

SUPPLEMENTARY TABLES

Supplementary Table 1S. STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*

	Item No	Recommendation	Page No
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the abstract	1
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	1
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	1
Objectives	3	State specific objectives, including any prespecified hypotheses	2
Methods			
Study design	4	Present key elements of study design early in the paper	2
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	2
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants	2
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	2
Data sources/measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	2
Bias	9	Describe any efforts to address potential sources of bias	8,9
Study size	10	Explain how the study size was arrived at	2
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	2
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	2,3
		(b) Describe any methods used to examine subgroups and interactions	2,3
		(c) Explain how missing data were addressed	3
		(d) If applicable, describe analytical methods taking account of sampling strategy	NA
		(e) Describe any sensitivity analyses	NA
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	3,4
		(b) Give reasons for non-participation at each stage	NA
		(c) Consider use of a flow diagram	NA
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	3,4
		(b) Indicate number of participants with missing data for each variable of interest	4,5
Outcome data	15*	Report numbers of outcome events or summary measures	4,5
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	3-5
		(b) Report category boundaries when continuous variables were categorized	3,4
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	NA
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	5-7
Discussion			
Key results	18	Summarise key results with reference to study objectives	4,5
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	8,9
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	4-8
Generalisability	21	Discuss the generalisability (external validity) of the study results	9
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	9

*Give information separately for exposed and unexposed groups

Supplementary Table 2S. Characterization of the participating hospitals

Features	<i>Hospital Universitario Austral</i>	<i>Hospital Israelita Albert Einstein</i>	<i>Clínica Alemana de Santiago</i>	<i>Fundación Santa Fe de Bogotá</i>
Localization	Buenos Aires, Argentina	Sao Paulo, Brazil	Santiago, Chile	Bogotá, Colombia
Number of workers	3,070	8,230	5,188	2,578
Number of bed	230	701	438	393
Teaching Hospital	Yes	Yes	No	Yes

Supplementary Table 3S. Estimated means differences for the percentages of positive responses in the dimensions of the Hospital Survey on Patient Safety Culture between non-teaching institutions and teaching hospitals

Dimensions	Teaching hospital		Contrasts	
	No	Yes	No - Yes (CI 95%)	P-value
Teamwork within units	80.8 (79.5–82.0)	78.2 (77.9–78.5)	2.6 (1.3–3.9)	<0.001
Expectations and actions promoting patient safety	75.2 (69.2–81.6)	64.1 (61.3–67.0)	11.1 (4.2–17.9)	0.002
Organizational learning – Continuous improvement	82.2 (75.5–89.5)	81.3 (76.4–86.5)	0.9 (-7.7–9.6)	0.830
Management support for Patient safety	79.8 (75.8–84.0)	75.0 (70.3–80.0)	4.8 (-1.5–11.2)	0.137
Feedback & communication about errors	74.9 (72.7–77.2)	72.3 (66.8–78.3)	2.5 (-3.6–8.7)	0.415
Frequency of events reported	77.7 (74.7–80.7)	63.1 (52.9–75.3)	14.5 (3.0–26.1)	0.014
Overall perceptions of patients safety	64.0 (55.6–73.7)	66.8 (60.0–74.5)	-2.9 (-14.4–8.7)	0.629
Communication openness	58.0 (54.2–62.0)	59.6 (58.8–60.3)	-1.6 (-5.5–2.4)	0.437
Teamwork across units	62.3 (61.4–63.1)	64.0 (57.7–71.0)	-1.7 (-8.5–5.0)	0.612
Staffing	42.9 (39.6–46.5)	37.6 (34.0–41.5)	5.3 (0.2–10.4)	0.041
Handoffs & transitions	65.5 (58.1–73.7)	55.0 (45.0–67.2)	10.4 (-3.0–23.9)	0.129
Non-punitive response to error	35.4 (33.4–37.5)	39.9 (39.8–40.1)	-4.5 (-6.6–2.5)	<0.001

Legend. CI: Confidential interval 95%

Supplementary Table 4S. Estimated means differences for the percentages of positive responses in the dimensions of the Hospital Survey on Patient Safety Culture between healthcare professional without direct contact with the patients and those who are in direct contact

Dimensions	Direct contact with the patient		Contrasts	
	No	Yes	No - Yes (CI 95%)	P-value
Teamwork within units	80.2 (77.3–83.2)	79.6 (77.6–81.5)	0.6 (-3.5–4.8)	0.768
Expectations and actions promoting patient safety	72.2 (69.1–75.4)	69.0 (62.3–76.5)	3.2 (-1.0–7.3)	0.133
Organizational learning – Continuous improvement	81.9 (77.8–86.1)	81.8 (77.3–86.6)	0.1 (-3.6–3.8)	0.971
Management support for Patient safety	81.4 (78.3–84.5)	76.5 (72.4–81.0)	4.8 (1.6–8.1)	0.003
Feedback & communication about errors	74.5 (71.3–77.8)	73.5 (70.1–77.1)	1.0 (-1.7–3.7)	0.478
Frequency of events reported	72.7 (65.4–80.8)	69.9 (61.0–80.0)	2.8 (-1.0–6.6)	0.143
Overall perceptions of patients safety	66.9 (59.6–75.1)	65.2 (59.7–71.1)	1.7 (-1.6–5.1)	0.317
Communication openness	60.4 (57.4–63.6)	58.4 (56.2–60.8)	2.0 (-1.3–5.3)	0.232
Teamwork across units	65.1 (59.8–70.9)	62.6 (59.3–66.1)	2.5 (-1.8–6.8)	0.256
Staffing	37.4 (34.4–40.6)	40.9 (36.5–46.0)	-3.6 (-10.2–3.0)	0.287
Handoffs & transitions	53.0 (46.6–60.4)	61.7 (53.3–71.4)	-8.7 (-14.1–-3.2)	0.002
Non-punitive response to error	41.8 (36.1–48.4)	36.6 (33.8–39.6)	5.2 (-1.5–11.9)	0.128

Legend. CI: Confidential interval 95%

Supplementary Table 5S. Multiple comparisons among hospital units in the dimensions of the Hospital Survey on Patient Safety Culture

Contrasts	Mean (CI 95%)	P-value	Mean (CI 95%)	P-value	Mean (CI 95%)	P-value
	Teamwork within units		Expectations and actions promoting patient safety		Organizational learning – Continuous improvement	
Nursing wards – Radiology	-1.8 (-6.3; 2.7)	>0.999	0.5 (-3.5; 4.5)	>0.999	2.6 (-1.5; 6.7)	0.678
Nursing wards – Emergency room	-0.7 (-5.0; 3.7)	>0.999	3.4 (-3.7; 10.4)	>0.999	4.6 (-4.2; 13.4)	>0.999
Nursing wards – ICU	-1.6 (-5.9; 2.7)	>0.999	-0.6 (-6.1; 4.9)	>0.999	2.3 (-2.9; 7.6)	>0.999
Nursing wards – Other	-1.9 (-6.9; 3.0)	>0.999	-1.4 (-5.7; 3.0)	>0.999	2.5 (-1.0; 6.0)	0.432
Radiology – Emergency room	1.1 (-3.0; 5.2)	>0.999	2.8 (-4.0; 9.6)	>0.999	2.0 (-3.6; 7.6)	>0.999
Radiology – ICU	0.2 (-3.9; 4.3)	>0.999	-1.1 (-7.3; 5.1)	>0.999	-0.3 (-5.6; 5.0)	>0.999
Radiology – Other	-0.1 (-2.8; 2.6)	>0.999	-1.9 (-6.7; 2.9)	>0.999	-0.1 (-3.2; 3.0)	>0.999
Emergency room – ICU	-0.9 (-7.6; 5.8)	>0.999	-4.0 (-14.8; 6.9)	>0.999	-2.3 (-12.9; 8.4)	>0.999
Emergency room – Other	-1.2 (-4.4; 1.9)	>0.999	-4.7 (-7.5; -1.9)	<0.001	-2.1 (-7.3; 3.1)	>0.999
ICU – Other	-0.3 (-6.9; 6.2)	>0.999	-0.8 (-9.3; 7.7)	>0.999	0.2 (-6.2; 6.6)	>0.999
	Management support for Patient safety		Feedback & communication about errors		Frequency of events reported	
Nursing wards – Radiology	-2.5 (-6.3; 1.4)	0.496	8.6 (0.0; 17.2)	0.052	6.8 (-0.6; 14.2)	0.099
Nursing wards – Emergency room	4.2 (-3.3; 11.6)	0.659	6.7 (-8.6; 22.0)	>0.999	7.3 (-6.8; 21.3)	>0.999
Nursing wards – ICU	1.6 (-2.2; 5.5)	0.954	2.2 (-5.6; 10.1)	>0.999	7.1 (-0.5; 14.7)	0.083
Nursing wards – Other	-2.9 (-7.2; 1.5)	0.496	5.3 (-1.6; 12.1)	0.269	4.3 (0.7; 7.9)	0.009
Radiology – Emergency room	6.6 (-1.0; 14.3)	0.139	-1.9 (-11.6; 7.8)	>0.999	0.5 (-7.5; 8.5)	>0.999
Radiology – ICU	4.1 (0.5; 7.7)	0.014	-6.4 (-14.6; 1.8)	0.269	0.3 (-8.3; 9.0)	>0.999
Radiology – Other	-0.4 (-2.1; 1.4)	0.961	-3.3 (-6.2; -0.5)	0.010	-2.5 (-8.0; 2.9)	>0.999
Emergency room – ICU	-2.6 (-10.7; 5.6)	0.961	-4.5 (-19.2; 10.2)	>0.999	-0.1 (-15.0; 14.8)	>0.999
Emergency room – Other	-7.0 (-13.0; -1.0)	0.010	-1.4 (-11.1; 8.2)	>0.999	-3.0 (-13.7; 7.7)	>0.999
ICU – Other	-4.5 (-10.0; 1.1)	0.207	3.0 (-5.2; 11.3)	>0.999	-2.9 (-11.2; 5.5)	>0.999
	Overall perceptions of patients safety		Communication openness		Teamwork across units	
Nursing wards – Radiology	-5.8 (-12.2; 0.5)	0.097	0.1 (-3.1; 3.3)	>0.999	-3.6 (-8.3; 1.2)	0.285
Nursing wards – Emergency room	-0.8 (-5.1; 3.6)	>0.999	-2.4 (-6.5; 1.8)	0.936	1.8 (-2.6; 6.1)	>0.999
Nursing wards – ICU	1.9 (-2.7; 6.5)	>0.999	3.0 (-4.3; 10.3)	>0.999	-4.1 (-8.2; 0.1)	0.060
Nursing wards – Other	-2.3 (-7.7; 3.0)	>0.999	1.9 (-1.1; 4.9)	0.780	-2.8 (-7.8; 2.2)	0.750
Radiology – Emergency room	5.0 (-1.0; 11.0)	0.161	-2.4 (-9.0; 4.1)	>0.999	5.3 (1.8; 8.9)	<0.001
Radiology – ICU	7.7 (1.8; 13.6)	0.003	2.9 (-2.7; 8.6)	>0.999	-0.5 (-1.9; 1.0)	>0.999
Radiology – Other	3.5 (0.7; 6.3)	0.005	1.8 (-3.9; 7.5)	>0.999	0.8 (-2.2; 3.7)	>0.999
Emergency room – ICU	2.7 (2.1; 3.2)	<0.001	5.4 (-5.9; 16.7)	>0.999	-5.8 (-7.7; -4.0)	<0.001
Emergency room – Other	-1.5 (-6.6; 3.5)	>0.999	4.2 (2.2; 6.2)	<0.001	-4.6 (-10.6; 1.4)	0.285
ICU – Other	-4.2 (-9.5; 1.1)	0.205	-1.1 (-9.3; 7.0)	>0.999	1.2 (-2.5; 5.0)	>0.999
	Staffing		Handoffs & Transitions		Non-punitive response to error	
Nursing wards – Radiology	-6.4 (-9.2; -3.6)	<0.001	-2.8 (-7.1; 1.5)	0.486	1.7 (-1.7; 5.1)	>0.999
Nursing wards – Emergency room	-1.9 (-11.1; 7.2)	>0.999	-5.1 (-12.6; 2.5)	0.462	-2.0 (-9.6; 5.7)	>0.999
Nursing wards – ICU	2.2 (-1.5; 5.8)	0.724	-0.4 (-6.0; 5.2)	>0.999	1.6 (-3.9; 7.2)	>0.999
Nursing wards – Other	-1.4 (-5.2; 2.4)	>0.999	5.1 (-2.1; 12.3)	0.390	-0.4 (-7.7; 6.9)	>0.999
Radiology – Emergency room	4.5 (-7.4; 16.3)	>0.999	-2.3 (-10.0; 5.4)	>0.999	-3.7 (-10.0; 2.7)	0.981
Radiology – ICU	8.6 (4.8; 12.3)	<0.001	2.3 (-1.9; 6.6)	0.650	-0.1 (-5.2; 5.1)	>0.999
Radiology – Other	5.0 (0.7; 9.3)	0.012	7.9 (2.7; 13.0)	<0.001	-2.1 (-7.9; 3.6)	>0.999
Emergency room – ICU	4.1 (-8.4; 16.6)	>0.999	4.6 (-7.5; 16.8)	>0.999	3.6 (-5.6; 12.7)	>0.999
Emergency room – Other	0.5 (-10.8; 11.9)	>0.999	10.2 (-2.8; 23.2)	0.259	1.5 (0.3; 2.8)	0.006
ICU – Other	-3.5 (-4.2; -2.9)	<0.001	5.5 (0.8; 10.3)	0.010	-2.1 (-11.0; 6.9)	>0.999

Legend. CI: Confidential interval 95%; ICU: Intensive care Unit

Supplementary Table 6S. Multiple comparisons among time-period in the hospital in the dimensions of the Hospital Survey on Patient Safety Culture

Contrasts	Mean (CI 95%)	P-value	Mean (CI 95%)	P-value	Mean (CI 95%)	P-value
	Teamwork within units		Expectations and actions promoting patient safety		Organizational learning – Continuous improvement	
Until 1 year – 1 to 5 years	6.8 (6.1; 7.4)	<0.001	6.0 (3.7; 8.3)	<0.001	4.3 (0.8; 7.8)	0.006
Until 1 year – 6 to 10 years	7.9 (4.2; 11.5)	<0.001	8.3 (3.7; 12.9)	<0.001	7.5 (2.6; 12.4)	<0.001
Until 1 year – 11 to 15 years	7.0 (4.5; 9.4)	<0.001	6.5 (1.9; 11.1)	0.001	6.6 (0.5; 12.6)	0.022
Until 1 year – 16 to 20 years	4.9 (2.7; 7.1)	<0.001	4.1 (1.6; 6.6)	<0.001	6.9 (0.1; 13.7)	0.044
Until 1 year – more than 20 years	2.2 (0.7; 3.8)	0.001	2.2 (-0.5; 5.0)	0.193	-0.5 (-6.4; 5.4)	>0.999
1 to 5 years – 6 to 10 years	1.1 (-2.0; 4.1)	>0.999	2.3 (-0.5; 5.2)	0.193	3.2 (0.0; 6.5)	0.044
1 to 5 years – 11 to 15 years	0.2 (-1.7; 2.1)	>0.999	0.5 (-1.5; 2.5)	0.636	2.3 (-1.5; 6.0)	0.610
1 to 5 years – 16 to 20 years	-1.9 (-4.1; 0.3)	0.124	-1.9 (-4.9; 1.1)	0.454	2.6 (-1.6; 6.9)	0.610
1 to 5 years – more than 20 years	-4.6 (-6.1; -3.1)	<0.001	-3.8 (-6.6; -1.0)	0.002	-4.8 (-9.5; -0.1)	0.044
6 to 10 years – 11 to 15 years	-0.9 (-3.6; 1.8)	>0.999	-1.8 (-3.1; -0.6)	<0.001	-1.0 (-3.9; 2.0)	>0.999
6 to 10 years – 16 to 20 years	-3.0 (-6.4; 0.4)	0.124	-4.2 (-9.6; 1.1)	0.208	-0.6 (-2.8; 1.5)	>0.999
6 to 10 years – more than 20 years	-5.6 (-9.9; -1.4)	0.002	-6.1 (-9.2; -3.0)	<0.001	-8.0 (-14.6; -1.4)	0.006
11 to 15 years – 16 to 20 years	-2.1 (-2.6; -1.5)	<0.001	-2.4 (-6.9; 2.1)	0.508	0.3 (-1.5; 2.2)	>0.999
11 to 15 years – more than 20 years	-4.7 (-8.6; -0.9)	0.006	-4.3 (-7.2; -1.3)	<0.001	-7.1 (-13.4; -0.7)	0.017
16 to 20 years – more than 20 years	-2.7 (-6.0; 0.6)	0.174	-1.9 (-5.1; 1.4)	0.508	-7.4 (-13.3; -1.5)	0.003
	Management support for Patient safety		Feedback & communication about errors		Frequency of events reported	
Until 1 year – 1 to 5 years	3.6 (1.2; 5.9)	<0.001	10.7 (8.3; 13.1)	<0.001	6.6 (5.8; 7.5)	<0.001
Until 1 year – 6 to 10 years	7.9 (2.7; 13.2)	<0.001	14.4 (8.7; 20.1)	<0.001	7.1 (5.4; 8.8)	<0.001
Until 1 year – 11 to 15 years	3.6 (-2.4; 9.5)	0.533	15.3 (8.7; 21.9)	<0.001	9.0 (4.7; 13.3)	<0.001
Until 1 year – 16 to 20 years	5.7 (1.6; 9.9)	0.001	16.5 (10.0; 23.0)	<0.001	8.0 (1.1; 14.9)	0.011
Until 1 year – more than 20 years	-3.0 (-8.2; 2.2)	0.533	10.0 (1.7; 18.2)	0.007	4.8 (-1.7; 11.2)	0.398
1 to 5 years – 6 to 10 years	4.4 (0.5; 8.3)	0.019	3.7 (-0.5; 7.8)	0.118	0.5 (-1.0; 1.9)	>0.999
1 to 5 years – 11 to 15 years	0.0 (-3.8; 3.7)	0.998	4.5 (-0.1; 9.1)	0.055	2.4 (-1.6; 6.4)	0.801
1 to 5 years – 16 to 20 years	2.2 (-1.3; 5.7)	0.533	5.8 (1.7; 9.9)	0.001	1.3 (-3.5; 6.2)	>0.999
1 to 5 years – more than 20 years	-6.6 (-11.1; -2.1)	<0.001	-0.7 (-5.3; 3.8)	>0.999	-1.9 (-7.1; 3.4)	>0.999
6 to 10 years – 11 to 15 years	-4.4 (-6.3; -2.4)	<0.001	0.9 (-1.9; 3.7)	>0.999	1.9 (-1.2; 5.0)	0.757
6 to 10 years – 16 to 20 years	-2.2 (-4.0; -0.4)	0.006	2.1 (-2.3; 6.5)	0.918	0.9 (-4.0; 5.8)	>0.999
6 to 10 years – more than 20 years	-11.0 (-12.9; -9.0)	<0.001	-4.4 (-9.8; 0.9)	0.169	-2.3 (-8.3; 3.6)	>0.999
11 to 15 years – 16 to 20 years	2.2 (-1.3; 5.6)	0.533	1.2 (-2.0; 4.5)	>0.999	-1.0 (-5.1; 3.0)	>0.999
11 to 15 years – more than 20 years	-6.6 (-7.6; -5.5)	<0.001	-5.3 (-10.5; 0.0)	0.046	-4.3 (-10.3; 1.8)	0.467
16 to 20 years – more than 20 years	-8.8 (-12.5; -5.0)	<0.001	-6.5 (-9.1; -4.0)	<0.001	-3.2 (-9.3; 2.9)	>0.999
	Overall perceptions of patients safety		Communication openness		Teamwork across units	
Until 1 year – 1 to 5 years	4.5 (3.1; 5.9)	<0.001	6.6 (3.0; 10.2)	<0.001	8.6 (5.5; 11.7)	<0.001
Until 1 year – 6 to 10 years	7.9 (3.1; 12.8)	<0.001	8.7 (6.1; 11.2)	<0.001	12.1 (5.3; 18.9)	<0.001
Until 1 year – 11 to 15 years	4.2 (-0.9; 9.3)	0.175	6.0 (0.1; 11.9)	0.046	9.6 (1.7; 17.5)	0.007
Until 1 year – 16 to 20 years	7.9 (2.7; 13.0)	<0.001	3.4 (-1.5; 8.4)	0.371	10.6 (3.0; 18.1)	0.001
Until 1 year – more than 20 years	0.8 (-5.3; 6.8)	>0.999	0.9 (-5.7; 7.5)	>0.999	4.4 (-3.4; 12.2)	0.630
1 to 5 years – 6 to 10 years	3.4 (-0.1; 6.9)	0.059	2.1 (0.4; 3.7)	0.004	3.5 (-0.9; 8.0)	0.222
1 to 5 years – 11 to 15 years	-0.3 (-3.7; 3.1)	>0.999	-0.7 (-3.5; 2.2)	>0.999	1.0 (-3.2; 5.2)	0.642
1 to 5 years – 16 to 20 years	3.4 (-0.3; 7.1)	0.103	-3.2 (-6.0; -0.3)	0.017	2.0 (-2.3; 6.3)	0.630
1 to 5 years – more than 20 years	-3.7 (-9.1; 1.7)	0.353	-5.7 (-11.5; 0.1)	0.057	-4.2 (-9.8; 1.5)	0.280
6 to 10 years – 11 to 15 years	-3.7 (-5.8; -1.6)	<0.001	-2.7 (-7.0; 1.6)	0.464	-2.5 (-4.0; -1.1)	<0.001
6 to 10 years – 16 to 20 years	0.0 (-2.1; 2.0)	>0.999	-5.2 (-9.6; -0.8)	0.008	-1.5 (-3.3; 0.2)	0.133
6 to 10 years – more than 20 years	-7.1 (-11.0; -3.3)	<0.001	-7.7 (-14.8; -0.7)	0.021	-7.7 (-11.3; -4.1)	<0.001
11 to 15 years – 16 to 20 years	3.7 (-0.4; 7.7)	0.103	-2.5 (-4.8; -0.2)	0.021	1.0 (-0.8; 2.8)	0.630
11 to 15 years – more than 20 years	-3.4 (-6.8; 0.1)	0.040	-5.0 (-8.5; -1.6)	<0.001	-5.2 (-8.4; -1.9)	<0.001
16 to 20 years – more than 20 years	-7.1 (-10.6; -3.5)	<0.001	-2.5 (-7.2; 2.2)	0.594	-6.2 (-8.1; -4.2)	<0.001

	Staffing		Handoffs & Transitions		Non-punitive response to error	
Until 1 year – 1 to 5 years	1.1 (-3.5; 5.7)	>0.999	4.5 (1.1; 7.8)	0.001	0.7 (-2.5; 4.0)	>0.999
Until 1 year – 6 to 10 years	3.1 (-3.8; 10.0)	>0.999	8.9 (3.5; 14.3)	<0.001	3.1 (-1.4; 7.5)	0.463
Until 1 year – 11 to 15 years	-0.2 (-7.1; 6.8)	>0.999	5.6 (-2.3; 13.5)	0.412	-4.4 (-8.8; 0.0)	0.052
Until 1 year – 16 to 20 years	-2.8 (-9.7; 4.2)	>0.999	6.3 (-2.2; 14.7)	0.393	-6.6 (-17.9; 4.6)	0.719
Until 1 year – more than 20 years	-7.5 (-17.2; 2.2)	0.279	2.7 (-4.8; 10.2)	>0.999	-5.6 (-16.9; 5.8)	>0.999
1 to 5 years – 6 to 10 years	2.0 (-3.3; 7.2)	>0.999	4.4 (2.3; 6.6)	<0.001	2.3 (-1.4; 6.0)	0.636
1 to 5 years – 11 to 15 years	-1.3 (-7.1; 4.5)	>0.999	1.1 (-3.9; 6.2)	>0.999	-5.1 (-5.8; -4.5)	<0.001
1 to 5 years – 16 to 20 years	-3.8 (-8.0; 0.3)	0.085	1.8 (-3.4; 7.0)	>0.999	-7.4 (-15.8; 1.0)	0.142
1 to 5 years – more than 20 years	-8.6 (-15.4; -1.7)	0.004	-1.8 (-7.0; 3.4)	>0.999	-6.3 (-14.4; 1.8)	0.276
6 to 10 years – 11 to 15 years	-3.2 (-5.9; -0.5)	0.007	-3.3 (-9.4; 2.9)	>0.999	-7.5 (-11.2; -3.8)	<0.001
6 to 10 years – 16 to 20 years	-5.8 (-9.8; -1.8)	<0.001	-2.6 (-7.6; 2.3)	>0.999	-9.7 (-18.7; -0.7)	0.023
6 to 10 years – more than 20 years	-10.5 (-14.0; -7.1)	<0.001	-6.2 (-11.5; -0.8)	0.011	-8.6 (-18.8; 1.6)	0.177
11 to 15 years – 16 to 20 years	-2.6 (-6.7; 1.6)	0.684	0.6 (-2.8; 4.1)	>0.999	-2.2 (-8.7; 4.3)	>0.999
11 to 15 years – more than 20 years	-7.3 (-9.1; -5.5)	<0.001	-2.9 (-6.9; 1.1)	0.393	-1.2 (-7.3; 5.0)	>0.999
16 to 20 years – more than 20 years	-4.7 (-7.8; -1.6)	<0.001	-3.5 (-8.3; 1.2)	0.393	1.1 (-2.8; 4.9)	>0.999

Legend. CI: Confidential interval 95%

Supplementary Table 7S. Multiple comparisons among time-period at the position in the dimensions of the Hospital Survey on Patient Safety Culture

Contrasts	Mean (CI 95%)	P-value	Mean (CI 95%)	P-value	Mean (CI 95%)	P-value
	Teamwork within units		Expectations and actions promoting patient safety		Organizational learning – Continuous improvement	
Until 1 year – 1 to 5 years	4.8 (2.9; 6.8)	<0.001	4.5 (2.4; 6.7)	<0.001	3.7 (0.6; 6.8)	0.008
Until 1 year – 6 to 10 years	6.9 (4.1; 9.7)	<0.001	8.0 (2.0; 14.0)	0.002	8.1 (3.6; 12.6)	<0.001
Until 1 year – 11 to 15 years	5.4 (1.4; 9.4)	0.002	7.0 (6.6; 7.3)	<0.001	6.6 (0.2; 13.0)	0.041
Until 1 year – 16 to 20 years	4.1 (2.5; 5.7)	<0.001	6.3 (2.5; 10.1)	<0.001	7.7 (3.6; 11.8)	<0.001
Until 1 year – more than 20 years	-0.7 (-2.9; 1.6)	>0.999	1.3 (0.3; 2.2)	0.002	-1.5 (-6.4; 3.3)	>0.999
1 to 5 years – 6 to 10 years	2.1 (-0.7; 4.9)	0.294	3.5 (-1.3; 8.3)	0.301	4.4 (1.5; 7.2)	<0.001
1 to 5 years – 11 to 15 years	0.6 (-1.4; 2.5)	>0.999	2.4 (0.6; 4.3)	0.002	2.9 (-1.3; 7.0)	0.370
1 to 5 years – 16 to 20 years	-0.7 (-2.7; 1.3)	>0.999	1.8 (-2.0; 5.6)	0.972	4.0 (1.3; 6.7)	0.001
1 to 5 years – more than 20 years	-5.5 (-9.3; -1.6)	0.001	-3.3 (-4.5; -2.1)	<0.001	-5.3 (-8.5; -2.1)	<0.001
6 to 10 years – 11 to 15 years	-1.5 (-5.4; 2.4)	>0.999	-1.1 (-5.6; 3.5)	>0.999	-1.5 (-6.3; 3.3)	>0.999
6 to 10 years – 16 to 20 years	-2.8 (-5.1; -0.4)	0.012	-1.7 (-5.8; 2.4)	0.986	-0.4 (-2.2; 1.5)	>0.999
6 to 10 years – more than 20 years	-7.5 (-11.4; -3.7)	<0.001	-6.7 (-12.1; -1.4)	0.005	-9.6 (-15.4; -3.9)	<0.001
11 to 15 years – 16 to 20 years	-1.2 (-5.1; 2.7)	>0.999	-0.6 (-3.5; 2.3)	>0.999	1.1 (-4.2; 6.5)	>0.999
11 to 15 years – more than 20 years	-6.0 (-12.0; 0.0)	0.050	-5.7 (-6.5; -4.9)	<0.001	-8.1 (-13.0; -3.2)	<0.001
16 to 20 years – more than 20 years	-4.8 (-6.5; -3.1)	<0.001	-5.1 (-8.8; -1.3)	0.002	-9.2 (-14.2; -4.3)	<0.001
	Management support for Patient safety		Feedback & communication about errors		Frequency of events reported	
Until 1 year – 1 to 5 years	2.0 (-0.9; 4.9)	0.352	9.2 (7.3; 11.1)	<0.001	5.4 (2.0; 8.8)	<0.001
Until 1 year – 6 to 10 years	6.9 (-0.2; 14.0)	0.063	14.1 (10.0; 18.2)	<0.001	8.4 (4.9; 11.9)	<0.001
Until 1 year – 11 to 15 years	3.8 (0.2; 7.3)	0.028	14.1 (4.8; 23.4)	<0.001	6.6 (1.8; 11.3)	0.001
Until 1 year – 16 to 20 years	4.1 (-2.3; 10.6)	0.436	16.8 (11.3; 22.4)	<0.001	10.5 (3.9; 17.1)	<0.001
Until 1 year – more than 20 years	-2.9 (-8.8; 3.0)	0.706	8.9 (1.8; 16.0)	0.005	5.8 (-4.2; 15.8)	0.819
1 to 5 years – 6 to 10 years	4.9 (0.3; 9.5)	0.028	4.9 (1.1; 8.7)	0.003	3.0 (0.4; 5.6)	0.011
1 to 5 years – 11 to 15 years	1.7 (0.1; 3.4)	0.028	4.9 (-1.8; 11.7)	0.305	1.2 (-1.3; 3.6)	>0.999
1 to 5 years – 16 to 20 years	2.1 (-2.2; 6.5)	0.706	7.6 (2.5; 12.8)	<0.001	5.1 (-2.8; 12.9)	0.669
1 to 5 years – more than 20 years	-5.0 (-10.0; 0.1)	0.063	-0.3 (-4.5; 3.9)	>0.999	0.4 (-5.7; 6.5)	>0.999
6 to 10 years – 11 to 15 years	-3.2 (-6.8; 0.5)	0.143	0.0 (-5.8; 5.9)	>0.999	-1.8 (-4.1; 0.4)	0.203
6 to 10 years – 16 to 20 years	-2.8 (-6.4; 0.8)	0.254	2.7 (-1.4; 6.9)	0.409	2.1 (-3.1; 7.2)	>0.999
6 to 10 years – more than 20 years	-9.9 (-12.4; -7.4)	<0.001	-5.2 (-11.7; 1.4)	0.231	-2.6 (-10.0; 4.8)	>0.999
11 to 15 years – 16 to 20 years	0.4 (-3.2; 4.0)	0.834	2.7 (-4.6; 10.0)	>0.999	3.9 (-2.4; 10.2)	0.738
11 to 15 years – more than 20 years	-6.7 (-10.7; -2.7)	<0.001	-5.2 (-8.7; -1.7)	<0.001	-0.7 (-5.8; 4.3)	>0.999
16 to 20 years – more than 20 years	2.0 (-0.9; 4.9)	0.352	9.2 (7.3; 11.1)	<0.001	5.4 (2.0; 8.8)	<0.001
	Overall perceptions of patients safety		Communication openness		Teamwork across units	
Until 1 year – 1 to 5 years	4.9 (3.8; 6.1)	<0.001	5.2 (0.9; 9.5)	0.006	7.2 (4.1; 10.2)	<0.001
Until 1 year – 6 to 10 years	8.2 (2.6; 13.7)	<0.001	8.5 (5.1; 11.9)	<0.001	10.6 (0.2; 20.9)	0.042
Until 1 year – 11 to 15 years	5.0 (1.5; 8.4)	0.001	4.5 (-4.6; 13.6)	>0.999	8.4 (1.4; 15.5)	0.007
Until 1 year – 16 to 20 years	6.9 (0.5; 13.3)	0.025	3.8 (-5.1; 12.8)	>0.999	9.2 (-2.7; 21.1)	0.276
Until 1 year – more than 20 years	-1.5 (-6.6; 3.6)	>0.999	-0.4 (-6.2; 5.5)	>0.999	1.4 (-5.1; 7.9)	>0.999
1 to 5 years – 6 to 10 years	3.2 (-1.2; 7.7)	0.341	3.3 (-1.0; 7.6)	0.308	3.4 (-4.0; 10.8)	>0.999
1 to 5 years – 11 to 15 years	0.0 (-2.1; 2.2)	>0.999	-0.7 (-4.8; 3.5)	>0.999	1.3 (-2.2; 4.7)	>0.999
1 to 5 years – 16 to 20 years	2.0 (-3.2; 7.2)	>0.999	-1.4 (-7.6; 4.9)	>0.999	2.0 (-5.8; 9.9)	>0.999
1 to 5 years – more than 20 years	-6.4 (-12.1; -0.8)	0.015	-5.6 (-10.2; -0.9)	0.008	-5.8 (-13.1; 1.5)	0.267
6 to 10 years – 11 to 15 years	-3.2 (-5.7; -0.7)	0.004	-4.0 (-12.7; 4.7)	>0.999	-2.1 (-7.1; 2.8)	>0.999
6 to 10 years – 16 to 20 years	-1.3 (-4.6; 2.0)	>0.999	-4.7 (-11.9; 2.6)	0.680	-1.4 (-6.0; 3.3)	>0.999
6 to 10 years – more than 20 years	-9.7 (-11.9; -7.5)	<0.001	-8.9 (-16.4; -1.4)	0.008	-9.2 (-16.8; -1.5)	0.007
11 to 15 years – 16 to 20 years	1.9 (-3.1; 6.9)	>0.999	-0.7 (-8.3; 6.9)	>0.999	0.8 (-6.1; 7.6)	>0.999
11 to 15 years – more than 20 years	-6.5 (-10.8; -2.1)	<0.001	-4.9 (-9.6; -0.2)	0.037	-7.0 (-16.0; 1.9)	0.267
16 to 20 years – more than 20 years	-8.4 (-10.6; -6.2)	<0.001	-4.2 (-10.9; 2.5)	0.686	-7.8 (-13.0; -2.6)	<0.001

	Staffing		Handoffs & Transitions		Non-punitive response to error	
Until 1 year – 1 to 5 years	-0.5 (-3.5; 2.5)	>0.999	5.5 (3.8; 7.2)	<0.001	0.8 (-3.6; 5.2)	>0.999
Until 1 year – 6 to 10 years	1.4 (-5.0; 7.8)	>0.999	9.8 (6.1; 13.5)	<0.001	2.9 (-2.2; 7.9)	>0.999
Until 1 year – 11 to 15 years	-0.8 (-6.7; 5.2)	>0.999	5.5 (-0.8; 11.7)	0.138	-4.6 (-12.6; 3.5)	>0.999
Until 1 year – 16 to 20 years	-2.4 (-10.6; 5.7)	>0.999	5.7 (-0.3; 11.7)	0.079	-1.7 (-13.3; 9.9)	>0.999
Until 1 year – more than 20 years	-8.1 (-19.9; 3.7)	0.510	3.6 (-3.1; 10.4)	>0.999	-4.8 (-14.0; 4.4)	>0.999
1 to 5 years – 6 to 10 years	1.9 (-3.9; 7.8)	>0.999	4.3 (1.8; 6.8)	<0.001	2.1 (-2.8; 6.9)	>0.999
1 to 5 years – 11 to 15 years	-0.3 (-4.0; 3.5)	>0.999	0.0 (-3.8; 3.8)	>0.999	-5.4 (-9.5; -1.2)	0.002
1 to 5 years – 16 to 20 years	-1.9 (-7.5; 3.6)	>0.999	0.2 (-3.0; 3.5)	>0.999	-2.5 (-11.2; 6.2)	>0.999
1 to 5 years – more than 20 years	-7.6 (-16.6; 1.4)	0.182	-1.8 (-7.0; 3.3)	>0.999	-5.6 (-12.7; 1.5)	0.299
6 to 10 years – 11 to 15 years	-2.2 (-4.6; 0.2)	0.105	-4.3 (-9.5; 0.9)	0.192	-7.4 (-14.5; -0.4)	0.029
6 to 10 years – 16 to 20 years	-3.9 (-8.0; 0.3)	0.101	-4.1 (-7.6; -0.6)	0.010	-4.6 (-14.9; 5.8)	>0.999
6 to 10 years – more than 20 years	-9.5 (-17.2; -1.9)	0.004	-6.2 (-10.4; -1.9)	<0.001	-7.6 (-17.3; 2.1)	0.297
11 to 15 years – 16 to 20 years	-1.7 (-4.1; 0.8)	0.530	0.2 (-4.3; 4.7)	>0.999	2.9 (-5.7; 11.4)	>0.999
11 to 15 years – more than 20 years	-7.3 (-15.3; 0.7)	0.104	-1.9 (-6.9; 3.1)	>0.999	-0.2 (-2.9; 2.5)	>0.999
16 to 20 years – more than 20 years	-5.7 (-12.6; 1.2)	0.207	-2.1 (-7.4; 3.2)	>0.999	-3.1 (-13.8; 7.7)	>0.999

Legend. CI: Confidential interval 95%

Supplementary Table 8S. Multiple comparisons among time-period at the professional category in the dimensions of the Hospital Survey on Patient Safety Culture

Contrasts	Mean (CI 95%)	P-value	Mean (CI 95%)	P-value	Mean (CI 95%)	P-value
	Teamwork within units		Expectations and actions promoting patient safety		Organizational learning – Continuous improvement	
Until 1 year – 1 to 5 years	4.9 (-0.3; 10.0)	0.079	3.1 (-2.1; 8.4)	0.537	1.7 (-1.0; 4.4)	0.674
Until 1 year – 6 to 10 years	6.8 (1.3; 12.3)	0.005	4.4 (-1.2; 9.9)	0.255	3.8 (-2.0; 9.5)	0.651
Until 1 year – 11 to 15 years	8.0 (2.2; 13.9)	0.001	6.5 (-1.4; 14.5)	0.213	4.0 (-1.8; 9.8)	0.553
Until 1 year – 16 to 20 years	5.0 (-0.3; 10.2)	0.079	2.2 (-3.6; 8.1)	0.899	4.8 (-2.1; 11.6)	0.553
Until 1 year – more than 20 years	1.4 (-1.8; 4.5)	0.728	-1.5 (-5.0; 2.0)	0.899	-1.1 (-4.3; 2.2)	>0.999
1 to 5 years – 6 to 10 years	1.9 (-1.2; 5.1)	0.568	1.2 (-0.4; 2.9)	0.308	2.0 (-2.3; 6.4)	>0.999
1 to 5 years – 11 to 15 years	3.1 (1.2; 5.1)	<0.001	3.4 (-1.0; 7.8)	0.281	2.3 (-1.7; 6.2)	0.753
1 to 5 years – 16 to 20 years	0.1 (-2.1; 2.3)	0.930	-0.9 (-5.0; 3.1)	0.899	3.0 (-2.0; 8.1)	0.732
1 to 5 years – more than 20 years	-3.5 (-5.9; -1.1)	<0.001	-4.7 (-8.8; -0.5)	0.017	-2.8 (-7.1; 1.5)	0.651
6 to 10 years – 11 to 15 years	1.2 (-0.9; 3.3)	0.595	2.2 (-0.8; 5.1)	0.308	0.2 (-0.7; 1.2)	>0.999
6 to 10 years – 16 to 20 years	-1.8 (-5.6; 1.9)	0.728	-2.2 (-5.6; 1.3)	0.517	1.0 (-1.4; 3.4)	>0.999
6 to 10 years – more than 20 years	-5.4 (-7.9; -3.0)	<0.001	-5.9 (-8.8; -3.0)	<0.001	-4.8 (-8.1; -1.5)	<0.001
11 to 15 years – 16 to 20 years	-3.0 (-5.7; -0.4)	0.012	-4.3 (-6.6; -2.0)	<0.001	0.7 (-0.9; 2.4)	>0.999
11 to 15 years – more than 20 years	-6.6 (-9.5; -3.8)	<0.001	-8.1 (-12.3; -3.9)	<0.001	-5.1 (-9.1; -1.0)	0.003
16 to 20 years – more than 20 years	-3.6 (-7.6; 0.4)	0.098	-3.8 (-6.9; -0.6)	0.007	-5.8 (-11.6; -0.1)	0.043
	Management support for Patient safety		Feedback & communication about errors		Frequency of events reported	
Until 1 year – 1 to 5 years	3.1 (-0.1; 6.3)	0.071	5.7 (1.6; 9.8)	0.001	3.0 (-2.7; 8.6)	>0.999
Until 1 year – 6 to 10 years	4.6 (-1.5; 10.7)	0.349	10.6 (7.1; 14.1)	<0.001	6.1 (-0.2; 12.3)	0.067
Until 1 year – 11 to 15 years	4.1 (-2.7; 10.8)	0.856	11.0 (6.8; 15.3)	<0.001	3.4 (-2.2; 9.0)	0.836
Until 1 year – 16 to 20 years	4.1 (-2.8; 11.0)	0.856	10.9 (8.8; 12.9)	<0.001	4.6 (-2.0; 11.2)	0.521
Until 1 year – more than 20 years	-2.1 (-9.7; 5.4)	>0.999	9.7 (5.9; 13.5)	<0.001	4.0 (-1.3; 9.3)	0.378
1 to 5 years – 6 to 10 years	1.5 (-1.4; 4.4)	>0.999	4.9 (2.7; 7.1)	<0.001	3.1 (2.1; 4.1)	<0.001
1 to 5 years – 11 to 15 years	1.0 (-2.4; 4.3)	>0.999	5.3 (2.4; 8.2)	<0.001	0.4 (-0.7; 1.6)	>0.999
1 to 5 years – 16 to 20 years	1.0 (-2.3; 4.2)	>0.999	5.2 (0.8; 9.6)	0.011	1.7 (-1.9; 5.3)	>0.999
1 to 5 years – more than 20 years	-5.2 (-12.2; 1.7)	0.349	4.0 (-2.1; 10.1)	0.559	1.0 (-1.7; 3.7)	>0.999
6 to 10 years – 11 to 15 years	-0.6 (-2.4; 1.2)	>0.999	0.4 (-1.7; 2.6)	>0.999	-2.7 (-4.4; -0.9)	<0.001
6 to 10 years – 16 to 20 years	-0.5 (-2.8; 1.7)	>0.999	0.3 (-2.9; 3.5)	>0.999	-1.4 (-5.0; 2.1)	>0.999
6 to 10 years – more than 20 years	-6.8 (-13.1; -0.4)	0.028	-0.9 (-4.4; 2.6)	>0.999	-2.1 (-5.1; 0.9)	0.521
11 to 15 years – 16 to 20 years	0.0 (-2.8; 2.9)	>0.999	-0.2 (-3.0; 2.7)	>0.999	1.2 (-1.2; 3.7)	>0.999
11 to 15 years – more than 20 years	-6.2 (-12.6; 0.2)	0.063	-1.3 (-6.2; 3.5)	>0.999	0.6 (-2.6; 3.7)	>0.999
16 to 20 years – more than 20 years	-6.2 (-10.0; -2.4)	<0.001	-1.2 (-6.2; 3.9)	>0.999	-0.7 (-5.5; 4.1)	>0.999
	Overall perceptions of patients safety		Communication openness		Teamwork across units	
Until 1 year – 1 to 5 years	4.0 (0.4; 7.6)	0.019	1.9 (-0.7; 4.5)	0.378	7.8 (4.6; 10.9)	<0.001
Until 1 year – 6 to 10 years	5.9 (0.6; 11.3)	0.019	4.0 (2.3; 5.8)	<0.001	11.0 (7.2; 14.8)	<0.001
Until 1 year – 11 to 15 years	5.0 (0.5; 9.5)	0.016	3.1 (0.2; 6.1)	0.028	8.5 (2.7; 14.3)	<0.001
Until 1 year – 16 to 20 years	3.1 (-2.5; 8.6)	0.662	0.4 (-2.9; 3.7)	>0.999	8.9 (6.3; 11.5)	<0.001
Until 1 year – more than 20 years	-1.5 (-7.5; 4.4)	>0.999	-3.1 (-9.0; 2.9)	0.802	3.9 (-2.5; 10.3)	0.722
1 to 5 years – 6 to 10 years	2.0 (-1.4; 5.3)	0.636	2.1 (-0.9; 5.2)	0.467	3.2 (1.7; 4.7)	<0.001
1 to 5 years – 11 to 15 years	1.0 (-2.0; 4.0)	>0.999	1.2 (-1.9; 4.3)	>0.999	0.7 (-3.7; 5.1)	>0.999
1 to 5 years – 16 to 20 years	-0.9 (-5.1; 3.3)	>0.999	-1.5 (-6.6; 3.5)	>0.999	1.1 (-2.3; 4.6)	>0.999
1 to 5 years – more than 20 years	-5.5 (-13.4; 2.4)	0.403	-5.0 (-13.2; 3.3)	0.665	-3.9 (-11.8; 4.0)	>0.999
6 to 10 years – 11 to 15 years	-1.0 (-2.2; 0.3)	0.256	-0.9 (-2.2; 0.3)	0.378	-2.5 (-7.9; 3.0)	>0.999
6 to 10 years – 16 to 20 years	-2.9 (-5.1; -0.6)	0.003	-3.6 (-8.4; 1.1)	0.329	-2.1 (-6.0; 1.9)	>0.999
6 to 10 years – more than 20 years	-7.5 (-13.5; -1.5)	0.004	-7.1 (-13.0; -1.2)	0.007	-7.1 (-15.8; 1.6)	0.202
11 to 15 years – 16 to 20 years	-1.9 (-3.9; 0.1)	0.066	-2.7 (-7.3; 1.9)	0.665	0.4 (-2.9; 3.7)	>0.999
11 to 15 years – more than 20 years	-6.5 (-11.7; -1.3)	0.004	-6.2 (-11.9; -0.5)	0.022	-4.6 (-9.2; 0.0)	0.047
16 to 20 years – more than 20 years	-4.6 (-8.4; -0.8)	0.007	-3.5 (-8.6; 1.6)	0.470	-5.0 (-10.1; 0.0)	0.049

	Staffing		Handoffs & Transitions		Non-punitive response to error	
Until 1 year – 1 to 5 years	0.7 (-1.3; 2.7)	0.899	1.1 (-3.4; 5.5)	>0.999	1.2 (-2.9; 5.4)	>0.999
Until 1 year – 6 to 10 years	-1.4 (-3.8; 1.0)	0.606	2.6 (0.6; 4.6)	0.003	1.0 (-3.2; 5.2)	>0.999
Until 1 year – 11 to 15 years	-2.5 (-5.8; 0.8)	0.286	-0.2 (-3.1; 2.6)	>0.999	-4.2 (-7.6; -0.7)	0.006
Until 1 year – 16 to 20 years	-2.9 (-4.3; -1.6)	<0.001	2.5 (-0.6; 5.5)	0.251	-3.5 (-13.9; 7.0)	>0.999
Until 1 year – more than 20 years	-9.8 (-15.5; -4.1)	<0.001	-2.8 (-9.5; 3.8)	>0.999	-6.6 (-17.2; 4.1)	0.725
1 to 5 years – 6 to 10 years	-2.1 (-4.5; 0.4)	0.156	1.5 (-2.1; 5.2)	>0.999	-0.2 (-2.2; 1.7)	>0.999
1 to 5 years – 11 to 15 years	-3.1 (-7.2; 0.9)	0.266	-1.3 (-4.1; 1.5)	>0.999	-5.4 (-10.1; -0.8)	0.010
1 to 5 years – 16 to 20 years	-3.6 (-6.6; -0.6)	0.007	1.4 (-1.4; 4.2)	>0.999	-4.7 (-12.4; 2.9)	0.725
1 to 5 years – more than 20 years	-10.5 (-17.3; -3.6)	0.001	-3.9 (-8.9; 1.1)	0.281	-7.8 (-16.5; 0.9)	0.120
6 to 10 years – 11 to 15 years	-1.1 (-2.8; 0.7)	0.606	-2.9 (-5.0; -0.7)	0.001	-5.2 (-8.4; -2.0)	<0.001
6 to 10 years – 16 to 20 years	-1.5 (-4.6; 1.5)	0.672	-0.1 (-1.2; 0.9)	>0.999	-4.5 (-11.1; 2.1)	0.542
6 to 10 years – more than 20 years	-8.4 (-13.6; -3.2)	<0.001	-5.4 (-11.8; 0.9)	0.162	-7.6 (-14.2; -1.0)	0.011
11 to 15 years – 16 to 20 years	-0.5 (-3.5; 2.5)	0.899	2.7 (1.1; 4.3)	<0.001	0.7 (-5.6; 7.0)	>0.999
11 to 15 years – more than 20 years	-7.3 (-10.9; -3.7)	<0.001	-2.6 (-7.6; 2.5)	>0.999	-2.4 (-8.9; 4.1)	>0.999
16 to 20 years – more than 20 years	-6.9 (-12.3; -1.4)	0.004	-5.3 (-11.4; 0.8)	0.162	-3.1 (-6.7; 0.5)	0.147

Legend. CI: Confidential interval 95%

Supplementary Table 9S. Multiple comparisons among hours per week in the dimensions of the Hospital Survey on Patient Safety Culture

Contrasts	Mean (CI 95%)	P-value	Mean (CI 95%)	P-value	Mean (CI 95%)	P-value
	Teamwork within units		Expectations and actions promoting patient safety		Organizational learning – Continuous improvement	
< 20h – 20-39h	4.0 (0.5; 7.5)	0.013	4.2 (-2.5; 10.9)	0.399	-0.5 (-6.6; 5.7)	>0.999
< 20h – 40-59h	7.0 (1.1; 12.9)	0.009	5.2 (-1.4; 11.7)	0.256	-2.1 (-9.0; 4.9)	>0.999
< 20h – 60-79h	7.4 (-2.4; 17.2)	0.301	9.4 (-0.7; 19.6)	0.090	-0.7 (-11.5; 10.1)	>0.999
< 20h – ≥ 80h	5.7 (3.7; 7.7)	<0.001	3.0 (-0.4; 6.4)	0.120	-5.3 (-13.1; 2.5)	0.551
20-39h – 40-59h	3.0 (-2.0; 7.9)	0.672	0.9 (-1.3; 3.1)	0.687	-1.6 (-5.0; 1.8)	>0.999
20-39h – 60-79h	3.4 (-5.6; 12.3)	>0.999	5.2 (-2.4; 12.9)	0.399	-0.3 (-6.7; 6.1)	>0.999
20-39h – ≥ 80h	1.7 (-2.9; 6.3)	>0.999	-1.2 (-4.6; 2.2)	0.687	-4.8 (-10.4; 0.7)	0.145
40-59h – 60-79h	0.4 (-3.0; 3.8)	>0.999	4.3 (-1.4; 10.0)	0.283	1.3 (-3.8; 6.5)	>0.999
40-59h – ≥ 80h	-1.3 (-6.3; 3.8)	>0.999	-2.2 (-5.4; 1.1)	0.399	-3.2 (-10.6; 4.2)	>0.999
60-79h – ≥ 80h	-1.7 (-9.5; 6.2)	>0.999	-6.4 (-14.6; 1.8)	0.256	-4.6 (-16.7; 7.6)	>0.999
	Management support for Patient safety		Feedback & communication about errors		Frequency of events reported	
< 20h – 20-39h	3.1 (-2.7; 9.0)	>0.999	1.3 (-2.5; 5.0)	>0.999	3.4 (-5.8; 12.6)	>0.999
< 20h – 40-59h	2.9 (-2.2; 8.0)	>0.999	-1.5 (-3.9; 0.9)	0.858	1.4 (-2.5; 5.3)	>0.999
< 20h – 60-79h	5.9 (-6.2; 18.1)	>0.999	3.0 (-6.5; 12.6)	>0.999	6.5 (-2.8; 15.8)	0.477
< 20h – ≥ 80h	3.5 (0.2; 6.8)	0.027	2.7 (-3.1; 8.5)	>0.999	2.4 (-7.7; 12.5)	>0.999
20-39h – 40-59h	-0.2 (-3.3; 2.9)	>0.999	-2.8 (-8.3; 2.8)	>0.999	-2.0 (-7.3; 3.3)	>0.999
20-39h – 60-79h	2.8 (-6.1; 11.8)	>0.999	1.7 (-7.4; 10.8)	>0.999	3.1 (-1.4; 7.6)	0.477
20-39h – ≥ 80h	0.4 (-2.2; 2.9)	>0.999	1.5 (-4.3; 7.2)	>0.999	-1.0 (-9.4; 7.5)	>0.999
40-59h – 60-79h	3.0 (-4.4; 10.4)	>0.999	4.5 (-4.6; 13.6)	>0.999	5.1 (-0.8; 11.0)	0.160
40-59h – ≥ 80h	0.6 (-1.3; 2.5)	>0.999	4.2 (-4.5; 12.9)	>0.999	1.0 (-7.3; 9.4)	>0.999
60-79h – ≥ 80h	-2.5 (-11.0; 6.1)	>0.999	-0.3 (-13.1; 12.5)	>0.999	-4.1 (-16.2; 8.1)	>0.999
	Overall perceptions of patients safety		Communication openness		Teamwork across units	
< 20h – 20-39h	12.3 (3.3; 21.3)	0.002	12.8 (3.4; 22.3)	0.002	9.2 (-2.5; 20.9)	0.237
< 20h – 40-59h	13.2 (4.1; 22.3)	0.001	12.9 (3.3; 22.4)	0.002	12.5 (5.2; 19.7)	<0.001
< 20h – 60-79h	14.7 (4.0; 25.5)	0.001	16.4 (8.0; 24.9)	<0.001	10.6 (-0.9; 22.2)	0.092
< 20h – ≥ 80h	10.0 (5.8; 14.1)	<0.001	9.7 (8.0; 11.4)	<0.001	11.3 (4.8; 17.8)	<0.001
20-39h – 40-59h	0.9 (-3.2; 5.1)	0.786	0.0 (-3.1; 3.2)	>0.999	3.3 (-4.2; 10.7)	>0.999
20-39h – 60-79h	2.4 (-3.2; 8.1)	0.786	3.6 (-0.9; 8.1)	0.176	1.4 (-6.9; 9.8)	>0.999
20-39h – ≥ 80h	-2.3 (-7.3; 2.6)	0.786	-3.1 (-11.2; 5.0)	>0.999	2.1 (-8.4; 12.6)	>0.999
40-59h – 60-79h	1.5 (-0.5; 3.5)	0.295	3.6 (2.2; 5.0)	<0.001	-1.8 (-6.6; 3.0)	>0.999
40-59h – ≥ 80h	-3.3 (-9.6; 3.0)	0.786	-3.2 (-11.7; 5.3)	>0.999	-1.1 (-10.2; 7.9)	>0.999
60-79h – ≥ 80h	-4.8 (-13.1; 3.5)	0.697	-6.8 (-15.0; 1.5)	0.176	0.7 (-11.8; 13.2)	>0.999
	Staffing		Handoffs & Transitions		Non-punitive response to error	
< 20h – 20-39h	8.1 (0.3; 15.8)	0.037	3.6 (-7.1; 14.2)	>0.999	12.8 (-3.7; 29.3)	0.261
< 20h – 40-59h	13.1 (4.5; 21.6)	<0.001	7.3 (-5.2; 19.7)	0.956	11.3 (-6.6; 29.2)	0.578
< 20h – 60-79h	15.7 (5.1; 26.4)	<0.001	8.7 (-11.7; 29.1)	>0.999	8.7 (-9.6; 27.0)	>0.999
< 20h – ≥ 80h	13.4 (8.0; 18.8)	<0.001	5.1 (-6.6; 16.8)	>0.999	9.1 (-2.3; 20.6)	0.230
20-39h – 40-59h	5.0 (0.8; 9.1)	0.009	3.7 (-2.5; 10.0)	0.956	-1.5 (-5.5; 2.5)	>0.999
20-39h – 60-79h	7.7 (-0.1; 15.4)	0.055	5.2 (-6.0; 16.3)	>0.999	-4.1 (-8.7; 0.6)	0.140
20-39h – ≥ 80h	5.3 (1.2; 9.5)	0.004	1.5 (-6.9; 10.0)	>0.999	-3.7 (-11.3; 4.0)	>0.999
40-59h – 60-79h	2.7 (-1.5; 6.9)	0.385	1.4 (-6.8; 9.7)	>0.999	-2.6 (-4.5; -0.6)	0.002
40-59h – ≥ 80h	0.3 (-2.0; 2.7)	0.770	-2.2 (-7.3; 2.9)	>0.999	-2.1 (-8.8; 4.5)	>0.999
60-79h – ≥ 80h	-2.3 (-7.6; 3.0)	0.651	-3.6 (-14.4; 7.2)	>0.999	0.4 (-6.6; 7.4)	>0.999

Legend. CI: Confidential interval 95%