Rank contact event (HCE)Non-sterile equipment touched by non-scrubbed staff immediately after patient contactTotal HCE (N=591)1Storage trolley top462IV bag/line463OR table control414Door plate335Anaesthetic work station266Suction canister/tubes257IV Pole258Positioning supports249Ward bed upper surface2310Olympus stack2311Patient notes2112Bedding/gown2013Anaesthetic top1516Moving and handling glide board/sheet1417Oxygen mask/tubing1418ECG cables1319Oxygen cylinder1121Seats upper surface1022Blood Pressure cables/cuff9
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21Seats upper surface1022Blood Pressure cables/cuff9
22 Blood Pressure cables/cuff 9
23 Medication canister 9
24Oxygen saturation probe and cables925IV Pump buttons8
251v Fullip buttons826Operating light handle outer edge7
20Operating light handle outer edge727Storage trolley drawer6
28 OR phone 6
29 Monitors (excluding computer monitor) 6
25Montol's (excluding computer montol')030Computer keyboard and mouse6
31 Syringe 5
32 Waste bag 5
33 Elastic adhesive bandage 4
34 Diathermy machine 3
35 Warming blanket/machine 3
36Vascular compression garment3
37 Ward bed control 3
38 Urinary Catheter 3
39 Laryngoscope 2
40 Sharps bin lid 2
41 Basin on wheels top edge 2
42 Disposable floor cable safety mat 2
43 Blood glucose monitor 1
44 Clamp 1
45 Foot button 1
46 Laryngeal mask packet 1
47 Medication cupboard 1
48 Microscope remote control 1
49 Needle packets 1
50 Pen 1
51 Personal Protective Equipment dispenser 1
52 Non-sterile glove 1
53 Shelf (for notes) 1
54 Urinary catheter support 1
55 Clip board 1
56 Light Switch 1
57 Nappy 1

**Table A1** Non-sterile equipment, excluding hand hygiene products, touched by non-scrubbed healthcare workers. During 11 full length (12 hours 50 minutes) surgical operations.

Appendix Table A2. Non-sterile equip	Appendix Table A2. Non-sterile equipment touched by non-scrubbed staff during a full			
length (185 minutes) Ophthalmology surgery (Ophthalmology 2 Adult)				
Non-sterile equipment touched in the	Hand	Non-sterile equipment	Hand	
patient zone	contact	touched in the	contact	
	events	healthcare zone	events	
IV bag/line	7	Door plate	1	
OR table control	6	Clip board	1	
IV Pole	5		<u>.                                    </u>	
Operating table top	4			
Ward bed upper surface	4			
Moving and handling glide board/sheet	4			
Oxygen cylinder	3			
IV Pump buttons	3			
Suction canister/tubes	3			
Anaesthetic work station IV tray	3			
Urinary Catheter	3			
Syringe	2			
Olympus stack	2			
Warming blanket/machine	2			
Storage trolley top	1			
	1			
Positioning supports				
Blood Pressure cables/cuff	1			
Ward bed control	1			
Vascular compression garment	1			

<b>Table A3.</b> Non-sterile equipment touched by non-scrubbed staff during a full length (80 minutes) Gynaecology surgery. Gynaecology 1 Adult					
Non-sterile equipment touched in the		Non-sterile equipment	Hand		
patient zone	contact	touched in the healthcare	contact		
	events	zone	events		
OR table control	12	Medication canister	4		
Storage trolley top	8	Door plate	3		
Seats upper surface	5	shelf (for notes)	1		
Anaesthetic work station	3	PPE Gloves	1		
IV Pump buttons	3	Medication cupboard	1		
IV Pole	2	Waste bag	1		
Bedding/gown	2	Floor cable safety mat	2		
Blood Pressure cables/cuff	1	Sharps bin lid	1		
Operating light handle outer edge	1	Foot button	1		
Urinary Catheter Support	1	Storage trolley drawer	1		
Olympus stack	1				
Syringe	1				
Moving and handling glide board/sheet	1				
Vascular compression garment	1				
Warming blanket/machine	1				

**Appendix Table A4.** Non-sterile equipment touched by non-scrubbed staff during a full length (40 minutes) Ear Nose Throat surgery. Ear Nose Throat 1 Adult

Non-sterile equipment touched in the	Hand	Non-sterile equipment	Hand
patient zone	contact	touched in the healthcare	contact
	events	zone	events
Storage trolley top	8	Elastic adhesive bandage	3
Olympus stack	5	Door plate	3
Anaesthetic work station IV tray	5	Storage trolley drawer	2
Suction canister/tubes	3	Laryngeal mask packet	1
Anaesthetic work station	2	Medication canister	1
IV Pole	2	Patient notes	4
Syringe	2		I
Breathing circuit	1		
Oxygen mask/tubing	1	-	
Seats upper surface	1		
Positioning supports	1		
IV bag/line	1	-	
Clamp	1	-	
		1	

Appendix Table A5. Non-sterile equipment touched by non-scrubbed staff during a full

length (65 minutes) Ear Nose Throat surgery. Ear Nose Throat 2 Adult

Non-sterile equipment touched in the	Hand	Non-sterile equipment	Hand
patient zone	contact	touched in the healthcare	contact
	events	zone	events
Storage trolley top	12	Door plate	3
Anaesthetic work station	6	Medication box	1
Bedding/gown	5	Pen	1
Ward bed upper surface	4	Elastic adhesive bandage	1
IV bag/line	4	Storage trolley drawer	1
Blood Pressure cables/cuff	4	Patient notes	2
Oxygen mask/tubing	3		
Positioning supports	3		
Oxygen saturation probe and cables	3		
Oxygen cylinder	3		
Suction canister/tubes	3		
Laryngoscope	2		
Operating table top	2		
ECG cables	2		
Olympus stack	2		
Breathing circuit	1		
Moving and handling glide board/sheet	1		

**Appendix Table A6.** Non-sterile equipment touched by non-scrubbed staff during a full length (40 minutes) Ear Nose Throat surgery. Ear Nose Throat 3 Adult

Non-sterile equipment touched in the	Hand	Non-sterile equipment	Hand
patient zone	contact	touched in the healthcare	contact
	events	zone	events
IV bag/line	11	Door plate	2
Storage trolley top	10	Comp. keyboard &	1
		mouse	
Suction canister/tubes	6	Storage trolley drawer	1
OR table control	5		1
Anaesthetic work station IV tray	3		
Oxygen saturation probe and cables	3		
Diathermy machine	3		
Anaesthetic work station	3		
Bedding/gown	2		
IV Pump buttons	2		
Positioning supports	1		
Operating table top	1		
Breathing circuit	1		
Ward bed control	1		
IV Pole	1		
Moving and handling glide board/sheet	1		

**Appendix Table A7.** Non-sterile equipment touched by non-scrubbed staff during a full length (60 minutes) maxillofacial surgery. Maxillofacial 1 Adult

Non-sterile equipment touched in the	Hand	Non-sterile equipment	Hand
patient zone	contact	touched in the healthcare	contact
	events	zone	events
IV bag/line	12	Comp. keyboard &	4
		mouse	
Moving and handling machine	10	Door plate	3
IV Pole	4	Patient notes	3
Positioning supports	3	OR phone	2
Olympus stack	2	Sharps bin lid	1
Operating light handle outer edge	2	Storage trolley drawer	1
Anaesthetic work station IV tray	1		
Oxygen cylinder	1		
Seats upper surface	1		
Oxygen mask/tubing	1		

## Appendix Table A8. Non-sterile equipment touched by non-scrubbed staff during a full length (30 minutes) maxillofacial surgery. Maxillofacial2 Children

	L		
Non-sterile equipment touched in the	Hand	Non-sterile equipment	Hand
patient zone	contact	touched in the healthcare	contact
	events	zone	events
Oxygen mask/tubing	4	Patient notes	4
Oxygen cylinder	4	Door plate	1
Operating table top	4		
Anaesthetic work station IV tray	3		
		-	
Anaesthetic work station	2		
		-	
Olympus stack	2		
		-	
Breathing circuit	2		
		4	
Storage trolley top	1		
ECG cables	1		
		]	

Appendix Table A9. Non-sterile equipment touched by non-scrubbed staff during a full				
length (55 minutes) ophthalmology surgery. Ophthalmology 1 Adult				
Non-sterile equipment touched in the	Hand	Non-sterile equipment	Hand	
patient zone	contact	touched in the healthcare	contact	
	events	zone	events	
IV bag/line	5	Door plate	5	
IV Pole	3	OR phone	3	
OR table control	1	Patient notes	2	
Breathing circuit	1	Waste bag	2	
Positioning supports	1	Comp. keyboard &	1	
		mouse		
Blood glucose monitor	1	PPE dispenser	1	
Anaesthetic work station IV tray	1	Needle packets	1	
Basin on wheels top edge	1		1	
Microscope remote control	1			

## Appendix Table A10. Non-sterile equipment touched by non-scrubbed staff during a full

length (80 minutes) urology surgery. Urology 1 Adult

Non-sterile equipment touched in the	Hand	Non-sterile equipment	Hand
patient zone	contact	touched in the healthcare	contact
	events	zone	events
Storage trolley top	6	Door plate	3
Positioning supports	6	Waste bag	2
IV bag/line	6	OR phone	1
IV Pole	6	Patient notes	1
Suction canister/tubes	5		
Olympus stack	4		
Monitors (excluding computer monitor)	3		
Anaesthetic work station	3		
OR table control	3		
Bedding/gown	2		
Seats upper surface	2		
Ward bed upper surface	1		
Ward bed control	1		
Vascular compression garment	1		
Operating table top	1		
ECG cables	1		
Moving and handling machine	1		

## Appendix Table A11. Non-sterile equipment touched by non-scrubbed staff during a full

length (60 minutes) urology surgery. Urology 2 Children

Non-sterile equipment touched in the	Hand	Non-sterile equipment	Hand
patient zone	contact	touched in the healthcare	contact
	events	zone	events
Positioning supports	8	Door plate	3
Anaesthetic work station	7	Medication canister	3
Ward bed upper surface	6	Patient notes	2
Breathing circuit	6		<u> </u>
ECG cables	5		
Bedding/gown	5		
Moving and handling glide board/sheet	4		
Monitors (excluding computer monitor)	3		
Oxygen mask/tubing	3		
Operating light handle outer edge	3		
Oxygen saturation probe and cables	3		
Olympus stack	3		
IV Pole	2		
OR table control	2		
OK table control	2		

## Appendix Table A12. Non-sterile equipment touched by non-scrubbed staff during a full

length (75 minutes) urology surgery. Urology 3 Children

Non-sterile equipment touched in the	Hand	Non-sterile equipment	Hand
patient zone	contact	touched in the healthcare	contact
	events	zone	events
Ward bed upper surface	8	Door plate	6
Suction canister/tubes	5	Patient notes	3
Breathing circuit	4	Light Switch	1
ECG cables	4		<u> </u>
Bedding/gown	4	-	
Operating table top	3	-	
Blood Pressure cables/cuff	3	-	
Moving and handling glide board/sheet	3	-	
Olympus stack	2	-	
Oxygen mask/tubing	2	-	
Operating light handle outer edge	1	-	
Seats upper surface	1	-	
Basin on wheels top edge	1	-	
Nappy	1	-	