Teaching Social Determinants of Health in Family Medicine Residency

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Northwestern Medicine®
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National Collaborative for Education to Address the Social Determinants of Health

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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.”

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.
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%
### Social Determinants of Health
#### Family Medicine Milestones

<table>
<thead>
<tr>
<th>PROF-3 Demonstrates humanism and cultural proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Has not achieved</strong> Level 1</td>
</tr>
<tr>
<td>Consistently demonstrates compassion, respect, and empathy</td>
</tr>
<tr>
<td>Recognizes impact of culture on health and health behaviors</td>
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</table>

**Comments:**
### Social Determinants of Health

**Family Medicine Milestones**

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#### SBP-3 Advocates for individual and community health

<table>
<thead>
<tr>
<th>Has not achieved Level 1</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognizes social context and environment, and how a community’s public policy decisions affect individual and community health</td>
<td>Recognizes that family physicians can impact community health</td>
<td>Identifies specific community characteristics that impact specific patients’ health</td>
<td>Collaborates with other practices, public health, and community-based organizations to educate the public, guide policies, and implement and evaluate community initiatives</td>
<td>Role-models active involvement in community education and policy change to improve the health of patients and communities</td>
<td></td>
</tr>
<tr>
<td>Lists ways in which community characteristics and resources affect the health of patients and communities</td>
<td>Understands the process of conducting a community strengths and needs assessment</td>
<td>Seeks to improve the health care systems in which he or she practices</td>
<td></td>
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</tr>
</tbody>
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**Comments:**
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.
Curriculum Resources
to teach social determinants of health
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

Community of Educators

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

http://www.feinberg.northwestern.edu/sites/cpci/hrsa-grant/educational-resources/community-of-educators.html
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.
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.
GIS Resources
to teach social determinants of health
Community Health Resource Navigator
Aunt Bertha
www.auntbertha.com
UDS Mapper
https://www.udsmapper.org/

Use the UDS Mapper to examine community health:
- Explore Service Areas
- Analyze Population Indicators
- Upload Your Own Data

Login
Username (email):
Password:

Forget Username or Password?

Register Now
The UDS Mapper is free to use and open to the public.

Northwestern Medicine
Community Health Resource Navigator (CHRN) Demonstration
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 decision making.
Welcome to The 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.
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.

View on Map

Explore Topics & Indicators:

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

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
Community Health Resource Navigator

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

[Generate Report]
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.

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[Generate Report]
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)
- [x] Markets
- [ ] Grocery Stores
- [ ] Public Recreation Facilities
- [ ] Public Recreational Areas
- [x] Parks
- [ ] Private and Membership Recreation Facilities
- [ ] User-Added Locations

Radius: 3 mi

Reset Generate Report
Healthy Eating and Active Living

Check the boxes next to the indicators 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

Address: 3406 Kehm Blvd, Park City, Illinois, 60085

Reset Generate Report
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
- Mariano's Fresh Market 3434 Kehre Blvd, Park City, Illinois, 60060
- Washington Fruit Market Inc 2055 S Lewis Ave, Washington, IL 62090

PARKS
- Chippewa Park
- University Park
- Greenbelt Forest Preserve
- Victory Park
- Wyman Park
- North Beach Park
- Wessel Field Park
- Belvidere Park
- Washington Park
- Dogwood Park
- Clearview Park
- Bos Diamond Memorial Park
- Audubon Park
- Glen Elora Park
- Roosevelt Park
- King Park
- Ray Bradbury Park
- Yeoman Park
- Kirk Park
- McClary Trail
- Belle Plaine Park
- Christine Thompson Park
- Lassen Park
- Roosevelt Park

PRIVATE AND MEMBERSHIP RECREATION FACILITIES
- Outdoor Cross Fit 3134t Airport Rd, Gurnee, Illinois, 60031
- Little Gym 12227 Airport Rd, Gurnee, Illinois, 60031
- Field House Sports & Fitness 1111 Greenview Dr, Gurnee, Illinois, 60031
- TWA Family Fitness & Wellness 2111 Skyline Dr, Mount Prospect, Illinois, 60056
- Carmel 415 N. Greenwood Ave, Mount Prospect, Illinois, 60056

https://www.healthlandscape.org/@data/385cG-9D1/694.html
NM Family Medicine Residency
Pilot Curriculum Development & Evaluation
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
Our Residency Community
Northwestern McGaw Family Medicine Residency at Lake Forest

Median Income

Waukegan, IL  $45,983
Grayslake, IL  $87,967
Lake Forest, IL  $152,658
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

Legend

Social & Economic Opportunity Index Categories

- Very Low
- Low
- Moderate
- High
- Very High

NU Fam Med residency sites
Educational Opportunity Index

Legend

Educational Opportunity Index Categories

- Very Low
- Low
- Moderate
- High
- Very High

NU Fam Med residency sites
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

Social Determinants of Health

- Housing
- Mental Health
- Education
- Public Benefits
- Domestic Violence
- Food Security
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
NM Grayslake Outpatient Center

Poverty Index
Lake Forest Hospital

Poverty Index
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

- Engaging Conversation
- Providing Resources

(1=Novice to 5=Expert)
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)
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%
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%
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%
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%
Social Determinants of Health
Survey Results, n=13 Family Medicine Residents

Food security is a medical issue
Food security is a social problem

Food security is important enough that it's worth taking the time to screen
Actual food insecurity is rare

I am comfortable having a food security conversation with patients
I am worried that asking about food security will feel awkward

I am confident I have the knowledge and tools to help patients with food security
I am worried about what I can actually do to help patients
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
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

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@NU_NCEAS