

# WELCOME!

## Resources for Developing an Understanding of Health Disparities

Susan White, MD  
February 28, 2017  
1:00pm-2:00pm



[www.clinicians.org](http://www.clinicians.org)

**CENTENE**<sup>®</sup>  
Corporation

# ASSOCIATION OF CLINICIANS FOR THE UNDERSERVED

ACU is a nonprofit, transdisciplinary organization of clinicians, advocates and health care organizations united in a common mission to improve the health of America's underserved populations by enhancing the development and support of the health care clinicians serving these populations.



[www.clinicians.org](http://www.clinicians.org)

**CENTENE**<sup>®</sup>  
Corporation

# ACU PARTNERSHIP

**CENTENE**<sup>®</sup>  
*Corporation*

**Joyce Larkin**

Vice-President, Corporate Community Relations

**Marianne Burdison**

Senior Director, Strategic Alliances & Development



# ASSOCIATION OF CLINICIANS FOR THE UNDERSERVED

- Gaby Witte | Health Policy Fellow
  - [gwitte@clinicians.org](mailto:gwitte@clinicians.org)
  - 703-562-8843
- Mariah Blake | Staff Assistant
  - [mblake@clinicians.org](mailto:mblake@clinicians.org)
  - 703-562-8819



[www.clinicians.org](http://www.clinicians.org)

**CENTENE**<sup>®</sup>  
Corporation

# WEBINAR HOUSEKEEPING

We are  
Recording

Ask  
Questions

Have Fun



[www.clinicians.org](http://www.clinicians.org)

**CENTENE**  
Corporation

# SUSAN WHITE, MD

## ASSISTANT PROFESSOR OF OBSTETRICS AND GYNECOLOGY



Dr. White is the Director of Didactic Education and a founding faculty member of the Boston University School of Medicine PA Program. She has been a full time faculty member in PA education since 2007. Her education and research interests are in curriculum development and novel approaches to medical education and these resources were developed over the past three years for a course in Preventive Medicine. She currently serves on the Exam Development Board of the PA Education Association and was a 2014-2015 Gold Humanism Scholar at the Harvard Macy Institute Program for Educators. Having practiced Ob-Gyn in New Hampshire for over 20 years, she now practices gynecology at Boston Medical Center and Upham's Corner Health Center.



[www.clinicians.org](http://www.clinicians.org)

**CENTENE**  
Corporation

# Resources for Developing an Understanding of Health Disparities

---



Susan E. White MD  
Director of Didactic Education, Physician Assistant Program,  
**Boston University** School of Medicine, Boston MA  
Assistant Professor of Obstetrics and Gynecology  
Copyright 2016 Susan White

# Learning Objectives

---

Following the workshop, the learner will be able to

1. Locate and use the following resources for understanding disparity: Spent, Dartmouth Health Atlas, Food desert map, bias testing, Google Maps.
2. Use the food desert maps and google maps resources to develop an activity to foster understanding of the barriers and challenges for healthy food choices in a community.
3. Use the Dartmouth Health Atlas to assess differences in healthcare and outcomes in a location.



# The Origins



PA program at Boston University School of Medicine (N=56 students)

*The mission of the Boston University School of Medicine PA Program is to educate physician assistants who will provide exceptional patient care for diverse populations of patients, including those from vulnerable communities, and to cultivate leaders.*

*We value excellence, integrity, social justice, service, and are committed to developing a successful model for interprofessional education and clinical practice.*

Teaching hospitals:

- Boston Medical Center
- Boston VA System
- Roger Williams Medical Center, Providence RI (*to improve the health status of the communities it serves*)

# Defining Health Disparities

---

Food

Shelter

Transportation

Income

Insurance

# Activities for Awareness

---

## **Medication and Lifestyle Change**

Income Challenges

Food Access

Facing Our Own Biases

Regional Differences in Healthcare

# Medication & Lifestyle Change

Purpose: to raise awareness of taking medication and making a lifestyle change

Procedure:

- Tic Tacs in placed in prescription bottle with 4 times a day dosing
- Emailed prescription ready for pick up
- Limited pharmacy hours; only I can dispense
- Must email me with their lifestyle change
- Medication and lifestyle change is for 3 weeks
- Reflection piece

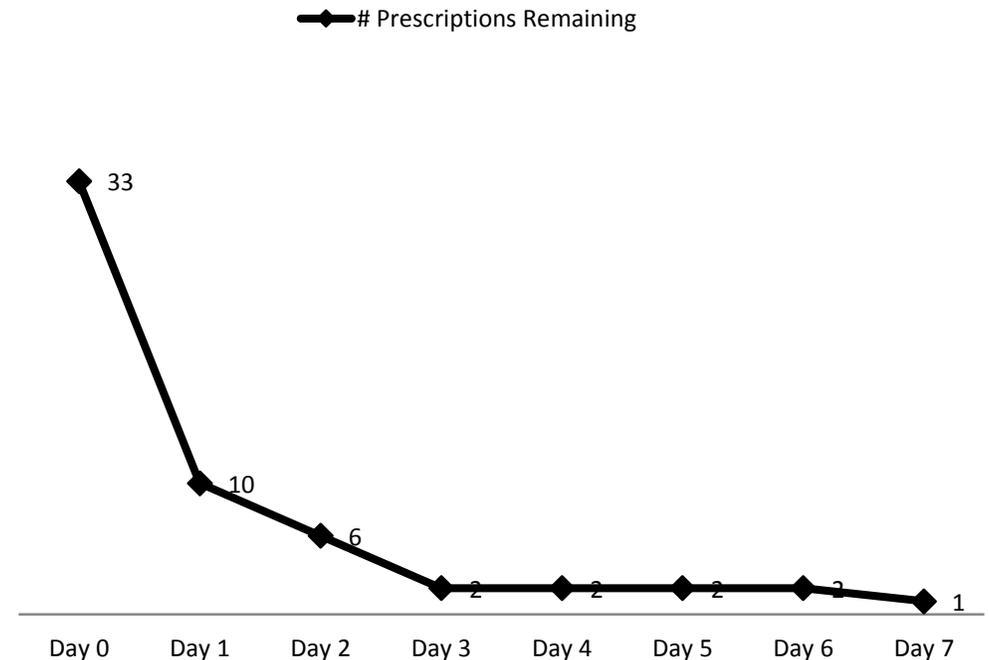


# Medication & Lifestyle Change

“I kept forgetting to take the medicine with me so I could take it on time. Good thing my life didn’t depend on it.”

“I could never remember to take my birth control pills. I was terrible at this! I found some pill reminder apps which helped and will help my patients maybe too.”

**# Prescriptions Remaining**

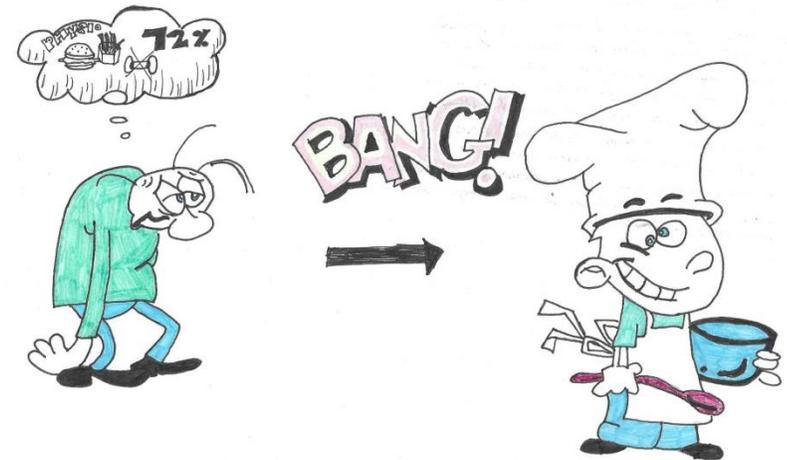


# Medication & Lifestyle Change

---

“I feel relieved that I can stop walking once this is over. On the other hand I know I should continue to do it but it is nice to know I don’t have to do it.”

“Harder than I thought to do this [eat 5 vegetables] everyday.”



“I decided to draw how my ‘transformation’ went with my lifestyle change of cooking ....at least 1 meal a day. Overall my lifestyle changes have been manageable and realistic.”

# Activities for Awareness

---

**Medication and Lifestyle Change**

**Income Challenges**

Food Access

Facing Our Own Biases

Regional Differences in Healthcare

# Income Challenges

---

Purpose: Raise awareness of the challenges of a low income

Procedure:

- Play the game Spent (<http://playspent.org/>) at home before coming to class
- Play it at least three times and make different choices each time.
- Class discussion

Urban Ministries of Durham serves over 6,000 people every year. But you'd never need help, right?

**PROVE IT**

ACCEPT THE CHALLENGE

**SPENT**

# Income Challenges

---

*Over 14 million Americans are unemployed. Now imagine you are one of them.*

*Your savings are gone. You've lost your house. And you're down to your last \$1000.*

**CAN YOU MAKE IT THROUGH THE MONTH?**

FIND A JOB OR EXIT

**SPENT**

# Spent

The screenshot displays the Spent mobile application interface. At the top left, the word "Spent" is written in a large, dark font. Below it, a horizontal line is visible. The app's main screen has a dark background. In the top left corner, the word "BALANCE" is written in small white letters, followed by "\$1,000" in a large, bold, orange font. In the top right corner, the word "DAY" is written in small white letters, followed by the number "1" in a large, bold, white font. The central part of the screen features the text "YOU'RE RUNNING OUT OF MONEY FAST" in a large, bold, white font. Below this, it says "It's time to get a job – any job Here's what's available Choose one:" in a smaller white font. Three job listings are shown as overlapping cards. The top card is titled "WAREHOUSE" and "2ND SHIFT". It describes a job for dependable, punctual, and hard-working warehouse associates, requiring the ability to lift 20 lbs and have reliable transportation. The pay is listed as "\$9/hr." and the shift is "12p-7p". Below the job listings, the word "SPENT" is written in a large, bold, white font. At the bottom of the screen, there is a navigation bar with several links: "DONATE", "ABOUT", "MADE BY MCKINNEY", "PRIVACY", "CONTACT US", "SOURCES", and "I CAN'T DO THIS". On the far right side of the screen, there is a vertical list of numbers from 1 to 30, representing days of the month. The number "1" is highlighted with a red circle, indicating the current day.

BALANCE

\$1,000

DAY 1

1  
2  
3  
4  
5  
6  
7  
8  
9  
\$ 10  
11  
12  
13  
14  
15  
16  
\$ 17  
18  
19  
20  
21  
22  
23  
\$ 24  
25  
26  
27  
28  
29  
30  
1

**YOU'RE RUNNING OUT OF MONEY FAST**

It's time to get a job – any job Here's what's available Choose one:

**WAREHOUSE**

**2ND SHIFT**

Looking for dependable, punctual, and hard-working warehouse associates. Must be able to lift 20 lbs and have reliable transportation.

\$9/hr.

12p-7p

**RESTAURANT**

**JOB**

Experienced server with a fast-paced atmosphere. Must be a person, Tuesday through Saturday. \$2.10/hr.

**NEED CASH?**

**SPENT**

DONATE ABOUT MADE BY MCKINNEY PRIVACY CONTACT US SOURCES I CAN'T DO THIS

# Income Challenges

---

Student comments about Spent.

“OMG”

“I could not win.”

“I am surprised that I can be a bad person. I put my dog down because I couldn't afford medical care for it.”

“Partway through I realized that this isn't a game – it's probably someone's real life.”

# Activities for Awareness

---

**Medication and Lifestyle Change**

**Income Challenges**

**Food Access**

**Facing Our Own Biases**

**Regional Differences in Healthcare**

# Food Access

---

Purpose: to raise awareness of the food availability in the vicinity of an urban safety net hospital (Boston Medical Center), challenges of following a specific diet and the notion of food deserts and food swamps.

## Procedure:

- Students are paired and assigned a case
  1. Research the diet
  2. Research the neighborhood
  3. Research food desert data
  4. Go shopping in a local convenience store

## Class Discussion

- Food deserts
- Food swamps
- Food access



# Food Access – Activity 1

---

## Diabetes

You are a 27 yo living at 727 Tremont St, Boston MA who does not have a car. Your son, age 11, has just been diagnosed with Type I Diabetes. You are a single parent with two other teenage children. You have just been laid off and are collecting unemployment. Your son has been placed on a 2000 cal ADA diet and needs daily insulin and blood sugar levels.

## Hypertension

You are 54 yo living at 128 Intervale St, Boston MA who does not have a car. You have a long history of hypertension but never took it seriously until you had a stroke last month. After physical therapy at the rehabilitation hospital, you can now walk about 1000 feet with a walker. You are living on disability income. On discharge from the hospital you started on a DASH Diet and two new medications for hypertension.

## Obesity

You are a 38 yo living at 29 Richfield St, Boston MA who does not have a car. You have been looking for work for the past 4 months and are living off unemployment. You were recently admitted to the hospital for cellulitis of the left ankle. On admission you weighed 274 lbs and were 5' 2" tall. You met with a nutritionist who suggested a low carbohydrate diet like Atkins or Paleo for weight loss. On discharge you were given a prescription for oral antibiotics.

# Food Access

## Activity 2 – Research your Neighborhood

---

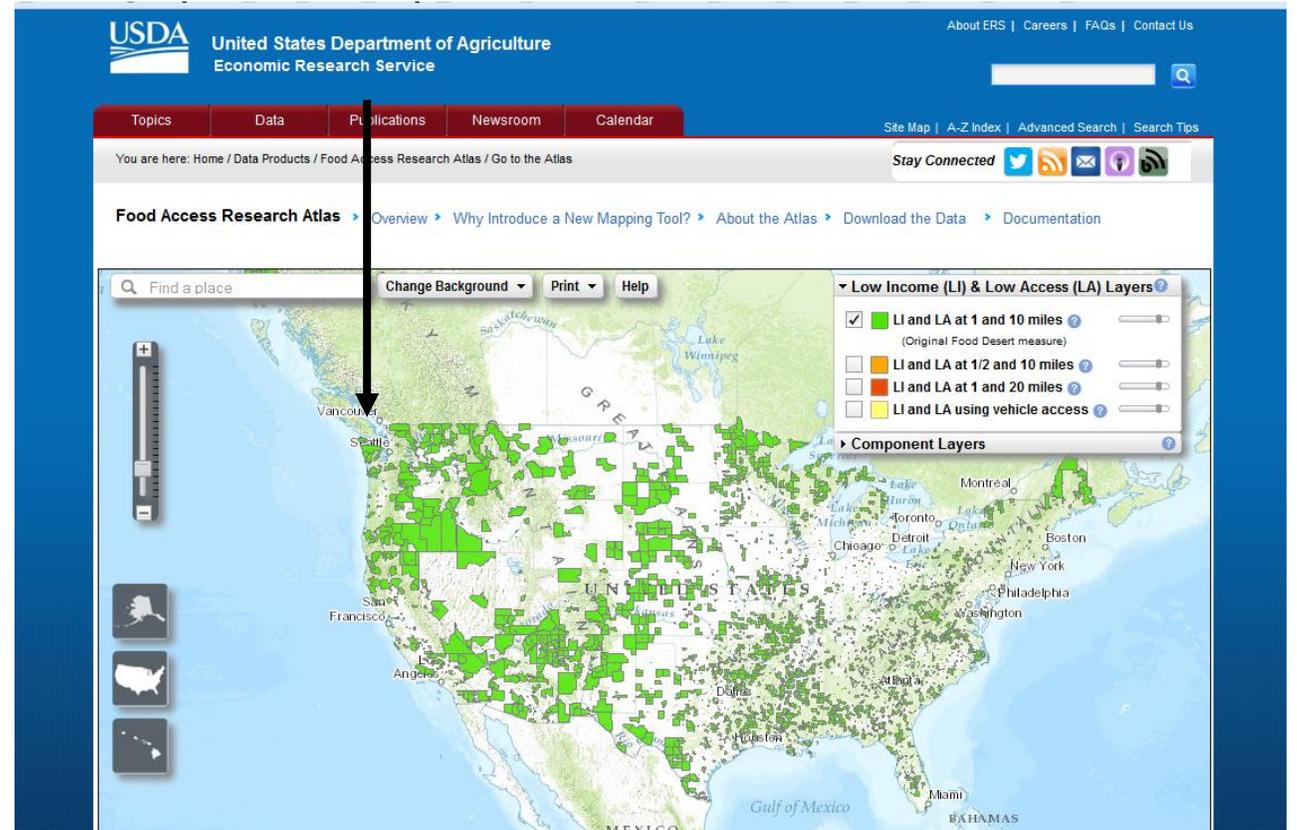
- Using Google maps ([www.google.com/maps](http://www.google.com/maps)) locate the address of your patient.
- Use Google street view and map view to check out the neighborhood.
- Find the following:
  - Nearest store that sells food
  - Nearest pharmacy
  - Numbers and types of restaurants available in the neighborhood
  - Closest full size grocery/supermarket (this would be a name brand store like Shaws, Stop & Shop, Market Basket etc)



- Neighborhood Search Tips
  - Try different search terms like food store, grocery, supermarket, market, pharmacy or drug store
  - Try using terms such as restaurant, café, fast food or food type (pizza, burgers) or brand name

# Food Access – Activity 3

Go back to this web page.  
The scale on the right side offers several colored layers with different options for LI and LA communities.



# Food Access – Activity 3

---

Data is based on the US Census Tracts

- ***low-access communities (LA)***

- at least 500 persons and/or at least 33% of the census tract's population live more than one mile from a supermarket or large grocery store
- For rural areas, 10 miles is used.

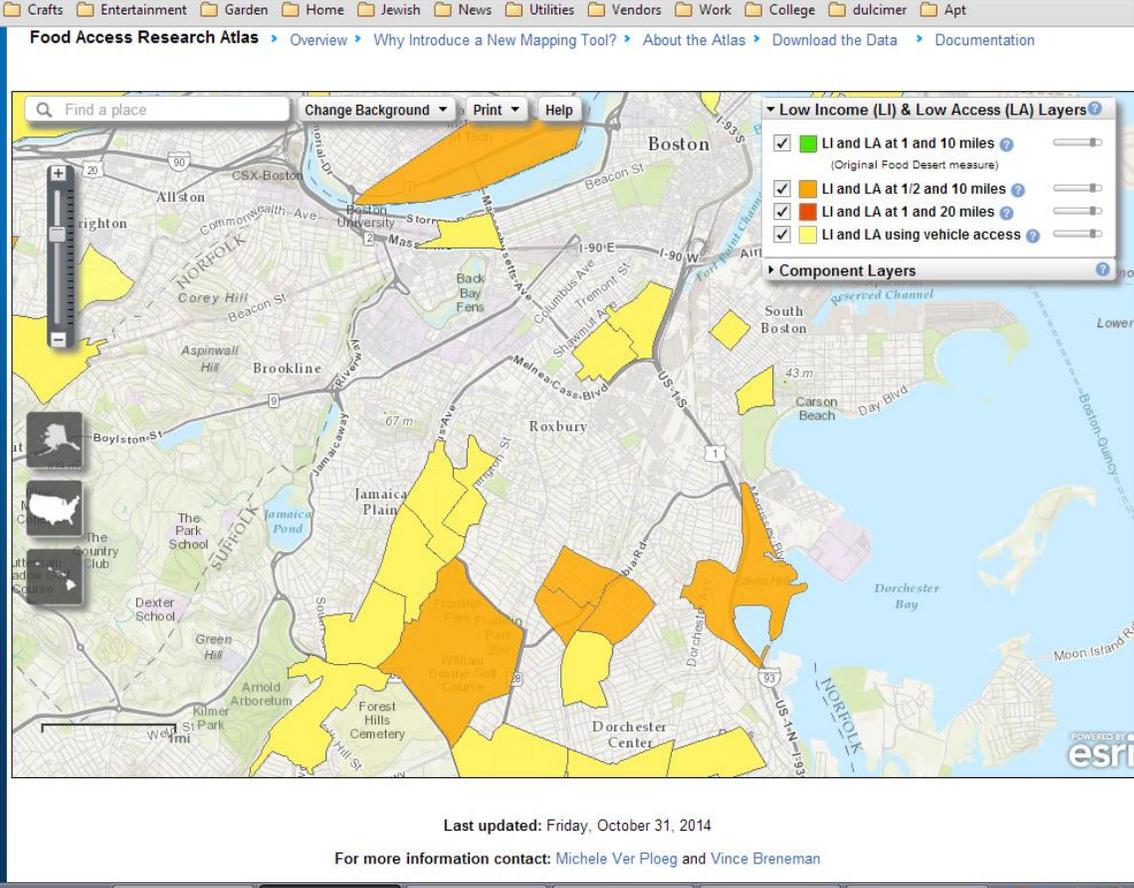
- ***low-income communities (LI)***

- poverty rate of 20 percent or greater
- median family income at or below 80 percent of the area median family income

The USDA Food Environment Atlas has options for looking at LA and LI communities with varying distances from supermarkets and without vehicle access.

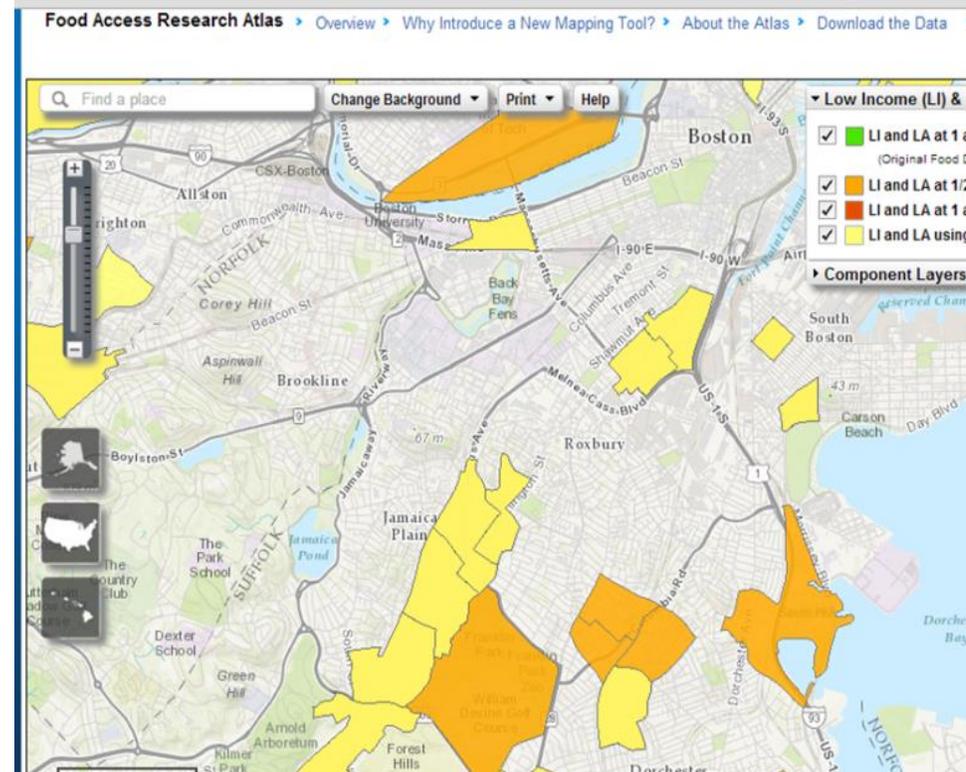
# Food Access – Activity 3

Use the toggle on the left to zoom into the Boston Area. Try turning on and off layers.



# Food Access – Activity 3

Type in your home address *OR* the place where you grew up.



# Activity 4 – Shopping for Food

---

Using the new diet in the case and what you know about their neighborhood, let's go food shopping.

- Find a convenience store or small corner store near you
- Find a day's worth of food that meets *your diet* requirements. You should have breakfast, lunch, dinner and two snacks.
- You don't have to purchase the food but try to calculate how much it would cost.
- Take a look at the choices and types of food available
- Fill out the sheet and hand it in



# Food – Deserts, Swamps and Eating Well

---

Assignment: shop in a convenience market near you. Develop a menu for a day which meets the dietary rules and answer the following questions.

1. How many types of fresh fruits and vegetables were available?
2. How many types of frozen fruits and vegetables were available?
3. How many types of canned fruits and vegetables were available?
4. What's for Breakfast? Lunch? Dinner? Snack?
5. Could you find a full day of food? Was their enough variety to extend to a full week of meals?
6. How did you feel about your shopping experience?

# Food – Deserts, Swamps and Eating Well

---

## Class Discussion

- Each group shares their diet
- Discuss how many and types of fast food places around their patient
- How could you as a PA help your patients who live in a desert or swamp?
- Deserts versus swamps
  - Which do you think would be more challenging to live in? Why?
  - How could a community make a swamp healthier?
    - Farmers markets
    - EBT cards
    - Delivery services

# Food – Deserts, Swamps and Eating Well

---

## How to set up your own

Go to <http://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas.aspx>

Find food desert in your area

On google maps find addresses for the cases

- Search for convenience markets and locate your cases near a convenience stores
- Using street view can help you determine the size of the store

## Additional items

- Using public transit have them figure out how to get to the nearest full service grocery store – how long does it take?
- Does the grocery store offer delivery? How much does it cost?
- Green space/Activity space – where can your patient go to get exercise?

# Activities for Awareness

---

**Medication and Lifestyle Change**

**Income Challenges**

**Food Access**

**Facing Our Own Biases**

**Regional Differences in Healthcare**

# Facing Our Own Biases

---

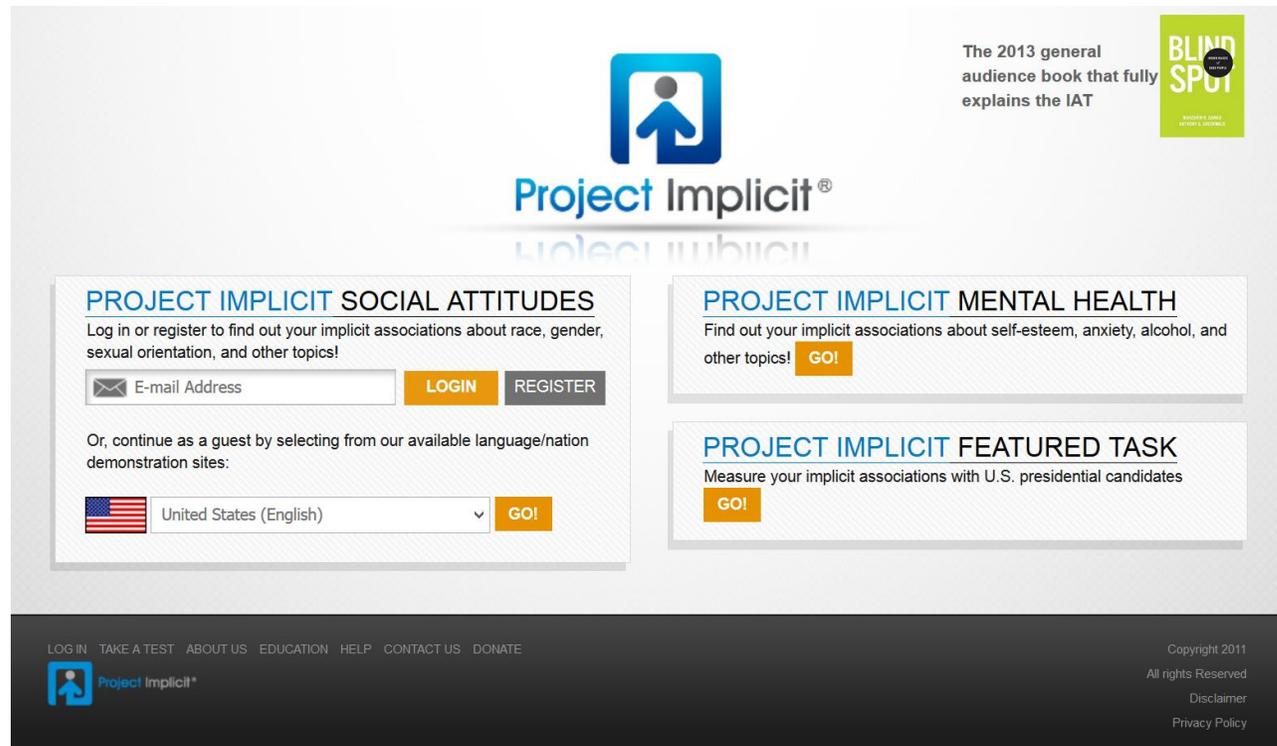
Purpose: to explore hidden or inherent bias which may affect our ability to give care

Procedure:

- Class discussion before activity
  - Bias definition
  - Bias in research
  - Overt bias vs inherent bias
- Activity (home assignment)
  - Inherent bias testing (Project Implicit)
- Class discussion after testing

# Facing Our Biases

<https://implicit.harvard.edu/implicit/>



The screenshot shows the Project Implicit website homepage. At the top center is the Project Implicit logo, which consists of a blue square containing a white stylized figure of a person with arms raised, and the text "Project Implicit®" below it. To the right of the logo, there is a promotional banner for the book "BLIND SPOT" by Anthony D. Greenwald and Banaji, with the text "The 2013 general audience book that fully explains the IAT".

Below the logo, there are three main sections:

- PROJECT IMPLICIT SOCIAL ATTITUDES**: "Log in or register to find out your implicit associations about race, gender, sexual orientation, and other topics!" This section includes an input field for "E-mail Address" with an envelope icon, and two buttons: "LOGIN" (orange) and "REGISTER" (grey).
- PROJECT IMPLICIT MENTAL HEALTH**: "Find out your implicit associations about self-esteem, anxiety, alcohol, and other topics!" with a "GO!" button (orange).
- PROJECT IMPLICIT FEATURED TASK**: "Measure your implicit associations with U.S. presidential candidates" with a "GO!" button (orange).

Below these sections, there is a navigation bar with links: "LOG IN", "TAKE A TEST", "ABOUT US", "EDUCATION", "HELP", "CONTACT US", "DONATE". On the left side of the navigation bar is the Project Implicit logo. On the right side, there is copyright information: "Copyright 2011", "All rights Reserved", "Disclaimer", and "Privacy Policy".

# Facing Our Own Biases

---

- Class discussion after testing
  - Index cards
    - Hand out 2 index cards and have everyone write down one bias they have on each card
    - No names
    - Include yourself and other faculty (and let them know you are doing this)
  - Collect cards
    - Give data back to class
    - Were you surprised at your implicit biases?
    - How does this affect patient care?
    - How can you use this information to provide better care?

# Activities for Awareness

---

**Medication and Lifestyle Change**

**Income Challenges**

**Food Access**

**Facing Our Own Biases**

**Regional Differences in Healthcare**

# Regional Differences in Healthcare

Purpose: to demonstrate and increase awareness of disparities in healthcare based on the region of the US

Procedure:

- Small group work in pairs. One person is A and other is B.
- Dartmouth Atlas of Health Care <http://www.dartmouthatlas.org/>
- Assigned to look up specific issues

DOWNLOADS | FAQ | ABOUT US

 THE DARTMOUTH ATLAS OF HEALTH CARE

[DATA BY REGION](#) [DATA BY HOSPITAL](#) [DATA BY TOPIC](#) [TOOLS](#) [KEY ISSUES](#) [PUBLICATIONS](#) [PRESS ROOM](#)

**Understanding of the Efficiency and Effectiveness of the Health Care System**

For more than 20 years, the Dartmouth Atlas Project has documented glaring variations in how medical resources are distributed and used in the United States. The project uses Medicare data to provide information and analysis about national, regional, and local markets, as well as hospitals and their affiliated physicians. This research has helped policymakers, the media, health care analysts and others improve their understanding of our health care system and forms the foundation for many of the ongoing efforts to improve health and health systems across America. [LEARN MORE](#)

**SPOTLIGHT**

OUR PARENTS, OURSELVES: HEALTH CARE FOR AN AGING POPULATION

This report, supported by **The John A. Hartford Foundation**, explores the care experienced by older adults in the U.S., including the number and types of care providers they see, along with

# Regional Differences in Healthcare

---

Dartmouth Atlas of Healthcare

<http://www.dartmouthatlas.org/>

Person A:

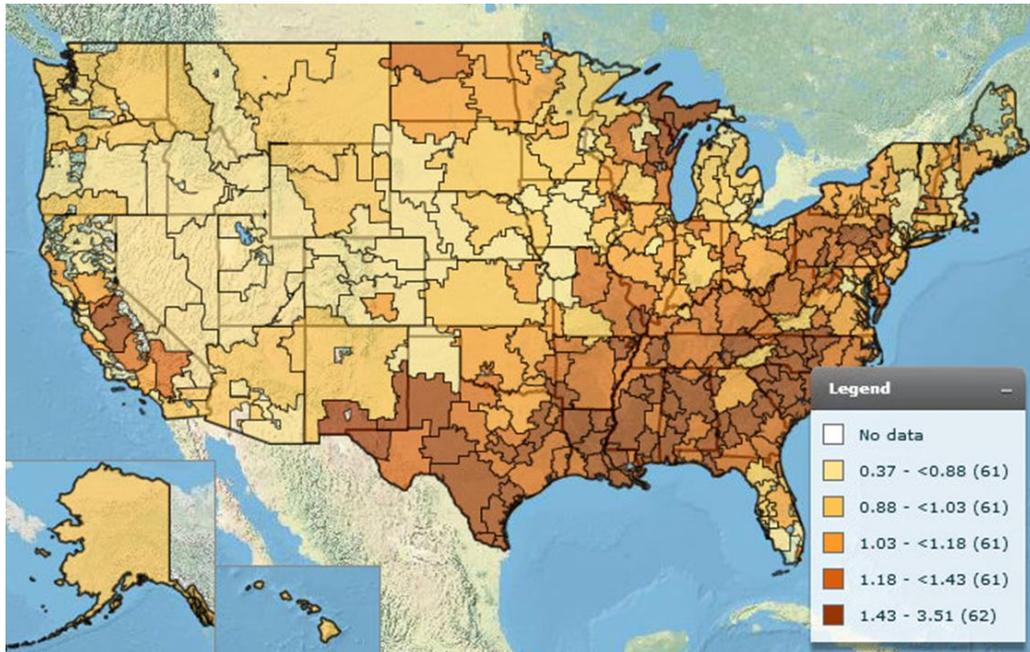
For Data by topic

- Variations in the Care of Surgical Conditions
- Topic: Diabetes and PAD
- Indicator: Leg Amputation by Race
- Bring up Map view

Person B

Data by topic

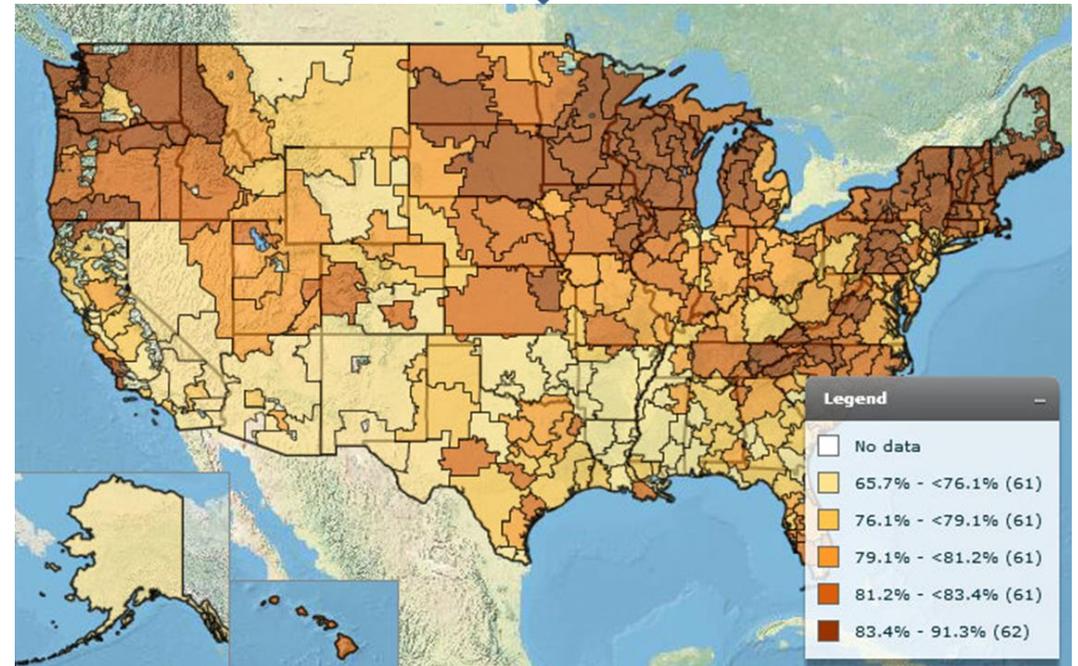
- Quality/Effective Care
  - Topic: Ambulatory Care Quality
  - Indicator: Diabetic Testing
  - Go to Table
    - Choose Hgb A1c > HRR under Region type > Refresh > Map
  - Bring up Map view



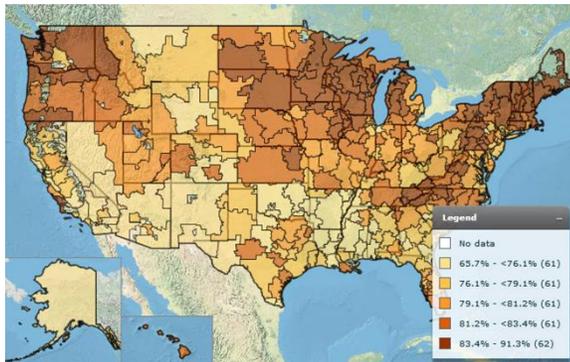
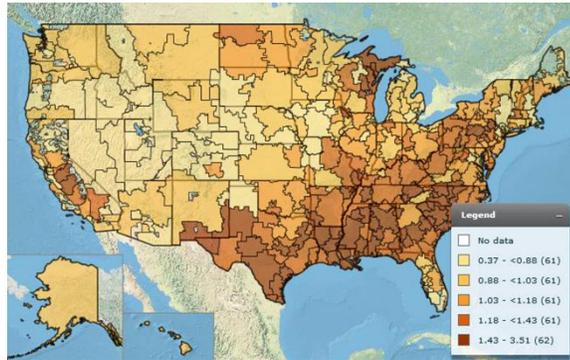
Lower Extremity Amputations, 2003 -2005



Appropriate HgA1c Screening, 2003 -2005



# Regional Differences in Healthcare



## Discussion

- What did you find?
- Why are amputations more frequent in the south?
- Why is HgbA1c important?
- Do you think there is a correlation between the two maps?
- Why are there regional differences?
- How do you as a provider keep current regarding screening for patients?
  - This is an introduction to the use of the smart phone app ePSS USPSTF recommendations

# Regional Differences in Healthcare

ePSS USPSTF recommendations <http://epss.ahrq.gov/PDA/index.jsp>

The screenshot shows the ePSS website interface. At the top left is the AHRQ logo (Agency for Healthcare Research and Quality). At the top right is the United States Department of Health & Human Services logo. Below the logos is a navigation menu with links: Home, About ePSS, What's New, Products, Support, and Contact Us. The main heading is "ePSS Electronic Preventive Services Selector". Below this is a paragraph explaining the tool's purpose: "The ePSS is an application designed to help primary care clinicians identify clinical preventive services that are appropriate for their patients. Use the tool to search and browse U.S. Preventive Services Task Force (USPSTF) recommendations on the web or on your PDA or mobile device. To search from your mobile device select from the following devices:". Below this paragraph is a list of device options, each with a "Learn More" link and a "Download" link:

- ▶ **Android (NEW!)** - Learn More | Download
- ▶ **BlackBerry/BlackBerry OS 10 (NEW!)** - Learn More | Download for BlackBerry OS 10
- ▶ **iPad (NEW!)** - Learn More | Download
- ▶ **iPhone/iPod touch (NEW!)** - Learn More | Download
- ▶ **Palm OS/webOS** - Learn More | Download for XP | Vista | Mac | Palm webOS
- ▶ **Windows 8/Windows Mobile** - Learn More | Download for Windows 8 | Download for XP | Vista | Mac
- ▶ **Web** - Learn More | Search for Recommendations

To the right of the text is a large image of a mobile PDA device displaying the ePSS application interface. The screen shows a form with fields for "Age" (with a dropdown menu), "Tobacco User" (with radio buttons for "Yes" and "No"), and "Sex" (with radio buttons for "Male" and "Female"). There are "Start" and "Next" buttons at the bottom of the screen.

Below the main text and image are four small promotional boxes:

- ePSS WEB**: Search and Browse U.S. Preventive Services Task Force (USPSTF) recommendations online. (Accompanied by an image of a desktop computer monitor).
- ePSS for iPad**: Check out the latest ePSS for iPad devices. (Accompanied by an image of an iPad).
- ePSS Widget**: Add the ePSS recommendations to any site by installing the ePSS Widget. (Accompanied by a small image of the ePSS application interface).
- Email Notifications**: Subscribe for optional ePSS PDA email notifications. Receive notifications of application and ePSS data updates. (Accompanied by an image of a laptop).

At the bottom of the page is a footer with the following text: "AHRQ Home | USPSTF | Questions? | Contact AHRQ | Accessibility | Privacy Policy | Freedom of Information Act | Disclaimers" and "U.S. Department of Health & Human Services | The White House | USA.gov: The U.S. Government's Official Web Portal". Below that is the address: "Agency for Healthcare Research and Quality - 540 Gaither Road Rockville, MD 20850 - Telephone: (301) 427-1364".

# Defining Health Disparities

---

Food

Shelter

Transportation

Income

Insurance

Education

Immigration status

Language

Green space

Activity space

Provider bias

Patient bias

Region of country

Time (work, travel)

# Tools, Resources and References

---

## Medication and Lifestyle Change

- Bottles, Tic-Tacs available on Amazon
- Labels: Avery

## Income Challenges

- Spent <http://playspent.org/>

## Food Deserts, Swamps and Eating Well

- Google maps <https://www.google.com/maps>
- US Department of Agriculture <http://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas.aspx>

## Facing Our Own Biases

- Project Implicit <https://implicit.harvard.edu/implicit/>

## Regional Differences in Healthcare

- ePSS USPSTF recommendations <http://epss.ahrq.gov/PDA/index.jsp>
- Dartmouth Atlas of Healthcare <http://www.dartmouthatlas.org/>

# Questions?

---



Susan White MD  
[susanew@bu.edu](mailto:susanew@bu.edu)  
617-638-5256