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**Additional file 1: Completed Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist**

Developed from:

Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

No. Item	Guide questions/description	Reported on Page No.
<b>Domain 1: Research team and reflexivity</b>		
<i>Personal Characteristics</i>		
1. Interviewer/facilitator	Which author/s conducted the interview or focus group?	Page 6
2. Credentials	What were the researcher's credentials? E.g. PhD, MD	Page 6
3. Occupation	What was their occupation at the time of the study?	Page 6
4. Gender	Was the researcher male or female?	Page 6
5. Experience and training	What experience or training did the researcher have?	Page 6
<i>Relationship with participants</i>		
6. Relationship established	Was a relationship established prior to study commencement?	Page 6
7. Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	Page 7
8. Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	Page 6

<b>Domain 2: study design</b>		
<i>Theoretical framework</i>		
9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	Page 5
<i>Participant selection</i>		
10. Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball	Page 6
11. Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email	Page 6
12. Sample size	How many participants were in the study?	Page 7
13. Non-participation	How many people refused to participate or dropped out? Reasons?	Page 7
<i>Setting</i>		
14. Setting of data collection	Where was the data collected? e.g. home, clinic, workplace	Page 6
15. Presence of non-participants	Was anyone else present besides the participants and researchers?	Page 6
16. Description of sample	What are the important characteristics of the sample? e.g. demographic data, date	Page 8 (Table 1)
<i>Data collection</i>		
17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	Page 7
18. Repeat interviews	Were repeat interviews carried out? If yes, how many?	N/A – single interview (Page 6)
19. Audio/visual recording	Did the research use audio or visual recording to collect the data?	Page 6
20. Field notes	Were field notes made during and/or after the interview or focus group?	Page 6
21. Duration	What was the duration of the interviews or focus group?	Page 6
22. Data saturation	Was data saturation discussed?	Page 6
23. Transcripts returned	Were transcripts returned to participants for comment and/or correction?	N/A – transcripts were not returned.

<b>Domain 3: analysis and findings</b>		
<i>Data analysis</i>		
24. Number of data coders	How many data coders coded the data?	Page 7
25. Description of the coding tree	Did authors provide a description of the coding tree?	Page 8 (Additional file 4)
26. Derivation of themes	Were themes identified in advance or derived from the data?	Page 7
27. Software	What software, if applicable, was used to manage the data?	Page 7
28. Participant checking	Did participants provide feedback on the findings?	N/A – no.
<i>Reporting</i>		
29. Quotations presented	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	Pages 12-18 (Tables 3-5).
30. Data and findings consistent	Was there consistency between the data presented and the findings?	Pages 12-18 (Tables 3-5); pages 19-25
31. Clarity of major themes	Were major themes clearly presented in the findings?	Pages 19-25
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	Page 19; Page 24

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## Additional file 2: Topic guide (at-risk participants)

### **RA/Systemic health**

- When were you first told about your risk of arthritis? CCP+ test?
  - How did you receive this news?
  - Do you understand what this risk means?
- What do you understand by someone having RA?
  - Do you have family members with RA or any experience of RA?
  - Do you have any symptoms? If so what? E.g. joint pain
  - What is the impact on your life/if any? E.g. fatigue
- Have your health priorities changed since you found out you were at risk of developing RA?
- Could you describe your top 5 health priorities since CCP+ test?
  - What about your teeth and gums?
  - How important is this?

What do you understand around the link between gum disease and RA? Have you ever heard about a link before?

### **Barriers and facilitators for keeping your mouth healthy?**

- Do you feel you have healthy teeth and gums?
  - If not- why?
  - What makes you think that?
    - Is there anything you would like to change/would you like to improve your teeth and gums?
- What do you do regularly to look after your teeth and gums?
  - At home? Cleaning/flossing/diet etc. how/when/how often
  - Seeing dentist/hygienist? how/when/how often
- Has any of this changed since you were told of your risk of RA?
- Does anything get in the way of you looking after your teeth and gums and/or visiting dentist?
  - Health issues
  - Dexterity in hands
  - Other commitments (work/family) and time
  - Are you a regular attender at the dentist?
  - Do you have a dentist? Can you get to the dentist?
  - Is cost an issue at the dentist or for making any of the suggested changes to the way you look after your teeth and gums?

### **Acceptability of periodontal care in treatment plan of individuals at risk of developing RA**

- Knowing that there is a link between your gums and developing RA do you think you should be offered help with this?
  - How would you want that help? What's the main challenge for you?
  - At home – remembering/cleaning/flossing
  - Better toothbrush or other things to use at home

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- Getting a dentist? Getting to a dental appointment?
  - Cost of dentist? Cost of getting to a dentist?
  - Advice from rheumatology team?
  - Further information? From who? And how want it – verbal/written/app?

### **Shared risk factors**

Have you heard about any other links with developing RA?

- Are you aware of the effect of smoking on your health in particular your mouth
  - What about the link with developing RA?
  - What do you think about help with stopping smoking being offered as part of the study?
- Are you aware of the effect that your diet and gut bacteria has on your health?
- What about the link that your diet and gut bacteria has to developing RA?
- Would you also be willing to change your diet following advice from a health professional, take a prescribed supplement (purified yoghurt) or an antibiotic to reduce your risk?

### **Factors influencing your participation in the research project**

#### **Knowledge of and weighing up pros and cons of preventative intervention**

- What encourages/would encourage you to participate in a study that would provide dental and in particular gum treatment with a view of potentially helping your joints (Caveat)
  - Pain free treatment
  - Resolving your pain
  - On-off appointment vs longer-term treatment
  - Would gender of the dentist influence your decision
- What would be the main challenge for you to taking part in such a study?
  - Anxiety – Of dentist? Treatment? Pain? Discomfort?
    - Types/cause/experiences
    - Specific fears
    - Onset
    - Coping Strategies
  - Barriers to care if any
    - Language/cultural difficulties
    - Fear/embarrassment
    - Time commitment

What could we do to overcome these challenges and encourage you to take part?

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### **Additional file 3: Topic guide (healthcare professional participants)**

#### **Introduction**

- Introduction to the study
- Explain about confidentiality and recording

#### **What is your current healthcare role?**

#### **What are your thoughts about the link between oral and general health?**

#### **In your experience is there any/enough collaboration between medicine and dentistry?**

#### **Can you think of any examples of areas where there could be more collaboration between medicine and dentistry? How about MDT meetings having a DCP input?**

#### **What do you think are the main challenges of working more collaboratively between medicine and dentistry?**

- Would it be important/necessary?
- Is it happening already? If yes, is it enough? If no, why not?
- What would make it easier?
- What is your individual experience?

#### **Have they ever told the patients that there is a link?**

- Communicate about the risk?

#### **What is the problem?**

#### **Do you see any utility to engage with patients about prevention?**

- Would this new understanding help motivate patients?

#### **Why the diabetes commissioning guide not being used?**

#### **What opportunities do you see?**

- for including periodontal care in treatment plan of individuals at risk of developing RA
- Would you do it?
- How?

#### **What are the main barriers and facilitators for care provision in this group from your perspective**

- What would make a difference from your perspective?
- Would non-inferiority with a pharmacological intervention make a difference? For policy, integrated care pathway?
- What about prevention?

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**Additional file 4: Example of coding tree (Theme 2, subtheme 2)**