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## Infection control

### "Clean hands are safer hands" - Statewide project for hand hygiene improvement, state of São Paulo, Brazil

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**Background:** Hand hygiene is a basic measure to reduce healthcare-related infections and although it is a simple measure, low compliance among health professionals is a worldwide problem. The first Global Challenge for Patient Safety proposed by the WHO includes guidelines to encourage health professionals to wash their hands at the "right moment", by implementing a multimodal strategy. Acknowledging the importance of this strategy, the Division of Hospital Infection of the Epidemiological Surveillance Centre has developed a government project to encourage adherence to hand hygiene by implementing the "Clean hands are safer hands" project in hospitals of the state of São Paulo.

**Methods:** In October 2010, an institutional Work Group was created to define the implementation strategies proposed by the WHO adapted to the Brazilian reality; conduct training and evaluate the results. Hospital adhesion was voluntary, subject to the choice of at least one institutional unit for project implementation, and as the minimum criterion, the availability of alcoholic preparation for hand hygiene at the healthcare site and access to liquid soap and paper towels. The project began in August 2011 and ended in July 2012. The improvement indicators were assessed through questionnaires sent to professionals in the unit at the beginning and end of the project regarding the structure for hand sanitation; perception and knowledge of the professionals on hand hygiene and amount of alcoholic product measured monthly (mL) relative to the number of patients day (PDs) at the unit. This study will show the results of amount of alcoholic product used.

**Results:** A total of 585 institutions were trained, with effective implementation in 149 units of 122 hospitals: 103 intensive care units (ICUs) and 46 non-intensive care unit (non-ICUs). In the ICUs, the median consumption of alcoholic product increased from 13.2 mL/PDs to 23.7 mL/PDs, when compared to the initial and final periods, with the same occurring in non-ICUs, where it increased from 9.4 mL/PDs to 15 mL/PDs (Table 1).

**Conclusions:** There was an increase in the consumption of alcoholic product in the units participating in the project, especially in the ICUs, but within the minimum standards acceptable by the WHO. New government proposals to expand the project aim to ensure sustained improvements in hand hygiene, as well as building a benchmarking of alcoholic product consumption in Brazilian hospitals.

Table 1. Characterization of the units participating in the project "Clean Hands are safer hands" and distribution of alcoholic product consumption (mL / PD) - State of Sao Paulo, Brazil, August 2011 to July 2012.

Type of unit	Period	Hospitals	Units	PDs	Consumption L	Distribution of alcohol based sub-consumption mL/PD					
						Hand	100	200	700	800	
					mean	median	percentile	Median	percentile	percentile	
ICU	Aug/11	82	98	27.681	871	38	2.8	6.7	13.2	23	43.6
	Jul/12	82	98	38.499	1583	41.1	13.6	17.8	23.7	48.6	81.7
	Total	82	98	424.798	148.099	34.4	13.6	14.9	22	38.8	45.3
Non-ICU	Aug/11	33	23	28.171	892	27.5	2.1	4.1	9.4	16	43.6
	Jul/12	33	21	36.239	897	38	6.4	11	19	28.4	34.4
	Total	33	21	300.542	10.128	28.8	7.8	8.1	14.7	21	37.1
PD (mean-SD)											