



### SDoH Overview

- Social Determinants of Health (SDoH) are the social and economic factors that impact an individual's health.
- Studies have shown that social and economic inequalities are directly related to one's health status.
- Where someone is born, lives, works and plays are the factors that directly correlate to the unfair and avoidable differences in their health status.
- Root causes of SDoH are poverty, lack of education, racism, discrimination, and stigma.
- More emphasis is being placed on SDoH from the healthcare industry. According to a recent survey, nearly 90% of Physicians say they have patients that are impacted by SDoH. (Japsen, 2018). Healthcare organizations are doing more to address SDoH factors that impede patients' health status.
- ABHKY has a primary focus on addressing SDoH specifically areas of deficiency, including but not limited to food insecurity.

©2018 Aetna Inc. 2

### The World Health Organization has identified 10 primary SDoH

- Social gradient
- Stress
- Early Life
- Social Exclusion
- Work
- Unemployment
- Social Support
- Addiction
- **Food**
- Transportation (Wilkinson & Marmot, 2003)

©2018 Aetna Inc. 3

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

The top five states in the U.S. with the highest food insecurity are:

- Mississippi
- Arkansas
- Louisiana
- **Kentucky**
- Texas (Campbell, 2016)



©2018 Aetna Inc.

A Closer Look: Kentucky

Estimated Population of Kentucky: 4,454,189 (U.S. Census Bureau, 2017)

- Food insecurity refers to a lack of access and/or enough food to support a healthy and active life.
- USDA defines food insecurity as a state "in which consistent access to adequate food is limited by a lack of money and other resources at times during the year." (Campbell, 2016).
- We examined multiple research studies, articles and reports from credible sources including but not limited to, KY Department of Agriculture, Centers for Disease Control and Prevention (CDC), Feeding America, KY Association of Food Banks, KY Department of Public Health, etc.
- According to a 2016 Feeding America Study, Map the Meal Gap, which assessed county data from 2010-2014, 17% of Kentuckians are food insecure.
- Food insecurity exist in every county in Kentucky.
- 1 in 6 Kentuckians are food insecure.

©2018 Aetna Inc.

A Closer Look: KY Findings

- Wolfe County has the highest food insecurity rate in the state, at 22.8%.
- Oldham County has the lowest food insecurity rate in the state, at 9.0%.
- The 5th Congressional District has the highest food insecurity rate of Kentucky's congressional districts, at 19.8%.
- Children are at a higher risk of food insecurity, 22% of Kentucky's children are food insecure.
- There are 11 Kentucky counties that have childhood insecurity rates of 30% or higher (see list below):
  - Wolfe (37.0%); Harlan (31.6%); Clay (31.4%); Knox (31.1%); McCreary (30.7%);
  - Magoffin (30.7%); Lee (30.5%); Jackson (30.3%); Martin (30.3%); Breathitt (30.2%); and
  - Lewis (30.0%).
- 29.8% of Kentuckians in food insecure households have incomes above 185% of the poverty line, making them likely ineligible for most federal nutrition assistance programs." (Kentucky Department of Agriculture, 2016)
- Food insecurity can result in physical consequences which include obesity, diabetes and hypertension. *(for the purpose of this session we will focus on diabetes)*

©2018 Aetna Inc.

---

---

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---

---

---

**What's the link between diabetes and food insecurity?**

- According to National Health and Examination Survey (NHANES) data, **low-income adults** who are **food insecure** are almost **2x's** as likely to **have diabetes** as **low-income adults** who are **food secure**.
- Almost half of individuals with diabetes who visit community health clinics are food insecure. The primary reason is:
  - **Diabetes is an expensive** chronic disease to manage. Someone who has diabetes is often forced to decide between caring for their diabetes and putting food on the table."
- **Other factors** can make it challenging to adequately manage diabetes, including:
  - lack of access to a variety of healthy foods,
  - poorer-quality healthy foods,
  - lack of transportation to purchase healthy foods,
  - a high availability of fast foods,
  - obesity,
  - stress,
  - poor mental health,
  - lack of opportunities to be physically active,
  - and limited access to health care." (Campbell, 2016).

©2018 Aetna Inc.

7

**2018 KY Diabetes Facts**

- Health care costs for people with diabetes is 2.3x's higher than those without diabetes (American Diabetes Association, 2016).
- "Diabetes has the 4<sup>th</sup> highest average cost for individual Kentucky hospitalizations at \$29,281.
- It is the third highest overall cost of several common chronic diseases in the Kentucky Medicaid population.
- It is one of the most costly chronic conditions for both active employees and early retirees in the Kentucky Employees' Health Plan (KEHP) population at almost \$70 million in combined medical and prescription drug costs.
- The American Diabetes Association (ADA) estimates that diabetes cost Kentucky \$3.85 billion in total medical costs, lost work and wages.
- The projected economic impact for diabetes in Kentucky in 2020 is \$6.5 billion.

©2018 Aetna Inc.

8

**The Impact of Diabetes Prevalence in Kentucky**

- The Diabetes diagnosis has **DOUBLED** from 2000 to 2016; **6.5% in 2000** (198,052 Kentuckians) to **13.1% in 2016** (449,324 Kentuckians)
- Currently, **141,891** adult citizens are living with **undiagnosed** diabetes
- An estimated **26,874** Kentucky adults are diagnosed with diabetes every year.
- A total of **3,206 youth** had a **diabetes diagnosis** claim in the Kentucky Employees' Health Plan (274) and Medicaid (2,932).
- As of 2016, **9.6%** (275,368) Kentucky adults had diagnosed **prediabetes** (up from 8.4% in 2015).
- Applying the national rate to Kentucky, an estimated **1 in 3** adults (33.9% or 1,122,795) have **diagnosed or undiagnosed prediabetes**. (KY Public Health, 2018)



©2018 Aetna Inc.

9

---

---

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---

---

---



Questions so far?

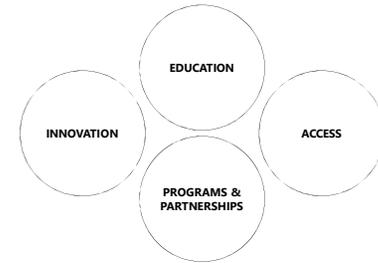
### Focus on Rural Kentucky

- Examine the cultural norms,
- Understand the local shopping options, limitations and access,
- Promote establishments where SNAP is approved,
- Help residents in rural KY communities learn new or "new to them" cooking techniques in a way that is comfortable and familiar to them,
- Know the unwritten rules of a region,
- Respect the culture,
- Build relationship, and
- Continue the conversation.

©2018 Aflac Inc.

11

### How do we mitigate nutrition deficiencies in rural counties?



©2018 Aflac Inc.

12

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

**ABHKY Education initiatives**

---

Current Curriculum

- Slow-Cooking Nutrition classes
- Diabetes Nutrition classes
- Truck Farm

2019 Initiative

- Foster Care Specific: Aging Out courses

Education Resources that focus on other SDoH

- Scholarships & Financial Support (Black Achievers and Family Scholar House)

©2018 Aetna Inc. 13

**What makes a meal?**

---

**Protein**

- Tissue repair
- Cellular repair and communication

**Carbohydrate**

- Quick acting energy
- Helps with hormones during high intensity exercise (recovery)

**Fat**

- Long term energy; low intensity exercise
- Vitamin absorption

©2018 Aetna Inc. 14

**KY Nutrition Statistics**

---

**Adult Statistics**

Dietary Behaviors

46.2% of adults reported consuming fruit less than one time daily.  
24.9% of adults reported consuming vegetables less than one time daily.

**Adolescent Statistics**

Dietary Behaviors

44.6% of adolescents reported consuming fruit less than one time daily.  
42.7% of adolescents reported consuming vegetables less than one time daily.

**Child Statistics**

Breastfeeding

66.1% of infants were ever breastfed.  
37.5% of infants were breastfed for at least 6 months (Centers for Disease Control and Prevention, 2016)

©2018 Aetna Inc. 15

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

Evidence-based approaches

Diabetes Prevention Programs

- Focused on Lifestyle Change
- Results show improved health
- Can delay or prevent Type 2 Diabetes
- Accessible to many Kentuckians via certified DPP Lifestyle Programs (oversite by Kentucky Diabetes Prevention and Control Program)

Micro-Clinics

- Small group friends or family that make a group decision to get healthy and is lead by a facilitator; the group is called a micro-clinic
- Micro-clinic sets its own incremental goals
- Group participates in a health programs that are focused on education of practical habits and behavior changes
- Micro-clinic undergoes routine health monitoring and screenings
- Progress is tracked
- Interactive activities are conducted ex. Group fitness, cooking, and recruiting others to join and/or form their own micro-clinic

©2018 Aetna Inc.

16

Innovation to expand access

- Homeless Vending Machine
- Mobile Markets
- Web-based Education
- Eating Dinner Together Campaign
- Double-Up Bucks initiative
- Community Gardens (Hope Hill partnership); cultivating produce on borrowed land

©2018 Aetna Inc.

17

Programs/ Partnerships

- Partner with Feeding America through local food banks
- Partner with FQHC, Health Departments, Cooperative Extension and Colleges& Universities
- Support Backpack Program- Feeding America model
- Support Congregate meal sites – Feeding America & Older American Act models
- Provide and promote access to resources i.e. WIC/SNAP (ABH Nourish Program)

©2018 Aetna Inc.

18

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---



Questions????

### References

Japsen, B. (2018). *Nearly 90% of Doctors say Social Determinants Impede Care of Patients*. Retrieved from: Forbes Media <https://www.forbes.com/sites/brucejapsen/2018/09/18/social-determinants-impede-care-of-88-of-patients-doctors-say/#278c446f2b2c>

Wilkinson, R. B. Marmot, M. (2003). *The Social Determinants of Health: The Solid Facts* (PDF) (2nd ed.). World Health Organization Europe. ISBN 978-92-890-1371-0. Retrieved from: [https://www.who.int/social\\_determinants/sdh\\_definition/en/](https://www.who.int/social_determinants/sdh_definition/en/)

Campbell, A. (2016). *Are You Food Insecure?* Retrieved from: Diabetes Self-Management. <https://www.diabetesselfmanagement.com/blog/are-you-food-insecure/>

QuickFacts Kentucky, (2017). Retrieved from: United States Census Bureau. <https://www.census.gov/quickfacts/ky>

Hunger Study Finds Food Insecurity Levels Remain Historically High. (2016). Retrieved from: Kentucky Department of Agriculture. <http://www.kyagr.com/Kentucky-AGNEWS/2016/Hunger-study-finds-food-insecurity-levels-remain-historically-high.html>

©2018 Aetna Inc.

20

### References, Cont'd

*The Cost of Diabetes*. (2018). Retrieved from: American Diabetes Association, <http://www.diabetes.org/advocacy/news-events/cost-of-diabetes.html>

2018 Kentucky Diabetes Fact Sheet: *Diabetes A Public Health Epidemic* (2018). Retrieved from: Kentucky Public Health. <https://madisoncountyhealthdept.org/Documents/Community/2018KYDiabetesFactSheet.pdf>

Kentucky State Nutrition, Physical Activity and Obesity Profile. (2016). Retrieved from: Centers for Disease Control and Prevention. <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/profiles/kentucky.html>

©2018 Aetna Inc.

21

---

---

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---

---

---

Closing  
slide

---

---

---

---

---

---

---