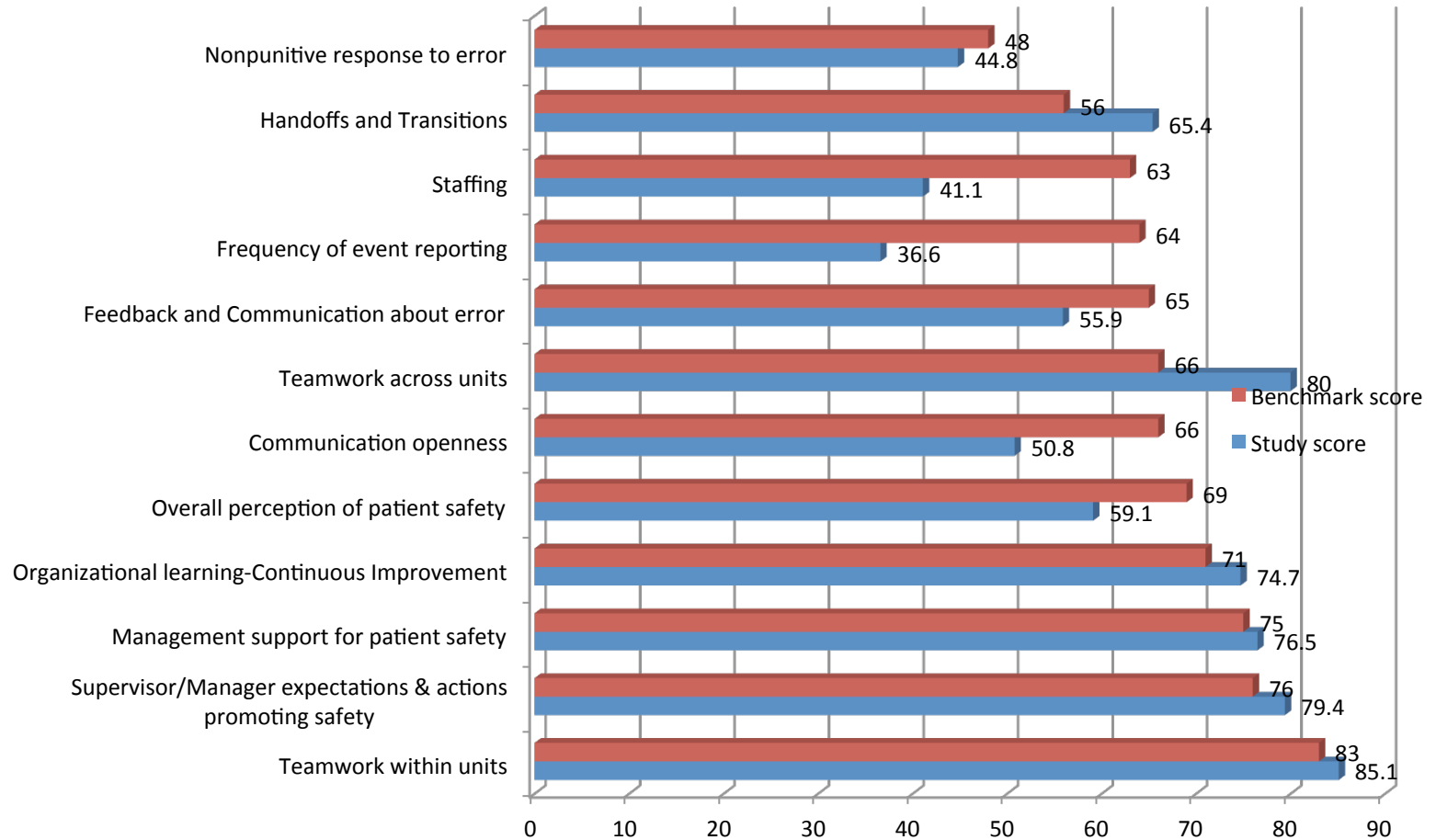
Composite and Item level measure areas of strength

- Composite and Item measures $\geq 75\%$ are regarded as areas of strength.
- Those $< 75\%$ are regarded as areas of greatest potential for improvement
- For composite measures, 4 areas of strength emerged
- For Item measures, 12 areas of strength emerged.

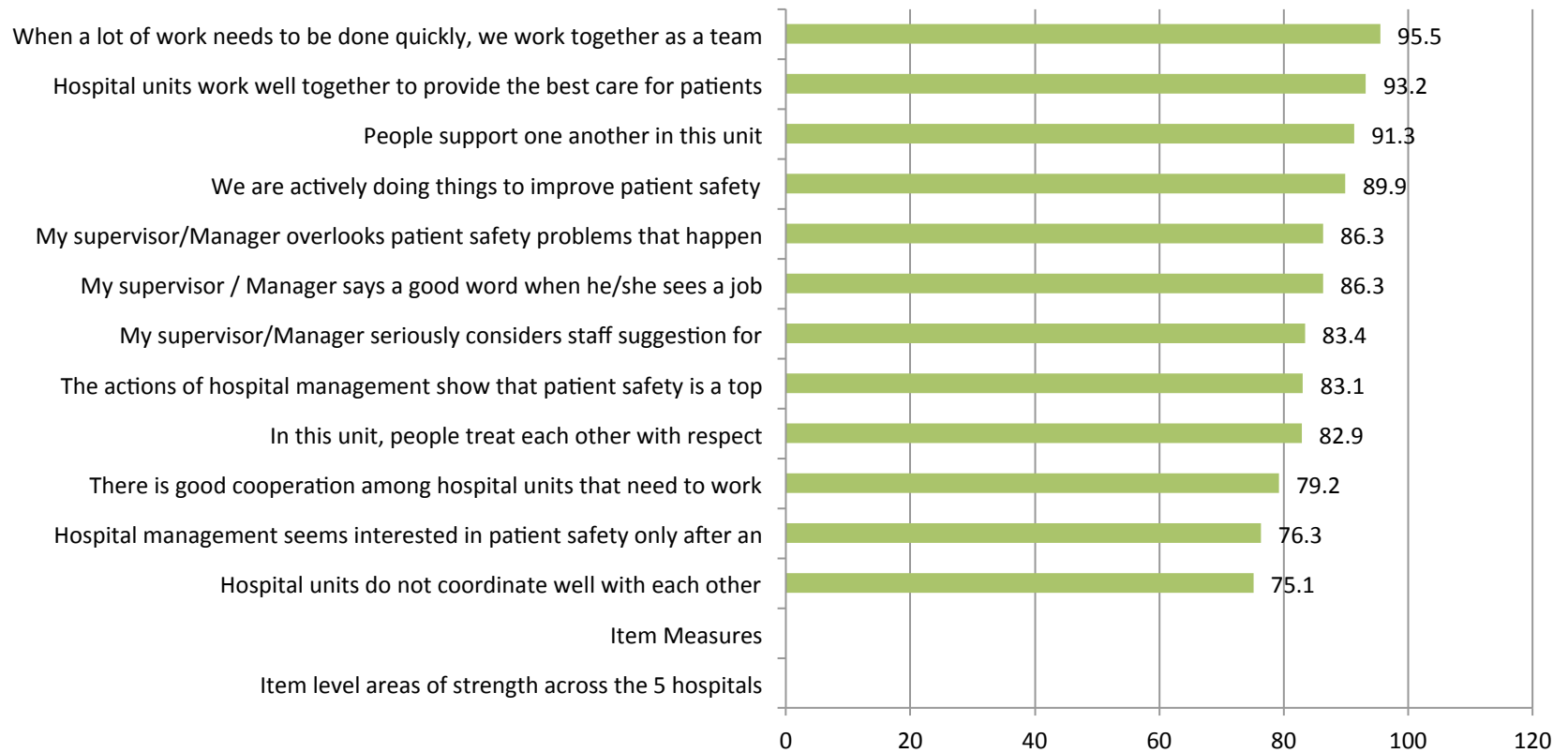
Dimension average positive response scores



Item measures average positive response scores



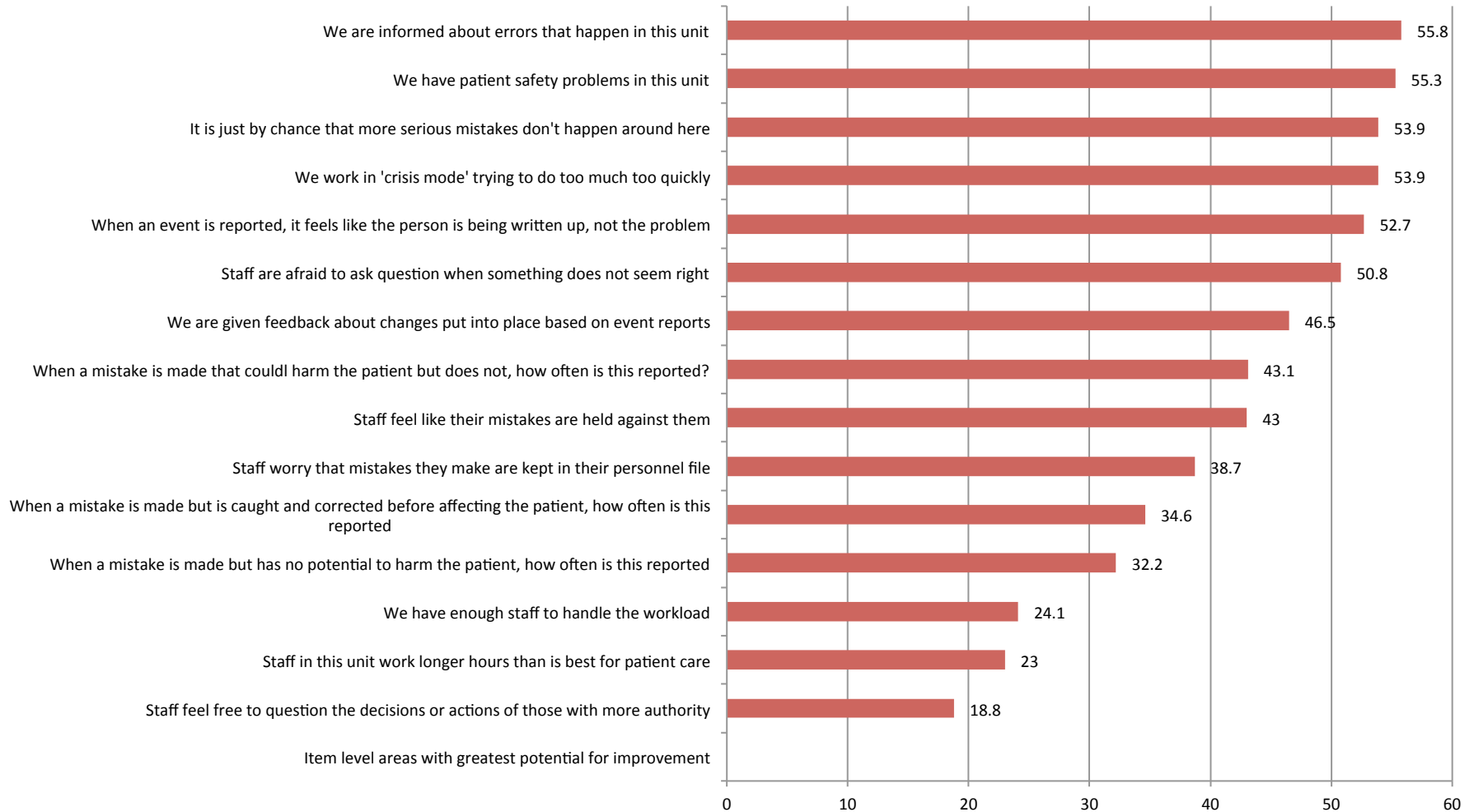
Item level measures of strength



Item level measures of weakness

- Out of the 42 Item measures, 30 areas of weakness emerged.
- These are shown in the charts below

Item level measures of weakness 1

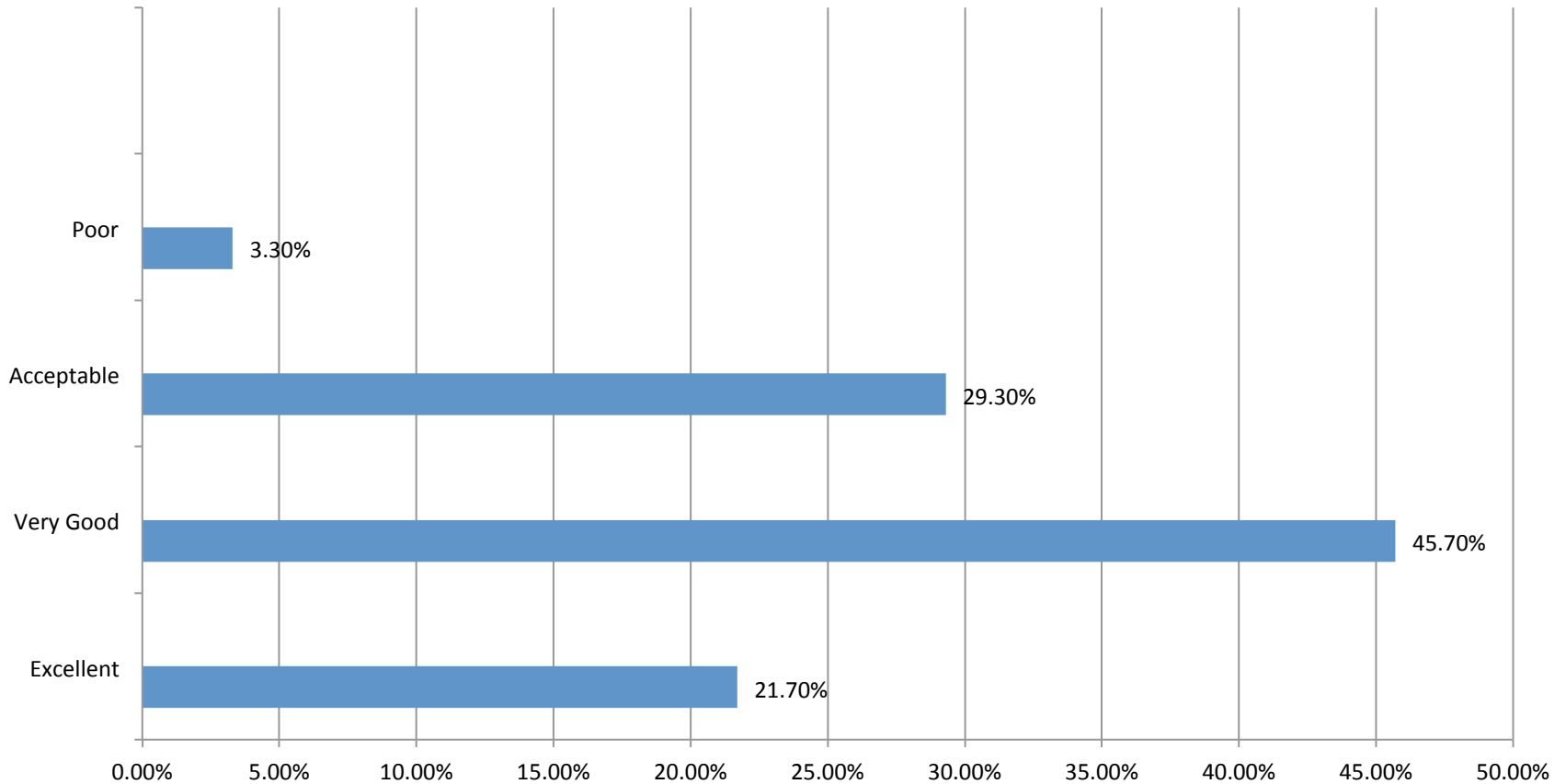


Item measures areas of weakness

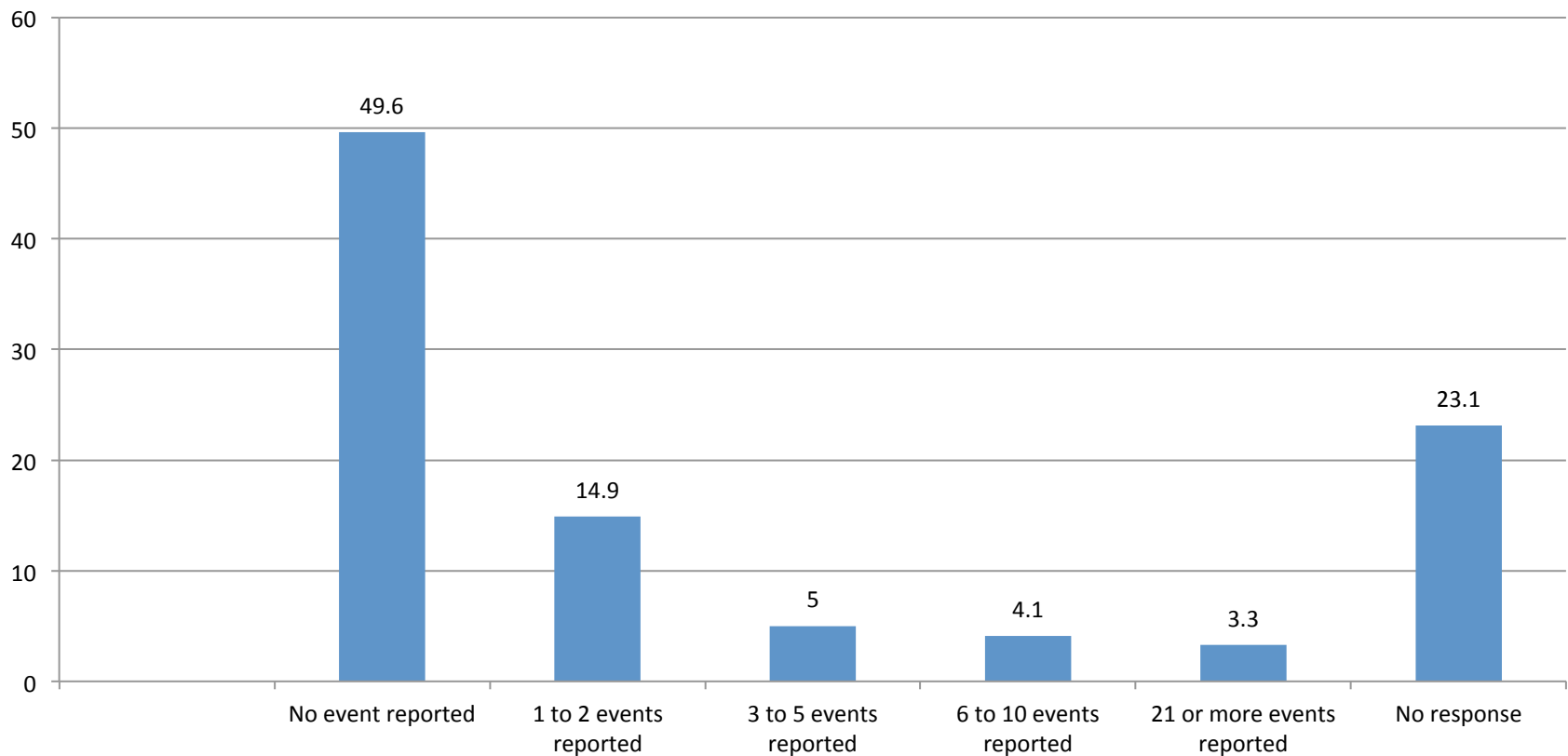
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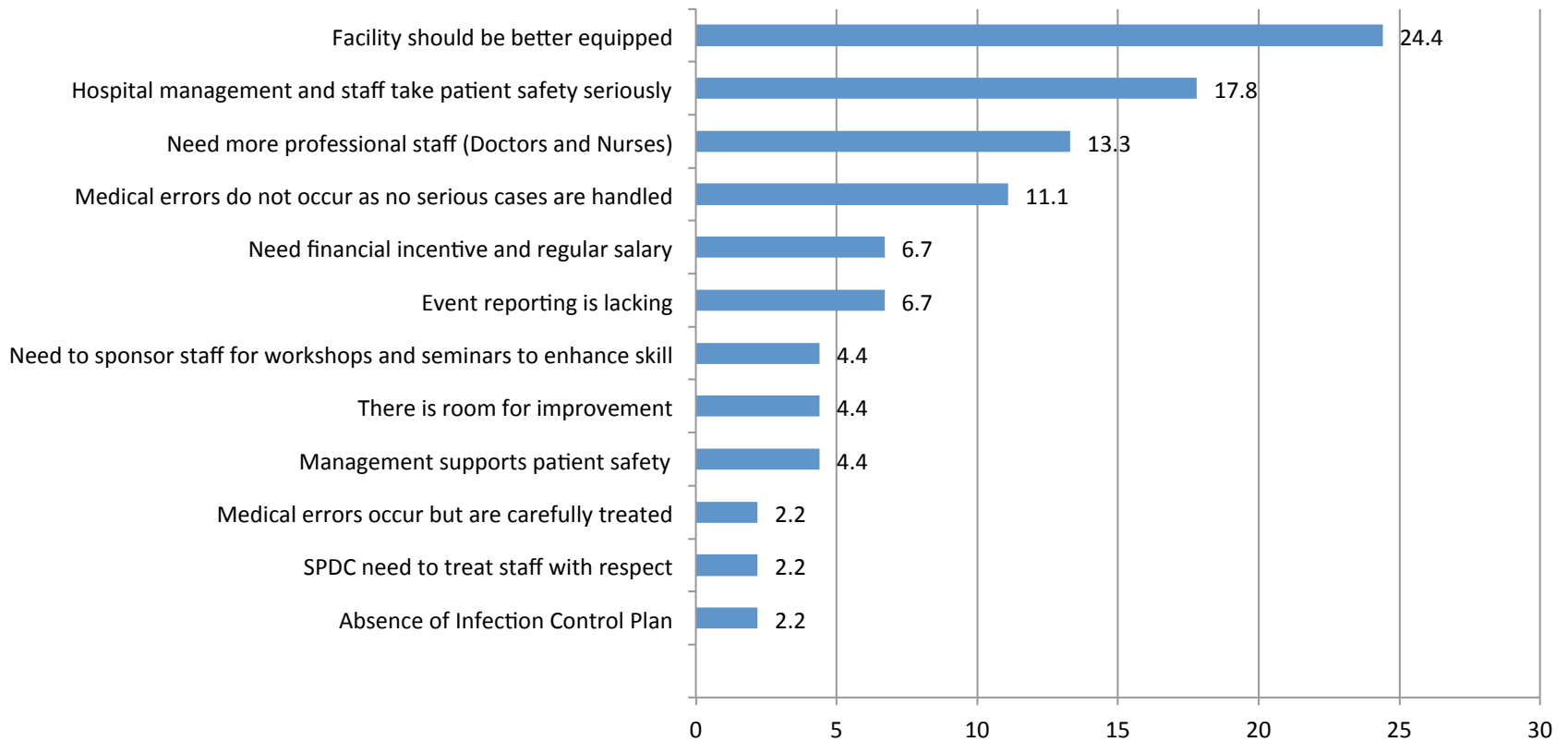
Distribution of respondents' overall grade of safety



Distribution of number of events reported over the past 12 months.



Summary of staff comments



Discussion

- All facilities in this study, Apart from Nembe General Hospital, were originally PHCs latter refitted to Cottage Hospitals by SPDC
- They handle minor to moderate cases
- As far as we know, this study is the first one that investigated patient safety culture in cottage hospitals in Nigeria.

Discussion 2

- The instrument used (Hospital Survey on Patient Safety Culture) was developed by the AHRQ for assessment of big hospitals where complicated cases are handled³⁸.
- Using this instrument in Cottage Hospitals where serious and uncomplicated cases are handled had its challenges, and limitations.

Discussion 3

- As has been recommended by other studies ^{31,}
³², It would be necessary to develop an instrument aimed specifically at primary health care centres and smaller hospitals and the range of services they offer.

Discussion 4

- The overall perception of patient safety culture in this study is 59.1%. This is similar to the 57% in the study in Iran³¹ and the 59% obtained in Turkey³². It is however lower than the 69% in the AHRQ benchmark database hospitals in the USA³⁸. This might be explained by the fact that the cottage hospitals we studied have a lower potential for life-threatening medical errors and procedures.

Discussion 5

- The composites that received high positive Percent scores (“teamwork within units” [85.1%], “teamwork across units” [80%], “supervisor/manager expectations and actions promoting safety” [79.4%], “management support for patient safety” [76.5%] and “organisational learning-continuous improvement” [74.7%]) should be built upon to sustain patient safety culture

Discussion 6

- Teamwork across units obtained in this study is higher than the benchmark database hospitals score of 66%.
 - Staffs in health centres and smaller hospitals seem to have better cooperation and coordination within and across different units than bigger and more complex hospitals and is in keeping with findings from similar studies
- 32

Discussion 6

- Unlike in other similar studies^{31-32, 39, 41-42} where the lowest score was in the patient safety culture composite of “non-punitive response to error”, the present study’s lowest score was in the composite “Frequency of events reporting” with average score of 36.6%.

Discussion 6

- This is reflected in the high proportion (49.6%) of respondents who “reported no events ” in the past 12 months in this study.
- As result of this study show, non-punitive response to errors is one of the weak composites with great potential for improvement. Perhaps, this explains the low reporting of events

Discussion 7

- Staffing was another patient safety composite with a very low average percent positive score in this study.
- This is an area that need to be looked into seriously.
- There is research evidence that production pressure increases medical errors ¹².

Discussion 8

- Majority of the respondents in this study selected as their work area/unit 'many different work areas/no specific units. This could be explained by the fact that these cottage hospitals studied being small hospitals are not departmentalized and so many workers are distributed to units or work areas according to need or work pressure daily. All the medical doctors working in these hospitals are non-specialist doctors.

Conclusion and recommendation 1

- The Hospital Survey of Patient Safety Culture (HSPSC) instrument was successfully applied to assess the patient safety culture in 5 Cottage hospitals in the Niger Delta region of Nigeria.

Conclusion 2

- Teamwork across units, teamwork within units, supervisor/manager expectations and actions promoting safety and management support for patient safety were areas of strength across the hospitals studied.

Conclusion 3

- Frequency of event reporting, staffing and non-punitive response to error emerged as areas with greatest potential for improvement.

Recommendations 1

- That both the SPDC and the government should continue to collaborate to develop a system that will enhance voluntary error reporting by eliminating punitive response to errors thereby creating a climate that will make it possible for the system to learn from errors and prevent secondary occurrence.

Recommendation 2

- Staffing should particularly be addressed to ensure that facilities will have enough manpower to carry out the job at hand
- Deliberate efforts should also be made to sustain those areas of strength already in existence so that the standard will not fall.

Recommendation 3

- The areas of weakness identified should be targeted with safety improvement interventions to strengthen them.
- Finally, this assessment should be repeated on a continuous basis to monitor the effects of patient safety interventions that are put in place as part of the quality project on-going in the facilities.

Acknowledgement

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- I thank my Manager, Dr Babatunde Fakunle for his immense assistance towards the successful completion of this study, and his overall commitment to patient safety and health care quality.

- Thank you for your attention