

## **Pop Health Performance Improvement Activity**

**(Please note that this activity is still awaiting approval from the American Board of Family Medicine as of June 2017)**

Funding: Health Resources and Services Administration

Partners:

- American Academy of Family Physicians
- American Board of Family Medicine
- Community Health Center, Inc.

Introduction

Thank you for your interest in this Performance Improvement Activity. There are numerous efforts to better connect patients seen in primary care with existing community resources.<sup>1</sup> We hope that the following materials and activities will help you get a better understanding of how to accomplish this in your clinic.

Objectives:

- Define population health and social determinants of health
- Demonstrate how to use online population health tools
- Describe how those tools can be used to improve the delivery of care

If you have any questions about this activity, please email Winston Liaw, at [winstonliaw@gmail.com](mailto:winstonliaw@gmail.com).

Overview of tasks (anticipated time):

- 1) Review population health and geospatial concepts by reading the documents, "Introduction to Population Health" and "Introduction to Geospatial Concepts". (60 minutes)
- 2) Apply these concepts by completing the activity in the document named, "Pop Health Tour – Mapping Clinical Data and Linking to Community Resources". (60 minutes)
- 3) FOR PRACTICING PHYSICIANS: Generate a list of 10 prediabetics and refer them to a Diabetes Prevention Program (60-120 minutes)

After completing tasks (1) and (2), please continue this activity below.

NOTE: If you are a non-practicing physician, you can complete Case Study 2 in place of completing the steps below.

### **Step 1: Identify 10 eligible prediabetics:**

- 1) To be eligible for a referral to a Diabetes Prevention Program, patients must meet the following requirements:<sup>2</sup>
  - Be at least 18 years old AND

- Be overweight (body mass index  $\geq 24$ ;  $\geq 22$  if Asian) AND
  - Have no previous diagnosis of type 1 or type 2 diabetes AND
  - Have a blood test result in the prediabetes range within the past year:
    - Hemoglobin A1c: 5.7% - 6.4% OR
    - Fasting plasma glucose: 100-125 mg/dl OR
    - Two-hour plasma glucose (after a 75 gram glucose load): 140-199 mg/dL OR
  - Be previously diagnosed with gestational diabetes
- 2) You will need to compile their medical record numbers and address zip codes
  - 3) In a separate spreadsheet, list the zip codes and number of patients per zip code in two columns. If desired, you can use the file, "Population Health PIA Sample Spreadsheet", to enter the data. Due to the Health Insurance Portability and Accountability Act of 1996 (HIPAA), neither the spreadsheet nor the spreadsheet's file name can have any protected health information such as names and addresses because the mapping platform is not HIPAA compliant.

	A	B
1	Zip Code	Number of Patients
2	22033	3
3	20151	1
4	20165	1
5	20171	2
6	20124	1
7	22181	1
8	22003	1

- 4) Map these data. Refer to the document "How to Map Thematic Data in HealthLandscape" for instructions on how to upload data. This document is located on this website:

<http://www.graham-center.org/rgc/maps-data-tools/tools/copc.html>

Under the option, "Type", select "ZCTA 2010".

Under the option, "ID", select "Zip Code".

Under the option, "Do any columns represent a", select "Group / Category": Number of patients.

Make sure that the zip codes are not duplicated within the spreadsheet. Otherwise, the map will not be accurate.

**QuickThemes** ⓘ ✕

Select the geography type and FIPS or Abbreviation column

Type:  ⌵ ←

ID:  ⌵ ←

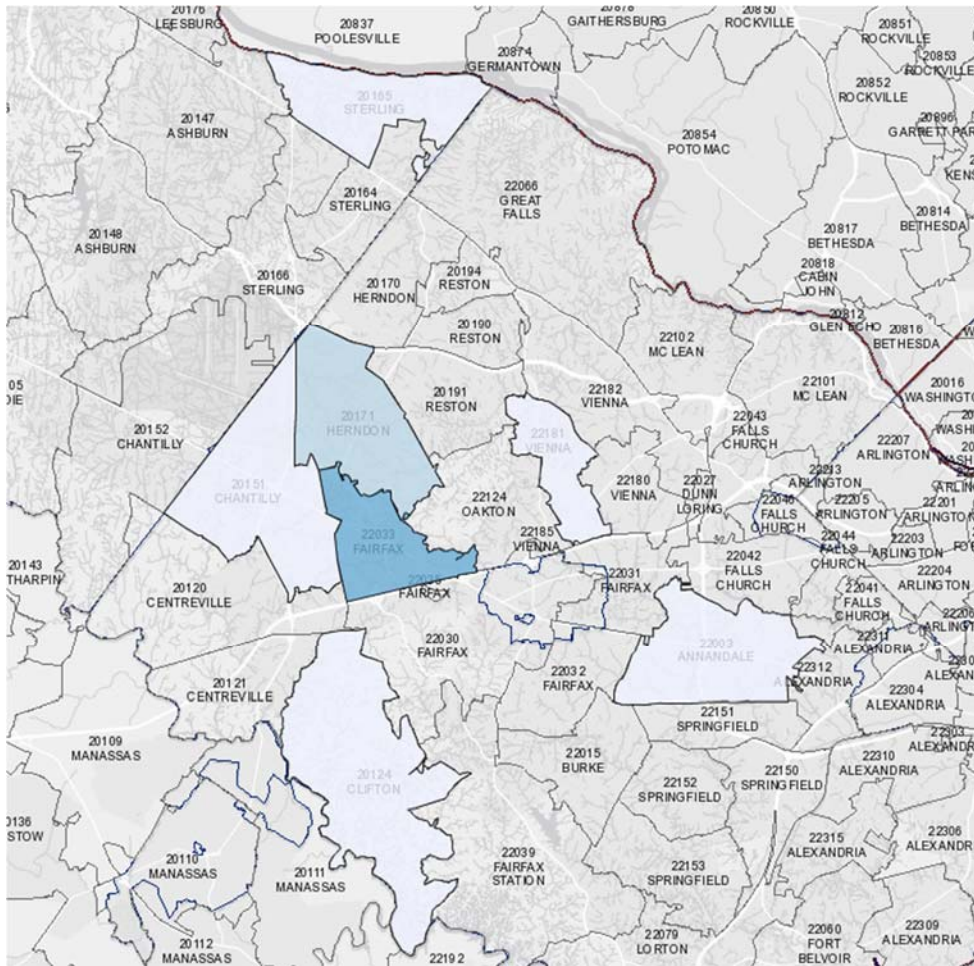
Do any columns represent a ...

Title:  ⌵

Group/Category:  ⌵

URL:  ⌵

Note:  ⌵ ←

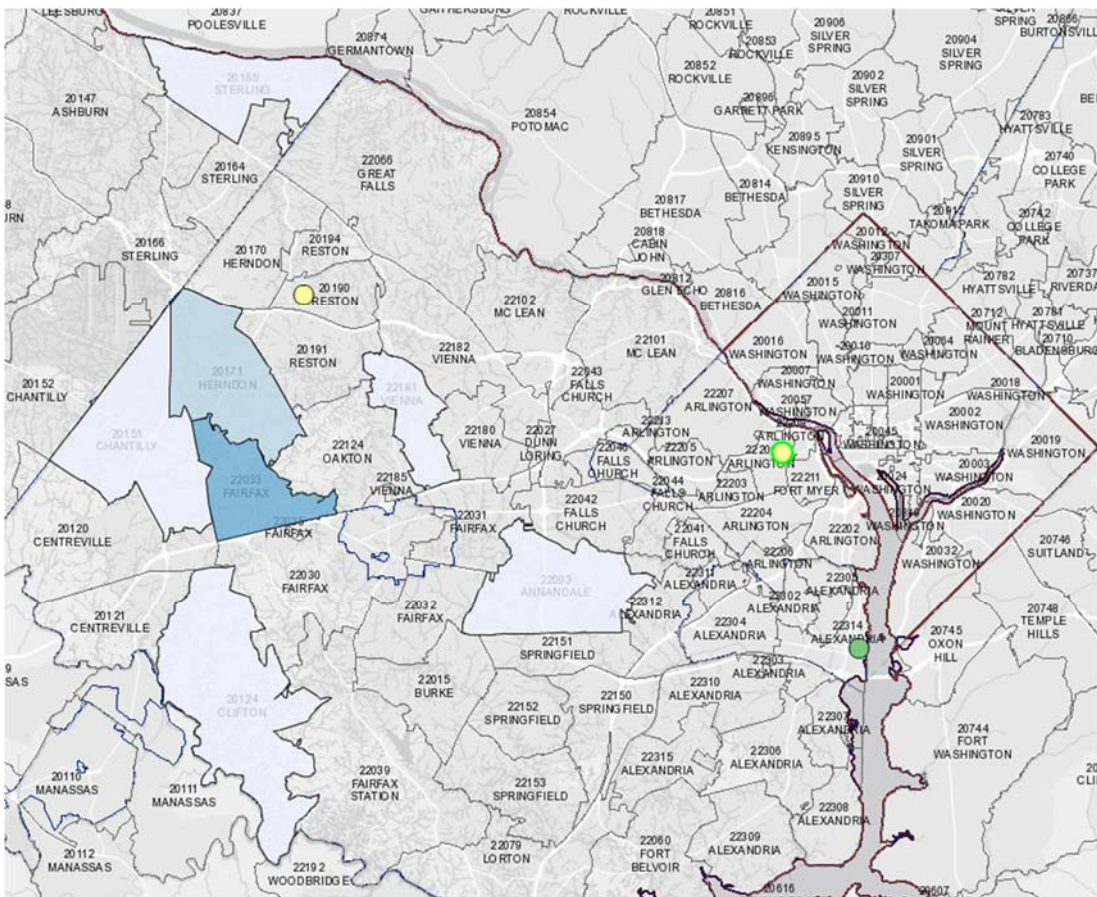


**Step 2: Map locations of Diabetes Prevention Programs:**

- 1) Access the file labeled “Diabetes Prevention Program Locations By State”. As a caveat, there were 1305 programs as of May, 2017. This program continues to grow, and there may not be a program located near your patients.
- 2) To map point addresses, refer to the document “How to Geocode and Extract Data in HealthLandscape” for instructions on how to upload data. This document is located on this website:  
<http://www.graham-center.org/rgc/maps-data-tools/tools/copc.html>
- 3) Map the data on the file “Diabetes Prevention Program Locations By State”. Only map the data in the worksheet of your state.

Under the question, “Do any columns represent a”, select “Group / Category: Name  
If your community lacks Diabetes Prevention Programs, go to the YMCA webpage, which has additional programs not listed within the attached spreadsheet.

<http://www.ymca.net/diabetes-prevention/locate-participating-y/>



- 4) Refer the prediabetics to the Diabetes Prevention Programs  
Here is a script for you or one of your team members:

You are at risk for becoming diabetic. Five to ten percent of prediabetics develop diabetes each year.<sup>3</sup> I wanted to refer you to a Diabetes Prevention Program in your community. These programs can lower your sugar, help you lose weight, and lower the chances that you will become diabetic.<sup>4,5</sup> The program lasts all year and includes education, lifestyle coaching, and support from others trying to make similar changes. If you want to join, I can give you a list of options.

- 5) If they are interested in joining, provide them with a list of options. Ask them if they want to join a program that is close to home, work, or another preferred location.
- 6) Track the number of patients that are interested in participating in a Diabetes Prevention Program.

<b>Zip Code</b>	<b>Number of Patients</b>	<b>Interested in Participating</b>	<b>Not Interested in Participating</b>	<b>% Interested in Participating</b>
22033	3	1	2	33%
20151	1	1	0	100%
20165	1	1	0	100%
20171	2	1	0	50%
20124	1	0	1	0%
22181	1	0	1	0%
22003	1	0	1	0%

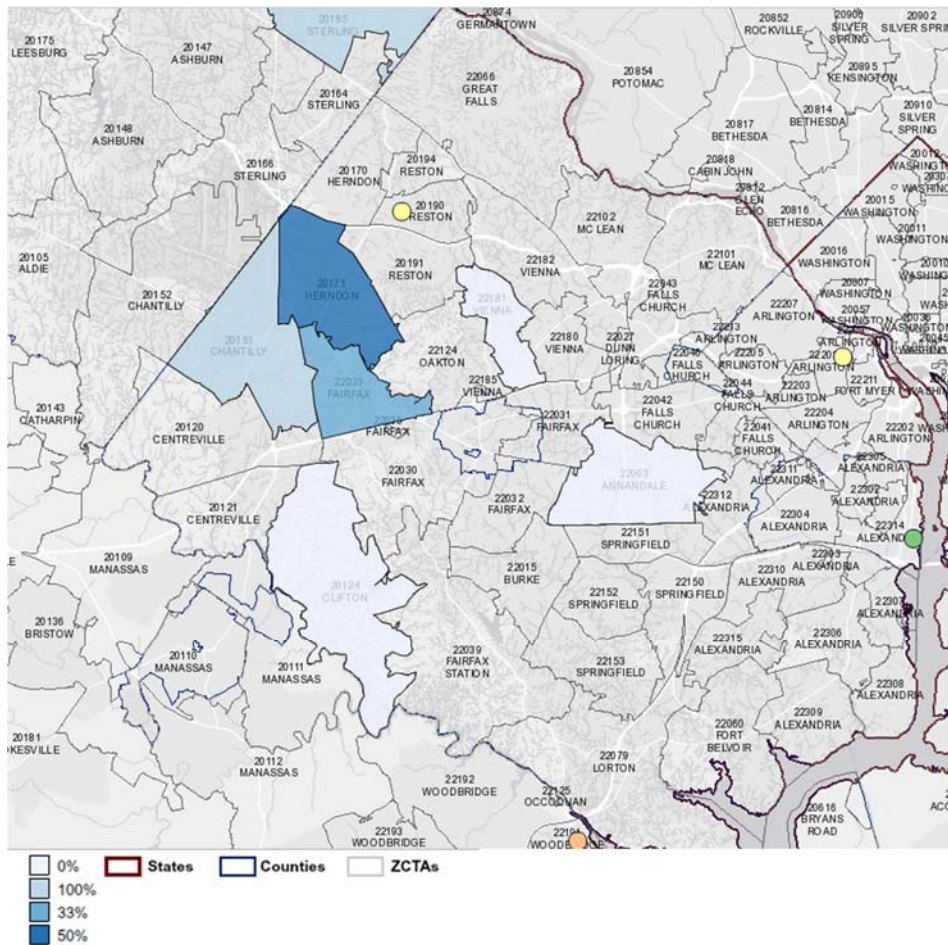
- 7) Map the percentage interested in participating. Follow the above instructions for mapping thematic data.

Under the option, "Type", select "ZCTA 2010".

Under the option, "ID", select "Zip Code".

Under the option, "Do any columns represent a", select "Group / Category": % Interested in Participating.





References:

1. Institute of Medicine. *Primary Care and Public Health: Exploring Integration to Improve Population Health*. Washington (DC): National Academy Press; 2012.
2. Centers for Disease Control and Prevention. National Diabetes Prevention Program Eligibility. <https://www.cdc.gov/diabetes/prevention/lifestyle-program/deliverers/eligibility.html>. Published January 14, 2016. Accessed March 31, 2017.
3. Tabák AG, Herder C, Rathmann W, Brunner EJ, Kivimäki M. Prediabetes: a high-risk state for diabetes development. *The Lancet*. 2012;379(9833):2279-2290. doi:10.1016/S0140-6736(12)60283-9.
4. Community Preventive Services Task Force. *Diabetes Prevention and Control: Combined Diet and Physical Activity Promotion Programs to Prevent Type 2 Diabetes Among People at Increased Risk.*; 2015.

5. Siu AL, on behalf of the U.S. Preventive Services Task Force. Screening for Abnormal Blood Glucose and Type 2 Diabetes Mellitus: U.S. Preventive Services Task Force Recommendation Statement. *Ann Intern Med.* 2015;163(11):861. doi:10.7326/M15-2345.