**Supplemental Appendix 1.**

Questionnaire used to obtain numeric ratings for pain, anxiety, nausea, and satisfaction scores.

**VRAIL Questionnaire**

Subject ID#: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Treatment Order: 1st: \_\_\_\_\_\_\_\_ 2nd: \_\_\_\_\_\_\_\_\_\_

**Pre/Baseline**

***Ask before VR/no VR:***

1. What is your current pain intensity (alerted by nursing then confirmed here for nursing scores ≥4)

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

no pain moderate Worst pain

at all pain possible**Immediate Post VR Condition Questions**

1. How much time did you spend thinking about your pain when you were using **Virtual Reality**?

During Virtual Reality, I thought about my pain

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

none of some of half of most of all of

the time the time the time the time the time

2. Rate your WORST pain intensity during **Virtual Reality**:

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

no pain mild moderate severe excruciating

at all pain pain pain pain

3. How UNPLEASANT was your pain during **Virtual Reality**?

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

not unpleasant mildly moderately severely excruciatingly

at all unpleasant unpleasant unpleasant unpleasant

**Immediate Post VR Condition Questions**

4. How much ANXIETY did you have while using **Virtual Reality**?

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

none mildly moderately pretty extremely

at all anxious anxious anxious anxious

5. To what extent (if at all) did you feel NAUSEA during **Virtual Reality**?

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

no nausea mild moderate severe vomit

at all nausea nausea nausea

**Immediate Post Control Condition (No VR) Questions**

1. How much time did you spend thinking about your pain during **No VR** (when you were not using the Virtual Reality device)?

I thought about my pain

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

none of some of half of most of all of

the time the time the time the time the time

2. Rate your WORST pain intensity during **No VR** (when you were not using the Virtual Reality device):

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

no pain mild moderate severe excruciating

at all pain pain pain pain

3. How UNPLEASANT was your pain during **No VR**  (when you were not using the Virtual Reality device)?

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

not unpleasant mildly moderately severely excruciatingly

at all unpleasant unpleasant unpleasant unpleasant

**Immediate Post Control Condition (No VR) Questions**

4. How much ANXIETY did you have during **No VR**  (when you were not using the Virtual Reality device)?

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

none mildly moderately pretty extremely

at all anxious anxious anxious anxious

5. To what extent (if at all) did you feel NAUSEA during **No VR**?

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

no nausea mild moderate severe vomit

at all nausea nausea nausea

**POST Treatment Questionnaire**

***Ask after VR/no VR completed:***

1. While experiencing Virtual Reality, to what extent did you feel like you WENT INSIDE the **Virtual Reality Environment**, as if it was a place you visited?

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

I did not feel mild moderate strong I went completely

like I sense of sense of sense of inside the

went inside going going going virtual reality

at all inside inside inside world

as if it was a place I

visited

2. Did **Virtual Reality** make you feel ABSENT from your birth experience?

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

Not at all somewhat moderately very much Completely

3. Did you enjoy using **Virtual Reality?**

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

Not at all somewhat moderately very much Completely

4. Which did you prefer better for pain control?

No VR Virtual Reality

5. Would you use **Virtual Reality** again?

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

Not at all somewhat moderately very much Completely

6. I would be interested in **Virtual Reality** content designed specifically for childbirth and labor

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

0 1 2 3 4 5 6 7 8 9 10

Not at all somewhat moderately very much Completely

7. Have you ever used **Virtual Reality** before this study?

No Yes