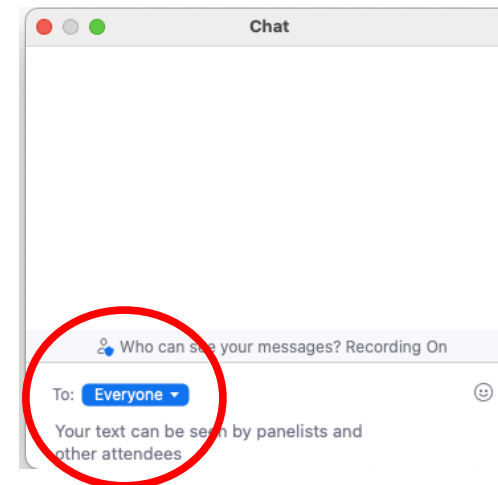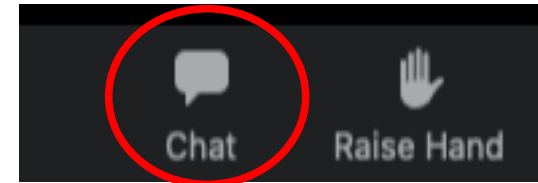# Welcome & thank you for joining us!

Please let us know who you are by introducing yourself (name & OHT or other org)

➢Open Chat

➢Set response to <mark>**everyone**</mark>

in the chat box

Land Acknowledgement

We wish to acknowledge this land on which the University of Toronto operates. For thousands of years it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land.

Poll 1

1. Have you joined us for an HSPN webinar previously ? (Single Choice) *
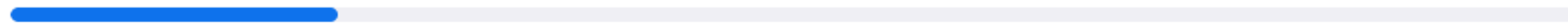
121/121 (100%) answered

Yes   (95/121) 79%

No, this is my first event   (26/121) 21%

Agenda

1. Patient Reported Outcomes

2. Equity Analyses

3. Using Health System Data to Understand Health Outcomes

Today's event

Measuring Health Outcomes in OHTs

Dr. Kaileah McKellar
Evaluation Lead
HSPN

Presenters

Dr. Walter Wodchis
Principal Investigator
HSPN

Dr. Ruth Hall
OHT Evaluation Co-Lead
HSPN

6

The Quadruple Aim Framework

Measurement

- Organized care that is easy to access

- Better Patient and Population Health

Patient Experience Survey

Patient Survey + OHT Improvement Indicators

Patient Experience   **Health Outcomes**

Provider Experience   **Cost**

Provider Experience Survey

OHT Improvement Indicators

- Providers feel supported to organize care for patients

- Cost containment
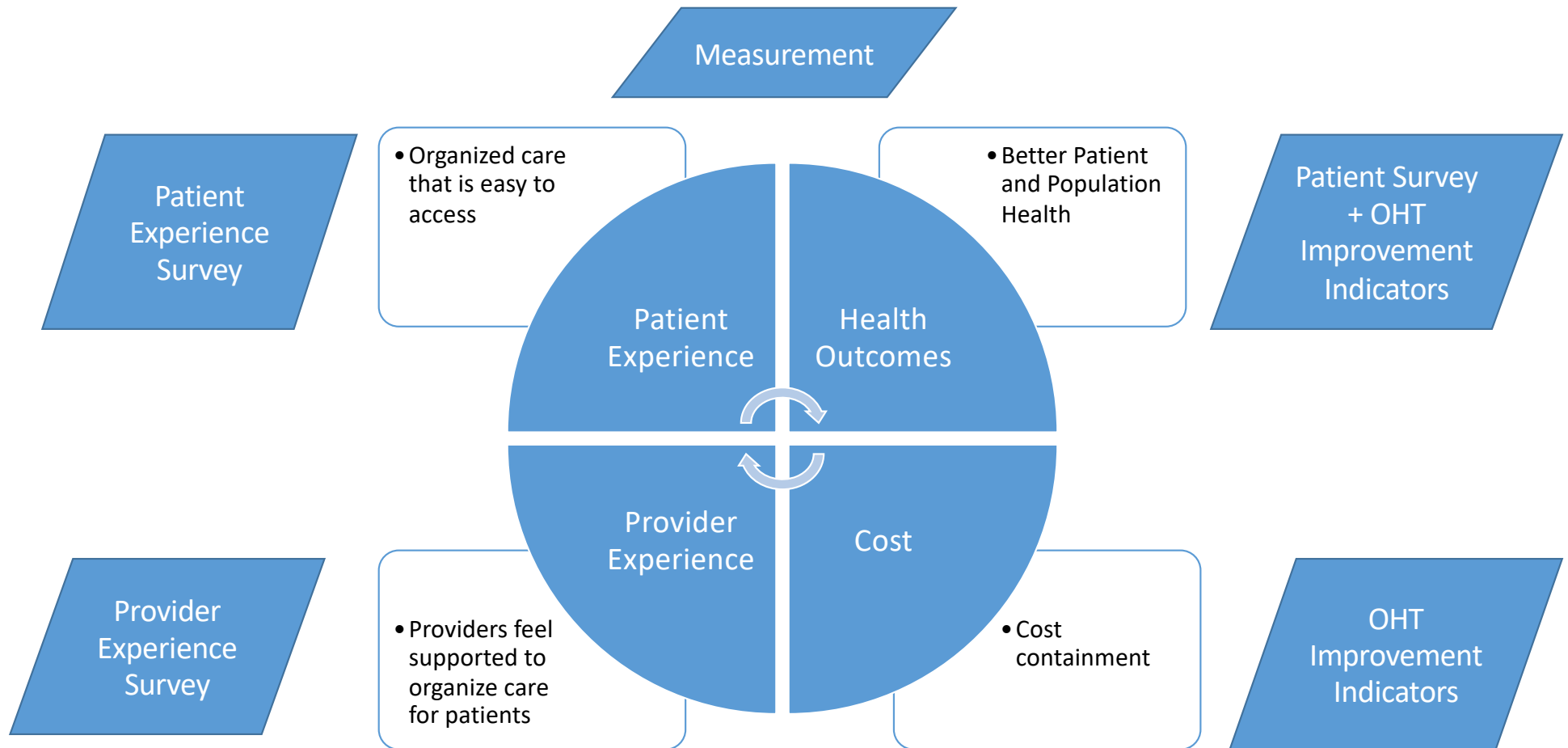
HSPN

The Quadruple Aim Framework
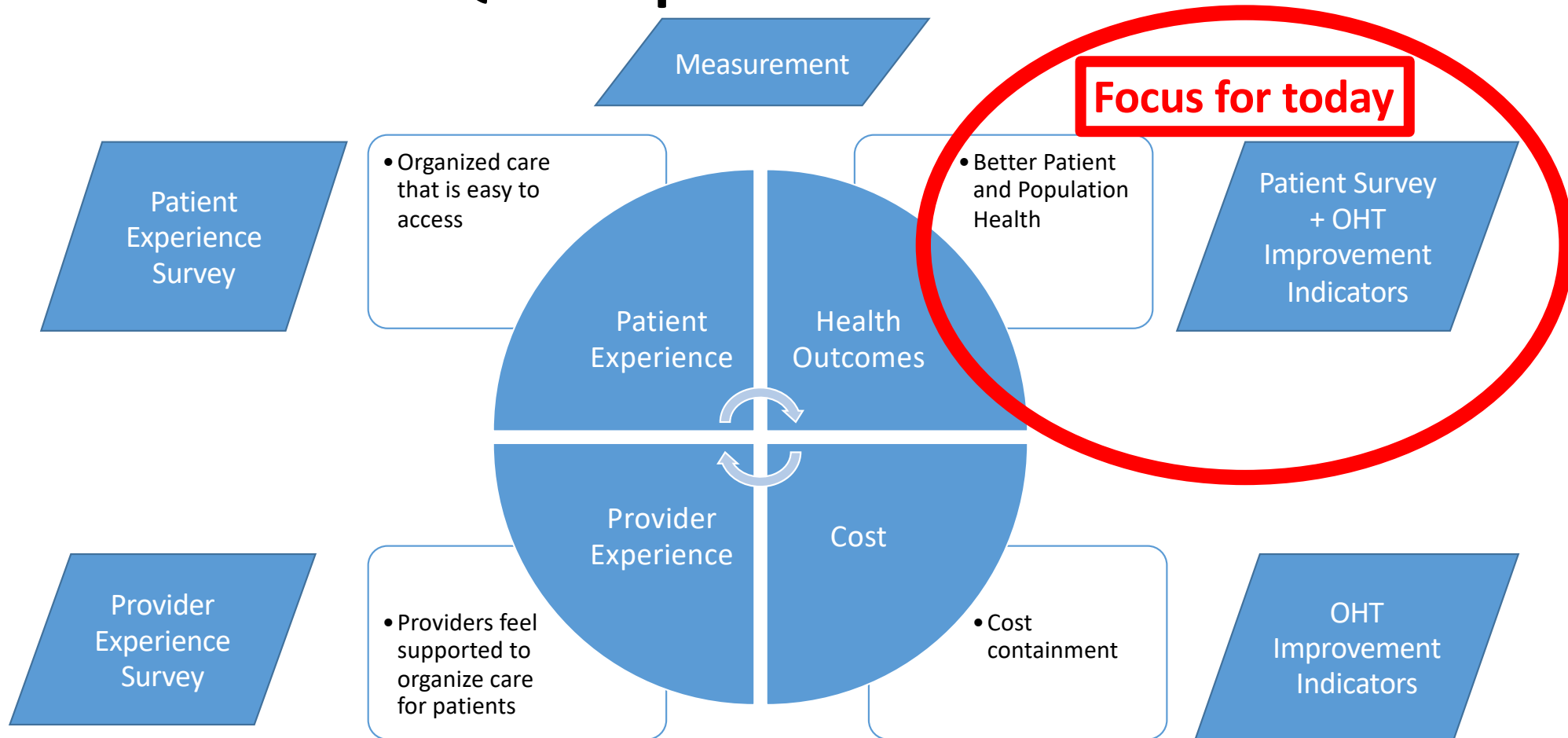
Patient Reported Outcomes

Walter Wodchis

HSPN

HSPN OHT Patient Survey

6 attributes of patient-centredness:

- ➤ Easily access health & social care
- ➤ Having someone to count on
- ➤ Being heard
- ➤ Knowing how to manage health
- ➤ **Independence & Well-being (PROM)**
- ➤ Feeling safe

Other measures:

- ➤ Health services and digital use
- ➤ Transitions(acute, ED, physician, lab)
- ❖ Age, Gender, Race/Ethnicity
- ❖ Social Determinants of Health (Income, Food & Housing Security) + Social Isolation

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PROM Overall health

EuroQol 5 Dimension 5 Level

Mobility
 ➢ No problems…Unable to walk about

Self-care
 ➢ No problems…Unable to wash/dress myself

Usual Activities
 ➢ No problems…Unable to do usual act.

Pain/Discomfort
 ➢ No pain…Extreme pain/Discomfort

Anxiety / Depression
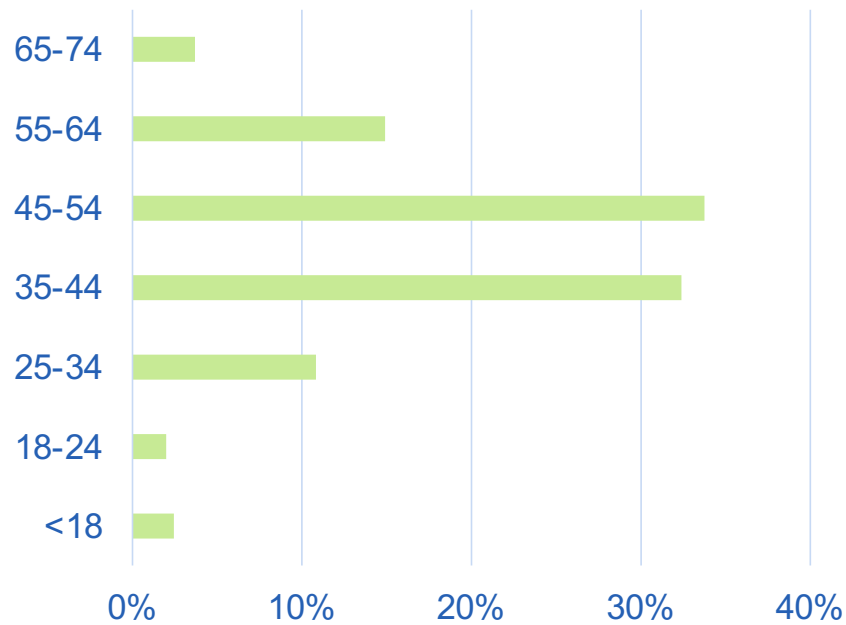 ➢ None…Extremely anxious/depressed

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PROM
Overall health

<u>Overall Self-Rated Health</u>

<u>Patient Health Questionnaire - 2</u>
- ➢ **Little Interest**
- ➢ **Feeling Down**

HSPN

Patient Survey Respondents (n=4,024 to date)

Respondents by Age Category

Age Category	Percent
65-74	~4%
55-64	~15%
45-54	~34%
35-44	~33%
25-34	~11%
18-24	~2%
<18	~3%

(x-axis: 0%, 10%, 20%, 30%, 40%)

Gender

- Other: 1%
- Woman: 63%
- Man: 37%

Percent of Respodents

Legend: Man, Woman, Other

HSPN

13
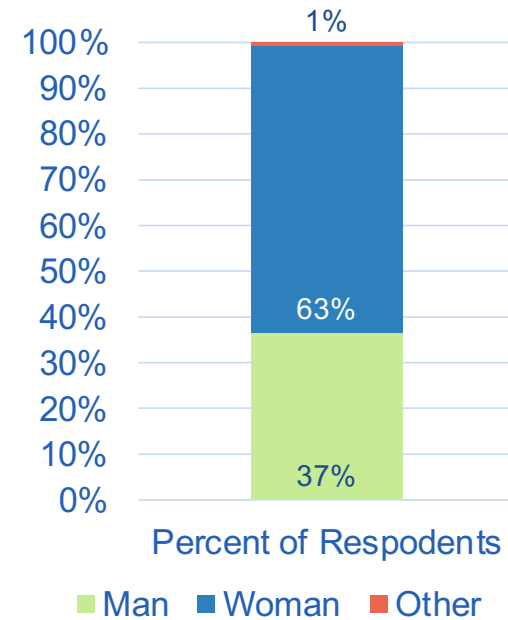
Patient Survey Respondents (to date)

Race/Ethnicity	Percent
White	96.7%
Black	0.4%
East or Southeast Asian	0.6%
Middle Eastern or North African	0.1%
South Asian or Indo-Caribbean	0.2%
Latino/Hispanic	0.3%
First Nations	0.6%
Métis	0.6%
Other/NA	0.5%

HSPN

Self-Reported Health & EQ-5D
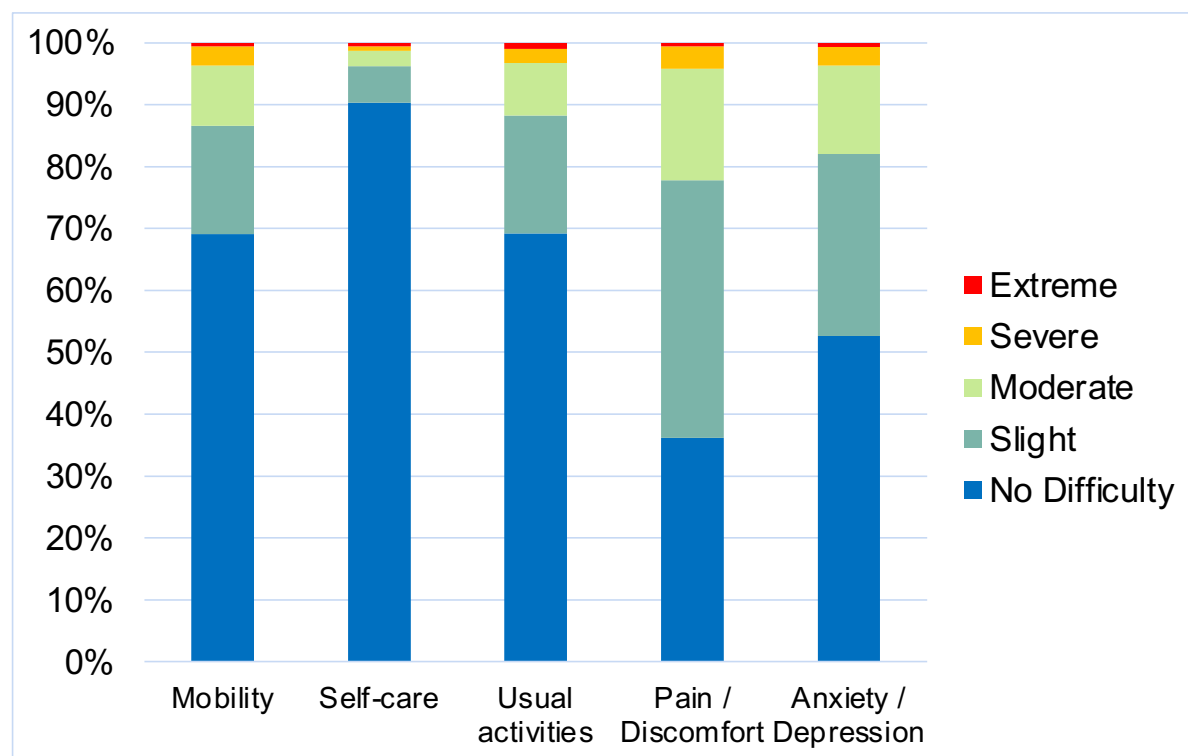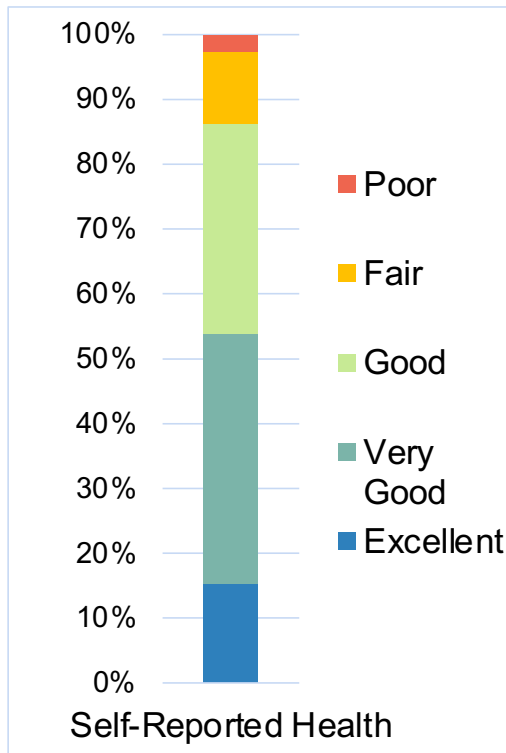
Self-reported Mental Health (PHQ-2)
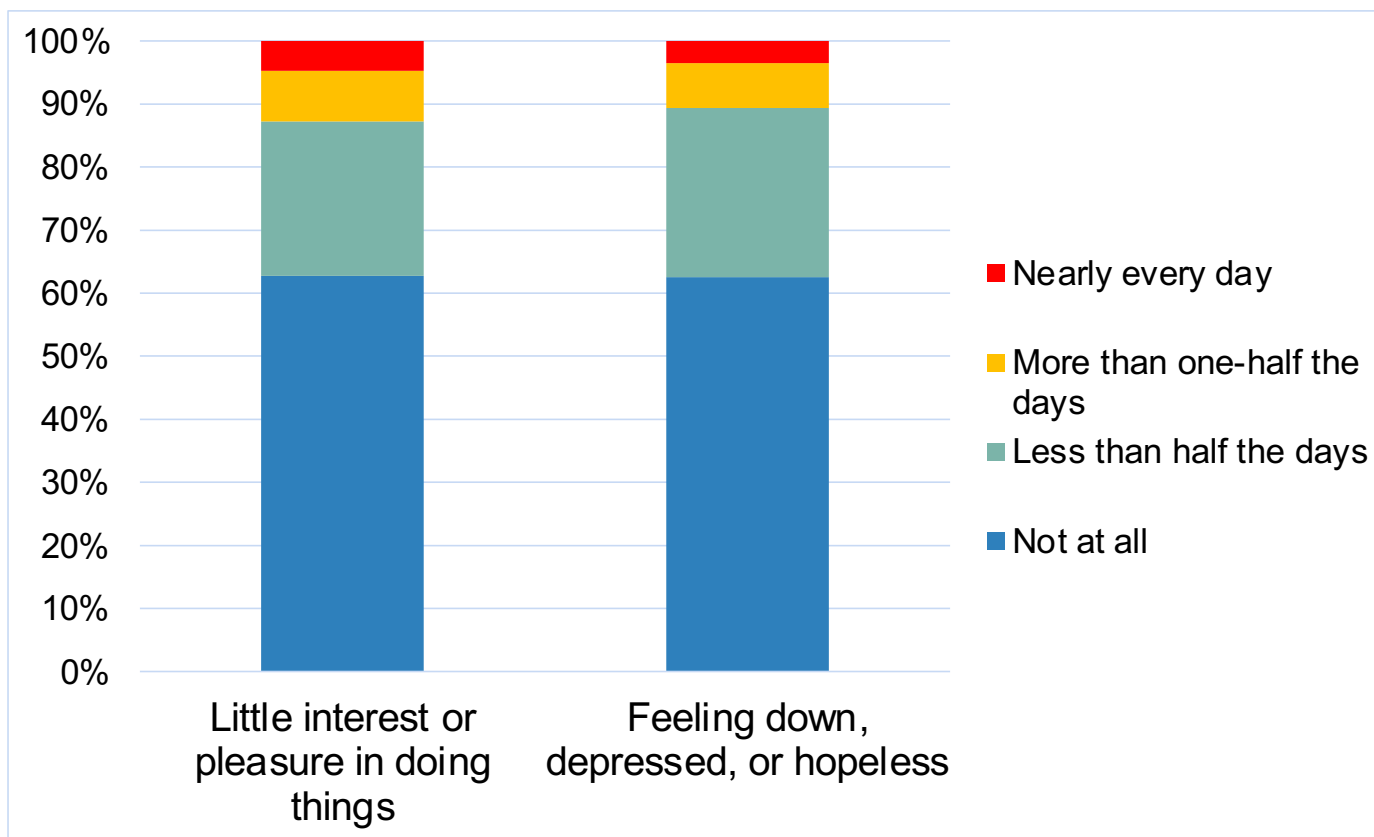
Patient Reported Outcome Measures

- There are multiple ways to be measuring health including overall self-rated health (a well-known measure).

- There are also advantages to the EuroQOL – 5D – 5L because it taps into different aspects of health that are important to different populations (e.g. Frail Older Adults with self-care vs Individuals with Mental Health concerns vs Individuals with usual activity disruption) … and it offers a common standard to assess overall health and comparative health improvements.

- The PHQ-2 is specific to identifying depression-related symptoms to compensate for low sensitivity in the EQ-5D-5L.

HSPN

Equity: Social Determinants of Health

- HSPN believes that equity must be addressed in all measurement.

- In the realm of Patient Reported Outcome Measures, it is important to assess equity – particularly as it relates to Social Determinants of Health.

- Social Determinants of Health include aspects such as ;
  - ➢ Income Security
  - ➢ Food Security
  - ➢ Housing Security

  These are related but not entirely overlapping (corr = 0.48 – 0.59)

HSPN

Equity: Social Determinants of Health

- Increasingly, social isolation has been identified as a key factor that is associated with many health outcomes.

- Social Isolation may be acknowledged as a SDOH factor. The Stanford Social Isolation index is the most widely applied measure. The short-form includes 3 aspects of Isolation:
  - ➤ Feeling Isolated
  - ➤ Feeling Left Out
  - ➤ Lacking Companionship

  These are related but not entirely overlapping (corr = 0.62 - 0.76)

HSPN

Equity: Social Determinants of Health

- In order to assess the extent to which SDOH may be an important factor related to PROMs (and PREMs), the HSPN patient survey includes measures of SDOH.

- Here we will highlight the overall distribution of SDOH in the current respondents to the HSPN patient survey

HSPN

Social Determinants of Health

Legend: Always (red), Sometimes (yellow/orange), Rarely (green), Never (blue)

Categories: Difficulty paying bills, Enough money left for food*, Worry about losing home, Feeling isolated, Feeling left out, Lacking companionship

* Reverse scored from questionnaire so Always means always **not** enough money for food
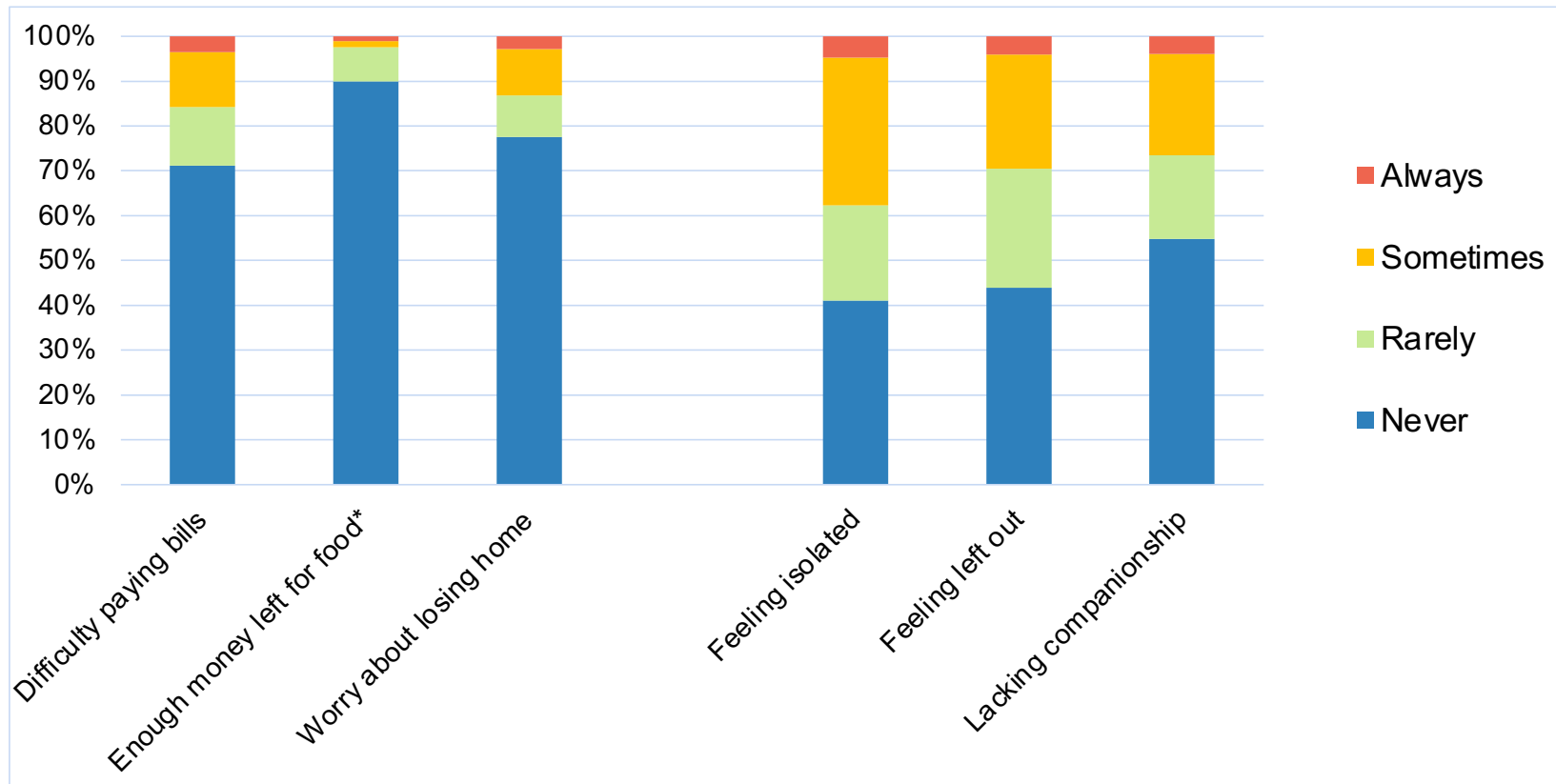
SDOH and PROMs

- We have also begun to examine the differences in Patient Reported Outcome (and Experience) measures according to SDOH measures.

- Here we highlight a few associations with PROMs

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SDOH and self-reported overall health

Difficulty paying bills at the end of the month

Legend:
- Fair/Poor
- Good
- Excellent/Very Good

SDOH and self-reported overall health

HSPN
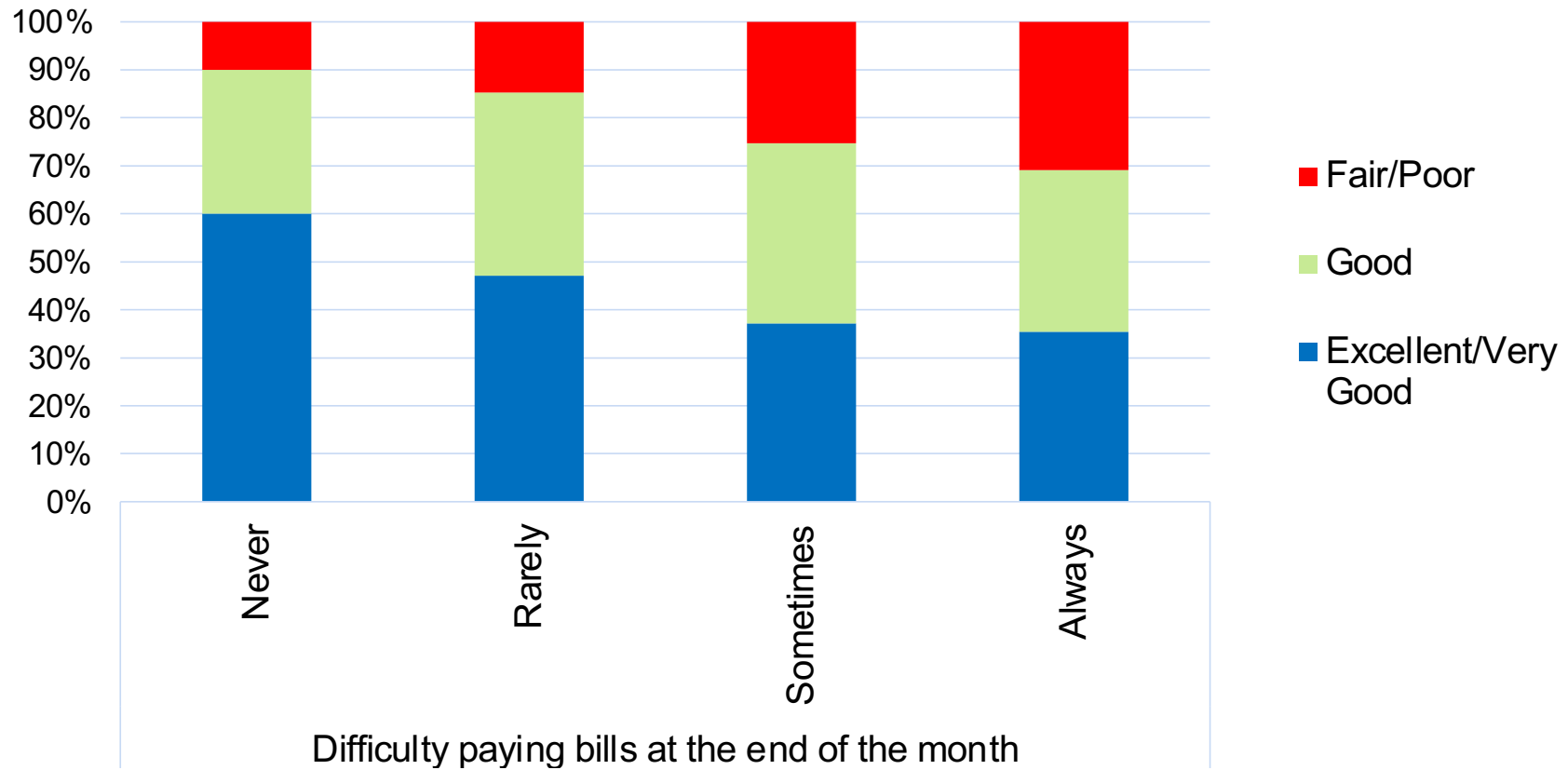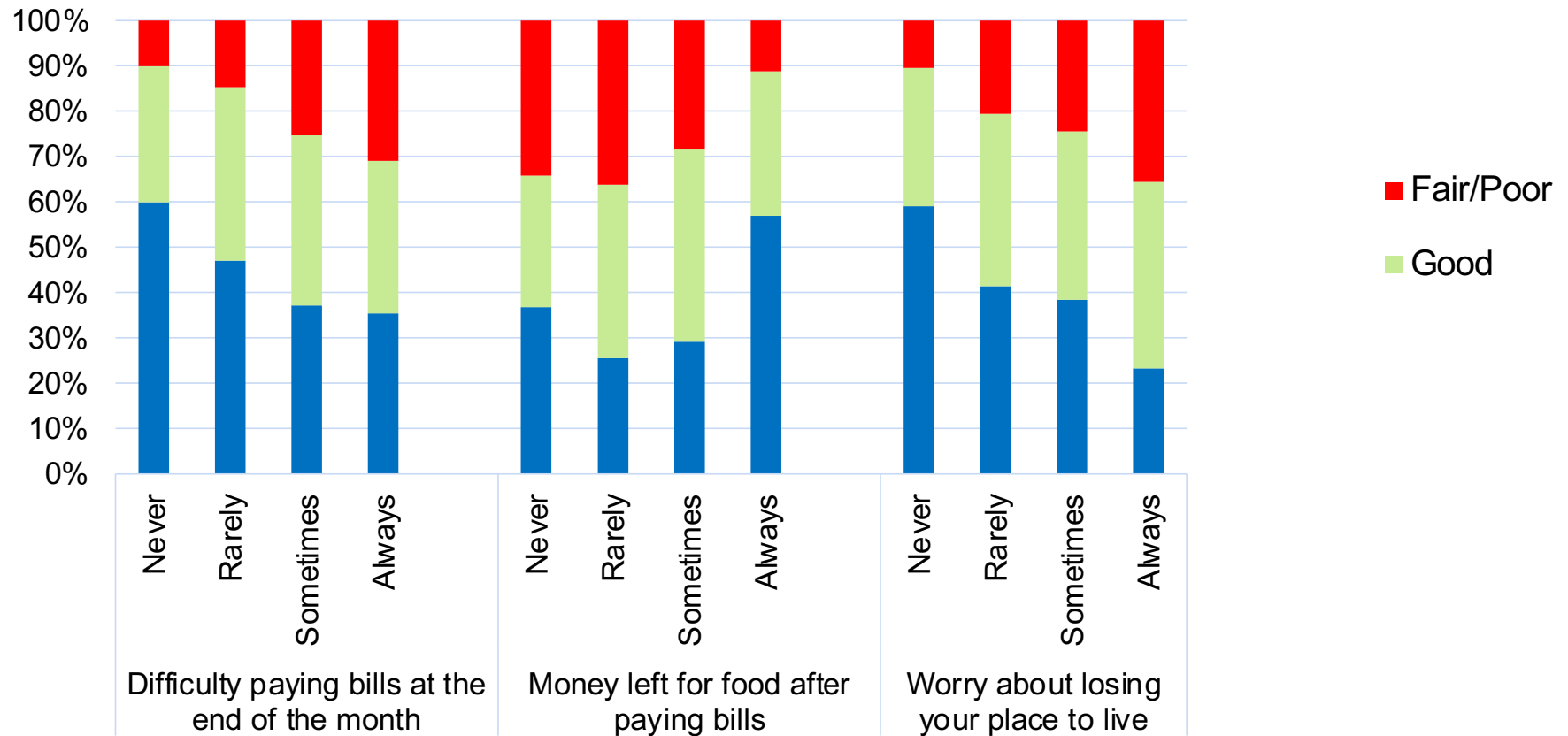
Isolation and self-reported overall health
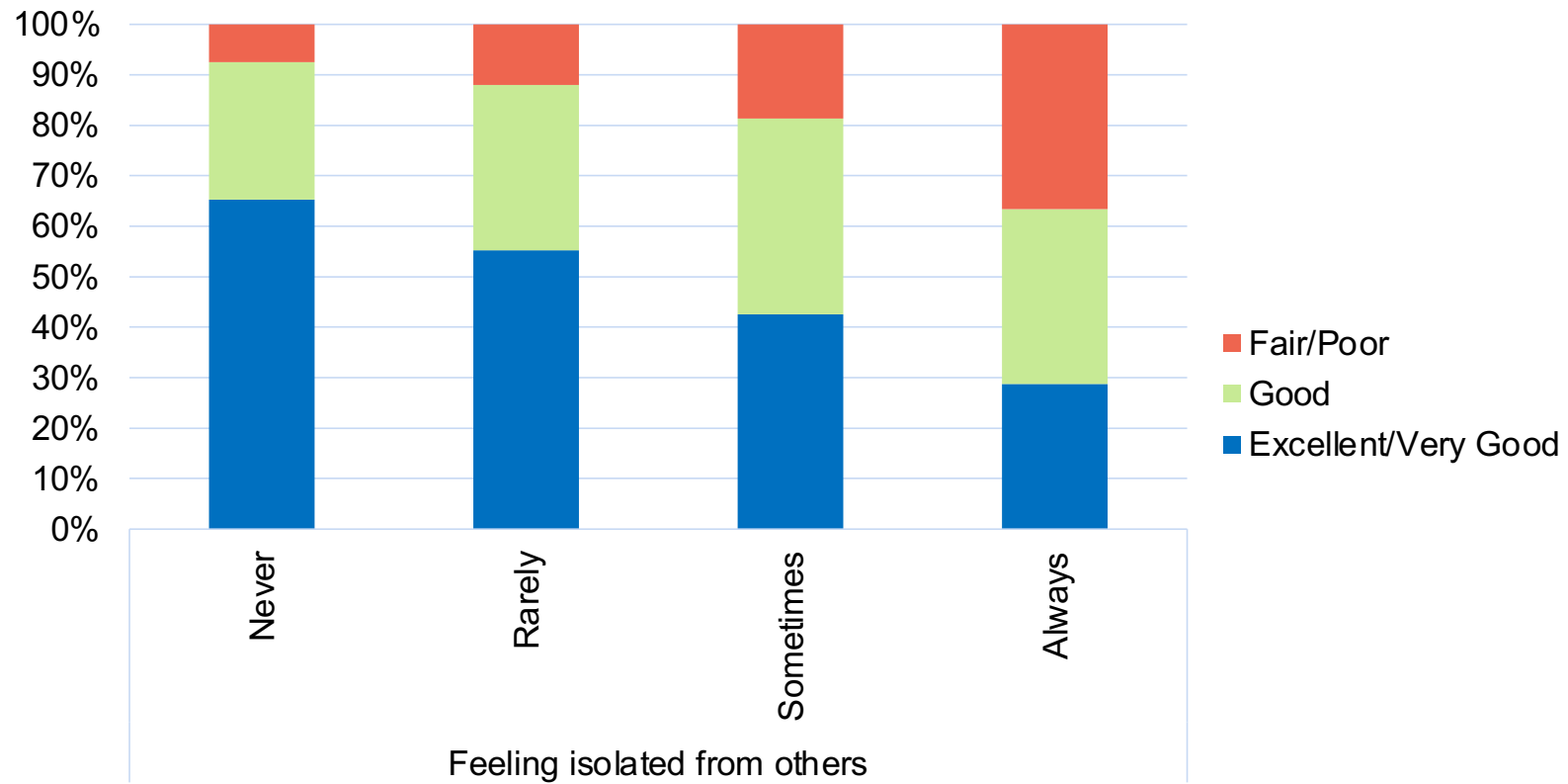
Isolation and self-reported overall health
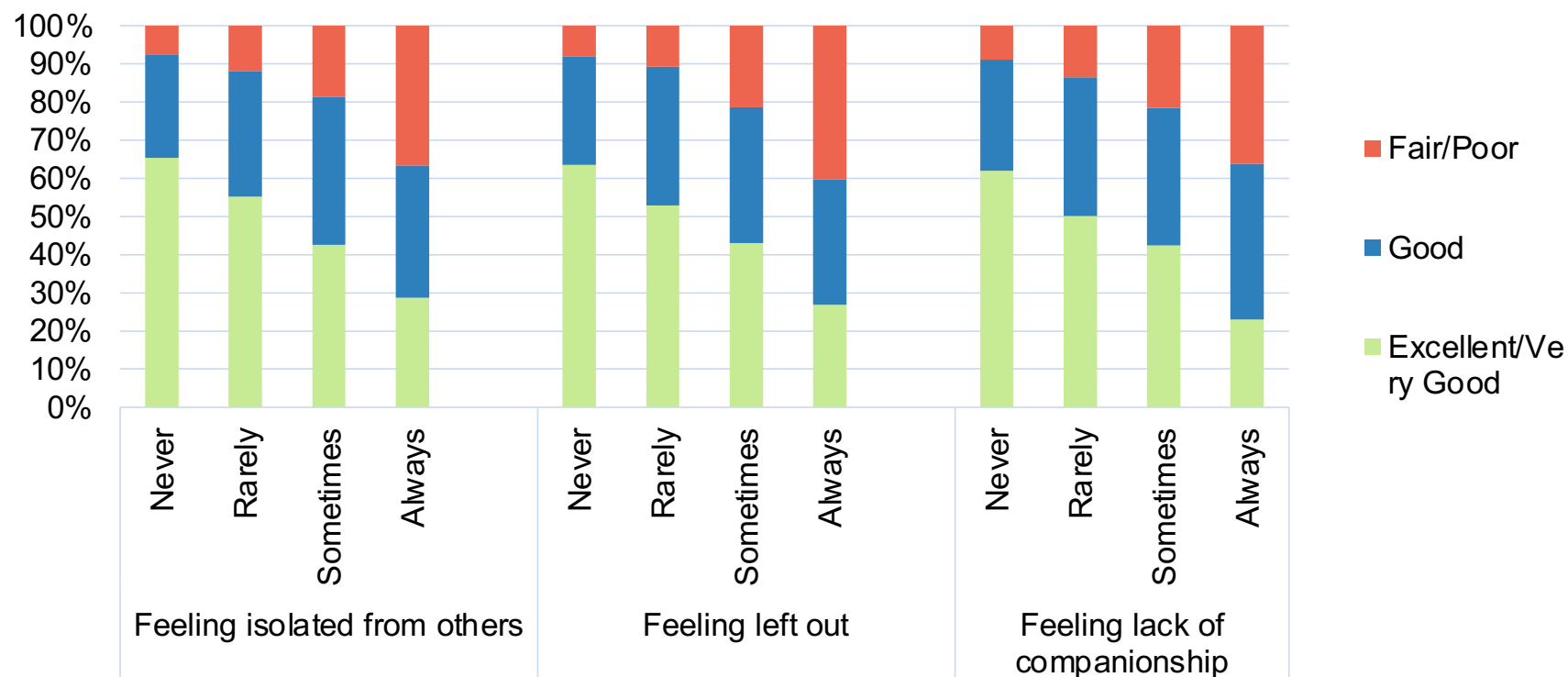
SDOH, Isolation and Mental Health

Little interest or pleasure in doing things

Legend:
- **Nearly every day** (red)
- **More than one-half the days** (orange)
- **Less than half the days** (light green)
- **Not at all** (blue)

X-axis categories:
- Difficulty paying bills at the end of the month: Never, Rarely, Sometimes, Always
- Feeling isolated from others: Never, Rarely, Sometimes, Always
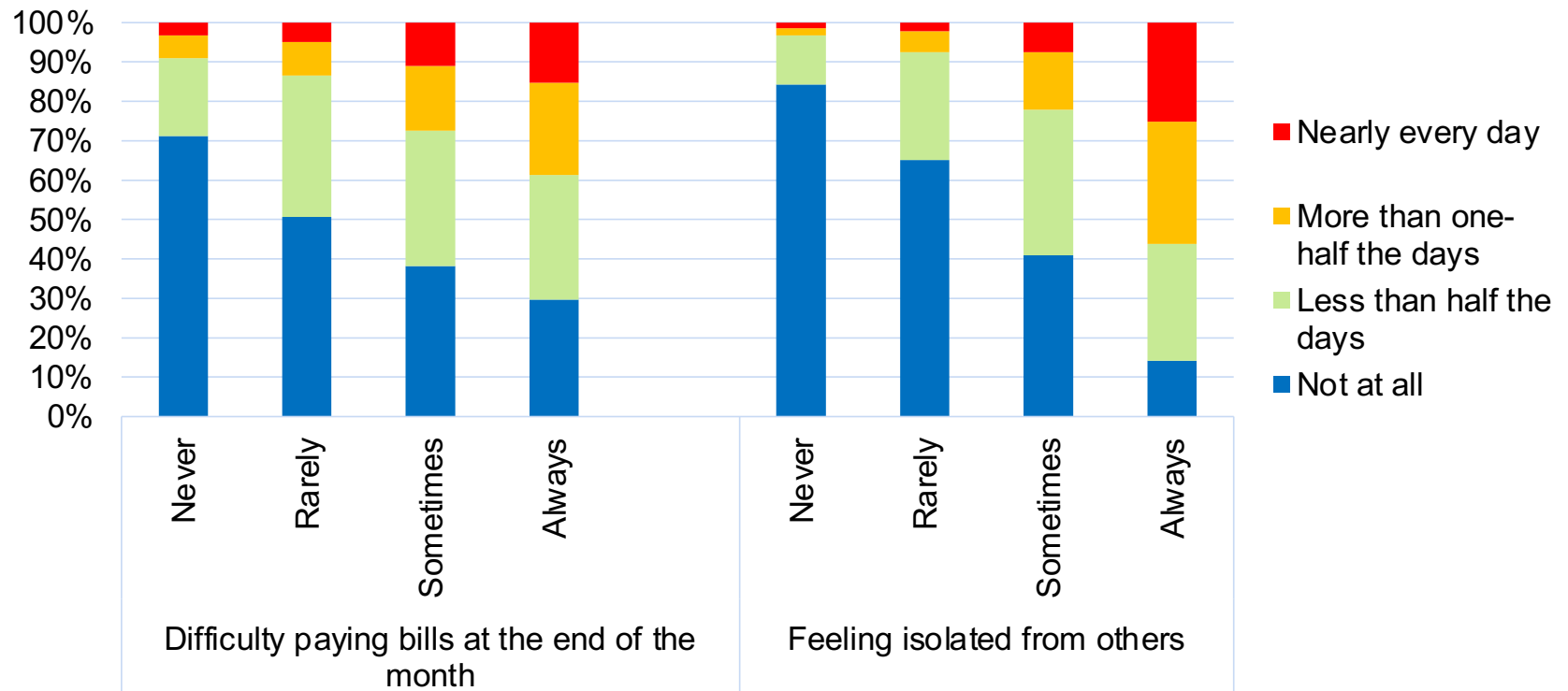
SDOH, Isolation and Mental Health

Feeling down, depressed, or hopeless
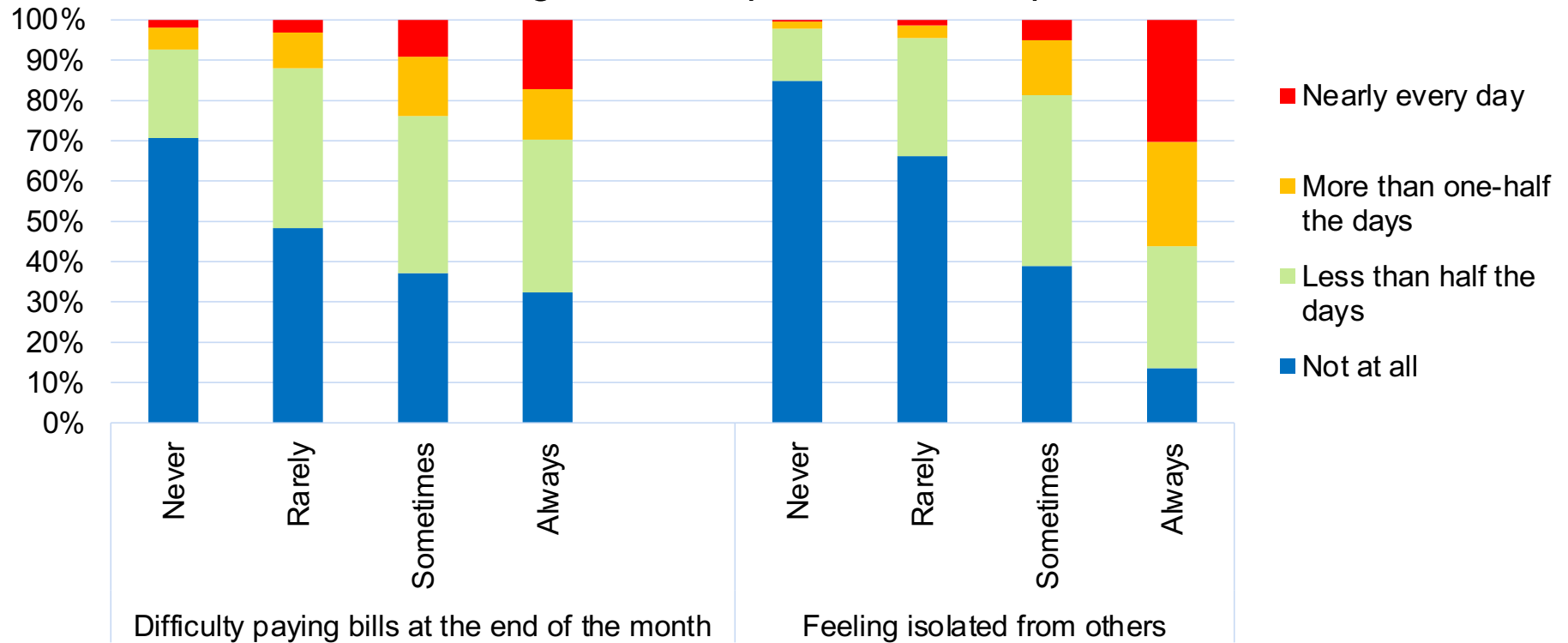
Summary

- Social Determinants of Health are clearly related to Patient Reported Outcome Measures in the HSPN patient survey.

- They are also statistically significant and statistically meaningful.

- All of the P-values for the Chi-Square statistic are < 0.001 and the Kendall's Tau values are a little above 0.2 for the Income and Housing insecurity measures (about 0.17 for Food Insecurity) … which is considered to be a Moderate relationship.

- The P-values for Chi-Square are all < 0.001 and the Kendall's Tau values are generally above 0.4 for the Social Isolation measures … which is considered to be a Strong relationship.

HSPN

SDOH and PREMs

- In this month we are focused on Patient Reported Outcome Measures, but we did not have the opportunity to discuss associations of Patient Reported Experience Measures with Social Determinants of Health in the April webinar … so we will touch on it here.

- There are also statistically significant Moderate relationships among a number of the Patient Reported Experience dimensions… in particular **Having Someone to Count On** and **Knowing What to Expect** and overall **Coordination of Care**.

  Fortunately, although there are statistically significant relationships between access to care and SDOH measures that we have assessed in the patient survey, they are generally *weak* or *very weak* according to Kendall's Tau.

HSPN

SDOH, Isolation and Having Someone to Count On

Confidence that healthcare provider will check up to ensure needs are met

Legend:
- Not at all confident (red)
- Not very confident (orange)
- Somewhat confident (green)
- Very confident (blue)

Difficulty paying bills at the end of the month: Never, Rarely, Sometimes, Always

Feeling isolated from others: Never, Rarely, Sometimes, Always
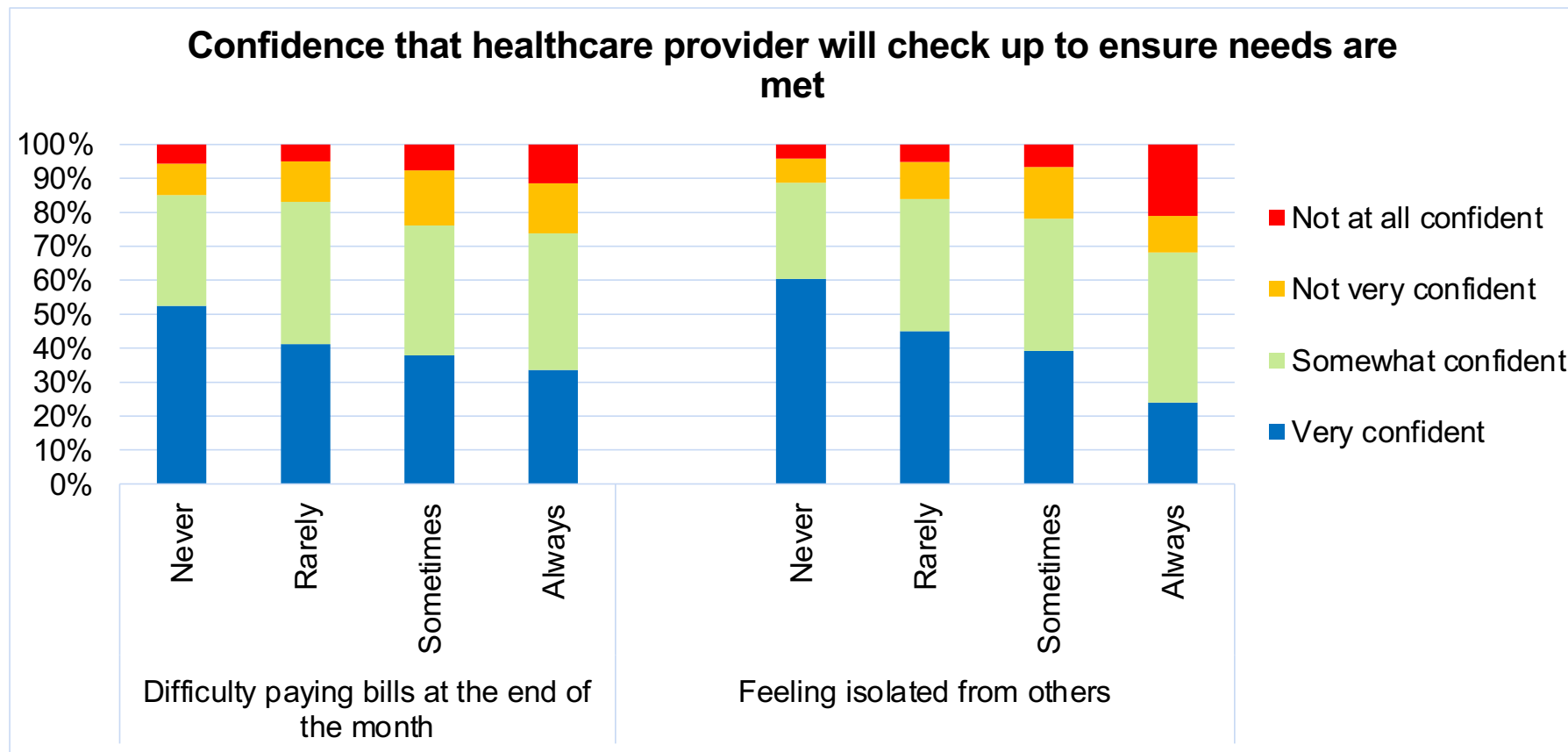
Summary notes

- Mental health conditions are a concern and these are highly related to social determinants of health.

- Social determinants of health are important determinants of overall health and mental health outcomes.

- Social isolation has a strong association with PROMs and PREMs and could/should be considered a core Social Determinant of Health.

HSPN

Ideas for discussion in the chat

- Do you think it is important and/or useful to measure social determinants of health amongst individuals in your OHT ?

- Do you think it is useful to have a common approach to measuring PROMs, PREMs and / or SDOH across OHTs ?

- We have called the survey a Patient Survey because we feel that individuals who will receive the survey are likely to be patients who are known to providers in the OHT -- but we are interested in your thoughts on other descriptors and ways to reach individuals who are not accessing services (in which case we may need to add items to the survey in this regard to substitute for some of the current items).

HSPN

Is there value in Common Measurement?

- It would be highly valuable to all Ontario Health Teams if there is a common standard approach to assessing Patient Reported Outcome Measures, Patient Reported Experience Measures and Social Determinants of Health.

- This is why HSPN developed a common Patient Survey and has made it available for use in all OHTs. HSPN is also providing backbone support by enabling a common platform for data collection to enable comparisons across OHTs that participate in the patient survey. We are doing the same for provider experience surveys.

HSPN

Are there limitations to the HSPN survey?

- There are many limitations to the HSPN survey:
  - Some of the wording is not ideal … because we have aligned with the Ontario Health Care Experience Survey to enable comparisons not only within OHTs but also to the general Ontario population.

  - Some think the survey is too long…we are finding one or two items that many be redundant but further field testing is still required amongst more varied patient populations. About 1/3 of the experience items related to use of specialist, laboratory, emergency and inpatient care which are not answered by individuals who do not use these services. There are also digital health items which are novel and were introduced with the advent of COVID19 and a rapid escalation of virtual care options. (The OECD is field-testing a PREM/PROM survey with 175 items).

HSPN

Are there limitations to the HSPN survey?

- The main sections of the Patient Survey include:
  - ➤ Health services accessed by the patient
  - ➤ Patient-reported Outcome Measures (EQ-5D-5L, PHQ-2 & SRH)
  - ➤ Patient-reported Experience measures aligning with the 6 attributes of patient-centred care
  - ➤ Transitions in care related to specialist, laboratory, ED and acute care
  - ➤ Digital health and virtual care
  - ➤ Sociodemographics including age, gender, ethnicity/race and SDOH
  - ➤ Open-Ended comment to identify opportunities to improve care

- Which of these is unnecessary ? (Let's poll for what is useful)

HSPN

Poll 2

1. Which of the following should be included in an OHT patient survey? (Multiple Choice) *

125/125 (100%) answered

Health services accessed by the patient — (97/125) 78%

Patient-reported Outcome Measures (EQ-5D-5L, PH... — (99/125) 79%

Patient-reported Experience measures aligning with t... — (99/125) 79%

Transitions in care related to specialist, laboratory, E... — (84/125) 67%

Digital health and virtual care — (80/125) 64%

Sociodemographics including age, gender, ethnicit... — (111/125) 89%

Open-Ended comment to identify opportunities to i... — (89/125) 71%

Using Health System Data as a Proxy for Health Outcomes

Ruth Hall

HSPN

Proxy Measures

HSPN

What is a proxy measure?

- A measure used in place of something that either has not been or cannot be measured *directly*

- An indirect measure which is strongly correlated to the outcome of interest.

- **Why do we use them?**

- To understand as much as we can about patient and population health outcomes

- To be able to compare across OHTs

HSPN Overall Attributed Population Indicators

Population Health

- Premature mortality
- Cost per month alive

Hospital-based

- Days in acute inpatient care
- ALC days (delayed discharge)
- ACSC (avoidable) hospitalizations
- Emergency Department visits best managed elsewhere

Community-based Care

- Readmissions within 30 days for selected conditions
- Continuity of Physician Care
- Physician visits after discharge from hospital
- Virtual physician care

HSPN

ALC = Alternative Level of Care; ACSC = Ambulatory Care Sensitive Conditions

HSPN Target Population Indicators

Mental Health & Addictions Care

- Outpatient visits within 7d of MHA hospital discharge
- ED as first point of contact for MHA
- Frequent (4+) ED visits for MHA
- Repeat ED visits within 30days for MHA
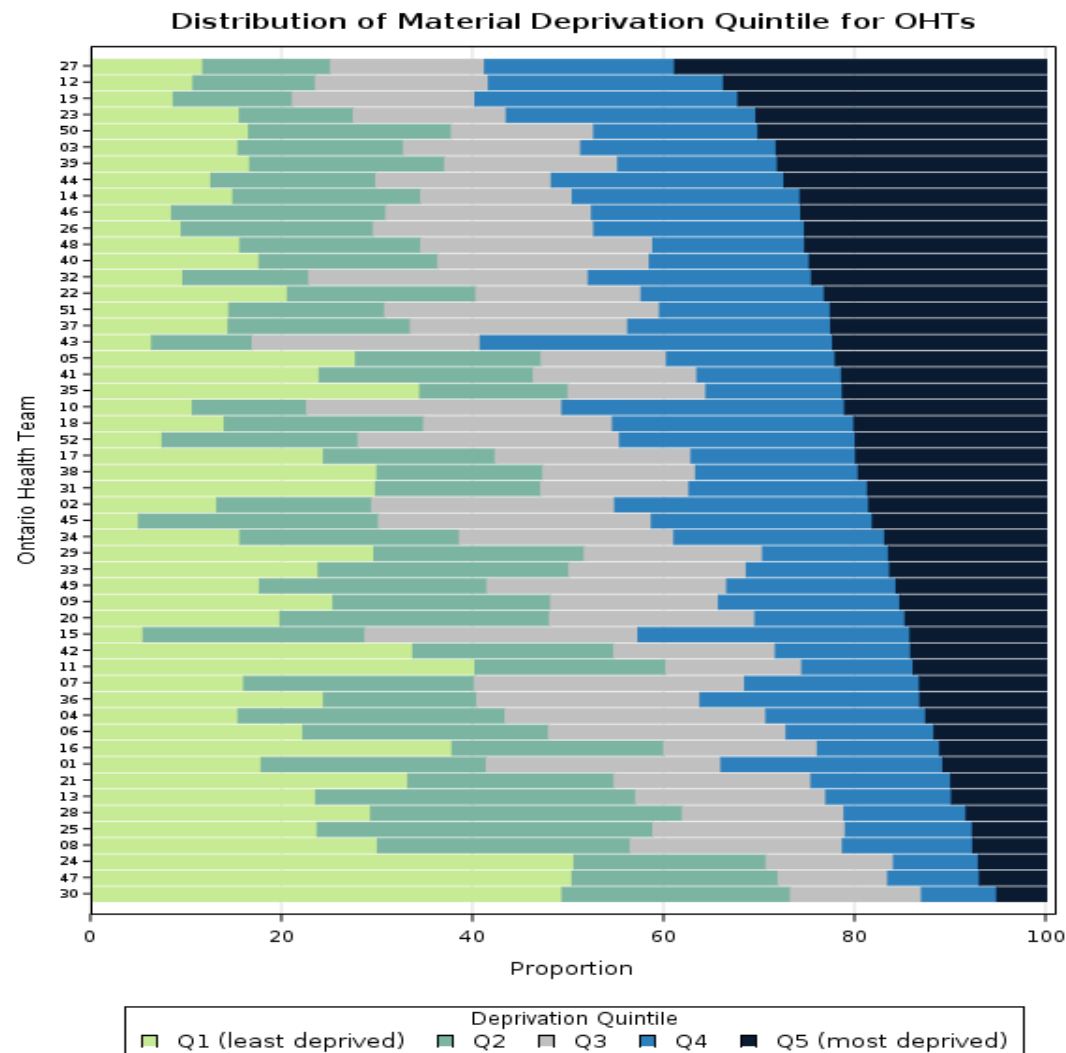- Rate of ED visits for deliberate self-harm

Older/Frail Adults

- 2+ fall-related ED visits (among frail)
- Days at home (among frail)
- Change in ADL long form
- Caregiver distress
- Change in Health Related Quality of Life

Palliative & End-of-Life Care

- Deaths in hospital
- ED visit in the last 30days of life
- Palliative physician home visits in the last 90days of life
- Palliative home care in the last 90days of life
- Days at home in the last 6months of life

HSPN 🌐   ED = Emergency Department; ADL= Activities of Daily Living; MHA = Mental Health and Addictions
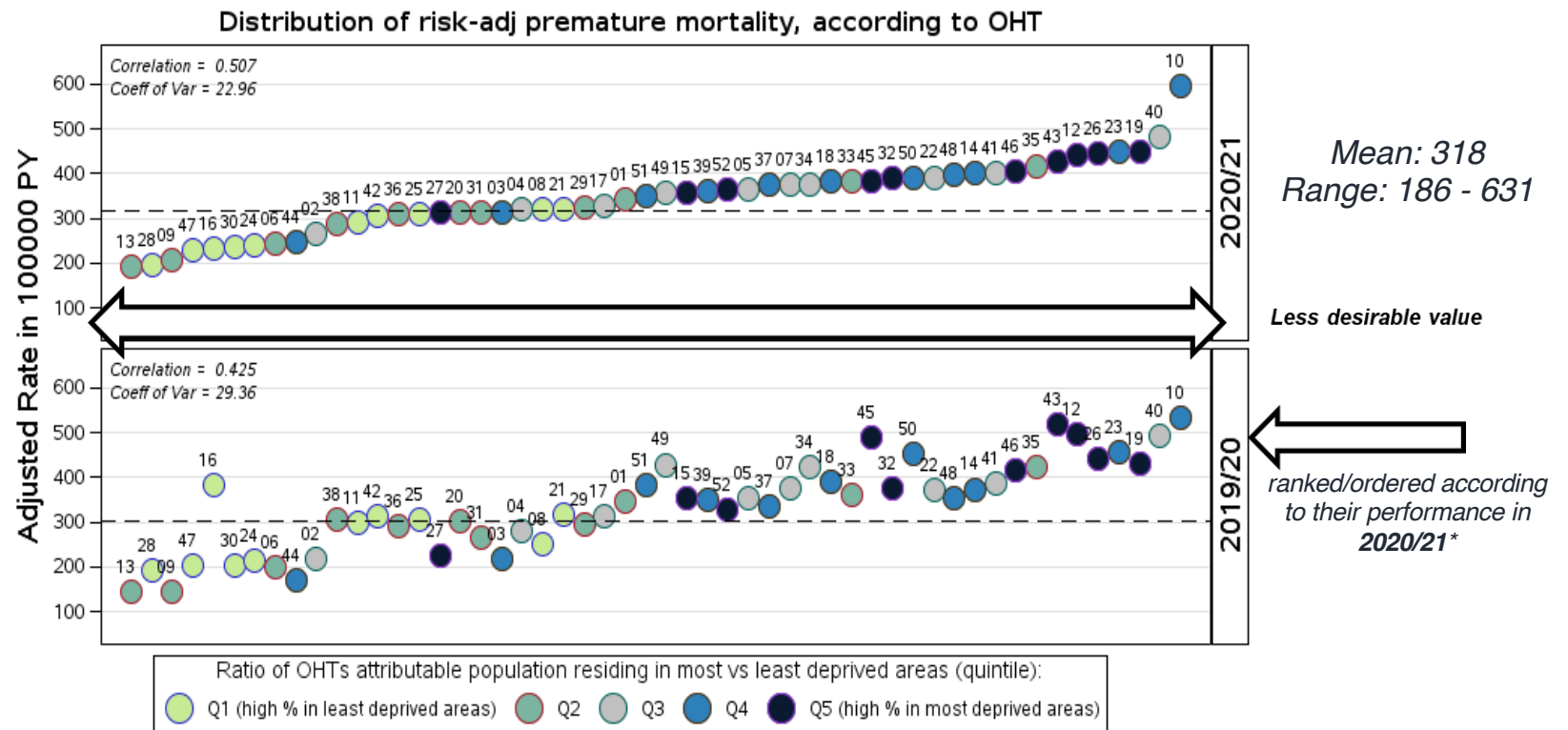
Equity measurement for all indicators:
Material deprivation varies across OHTs

Quintile data: a score of 5 means it is in the most deprived 20% of Ontario

Distribution of Material Deprivation Quintile for OHTs

Deprivation Quintile: Q1 (least deprived), Q2, Q3, Q4, Q5 (most deprived)

For information on ON-Marg, see: Matheson FI and van Ingen T. *2016 Ontario Marginalization Index User Guide.* Toronto, ON. St. Michael's Hospital; 2018. Joint publication with Public Health Ontario.
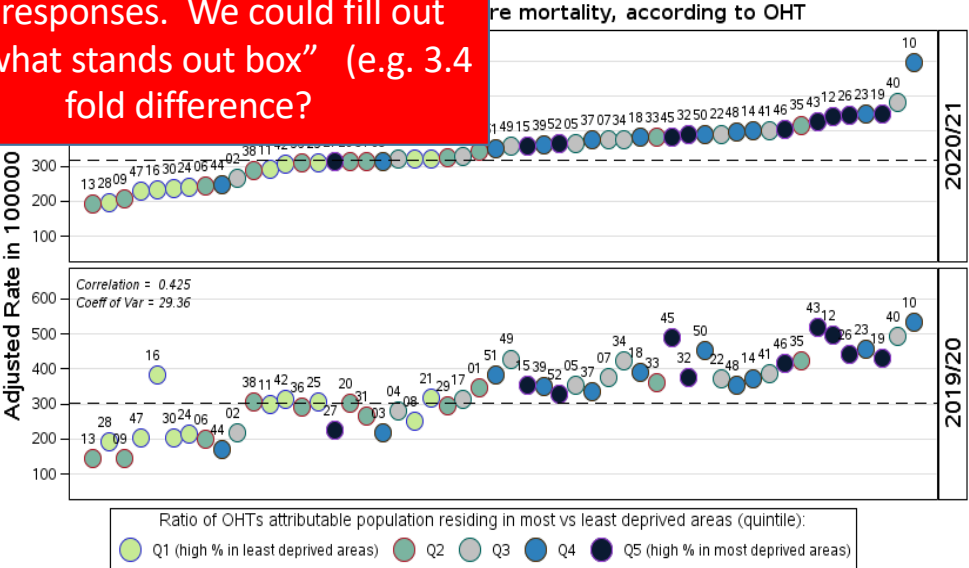
Premature mortality

Distribution of risk-adj premature mortality, according to OHT

Mean: 318
Range: 186 - 631

coloured according to the proportion of their attributable population living in the most vs least deprived neighbourhoods

More desirable value ⟵——————⟶ Less desirable value

ranked/ordered according to their performance in **2020/21***

Ratio of OHTs attributable population residing in most vs least deprived areas (quintile):
○ Q1 (high % in least deprived areas)   ○ Q2   ○ Q3   ○ Q4   ● Q5 (high % in most deprived areas)

Note: Dashed lines reflect total population (crude) average in given year

Correlation with deprivation	Variability across OHTs (same year)
Moderate ($tau_{2020/21}=0.507$)	High ($CV_{2020/21}=23.0$)

HSPN   IC/ES

mortality

re mortality, according to OHT

Adjusted Rate in 100000

2020/21

Correlation = 0.425
Coeff of Var = 29.36

2019/20

Ratio of OHTs attributable population residing in most vs least deprived areas (quintile):
- Q1 (high % in least deprived areas)
- Q2
- Q3
- Q4
- Q5 (high % in most deprived areas)

Note: Dashed lines reflect total population (crude) average in given year

Mean: 318
Range: 186 - 631

Correlation with deprivation	Variability across OHTs (same year)
Moderate ($tau_{2020/21}$=0.507)	High (CV$_{2020/21}$=23.0)

HSPN IC/ES

What stands out?

How does this relate to what is happing in your OHT?

➤ Please respond to **everyone** in the chat box

Hospitalizations for Ambulatory Care Sensitive Conditions
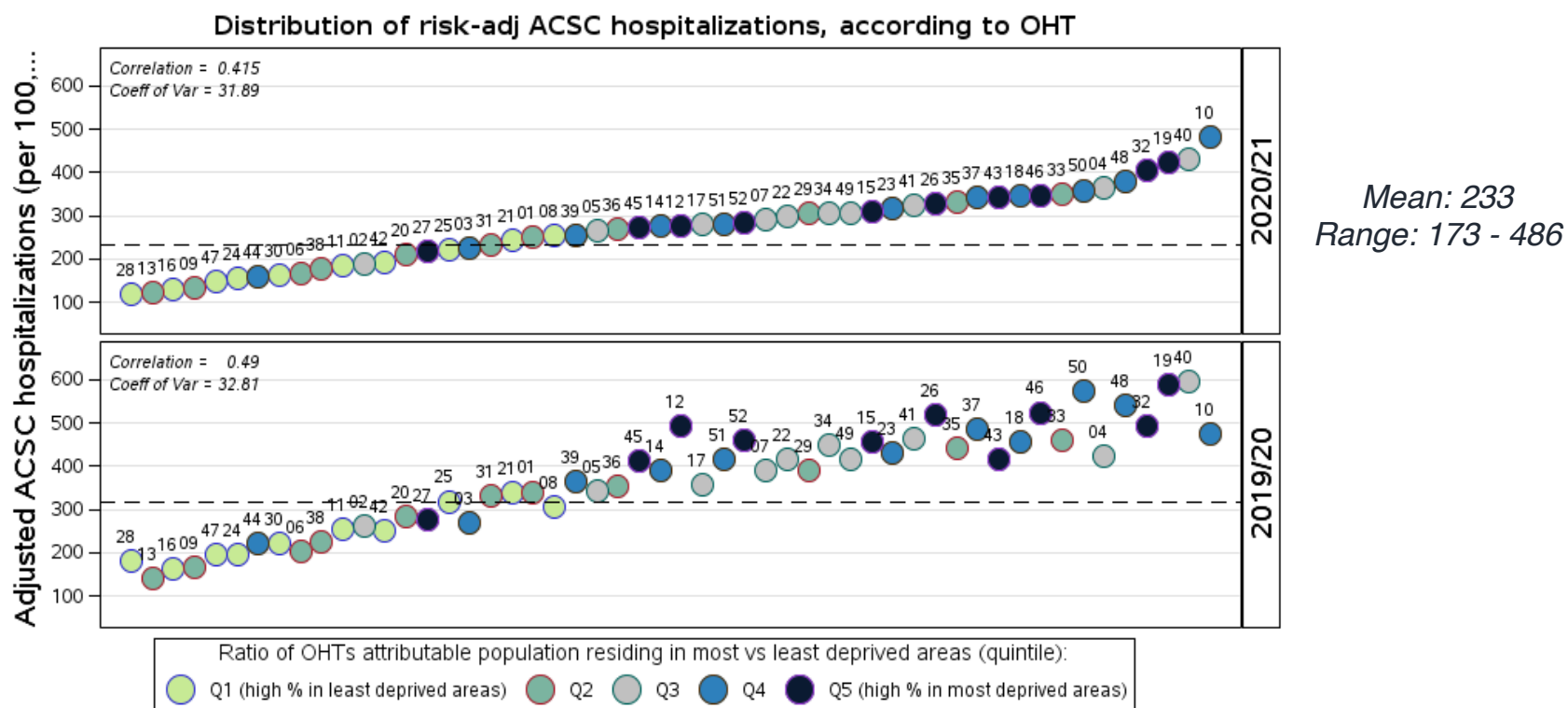
Distribution of risk-adj ACSC hospitalizations, according to OHT

Mean: 233
Range: 173 - 486

Correlation with deprivation	Variability across OHTs (same year)
Moderate ($tau_{2020/21}$=0.41)	High ($CV_{2020/21}$=31.9)

Hospitalizations for Ambulatory Care Sensitive Conditions
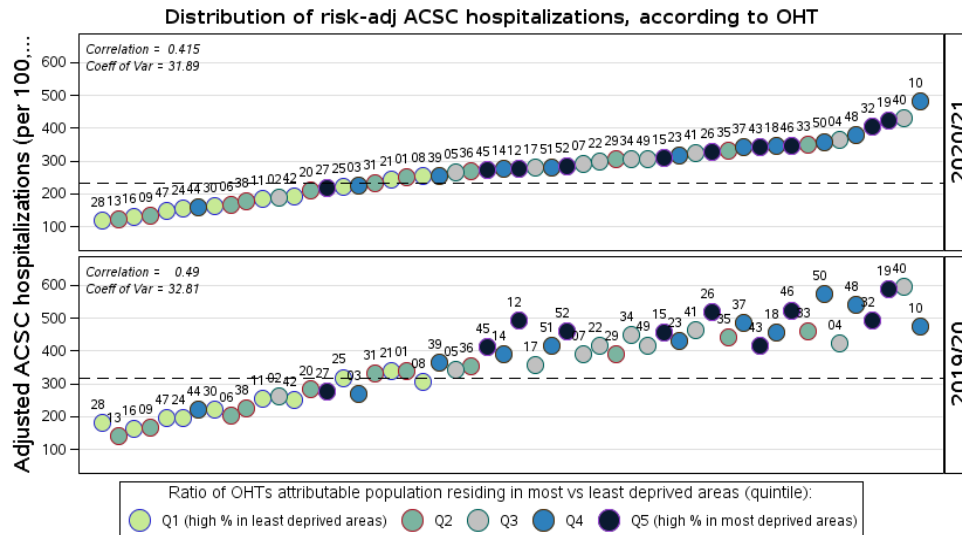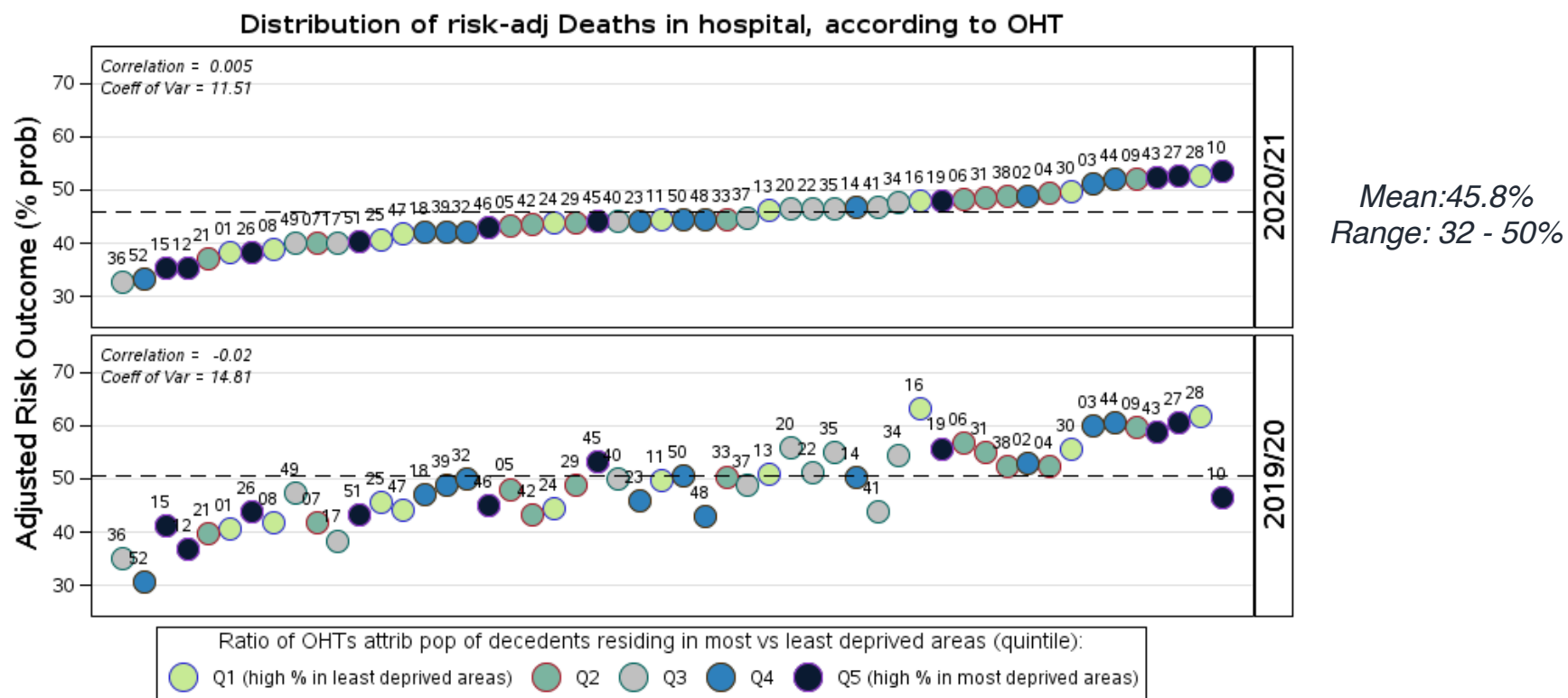

Mean: 233
Range: 173 - 486

Correlation with deprivation	Variability across OHTs (same year)
Moderate ($tau_{2020/21}$=0.41)	High ($CV_{2020/21}$=31.9)

What stands out?

How does this relate to what is happing in your OHT?

➤ Please respond to everyone in the chat box

Deaths in Hospital among who died in fiscal years 2019/20 and 2020/21

Distribution of risk-adj Deaths in hospital, according to OHT

Mean: 45.8%
Range: 32 - 50%

Correlation with deprivation	Variability across OHTs (same year)
Negligible ($tau_{2020/21}$=0.005)	Moderate ($CV_{2020/21}$=11.5)

Deaths in Hospital among who died in fiscal years 2019/20 and 2020/21

What stands out?

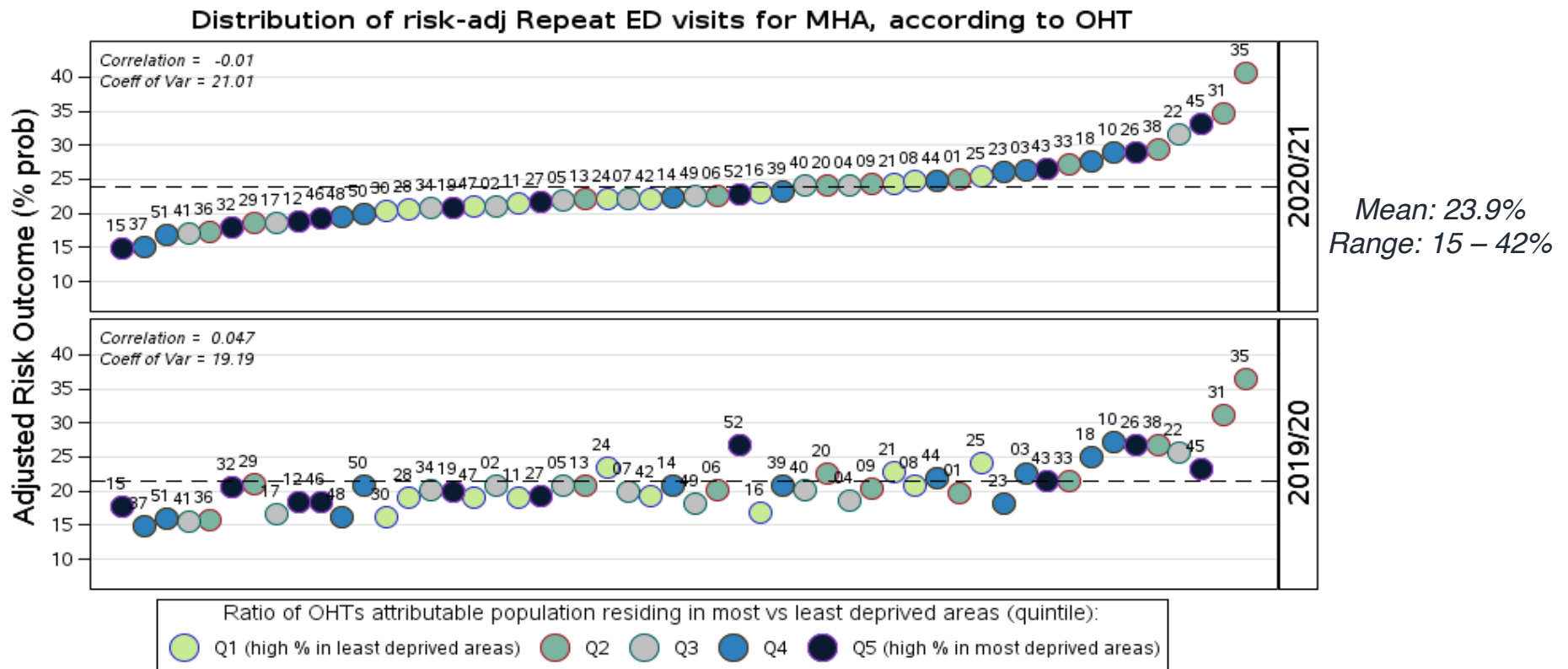Can remove if you don't link the format. If we like it ill add the figures.

We could do this for some but not all indicators

How does this relate to what is happing in your OHT?

➢Please respond to **everyone** in the chat box

HSPN IC/ES

Repeat MHA ED visits with 30 days of first MHA ED visit

Distribution of risk-adj Repeat ED visits for MHA, according to OHT

Mean: 23.9%
Range: 15 − 42%

Note: Dashed lines reflect total population (crude) average in given year

Correlation with deprivation	Variability across OHTs (same year)
Negligible ($tau_{2020/21}$= - 0.01)	High ($CV_{2020/21}$=21.0)

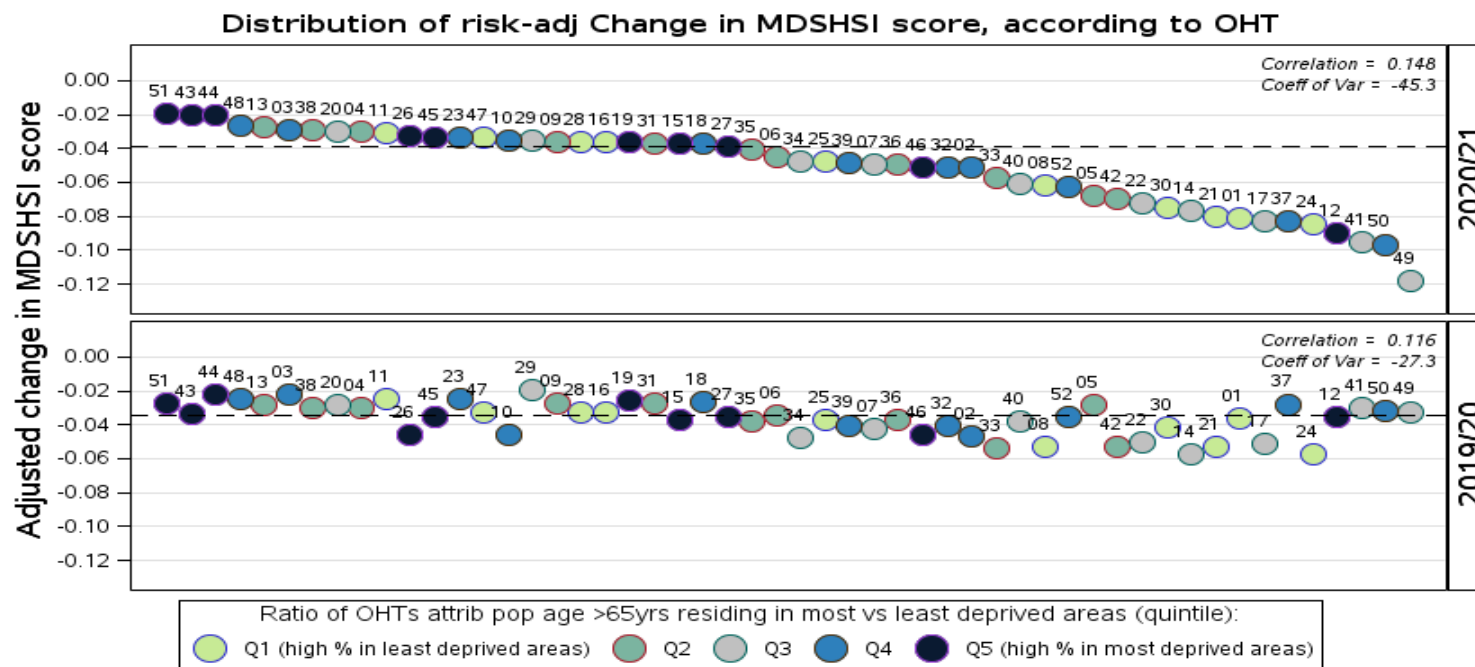# Repeat MHA ED visits with 30 days of first MHA ED visit

Can remove if you don't link the format. If we like it ill ad the figure

What stands out?

How does this relate to what is happing in your OHT?

➢Please respond to **everyone** in the chat box

HSPN IC/ES

Change in Health Status Index among long stay home care clients

Distribution of risk-adj Change in MDSHSI score, according to OHT

Mean change: - 0.4
Range: -0.02 to -0.12

Ratio of OHTs attrib pop age >65yrs residing in most vs least deprived areas (quintile):
Q1 (high % in least deprived areas)   Q2   Q3   Q4   Q5 (high % in most deprived areas)

Note: Dashed lines reflect total population (crude) average in given year

Correlation with deprivation	Variability across OHTs (same year)
Weak ($tau_{2020/21}$= 0.15)	High (CV$_{2020/21}$= -45.0)

Change in Health Status Index among long stay home care clients

What stands out?

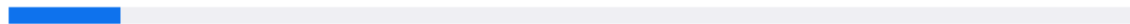## How does this relate to what is happing in your OHT?

➢Please respond to **everyone** in the chat box

HSPN IC/ES

Poll 3

1. Are these indicators still relevant proxy measures for patient/population outcomes? (Single Choice) *

60/60 (100%) answered

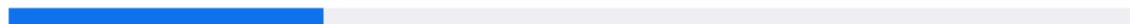Very relevant   (6/60) 10%

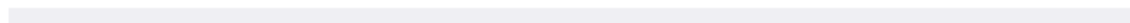Relevant   (37/60) 62%

Somewhat relevant   (17/60) 28%

Not at all relevant   (0/60) 0%

Chat Discussion

What other proxy patient outcome indicators from routinely collected data do think are relevant?

➢Please respond to <mark>**everyone**</mark> in the chat box

Making Comparisons

Current State

- Rank all OHTs by performance, use colour coding to show material deprivation

- OHTs remain anonymous (each know their own ID)

Future State?

- Create peer groupings

- De-anonymize OHTs in reporting

HSPN

Poll 4

1. Is it time to be thinking about peer grouping for OHT comparisons? (Single Choice) *

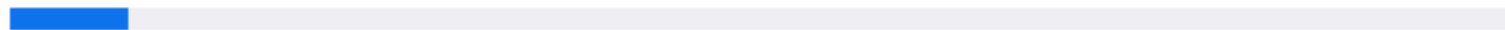65/65 (100%) answered

Yes   (60/65) 92%

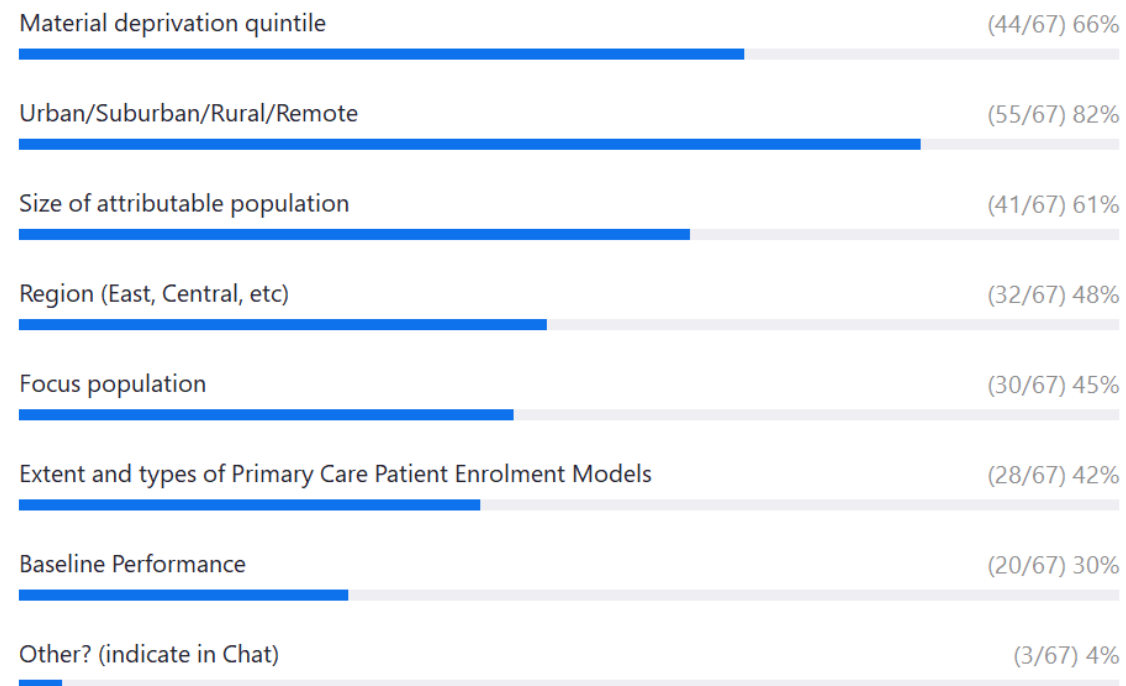No   (5/65) 8%

Poll 5

1. What factors makes another OHT comparable to your OHT (select all that apply) (Multiple Choice)

67/67 (100%) answered

Material deprivation quintile   (44/67) 66%

Urban/Suburban/Rural/Remote   (55/67) 82%

Size of attributable population   (41/67) 61%

Region (East, Central, etc)   (32/67) 48%

Focus population   (30/67) 45%

Extent and types of Primary Care Patient Enrolment Models   (28/67) 42%

Baseline Performance   (20/67) 30%

Other? (indicate in Chat)   (3/67) 4%

Chat Discussion
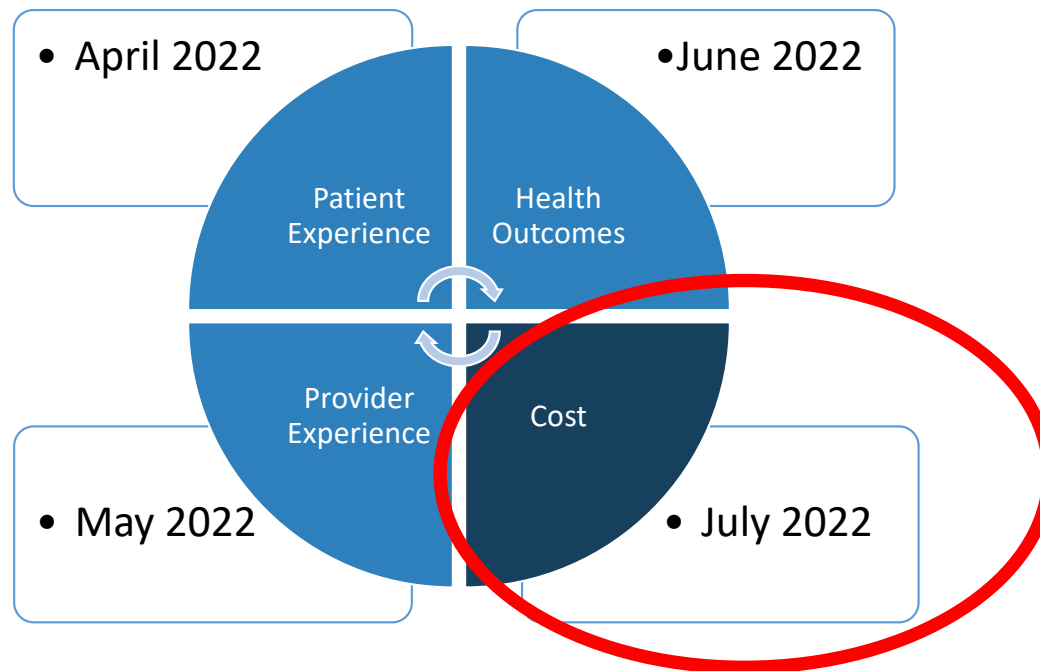
Is it time to de-anonymize OHTs in reports?

What are relevant considerations?

➤Please respond to <mark>everyone</mark> in the chat box

Up Next

HSPN Webinar Series
- 4th Tuesday of the Month: 12:00 – 1:30pm

- April 2022
- June 2022
- May 2022
- July 2022

Patient Experience | Health Outcomes | Provider Experience | Cost

HSPN

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THANK YOU!

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