

POLICYLAB

MEAL DELIVERY

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

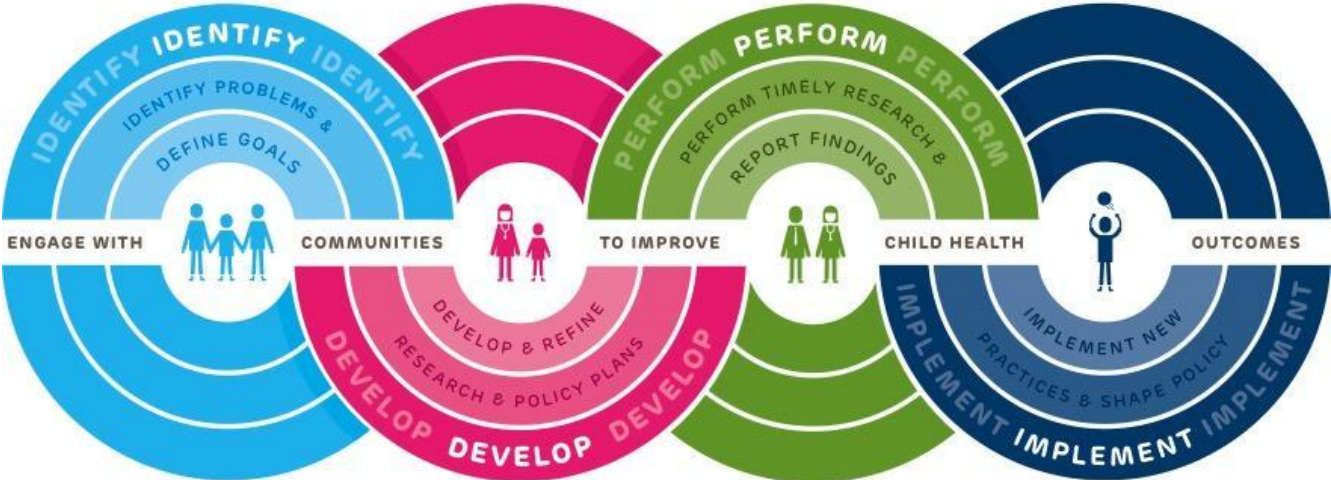
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INNOVATING THROUGH POLICYLAB

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.



ROADMAP

- ❑ Background: Food Insecurity in Philadelphia and Beyond
- ❑ Aim 1: Nutrition Screener
- ❑ Aim 2: Inpatient Food Delivery Pilot
- ❑ Takeaways

OVERVIEW

FOOD INSECURITY

(NATIONALLY)

FOOD INSECURITY

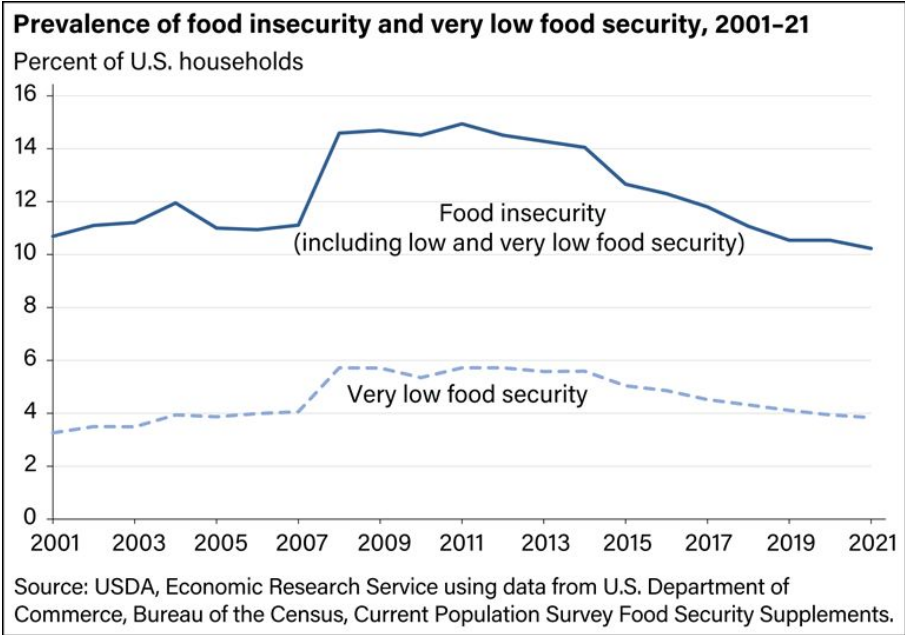
Food Security: the ability to access enough food at all times in order to live a meaningful, active and healthy life.

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*

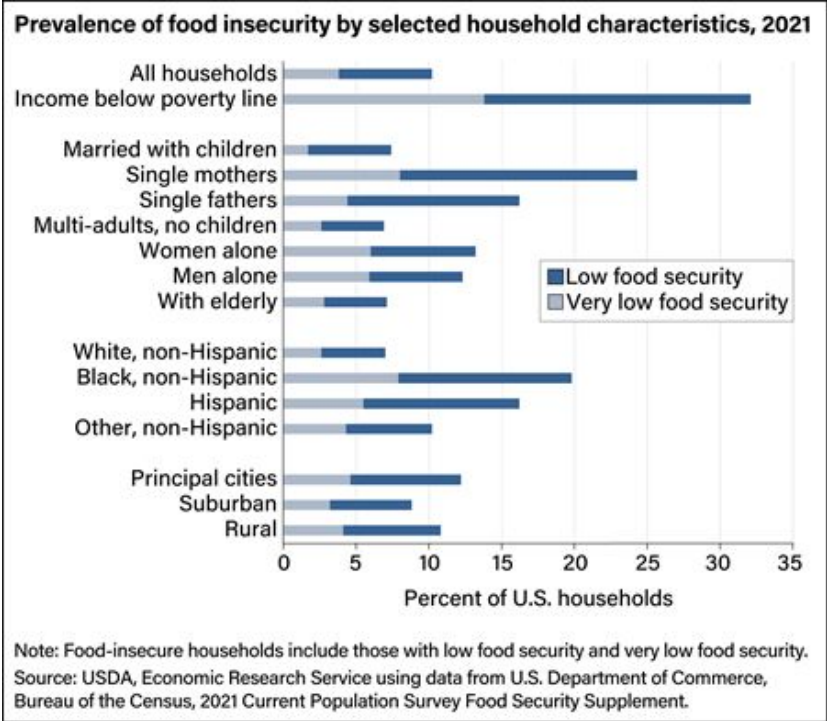
FOOD INSECURITY (contd)

10% of all US households are food insecure.



FOOD INSECURITY (contd)

32% of households with income < the poverty line are food insecure



OVERVIEW

FOOD INSECURITY

CHOP INPATIENT SETTING

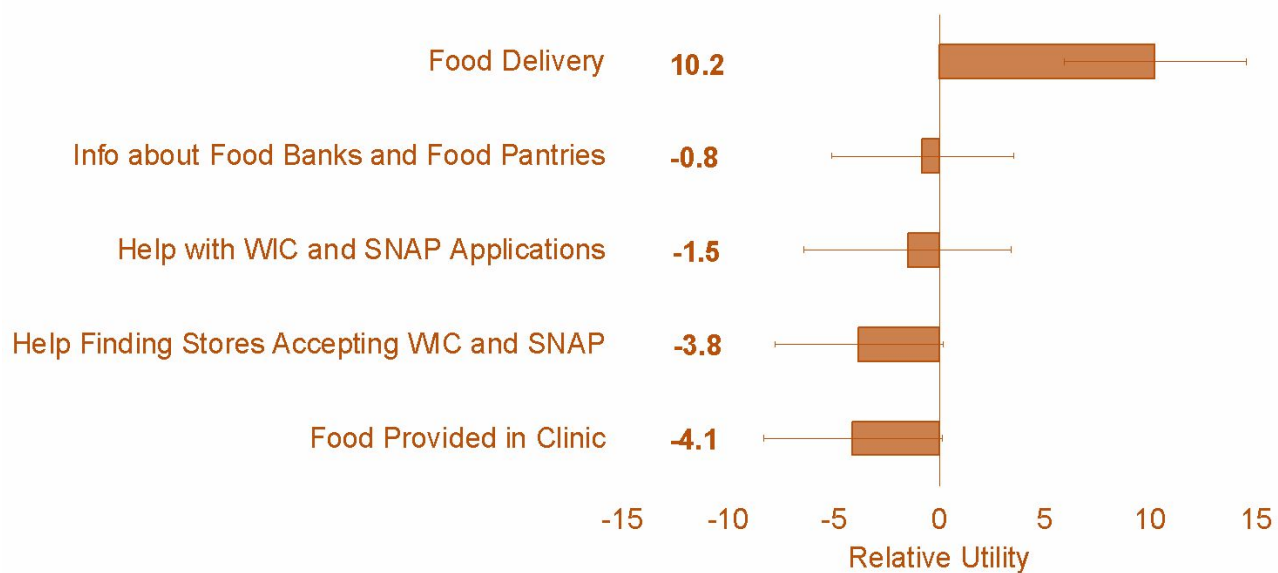
AT CHOP...

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**



AT CHOP...



In a 2021 survey of 142 parents/caregivers at CHOP, food delivery was the most preferred resource

AT CHOP...

"[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

AT CHOP...

“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

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

Food Delivery/Prepared Meals Programs: Brief Summary of Existing Interventions

Overview:

Within the last 5 years, several notable studies looking at the impact of food delivery and prepared meals have been published. These studies have primarily looked at meal delivery in the context of targeting 1) the homebound/elderly and 2) food insecurity (FI) as it pertains to the COVID-19 pandemic. The majority of these studies are 2 or 3-arm randomized control trials with pre-post quantitative evaluation and a qualitative follow-up, typically in the form of semi-structured interviews. Within the interviews, researchers assessed intervention satisfaction with the meals, impact on perceived FI, and more (several relative qualitative questions are included below).

Homebound/Elderly:

The study by Buys et al. looks at meal delivery for discharged patients, but only for elderly adults. The study concluded that delivering meals to older adults following hospital discharge is feasible in collaboration with a small nonprofit organization and requires further research (Buys, 2017). Similarly, the Ross et al. study looked at elderly adults, but focused on already homebound adults as well as an innovative style of food delivery that looked at reducing food waste through repurposed meals. The study concluded that the intervention could address the nutrition and socialization needs of homebound, but a more expansive RCT is needed (Ross, 2022). Similar results were found in a 2019 study by Grays conducted with older adults living in the community.

Children/Family-Based:

The study by Fischer et al. assessed the impact of a family-based produce prescription and nutrition education intervention on adults and children. Among other results, the study concluded that fruit and vegetable intake remained the same post intervention (below recommended levels) and that FI scores had not changed post-intervention. Interviews however did indicate improved food access and reliability (Fischer, 2022).

A document analysis by McLoughlin et al. assesses the equitability of school district meal distribution in four large cities during the COVID-19 pandemic. Through qualitative coding, the study highlighted several strategies within the Getting to Equity (GTE) framework that would increase meal access and eliminate barriers. Strategies included the efficient provision of meal locations and times and the promotion of balanced dieting (McLoughlin, 2020).

Other Meal Delivery Studies:

MEAL DELIVERY EFFICACY: A LITERATURE REVIEW

“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”

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RECALL...

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**





AIM 1

CLINIC-BASED RESOURCE NAVIGATION

MY PROJECT OBJECTIVE

***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 Vasani, MD, MSHP; Benicio Beatty; Gabrielle DiFiore, MPH; Maura Powell, MPH, MBA; George Dalembert, 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 a 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 focused on three key domains: diet, nutritional risk assessment, and social needs.

MANUSCRIPT SUMMARY

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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%



ANNALS OF FAMILY MEDICINE™

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OVERVIEW

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

INFLIGHT
CUISINE

HOME ABOUT US INTAKE/WAIVER MENU OUR LOCATION CONTACT US

Healthy Eating Starts With Us

Inflight Cuisine serves well-balanced and highly nutritional meals to our customers.

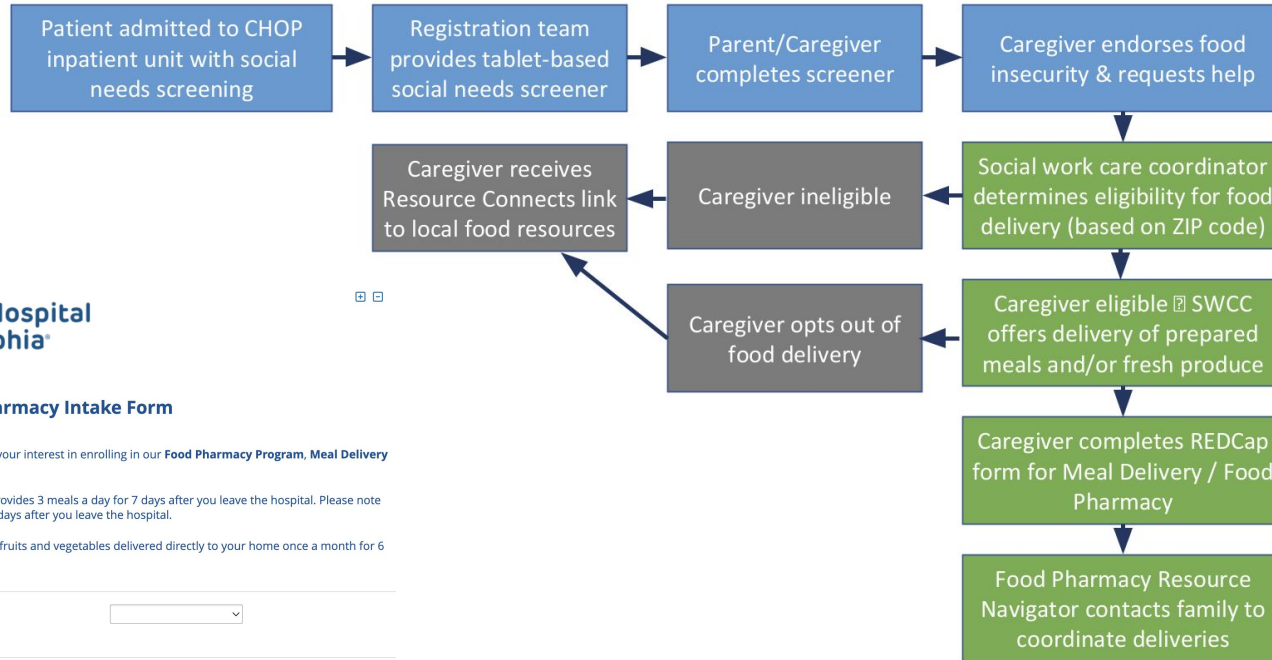
Place Order →

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 **Food Pharmacy Program**, **Meal Delivery 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:

* must provide value

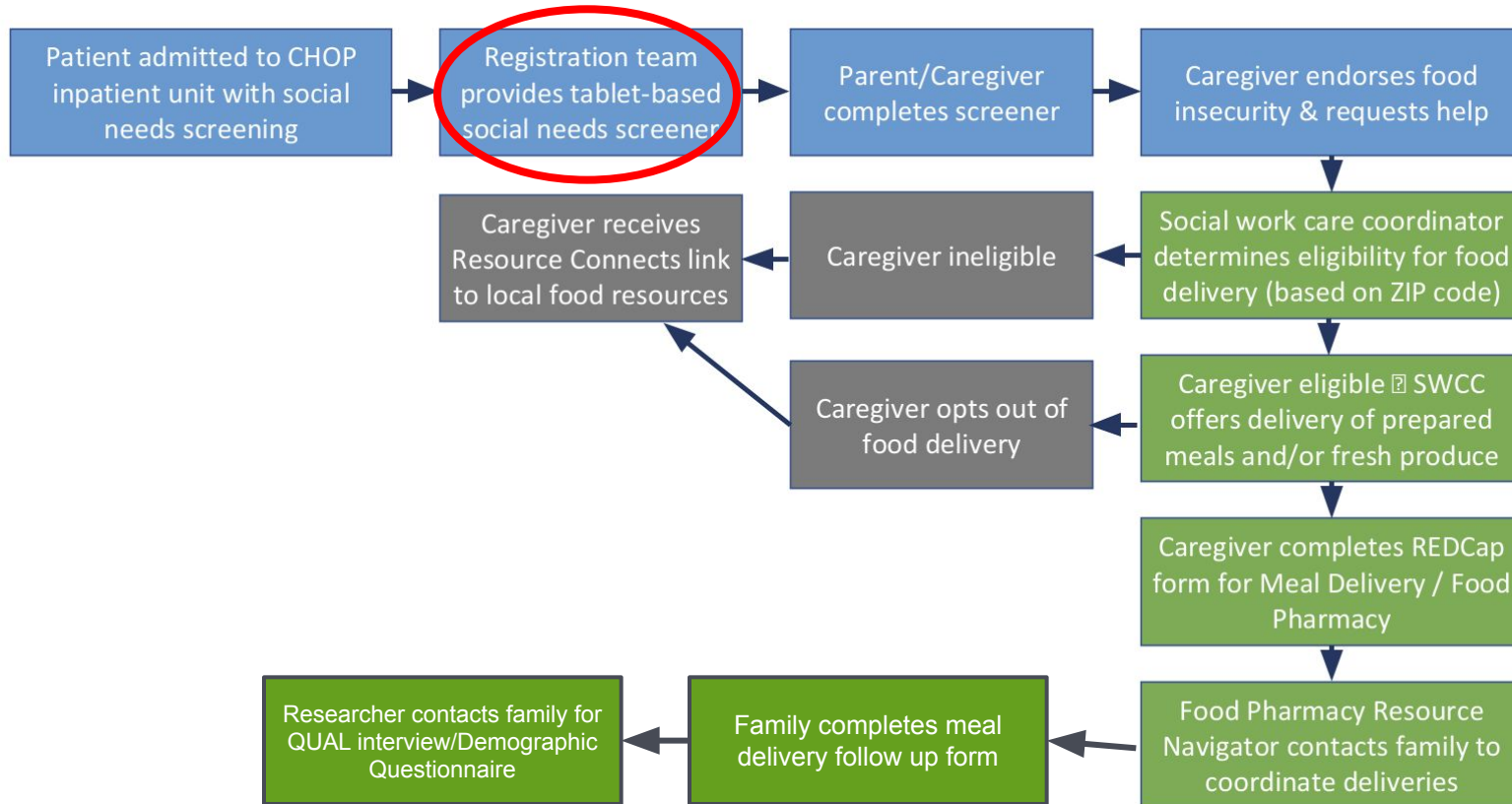
Which programs are you interested in? (select all that apply)

* must provide value

Food Pharmacy

Meal Delivery

MY PROJECT OBJECTIVES



OVERVIEW

FOOD DELIVERY PROGRAM LAUNCH

ENROLLMENT FLYER



CHOP FOOD PROGRAMS

MEAL DELIVERY PROGRAM

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SCAN HERE TO ENROLL IN THESE PROGRAMS



SCAN HERE

Instructions

- Scan the QR Code OR access the website via the URL below to sign-up for the Meal Delivery Program
- Open camera app and hold over 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

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Please select your preferred language:

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

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Food Pharmacy

Meal Delivery

What is your phone number?

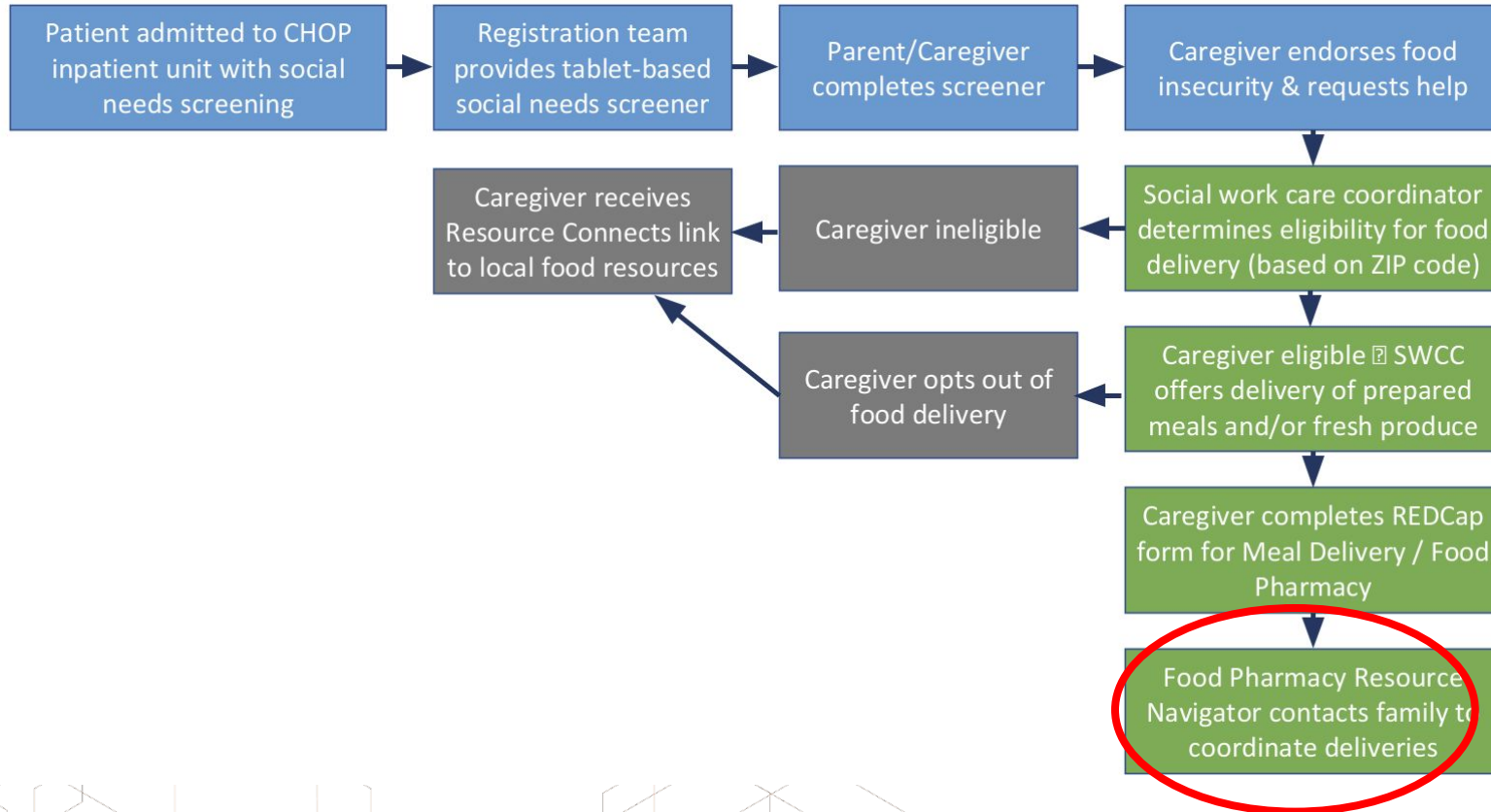
* must provide value

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

Today M-D-Y

BARRIERS



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

Page 1

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

OVERVIEW

PERSONAL SKILLS ASSESSMENT

PERSONAL SKILLS ASSESSMENT

LIT REVIEW/MANUSCRIPT
WRITING

QUALITATIVE
INTERVIEWING

COLLABORATIVE DESIGN

SHADOWING/OBSERVATION
OPPORTUNITIES



ACKNOWLEDGEMENTS

Dr. Aditi Vasan

Abbe Stern & The Food Delivery Program Team

CHOP PolicyLab Team

Joanne Levy & The SUMR Program Staff

SUMR 2023 Cohort



QUESTIONS AND COMMENTS?



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RESOURCES

1. Gay, T. (2022, June 9). Reimagining Food Justice + Food Sovereignty Toolkit — Intersectional Environmentalist. Intersectional Environmentalist. Retrieved August 14, 2023, from <https://www.intersectionalenvironmentalist.com/toolkits/reimagining-food-justice-food-sovereignty-toolkit>
2. (n.d.). Inflight Cuisine - Inflight Cuisine. Retrieved August 14, 2023, from <https://www.inflightcuisine.com/>
3. Food Pharmacy. (n.d.). Children's Hospital of Philadelphia. Retrieved August 14, 2023, from <https://www.chop.edu/centers-programs/food-pharmacy>
4. Chart Detail. (2023, August 8). USDA ERS - Chart Detail. Retrieved August 14, 2023, from <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=104672>
5. Chart Detail. (2023, August 8). USDA ERS - Chart Detail. Retrieved August 14, 2023, from <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=102455>