Covering Nutrition Services in Michigan's Comprehensive Health Care Program: Introducing In Lieu of Services

Updated: August 2025

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Michigan Department of Health & Human Services

Note: This presentation provides an overview of ILOS requirements included in the ILOS Policy Guide. Please note that the ILOS Policy Guide is the definitive source for information related to all ILOS guidelines and policies. MDHHS reserves the right to change any ILOS-related requirements, dates or any other information deemed necessary. Please note that any updates or changes will be reflected in the ILOS Policy Guide available on the ILOS webpage and should be considered the most current guidance.

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Objectives

This presentation will provide an overview of the following:

Michigan Department of Health and Human Services' (MDHHS) approach to addressing social determinants of health through Medicaid.
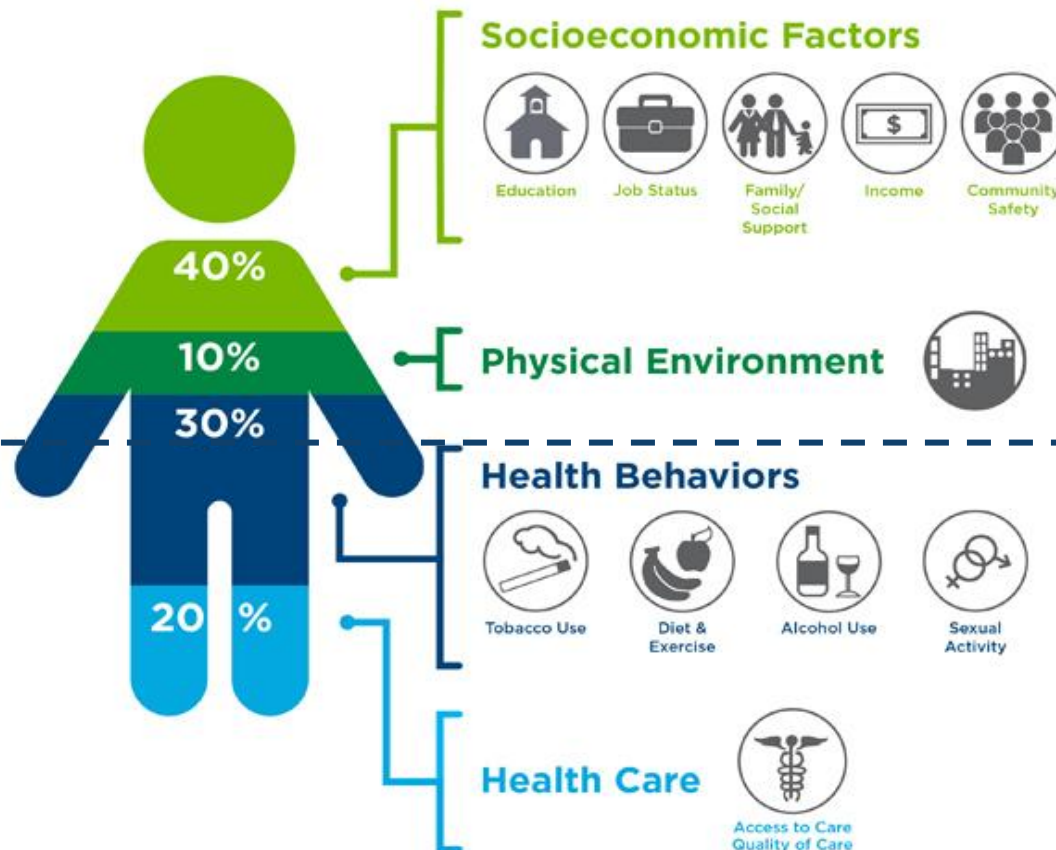
Introduction to a set of nutrition services, called In Lieu of Services (ILOS), for eligible individuals enrolled in Medicaid Health Plans (MHPs).

An overview of ILOS requirements and policies.

The Case for Addressing Social Determinants of Health

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What Goes Into Your Health?

Socioeconomic Factors

Education | Job Status | Family/ Social Support | Income | Community Safety

40%

10%

30%

20%

Physical Environment

Health Behaviors

Tobacco Use | Diet & Exercise | Alcohol Use | Sexual Activity

Health Care

Access to Care Quality of Care

Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)

The Bridgespan Group

Social determinants of health (SDOH)—also known as basic needs—can greatly impact a person's health outcomes, sometimes more than health care.

New Ways to Address SDOH Through Medicaid Beginning in October 2024

Example Requirements:

- Screen Medicaid Enrollees for unmet needs.
- Monitor whether Medicaid Enrollees receive services to address their needs.

Example Requirements:

- Invest a portion of Medicaid profits in CBOs.
- Encourage Medicaid Health Plans to offer ILOS.

Identifying Social Needs

Managing Social Needs

Investing in & Engaging with the Community

Example Requirements:

- Encourage use of Community Health Workers (CHWs).
- Require partnerships with community-based organizations (CBOs).

ILOS Introduction

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What are In Lieu of Services (ILOS)?

• ILOS are services a state deems to be **medically appropriate** and **cost effective** when provided as substitutes to other services and settings covered in a state's Medicaid program.

• **ILOS** are administered through Medicaid, which is a health program, so **they must address health-related needs.**

Goals of ILOS

What are MDHHS' Goals in Introducing ILOS?

- Promote availability of services to:

  ➤ **Meet Enrollee needs;**

  ➤ **Improve health; and**

  ➤ **Reduce the future need for medical services.**

- Connect with MDHHS' broader strategy to address SDOH and improve health equity.

Why Focus on Food and Nutrition?	**Michigan's ILOS will initially focus on food and nutrition services** because: - Substantial evidence shows that **investing in food and nutrition** significantly **improves health outcomes** and reduces unnecessary health care costs.[1] - Access to food and nutrition is a **critical need in communities across Michigan.**[2]

Sources
1. ILOS Evidence Review Summary
2. 2022-2024 Social Determinants of Health Strategy

ILOS Federal Requirements

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Optional

Medicaid Health Plans can choose whether to offer ILOS and Medicaid Enrollees can choose whether to use ILOS.

→ ILOS may be available to some Enrollees and not others based on which Medicaid Health Plan they enroll with.

→ Even if the Enrollee qualifies for ILOS, it is up to the Enrollee whether they use ILOS or not.

Medically Appropriate

Each ILOS must be **medically appropriate** for the Enrollee.

→ ILOS will only be available to some Enrollees based on their health conditions and whether the ILOS can help to improve their health.

Preserve Enrollees' Rights

"ILOS **may not be used to reduce, discourage, or jeopardize**" access to Medicaid services.[1]

→ An Enrollee's Medicaid coverage and access to medical services will stay the same if an Enrollee chooses to use a food service or chooses not to.

1. See 42 CFR 438.3(e)(2)(ii)(B)

ILOS Definitions in Michigan

	Medically Tailored Home Delivered Meal	A fresh or frozen home delivered meal which is medically tailored for a specific disease or condition. This ILOS includes support from a certified nutrition professional.
	Healthy Home Delivered Meal	A nutritionally-balanced, home delivered meal consisting of a hot, cold, frozen or shelf-stable meal aimed at promoting improved nutrition for the Enrollee.
	Healthy Food Pack	A healthy food pack consists of an assortment of medically-tailored or nutritionally-appropriate foods provided to an Enrollee.
	Produce Prescription	A voucher for the Enrollee to purchase any variety of fruits and vegetables or plants/seeds that produce fruits and vegetables.

ILOS Eligibility Criteria

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Social Risk Factor	The Enrollee cannot get enough food when they need it.

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Clinical Risk Factors*	**The Enrollee has one of the following:** • **An illness that can be improved with a healthy diet**, like diabetes, congestive heart failure, stroke, chronic obstructive pulmonary disease (COPD), hypertension, human immunodeficiency virus (HIV), cancer with malnutrition, malnutrition, sickle cell disease or renal disease. • **Been in a hospital or skilled nursing facility** in the last 60 days. • **Are pregnant and currently have, have a history of or are at risk of complications from being pregnant**, including things like diabetes while pregnant, preeclampsia, and newborn low birthweight. • **Used to be in foster care and has a nutrition-sensitive condition.** • **Are a child with elevated blood lead levels or childhood obesity.** • **Are eligible for the Children's Special Health Care Services (CSHCS)** program.

While the social risk factor is the same across all four services, the clinical risk factor that qualifies an Enrollee for an ILOS differs slightly across the services. More detail on service eligibility, include specific service limitations, can be found online.

ILOS Example # 1

Example Scenario:
An Enrollee is diagnosed with gestational diabetes (GDM). The person has access to some food, but it is less healthy and high in carbohydrates. As a result, the individual has persistently high blood sugar, even though they try to adhere to the GDM regimen prescribed by their doctor.

ILOS Provided:
Healthy Food Pack

Substitute for a Future Service:
Prolonged inpatient admission for a complicated delivery of larger-than-average baby due to persistent high blood sugar.

ILOS Example # 2

Example Scenario:

An Enrollee undergoing chemotherapy and radiation is at risk for an inpatient admission. The person is experiencing food insecurity – they can receive one hot meal per day at a community kitchen, but they do not tolerate the food and cannot eat enough to meet their needs throughout the day with low-cost, shelf-stable items like tea and crackers. They are feeling weak and dizzy at home and experiencing vomiting and diarrhea.

ILOS Provided:
Healthy Home Delivered Meal

Substitute for a Future Service:
Inpatient admission due to dehydration and electrolyte imbalance.

ILOS Example # 3

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Example Scenario:
An Enrollee has salt-sensitive hypertension and is experiencing food insecurity. They have access to some packaged foods, but they are high in sodium. Because of their high sodium intake, they are experiencing blood pressure spikes with symptoms of severe headache and chest pain.
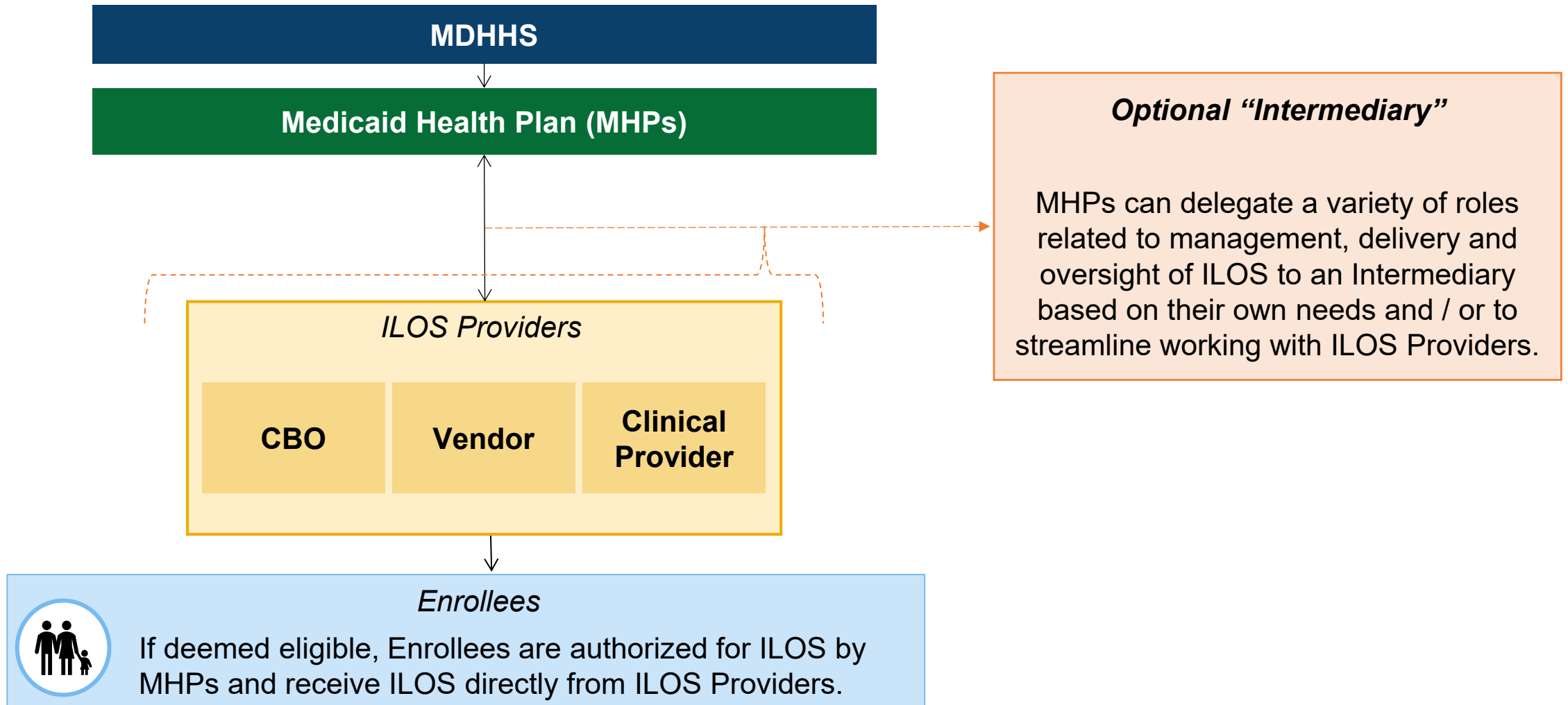
ILOS Provided:
Medically Tailored Home Delivered Meal

Substitute for a Future Service:
Emergency transportation and emergency department visit for symptoms associated with high salt intake.

ILOS Policies & Requirements in Michigan

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Illustrative ILOS Roles and Functions

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MDHHS

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Medicaid Health Plan (MHPs)

ILOS Providers

CBO	**Vendor**	**Clinical Provider**

↓

Enrollees

If deemed eligible, Enrollees are authorized for ILOS by MHPs and receive ILOS directly from ILOS Providers.

Optional "Intermediary"

MHPs can delegate a variety of roles related to management, delivery and oversight of ILOS to an Intermediary based on their own needs and / or to streamline working with ILOS Providers.

This visual is illustrative – Medicaid Health Plans are responsible for developing processes related to ILOS so workflows may differ as ILOS is implemented.

ILOS Access

Access and Availability of ILOS

- ILOS can be an important resource in addressing eligible Enrollees' nutrition needs, improving health and reducing the need for medical services.

- MDHHS strongly encourages Medicaid Health Plans to offer a robust menu of ILOS across its service Regions to ensure Enrollees have access.

  → Enrollee access to ILOS will depend on their individual eligibility, the Medicaid Health Plans they are enrolled in and where they live.

Medicaid Health Plan ILOS Offerings

MHP Elections of ILOS

Offering ILOS	ILOS by Region
• Medicaid Health Plans may offer ILOS following MDHHS-approval of the Medicaid Health Plan's ILOS Implementation Plan. • Medicaid Health Plans are allowed to terminate ILOS once annually at the end of the contract year.	• Medicaid Health Plans may elect to offer one or more approved ILOS and may choose which of its Region(s) to offer the ILOS. Medicaid Health Plans may choose to offer different ILOS in different Regions. • Medicaid Health Plans must, however, make the ILOS available for all Enrollees residing within the Region(s) it is electing to offer ILOS.

Medicaid Health Plan Administration of ILOS

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Enrollee Identification

- Identify Enrollees eligible for ILOS using a variety of sources.
- Notify Enrollees that they may be eligible for ILOS.

Authorization of ILOS

- Determine Enrollee's eligibility for ILOS.
- Authorize medically appropriate ILOS in a timely manner.

Referring for ILOS

- Make and track referrals to completion.
- Regularly monitor referrals and referral outcomes.

Deauthorizing ILOS

- Determine if it is appropriate to deauthorize ILOS.
- Notify Enrollees if ILOS will be deauthorized.

Grievances & Appeals

- Manage Enrollee grievances and appeals.

Medicaid Health Plans are responsible for developing a process to administer ILOS, including all elements listed above. Medicaid Health Plans must submit an ILOS Implementation Plan, documenting their ILOS policies and procedures to MDHHS for approval prior to administering ILOS.

Ensuring ILOS Are Medically Appropriate

Assessing Medical Appropriateness

In accordance with Federal requirements, Medicaid Health Plans must ensure that an ILOS is medically appropriate.

- Medicaid Health Plan policies and procedures must outline the process to ensure the medical appropriateness of each ILOS for the Enrollee.

- The process must require documentation that ILOS is medically appropriate for the Enrollee and is likely to reduce or prevent the need for State Plan covered services based on the professional judgement of licensed clinical staff at the Medicaid Health Plan or a Network Provider.

EXAMPLE

When authorizing a **Produce Prescription**, **Medicaid Health Plans may use the result of clinical evaluations to document** that an **Enrollee** has **gestational diabetes**, screened positive for **food insecurity** and **a licensed provider documented** that the **Produce Prescription will likely help avoid gestational diabetes-related emergency department visits or hospitalizations.**

Enrollee Rights and Protections

Enrollee Rights

- If an Enrollee requests one or more ILOS offered by the Medicaid Health Plan but was not authorized to receive the requested ILOS because of a determination that the ILOS was not medically appropriate, Enrollees can appeal and/or file a grievance.

- ILOS are subject to the State Fair Hearing process.

Medicaid Health Plan Monitoring

- Medicaid Health Plans must regularly monitor and maintain a record of grievances and appeals to ensure that Enrollee rights related to ILOS are not violated.

- Medicaid Health Plans must report ILOS-related grievances and appeals to MDHHS consistent with requirements for other State Plan covered services.

Potential ILOS Providers

An organization may opt to become an ILOS Provider because providing ILOS aligns with the organization's goals to address food needs and contribute to the health and wellness of Michiganders.

Examples of Entities that May Become ILOS Providers

Community-based Organizations

Public and private non-profit organizations that represent a community or significant segments of a community and provide educational, health, social support or other related services to individuals in the community.

Example ILOS Provider:
Food bank

Vendors

Private, non-profit or for-profit companies that provide nutrition-related goods or services.

Example ILOS Provider:
Companies that provide prepared meals

ILOS Provider Qualifications

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Qualifications for ILOS Providers offering any of the four ILOS

- ✓ Enroll in CHAMPS* and contract with a Medicaid Health Plan.
- ✓ Have relevant experience delivering the ILOS.
- ✓ Adhere to food safety requirements.
- ✓ Be able to assess and address Enrollee needs.
- ✓ Preferably, be a Michigan-based organization.
- ✓ Have a plan to manage risks and communicate with Enrollees.

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Additional qualifications for ILOS Providers offering meal ILOS

- ✓ Have required capacity.
- ✓ Document required information.

Community Health Automated Medicaid Processing System (CHAMPS) is the MDHHS web-based, Medicaid Management System. Any Provider that will be reimbursed using Medicaid funding must enroll in CHAMPS.

Medicaid Health Plans are Required to Utilize Locally-Based ILOS Providers

30%

Requirement:

- In Contract Year 2025, at least **30% of each ILOS type must be provided by locally-based ILOS Providers.**
- Over time, this percentage will increase.

Rationale:

- Ensures ILOS are delivered by organizations familiar with Enrollees' communities.
- Support capacity of local organizations—ILOS can provide a more stable funding stream to organizations.

To be a locally-based ILOS Provider, an organization must be:

- A CBO with a physical presence in Michigan, defined as having one (1) or more office locations in Michigan—preferably in the Region(s) the ILOS is being provided—and participate in the Michigan food economy;
- An independent community grocer, headquartered in Michigan; or
- A direct marketing farmer, headquartered in Michigan.

Example Calculation: Locally-Based ILOS Providers

Region	ILOS Delivered By	MHP #1		MHP #2	
		Medically Tailored Home Delivered Meals	**Healthy Home-Delivered Meals**	**Medically Tailored Home Delivered Meals**	**Healthy Food Packs**
A	Locally-based Providers	-	500	50	2,000
	Other Providers	1,000	4,000	300	1,000
B	Locally-based Providers	-	500	100	500
	Other Providers	500	1,200	600	5,000
C	Locally-based Providers	500	3,000	400	1,000
	Other Providers	500	3,000	400	7,500
Total	**Locally-based Providers**	**500**	**4,000**	**550**	**3,500**
	Other ILOS Providers	2,000	8,200	1,300	13,500
	TOTAL	**2,500**	**12,200**	**1,850**	**17,000**
	PERCENTAGE DELIVERED BY LOCALLY-BASED ILOS PROVIDERS	**20%** ❌	**33%** ✅	**30%** ✅	**21%** ❌

Key: 🟥 MHP met minimum threshold 🟩 MHP did not meet minimum threshold

Adherence to Service Definitions

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ILOS Providers must adhere to the service definition

- Each of the four ILOS is described in detail in the ILOS Policy Guide.

- When delivering an ILOS, the ILOS Provider must adhere to the full MDHHS-established ILOS service definitions without modifications.

- Per federal regulations, **the food provided through ILOS must be less than 3 meals / day.**

REMINDER: Medicaid Health Plans are responsible for ensuring the medical appropriateness of each ILOS for the Enrollee when authorizing ILOS. *ILOS Providers must only provide and be reimbursed by a Medicaid Health Plan for ILOS the Medicaid Health Plan determines to be medically appropriate.*

Payment for ILOS

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Medicaid Health Plans and ILOS Providers together determine:

✓ **The payment approach** — Medicaid Health Plans and ILOS Providers could use **fee for service** *or* alternative payment models, including **capitated payments**, to pay for ILOS.

✓ **The payment amount** — Medicaid Health Plans and ILOS Providers negotiate to establish a rate for ILOS.

Medicaid Health Plans *must* make timely payments to ILOS Providers for authorized ILOS provided to Enrollees, consistent with existing contract standards.

MDHHS developed Optional ILOS Pricing Guidance that Medicaid Health Plans and ILOS Providers may use when developing their contracting agreements. It includes potential service rates for each of the four ILOS.

ILOS Billing

Medicaid Health Plans are responsible for submitting encounters to MDHHS. ILOS Providers are expected to submit claims to Medicaid Health Plans. If claims submission is not feasible, ILOS Providers can submit invoices.

Invoicing Guidance

For ILOS Providers that are unable to submit claims, MDHHS has developed invoicing guidance including the data elements that must be included on an invoice.

✓ An invoice must be submitted for each ILOS that is delivered.

✓ Invoices must include a discrete, defined code (HCPCS) specific to the ILOS, per federal requirements.

Data Sharing to Support ILOS

Facilitating ILOS Data Exchange

✓ **Medicaid Health Plans and ILOS Providers must have:**
  - Data sharing capabilities to support administration of ILOS.
  - **The appropriate legal basis for disclosure and exchange of the required date elements.**

Topic	MDHHS Requires	Medicaid Health Plans and ILOS Providers Mutually Agree Upon
Data Elements	• Medicaid Health Plans and ILOS Providers must share a set of data elements related to 1) Enrollee information and 2) ILOS information.	• Any <u>additional</u> data elements.
File Format		• What format will be used to share data (e.g., Excel workbook). If the Medicaid Health Plan and ILOS Provider mutually agree on using Excel, they must use the MDHHS-produced EIF template and RTF template.
Transmission Methods		• What format will be used to transmit shared data (e.g., secure web-based portal, secure file transfer protocol [SFTP] upload).
Transmission Frequency		• Appropriate cadence for data sharing.

Safeguarding Enrollee Data

MHPs and ILOS Providers receiving, storing, using, or transmitting personal identifiable information (PII) and protected health information (PHI) must have written policies and procedures for doing so in accordance with federal and state laws, and other obligations under the Contract.

➢ *This includes but is not limited to the Health Insurance Portability and Accountability Act (HIPAA), 42 CFR Part II, the Confidentiality of Medical Information Act (CMIA), and state law.*

Getting Started with ILOS

What Do Medicaid Health Plans Need to Do to Offer ILOS?

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Medicaid Health Plans must follow all requirements outlined in their CHCP contracts and ILOS Policy Guide before offering ILOS.

- ✅ Determine which ILOS it will offer and develop its ILOS administration policies and procedures.

- ✅ Develop an ILOS Provider Network by contracting with ILOS Providers to deliver ILOS.

- ✅ Complete an ILOS Implementation Plan and submit to MDHHS for review and approval.

- ✅ Update its Enrollee handbook, provider directory and website and provide appropriate notifications about ILOS to Enrollees.

What Do ILOS Providers Need to Do to Deliver ILOS?

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ILOS Providers must follow all requirements outlined in the ILOS Policy Guide before delivering ILOS.

✓ Confirm it can meet the service-specific ILOS Provider qualifications and deliver the ILOS as defined in the ILOS Policy Guide.

✓ Enroll with the state as a Michigan Medicaid Provider through CHAMPS using the "ILOS Atypical Agency" application.

✓ Contract with Medicaid Health Plans to deliver ILOS.

✓ Begin building necessary capacity to comply with the billing and data sharing requirements outlined in the ILOS Policy Guide.

How Will Enrollees Know if They Qualify for ILOS?

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Enrollees may be able to access ILOS if the Medicaid Health Plan they are enrolled with offers them.

Medicaid Health Plans must inform Enrollees about available ILOS and the process to access ILOS.
Enrollees interested in ILOS should:

- ✔ Look out for any updates or notification from their Medicaid Health Plan about ILOS.

- ✔ Review their Enrollee handbook, health plan website, or MDHHS ILOS webpage to see whether their Medicaid Health Plan is offering ILOS in their area.

- ✔ Contact their Medicaid Health Plan Member Services Department to request additional information and see whether they may qualify.

Thank you for your interest in ILOS.

Please refer to the MDHHS ILOS webpage for resources and any updates on ILOS:

https://www.michigan.gov/mdhhs/mihealthylife/ michigan-in-lieu-of-services

If you have any questions, please contact: MDHHS-ENGAGEMedicaid@michigan.gov.

Appendix

Acronym List

Acronym	Name
CBO	Community-Based Organization
CHAMPS	Community Health Automated Medicaid Processing System
CHW	Community Health Worker
FQHC	Federally Qualified Health Center
HCPCS	Healthcare Common Procedure Coding System
ILOS	In Lieu of Services
MDHHS	Michigan Department of Health and Human Services
MHP	Medicaid Health Plan
RHC	Rural Health Center
SDOH	Social Determinants of Health
STFP	Standard File Transfer Protocol

MDHHS Medicaid Health Plans

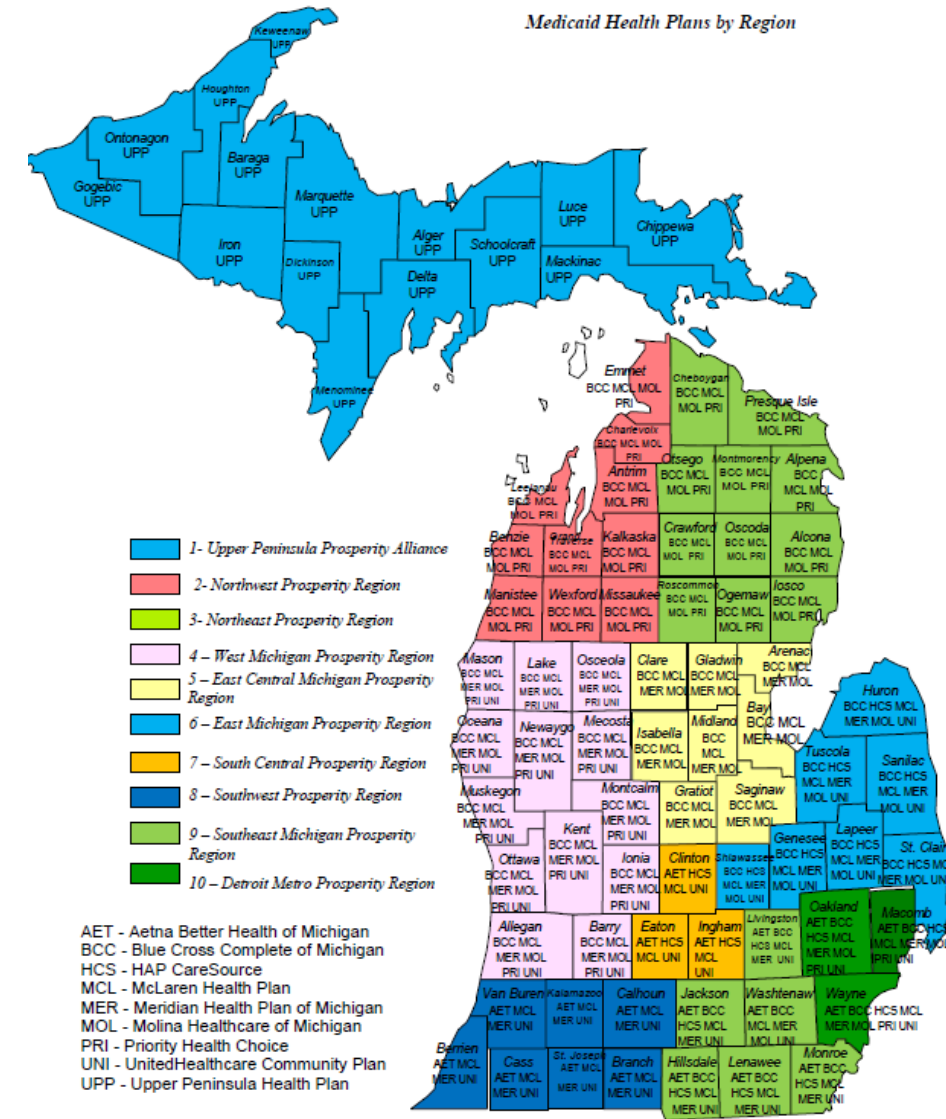| Medicaid Health Plans |
|---|
| Aetna Better Health of Michigan |
| Blue Cross Complete of Michigan |
| HAP CareSource |
| McLaren Health Plan |
| Molina Healthcare of Michigan |
| Meridian Health Plan of Michigan |
| Priority Health Choice |
| United Healthcare Community Plan |
| Upper Peninsula Health Plan |

Medicaid Health Plan Regions

- **Region 1 – Upper Peninsula Prosperity Alliance:** Upper Peninsula Health Plan, LLC.

- **Region 2 – Northwest Prosperity Region:** Blue Cross Complete of Michigan, LLC, McLaren Health Plan, Inc., Molina Healthcare of Michigan, Inc., Priority Health Choice, Inc.

- **Region 3 – Northeast Prosperity Region:** Blue Cross Complete of Michigan, LLC, McLaren Health Plan, Inc., Molina Healthcare of Michigan, Inc., Priority Health Choice, Inc.

- **Region 4 – West Michigan Prosperity Alliance:** Blue Cross Complete of Michigan, LLC, McLaren Health Plan, Inc., Meridian Health Plan of Michigan, Inc., Molina Healthcare of Michigan, Inc., Priority Health Choice, Inc., United Healthcare Community Plan, Inc.

- **Region 5 – East Central Michigan Prosperity Region:** Blue Cross Complete of Michigan, LLC, McLaren Health Plan, Inc., Meridian Health Plan of Michigan, Inc., Molina Healthcare of Michigan, Inc.

- **Region 6 – East Michigan Prosperity Region:** Blue Cross Complete of Michigan, LLC, HAP CareSource, Inc., McLaren Health Plan, Inc., Meridian Health Plan of Michigan, Inc., Molina Healthcare of Michigan, Inc., United Healthcare Community Plan, Inc.

- **Region 7 – South Central Prosperity Region:** Aetna Better Health of Michigan, Inc., HAP CareSource, Inc., McLaren Health Plan, Inc., United Healthcare Community Plan, Inc.

- **Region 8 – Southwest Prosperity Region:** Aetna Better Health of Michigan, Inc., McLaren Health Plan, Inc., Meridian Health Plan of Michigan, Inc., United Healthcare Community Plan, Inc.

- **Region 9 – Southeast Prosperity Region:** Aetna Better Health of Michigan, Inc., Blue Cross Complete of Michigan, LLC, HAP CareSource, Inc., McLaren Health Plan, Inc., Meridian Health Plan of Michigan, Inc., United Healthcare Community Plan, Inc.

- **Region 10 – Detroit Metro Prosperity Region:** Aetna Better Health of Michigan, Inc., Blue Cross Complete of Michigan, LLC, HAP CareSource, Inc., McLaren Health Plan, Inc., Meridian Health Plan of Michigan, Inc., Molina Healthcare of Michigan, Inc., Priority Health Choice, Inc., United Healthcare Community Plan, Inc.

Medicaid Health Plans by Region

1- Upper Peninsula Prosperity Alliance
2- Northwest Prosperity Region
3- Northeast Prosperity Region
4 – West Michigan Prosperity Region
5 – East Central Michigan Prosperity Region
6 – East Michigan Prosperity Region
7 – South Central Prosperity Region
8 – Southwest Prosperity Region
9 – Southeast Michigan Prosperity Region
10 – Detroit Metro Prosperity Region

AET - Aetna Better Health of Michigan
BCC - Blue Cross Complete of Michigan
HCS - HAP CareSource
MCL - McLaren Health Plan
MER - Meridian Health Plan of Michigan
MOL - Molina Healthcare of Michigan
PRI - Priority Health Choice
UNI - UnitedHealthcare Community Plan
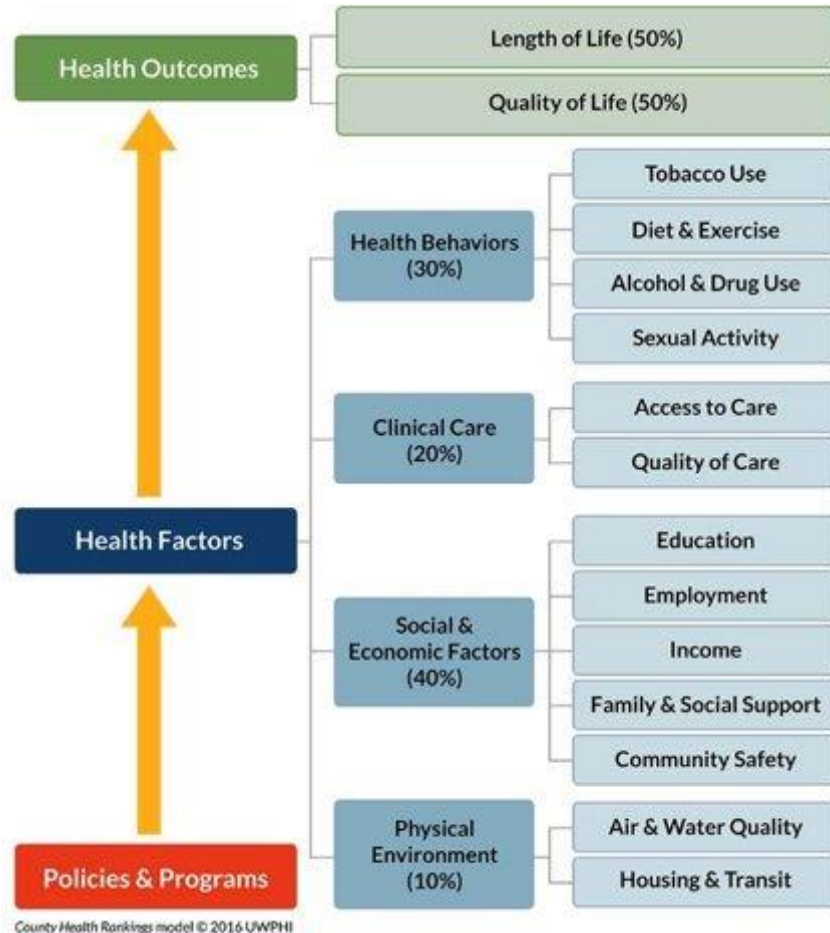UPP - Upper Peninsula Health Plan

Updated 10/1/2024

How Addressing NMDOH Can Impact Healthcare Utilization in Pediatric Populations

Ashley Gibson, MD, MS, FAAP

Sandra McKay, MD, FAAP

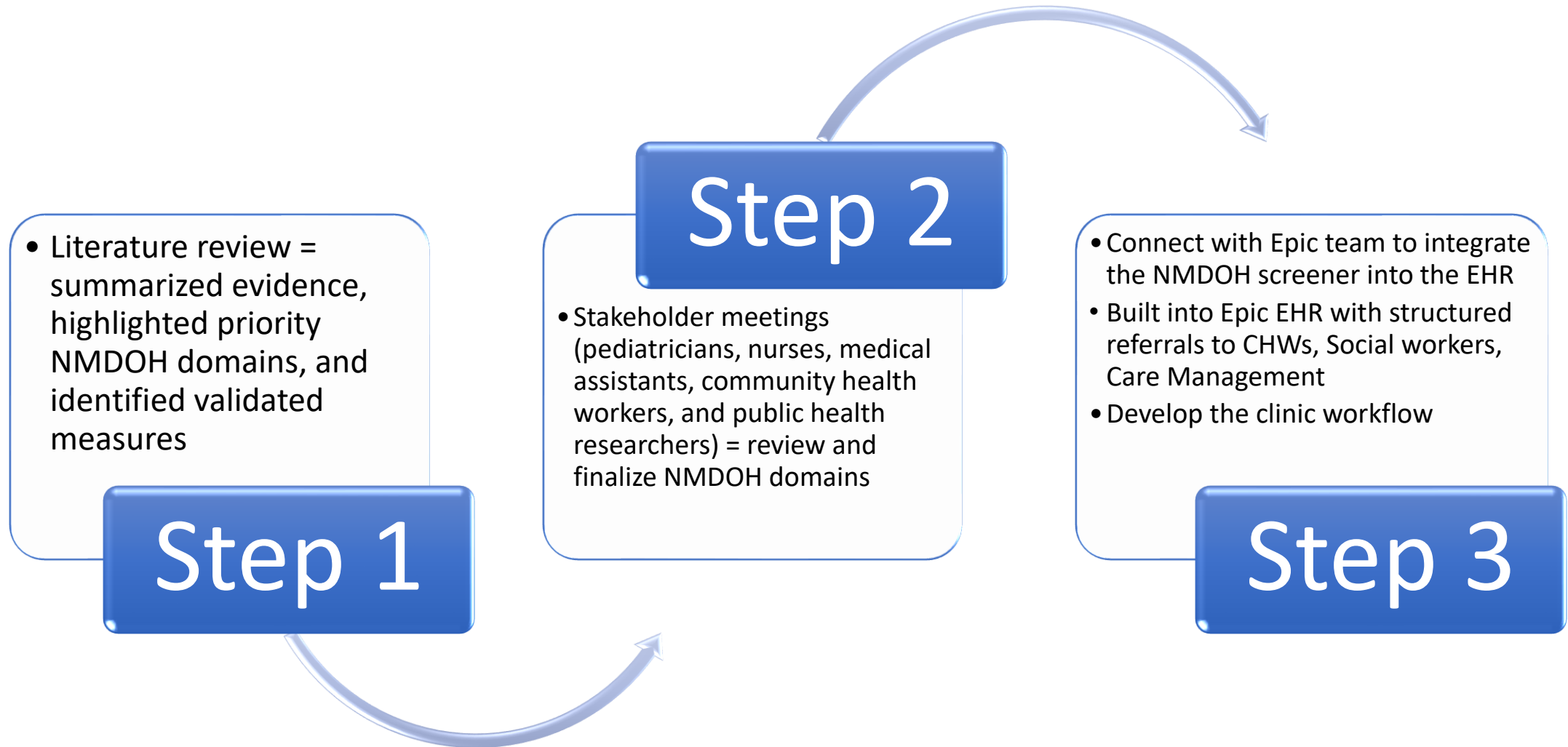# The Challenge in Pediatrics

Length of Life (50%)

Quality of Life (50%)

Health Outcomes

Health Behaviors (30%)
- Tobacco Use
- Diet & Exercise
- Alcohol & Drug Use
- Sexual Activity

Clinical Care (20%)
- Access to Care
- Quality of Care

Health Factors

Social & Economic Factors (40%)
- Education
- Employment
- Income
- Family & Social Support
- Community Safety

Physical Environment (10%)
- Air & Water Quality
- Housing & Transit

Policies & Programs

County Health Rankings model © 2016 UWPHI

- Non-medical drivers of health (NMDOH) strongly influence child health and healthcare utilization

- Unmet needs → higher acute care use and worse outcomes

- Few real-world pediatric studies test whether screening improves utilization patterns
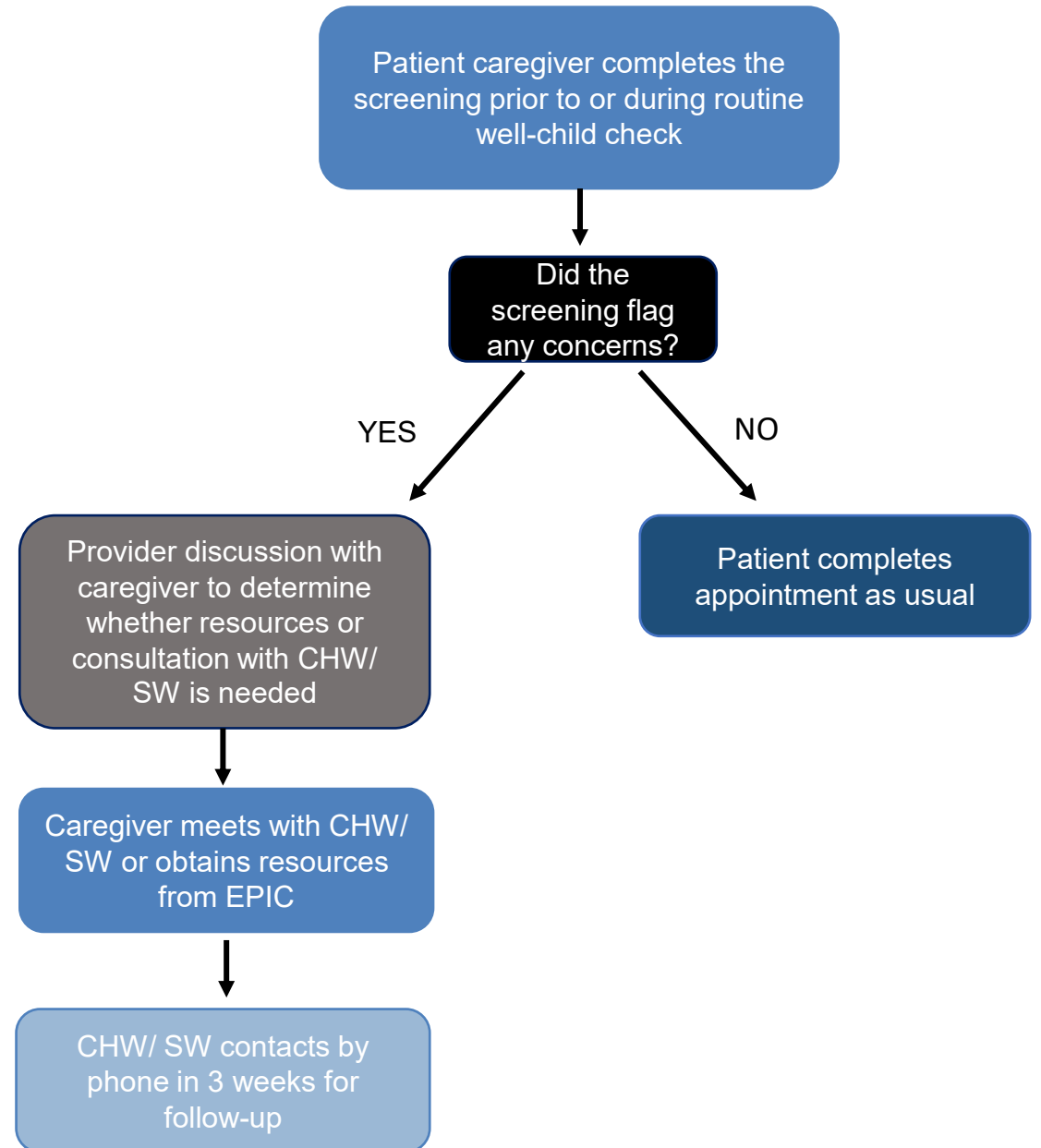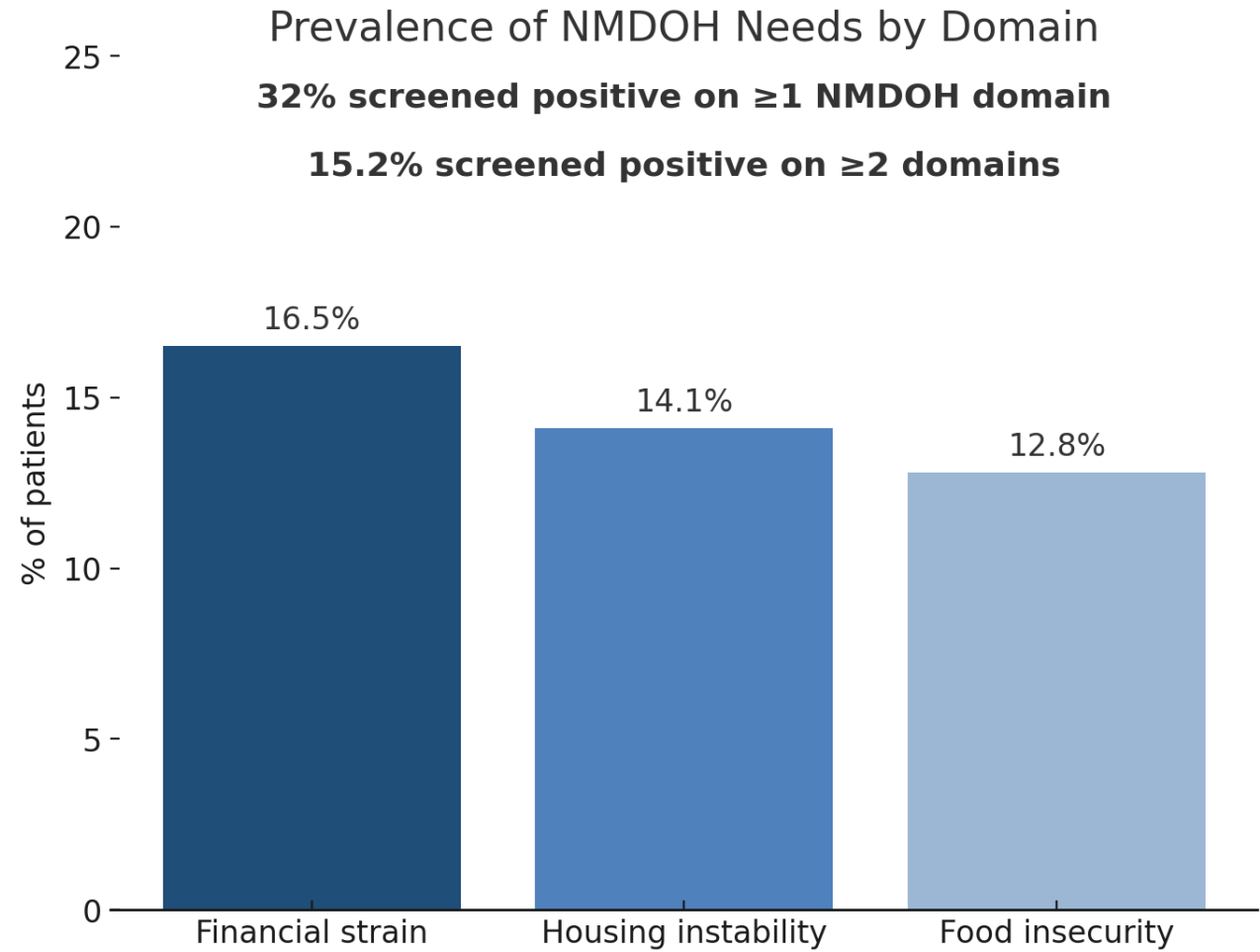
PROGRAM DEVELOPMENT AND PLANNING

Step 1
- Literature review = summarized evidence, highlighted priority NMDOH domains, and identified validated measures

Step 2
- Stakeholder meetings (pediatricians, nurses, medical assistants, community health workers, and public health researchers) = review and finalize NMDOH domains

Step 3
- Connect with Epic team to integrate the NMDOH screener into the EHR
- Built into Epic EHR with structured referrals to CHWs, Social workers, Care Management
- Develop the clinic workflow

Our Approach

Universal NMDOH screening at every well-child visit

NMDOH domain	Source
Health Literacy	STOHFLA
Transportation issues	PRAPARE screening tool
Food insecurity	2-Item Hunger Vital Scale
Housing instability	Housing Instability screener
Financial strain	National Academy of Medicine domains
Legal concerns	National Center for Medical legal partnership

Patient caregiver completes the screening prior to or during routine well-child check

Did the screening flag any concerns?

YES

NO

Provider discussion with caregiver to determine whether resources or consultation with CHW/ SW is needed

Patient completes appointment as usual

Caregiver meets with CHW/ SW or obtains resources from EPIC

CHW/ SW contacts by phone in 3 weeks for follow-up

Who We Serve
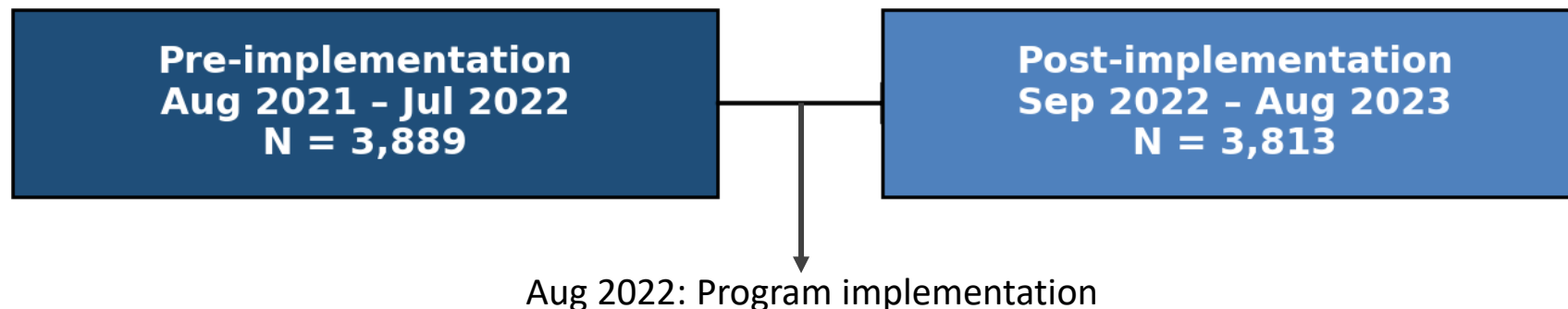
- Large, diverse, urban pediatric population (Houston, TX)
- High Medicaid enrollment
- ~1 in 3 families screened positive for ≥1 NMDOH need

**Prevalence of NMDOH Needs by Domain**

32% screened positive on ≥1 NMDOH domain

15.2% screened positive on ≥2 domains

% of patients

- Financial strain: 16.5%
- Housing instability: 14.1%
- Food insecurity: 12.8%

Study Design

Retrospective cohort using Epic EHR data

- 2 cohorts: patients with a well-child visit prior to and following NMDOH screening implementation

- Outcomes: ED visits, sick visits, hospitalizations, subsequent well-child visits

 - Assessed from the index well-child visit through the end of each group period

Pre-implementation
Aug 2021 – Jul 2022
N = 3,889

Post-implementation
Sep 2022 – Aug 2023
N = 3,813

Aug 2022: Program implementation

Emergency Department Visits

- The distribution of ED visits differed significantly between pre- and post-implementation (p=0.002)

- Fewer children had ≥1 ED visit, and fewer were high-frequency ED users (≥2 visits) after implementation
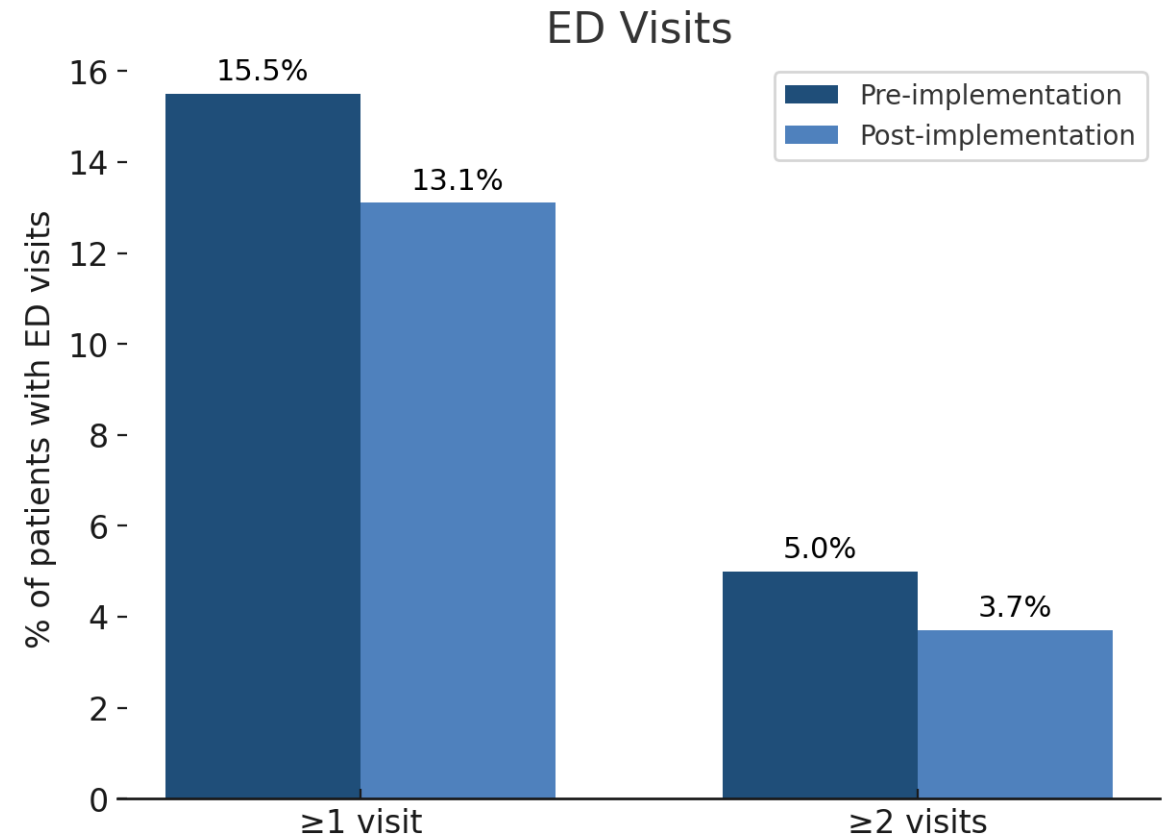
ED Visits

Sick Visits

- The distribution of sick visits differed significantly between pre- and post-implementation (p<0.001)

- Fewer children had 2−4 and ≥5 sick visits after NMDOH screening implementation
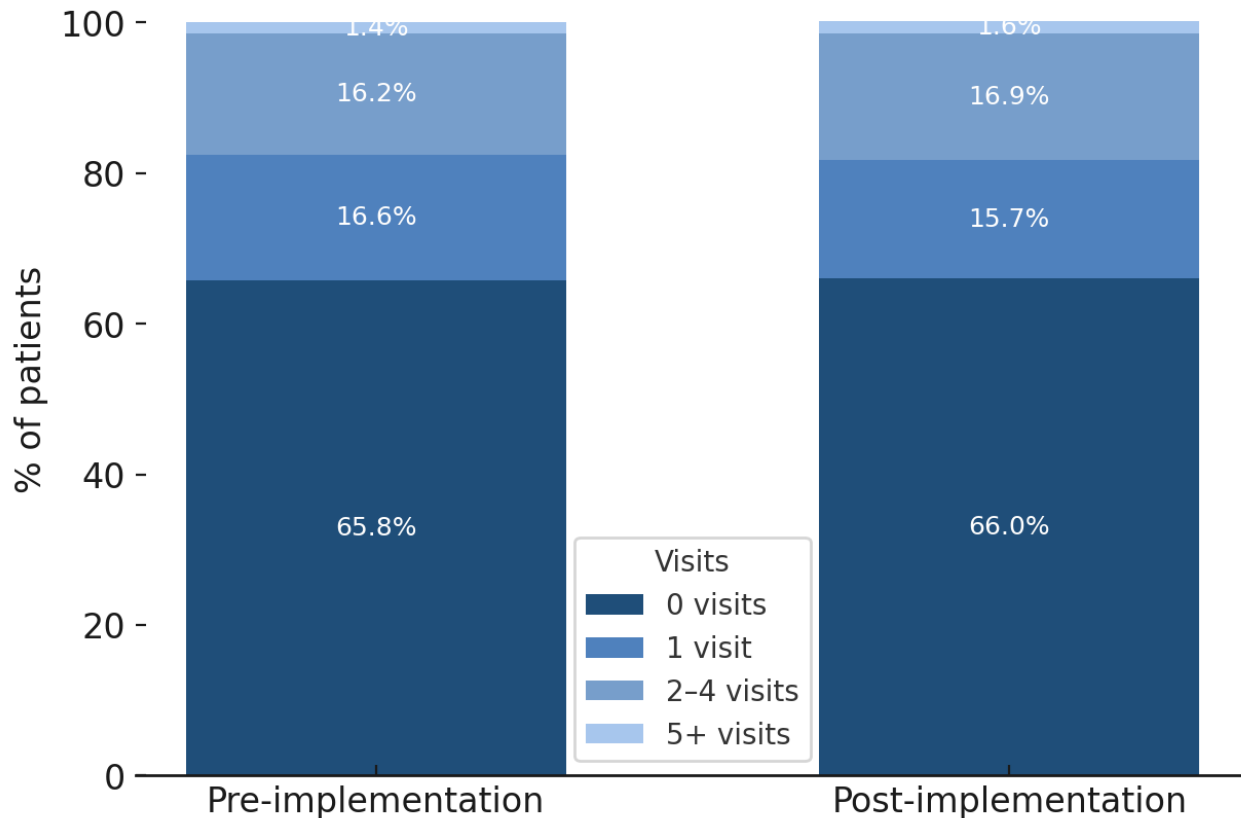

Sick Visits (Frequent Utilization)
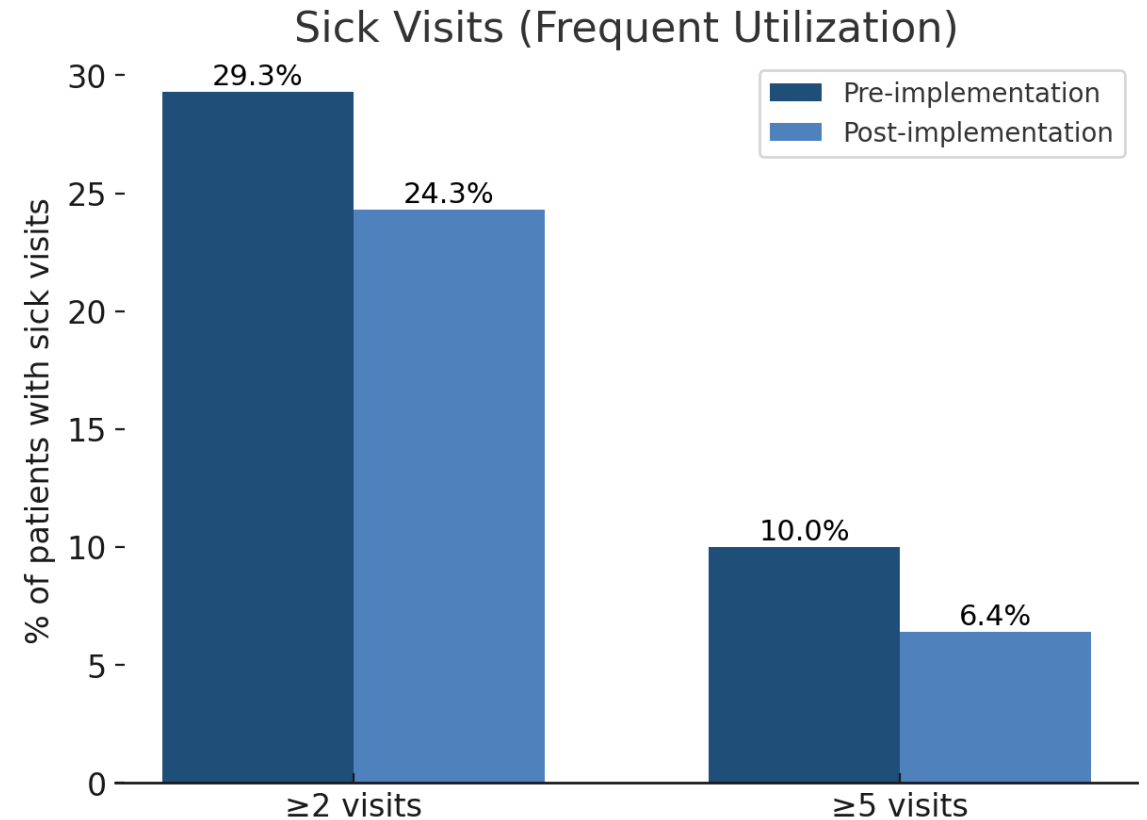
Hospitalizations

- Hospitalization rates showed a non-significant downward trend (p=0.120)

- ≥1 hospitalization: 2.5% pre vs. 2.0% post
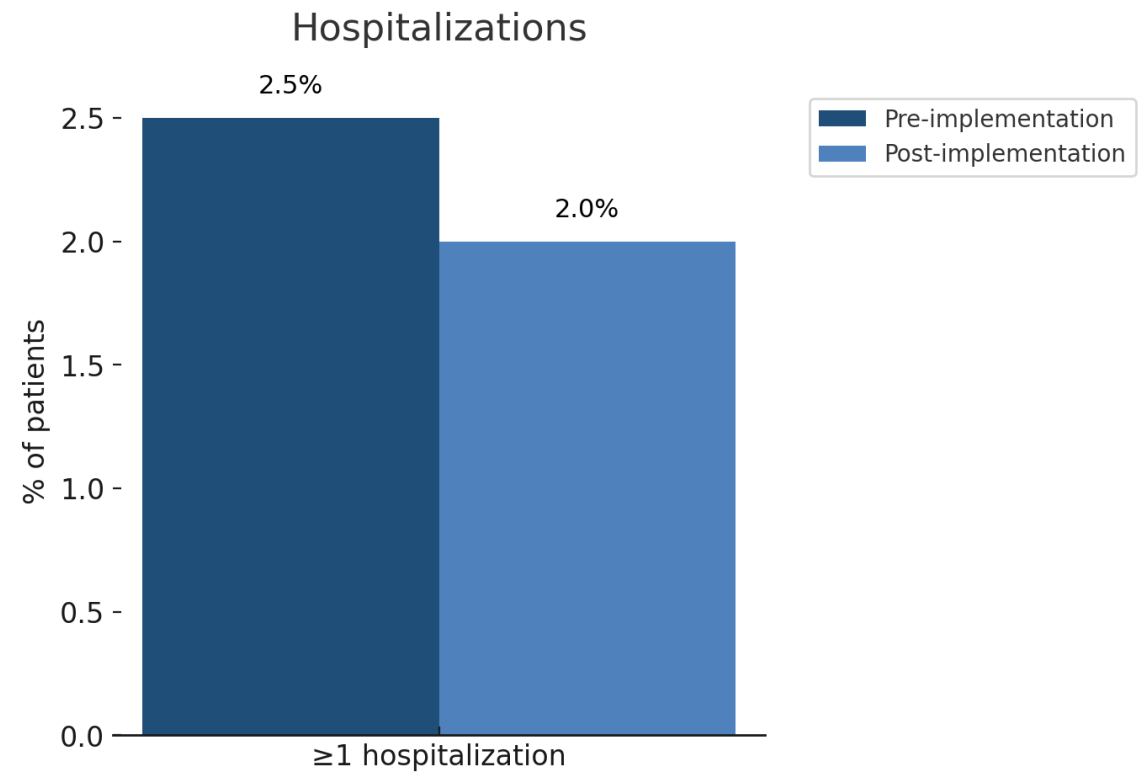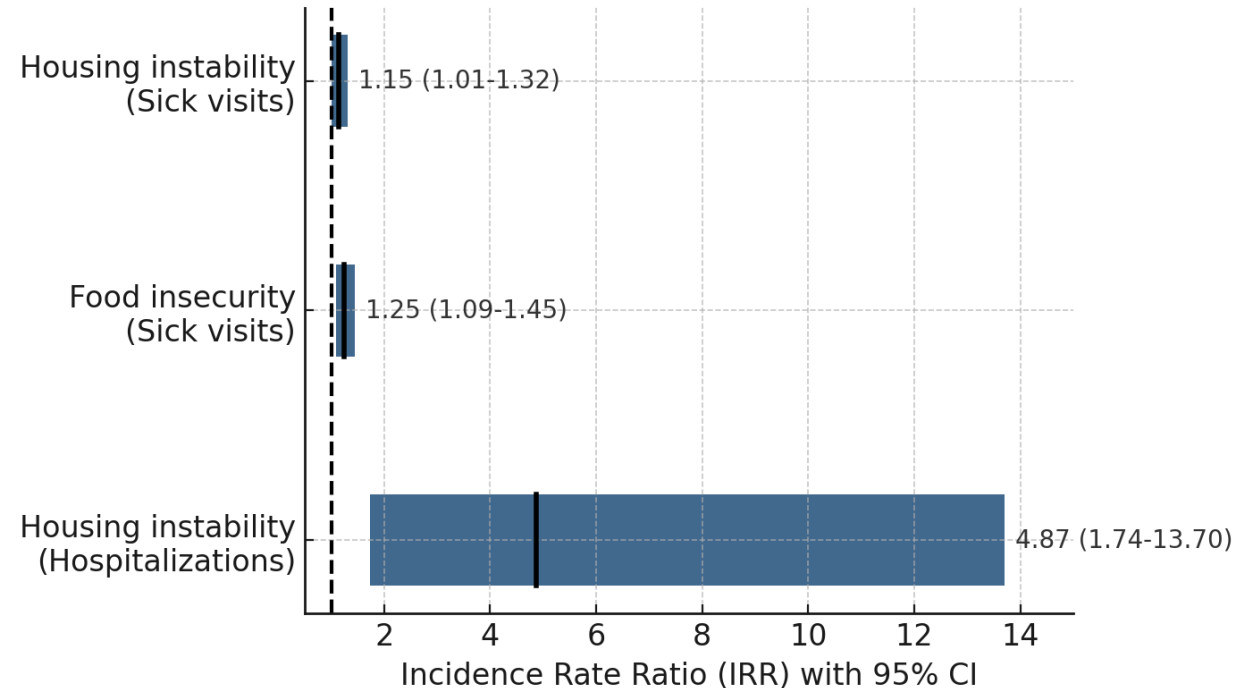
Well-Child Visits

Well-Child Visits Distribution

- No difference in well-child visits (p=0.981)

- Similar distribution of 0, 1, 2–4, and 5+ visits across cohorts

NMDOH and Utilization

Regression Results

- Housing instability and food insecurity were associated with higher utilization

- Other domains (medical-legal, health literacy) were associated with lower utilization

- Referrals to care coordination were associated with more frequent acute care visits

NMDOH Factors Linked to Higher Utilization

Housing instability (Sick visits) 1.15 (1.01-1.32)

Food insecurity (Sick visits) 1.25 (1.09-1.45)

Housing instability (Hospitalizations) 4.87 (1.74-13.70)

Incidence Rate Ratio (IRR) with 95% CI

Summary of Findings

- NMDOH screening identified patient needs and provided insight into associated healthcare utilization

- Screening was associated with significantly fewer ED and sick visits

- Hospitalizations were uncommon but showed a downward trend

- Well-child visits remained stable across cohorts

ED Visits	⬇
Sick Visits	⬇
Hospitalizations	⬇
Well-Child Visits	↔

Interpretation & Implications

- Following implementation of NMDOH screening, an overall improved utilization pattern was observed

- Stable preventative care and less acute care use, without an increase in hospitalizations

- Findings highlight the potential for NMDOH screening to support efficient, patient-centered utilization

Vision

- Build on these findings through prospective, longitudinal studies
- Evaluate long-term health outcomes, utilization patterns, ROI, and patient-centered measures
- Opportunity to partner with MCOs to assess cost savings and patient benefit

Shared Vision

| Healthier Families | Lower Costs | Stronger Systems |

Thank you

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