

APPENDIX A: Survey Questions

Woolcock researchers are interested in designing an exciting new wearable device for monitoring breathing continuously. To do this, we would love your feedback in answering this quick survey.

All survey responses will be anonymous and non-identifiable. Do you consent to your responses being used for analysis purposes?

- a) Yes (BEGIN SURVEY)
- b) No (EXIT SURVEY)

USE OF TECHNOLOGY

1) Do you use a smart-phone?
SELECT ONE ANSWER

- a) Yes
- b) No

2) Do you use a tablet?
SELECT ONE ANSWER

- a) Yes
- b) No

3) Do you use a smart-watch such as an applewatch?
SELECT ONE ANSWER

- a) Yes
- b) No

4) Do you use a health monitoring device such as a *fitbit*?
SELECT ONE ANSWER

- a) Yes
- b) No

5) What other technology/electronic gadgets do you use?
PLEASE ENTER SOMETHING IN THIS FIELD/BOX. IF YOU ARE NOT SURE WHAT TO WRITE
PLEASE FILL IN 'DON'T KNOW' OR 'N/A'.

[open text box]

6) Would you wear a device to monitor your breathing ?
SELECT ONE ANSWER

- a) Yes (**GO TO QUESTION 6.1**)
- b) No (**GO TO QUESTION 6.2**)
- c) Depends (**GO TO QUESTION 6.3**)

6.1 If “Yes”, why would you wear one?

SELECT ALL THAT APPLY

- a) I am interested in my health in general
- b) I would like to track my breathing patterns during stress and/or meditation
- c) I would like to track performance during exercise
- d) I often get breathless
- e) I have asthma
- f) I have a known respiratory disease other than asthma
- g) Curiosity
- h) Other (FILL IN REASON IN THE FIELD BELOW)
[open text box]

[Go to QUESTION 7]

6.2) If “No”, why not?

(FILL IN REASON IN THE FIELD BELOW)

[open text box]

[Go to QUESTION 7]

6.3). If “depends”, what does it depend on?

(FILL IN REASON IN THE FIELD BELOW)

[open text box]

[GO TO QUESTION 6.4]

6.4) If you did decide to use a device to monitor your breathing, why would you use it?

SELECT ALL THAT APPLY

- a) I am interested in my health in general
- b) I would like to track my breathing patterns during stress and/or meditation

- c) I would like to track performance during exercise
- d) I often get breathless
- e) I have asthma
- f) I have a known respiratory disease other than asthma
- g) Curiosity
- h) Other (FILL IN REASON IN THE FIELD BELOW)
[open text box]

[GO TO QUESTION 7]

7) Which of the following reasons would make wearing a breathing monitor device appealing
SELECT ALL THAT APPLY

- a) It allows me to monitor my breathing patterns when I'm exercising
- b) It allows me to monitor my breathing patterns when I'm meditating
- c) It allows me to monitor my breathing patterns when I'm rushing around
- d) It helps me understand my patterns of breathing
- e) It helps me relate my breathing patterns to exposure to pollution or allergens at work, school or home
- f) It detects when my asthma is getting worse (before I am aware of it)
- g) It measures how well my medication is working
- h) Other (FILL IN REASON IN THE FIELD BELOW)
[open text box]

8) Which of the following reasons would make wearing a breathing monitor device unappealing?
SELECT ALL THAT APPLY

- a) I can't see the usefulness of using such a device
- b) I don't see that monitoring my breathing will help me to manage my asthma
- c) I would only use such a device if I was told to by my doctor or other health professional
- d) I am concerned about the privacy of the data obtained
- e) Other (FILL IN REASON IN THE FIELD BELOW)
[open text box]

9) How long would you be willing to wear the device in one session?
SELECT ALL THAT APPLY

- a) intermittently
- b) 1 - 2 hours
- c) 2 - 6 hours
- d) 6 - 12 hours
- e) 24 hours
- f) _____

10) Would you wear the device at night?
SELECT ONE ANSWER

- a) Yes
- b) No

10.1) How would you prefer to wear the device at night?

SELECT ALL THAT APPLY

- a) An ear bud sitting in your ear
- b) An earpiece behind the ear
- c) A wrist band
- d) A sticky patch on the neck
- e) A band around the chest
- f) A fashionable neck band
- g) other? _____

10.2) How often would you wear the device at night?

SELECT ALL THAT APPLY

- a) 5 nights a week or more
- b) 2-4 nights a week
- c) 1 night a week
- d) Only when I'm feeling unwell
- e) Other? _____

11) Would you wear the device in the day?

SELECT ONE ANSWER

- a) Yes
- b) No

11.1) How would you prefer to wear the device during the day?

SELECT ALL THAT APPLY

- a) An ear bud sitting in your ear
- b) An earpiece behind the ear
- c) A wrist band
- d) A sticky patch on the neck
- e) A band around the chest
- f) A fashionable neck band
- g) other? _____

11.2) How often would you wear the device in the day?

SELECT ALL THAT APPLY

- a) 5 days a week or more
- b) 2-4 days a week
- c) 1 day a week
- d) Only when I'm feeling unwell
- e) Only during exercise

f) Other? _____

12) How long would you be willing to wait for the device to charge?
SELECT ONE ANSWER

- a) 30 minutes
- b) 1 hour
- c) 2 hours
- d) overnight
- Other? _____

13) How often would you be willing to charge the device?
SELECT ONE ANSWER

- a) every 6 hours
- b) every 12 hours
- c) every 24 hours
- d) Other? _____

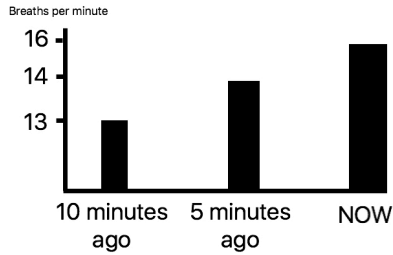
14) How much would you be willing to pay for the device?
SELECT ONE ANSWER

- a) I would only use it if it were free.
- b) <\$50
- c) \$51-100
- d) \$101-200
- e) > \$200

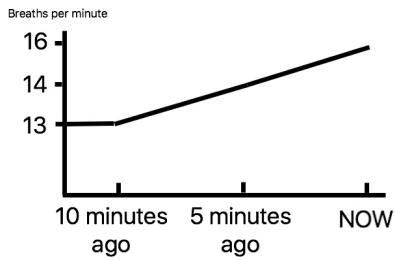
15) Which of the following displays, in your opinion, is the easiest for understanding how your breathing changes over time?
SELECT ONE ANSWER

- a)

NOW	16	BPM
5 minutes ago	14	BPM
10 minutes ago	13	BPM



b)



c)

16) What would you like to see on the display?

SELECT ALL THAT APPLY

a) My current breathing data (e.g. number of breaths per minute)

16 BPM

b) How my breathing changes over time (e.g. any of the displays in the previous question)

c) Alerts when breathing is problematic

d) Other? _____

17) What features would be useful to you?

SELECT ALL THAT APPLY

a) syncing your breathing data with a phone/tablet

b) syncing your breathing data with a computer

c) Other? _____

18) When you are unable to sync with another device (e.g. during travel), how long would you like the device to store your data for?

SELECT ONE ANSWER

a) 6 hours

- b) 1 day
- c) 3 days
- d) 1 week
- e) Other? _____

19) When the device is ready, would you be willing to participate in a trial of the device (we will ask you to provide your contact details)?
SELECT ONE ANSWER

- a) Yes
- b) No
- c) Unsure, but you can contact me again about this trial

QUESTIONS ABOUT ASTHMA

20) Have you ever been told by a health professional (such as a nurse, doctor or pharmacist) that you have asthma?
SELECT ONE ANSWER

a) Yes (GO TO Q.21)
b) No (GO TO Q.27)
c) Unsure (GO TO Q.21)

21) Have you had symptoms of asthma or taken medication for asthma in the last 12 months?
SELECT ONE ANSWER

11 Yes
12 No
13 Unsure

22) In the past 4 weeks, how did your asthma prevent you from getting as much done at work, school or home?
SELECT ONE ANSWER

a) All of the time
b) Most of the time
c) Some of the time
d) A little of the time
e) Not at all

23) During the past 4 weeks, how often have you had shortness of breath?
SELECT ONE ANSWER

a) More than once a day

b) Once a day
c) 3-6 times a week
d) Once or twice a week
e) Not at all

24) During the past 4 weeks, how often did your asthma symptoms (wheezing, coughing, shortness of breath, chest tightness or pain) wake you up at night or earlier than usual in the morning?

SELECT ONE ANSWER

a) 4 or more times a week
b) 2 to 3 night a week
c) 1 night a week
d) Less than 1 night a week
e) Not at all

25) During the past 4 weeks, how often have you used your reliever medication?

SELECT ONE ANSWER

a) 3 or more times a day
b) 1 or 2 times per day
c) 2 or 3 times per week
d) Once a week or less
e) Not at all

26) How would you rate your asthma control during the past 4 weeks?

SELECT ONE ANSWER

a) Not controlled
b) Poorly controlled
c) Somewhat controlled
d) Well controlled
e) Completely controlled

ABOUT YOU

27) To which age group category do you belong?

SELECT ONE ANSWER

18 to 29 years
30 to 39 years
40 to 49 years
50 to 59 years
60 to 69 years

70 Years and over

28) Are you?...
SELECT ONE ANSWER

a) male
b) female

29) In which postcode do you live?
FILL IN A 4-DIGIT NUMBER
[open text box restricted to 4 digits]

30) Which best describes the highest level of formal education you have completed?
SELECT ONE ANSWER

a) Didn't go to school
b) Secondary school year 8 or below
c) Secondary school year 9 or 10 equivalent
d) Secondary school year 11 or 12 equivalent
e) Certificate or diploma (e.g. TAFE)
f) Bachelor Degree
g) Post graduate qualification or higher degree

31) What is your total annual household income (before tax)?
(If you are single and not living with family please answer for yourself only)

SELECT ONE ANSWER

a) Less than \$26,000
b) \$26,000 to \$51,999
c) \$52,000 to \$72,799
d) \$72,800 to \$103,999
e) \$104,000 to \$155,999
f) \$156,000 or more
g) Prefer not to say

32) What best describes your employment status?
SELECT ONE ANSWER

a) Full time employment
b) Part time employment
c) Casual employment
d) Unpaid or volunteer
e) Engaged in home duties
f) Currently unemployed and seeking work
g) Currently unemployed and not seeking work
h) Not in the labour force – retired from work
i) Not in the labour force – other reason
j) Prefer not to say

33) Do you usually speak a language other than English at home?

SELECT ONE ANSWER

a) Yes
b) No