Supplementary File 2: Journalist Interview Schedule

Thank you very much for doing this interview. As mentioned in the information sheet I sent you, this interview is to better understand Australian journalists' views towards media reporting of new medical tests. This interview will take between 30 minutes and one hour.

As mentioned in the participant information sheet, this interview will be audio-recorded to make sure we have an accurate record of your responses, and your identity and everything you say will be kept strictly confidential.

Do you have any questions before we begin? Okay, so I will start the audio-recording now.

Journalist experience

- Who/where are you currently working for and what is your current role?
- Have you worked elsewhere in the past? [If yes], could you tell us about your previous experience (e.g. where, main role, etc)
- How long have you been active as a journalist?
- General or specialist?
- Health only or not?
- [If general], could you give us a sense of how often you report on a health-related topic?

Promotion of new tests

Briefly define what we mean by medical tests before we begin questions.

There are different forms of medical tests, and we can put them into two broad categories; diagnostic tests and screening tests. Diagnostic tests are for people with symptoms to diagnose for a specific condition or disease. For example, something like a new heart scan to detect a heart attack, in people reporting symptoms that look like a heart attack. But then there's also screening tests, which are for people without symptoms to try to detect disease before, it appears symptomatic. For example, the PSA test for healthy men to detect prostate cancer.

- In general, how interested are readers in stories about medical tests?
- Are you approached about studies on new tests?
- Have you even been asked to write a story to promote a new test?
 - Who by?

- What do you see as the key elements of stories on new tests?
- When you write a story about a new medical test what evidence do you look for?
- What type of information or evidence do companies, health professionals or academics/researchers/scientists bring/may bring to you when they want to promote their new tests?
- What is essential for your story in your view / experience?

Potential Causes of the promotion of new medical tests

- In your view, what are the **key factors** influencing how new medical tests are reported in the media? *Prompt examples if needed:* press release, lack of time, promote interest/entertainment (click bait)
- What are your views on large corporate interests in health and people with various commercial interests?
 - Do you think they can play a role in driving news coverage or influencing news stories? Please expand.

There is a body of literature showing that **press release** content often makes it into the media.

- What are your views on this?
 - O Do you think this is a good thing or bad thing?
 - Why? Please expand.
- What are other factors that might directly influence the content of what makes it into the media?
 - How do these compare to something like a press release?

From my understanding, journalists can now easily track number of readers, shares, time spent reading an article. The term **click bait** seems to get mentioned in relation to getting more reads.

- What are your views on this?
 - o *Prompt*: Do you see this a being a positive or negative or both? Please expand.
- Do you feel like you under pressure to produce click bait stories?
 - o *Prompt:* Why or why not?

Does this influence the way stories on new tests are written in your view and if yes, how? **Downsides of promotion of medical tests**

- In your view, what are the potential downsides or negative effects of promoting new medical tests?
 - *Prompts if needed:* e.g. people overestimating the benefits of new tests, not aware of potential downsides or harms of new tests, enthusiasm for tests before there is evidence to support their use.
 - For example, we did a study examining how the global media reports on the benefits and harms of 5 new medical tests for people without symptoms. These were the Apple watch ECG, 3D mammography, and blood biomarker and AI tests for dementia and cancer. We found that less than 20% of the stories mentioned potential harms or downsides of these medical tests.
- There is some concern that uncritical reporting of new medical tests could promote **overdiagnosis and overtreatment**.
- Have you heard of overdiagnosis?
 - o If yes, could you tell me what you understand it to mean?

Prompt example – if needed

- Overdiagnosis happens when someone gets a diagnosis that ends up causing them more harm than good. For example, the apple watch now has an electrocardiogram to track heart rhythms in healthy people. It aims to detect a condition called atrial fibrillation. The difficulty is that healthy people can have seemingly irregular heart rhythms that may never go on to give them any trouble. However, a diagnosis of atrial fibrillation may lead to harms from over testing, anxiety due to have a heart condition, and bleeding from unnecessary blood thinning medicines.
 - Have you reported on it before? What was the context?
- What are your views on overdiagnosis?
- What are your views on how media coverage of new tests, or medicine generally, may help to contribute to overdiagnosis?

Potential Barriers to reporting accurately on new medical tests

• What do you think are/may be the key challenges or barriers for journalists in reporting accurately on new tests?

Prompts – if needed:

- o Less journalists?
- o Less specialist reporters?
- o Time?

- How to make a story on a new test both accurate (including being critical) and interesting. Reporting on difficult topics may not get lots of readers. e.g. challenges of writing about overdiagnosis and getting interest.
- o Researchers trusting journalists?

Training

- Have you received any training to help you better understand or access medical evidence in general?
 - o If yes, what was the context?
 - Do you think it improved your reporting?
 - Would you recommend something similar to other journalists?
 - o If no, would you be interested in that type of training? Why or why not?

Potential Solutions to improve reporting on medical tests

• Do you think anything can be done to help wind back some of the overly positive reporting about new tests and promote more critical reporting, particularly about the potential downsides or limitations of new tests, such as overdiagnosis?

Prompts - if needed:

- o Institutional change?
- Press release greater transparency in conflicts of interest.
- o Researchers trusting journalists. How?
- Supporting journalists?
- Being available to journalists to read a call, interpret a paper, fact check a story/press release?
- A checklist to guide reporting?

Openness to training

We are interested in developing some kind of training package for journalists to better support their reporting on new tests. How would you feel about this idea?

- What would you like to see included in this?
- o Best format? (e.g. face to face, webinars, blended, etc)
- Length of training
- Top up training (e.g. shorter follow-up sessions after a more extensive training package)

We have some training ideas that I would like to run by you, so I am going to put them explicitly to you one by one.

- What do you think of an Australian Science Media Centre workshop on this issue? A short one- running between 60 and 90 minutes?
- What are relative merits of a workshop that comes to your workplace like the Science Media Centre currently does compared to a workshop held somewhere-that journalists from different media outlets could attend?
- What do you think of the idea of being offered access to a network of researchers working in this field? to read a paper, fact check a story for example.
- A checklist to guide reporting?

Closing

Now we're coming to the end of the interview, but before we wrap up do you have any questions or is there anything, we didn't discuss that you would like to add in relation to journalists reporting new medical tests or overdiagnosis generally?

Finally, before we finish, I am wondering do you know of any other journalist(s) who may be interested in taking part in this study? We are trying to recruit 10 more journalists. Any suggestions would be great.

Thank you very much for your time.