# The Community Health Approach to Prevention

<u>Presentation by</u> Anthony Poole PA-C Fetter Health Care Network Chief Clinical and Quality Officer



## **The Community Health Center Movement**

Born out of the Civil Rights Movement and President Lyndon Johnson's "War of Poverty" initiatives in early 1960's.

Dr. Jack Geiger and colleagues built the Community Health Center Model after observing how poor rural communities in South Africa were able to show improvements in their overall health statistics by using a "Community-Based Health Care Model".

Funding for the first Community Health Centers was approved in 1965 and two Health Centers opened that year, one in Rural Mississippi and one in Urban Boston Massachusetts



Community Health Centers serve as the primary medical home for more than 27 million people in 10,400 rural and urban communities across America.

## **Examples of services provided by FQHC's include:**

Family Medicine	Pediatrics	Women's Health (OB/Gyn)
Behavioral Health	Health Care for Homeless	Health Care for Migratory Agricultural Workers
Oral Health	School-Based Clinics	Podiatry
Home Health	Diagnostic Imaging	Pharmacies (with 340B Savings Programs)
Pain Management	Physical Therapy	Urgent Care
Dietitian Services	Infectious Disease (HIV and Hep C Programs)	Case Management
Community Health Workers	Optometry	Chronic Care Management



## **South Carolina Facts:**

There are currently 22 Community Health Centers in South Carolina providing coverage to patients in all 46 counties.

The CHC's in South Carolina share a common passion for providing quality health services to all people and openly share ideas and best practices with other CHC's in the state. The South Carolina Primary Health Care Association (SCPHCA) is the unifying organization for CHC's in SC and works to coordinate joint workgroups and training across the individual agencies here in South Carolina.

# Community Health Centers

## South Carolina Facts





In 1967, Fetter Health Care Network, formerly known as the Franklin C. Fetter Family Health Center, was established under the auspices of the Medical University of South Carolina (MUSC) as a demonstration project initially funded by the Federal Office of Economic Opportunity. It was established to provide comprehensive health care services to Charleston's low-income community.

Fetter Health Care Network, founded just two years into the national community health center movement, is the oldest Federally Qualified Health Center in the state of South Carolina.



## **Fetter's Mission Statement:**

To deliver timely, comprehensive and quality health services with dignity and respect <u>regardless of a person's ability to pay</u>; <u>foster partnerships with community providers</u> to enhance the health of the region; and advocate for policies which promote and protect the physical, mental and social well-being of the communities we serve.

# Fetter Health Care Network

## VALUE ( IMPACT of HEALTH CENTERS Fetter Health Care Network, Inc.

using 2015 IMPLAN Online.

Federally Qualified Health Centers and other safety-net clinics such as **Fetter Health Care Network**, **Inc.** provide tremendous value and impacts to their communities from JOBS and ECONOMIC STIMULUS to local communities; SAVINGS to the health care system; ACCESS to care for vulnerable populations. Highlights of **2016 contributions** are shown below.



Center Growth

© 2017 Capital Link. All Rights Reserved.



FHCN serves patients at 25 stationary & seasonal sites across Charleston, Berkeley, Colleton and Dorchester Counties.

•8 Fixed Primary Care Offices in Summerville, Downtown Charleston, Johns Island, Hollywood, Walterboro, North Charleston, Cross, Moncks Corner.

•I Dental Location – Downtown Charleston. (Mobile Dental Unit will roll out by end of 2018.)

- •3 School-Based Programs Hollywood and Ravenell areas.
- •I Health Care for the Homeless Center One80 Place

•I Health Center embedded in Mental Health Centers – Charleston Dorchester Mental Health.

•II Migrant Agricultural Worker Sites



## **TCHIP Subcommittee - Clinical Preventive Services**

Focus Areas:

- I. Diabetes
- 2. Immunizations
- 3. Cancer Screenings



## **Diabetes in South Carolina**

- •I in 8 adults (18yrs and older)
- •I in 6 African Americans
- •l in 4 adults over age 65
- •Diabetes is the 7<sup>th</sup> leading cause of death in our state
- •Diabetes is the leading cause of preventable blindness in the US.





## **Diabetes in South Carolina**

The CDC reports that only 69% of patients aged 18 and older in South Carolina that have been diagnosed with diabetes have had two or more AIc checks, and 56.5% received a dilated eye exam.

## **Fetter's Diabetes Services Goals**

I.Increase AIc screenings

2.Reduce the percentage of patients in our network with uncontrolled diabetes (AIc

>9%)

**3.Increase Diabetic Retinopathy Exams** 

**4.Implement a Diabetes Education Program** 



## **Diabetes in South Carolina**

The CDC reports that only 69% of patients aged 18 and older in South Carolina that have been diagnosed with diabetes have had two or more AIc checks, and 56.5% received a dilated eye exam.

## **Fetter's Diabetes Goals**

I.Increase AIc screenings

a. As of October 1, 2018, Fetter has screened 97% of our diabetic patients using Alc test

2.Reduce the percentage of patients in our network with uncontrolled diabetes (AIc >9%)

2015	2016	2017
33%	35%	27%

### **3.Increase Diabetic Retinopathy Exams.**

a.In 2017, Fetter purchased RetinaVue cameras to be able to perform diabetic retinopathy screenings in house at each of our locations.

4. Implement a Diabetes Education Program.



## **Screening for Diabetic Retinopathy**



Since implementing our diabetic retinopathy screening program, Fetter has screened over 370 patients.

16% of screenings have resulted in referable pathology findings on examination

## Preventive Services

In 2016, Fetter began a **partnership** with MUSC College of Nursing and MUSC College of Pharmacy to implement a diabetes education program utilizing faculty and students to spearhead the initiative.

#### Impact of Diabetes Education and Management by Pharmacists and Pharmacy Students at a Federally Qualified Health Center

SOUTH CAROLINA Telehealth ALLIANCE

Kathleen Wray,<sup>1</sup>Christian Leppert,<sup>1</sup>Andrew Swanner,<sup>1</sup> James Sterrett PharmD, BCPS,<sup>2</sup>Erin Weeda PharmD, BCPS<sup>2</sup>

1 South Carolina College of Pharmacy, Medical University of South Carolina Campus 2 Medical University of South Carolina College of Pharmacy



#### Background

- The prevalence of type 2 diabetes mellitus (DM2) in South Carolina was 10.5% in 2015, with higher rates in lower income communities<sup>1</sup>
- All 46 counties in SC face a shortage of primary care providers.<sup>2</sup>
- It has been demonstrated through the Ashville Project that pharmacists can produce a significant decrease in patient A1c through diabetes education (DE)<sup>3</sup>
- Fetter Health Clinic is a Federally Qualified Health Center (FQHC) that provides comprehensive medical services to insured, uninsured, and underserved patients in several SC counties.
- Through a collaborative practice agreement, Fetter Health Clinics have begun to utilize clinical pharmacists as well as pharmacy students for DE and diabetes management. These services were greatly aided by Telehealth monitors provided by the SC Telehealth alliance.
- Financial feasibility of pharmacists' DE services depends largely on demonstration of A1c reduction (A1c ≤ 9%)

#### Objectives

 Primary Objective: To evaluate the impact of diabetes education and management by pharmacists and pharmacy students at a FQHC in South Carolina.

#### Methods

Study Design: Single-center, retrospective, cohort study

#### Inclusion Criteria:

- Adult patients with DM2
- $\bullet \geq \! 1 \, DE$  consults at a Fetter Clinic between Jan 1, 2018 and Jul 1, 2018
- At least one recorded A1c before and one A1c after a DE Consult
- Data collection: Electronic medical record
- Data was collected retrospectively from a prospectively maintained clinic database
- All patients enrolled in the DE Program were reviewed for eligibility
   Statistical Analysis:
- Outcomes compared before and after using Wilcoxon Signed Rank and McNemar tests

#### Table 1: Diabetes Education (DE) Consults

Patients were referred to a PharmD whenever A1c ≥ 9% or at clinician's discretion DM2 visits were conducted in person or through Telehealth, and included disease state education, medication optimization, lifestyle modifications, and labs ordered by the PharmD, as appropriately outlined in a collaborative practice agreement PharmD supervision of pharmacy students was conducted directly or through Tele-Precepting

Table 2: Baseline Characteristics			
<b>Baseline Demographics</b>	Patients (n = 54)		
Age (yrs), median (IQR)	58 (54 - 63)		
Female, n (%)	33 (61.1%)		
Race, n (%) African American Caucasian Other	39 (72.2%) 12 (22.2%) 3 (5.6%)		
Days Between A1c measurements, median (IQR)	79 (59 – 96.5)		
Uninsured, n (%)	18 (33.3%)		

Table 3: A1c Before and After DE Consult			
	Baseline	Final	p-value
Median (IQR) A1c	10.25 (8.88-11.53)	8.45 (7.78-10.63)	p<0.001
Proportion of patients with an A1c ≥9	n=40 (74.1%)	n=24 (44.4%)	p<0.001
Median (IQR) A1c in patients with first A1c≥9 (n=40)	10.70 (9.95-12.48)	9.20 (8.13-11.10)	p<0.001
Median A1c in patients with first A1c<9	8.15 (7.40-8.60)	7.65 (6.65-7.95)	p=0.12

#### Results

- Of the 162 patients registered in the DE Program, 54 were included in the study
- Patients included were primarily female (61%), African American
- (72%), and had an median baseline A1c of 10.25% (Tables 2 and 3)
- A total of 47 (87%) patients had a reduction in A1c following a DE Consult, with 63% of patients having at least a one point reduction (Table 4)

Table 4: A1c Reduction		
	# of Patients	
Any A1c reduction	47 (87%)	
A1c reduction ≥ 1	34 (63%)	
A1c reduction ≥ 2	17 (31.5%)	
A1c reduction ≥ 3	11 (20.4%)	

Of those patients with a starting A1c ≥ 9% (n=40), the median A1c dropped 1.5 points after a DE Consult (p < 0.001) (Table 3)</li>

#### Conclusions

- Supervised pharmacy student/PharmD DE Consults resulted in a significant decrease in median patient A1c values
- Patients with initial A1c values ≥ 9% saw the greatest reduction in A1c as a result of DE Consults performed by PharmD team
- The number of patients with an A1c  $\ge$  9% decreased significantly
- following DE Consults, suggesting considerable financial reimbursement
   Further studies evaluating the long-term impact of DE services on DM2 outcomes and financial benefit are warranted
- When needed, the telehealth technology expanded quality care and precepting from a distance to rural sites.

#### Citations

- 1. Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2017
- Pharmacists' Impact on Patient Safety. American Pharmacists Association.
   Cranor CW, et. al. The Asheville Project: Long-Term Clinical and Economic Outcomes of
- Cranor CW, et. al. The Ashevule Project. Long-Term Clinical and Economic Outcomes of a Community Pharmacy Diabetes Care Program. J Am Pharm Assoc. 2003;43: 173-84.

#### Disclosures

Authors have no financial disclosures or conflicts of interest

American College of Clinical Pharmacy • Poster Session A: Quality Assurance Process Improvement • Seattle, Washington • October 20, 2018



**CDC GOAL:** Maintain high childhood vaccination rates, increase adolescent and adult vaccination coverage rates, and eliminate disparities in vaccination





**CDC GOAL:** Maintain high childhood vaccination rates, increase adolescent and adult vaccination coverage rates, and eliminate disparities in vaccination rates.

### **Childhood Coverage Rates**



<sup>s</sup> The combined 7-vaccine series includes ≥4 doses of DTaP, ≥3 doses of Polio, ≥1 dose of measles-containing vaccine, Hib full series, ≥3 HepB, ≥1 Var, and ≥4 PCV.

### Fetter Childhood Immunizations

2015	2016*	2017*
79.69%	30.61%	38%

\*In 2016, HRSA Reporting age changed for this measure to include only age 0-24 months.

#### Source: SC DHEC



## **Fetter's Action Steps:**

In 2017, Fetter **partnered with** the team from Pfizer Vaccines on an initiatives to improve our immunization rates across the network

Most immunization rates remain below national goals<sup>8-10</sup>



Data are for receipt of all recommended doses.

DTaP = diphtheria, tetanus, acellular pertussis; Hib = Haemophilus influenzae type b; HPV-m/f = human papillomavirus -male/-female; MCV = meningococcal conjugate vaccine; MMR = measles, mumps, rubella; Tdap = tetanus, diphtheria, acellular pertussis.



## Fetter's <u>Partnership</u> with Pfizer's Vaccine Team

Action Steps:

•Educational Lunch and Learns at each of our site locations. Educational for both the provider AND clinical support staff

•Assistance with implementation of standing orders for vaccines (Pediatrics and Adults)

•Customized educational posters for exam rooms and waiting rooms.

•Implementation of Patient Telephonic Reminder Program (Televox) when vaccines are due

- •Televox Calls for reminders to schedule Annual Wellness Visits
- •Dual-Branded Post Card Reminders for Wellness Visits and when immunizations are due.

## Preventive Services

## Immunizations



## Create Your Own Custom Pneumococcal Pneumonia Patient Education Wall Chart





## **Cancer Screenings**

Fetter Health Care Network <u>partners</u> in women's health screenings:







## **Cancer Screenings**

### **Colon Cancer Screening:**

Colorectal cancer is the second leading cause of cancer death for both men and women in the United States. Each year in South Carolina, 2,200 new people will be diagnosed with the disease and more than 800 will die from the disease. Statistics show the medically underserved has a higher incidence and lower survival rates from colorectal cancer diagnosis.

Fetter Partners in Colorectal Cancer Screening:

Colon Cancer Prevention Network – Columbia, SC
American Cancer Society
Labcorp
Cologuard (Exact Sciences Laboratory)
Access Health – Roper Hospital



## **Cancer Screenings**

### **Colon Cancer Screening:**



**Fetter's Colon Cancer Screening Rates** 

CHC Avg in 2016 – 33%



# Challenges Facing Community Health Centers and our patient population:

Uncertainty of Federal Funding

•Lack of Medicaid Expansion in South Carolina

Transportation

•Opiate Epidemic

•Perception that CHC's only care for the poor patients with no insurance

•Perception that CHC's provide lower quality of care than other health care providers



## **Opportunities for Fetter Health Care in the Tri-County Area**

### •Expanded Partnerships:

- One80 Place Expanding options to see ALL homeless patients at One80 clinic
- Colon Cancer Prevention Network expanded access to free colonoscopies in Tri-County Area
- Best Chance Network
- Choose Well
- Dorchester County Mental Health Center

### •Expanded Services

- Mobile Dental Unit
- Increasing Behavioral Health Services to include Substance Use Disorder
- Expanding School-Based Clinics North Charleston
- Improving Diabetes Education Program hiring additional Certified Diabetic Educators
- Nutrition/Dietitian Services
- Infectious Disease Focus HIV Prevention (PrEP), Hepatitis C Treatment
- Discounted cost for Mail-Order Pharmacy Services



# Thank you for your time!