Demographic differences in reach of an initiative in the healthcare setting to screen and refer patients for social needs.

Rachel Zucker, Kathleen Albers, Cheryl Kelly, Alex Erkenbeck, Allen Cheadle, James Lagrotteria, Christina Clarke, Michelle Odelberg, Sheridan Green

KAISER PERMANENTE®

CCHE

PiER

Learning Objectives

- Discuss relationship between **unmet social needs and health care**

- Introduce **Thrive Local**, a closed-loop referral system to address social needs

- Share information on need resolution for all needs vs. "Big 4" needs

  - Housing, food, transportation, financial

- Discuss **reach** of the Thrive Local initiative across member population

- Identify sequential **drop-offs at different steps of the referral process** for various demographic groups

- Explore **unintended consequences** of differential participation among those receiving assistance through closed-loop referral system

Even before COVID-19, people struggled with unmet social needs

68%

Had at least one social factor they needed help with in the past year.

People reporting unmet social needs are

2x

as likely to rate their health as fair or poor.

97%

Of respondents want medical providers to ask about social factors during care visits.

1 in **4 Americans**

Had a social factor they say was a barrier to health in the past year.

2019 Social Needs in America Study (national data)

Thrive Local: Kaiser Permanente's Initiative to Address Members Social Needs

Thrive Local is a program **for connecting members to community-based programs and services**.

The platform (powered by Unite Us) includes:

Resource Directory
Online directory of local community organizations and social service providers. Includes eligibility criteria, hours of operation, location, and other key information. Search and filter functions help narrow choices to appropriate resources.

Community Network
Many organizations participate with Kaiser Permanente in community networks allowing us to coordinate care by making electronic social referrals with each other and tracking outcomes.

THRIVE LOCAL

COMMUNITY NETWORK
Community organizations participate in network and use Unite Us platform to make and track electronic social referrals with Kaiser Permanente and each other

RESOURCE DIRECTORY
Online platform allows users to search for local community resources to share with members

UNITE US

4

What happens once a member has a service case initiated?

MRN found in Thrive Local

One (or more) "referrals" created

CBO "accepted referral"

One (or more) "referrals" closed & resolved

A member's information is transmitted to Thrive Local when the Thrive Local button is clicked within a patient's medical record in EPIC.

Once MRN is added to Thrive Local, the KP user/medical provider can send one or many referrals to one or many CBOs.

Upon receiving a referral, a CBO can accept, review/pending, reject or forward a referral based on CBO eligibility criteria, availability, and ability to contact the member.

After accepting a referral, the CBO updates service as "closed and resolved" when services provided, or "unresolved", if unable to contact patient or provide services.

Methods

Three data sources:

- Membership data
- Referral data from Unite Us
- Social needs screening data across a variety of screeners used within the Kaiser Permanente health system
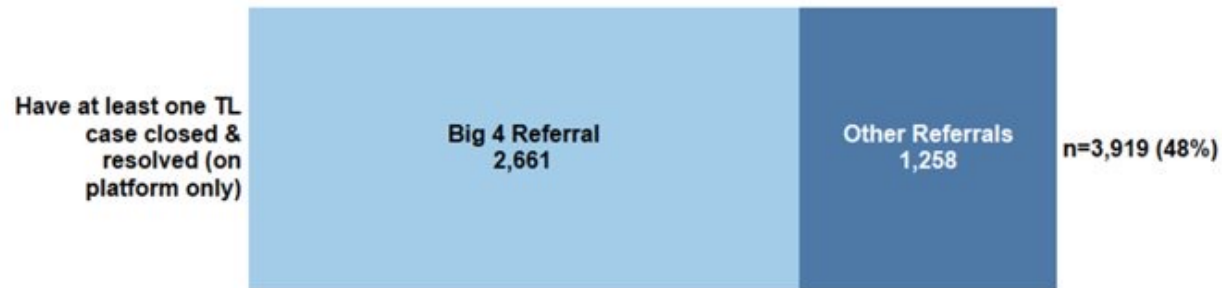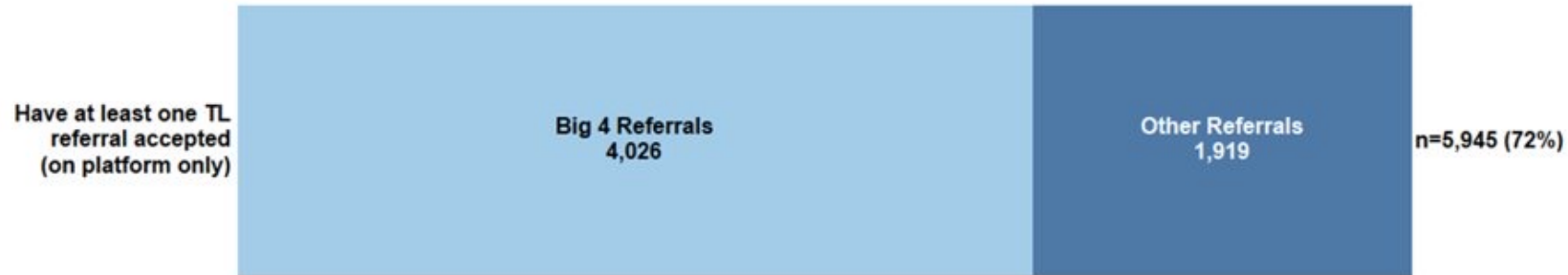
Reminder:

- "Big 4 Needs" include Financial, Housing, Food, and Transportation

Limitations:

- Current data spans from January 2020 to May 2022, though each region implemented the platform at different times.

- This is a snapshot - numbers can change as people move through the system. Participants were given a minimum of 2 weeks to capture their referral's progress prior to categorization.

- The screening and referral initiatives are not always deployed in the same places and patient populations. Some people in Thrive Local did not have a social needs screener and people who have a social need documented that are not in Thrive Local.

Referral Initiation to Completion

Have at least one TL referral started (on platform only)

Big 4 Referrals 6,008 | Other Referrals 2,240 | n=8,248

Have at least one TL referral accepted (on platform only)

Big 4 Referrals 4,026 | Other Referrals 1,919 | n=5,945 (72%)

Have at least one TL case closed & resolved (on platform only)

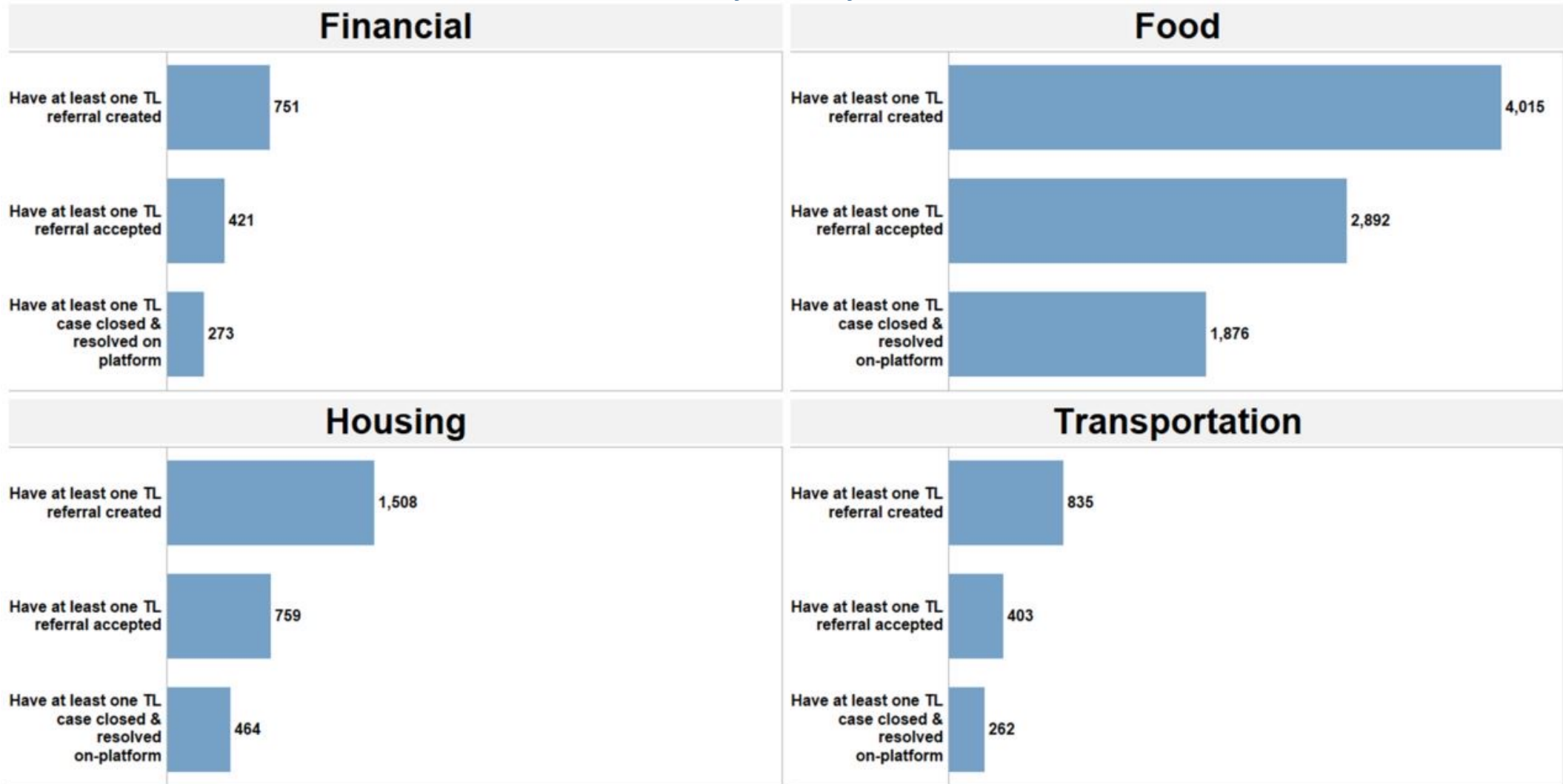Big 4 Referral 2,661 | Other Referrals 1,258 | n=3,919 (48%)
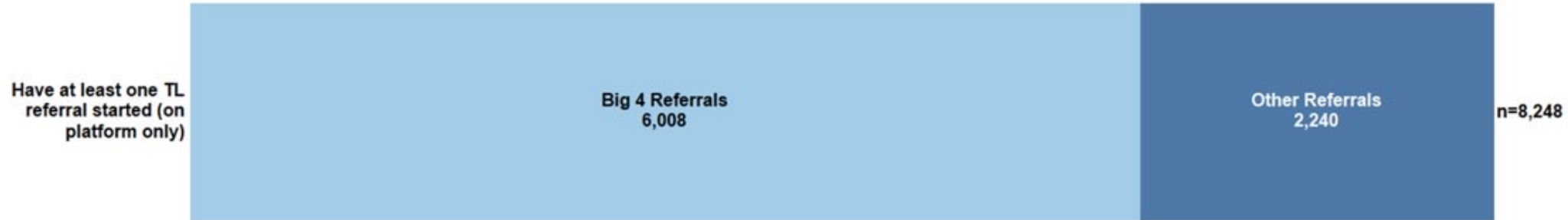
Not everyone who has a referral started moves through the system successfully.
For those with any type of need, about three-quarters of individuals have a referral accepted by a CBO. Just under half have a closed loop referral that has been resolved.
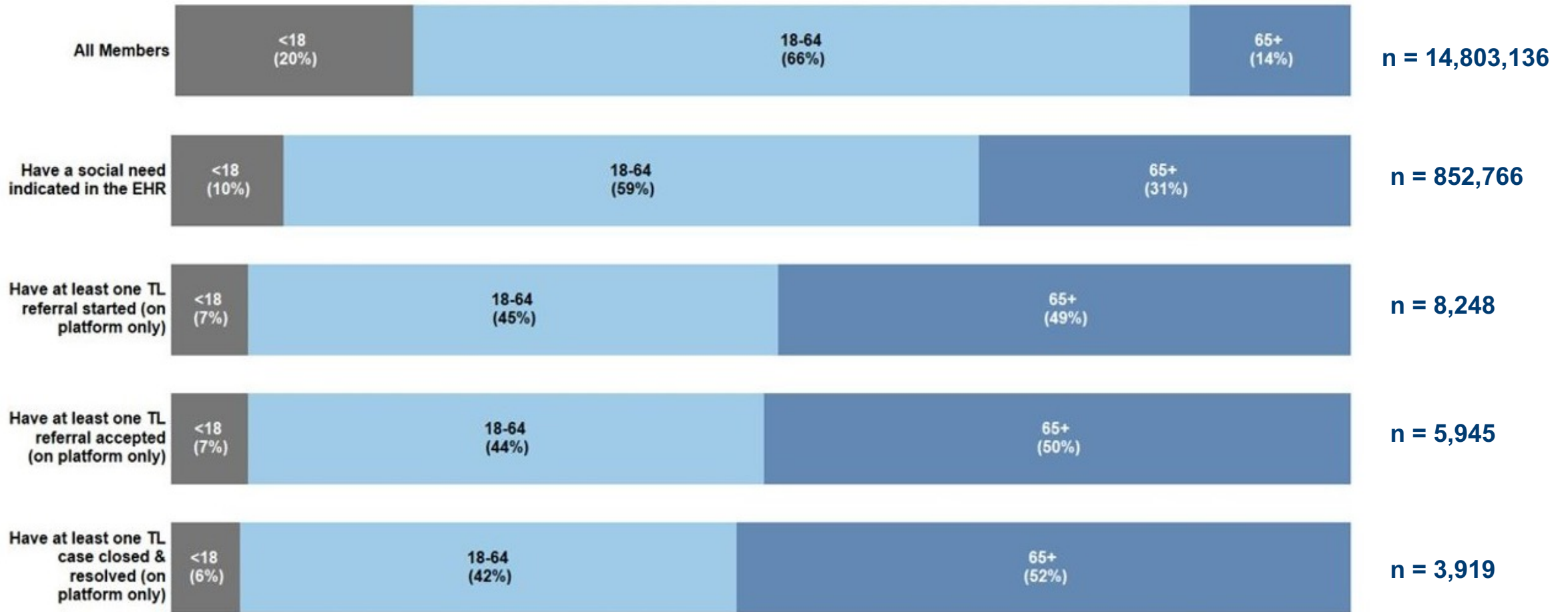
Voltage Drop Among the Big 4 Needs

January 2020-May 2022

Financial

Have at least one TL referral created	751
Have at least one TL referral accepted	421
Have at least one TL case closed & resolved on platform	273

Food

Have at least one TL referral created	4,015
Have at least one TL referral accepted	2,892
Have at least one TL case closed & resolved on-platform	1,876

Housing

Have at least one TL referral created	1,508
Have at least one TL referral accepted	759
Have at least one TL case closed & resolved on-platform	464

Transportation

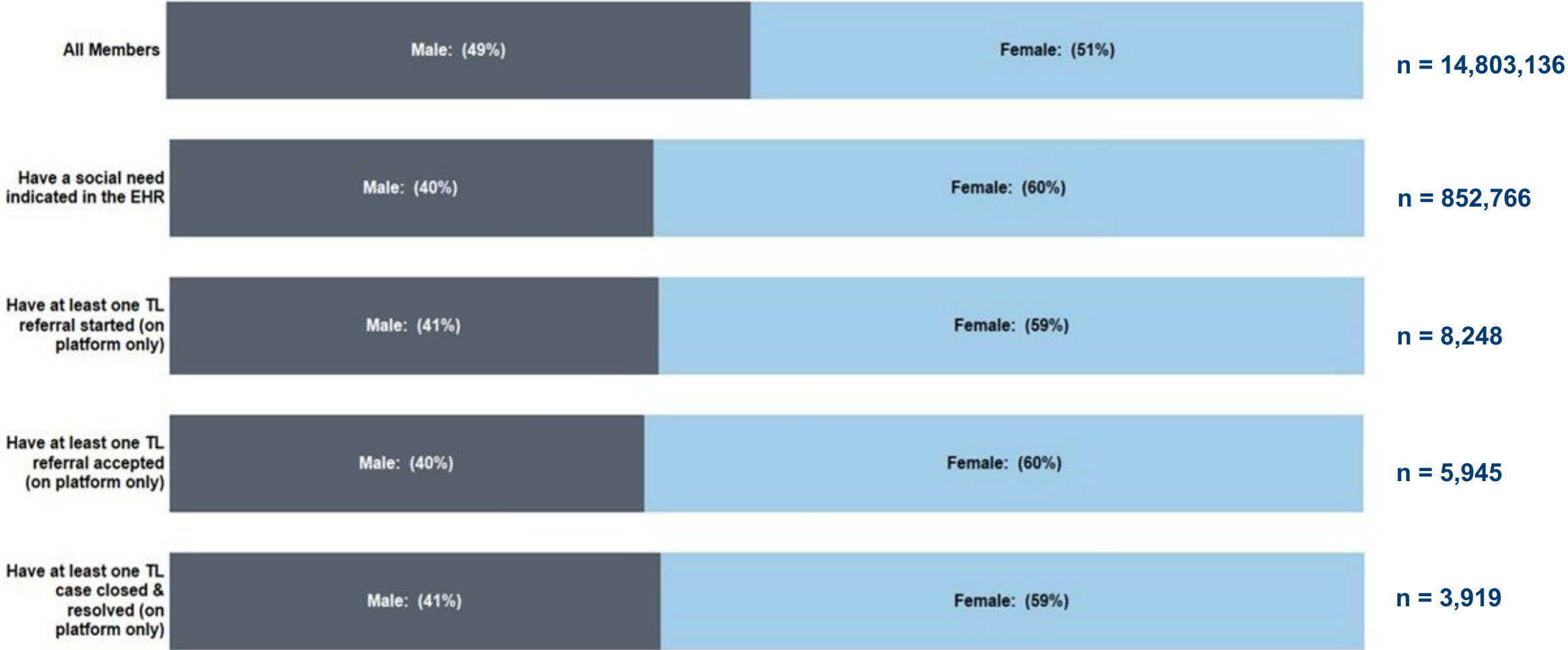|	
Have at least one TL referral created	835
Have at least one TL referral accepted	403
Have at least one TL case closed & resolved on-platform	262

Transportation and housing saw the biggest voltage drop in referrals reaching closed status (31%); **Food referrals** were the most likely to be successfully closed (46%).
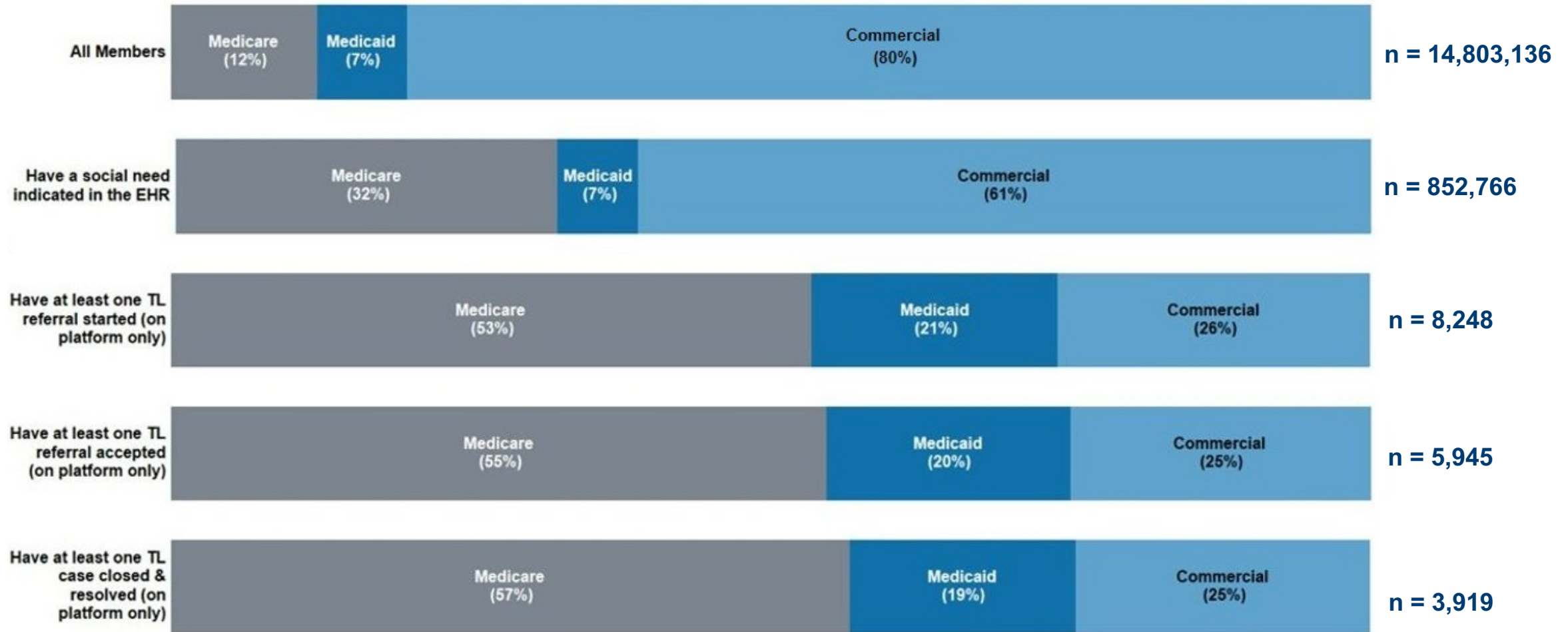
Movement Through Thrive Local System by Age

	<18	18-64	65+	
All Members	<18 (20%)	18-64 (66%)	65+ (14%)	n = 14,803,136
Have a social need indicated in the EHR	<18 (10%)	18-64 (59%)	65+ (31%)	n = 852,766
Have at least one TL referral started (on platform only)	<18 (7%)	18-64 (45%)	65+ (49%)	n = 8,248
Have at least one TL referral accepted (on platform only)	<18 (7%)	18-64 (44%)	65+ (50%)	n = 5,945
Have at least one TL case closed & resolved (on platform only)	<18 (6%)	18-64 (42%)	65+ (52%)	n = 3,919

18-64 year olds make up 59% of those with social needs but only 45% of Thrive Local referrals and 42% of those who receive help from Thrive Local

Movement Through Thrive Local System by Gender

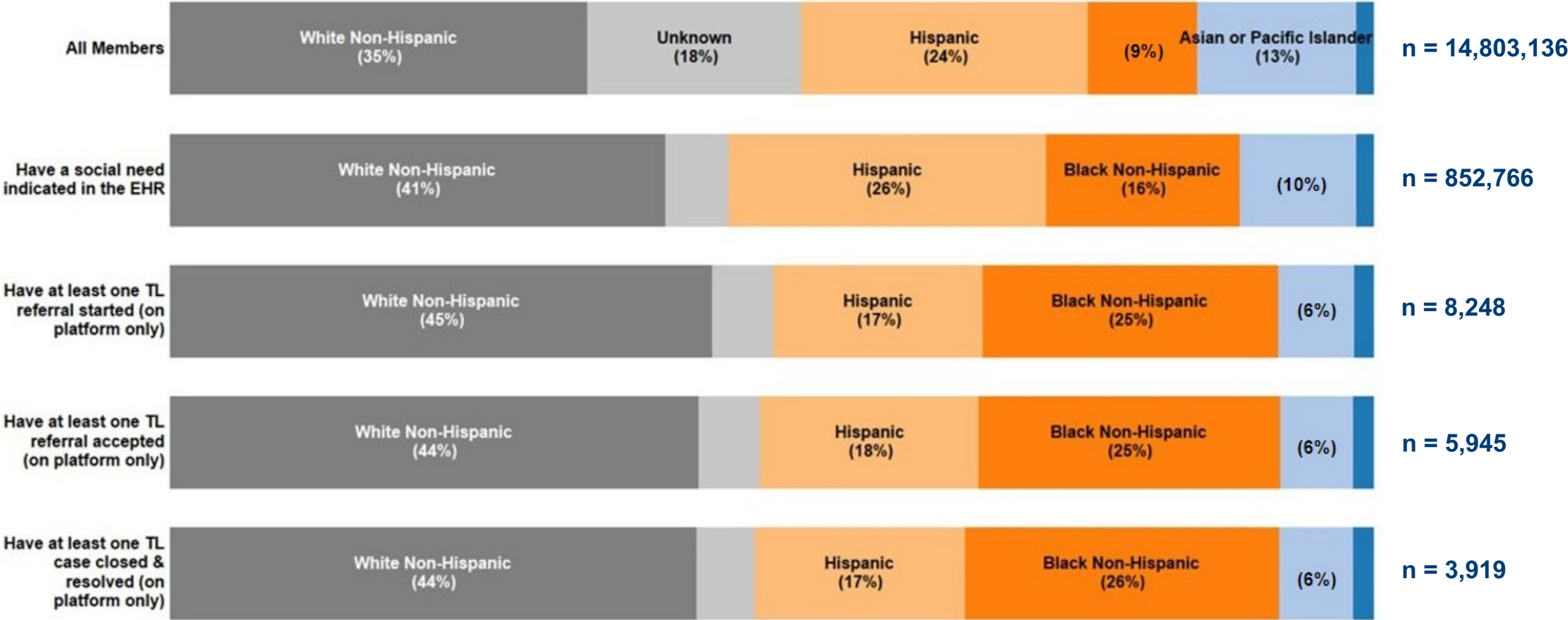|		n = 14,803,136
All Members	Male: (49%) Female: (51%)	
Have a social need indicated in the EHR	Male: (40%) Female: (60%)	n = 852,766
Have at least one TL referral started (on platform only)	Male: (41%) Female: (59%)	n = 8,248
Have at least one TL referral accepted (on platform only)	Male: (40%) Female: (60%)	n = 5,945
Have at least one TL case closed & resolved (on platform only)	Male: (41%) Female: (59%)	n = 3,919

60% of females have a social need. Males and females appear to be making it through the Thrive Local system at equal rates.

Movement Through Thrive Local by Insurance Type

|			
All Members	Medicare (12%)	Medicaid (7%)	Commercial (80%)	n = 14,803,136
Have a social need indicated in the EHR	Medicare (32%)	Medicaid (7%)	Commercial (61%)	n = 852,766
Have at least one TL referral started (on platform only)	Medicare (53%)	Medicaid (21%)	Commercial (26%)	n = 8,248
Have at least one TL referral accepted (on platform only)	Medicare (55%)	Medicaid (20%)	Commercial (25%)	n = 5,945
Have at least one TL case closed & resolved (on platform only)	Medicare (57%)	Medicaid (19%)	Commercial (25%)	n = 3,919

Commercial members make up 61% of social needs, but only 26% of started and 25% of resolved Thrive Local referrals.

Movement Through Thrive Local by Race & Ethnicity

All Members	White Non-Hispanic (35%)	Unknown (18%)	Hispanic (24%)	(9%) / Asian or Pacific Islander (13%)	n = 14,803,136

All Members — White Non-Hispanic (35%), Unknown (18%), Hispanic (24%), (9%), Asian or Pacific Islander (13%) — n = 14,803,136

Have a social need indicated in the EHR — White Non-Hispanic (41%), Hispanic (26%), Black Non-Hispanic (16%), (10%) — n = 852,766

Have at least one TL referral started (on platform only) — White Non-Hispanic (45%), Hispanic (17%), Black Non-Hispanic (25%), (6%) — n = 8,248

Have at least one TL referral accepted (on platform only) — White Non-Hispanic (44%), Hispanic (18%), Black Non-Hispanic (25%), (6%) — n = 5,945

Have at least one TL case closed & resolved (on platform only) — White Non-Hispanic (44%), Hispanic (17%), Black Non-Hispanic (26%), (6%) — n = 3,919

Hispanics make up 26% of those with social needs but only 17% of Thrive Local referrals and resolved cases.

Screening of Kaiser Permanente Members by Race
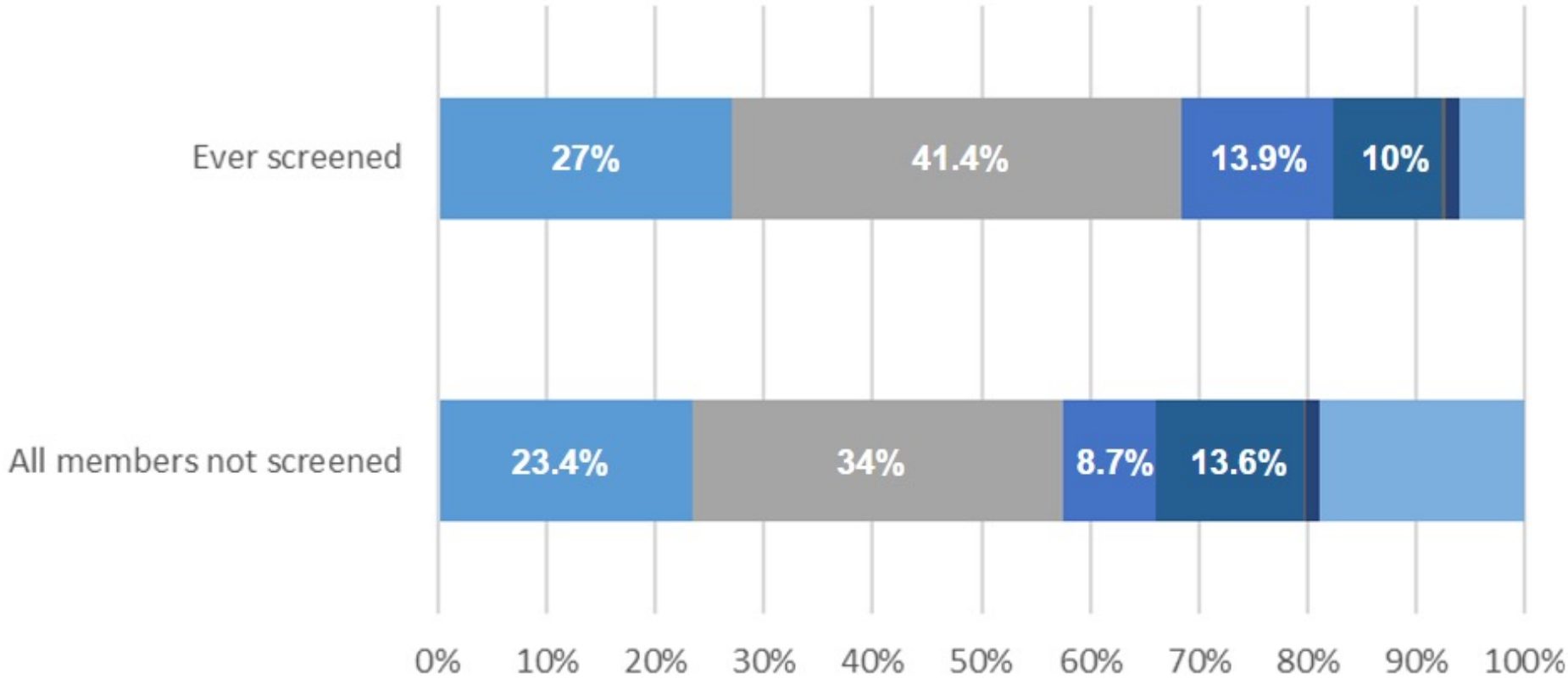
41.4% of members who were screened were white, compared to 34% of the non-screened group.
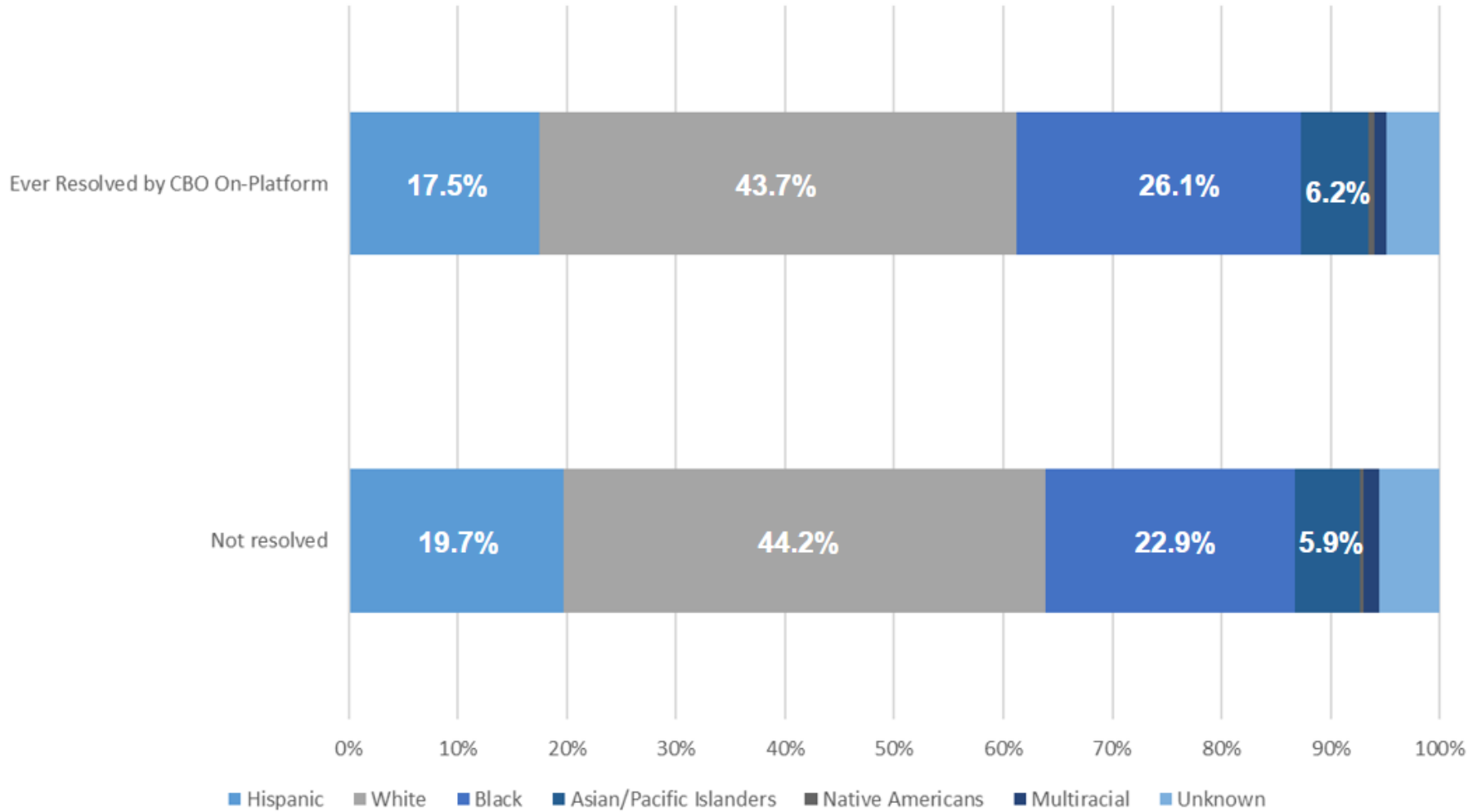
p-value: <0.001

Thrive Local Referrals Resolved vs. Not Resolved by Race & Ethnicity

There are smaller but still statistically significant differences by race and ethnicity in the groups who had their referrals resolved vs. not resolved.

p-value: 0.053

Demographic differences exist in how people move through Thrive Local

Over-represented in **a positive social need compared to the general population:**

- Older
- Female
- Non-Hispanic black, Hispanic, non-Hispanic white
- On Medicare

Under-represented in **an on-platform referral started compared to those with a positive social need:**

- Younger (18-64)
- Hispanic, Asian or Pacific Islander
- Commercial insurance

Under-represented in **an on-platform resolved referral to those with a referral started:**

- Younger (18-64)
- Asian or Pacific Islander
- On Medicaid or Commercial Insurance

More investigation is needed but the following could be contributing to these differences:

- Robust screening protocols and outreach in some patient groups but not in others
- Non-uniform implementation of the Thrive Local system across regions – i.e., targeting certain clinics, specific patient groups
- Different availability of community-based organizations to meet certain patient populations' needs
- Different use patterns of healthcare among patient populations

Takeaways:

- It is critically important to understand how social needs initiatives reach and meet the needs of different demographic groups.

- Group differences were clearly observed in how people progress through the program. It's important to examine the differences to identify potential systemic issues and areas for implementation improvements.

  - Differences may relate to cultural, individual, program implementation, and other influences.

  - Focused outreach on populations during the drop-offs identified could improve equitable program implementation and resolution of social needs.

Thank you to the CCHE and PiER teams

 Allen Cheadle, Maggie Jones, Juno Matthys, Erin Hertel, Diana Charbonneau

 Sheridan Green, Cheryl Kelly, Kathleen Albers, James Lagrotteria, Christina Clarke, Michelle Odelberg, Alex Erkenbeck, Rachel Zucker

Contact information

Allen Cheadle
Allen.D.Cheadle@kp.org

Sheridan Green
Sheridan.X.Green@kp.org

Rachel Zucker
Rachel.X.Zucker@kp.org