

Supplementary File 5: Studies reporting overall contamination using other quantitative methods

AUTHOR YEAR	SETTING	DEVICE AND NUMBER	OUTCOME MEASURES	CONTAMINATION MEASURED USING OTHER QUANTITATIVE METHODS
CATANO 2012	Tertiary hospital	30 keyboards	Total bacterial load	39 isolations obtained from the 30 keyboards; 56.4% of isolations considered potentially clinically relevant
DANCER 2008	2 acute surgical wards at a teaching hospital	2 keyboards (52 total swabs)	Hygiene failure (a site with ACC > 2.5 CFU/cm ² or any site with the presence of MSSA or MRSA)	13/52 swabs
HARDY 2014	All wards in 3 hospitals	Unknown number of computer keyboards and COWs	Percentage of times each of the sites failed (>1,000 RLU) ATP monitoring	Computers on wheels: 33.1% Keyboards: 34.7%
HARTMANN 2004	ICU	Unknown number of keyboards and mice	Potentially pathogenic microorganisms (2+ CFU)	Keyboards: 15/238 (6.3%) of samples Mice: 13/238 (5.5%) of samples
MAN 2002	Nurse stations, patient bed bays in a number of different wards	85 computer keyboards + 80 mice + 44 mouse pads	Total bacterial load	40/85 (47%) keyboards, 36/80 (45%) mice, and 15/44 (34%) mouse pads yielded multiple bacterial species
MOORE 2013	ICU and GI surgical wards	Unclear # of keyboards	Aerobic colony counts	GI ward: 8/66 (12%) keyboards contaminated at levels > 100 CFU/ 25 cm ² on at least 1 occasion Data for ICU not reported
PUGLIESE 2011	Emergency dept	72 keyboards	Total bacterial load	10 (13.8%) colonized with 9 different identified bacteria
RASTOGI 2012	NICU	3 keyboards	Total bacterial load	5 positive cultures obtained from keyboards
SAITO 2015	Six ORs	12 keyboards and 6 touch screens	mean ATP value (log ₁₀ RLU)	Keyboards for nurses: 2.8 +/- 0.3 Keyboards for anesthesiologists: 2.8 +/- 0.3 Touch screens for anesthesiologists: 2.0 +/- 0.3
SYKES 2006	Unknown clinical setting, UK	5 ultrasound machine keyboards	Total bacterial load	Pathogens identified: Acinetobacter (2 keyboards), Acinetobacter Iwoffii, Enterococcus faecium, Enterococcus faecalis, Pseudomonas putida, S. aureus (fully sensitive)

Abbreviations: ACC = Aerobic Colony Counts, ATP = Adenosine triphosphate, CFU = Colony forming units, COWs = computers on wheels, GI = gastrointestinal, ICU = Intensive care unit, NICU = Neonatal Intensive Care Unit, OR = Operating room, RLU = Relative light units, S. aureus = Staphylococcus aureus