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.
Domain 1: Research		
team and reflexivity		
Personal		
Characteristics		
1.	Which author/s conducted the interview or	Page 6
Interviewer/facilitator	focus group?	
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	What experience or training did the	Page 6
training	researcher have?	
Relationship with		
participants		
6. Relationship	Was a relationship established prior to study	Page 6
established	commencement?	
7. Participant	What did the participants know about the	Page 7
knowledge of the	researcher? e.g. personal goals, reasons for	
interviewer	doing the research	
8. Interviewer	What characteristics were reported about the	Page 6
characteristics	interviewer/facilitator? e.g. Bias,	
	assumptions, reasons and interests in the	
	research topic	

Domain 2: study design		
Theoretical framework		
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
Participant selection		
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
Setting		
14. Setting of data collection	Where was the data collected? e.g. home, clinic, workplace	Page 6
15. Presence of non-	Was anyone else present besides the	Page 6
participants	participants and researchers?	
16. Description of sample	What are the important characteristics of the sample? e.g. demographic data, date	Page 8 (Table 1)
Data collection		
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 inter views 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.

Domain 3: analysis and findings		
Data analysis		
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.
Reporting		
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

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

- 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?

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?

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

