



**Healthcare Provider
Medical Cannabis Study**
**15th National Clinical Conference on
Cannabis Therapeutics June 11, 2022**

Preliminary Results Presentation
Dr. Marion McNabb
President
Cannabis Center of Excellence



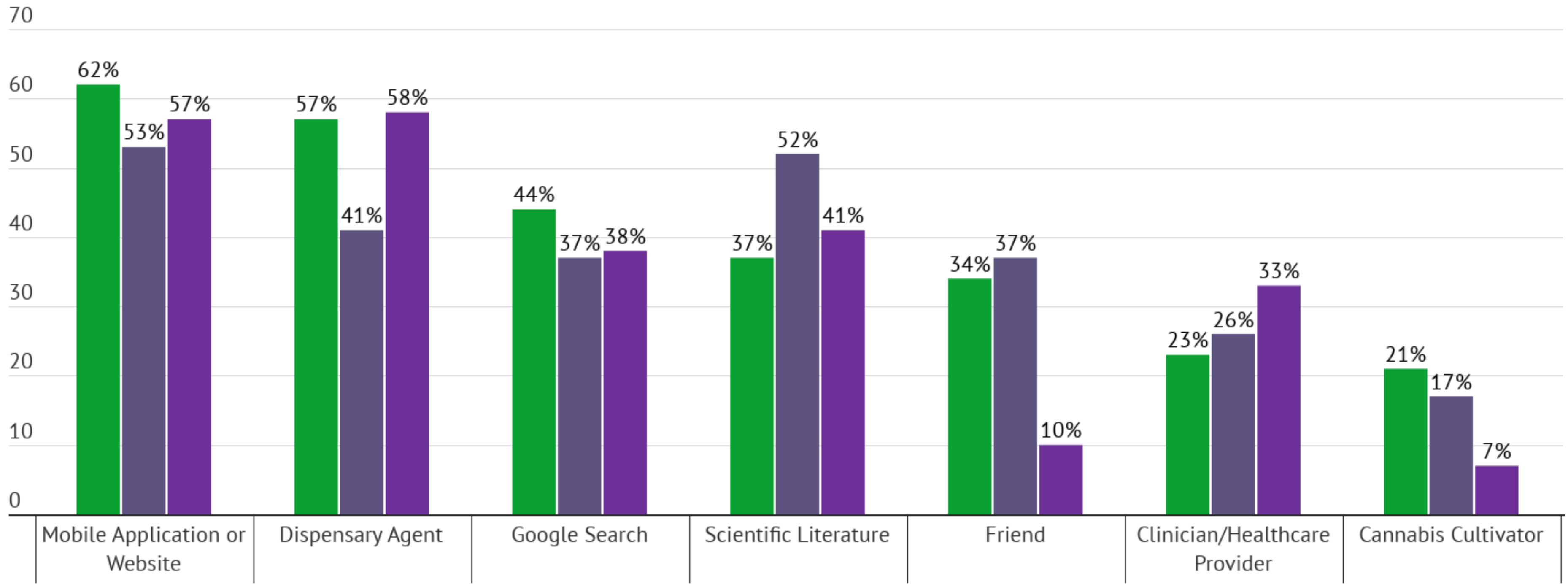
Cannabis Research, Education, & Social Justice

The Virtual Cannabis Center of Excellence, INC (CCOE), is a 501c(3) non-profit organization that virtually brings together citizens, medical patients, academics, researchers, community members, healthcare professionals, policymakers, and the cannabis industry to conduct research studies, education programs, and document best practices.

www.cannacenterofexcellence.org

% of Study Respondents Reporting Sources They Obtain Knowledge About Cannabis in the United States.

2018, 2019, & 2020 Cannabis Center of Excellence/UMass Dartmouth Studies



● 2018 CCOE Consumer and Patient Study (N=1,292) ● 2019 CCOE Veterans Medical Cannabis Study (N=565) ● 2020 CCOE COVID-19 and Cannabis Study (N=481)



HEALTHCARE PROVIDER MEDICAL CANNABIS STUDY



Anonymous Survey of Healthcare Provider's Knowledge, Attitudes, and Practices Related to Medical Cannabis

Data Collection: May 2021 - May 2022

Total Responses to Date: 354 Healthcare Providers

Study Ends: August 1, 2022

Approved: UMass Dartmouth IRB

Study Led by: Cannabis Center of Excellence, Medicinal Genomics, and UMass Dartmouth

A Cannabis Citizen Science Research Study
Presented By:

Healthcare
Provider
&
Medical
Cannabis
Study

YOUR VOICE & WELLNESS IS OUR PRIORITY

WE NEED YOU!

- ✓ DOCTORS
- ✓ pharmacist
- ✓ MIDWIVES
- ✓ clinical psychologist
- ✓ EMT'S
- ✓ other allied healthcare professionals

WHAT DO YOU THINK ABOUT MEDICAL CANNABIS?

Participate in a 12 minute anonymous survey & help contribute to the greater patient + provider conversation around medical cannabis! Study result will support Healthcare Wellness Programs.

SCAN HERE TO TAKE ACTION & TAKE OUR SURVEY

Take the Survey & Be Entered to Win a Ticket to the CannMed Medical Practicum May 3, 2022!
Winners Announced March 2022



STUDY INVESTIGATORS



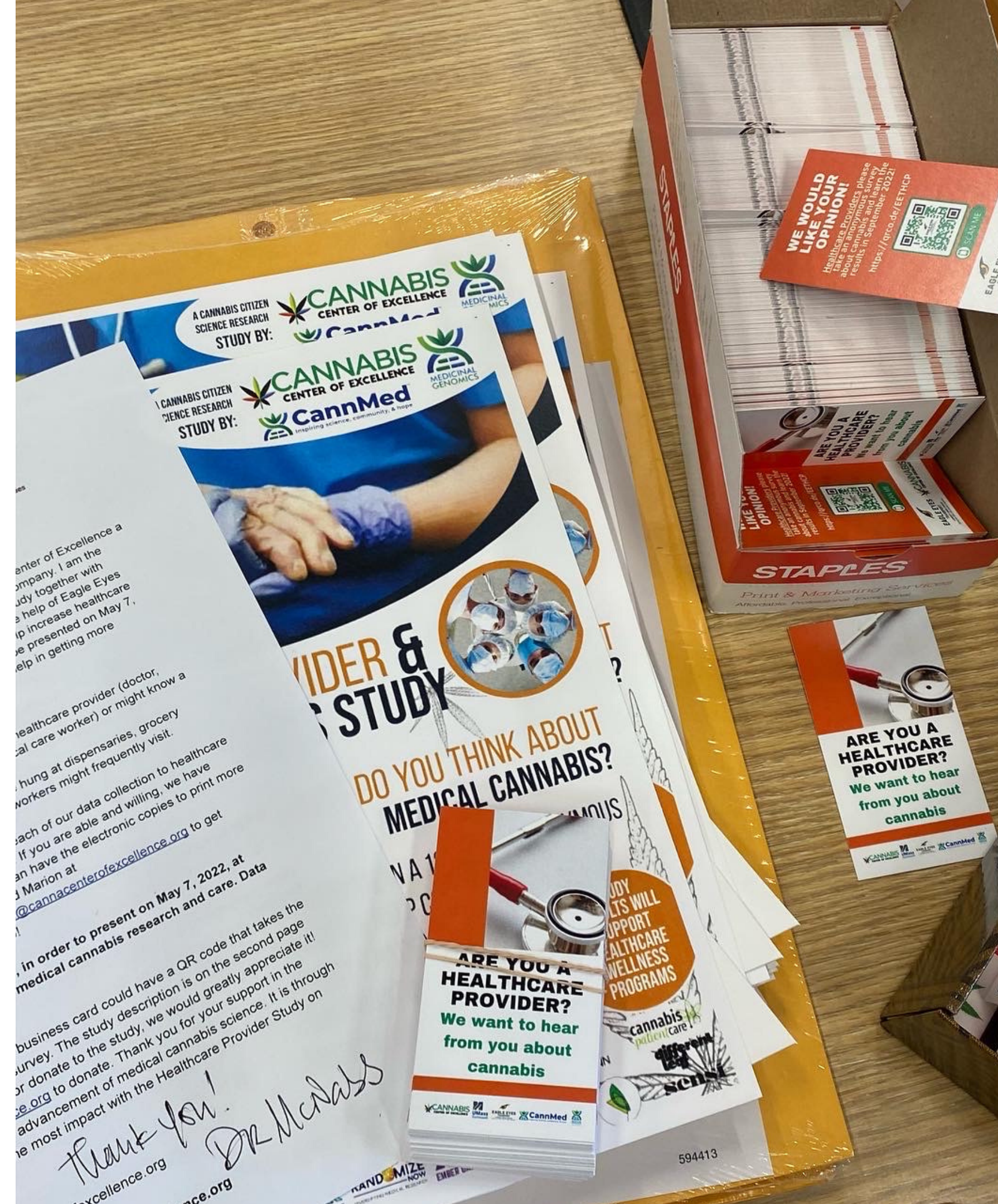
Principal Investigator: Dr. Marion McNabb, Cannabis Center of Excellence
Co-investigators include: Kevin McKernan, Medicinal Genomics Founder and Chief Science Officer; Dr. Steven White, Professor, UMass Dartmouth; Dr. Staci Gruber, Director, Cognitive and Clinical Neuroimaging Core, Director, Marijuana Investigations for Neuroscientific Discovery (MIND) at McLean Hospital, & Associate Professor of Psychiatry at Harvard Medical School; Dr. Jessica Knox, The American Cannabinoids Clinics, Pivotal EDU; Dr. Dustin Sulak, Healer.com; Blue Quisquis, National Native American Cannabis Association; Dr. James (J) Smith; Chris McElvany, Super Critical; Dr. Peter Grinspoon, Primary Care & Medical Cannabis Clinician at Mass General Hospital; Stanley Atkins, II, the "CanniMedic" & Georgia Chapter Director of Minorities for Medical Marijuana (M4MM); Melissa Bouchard, Associate in Nursing; Stephen Mandile, Iraqi War Veteran and Joint Venture & Co; Mary Lynn Mathre, Founder, Patients Out of Time & 14th National Conference on Cannabis Therapeutics; Dru Verdet, Massachusetts, Dr. Sarah Trocchio, Rider University; Joe Kreiger, Boston BioLife, Jessilyn Dolan; Vermont Cannabis Nurses Association; Vanessa Jones, CCOE, D.J. Ritter, Cannabis Center of Excellence, INC; & Alex Rewegan, MIT Ph.D. Candidate.



DATA COLLECTION AND OUTREACH METHODS

Data Collection: May 2021 - Aug 1, 2022

- Convenience Sampling Approach
- Distributed Yard Signs, Flyers, QR Codes, Social Media, & Email Blasts
- Community events and educational outreach
 - NECANN Boston Fall 2021
 - Harvest Cup Worcester Fall 2021
 - Cultivators Cup South Shore Fall 2021
 - NECANN Boston Spring 2022
 - CannX Tel Aviv Israel March 2022
 - CannMed Pasadena, Cali May 4, 2022



A Cannabis Citizen Science Research Study
Presented By:



Healthcare Provider & Medical Cannabis Study

YOUR VOICE & WELLNESS IS OUR PRIORITY

WE NEED YOU!

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Winners Announced March 2022



CANNABIS CITIZEN SCIENCE: ENGAGING THE COMMUNITY IN RESEARCH

Employing cannabis citizen scientist techniques to raise awareness and educate local communities of healthcare providers.



NEW

Cannabis



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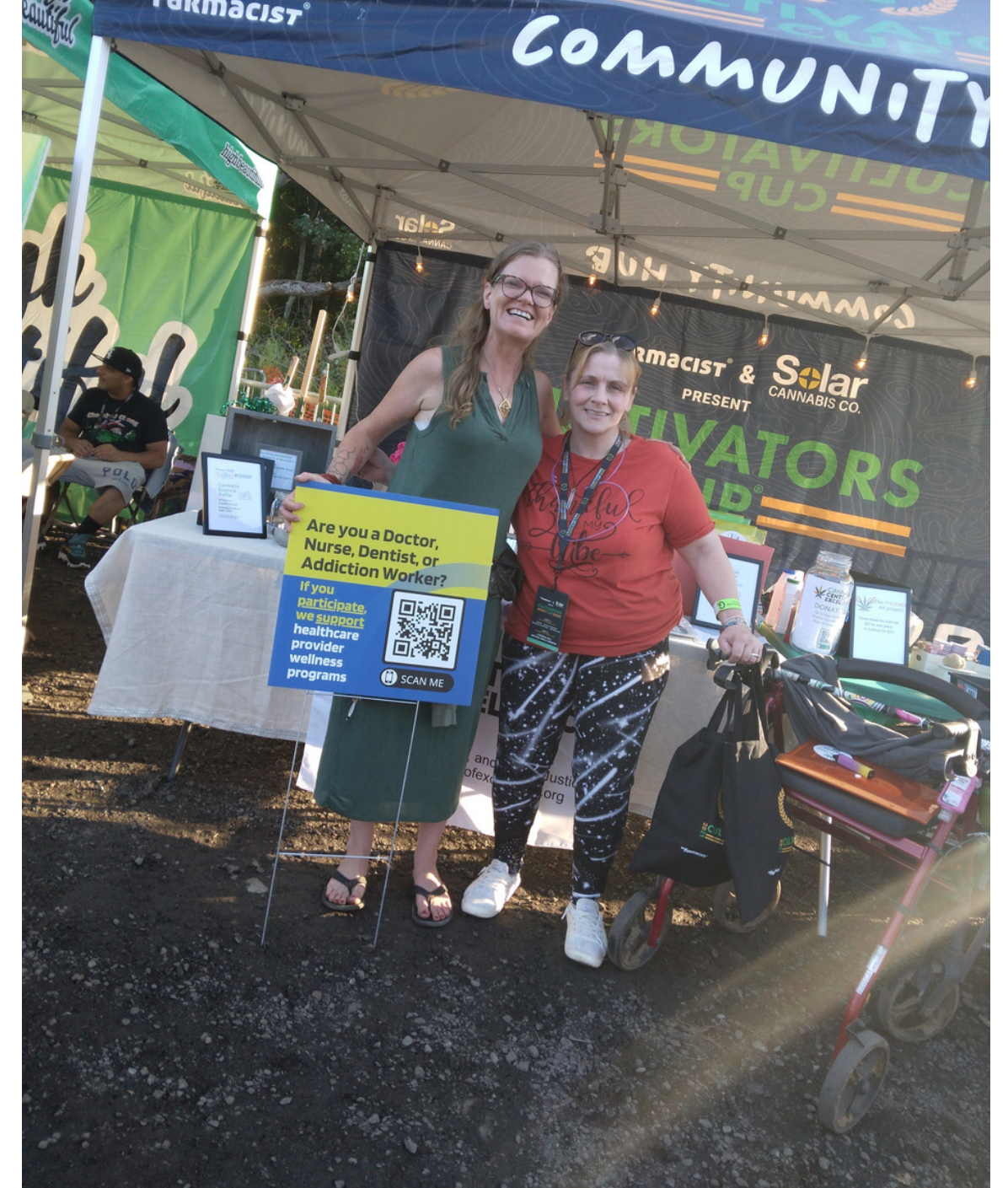
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Zen

Scientist

Be the change in your community.



Join iCount



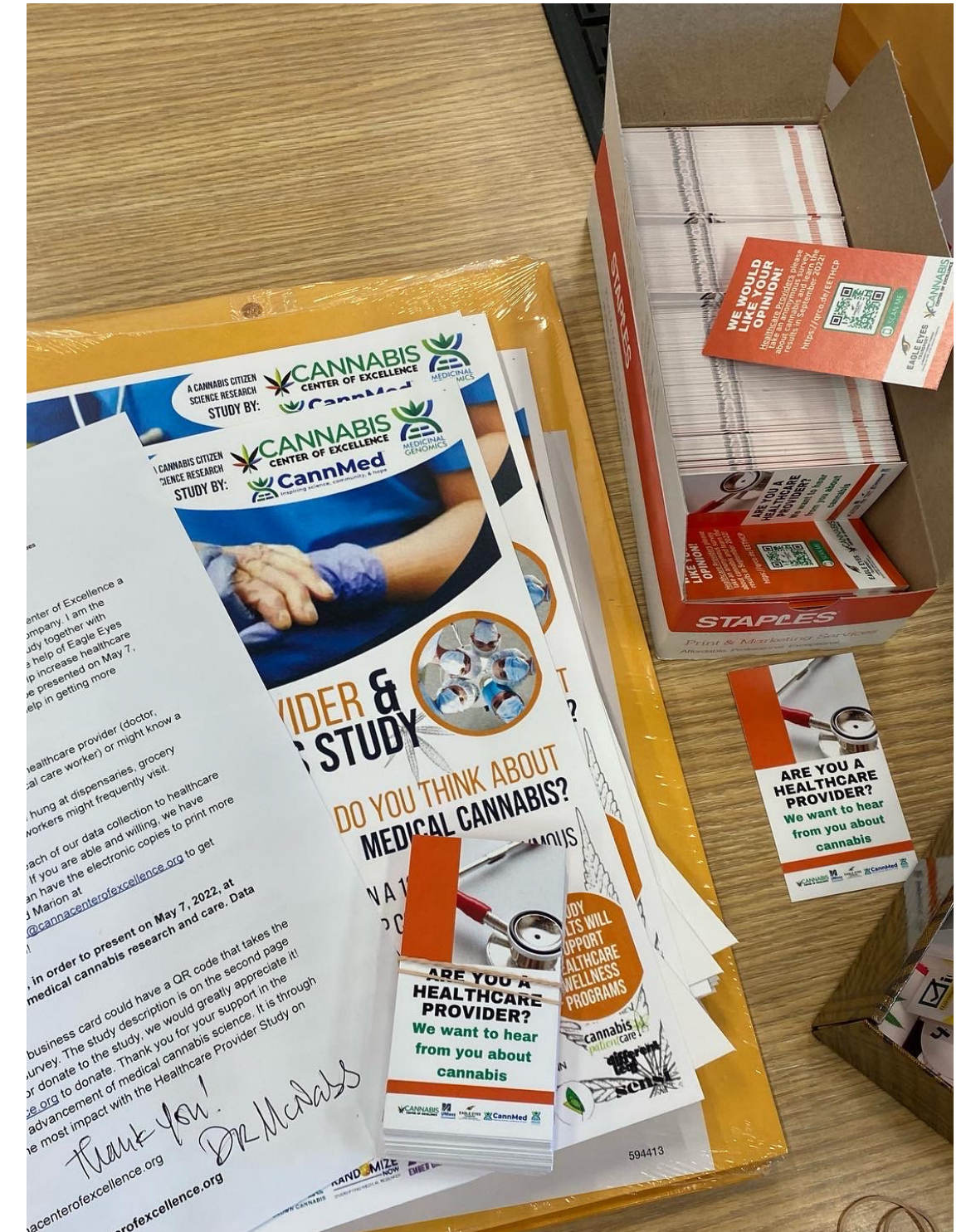
DATA COLLECTION & OUTREACH PARTNERSHIP



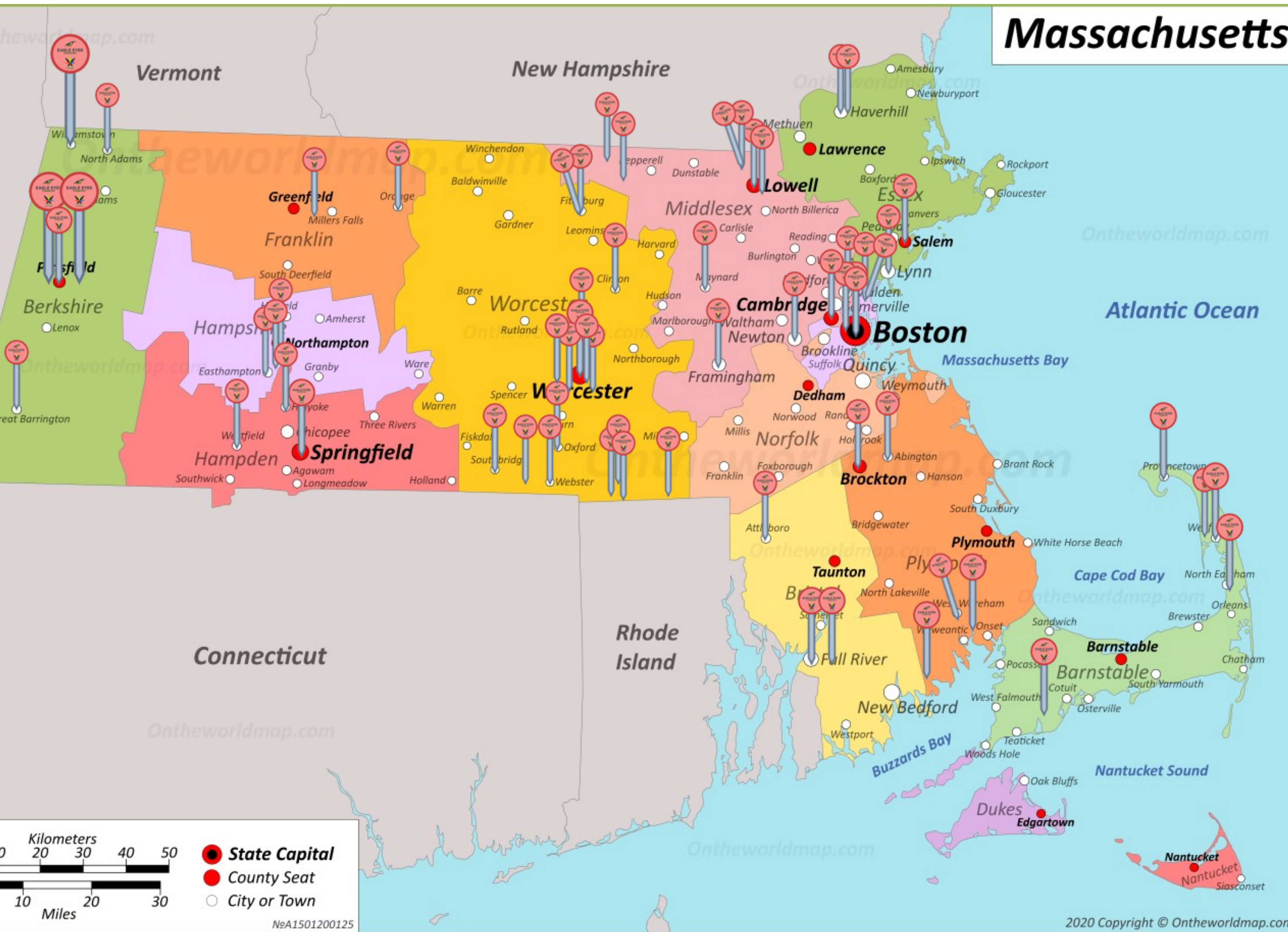
**EAGLE EYES
TRANSPORT**

A MINORITY OWNED COMPANY
Serving over 90% of MA cannabis companies

110 study packets given to Eagle Eyes (March - August 2022) to transport to cannabis retail outlets they serve in Massachusetts, asking their help in raising awareness at local hospitals and health centers.



Massachusetts



- NATURE'S MEDICINES - FALL RIVER
- NATURE'S MEDICINES - WAREHAM
- NATURE'S MEDICINES - UXBRIDGE
- BLOOMBROTHERS - PITTSFIELD
- HIBRID - PITTSFIELD
- JACKS - PITTSFIELD
- DREAMER - SOUTHAMPTON
- BUD'S GODS - ABINGTON
- BUD'S GOODS - WORCESTER
- THE BOTANIST - WORCESTER
- THE VAULT - WEBSTER
- BUDS N ROSES - BLACKSTONE
- CAMPFIRE - WEST BOYLSTON
- SMYTH - LOWELL
- TREEHOUSE - DRACUT
- STEM - HAVERHILL
- SEAGRASS - SALEM
- WESTERNFRONT - CHELSEA
- RISE - DRACUT
- RISE - CHELSEA
- RISE - MAYNARD
- ASCEND - BOSTON
- ASCEND - NEWTON
- SEED - BOSTON
- PURE OASIS - BOSTON
- SUNNYSIDE - FALL RIVER
- BASK - FAIRHAVEN
- GREENHEART - BROCKTON
- TRIPLE M - MASHPEE
- COOKIES - WORCESTER
- TRADERROOTS - WAREHAM

- CAPE GOD CANNABIS - WELFLEET
- RESINATE - WORCESTER
- HEAL - STURBRIDGE
- GREEN MEADOWS - SOUTHBRIDGE
- HIGH HOPES - HOPEDALE
- 253 - TURNER FALLS
- CLEAR SKY - NORTHADAMS
- RESINATE - NORTHAMPTON
- INSA - SPRINGFIELD
- INSA - EASTHAMPTON
- BLACKSTONE VALLEY - UXBRIDGE
- NE HARVEST - CLINTON
- APOTHCA - FITCHBURG
- UNITED CULTIVATION - ASHBY
- FULL HARVEST MOONZ - HAVERHILL
- CURALEAF - OXFORD
- REVERIE 73 - LOWELL
- OLDE WORLD REMEDIES - LYNN
- HOME GROWN 617 - CAMBRIDGE
- HENNEP - PROVINCETOWN
- PIPING PLOVER - WELFLEET
- SALTY FARMERS - EASTHAM
- SILVER THERAPUTICS - ORANGE
- SILVER THERAPUTICS - WILLIAMSTOWN
- HARBORHOUSE - CHELSEA
- CULTIVATE - FRAMINGHAM
- REBELLE - GREAT BARRINGTON
- DAZED - HOLYOKE
- BOSTON GARDEN - ATHOL
- THE HEALING CENTER - FITCHBURG
- HEKKA - WESTFIELD

● State Capital
● County Seat
○ City or Town
 NoA1501200125





HEALTHCARE PROVIDER & MEDICAL CANNABIS STUDY



WHAT DO YOU THINK ABOUT MEDICAL CANNABIS?

PARTICIPATE IN A 12 MINUTE ANONYMOUS SURVEY & HELP CONTRIBUTE TO THE GREATER PATIENT + PROVIDER CONVERSATION AROUND MEDICAL CANNABIS!

STUDY RESULTS WILL SUPPORT HEALTHCARE WELLNESS PROGRAMS

TAKE THE SURVEY & BE ENTERED TO WIN A TICKET TO THE CANNMED MEDICAL PRACTICUM MAY 3, 2022 & SEE THE STUDY RESULTS!

WINNERS ANNOUNCED MARCH 2022



PRELIMINARY RESEARCH RESULTS

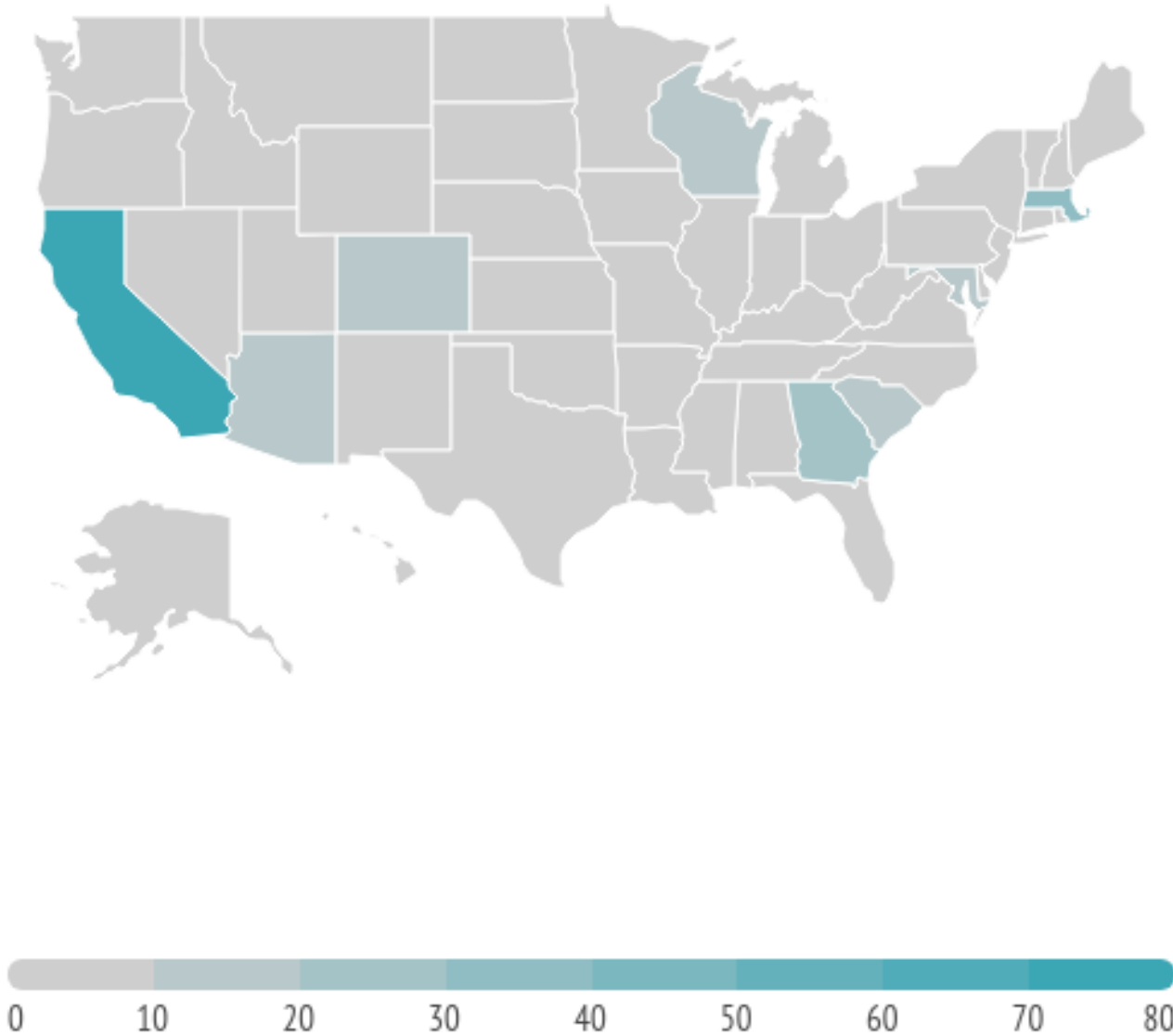
MAY 2021-MAY 2022

Healthcare Provider Medical Cannabis Study

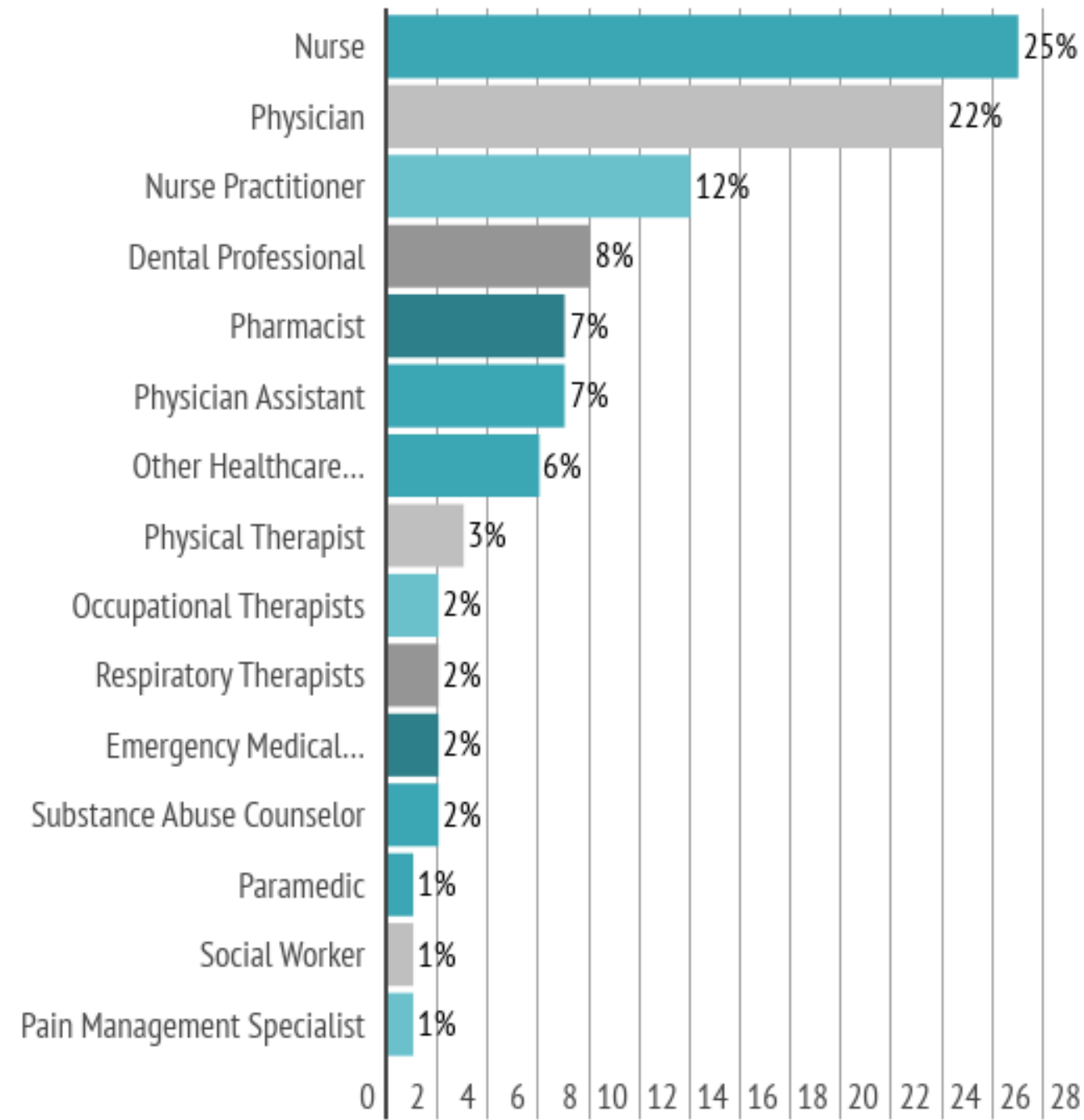
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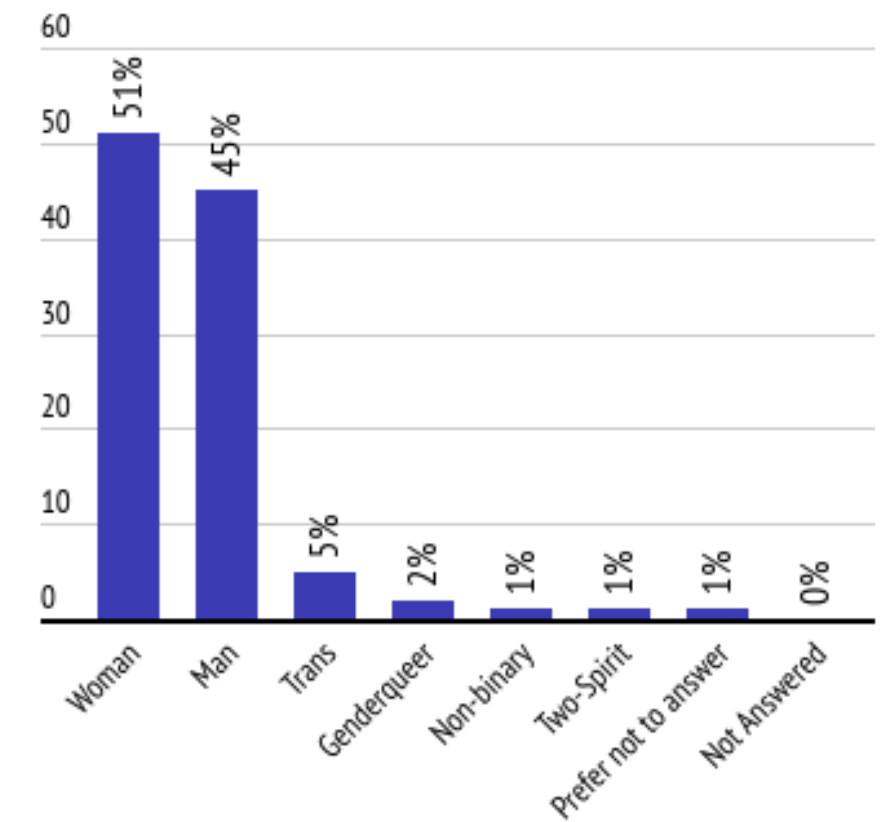
Respondents by State (N=354)



Type of Healthcare Professional (N=354)



Gender of Respondents (N=354)



Race of Respondents (N=354)

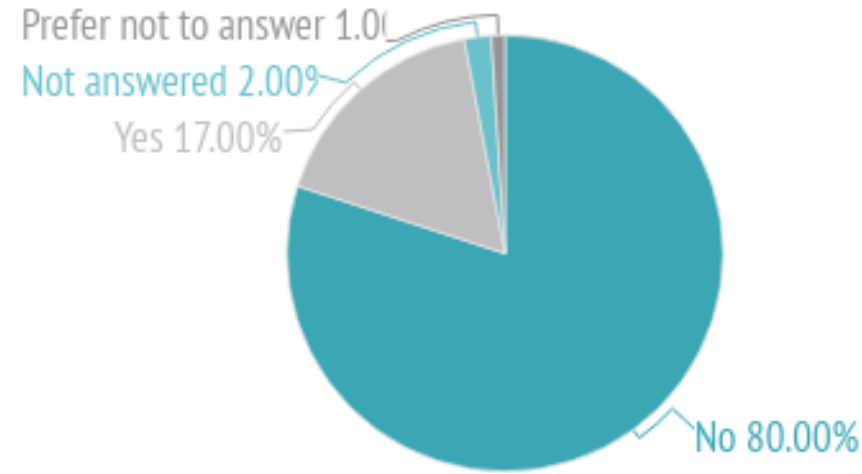


Healthcare Provider Medical Cannabis Study

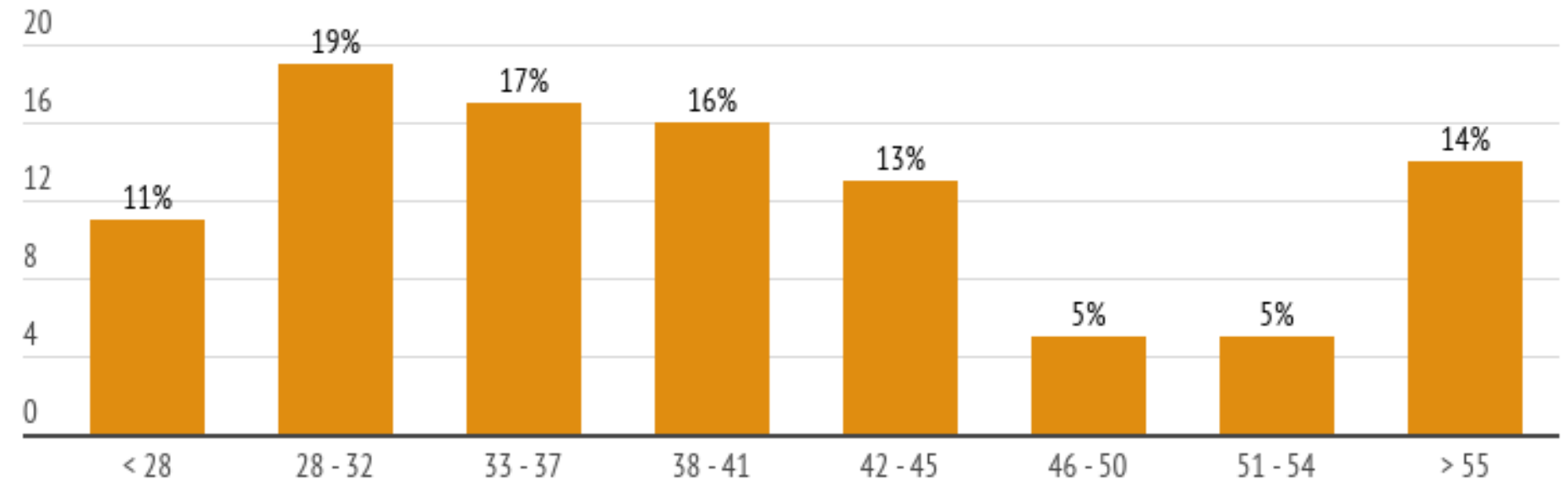
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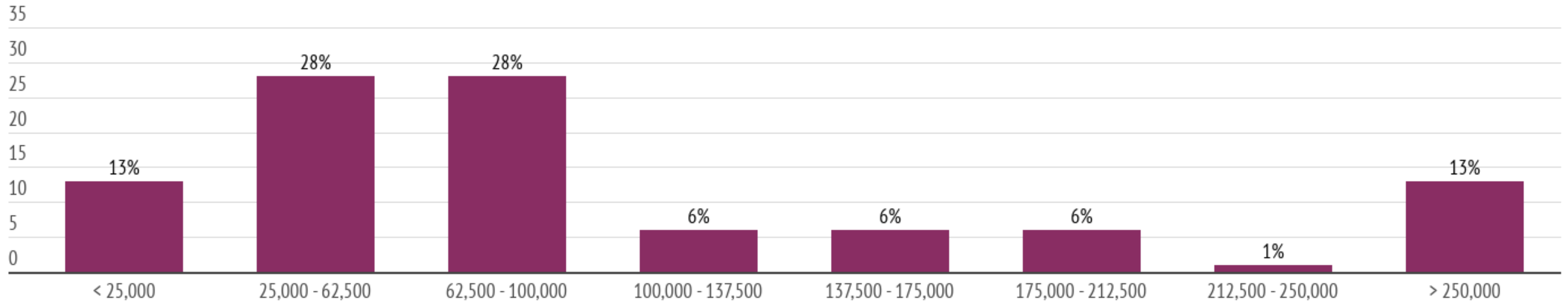
Respondents that work for the Department of Veterans Affairs (VA)



Age Range of Respondents in Years (N=354)



Respondents approximate annual income (in USD) (N=354)

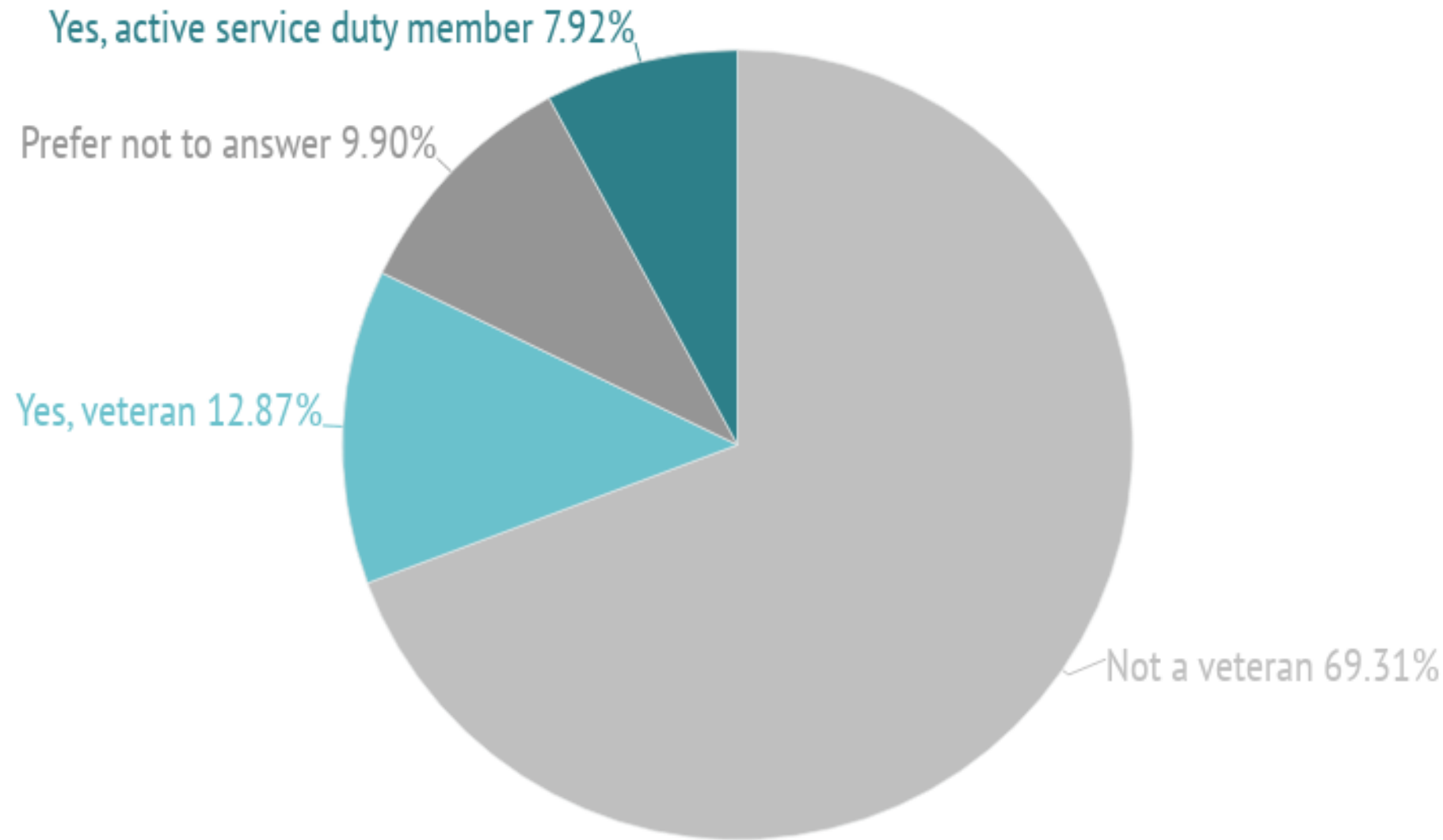


Healthcare Provider Medical Cannabis Study

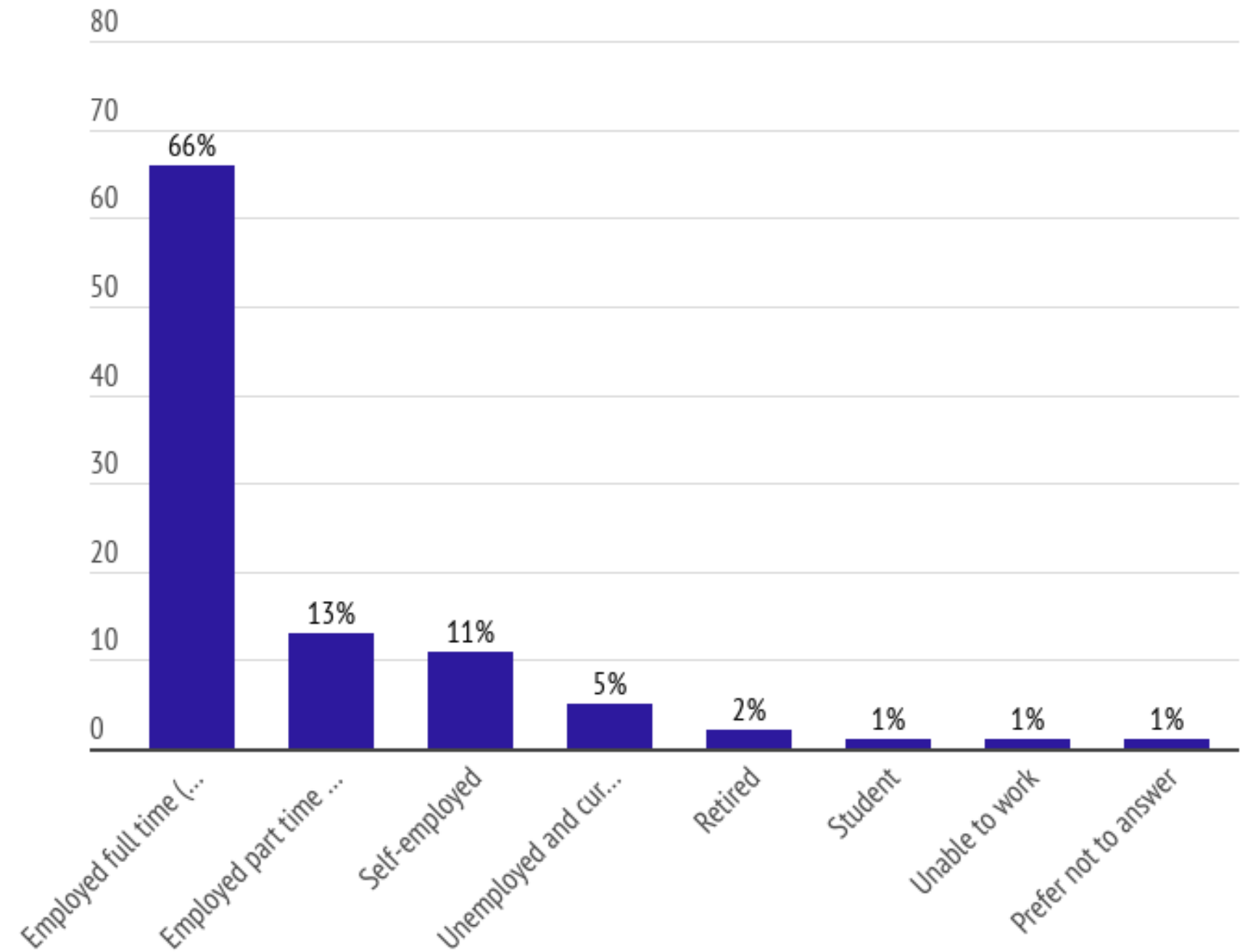
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Respondents that are Active U.S. military service duty member or U.S. Military veterans



Respondents Current Employment Status (N=354)

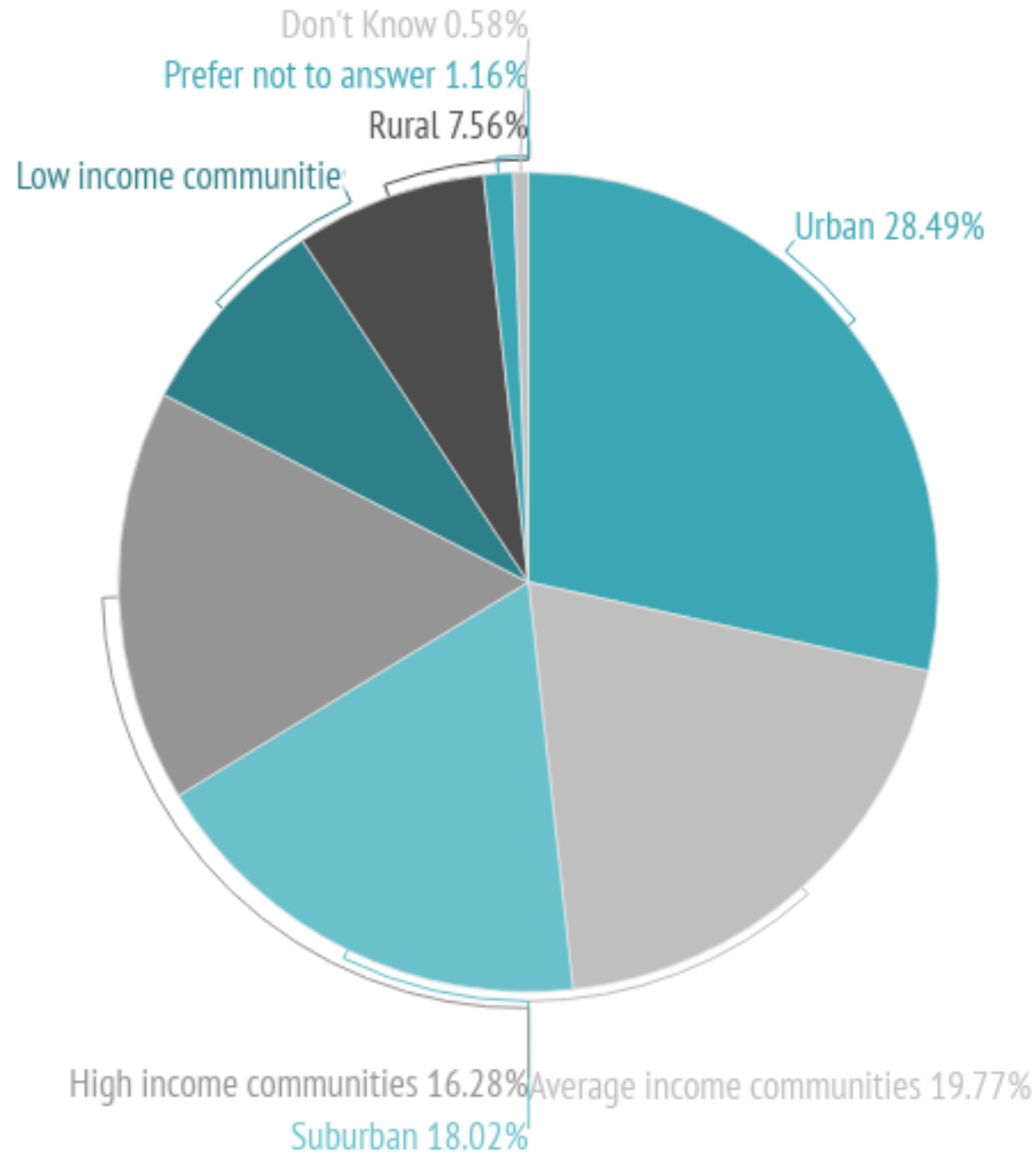


Healthcare Provider Medical Cannabis Study

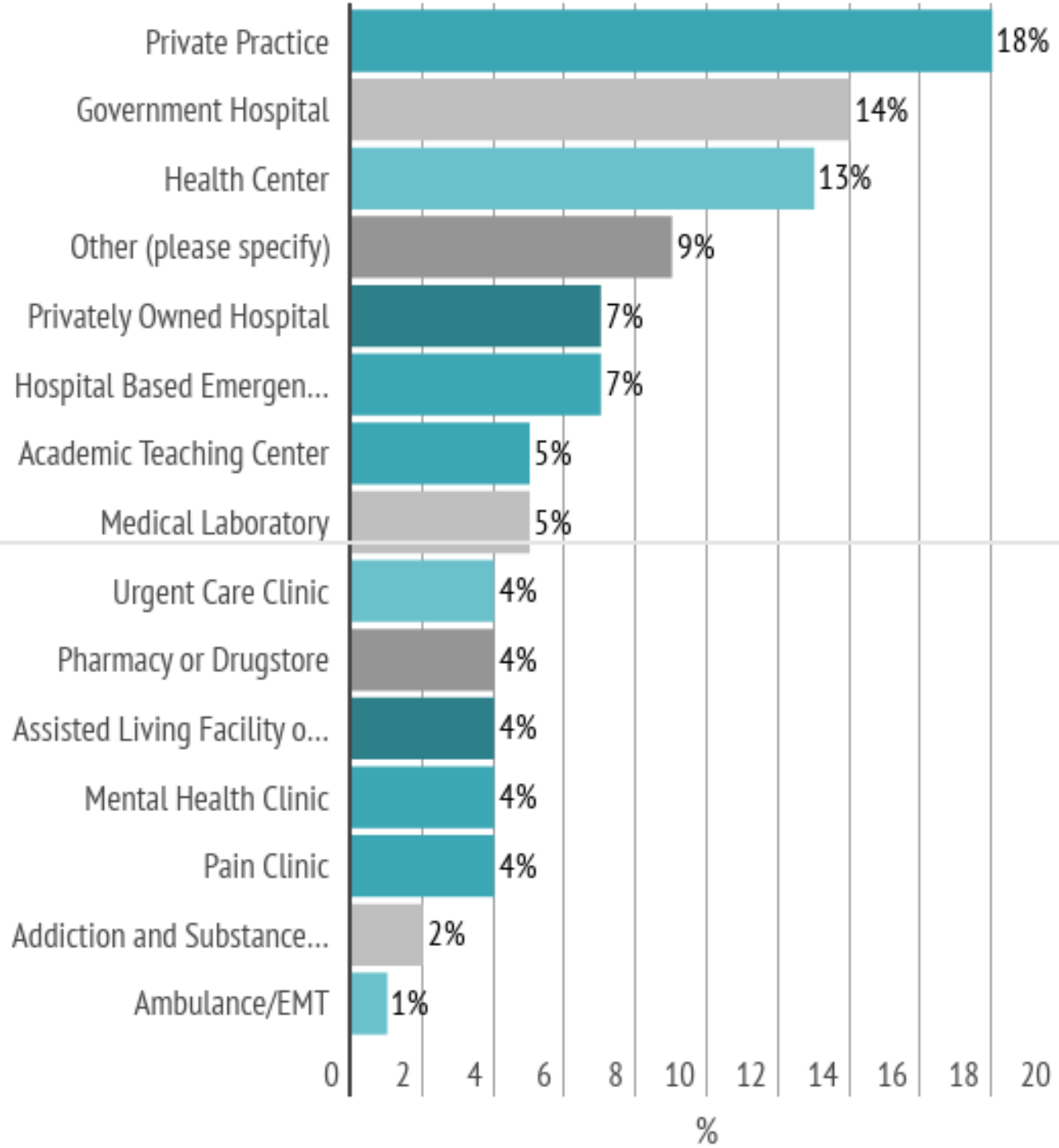
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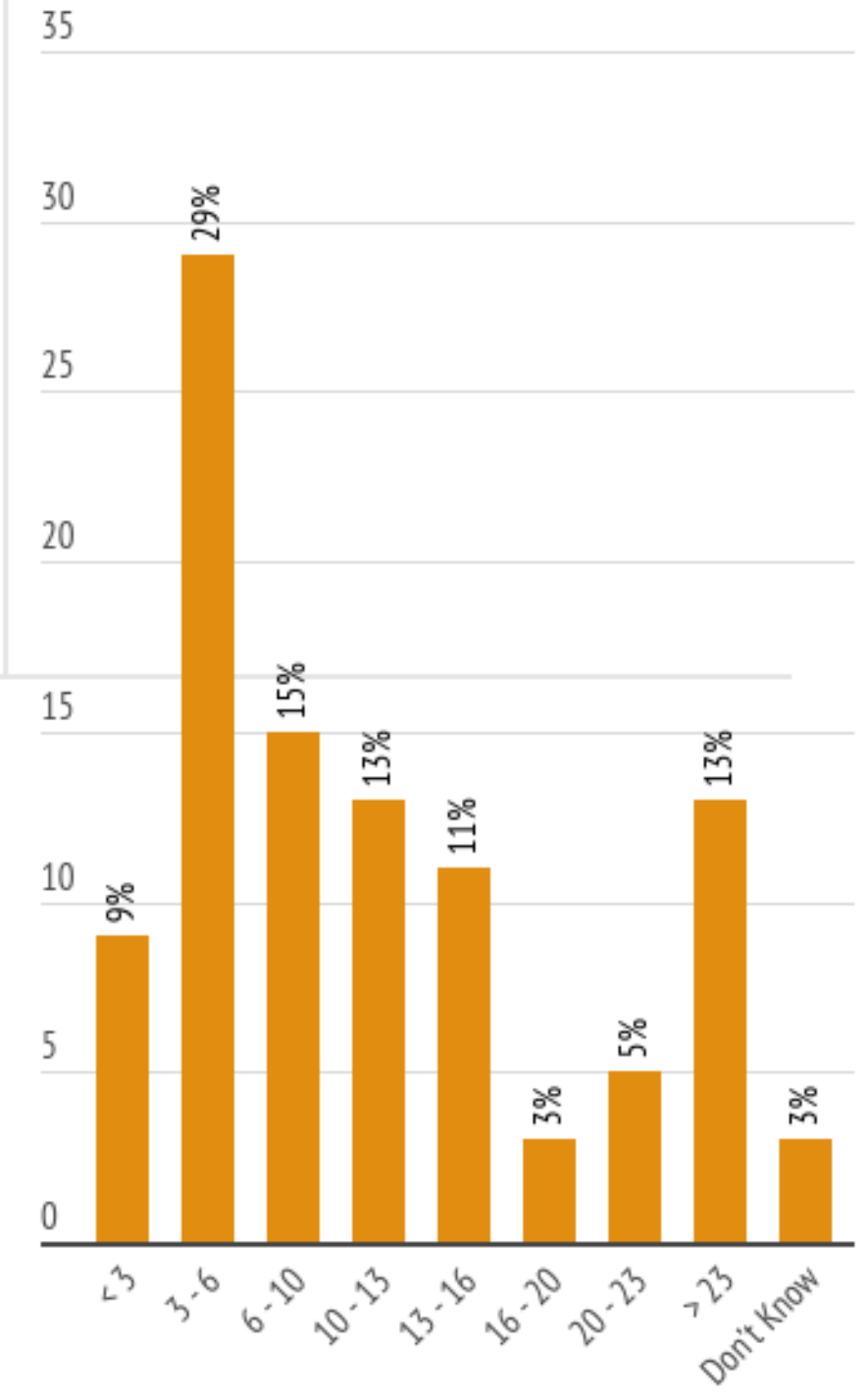
In which type of communities do you primarily practice healthcare? (N=354)



Type of Healthcare Facility Work In (N=354)



Years Practiced Medicine

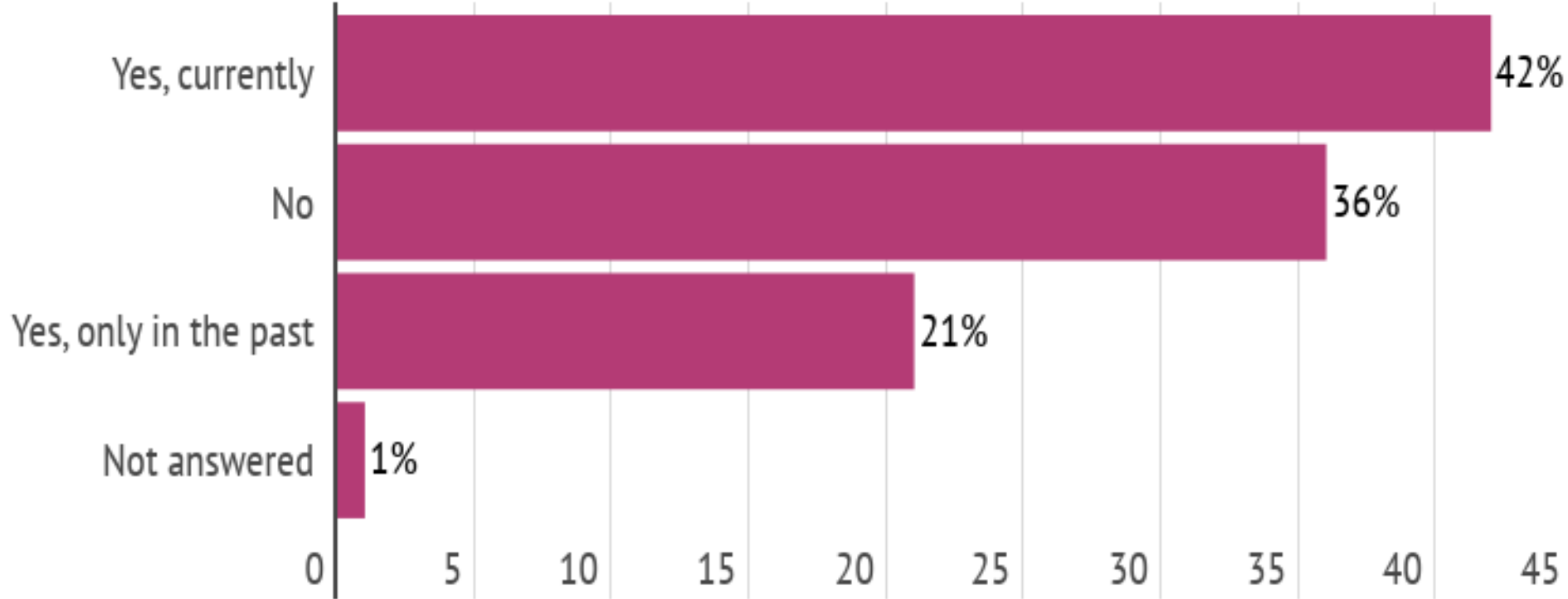


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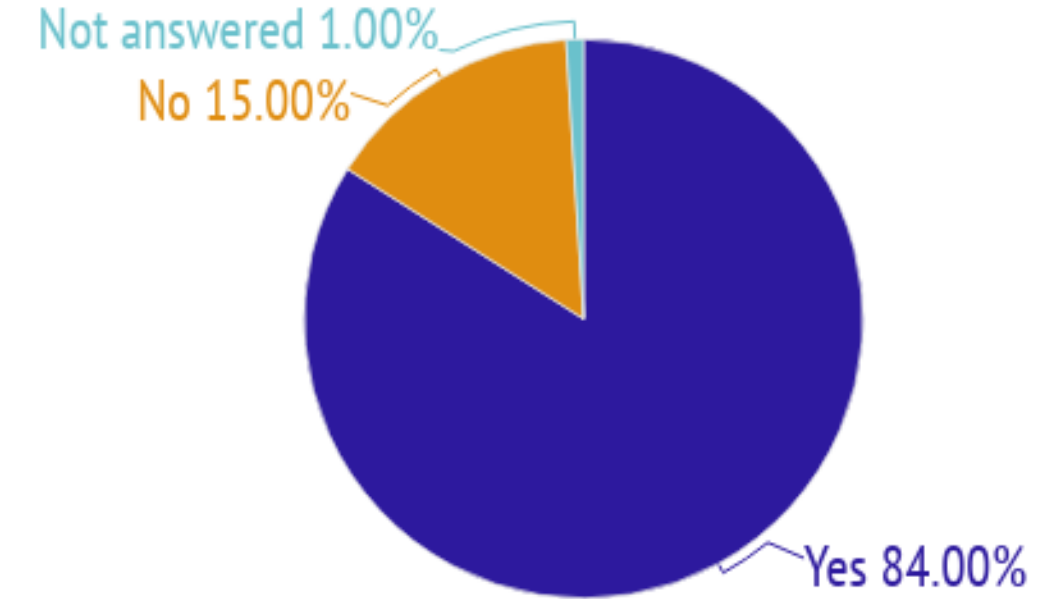
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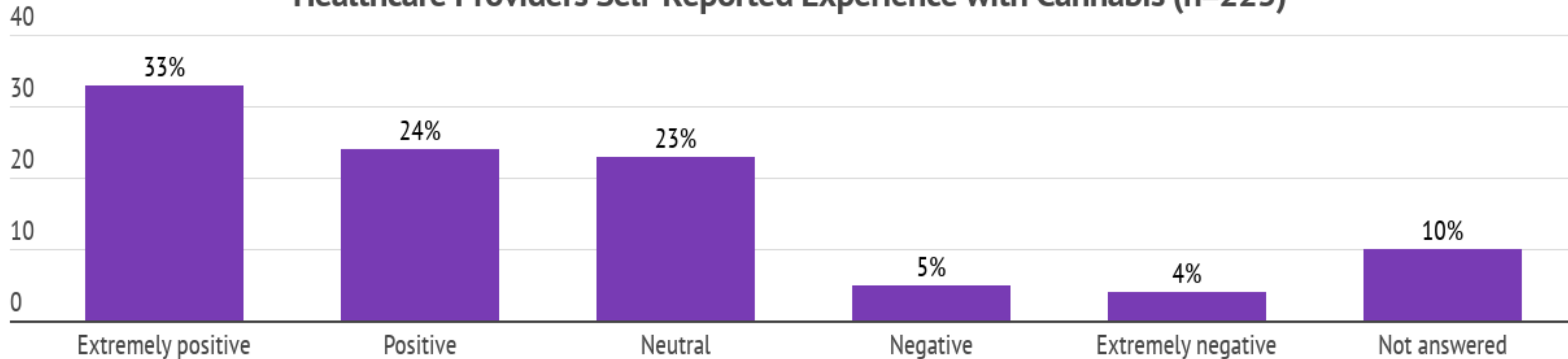
Healthcare Providers Cannabis Consumption (N=354)



Healthcare Providers ever visited a medical cannabis retail outlet or dispensary (N=354)



Healthcare Providers Self-Reported Experience with Cannabis (n=223)





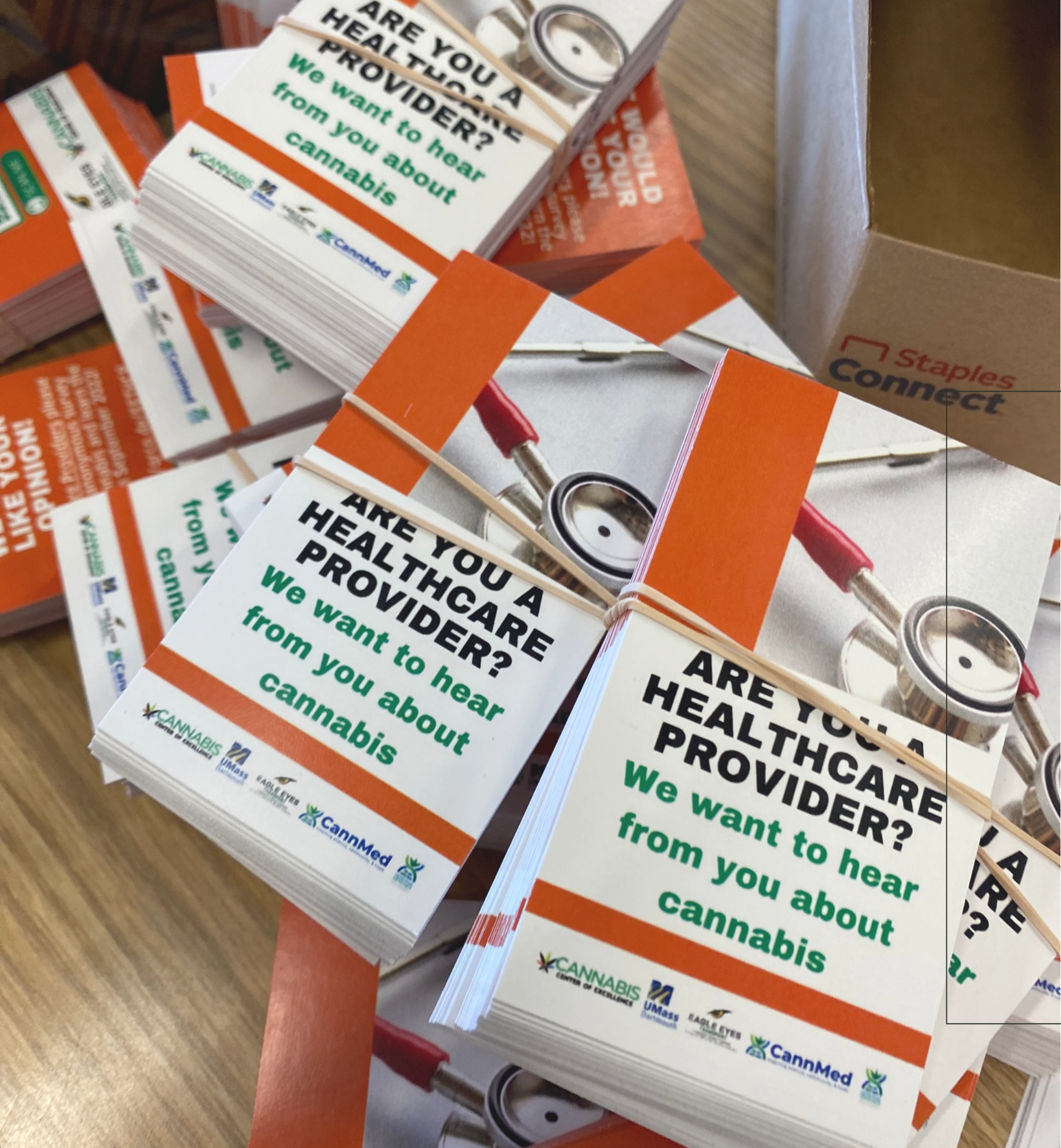
STUDY RESPONDENTS PROFILES

354 healthcare providers responded.

- 25% Nurses
- 51% Women
- 17% Work for the Veterans Affairs
- 53% Below age of 37 years
- 69% Earn <\$100k/Year
- Race/Ethnicity:
 - 10% African American
 - 78% White

42% are currently
cannabis consumers
84% have visited a
dispensary





MEDICAL CANNABIS BACKGROUND & BELIEFS

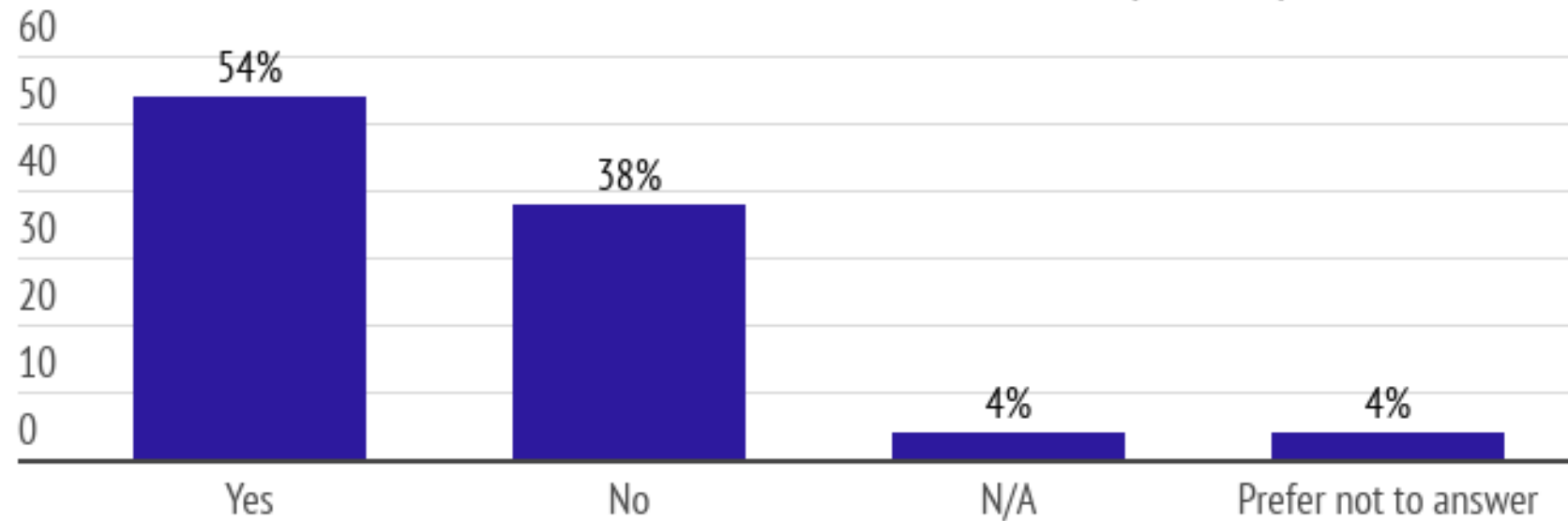
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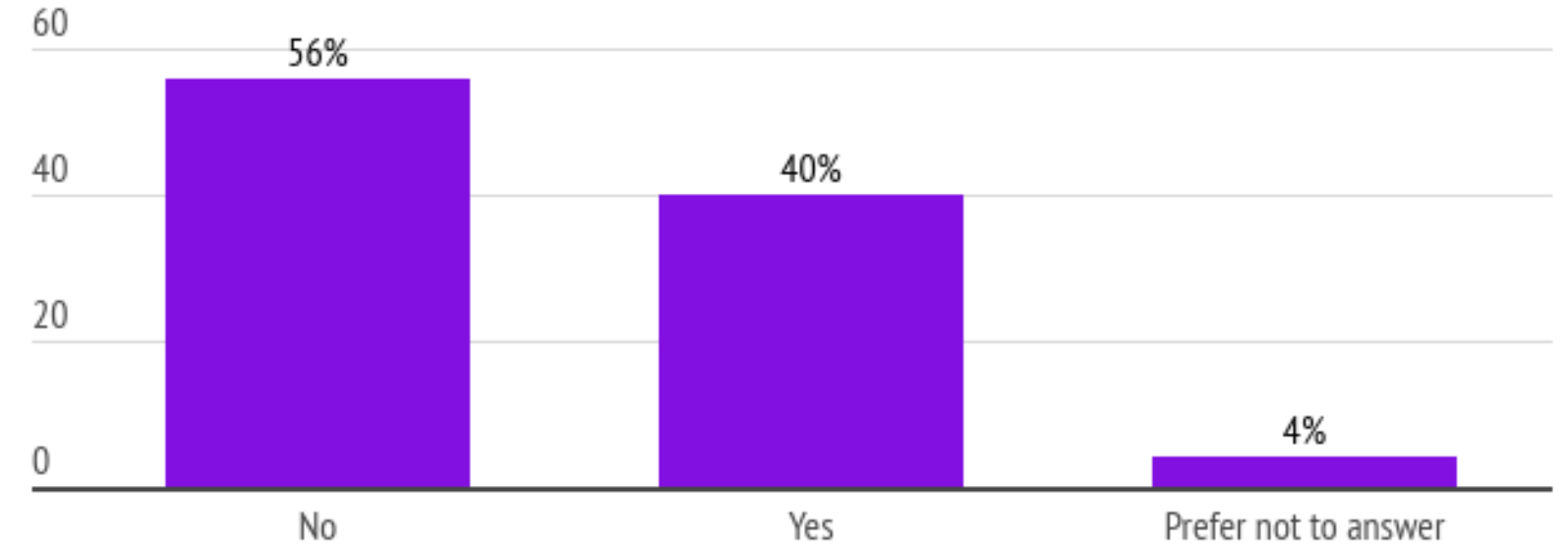
Results Presented on May 5, 2022 CannMed 2022 Pasadena, California



% Respondents Who Are Currently Registered by a State Agency to Recommend Medical Cannabis (N=354)



Respondents that have plans to become registered to recommend medical cannabis (n=134)



Impacts to Register with the State to Recommend Medical Cannabis (N=354)

The Following Impact Respondents Ability to Get Certified To Recommend Cannabis	% Reported Impacts
I want to be certified, but haven't done so (no barriers)	26%
My state/government body doesn't recognize my profession to become certified	23%
I am certified	22%
Not Applicable	12%
My healthcare facility or organization won't let me become certified	12%
My workplace has a don't ask, don't tell policy	9%
My practice and insurance coverage prevent me from being certified	8%
I don't want to become certified	7%
Other (please specify)	5%
Prefer not to answer	2%

% Believe Medical Cannabis Has a Role in Medical Care (N=354)

First line treatment for chronic pain or some other conditions 37%	Has a role if first line and conventional treatments fail 13%	Need more scientific evidence to make a firm decision 12%
Some role for treatment of specific health conditions 30%	Not answered 5%	Other (please specify) 2%

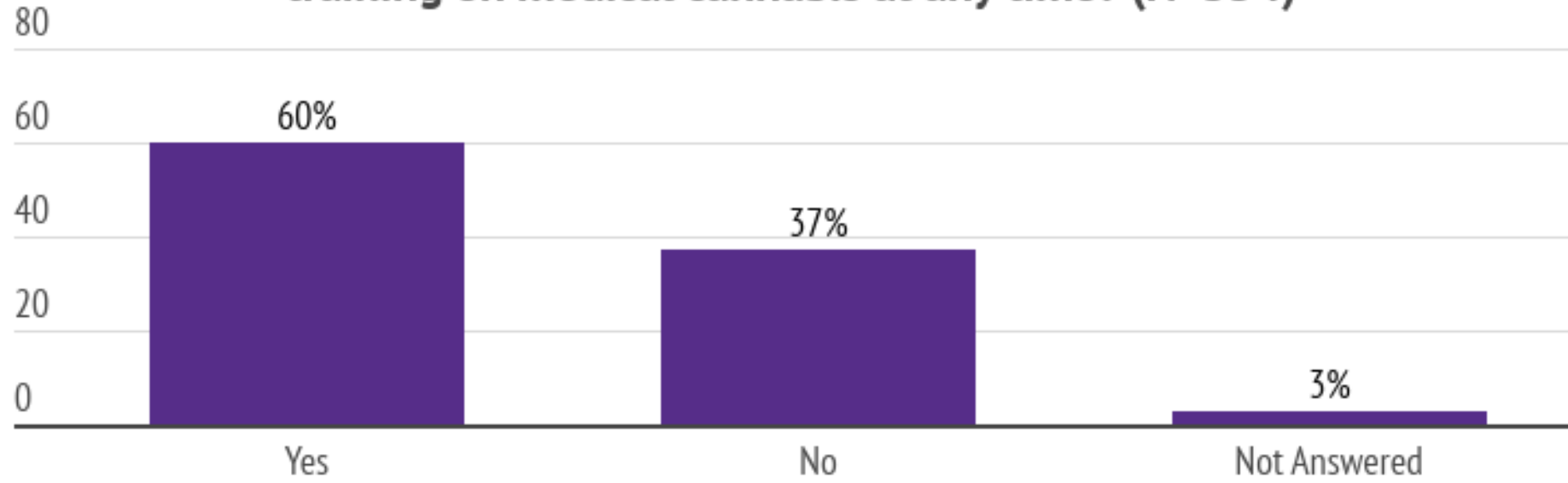


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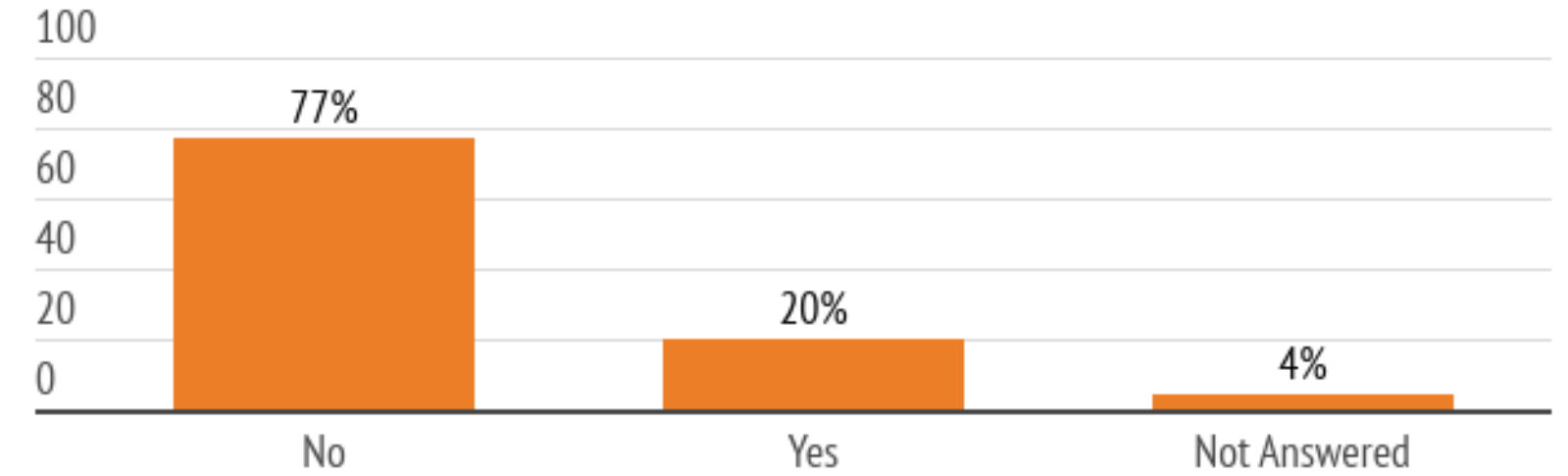
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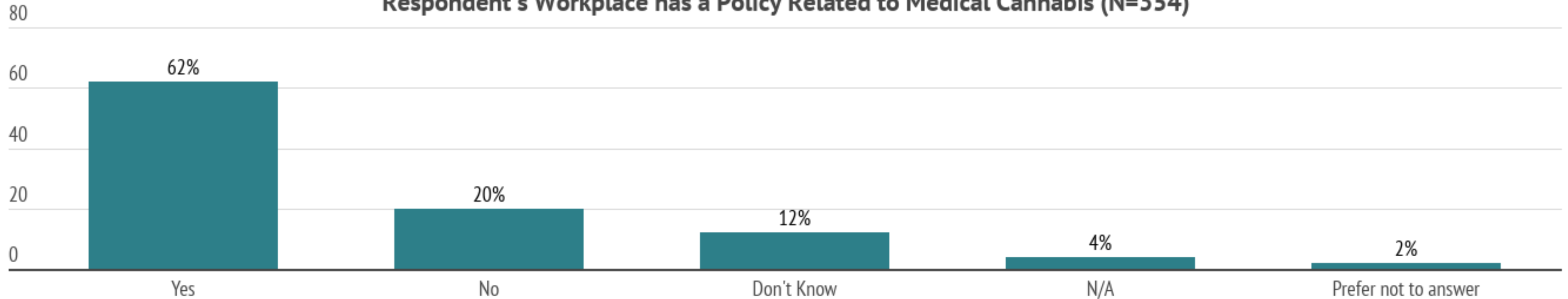
Have you received any formal education or training on medical cannabis at any time? (N=354)



Have you received CME credits for any medical cannabis education you have completed? (n=213)



Respondent's Workplace has a Policy Related to Medical Cannabis (N=354)

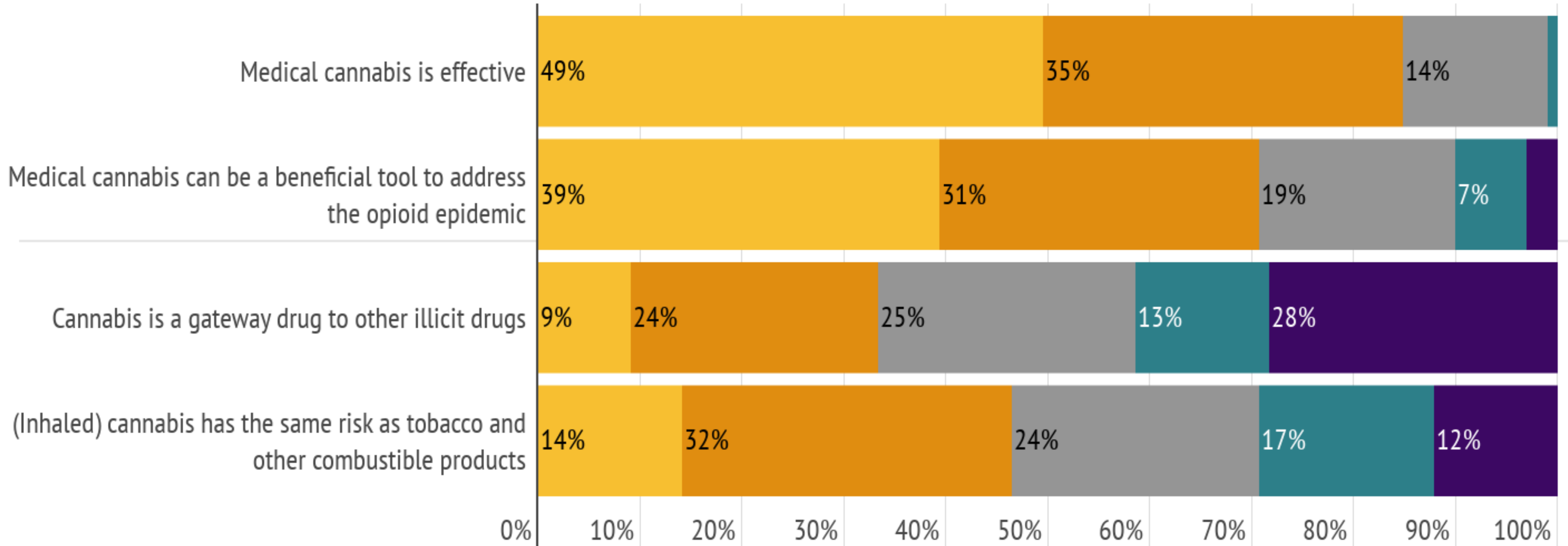


Healthcare Provider Medical Cannabis Study

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% Respondents Who Agree With the Following Statements (N=354)



● Strongly agree ● Somewhat agree ● Neither agree nor disagree ● Somewhat disagree ● Strongly disagree



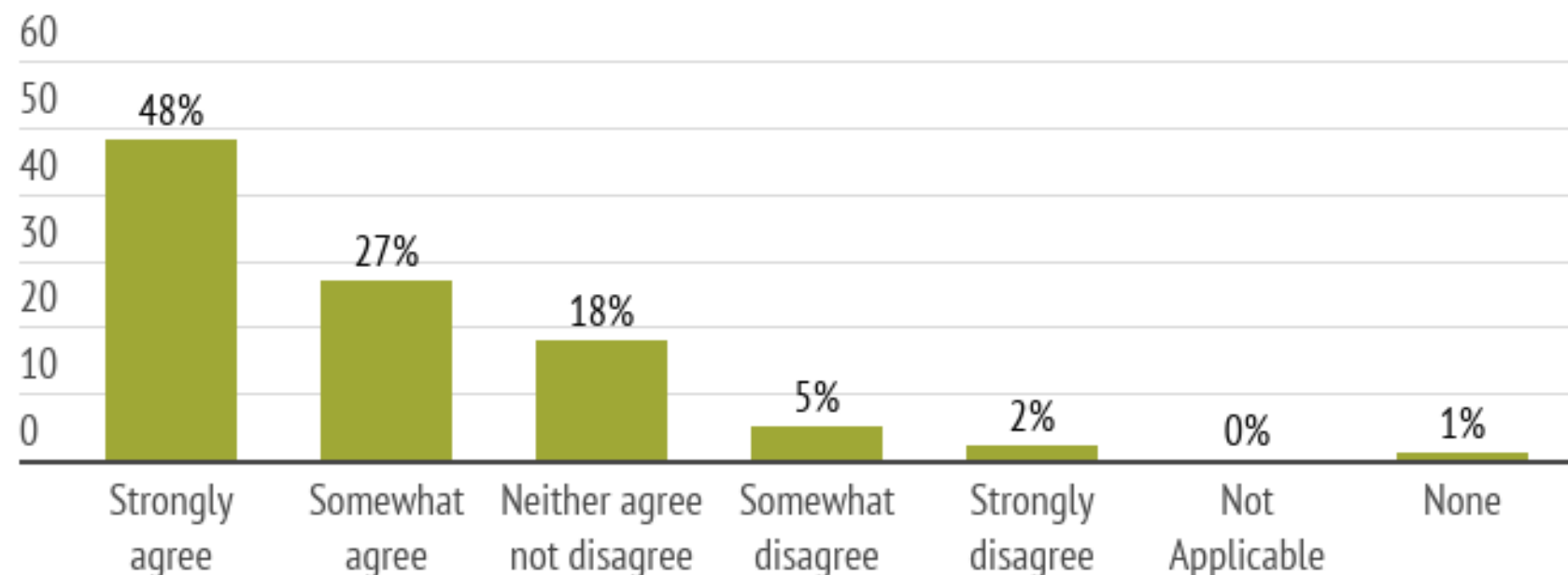
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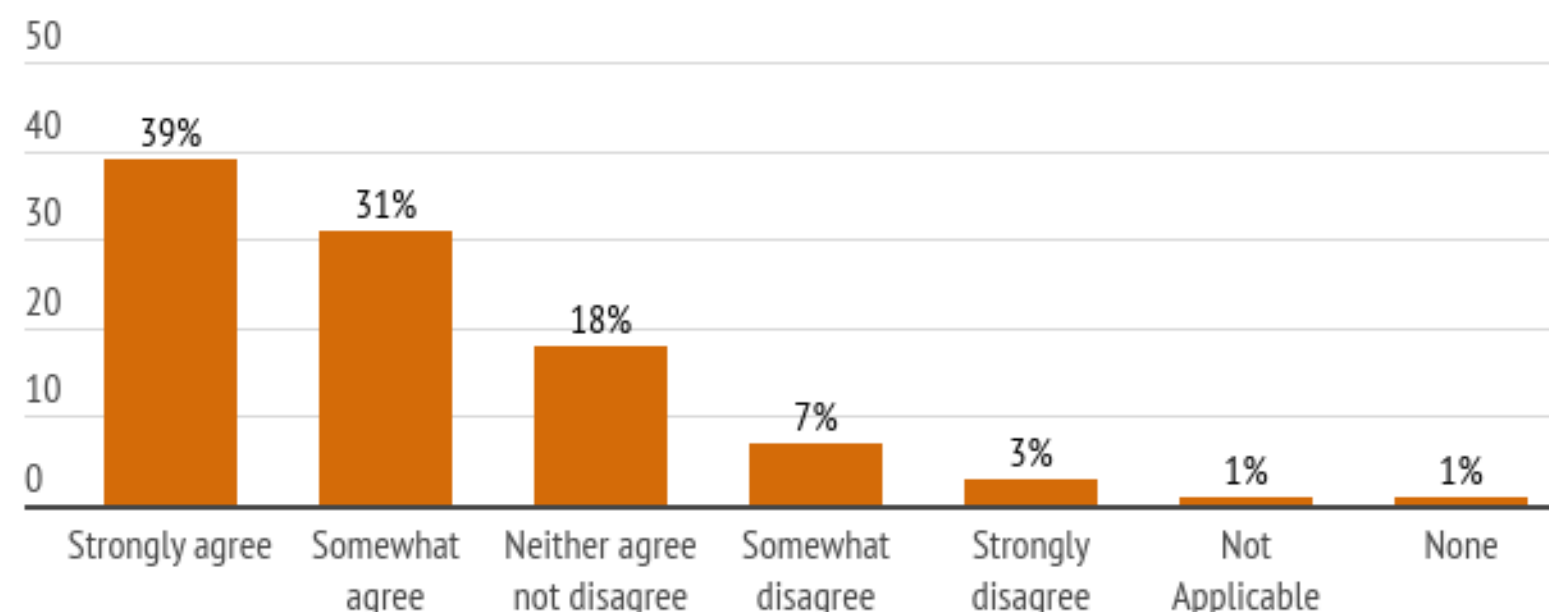
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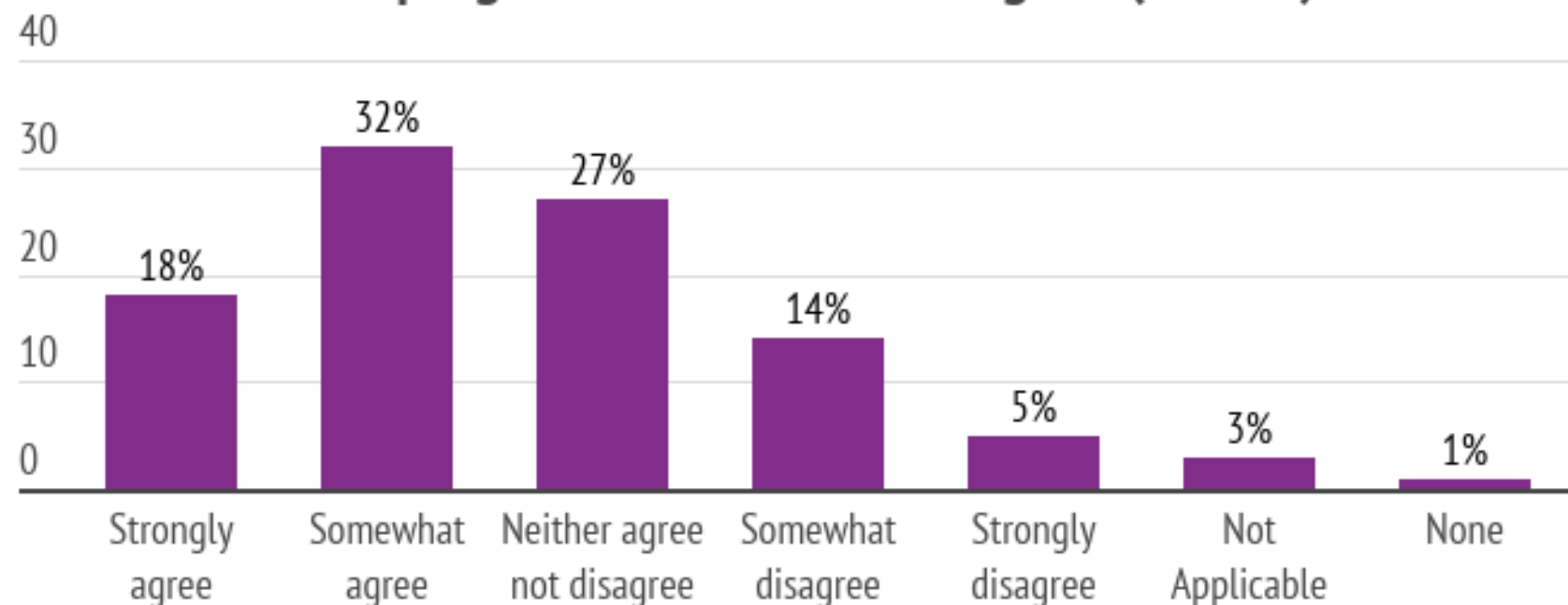
% Respondents who agree medical cannabis is a legitimate medical therapy. (N=354)



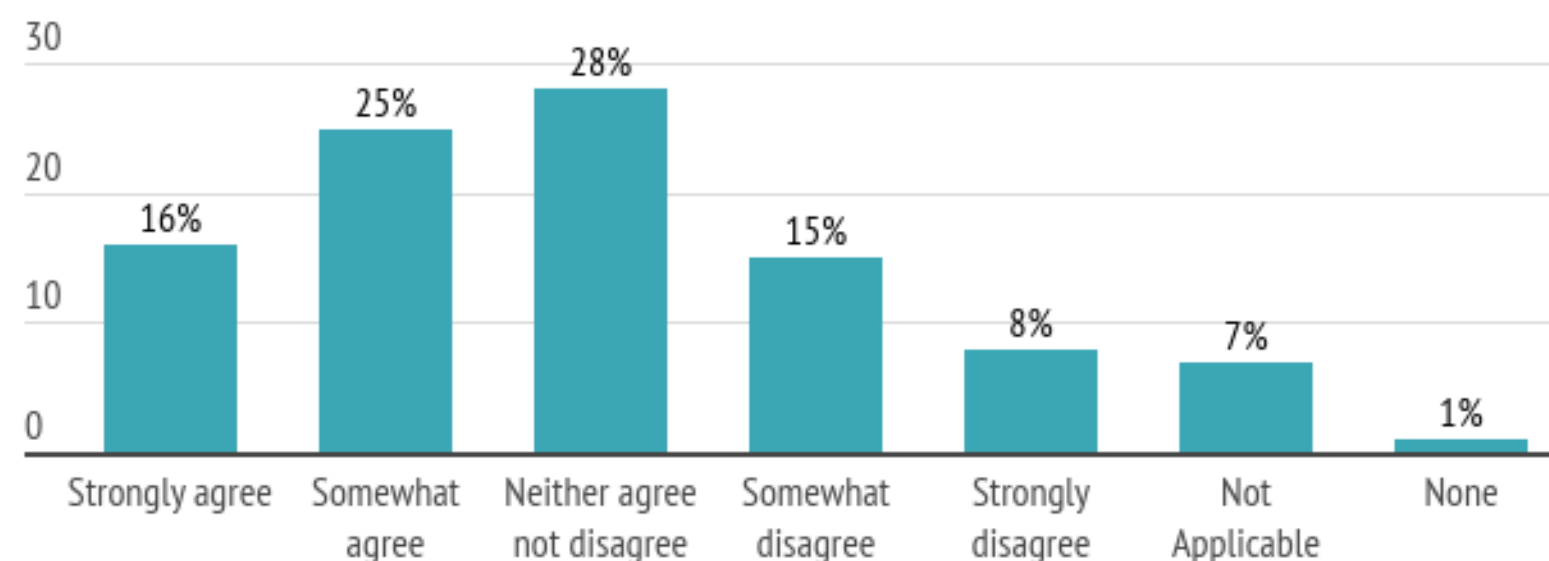
% Respondents who believe medical providers should be offering medical cannabis for managing medical conditions. (N=354)



% Respondents who agree the process to certify patients in the medical cannabis program is difficult to navigate. (N=354)



% Respondents who believe the process to certify patients in the medical cannabis program prevents them from enrolling patients. (N=354)

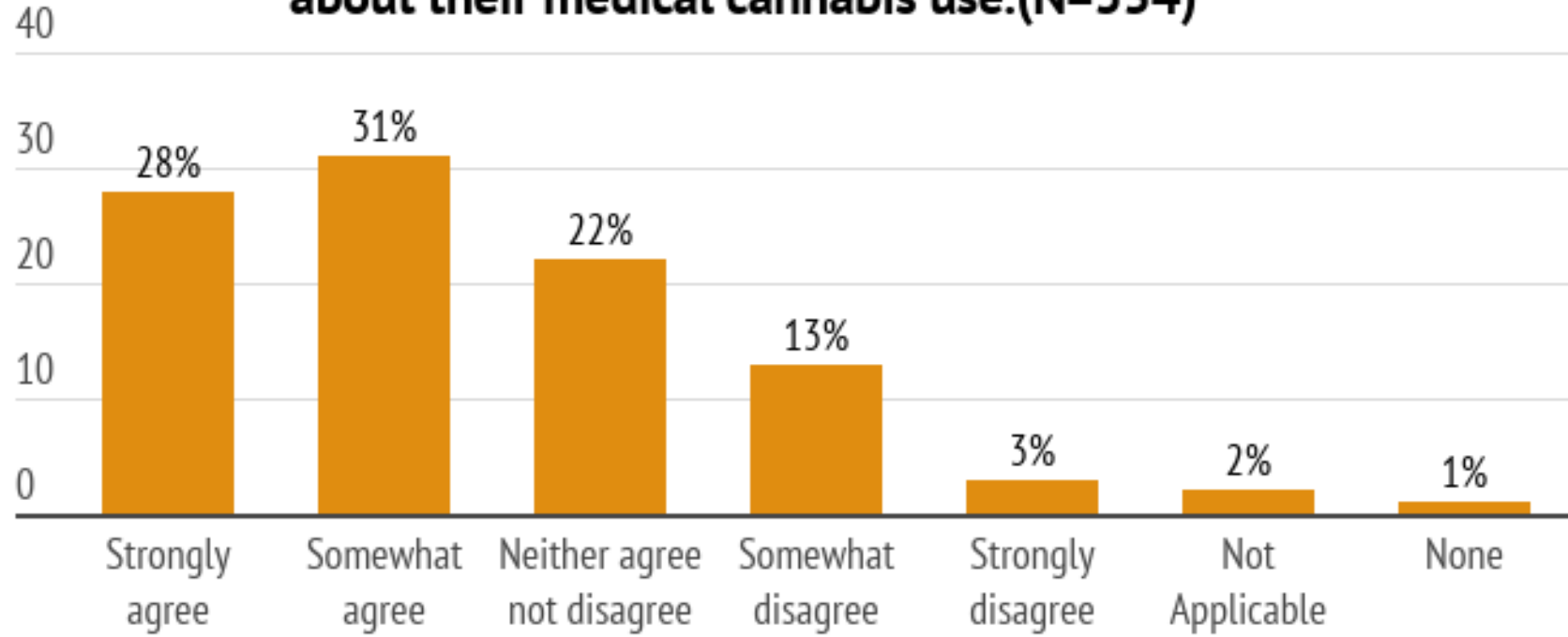


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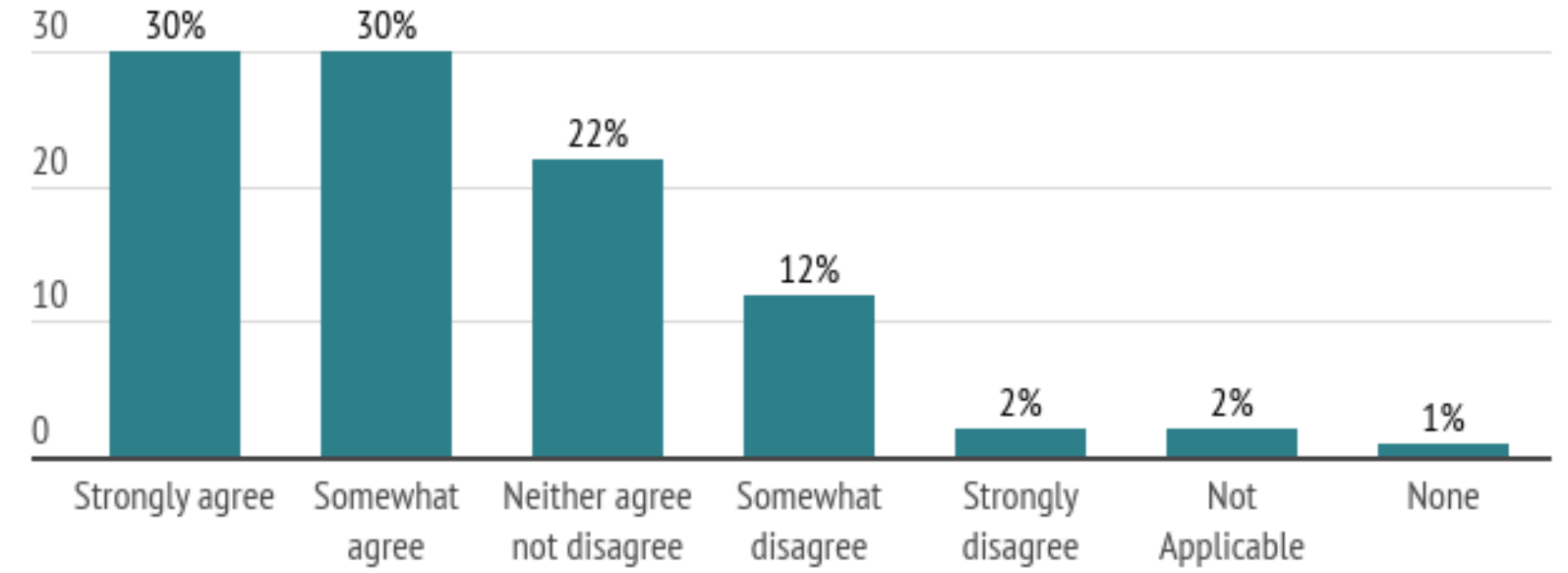
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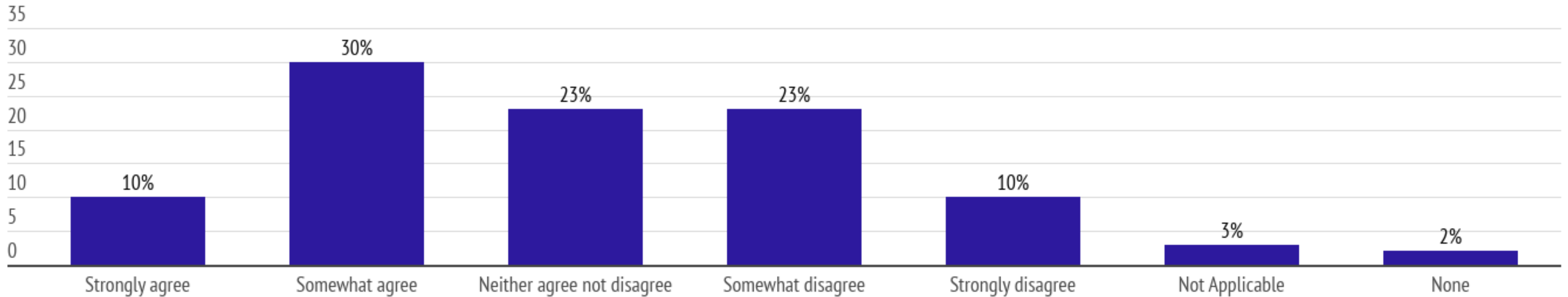
% Respondents who regularly ask my patients about their medical cannabis use.(N=354)



% Respondents who report medical patients feel comfortable talking to them about medical cannabis (N=354)



% Respondents who report their average patient is knowledgeable about medical cannabis (N=354)

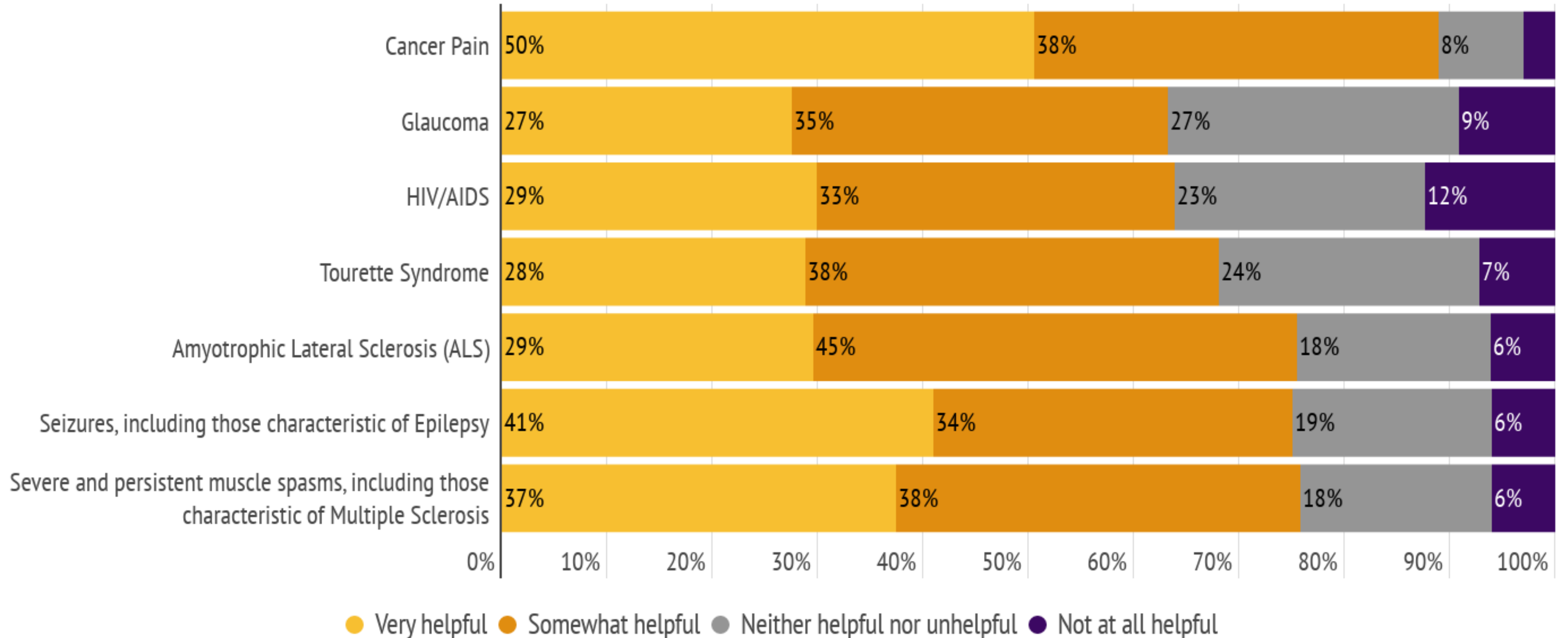


Healthcare Provider Medical Cannabis Study

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How helpful do you think cannabinoids are for the treatment of the following health conditions (N=354)



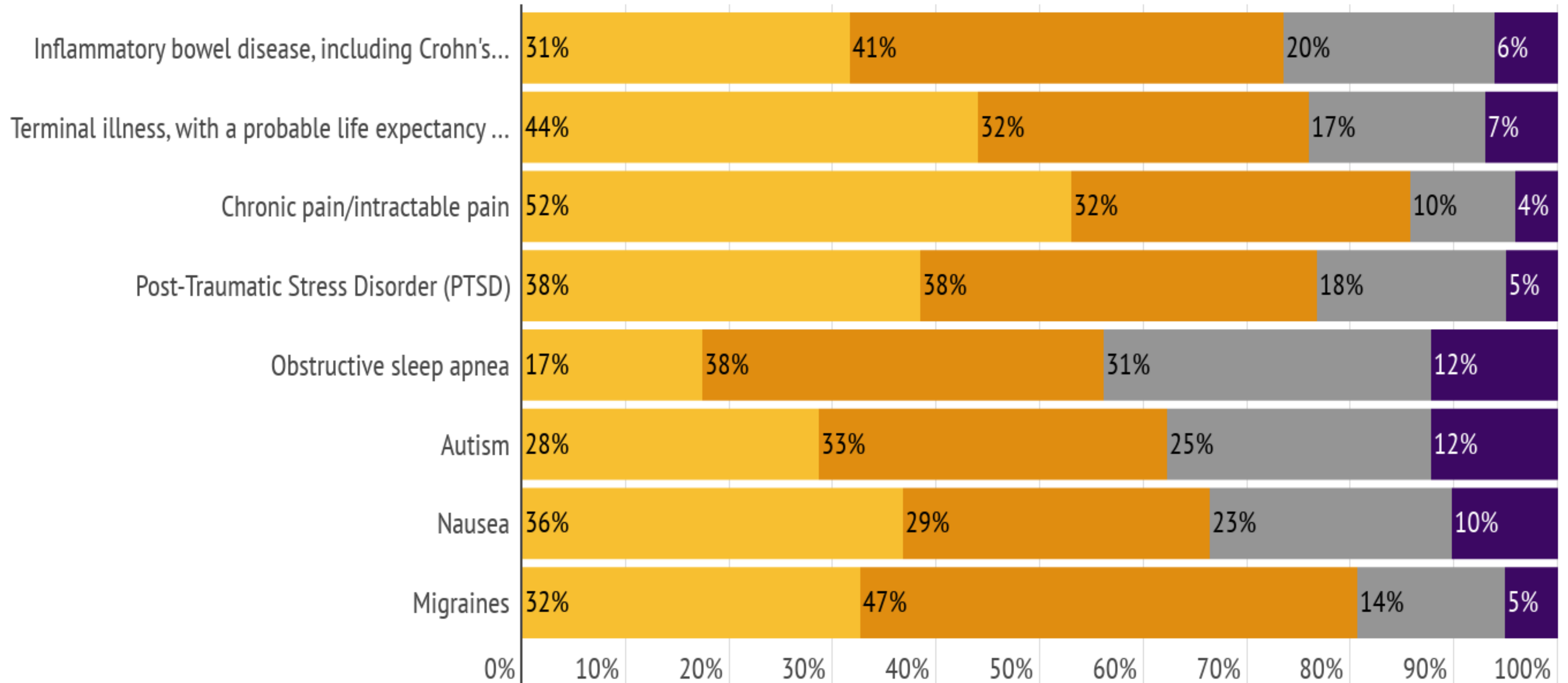
Healthcare Provider Medical Cannabis Study

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How helpful respondents think cannabinoids are for the treatment of the following health conditions (N=354)



● Very helpful ● Somewhat helpful ● Neither helpful nor unhelpful ● Not at all helpful

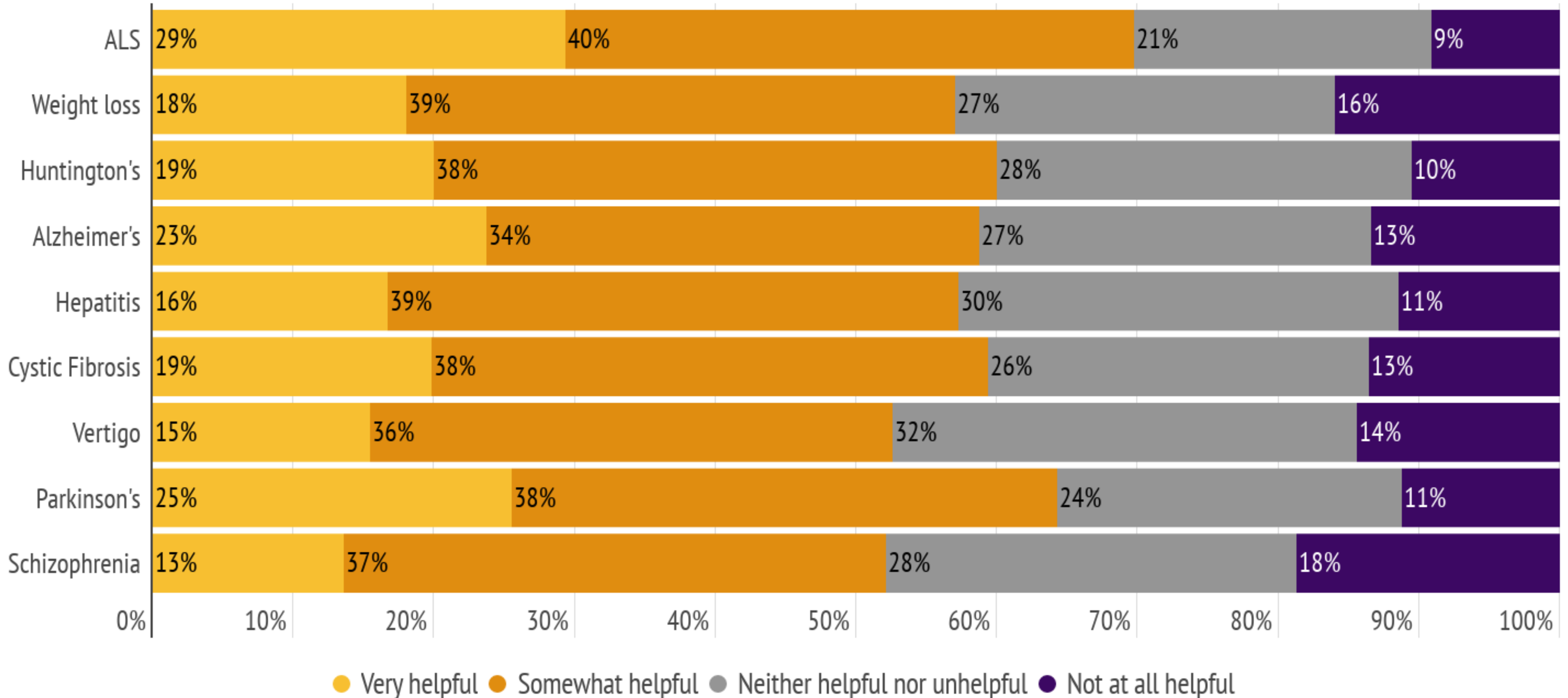


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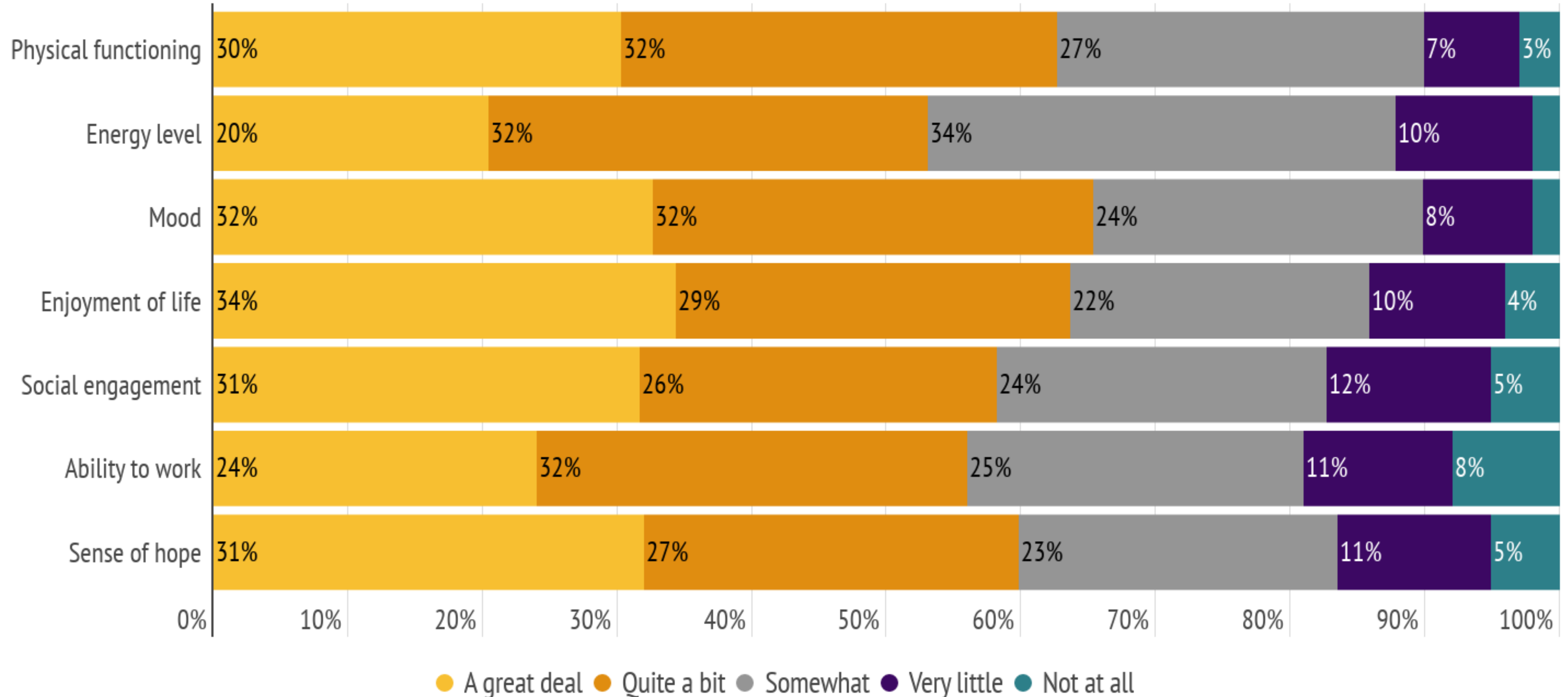
Healthcare Provider Medical Cannabis Study

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To what extent can medical cannabis improve the following for patients (n=354)





MEDICAL CANNABIS BELIEFS

354 healthcare providers responded.

- 60% Have received formal training about medical cannabis
- 54% registered by a State to recommend Medical Cannabis
- 37% Believe Medical Cannabis can be a First Line Treatment
- 30% Believe Medical Cannabis plays some role in medical treatments

70% agree cannabis can be used to address the opioid epidemic





TOP CONDITIONS CANNABIS HELPFUL FOR

354 healthcare providers responded.

- Top Conditions Believed Medical Cannabis Works Best:

- Chronic Pain
- Cancer Pain
- Seizures
- Muscle Spasms
- PTSD
- Terminal Illness
- Parkinson's
- ALS

41% strongly disagree cannabis is a gateway drug





HEALTHCARE PROVIDER CONCERNS ABOUT CANNABIS

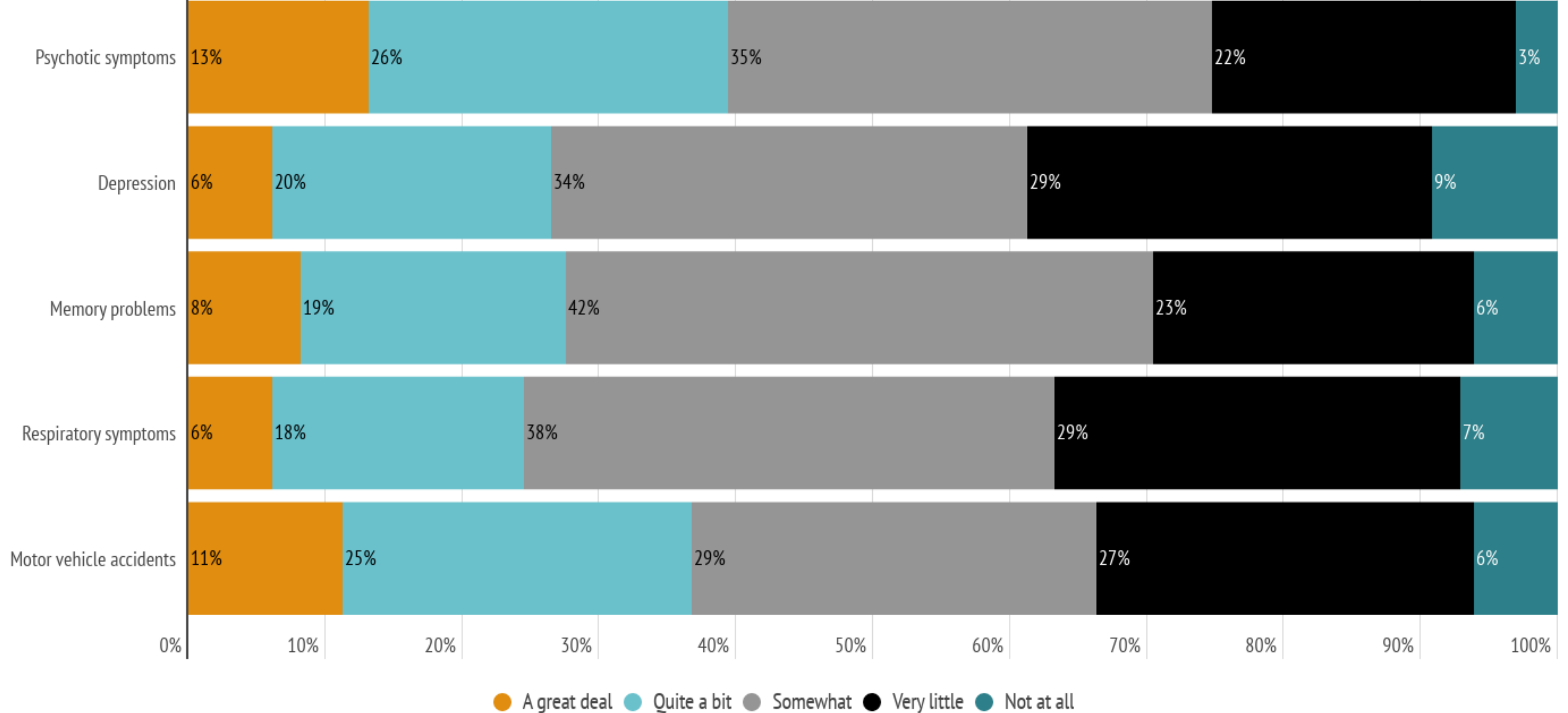
Risks of cannabis use and mis-use reported by healthcare providers.

Healthcare Provider Medical Cannabis Study

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To What Extent Respondents Think Cannabis Increases the Risk For the Following (1 of 2)



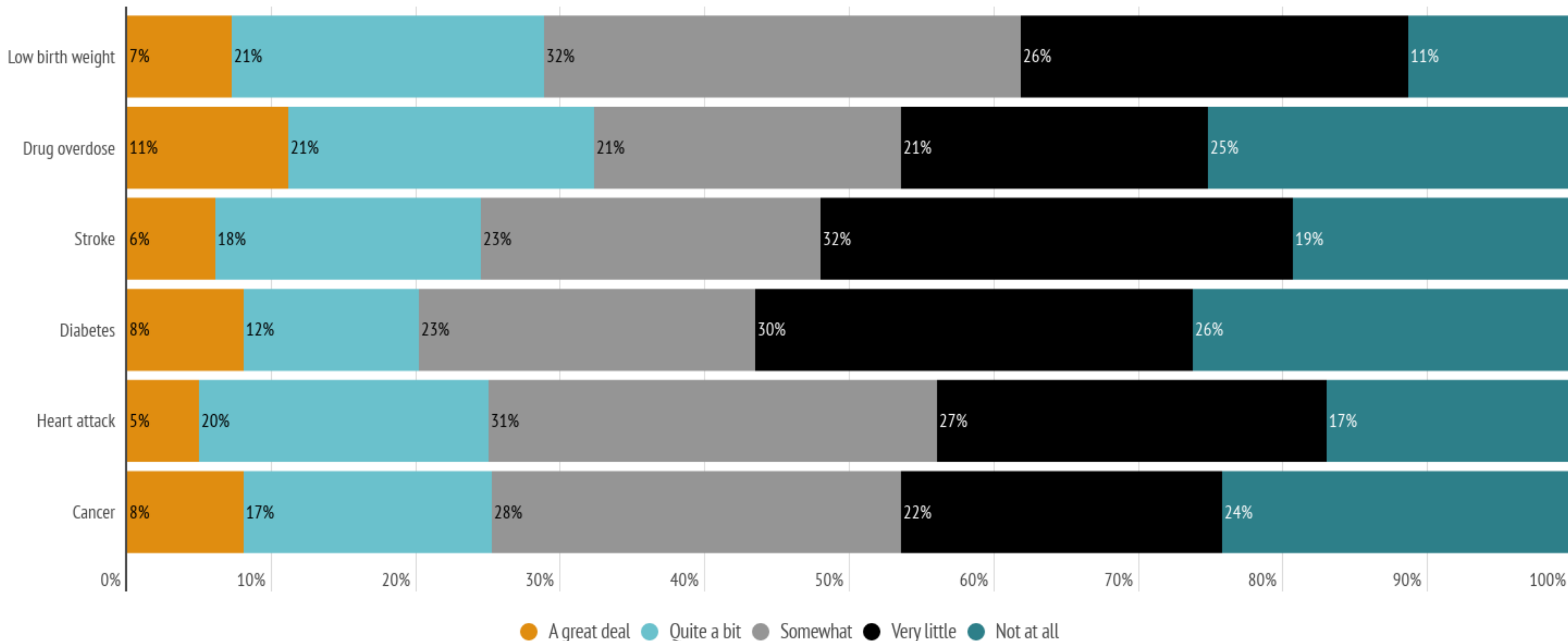
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To What Extent Respondents Think Cannabis Increases the Risk For the Following (2 of 2)

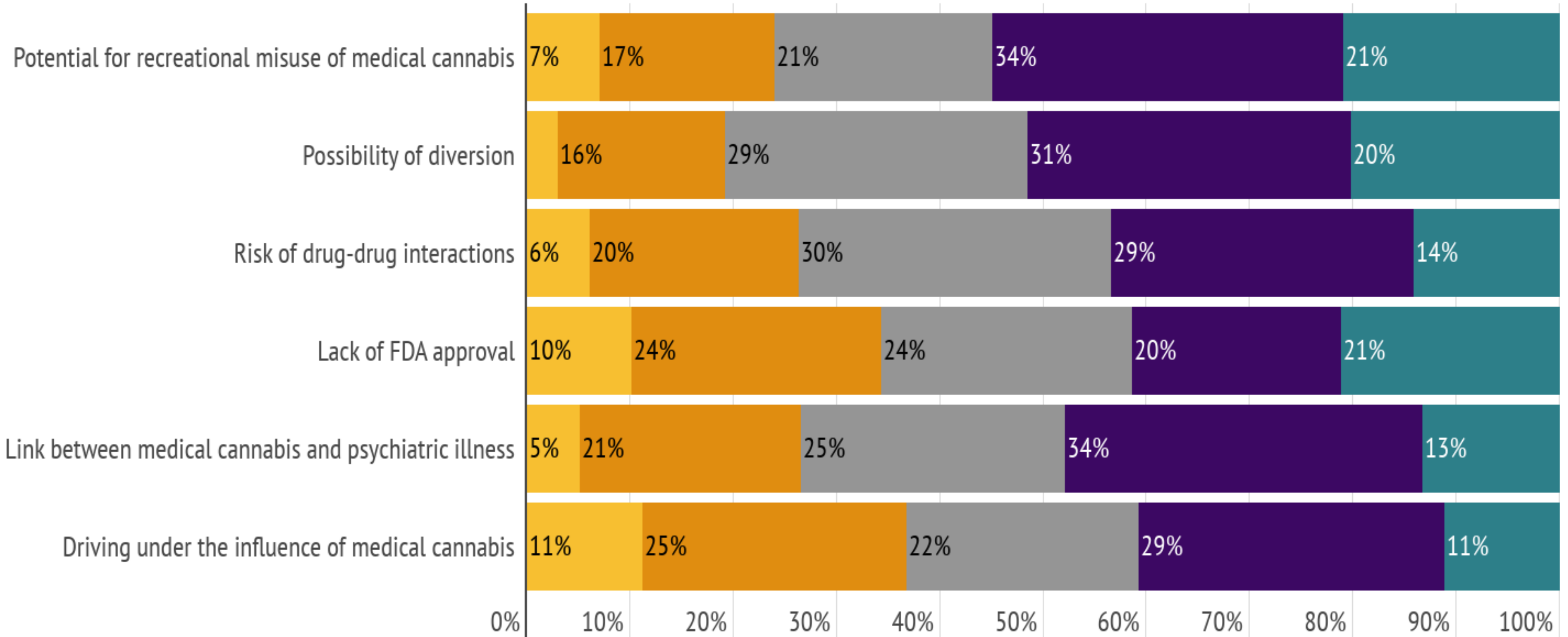


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To what extent healthcare providers expressed concern with the following (n=354)



● Extremely concerned ● Very concerned ● Moderately concerned ● Somewhat concerned ● Not concerned at all

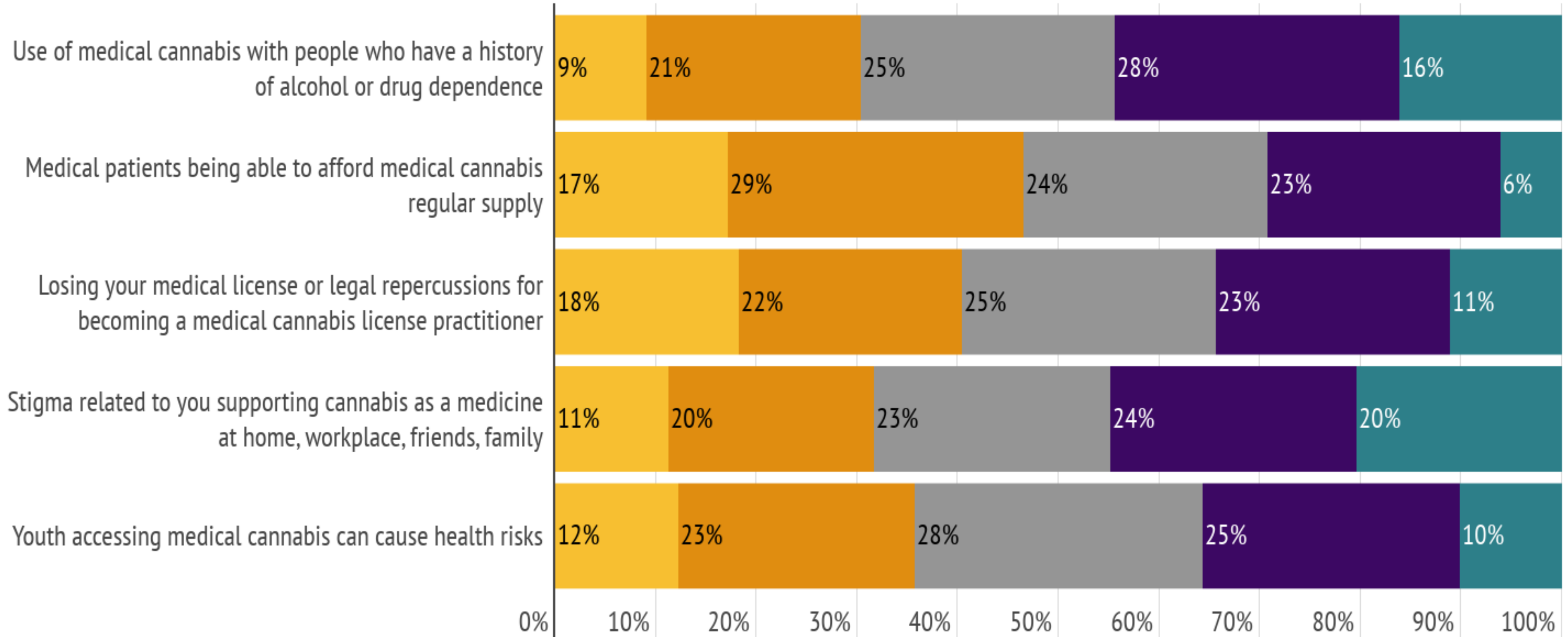


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 **CANNABIS**
CENTER OF EXCELLENCE


MEDICINAL
GENOMICS
Founder of CannMed Events


UMass
Dartmouth

MEDICAL CANNABIS KNOWLEDGE


UMass
Dartmouth

mcr
labs

cannabis
science and solutions


THE CANNIMED
EST. 2015

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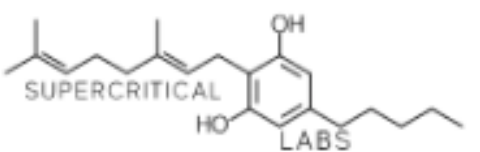
 MEDICINAL
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COAST


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LABS


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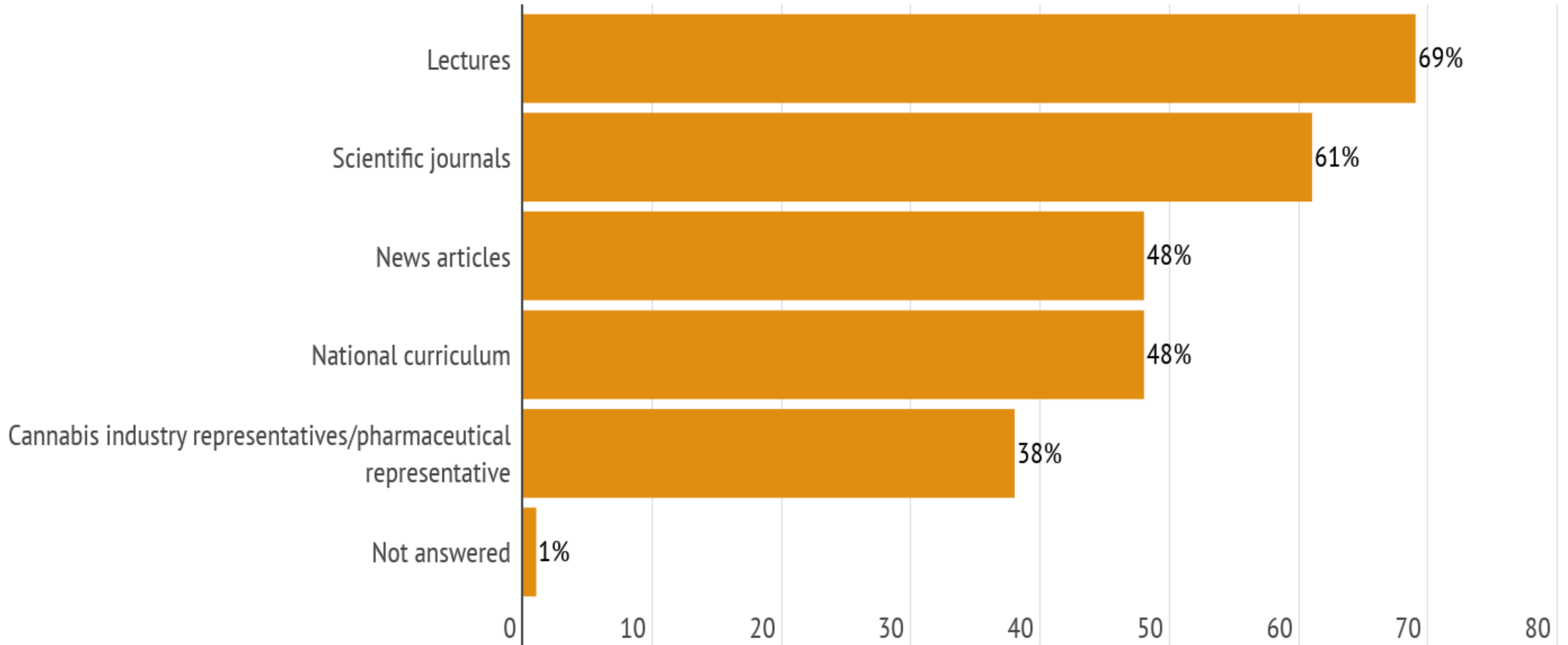
 **cannapreneur**
PARTNERS

Healthcare Provider Medical Cannabis Study

Data Collected From May 2021 - May, 2022 N=354 Providers Responded
Results Presented on May 5, 2022 CannMed 2022 Pasadena, California



How respondents would like to learn about medical cannabis (N=354)



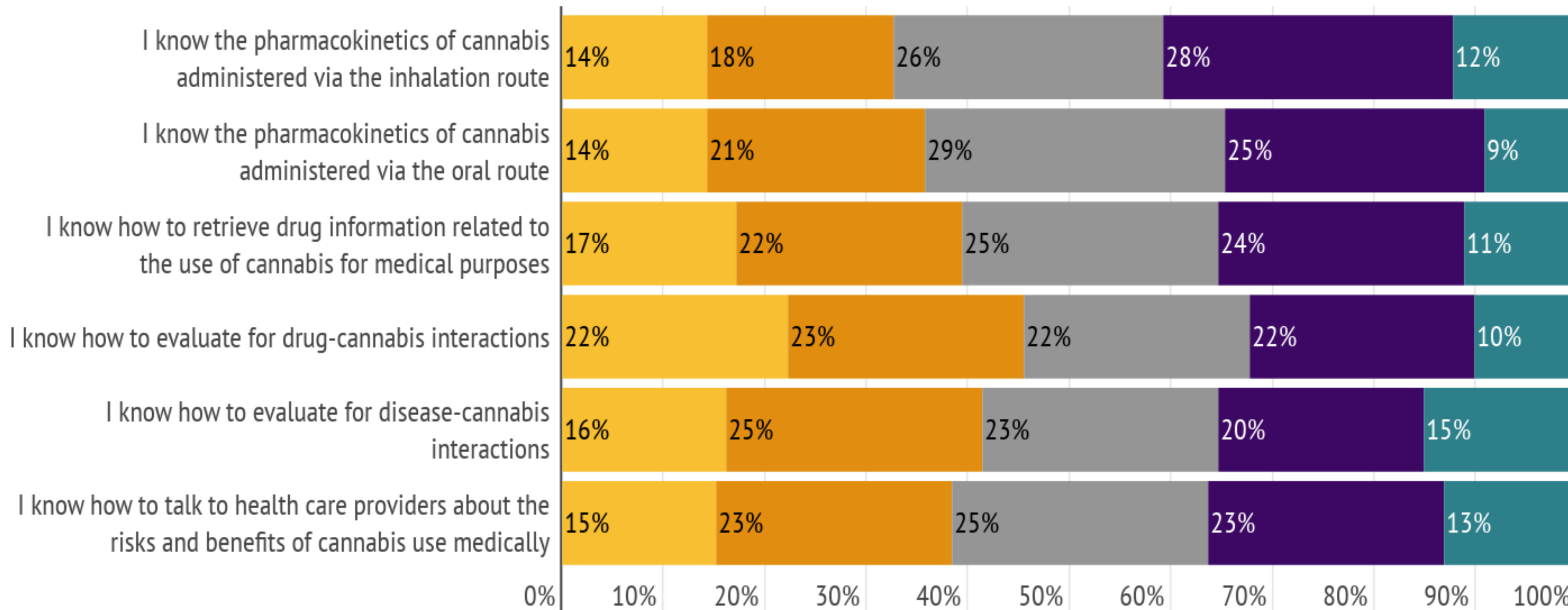
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Respondents Level of Confidence Knowing the Following About Medical Cannabis (N=354)



● Completely confident ● Fairly confident ● Somewhat confident ● Slightly confident ● Not confident at all

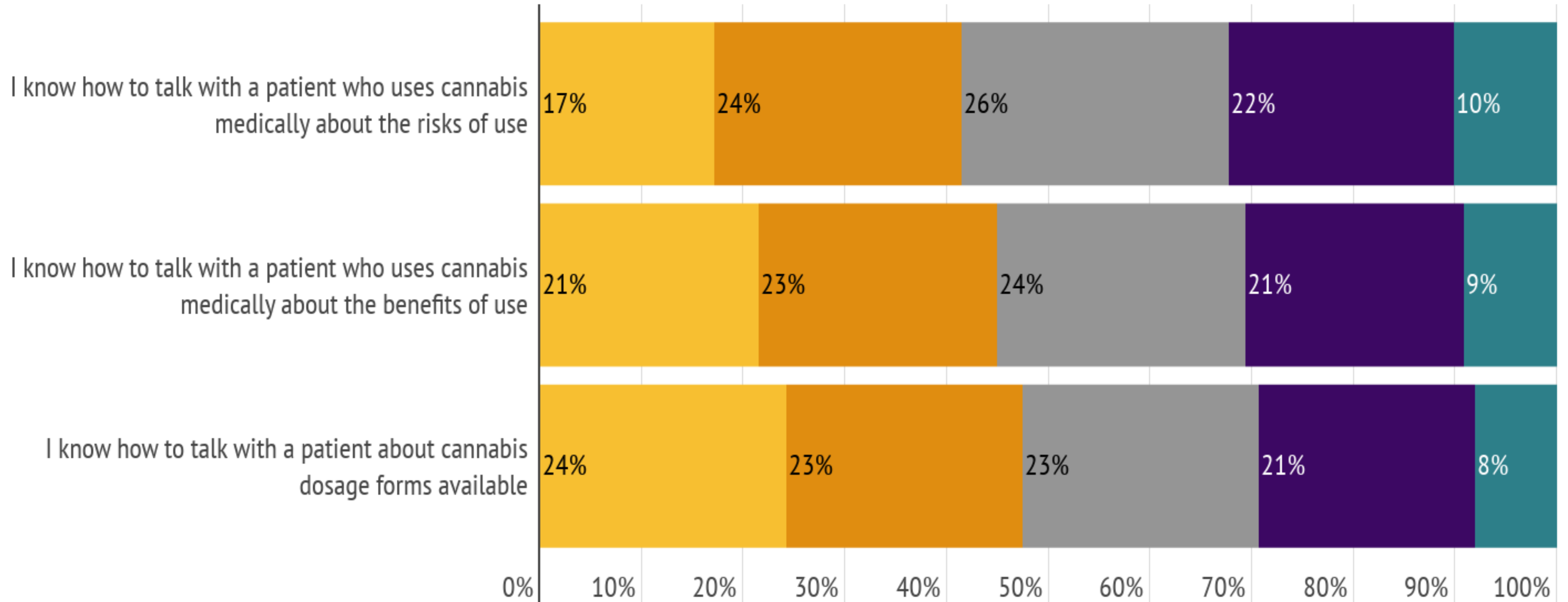


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Respondents Level of Confidence with Medical Cannabis Patient Counseling (N=354)



● Completely confident ● Fairly confident ● Somewhat confident ● Slightly confident ● Not confident at all



Healthcare Provider Medical Cannabis Study

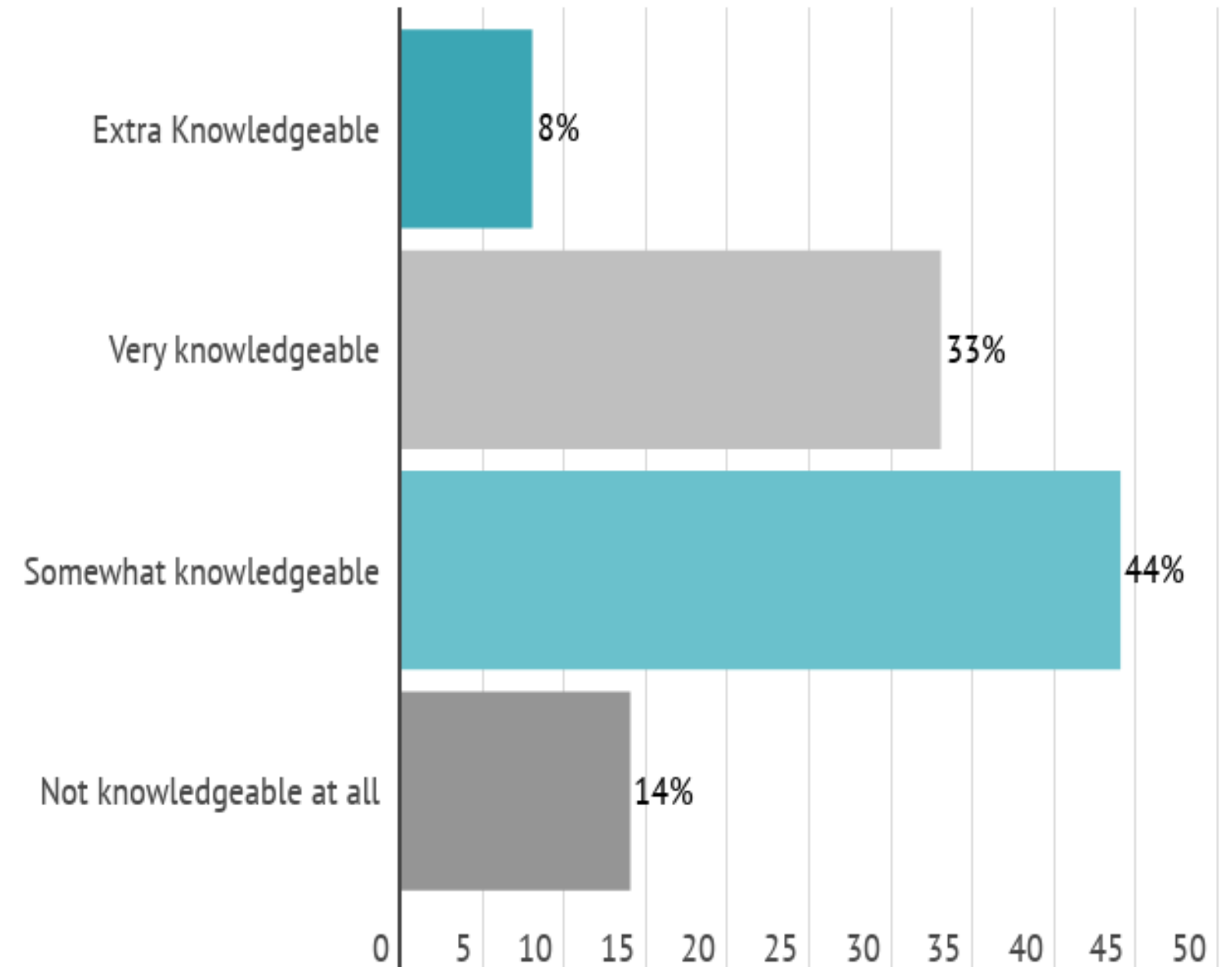
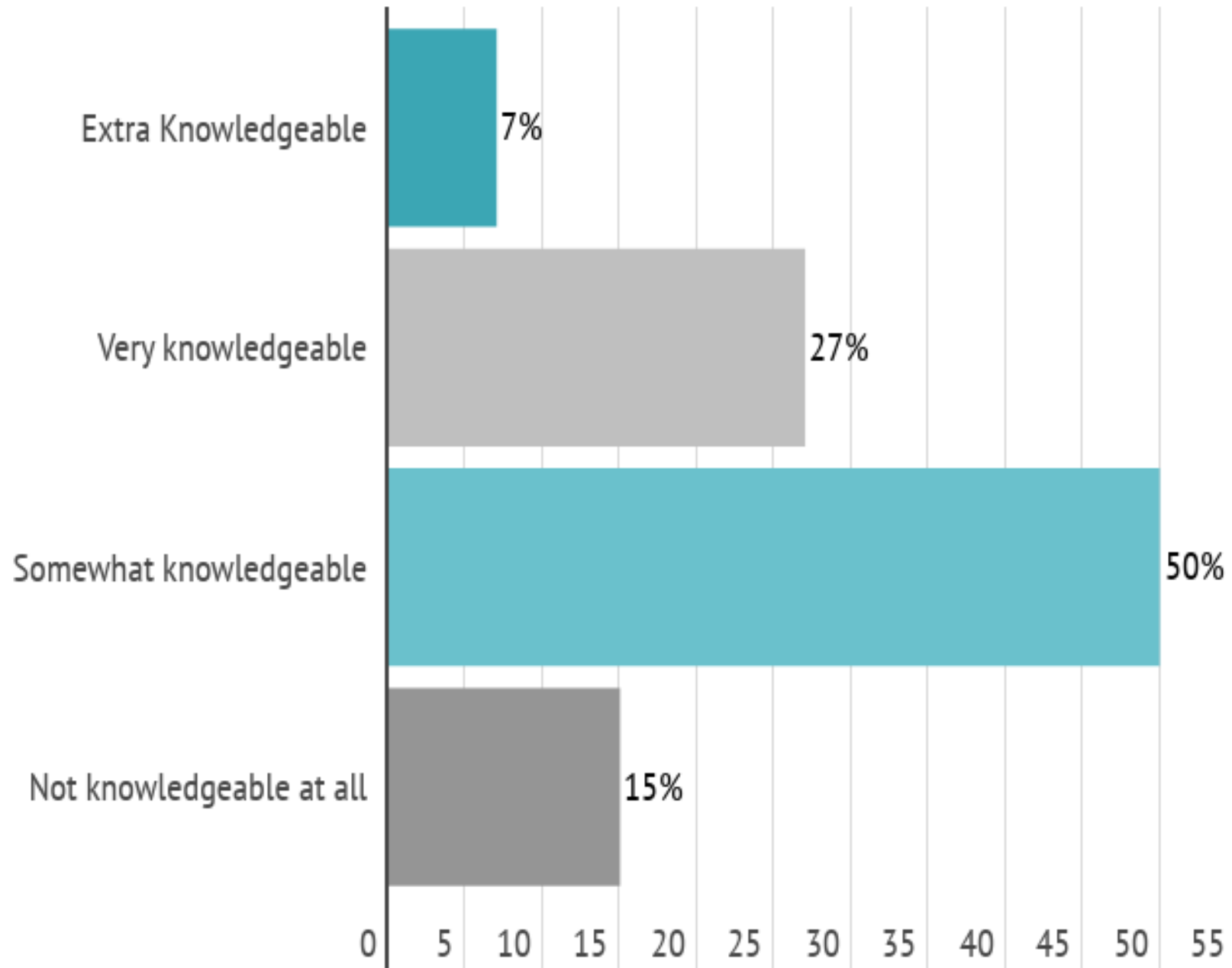
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Respondents Level of Knowledge About Medical Cannabis (N=354)

The effect of the endocannabinoid receptor activation on neuronal function

The physiology of the endocannabinoid system

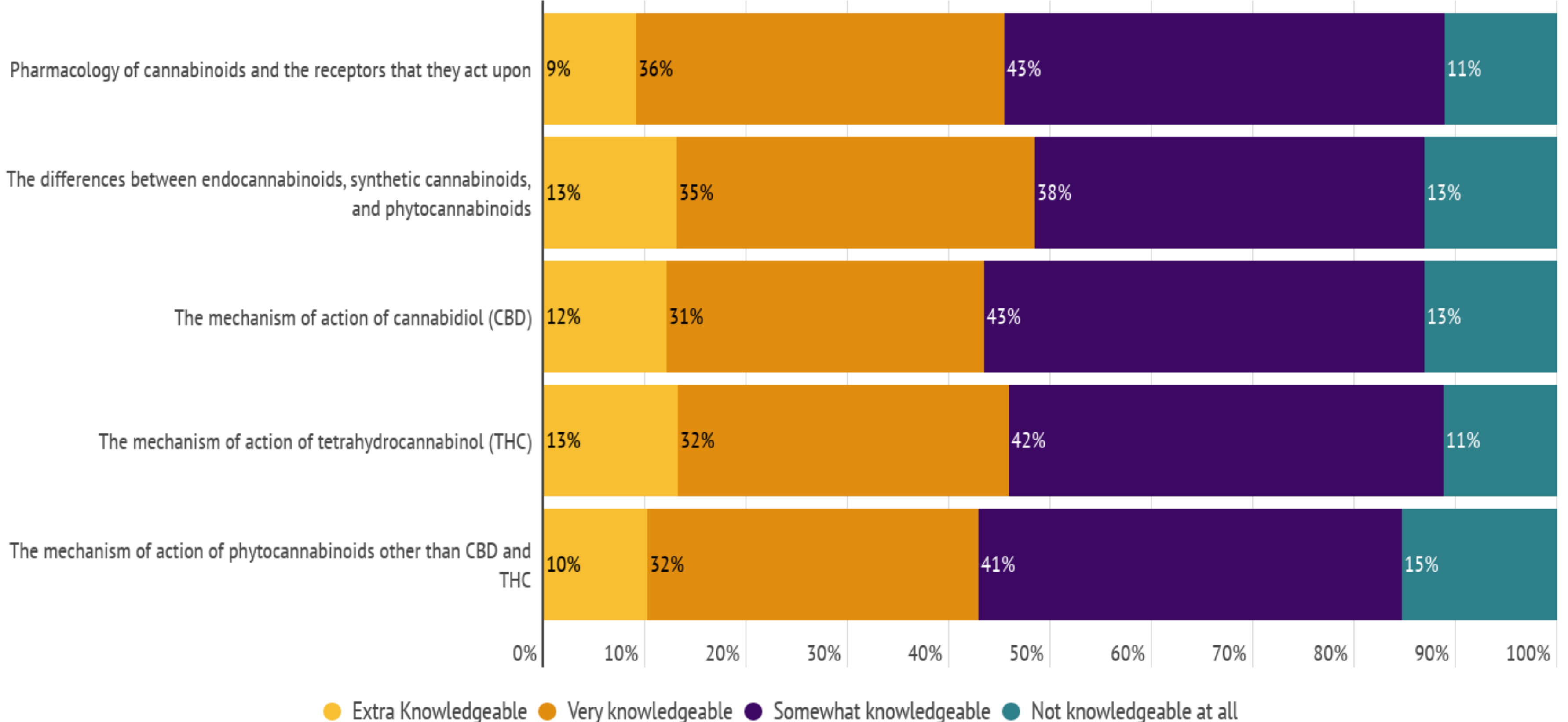


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Respondents Level of Knowledge About Medical Cannabis (N=354)



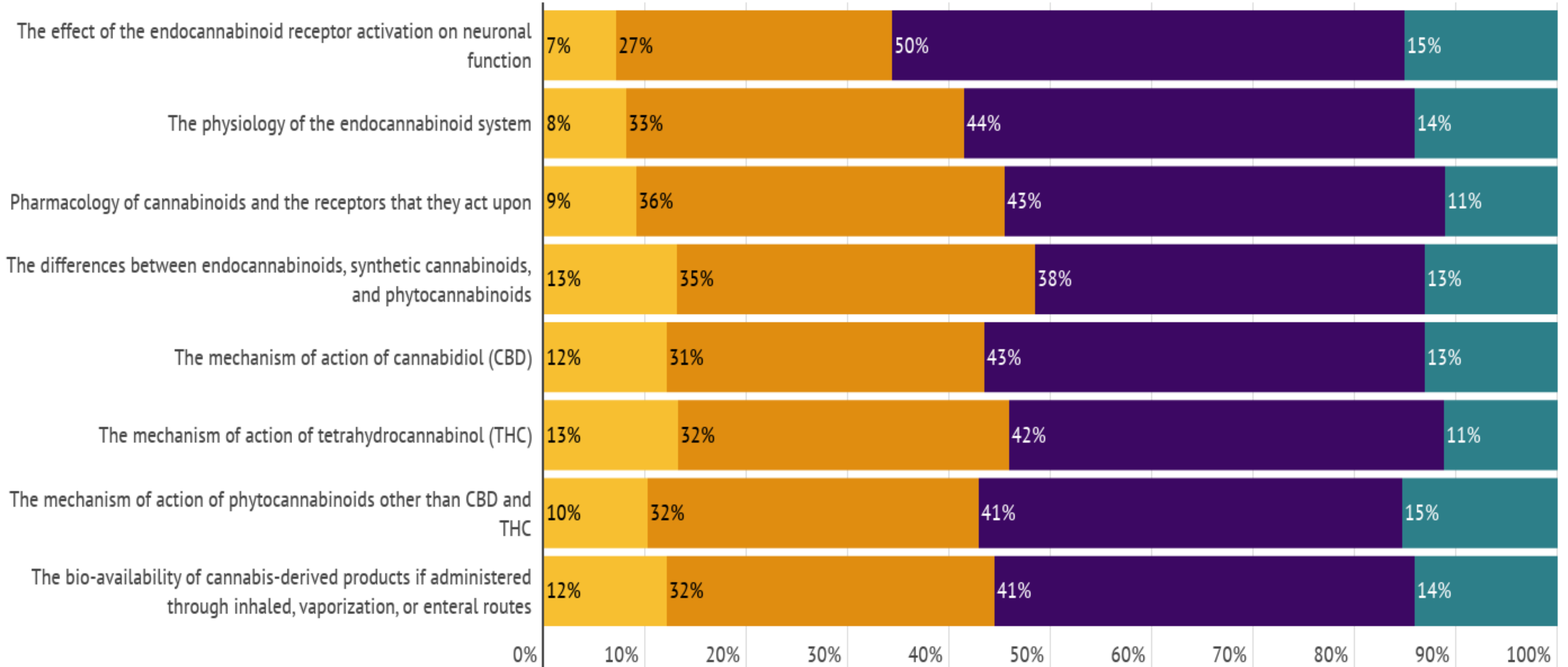
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Respondents Level of Knowledge About Medical Cannabis (N=354)



● Extra Knowledgeable ● Very knowledgeable ● Somewhat knowledgeable ● Not knowledgeable at all

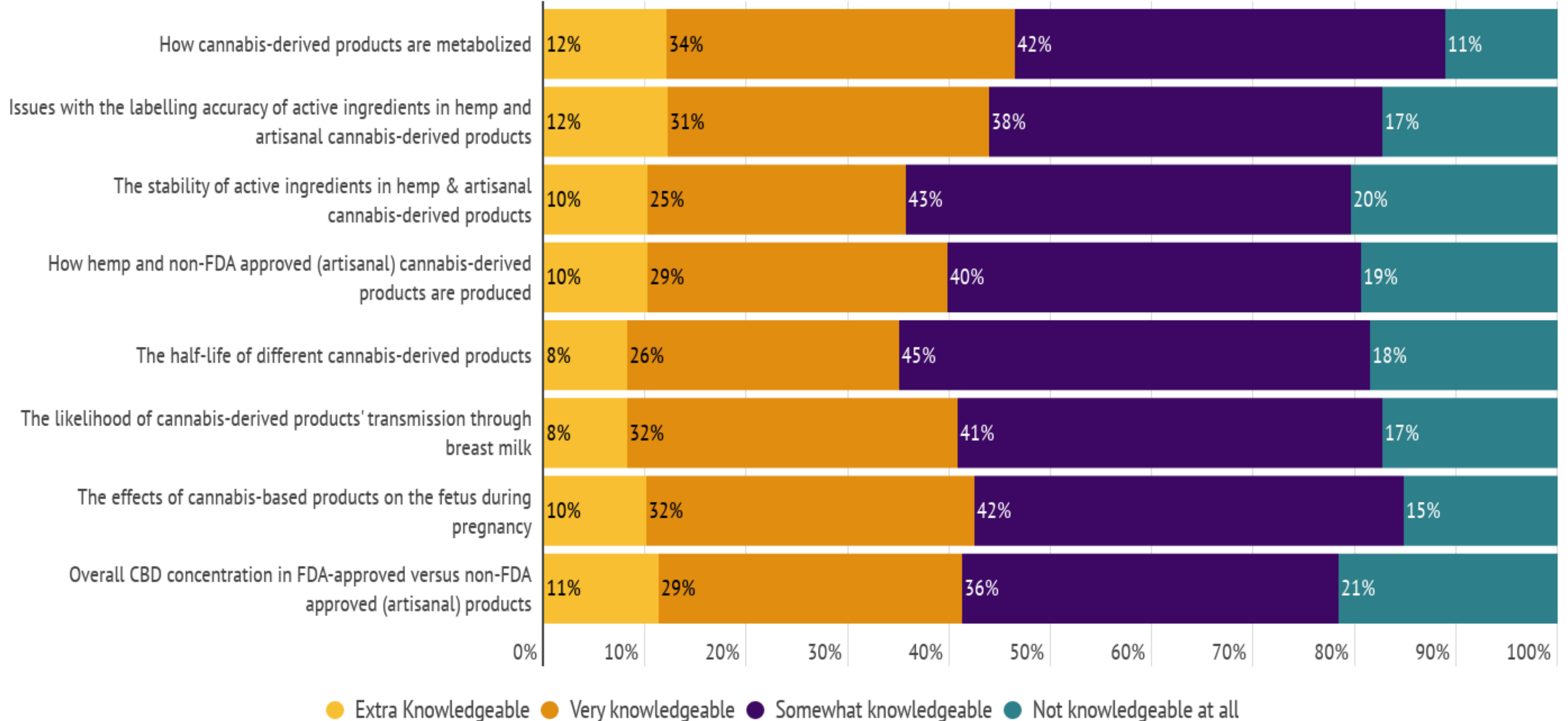


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Respondents Level of Knowledge About Medical Cannabis (N=354)

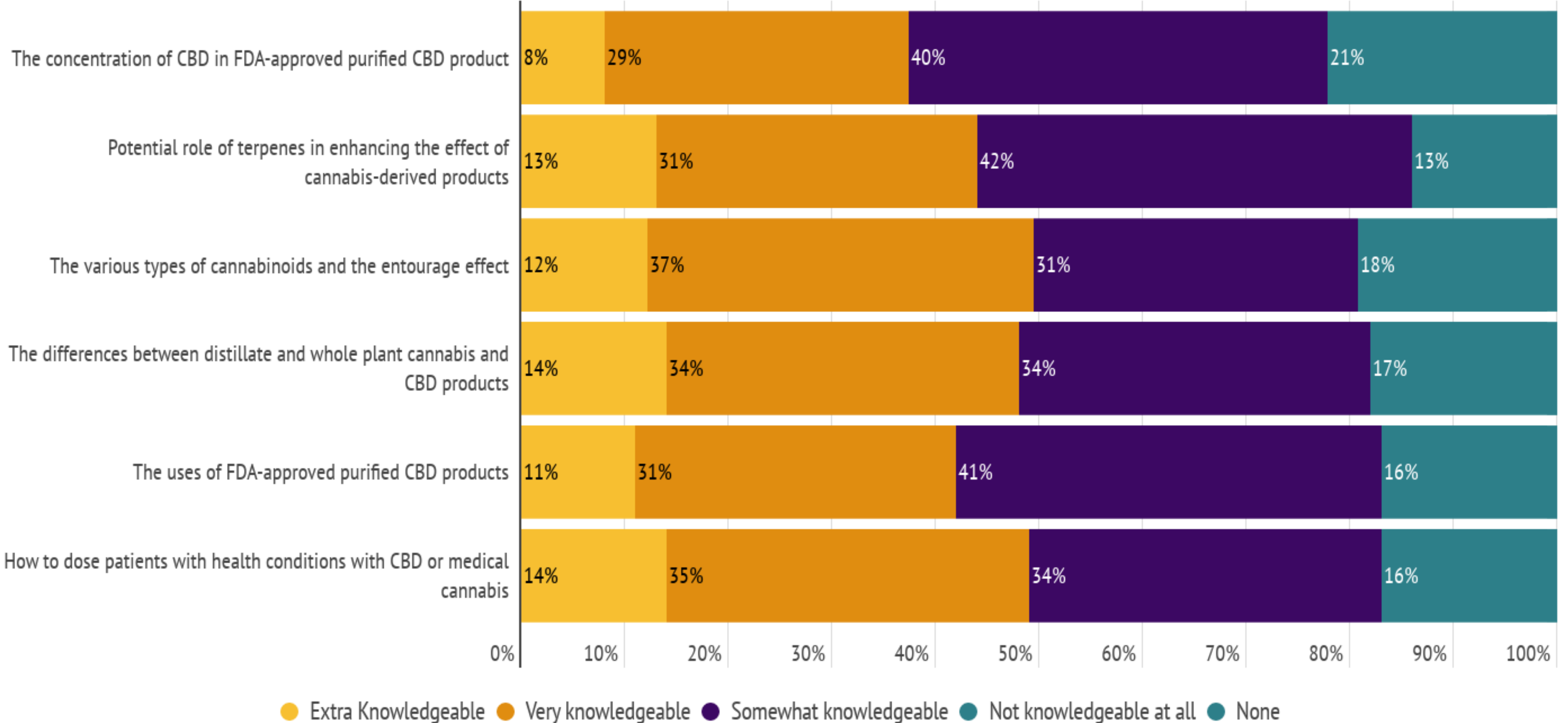


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Respondents Level of Knowledge About Medical Cannabis (N=354)



KEY TAKEAWAYS

Over half of the sample report being knowledgeable or very knowledgeable about key cannabis competencies.



Healthcare providers were less likely to report knowing the mechanisms of action for CBD, THC, and other cannabinoids.

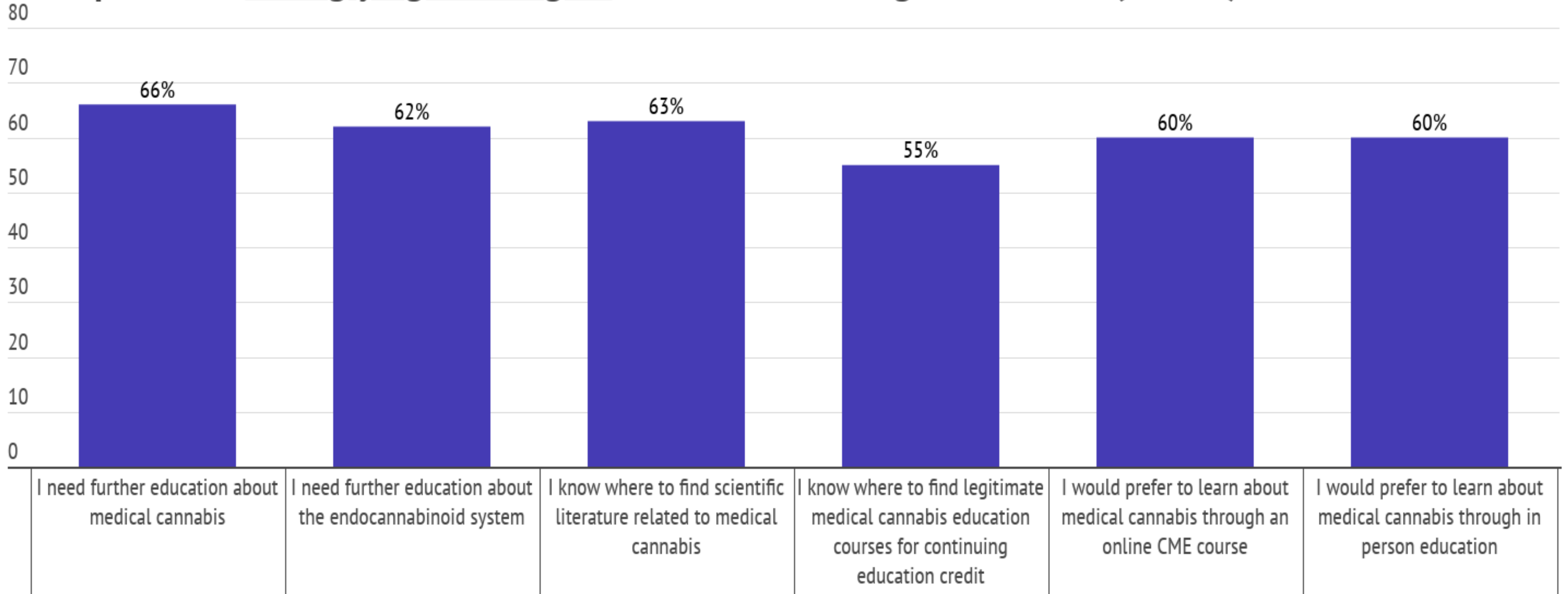
Additionally, providers are unsure of the cannabinoid profiles and content of FDA-approved vs. non FDA approved products.

Healthcare Provider Medical Cannabis Study

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Respondents Strongly Agree or Agree With the Following Statements: (N=354)



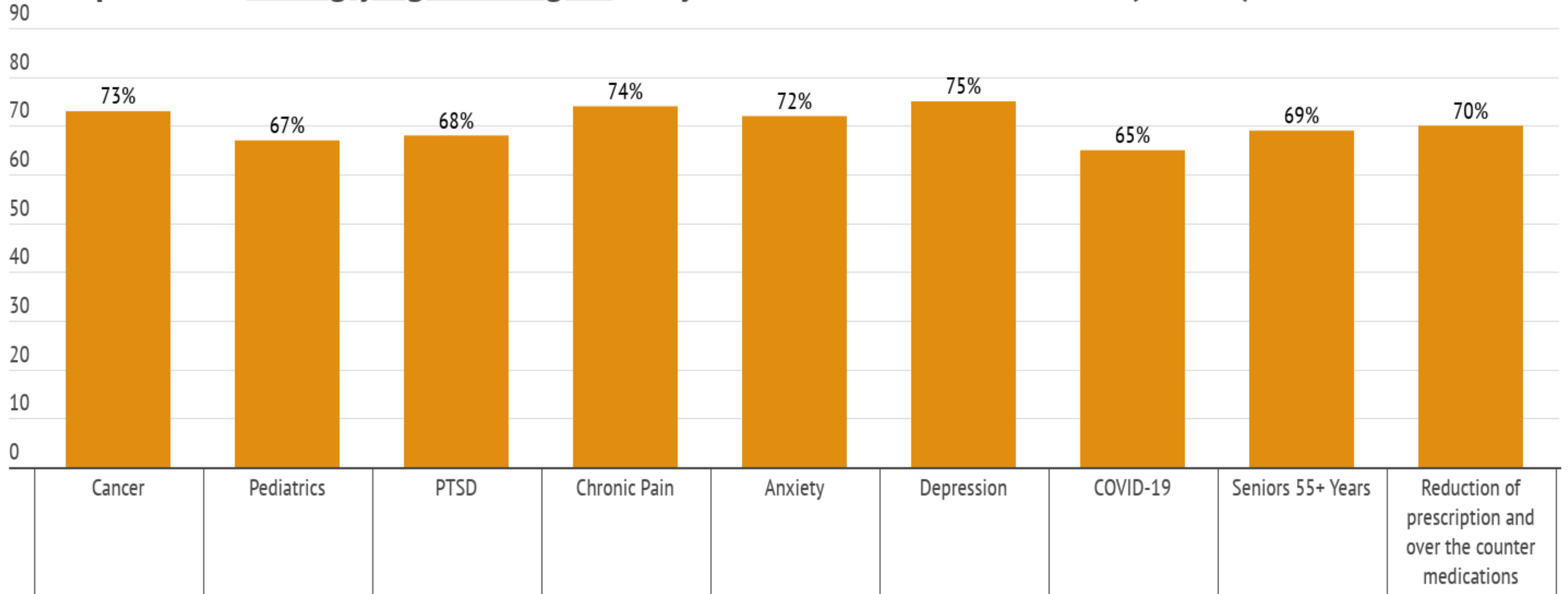
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Respondents Strongly Agree or Agree They Want to Learn More About: (N=354)

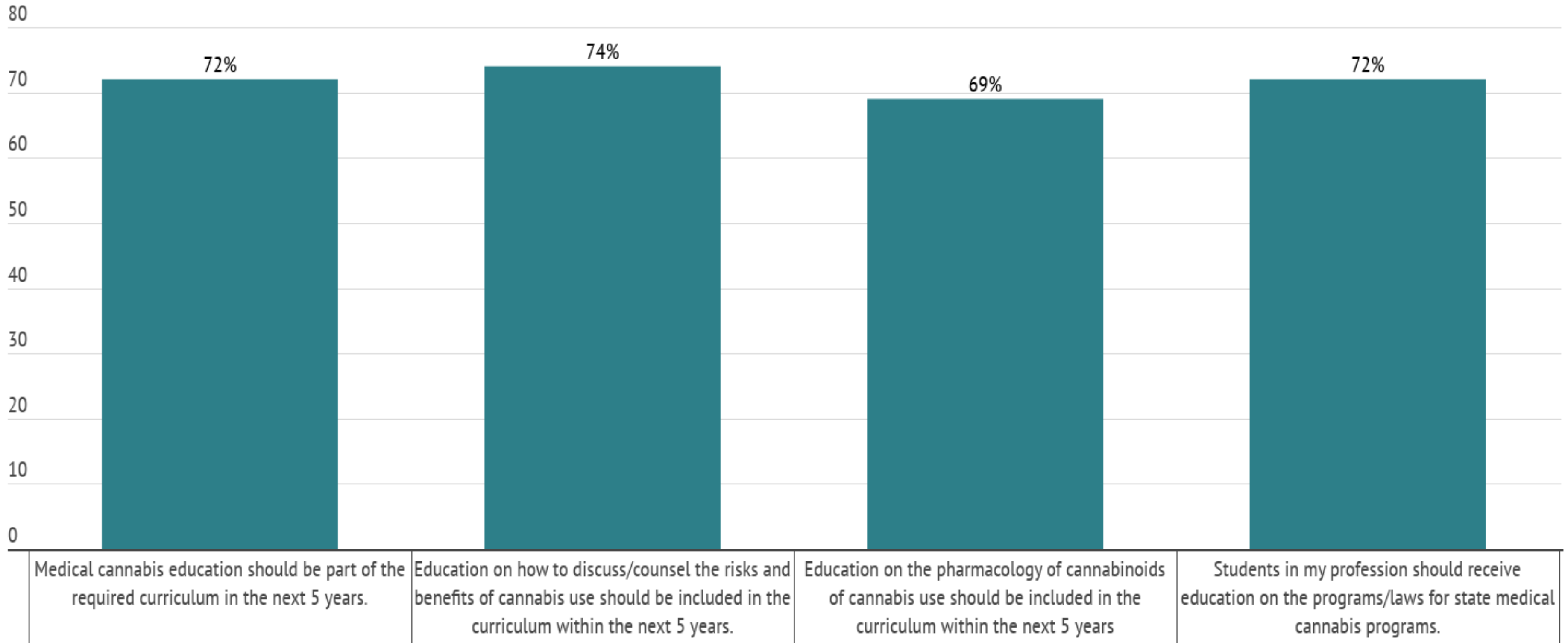


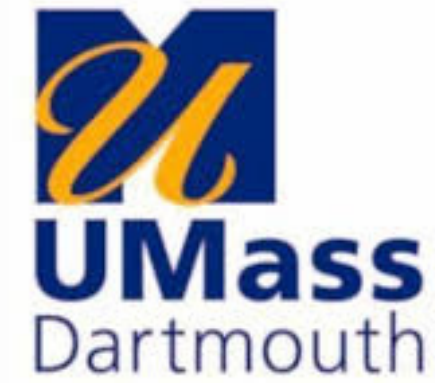
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Respondents Strongly Agree or Agree With the Following Statements: (N=354)





NEXT STEPS

1. Data collection continues until Aug 1, 2022
2. Continued Outreach & Partnership with Eagle Eyes Transport & Study Co-Investigators
3. Prepare final report and publication to publish Oct, 2022





STAY IN TOUCH

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