# Together 2 Goal®

AMGA Foundation National Diabetes Campaign

**Monthly Campaign Webinar** 

February 15, 2018

#### **TODAY'S WEBINAR**

#### Together 2 Goal® Updates

- Webinar Reminders
- Together 2 Goal® Innovator Track
- AMGA Annual Conference
- Geisinger's Fresh Food Farmacy
  - Andrea Feinberg, M.D.
- Q&A
  - Use Q&A or chat feature





#### **WEBINAR REMINDERS**

- Webinar will be recorded today and available the week of February 19<sup>th</sup>
  - www.Together2Goal.org
- Participants are encouraged to ask questions using the "Chat" and "Q&A" functions on the right side of your screen





# INTRODUCING THE INNOVATOR TRACK: NOW ACCEPTING APPLICATIONS!

Cardiovascular Disease Cohort	Eye Care Cohort		
	F P P P P P P P P P P P P P P P P P P P		
<ul><li>Accepting 10 T2G groups</li><li>Applications due February 28</li></ul>	<ul><li>Accepting 10 T2G groups</li><li>Applications due March 16</li></ul>		

Questions? Need the application? Visit our website or email us at <a href="mailto:line">InnovatorTrack@amga.org</a>



#### **JOIN AMGA MARCH 7-10 IN PHOENIX!**



**Shared Learning** 

Real-world case studies and insights, led by AMGA member groups



**Inspiring Keynotes** 

Featuring burnout expert
Abraham Verghese,
disruption guru Jonah Berger,
former Congresswoman
Gabby Giffords, and
astronaut Mark Kelly



Networking

15+ hours of freeflowing conversations and structured networking events

Learn more and register at: amga.org/ac18



#### **TODAY'S FEATURED PRESENTER**

Andrea Feinberg, M.D.



Medical Director of Health and Wellness Geisinger





# Fresh Food Farmacy:

New way of taking care of patients with Type II DM who are food insecure.

Andrea Feinberg, MD

Medical Director of Health and Wellness
Geisinger

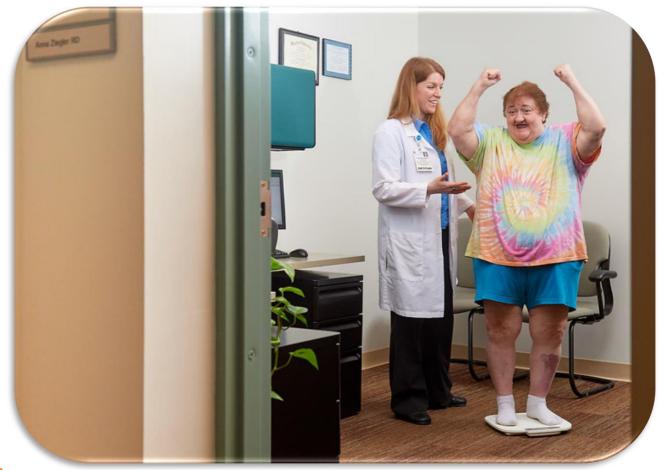


## The Fresh Food Farmacy Foundation and Vision

- Population Health Community Needs Assessment
- Health Outcomes/Premature Mortality
- Food Insecurity and Health Implications
- Diabetes: Disease, Costs, Tx., and FFF Program
- Clinical Outcomes
- Financial Outcomes
- Where are we now and future plans



### **Meet Brendalee**





# Lifestyle changes for the better

- Middle aged female lives with her husband and sister and leads a very sedentary lifestyle due to her fibromyalgia
- Patient began with her case manager in November and learned that her sugars could be controlled through diet and exercise (walking in a pool) She enrolled in FFF December 2016.
- Biometrics:

```
12/13/16 A1C 8.3 BP 134/74 WT 304 6/22/17 A1C 7.0 BP 140/60 WT 286 9/25/17 A1C 6.4 BP 110/60 WT 281
```



#### Where did we start?

- Community Health Needs Assessment: data used to determine pilot location
- Heavy burden of food insecurity and diabetes in Northumberland County, Pa

Measure	Northumberland	Lackawanna	Juniata/Mifflin	PA	US
Food Insecurity Rate	12.7%	12.7%	12.2%	13.1%	13.4%
Child Food Insecurity Rate	19.8%	18.9%	20.1%	17.9%	17.9%
Diabetes Rate	10.0%	9.7%	10.1%	8.7%	9.7%

Data Sources: Food Insecurity – Feeding America, 2015 Diabetes: CDC Diabetes Atlas & BRFSS, 2009-2013



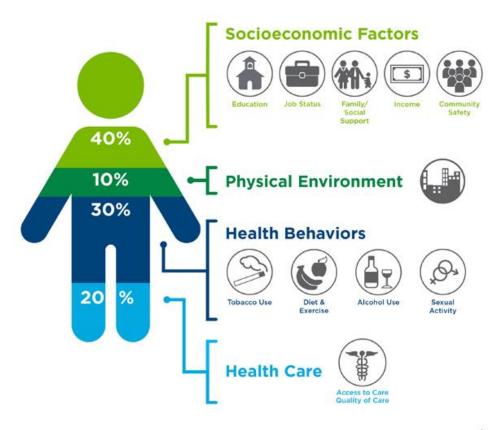
# Multiple factors impact patient health

#### Four areas impact health:

- Socioeconomic Factors
  - Education
  - Job Status
  - Family/Social Support
  - Income
  - Community Safety
- Physical environment
- Health behaviors
  - Tobacco use
  - Diet and exercise
  - Alcohol use
  - Sexual activity
- Health Care



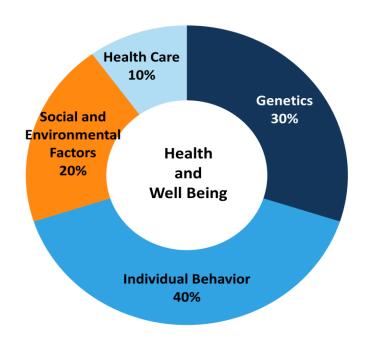
#### What Goes Into Your Health?



Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls; Solving Complex Problems (October 2014)

# Impact of factors on premature death

Impact of Different Factors on Risk of Premature Death







# Diabetes is the fastest growing chronic condition

- 39 million or 15% of adults will have diabetes by 2020.
- 1 in 3 adults will have diabetes by 2050¹



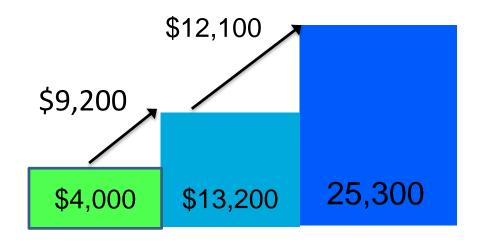
<sup>1</sup>Diabetes Statistics Report, 2014; <sup>2</sup>United Healthcare, United States of Diabetes, 2010



# Diabetes is driving unprecedented costs

- #1 Diabetes has highest healthcare spend<sup>2</sup>
- 17.5 missed workdays per year<sup>3</sup>

#### Average Annual Medical Costs Per Person<sup>1</sup>



<sup>1</sup>United Healthcare, United States of Diabetes, 2010; <sup>2</sup>US Spending on Personal Health Care and Public Health, 1996–2013," JAMA, 2016; <sup>3</sup>Economic Costs of Diabetes in the US in 2012



# What if we could reduce diabetes complications and close the meal gap?

#### **Major Complications of Diabetes**

#### Microvascular

#### Macrovascular

#### Eye

High blood glucose and high blood pressure can damage eye blood vessels, causing retinopathy, cataracts and glaucoma

#### Kidney

High blood pressure damages small blood vessels and excess blood glucose overworks the kidneys, resulting in nephropathy.

#### Neuropathy

Hyperglycemia damages nerves in the peripheralnervous system. This may result in pain and/or numbness. Feet wounds may go undetected, get infected and lead to gangrene.

#### Brain Increase cerebrov transien

Increased risk of stroke and cerebrovascular disease, including transient ischemic attack, cognitive impairment, etc.

#### Heart

High blood pressure and insulin resistance increase risk of coronary heart disease

#### Extremities

Peripheral vascular disease results from narrowing of blood vessels increasing the risk for reduced or lack of blood flow in legs. Feet wounds are likely to heal slowly contributing to gangrene and other complications.

Figure 1. Major microvascular and macrovascular complications associated with diabetes mellitus. Parts of the image were adapted from Servier Medical Art. Retrieved from https://pdb101.rcsb.org/global-health/diabetes-mellitus/monitoring/complications



## Type II diabetes treatment

- Lifestyle changes: cornerstone of treatment
  - Weight management
  - Nutrition
  - Physical activity
  - Smoking cessation
  - Alcohol use
- Blood pressure control
- Lipid control
- Stratified glycemic management



## Diabetes and food insecurity relationship

Food insecurity is significantly associated with poor metabolic control in adults with diabetes specifically HBA1c and LDL Cholesterol.

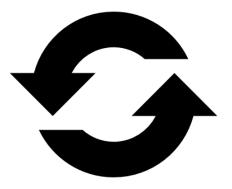
- Patients with HBA1c of 6.5-9: 1 in 5 are food insecure\*
- Patients with HBA1c >9: 1 in 4 are food insecure\*

\*Berkowitz SA, Baggett TP, Wexler DJ, Huskey KW, Wee CC. Food insecurity and metabolic control among U.S. adults with diabetes. Diabetes Care. 2013;36:3093-3099



## Food insecurity and diabetes relationship

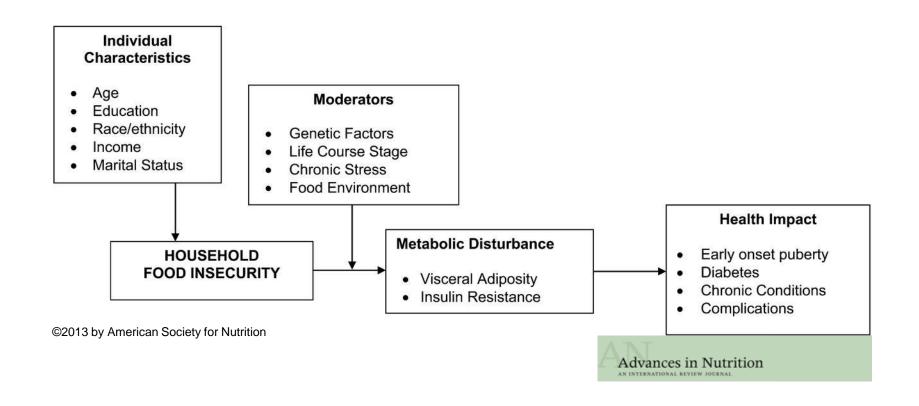
Food insecurity raises your risk for diabetes



Diabetes raises your risk for food insecurity



## Food insecurity impact on chronic conditions and outcomes



Barbara A. Laraia Adv Nutr 2013;4:203-212



# **Food insecurity questions**

- Within the past 12 months, we worried whether our food would run out before we got money to buy more (Y/N).
- Within the past 12 months, the food bought just didn't last and we didn't have money to get more (Y/N).



# **U.S.** food insecurity statistics

#### In 2015 it was estimated that:

- 13% (almost 1 in 8) American adults were food insecure\*
- 18% (1 in 6) American children were food insecure^

\*http://www.worldhunger.org/hunger-in-america-2015-united-states-hunger-and-poverty-facts/ ^https://www.childtrends.org/indicators/food-insecurity/



# 2014 hunger study by CPFB

#### Health complications of food insecurity:

- 33% of households report at least one family member with DM
- 58% of households report at least one family with HTN
- 13% of households have no health insurance of any kind

#### **Spending tradeoffs:**

70% of households choose between paying for food or paying for medical care.

#### **Health Status:**

30% report poor health



# Women and food insecurity

- Women make up 70% of the worlds poor
- FFF: 56% of patients are women



# **Coming together**

#### Key partnerships:

- Central Pennsylvania Food Bank
- Local grocers
- Philanthropy
- Grants



# Food as medicine pilot





### **Program structure**

#### Clinical criteria:

- 18 years of age or older
- Diagnosed with Type II DM
- HBA1c 8.0% or greater
- Geisinger primary or specialty care
- Food insecure



# Fresh Food Farmacy medical home

#### Care team:

- RN Health Manager
- MTM Pharmacist
- Registered Dietitian
- Wellness Associate
- Community Health Associate

Provides education and food prescription for patient <u>and</u> entire household.



# What the FFF team provides the patient

#### **Education:**

- Care team provides clinical education about chronic disease
- Stanford designed Diabetes Self Management Program (DSMP)

#### Food:

• Fresh, health food for patient and entire household for 5 days (10 meals)

#### Social needs:

Connect patient to transportation, SNAP (Food stamps), etc.



# **Patient experience**

- Engage patient and review program structure to determine interest
- Register patient for welcome class to learn more and meet the care team

Enroll

# Provide Food Rx

- Schedule food pick up
- Address transportation gaps
- Receive recipes and meal planning support

- Meet with care team members to address individual needs
- Participate in group classes and Medical Home

Care Team Support



# **Fresh Food Farmacy**





#### **Patient stories**





# Grandmother makes a change for the family

- 55 y/o female raising her 3 grandkids with a husband on peritoneal dialysis
- Has been underinsured and uninsured over the last few years
- January 2017 had given up on herself completely
- Case manager continued working with the patient, enrolled the patient who is now checking her sugars, watching what she is eating and even began walking for exercise. Family now enjoys the foods.
- Biometric Response:

```
1/9/17 A1C 13.8 BP 124/80 WT 181 5/9/17 A1C 6.9 BP 110/70 WT 165 9/6/17 A1C 5.8 BP 102/72 WT 155
```



### **Meet Rita**





# Here for support

"The Fresh Food Farmacy has been very beneficial because they keep you on track with the classes, food and recipes. It makes being a diabetic a little easier. And not only that, they're also there for support." – Gail Calloway

- Enrolled July 2017
- Baseline A1c 9.0 (April 2017)
- F/U A1c -7.7 (August 2017)



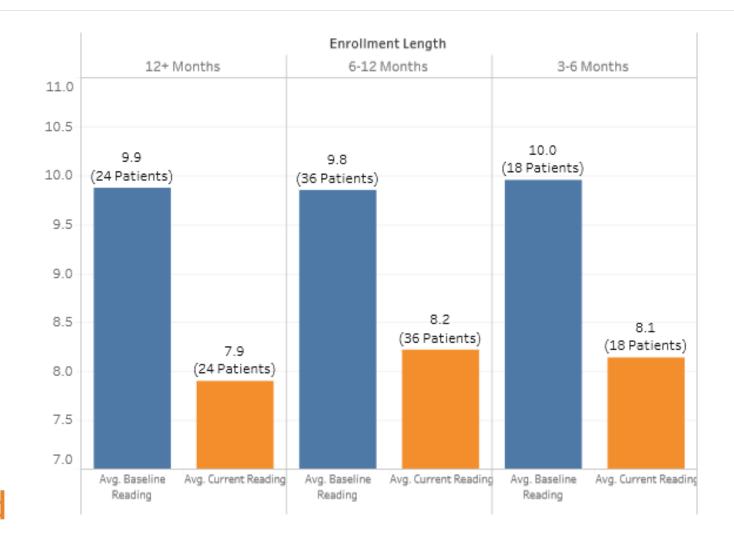
# **Healthy eating habits**

"The Fresh Food Farmacy has been a godsend in terms of helping with food. I have two small children, one of whom is disabled, and our family is on a tight budget. The Fresh Food Farmacy gives me access to foods that help me make healthier, more-balanced meals for my family. Since starting Fresh Food Farmacy, my family changed our entire style of eating. My husband lost 15 pounds and I lost 10." – Anonymous patient

- Enrolled June 2017
- Baseline A1c 9.4 (May 2017)
- F/u A1c 6.5 (August 2017)

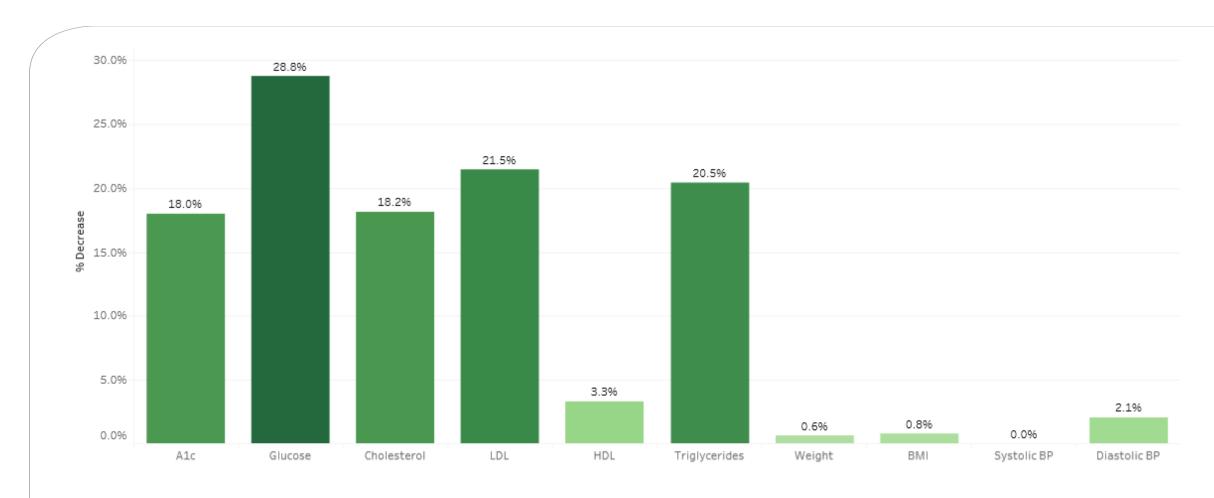


## Average baseline/current reading: A1c





#### Average decrease from baseline to current



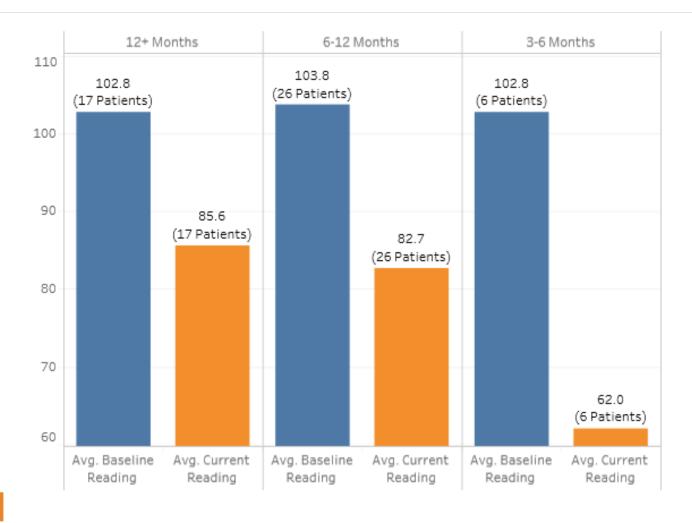


#### Average baseline/current reading: Cholesterol

Geisinger

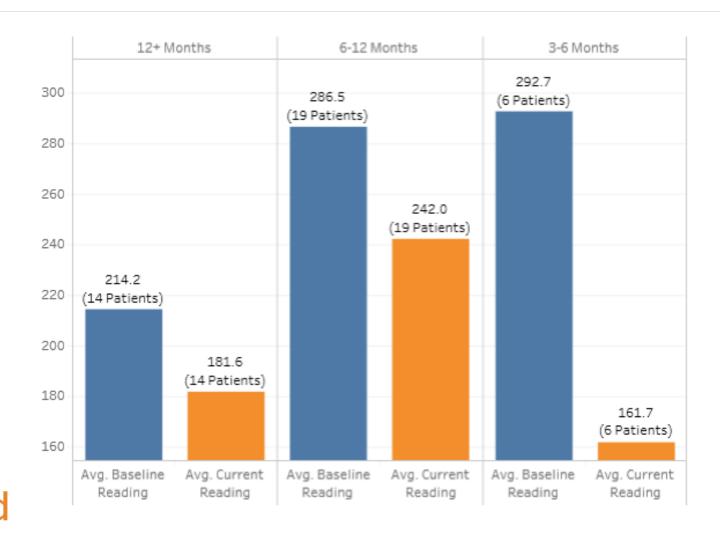


## Average baseline/current reading: LDL



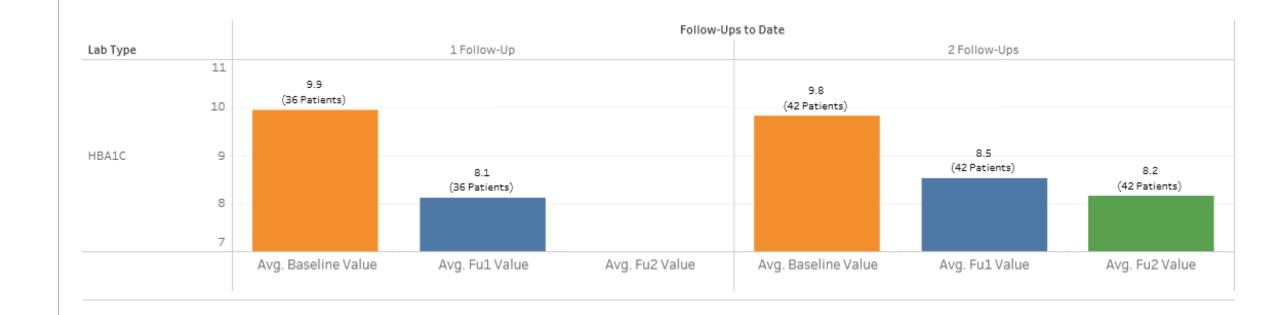


#### Average baseline/current reading: Triglycerides





## Lab trending by measure: A1c





## Lab trending by measure: Cholesterol





## Lab trending by measure: LDL





# Lab trending by measure: Triglycerides





#### Where are we now?

- Enrollment struggles
- Current programming in Northumberland County to include Family Medicine, GIM, Women's Health, and Specialty Endocrine Care
- Future programming to include Lewistown Mifflin and Juniata Counties followed by Scranton- Lackawanna County
- Ongoing clinical and financial impact analysis









#### **MARCH 2018 MONTHLY WEBINAR**

- Date/Time: Thursday, March 15, 2-3pm Eastern
- Topic: Addressing Health Disparities in Latino Populations with Diabetes
- Presenter: David Marrero, Ph.D. of University of Arizona



