

# Leveraging SDOH Data to Improve Care Management and Reducing the Cost of Care

Presented By:

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ASSOCIATION



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ASSOCIATION

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## OUR MISSION

Our mission is to provide a community for like-minded professionals to come together for networking, education, and industry collaboration to stay ahead and advance their careers.

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THREE COMMUNITIES



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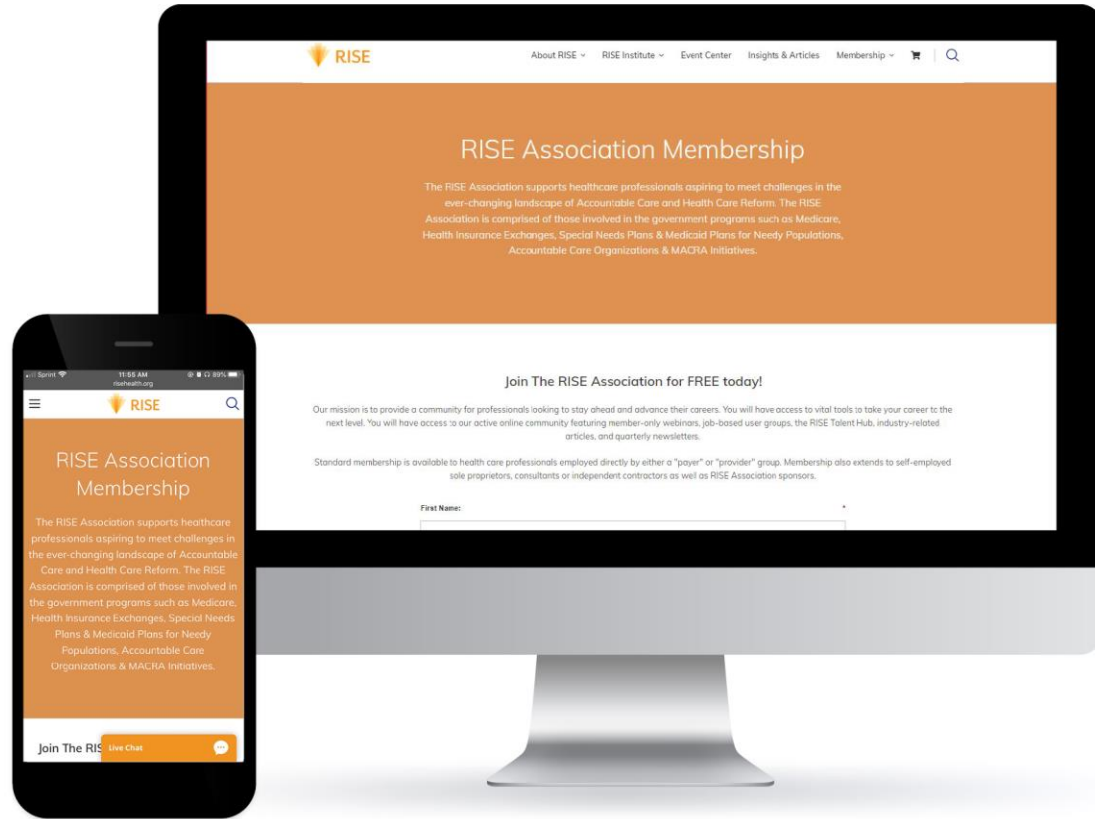
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# Ciox Overview

Ciox is a **technology-driven** healthcare company that empowers greater health by simply and securely connecting health care decisionmakers with the data and hidden insights in medical records.

Ciox assists Health Plans by improving the way healthcare information is shared and acted upon, resulting in **better quality of care** and **improved outcomes** for patients and health plans.

- **50M+** record request from 1M+ annual unique requestors
- **Number 1** in market experience and coverage with access to **3 out of 4** top hospitals in the U.S
- **Only one** in the market using historical provider data points to improve targeting outcomes

## Clinical Data Acquisition & Insights (CDAI)

Multi-channel retrieval to maximize yield and minimize provider abrasion coupled with risk adjustment coding and member-centric data management



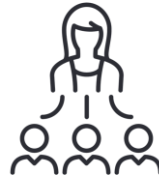
**1st**

Over 60% of ALL Medicare Risk Adjustment Charts retrieved



**40+**

years of health information management experience



**700,000+**

providers touched nationwide



**120+**

Health plans served



**50M+**

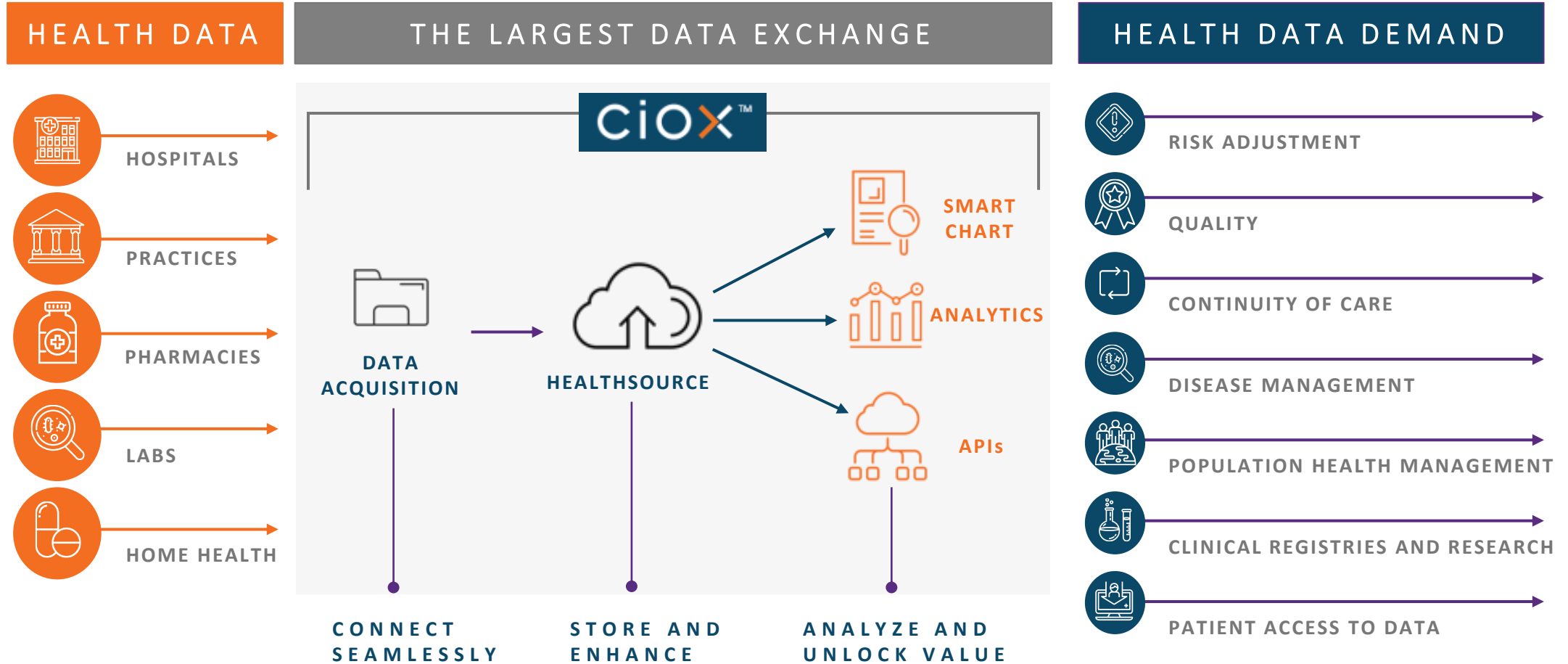
health information requests fulfilled annually



**3 out of 4**

Top U.S. hospitals served with embedded HIM experts

# Ciox Health: The nation's largest health data exchange



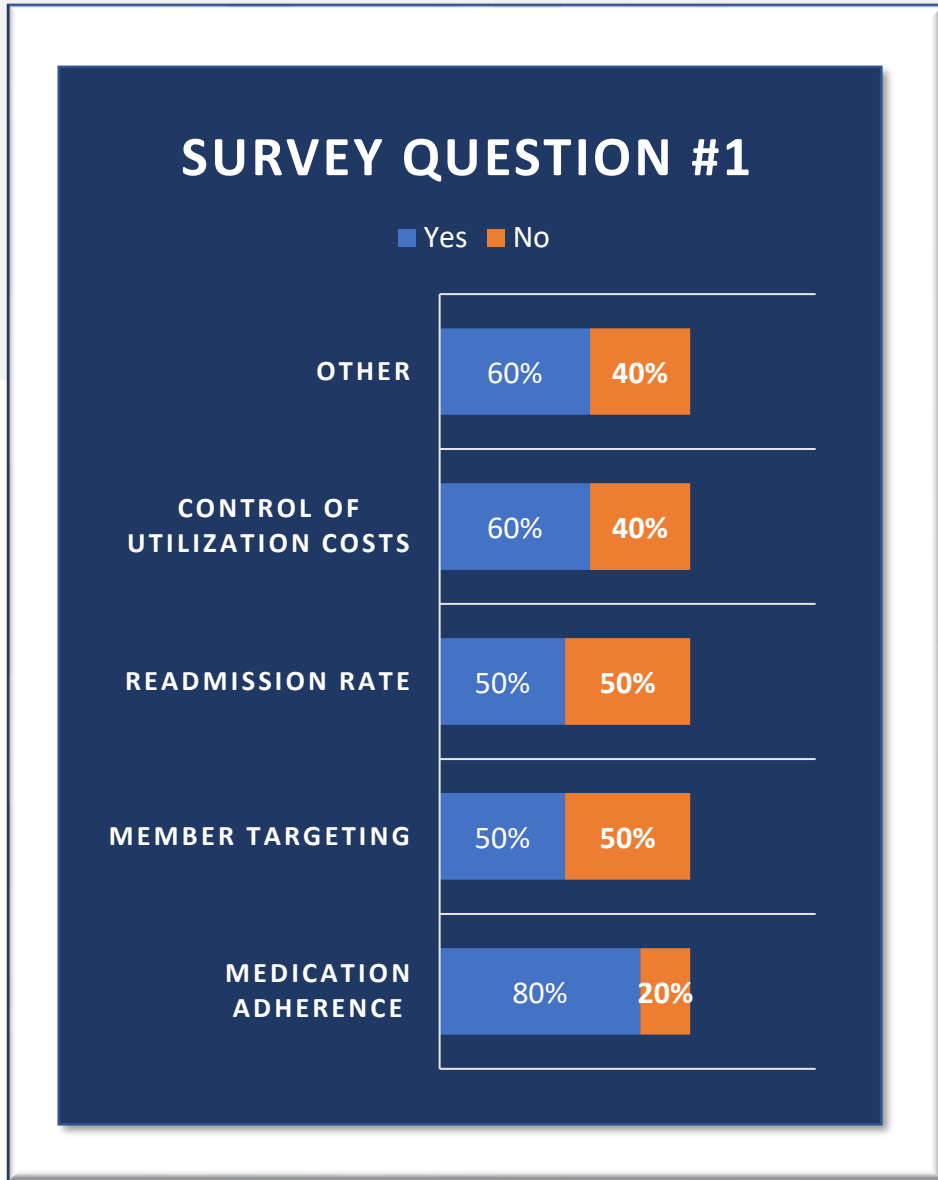
Our vision is to enable ubiquitous access to health information and unlock inherent value across the health plan value chain.

# Poll Question #1



# Survey Question:

Please identify use cases below to support your SDOH strategy



## Percentage Breakouts

- 80%  Medication Adherence
- 50%  Member targeting for virtual care assessment or IHA
- 50%  Readmission Rate
- 60%  Control of Utilization Costs
- 60%  Other (Other options besides the above)

# Leveraging SDOH Data to Improve Care Management and Reducing the Cost of Care

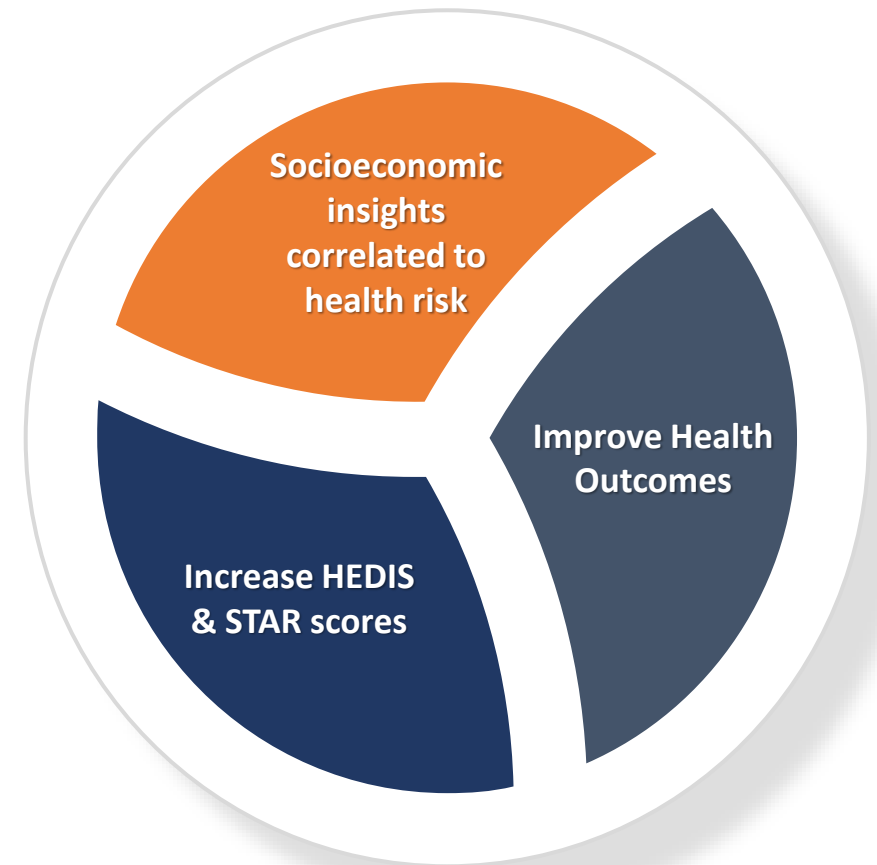
Social determinants of health attributes are derived from public records and other regulated data sources can identify social risk factors that would otherwise go undiscovered and contribute to higher utilization.

**Great care management can lead to healthier members**

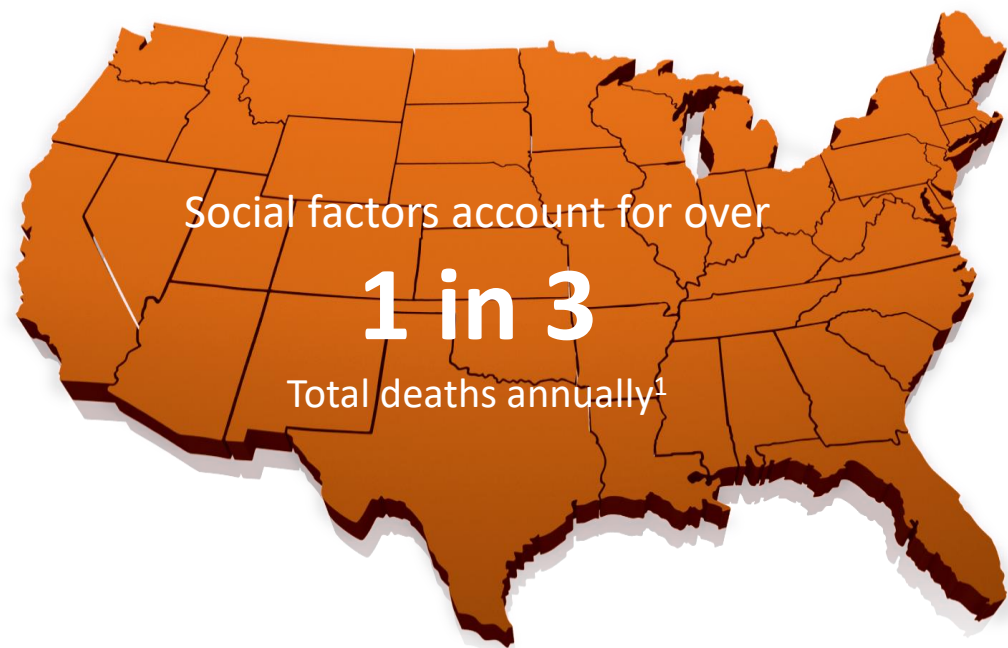
## Today's Topics:

- Socioeconomic insights correlated to health risk
- SDOH can assist in increasing HEDIS & STAR Scores
- Improve health outcomes and lower admin cost
- Predict an individual's medication adherence
- Member's motivation level impacts wellness outcomes

## Value of SDOH to Healthcare Payers



# Why are SDOH Important?



*“Data and research indicates that the social determinants of health have a higher impact on population health than healthcare and that a higher ratio of social service spending versus healthcare spending results in improved population health.”<sup>2</sup>*

## In the United States, 1 in 10 people:

- Live in poverty,<sup>1</sup> and many cannot afford things such as: healthy foods, health care, and housing.
- Don't have health insurance.<sup>1</sup>

## Relocation

- 35M people move annually<sup>1</sup>
- 1.3M people move out of state annually<sup>1</sup>
- 40% of movers never notify the Post Office<sup>1</sup>

## Status Changes: Name, Divorces, Marriages

- 1.5M changes in marital status each year<sup>1</sup>
- 50K applications for name changes each year<sup>1</sup>
- 3.9M children are born annually<sup>1</sup>
- 2.7M people die annually<sup>1</sup>
- Not all are reported to SSA

## Phone Numbers & Emails

- The U.S. has over 350M active cell numbers<sup>1</sup>
- Total active phone numbers exceeds U.S. population

## Employment Status

- 21M employment changes annually<sup>12</sup>

# SDOH can affect the member's health

## Housing

- Members that are worried about where they are going to sleep next are less likely to worry about their health/wellness concerns
- Members who are homeless are at higher risk for certain illnesses due to their unstable living environment<sup>3</sup>

## Income

- Can Impact: Educational attainment, healthcare affordability, housing, and access to healthy food
- “According to a 2018 report from the Commonwealth Fund, patients with low income are more likely to experience chronic illnesses like obesity, hypertension, and diabetes”<sup>3</sup>

## Food Security

- Food security most prominently affects a patient's ability to manage or stave off chronic illness
- “According to Feeding America, 66 percent of those Feeding America serves had to choose between food access and medical care.”<sup>3</sup>

## Utilities

- Paying for utilities can be a challenge and are what make a home livable.
- February 2020 study stated, “16 percent of the patients getting a shut-off warning letter from their utilities company.” Were screened for stress in their wellness exam<sup>3</sup>

# Poll Question #2

# Survey Question:

## How are you using SDOH data today?



### Percentage Breakouts

- 90%  Care Management
- 50%  Risk Adjustment
- 10%  Bid & Financial accruals
- 30%  General Analysis/Research
- 30%  Other (Other options besides the above)



# Socioeconomic insights correlated to health risk

## Great Care Management = Healthier patients

### Example 1:

Increased obesity can be linked to income below poverty level, receipt of food stamps, and lower income.

- Study concluded that lower income levels equated to poorer food quality and less consumption of healthy foods like fruits and vegetables.<sup>4</sup>

### Example 2:

Members with the least amount of education or who were unemployed had the most sleep complaints.

- Those who were unemployed or income >\$75K a year also had significantly more sleep complaints than those who were gainfully employed and income \$75K + annually.
- Lack of sleep can weaken the immune system, increase obesity, and put us at risk of developing diabetes and heart disease.<sup>4</sup>

### Industry Tip:

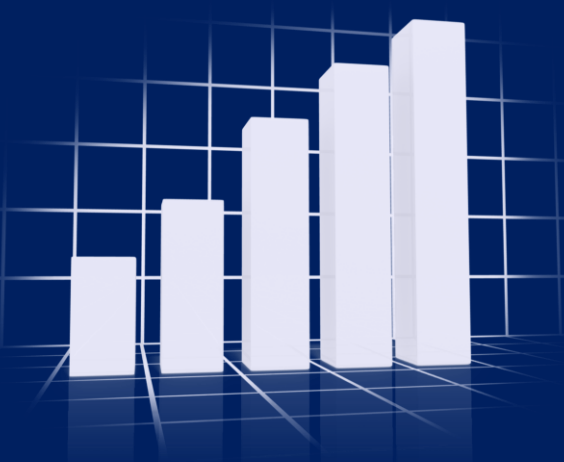
- Create a motivation score of a member's risk of not being motivated to manage his/her own health
- **Education/Inform:** enhance education regarding disease prevention and living life with vitality. Specifically, diabetes and Hypertension (HTN) precautions and dietary restrictions to reduce risk of ESRD earlier in life.<sup>4</sup>

# SDOH can assist in increasing HEDIS & STAR Score

Over 190 million people are enrolled in health plans that report HEDIS results<sup>1</sup>

Action	Example/Recommendation
Improve Outreach to patients	<ul style="list-style-type: none"> <li>• <b>Example:</b> Woman between 50-74 should have at least 1 mammogram in the past 2 years. Due to disparities, lack of education, and language barrier low participate</li> <li>• <b>Recommendation:</b> A simple postcard reminder (i.e. Spanish) is cheap and effective.<sup>5</sup></li> </ul>
Increase participation in patient experience measures	<ul style="list-style-type: none"> <li>• <b>Example:</b> HEDIS ratings are tied to % of patients in a health plan who have completed the CAHPS survey</li> <li>• <b>Recommendation:</b> Research indicates that a phone follow-up can improve CAHPS response rates by 4 to 20% points compared to mail alone<sup>5</sup></li> </ul>
Reduce hospital readmissions	<ul style="list-style-type: none"> <li>• <b>Example:</b> Patient Outcome Scores, such as: Observed-to-Expected Readmissions and/or Expected ED Utilization</li> <li>• <b>Recommendation:</b> Readmission Risk Score built on socioeconomic attributes can help predict which patients are at highest risk for readmission and which social determinant barriers are contributing most to that risk<sup>5</sup></li> </ul>
Ensure network pharmacies meet medication management measures	<ul style="list-style-type: none"> <li>• <b>Example(s):</b> High-risk medication use, diabetes treatment, medication adherence</li> <li>• <b>Recommendation:</b> Use SDOH data to identify members who are most likely not to adhere to their medication treatment plan<sup>5</sup></li> </ul>

# Improve health outcomes and keep administrative cost lower



Improve....	How and Why
<b>Member’s diets and access to healthy food</b>	<ul style="list-style-type: none"> <li>Recently a Health Plan created a “Fresh Food Pharmacy” program that has been delivering fresh foods to their patients in the community as well as offering cooking lessons and other social support to encourage cooking. Their CEO indicated that they have already seen associated decreases in diabetes rates.<sup>6</sup></li> </ul>
<b>Member’s physical environment</b>	<ul style="list-style-type: none"> <li>“Silver Sneakers” type of programs help keep members motivated and engaged in their wellness plan</li> <li>AARP has a goal to have a sponsored fitness park in every state<sup>6</sup></li> </ul>
<b>Member’s access to apps &amp; Internet</b>	<ul style="list-style-type: none"> <li>A Health Plan &amp; Comcast teamed up and provided Internet services for less than \$10 a month to low-income family<sup>6</sup></li> <li>Covid has made internet services a must in this environment</li> </ul>
<b>Use technology to bridge the gaps</b>	<ul style="list-style-type: none"> <li>Using new apps or tech partners such as Uber, can help get patients to much needed visits. Uber ride to/from the provider is cheaper than an in-home assessment. Health plan’s goal is to have the PCP and their member engage</li> </ul>
<b>Financial incentives to address SDOH</b>	<ul style="list-style-type: none"> <li>Money talks</li> <li>Incentives for both the provider &amp; member can drive participation.<sup>6</sup> Risk-sharing has become for popular since both parties share part of the risk</li> </ul>

# Predict an individual's medication adherence

## Example:

- Tecla did a study on how SDOH may have a potential impact to high disease burden conditions such as:
  - Schizophrenia and bipolar disorders
  - Antipsychotic medication is an essential part of treatment for these conditions and if not adhered to can cause major issues.<sup>7</sup>
- What they observed was employment had a large impact and that education and social support could be additional support services to help members to adhere to their medication schedules<sup>7</sup>

## Call to action:

- Create adhere score that can provide predictive insight into members who are most at-risk adherence issues

## SDOH metrics for use to support adherence targeting<sup>8</sup>:

- # of office visits & inpatient LOS
- Geographic spread in pharmacy visits
- Pharmacy claims: Co-payments, brand name status, mail order use
- Income and education levels

# Member's motivation level impacts wellness outcomes

## Example:

- Members and their children who don't go in for wellness checks could run a risk of a missed serious condition and not treated could lead to increase financial burden
  - Nearly **two-thirds** of children experience some sort of social determinant of health that affects their opportunity for wellness, according to separate data from Nemours Children's Health System<sup>9</sup>
- Housing **goes beyond** just having a home
  - Unclean homes or poor-quality living arrangements can also lead to serious health conditions

## Impact:

- Lack of motivation doesn't just affect the member
- Lack of motivation to care of one's child can overall stunt a child's social and health opportunity, which can have an adverse effect on wellness into adulthood<sup>9</sup>

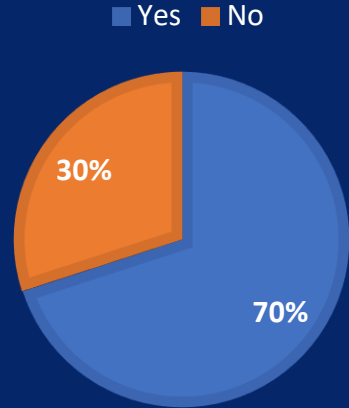
## Call to Action:

- Explain the purpose for asking about SDOH and confirm that these screenings are part of standard appointment protocols<sup>9</sup>
- Communicate to your members about child programs/services and family support groups to engage both parent and child<sup>9</sup>

# Poll Question #3



## SDOH DATA IN ON ROADMAP



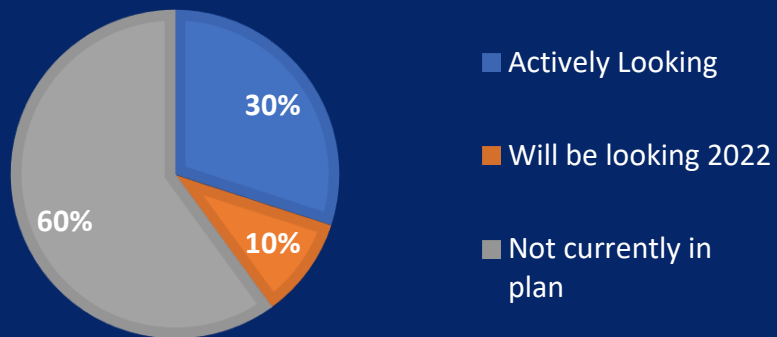
# Survey Questions:

Are SDOH data and solutions on your product development roadmap?

**80%**  Yes

**20%**  No

## SEARCHING FOR A SDOH VENDOR



Are you searching for a vendor to support your SDOH needs?

**30%**  Actively looking now

**10%**  Will be looking in 2022

**60%**  Not currently in strategic plan

# Leveraging SDOH Data to Improve Care Management and Reducing the Cost of Care

Healthcare should encompass the member's whole life, not just treating an underlying condition or making a diagnosis. In today's world providers can have many patients to see and less time to spend with each one.

Identifying specific layers of social complexities attributing to one poor health is key to effectively treating a patient. Thus, using SDOH data can tremendously improve intervention, outcomes, and overall administrative costs.

- **Socioeconomic insights:**

- Correlated to health risks
- Can assist in increasing HEDIS & STAR Scores
- Improve health outcomes and lower administrative cost
- Predict an individual's medication adherence

- **Call to Action:**

- Start reviewing what data elements you are receiving already, such as: Zip Code, Education, Home status, Income, and internet accessibility. Then incorporate them into your care management strategy



Health Plan providers can get a copy of the recent SDOH Survey findings, scan the QR Code or go to <https://ravencsi.com/r/r/SDoH> and complete the short application\*



THANK YOU

*\*Survey results available until end of September '21*

# References

1. [Health Insurance Coverage in the United States: 2017 \(census.gov\)](#)
2. <https://catalyst.nejm.org/doi/full/10.1056/CAT.17.0312>
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4. [The Impact of Socioeconomic Status on Health | Psychology Today](#)
5. [Improve HEDIS Scores and Star Ratings by Improving Patient Care | LexisNexis Risk Solutions](#)
6. [Want To Improve The Social Determinants Of Health? Here Are 8 Solutions \(forbes.com\)](#)
7. [Predictors of medication adherence among patients with severe psychiatric disorders: findings from the baseline assessment of a randomized controlled trial \(Tecla\) | BMC Psychiatry | Full Text \(biomedcentral.com\)](#)
8. [Predicting Adherence to Chronic Disease Medications in Patients with Long-term Initial Medication Fills Using Indicators of Clinical Events and Health Behaviors \(harvard.edu\)](#)
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