

Exploring New Technologies to Manage Cancer Pain in the Community

TOPIC GUIDE FOR PROFESSIONAL INTERVIEWS

- Introductions.
- I'd be interested in your views about the use of digital technology to improving cancer pain management.
- What do you feel are the current challenges in achieving effective cancer pain management?
- Do you routinely make use of any digital pain management resources (for example web based resources or software applications) or direct patients to any digital resources to help with cancer pain management?
- We are considering developing a digital intervention to help with cancer pain management. One element of this might be an electronic diary in which patients could track their pain levels, for example with a touch screen application for tablet. What are your views on this?

Prompts might include:

- Would you value access to patient reported pain measurement data?
- Do you think that there are advantages to collecting patient pain data via digital diaries?
- Are there any specific patient reported measures that you might find useful?
- How might you use this data?
- Can you foresee any problems with asking patients to track pain electronically?
- Do you think that medication adherence is a problem in cancer pain management?
- We are considering using digital medication adherence devices to provide professionals with accurate data on analgesic use. What are your thoughts about this?
Prompts might include:
 - Would you value this data?
 - How might you use this data?
 - Can you foresee any down sides to the use of digital medication adherence devices?
- What format might you like data on patient's pain levels and medication use to be presented to you?
- Who should take ownership of this data?
- Can you think of any other ways of using digital technology to improve cancer pain management?

TOPIC GUIDE FOR PATIENT AND CARER INTERVIEWS

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Interviews will be directed to some extent by the participants, but it is anticipated that the following topics will be covered:

- Introductions.
- Could you start by telling me about yourself and your experiences of cancer pain?

- Have you/ the person that you care for experienced any particular challenges in achieving satisfactory pain control?
 - examples and prompts might include communication with health professional, taking medications regularly/ medication side effects, accessing health care, night time and weekend arrangements for help with pain management)?

- Tell me how you feel about using computing technology?
 - Examples and prompts might include what type of devices the person has access to e.g. computers/ tablets/ smart-phones, frequency of use, what kind of things they are currently using them for, and any current health care related uses?

- How would you feel about using computing technology to help manage cancer pain?

- One way that computer technology might be used is for keeping a diary of pain levels. How would you feel about using/ helping another to use an electronic pain diary? What features might be important/ useful?

- How often might you feel happy using such a diary?

- Can you think of any good or bad things about keeping an electronic pain diary?

- How would you feel about electronic pill bottles being used to give reminders about medication use and to track when pain medications are being used?

- Is there anything which would prevent you from using digital technology to help with cancer pain management?

- If you recorded pain measurements/ helped another to use an electronic pain diary, who would you like this information to be shared with?

- Have you any other suggestions as to how digital technology might be used to help with cancer pain management?

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SCHEDULE AND TOPIC GUIDE FOR PROFESSIONAL FOCUS GROUPS

There will be flexibility to allow the focus group to be directed to an extent by participants. However, it is envisaged that the following schedule will be followed:

1. Welcome and introduction
2. Background to the research.
 - Cancer pain is often poorly controlled.
 - The research team are interested in developing an intervention to improve pain management in the community.
 - The intervention might include a digital pain diary to allow patients to monitor and track their pain levels and feed this back to professionals.
 - Another component of the intervention might include electronic pill bottles which can provide the professional with accurate information about analgesic dosing and timing.
3. Setting out the ground rules:
 - We want everyone to be comfortable sharing their personal opinion. We would ask you all to treat these discussions as confidential.
 - Each of you may have very different ideas but feel free to say what you think; there are no right or wrong answers and we are interested in the whole range of opinions.
 - We plan to audio-record the discussion (with everyone's permission) so can I please ask you to speak one at a time so that we capture all the information you give us.
 - If everyone is happy to go ahead, can I please ask you to initial and sign the consent forms that you have been given.
4. Audio recorder is switched on.
5. Focus group discussion starter questions:
 - What do you feel are the current challenges in achieving effective cancer pain management?
 - What are your thoughts on using computer technology to allow patients to track their pain levels? Prompts might include:
 - Practicalities
 - Barriers to patients using technology
 - Potential value of access to patient reported pain measurement data?
 - Any specific patient reported measures that might be particularly useful?
 - Do you think that medication adherence is problem in cancer pain management?
 - What do you think about using digital medication adherence devices in cancer pain management? Prompts might include:
 - Potential value

- Practicalities and barriers
 - How might you make use of patient reported pain data and/ or information on medication adherence?
 - What format might you like this data to be presented to you e.g. printouts, emails, on patient held devices?
 - Can you see any problems with the collection of pain and medication adherence data?
 - Can you think of any other ways of using digital technology to improve cancer pain management?
6. End of focus group
Audio-recorder is turned off, participants are thanked, confidentiality re-affirmed, and travel expense forms distributed.