

Identifying Barriers and Enablers for the Utilization of a Buprenorphine-naloxone Induction Stabilization and Discharge Pathway (UNBLIND)

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Background

Escalating Opioid Crisis in Canada

- Opioid use disorder is a chronic, relapsing condition associated with increased mortality and morbidity
- Okanagan: 2nd highest illicit drug overdose death rate in province: 40.8/100,000 (BC: 30.9/100,000 Canada: 11.8/100,000)

New Treatment Pathway for Inpatients

- Kelowna General Hospital: Adult Buprenorphine-naloxone Induction Stabilization and Discharge Orders Pathway went live September, 2018
- Goals of pathway: Manage acute opioid withdrawal, stabilize opioid-dependent patients and transition patients to long-term outpatient management

Theory-Informed Behaviour Change

- Barriers and enablers to the implementation and use of this pathway are unknown
- Capability, Opportunity, Motivation (COM) are sources of behaviour
- Theoretical Domains Framework (TDF) is a validated tool which uses COM to identify sources of behaviour

Objective

- To identify modifiable barriers and enablers for the implementation of the buprenorphine-naloxone pathway by healthcare providers at Kelowna General Hospital using the TDF

Methods

Design

- Descriptive cross-sectional study

Setting

- January 2019 to April 2019 at Kelowna General Hospital, Kelowna BC
- Inpatient wards: Emergency Department, Intensive Care Unit, Medicine and Psychiatry

Population

- Healthcare professionals: Physician (MD), Nurse Practitioner (NP), Registered Nurse (RN), Registered Psychiatric Nurse (RPN), Licensed Practical Nurse (LPN), Pharmacist (Ph), Social Worker (SW)

Data Collection

- 20-item, TDF-coded, online questionnaire (SurveyMonkey®)
- 5-point Likert scale: Strongly Disagree=1, Neutral=3, Strongly Agree=5
- Recruitment: ward-specific email lists

Data Analysis

- Median, Mode and Interquartile Range (IQR) for each TDF Domain
- Barrier: ≥ 50% respondents rate Strongly Disagree-Neutral (1-3)
- Enabler: ≥ 50% respondents rate Agree-Strongly Agree (4-5)

Results

Table 1. Demographics

Characteristic (n = 56)	n (%)
Professional Discipline	
Registered Nurse (RN)	23 (41)
Physicians (MD)	14 (25)
Pharmacist (Ph)	10 (18)
Licensed Practical Nurse (LPN)	4 (7)
Registered Psychiatric Nurse (RPN)	2 (4)
Social Worker (SW)	2 (4)
Nurse Practitioner (NP)	1 (2)
Clinical Practice Area or Specialty	
Medicine Ward	18 (32)
Emergency Department	16 (29)
Intensive Care Unit	8 (14)
Psychiatry Ward	4 (7)
Substance Use Team	2 (4)
Other	8 (14)
Years in Professional Field	
1 to 5 years	17 (30)
6 to 10 years	15 (27)
11 to 20 years	15 (27)
20 years or greater	9 (16)
Approximate Time Treating OUD Patients	
Several times per month	29 (52)
Several times per week	14 (25)
Several times per day	8 (14)
Never	5 (9)

Table 2. Identification of Barriers and Enablers

COM	TDF Domain (n = 14)	Barrier or Enabler	Median	IQR
C	Behavioural Regulation	Barrier	3	2
	Knowledge	Barrier	3	1
	Skills	Enabler	4	1
	Memory/Attention/Decision	Enabler	4	0
O	Environ. Context & Resources	Barrier	3	1
	Social Influences	Enabler	4	1
M	Emotions	Barrier	3	2
	Goals	Barrier	3	1
	Beliefs About Capabilities	Barrier	3	1
	Reinforcement	Barrier	3	0
	Professional Role & Identity	Enabler	4	2
	Beliefs About Consequences	Enabler	4	1
	Optimism	Enabler	4	1
	Intentions	Enabler	4	0

Results

Figure 1. Barriers Identified (n = 7)

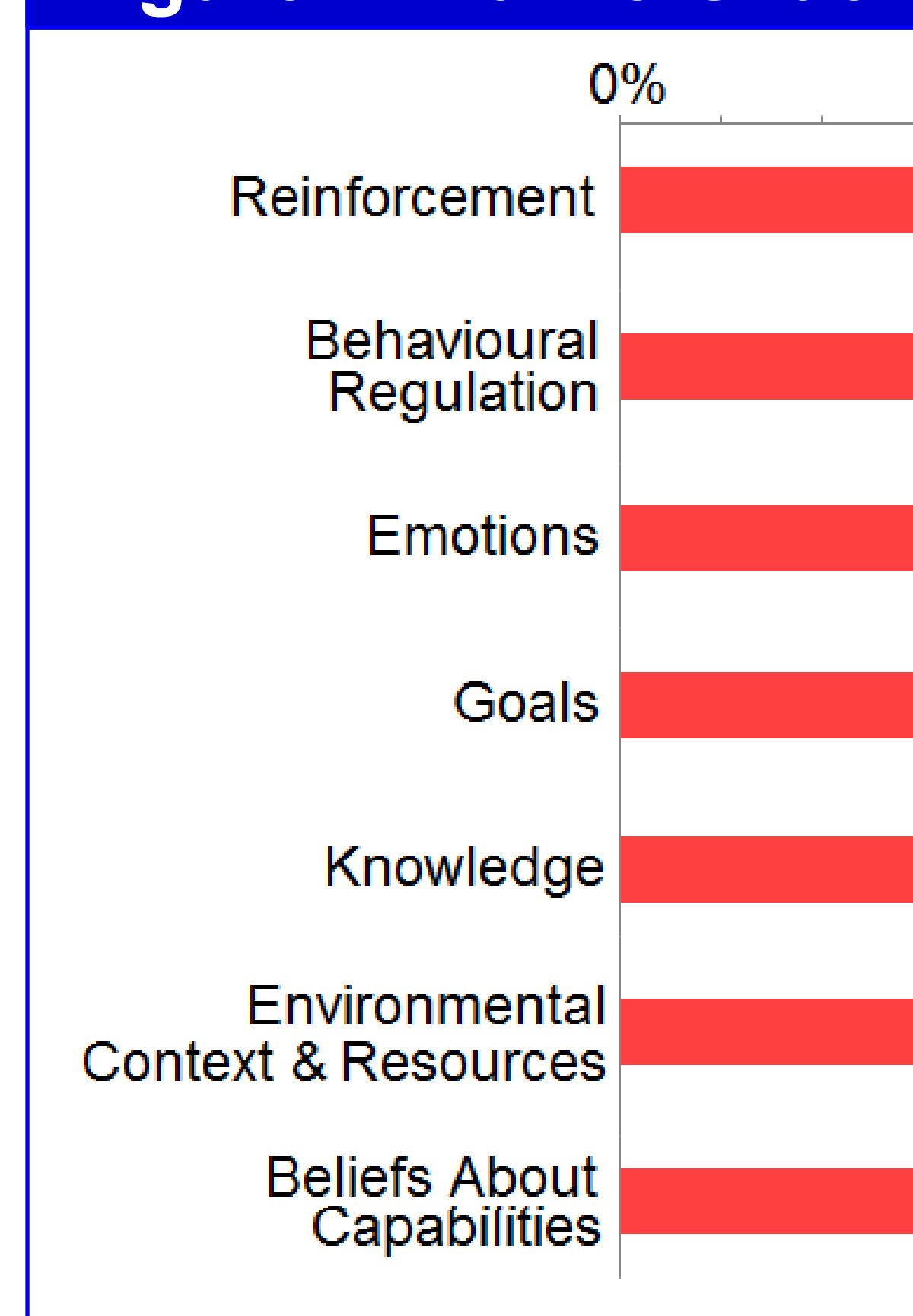


Figure 2. Enablers Identified (n = 7)

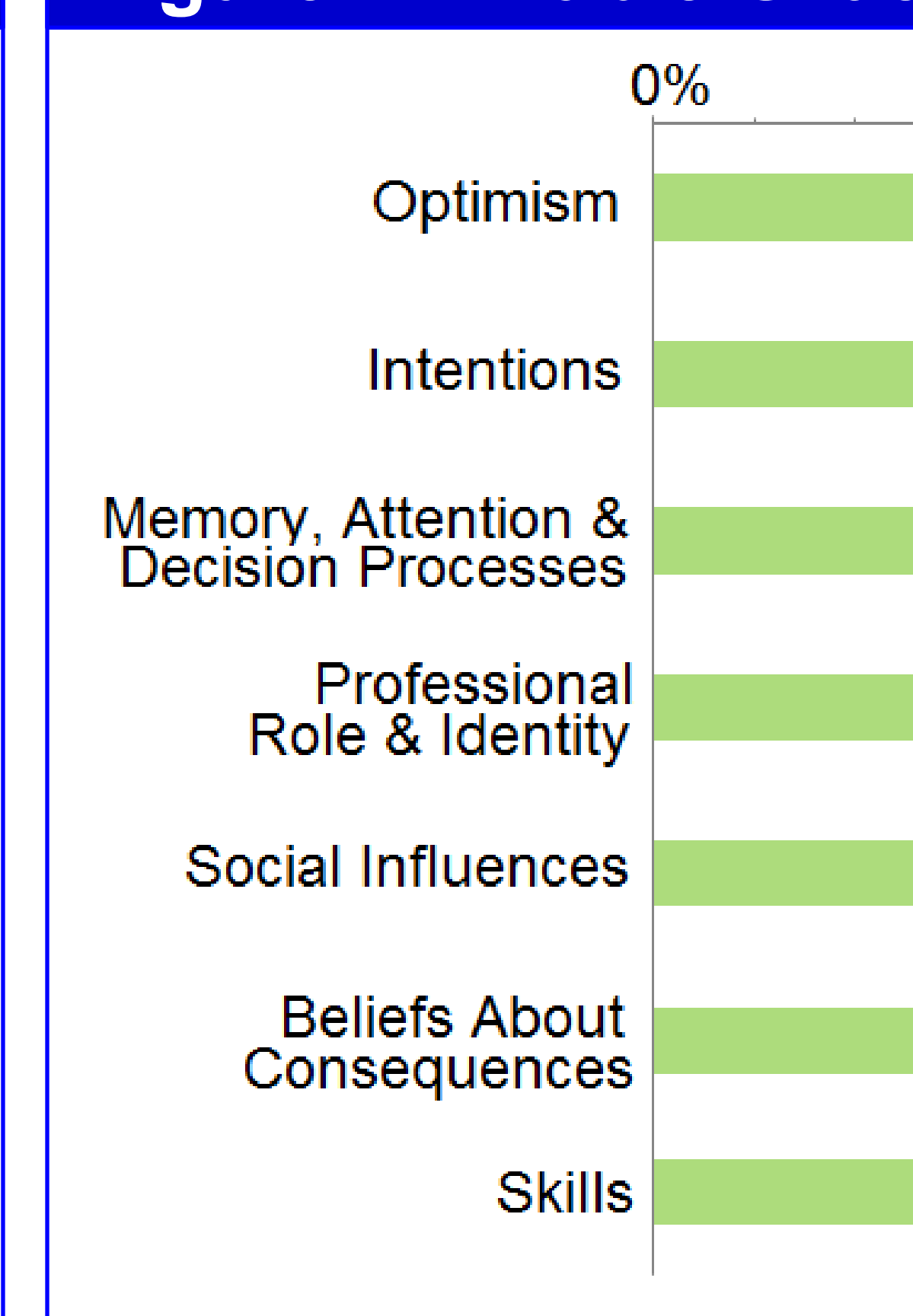


Table 3. Primary Barriers and Enablers by Professional Discipline

Profession	n (%)	Primary Barriers	Primary Enablers
Physicians (MD)	14 (25)	1. Goals 2. Emotions 3. Reinforcement	1. Professional Role & Identity 2. Intentions 3. Memory, Attention & Decision Processes
Nursing Professions (NP, RN, LPN, RPN)	30 (54)	1. Reinforcement 2. Behavioural Regulation 3. Environ. Context & Resources	1. Optimism 2. Intentions 3. Memory, Attention & Decision Processes
Pharmacists (Ph)	10 (18)	1. Reinforcement 2. Behavioural Regulation 3. Goals	1. Optimism 2. Professional Role & Identity 3. Intentions

Discussion

Strengths

- TDF is a validated tool used to assess implementation problems
- Diverse population studied (responses from all targeted professions captured)
- Even distributions amongst demographics (practice area, experience, etc.)

Limitations

- Questionnaire format provides minimal opportunity for response clarification
- Domain data may depend on single question
- Selection Bias (respondents are volunteers)
- External Validity (local design may limit extrapolation to other sites)

Future Initiatives

- Targeted Behavioural Change Interventions (BCIs) can be designed and tailored based on the barriers to implementation identified by this study
- Utilization of the buprenorphine-naloxone pathway can be measured before and after the initiation of BCIs to study their effects on behavioural change

Conclusions

- A number of key barriers and enablers to the implementation of the buprenorphine-naloxone pathway have been identified
- Subgroup analyses show professions encounter similar barriers and enablers
- Initiatives for future study have been discovered

