

Supplementary Materials

S1. One-to-One Interview Guide

TOPIC GUIDE ONE

| | |
|--------------------------------------|---|
| Welcome; introduction; consent | <ul style="list-style-type: none"> - Thank you for taking part - Remind participant that interview is recorded; start recording. - Explain purpose of interview: to explore opinions relating to physical activity during cancer treatment, in particular an e-bike intervention - Withdrawal without penalty (except 21 days after final interview) <p>HOW DID YOU HEAR ABOUT THIS STUDY?</p> |
| Warm up | <ul style="list-style-type: none"> - Ask about day / plans for the week |
| Cancer Journey | <p>If they are comfortable, discuss their cancer journey</p> <ul style="list-style-type: none"> ○ Just to check, would you be comfortable speaking to me about your cancer journey in slightly more detail than the initial survey? - Tell me about your cancer journey <ul style="list-style-type: none"> ○ How far along [first diagnosis, relapse etc.]? ○ Undergoing treatment [how long for / left to go]? ○ If treatment ended, how long ago? - Explain to me your current physical health <ul style="list-style-type: none"> ○ Daily energy levels ○ Cancer ‘commitments’ |
| Physical Activity | <p>What does your current physical activity engagement look like?</p> <ul style="list-style-type: none"> ○ Do you participate in regular physical activity? ○ How often? Is it consistent each week? ○ Preferred physical activity modes? - Describe what your physical activity engagement looked like across your lifespan [briefly]? - How has your physical activity engagement changed throughout your cancer journey? |

| | |
|---------------------|--|
| | <ul style="list-style-type: none"> - Explain to me what motivates you to engage in physical activity? <ul style="list-style-type: none"> o Skip if no physical activity completed - Do you think engaging in PA during cancer treatment is important? <ul style="list-style-type: none"> o Do you think it impacts your recovery? - Explain, if any, your perceived barriers to physical activity? <ul style="list-style-type: none"> o Cancer related o Non-cancer related (if deemed important / relevant) - Explain, if applicable, how your cancer has interfered with your ability to do physical activity? <ul style="list-style-type: none"> o Energy levels o Specific cancer / treatment side effects |
| Bike / E-bike usage | <p>Describe to me your current understanding of an e-bike</p> <ul style="list-style-type: none"> o What is it? o What they're used for? o Benefits / limitations compared to normal cycling? o Do you know anyone with an e-bike? If so, what is their perception? <p>Explain what an e-bike is</p> <ul style="list-style-type: none"> - An e-bike is an electronic bike <ul style="list-style-type: none"> o bicycles with a battery-powered "assist" that comes via pedalling o Can help when cycling up hills o Make pedalling easier - Some come with a motor by the press of a button - Research has found people cycle further and more regularly (Castro et al., 2019) <p>Describe your current cycling engagement</p> <ul style="list-style-type: none"> - Do you cycle? If so, how often? - Have you previously used an e-bike or regular bicycle? <ul style="list-style-type: none"> o Do you own one or loaned one? <p>Why did you agree to take part in this research?</p> <p>Initial thoughts / opinions of e-cycling</p> <ul style="list-style-type: none"> - Does it interest you? - Perceived ease of use during cancer treatment - E-cycling vs conventional cycling? |

| | |
|------------------------------|--|
| | Ask for any generic comments about e-cycling |
| E-cycling taster session | <p>Discuss the process of the 1-hour e-cycling taster session</p> <ul style="list-style-type: none"> - Arrange a date / time if not already done so - Explain that more information will be provided nearer the time |
| Final comments and thank you | <ul style="list-style-type: none"> - Please specify any other comments you wish to add? - Thank you for your time - I hope you enjoy your e-cycling taster session! |

TOPIC GUIDE TWO

| | |
|--------------------------------------|---|
| Welcome; introduction; consent | <ul style="list-style-type: none"> - Thank you for taking part - Remind participant that interview is recorded; start recording. - Explain purpose of interview: to explore opinions relating to physical activity during cancer treatment, in particular an e-bike intervention - Withdrawal without penalty (except 21 days after final interview) |
| Warm up | <ul style="list-style-type: none"> - Ask about day / plans for the week |
| E-cycling taster session | <p>Question the participant about their 1-hour taster session</p> <ul style="list-style-type: none"> - Tell me about the session - Particular likes / dislikes? - How did you find riding the e-bikes? - E-bike compared to conventional bike? <p>Did you have to plan the session around any treatments?</p> |
| E-bike Intervention | <p>From your experiences using an e-bike:</p> <ul style="list-style-type: none"> - Can you identify any potential benefits of using an e-bike during your cancer journey? - Describe whether you perceive e-cycling to be feasible during your cancer journey? |

| | |
|--|---|
| | <ul style="list-style-type: none"> - Would you have a preference for an e-bike rather than a regular bicycle? <ul style="list-style-type: none"> o If yes/no, why? - Would an e-bike be easy enough to use during: <ul style="list-style-type: none"> o times of high stress o lacking energy o other barriers to cycling - Potential reasons for not engaging? <p>Cancer journey</p> <ul style="list-style-type: none"> - Is / was there a time in your cancer journey that you would perceive most difficult to engage in a physical activity intervention? <ul style="list-style-type: none"> o When? o Why? o More specifically, an e-bike intervention? o In these ‘difficult’ times, what is the biggest barrier to exercise? - How does e-cycling compare to other modes of physical activity you have done previously? - Describe a time during your cancer journey that would be feasible to engage in an e-bike intervention? <ul style="list-style-type: none"> o Pre-treatment? During treatment? Post-treatment? At what point post-treatment? - If you had access to an e-bike would you consider using it instead of a car or public transport. <ul style="list-style-type: none"> o Under what circumstance? o Would you use it for commuting for chores/shopping? o Would you use it for leisure PA? o Would you use it for anything else? - Do you think you would like to monitor your e-cycling activity? <ul style="list-style-type: none"> o If so, would a paper diary or activity tracking watch be better? - Interviewer to give a brief overview of what an e-bike intervention might involve. Explain whether an e-bike intervention sounds like something you would be interested in trying. <ul style="list-style-type: none"> o If yes/no, why? o What would you want from the study? o What would motivate you to take part? <p>Speak freely about the intervention in general</p> |
|--|---|

| | |
|---------------------------------------|--|
| Final comments and thank you | <ul style="list-style-type: none">- Please specify any other comments you wish to add?- Thank you for taking part |
|---------------------------------------|--|