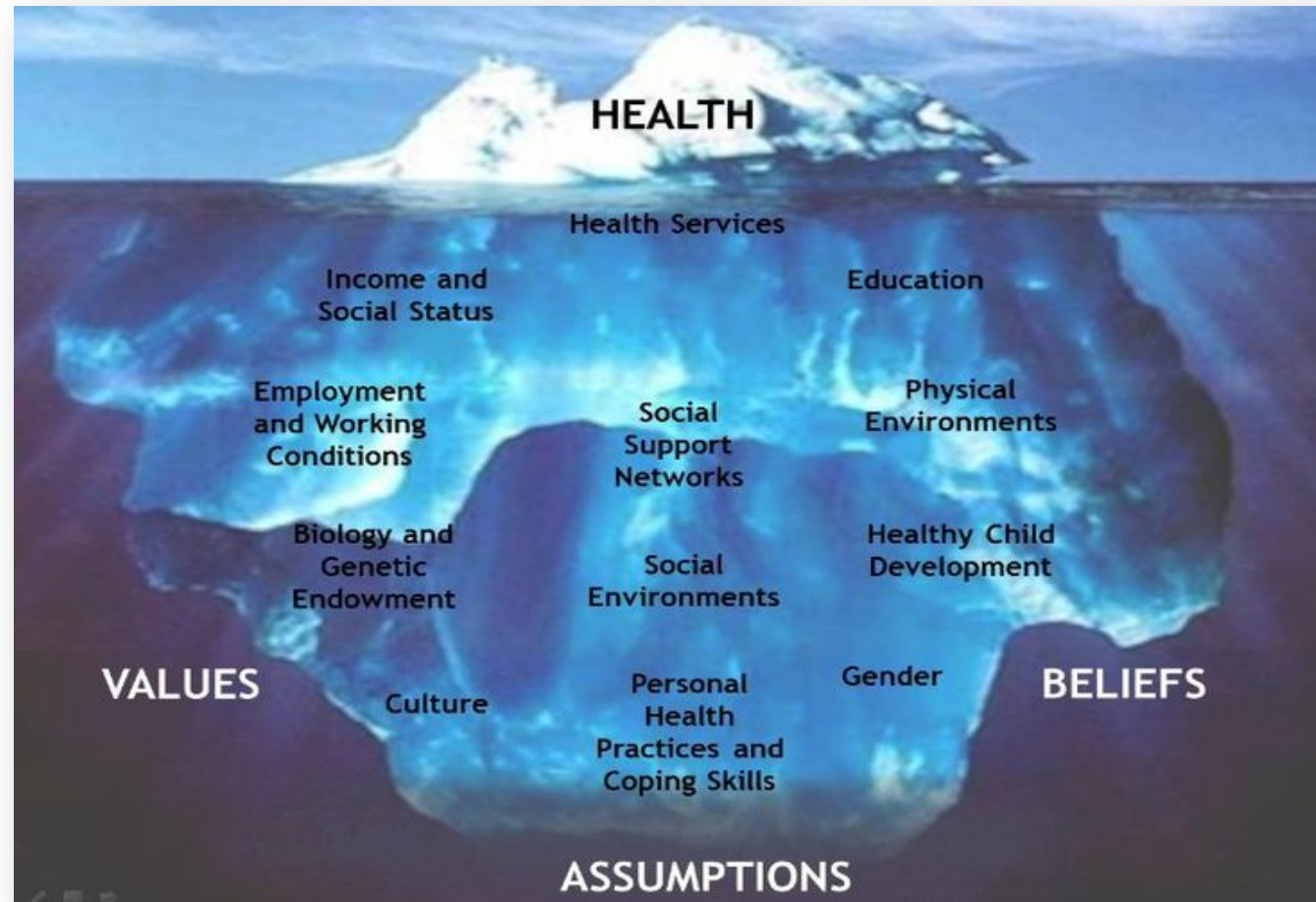


# Operationalizing Social Determinants of Health



Nicole Friedman, MS  
Briar Ertz-Berger, MD, MPH

## Patient Story: Shannon McGrath



Shannon McGrath, pictured with her son Rayder, says it has been a lot easier to make her medical appointments recently, thanks to help from a "patient navigator" — assigned to her by Kaiser Permanente — who arranged McGrath's transportation.

*Kristian Foden-Vencii/OPB*

# Today's Objectives

**Background on Kaiser NW and Building the Business Case**

**New Tools**

**New Interventions**

**Measuring Impact**

**What's Next**

# KP Northwest Region Profile



## Who we care for...

- Small and large employers, individuals, and Medicare and Medicaid members
- 560,000 medical members
- 245,000 dental members

## Who delivers care...

- 11,000 employees
- 1,033 physicians
- 140 dentists
- 57 optometrists

## Where we deliver care...

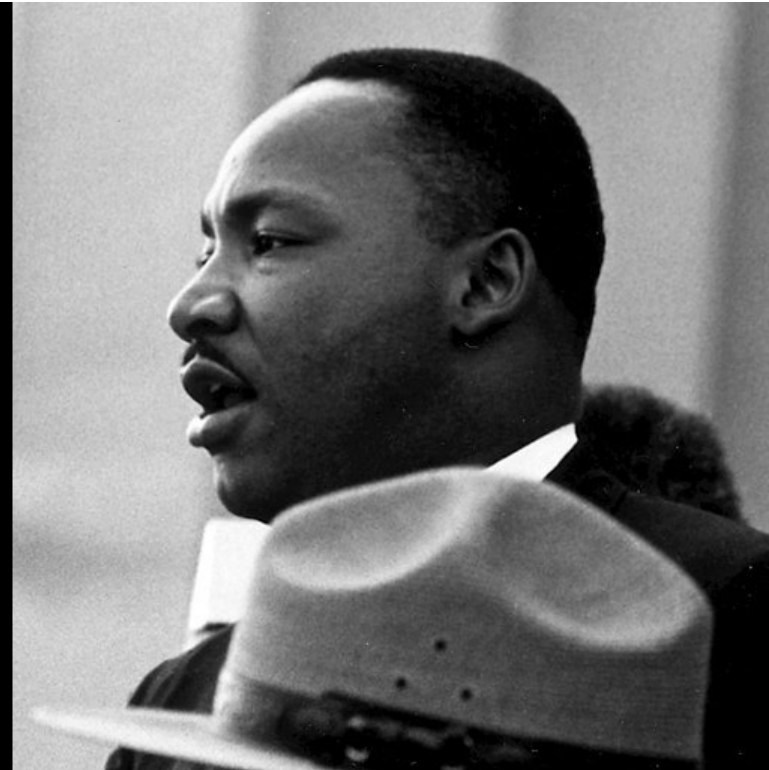
- 2 KP-owned hospitals and 4 contract hospitals
- 33 KP medical offices and 11 contract medical offices
- 17 dental offices

# Addressing Social, Economic and Behavioral Health: The right thing to do and a business imperative

“  
OF ALL THE  
FORMS OF  
INEQUALITY,  
**INJUSTICE IN  
HEALTH CARE**  
IS THE MOST  
SHOCKING AND  
INHUMAN.

”

*Dr. Martin Luther King, Jr.*





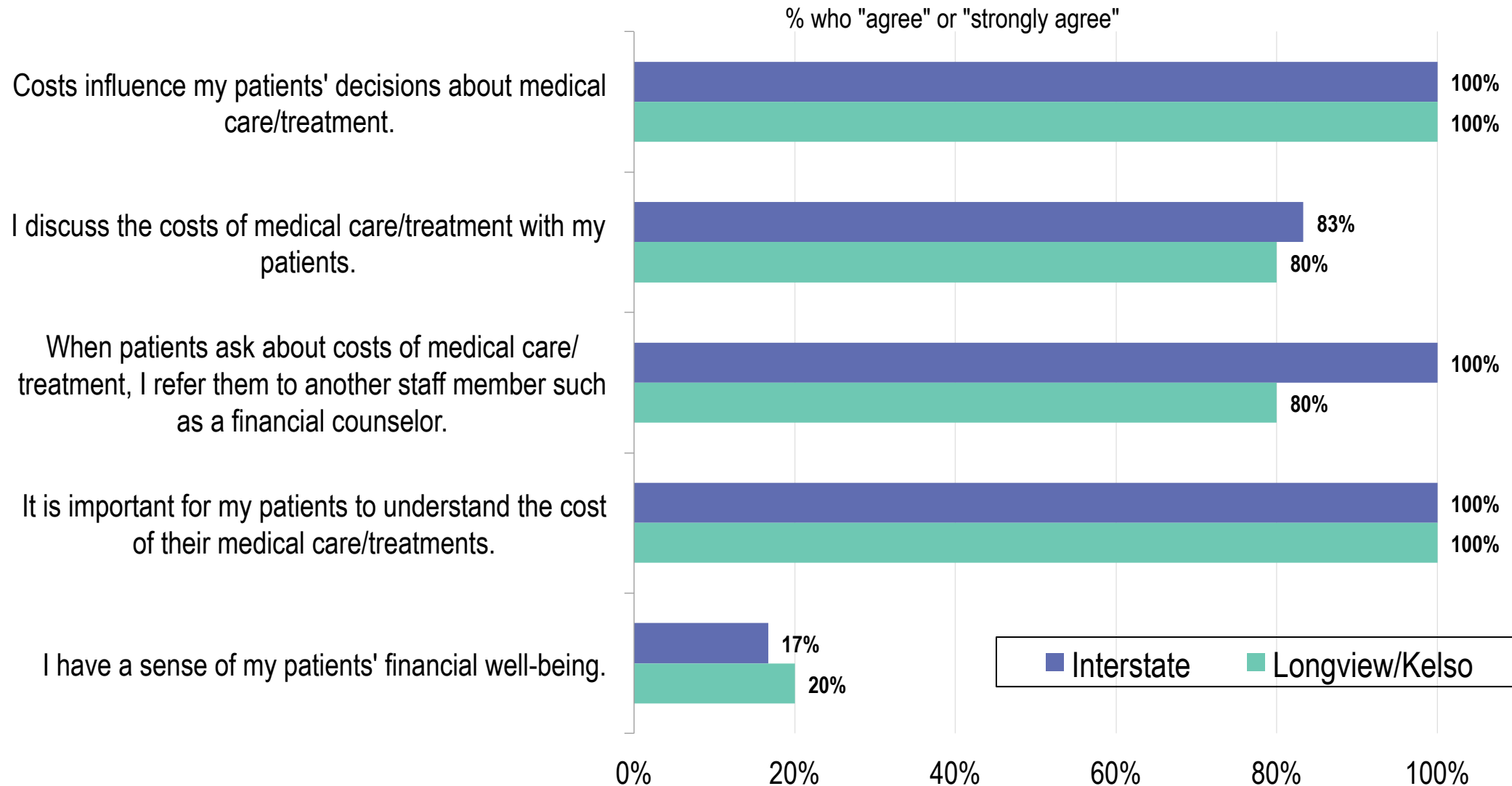
# Why Else?

- Business Necessity
  - CMS Requirement
- Addressing social needs will improve health outcomes
  - Lack of transportation is the #1 unmet social need leading to a significant number of missed appointments for needed medical care
- Solving for Affordability
  - Assessment of high utilizers revealed that these patients had at least four unmet social needs which is double that of non high utilizers.
- Growth
  - Marketing Strategy and Business Development – How reducing social barriers to care can increase “days at work”.
- Expanding the “Medical Neighborhood”
  - Accelerates partnerships with community based organizations

# Respecting our members' Financial Health

- KPNW is close to 50% deductible plans in our commercial membership
- In a recent article published by the Atlantic, 47% of people surveyed could not pay for a \$400 medical emergency
- In Oregon 211 survey data, medical expenses were one of the main contributors to homelessness and debt crisis
- Choosing to pay for medications or buy food is a daily challenge many patients face

# Provider Opinions on Member Medical Costs



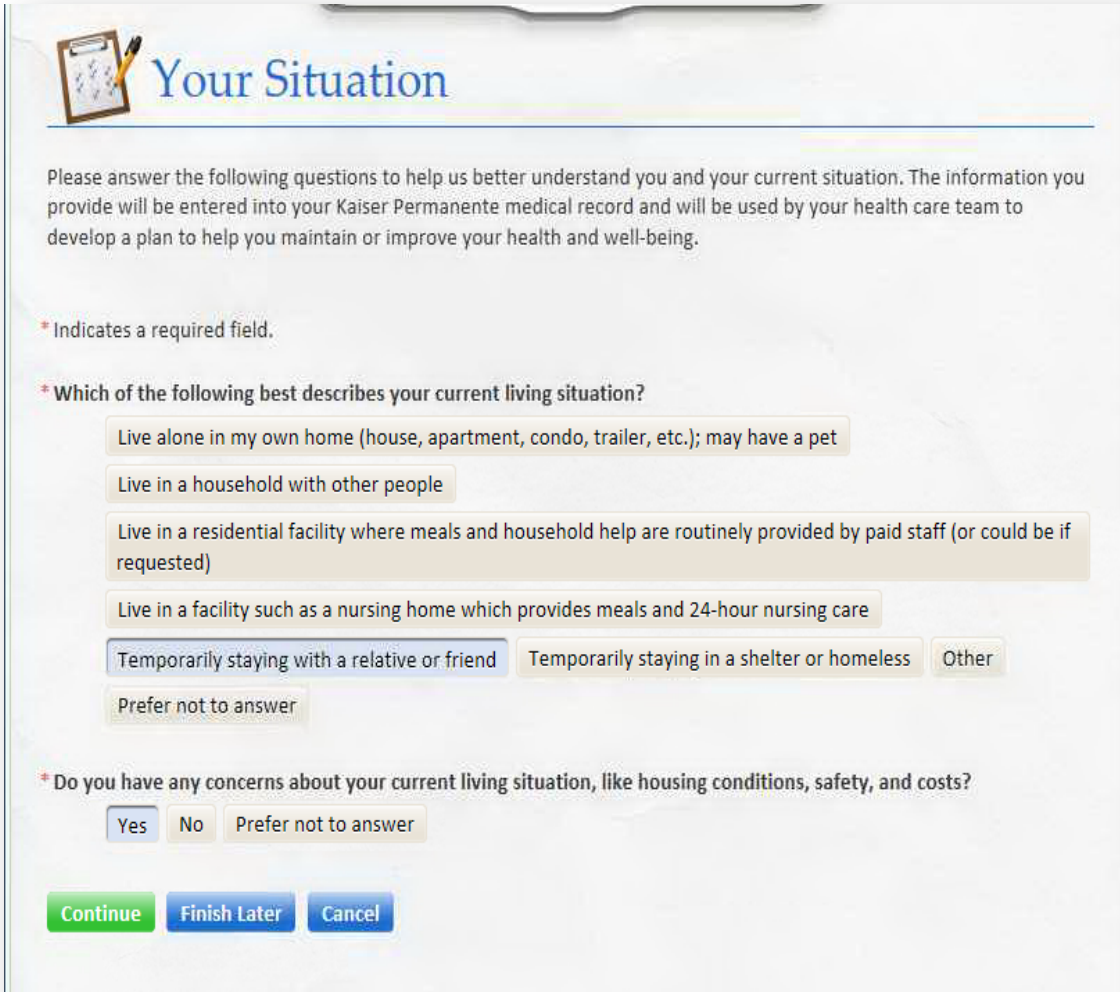



We can't fix what we cant see.



# New Tools: Assessing for Socioeconomic Disparities

## Your Current Life Situation (YCLS) Questionnaire in the Medical Record



 **Your Situation**

Please answer the following questions to help us better understand you and your current situation. The information you provide will be entered into your Kaiser Permanente medical record and will be used by your health care team to develop a plan to help you maintain or improve your health and well-being.

\* Indicates a required field.

\* Which of the following best describes your current living situation?

☐ Live alone in my own home (house, apartment, condo, trailer, etc.); may have a pet

☐ Live in a household with other people

☐ Live in a residential facility where meals and household help are routinely provided by paid staff (or could be if requested)

☐ Live in a facility such as a nursing home which provides meals and 24-hour nursing care

☒ Temporarily staying with a relative or friend

☐ Temporarily staying in a shelter or homeless

☐ Other

☐ Prefer not to answer

\* Do you have any concerns about your current living situation, like housing conditions, safety, and costs?

☒ Yes

☐ No

☐ Prefer not to answer

- Validated assessment
- Vetted through patient advisory groups across multiple regions
- Fully integrated into the electronic medical record (KPHC)
- Multi-disciplinary tool
- Assesses core domains of unmet social needs

# Coding Social Needs in the Medical Record

DIAGNOSIS

▼ Social

- ☒ COMMUNITY RESOURCES COUNSELING [Details](#)
- ☐ CAREGIVER STRESS [Details](#)
- ☐ FAMILY STRESS [Details](#)
- ☐ INSUFFICIENT SOCIAL INSURANCE OR WELFARE SUPPORT [Details](#)
- ☐ NEEDS ASSISTANCE WITH COMMUNITY RESOURCES [Details](#)
- ☐ UNAVAILABILITY OR INACCESSIBILITY OF OTHER HELPING AGENCIES [Details](#)
- ☐ SOCIAL ISOLATION [Details](#)
- ☐ PROBLEMS RELATED TO OTHER LEGAL CIRCUMSTANCES [Details](#)
- ☐ PROBLEMS RELATED TO RELEASE FROM PRISON [Details](#)
- ☐ LANGUAGE PROBLEM [Details](#)

▼ Economic

- ☐ FINANCIAL PROBLEM [Details](#)
- ☐ FOOD INSECURITY [Details](#)
- ☐ HOMELESSNESS [Details](#)
- ☐ HOUSING OR ECONOMIC CIRCUMSTANCE [Details](#)
- ☐ INADEQUATE MATERIAL RESOURCES [Details](#)
- ☐ INTENTIONAL UNDERDOSING OF MEDICATION BY PATIENT DUE TO FINANCIAL HARDSHIP [Details](#)
- ☐ UNEMPLOYMENT [Details](#)
- ☐ LOW INCOME [Details](#)

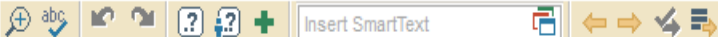




- Ensure screening questions map to taxonomy
- +20 specific social Z-Codes
- Standardization of code definition
- Over 32,000 social v-codes diagnosed to date
- Enables predictive analytics/ micro-segmentation

# Linking Screening to Intervention: Tracking referrals in the Medical Record

**Food Programs**  
☒ Food Programs ⓘ

Priority:

Class:






Comments (F6):      

Food Programs : Oregon Food Bank - Mobile Pantries and Food Benefit Programs - SNAP

**Housing and Shelter**  
☒ Housing and Shelter ⓘ

Priority:

Class:

Comments (F6):      

Housing and Shelter : Homeless resources - Human Solutions

- All referrals tracked in Pt. medical record.
- Quality Assurance
- Reduces duplication
- Enables the development of “Social Service Community Home”
- Allows for data informed partnerships



# Referrals Verse Connections

Additional Progress Notes - Kpnwpbeye,Test

Arial 11 B I U A + Insert SmartText

**Recommendation:**  
Provided support for internal KPNW services for:  
{Services CUI:144891}

New Connection to Community Resources for:  
{Needs CUI:144890}

Coordination with Community Health:  
{Health Plans:150547}

{Routed to CUI:98781}

Next contact by {Who and when:110439}.  
Areas to focus on in follow-up: \*\*\*

**Situation:**  
Follow up on social, economic and behavioral needs referral to \*\*\*

**Background:**  
Spoke with {SPOKE WITH:53287}.

Patient or agent contacted the recommended resource?  
Public Assistance: {PA Satisfied or Not CUI:144892}  
Food: {Food or Not Satisfied CUI:158305}  
Housing: {Housing or Not Satisfied CUI:158307}.

**Assessment of Social, non-Medical Needs:**  
\*\*\*  
{Intensity CUI:150546}

needs were satisfied  
needs were not satisfied  
was unable to reach  
referral in progress  
resource no longer needed  
member declined support  
did not contact

Press F3 key to expand form

Accept Cancel

- Smart data elements track referral status
- Patient reported outcomes measures
- Capacity and Scalability:
  - Health system have administrative fiscal restraints and community agencies have resource restraints
  - Tiering the population based on social and medical risk
    - The Rockwood Learning
  - Leverage technology for mass customization of community resource referrals

# Reportable Outcomes: Social Determinants Reporting

MOI	PCP	MRN	category	agency	RFL_source	RFL_progress	intensity_level	Assoc_dx	lob	Last_ED_30D	Last_ED_6M	ED_30_days	ED_6m_days
CPK	DAVIS,NADIA		Transportation	Other Pacifica	Primary Care	and needs were satisfied	3	INADEQUATE MATERIAL RESOURCES	Medicare	09/01/2017	09/01/2017	1	8
CPK	DAVIS,NADIA		Transportation	Other	Primary Care	and needs were satisfied	3	INADEQUATE MATERIAL RESOURCES	Medicare	09/01/2017	09/01/2017	1	8
CPK	DAVIS,NADIA		KP Resources	Other	Primary Care	and needs were satisfied	3	INADEQUATE MATERIAL RESOURCES	Medicare	09/01/2017	09/01/2017	1	8
GTW	KREBS ,RICHARD		Transportation	Other	Primary Care	some needs were satisfied	4	NEEDS ASSISTANCE WITH COMMUNITY RESOURCES	Medicaid	.	08/29/2017	0	6
GTW	KREBS ,RICHARD		Health & Social Service Agencies	Other	Primary Care	some needs were satisfied	4	NEEDS ASSISTANCE WITH COMMUNITY RESOURCES	Medicaid	.	08/29/2017	0	6
GTW	KREBS ,RICHARD		Anti-Poverty Resources	Other	Primary Care	some needs were satisfied	4	NEEDS ASSISTANCE WITH COMMUNITY RESOURCES	Medicaid	.	08/29/2017	0	6
GTW	KREBS ,RICHARD		Government Assistance Programs	Other	Primary Care	some needs were satisfied	4	NEEDS ASSISTANCE WITH COMMUNITY RESOURCES	Medicaid	.	08/29/2017	0	6
GTW	KREBS ,RICHARD		Dental Resources	Other, CareOregon DCO	Primary Care	some needs were satisfied	4	NEEDS ASSISTANCE WITH COMMUNITY RESOURCES, COMMUNITY RESOURCES COUNSELING	Medicaid	.	08/29/2017	0	6
GTW	KREBS ,RICHARD		Transportation	Ride to Care	Primary Care	some needs were satisfied	4	COMMUNITY RESOURCES COUNSELING	Medicaid	.	08/29/2017	0	6

# Interventions: Patient Navigation



- Navigator Network: 30 Navigators integrated across care delivery settings
- Community resource “connectors”
- Bilingual/Bi-cultural
- Target Population: Hybrid of referrals and data informed outreach
- Investment in specialized training



# Navigation Results

## 1. Transforming Care Delivery

- Over 10,000 patient screened, 32,000 social v-codes and 12,000 referrals to community agencies
- Data available to micro-segment our population based on social needs data
- Business case for new role: Community Clinic Integrator.

## 2. Providing Exceptional Care Experience

1. Addressing social needs improves member satisfaction with care and cost of care

## 3. Improving Reputation that leads to membership growth

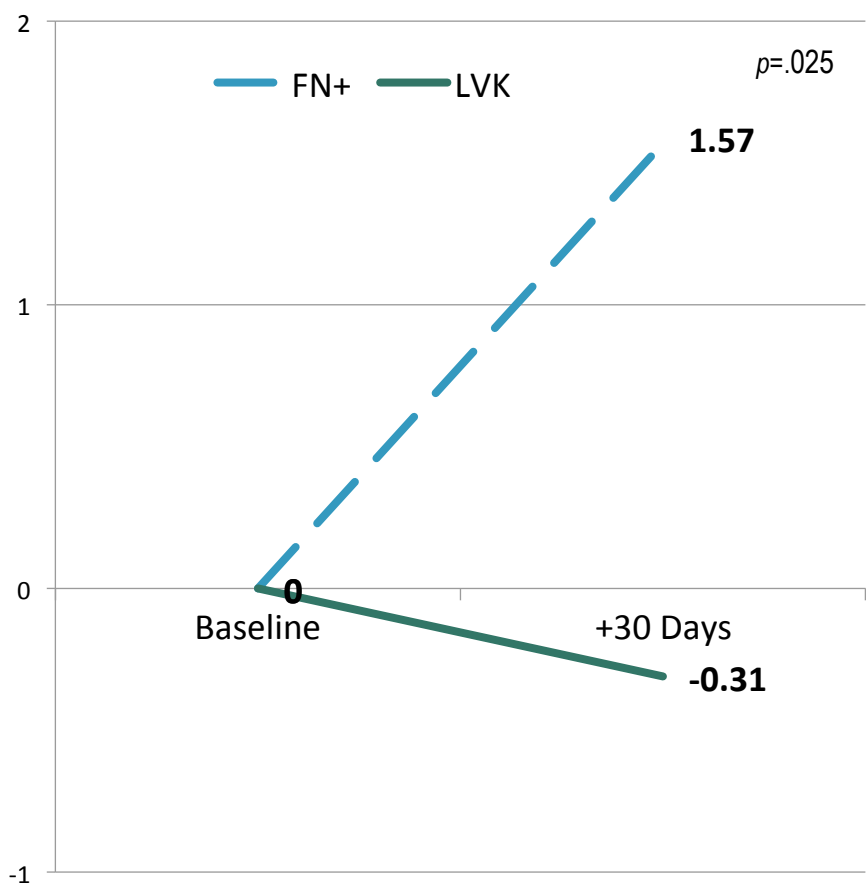
1. Recent public and national press
2. Data available for our B-Corp status
3. Partnership with Marketing Strategy and Business Development: Pilot at employer group to address social needs for low income agricultural workers

## 4. Solving for Affordability

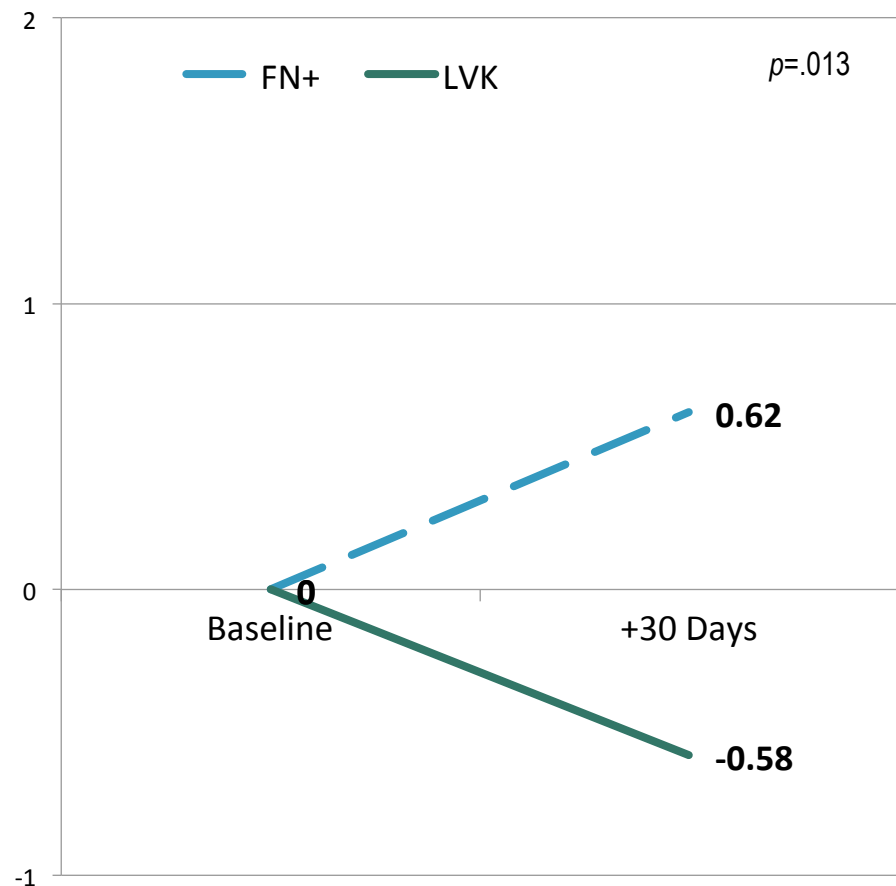
- Addressing social needs in the emergency room with patient navigators is showing promising trends in reducing bounce backs to the ER, especially for Medicaid. These trends are being validated through rigorous evaluation

# Results: Impact of Addressing Social Needs on Member Satisfaction

## Satisfaction with Care



## Satisfaction with Cost Assistance



# Interventions: Interdisciplinary Intensive case management



## Team:

Nursing, Social Work, Navigation, Behavioral Health and Physician Champions

## Patient Population:

- At least 6 ED visits in 6 months
- Behavioral, mental health, addiction
- More than 3x the amount of unmet social needs
- Chronic pain/ substance use disorders
- History of trauma/abuse

## Interventions:

- Holistic Assessment
- Place-based interventions
- Trauma informed care
- Community Resources

# Impact of Interdisciplinary Case Mgmt.:

## 1. Quality:

1. Reduction in pain medication prescribing
2. Increase in person-centered care plans
3. Social needs systematically assessed

## 2. Cost Savings (compared to match control)

1. 42% reduction in ED utilization
2. 47% reduction in inpatient admissions
3. 24% reduction in no-shows
4. 23% reduction in nurse advice calls





# Interventions: Community Health Workers



## Empowering members:

“I had a lot of depression. I still have it, but its calmed down. I’m taking medication and feel better. But with the help from [the CHW] I feel like I can do things. He has helped me learn to do more things on my own. He has taught me things and given me lots of ideas and advice about how to feel better.”

# Learnings



1. Executive level sponsorship
  1. Physician Leadership
  2. Resources do this work- Re-deploy/partner/contract!
2. Spread and Scale
  1. Fail fast, learn fast
  2. Leverage technology
  3. Relentless dedication to simplifying partnerships
3. Promote Learning Culture
  1. Use data to ask and answer questions
  2. Bigger and brander is not better, better is better
4. Measure
  1. Short and long term goals
  2. New ways to measure return on investment
  3. Shared goals

Addressing social needs ultimately means health care systems will be part of  
a new ecosystem

