Teaching Social Determinants of health in Family Medicine Residency

Paul Ravenna, MD
Katherine Wright, MPH, PhD
Elizabeth R. Ryan, EdD
Deborah S. Clements, MD, FAAFP

Northwestern Medicine®

Financial Disclosures

National Collaborative for Education to Address the Social Determinants of Health

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number UH1HP29963, Academic Units for Primary Care Training and Enhancement, $3,691,515 total award amount.

This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

Northwestern Medicine®

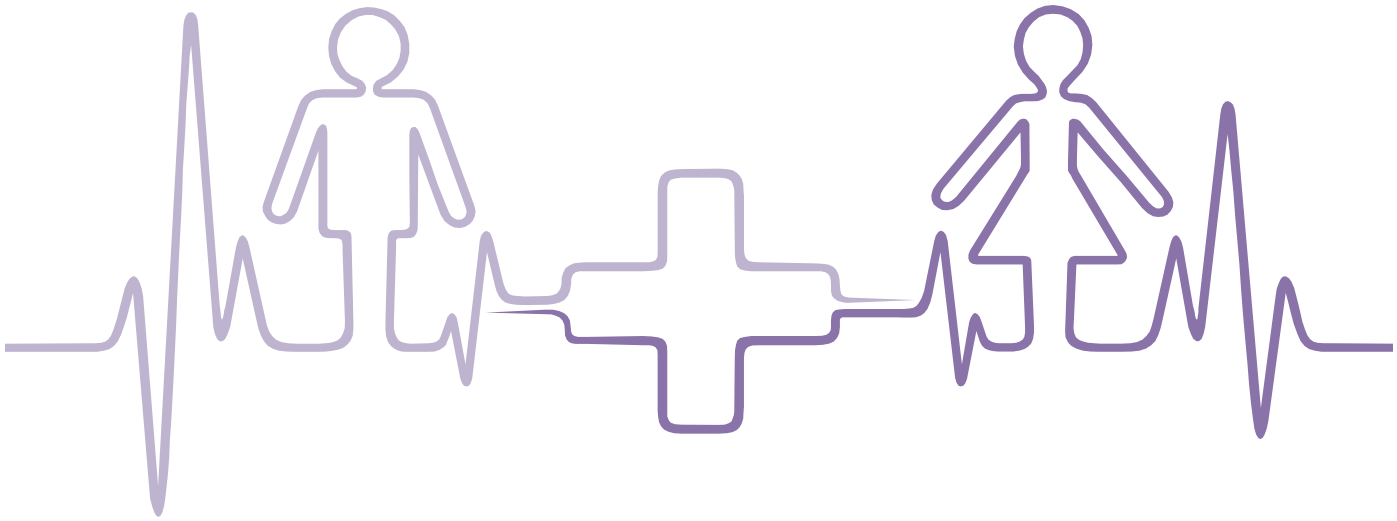
Agenda

- Overview of curriculum resources to teach SDOH
- Community Health Resource Navigator (CHRN) demonstration
- Northwestern Lake Forest Family Medicine Residency pilot curriculum development and evaluation
- Next steps for the National Collaborative for Education to Address the Social Determinants of Health

Social Determinants of Health

HealthyPeople 2020

"...defined as conditions in the social, physical, and economic environment in which people are born, live, work, and age. They consist of policies, programs, and institutions and other aspects of the social structure, including the government and private sectors, as well as community factors."



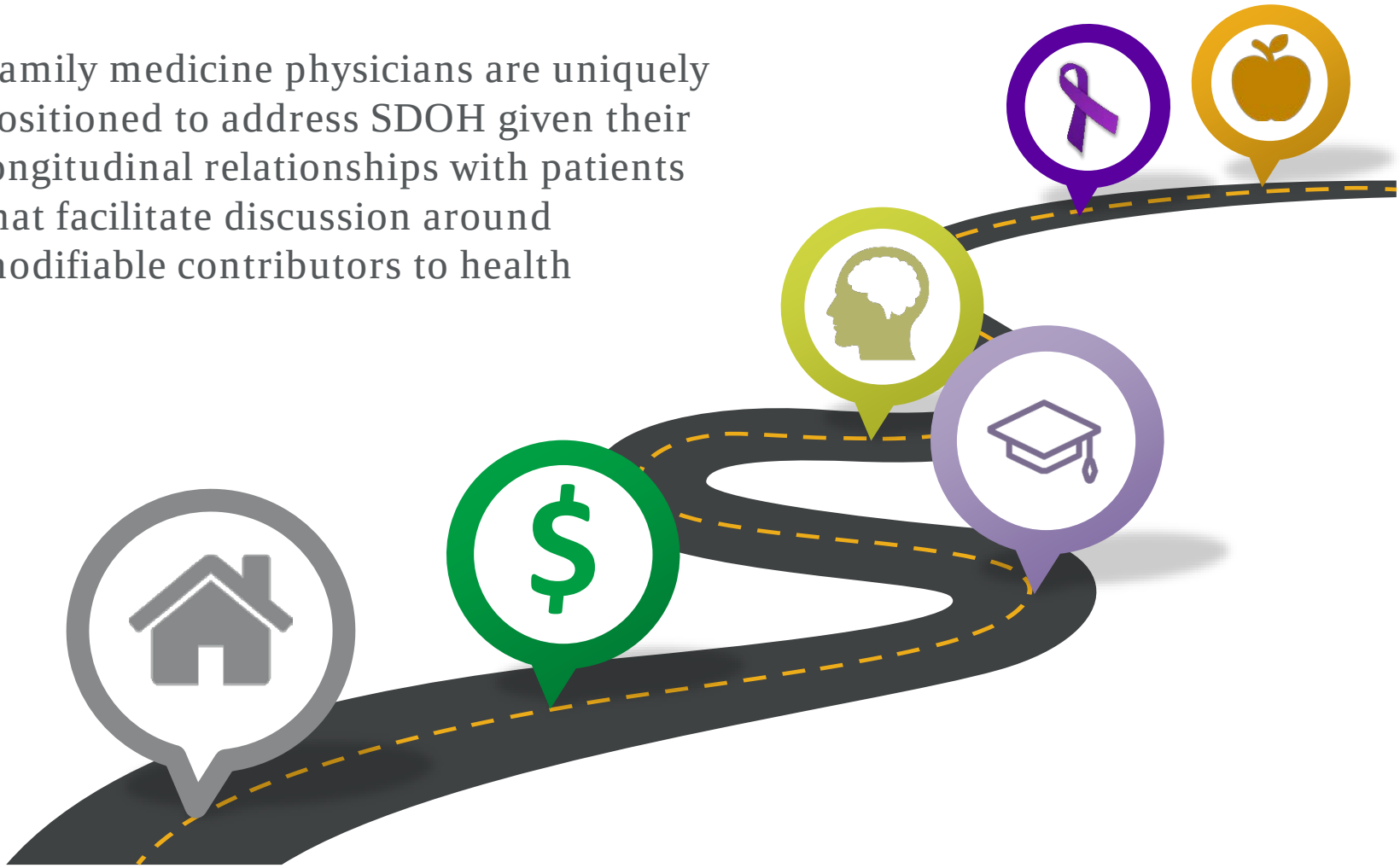
Northwestern Medicine®

HealthyPeople 2020; retrieved from: https://www.healthypeople.gov/2010/hp2020/advisory/SocietalDeterminantsHealth.htm

Social Determinants of Health

Roadmap

Family medicine physicians are uniquely positioned to address SDOH given their longitudinal relationships with patients that facilitate discussion around modifiable contributors to health



Northwestern Medicine®

Social Determinants of Health

Survey Results; n=132 Family Medicine & Internal Medicine Residents

84% of residents stated they received previous training on SDOH in medical school

However, the following proportion of residents rated themselves as highly experienced or expert at the following skill-based competencies:

identifying SDH in their practice: 28%

discussing those challenges with patients: 14%

Northwestern Medicine®

Social Determinants of Health

Family Medicine Milestones

PROF-3 Demonstrates humanism and cultural proficiency					
Has not achieved Level 1	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
	Consistently demonstrates compassion, respect, and empathy Recognizes impact of culture on health and health behaviors	Displays a consistent attitude and behavior that conveys acceptance of diverse individuals and groups, including diversity in gender, age, culture, race, religion, disabilities, sexual orientation, and gender identity Elicits cultural factors from patients and families that impact health and health behaviors in the context of the biopsychosocial model Identifies own cultural framework that may impact patient interactions and decision-making	Incorporates patients' beliefs, values, and cultural practices in patient care plans Identifies health inequities and social determinants of health and their impact on individual and family health	Anticipates and develops a shared understanding of needs and desires with patients and families; works in partnership to meet those needs	Demonstrates leadership in cultural proficiency, understanding of health disparities, and social determinants of health Develops organizational policies and education to support the application of these principles in the practice of medicine
☐	☐	☐	☐	☐	☐
Comments:					

Northwestern Medicine®

ACGME Family Medicine Milestones
retrieved from: https://www.acgme.org/Portals/0/PDFs/Milestones/FamilyMedicineMilestones.pdf

Social Determinants of Health

Family Medicine Milestones

SBP-3 Advocates for individual and community health					
Has not achieved Level 1	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
	Recognizes social context and environment, and how a community's public policy decisions affect individual and community health	Recognizes that family physicians can impact community health Lists ways in which community characteristics and resources affect the health of patients and communities	Identifies specific community characteristics that impact specific patients' health Understands the process of conducting a community strengths and needs assessment	Collaborates with other practices, public health, and community-based organizations to educate the public, guide policies, and implement and evaluate community initiatives Seeks to improve the health care systems in which he or she practices	Role-models active involvement in community education and policy change to improve the health of patients and communities
☐	☐	☐	☐	☐	☐
Comments:					

Northwestern Medicine®

ACGME Family Medicine Milestones
retrieved from: https://www.acgme.org/Portals/0/PDFs/Milestones/FamilyMedicineMilestones.pdf

Social Determinants of Health

ACGME common requirements

VI.A.1.b) Quality Improvement

Residents must receive training and experience in quality improvement processes, including an understanding of health care disparities.

IV.A.5.f) Systems-based Practice:

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Accreditation Council for Graduate Medical Education

Northwestern Medicine®

ACGME Common Program Requirements
retrieved from: http://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/CPRs_2017-07-01.pdf

Curriculum Resources

to teach social determinants of health

Northwestern Medicine®

Social Determinants of Health

Curriculum Landscape

- Many undergraduate medical schools have incorporated this topic into training, but often focus on change in attitudes and knowledge, and not skill development.
- SDH training in residency is sparse and highly variable in content, delivery and evaluation
- As a consequence, physician residents enter the workforce without being equipped with the skills necessary to address SDH

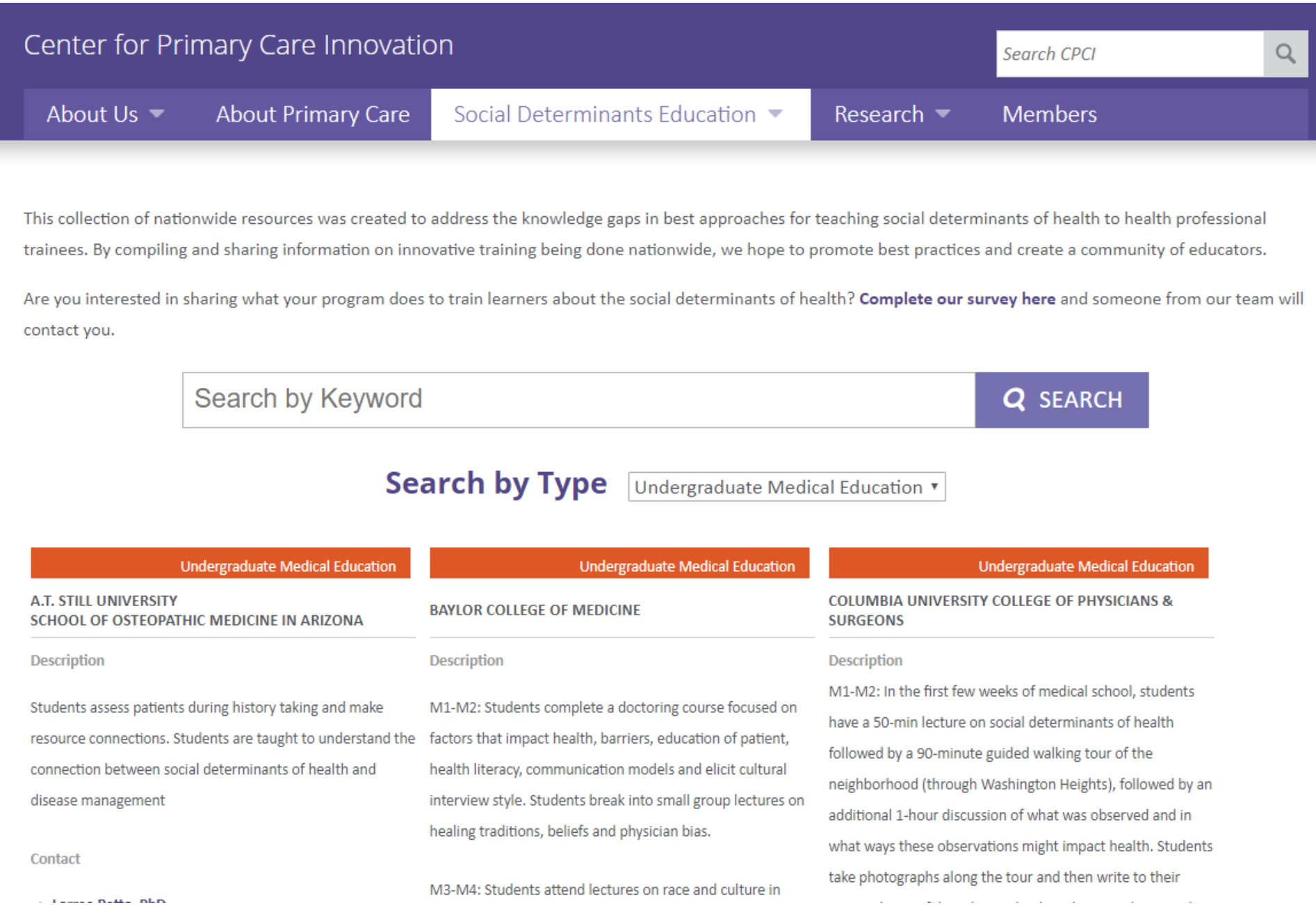
National Collaborative for Education to Address Social Determinants of Health

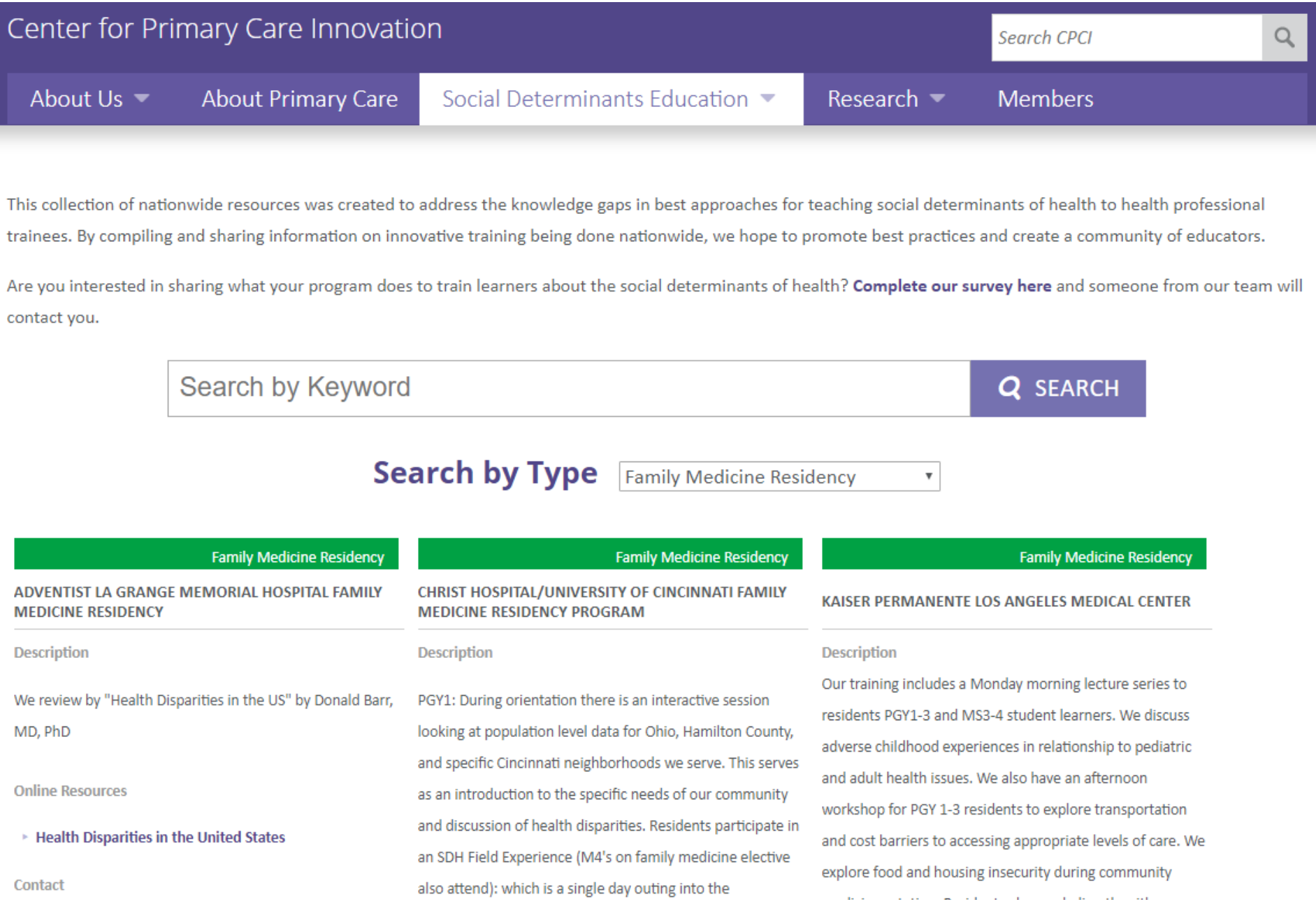
Collection of Curriculum Resources

Review our collection or submit your own to contribute to our community of work.

Northwestern Medicine®

http://www.feinberg.northwestern.edu/sites/cpci/hrsa-grant/educational-resources/community-of-educators.html


Center for Primary Care Innovation
Search CPCI
About Us
About Primary Care
Social Determinants Education
Research
Members
This collection of nationwide resources was created to address the knowledge gaps in best approaches for teaching social determinants of health to health professional trainees. By compiling and sharing information on innovative training being done nationwide, we hope to promote best practices and create a community of educators.
Are you interested in sharing what your program does to train learners about the social determinants of health? Complete our survey here and someone from our team will contact you.
Search by Keyword
SEARCH
Search by Type
Undergraduate Medical Education
Undergraduate Medical Education
A.T. STILL UNIVERSITY SCHOOL OF OSTEOPATHIC MEDICINE IN ARIZONA
Description
Students assess patients during history taking and make resource connections. Students are taught to understand the connection between social determinants of health and disease management
Contact
Undergraduate Medical Education
BAYLOR COLLEGE OF MEDICINE
Description
M1-M2: Students complete a doctoring course focused on factors that impact health, barriers, education of patient, health literacy, communication models and elicit cultural interview style. Students break into small group lectures on healing traditions, beliefs and physician bias.
M3-M4: Students attend lectures on race and culture in
Undergraduate Medical Education
COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANS & SURGEONS
Description
M1-M2: In the first few weeks of medical school, students have a 50-min lecture on social determinants of health followed by a 90-minute guided walking tour of the neighborhood (through Washington Heights), followed by an additional 1-hour discussion of what was observed and in what ways these observations might impact health. Students take photographs along the tour and then write to their



Northwestern Medicine®

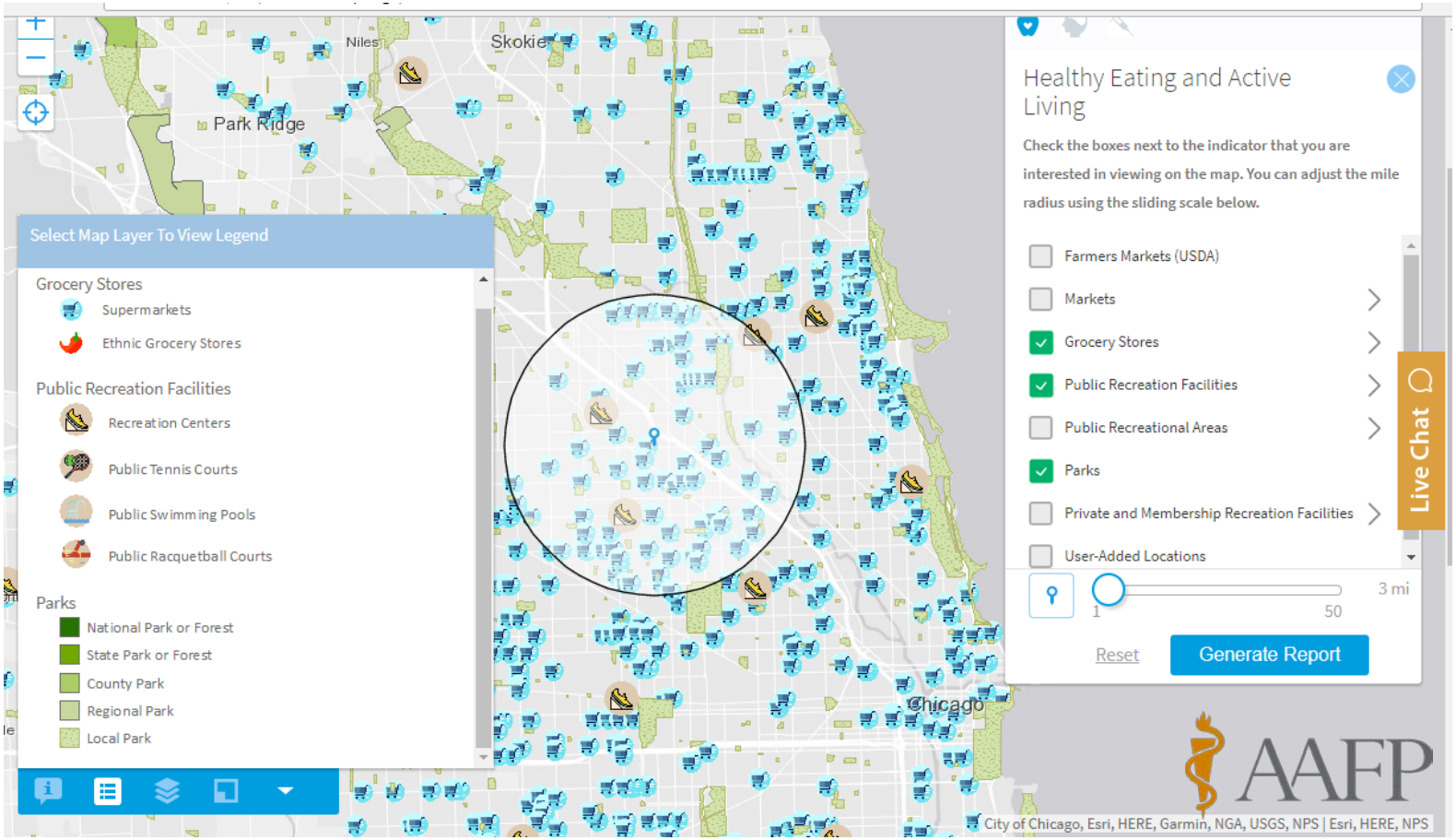
GIS Resources

to teach social determinants of health

Northwestern Medicine®

Community Health Resource Navigator

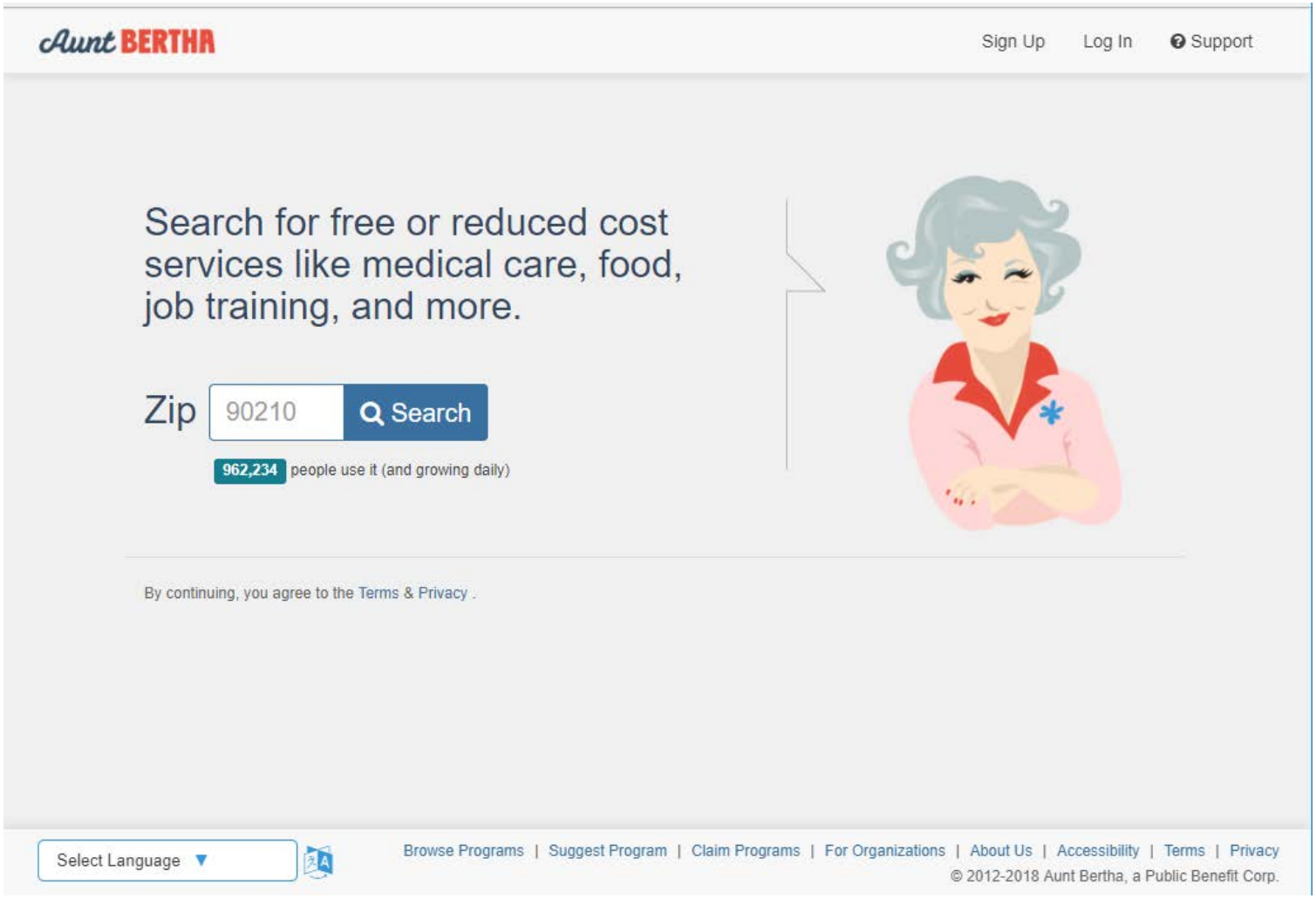
https://www.aafp.org/patient-care/social-determinants-of-health/chrn.html



Northwestern Medicine®

Aunt Bertha

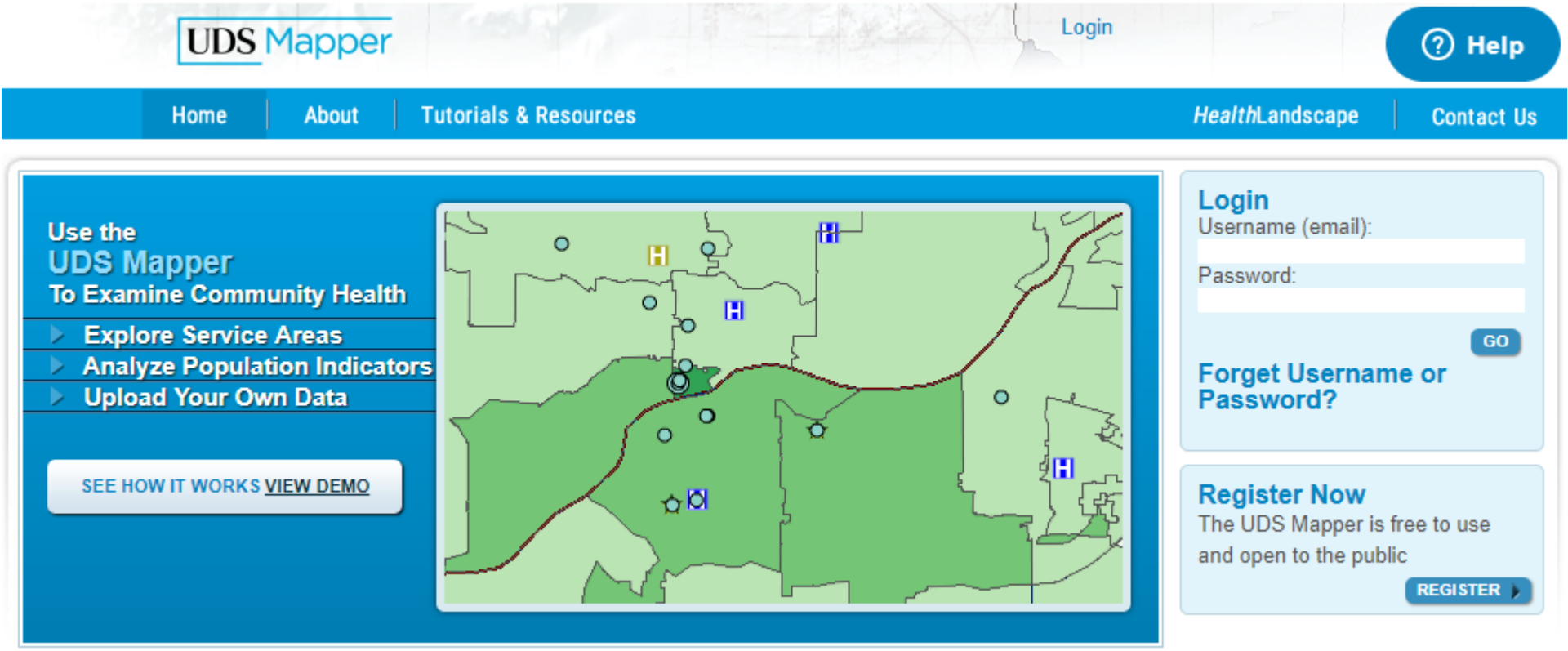
www.auntbertha.com



Northwestern Medicine®

UDS Mapper

https://www.udsmapper.org/



Northwestern Medicine®

Community Health Resource Navigator (CHRN)

Demonstration

Northwestern Medicine®

PATIENT CARE

- Clinical Recommendations by Topic
- Clinical Recommendations by Type
- Well-being and Prevention
- Public Health Emergencies
- Social Determinants of Health
  - Access to Health Care
  - Cultural Proficiency
  - Early Childhood Literacy
  - PTSD & TBI: Caring for Veterans
  - Community Health Resource Navigator
    - CHRN Interactive Mapping Tool

Community Health Resource Navigator

Social and environmental factors account for more than 50 percent of all health outcomes. Helping patients identify resources they can use to lead healthier lives is an important role family physicians can provide.

To assist our physicians, the AAFP developed the **Community Health Resource Navigator (CHRN)**. The CHRN is an interactive mapping tool for AAFP members that locates community resources relevant to your patient's health needs. It generates a customized report that may be downloaded, printed, and shared during a patient visit.

The purpose of the CHRN is to help family physicians personalize care by assessing patients' environment and barriers to healthy living. The tool provides resources in communities that can assist patients in achieving a healthy lifestyle. This may help shape counseling options and shared

Get Started

Use the CHRN to begin locating community resources for your patients.

Access Resources

Supported in part by a grant from the AAFP Foundation.

AAFP FOUNDATION

Search address or place

Welcome to The Community Health Resource Navigator

COMMUNITY
Health Resource Navigator

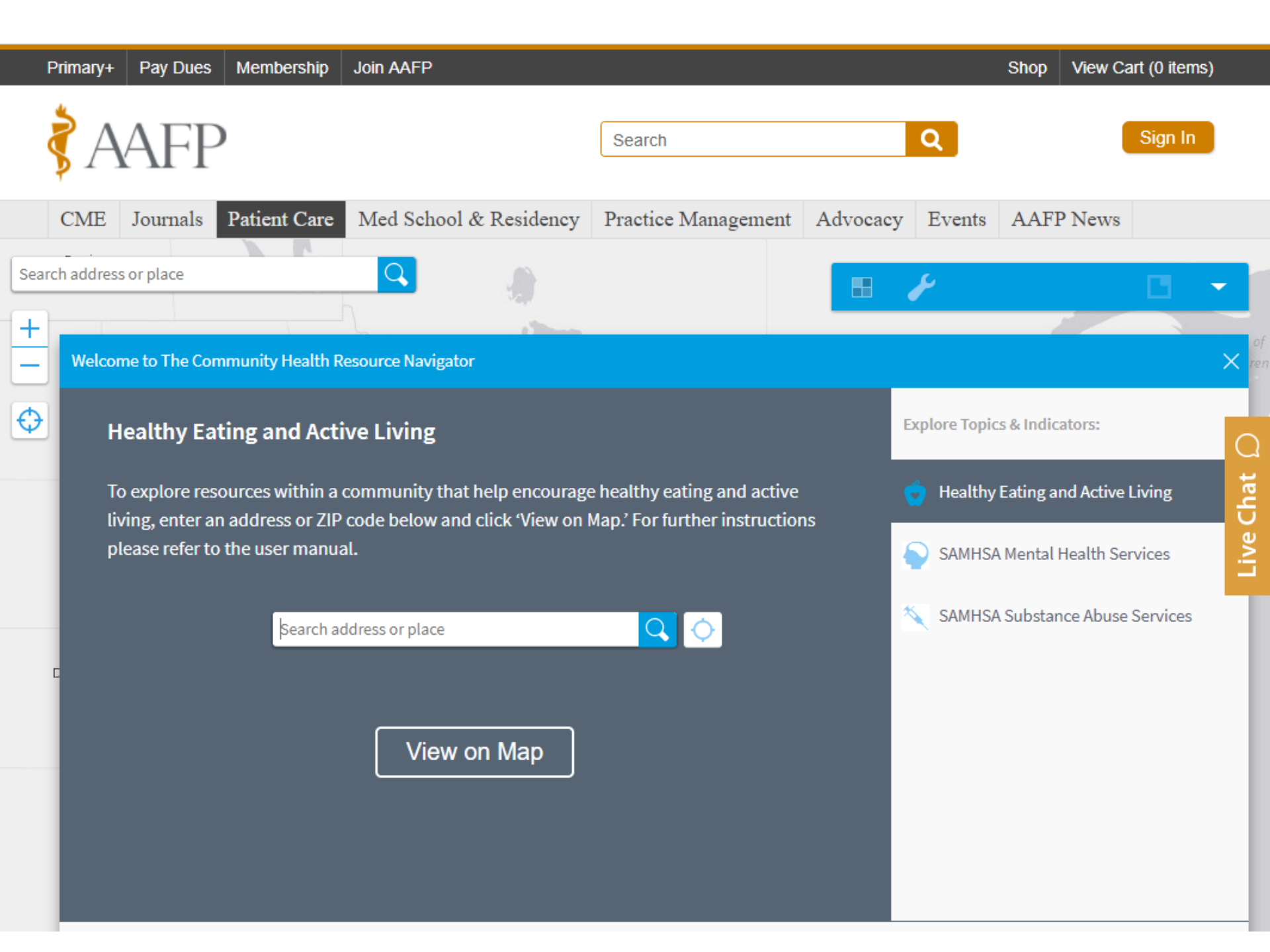
Social, economic, and environmental factors account for 50% of health outcomes. The Community Health Resource Navigator is an interactive mapping tool that identifies social determinants of health and community resources in your patients' neighborhood.

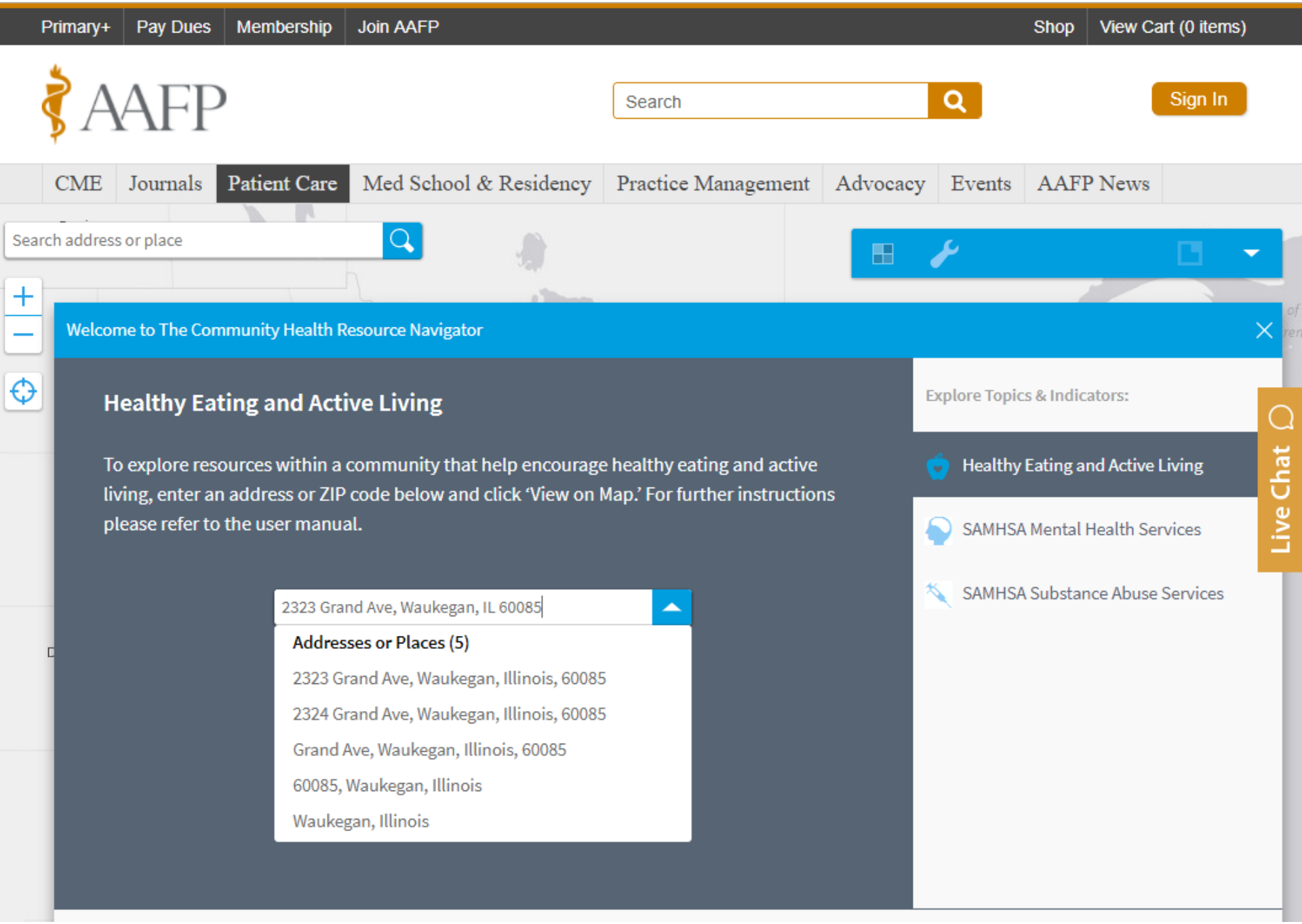
To get started, select a topic on the right.

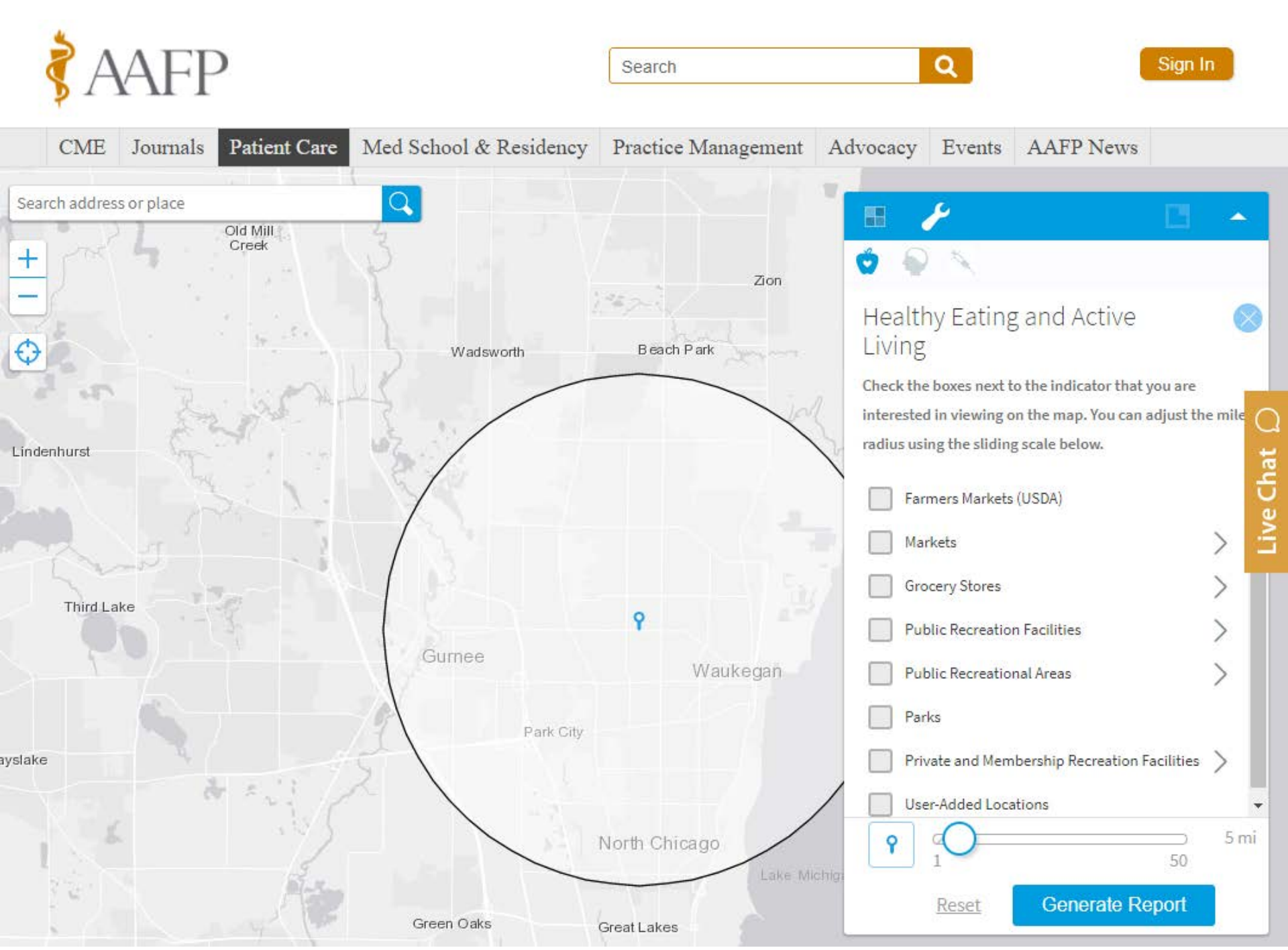
Explore Topics & Indicators:

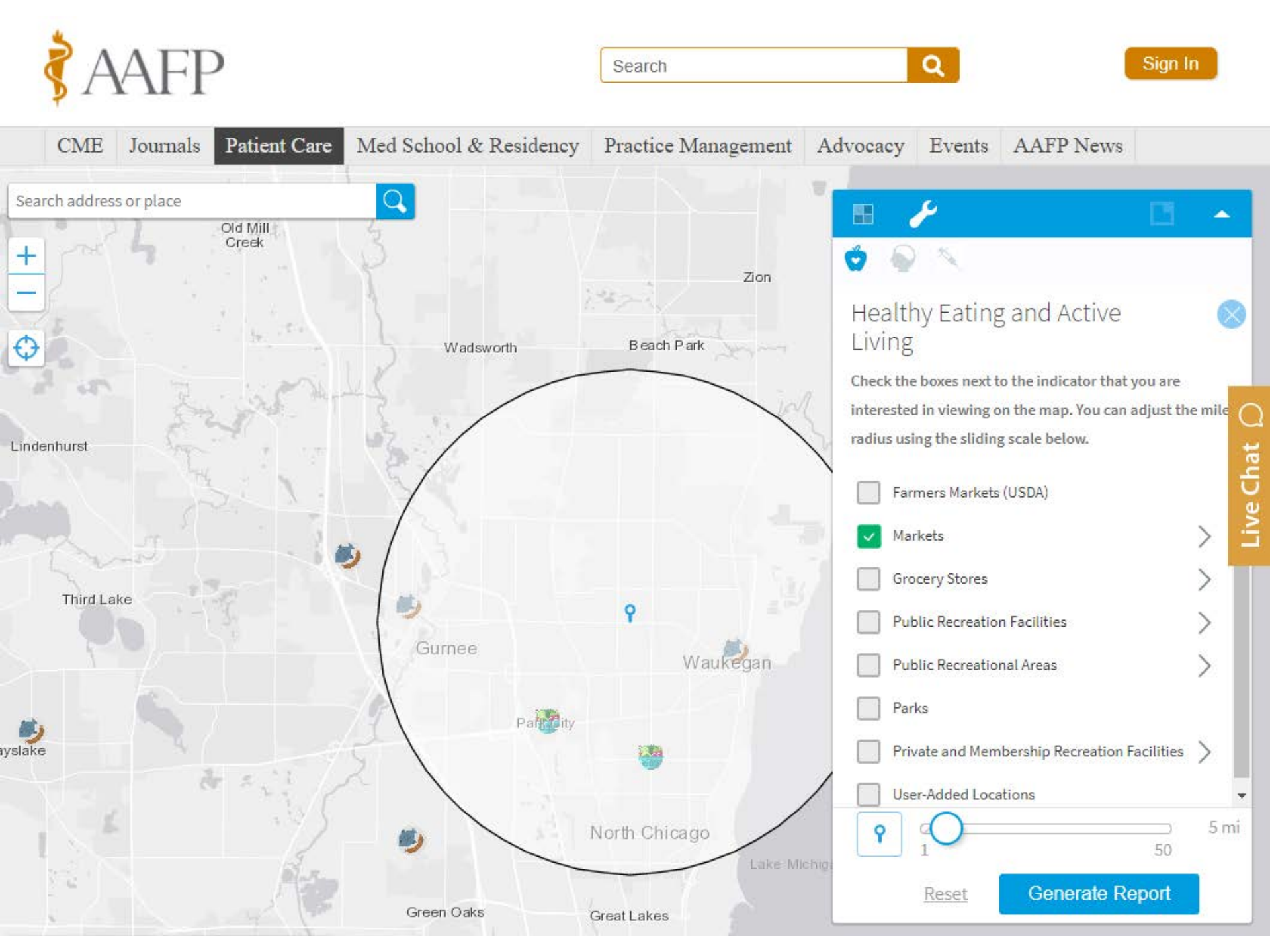
- Healthy Eating and Active Living
- SAMHSA Mental Health Services
- SAMHSA Substance Abuse Services

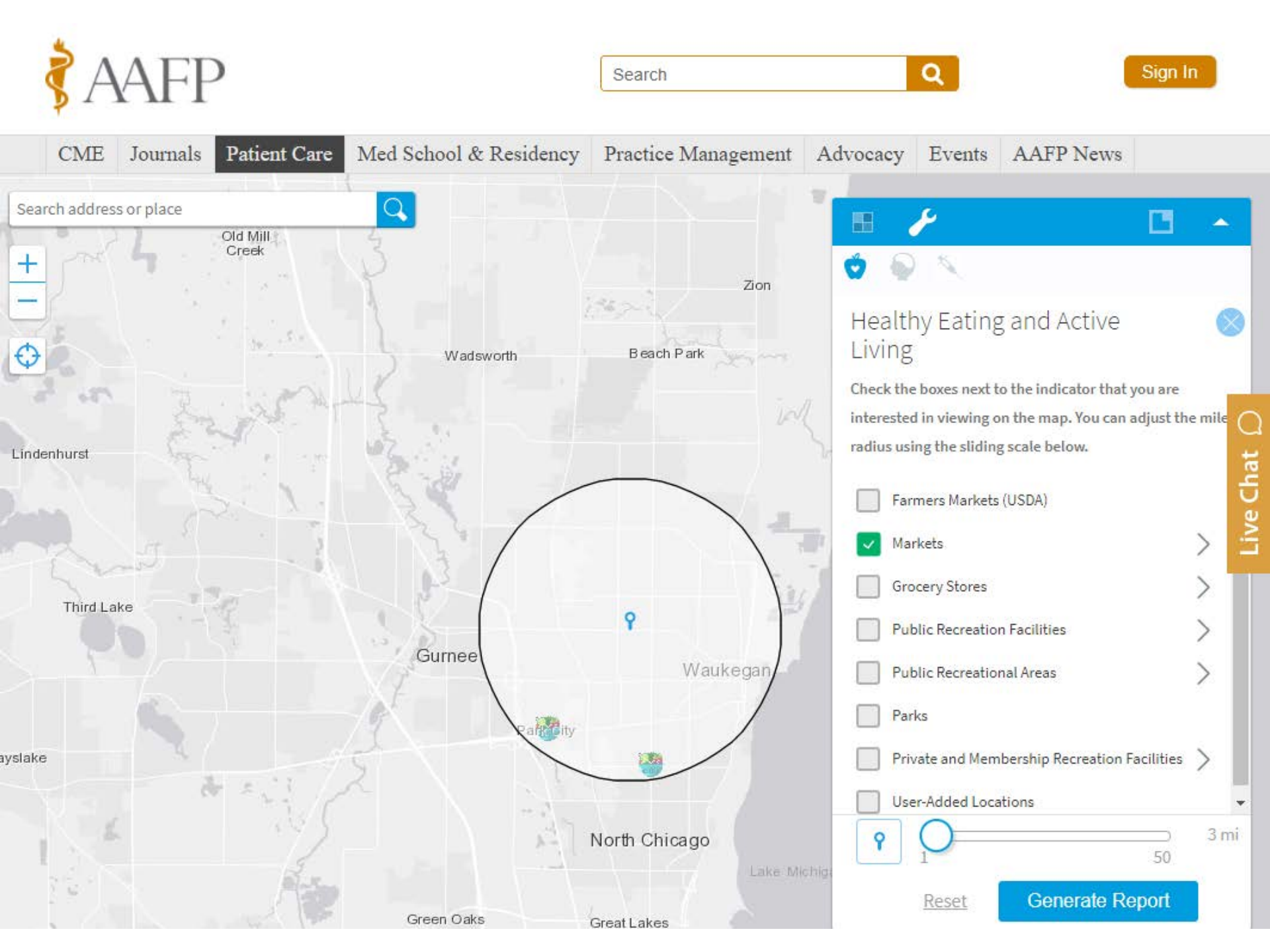
Live Chat

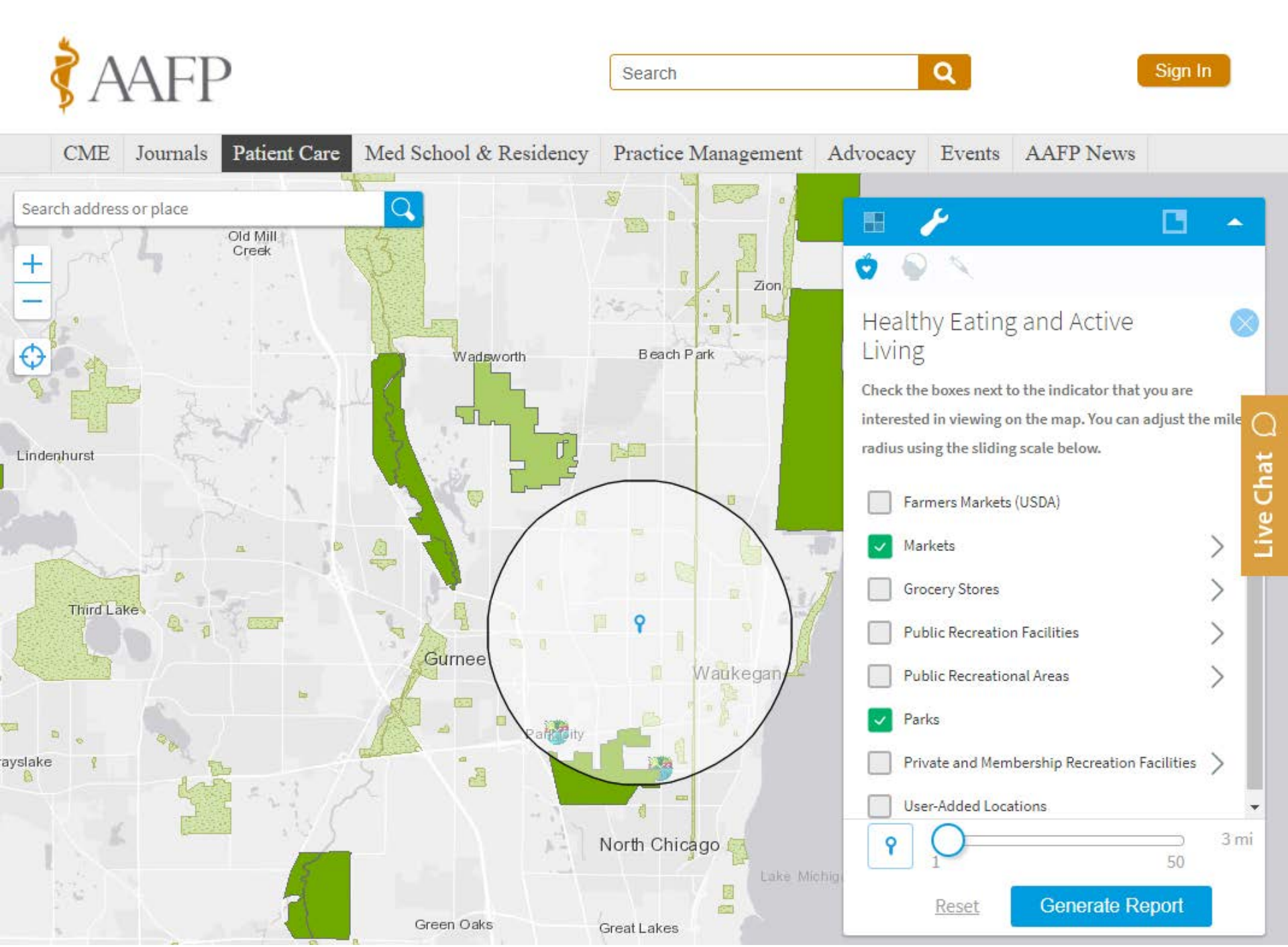

Primary+
Pay Dues
Membership
Join AAFP
Shop
View Cart (0 items)
AAFP
Search
Sign In
CME
Journals
Patient Care
Med School & Residency
Practice Management
Advocacy
Events
AAFP News
Search address or place
Welcome to The Community Health Resource Navigator
Healthy Eating and Active Living
To explore resources within a community that help encourage healthy eating and active living, enter an address or ZIP code below and click 'View on Map.' For further instructions please refer to the user manual.
Search address or place
View on Map
Explore Topics & Indicators:
Healthy Eating and Active Living
SAMHSA Mental Health Services
SAMHSA Substance Abuse Services
Live Chat

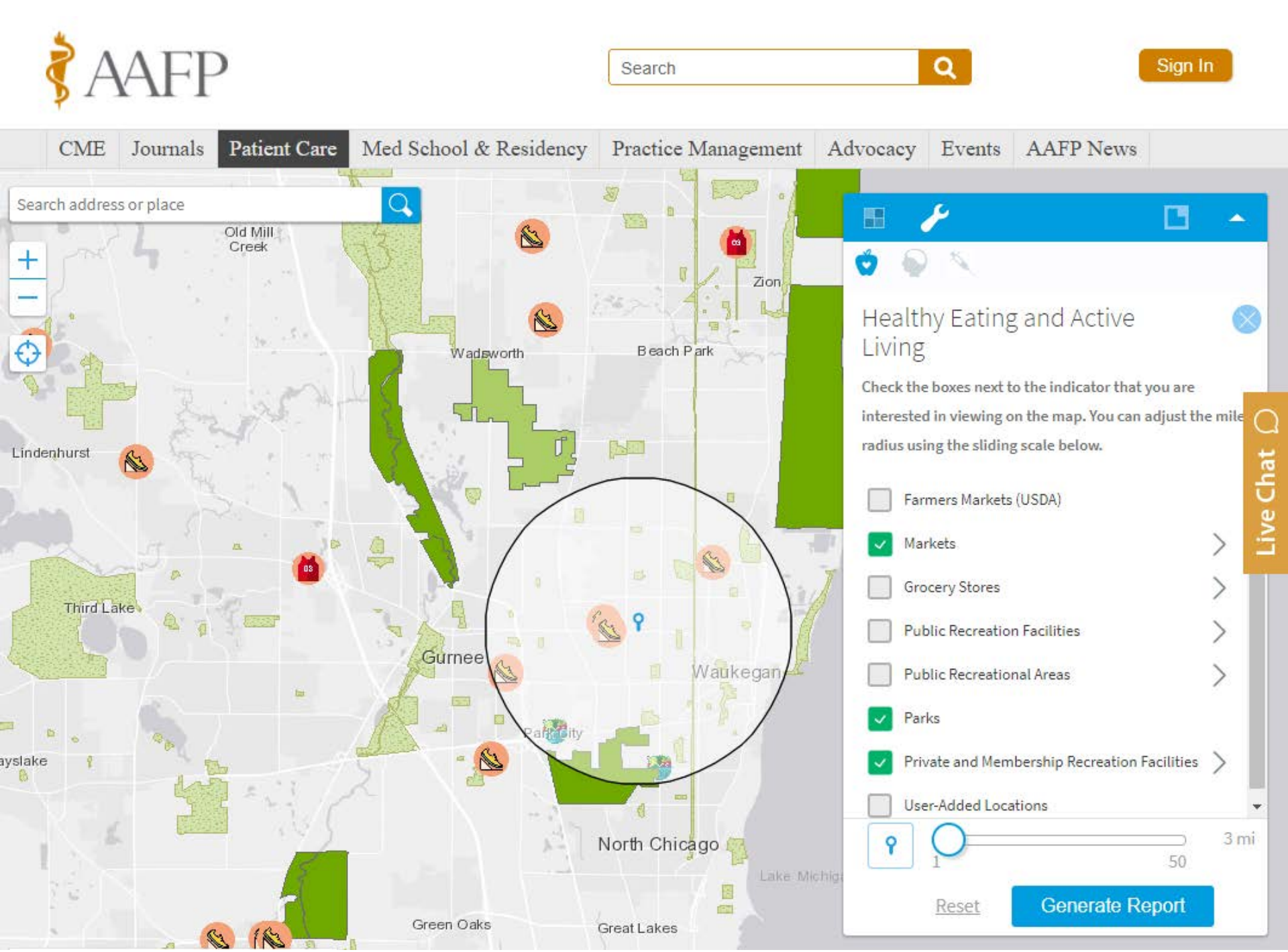

Primary+
Pay Dues
Membership
Join AAFP
Shop
View Cart (0 items)
AAFP
Search
Sign In
CME
Journals
Patient Care
Med School & Residency
Practice Management
Advocacy
Events
AAFP News
Search address or place
Welcome to The Community Health Resource Navigator
Healthy Eating and Active Living
To explore resources within a community that help encourage healthy eating and active living, enter an address or ZIP code below and click 'View on Map.' For further instructions please refer to the user manual.
2323 Grand Ave, Waukegan, IL 60085
Addresses or Places (5)
2323 Grand Ave, Waukegan, Illinois, 60085
2324 Grand Ave, Waukegan, Illinois, 60085
Grand Ave, Waukegan, Illinois, 60085
60085, Waukegan, Illinois
Waukegan, Illinois
Explore Topics & Indicators:
Healthy Eating and Active Living
SAMHSA Mental Health Services
SAMHSA Substance Abuse Services
Live Chat

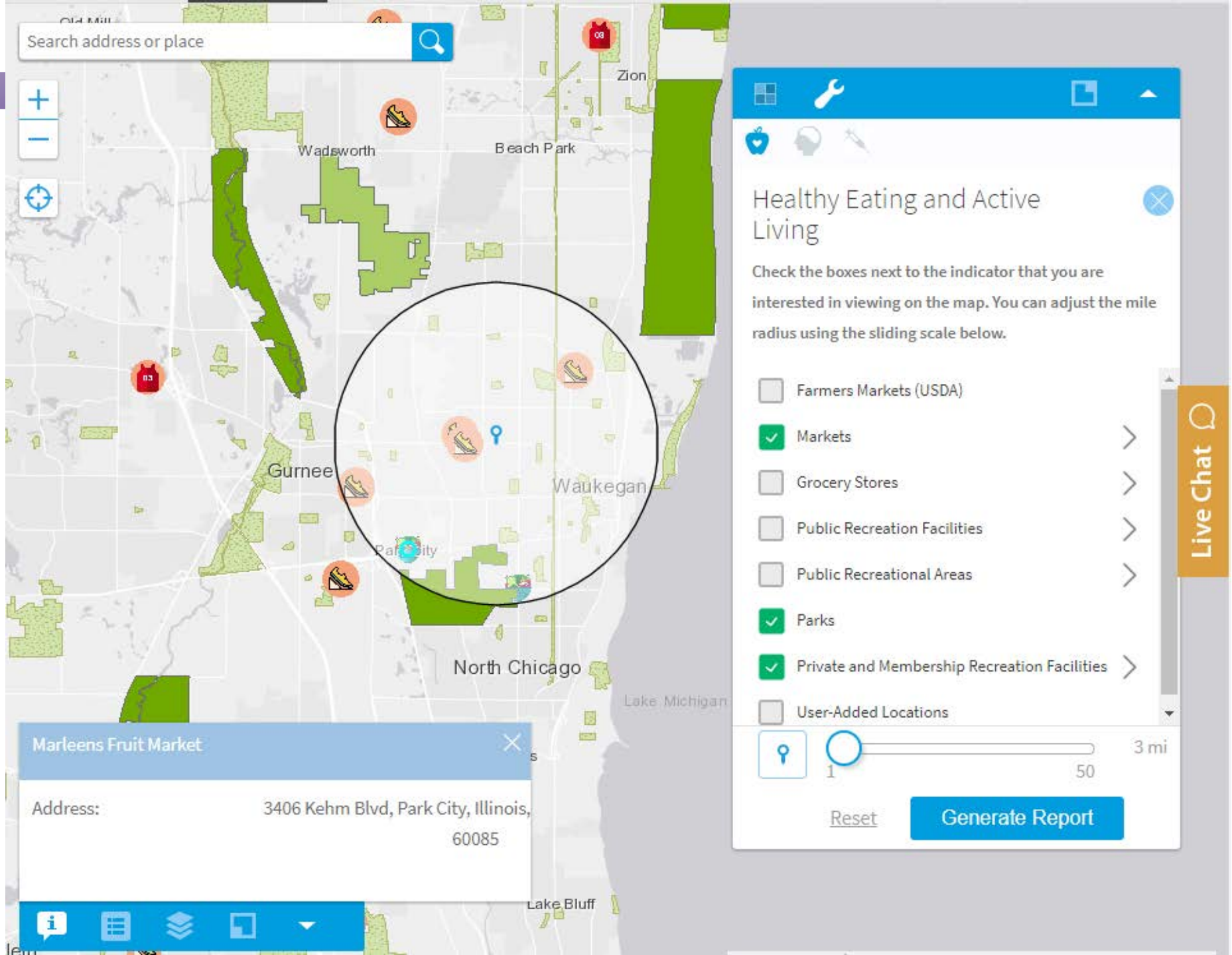

AAFP
Search
Sign In
CME
Journals
Patient Care
Med School & Residency
Practice Management
Advocacy
Events
AAFP News
Search address or place
Old Mill Creek
Zion
Wadsworth
Beach Park
Lindenhurst
Third Lake
Gurnee
Waukegan
Park City
North Chicago
Green Oaks
Great Lakes
Healthy Eating and Active Living
Check the boxes next to the indicator that you are interested in viewing on the map. You can adjust the mile radius using the sliding scale below.
Farmers Markets (USDA)
Markets
Grocery Stores
Public Recreation Facilities
Public Recreational Areas
Parks
Private and Membership Recreation Facilities
User-Added Locations
1
50
5 mi
Reset
Generate Report
Live Chat

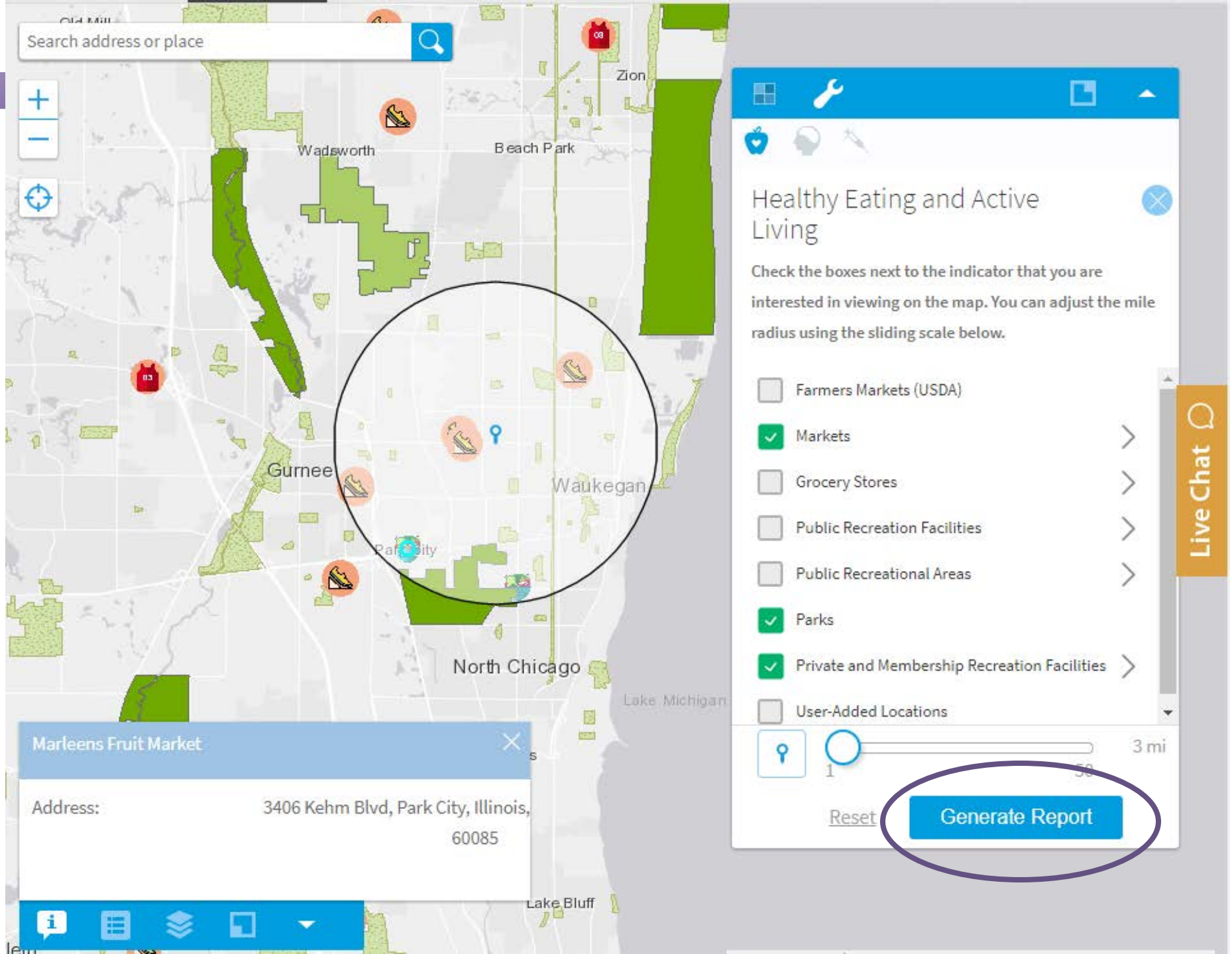

AAFP
Search
Sign In
CME
Journals
Patient Care
Med School & Residency
Practice Management
Advocacy
Events
AAFP News
Search address or place
Old Mill Creek
Zion
Wadsworth
Beach Park
Lindenhurst
Third Lake
Gurnee
Waukegan
North Chicago
Green Oaks
Great Lakes
Healthy Eating and Active Living
Check the boxes next to the indicator that you are interested in viewing on the map. You can adjust the mile radius using the sliding scale below.
Farmers Markets (USDA)
Markets
Grocery Stores
Public Recreation Facilities
Public Recreational Areas
Parks
Private and Membership Recreation Facilities
User-Added Locations
1
50
5 mi
Reset
Generate Report
Live Chat


AAFP
Search
Sign In
CME
Journals
Patient Care
Med School & Residency
Practice Management
Advocacy
Events
AAFP News
Search address or place
Old Mill Creek
Zion
Wadsworth
Beach Park
Lindenhurst
Third Lake
Gurnee
Waukegan
North Chicago
Green Oaks
Great Lakes
Healthy Eating and Active Living
Check the boxes next to the indicator that you are interested in viewing on the map. You can adjust the mile radius using the sliding scale below.
Farmers Markets (USDA)
Markets
Grocery Stores
Public Recreation Facilities
Public Recreational Areas
Parks
Private and Membership Recreation Facilities
User-Added Locations
1
50
3 mi
Reset
Generate Report
Live Chat

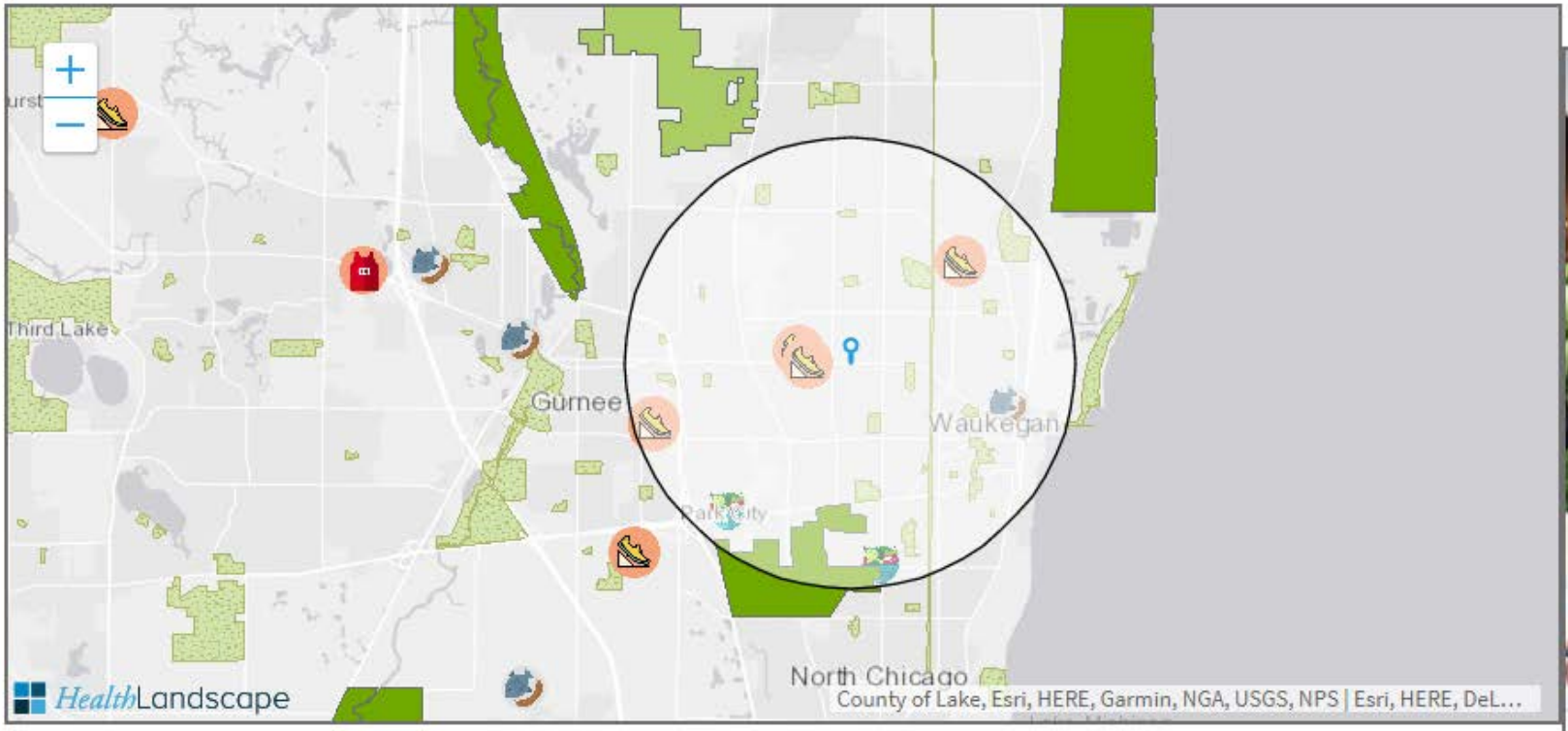

AAFP
Search
Sign In
CME
Journals
Patient Care
Med School & Residency
Practice Management
Advocacy
Events
AAFP News
Search address or place
Old Mill Creek
Zion
Wadsworth
Beach Park
Lindenhurst
Third Lake
Gurnee
Waukegan
North Chicago
Green Oaks
Great Lakes
Healthy Eating and Active Living
Check the boxes next to the indicator that you are interested in viewing on the map. You can adjust the mile radius using the sliding scale below.
Farmers Markets (USDA)
Markets
Grocery Stores
Public Recreation Facilities
Public Recreational Areas
Parks
Private and Membership Recreation Facilities
User-Added Locations
1
50
3 mi
Reset
Generate Report
Live Chat


AAFP
Search
Sign In
CME
Journals
Patient Care
Med School & Residency
Practice Management
Advocacy
Events
AAFP News
Search address or place
Old Mill Creek
Zion
Wadsworth
Beach Park
Lindenhurst
Third Lake
Gurnee
Waukegan
North Chicago
Green Oaks
Great Lakes
Healthy Eating and Active Living
Check the boxes next to the indicator that you are interested in viewing on the map. You can adjust the mile radius using the sliding scale below.
Farmers Markets (USDA)
Markets
Grocery Stores
Public Recreation Facilities
Public Recreational Areas
Parks
Private and Membership Recreation Facilities
User-Added Locations
1
50
3 mi
Reset
Generate Report
Live Chat


Search address or place
Zion
Wadsworth
Beach Park
Gurnee
Waukegan
North Chicago
Lake Michigan
Lake Bluff
Healthy Eating and Active Living
Check the boxes next to the indicator that you are interested in viewing on the map. You can adjust the mile radius using the sliding scale below.
Farmers Markets (USDA)
Markets
Grocery Stores
Public Recreation Facilities
Public Recreational Areas
Parks
Private and Membership Recreation Facilities
User-Added Locations
1
50
3 mi
Reset
Generate Report
Live Chat
Marleens Fruit Market
Address:
3406 Kehm Blvd, Park City, Illinois, 60085


Search address or place
Zion
Wadsworth
Beach Park
Gurnee
Waukegan
North Chicago
Lake Michigan
Lake Bluff
Healthy Eating and Active Living
Check the boxes next to the indicator that you are interested in viewing on the map. You can adjust the mile radius using the sliding scale below.
Farmers Markets (USDA)
Markets
Grocery Stores
Public Recreation Facilities
Public Recreational Areas
Parks
Private and Membership Recreation Facilities
User-Added Locations
1
3 mi
Reset
Generate Report
Live Chat
Marleens Fruit Market
Address:
3406 Kehm Blvd, Park City, Illinois, 60085

Print



MARKETS

Marleens Fruit Market 3406 Kehm Blvd, Park City, Illinois, 60085

Waukegan Fruit Market Inc 951 S Lewis Ave, Waukegan, Illinois, 60085

PARKS

Chittenden Park

University Park

Greenbelt Forest Preserve

Victory Park

Community Health Resource Navigator

Report Example

MARKETS

Marleens Fruit Market 3406 Kehm Blvd, Park City, Illinois, 60085
Waukegan Fruit Market Inc 951 S Lewis Ave, Waukegan, Illinois, 60085

PARKS

Chittenden Park
University Park
Greenbelt Forest Preserve
Victory Park
Upton Park
North Beach Park
Silver Park
Weiss Field Park
Belvidere Park
Washington Park
Dugdale Park
Clearview Park
Ben Diamond Memorial Park
Adelphi Park
Glen Flora Park
Roosevelt Park
King Park
Ray Bradbury Park
Yeoman Park
Kirk Park
McClory Trail
Belle Plaine Park
Christine Thompson Park
Larsen Park
Bowen Park

Hinkston Park

PRIVATE AND MEMBERSHIP RECREATION FACILITIES

Outpost Cross Fit 83 Ambrogio Dr, Gurnee, Illinois, 60031
Little Gym 101 Ambrogio Dr, Gurnee, Illinois, 60031
Field House Sports & Fitness 800 Baldwin Ave, Waukegan, Illinois, 60085
T-N-T Boxing & Fitness 2748 Grand Ave, Waukegan, Illinois, 60085
Curves 805 W Greenwood Ave, Waukegan, Illinois, 60087

HealthLandscape

Northwestern Medicine®

NM Family Medicine Residency

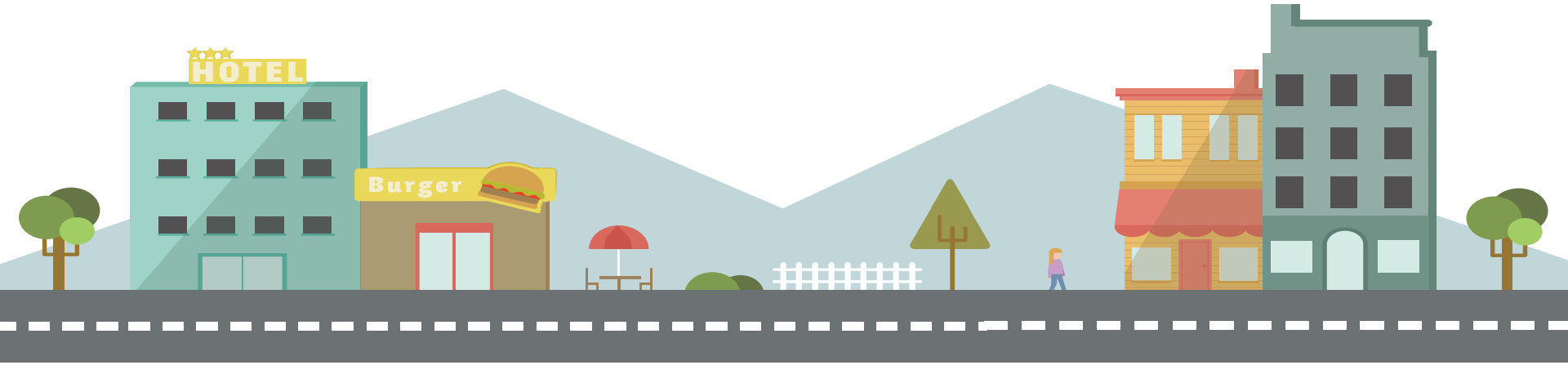
Pilot Curriculum Development & Evaluation

Northwestern Medicine®

Our Residency Communities

Northwestern McGaw Family Medicine Residency at Lake Forest

We serve 3 Chicagoland communities close in proximity, but very different in terms of resources and health status

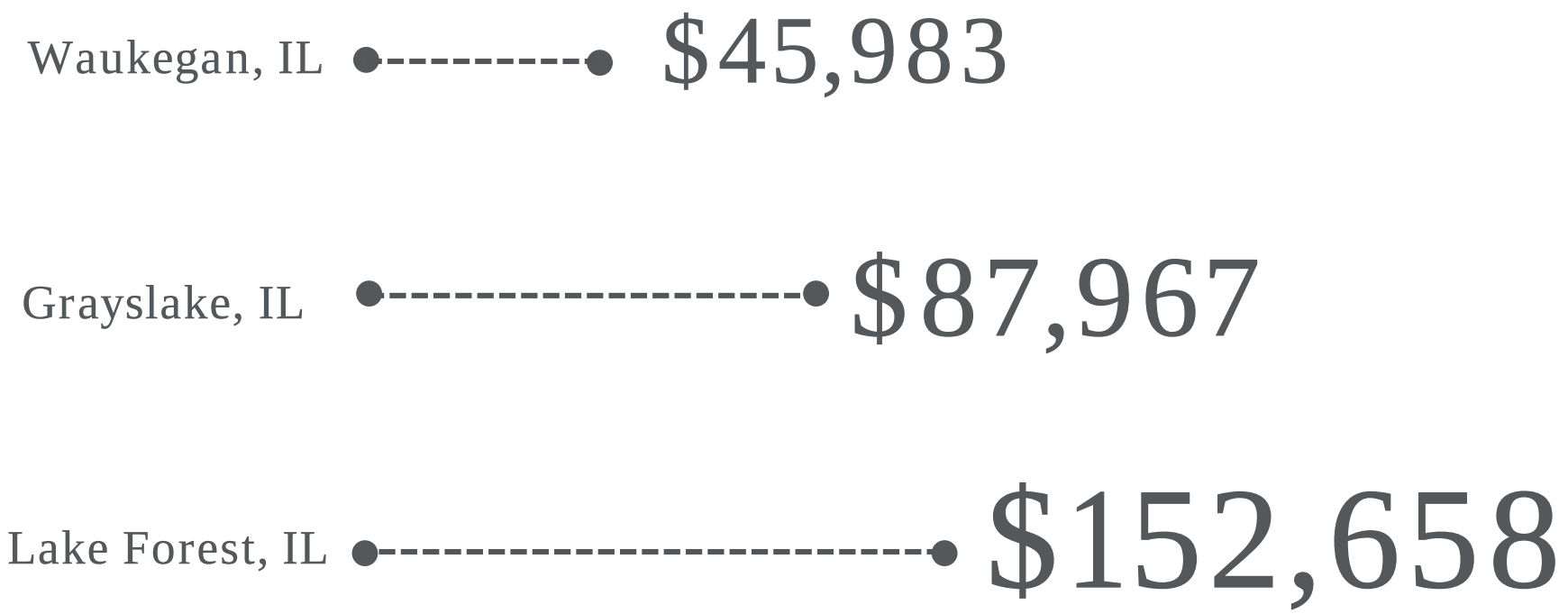


Northwestern Medicine®

Our Residency Community

Northwestern McGaw Family Medicine Residency at Lake Forest

Median Income



Northwestern Medicine®

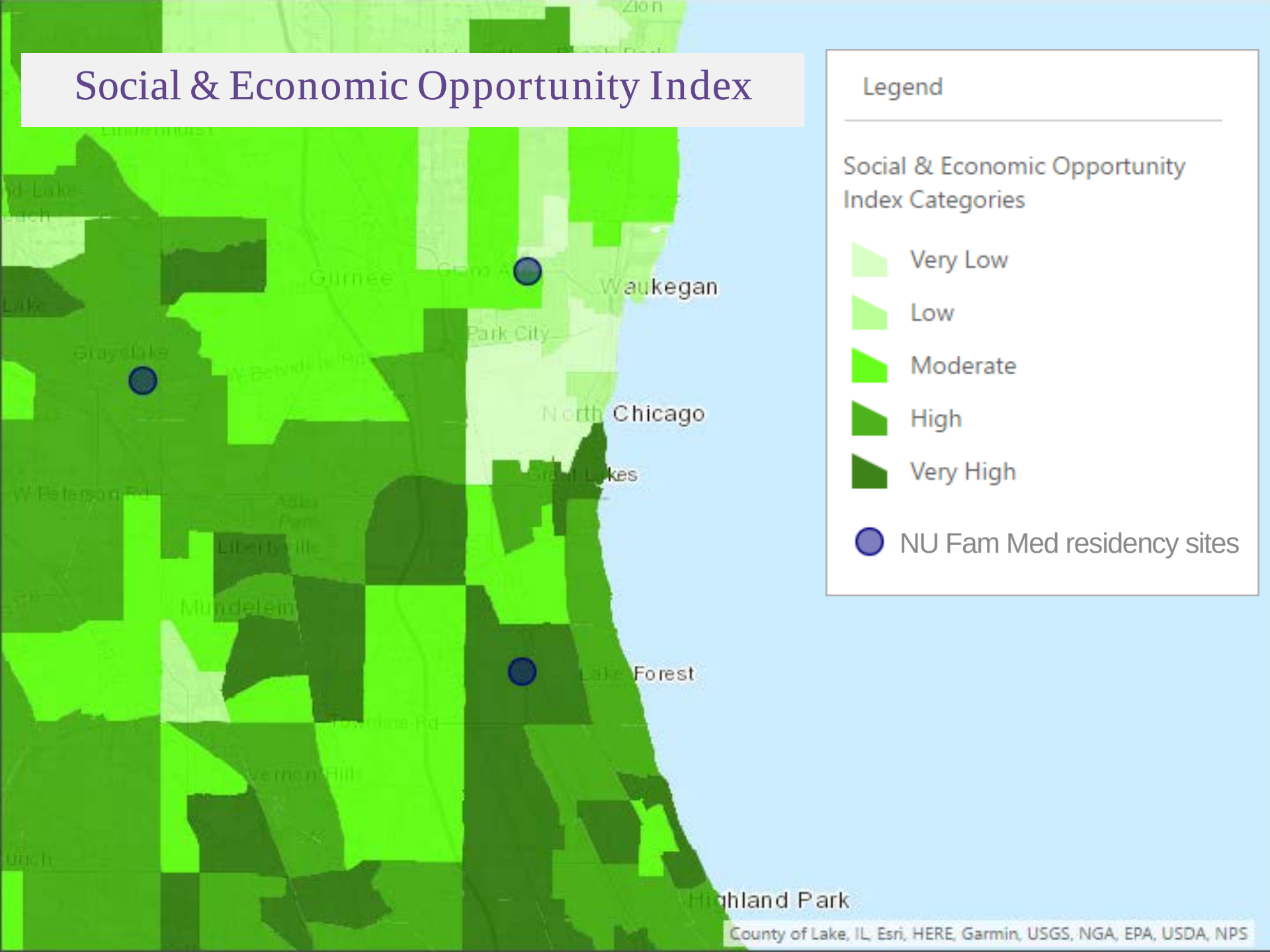
Motivating Principles

Pilot SDoH Curriculum Development

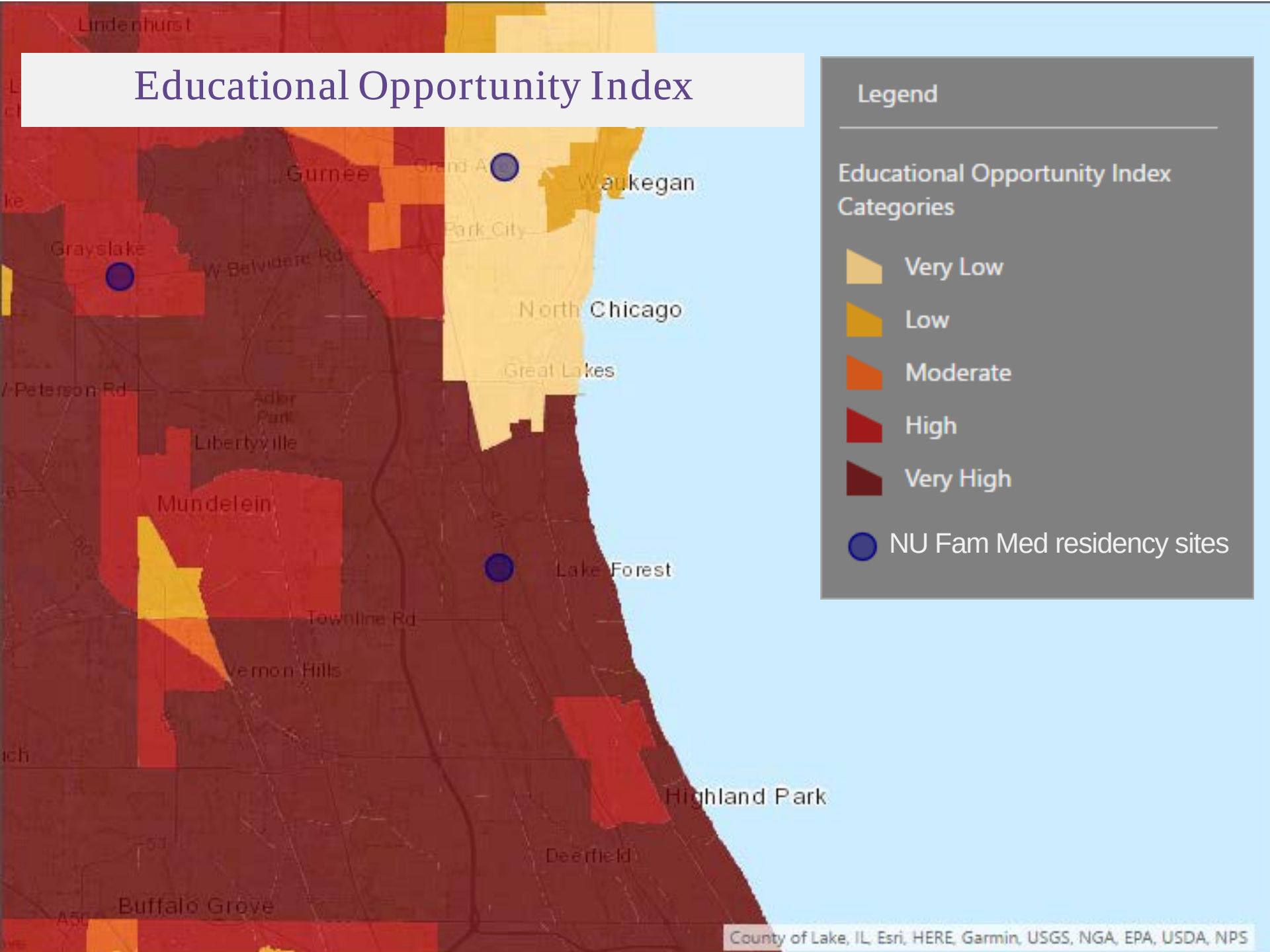
Geography matters.

Zip code can be more predictive of health status than genetic code in some contexts

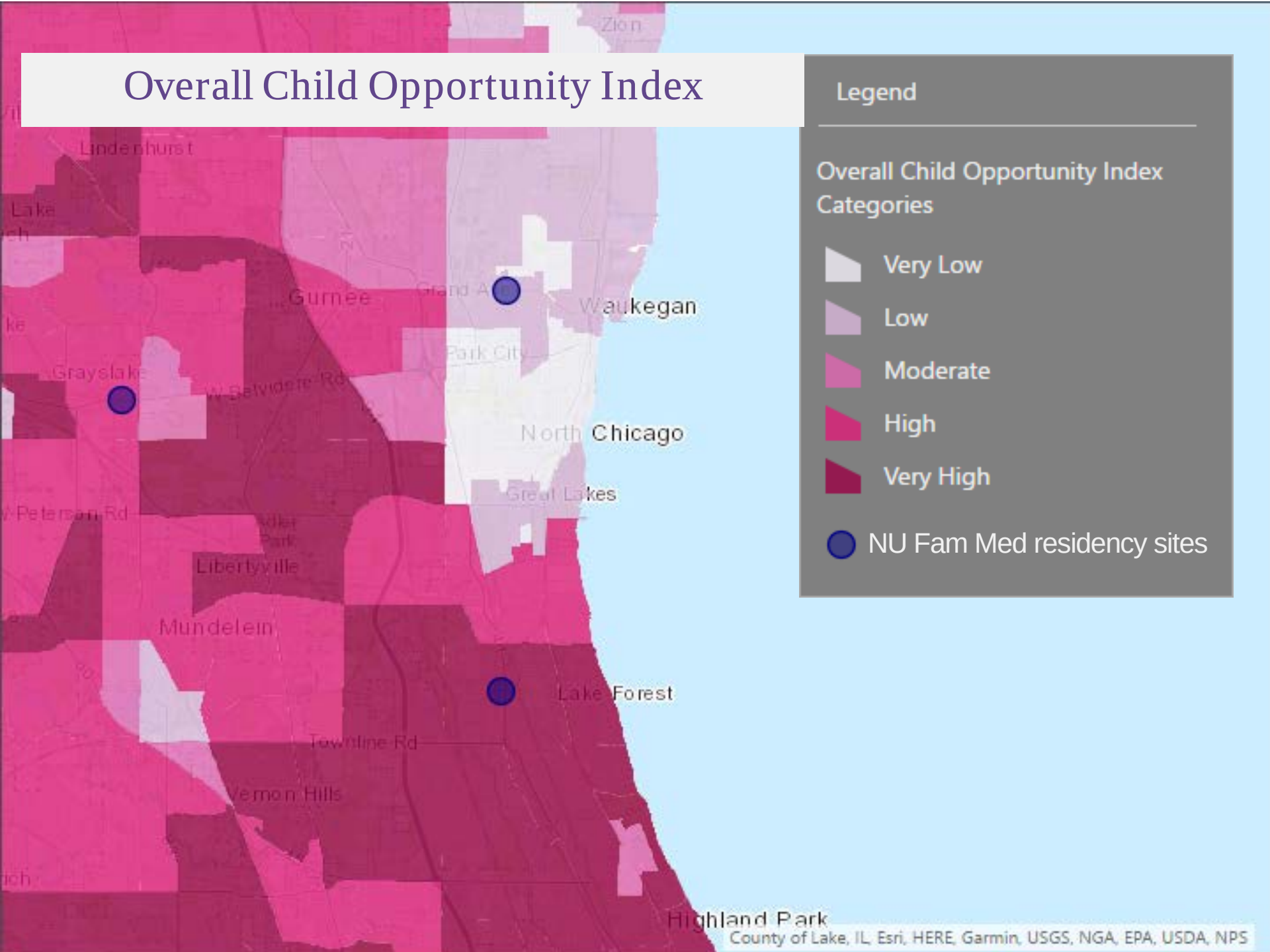
Social & Economic Opportunity Index



Educational Opportunity Index



Overall Child Opportunity Index



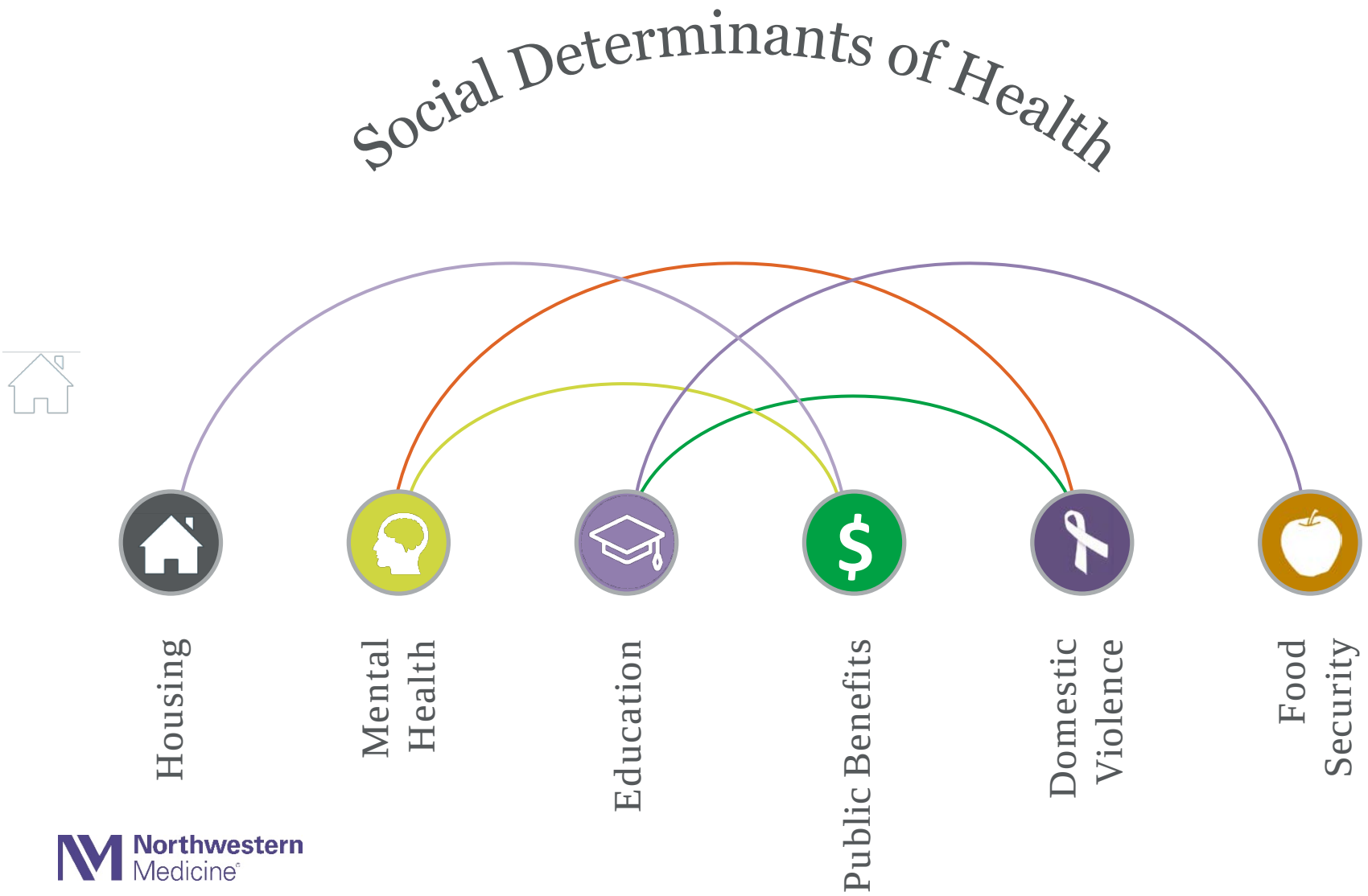
Motivating Principles

Pilot SDoH Curriculum Development

There are lots of moving parts.

As multiple systems operate simultaneously, we see complex interactions between social and contextual factors

Complex Interactions between Indicators



Northwestern Medicine®

Motivating Principles

Pilot SDoH Curriculum Development

One size doesn’t fit all.

The interaction between individual genes and environment is unique

Personalized Medicine

- No blueprint for each person's unique disease susceptibility

Personalized Medicine

- No blueprint for each person's unique disease susceptibility
- Highlights the need for individualized health promotion efforts

Motivating Principles

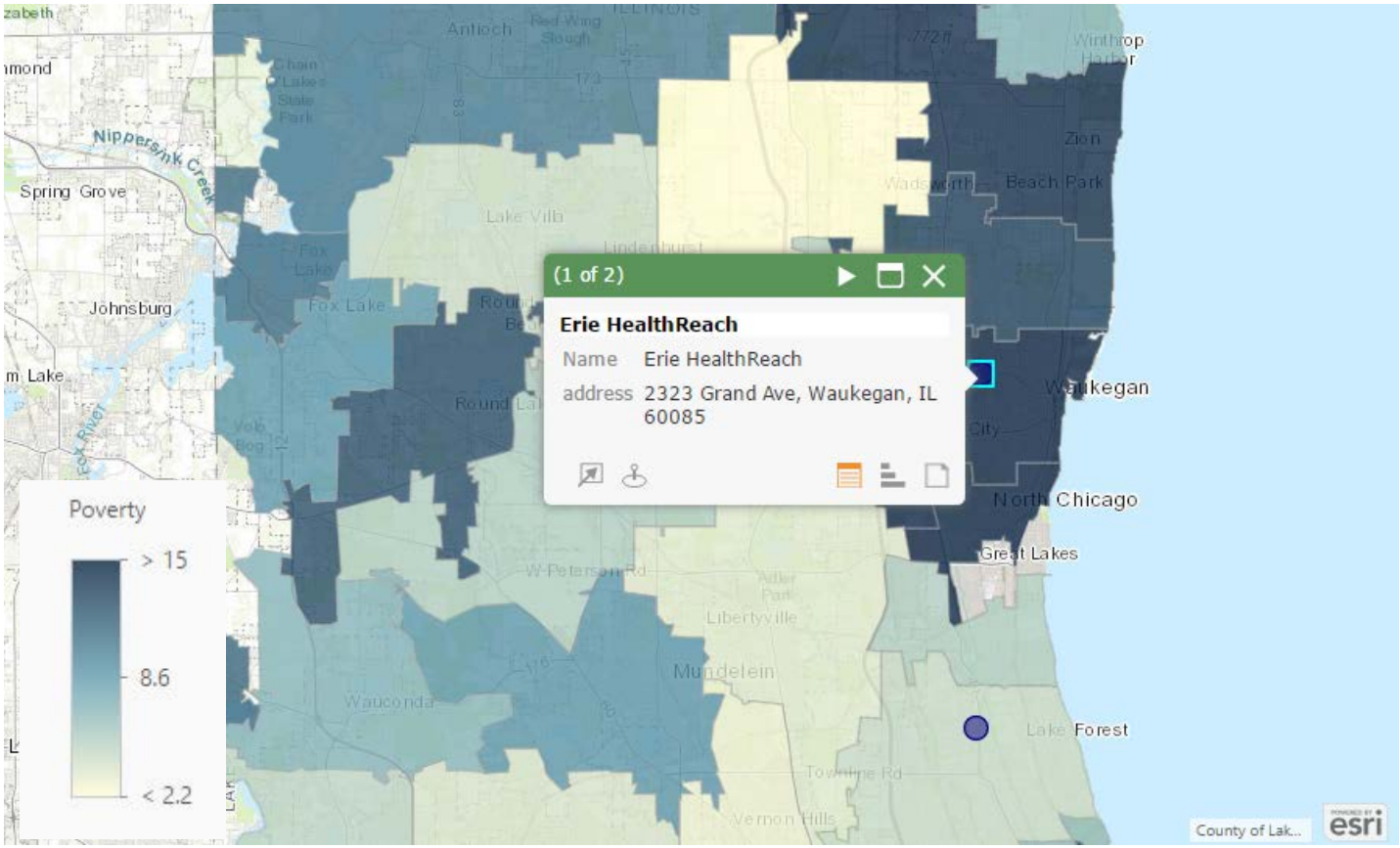
Pilot SDoH Curriculum Development

How can we enable students and residents to personalize care?

Geospatial analysis provides powerful information at the point of care

Erie HealthReach Waukegan

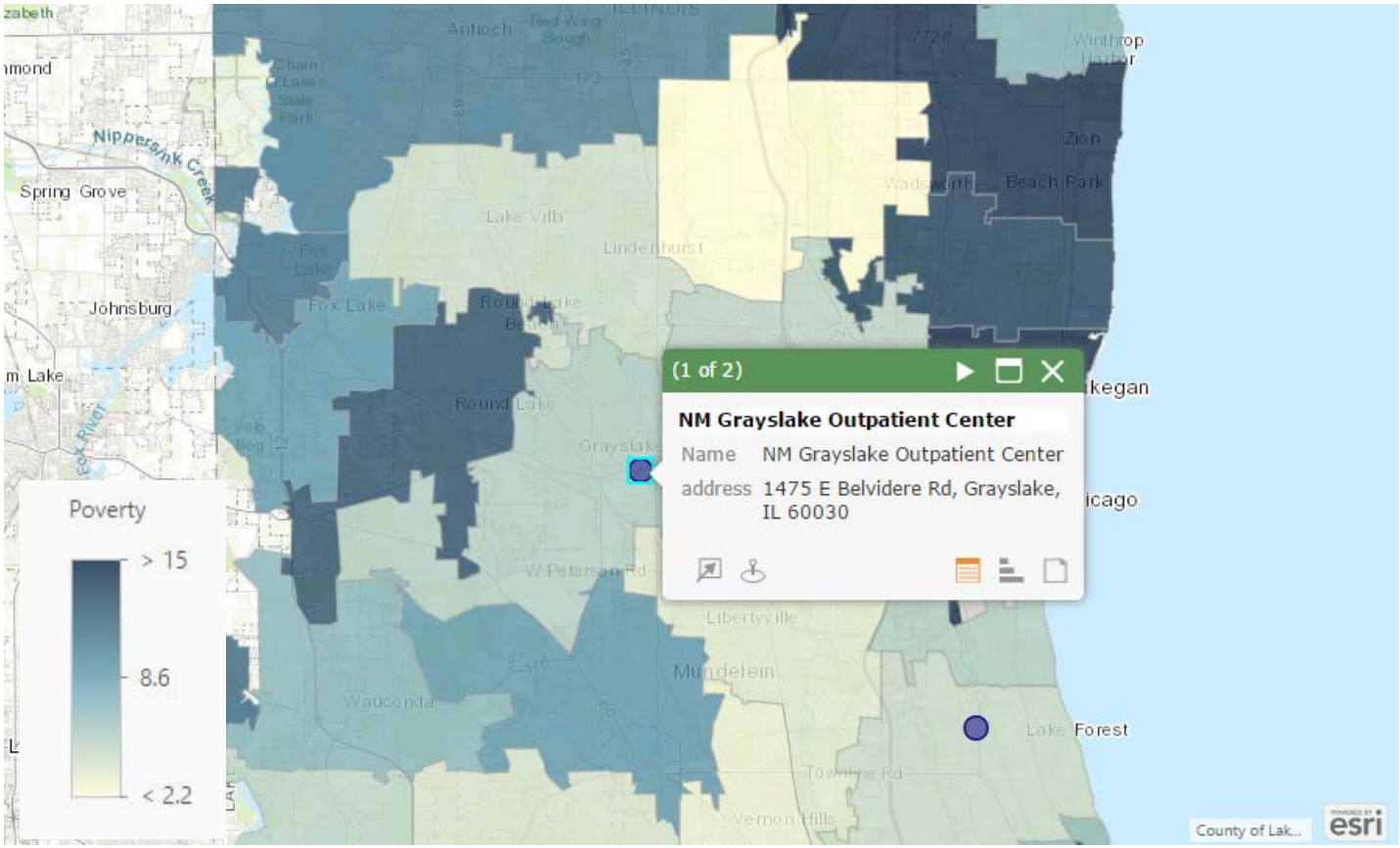
Poverty Index



Northwestern Medicine®

NM Grayslake Outpatient Center

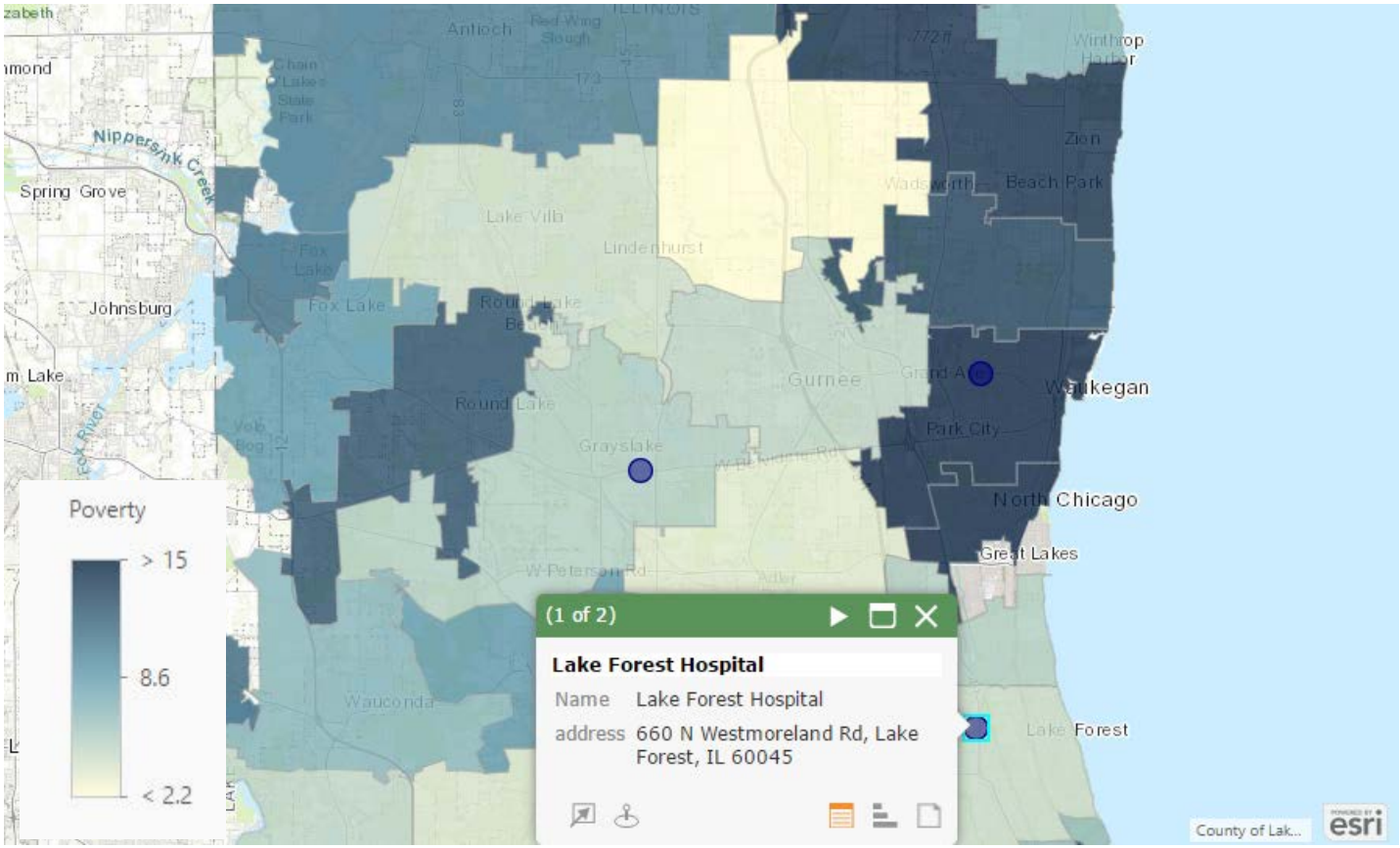
Poverty Index



Northwestern Medicine®

Lake Forest Hospital

Poverty Index



Northwestern Medicine®

Curriculum Topic Areas

Pilot SDoH Curriculum Development

Housing

Maternal Depression

Education

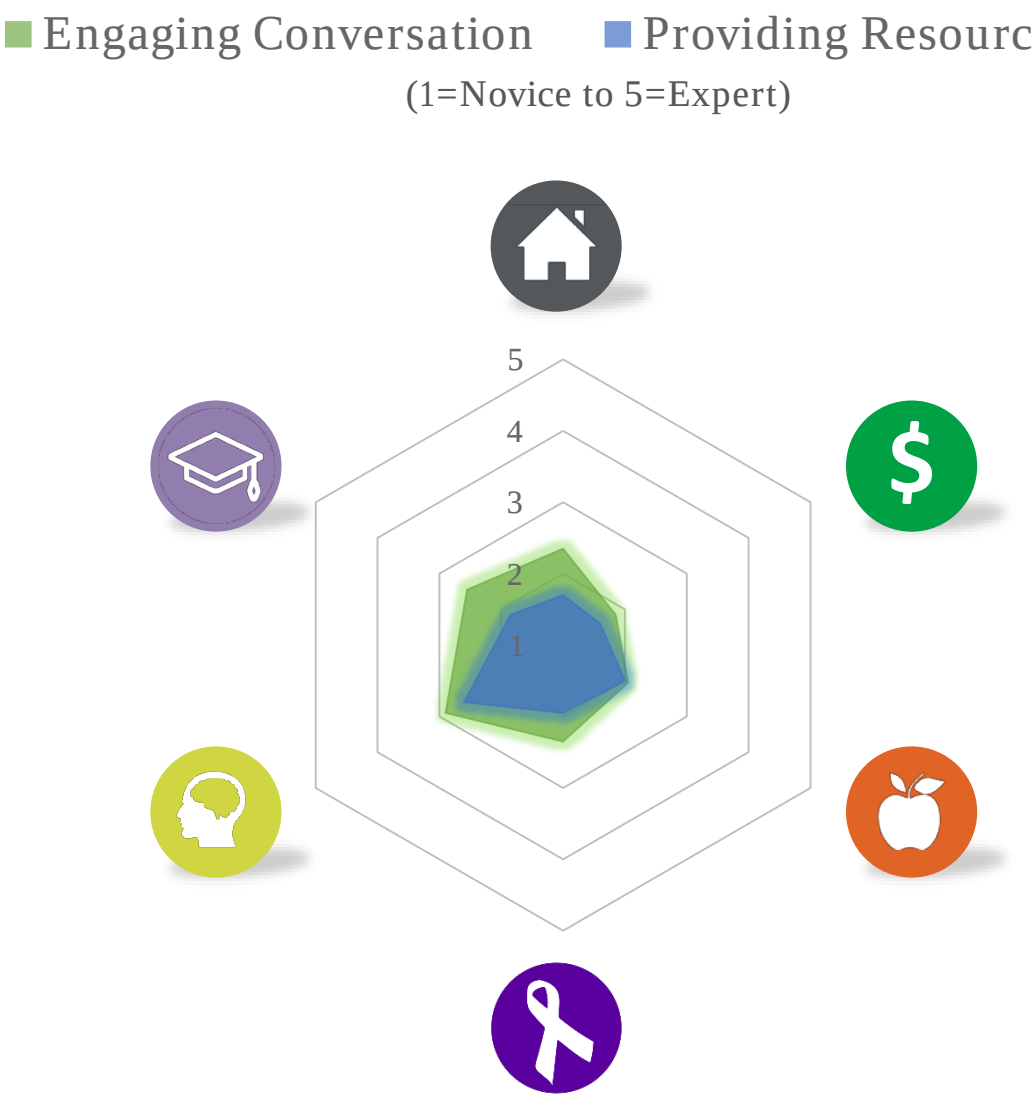
Food Insecurity

Domestic Violence

Public Benefits

SDoH Skills Gap

Pre-Curriculum Survey Results, n=21 Family Medicine Residents



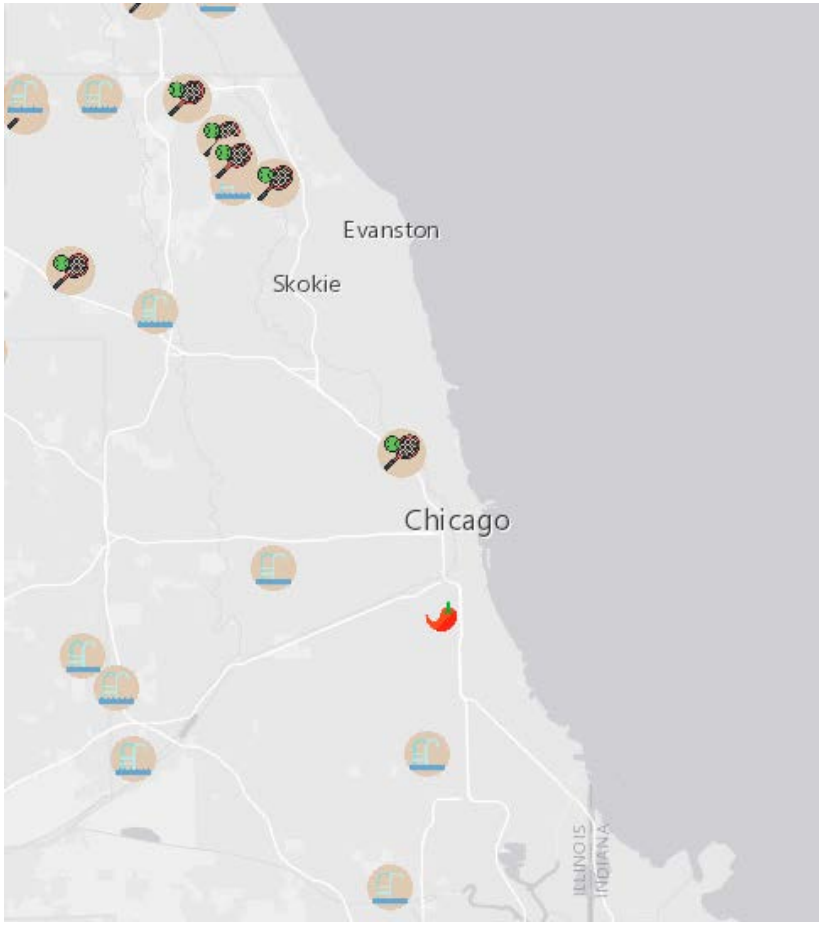
Northwestern Medicine®

Resident Mapping Exercise

Pilot SDoH Curriculum Development

Use the CHRN tool to identify resources for patient panels at both clinics

- Inclusion criteria:
  - Hypertension diagnosis
  - Adult patients
- 195 patient addresses mapped
- Completed an evaluation survey at the end of the session



Resident Mapping Exercise

Pilot SDoH Curriculum Development

Residents completed a brief evaluation indicating the utility of the CHRN tool for each patient

- Yes, the tool is useful at point of care: 113/195 patients total= **57.9%**
- Broken down further:
  - Erie (FQHC): **60.8%**
  - Grayslake Outpatient Center: **54.8%**

Evaluation Survey

Example Items

- Which of the following, if any, do you wish you could write a prescription for? (check all that apply)

- Which of the following, if any, do you wish could be paid for through the health care system?

  (check all that apply)

- ☐ Nutritional food
- ☐ Housing assistance
- ☐ Help with utility bills
- ☐ Employment assistance
- ☐ Transportation assistance
- ☐ Household goods
- ☐ Health insurance
- ☐ Financial counseling or assistance
- ☐ Fitness program
- ☐ Legal aid
- ☐ Child care
- ☐ Adult education
- ☐ Mental health assistance
- ☐ Social work assistance
- ☐ Assistance with accessing the social services listed above
- ☐ None

Social Determinants of Health

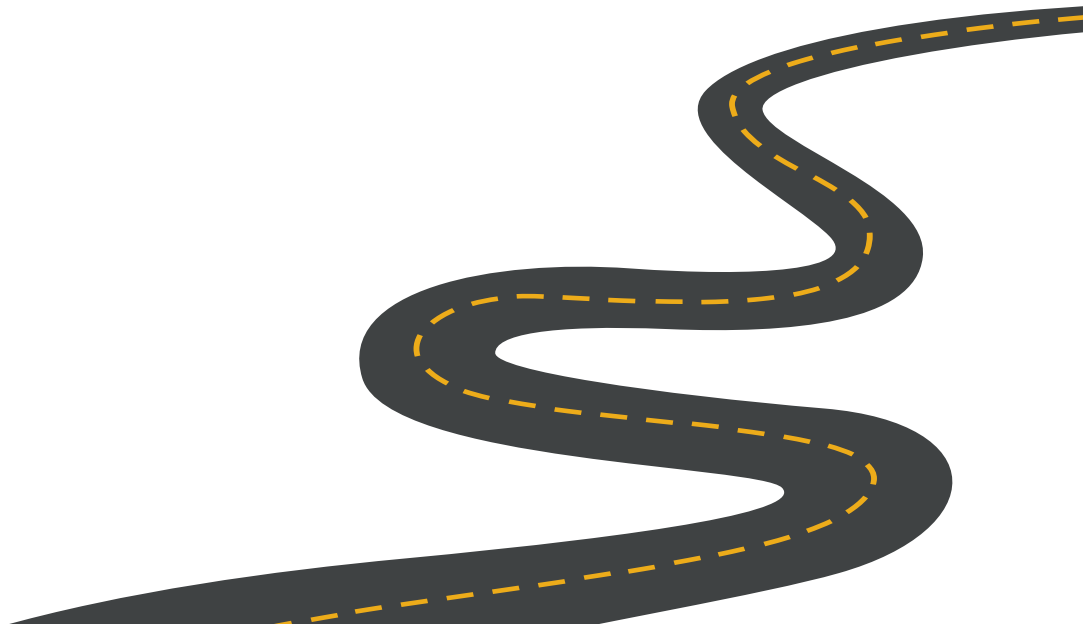
Survey Results: Mental Health Assistance

WOULD WRITE A Rx FOR MENTAL HEALTH ASSISTANCE

69%

WISH MENTAL HEALTH ASSISTANCE WAS PAID FOR BY THE HEALTHCARE SYSTEM

62%



Northwestern Medicine®

Social Determinants of Health

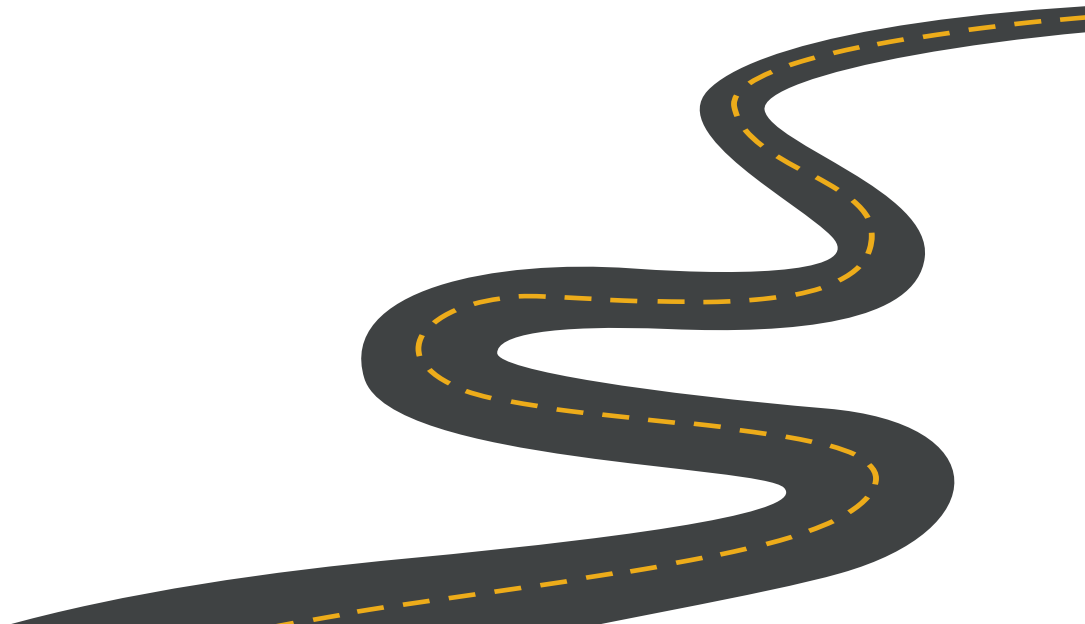
Survey Results: Housing Assistance

WANT TO WRITE A PRESCRIPTION FOR HOUSING

46%

WISH HOUSING WAS PAID FOR BY THE HEALTHCARE SYSTEM

23%



Northwestern Medicine®

Social Determinants of Health

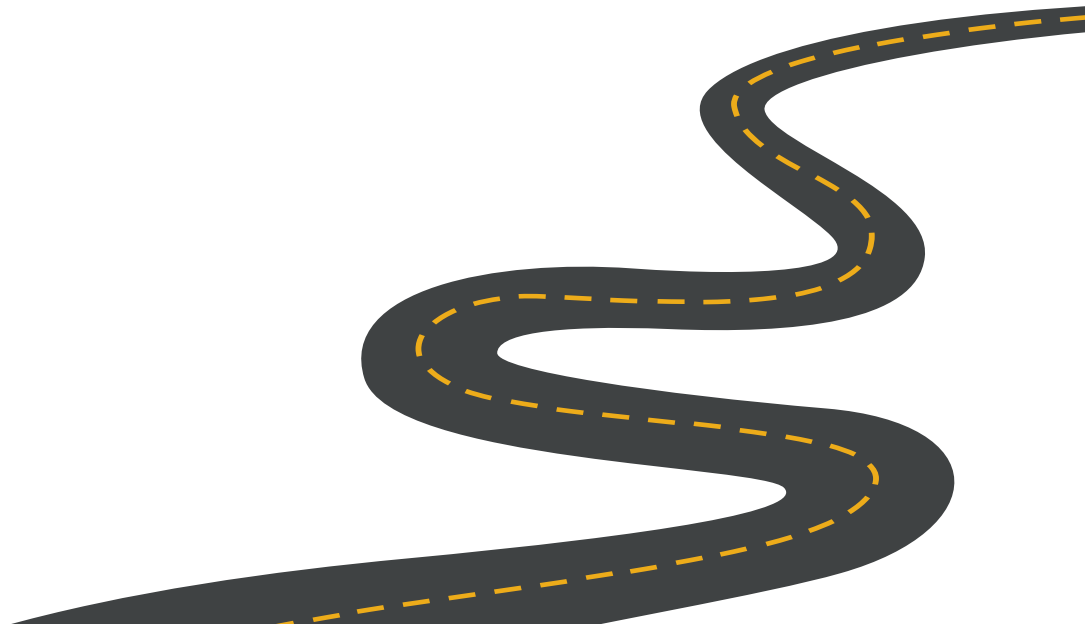
Survey Results: Adult Education

WOULD WRITE A Rx FOR ADULT EDUCATION ASSISTANCE

23%

WISH ADULT EDUCATION WAS PAID FOR BY THE HEALTHCARE SYSTEM

8%



Northwestern Medicine®

Social Determinants of Health

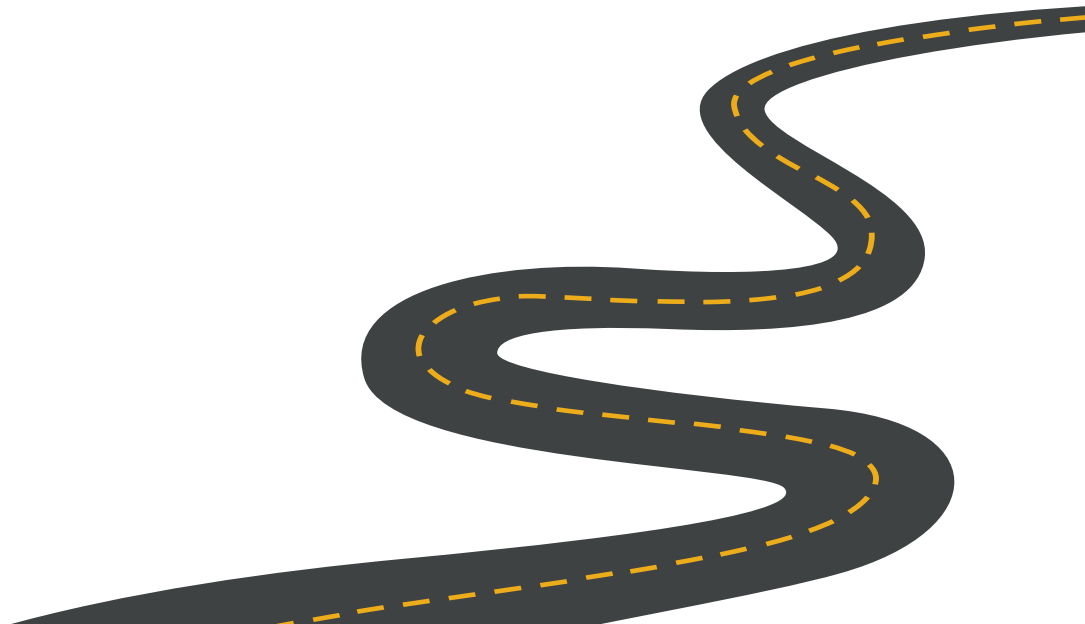
Survey Results: Nutritional Food

WOULD WRITE A Rx FOR NUTRITIONAL FOOD

85%

WISH NUTRITIONAL FOOD WAS PAID FOR BY THE SYSTEM

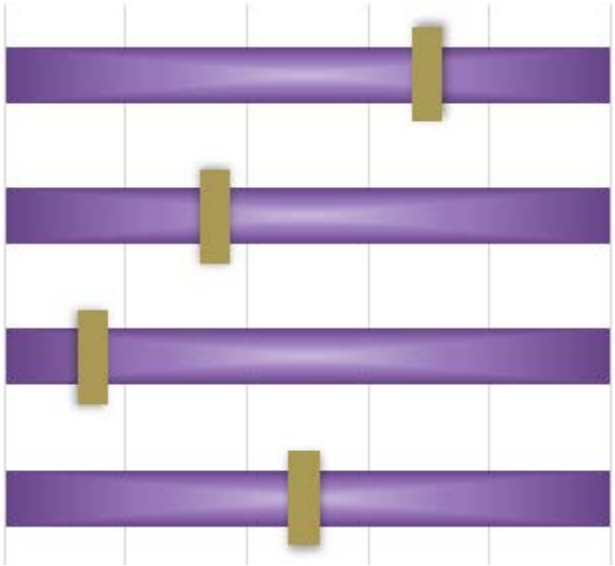
85%



Northwestern Medicine®

Social Determinants of Health

Survey Results, n=13 Family Medicine Residents



Nutrition

How does mapping patient addresses change your understanding of each patient's community?

Survey Results, n=13 Family Medicine Residents

- Helps me see feasibility in my plan for their healthcare
- Even when the map identifies resources, it doesn't help with all the stuff people actually need in order to use those resources
- Being able to see what resources are available can help to adjust what suggestions to give patients
- It gives me better insight into why some of their screening measures are out of control

Describe one limitation of mapping clinical data

Survey Results, n=13 Family Medicine Residents

- Making sure that the maps are frequently updated with correct information
- Many pts without transportation--what resources are on bus-lines?
- Currently the only option is to locate resources that are around, would be nice to assess if pt's can actually access them based on certain parameters or offered services
- Limited information about listed resources

Describe one benefit of mapping clinical data

Survey Results, n=13 Family Medicine Residents

- Would be useful for community planning. In theory I would be able to identify resources my patients don't already know about and could use.
- Informing patients of nearby places to be active/get fresh produce
- Having point of care information to hand to patients regarding health and nutrition available to them
- Easily available resources for patients; recognizing resource poor areas

Northwestern Medicine®

Next Steps:

- Next iteration of curriculum development
- Implementation at the point of care
- National Collaborative for Education to Address Social Determinants of Health

Questions?

Thank You

@NUFSMFamMed

@NU_NCEAS

Northwestern Medicine®