Appendix 1. Survey on perioperative personal electronic device use

Q1

**On average, how many days per week are you in the operating room?**

* 0 (0)
* 1 (1)
* 2 (2)
* 3 (3)
* 4 (4)
* 5 (5)
* 6 (6)
* 7 (7)

Q2

**On average, how often do YOU *write/read a text* from your personal electronic device while you are at work but OUTSIDE the operating room?**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q3

**On average, how often do YOU *make/answer phone calls* on your personal electronic device while you are at work but OUTSIDE the operating room?**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q4

**On average, how often do YOU b*rowse the internet* from your personal electronic device while you are at work but OUTSIDE the operating room?**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q5

**On average, how often do YOU *write/read a text* from your personal electronic device while you are INSIDE the operating room?**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q6

**On average, how often do YOU *make /answer phone calls* on your personal electronic device while you are INSIDE the operating room?**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q7

**On average, how often do YOU *browse the internet* from your personal electronic device while you are INSIDE the operating room?**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q8

**On average, how often have you observed OTHER MEMBERS of the operating room staff (nurses, surgeons, other anesthesia providers) *write/read a text* from your personal electronic device while INSIDE the operating room?**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q9

**On average, how often have you observed OTHER MEMBERS of the operating room staff (nurses, surgeons, other anesthesia providers) *make /answer phone calls* on your personal electronic device while INSIDE the operating room?**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q10

**On average, how often have you observed OTHER MEMBERS of the operating room staff (nurses, surgeons, other anesthesia providers) *browse the internet* from a personal electronic device while INSIDE the operating room?**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q11

**How often do you text/talk about medical cases that you are working on with colleagues involved in the patient's care on your personal electronic device.**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q12

**Do you post on social media regarding medical cases that you have worked on at your hospital/clinic?**

* Yes (1)
* No (2)
* It depends (3)

Q13

**Does your hospital have a policy regarding the use of personal electronic devices in the operating rooms that you are familiar with?**

* Yes (1)
* No (2)
* I don't know (3)

Q14

**Do you think that establishment of “no phone/electronic devices" policies in your institution will be beneficial for your patient care?**

* Yes (1)
* No (2)
* Depends on the specifics of the policy (3)

Q15

**Do you think a policy on the use of personal electronic devices in the operating room is reasonable and rationale in 2020?**

* Yes (1)
* No (2)
* Depends on the specifics of the policy (3)

Q16

**Have you ever heard about any lawsuits related with health care and use of personal electronic device data?**

* Yes (1)
* No (2)

Q17

Please rank the following proportion of your personal electronic device usage during work from Rarely to Frequently for each item.  
   
 **JOB-RELATED TASKS**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q18

**SOCIAL MEDIA**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q19

**ENTERTAINMENT**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q20

**ONLINE SHOPPING**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q21

**BANKING**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q22

**EDUCATIONAL USE**

* Never (1)
* Rarely (about once a month) (2)
* Sometimes (about once a week) (3)
* Often (about once a day) (4)
* Frequently (multiple times a day) (5)

Q23

**Have you ever had a significant distraction within the operating room because of your personal electronic devices?**

* Yes (1)
* No (2)

Q24

**Have you ever recognized in others or heard about a significant distraction within the OR because of personal electronic devices?**

* Yes (1)
* No (2)

Q25

**Do you think you should reduce the time spent with your own personal electronic device?**

* Yes (1)
* No (2)

Q26

**Sometimes, after I stop using my personal electronic device, I have the need to start using it again.**

* Yes (1)
* No (2)

Q27

**Do you think or recognize that the use of the personal electronic devices can affect your attention and thus the patient safety?**

* Yes (1)
* No (2)

Q28

**What is your age?**

* Less than 30 years (1)
* 30 to 39 years (2)
* 40 to 49 years (3)
* 50 to 59 years (4)
* 60 to 69 years (5)
* 70 years or more (6)

Q29

**Are you currently:**

* a resident (1)
* a fellow (2)
* in practice (3)

Q30

**For how many years have you been in practice since the end of your residency/fellowship?**

* 0 to 4 years (1)
* 5 to 9 years (2)
* 10 to 14 years (3)
* 15 to 19 years (4)
* 20 years or more (5)
* N/A (6)

Q31

**Do you work with any of the following?**  
(Mark all that apply.)

* Medical students (1)
* Physician resident anesthesiologists (2)
* Student registered nurse anesthetists (SRNAs) (3)
* Certified registered nurse anesthetists (CRNAs) (4)
* Anesthesiologist assistants (AAs) (5)

Appendix 2. Perioperative Use of Electronic Devices Summary of Survey Data

| **Perioperative Use of Electronic Devices Summary of Survey Data** | |
| --- | --- |
|  | Total (N=249) |
| **Average of PED use outside OR** |  |
| N | 241 |
| Mean (SD) | 3.6 (0.9) |
| Median | 3.7 |
| Q1, Q3 | 3.0, 4.3 |
| Range | (1.0-5.0) |
|  |  |
| **Average of PED use inside OR** |  |
| N | 236 |
| Mean (SD) | 1.8 (0.9) |
| Median | 1.5 |
| Q1, Q3 | 1.0, 2.3 |
| Range | (1.0-5.0) |
|  |  |
| **Average of PED use observed by others inside OR** |  |
| N | 230 |
| Mean (SD) | 2.9 (1.1) |
| Median | 3.0 |
| Q1, Q3 | 2.0, 3.7 |
| Range | (1.0-5.0) |
|  |  |
| **Q1: Avg Number of days in OR per Week** |  |
| 0 | 3 (1.2%) |
| 1 | 13 (5.2%) |
| 2 | 12 (4.8%) |
| 3 | 29 (11.6%) |
| 4 | 95 (38.2%) |
| 5 | 94 (37.8%) |
| 6 | 3 (1.2%) |
|  |  |
| **Q2: Frequency respondent Texts from PED outside OR** |  |
| Missing | 7 |
| 1=Never | 8 (3.3%) |
| 2=Rarely (about once a month) | 7 (2.9%) |
| 3=Sometimes (about once a week) | 13 (5.4%) |
| 4=Often (about once a day) | 63 (26.0%) |
| 5=Frequently (multiple times a day) | 151 (62.4%) |
|  |  |
| **Q3: Frequency respondent uses Phone from PED outside OR** |  |
| Missing | 7 |
| 1=Never | 28 (11.6%) |
| 2=Rarely (about once a month) | 82 (33.9%) |
| 3=Sometimes (about once a week) | 70 (28.9%) |
| 4=Often (about once a day) | 37 (15.3%) |
| 5=Frequently (multiple times a day) | 25 (10.3%) |
|  |  |
| **Q4: Frequency respondent Browses Internet from PED outside OR** |  |
| Missing | 6 |
| 1=Never | 14 (5.8%) |
| 2=Rarely (about once a month) | 35 (14.4%) |
| 3=Sometimes (about once a week) | 41 (16.9%) |
| 4=Often (about once a day) | 59 (24.3%) |
| 5=Frequently (multiple times a day) | 94 (38.7%) |
|  |  |
| **Q5: Frequency respondent Texts from PED inside OR** |  |
| Missing | 12 |
| 1=Never | 82 (34.6%) |
| 2=Rarely (about once a month) | 53 (22.4%) |
| 3=Sometimes (about once a week) | 46 (19.4%) |
| 4=Often (about once a day) | 31 (13.1%) |
| 5=Frequently (multiple times a day) | 25 (10.5%) |
|  |  |
| **Q6: Frequency respondent uses Phone from PED inside OR** |  |
| Missing | 13 |
| 1=Never | 205 (86.9%) |
| 2=Rarely (about once a month) | 15 (6.4%) |
| 3=Sometimes (about once a week) | 5 (2.1%) |
| 4=Often (about once a day) | 4 (1.7%) |
| 5=Frequently (multiple times a day) | 7 (3.0%) |
|  |  |
| **Q7: Frequency respondent Browses Internet from PED inside OR** |  |
| Missing | 12 |
| 1=Never | 153 (64.6%) |
| 2=Rarely (about once a month) | 42 (17.7%) |
| 3=Sometimes (about once a week) | 17 (7.2%) |
| 4=Often (about once a day) | 12 (5.1%) |
| 5=Frequently (multiple times a day) | 13 (5.5%) |
|  |  |
| **Q8: Frequency respondent observes others Text from PED inside OR** |  |
| Missing | 18 |
| 1=Never | 20 (8.7%) |
| 2=Rarely (about once a month) | 44 (19.0%) |
| 3=Sometimes (about once a week) | 48 (20.8%) |
| 4=Often (about once a day) | 57 (24.7%) |
| 5=Frequently (multiple times a day) | 62 (26.8%) |
|  |  |
| **Q9: Frequency respondent observes others Phone from PED inside OR** |  |
| Missing | 17 |
| 1=Never | 71 (30.6%) |
| 2=Rarely (about once a month) | 79 (34.1%) |
| 3=Sometimes (about once a week) | 49 (21.1%) |
| 4=Often (about once a day) | 17 (7.3%) |
| 5=Frequently (multiple times a day) | 16 (6.9%) |
|  |  |
| **Q10: Frequency respondent observes others Browse Internet from PED inside** |  |
| **OR** |  |
| Missing | 18 |
| 1=Never | 35 (15.2%) |
| 2=Rarely (about once a month) | 56 (24.2%) |
| 3=Sometimes (about once a week) | 61 (26.4%) |
| 4=Often (about once a day) | 44 (19.0%) |
| 5=Frequently (multiple times a day) | 35 (15.2%) |
|  |  |
| **Q11: Frequency respondent text/talk about cases with colleagues on PED** |  |
| Missing | 16 |
| 1=Never | 143 (61.4%) |
| 2=Rarely (about once a month) | 40 (17.2%) |
| 3=Sometimes (about once a week) | 27 (11.6%) |
| 4=Often (about once a day) | 12 (5.2%) |
| 5=Frequently (multiple times a day) | 11 (4.7%) |
|  |  |
| **Q12: Does respondent post medical cases on social media** |  |
| Missing | 16 |
| 1=Yes | 4 (1.7%) |
| 2=No | 227 (97.4%) |
| 3=It depends | 2 (0.9%) |
|  |  |
| **Q13: Respondents familiarity with hospital policy of PED use in OR** |  |
| Missing | 17 |
| 1=Yes | 171 (73.7%) |
| 2=No | 8 (3.4%) |
| 3=Don't know | 53 (22.8%) |
|  |  |
| **Q13: Respondents familiarity with hospital policy of PED use in OR (DK=No)** |  |
| Missing | 17 |
| 1=Yes | 171 (73.7%) |
| 2=No | 61 (26.3%) |
|  |  |
| **Q14: Would a policy prohibiting PED use benefit patient care** |  |
| Missing | 16 |
| 1=Yes | 17 (7.3%) |
| 2=No | 122 (52.4%) |
| 3=It depends | 94 (40.3%) |
|  |  |
| **Q15: Is a PED use policy in OR reasonable and rational in 2020** |  |
| Missing | 16 |
| 1=Yes | 93 (39.9%) |
| 2=No | 41 (17.6%) |
| 3=It depends | 99 (42.5%) |
|  |  |
| **Q16: Have you heard about lawsuits related to health care and PED use** |  |
| Missing | 16 |
| 1=Yes | 166 (71.2%) |
| 2=No | 67 (28.8%) |
|  |  |
| **Q17: Rank PED use for Job Related Tasks during work** |  |
| Missing | 20 |
| 1=Never | 23 (10.0%) |
| 2=Rarely (about once a month) | 23 (10.0%) |
| 3=Sometimes (about once a week) | 35 (15.3%) |
| 4=Often (about once a day) | 63 (27.5%) |
| 5=Frequently (multiple times a day) | 85 (37.1%) |
|  |  |
| **Q18: Rank PED use for Social Media during work** |  |
| Missing | 21 |
| 1=Never | 123 (53.9%) |
| 2=Rarely (about once a month) | 35 (15.4%) |
| 3=Sometimes (about once a week) | 32 (14.0%) |
| 4=Often (about once a day) | 24 (10.5%) |
| 5=Frequently (multiple times a day) | 14 (6.1%) |
|  |  |
| **Q19: Rank PED use for Entertainment during work** |  |
| Missing | 22 |
| 1=Never | 115 (50.7%) |
| 2=Rarely (about once a month) | 43 (18.9%) |
| 3=Sometimes (about once a week) | 37 (16.3%) |
| 4=Often (about once a day) | 22 (9.7%) |
| 5=Frequently (multiple times a day) | 10 (4.4%) |
|  |  |
| **Q20: Rank PED use for Online Shopping during work** |  |
| Missing | 21 |
| 1=Never | 141 (61.8%) |
| 2=Rarely (about once a month) | 57 (25.0%) |
| 3=Sometimes (about once a week) | 25 (11.0%) |
| 4=Often (about once a day) | 5 (2.2%) |
|  |  |
| **Q21: Rank PED use for Banking during work** |  |
| Missing | 20 |
| 1=Never | 127 (55.5%) |
| 2=Rarely (about once a month) | 49 (21.4%) |
| 3=Sometimes (about once a week) | 49 (21.4%) |
| 4=Often (about once a day) | 4 (1.7%) |
|  |  |
| **Q22: Rank PED use for Educaiton during work** |  |
| Missing | 20 |
| 1=Never | 18 (7.9%) |
| 2=Rarely (about once a month) | 28 (12.2%) |
| 3=Sometimes (about once a week) | 70 (30.6%) |
| 4=Often (about once a day) | 61 (26.6%) |
| 5=Frequently (multiple times a day) | 52 (22.7%) |
|  |  |
| **Q23: Has respondent had a significant distraction within the OR becaue of** |  |
| **PED** |  |
| Missing | 20 |
| 1=Yes | 5 (2.2%) |
| 2=No | 224 (97.8%) |
|  |  |
| **Q24: Respondent is aware of others having a distraction within the OR** |  |
| **because of PED** |  |
| Missing | 21 |
| 1=Yes | 34 (14.9%) |
| 2=No | 194 (85.1%) |
|  |  |
| **Q25:Respondents desire to reduce time on PED** |  |
| Missing | 21 |
| 1=Yes | 70 (30.7%) |
| 2=No | 158 (69.3%) |
|  |  |
| **Q26:Respondent feels need to start using PED after stopping** |  |
| Missing | 21 |
| 1=Yes | 47 (20.6%) |
| 2=No | 181 (79.4%) |
|  |  |
| **Q27: Recognition of effect of PED use on attention/safety** |  |
| Missing | 20 |
| 1=Yes | 183 (79.9%) |
| 2=No | 46 (20.1%) |
|  |  |
| **Q28: Age** |  |
| Missing | 25 |
| <30 | 5 (2.2%) |
| 30 to 39 | 85 (37.9%) |
| 40 to 49 | 70 (31.3%) |
| 50 to 59 | 41 (18.3%) |
| 60 to 69 | 23 (10.3%) |
|  |  |
| **Q29: Trainee status** |  |
| Missing | 28 |
| 1=Resident | 16 (7.2%) |
| 2=Fellow | 3 (1.4%) |
| 3=In Practice | 202 (91.4%) |
|  |  |
| **Q30: Years in practice** |  |
| Missing | 25 |
| 0 to 4 years | 46 (20.5%) |
| 5 to 9 years | 43 (19.2%) |
| 10 to 14 years | 39 (17.4%) |
| 15 to 19 years | 22 (9.8%) |
| >=20 years | 52 (23.2%) |
| N/A | 22 (9.8%) |
|  |  |
| **Q31: Do you work with Medical students** |  |
| Missing | 89 |
| 1=Yes | 160 (100.0%) |
|  |  |
| **Q31: Do you work with Physician resident anesthesiologists** |  |
| Missing | 58 |
| 1=Yes | 191 (100.0%) |
|  |  |
| **Q31: Do you work with Student registered nurse anesthetists (SRNAs)** |  |
| Missing | 50 |
| 1=Yes | 199 (100.0%) |
|  |  |
| **Q31: Do you work with Certified registered nurse anesthetists (CRNAs)** |  |
| Missing | 40 |
| 1=Yes | 209 (100.0%) |
|  |  |
| **Q31: Do you work with Anesthesiologist assistants (AAs)** |  |
| Missing | 238 |
| 1=Yes | 11 (100.0%) |