Table 1: Response to cognitive interviewing during piloting of questionnaire

Questions	Participant 1: NB [25F] (21/10/2024)	Participant 2: FM [24F] (23/10/2024)
Time Taken	25mins	47 mins
Likert Scale:		
1.The MPharm degree has adequately prepared me to become a prescribing pharmacist		
2.The MPharm degree has taught me to learn how to prescribe ethically, safely and effectively		
3.My MPharm training has prepared me to take responsibility for my prescribing decisions while working within a healthcare team		
4.The SCP & simulation lessons have helped me understand the legal and clinical requirements of prescription writing		
5. The MPharm degree has enhanced by communication skills with and patients and other healthcare professionals	'Feels like kaizen'	Skill development: too many text boxes to fill out
6.The MPharm degree has improved my clinical decision-making skills in relation to prescribing		
7. The MPharm degree has developed my ability to identify and apply up-to-date evidence sources (remove)	Was confused about what the question was asking	Asked me what evidence sources meant
8. Please provide rationale for your answer to the above questions please give examples such as any aspect(s) of the degree which helped you improve these skills?		
9. My MPharm placements exposed me to real-life scenarios, allowing me to apply the theoretical knowledge I have learned into practice		
10. I feel excited to become a pharmacist prescriber.		
11. Being a prescriber will enhance my professional identity as a pharmacist		
12. Pharmacist qualifying as prescribers will expand their role in patient care		Pharmacist(s) 'care' was missing

Table 1 (continued)

13. I am concerned that prescribing may take too much time away from my other responsibilities as a pharmacist		
14. I feel anxious about the responsibility of prescribing for patients. (remove requirement for text box)	Too many boxes, less likely to get answers	'ahh now I need to provide an explanation'
15. If you have agreed to the above question, please provide reasoning why/rationale/explanation?		
16. Pharmacist prescribers can contribute to reducing prescribing errors		
17. Pharmacist prescribers will benefit other healthcare professionals by supporting workload		
18. Pharmacist prescribers can help reduce wait times for patients to receive treatment.		
19. Having more pharmacist prescribers will help improve access to healthcare for patients with chronic conditions		
20. Pharmacist prescribers can provide valuable input in managing polypharmacy, especially with patients with multimorbidity	Box: wasn't sure what to include. Too some time to think about it. Felt like they were repeating the question	Box: wasn't sure what else to include
Confidence Scale:		
1.Taking and documenting a medical history including medication history, allergies and intolerances		
2.Diagnosing medical conditions		
3.Performing physical examinations to decide an appropriate course of action for a patient		
4.Requesting and interpreting relevant investigations (e.g. blood tests)		
5.Using evidence-based and up-to-date resources (e.g., National & Local guidelines and other resources) to support my prescribing decisions.		
6.Involving patients in shared decision-making about their treatment and prescriptions		

Table 1 (continued)

7.Discussing risks, benefits, alternatives and consequences of doing nothing with patients about treatments.		
8.Developing an effective monitoring plan for patients after prescribing a medication		
9.Providing information to patients about their medicines/treatments		
10.Provide safety-netting advice to patients on what to do if their condition worsens or if side effects develop.	Wasn't happy to see to another 9 questions on next page	
11.Identifying and addressing patient adherence issues related to the prescribed medications		
12.Verbally communicating my prescribing decisions to other members of the multidisciplinary team (MDT), (using ISBAR).		
13.Collaborating with other healthcare professionals to develop a comprehensive treatment plan for patients.		
14.I understand the risks associated with prescribing and feel confident in mitigating these risks		
15.Documenting my prescribing decisions in patient records.		
16.Managing polypharmacy in patients with chronic conditions		
17.Managing patients with allergies or sensitivities to certain medications		
18.Considering how different patient factors (e.g. liver impairment, renal impairment or pregnancy) may affect prescribing decisions		
Free Style Questions:		
1.Reflecting on your MPharm Degree, what has prepared you the most for independent prescribing?		
2.When you qualify, please describe how you will use your prescribing skills for patient care (please give examples)?		

Table 1 (continued)

3.What concerns, if any, do you have about becoming a prescriber?		
4.How will you determine when a prescribing decision is beyond your expertise, or how will you assess your competence to prescribe?		
5.During your foundation year, what support or further training you would need to develop your prescribing skills?		
6.How do you feel about the current balance of theoretical learning vs practical application in your preparation for prescribing? What improvements could be made?		
7.What kind of assessment methods would you find most helpful in tracking your progress as a prescriber during your foundation year (tick all that apply)? Oral Case presentation Patient Case discussions OSCEs Reflective portfolios Written exams with MCQs Observations with prescribing supervisors		

Table 2: Response from verbal probing post-questionnaire completion

	Participant 1	Participant 2
Understanding, Clarity and intent		
Were there any questions you found confusing or difficult to understand? If so, which ones?	Confidence scale q5	No
Did any terms or phrases seem unclear or ambiguous?	Confidence scale q5	No
Did you find any questions that seemed too like others?	No	No
If a question was unclear, how would you suggest rephrasing it?	Specify which guidelines	n/a
Sensitivity and Comfort		
Were there any questions where you hesitated or felt unsure about how to respond?	Longer questions: wasn't sure how much details to include	Text box question wasn't sure how much to write
How did you feel overall while completing the questionnaire?	- Questions were good and very relevant to topic - Too long - Filled out because they were a friend (would have discontinued otherwise)	- Liked confidence scale questions but would prefer 1-5 instead of 1-10 - Text boxes made questionnaire too long
Technical Issues, Layout and Visual Design?		
Did you encounter any technical difficulties while filling out the questionnaire (e.g., page not loading, buttons not working)?	No – include a previous button	No
Were the instructions for navigating through the survey clear?	yes	Yes
Was it easy to access and complete on your device?	yes	yes
Did you notice any errors in the skip instructions?	n/a	n/a
Did you find the font size, colour, or style comfortable for reading?	- Hard to identify which circle belong to which numbers (confidence scale)	- 'Maybe have 1-5 instead of 1-10' for confidence scale
Assessing Interest, Engagement, tone (and flow)		
Was the language of the questionnaire appropriate for your level of understanding?	yes	yes
Did the wording of any questions feel biased (suggest a certain type of answer)?	no	no
Which part of the questionnaire did you find most interesting or engaging?	Confidence scale	Confidence scale
Were there any sections that you found boring or repetitive?	Not boring but long – free style (max 5)	Free style (3)
Were there any parts of the questionnaire where you felt stuck or had to think too much?	Free style questions	Free style questions
Did you feel that any of the questions were irrelevant?	No	Yes – how confident are you about diagnosing? Haven't done much of it
Did the questionnaire feel too long or too short?	Too long	Too long – boxes (first two sections) need to be removed
Did you feel that the order of the questions made sense?	Made sense	Made sense
Did you ever feel like you wanted to abandon the questionnaire before completing it? If so, when and why?	Yes (when they saw text boxes)	No – but wanted to skip
Overall Feedback		
What was your overall impression of the survey—was it enjoyable, tedious, or just fine? Why?	It was a nice way to reflect on the degree and what I learnt from it. I was able to analyse the degree, it was quite interesting and fun. It was just too long.	Very thorough and made me think about the MPharm course.
Were there any specific sections that you think should be expanded, shortened, or removed entirely?	Reduce free style questions or change to multiple choice	Reduce number of questions in last section
After completing the survey, do you have any additional thoughts or comments that could help improve it?	- There needs to be a previous button. - Try merge questions together to reduce question – confidence question	- Review answers at the end - Shows the questions on top e.g. 1 of 20
Was there anything important that you think the questionnaire should have asked but didn't?	No	Maybe at the end include a box for students to include their own opinions on prescribing - What improvements would you like to see in future MPharm?