MEAL DELIVERY
UNDERSTANDING FOOD INSECURITY IN PHILADELPHIA THROUGH PREPARED-MEAL & FOOD PHARMACY PROGRAMS

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At PolicyLab we are poised and ready to anticipate and respond quickly to the challenges that children and their families experience in communities all across the country.
OVERVIEW

ROADMAP

- Background: Food Insecurity in Philadelphia and Beyond
- Aim 1: Nutrition Screener
- Aim 2: Inpatient Food Delivery Pilot
- Takeaways
FOOD INSECURITY
(NATIONALLY)
FOOD INSECURITY

Food Security: the ability to access enough food at all times in order to live a meaningful, active and healthy life.

Food Justice: a multidisciplinary and grassroots perspective of the food system that views healthy, nutritious, and culturally competent foods as a human right while addressing the structural barriers and food insecurities to that right.

Source: Intersectional Environmentalist
10% of all US households are food insecure.
32% of households with income < the poverty line are food insecure
FOOD INSECURITY
CHOP INPATIENT SETTING
20% of families screened in the ED and hospital endorse food insecurity within the past 12 months

14% of families screened in the hospital are concerned about having enough food while they are admitted
In a 2021 survey of 142 parents/caregivers at CHOP, food delivery was the most preferred resource.
“[Food delivery] is convenient for women like me who just like… I just had this kid, and going to the market is a whole task with a toddler and a baby. And then food prices kind of went up, so food stamps, they help, but they don’t last the whole month. So it would be good to have something extra just to get back up.” – Participant 11

“I think that food delivery will probably be better than food in clinic because the last time I was in clinic, I had three children with me. So even if you had [food] available, I probably wouldn’t have grabbed anything because, depending on my mode of transportation, it may be difficult to maneuver with three children and a box of food… If you offered to have some food delivered to my house, I would’ve definitely said yes, versus you offering me food in the clinic for me to take with me. It’s just the convenience of it being brought to you.”

– Participant 21
“I think honestly, getting families connected with SNAP and WIC would be the most helpful thing. Because if it is families with children, you can go to literally a corner store, if your child is hungry, and buy them a sandwich. As long as it's a cold sandwich, you can get them a cold sandwich. So I think resources like help with getting them connected with SNAP and resources on that would be way more helpful than anything.” – Participant 20
TO SUMMARIZE:

Food insecurity at CHOP is an important issue

Families in inpatient care struggle to find food before, during, and after hospital admission

Families prefer meal-delivery to other resources

Families want assistance connecting with WIC and SNAP
OVERVIEW

RESEARCH → PRACTICE

Clinic-Based Resource Navigation Pilot (Spring 2023)

AIM 1

Inpatient Food Delivery Pilot (Summer/Fall 2023)

AIM 2
MEAL DELIVERY EFFICACY: A LITERATURE REVIEW

Homebound/Elderly

Interventions reviewed could have the potential to address the nutrition and socialization needs of homebound.

Children/Family-Based

Though FI scores remained unchanged after the intervention, interviews did indicate improved food access and reliability.
“the existing literature examines the impact of food delivery and produce prescription on post-discharge and homebound elderly individuals, the impact of food delivery on adolescents and families, and the exacerbation of food insecurity by the COVID-19 pandemic.

A review of the literature reveals a gap in information about discharged patients and their families in the pediatric setting. Our study is poised to examine that gap by assessing the effectiveness of a prepared meal delivery program and a produce prescription program at CHOP”
MEAL DELIVERY EFFICACY: A LITERATURE REVIEW

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RECALL...

20% of families screened in the ED and hospital endorse food insecurity within the past 12 months

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AIM 1
CLINIC-BASED RESOURCE NAVIGATION
Draft manuscript for
Clinic-Based Resource Navigation Program
MANUSCRIPT SUMMARY

BACKGROUND
- CHOP’s Medical Financial Partnership (MFP) implemented a standardized screening and referral program

HYPOTHESIS
- Families will have more comfort disclosing needs in a nutrition related screener and have better resource engagement through direct communication with a resource navigator via phone call

Title: Connecting Families to Nutrition Benefit Programs Through a Standardized Nutrition Screener

Authors: Aditi Vasan, MD, MSHP; Benicio Beatty; Gabrielle DiFiore, MPH; Maura Powell, MPH, MBA; George Dalember, MD, MSHP; Kate Morrow, LSW; Katie Gwynn, BSW; Katie McPeak, MD; Alexander Fiks, MD, MSCE

The Innovation
Recognizing the prevalence of food insecurity (FI) among families with infants in Philadelphia, the CHOP Medical Financial Partnership (MFP) implemented a standardized screening and referral program with the goal of connecting families to available resources, specifically government nutrition benefit programs like WIC and SNAP. The program differs from prior interventions in that it 1) assesses social need within the context of nutrition and 2) connects families to benefits with a resource navigator as opposed to disseminating information via resource menu website. MFP predicts that families will have more comfort disclosing needs in a nutrition-related screener and have better resource engagement through direct communication with a resource navigator via phone call.

Who & Where
The MFP program targeted CHOP primary care families with infants, aiming to increase enrollment in the partnership program by 30% over a month-long period from November to December 2022. The interdisciplinary team developed a tablet-based nutrition questionnaire embedded within the EHR and disseminated it to well-visit families with infants 0-6 months. The questionnaire assessed general health and food insecurity, family stressors, and the need for resources.
INNOVATION

- Assesses social need within the context of nutrition
- Connects families to benefits with a resource navigator as opposed to disseminating information via resource menu website

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MANUSCRIPT SUMMARY

WHO
- Targeted CHOP primary care families with infants
- Aim to increase enrollment in the partnership programs by 30% over 1 month (Nov-Dec)
- Connecting families to government programs (WIC/SNAP)

HOW
- Cycle of questionnaires for food insecurity, followed by targeted follow-up phone calls from resource navigators

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MANUSCRIPT SUMMARY

RESULTS
- The program exceeded the aim of increasing MFP program enrollment by 38%

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AIM 2
INPATIENT FOOD DELIVERY
PILOT PROGRAM
MEAL DELIVERY PROGRAM

• Receive 1 week of FREE prepared meals (3 meals a day for 7 days) for everyone in your household

• Speak with our caterer, Inflight Cuisine, about dietary restrictions, preferences, and delivery schedule

• Meal delivery orders will be processed between 8:30AM and 4PM, Monday through Friday.

• Delivery will begin within 5 days of your child’s discharge
FOOD PHARMACY PROGRAM

- Receive free delivery of fresh fruits and vegetables to your home once a month for 6 months
- Each box contains 6–8 seasonal fruits and vegetables sourced from local farms
- The box will be delivered to your home (contact-free) by our partner Food Connect
- Food Connect will communicate with you directly about each delivery via text message.
ENROLLMENT FLOWCHART

Meal Delivery and Food Pharmacy Intake Form

Please complete the survey below to indicate your interest in enrolling in our Meal Delivery Program, our Food Pharmacy Program, or BOTH.

As a reminder, our Meal Delivery Program provides 3 meals a day for 7 days after you leave the hospital. Please note that the first meal delivery may arrive up to 3 days after you leave the hospital.

Our Food Pharmacy Program provides fresh fruits and vegetables delivered directly to your home once a month for 6 months.

Please select your preferred language:

Please select your preferred language:

* must provide value

Which programs are you interested in? (select all that apply)

* must provide value

- Food Pharmacy
- Meal Delivery

Food Pharmacy Resource Navigator contacts family to coordinate deliveries
**MY PROJECT OBJECTIVES**

1. Create a flyer to be used for enrollment in the Food Delivery Program.
2. Complete a literature search to aid in formulating a study interview guide.
3. Conduct qualitative interviews with enrolled families.

- **Patient admitted to CHOP inpatient unit with social needs screening**
- **Registration team provides tablet-based social needs screener**
- **Parent/Caregiver completes screener**
- **Caregiver receives Resource Connects link to local food resources**
- **Caregiver ineligibility**
- **Caregiver opts out of food delivery**
- **Caregiver eligible → SWCC offers delivery of prepared meals and/or fresh produce**
- **Caregiver completes REDCap form for Meal Delivery / Food Pharmacy**
- **Researcher contacts family for QUAL interview/Demographic Questionnaire**
- **Family completes meal delivery follow up form**
- **Food Pharmacy Resource Navigator contacts family to coordinate deliveries**

- **Caregiver endorses food insecurity & requests help**
- **Social work care coordinator determines eligibility for food delivery (based on ZIP code)**
FOOD DELIVERY PROGRAM LAUNCH
Please complete the survey below to indicate your interest in enrolling in our Food Pharmacy Program, Meal Delivery Program, or BOTH!

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Please select your preferred language:
* must provide value

Which programs are you interested in? (select all that apply)
* must provide value

What is your phone number?
* must provide value

What day do you expect to leave the hospital? (if you’re unsure, pick the Monday of the week you think you may leave)
* must provide value

Instructions
- Scan the QR Code 08 or access the website via the URL below to sign-up for the Meal Delivery Program
- Open camera app and hold QR code (left).
- Tap the pop-up link to open the survey
- Complete the survey to enroll in the Program

URL: https://redcap.link/foodprograms
Additional Questions? Please Contact foodpharmacy@chop.edu
BARRIERS

Patient admitted to CHOP inpatient unit with social needs screening

Registration team provides tablet-based social needs screener

Parent/Caregiver completes screener

Caregiver endorses food insecurity & requests help

Caregiver receives Resource Connects link to local food resources

Caregiver ineligible

Caregiver opts out of food delivery

Social work care coordinator determines eligibility for food delivery (based on ZIP code)

Caregiver eligible; SWCC offers delivery of prepared meals and/or fresh produce

Caregiver completes REDCap form for Meal Delivery / Food Pharmacy

Food Pharmacy Resource Navigator contacts family to coordinate deliveries
IMPLEMENTATION AND PRELIMINARY RESULTS
SO FAR...

- **Enrolled families n = 3**
- Food delivered to all families
- **Next Step: Contact families following meal delivery**
- Follow-Up Form
- Qualitative Interview & Demographic Survey

### Follow-Up Form - Meal Delivery

Please fill out the survey below as you make follow-up calls to families.

**Patient name:** [patient_name]  
**Caregiver name:** [guardian_name]

Programs used: [program_interest]

- **Did you get prepared meals delivered to your home after your child was discharged?**  
  - Yes  
  - No

- **Was the meal delivery process convenient for you?**  
  - Yes  
  - No

- **What would make the meal delivery process better for you?**

- **Did you like the meals that were delivered?**  
  - Yes  
  - No

- **What would make the meals better?**

### Qualitative Interview Script and Demographic Questionnaire Draft

This is the draft interview script and is subject to changes after piloting the script with caregivers.

Hello, it’s nice to meet you. My name is _______. I am a researcher at the Children’s Hospital of Philadelphia, working with a team trying to better understand families’ experiences with participating in a prepared food delivery program. Our goal is to better understand families’ thoughts on if and how these programs impact their experiences during and after their child’s time in the hospital.

Over the next 30 minutes, I’d like to ask you some questions related to this. If it’s okay with you, I’d like to record our conversation so that our team can listen to it later and make sure we hear all of your thoughts. Your responses will be completely anonymous and won’t be shared with your child’s care team or have any impact on your child’s medical care. If you would rather not answer more questions, or any specific questions, we can stop at any time. When we’re done with the interview, you’ll get a $25 gift card as a thanks for your time. Is it okay if we begin?

The first set of questions are about your experiences related to food and health.

1) Many families experience challenges getting enough food for themselves and their families, particularly with all of the changes brought on by the pandemic. Can you share where you and your family typically get the food that you eat?
FOLLOW-UP SURVEY

- Was the meal delivery process convenient for you? (Y/N)
- What would make the meal delivery process better for you? __________
- Did you like the meals that were delivered? (Y/N)
- What would make the meals better? __________

INTERVIEW

1. Experiences related to food & health
2. Program-specific experiences
3. Improving the program
4. Demographic questionnaire
PERSONAL SKILLS ASSESSMENT
PERSONAL SKILLS ASSESSMENT

- LIT REVIEW/MANUSCRIPT WRITING
- QUALITATIVE INTERVIEWING
- COLLABORATIVE DESIGN
- SHADOWING/OBSERVATION OPPORTUNITIES
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CHOP PolicyLab Team

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SUMR 2023 Cohort
QUESTIONS AND COMMENTS?

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