

Supplementary File One – Interview Schedule

Section 1: Informed consent and demographics (10 mins)

- **Read information sheet, check they understand, respond to any questions, and seek consent**
- **Check eligibility**
 - Aged between 13-17 years
 - Have not personally had cancer
- **Record demographics (on Data Collection Sheet)**
 - Age
 - Ethnicity
 - Gender

Section 2: Physical activity (10 minutes)

Purpose of this section is to understand what their life priorities are at the moment and where physical activity fits into this, as well as their current levels of physical activity. It is also an opportunity to build rapport.

- **LIFE PRIORITIES EXERCISE:** I'm going to show you a list of things that I want you to prioritise in terms of how important they are to you at the moment.

Interviewer to have these 'life priorities' printed out on cards and to ask the participant to put them in order of importance.

- Looking physically attractive
 - Learning a new skill
 - Doing well at school
 - Staying fit and healthy
 - Making new friends
 - Having fun and enjoying yourself
 - Saving money
 - Getting the latest technology
- Are there other things, not on this list, that are priorities for you at the moment? If so, please add to list so that they can be included in your ranking exercise.
 - Why have you put them in this order? [PROBE: highest/lowest priorities]
 - Which ones do you think will become more important to you over the next few years? Why do you say this?

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- What other things are priorities for you at the moment not on this list?
- Generally speaking, how important is staying fit and healthy to you at the moment?
 - What are the benefits to you of being fit and healthy?
 - What things do you do to stay fit and healthy? [PROBE: diet, physical activity]
- Where do you get advice and information about how to stay fit and healthy?
 - PROBE: friends, family, teachers, media, healthcare professionals
- In a typical week, what types of physical activity do you do? Explore what (including frequency and intensity)
- In a typical day, how many hours do you spend sitting down (e.g. lessons, TV viewing time, games console playing, internet surfing, phone chats etc.)?
- How easy/difficult is it for you to be physically active? Identify the barriers and facilitators of exercise
 - What could you do to be less *inactive*? Is this likely/possible? What would get in the way or put you off?
 - What kind of activities do you enjoy? Could you do these more?
 - Is there anything you would like to do/try? What's stopping you?

Section 3: Understanding of cancer (30-40 minutes)

This section is intended to elicit beliefs about bowel cancer risk including those relating to the Illness Risk Representations (IRR) framework. Where a question is intended to elicit beliefs relating to a component of the IRR, the relevant component is identified alongside in bold font and square brackets.

Opening questions

This subsection is intended to build the participants comfort talking about cancer and to begin eliciting knowledge and beliefs about cancer.

- What do you think or feel when you hear the word 'cancer'?
 - What are the first thoughts that come into your mind?
 - Do you have any particular images in your mind?
- Do you feel that you have in any way been affected by cancer? (For example, friends or family developing the disease).
- What types of cancer have you heard of? [E.g. lung, breast, bowel etc.]
- Please can you tell me what, if anything, you know about bowel cancer?

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- Discuss initial thoughts and images again (if they know what bowel cancer is)
- NB this is just an opening question, understanding will be further prompted below; if they struggle ask them what they know about cancer in general then:
 - Make sure before moving on that they know what the bowel is - show image in Cancer Research UK debriefing leaflet and make sure that they know that bowel refers to the large colon and rectum; briefly explain digestive system and how bowel fits within that – wording on leaflet if needed

Beliefs about likelihood

This subsection largely explores beliefs relating to likelihood of bowel cancer

- What do you think causes bowel cancer? [**Cause & Identity**]
 - [PROBE: diet, smoking, alcohol, genetics, environment]
 - How do you think these different things cause cancer? What do you think they do to the human body that causes cancer?
 - EXPLORE e.g. if they say ‘diet’, ask them in what way they think that would cause cancer i.e. what is their understanding of the physiological link;
 - EXPLORE to identify any misperceptions about cause - if identify, see if they can explain what they think the mechanism of action is.
- How much control do you think people have over whether or not they get cancer? [**Cause & Control**]
 - Is bowel cancer sometimes caused by things we have no control over? i.e. our genes.
 - How much do you think the risk of getting bowel cancer is down to what we do (our lifestyle) versus things we have no control over (our genetics)? Why do you say that?
- What do you think people can do to reduce their risk of getting bowel cancer (e.g. not smoking, drinking etc. but also PA)? [**Cause & Control**]
 - EXPLORE to tease out understanding of physiological link; Again probe for misperceptions about how cancer can be prevented.
 - How effective do you think these things are at reducing the risk of getting cancer? Which do you think is most/least effective?
- Do you think that things you do now affect your chances of getting bowel cancer in the future? [**Cause & Timeline**]
 - What makes you think/believe this?
 - EXPLORE at what age (if any) they think that what they do will start to have an effect.
- Who do you think is most at risk of getting bowel cancer? [**Identity & Timeline**]

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- Why do you say this?
- At what age do you think people are most likely to get bowel cancer? Why is this?
- How likely do you think you are to get bowel cancer at some point in your life?
 - EXPLORE reasoning: family history, lifestyle? Is this view based on current lifestyle or on basis of future (intended) lifestyle? Ask them about both.

This subsection ends with a few questions relating specifically to exploring participants understand of the link between bowel cancer and PA.

- Did you know that being physically active can reduce your risk of getting bowel cancer? *NB this is at least half an hour of moderate PA 5 times a week, although the more the better*
 - Why do you think this might be?
 - Encourage them to suggest causal explanations. [**Cause & Control**]
- How likely do you think you would be to get bowel cancer at some point in the future if you: [**Control**]
 - Did all the things that doctors recommend to prevent it (i.e. healthy diet, exercise, didn't smoke, had little/no alcohol, kept at a healthy weight)?
 - Did all of these recommended things but you still didn't do any exercise?
 - Didn't do any of the things that doctors recommend (i.e. had an unhealthy diet, didn't exercise, smoked, drank alcohol, and were overweight)?

Beliefs about Severity

This subsection largely explores beliefs relating to severity of bowel cancer

- Which cancers do you think are the most serious?
- How serious do you think bowel cancer is?
 - What do you think the symptoms would be? [**Identity & Consequences**]
 - How much pain/discomfort do you think people experience when they have bowel cancer? What is the nature of this pain? i.e. where is it, and does it come and go or is it there all the time? [**Consequences**]
 - Do you think bowel cancer be cured (e.g. radiotherapy, chemotherapy). How well do you think this works? [**Control**]
 - Do you think the pain can be controlled? How well do you think this works? [**Control**]
 - What do you think is the worst thing that could happen if someone got bowel cancer? What's the likelihood of this happening? [**Consequences**]

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- What do you think the consequences of cancer could be for you and your family?
[Consequences]
 - PROBE: for non-health related (as well as health related) consequences e.g. for study, work, stress, finances, emotions
- If you developed bowel cancer but had no medical treatment for it, what do you think would happen? **[Consequences & Control]**
 - Do you think you could get better by yourself? Could your body ‘fight it off’?
 - Is there anything you could do/take (e.g. unconventional medicines) that would make you better?
 - How long do you think you would be ill for?
- If you did get treatment, what do you think would happen? **[Consequences & Control]**
 - What course would things take?
 - Can you put a time against these things i.e. how long would take?

This section ends with a few questions to explore emotional responses relating to risk

- Are you worried about getting bowel cancer? Why/why not?
 - EXPLORE whether they think these levels of worry might change as they get older
- If you developed cancer in the future, do you think that you might look back at choices you made about your lifestyle? What do you think your thoughts might be?
 - How might this make you feel?
 - Explore different scenarios i.e. if they had lived a very healthy life, and a less healthy life. Ask for each, ‘do you think you might wish you had done things differently?’

Section 4: Reflections (5 minutes)

Purpose of this section is to reflect on the issues discussed and bring the interview to a close.

- What do you think is the biggest challenge in motivating young people to do more physical activity?
- What do you think would most motivate you to make lifestyle changes that will help reduce the risk of getting cancer when you are older?
- What advice would you give to us about how we should communicate the risks of cancer to young people?

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Debriefing

Give them Cancer Research UK leaflet

Ask them if they have any questions and try and answer (but explain limits: we are not experts in (bowel) cancer)

Refer them to Cancer Research UK website and helpline (details on leaflet) if needed