

Online Appendix 1: Survey Alterations -Pharmacists' Adoption of Prescribing

Final Question	Original Question	Changes & Rationale (Source)
<p>Self-Efficacy Questions</p> <p>PB8. How sure are you that you could:</p> <ol style="list-style-type: none"> perform a patient assessment to prescribe? prescribe in a clinical area that you are familiar with? prescribe in a clinical area that you are <u>not</u> familiar with? adapt a prescription for patients starting a new therapy? initiate new therapy for a patient? accept responsibility for medication management? <p>How sure are you that you could: (<i>Community, Outpatient pharmacy, and PCN ONLY...not presented in main paper</i>)</p> <ol style="list-style-type: none"> prescribe a refill for patients on appropriate chronic medications? prescribe the amount of appropriate chronic therapy required until the physician visit? prescribe to extend appropriate chronic therapy for three months of therapy? <p>How sure are you that you could: (<i>Inpatient Hospital Practice ONLY non presented in main paper</i>)</p> <ol style="list-style-type: none"> Prescribe for patients while in the hospital Prescribe for discharge <ul style="list-style-type: none"> ● Not At All Sure ● Somewhat Sure ● Quite Sure ● Very Sure ● Extremely Sure 	<p>How sure are you that you could:</p> <ol style="list-style-type: none"> perform a patient assessment to prescribe? prescribe in a clinical area where you are comfortable? prescribe the minimum amount of medication required? prescribe for three months of therapy? prescribe in a clinical area where you are not comfortable? prescribe for patients on chronic medications? adapt a prescription for patients starting a new therapy? <ul style="list-style-type: none"> ● Not At All Sure ● Slightly Sure ● Somewhat Sure ● Rather Sure ● Quite Sure ● Very Sure ● Extremely Sure 	<ul style="list-style-type: none"> ● Question originally in Predictors of Prescribing section ● Scale reduced to 5 options, removed slightly and rather (Expert Review) ● Added "...until the physician visit" to "c" (Research Team review) ● Cognitive interview experience showed that some respondents answered according to their practice behaviour instead of perceptions, some respondents indicated the need for an n/a option (Cognitive Interview) ● Question split as some questions were specific to certain practice areas ((Cognitive Interview) ● Question moved from Predictors of Prescribing section based on continued uncertainty whether we are interested in beliefs or behaviours (Research Team review)

Impact on Practice		
<p>To what extent has prescribing impacted the following for you?</p> <ol style="list-style-type: none"> job satisfaction professional image overall workload personal financial reimbursement time spent with patient time spent assessing patients quality of patient care quality of physician relationship time spent on continuing professional development <ul style="list-style-type: none"> Greatly Decreased Decreased Same Increased Greatly Increased 	<p>To what extent has prescribing impacted the following? (Adapted from: Latter 2010) Greatly decreased/decreased/same/increased/greatly increased</p> <ul style="list-style-type: none"> time spent on patient assessment? time spent interviewing patients or caregivers? time spent interacting with physicians? time spent interacting with other health care professionals? need for documentation? overall workload? <p>Please indicate which of the following has resulted from your ability to prescribe.</p> <ul style="list-style-type: none"> New ongoing clinical service (If yes are these services ongoing or one-time?) New physician relationships New health care professional relationships New patients New contracts (e.g. facility) New educational, training, or speaking opportunities <p>To what extent has prescribing influenced the following aspects of your practice? (Adapted from: Latter 2010) Completely negative, very negative influence, negative, neutral, positive, very positive, completely positive</p> <ul style="list-style-type: none"> Patient relationships Relationships with physicians Relationships with other health care professionals 	<ul style="list-style-type: none"> Changed first two options to “Time spent with patients” and “Time spent assessing medication therapy” to differentiate them further (Expert Review) “Ongoing” removed from “New clinical service” based on recommendation (Expert Review) Changed to “new” and “expanded” sub-options for each option (Expert Review) “To what extent has prescribing impacted the following?” and “Please indicate which of the following has resulted from your ability to prescribe” questions merged (Research Team feedback) Added “time spent on clinical services” (Research Team feedback) Removed “contracts” and “educational, training...” when questions merged (Research Team feedback) Consolidated from “All Prescribers” subsection upon addition of question PB2 to improve respondent pathway through the section (Cognitive Interviews) Added “To what extent has prescribing influenced the following aspects of your practice?” to the question matrix (Cognitive Interviews) Added “Time spent on continuing professional development” (Research Team suggestion) Removed time with physicians, time and quality of relationships with other health care professionals (Pilot study) Moved “time for documentation” to support (Pilot Study)

Support Questions		
<p>PB6. To what extent do the following factors affect your prescribing activities (e.g. adapt, provide emergency supply, or initiate therapy)?</p> <ul style="list-style-type: none"> a. pharmacy staffing at my practice location b. access to patient information c. my practice environment d. patient expectations e. relationships with physicians f. relationships with other health care professionals g. Requirement to document patient care h. my education and training i. Employer expectations <ul style="list-style-type: none"> • Strong Barrier • Weak Barrier • Not a Factor • Weak Support • Strong Support 	<p>In considering the following, how well would prescribing fit into your practice? (Westrick 2010) 1 = very poor fit, 2 = poor fit, 3 = moderate fit, 4 = good fit, 5 = very good fit</p> <ul style="list-style-type: none"> • Practice setting • Management support • Day-to-day activities • Technicians • Overall staffing • Access to patient information • Physician relationships • Health care professional relationships 	<ul style="list-style-type: none"> • Removed “Technicians” based on expert review (Expert Review) • Removed “Day-to-day activities” (Expert Review) • Moved from General Practice Descriptors section based on research team feedback (Research Team) • Added documentation from “impact” questions. (Pilot Survey) • Added employers expectations and my education and training (Pilot Survey)

Prescribing Beliefs		
<p>PP1. Please consider pharmacist prescribing in general to answer these questions. How strongly do you agree or disagree with the following statements.</p> <p>a. Pharmacist prescribing is an extension of the role that pharmacists already fulfill.</p> <p>b. Patients are responsible for ensuring they have a sufficient supply of medications.</p> <p>c. Physicians are responsible for ensuring patients have a sufficient supply of medications.</p> <p>d. Pharmacists are responsible for ensuring patients have a sufficient supply of medications.</p> <p>e. Prescribing increases pharmacists' personal liability.</p> <ul style="list-style-type: none"> ● Completely Disagree ● Strongly Disagree ● Disagree ● Neutral ● Agree ● Strongly Agree ● Completely Agree 	<p>How strongly do you feel that:</p> <p>a. It is the pharmacists' responsibility to ensure patients have sufficient supply of medications.</p> <p>b. Patients should be responsible for ensuring patients have a sufficient supply of medications.</p> <p>c. It is the pharmacists' job to alter medications to avoid drug related problems.</p> <p>d. Pharmacist prescribing is an extension of the medication recommendations I already make.</p> <p>e. Pharmacist prescribing is risky.</p> <ul style="list-style-type: none"> ● Very Strongly Disagree ● Strongly Disagree ● Disagree ● Neutral ● Agree ● Strongly Agree ● Very Strongly Agree 	<ul style="list-style-type: none"> ● Questions on who should prescribe were removed. ● Scale reduced to 5 options, strongly disagree to strongly agree based on (Expert Review) ● Clarified "Pharmacists prescribing is risky." to "Prescribing increases my personal liability." (Expert Review) ● Changed "Pharmacists prescribing is an extension of the medication recommendations I already make." to "...is an extension of the role that pharmacists already fulfill." (Research Team feedback) ● Changed to 7-point scale based (Cognitive interviews)
<p>PP4. What do you believe are the <u>societal</u> benefits to pharmacists' prescribing? (<i>Check all that apply</i>) (ONLY asked of community pharmacists therefore not presented in paper)</p> <ul style="list-style-type: none"> ● Access to health care services ● Choice in health care providers ● Patient convenience ● Physician convenience ● Improved Patient outcomes ● Physicians' understanding of the pharmacists' role ● Health care professionals' understanding of the pharmacists' role ● Patients' understanding of the pharmacists' role ● Efficiency of the health care system ● <u>None of the above</u> 	<p>SOCIAL BENEFITS (Westrick 2010)</p> <ul style="list-style-type: none"> ● Patient convenience ● Physician convenience ● Patient health ● Physicians' understanding of the pharmacists' role ● Health care professionals' understanding of the pharmacists' role ● Patients' understanding of the pharmacists' role 	<ul style="list-style-type: none"> ● "Check All" added for clarification, "Patient Health" changed to "Patient Outcomes", "Sustainable health care system due to improved health human resource management" option added and "Other" option (Expert Review) ● Heading changed from "social" to "societal" based on (Research Team) ● "Sustainable health care system due to improved health human resource management" option changed to "Benefit to the health care system (Research Team feedback) ● Added "None of the above" option to determine whether the respondent did not chose any options intentionally or left the question blank (CI Summary) ● Added "Access to health care services" and "Choice in health care providers" which are arguments for the legislation based on Research Team review (CI Revised version) ● Clarified "improved" patient outcomes based on Research Team review (CI Revised version)

Prescribing Beliefs		
Not included in January 3, 2013 version	<p>Please indicate your agreement with the following 6 statements (Pronk, 2002: The influence of the innovation characteristics.)</p> <p>Very strongly disagree/Strongly disagree/Disagree/Neutral/Agree/Strongly agree/Very strongly agree</p> <ul style="list-style-type: none"> • My patients must give me the impression that prescribing has added value. • Prescribing must directly fit in the daily activities of my practice. • I will only try out prescribing if I can try it out without any commitments. • Prescribing improves the image of me and my practice. • Prescribing improves promotes ties of my patients with my practice. • Prescribing only succeeds in my practice when prescribing is not too complex. 	<ul style="list-style-type: none"> • Statements re-worded for clarity based on (Expert review) • Changed “I will only try out prescribing if I can try it out without any commitments.” To “It was (or will be) easy to test prescribing in my practice.” (expert review) • Completed question removed due to confusion (Cognitive Interviews)
Question moved to Prescribing Practice Behaviours section	<p>Please think about your own experience prescribing when responding to these questions. If you do not prescribe, please consider your general thought about prescribing. To what extent has prescribing influenced the following aspects of your practice? (Adapted from: Latter 2010)</p> <p>Completely negative, very negative influence, negative, neutral, positive, very positive, completely positive</p> <ul style="list-style-type: none"> • Patient relationships • Relationships with physicians • Relationships with other health care professionals 	<ul style="list-style-type: none"> • Question combined with “To what extent has prescribing impacted the following for you?” question and moved into the Prescribing Practice Behaviours section
Not included in January 3, 2013 version	<p>PERSONAL Benefits (Stewart 2007)</p> <ul style="list-style-type: none"> • Your professional image • Your job satisfaction • Quality of your patient care 	<ul style="list-style-type: none"> • “Check All” added for clarification and “Other” option added (Expert Review) • Financial rewards added (Expert Review) • Working Group discussed changing from checkboxes to yes/no options (Cognitive Interview) • Question combined with impact (Cognitive Interview)

Prescribing Beliefs		
Not included in January 3, 2013 version	<p>When thinking about changes in pharmacy practice, how would you describe yourself? (Stewart, 2007)</p> <ul style="list-style-type: none">• Venturesome and willing to take risks in relation to new ways of practicing• Serve as a role models for others in relation to new ways of practicing• Deliberate for some time before adopting new ways of practicing• Cautious in relation to new ways of practicing and tend to change after most pharmacists have done so• Resist new ways of practicing	<ul style="list-style-type: none">• Question deleted following cognitive interviews as the question was unclear (Cognitive Interview)

Use of Electronic Health Records		
<p>Which of the following statements describes how you use Netcare? Please check ONE for each statement.</p> <p>a. demographic information including personal health care numbers (number from Alberta Health card)</p> <p>b. double doctoring or multiple pharmacies</p> <p>c. medication history/ allergies/refills including information from PIN (i.e., pharmaceutical information network)</p> <p>d. lab values</p> <p>e. medical history such as diagnostic tests and discharge or admission history</p> <ul style="list-style-type: none">● Not at all● Rarely, I use another system● Rarely● Occasionally● Routinely	<p>Which of the following statements describes how you use Netcare? Please state yes or no to each statement.</p> <ul style="list-style-type: none">● I look up demographic information including PHNs● I check for double doctoring.● I look up medication history● I look up lab values● I look up diagnostic tests● I look up medical history such as discharge history	<ul style="list-style-type: none">● Diagnostic tests and discharge history questions combined (Expert Review)● Changed answer options from yes/no based (Expert review)