Additional file 1
(Supplementary methods)

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### CONSORT 2010 checklist of information to include when reporting a randomised trial*

<table>
<thead>
<tr>
<th>Section/Topic</th>
<th>Item No</th>
<th>Checklist item</th>
<th>Reported on page No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title and abstract</strong></td>
<td>1a</td>
<td>Identification as a randomised trial in the title</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1b</td>
<td>Structured summary of trial design, methods, results, and conclusions</td>
<td>2-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(for specific guidance see CONSORT for abstracts)</td>
<td></td>
</tr>
<tr>
<td><strong>Introduction</strong></td>
<td>2a</td>
<td>Scientific background and explanation of rationale</td>
<td>4-5</td>
</tr>
<tr>
<td>Background and</td>
<td>2b</td>
<td>Specific objectives or hypotheses</td>
<td>5</td>
</tr>
<tr>
<td>objectives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Methods</strong></td>
<td>3a</td>
<td>Description of trial design (such as parallel, factorial) including allocation ratio</td>
<td>5</td>
</tr>
<tr>
<td>Trial design</td>
<td>3b</td>
<td>Important changes to methods after trial commencement (such as eligibility criteria), with reasons</td>
<td>9</td>
</tr>
<tr>
<td><strong>Participants</strong></td>
<td>4a</td>
<td>Eligibility criteria for participants</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>4b</td>
<td>Settings and locations where the data were collected</td>
<td>5</td>
</tr>
<tr>
<td><strong>Interventions</strong></td>
<td>5</td>
<td>The interventions for each group with sufficient details to allow replication, including how and when they were actually administered</td>
<td>6-7</td>
</tr>
<tr>
<td><strong>Outcomes</strong></td>
<td>6a</td>
<td>Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed</td>
<td>7-8</td>
</tr>
<tr>
<td></td>
<td>6b</td>
<td>Any changes to trial outcomes after the trial commenced, with reasons</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Sample size</strong></td>
<td>7a</td>
<td>How sample size was determined</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>7b</td>
<td>When applicable, explanation of any interim analyses and stopping guidelines</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Randomisation:</strong></td>
<td>8a</td>
<td>Method used to generate the random allocation sequence</td>
<td>6</td>
</tr>
<tr>
<td>Sequence generation</td>
<td>8b</td>
<td>Type of randomisation; details of any restriction (such as blocking and block size)</td>
<td>6</td>
</tr>
<tr>
<td><strong>Allocation concealment</strong></td>
<td>9</td>
<td>Mechanism used to implement the random allocation sequence (such as sequentially numbered containers), describing any steps taken to conceal the sequence until interventions were assigned</td>
<td>6</td>
</tr>
<tr>
<td>mechanism</td>
<td>10</td>
<td>Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions</td>
<td>6</td>
</tr>
</tbody>
</table>

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<table>
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<tr>
<th>Section</th>
<th>Page(s)</th>
</tr>
</thead>
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<tr>
<td>Blinding</td>
<td>11a If done, who was blinded after assignment to interventions (for example, participants, care providers, those assessing outcomes) and how</td>
</tr>
<tr>
<td></td>
<td>11b If relevant, description of the similarity of interventions</td>
</tr>
<tr>
<td>Statistical methods</td>
<td>12a Statistical methods used to compare groups for primary and secondary outcomes</td>
</tr>
<tr>
<td></td>
<td>12b Methods for additional analyses, such as subgroup analyses and adjusted analyses</td>
</tr>
<tr>
<td>Results</td>
<td>13a For each group, the numbers of participants who were randomly assigned, received intended treatment, and were analysed for the primary outcome</td>
</tr>
<tr>
<td></td>
<td>13b For each group, losses and exclusions after randomisation, together with reasons</td>
</tr>
<tr>
<td>Recruitment</td>
<td>14a Dates defining the periods of recruitment and follow-up</td>
</tr>
<tr>
<td></td>
<td>14b Why the trial ended or was stopped</td>
</tr>
<tr>
<td>Baseline data</td>
<td>15 A table showing baseline demographic and clinical characteristics for each group</td>
</tr>
<tr>
<td>Numbers analysed</td>
<td>16 For each group, number of participants (denominator) included in each analysis and whether the analysis was by original assigned groups</td>
</tr>
<tr>
<td>Outcomes and estimation</td>
<td>17a For each primary and secondary outcome, results for each group, and the estimated effect size and its precision (such as 95% confidence interval)</td>
</tr>
<tr>
<td></td>
<td>17b For binary outcomes, presentation of both absolute and relative effect sizes is recommended</td>
</tr>
<tr>
<td>Ancillary analyses</td>
<td>18 Results of any other analyses performed, including subgroup analyses and adjusted analyses, distinguishing pre-specified from exploratory</td>
</tr>
<tr>
<td>Harms</td>
<td>19 All important harms or unintended effects in each group (for specific guidance see CONSORT for harms)</td>
</tr>
<tr>
<td>Discussion</td>
<td>20 Trial limitations, addressing sources of potential bias, imprecision, and, if relevant, multiplicity of analyses</td>
</tr>
<tr>
<td></td>
<td>21 Generalisability (external validity, applicability) of the trial findings</td>
</tr>
<tr>
<td></td>
<td>22 Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence</td>
</tr>
<tr>
<td>Other information</td>
<td>3</td>
</tr>
</tbody>
</table>
Registration

Registration number and name of trial registry

Protocol

Where the full trial protocol can be accessed, if available

Funding

Sources of funding and other support (such as supply of drugs), role of funders

*We strongly recommend reading this statement in conjunction with the CONSORT 2010 Explanation and Elaboration for important clarifications on all the items. If relevant, we also recommend reading CONSORT extensions for cluster randomised trials, non-inferiority and equivalence trials, non-pharmacological treatments, herbal interventions, and pragmatic trials. Additional extensions are forthcoming; for those and for up to date references relevant to this checklist, see www.consort-statement.org.
Dynata (demographics in Australia, recruitment strategies)
(Screenshots were taken from the information documents Dynata shared with the researchers at the start of the study and gave permission to share)

Recruitment Methodologies

<table>
<thead>
<tr>
<th>SOURCE NAME</th>
<th>RECRUITMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty Panels</td>
<td>By invitation to 1000's of loyalty program members in travel, entertainment, media and retail.</td>
</tr>
<tr>
<td>Organic, Open Enrolment &amp; Partnerships</td>
<td>1000's of websites, social media influencers and mobile apps.</td>
</tr>
<tr>
<td>Affiliate Network</td>
<td>Brood range of websites, incl. schools, communities. Member logging into communities with valid username and password invited to participate.</td>
</tr>
</tbody>
</table>
Interventions (visual presentations)

**Trial A (Acute otitis media)**

**Pictograph**

*Of 100 children with acute middle ear infection*

**Without antibiotics**

- **2-3 days:** 16 patients
  - No pain: 100
  - Pain: 10

- **4-7 days:** 24 patients
  - No pain: 76
  - Pain: 24

- **10-12 days:** 22 patients
  - No pain: 78
  - Pain: 22

**With antibiotics**

- **2-3 days:** 11 patients
  - No pain: 89
  - Pain: 11

- **4-7 days:** 18 patients
  - No pain: 82
  - Pain: 18

- **10-12 days:** 7 patients
  - No pain: 93
  - Pain: 7

Source: Cochrane Database of Systematic Reviews. DOI: 10.1002/14651858.CD0000219.pub4
Bar graph

Recovery of children with middle ear infection


Text-only

Recovery of children with middle ear infection

Of 100 children who have middle ear infection:

Without antibiotic treatment
16 children will still experience pain at 2-3 days after diagnosis, 24 children will have pain at 4-7 days and 22 children will have pain at 10-12 days. The others will have no pain.

With antibiotic treatment
11 children will still experience pain at 2-3 days after diagnosis, 18 children will have pain at 4-7 days and 7 children will have pain at 10-12 days. The others will have no pain.

**Line graph**

Recovery of children with middle ear infection

- **Pain without antibiotics**
- **Pain with antibiotics**

<table>
<thead>
<tr>
<th>Day</th>
<th>Pain without antibiotics</th>
<th>Pain with antibiotics</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-3</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>4-7</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>10-12</td>
<td>22</td>
<td>10</td>
</tr>
</tbody>
</table>

**Trial B (Lateral epicondylitis)**

**Pictograph**

**Recovery of people with tennis elbow**

Of 100 people with tennis elbow who...

- **Waited and watched** (to see if it gets better on its own)
  - 27 people completely recovered by 6 weeks. By 1 year, 90 people completely recovered; the other 10 did not completely recover.

- **Had physiotherapy**
  - 85 people completely recovered by 6 weeks. By 1 year, 94 people completely recovered; the other 6 did not completely recover.

- **Had corticosteroid injection**
  - 78 people completely recovered by 6 weeks. By 1 year, 68 people completely recovered; the other 32 did not completely recover.
Bar graph

Recovery of people with tennis elbow

<table>
<thead>
<tr>
<th>Treatment</th>
<th>By 6 weeks</th>
<th>By 1 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wait and watch</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>65</td>
<td>84</td>
</tr>
<tr>
<td>Corticosteroid injection</td>
<td>78</td>
<td>82</td>
</tr>
</tbody>
</table>

Number of people with tennis elbow who were completely recovered.

Line graph

Recovery of people with tennis elbow

- Physiotherapy
- Wait and watch
- Corticosteroid injection

Number of people who had complete recovery.
The flow of the trials and outcome measurements

**Trial A**
(Acute otitis media)

- Participants recruitment
  (via an online provider)
- Randomisation

**Trial B**
(Lateral epicondylitis)

- Participants recruitment
  (via an online provider)
- Randomisation

**Baseline:** Demographic profile, Medical Maximizer-Minimizer Scale, Subjective Numeracy Scale, Decision intention
**Primary outcome:** Comprehension
**Secondary outcomes:** Satisfaction, Decision intention

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**All visual presentations were revealed**

**Secondary outcome:** Graph preference
**Health literacy scale**
Survey
Questions 1-6 are the same for both trials

1. Which age group applies to you?
   [ ] Under 18   [ ] 18 to 24 years   [ ] 25 to 34 years
   [ ] 35 to 44 years   [ ] 45 to 54 years   [ ] 55 to 64 years
   [ ] 65 years or older          [ ] Prefer not to say

2. What is your gender?
   [ ] Male    [ ] Female
   [ ] Other                                [ ] Prefer not to say

3. What is your level of education? Please indicate the highest level of education you have completed.
   [ ] High school - Year 10
   [ ] High school – Year 12
   [ ] Certificate I-IV, Diploma, or apprenticeship
   [ ] Undergraduate degree: Bachelor’s degree, or equivalent
   [ ] Postgraduate degree: Masters or Doctoral degree, or equivalent

4. Which state or territory do you live in? [PUNCH STATE FROM POSTCODE- OKAY TO MOVE THIS AFTER Q5 IN SCRIPT- DO NOT ASK RESPONDENTS]
   [ ] QLD  [ ] NSW  [ ] ACT   [ ] NT  [ ] WA  [ ] VIC
   [ ] TAS   [ ] SA

5. What is your postcode? ___________

6. Is English the main language that you speak at home?
   [ ] Yes  [ ] No

Questions 7 and 8 are specific for each trial

Trial A (Acute otitis media)

7. Acute middle ear infection is an infection behind the eardrum. It is very common, usually in children, and can be very painful. You can take any pain medicine with any of the options below. Imagine that a child you take care of gets a middle ear infection, what decision about using antibiotics might you make?
   [ ] The child usually should take antibiotics.
   [ ] The child usually should not take antibiotics.
   [ ] Unsure

8. Have you, or a person that you are responsible for, previously had an acute middle ear infection?
   [ ] Yes
   [ ] No

Trial B (lateral epicondylitis)

7. Tennis elbow is a condition in which people have pain and tenderness over the outside of the elbow. It usually gets better by itself, regardless of the type of treatment, but symptoms may last up to 2 years.

---

You can take any pain medicine with any of the options below. Imagine that you have tennis elbow, what decision about other treatment options, from the below list, might you make?

[ ] I would probably have a corticosteroid injection.
[ ] I would probably have physiotherapy.
[ ] I would probably wait and watch to see if it gets better on its own.
[ ] Unsure

8. Have you, or a person that you know, previously had tennis elbow (lateral epicondylitis)?

[ ] Yes  [ ] No

Questions 9 - 11 are the same for both trials (Q9 is MMM scale, Q10 and 11 are Subjective Numeracy Scale)

Comprehension questions Q12-Q17 (These questions are different for trial A and trial B)

Trial A (Acute otitis media) only

Middle ear infection is one of the most frequent diseases in childhood. Children usually experience symptoms of middle ear inflammation like pain, ear discharge, and fever.²

The numbers below show what happens over time to children up to 15 years of age with middle ear infection when different ways of managing it are chosen.

The intervention was inserted here

Based on the information in the XXXX (please insert the type of graph e.g., pictograph), please answer the following questions. (Used for all graph interventions)

Based on the information in the text box, please answer the following questions. (Used for all text interventions):

(Q12-Q17- ON SAME PAGE ALONG WITH THE INTERVENTION).

12. At 2-3 days, out of 100 children who did NOT take antibiotics, how many had pain?

Answer: ___________

13. At 10-12 days, out of 100 children who took antibiotics, how many had pain?

Answer: ___________

14. Which group was less likely to experience pain at about 4-7 days?

[ ] Children who took antibiotics
[ ] Children who did not take antibiotics.
[ ] No difference between the groups.
[ ] I do not know.

15. At 4-7 days, how many more children who did NOT take antibiotics will have pain, compared to those who took antibiotics?

Answer: ___________

---

16. At 2-3 days, how many more/fewer children who did NOT take antibiotics will be pain-free, compared to children who did take antibiotics?

[ ] 5 fewer  [ ] 5 more  [ ] 16 more  [ ] 11 fewer

17. In the week or so after a middle ear infection starts, the majority of children will NOT be in pain, regardless of whether they do or do not take antibiotics

[ ] True  [ ] False

**Trial B (Lateral epicondylitis) only**

Tennis elbow is a condition in which people have pain and tenderness over the outside of the elbow. This can make some movements of the arm and wrist painful.

The numbers below show what happens over time to people with tennis elbow when different ways of managing it are chosen.

*The intervention was inserted here*

Based on the information in the XXXX (please insert the type of graph e.g., pictograph), please answer the following questions. (Used for all graph interventions)

Based on the information in the text box, please answer the following questions. (Used for all text interventions):

(Q12-Q17-ON SAME PAGE ALONG WITH THE INTERVENTION)

12. Of 100 people with tennis elbow who chose to ‘wait and watch, how many people completely recovered by 6 weeks?

Answer: ___________

13. Of 100 people with tennis elbow who chose to have a corticosteroid injection, how many people completely recovered by 6 weeks?

Answer: ___________

14. How many more people who chose physiotherapy completely recovered by 6 weeks, compared to those who waited and watched?

Answer: ___________

15. Which group was more likely to be completely recovered by 1 year?

[ ] People who waited and watched
[ ] People who had physiotherapy
[ ] People who had a corticosteroid injection
[ ] No difference between the groups
[ ] I do not know

16. By 1 year, how many more/ fewer people who had physiotherapy completely recovered, compared to people who had a corticosteroid injection?

[ ] 26 fewer  [ ] 26 more  [ ] 32 more  [ ] 6 fewer

17. By 1 year, the majority of people who chose to wait and watch will be completely recovered, without having physiotherapy or a corticosteroid injection.

[ ] True  [ ] False
Question 18 is trial specific

Trial A

18. Imagine again that a child you take care of gets a middle ear infection. What decision about using antibiotics might you make?

[ ] The child usually should take antibiotics.

[ ] The child usually should not take antibiotics.

[ ] Unsure

Trial B

18. Imagine again that you have tennis elbow. What decision about the management option might you make?

[ ] I would probably have a corticosteroid injection.

[ ] I would probably have physiotherapy.

[ ] I would probably wait and watch to see if it gets better on its own.

[ ] Unsure

Questions 19-23 are the same for both trials

19. Can you please indicate the most important reason for your decision?

Questions 20-28 are the same for both trials

Trial A statement: You have just seen A XXXX (PIPE IN TEXT AS PER GRAPH SHOWN pictograph bar graph, line graph, text) presenting information about the recovery of children with middle ear infection.

Trial B statement: You have just seen a XXXX (PIPE IN TEXT AS PER GRAPH SHOWN pictograph bar graph, line graph, text) presenting information about the recovery of people with tennis elbow over time.

The allocated intervention was shown here again

Now we would like to ask you a few questions about how the information is presented.

20. In this presentation, how easy was it to understand the information presented? (From 1= Not at all easy to 10= extremely easy)

21. How satisfied are you with the information is presented? (From 1= not at all satisfied to 10=I am totally satisfied)

22. In the future, you may have to make a decision about managing a health condition. To help you make this decision you may like more information about how your health may change over time because of this condition (i.e. its prognosis). You have just seen A (PIPE IN TEXT AS PER GRAPH SHOWN pictograph bar graph, line graph, text) presenting prognostic information.
We will now show other ways to you and ask you to rank these ways from the MOST preferred option (1) to the LEAST preferred option (4) for receiving this type of information in future. [SHOW ALL INTERVENTIONS ALONG WITH LABELS]

[ ] Text only
[ ] A bar graph
[ ] A pictograph
[ ] A line graph

23. In a few words, please tell us why you chose the option that you ranked the highest (1)?

24. Do you prefer another way of presenting prognostic information THAT IS NOT IN THE PREVIOUS LIST (e.g., a combination of text and a graph, a table, a combination of a table and a graph)?

Please note that these are just examples and please feel free to suggest any other ways you may prefer.

25. Please rate how much experience you have had with each of the following graphs before today: (Rating from 1 = no experience to 5 = a lot of experience) (graphs were shown)

Questions 26 and 27 are the NVS health literacy scale

28. If you had any difficulties with the survey (reading, understanding questions, technical problems) or you have any comments to improve the survey, please note them here

Thank you for your time and for taking part in our survey