Supplemental materials for:

Schneider A, Cabral C, Herd N, Hay A, Kesten J, Anderson E, Lane I, Beck C, Michie S. Reducing primary care attendance intentions for pediatric respiratory tract infections. *Ann Fam Med.* 2019;17(3):239-249.

Information and advice for parents and carers



Knowing what viruses are circulating in your local area might provide some clues as to why your child is ill and what the best thing is for you to do to help them.

C Q Search

University of BRISTOL

Please select your local area from the drop-down menu to find out what viral illnesses are currently circulating:



Information and advice for parents and carers



- > Explanation:
- Rhinovirus
- Respiratory syncytial virus
- Influenza A

Bubble-size relates to number of children identified with the virus. The **darker** the colour, the more likely your child has the **viral illness** and does **not need to see a GP**.

Click on the bubbles to find out more about viral symptoms.

Most frequent respiratory viral illnesses in children in your local area in the week commencing:





Information and advice for parents and carers



- > Explanation:
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Bubble-size relates to number of children identified with the virus. The **darker** the colour, the more likely your child has the **viral illness** and does **not need to see a GP**.

Click on the bubbles to find out more about viral symptoms.

Most frequent respiratory viral illnesses in children in your local area in the week commencing:

#### <u>Rhinovirus</u> This virus is one of the main causes of the common cold. It can last for up to 15 days.

#### **Typical symptoms:**

- Runny nose
- ≻ Cough
- ➤ Sore throat
- > Fever / high temperature
- ≻ Ear ache
- > Tiredness
- > Aching muscles
- > Headache
- > Sneezing



### Influenza A

This is a common flu virus.

#### Typical symptoms:

- Runny nose
- Cough
- Sore throat
- Fever / high temperature
- > Muscle aches
- Headaches
- Tiredness
  - Vomiting & diarrhoea

Respiratory syncytial virus This is a common virus that most children get at some point. Symptoms look like a common cold.

#### **Typical symptoms:**

- Runny nose
- Cough
- Fever / high temperature
- Wheezing
- Not hungry
- Sneezing



C Q Search



Information and advice for parents and carers





C Q Search

What viruses are going around in your area?
How long will a viral illness last?
What are typical viral symptoms?
What can parents and carers do?
When to take your child to the doctor?

- Most viral illnesses will get better by themselves, but this might take longer than you expect.
- > Below is a list of some viral symptoms and their typical duration.



Information and advice for parents and carers

What viruses are going around in your area?
How long will a viral illness last?
What are typical viral symptoms?
What can parents and carers do?
When to take your child to the doctor?

> Viral illnesses are **very common** among children. Often children get 6 - 8 each year.

C Q Search

- Antibiotics are not effective for viral illnesses and in most cases doctors will advise home care for its symptoms.
- If your child has any of the following symptoms, it is likely that they have a viral illness. Click on the symptoms to find out more.

Cough	Ð
Sore throat	÷
Fever / high temperature	÷
Ear ache	Ð
Tiredness and aching	(±
Vomiting	Đ

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### Cough

- Children often cough when they have a viral illness because of mucus trickling down the back of the throat.
- Although it is upsetting to hear your child cough, it helps clear the throat.
- If they are eating, drinking and breathing normally and there is no wheezing, there is usually nothing to worry about.
- Most coughs clear up within 3 weeks and do not require any treatment.
- Noisy chesty coughs are still often caused by viruses.

### What you can do to help:

- Drinking lots of water will keep your child hydrated and replaces fluids lost when coughing and sneezing.
- If your child is over 1 year old, try a warm drink of lemon and honey.
- Cough medicines are not safe for children under 6 years and only potentially help to reduce symptoms, but will not help the cough get better faster.
- For more information see: <u>http://child-cough.bristol.ac.uk/</u>

C Q Search



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Information and advice for parents and carers

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	Cough	
ctor?	Sore throat 🕀 🕅	$\geq$
	<ul> <li>Your child's throat may be dry and sore.</li> <li>This is very common and usually nothing to worry about.</li> <li>Most sore throats are caused by minor viral illnesses such as colds or flu and can be treated at home.</li> <li>They normally get better within a week.</li> </ul>	V
	<ul> <li>What you can do to help:</li> <li>You can give your child paracetamol or ibuprofen as directed on the medicine packaging.</li> <li>Provide little and often cool or warm fluids, and avoid very hot drinks.</li> <li>Give your child cool, soft foods.</li> <li>Homemade mouthwash of warm, salty water can help.</li> <li>Your child can suck lozenges, hard sweets, ice cubes or ice lollies – but don't give them anything small and hard because of the risk of choking</li> </ul>	

Information and advice for parents and carers

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What can parents and carers do?
What can parents and carers do? When to take your child to the doctor?

- Viral illnesses are **very common** among children. Often children get 6 8 each year.
- Antibiotics are not effective for viral illnesses and in most cases doctors will advise home care for its symptoms.
- If your child has any of the **following symptoms**, it is likely that they have a viral illness. Click on the symptoms to find out more.

Cough	Ð
Sore throat	Ð
Fever / high temperature	Ð
• Your child may have a fever if they: feel hotter than usual; fee	el sweaty or

- clammy; have flushed cheeks. In children, a temperature of over 37.5°C is considered a fever.
- Children with viral illnesses often have a fever as it helps the body to fight the virus.
- A high temperature can be quite worrying, but most children recover with no problems within a few days.

### What you can do to help:

- Encourage them to drink plenty of fluids even if they are not thirsty.
- You could help to your child to stay at a comfortable temperature by covering them with a lightweight sheet or opening a window, but they should be appropriately dressed for their surroundings.
- If a fever is making your child uncomfortable, you can give them ٠ paracetamol or ibuprofen as directed on the medicine packaging.

Information: NHS (www.nhs.uk/) / Caring for children with coughs (child-cough.bristol.ac.uk/) C Q Search

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Information and advice for parents and carers

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Cough 🛨	
Sore throat	
Fever / high temperature	
Ear ache 🛨	7
<ul> <li>A baby or toddler may pull or rub at an ear.</li> <li>The ear can be red and there might be discharge.</li> <li>Other possible symptoms include irritability, crying, difficulty feeding and restlessness at night.</li> <li>Most ear ache is caused by viruses and will get better by itself within about 3 days.</li> <li>Your child may have a problem hearing for up to 2 to 6 weeks.</li> </ul>	
<ul> <li>What you can do to help:</li> <li>If your child has ear ache, you can give them paracetamol or ibuprofen as directed on the medicine packaging.</li> <li>Placing a warm flannel against the affected ear may also help relieve the pain.</li> </ul>	

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Cough	Ð	
Sore throat	Ð	
Fever / high temperature	Ð	
Ear ache	÷	
Tiredness and aching	Ð	5
<ul> <li>Your child might feel quite tired as the body is looking after itself by resting, so its defence system can fight the illness.</li> <li>Children may have some pain or discomfort when they have a viral illness, such as a headache or achy limbs.</li> <li>It is not usually a sign of anything serious.</li> </ul>		VV
<ul> <li>What you can do to help:</li> <li>Make sure your child gets plenty of rest.</li> <li>You can give them paracetamol or ibuprofen as directed on the medicine packaging.</li> </ul>		

### Information and advice for parents and carers



Information: NHS (<u>www.nhs.uk/</u>) / Caring for children with coughs (<u>child-cough.bristol.ac.uk/</u>)

- > Viral illnesses are **very common** among children. Often children get 6 8 each year.
- Antibiotics are not effective for viral illnesses and in most cases doctors will advise home care for its symptoms.
- If your child has any of the following symptoms, it is likely that they have a viral illness. Click on the symptoms to find out more.

Cough	(±	
Sore throat	Ð	
Fever / high temperature	÷	
Ear ache	Ð	
Tiredness and aching	÷	
Vomiting	7 E	21
<ul> <li>Vomiting is a common symptom of many normal childhood illiget better within a few days.</li> <li>It is very unlikely that your child will choke.</li> <li>Viral illnesses often cause young children to 'gag' (especially a and this can make them vomit.</li> <li>Vomiting may also be caused by an infection in the gut and us child will also have diarrhoea.</li> <li>What you can do to help:</li> <li>Drinking is the most important thing. Encourage your child to and often, even if it feels like the fluid is not staying down.</li> <li>Seek medical advice if you are concerned your child is becoming the second sec</li></ul>	nesses and It night) Gually your drink little	•••

dehydrated or if vomiting is not improving after two days.



Information and advice for parents and carers





- Most viral illnesses will get better by themselves.
- Antibiotics are not effective for viral illnesses and in most cases doctors will advise home care for its symptoms.
- Most parents do not consult a doctor for viral symptoms. Refer to the When to take your child to the doctor page for further advice.

### Top Tips - What you can do to help your child:

- Make sure your child gets plenty of rest. Even if sleep is disturbed, rest will help your child recover.
- Ensure your child gets plenty of fluids. This can be challenging click <u>here</u> for more advice on getting your child to consume fluids.
- Keep your child comfortable from pain and fevers by giving them paracetamol (e.g., Calpol) or ibuprofen if needed and as directed on the medicine packaging.

### Top Tip – What you can do to help others:

Hand washing can help prevent other members of your family to get infected.

**Note: This information on home management was co-created with parents.** (Caring for children with coughs: child-cough.bristol.ac.uk/)

C Q Search

Information and advice for parents and carers

Please contact your GP the same day if your child is showing any of the following symptoms:

### Fever / high temperature:

- Above 38°C in babies younger than 3 months old.
- Above 39°C in babies aged 3 to 6 months old.
- Persistent fever over 38.5°C for 5 days in a row in children older than 6 months.

### **Breathing problems:**

- > Rapid breathing.
- Working hard to breath, shown by skin being sucked in around the neck, or between or under the ribs.

### **Other symptoms:**

- Much paler than usual.
- Very cold hands and feet with a warm body.
- A new rash that does not fade when pushed Pushing a glass on the rash is a good way to tell if the rash will fade.
- > Not waking or always going straight back to sleep.
- Appears confused or disoriented.
- Bright light hurts the eyes.
- Vomiting persisting more than two days.





### **Supplemental Appendix 2. Public involvement**

A parent advisory group (N = 7), which was established to support research assessing the feasibility of collecting community-based real-time syndromic and microbiological respiratory tract infection surveillance data<sup>1</sup> was involved in developing the parenttargeted intervention material and the study design. Parents' feedback on the intervention and survey was gathered at a facilitated face-to-face meeting (N = 3 mothers) and parents that could not attend the meeting (N = 4) commented via email communication.

Parents provided feedback on the intervention content and presentation using the thinkaloud protocol, prompting them to verbalize their thoughts, impressions and feelings whilst engaging with the intervention material.<sup>2-4</sup> The usability of the proposed material was tested according to Nielsen's heuristics that were relevance to this intervention,<sup>5-6</sup> having parents rate the following:

• Consistency of presentation:

Is the intervention content clearly presented and are messages clearly communicated throughout?

• User's language:

Does the language of the intervention reflect the language used by parents? Is the intervention material understandable and clear?

- User's input options / repertoire of available actions:
   How easy is it to navigate the intervention material? Are there any potential navigation problems, for example moving between intervention components or selecting the local area?
- Aesthetic integrity and design simplicity:
   Is the design of the intervention content appropriate?

The approach of combining ratings of multiple evaluators has been found to be a reliable method to identify usability problems in a user interface design. Overall, parents viewed the intervention positively (*"This is really good advice. Shows not to panic. Very helpful"*), but minor changes regarding wording and the viral surveillance presentation were made based on their feedback.

The survey, including the illness scenario and proposed questions, was pretested with the group to increase validity and to check if:

- Answering the survey was not too burdensome;
- How long it would take (Average response time = 15min);
- Language used was clear and questions not misleading;
- Response scales were adequate.

The pretest highlighted some ambiguities and small changes were made in response, specifically clarifying instructions to keep answer options of validated scales unchanged wherever possible and changing the illness scenario to rhino virus and listing symptoms in the order discussed in the intervention material.

#### References

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- Nielsen J, Molich R. Heuristic Evaluation of user interfaces. CHI '90 Proceedings of the SIGCHI Conference on Human Factors in Computing Systems. 1990:249-256. doi: http://doi.org/10.1145/97243.97281

### Parent intervention – online survey

Note: all text presented in red is for administrative and programming purposed only; respondents will not see this text. Page breaks are represented by white space between boxed.

All questions marked with \* should have 'compulsory responses'.

The 'back' button will be disabled for this survey to prevent participants from going back to change earlier answers.

1. Screening and participant information questions						
Q1.1*	What is your gender?	Male (Skip to survey exit)	01			
		Female	02			

Q1.2\* What is your date of birth?

MM/YYYY:

01 3*	In what region do you live?		
GI.0		North East	01
		North West	02
		Yorkshire and The Humber	03
		West Midlands	04
		East Midlands	05
		East of England	06
		South West	07
		South East	08
		Greater London	09
		Wales	O10
		Scotland	011
		Northern Ireland	012
Q1.4*	What is your current employment status?	Employed full-time	01
Q1.4*	What is your current employment status?	Employed full-time Employed part-time	01 02
Q1.4*	What is your current employment status?	Employed full-time Employed part-time Self-employed	01 02 03
Q1.4*	What is your current employment status?	Employed full-time Employed part-time Self-employed Unemployed but looking for a job	01 02 03 04
Q1.4*	What is your current employment status?	Employed full-time Employed part-time Self-employed Unemployed but looking for a job Unemployed but not looking for a job / Long-term sick or disabled	01 02 03 04 05
Q1.4*	What is your current employment status?	Employed full-time Employed part-time Self-employed Unemployed but looking for a job Unemployed but not looking for a job / Long-term sick or disabled Full-time parent / homemaker	01 02 03 04 05 06
Q1.4*	What is your current employment status?	Employed full-time Employed part-time Self-employed Unemployed but looking for a job Unemployed but not looking for a job / Long-term sick or disabled Full-time parent / homemaker Retired	01 02 03 04 05 06 07
Q1.4*	What is your current employment status?	Employed full-time Employed part-time Self-employed Unemployed but looking for a job Unemployed but not looking for a job / Long-term sick or disabled Full-time parent / homemaker Retired Student / Pupil	01 02 03 04 05 06 07 08
Q1.4*	What is your current employment status?	Employed full-time Employed part-time Self-employed Unemployed but looking for a job Unemployed but not looking for a job / Long-term sick or disabled Full-time parent / homemaker Retired Student / Pupil	01 02 03 04 05 06 07 08
Q1.4*	What is your current employment status? How many children do you have aged	Employed full-time Employed part-time Self-employed Unemployed but looking for a job Unemployed but not looking for a job / Long-term sick or disabled Full-time parent / homemaker Retired Student / Pupil	01 02 03 04 05 06 06 07 08
Q1.4* Q1.5*	What is your current employment status? How many children do you have aged between 3 months and 12 years?	Employed full-time Employed part-time Self-employed Unemployed but looking for a job Unemployed but not looking for a job / Long-term sick or disabled Full-time parent / homemaker Retired Student / Pupil None (Skip to survey exit)	01 02 03 04 05 06 07 08 07

2

3

O3

04

4	O5
5	O6
6 or more	07

Q	1.6*	What is your date of birth of your youngest child aged between 3 months and 12 years?	
	MM/Y	YYY:	
			J

Q1.7*	And what is the gender of your youngest child aged between 3 months and 12 years?	Воу	01
		Girl	02
Q1.8*	What is your caregiving role for your youngest child aged between 3 months and 12 years?	I am the primary caregiver (i.e. responsible for the child most of the time)	01
		I share the caregiving role with another person (i.e. a partner / spouse)	02
		I do a minority of the caregiving (i.e. partner / spouse is responsible for the child	d most
		of the time) (Skip to survey exit)	02
		I do not have a caregiving role (Skip to survey exit)	<u>O3</u>

#### 2. Survey exit

Q2.1 Thank you for your interest in this research. Unfortunately, you do not meet the inclusion criteria for this study. We are currently looking to survey women with at least one child aged between 3 months and 12 years, with a range of caregiving responsibilities.

#### **3. INFORMED CONSENT SECTION**

Q3.1 This study is being conducted by University College London, University of Bristol and Public Health England. It is funded by the National Institute for Health Research (NIHR) Health Protection Research Unit (HPRU) in Evaluation of Interventions.

The aim of this study is to investigate when and why parents and carers decide to take a child to see a doctor. The findings will inform the development of information to help parents and carers decide when they should take their child to see a doctor.

As part of this survey, you will be asked to imagine that your child has a respiratory tract infection (i.e. infection of the sinuses, throat, airways, or lungs) with a specific list of symptoms. You will then be asked a series of questions about how you would respond to your child being ill.

The survey should take approximately 15 minutes to complete.

This study complies with the Data Protection Act. All the information we collect from this study will be completely anonymous and confidential and will only be used for our research purposes. Prior to submitting your responses at the end of the survey, you are free to withdraw from this research.

If you have any further questions about this study, please do not hesitate to get in touch with Dr Annegret Schneider using the following contact details:

 Name:
 Dr Annegret Schneider

 Address:
 Department of Clinical, Educational and Health Psychology

 University College London
 1-19 Torrington Place

 London WC1E 7HB
 Health Psychology

 Phone:
 +44 (0) 20 7679 1649

 Email:
 a.schneider@ucl.ac.uk

If you are willing to take part in this research, please respond to the questions on the following page to indicate your consent.

Q3.2*	If you are happy to take part in this research,		
	please read the 5 statements listed below. To	I have read the information and understand what the study involves.	
	indicate your agreement and proceed, please select all statements.	I understand that if I no longer wish to take part, I can withdraw from the study prior	or to
		submitting my responses at the end of the survey.	02

Multiple response. Must select all options before proceeding.	I consent to the processing of my personal information for the purposes of this research study.	03
	anonymous survey responses might be used in reports, publications and	
	presentations.	04
	I agree to participate in this study.	05

#### **4. HYPOTHETICAL SCENARIO**

- Q4.1 We are now going to present you with a hypothetical scenario. When answering the following questions in this survey we would like you to imagine that your youngest child aged between 3 months and 12 years is currently unwell. We would like you to imagine that he / she has had the following symptoms for <u>4 days in a row</u>:
  - Runny nose
  - Cough
  - Sore throat
  - Fever / high temperature up to 38.9 degrees Celsius
  - Ear ache
  - Tiredness and some disturbed sleep
  - Aching muscles
  - Sneezing

#### **5. INTERVENTION MATERIAL\***

\*The presentation of sections 5 and 6 need to be randomised – 50% of participants receive section 4 first; the other 50% of participants receive section 5 first.
 Q5.1 We are now going to show you some screen shots taken from a website we are currently in the process of developing. The website provides information about: the most common viruses among children during the past week in specific locations; common viruses and their associated symptoms; and how to care for a child with a virus. For the purposes of this survey, we are not able to show you data for your specific local area, so please imagine that this data is relevant to your location. Remember, these are screenshots, not an interactive website yet.

Please take the time to read all of this information carefully before proceeding, as you will not be able to go back and refer to this information later.

Q5.2 Participants are shown images of the intervention, in order, one page of the intervention material per screen. When displaying images, participants are not allowed to advance for 3 minutes.

6. Logic model component assessment*						
*The pr	*The presentation of sections 5 and 6 needs to be randomised – 50% of participants receive section 4 first; the other $50\%$					
of parti	cipants receive section 5 first.					
Q6.1	<ul> <li>Q6.1 Imagine that your child has been showing the symptoms 4 days in a row described in the illness scenario presented earlier: <ul> <li>Runny nose</li> <li>Cough</li> <li>Sore throat</li> <li>Fever / high temperature up to 38.9 degrees Celsius</li> <li>Ear ache</li> <li>Tiredness and some disturbed sleep</li> <li>Aching muscles</li> </ul> </li> </ul>					
Q6.2*	Please indicate how much you agree or disagree with the following statements (Ass (Intentions)	suming an appointment is available the same day):				
a. b.	I want to visit a GP today. I intend to visit a GP today. Strongly agree (1) to strongly disagree (5)					
Q6.3* People around me (Social influence – subjective norm)						
a. b. c.	Think I need to visit a GP today.       Strongly agree (1) to strongly disagree (5)         Think I do not need to visit a GP today.       Strongly agree (1) to strongly disagree (5)					

### Parent intervention – online survey

Q6.4*	Would you say that your child's symptoms as described in the illness scenario (runny ear ache, tiredness and some disturbed sleep, aching muscles, sneezing for 4 days i (Emotion - perceived severity of a health threat)	nose, cough, sore throat, fever / high temperature, n a row) suggest that the illness is…					
a. b. c. d. e.	Severe. Serious. Significant. Worrying. Normal (given where I live and time of year).	Strongly agree (1) to strongly disagree (5)					
Q6.5	For the following two questions, please use a scale of 0 to 100, where 0 = knowing n and 100 = knowing everything you possibly could. (Knowledge – information sufficiency)	othing, 50 = knowing enough to care for my child					
a.	How much do you think you currently know about the illness as described in the						
b.	scenario ?"         How much knowledge would you need to care adequately for your child showing the described symptoms? You might feel you need the same, more, or possibility even less, information about the topic.*       0 to 100						
C.	What additional information would you need to adequate care for your child showing the described symptoms? Please describe.	Textbox					
Q6.6*	Thinking about the illness scenario (runny nose, cough, sore throat, fever / high temp sleep, aching muscles, sneezing for 4 days in a row), do you think the cause of your (Knowledge & skills test – resources)	erature, ear ache, tiredness and some disturbed child's symptoms is a…					
a. b.	Viral infection? (randomise options) Bacterial infection?	True / False / Don't know					
Q6.7*	Approximately how long do you think the illness symptoms of your child could last, free provide your answer in number of days. If you are unsure, please provide an estimate	om start to finish without any antibiotics? Please e.					
a. b. c.	Fever/high temperature Sore throat Cough:	day(s)					
Q6.8*	How would you care for your child at home?						
а.	Please briefly describe strategies you would use to help your child showing the symptoms described in the scenario.	Textbox					
b.	Are you aware of further resources you could access if you would need to know more to care for your child showing the symptoms described?	No / Yes -Please describe (Textbox)					
Q6.9*	tiredness and some disturbed sleep, aching muscles, sneezing for 4 days in a row), I (Belief about capabilities)	feel confident about					
a. b. c. d. e. f. g.	Looking after them at home Taking their temperature Seeing if they need more fluids Checking for a rash Seeking advice from online resources Seeking advice or help from family and friends Seeking advice or help from healthcare professionals	Strongly agree (1) to strongly disagree (5)					
Q6.10*	We are also interested in your general understanding of infections. The following que (Knowledge & beliefs)	estions do not refer to the illness scenario anymore.					
a.	Are most cold, cough, and flu illnesses caused by bacteria or viruses?	Bacteria / Viruses / Other: / Don't know					
b.	Are antibiotics helpful in treating bacterial infections, viral infection, or both?	Bacterial infections / Viral infection / Both					
с.	How often are antibiotics needed for - Cough or bronchitis? - Sore throat? - Fever / high temperature? - Ear ache? - Tiredness and aching? - Vomiting?	Never (1) to always (5)					
d.	Please indicate how much you agree or disagree with the following statement: If my child does not receive an antibiotic for cold, cough, and flu symptoms, he / she will be sick for a longer time.	Strongly agree (1) to strongly disagree (5)					

#### **7. FEEDBACK ON INTERVENTION MATERIALS**

We would now like to ask you for feedback on the intervention material.

07.1* Please choose a point nearest to the statement that best describes your opinion on the presented information								
(Clarity, credibility, cognitive challenge)								
Credible	1	2	3	4	5	6	7	Information
information								presented not
presented								credible
Not at all	1	2	3	4	5	6	1	Very
understandable							_	understandable
Not intellectually stimulating	1	2	3	4	5	6	1	Intellectually stimulating
Not at all	1	2	3	4	5	6	7	Very
Comprehensible	1	0	2	4	F	0	7	
Not engaging	1	2	3	4	5	6	/	Engaging
Would make	1	2	3	4	5	6	1	Would not make
people think	1	0	2	4	F	0	7	
Does not make		2	3	4	5	0	1	makes sense
Confusion	1	0	2		F	<u> </u>	7	
arguments	I	2	3	4	5	0	1	Clear arguments
Not at all thought	1	2	3	4	5	6	7	Thought
provoking								provoking
Unclear	1	2	3	4	5	6	7	Clear information
information								presented
presented								
Valid claims	1	2	3	4	5	6	7	Invalid claims
Presented	1	2	3	4	5	6	7	Did not present
accurate								accurate
information								information
Did not really	1	2	3	4	5	6	7	Really made me
make me think								think

Q7.2* Please choose a point nearest to the statement that best describes your opinion on the information. (Emotional arousal, novelty)								
Powerful impact	1	2	3	4	5	6	7	weak impact
Emotional	1	2	3	4	5	6	7	Unemotional
Involving	1	2	3	4	5	6	7	Uninvolving
Boring	1	2	3	4	5	6	7	Exciting
Arousing	1	2	3	4	5	6	7	Not arousing
Stimulating	1	2	3	4	5	6	7	Not stimulating
Strong visuals	1	2	3	4	5	6	7	Weak visuals
Unique	1	2	3	4	5	6	7	Common
Novel	1	2	3	4	5	6	7	Ordinary
Unusual	1	2	3	4	5	6	7	Usual

Q7.3* If your child shows the symptoms described in the scenario (runny nose, cough, sore throat, fever / high temperature, ear ache, tiredness and some disturbed sleep, aching muscles, sneezing for 4 days in a row), would the information included in the online intervention influence your decision of visiting a GP?	No (skip to 8. closing questions) Yes (Randomised answer options)
<ul> <li>Q7.4* How important do you think would each component of the online intervention be when making your decision to visit a GP?</li> <li>Please drag the answer options below to reflect the importance of each component, first being most important and last least important.</li> </ul>	<ul> <li>What viruses are going around in your area?</li> <li>How long will a viral illness last?</li> <li>What are typical viral symptoms?</li> <li>What can parents and carers do?</li> <li>When to take your child to the doctor?</li> <li>(Randomised answer options)</li> </ul>

#### **8. CLOSING QUESTIONS**

Before you finish, we just have a few questions about you that will give us information about the people answering the survey.

Q8.1\* What is the highest qualification you have?

- a. No official qualification
- b. Up to GCSEs/ GCEs / 'O' Levels or equivalent

		<ul> <li>c. 'A' Levels / NVQs / GNVQs or equivalent</li> <li>d. First degree / diploma / HNC / HND or equivalent</li> <li>e. Higher degree (e.g. MSc, PhD) or equivalent</li> </ul>	
Q8.2*	How would you describe your ethnicity?	<ul> <li>a. White - British</li> <li>b. White - Irish</li> <li>c. Any Other White background</li> <li>d. Mixed - White and Black Caribbean</li> <li>e. Mixed - White and Black African</li> <li>f. Mixed - White and Black African</li> <li>g. Any Other Mixed background</li> <li>h. Asian or Asian British - Indian</li> <li>i. Asian or Asian British - Pakistani</li> <li>j. Asian or Asian British - Bangladeshi</li> <li>k. Asian or Asian British - Chinese</li> <li>l. Any Other Asian or Asian British - Caribbean</li> <li>n. Black or Black British - Caribbean</li> <li>n. Black or Black British - African</li> <li>o. Any Other Black or Black British background</li> <li>p. Other ethnic group</li> <li>q. I would rather not answer</li> </ul>	
Q8.3*	How many times have you taken your youngest child aged between 3 months and 12 years to see the doctor in the past 12 months?	times	
Q8.4*	Does your youngest child aged between 3 months and 12 years have any ongoing chronic health issues that might make him or her more likely to get sick?	Yes (please specify)     O       No     O	<u>1</u> 02

#### 9. Debrief

Q9.1 Thank you your participation.

#### • What was the aim of this survey?

We are interested in the potential value of information on locally circulating viruses on parents' decision to visit a GP if their child is sick. Most viral illnesses get better by themselves and do not require medical attention. We expect that providing parents with viral information (locally circulating viruses, symptom duration, what they can do to help their child) would reduce unnecessary primary care visits.

#### How was this tested?

Half of the people who completed this survey were shown the virus information prior to answering questions about visiting the GP for an imaginary viral illness of their child. The other half were not shown the virus information until after answering these questions. All participants had the chance to comment on the intervention material.

#### • Why is this important to study?

Viral illnesses in children are a very common problem managed in primary care. GP visits often result in antibiotics prescriptions, but the unnecessary overuse of antibiotics holds the danger that those important drugs won't work anymore in the future.

#### What if I want to know more?

You can download the virus information presented in the survey <u>here</u>. If you would like more information about this survey, please email Dr. Annegret Schneider: <u>a.schneider@ucl.ac.uk</u>.

Q9.2	Do you have any comments you would like to make about the virus information	Textbox
	presented to you or this survey more generally?	

Q9.3 Thank you for your time; your feedback is greatly appreciated.

### **Supplemental Appendix 4. Recruitment**

Ipsos Mori<sup>1</sup>, the third largest global market research company working for numerous private and public organizations, was contracted for the survey data collection. Research conducted by Ipsos Mori covers a variety of topics ranging from entertainment and shopping to climate change and health and University College London has a longstanding working relationship with this company.

Participants were recruited by the Ipsos Mori Omnibus team, an online panel providing access to individuals, who volunteered to take part in surveys and who have been profiled beforehand. Based on the panels' profile data, a representative sample was recruited using the following sampling algorithm:

- Quota targets for age and geographic region
- Working status quota weighted by a full time, part time, not working split
- Even-splits quotas for child's age and gender

The quota targets were relevant for mothers aged 18 to 65 years and based on the National Readership Survey data<sup>2</sup>, a source used to weight targets for large proportion of the studies run by the Ipsos Mori Omnibus team.

The data collection was carried out online from 24th January to 9th February 2017, distributing a survey link across the extracted sample. Of the 2451 panelists that responded to an invite to participate in this research, 806 were included in the final sample (completion rate = 32.9%). The rest was screened out as they belonged to a quota that was already full or because they did not fulfill quality criteria (e.g. responding too quickly and straight-lining). Figure 1 provides an overview of participant enrollment and inclusion in the study.

<sup>&</sup>lt;sup>1</sup> <u>https://www.ipsos.com/en-us</u>

<sup>&</sup>lt;sup>2</sup> <u>http://www.nrs.co.uk/</u>



Figure 1: Participant enrollment and inclusion.