

## Internet Intervention Adherence Questionnaire

This measure can be used to identify obstacles and barriers that interfere with using Internet intervention programs. This measure has two main sections – generic and specific. The generic items can be used by all users of Internet interventions to allow examination of these constructs across programs. The generic items make up three subscales: Internet/computer/technical (questions 1-4), personal/family (questions 5-10), and intervention-general (questions 11-16). The specific items relate only to a particular Internet intervention and can be used to examine unique aspects of the program (intervention-specific subscale).

Patients respond to the items on a 3-point scale from 0 to 2, indicating whether that obstacle was “not a problem,” “a little problem,” or “a major problem” in their use of the program. The fourth response choice, “not applicable”, is for items that may not apply.

Earlier versions of this scale have been used to measure barriers in several Internet intervention studies, including our U-Can-Poop-Too program, an Internet intervention for pediatric encopresis; BGATHome, an Internet intervention for adults with Type 1 diabetes; and SHUTi, an Internet intervention for adults with insomnia. The intervention-specific questions for each of these programs are listed below the intervention-general items. This new version of the scale is being used in an encopresis study which started in 2009. It has also been used in Internet intervention studies at Northwestern University (Mohr), University of North Carolina (Tate), and Australian National University (Christensen).

This revised questionnaire is an expanded and more detailed measure than the one we presented in two previously published papers: one where it was administered to patients who stated that they stopped using the U-Can-Poop-Too intervention for some reason other than that their medical condition “was resolved” (Ritterband et al., 2008) and one examining barriers to following through with a Web-based information prescription (Ritterband, 2005).

### Publications:

Ritterband, L. M., Ardan, K., Thorndike, F. P., Magee, J. C., Saylor, D. K., Cox, D. J., Sutphen, J. L., & Borowitz, S. M. (2008). Real world use of an Internet intervention for pediatric encopresis. *Journal of Medical Internet Research*, 10(2): e16. <http://www.jmir.org/2008/2/e16/>. PMID: 18653440

Ritterband, L. M., Borowitz, S. M., Cox, D. J., Kovatchev, B., Walker, L. S., Lucas, V., & Sutphen, J. (2005). Using the Internet to provide information prescriptions. *Pediatrics*, 116, e643-e647. <http://pediatrics.aappublications.org/cgi/reprint/116/5/e643>. PMID: 16263978

## Internet Intervention Adherence Questionnaire

Some people have problems when trying to use a web program. Please read the next items and tell us how much of a problem you had when trying to use the web program. Select whether each one was "Not a Problem", "A Little Problem", or "A Major Problem", when using the web program. If the item does not apply, please select "Not Applicable".

1. My Internet connection did not work (i.e., could not connect to the Internet).

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

2. My Internet connection worked, but I could not get connected to the web program.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

3. My connection was too slow; the program seemed to "hang."

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

4. My computer wasn't working or was having problems.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

5. I just forgot to go to the web program.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

6. I didn't want to go to the web program.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

7. I didn't have time to go to the web program.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

8. Other people were using the computer when I wanted or needed to use it.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

9. Personal issues stopped me from using the web program.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

10. Work issues stopped me from using the web program.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

11. The web program was too hard to navigate.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

12. The web program was too hard to understand.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

13. The web program did not seem very useful.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

14. I thought the program was going to take too long.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

15. The web program had too many words.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

16. The screen was hard to read (e.g., words were too small).

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

*Intervention-Specific Questions*

[U-Can-Poop-Too](#)  
[BGATHome](#)  
[SHUTi](#)

U-Can-Poop-Too – Specific Questions

17. The daily requirements were too much for me to do.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

18. The diaries took too long to complete.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

19. We didn't think this web program was really going to help.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

20. There were not Modules addressing my child's needs.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

21. The Follow-ups did not assign helpful Modules.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

22. The "Now I Cans" were not helpful in learning the material.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

23. The amount of content was too overwhelming for someone my child's age.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

24. My child did not want to use this program.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

25. My child was bored by the program.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

26. My child was too busy with school work.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

27. The daily requirements were too much for my child to do.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

28. My child would not stop playing with his/her toys to use the program.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

29. The material was too difficult for my child to understand.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

30. My child would not sit still long enough to get through the program.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

31. My child did not enjoy playing the games.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

32. Please list any additional issues not covered here, and indicate whether they were "A Little Problem" or "A Major Problem."

\_\_\_\_\_

|                  |                 |
|------------------|-----------------|
| A Little Problem | A Major Problem |
| 1                | 2               |

\_\_\_\_\_

|                  |                 |
|------------------|-----------------|
| A Little Problem | A Major Problem |
| 1                | 2               |

\_\_\_\_\_

|                  |                 |
|------------------|-----------------|
| A Little Problem | A Major Problem |
| 1                | 2               |

BGATHome - Specific Questions

17. There was too much homework.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

18. The homework was too difficult.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

19. The diaries took too long to do.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

20. The diaries were too hard to complete.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

21. The summary sheets took too long to complete.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

22. The summary sheets were too hard to complete.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

23. Did you use the online Bulletin Board?

If yes, how helpful was it?  
If no, why not?

24. Please list any additional issues not covered here, and indicate whether they were "A Little Problem" or "A Major Problem."

\_\_\_\_\_

|                  |                 |
|------------------|-----------------|
| A Little Problem | A Major Problem |
| 1                | 2               |

\_\_\_\_\_

|                  |                 |
|------------------|-----------------|
| A Little Problem | A Major Problem |
| 1                | 2               |

\_\_\_\_\_

|                  |                 |
|------------------|-----------------|
| A Little Problem | A Major Problem |
| 1                | 2               |

SHUTi – Specific Questions

17. The daily requirements were too much for me to do.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

18. The diaries took too long to complete.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

19. I didn't think this web program was really going to help.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

19. There were too many sleep rules to follow.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

20. My spouse/significant other did not like me using the program/following the sleep rules.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

21. I could not stick to the sleep restriction instructions.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

22. My sleep efficiency was not improving.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

23. There was too much homework.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |

24. The homework was too difficult.

|               |                  |                 |                |
|---------------|------------------|-----------------|----------------|
| Not a Problem | A Little Problem | A Major Problem | Not Applicable |
| 0             | 1                | 2               | 3              |