Scottish Government Health Directorates Chief Scientist Office



# DEVELOPMENT OF A MEASUREMENT GUIDED MEDICATION MANAGEMENT INTERVENTION TO OPTIMISE CANCER PAIN CONTROL

### Researchers

Dr Rosalind Adam, Professor Marijn de Bruin, Professor Christine Bond, Professor Chris Burton, Dr Peter Murchie.

#### Aim

To develop an intervention to help patients, caregivers, and healthcare professionals manage cancer pain more effectively.

# **Project Outline/Methodology**

We reviewed existing literature and interviewed patients with cancer pain, their caregivers, and professionals from different backgrounds. We asked about the challenges and problems faced during cancer pain management and discussed intervention ideas. We held focus groups with professionals to debate these ideas.

We modelled the problem using health psychology techniques, and used behavioural theories to help us design and develop an intervention. A small number of patients and professionals were asked to test the intervention and give us feedback.

# **Key Results**

Existing literature shows that patient reports of pain and related symptoms can be used by healthcare professionals to improve pain management.

Managing cancer is hard work for patients. Pain management takes place within this context.

Patients with cancer pain make trade-offs to balance pain with medication side effects, social function, and physical activities. Completely eliminating pain was not the main goal for most patients in our study.

Patients' individual treatment goals are not always recognised by professionals. Pain scores might be more meaningful by including a measure of the patient's "acceptable" pain level. An app has been created for patients with cancer pain. It allows patients to track painkiller use and to provide weekly updates about pain, side-effects, and other concerns to healthcare professionals via secure email.

Two patients have tested the app with their linked GPs and Macmillan nurses. App reports were used during medical consultations and seemed to promote a shared understanding about patients' approaches to pain and symptom management. The intervention helped GPs to recognise problems, including issues with psychological distress and suffering.

### Conclusions

This project has given insights into how patients and professionals approach pain management, and a digital app has been developed to address the problems identified. Early feasiblity testing suggests that the digital intervention could have a positive effect on medical consultations.

#### What does this study add to the field?

The digital intervention was informed by patients and professionals. The content is unique and the patient diary includes novel measures of pain control.

# Implications for Practice or Policy

The intervention has been designed to promote patient-centred symptom management. The intervention could potentially facilitate telephone reviews, with particular benefits for rural patients. Components of the intervention may be suitable to be adapted and used in other conditions, such as chronic non-malignant pain.

#### Where to next?

The digital intervention is ready to be tested on a larger sample of patients and professionals.

Further details from: Dr Rosalind Adam, rosalindadam@abdn.ac.uk, 01224 437906

Chief Scientist Office, St Andrews House, Regent Road, Edinburgh, EH1 3DG Tel:0131 244 2248 WWW.CSO.SCOt.nhs.uk