

Theoretical domain	Definition	Constructs
1. Knowledge	An awareness of the existence of something	Knowledge (including knowledge of condition /scientific rationale) Procedural knowledge Knowledge of task environment
2. Skills	An ability or proficiency acquired through practice	Skills Skills development Competence Ability Interpersonal skills
3. Social/professional role and identity	A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting	Professional identity Professional role Social identity Identity Professional boundaries Professional confidence Group identity Leadership Organisational commitment
4. Beliefs about capabilities	Acceptance of the truth, reality, or validity about an ability, talent, or facility that a person can put to constructive use	Self-confidence Perceived competence Self-efficacy Perceived behavioural control Self-esteem Empowerment Professional confidence
5. Optimism	The confidence that things will happen for the best or that desired goals will be attained	Optimism Pessimism Unrealistic optimism Identity
6. Beliefs about consequences	Acceptance of the truth, reality, or validity about outcomes of a behaviours in a given situation	Outcome expectancies Characteristics of outcome expectancies Anticipated regret Consequents
7. Reinforcement	Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus	Rewards (proximal / distal, valued / not valued, probable / improbable) Incentives Punishment Consequents Reinforcement Contingencies Sanctions
8. Intentions	A conscious decision to perform a behaviour or a resolve to act in a certain way	Stability of intentions Stages of change model Transtheoretical model and stages of change
9. Goals	Mental representations of outcomes or end states that an individual wants to achieve	Goals (distal / proximal) Goal priority Goal / target setting Goals (autonomous / controlled) Action planning Implementation intention
10. Memory, attention, and decision processes	The ability to retain information, focus selectively on aspects of the environment, and choose between 2 or more alternatives	Memory Attention Attention control Decision making Cognitive overload / tiredness

11. Environmental context and resources	Any circumstance of a person's situation or environment that discourages or encourages the development of skills and abilities, independence, social competence, and adaptive behaviours	Environmental stressors Resources / material resources Organisational culture /climate Salient events / critical incidents Person x environment interaction Barriers and facilitators
12. Emotion	A complex reaction pattern involving experiential, behavioural, and physiological elements, by which the individual attempts to deal with a personally significant matter or event	Fear Anxiety Affect Stress Depression Positive / negative affect
13. Social influences	Any circumstance of a person's situation or environment that discourages, or encourages the development of skills and abilities, independence, social competence, and adaptive behaviour	Social pressure Group conformity Social comparisons Group norms Social support Power Intergroup conflict Alienation Group Identity Modelling
14. Behavioural regulation	Anything aimed at managing or changing objectively observed or measured actions	Self-monitoring Breaking habits

Adapted from Cane et al. 2012, Atkins et al. 2017

Table 1: Theoretical domains framework (TDF)

Table 2
Sample characteristics (N=20)

Characteristics	N (%)
Speciality and role	
Community Pharmacist	16(80)
Community pharmacist and Manager	1(5)
Community and Hospital Pharmacist	3(15)
Sex	
Male	17 (85)
Female	3 (15)
Age	16 (80)
25-35	3 (15)
36-45	1 (5)
46-60	
Other	
Experience year of experience	11(55)
1-5	3 (15)
6-10	4 (20)
11-15	2 (10)
20+	

Theme	TDF domains & non-TDF subtheme	Codes/ constructs	Illustrative quotations
Pharmacists' self-perception	Social and prof role and identity	Primary guardian of patient welfare	"Obviously, I am a pharmacist and so my interest is always in patient health and patient's outcome" (CPAE1).
		Secondary role	"We're not involved in it directly... It would be totally the medicine management team at the surgery ... "As a pharmacist, you would intervene by highlighting it to the doctor, because the doctor is going to take the decision at the end of the day" (CPMTM1).
		Safeguarding action	" I would say it is part of my job to check whether they are... the amount that he was taking, Oramorph, isn't going to cause him on overdose or a serious reaction with alcohol misuse. CPMYM1).
Capabilities	Knowledge	Knowledge of condition/ scientific rational	"Opioids are not for chronic usethey're only when needed.....in flare up or acute pain" (CPKHH1).
	skills	Skills development through training	"We did cover the guidelines, but it was quite some time ago" (CPKHH1)
		Experience	"Tell if someone's misusing but, that's just from experience... or like, you know, intuition kind of thing. You would usually know anyway". (CPMYM)
	Beliefs about capabilities	Empowerment (lack of)	"It currently, it's impossible to monitor and optimise opioid, opioid treatments". (CPAE1)
Infrastructure and systemic constructs	Environmental Context and Resources	Barriers: Information	"Without access to medical records that'd probably be a barrier". (CPRO1)
		Funding and resources	"The, erm, funding, I think that it's one of the things that they probably might need to kind of fund to sort of, as a service...." (CPRO1)
		Systems	"There's nothing stopping that patient taking their prescription to another pharmacy ". CPHB1
	E-prescriptions		"They might not have the time to ...do proper checks to make sure... and they might just print it" (CPRO1.)
Personal Factors	Social Influences	Inter-group conflict with GP	"That, I think, [causes]frustrations with all community pharmacists because we don't have , erm, I think professional to professional communication between prescribers and pharmacist, sopatients have to come back the next day or a few days afterif there is a single piece of information that we need to clarify or double check .Sometimes.....you have to call back two, three times and you still can't get an answer. The patients might have to take their prescription somewhere else.... I think there's a huge barrier between pharmacists and prescribers" (CPMHZ1).
		With patients	"Obviously, if you have a bad experience with a patient, then sometimes you think twice about something, you know, doing something" (CPAAR1).
	Emotion	Empathy	"If [I] find out that the patient is misusing other substance with the opioidI'd be worried about them".(CPMSM)

		Stress	"Monitoring and talking to every patient and keeping tabs is going to be a very strenuous task, that would be very stressful". (CPRO1)
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Table 3

Relevant Theoretical Domains to Community Pharmacists' Role in Prescribed Opioid Optimisation with Illustrative Codes.

