



# Patient Perspectives on Pharmacist Prescribing in a Collaborative Interdisciplinary Setting at a Solid Organ Transplant Clinic



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## Background

- The Certified Pharmacist Prescriber (CPP) initiative aims to provide pharmacists with prescriptive authority in collaborative settings.
- The College of Pharmacists of BC has submitted the proposed CPP framework to the Ministry of Health for review.
- Across Canada, many pharmacists already prescribe in different capacities, from independent to collaborative prescribing.
- Successful implementation of CPP will require stakeholder support.

## Objectives

- To assess patient perspectives on pharmacists as prescribers in a collaborative setting.
- To utilize the survey and qualitative data to identify perceived barriers to pharmacists as prescribers.

## Methods

- Design:**
  - Prospective mixed-methods study with a quantitative survey and qualitative interview.
- Study Site and Recruitment:**
  - Solid Organ Transplant Clinic at Vancouver General Hospital between November 2018 to February 2019.
  - Sample of convenience.
- Study Survey and Education Package:**
  - Quantitative survey development.
  - Education package development:
    - CSHP Hospital Pharmacists Video
    - Infographic (Figure 1)
  - Semi-structured interview guide development.
- Two-Part Study:**
  - Quantitative survey:**
    - Determine patient perceptions of pharmacists' current scope of practice (Figure 2).
  - Qualitative interview:**
    - Pre-education interview using semi-structured interview guide.
    - Provide education package.
    - Post-education interview using same semi-structured interview guide.
- Endpoints:**
  - Determine relationships between themes based on patient perception.
  - Identify barriers for collaborative pharmacist prescribing.
- Analysis:**
  - Descriptive statistics for quantitative data and thematic analysis for qualitative data using NVivo 12 (Version 12.3.0.599).

	N=33	n	%
Age (years)	18-39	12	37
	40-59	8	24
	60-79	13	39
Sex	Male	18	55
	Female	15	45
Time since transplant (years)	0-1	18	55
	>1	15	45
Type of transplant	Kidney	20	61
	Liver	10	30
	Multiorgan	3	9
Ethnicity	Caucasian	23	70
	East Asian	6	18
	Other	4	12
Medications (#)	0-10	22	67
	>10	11	33
Current GP	Yes	33	100
	No	0	0
Regular Pharmacy	Yes	33	100
	No	0	0
Highest level of education	High school or equivalent	12	37
	Vocational/technical school	4	12
	Some college/university	6	18
	Undergraduate college/university degree	5	15
	Graduate or professional degree	6	18
Most fluent language	English	31	94
	Mandarin	2	6

Table 1: Baseline participant characteristics.

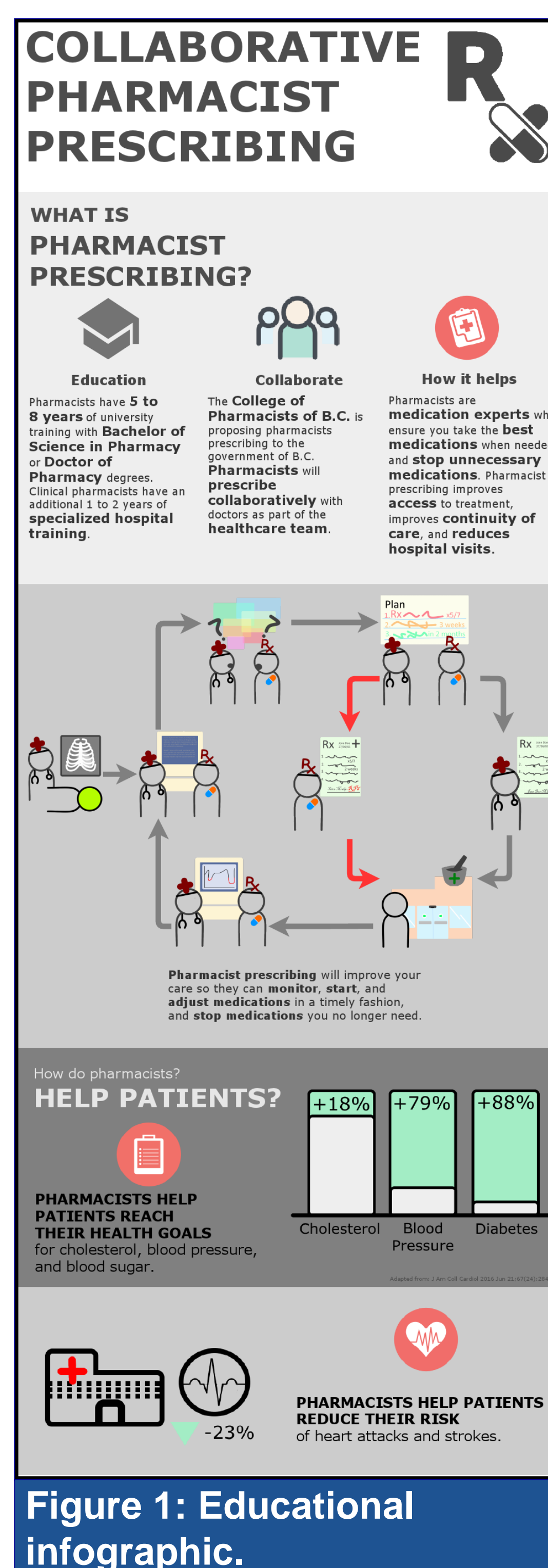


Figure 1: Educational infographic.

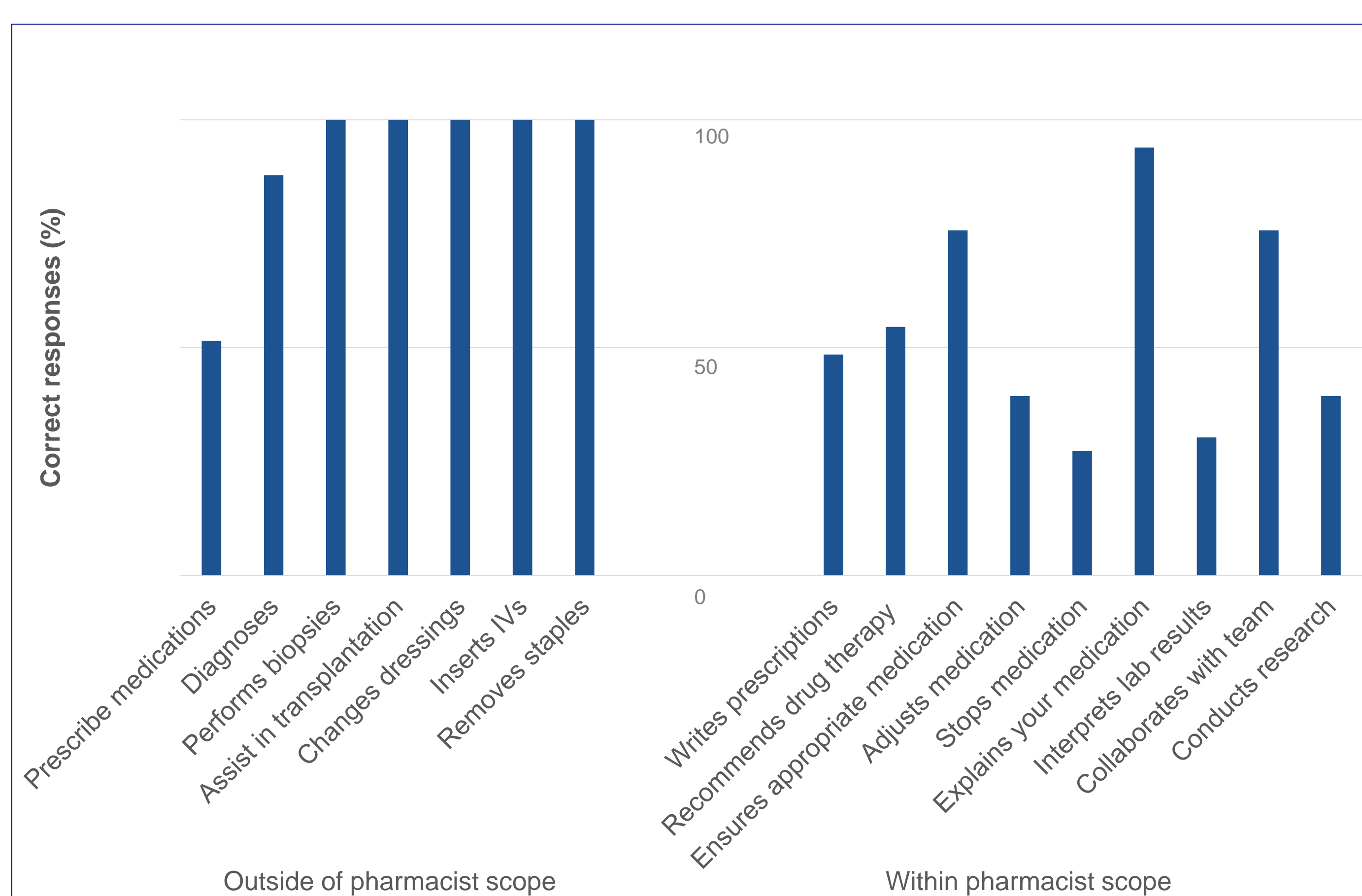


Figure 2: Baseline patient perception of pharmacists' scope of practice.

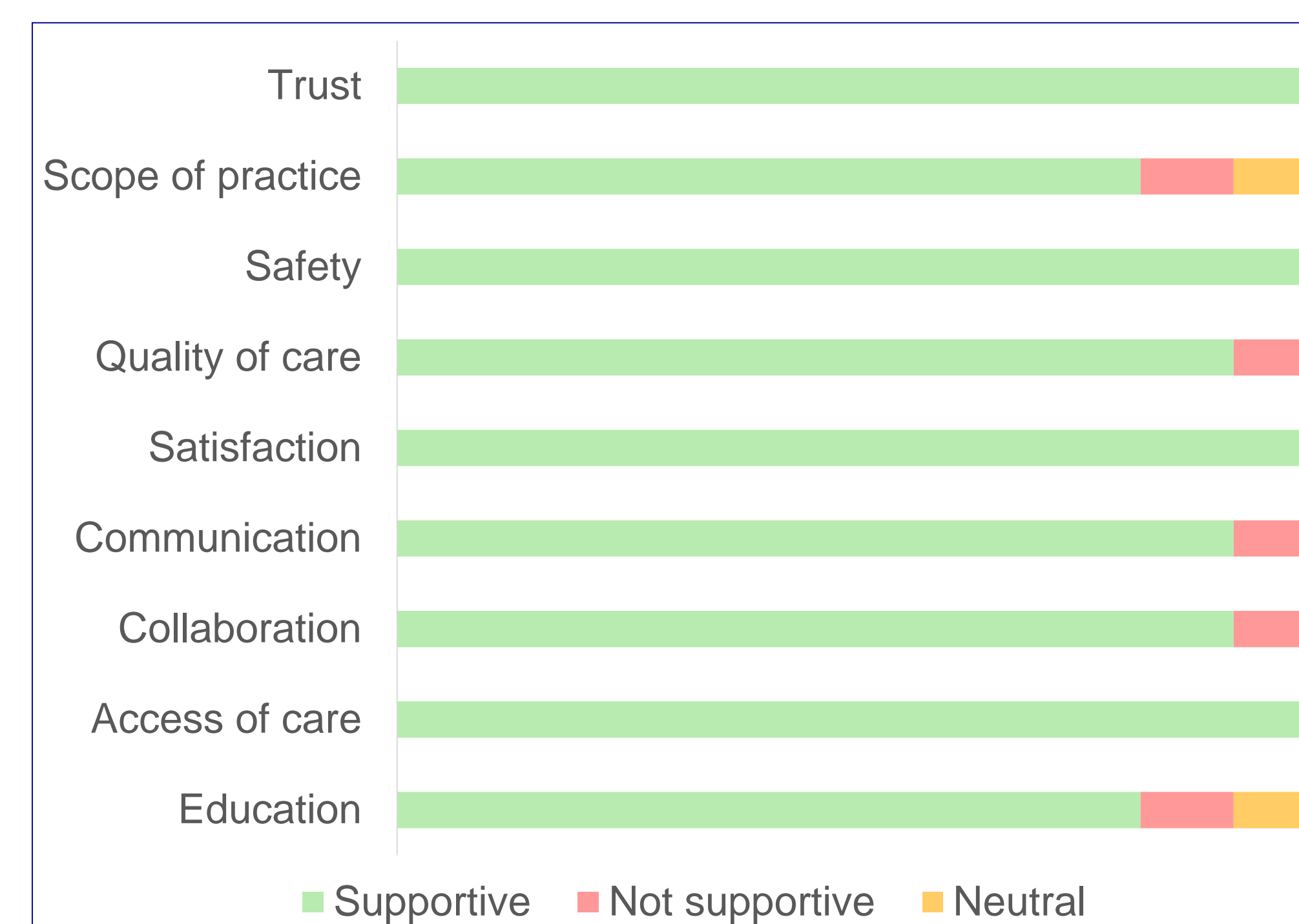


Figure 3: Pre-education themes.

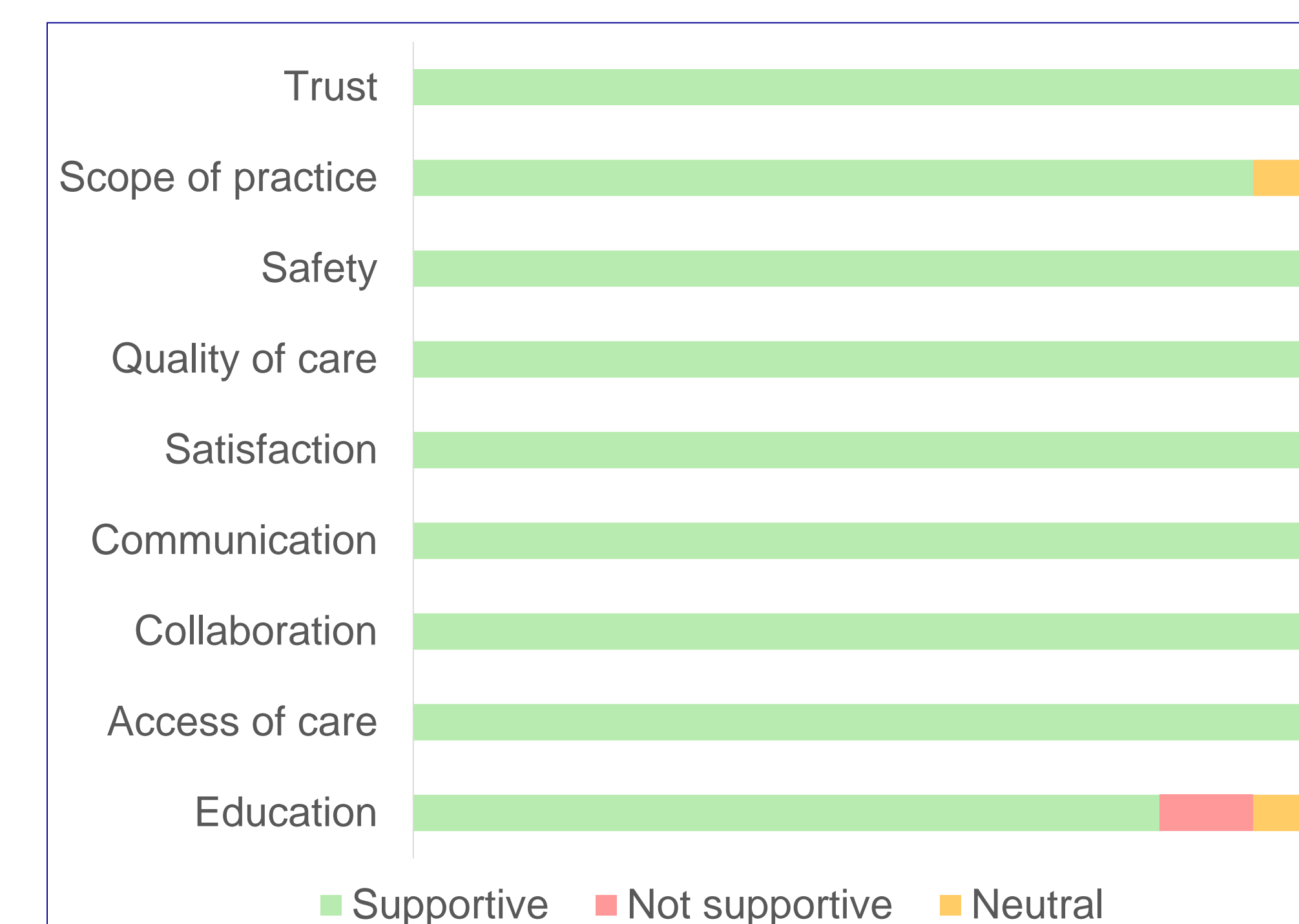


Figure 4: Post-education themes.

Response	Theme	Quote	
Supportive	Education	"Because they're a pharmacist, and they know, they would be specialized. I mean who else who be able to do that if it wasn't them?"	
	Access of care	"They have a far extensive knowledge of the drugs that helps keep me safe."	
	Collaboration	"The clinic pharmacist would make things more convenient for me."	
	Communication	"The clinic pharmacist could change my medication and make things easier for me."	
	Satisfaction	"They could call me and change my medication without having to wait for the doctors approval, so that would make things a lot quicker."	
	Quality of care	"They actually make the recommendations for many of the doctors at the end of the day, so why not get it right from the horse's mouth, like they say."	
	Safety	"They do everything for me on the drug side of things, so it would only make sense that they write them for me instead of somebody else. They interpret my lab results, they figure out what med dose I need, and when to stop them, when to drop them, and what's right for me based on symptoms or side effects."	
	Scope of practice	"It would be nice, if both [pharmacists and physicians] would collaborate on every medication that a patient would take, especially because every drug has risks."	
	Not supportive	Education	
		Collaboration	"I think [prescribing] is more of a doctors' role"
Communication		"Not the pharmacist because... they don't have the medical knowledge, [they] have the drug knowledge."	
Quality of care			
Neutral	Education		
	Scope of practice	"Well I don't know what training an actual pharmacist has"	

Table 2: Representative quotes pre-education.

Response	Theme	Quote	
Supportive	Education	"I had no idea that was the case that pharmacists go through that training to essentially become almost like a specialist to help doctors, right?"	
	Access of care	"Well obviously the decrease in hospital readmissions, and the money! That's a huge amount of money to be saved."	
	Collaboration	"I don't understand why they can't already. I find them very knowledgeable. I like their whole, holistic approach to caring for me. I think they would complete the team."	
	Communication	"It would be nice if someone like the pharmacist could adjust, or prescribe, or stop a medication that we don't need."	
	Satisfaction	"I thought they already collaborate and can prescribe, so I really think they should be able to!"	
	Quality of care	"The pharmacists is really a doctor, they're just a specialist is really what it is."	
	Safety	"...the video and infographic just reaffirms what I was already thinking to begin with, with pharmacists being the experts in that specific field"	
	Scope of practice	"...having pharmacists be able to prescribe would help get away from the inefficiencies that are in this whole system, and I could see a benefit too with pharmacists specializing on drug and prescriptions... that would free up doctors to deal with diagnosis and paying attention to other aspects of treatment."	
	Not supportive	Education	"Just like any part of the medical field, there's a risk of people not understanding your case if it's very complicated and just going ahead with the prescription"
		Scope of practice	"I don't know what [pharmacists] have been taught, but it seems to me that some new information would be needed, but not a lot."

Table 3: Representative quotes post-education.

## Conclusions

- All participants were supportive of collaborative pharmacist prescribing.
- Nine themes were identified, characterizing the participants' perspective on collaborative prescribing.
- Quantitative and qualitative data consistently identified two themes depicting participants' reservations to fully support collaborative prescribing:
  - Unfamiliarity with pharmacists' training
  - Unfamiliarity with pharmacists' scope of practice
- A key barrier to collaborative prescribing is the public's unawareness of pharmacists' qualifications.
- Once the participants were educated on the roles, responsibilities, and qualifications of pharmacists, they were more supportive of collaborative prescribing.
- Targeted initiatives to increase the public's awareness on pharmacists' training and scope of practice is necessary for the successful adoption of CPP.

