Prevalence of non-medical use of over-the-counter medications by healthcare providers

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Objective

- Describe survey methodology for analyzing drug use behaviors in a population

- Understand the definition of non-medical use

- Quantify the prevalence of non-medical use of over the counter drugs among healthcare providers and other adults

- Compare the reasons for non-medical use between healthcare providers and other adults

Conflicts of Interest

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No other competing conflicts of interest are declared.

Background

- Healthcare providers may misuse substances at a greater rate than the general population[1,2,3]

- Many providers may be hesitant to report substance misuse and underlying psychiatric symptoms[4]

- Much substance misuse/abuse research focuses on Rx and illicit substances

- OTC misuse/abuse can be dangerous and indicates risk behaviors

Methods

- Survey of Non-Medical Use of Prescription Drugs Program
    - Semi-annual online panel survey; 3Q19 launch used for this analysis
    - Questions about prescription and non-prescription drug use behaviors
    - 30,000 respondents stratified by region and sex
    - Nationally representative, validated estimates[5]

- Percentages are weighted to be nationally representative

- Prevalence and reasons for non-medical use were compared by healthcare provider status using Rao-Scott chi squared tests with adjustment for multiple comparisons

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Methods: Inclusion Criteria

Respondents are classified by <u>healthcare provider (HCP)</u> status:

- a healthcare professional proving care to patients

Must report using at least one <u>over-the-counter medication (OTC)</u>:

- acetaminophen, aspirin, dextromethorphan, diphenhydramine, ibuprofen, loperamide, naproxen, or other (non-specified) OTC

Compare <u>Non-Medical Use (NMU)</u> an OTC medication:

- use in a way other than what was stated on the label or directed by a healthcare provider

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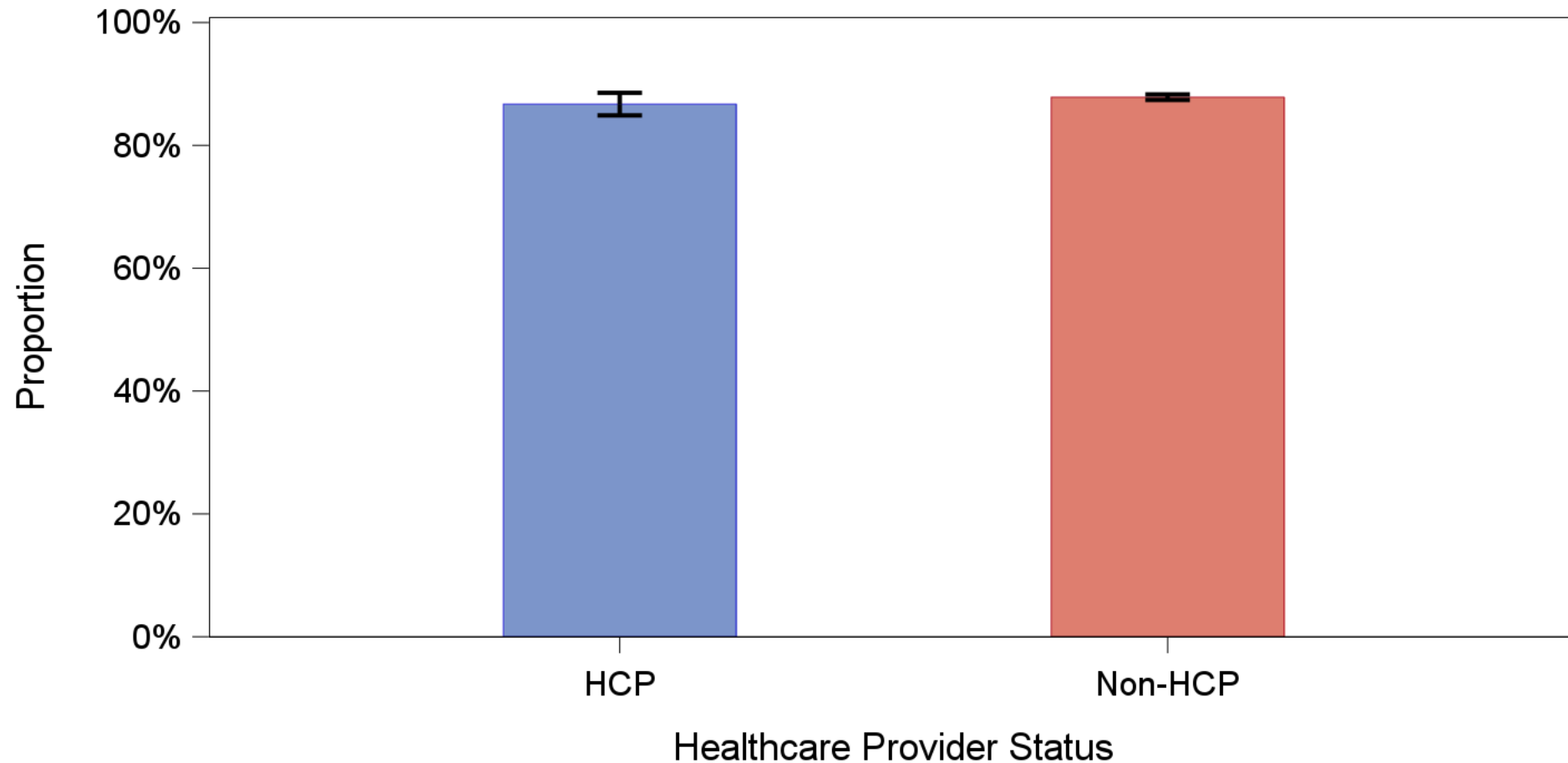# Results: Who are the respondents?

HCP:

- 1,668 respondents representing 12,450,537 adults
- 65% female
- Mean age: 40 years
- 37% acute pain in the last year
- 27% chronic pain in the last year

Non-HCP:

- 28,062 respondents representing 241,317,555 adults
- 51% female
- Mean age: 47 years
- 23% acute pain in the last year
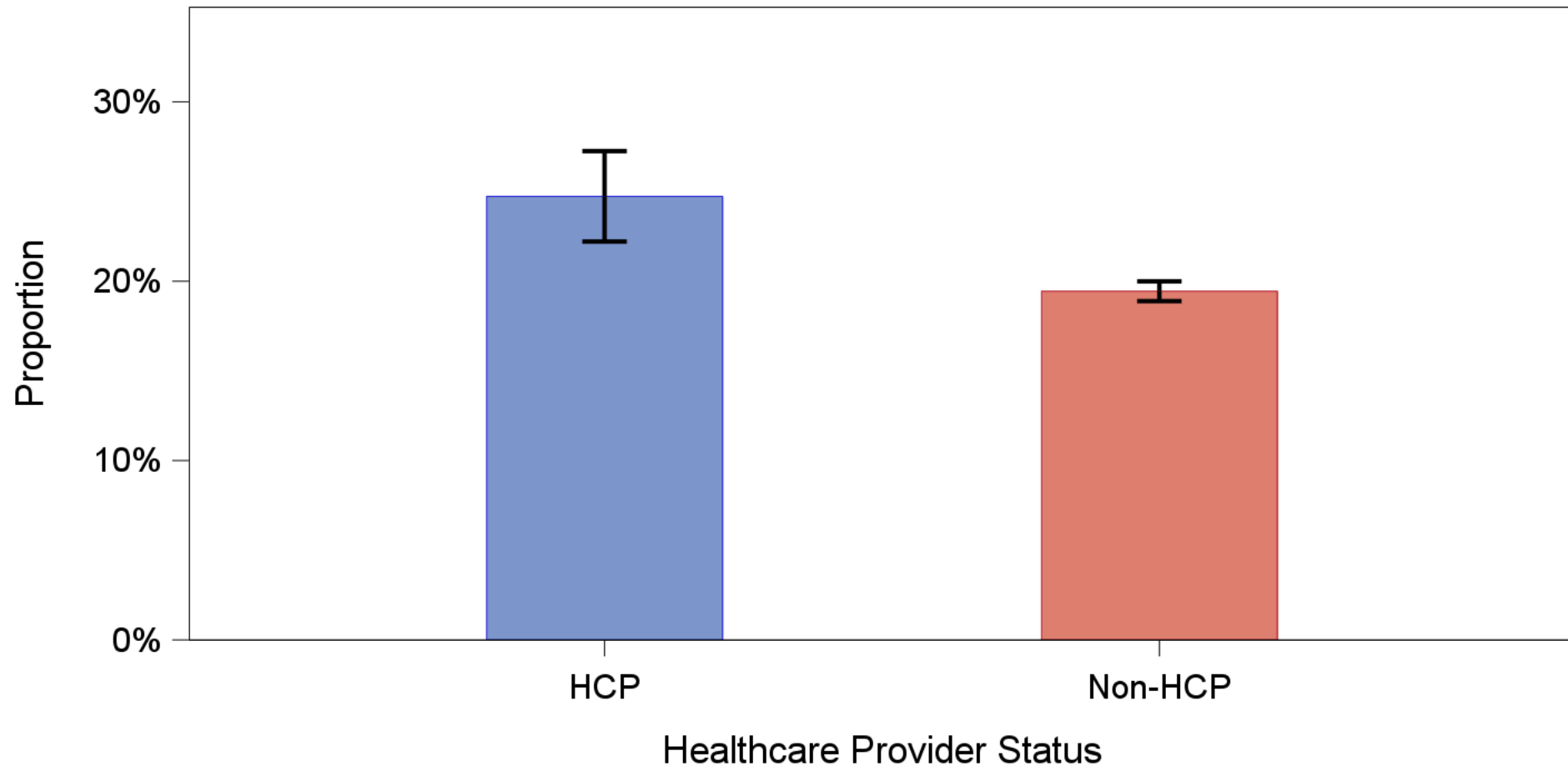- 25% chronic pain in the last year

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Results

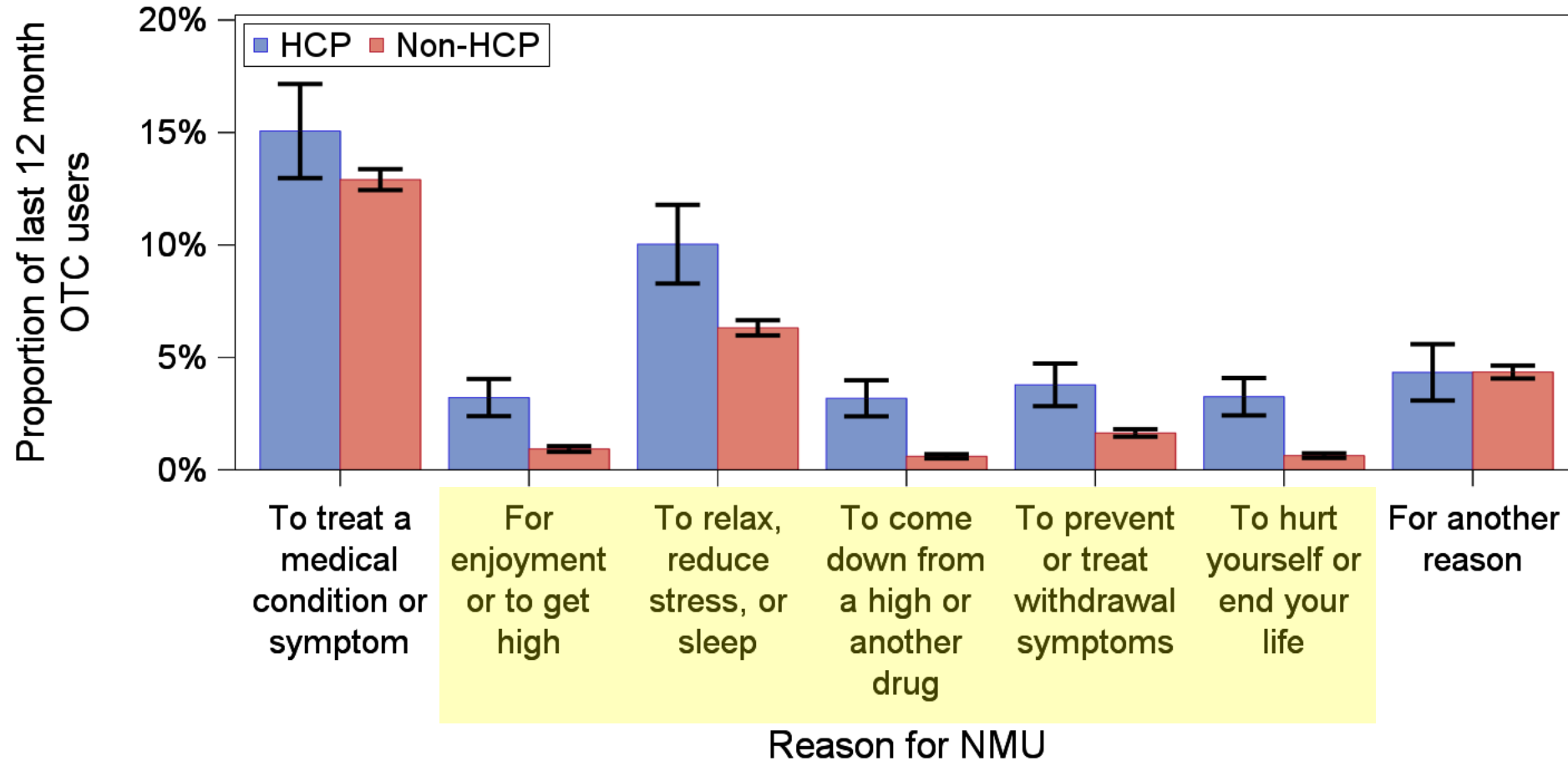Proportion who used any OTC in the last 12 months is not different by HCP status

Results

Proportion of last 12-month OTC users that NMU is significantly higher in HCPs

Results

Reason for NMU of any OTC drug in the last 12 months

Strengths and Limitations

- Strengths:
  - Validated, nationally representative survey
  - High power
  - Because of the scope of the survey, we are able to study a hard-to-reach population (healthcare workers)

- Limitations:
  - Because this is an online survey, residual bias from non-probability sampling could exist after calibration weights
  - Only 1 survey launch (1 quarter of data) used for this analysis

Conclusions

- Healthcare providers were more likely to NMU OTC medications

- Healthcare providers more likely to NMU for high risk reasons
  - Hurt themselves
  - Get high
  - Come down from a high

- Where does this lead us?
  - Repeat with more survey launches – does this pattern hold up over time?
  - Are certain demographics more at risk?
  - Association with other risk behaviors?
  - Policy and public health implications

References

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Questions?

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