

SDoH INSIGHTS AND ANALYTICS

Delayed Care in 2023



INTEGRATED
BENEFITS
INSTITUTE



Let's talk about

SDoH Insights and Analytics

Delayed Care in 2023



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Health Data & Management Solutions



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Integrated Benefits Institute

**Delayed and deferred care post pandemic
SDoH and care consumption
How are businesses using SDoH analytics?**

**Leave trends and insights
Working together, working better**

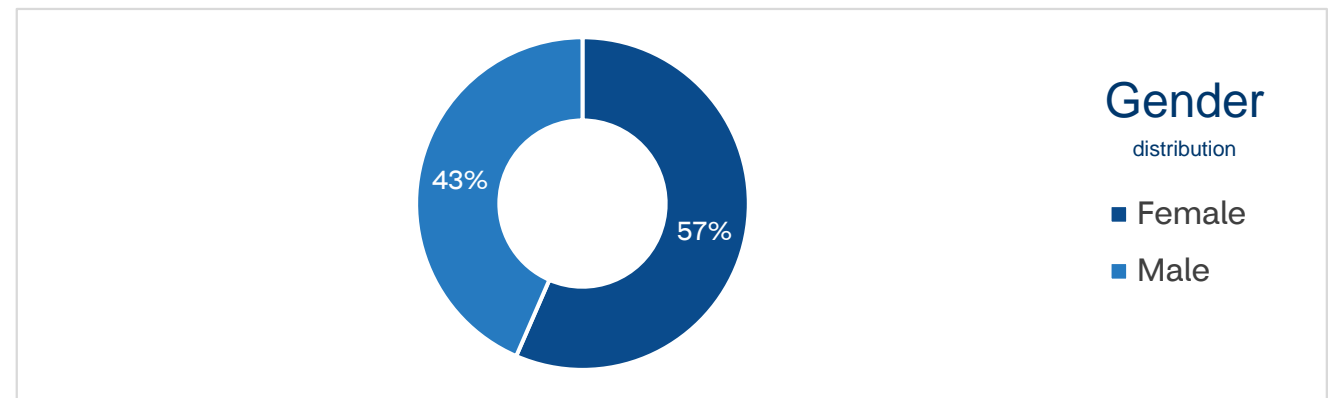
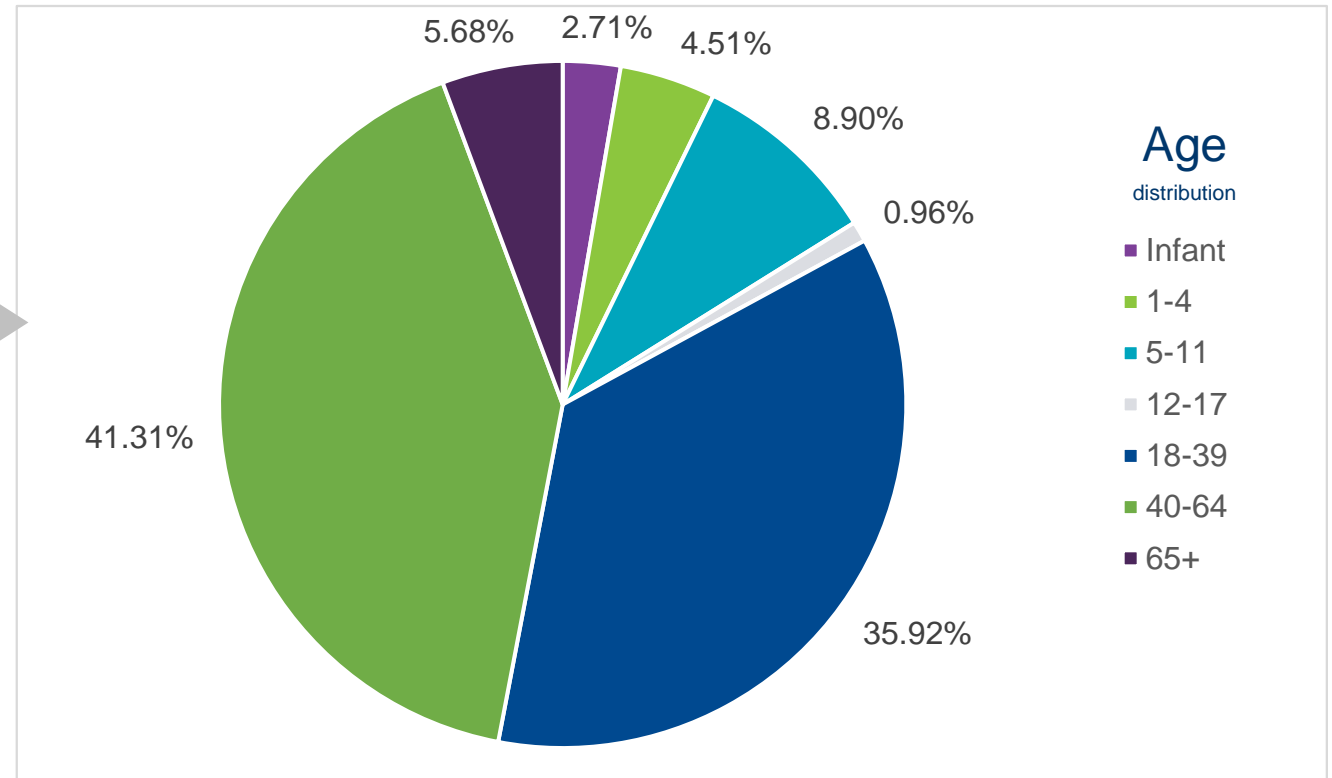
— Delayed or Deferred Care Patterns

What is the data set?

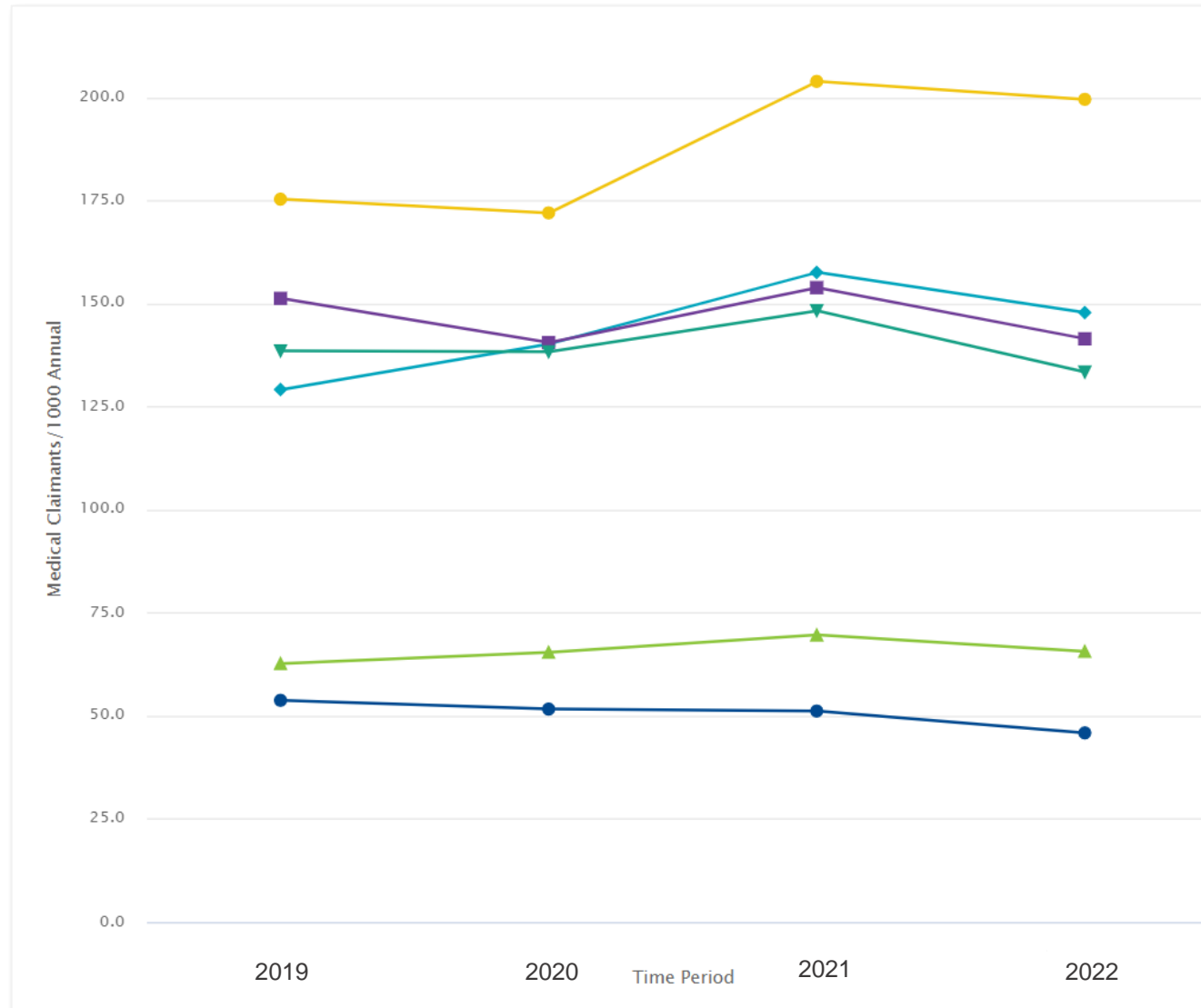
UNDERSTANDING THE

Data analyzed

- ✓ Composite data set, de-identified
- ✓ 75+ self-funded & fully funded employers
- ✓ All types of industries represented
- ✓ Geographically distributed across the US
- ✓ Roughly 250K members
 - ✓ Employees
 - ✓ Spouses
 - ✓ Dependents
- ✓ Multiple carriers
- ✓ Time adjusted to same number of months in each year



Trends in conditions and care



MCC Groups

- Asthma/ COPD
- ◆ Behavioral: depression, anxiety, bipolar disorder
- Cancers
- ▲ Diabetes
- ▼ Hypertension
- Obesity and lipid (fat) disorders; BMI

IN GENERAL

We see many dips in 2020.

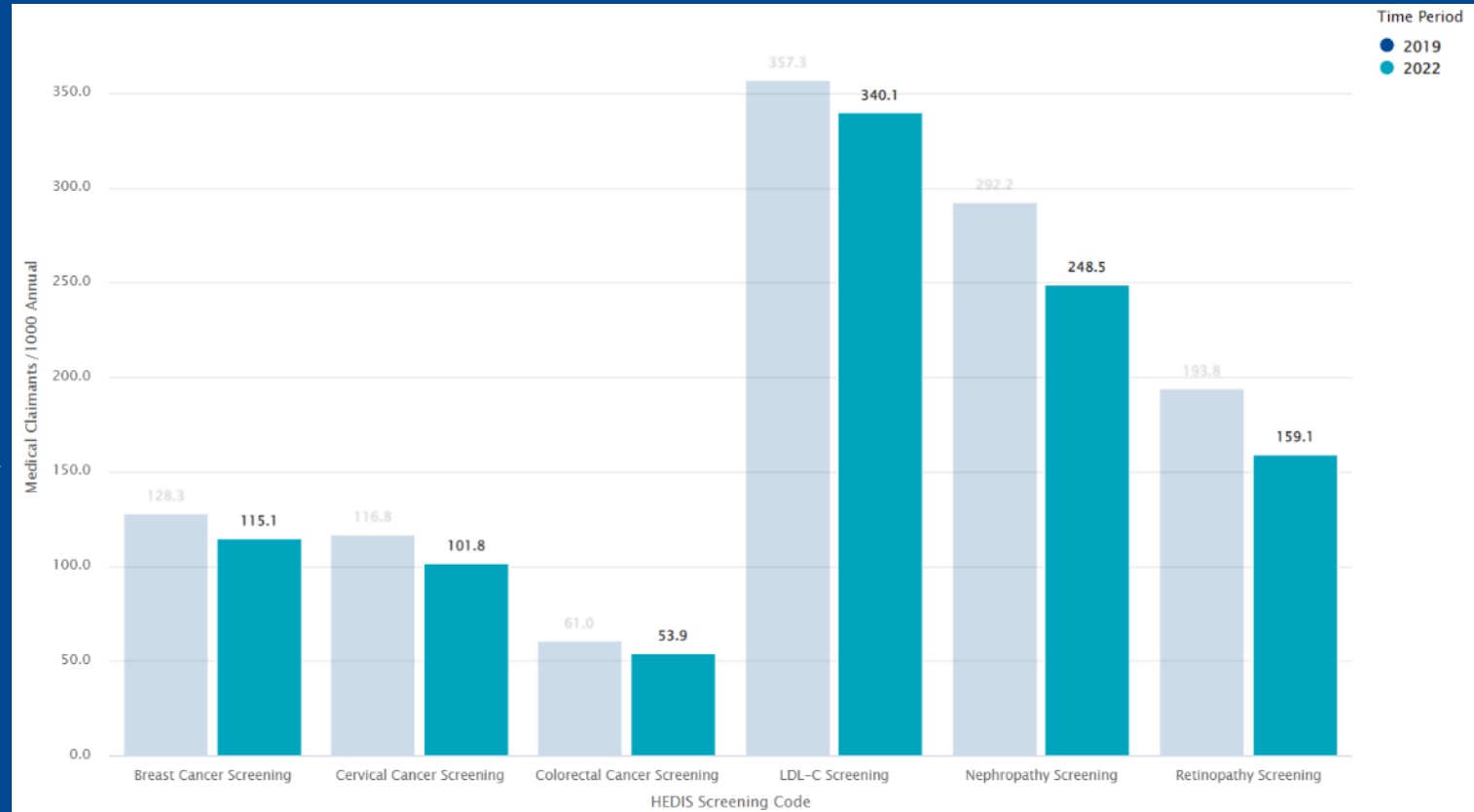
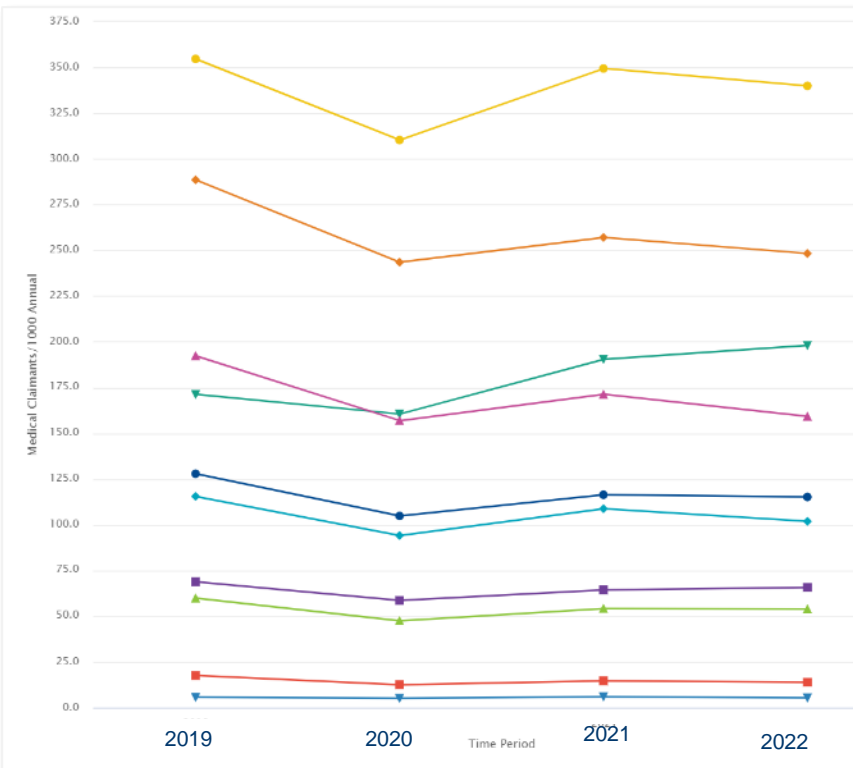
We see increases in 2021.

We see decreases in 2022.

Trends in preventative care

HEDIS Screening Code

- Breast Cancer Screening
- ◆ Cervical Cancer Screening
- Chlamydia Screening
- ▲ Colorectal Cancer Screening
- ▼ HbA1c Screening
- LDL-C Screening
- ◆ Nephropathy Screening
- Osteoporosis Screening
- ▲ Retinopathy Screening
- ▼ Cholesterol Screening



*What services have not yet fully recovered?
2019 vs. 2022*

- ✗ Breast Cancer screening
- ✗ Cervical Cancer screening
- ✗ Colorectal Cancer Screening
- ✗ LDL-C screening
- ✗ Nephropathy Screening
- ✗ Retinopathy Screening

Time for Care

Plan utilization for **preventive care services** and **ongoing care for chronic conditions** are generally improved over 2020 yet below 2019 levels.

What would you like to investigate next in this data set?

- a. How do **social and demographic factors** influence preventative and ongoing care?
- b. Do **cost trends** follow a similar pattern?
- c. Are increases in utilization tied to increased **disease burden**?
- d. Which sub-populations have **NOT increased preventive care** utilization?
- e. What sub-populations would most benefit from **targeted interventions**?

Poll

Care Patterns

Influences of Social Determinants

Investigating SDoH and Care Consumption

– Chronic Conditions

UNDERSTANDING THE

Analytics

SDOH INDEX:

Income Index

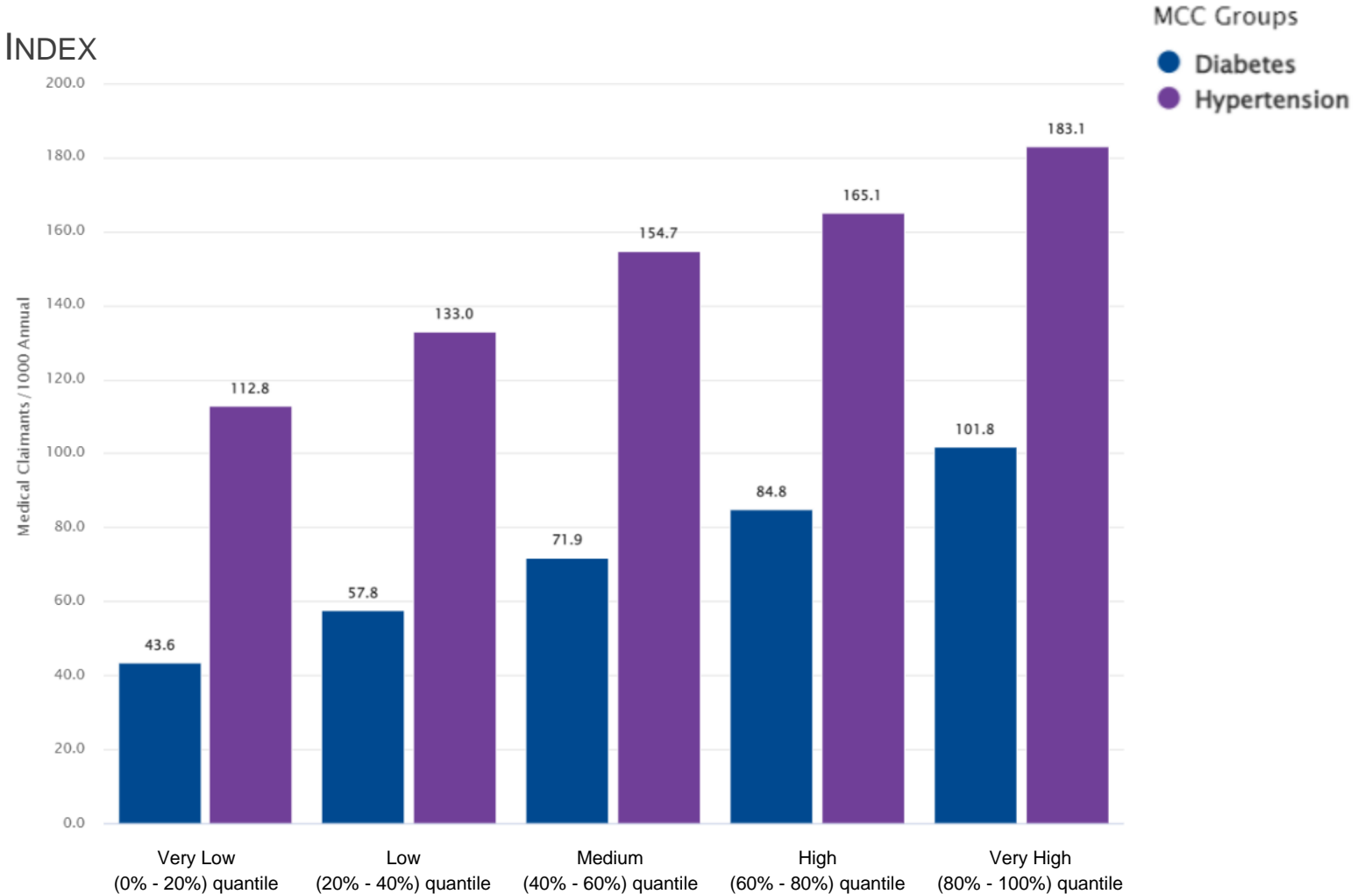
TIME PERIOD:

2021 data

CARE:

Diabetes, Hypertension

by INCOME INDEX



UNDERSTANDING THE

Insights

We see higher utilization in areas with higher income index values

Investigating SDoH and Care Consumption

– Behavioral Health

UNDERSTANDING THE

Analytics

SDOH INDEX:

Income Index

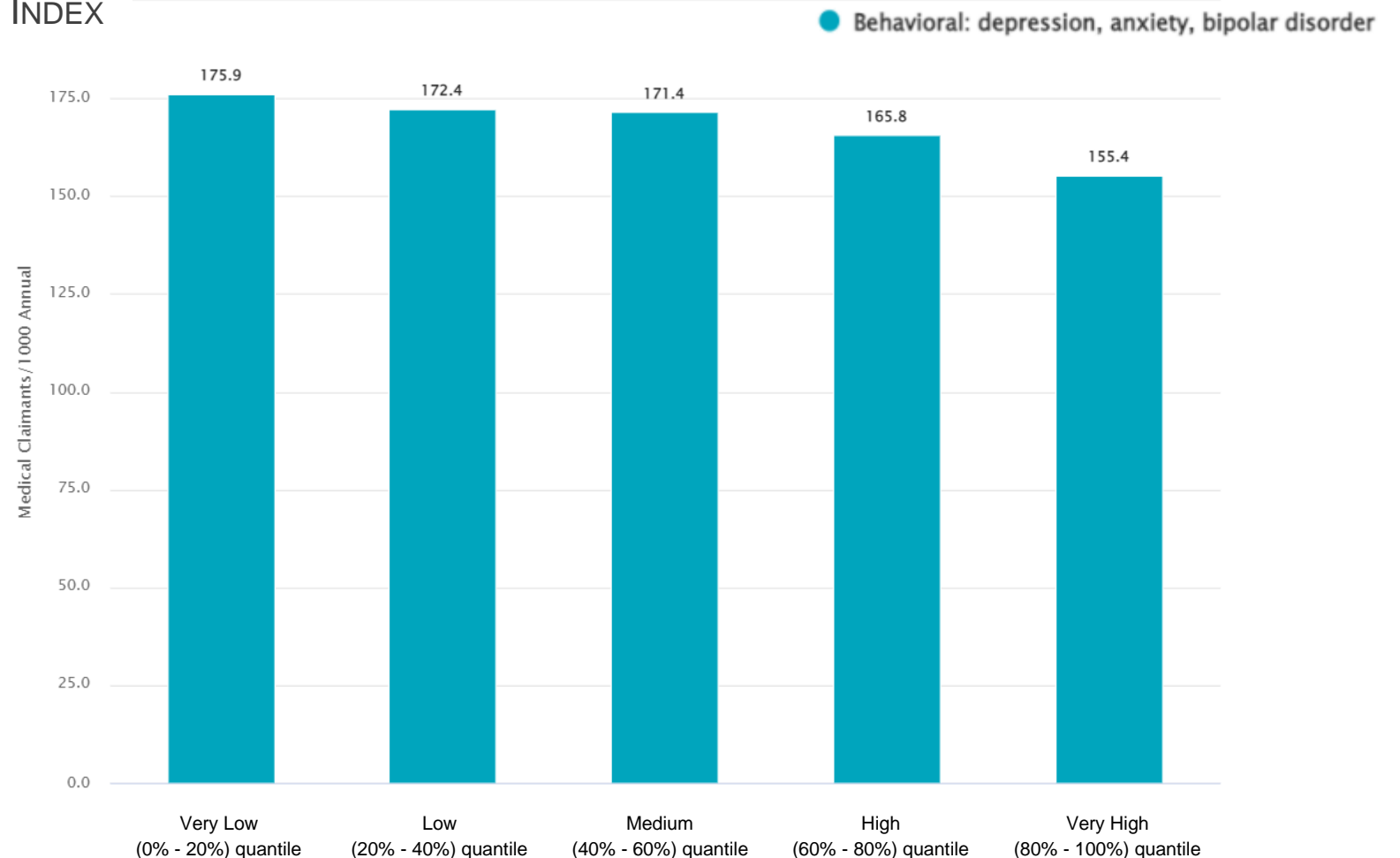
TIME PERIOD:

2021 data

CARE:

BH: Depression, Anxiety, Bipolar Disorder

by INCOME INDEX



UNDERSTANDING THE

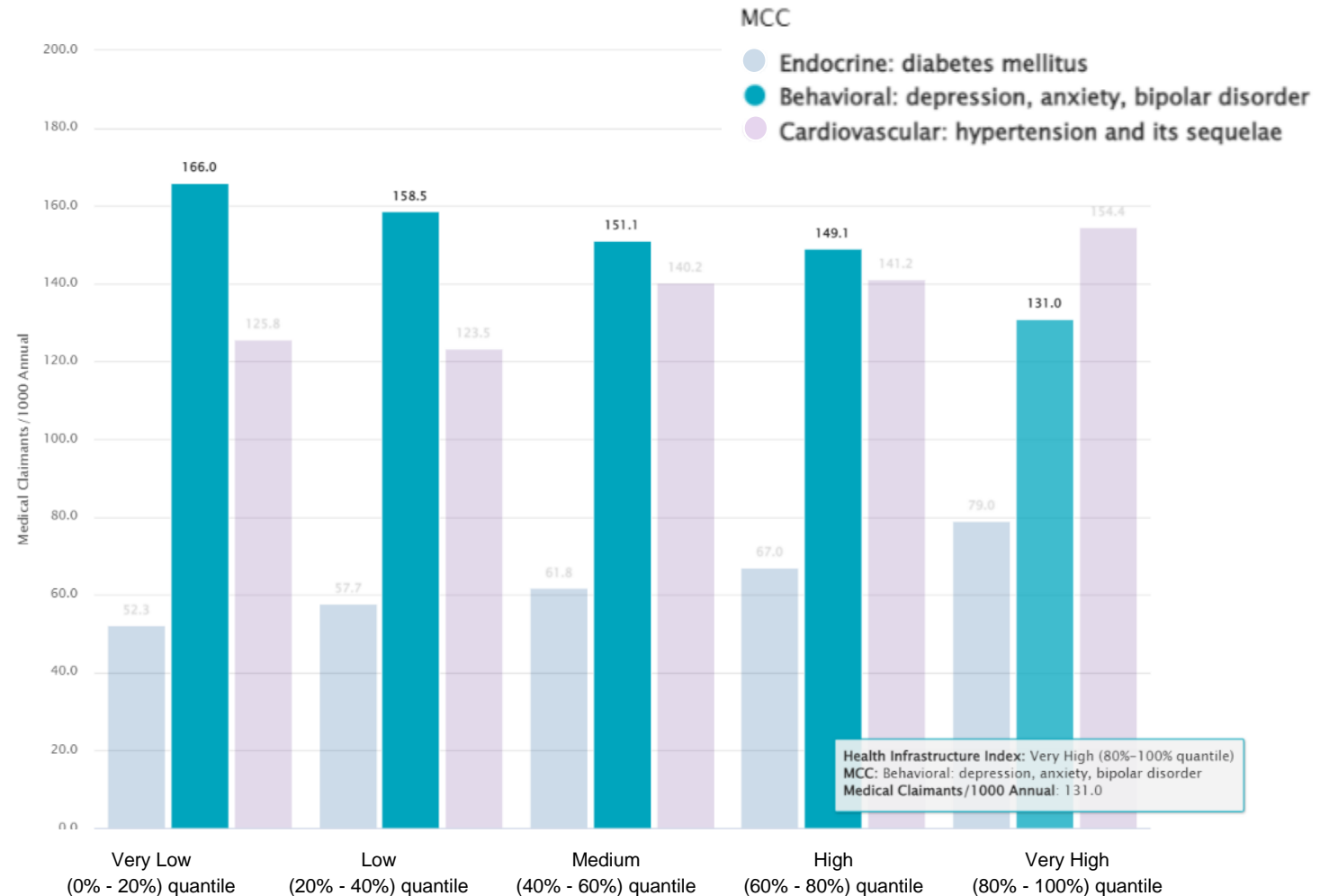
Insights

We see higher utilization in areas with lower income index values

Investigating SDoH and Care Consumption

– Different Social Influences

by HEALTH INFRASTRUCTURE INDEX



UNDERSTANDING THE

Analytics

SDoH Index:

Health Infrastructure Index

Time period:

2021 data

Care:

Behavioral: depression, anxiety, bipolar

UNDERSTANDING THE

Insights

We see higher utilization in areas with lower health infrastructure index values

Investigating SDoH and Care Consumption

UNDERSTANDING THE

Analytics

SDoH Index:

Health Infrastructure Index

Time period:

2021 data

Care:

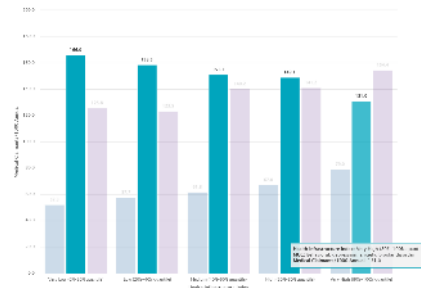
Behavioral: depression, anxiety, bipolar + Dermatology

UNDERSTANDING THE

Insights

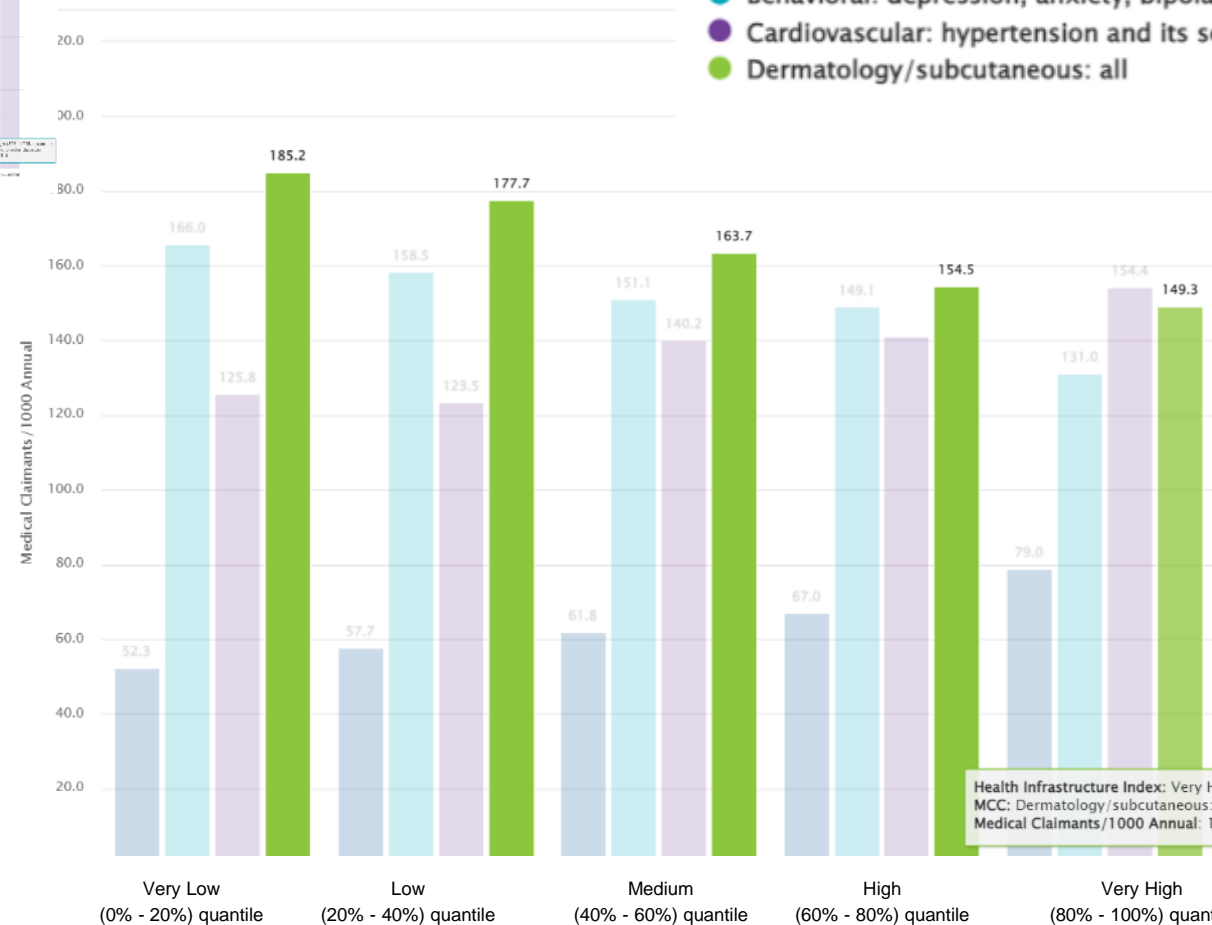
We see higher utilization in areas with lower health infrastructure index values

by HEALTH INFRASTRUCTURE INDEX



MCC

- Endocrine: diabetes mellitus
- Behavioral: depression, anxiety, bipolar disorder
- Cardiovascular: hypertension and its sequelae
- Dermatology/subcutaneous: all



We see the same pattern in Dermatology as well

Health Infrastructure Index: Very High (80%-100% quantile)
 MCC: Dermatology/subcutaneous: all
 Medical Claimants/1000 Annual: 149.3

Investigating SDoH, Care Consumption, and Costs

UNDERSTANDING THE

Analytics

SDoH Index:

Income Index compared to Health Infrastructure Index

Time period:

2021 data

Care:

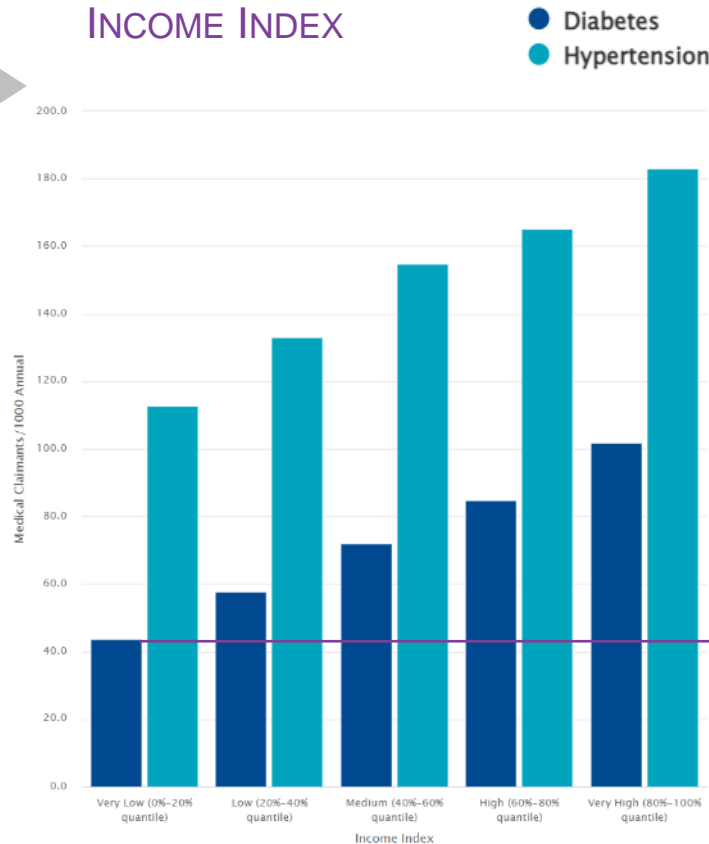
Diabetes, Hypertension

UNDERSTANDING THE

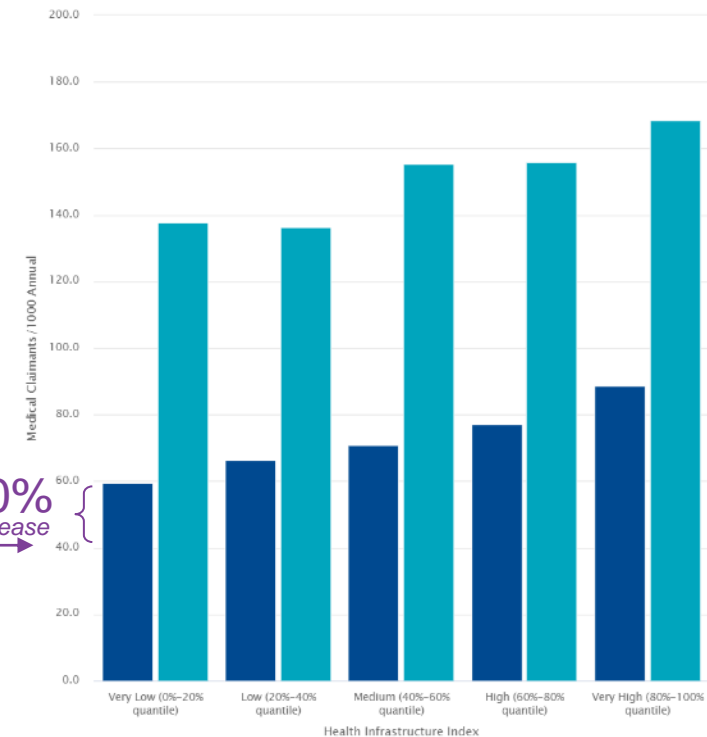
Insights

We see similar trends but different values with a different SDoH Index.

INCOME INDEX



HEALTH INFRASTRUCTURE INDEX



50% increase

Validates solving for cost in plans geared to low-income families.

Need more insights?

Investigating SDoH, Care Consumption, and Costs

UNDERSTANDING THE

Analytics

SDoH Index:

Income Index compared to Health Infrastructure Index

Time period:

2021 data

Care:

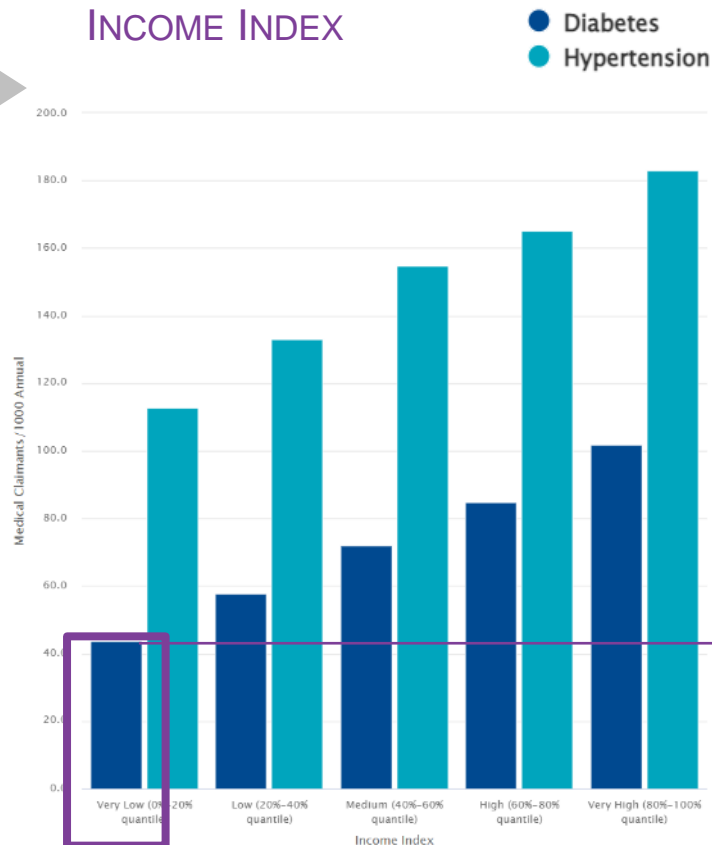
Diabetes, Hypertension

UNDERSTANDING THE

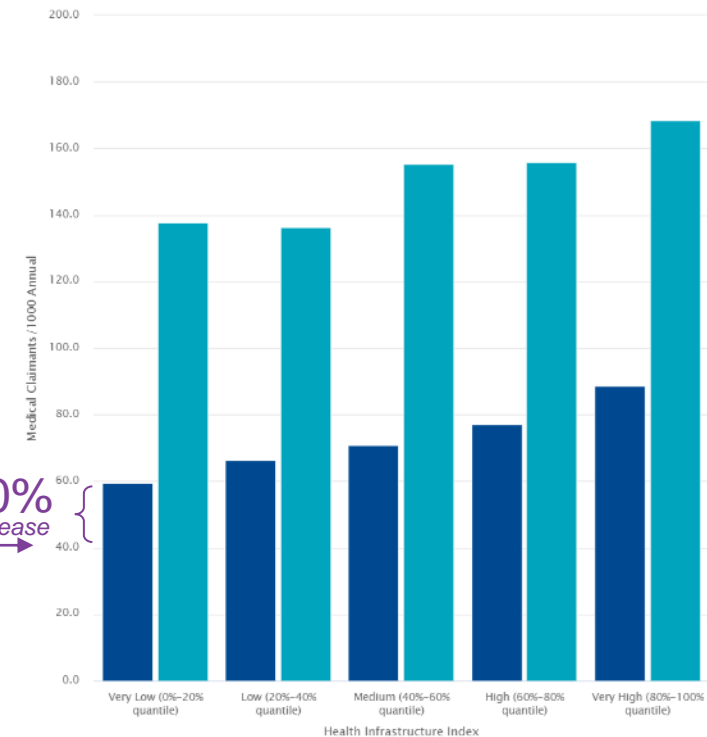
Insights

We see similar trends but different values with a different SDoH Index.

INCOME INDEX



HEALTH INFRASTRUCTURE INDEX



50% increase

Let's look at this audience more closely.

Validates solving for cost in plans geared to low-income families.

Need more insights?

Investigating SDoH, Care Consumption, and Costs

UNDERSTANDING THE

Analytics

SDoH Index:

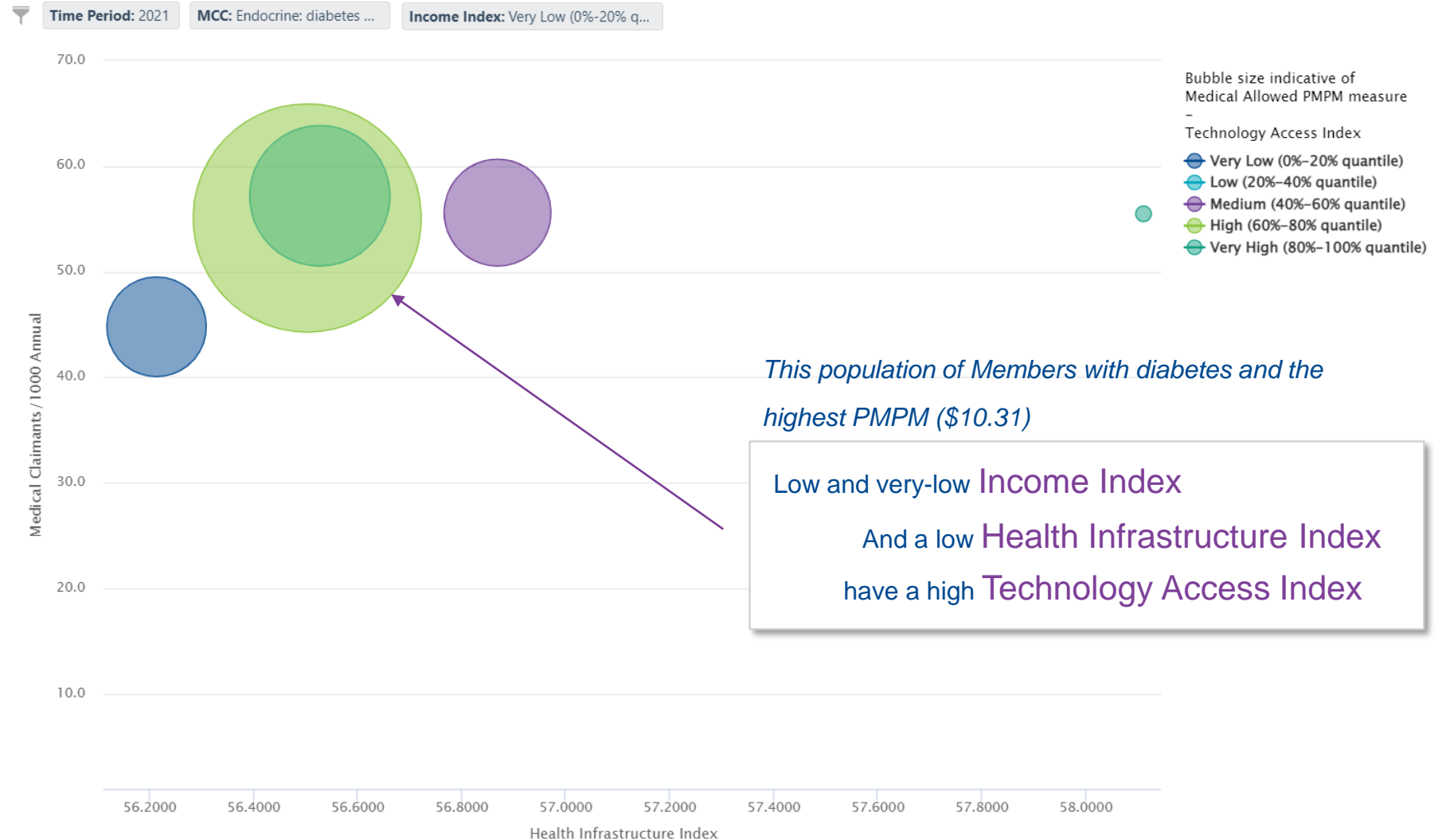
Income Index = *filtered for Low and Very Low*

Time period:

2021 data

Care:

Diabetes



UNDERSTANDING THE

Insights

Are there technology-based options that better meet the needs of this population?

SDoH and cancer screenings

by INCOME INDEX

UNDERSTANDING THE

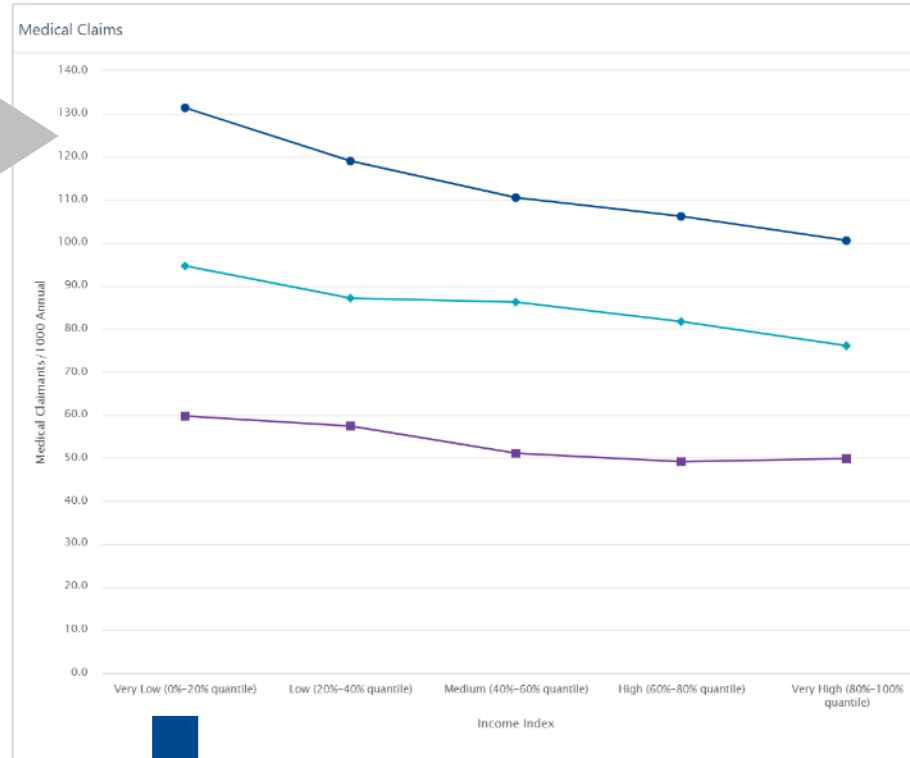
Analytics

SDoH Index:
Income Index



Time period:
2019 - 2022 data

Care:
Cancer Screenings



HEDIS Screening Code

- Breast Cancer Screening
- ◆ Cervical Cancer Screening
- Colorectal Cancer Screening

UNDERSTANDING THE

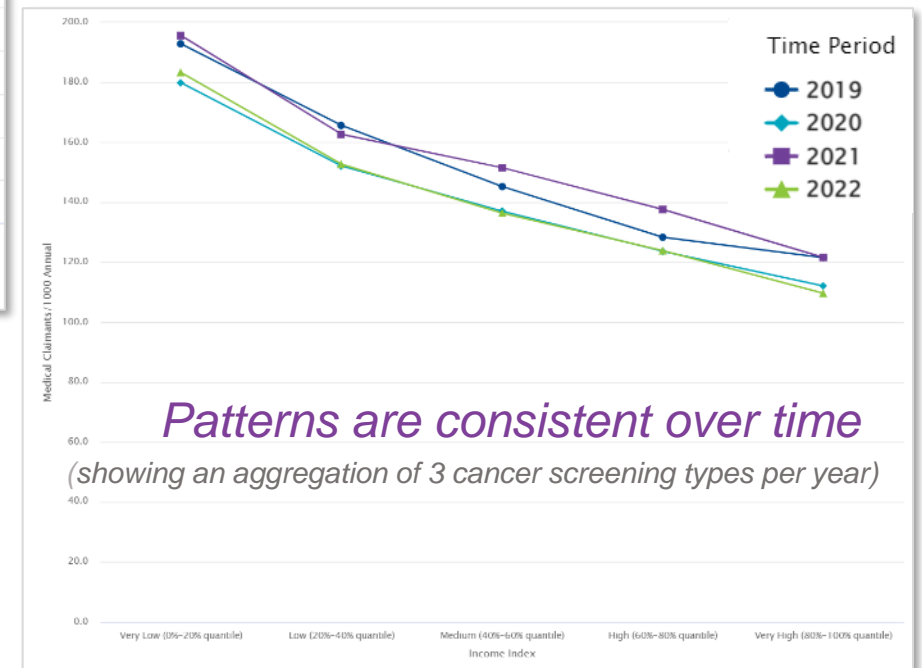
Insights

We see higher utilization in areas with lower income index ranges



~30%

more of the disadvantaged population utilized screenings



Patterns are consistent over time
(showing an aggregation of 3 cancer screening types per year)

How does a business use this?

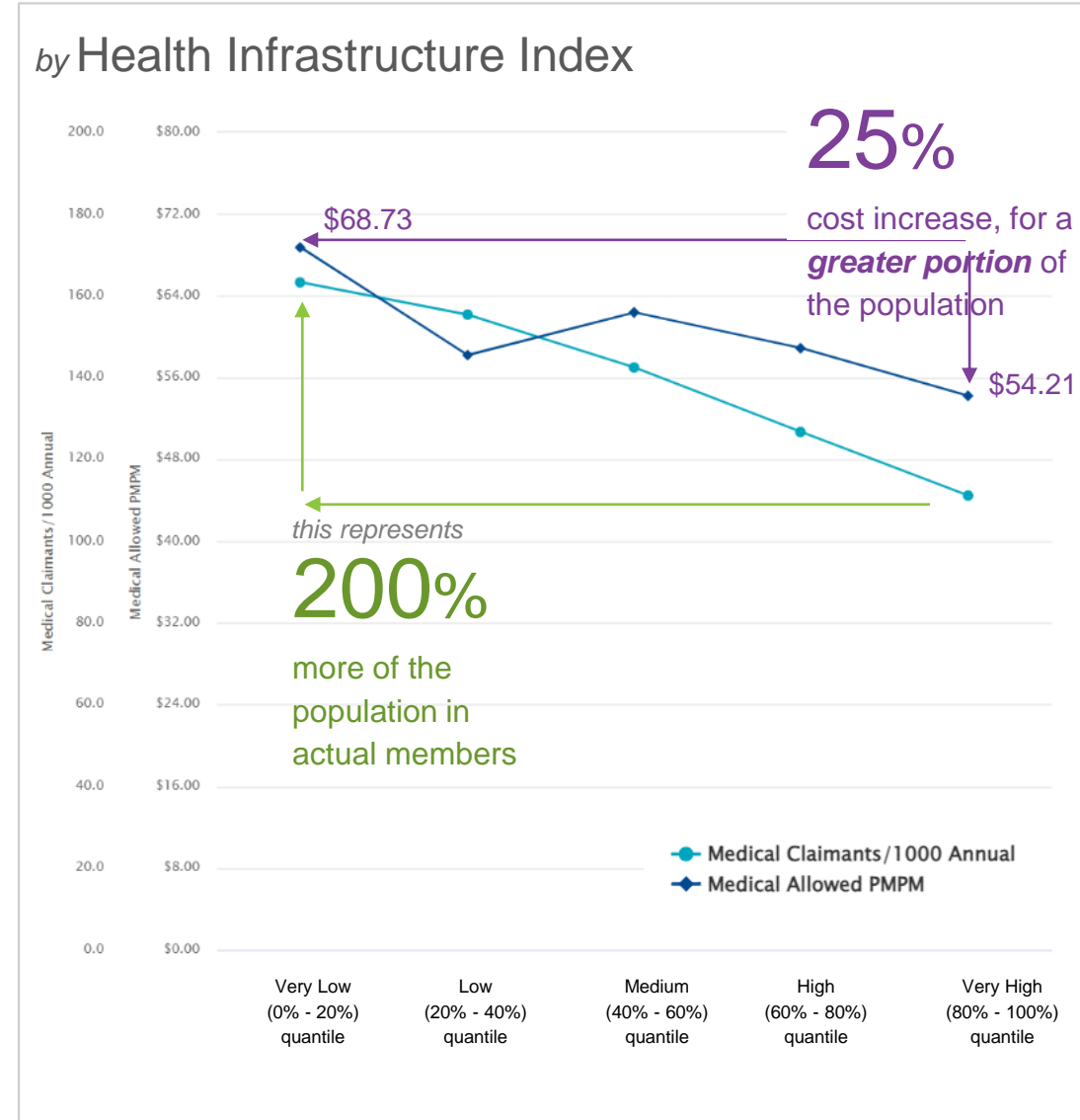
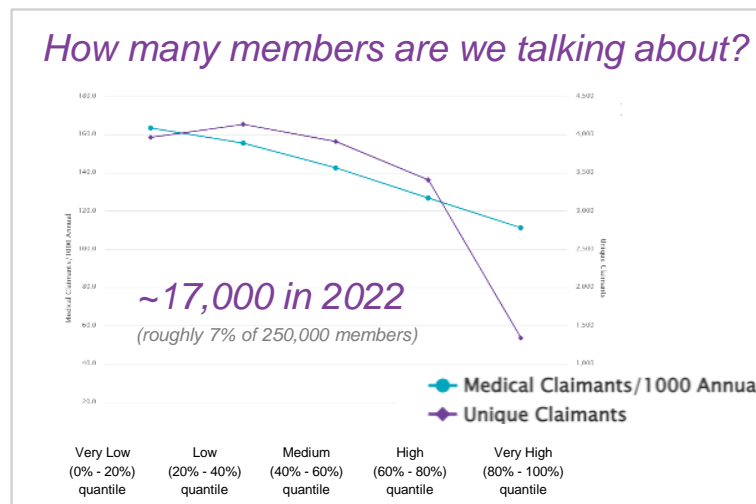
Impactful
business analyses
(Members with Cancer)

Time period:
2022 data

How does PMPM vary?

UNDERSTANDING THE
Insights

Members with cancer claims
cost more in areas with
reduced health infrastructure
(and there are many more of them.)



What is the OOP expense for Top 5 Providers? (for Cancer Care)

Episode Responsible 1 Provider Name	Medical Claimants/1000 Annual	Medical Allowed PMPM	Medical OOP/ Claimant
[Redacted]	2.8	\$0.34	\$241
[Redacted]	5.1	\$0.27	\$94
[Redacted]	2.3	\$0.16	\$118
[Redacted]	6.5	\$0.59	\$148
[Redacted]	4.3	\$0.14	\$87
Summary	20.7	\$1.49	\$133

How does the OOP expense vary by Income Index?

Episode Responsible 1 Provider Name	Income Index	Medical Claimants/1000 Annual	Medical Allowed PMPM	Medical OOP/ Claimant
[Redacted]	Very Low (0%-20% quantile)	3.7	\$0.36	\$230
	Low (20%-40% quantile)	2.5	\$0.33	\$284
	Medium (40%-60% quantile)	2.8	\$0.43	\$274
	High (60%-80% quantile)	2.4	\$0.22	\$176
	Very High (80%-100% quantile)	2.7	\$0.39	\$224
	Summary	2.8	\$0.35	\$241
[Redacted]	Very Low (0%-20% quantile)	2.5	\$0.12	\$73
	Low (20%-40% quantile)	5.0	\$0.29	\$89
	Medium (40%-60% quantile)	5.6	\$0.28	\$88
	High (60%-80% quantile)	5.2	\$0.28	\$117
	Very High (80%-100% quantile)	8.2	\$0.43	\$95
	Summary	5.2	\$0.27	\$94
[Redacted]	Very Low (0%-20% quantile)	1.0	\$0.09	\$194
	Low (20%-40% quantile)	1.9	\$0.13	\$85
	Medium (40%-60% quantile)	2.5	\$0.17	\$100
	High (60%-80% quantile)	3.0	\$0.19	\$130
	Very High (80%-100% quantile)	3.8	\$0.27	\$118
	Summary	2.3	\$0.16	\$118
[Redacted]	Very Low (0%-20% quantile)	6.7	\$0.52	\$135
	Low (20%-40% quantile)	7.7	\$0.81	\$141
	Medium (40%-60% quantile)	6.2	\$0.54	\$138
	High (60%-80% quantile)	6.5	\$0.52	\$135
	Very High (80%-100% quantile)	5.9	\$0.58	\$213
	Summary	6.6	\$0.60	\$148
[Redacted]	Very Low (0%-20% quantile)	4.6	\$0.13	\$90
	Low (20%-40% quantile)	6.6	\$0.20	\$78
	Medium (40%-60% quantile)	4.0	\$0.13	\$73
	High (60%-80% quantile)	2.7	\$0.08	\$82
	Very High (80%-100% quantile)	3.7	\$0.20	\$131
	Summary	4.4	\$0.14	\$87
Summary		21.1	\$1.52	\$133

IBI Insights

Leave Patterns: 2019 - 2022

***Leave trends and benchmarks
help tell the larger story***



Employers think about overall costs

UNDERSTANDING THE

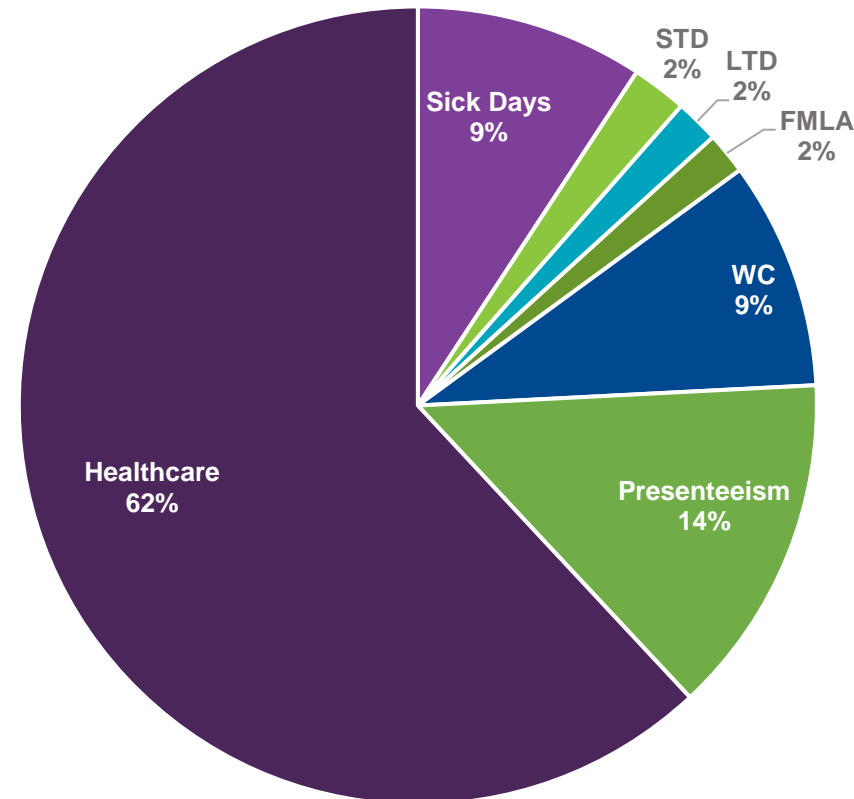
Analytics

The business costs of illness go well beyond the spend for health benefits ► **62%** of costs

A holistic evaluation of health expenditures includes absences and impaired job performance on the bottom-line.

Delays in care may show reductions in healthcare spending, but overall costs to the employer may rise as expenses shift to other illness related line items.

2020 Percent of Expenditures by Category*



Source: IBI Full Cost Estimator. U.S. workforce up to 1M employees

New leave and disability claims

IBI's longitudinal view



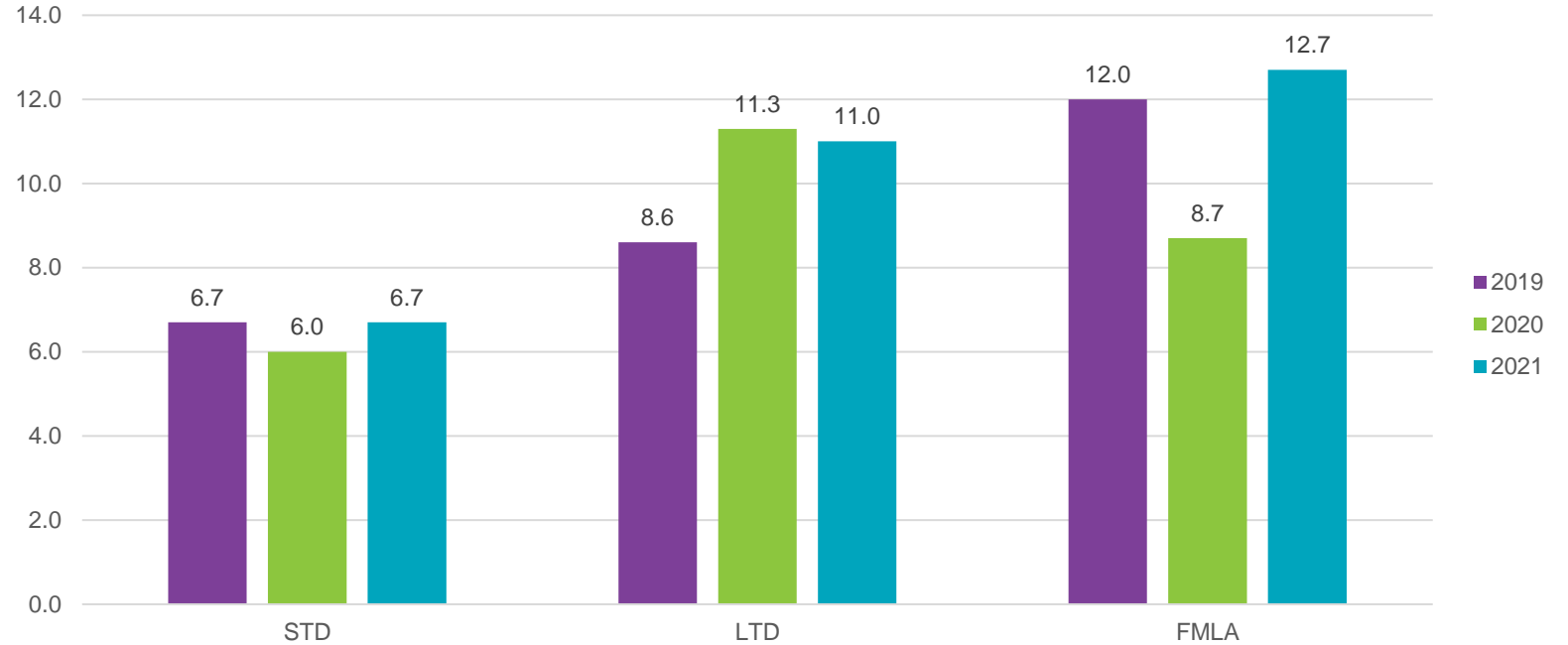
UNDERSTANDING THE

Analytics

Short-term disability and FMLA equal to 2019 levels

Long-term disability remains significantly higher than 2019 levels

STD is a leading indicator for LTD



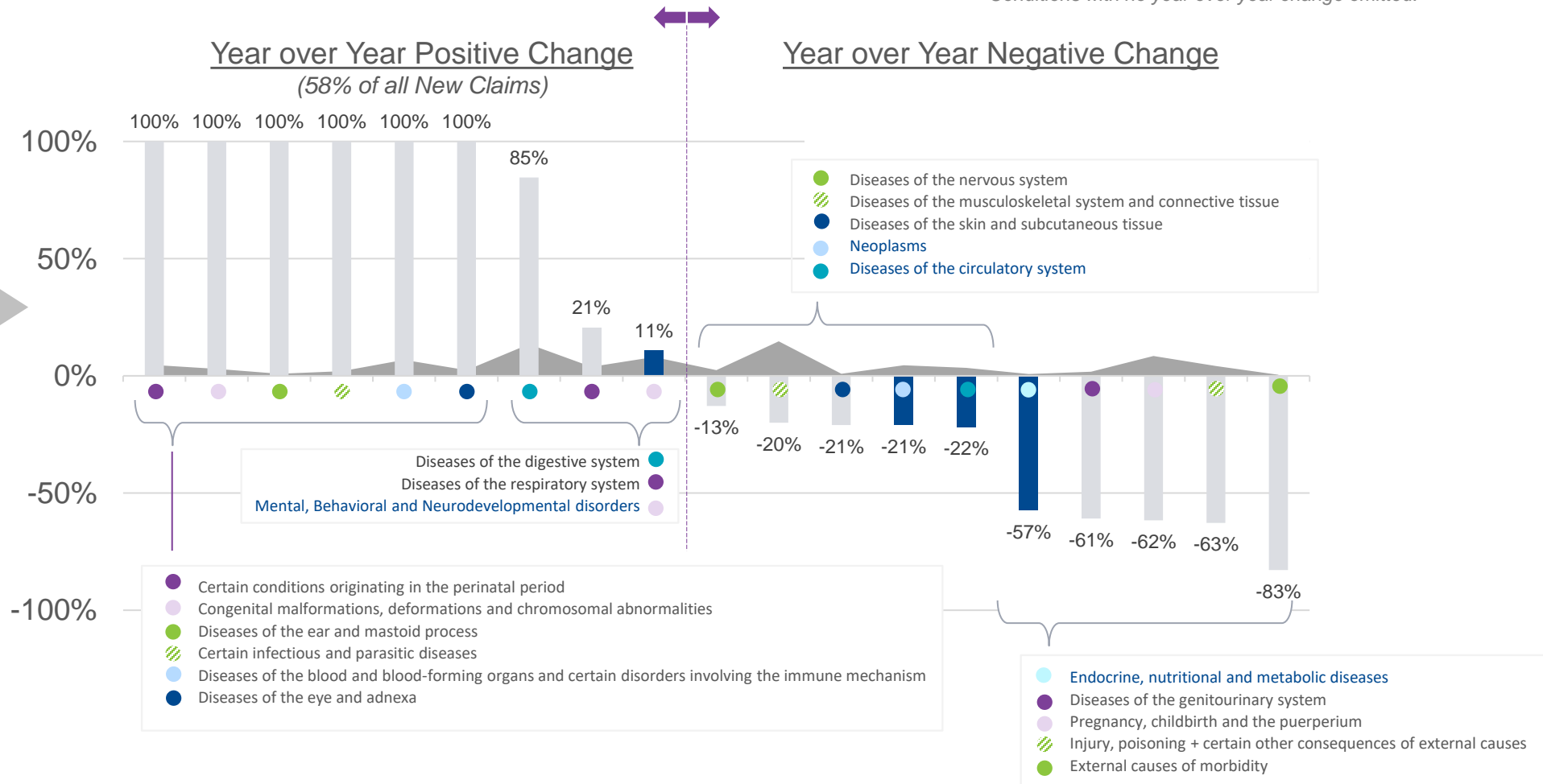
New claims per xxx employee:	2019	2020	2021	2020 V. 2019 % change	2021 v. 2020 % change
STD (per 100)	6.7	6.0	6.7	-10%	12%
LTD (per 1000)	8.6	11.3	11.0	31%	-3%
FMLA (per 100)	12.0	8.7	12.7	-28%	46%

How are short-term disability trends changing?

LEGEND

- % Change in New Claims by Condition, 2021 v. 2020
- Health conditions investigated in previous slides
- ▲ % of New Claims

Year over Year (2020 v 2019) Percent Change* *New Claims by ICD Condition Chapter*
 * Conditions with no year over year change omitted.



UNDERSTANDING THE **Analytics**

~ **58%** of all new Claims are in categories showing significant Year-over-Year positive changes

Delays in care and lower participation in health and wellness programs impact disability claims.

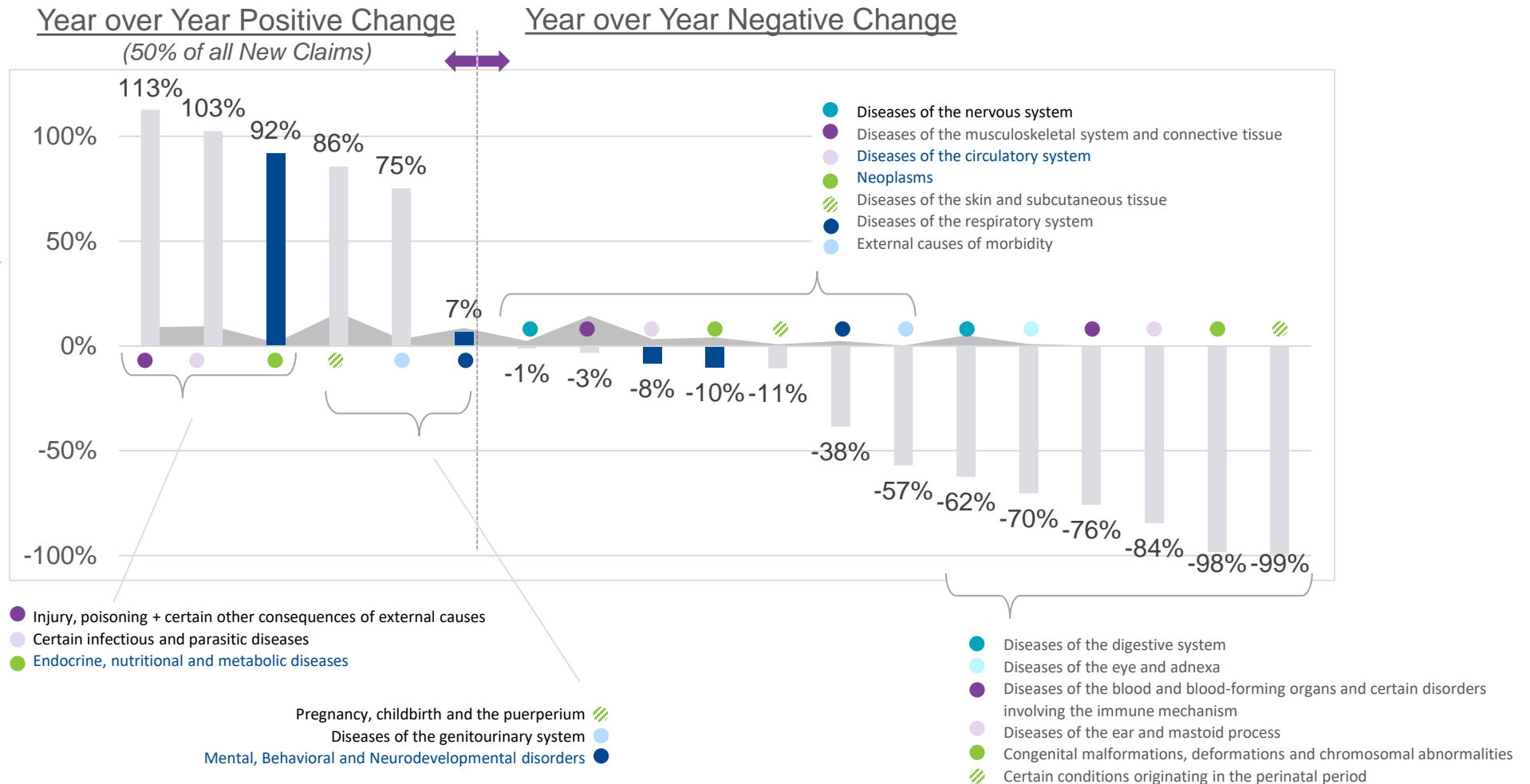
Where are your interventions targeted?

How are short-term disability trends changing?

LEGEND

- % Change in New Claims by Condition, 2021 v. 2020
- Health conditions investigated in previous slides
- % of New Claims

Year over Year (2021 v 2020) Percent Change* *New Claims by ICD Condition Chapter*
 * Conditions with no year over year change omitted.



UNDERSTANDING THE Analytics

~ **50%** of all new claims are in categories showing significant Year-over-Year positive changes

Delays in care and lower participation in health and wellness programs impact disability claims.

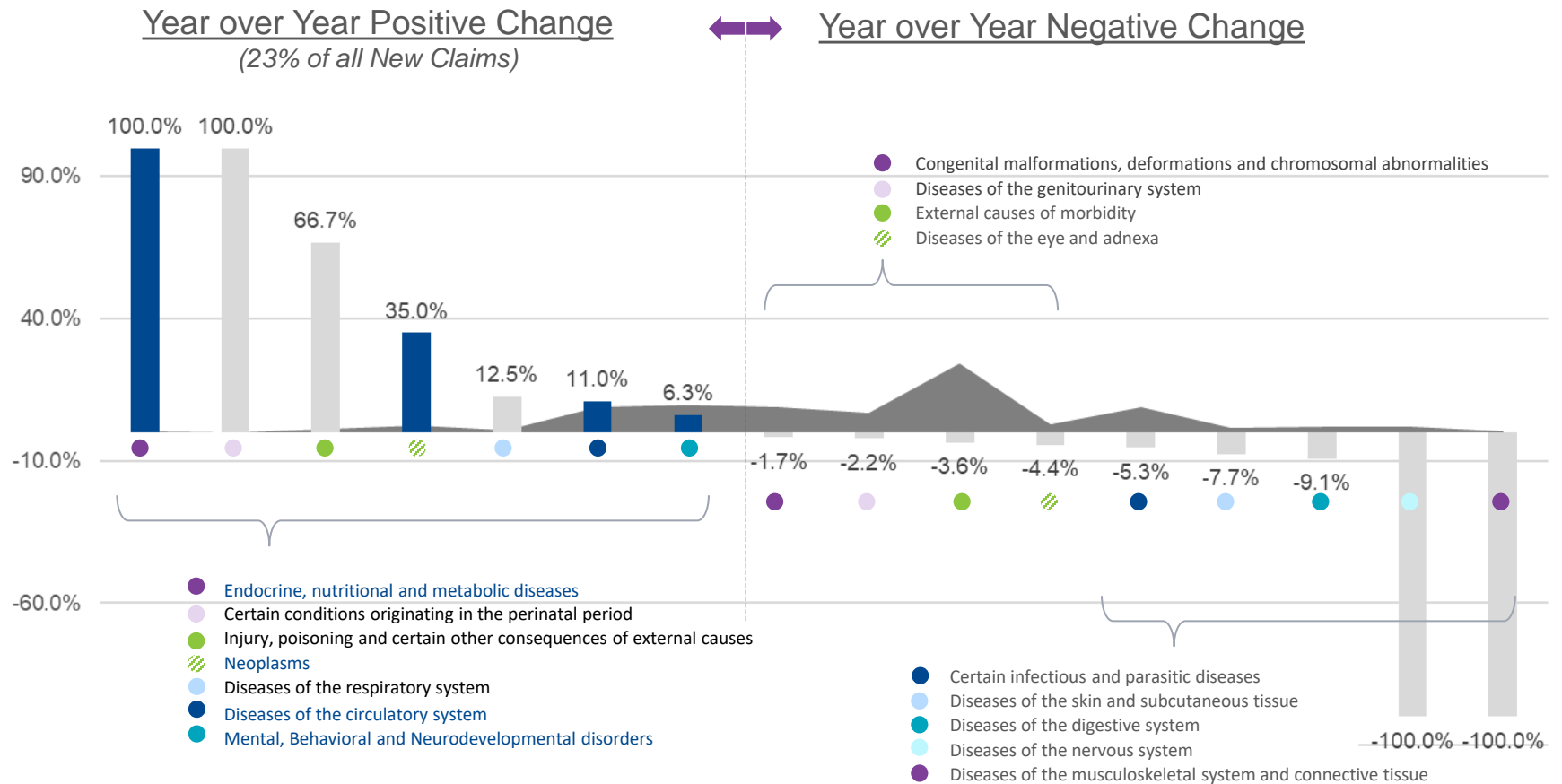
Where are your interventions targeted?

How are long-term disability trends changing?

LEGEND

- % Change in New Claims by Condition, 2021 v. 2020
- Health conditions investigated in previous slides
- % of New Claims

Year over Year (2020 v 2019) Percent Change* *New Claims by ICD Condition Chapter*
 * Conditions with no year over year change omitted.



UNDERSTANDING THE
Analytics

~ **23%** of all new Claims are in categories showing significant Year-over-Year positive changes

This represents the lag between STD and LTD.

Are your health and wellness programs incorporating all sources of expense?

How are long-term disability trends changing?

LEGEND

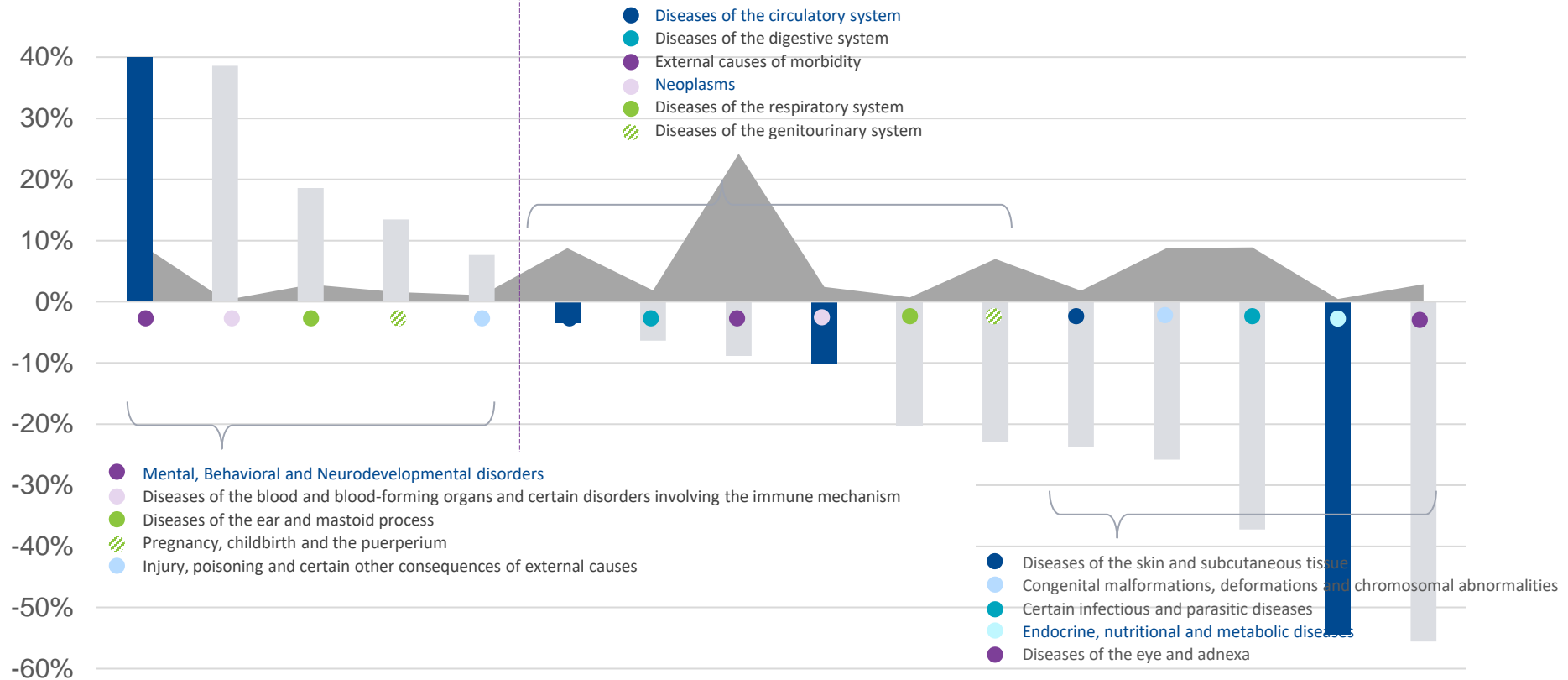
- % Change in New Claims by Condition, 2021 v. 2020
- Health conditions investigated in previous slides
- ▲ % of New Claims

Year over Year (2021 v 2020) Percent Change* *New Claims by ICD Condition Chapter*

* Conditions with no year over year change omitted.

Year over Year Positive Change
(15% of all New Claims)

Year over Year Negative Change



UNDERSTANDING THE
Analytics

~ **15%** of all new Claims are in categories showing significant Year-over-Year positive changes

This represents the lag between STD and LTD.

Are your health and wellness programs incorporating all sources of expense?

Mental/Behavioral Health

Key Performance Indicators

New Claims as a % of Total Claims

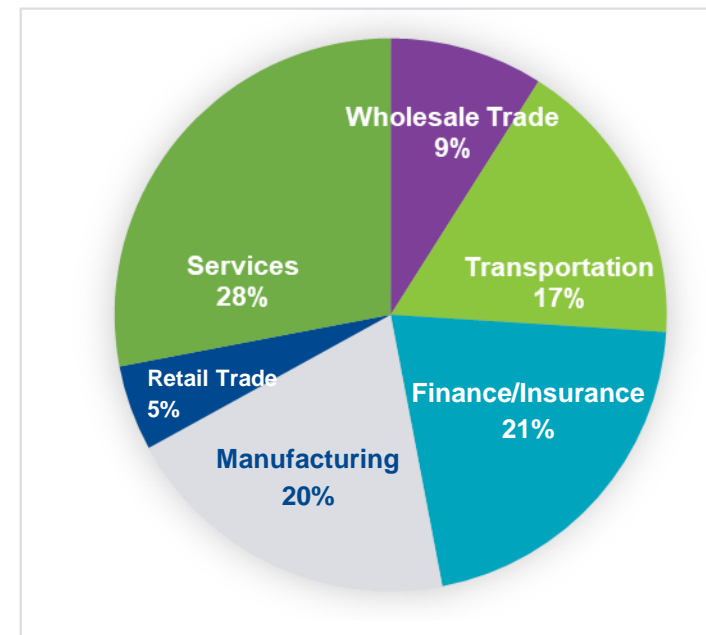
Claim Count

Short-Term Disability

Long-Term Disability

	2019	2020	2021	2019	2020	2021
Short-Term Disability	7.3%	8.0%	8.6%	147,889	145,780	232,706 (!!!)
Long-Term Disability	9.3%	9.1%	7.0%	37,415	35,946	40,099

Mental/Behavioral Health: 2021
Percent of **NEW** claims *by industry*



So now what?

What do employers really want?

1

Let's get **back to BASICS**. Use data to quantify and surface actionable inequities. Prioritize and create focus with employers.

2

ASK! Create collaborations **with employers** to coalesce a broader set of data. Use it to understand **whole health and productivity costs**.

3

Create focus and context with insights and analytics. Use data for **hyper-personalization and targeted, audience-specific efforts**.

SDoH INSIGHTS AND ANALYTICS

Delayed Care in 2023

Questions?



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