



Observing Cannabis Use in Iowa

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University of Iowa

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Acknowledgements

I ILLINOIS



TODAY'S PRESENTATION

- How did we get here?
- What have we done?
- Where are we going?

Improving Dementia Care and Reducing Unnecessary Use of Antipsychotic Medications in Nursing Homes



Alice Bonner, PhD, RN
Division of Nursing Homes

Center for Clinical Standards and Quality
Centers for Medicare & Medicaid Services

January 31st, 2013

2016 NSDUH Data

Cannabis & Older Adults

TABLE 2. Percentage of past month marijuana use* among all persons aged ≥12 years, by age group — National Survey on Drug Use and Health, United States, 2002–2014

Age group (yrs)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Linear trend	% change (diff)
	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	p-value [†]	2002 to 2014
Total	6.2 (5.9–6.5)	6.2 (5.9–6.4)	6.1 (5.8–6.4)	6.0 (5.7–6.3)	6.0 (5.8–6.3)	5.8 (5.6–6.1)	6.1 (5.8–6.4)	6.7 (6.4–7.0)	6.9 (6.6–7.2)	7.0 (6.7–7.3)	7.3 (6.9–7.6)	7.5 (7.2–7.9)	8.4 (8.1–8.7)	<0.001 [‡]	+35
12–17	8.2 (7.7–8.6)	7.9 (7.4–8.4)	7.6 (7.1–8.1)	6.8 (6.4–7.3)	6.7 (6.3–7.1)	6.7 (6.3–7.2)	6.7 (6.3–7.1)	7.4 (6.9–7.8)	7.4 (6.9–7.9)	7.9 (7.4–8.4)	7.2 (6.8–7.7)	7.1 (6.6–7.5)	7.4 (6.8–7.9)	NS	-10
18–25	17.3 (16.6–18.0)	17.0 (16.3–17.7)	16.1 (15.4–16.9)	16.6 (15.9–17.3)	16.3 (15.6–17.0)	16.5 (15.8–17.2)	16.6 (15.9–17.3)	18.2 (17.5–19.0)	18.5 (17.8–19.3)	19.0 (18.3–19.8)	18.7 (18.0–19.5)	19.1 (18.3–19.8)	19.6 (18.7–20.5)	<0.001 [‡]	+13
≥26	4.0 (3.7–4.3)	4.0 (3.7–4.3)	4.1 (3.8–4.4)	4.1 (3.7–4.4)	4.2 (3.8–4.5)	3.9 (3.6–4.2)	4.2 (3.9–4.6)	4.6 (4.3–4.9)	4.8 (4.4–5.1)	4.8 (4.5–5.2)	5.3 (4.9–5.7)	5.6 (5.2–6.0)	6.6 (6.2–6.9)	<0.001 [‡]	+65
26–34	7.7 (7.0–8.6)	8.4 (7.6–9.3)	8.3 (7.5–9.3)	8.6 (7.7–9.7)	8.5 (7.6–9.4)	7.9 (7.1–8.8)	8.8 (7.9–9.7)	9.6 (8.7–10.6)	10.6 (9.5–11.7)	10.2 (9.2–11.3)	11.3 (10.3–12.4)	12.6 (11.5–13.9)	12.7 (11.9–13.6)	<0.001 [‡]	+65
35–44	5.6 (5.0–6.4)	6.0 (5.3–6.8)	5.5 (4.8–6.2)	4.8 (4.2–5.5)	5.5 (4.8–6.4)	5.0 (4.3–5.7)	5.1 (4.4–5.8)	4.8 (4.2–5.5)	5.4 (4.7–6.1)	5.4 (4.7–6.2)	5.9 (5.1–6.7)	6.3 (5.6–7.1)	8.0 (7.4–8.7)	<0.001 [‡]	+43
45–54	4.0 (3.4–4.7)	3.3 (2.7–4.0)	4.5 (3.7–5.4)	4.3 (3.6–5.1)	4.5 (3.8–5.3)	4.4 (3.6–5.3)	3.9 (3.3–4.8)	4.9 (4.2–5.7)	5.0 (4.2–5.9)	4.9 (4.1–5.7)	5.2 (4.4–6.1)	5.4 (4.5–6.5)	5.9 (5.2–6.6)	<0.001 [‡]	+48
55–64	1.1 (0.6–1.8)	1.2 (0.7–1.8)	1.0 (0.6–1.7)	1.8 (1.2–2.6)	1.4 (0.9–2.0)	1.5 (1.0–2.2)	3.2 (2.2–4.4)	3.1 (2.3–4.1)	2.6 (1.9–3.5)	3.4 (2.6–4.3)	3.7 (2.9–4.7)	3.8 (3.1–4.6)	6.1 (5.2–7.1)	<0.001 [‡]	+455
≥65	0.3 (0.1–1.0)	0.1 (0.0–0.3)	0.1 (0.0–0.5)	0.3 (0.1–1.0)	0.2 (0.1–0.5)	0.2 (0.1–0.6)	0.3 (0.1–0.7)	0.6 (0.2–1.3)	0.5 (0.2–1.0)	0.7 (0.4–1.2)	0.9 (0.5–1.5)	0.9 (0.5–1.5)	1.3 (0.9–1.8)	<0.001 [‡]	+333

Abbreviations: CI = confidence interval; diff = difference; NS = not significant; + = increase; - = decrease.

* Past month use of marijuana is defined as those who reported use of marijuana within 30 days preceding the date of interview.

[†] Linear trends were assessed using logistic regression model from the 2002–2014 survey years.

[‡] Logistic regression (p<0.05).

State Cannabis Program Participation 65+

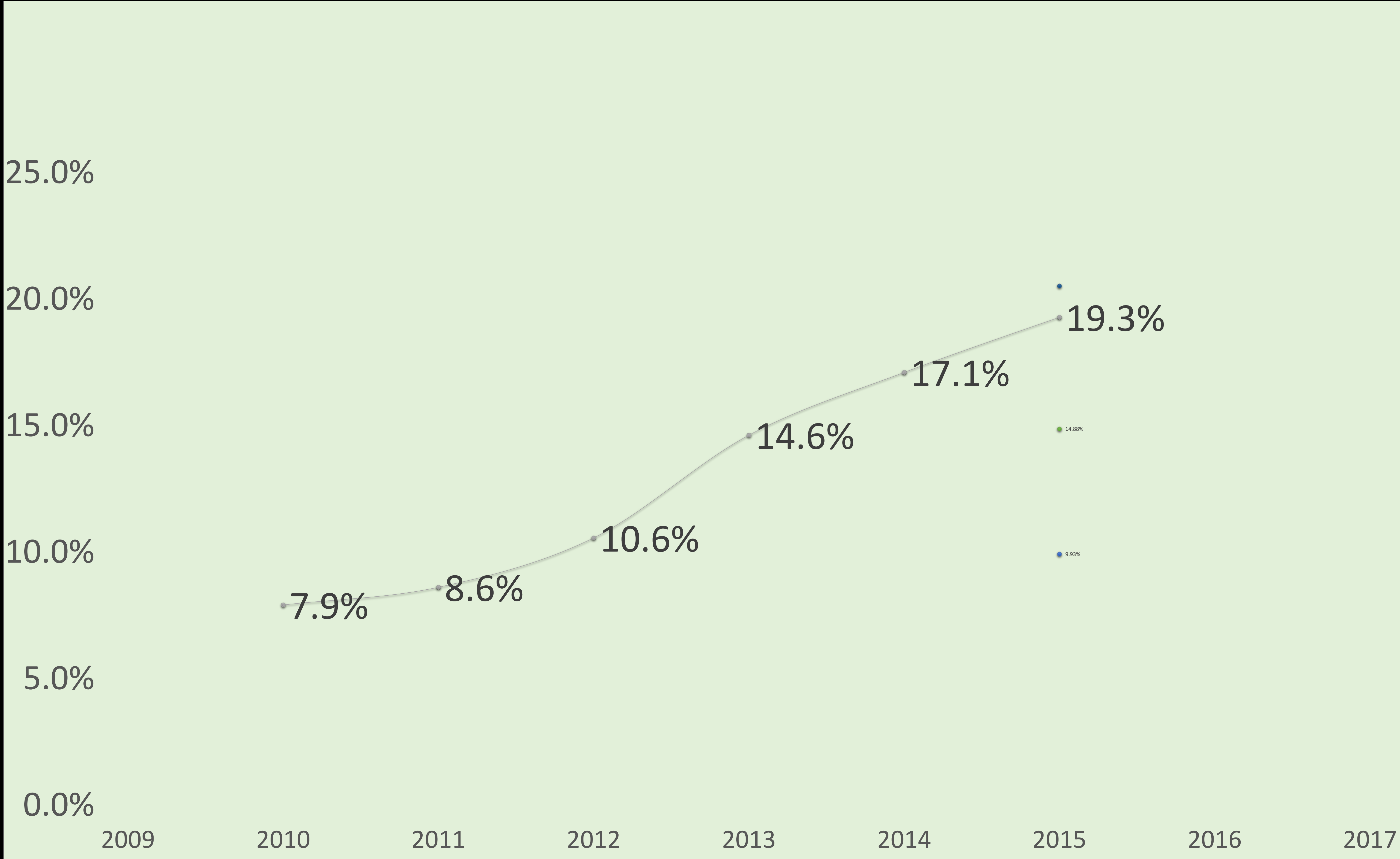


Figure 1: State Policies, Local Implementation Efforts and Cannabis Use among Older Americans

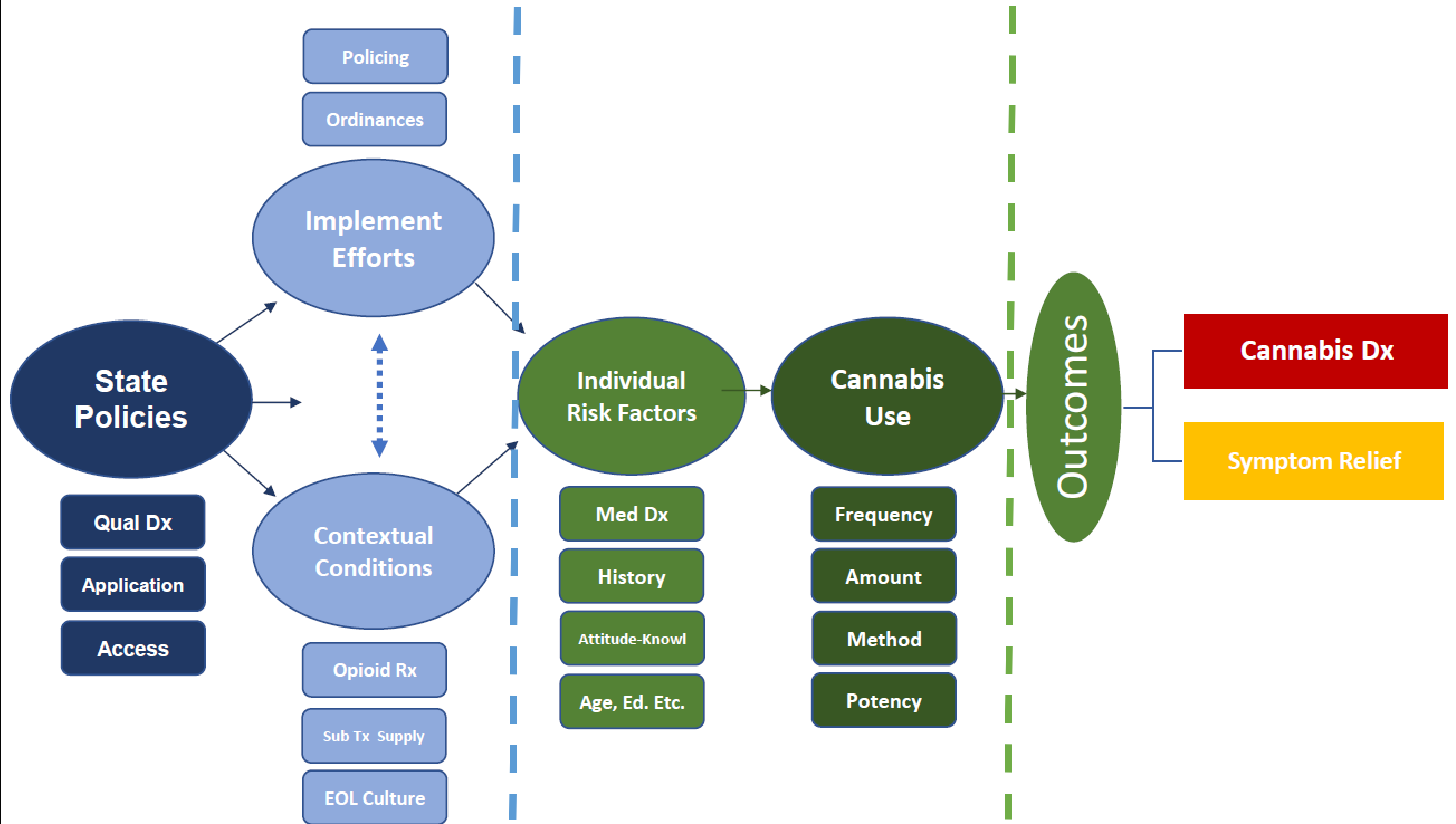


Table 1: Aspects of Statutory and Regulatory Code Pertinent to Older Adults

Codes (Examples)	Sub-Codes (Examples)		
Program Qualification	Exclusions: Inclusion:	Place of Residence: Clinical Symptoms: Diagnosed Conditions:	Federal Nursing Facility Pain Nausea Alzheimer's Disease Glaucoma
Application	Qualifying Providers: Medical Doctors: Nurses Processes:		Neurologists Psychiatrists Finger Printing Application Fee Renewal
Access	Home: Caregivers Product Type		Delivery Cultivation Combustibles-Edibles Labeling

Figure 3:

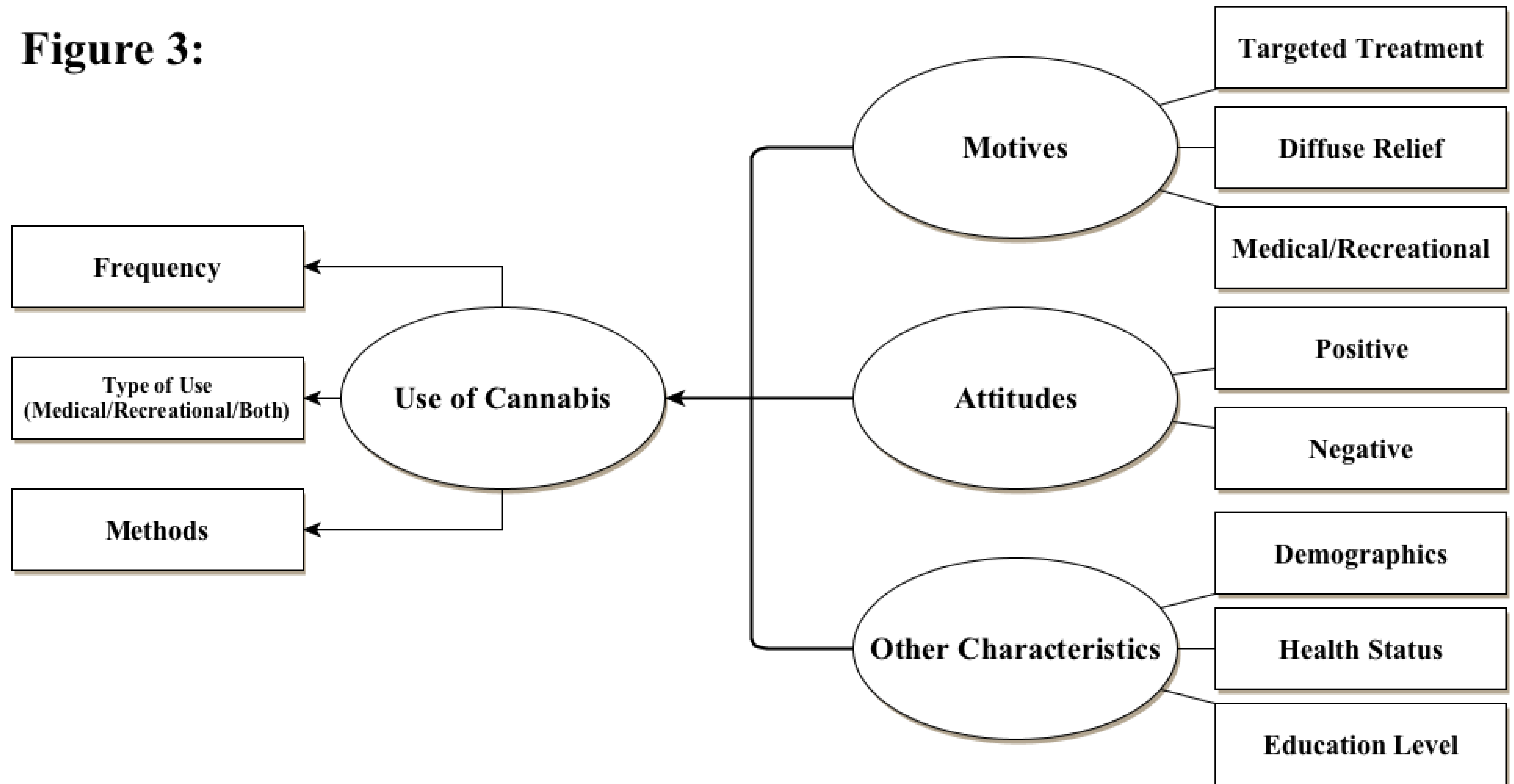
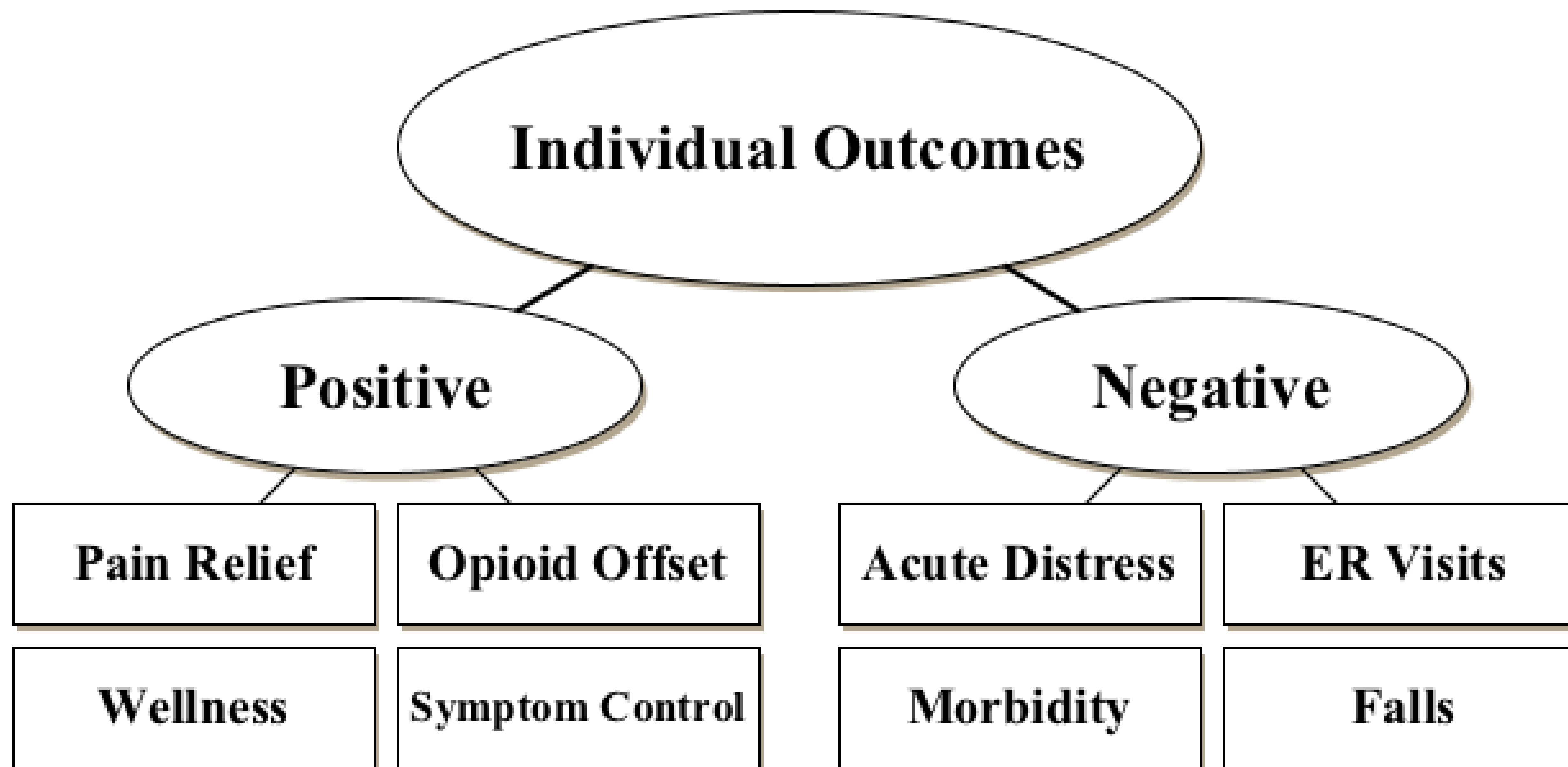


Figure 4:



Three Types of Studies

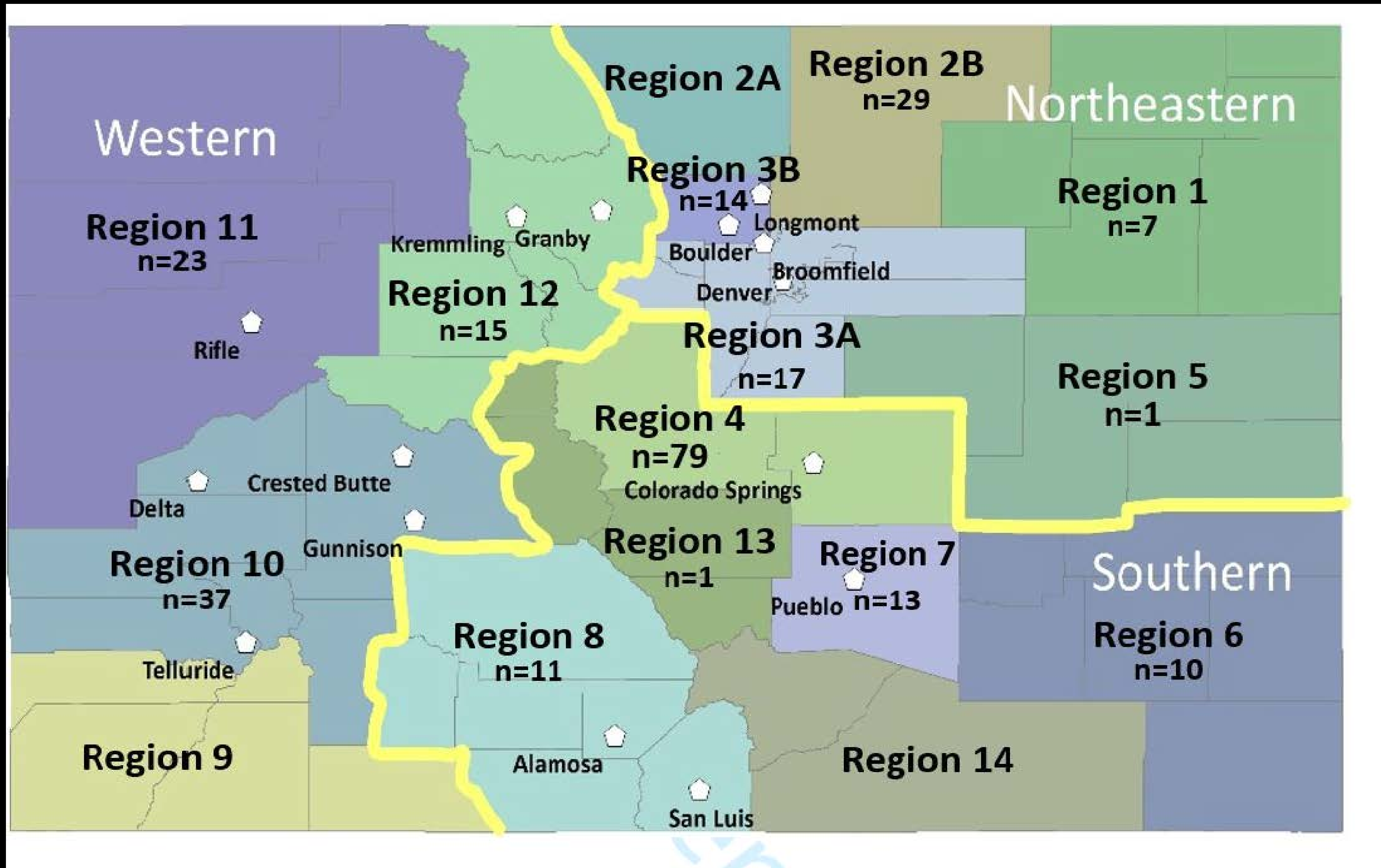
- Focus Groups and Interviews
- ***Survey Observations***
- Clinical Trials

PREVIOUS WORK

State of Colorado,
Department of Public Health

State of Illinois,
Department of Public Health

Focus Groups across Colorado



We identified five themes:

- 1) older adults perceive a stigma associated with cannabis use, even if used for medical purposes
- 2) there is a lack of information about the use of cannabis for medical purposes.
- 3) substantial barriers exist to medical cannabis program.
- 4) cannabis largely is used for symptom relief (e.g., pain) and as a substitute for opioids and other medications.
- 5) persons who use cannabis only for a medical purpose prefer their own physicians but do not always use

A Clinical Profile of Older Adults who use Cannabis

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OBJECTIVE

To describe

- a) prevalence and patterns of marijuana use, and
- b) predictors and outcomes of marijuana use, in Colorado adults age 65 and older

Design

State-wide survey, Self-reported health outcomes related to past year marijuana use cross-sectional paper or computer-based survey

Participants and Settings (n = 270)

Purposive sample of older adults \geq age 65 in each of Colorado's 16 Area Agencies on Aging regions; at senior centers, wellness clinics, health clinics, and marijuana dispensaries.

Methods

Logit regression of predictors of past year marijuana use (medical or recreational)

More than 100 survey questions...

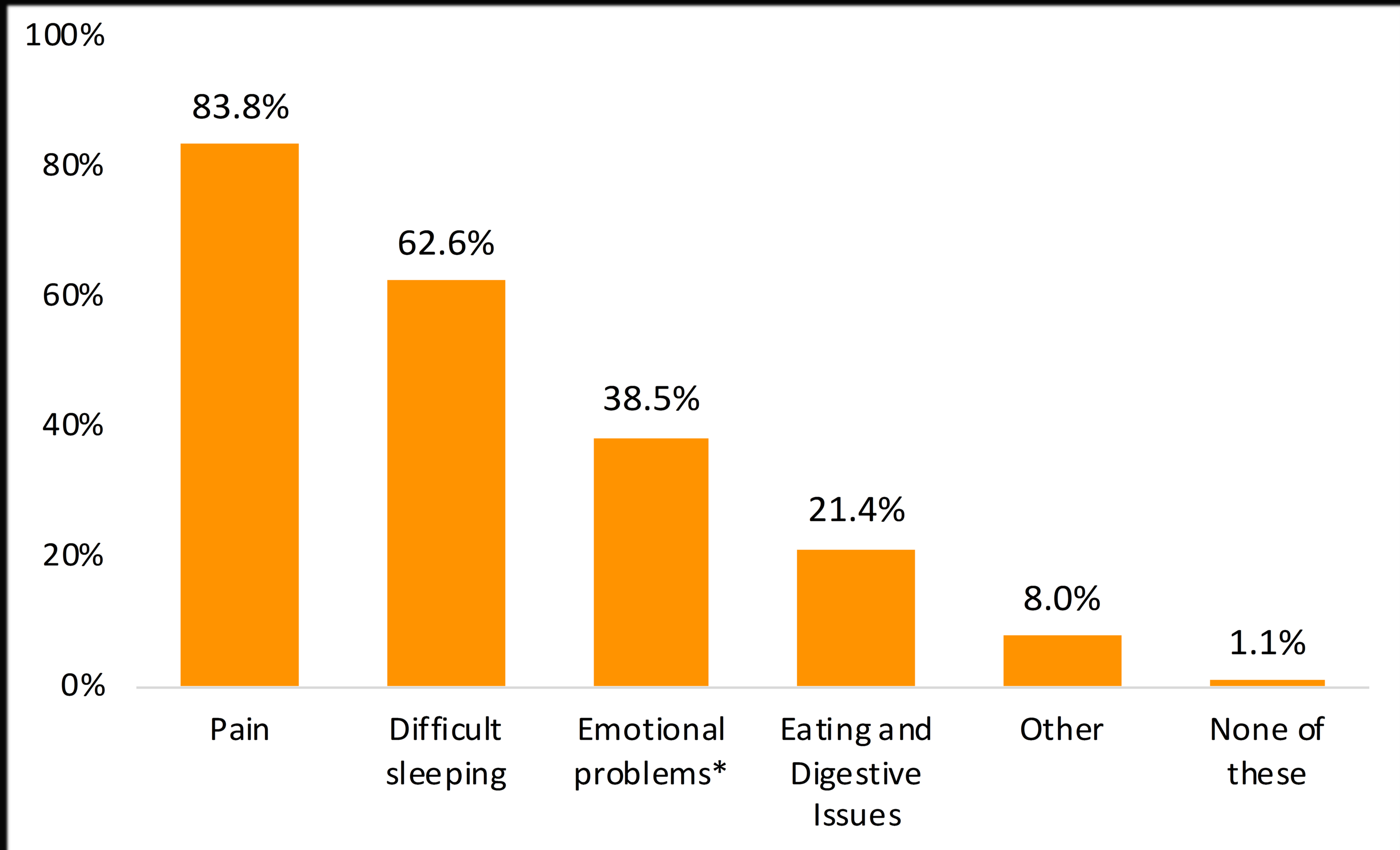
GENERAL ATTITUDES ABOUT MARIJUANA

14. Regardless of my current state law, I am in favor of legalized marijuana for the following reasons:	Do Not Agree				Strongly Agree
A. Tax its sale for state revenue	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
B. Medical benefits	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
C. Recreational use	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
D. Reduction of burden on legal/prison system	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
E. Safer, easier access	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
F. Other:					
G. Other:					
H. Other:					
I. Other:					
15. Has a health provider talked to you about marijuana use?	No	Yes			
	<input type="checkbox"/> 0	<input type="checkbox"/> 1			



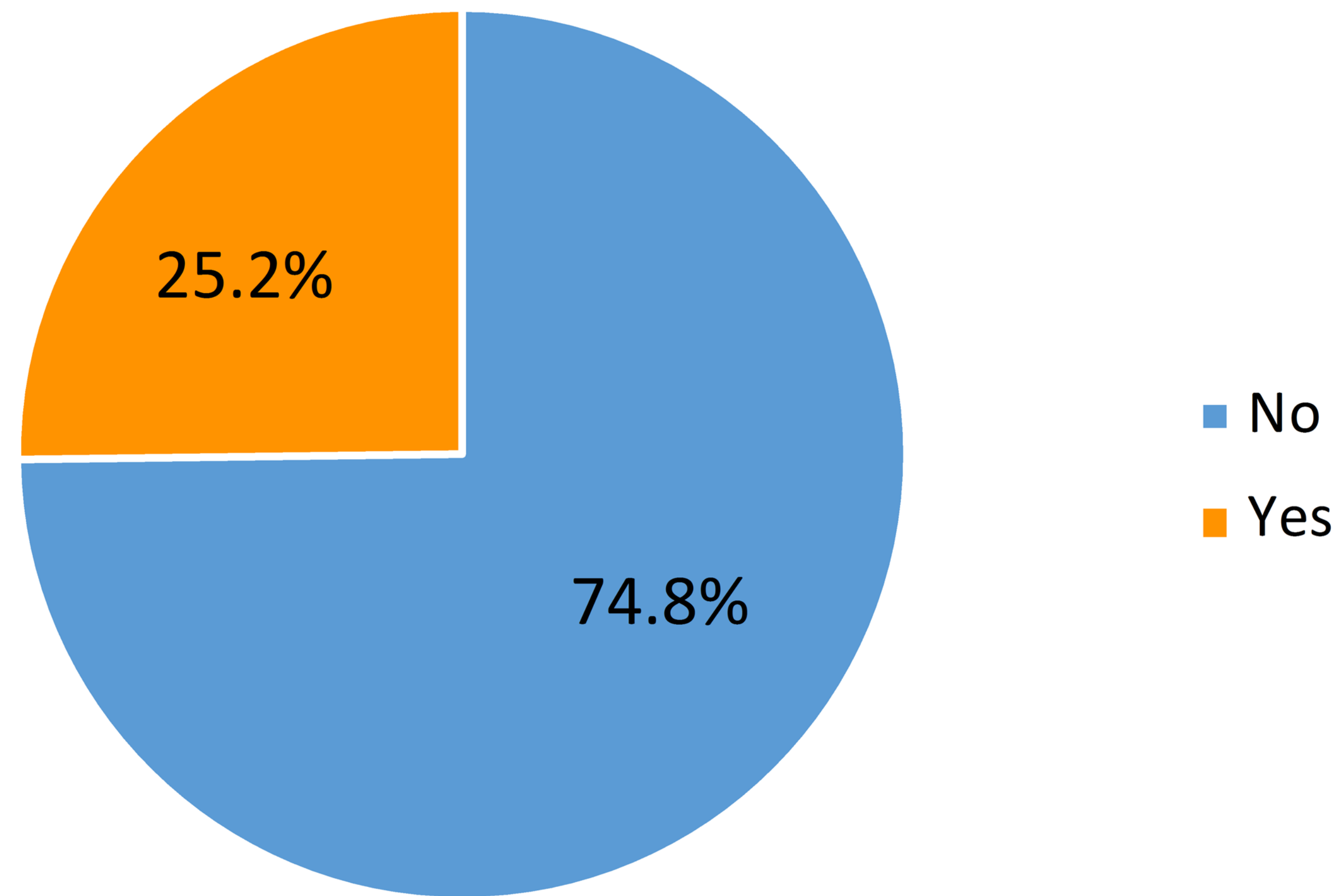
Medical Cannabis Program
Opioid Alternative Program

For what medical symptoms do you use cannabis?

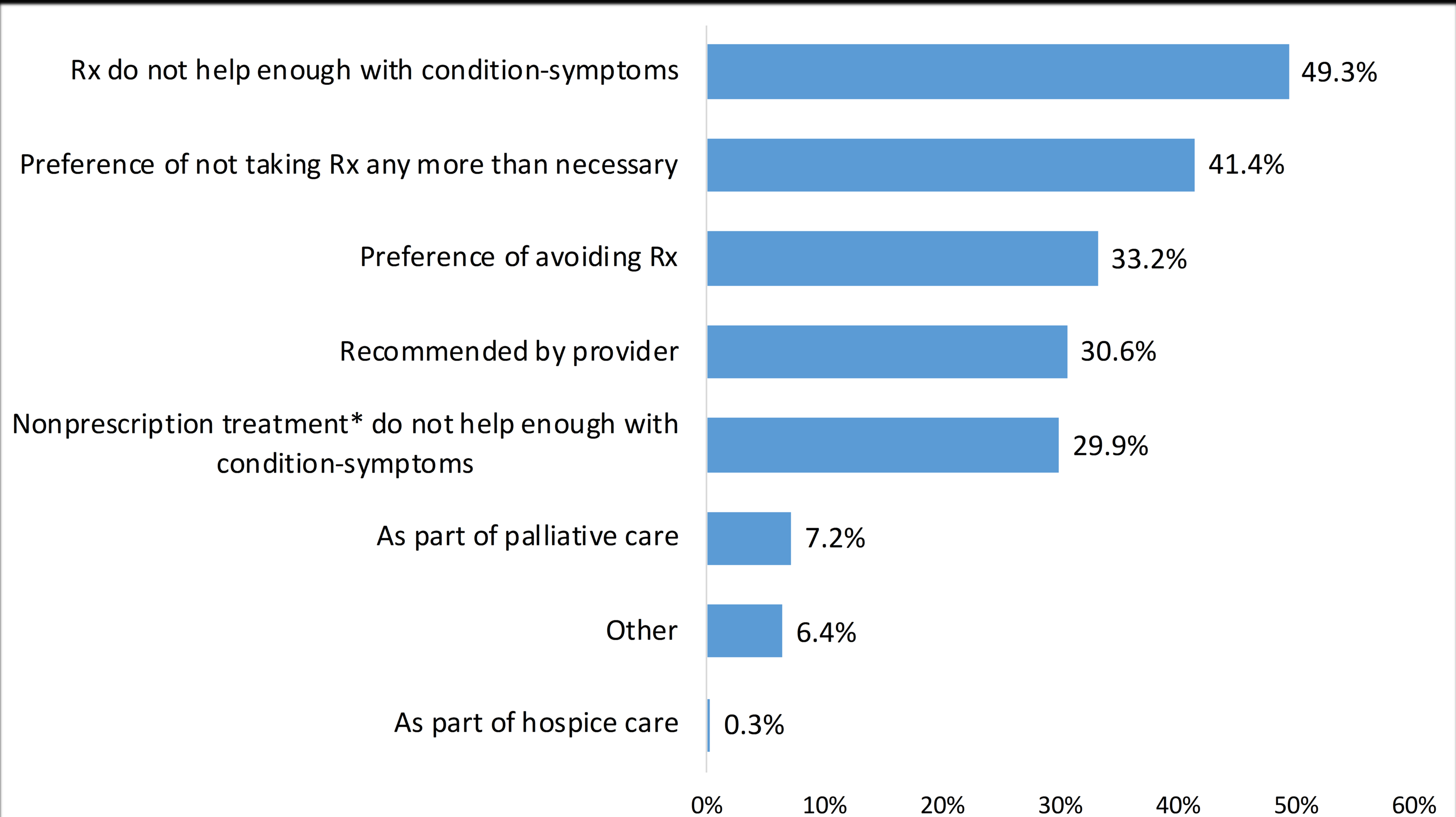


* Feeling anxious, depressed, or irritable

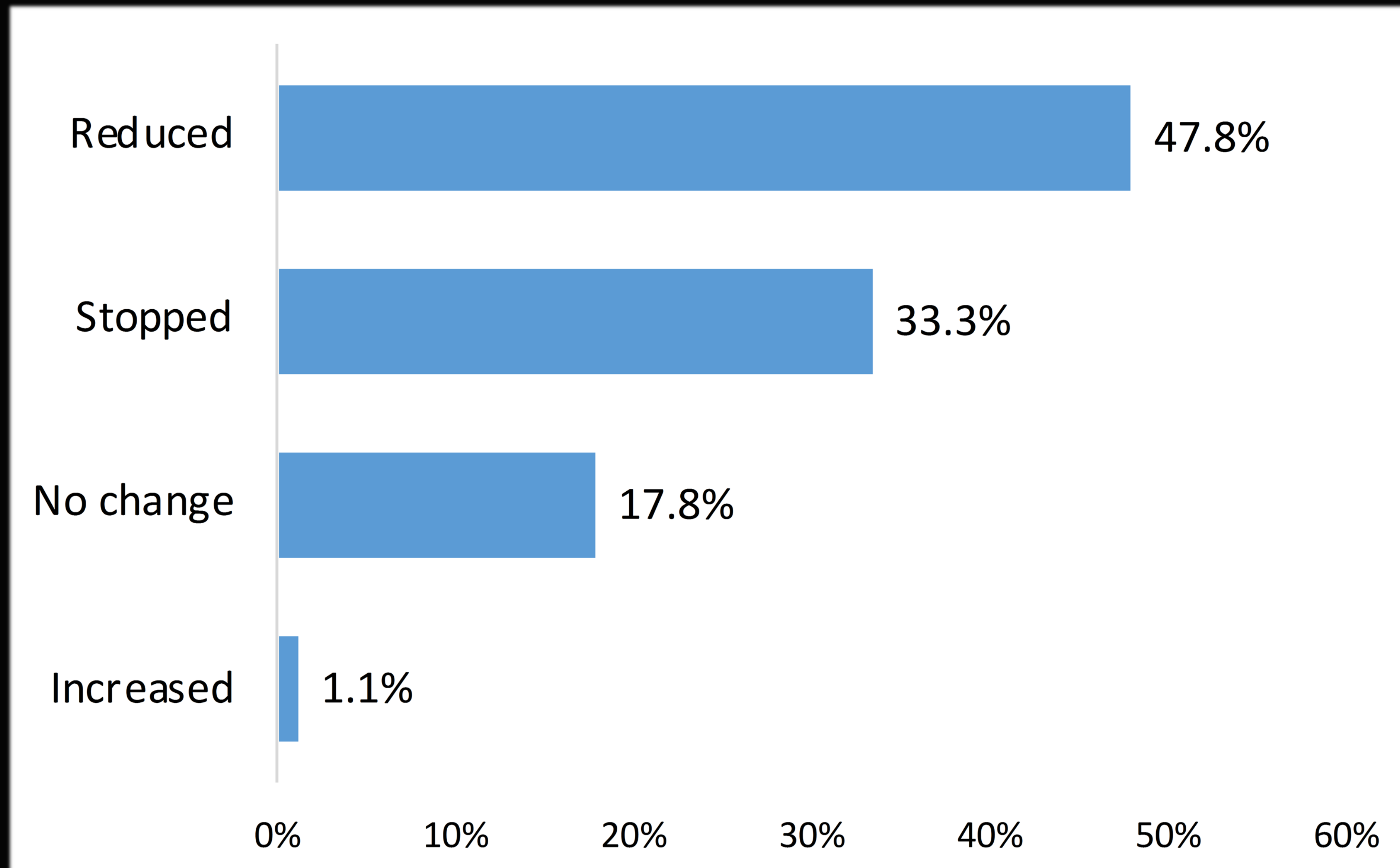
*Before you began the state program,
had you been using cannabis?*



Relative to your diagnosed conditions and symptoms, why do you use medical cannabis?

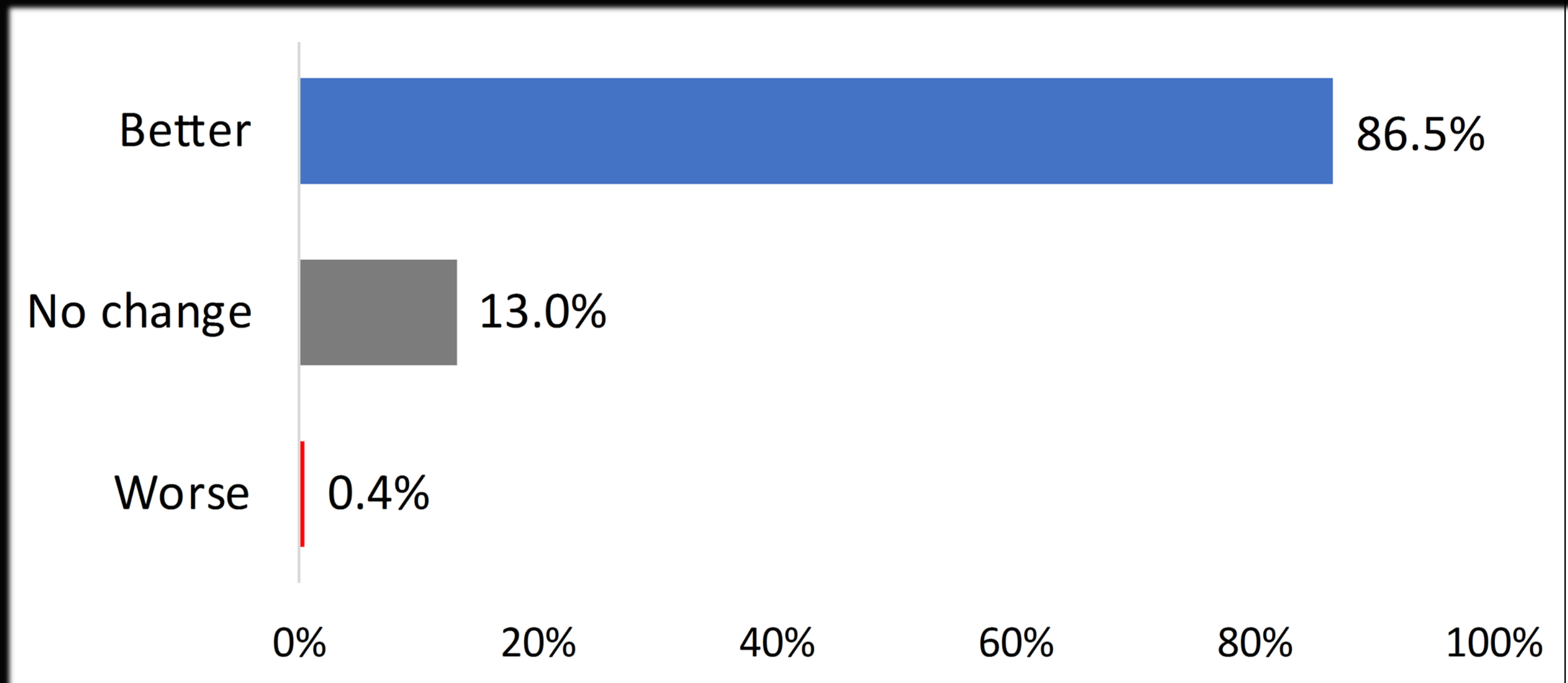


*Relative to your medical cannabis use,
has your current use of opioids or narcotics:*

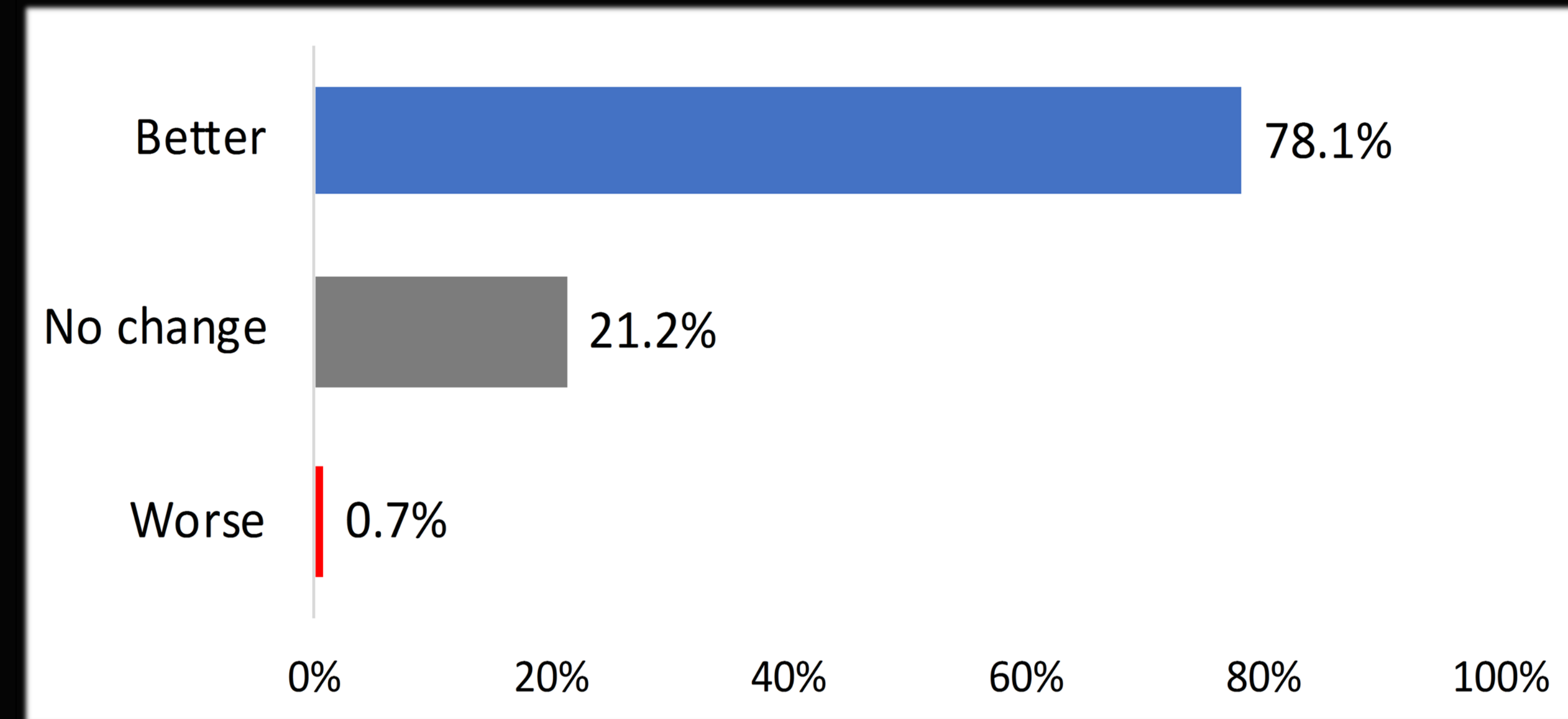


How does using cannabis affect your:

Pain

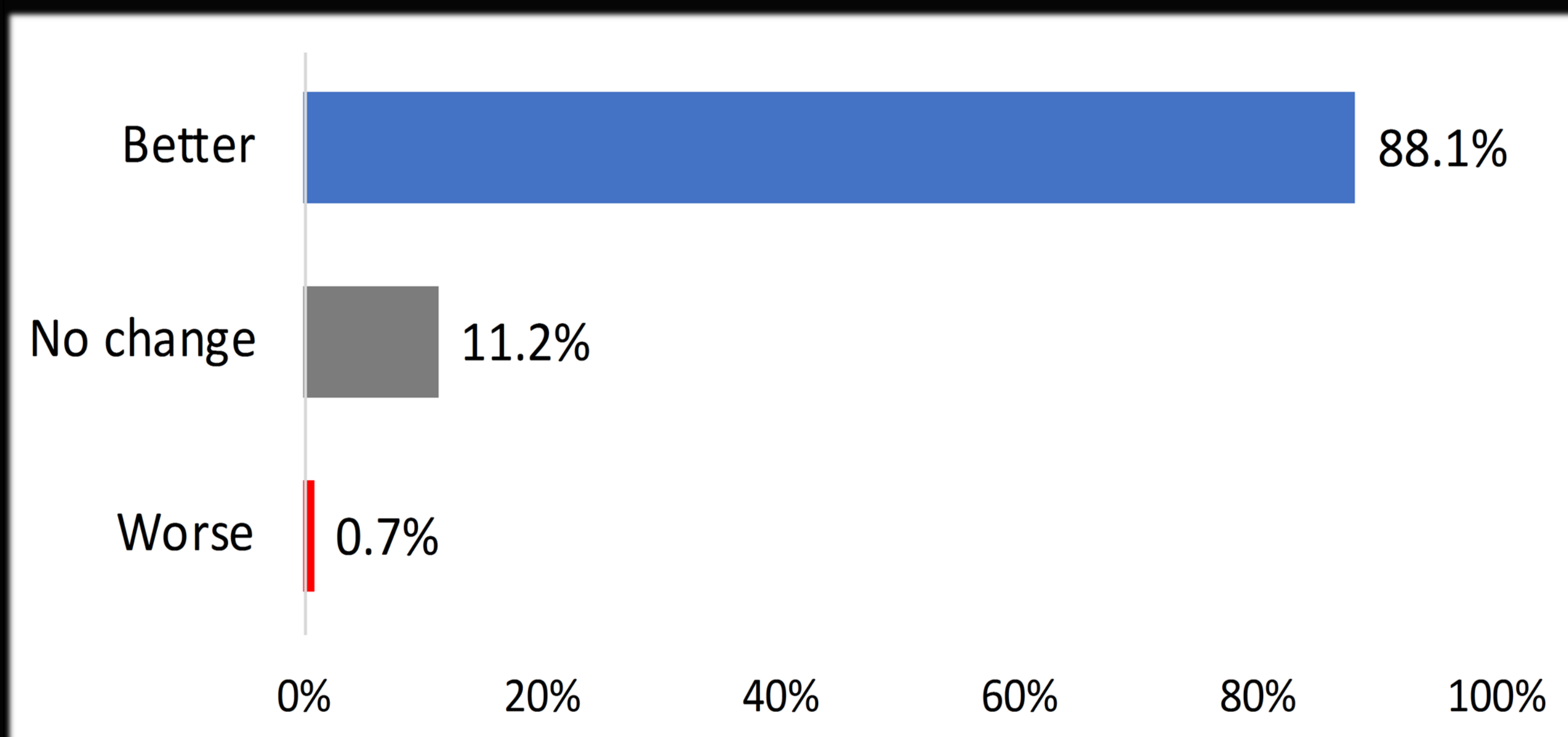


Sleep quality

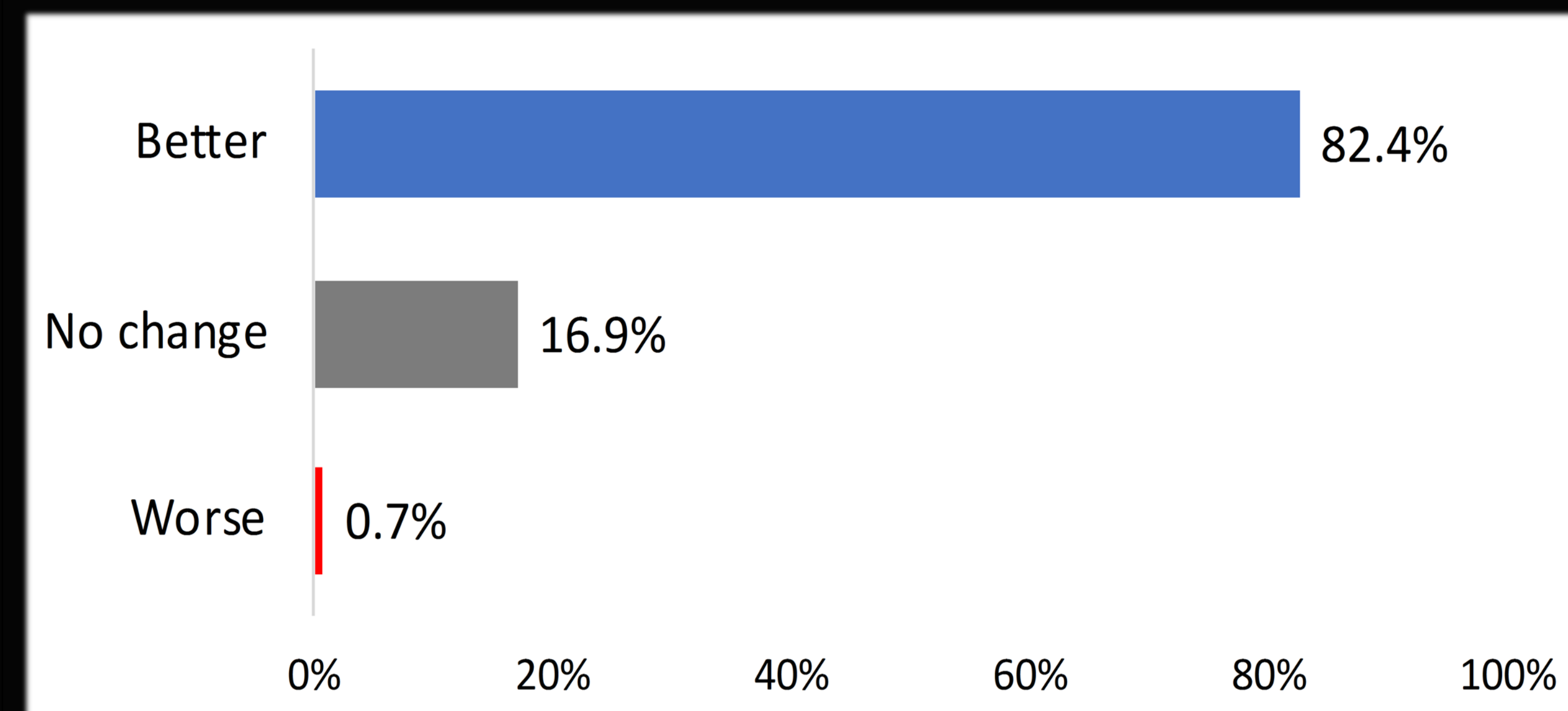


How does using cannabis affect your:

Overall quality of life

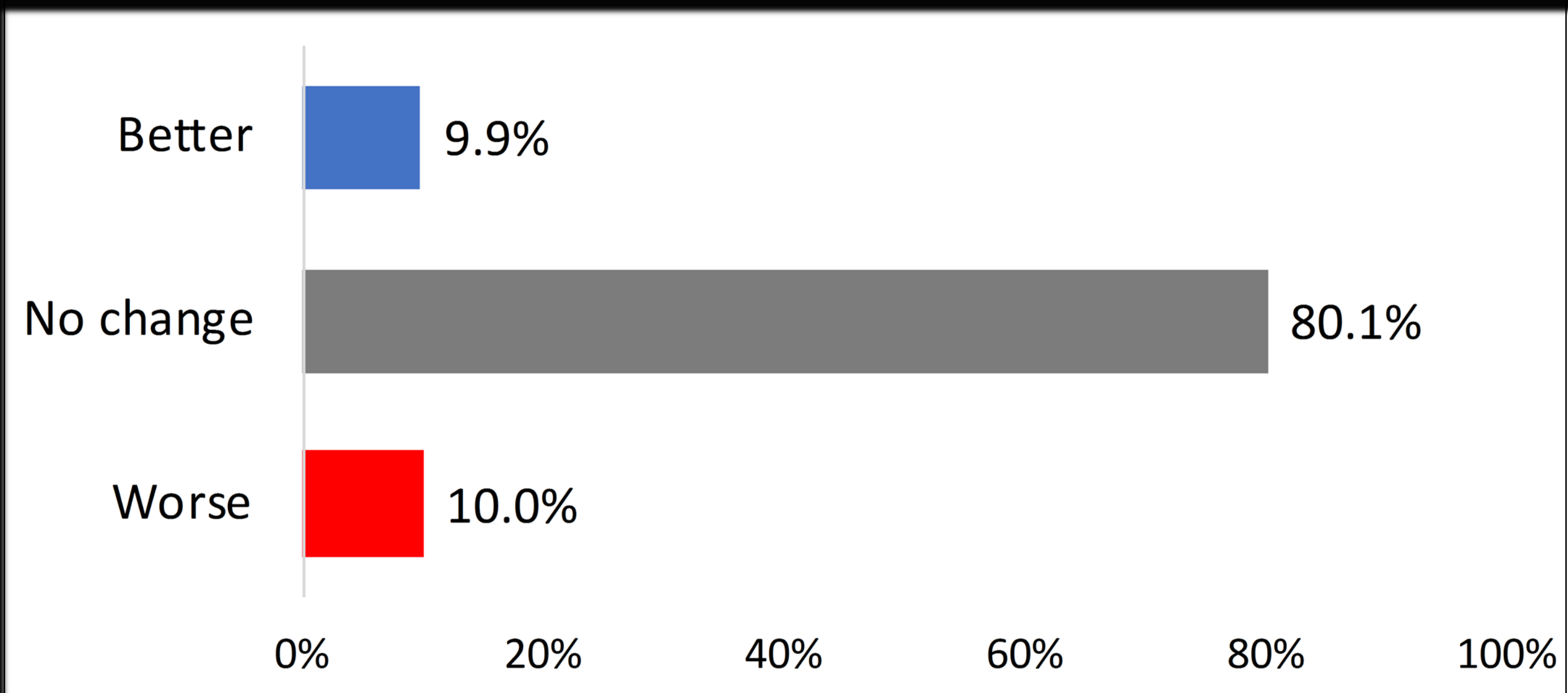


Health outcomes and expectations

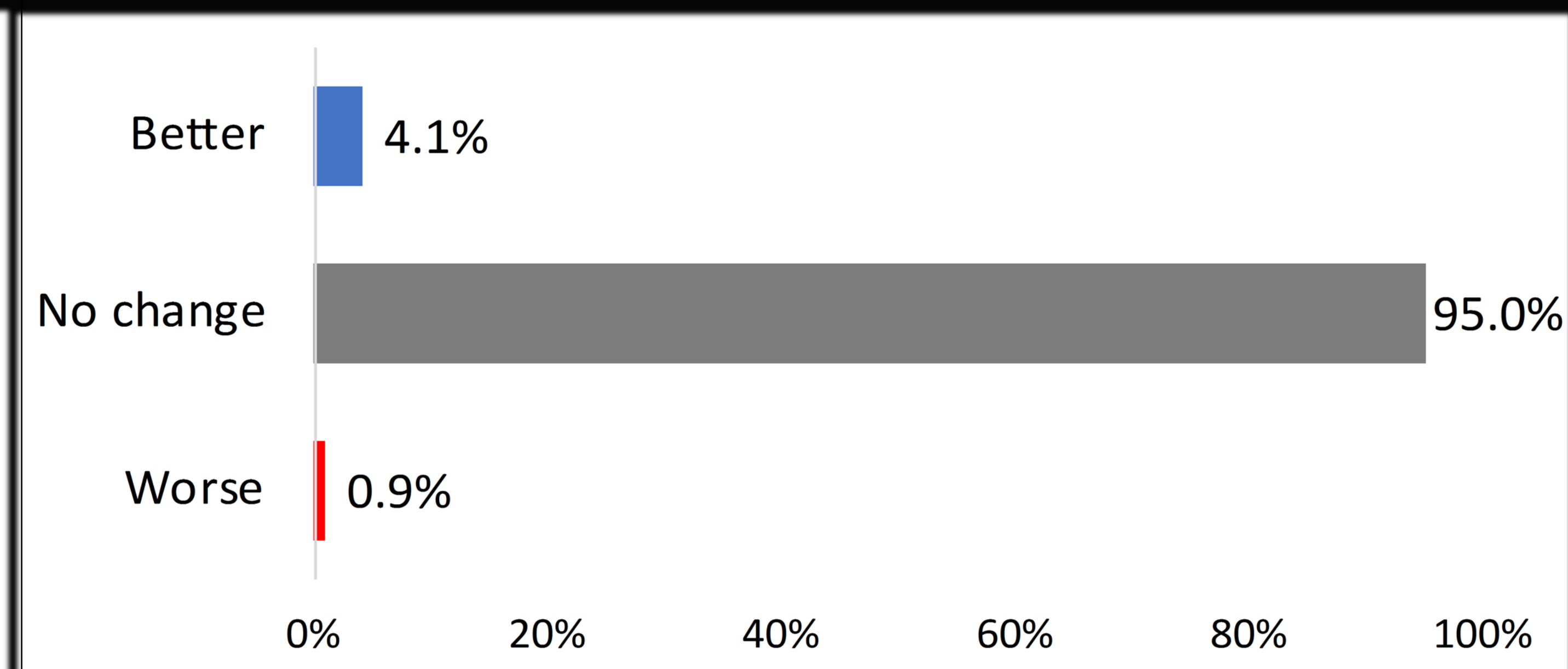


How does using cannabis affect your:

Memory or thinking



Frequency of falls



So What?

- Improved Quality of Life
- Diversion from Opioid Misuse
- Minimal Harms

Where to Next?

- Condition Specific Trials
- Palliation and End of Life
- Linking w Point of Sale Data

THANK YOU