

Table S1—Frequencies of environmental events

Event	Frequency	Overall	Not Post-Call	Post-Call
		Mean Observations Per Case		
<i>Miscellaneous</i>				
Team members talking and are interrupted by another team member	12	0.03	0.03	0.03
Sterile break (e.g., touching non-sterile equipment)	31	0.09	0.08	0.10
Equipment alerts	16	0.04	0.06	0.03
Miscellaneous Cluster Total	59	0.16	0.10	0.07
<i>E-Task Cluster</i>				
Complex or high-risk patient (noted at onset)	21	0.06	0.04	0.09
Incorrect patient information (noted verbally)	1	0.003	0	0.02
Anesthesia delays or interrupts surgery	19	0.05	0.02	0.10
E-Task Cluster Total[‡]	41	0.11	0.04	0.08
<i>Organization Cluster</i>				
Team members discuss management of next case	50	0.14	0.13	0.17
Teaching	266	0.74	0.79	0.74
Notice of time pressure	7	0.02	0.03	0.01
Organization Cluster Total	323	0.89	0.53	0.36
<i>Equipment Cluster</i>				
Equipment missing	70	0.19	0.2	0.2
Equipment broken	22	0.06	0.09	0.03
Unfamiliar equipment	14	0.04	0.05	0.03
Unclean equipment at start	1	0.003	0.005	0
Equipment dropped—needs to be cleaned	39	0.11	0.14	0.07
Unable to find necessary information in chart	6	0.02	0.03	0
Equipment malfunction	24	0.07	0.06	0.07
Equipment Cluster Total[*]	192	0.53	0.36	0.17
<i>Distractor Cluster</i>				
Miscellaneous noise	18	0.05	0.08	0.01
Music playing	109	0.30	0.24	0.42
Team member paged	150	0.42	0.39	0.50
Team member pages someone	47	0.13	0.09	0.19
Team member cell phone rings [*]	37	0.10	0.08	0.15
Team member answers cell phone	51	0.14	0.14	0.16
Team member calls someone on cell phone	240	0.66	0.62	0.79
Telephone rings in OR	230	0.64	0.84	0.42
Overhead speaker announcement [†]	62	0.17	0.28	0.04
Distractor Cluster Total	944	2.61	1.54	1.07

* p<0.05

† p<0.001

‡ p=0.001

Table S2—Frequencies and proportions of clinical and human factors errors

	Post-Call Status			
	<i>No</i>		<i>Yes</i>	
	#	%	#	%
Clinical Errors	2	1.01	5	3.55
Human Factor Errors	2	1.10	4	2.84
All Errors*	4	2.02	9	6.38
Cases	198		141	

*p=0.165 Post-Call “Yes” vs. Post-Call “No”

Figure S1—Attending surgeon/obstetrician study-post-OR questionnaire

Today's Date: ____/____/____ (mm/dd/yy) Time: ____ hr ____ min AM / PM

1. What was your role in this procedure?
 - a. Study Subject - attending surgeon / obstetrician / gynecologist
 - b. Other attending surgeon / obstetrician / gynecologist
 - c. Resident surgeon / obstetrician / gynecologist
 - d. Attending anesthesiologist
 - e. Resident anesthesiologist
 - f. Scrub Nurse
 - g. Circulating Nurse
 - h. Other (please describe) _____

2. In total, how many hours of sleep did you obtain last night (subtracting out the amount of time you were awake if you were awoken)? ____ hr ____ min

3. How many times were you awoken for work duties (e.g. paged)? ____ times

4. Please rate the quality of your sleep last night
awful|-----|excellent

5. How do you feel right now?
sleepy|-----|alert

6. On average, how much have you slept per 24 hours over the past 7 days? ____ hr ____ min

7. How would you rate the quality of teamwork during this procedure?
___ poor ___ fair ___ good ___ very good ___ excellent

8. How would you rate the quality of communication during this procedure?
___ poor ___ fair ___ good ___ very good ___ excellent

9. Did any medical errors, near misses, adverse events, or complications occur during this surgery (whether preventable or not)?
___ Yes ___ No
 - a. If so, how many? ____ events

Please briefly describe each incident on the attached pages

Figure S2—Attending surgeon/obstetrician study-staff reporting form

Case number ____ - ____ ____ ____
(completed by research team)

Patient Safety Study: Incident Reporting Form for Staff

Adverse events, near misses, and medical errors.

(Actual adverse events should be reported by the usual hospital incident reporting system as well)

May be completed by *any* member of the staff (nursing, respiratory therapy, physicians, secretary, etc). Includes corrected orders (verbal or written) or “catches” that may have prevented possible patient injury, unnecessary testing or patient discomfort.

This is a confidential form that will not be part of any patient or hospital records. It will be used only for purposes of quality improvement and research. Only study researchers at your institution will have access to these reports. Clinical staff and other hospital personnel will be provided with no knowledge of specific reports, events or reporters (de-identified summaries may be provided to programs for education, quality improvement, and research purposes).

1. Patient name _____

2. Patient ID # _____

3. Location _____

4. Date incident occurred ____ / ____ / ____

5. Time incident occurred ____:____ ____AM or ____ PM

6. Please briefly describe the incident (for medications, include name of drug) and, when applicable, what you and the team did to prevent or minimize harm

7. Was a problem in communication involved in this incident? ___ Yes ___ No

If yes, please describe briefly (who was involved or should have been involved in communication; nature of communication problem)

8. Did a problem with vigilance, alertness, or sleepiness contribute to the incident? ___ Yes ___ No

Thank you!