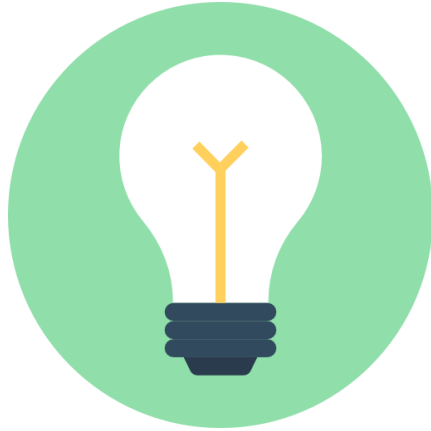# Social Determinants of Health Captured by Claims Data: A Comparison of Clinical Profiles

Michele Filoon, RHIA, CCS-P

Manager of Clinical Analytics

November 6, 2019

FAIR Health at a Glance

Unique Origins

Established as a conflict-free, independent, national nonprofit public charity

Broad Mission

To bring transparency and integrity to healthcare costs and health insurance information

Multi-Stakeholder Solutions

Fulfills mission with robust data products and custom analytics, award-winning consumer tools and research/policy-making platform

FAIRHealth®
Know Your Source

FH®

The FAIR Health Private Claims Repository

29+ Billion

Medical and Dental Claims from 2002 to the Present

Updated on a monthly basis

150+ Million

Covered Lives

493

Regions in the United States

Insights into the Private Claims Repository

Coverage
- All 50 states and District of Columbia
- US Territories – Puerto Rico, US Virgin Islands

60+ Contributors
- National and regional payors
- Third-party administrators

Private Insurance Claims
- Fully insured and self-insured/ERISA plans
- Cover 75 percent of privately insured US population
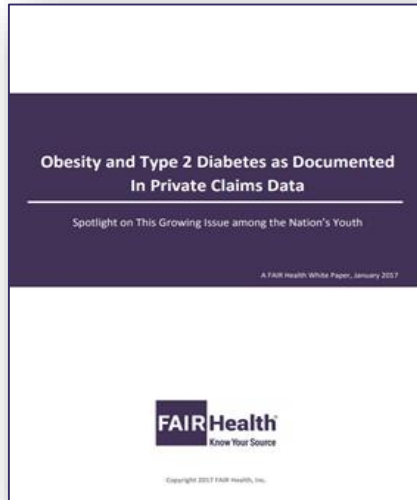
Quality Testing and Control
- Data validated with expert-vetted tests for completeness, volume, accuracy, etc.
- Recognized statistical outlier methodologies exclude excessively low and high values that distort distribution
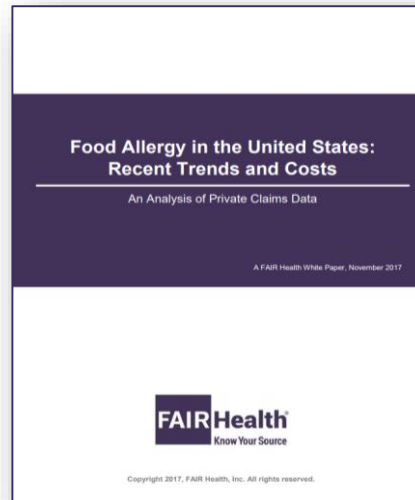
Neutral Crossroads
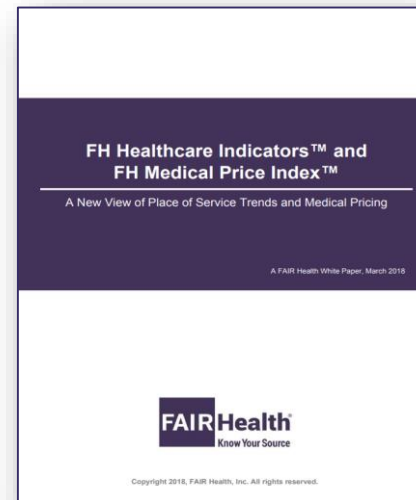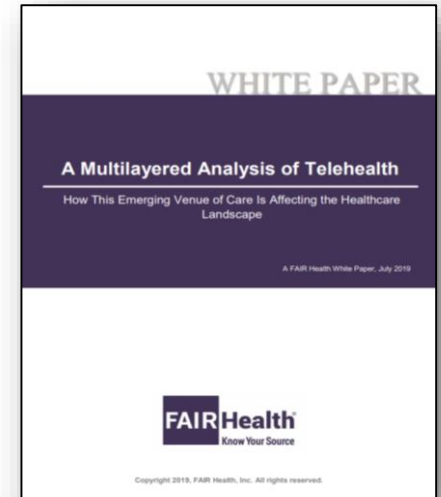
FAIR Health White Papers

January 2017

Obesity and Type 2 Diabetes as Documented
In Private Claims Data

Spotlight on This Growing Issue among the Nation's Youth

A FAIR Health White Paper, January 2017

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November 2017

Food Allergy in the United States:
Recent Trends and Costs

An Analysis of Private Claims Data

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March 2018

FH Healthcare Indicators™ and
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A New View of Place of Service Trends and Medical Pricing

A FAIR Health White Paper, March 2018

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April 2019

WHITE PAPER

FH Healthcare Indicators® and
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May 2019

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Spotlight on National Behavioral Health
Trends

A 10-Year Window into Key Mental Health and Substance Abuse
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July 2019

WHITE PAPER

A Multilayered Analysis of Telehealth

How This Emerging Venue of Care Is Affecting the Healthcare
Landscape

A FAIR Health White Paper, July 2019

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What Are Social Determinants of Health (SDoH)?

- "Healthy People 2020 defines social determinants of health as conditions in the environments in which people live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks."

- "Resources that enhance quality of life can have a significant influence on population health outcomes. Examples of these resources include safe and affordable housing, access to education, public safety, availability of healthy foods, local emergency/health services, and environments free of life-threatening toxins."

"Social Determinants of Health: Know What Affects Health—Frequently Asked Questions," Centers for Disease Control and Prevention, last updated February 7, 2018, https://www.cdc.gov/socialdeterminants/faqs/index.htm.

Why Study SDoH?

- Enables providers to better understand patients

- Helps providers have better communication with patients about conditions and behavior affecting their health

- Assists in achieving health equity in which everyone can achieve optimal health regardless of social circumstances

- Allows for more comprehensive care

- Helps to improve overall health outcomes

Methodology

- Three years of data (2016–2018)

- Longitudinal dataset

- Selected claims with ICD-10 diagnosis codes for relevant SDoH
  - ICD-10: Z55-Z65

- Analyzed data by patient demographics:
  - Age
  - Gender
  - Rural/Urban

- SDoH Diagnoses Analyzed
  - Problems Related to Primary Support Group, including Family Circumstances
  - Problems Related to Upbringing

Findings

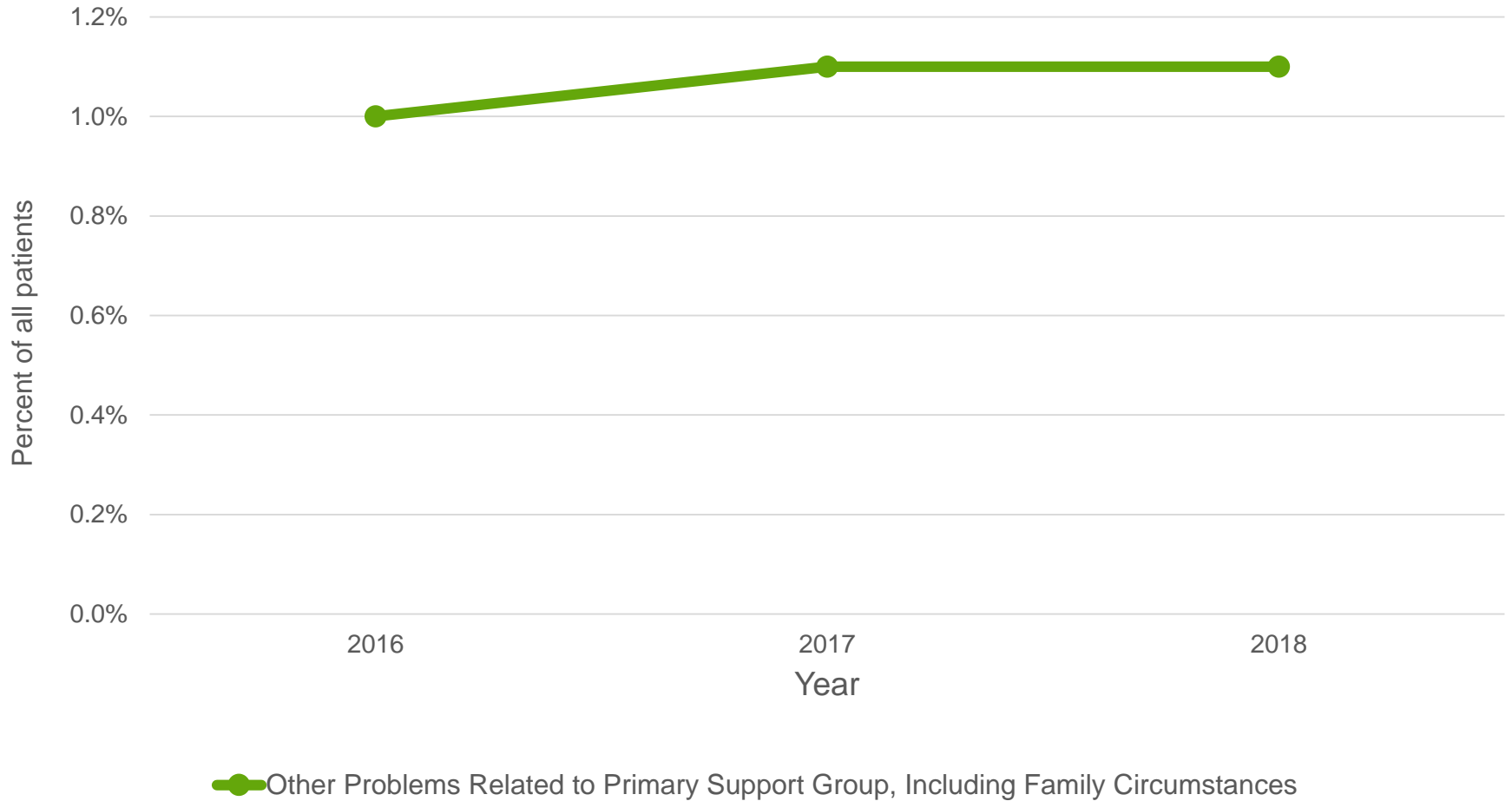*What do the claims data show?*

SDoH by Rural and Urban Indicator
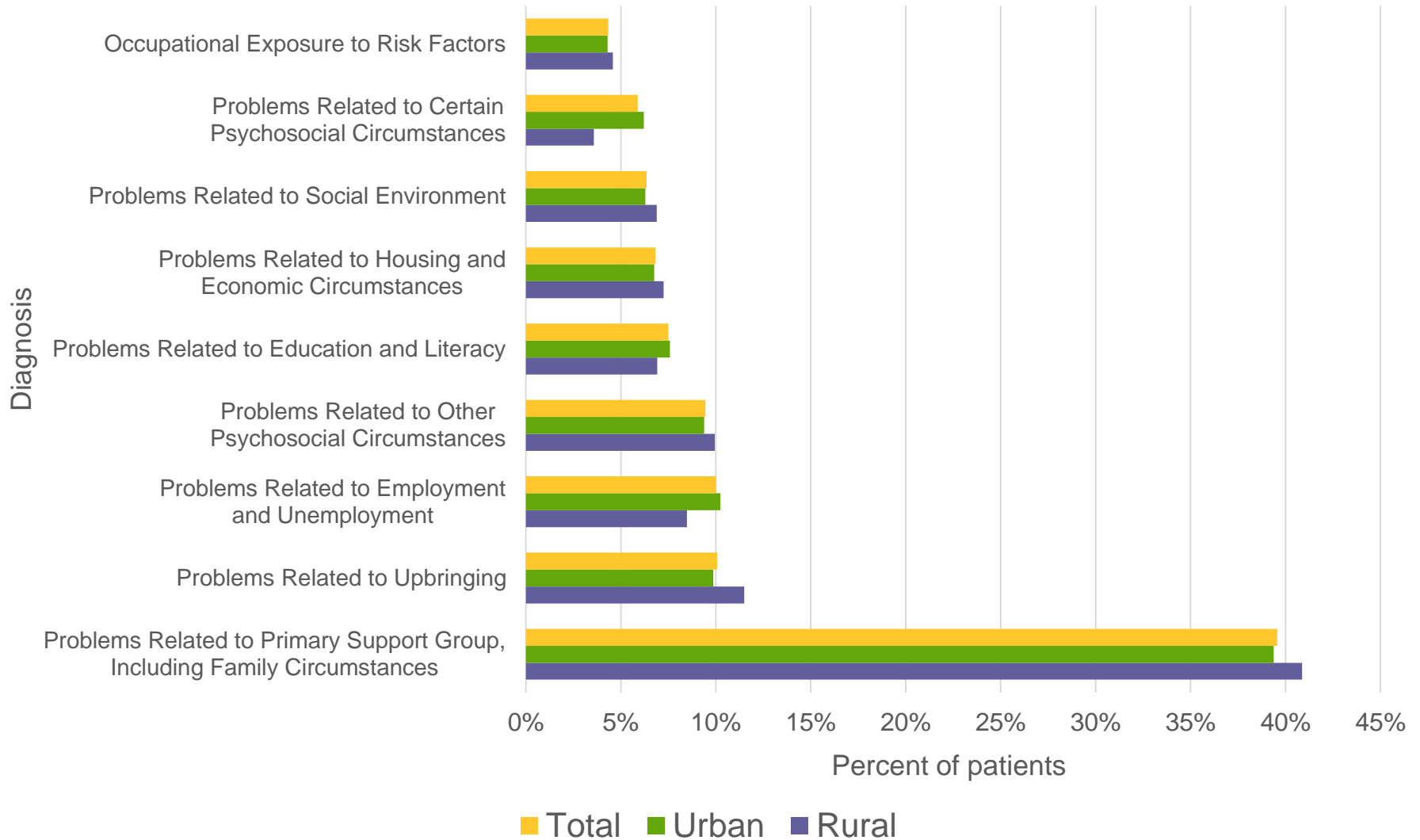
Patients with SDoH Diagnoses as a Percentage of all Patients

Percent of Patients with Other Problems Related to Primary Support Group as a Percentage of all Patients
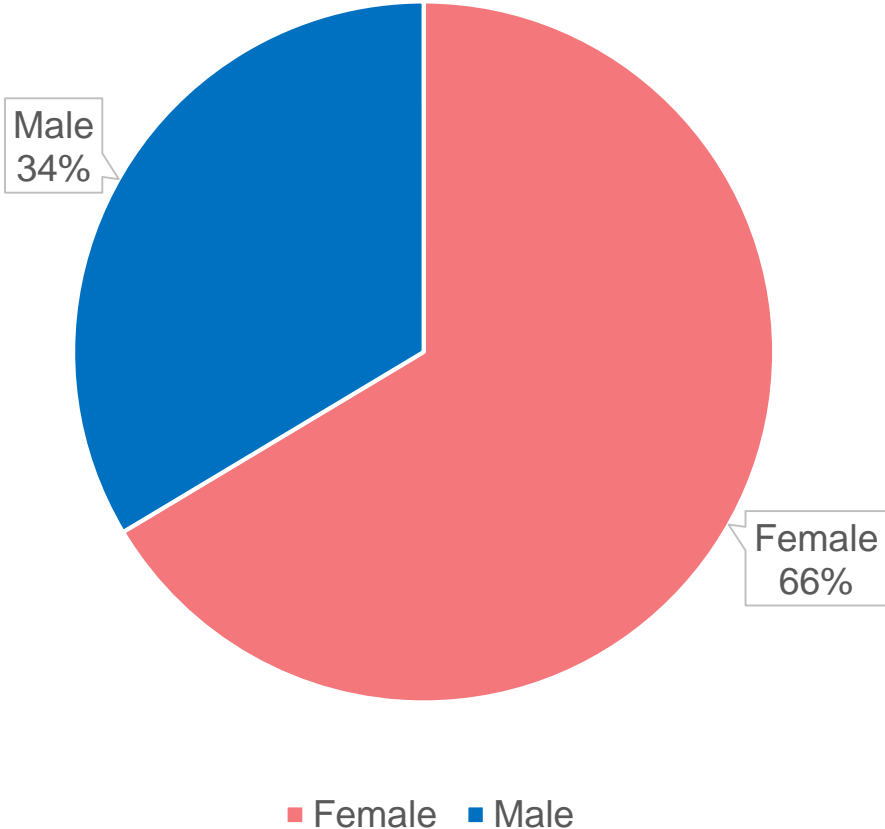
Problems Related to Primary Support Group, including Family Circumstances
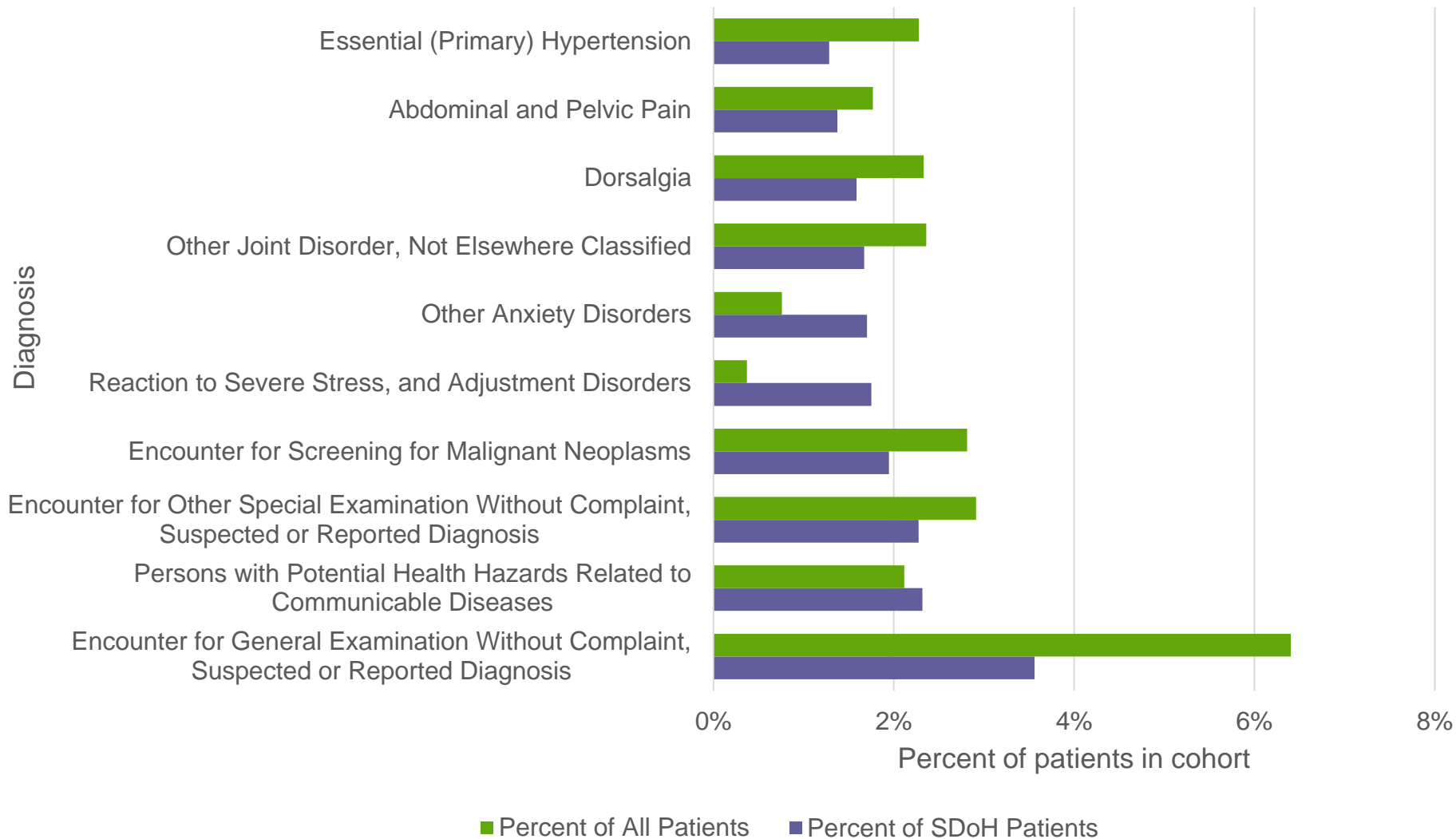
By Age
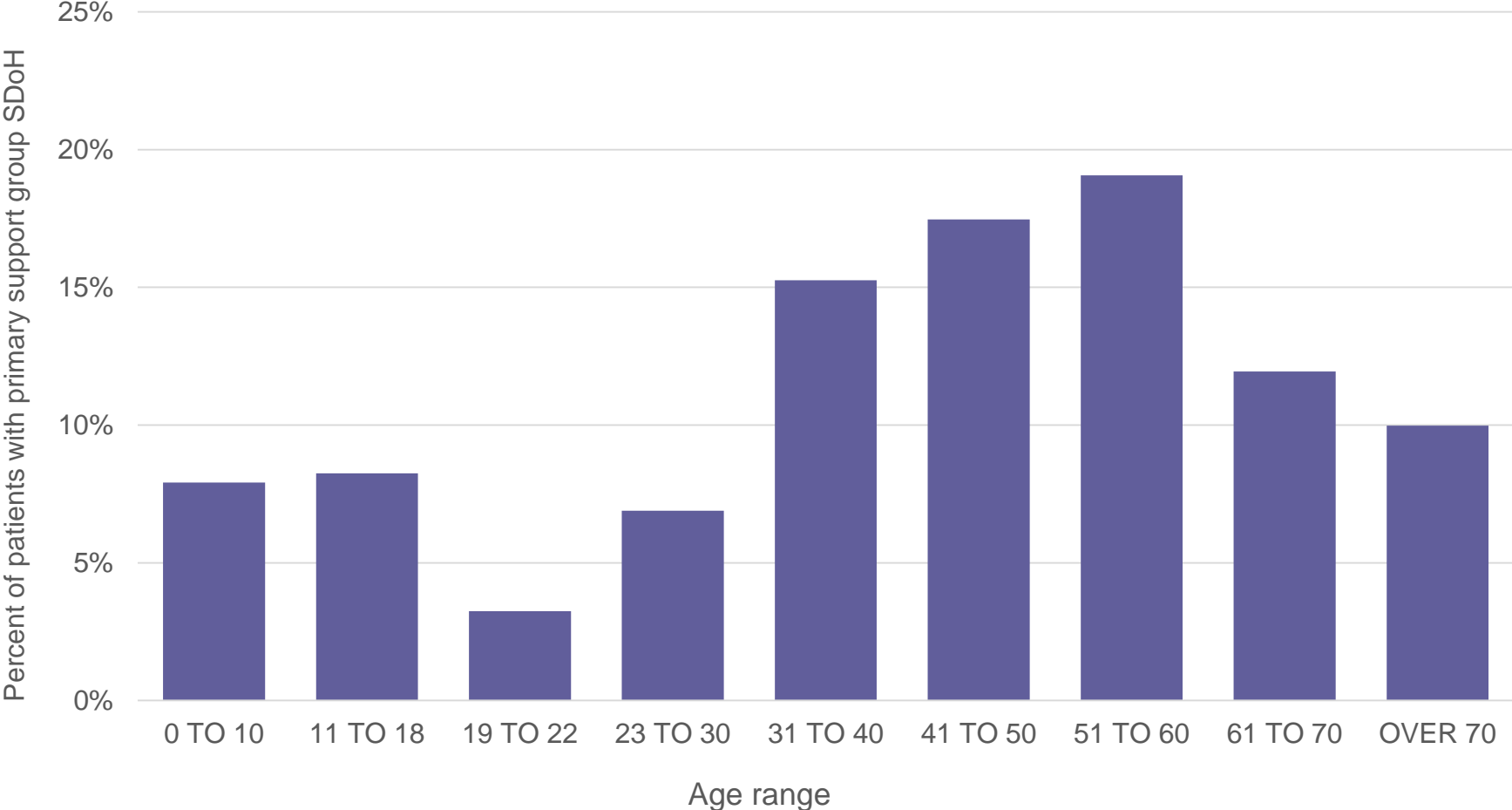
Problems Related to Primary Support Group, including Family Circumstances
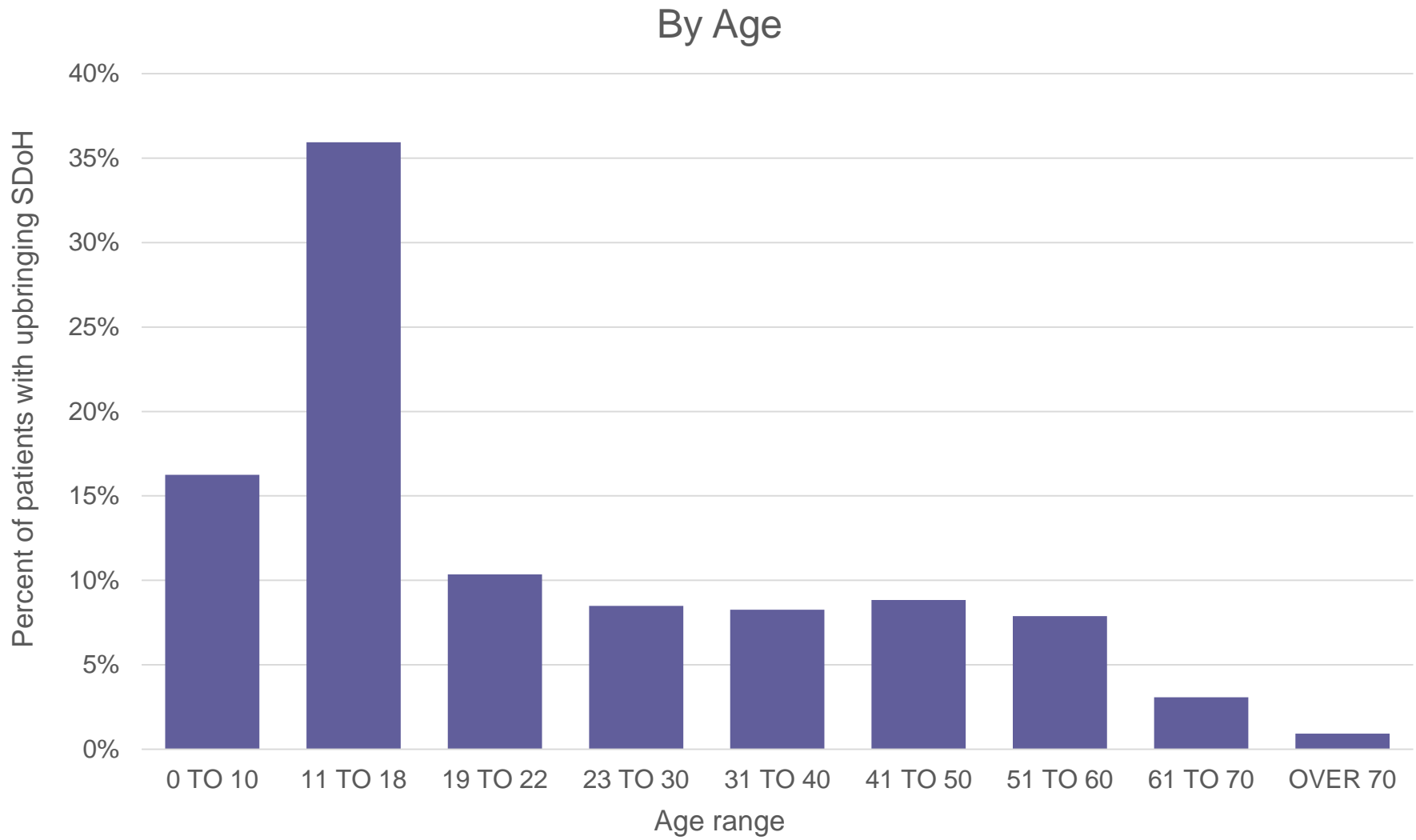
By Gender

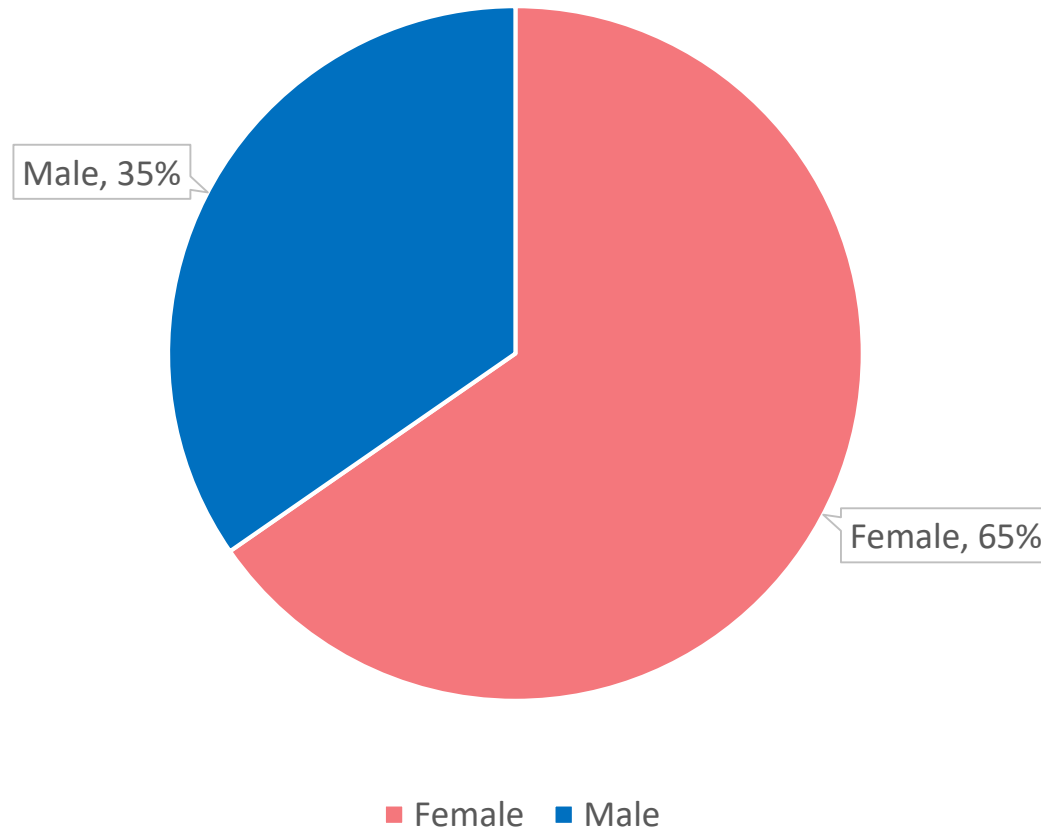# Problems Related to Primary Support Group vs. All Patients: Top Diagnoses
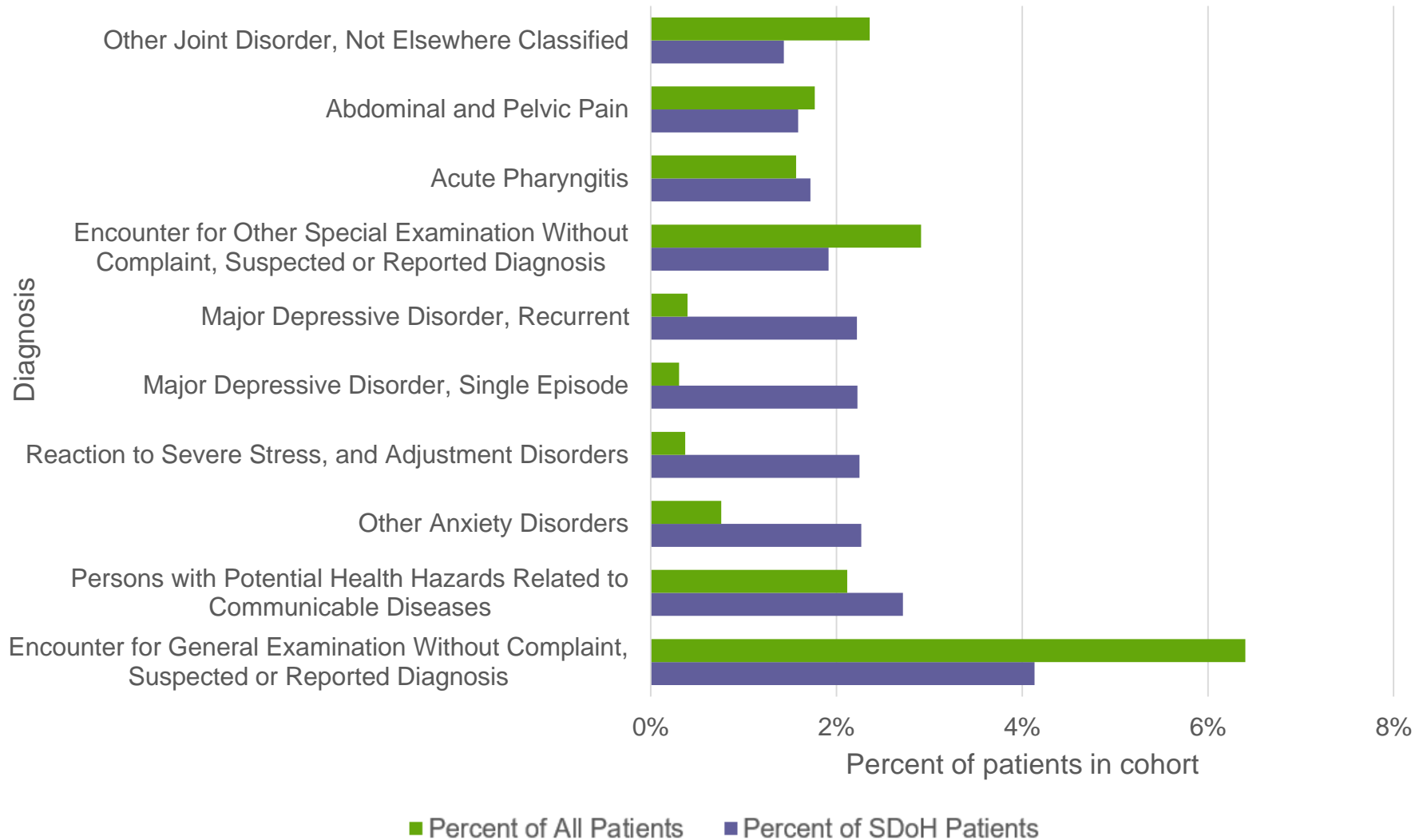
Problems Related to Upbringing

By Age

Problems Related to Upbringing

By Gender

Male, 35%

Female, 65%

■ Female ■ Male

Problems Related to Upbringing vs. All Patients: Top Diagnoses

Diagnosis (y-axis)
- Other Joint Disorder, Not Elsewhere Classified
- Abdominal and Pelvic Pain
- Acute Pharyngitis
- Encounter for Other Special Examination Without Complaint, Suspected or Reported Diagnosis
- Major Depressive Disorder, Recurrent
- Major Depressive Disorder, Single Episode
- Reaction to Severe Stress, and Adjustment Disorders
- Other Anxiety Disorders
- Persons with Potential Health Hazards Related to Communicable Diseases
- Encounter for General Examination Without Complaint, Suspected or Reported Diagnosis

Percent of patients in cohort (x-axis): 0% – 8%

Legend: ■ Percent of All Patients ■ Percent of SDoH Patients

Takeaways

- The SDoH diagnosis codes are increasingly being included on medical claims.

- Claims data can be used to support analyses of the populations with identified SDoH.

- Key trends are beginning to form:
  - Problems related to social supports, upbringing and economic stability are the top three most common SDoH being documented.
  - Women are more likely to be associated with a SDoH diagnosis.
  - SDoH are being identified during general checkups.
    - Of note, anxiety-related diagnoses and SDoH relationship

Questions/Discussion

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