Supplementary Box 1: Amended topic guide

Interview Schedule for qualitative interviews  
*Modifications in red*

1. What do you think the term flare-up means? How would you describe a flare-up?  
   a. Does the pain have to be at a certain level for you to think it is a flare-up?  
   b. Is the term flare-up something you had heard before this interview? Is it a useful term?

2. Have you ever experienced a flare-up of your knee osteoarthritis?  
   a. What was it like?  
   b. How long did it/did they last?  
   c. How quickly did the pain start?  
   d. Did it/do they stop you from doing anything?  
   e. Does the way your knee looks change during a flare-up? (e.g. swelling)  
   f. How long have you had flare-ups? Do you remember when they started?

3. How often do you tend to get them?  
   a. Has this become more or less frequent as time has gone on?

*We are interested in finding out what happens with your knee symptoms over time*

4. Do you think you would be able to draw me a diagram of time against level of pain to show me how you think your pain symptoms have changed over the past 6 months? Perhaps draw a line for background pain first and then one showing where you may have had flare-ups of pain

   *How useful do you think it was to draw your diagram? Would this be useful to take to your GP to explain what your pain is like?*

   *(Use the graph as a talking point for the following questions):*  
5. Can you identify any causes or triggers when you have flare-ups?

6. Can you predict when they will come on?  
   *Are they easier to manage if they are predictable?*

7. How do you manage them?  
   b. Why do you manage them in this way?  
   c. Have you ever consulted your doctor about one?  
   d. What would make you consult your doctor about one?  
   e. If you wouldn’t go to doctors-why? What do you think they would or would not offer you?
Supplementary Box 2: Example pain graphs shown during interview

**Disease Course Over Time**

**A**

Patients experience flare or increase in pain and return to a background of no pain in between.

**B**

Patients experience flares of pain and return to a background level of pain in between.

**C**

Patients experience an intense, long lasting pain flare and eventually returns to a state of no background pain.
Patients experience a long lasting flare on a background of normal pain.

Patients experience numerous flares and their background pain increases after each flare.

Patients experience a gradual increase in pain over time with no flares.