Georgia Department of Public Health

Georgia Approach to Diabetes and CVD Prevention

Presentation to: Chronic Disease University

Presented by: Health Systems Team

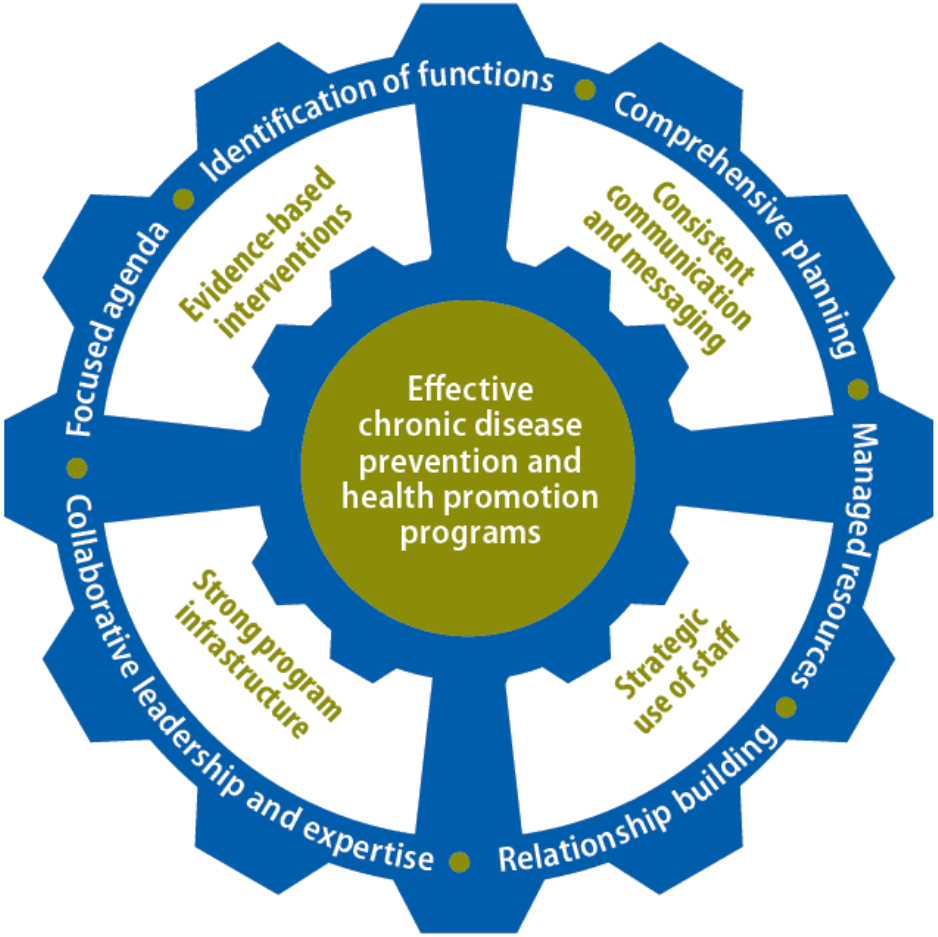
Date: March 14, 2018

We Protect Lives.

CHES/MCHES Competencies

- Demonstrate how programs align with organizational structure, mission, and goals (CHES competency 5.4.1)
- Apply principles of evidence-based practice in selecting and/or designing strategies or interventions. (CHES competency 2.3.3)
- Facilitate collaborative efforts among priority populations, partners, and other stakeholders (CHES competency 2.1.3)

Coordinated Chronic Disease Model



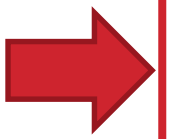
Voetsch K, Sequeira S, Chavez AH. A Customizable Model for Chronic Disease Coordination: Lessons Learned From the Coordinated Chronic Disease Program. Prev Chronic Dis 2016;13:150509. DOI: http://dx.doi.org/10.5888/pcd13.150509.

Public Health Workforce Initiatives

Statutory Authority for Nurse Protocol

Georgia Medical Practice Act

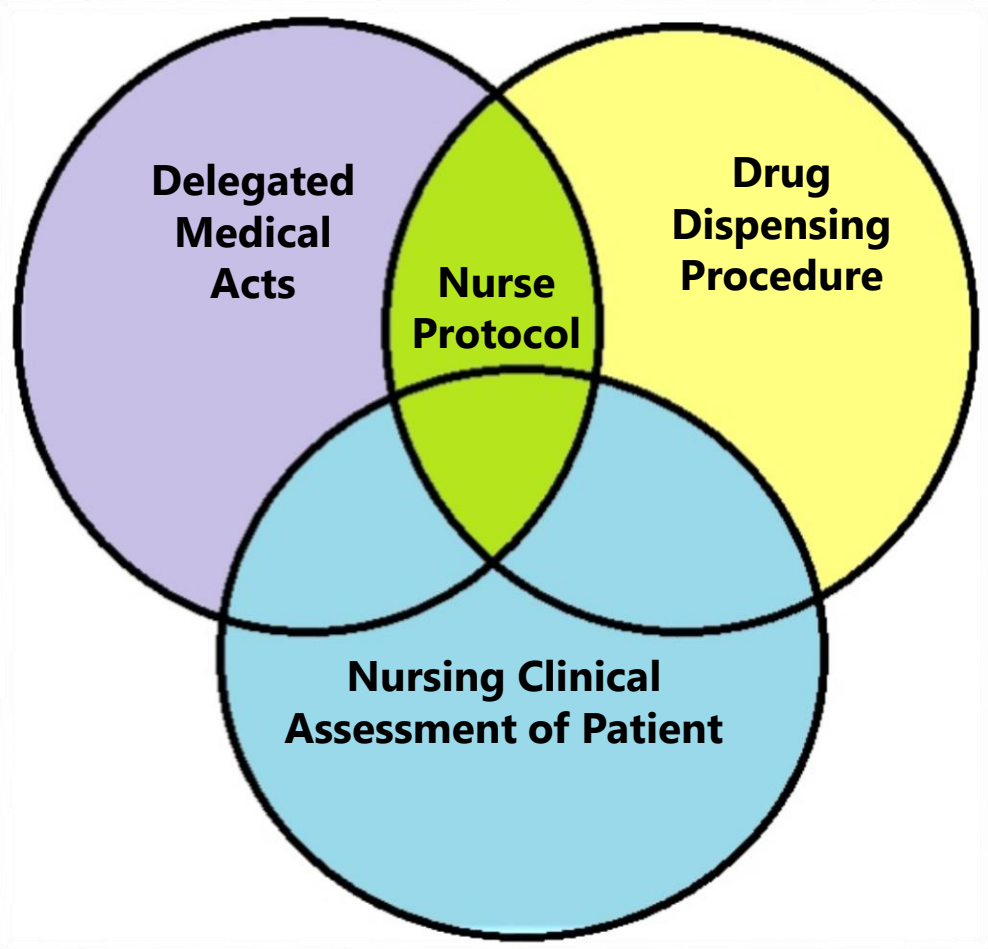
O.C.G.A. § 43-34-23



Delegated Medical Acts

- ✓ Ordering dangerous drugs
- ✓ Ordering medical treatments
- ✓ Ordering diagnostic studies
- ✓ Dispensing dangerous drugs

Inter-Connected Components of Nurse Protocol Practice



Hypertension and Diabetes Nurse Protocol

- Adoption of Nurse Protocols
  - Made at the district level (Certified Nurse Review Form)
  - Modifications can be made, but recommended that nurse protocol be adopted without modification.

- Training
  - Hypertension & Diabetes Nurse Protocol Workshop
    - Prepares participants to manage patients and prescribe based on protocol, practice physical exam, simulation lab, standardized patients, and case studies.
  - Next Training, May 24th & 25th

PHNs must complete all required training and be checked off before they can practice under any Nurse protocol.

https://dph.georgia.gov/nurse-protocols

Hypertension Nurse Protocol

Primary (Essential) Hypertension is defined as systolic blood pressure equal to or greater than 140 mmHg or diastolic blood pressure equal to or greater than 90 mmHg on at least two subsequent occasions, or taking antihypertensive medication with goal of maintaining a normal blood pressure.

Includes:

- Guide to assess and examine adults with primary hypertension
- Signs and symptoms of secondary hypertension
- Blood pressure treatment algorithm for in the initial and follow-up care of patients
- Proper technique for blood pressure measurement
- Recommendations for lifestyle modifications and educational resources

Target Populations for Care

Individuals newly diagnosed, or with pre-existing diagnosis of primary hypertension

Refer Individuals with:

- Pregnancy or becomes pregnant
- Are suspected of secondary HTN
- Have evidence of complications/end-organ damage
- Patient with HTN on non-protocol meds (pending)
- Abnormal labs or ECG
- Uncontrolled on 3 agents
- <18 yrs old
- Unexpected side effect, no response to therapy
- Presentation BP>180mmHg or >110mmHg (Hypertensive emergency requires 911 call)

Goals for Hypertension Management

- Blood pressure control
- Lipid control
- Attain body weight goal
- Lifestyle modifications (tobacco cessation) that emphasize health eating and physical activity.
- Dietary Approaches to Stop Hypertension(DASH) Diet

Diabetes Nurse Protocol

Diabetes mellitus is a group of metabolic diseases characterized by hyperglycemia resulting from defects in insulin secretion, insulin action or both.

Diagnostic Test	Diagnostic Range
Hemoglobin A1C	+6.5%
Fasting Plasma Glucose (FPG)	126 mg/dl or greater
Random Plasma Glucose	200mg/dl or greater (on two separate days with classic symptoms of hyperglycemia)

Includes:

- Guide to Assess and Examine Adults with diabetes
- Clinical Tasks in the initial and follow-up care of patients (ex. Annual dilated eye exam, annual ECG, A1C)
- Treatment Algorithm of Type 2 Diabetes
- Recommendations for Non-Pregnant Adults with Diabetes
- Educational Resources

Target Populations for Care

Individuals newly diagnosed, or with pre-existing diagnosis of Type II diabetes that **do not** require insulin for medication therapy

Refer Individuals With:

- Type I Diabetes
- Not at A1C goal
- Glucose ≥ 300
- HybA1C ≥ 10%
- Hypoglycemia (Recurring blood glucose less than 70 mg/dl)
- Ketonuria (protein in urine)
- Pregnancy
- SBP ≥ 180 or DBP ≥ 110
- Abnormal lab values
  - Potassium lab value (K ≤ 3.5 or K ≥ 5.5)
  - Creatinine ≥ 1.5 (1.4)
  - Lipid management
- New onset
  - Angina
  - Intermittent claudication
  - Acute vision loss
  - Acute foot injury or ulceration
  - Abnormal ECG

Goals for Diabetes Management

- Glycemic control-with medications (metformin first line therapy), or lifestyle changes
- Blood pressure control
- Lipid control
- Attain body weight goal
  - Lifestyle modifications (tobacco cessation) that emphasize health eating and physical activity.
  - Diabetes Prevention Program
  - Diabetes Self-Management Education
- Delay or prevent complications of diabetes

Diabetes Prevention and Self-Management Evidence Based Programs

Diabetes and Prediabetes in Georgia

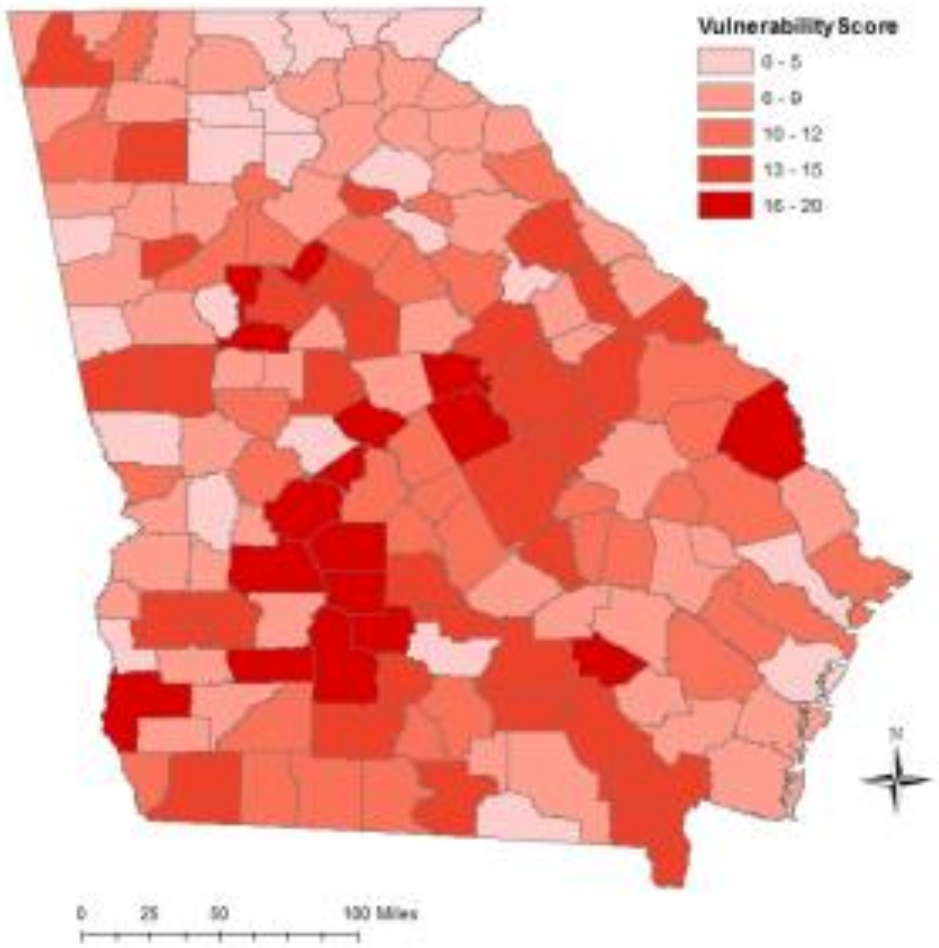
- *Prediabetes* is a condition in which the body's glucose levels are elevated but not to the point of a diabetes diagnosis.
- *Type 2 diabetes* the pancreas produces too little insulin or the body rejects the insulin being produced.
- 11.6% of Georgia Adults have a diagnosis of diabetes (20% higher than the national average)
- 6.8% of Georgia Adults are aware they have prediabetes
- Between 2000 and 2013, there were a total of 223,924 hospitalizations due to diabetes in Georgia

Prediabetes vs Diabetes

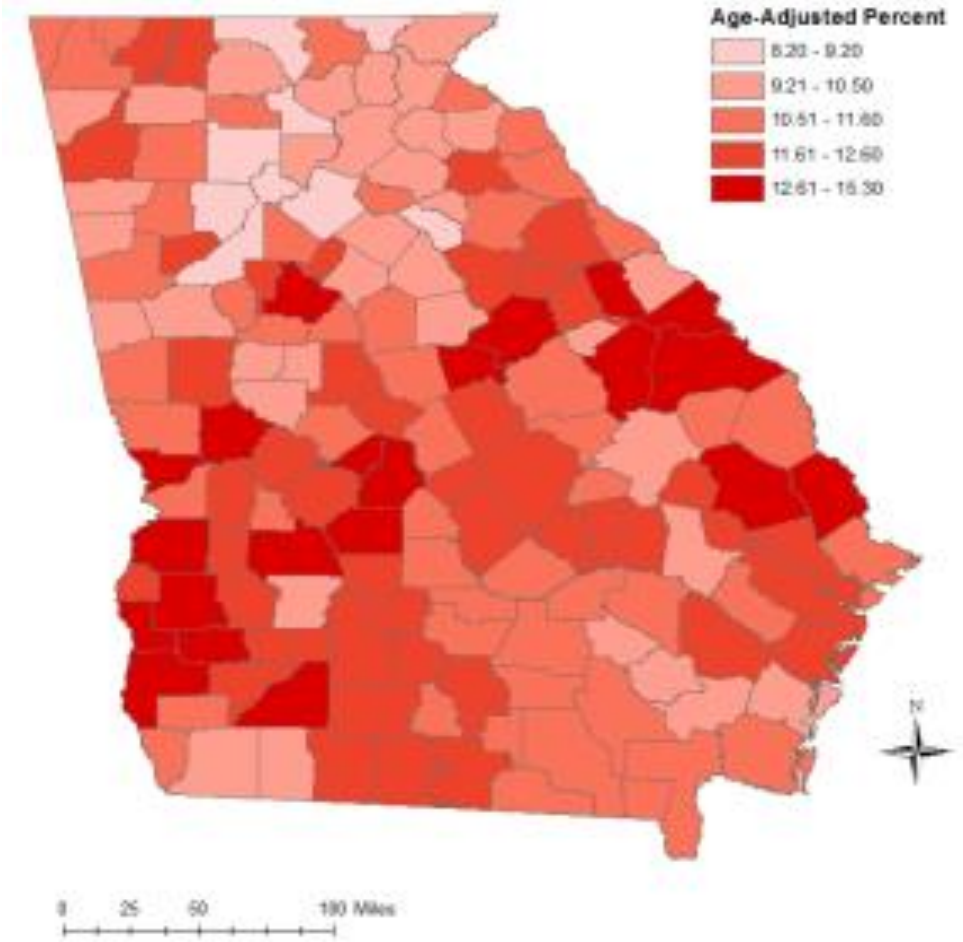
2018 Standards of Medical Care in Diabetes

Diagnostic Test	Prediabetes	Diabetes
Hemoglobin A1C	5.7-6.4%	≥ 6.5%
Fasting Plasma Glucose (FPG)	100-125 mg/dL	≥ 126 mg/dL
2 Hour Plasma During 75-g Oral Glucose Tolerance Test (OGTT)	140-199 mg/dL	≥ 200 mg/dL
Random Plasma Glucose	N/A	≥ 200 mg/dL (on two separate days with classic symptoms of hyperglycemia)

Burden of Prediabetes in Georgia



Burden of Diabetes in Georgia



National Diabetes Prevention Program

National Diabetes Prevention Program

- One year lifestyle change program
  - 16 sessions in the first 6 months
  - 6 sessions in the second 6 months
- Facilitated by a trained lifestyle coach
- Follow an approved curriculum
- Goals are to lose 5-7% of body weight and increase activity to 150 minutes per week
- Medicare will be covering in-person DPP delivery starting April 2018!

Who is eligible to participate in NDPP?

- 18 and older
- Overweight or obese
- Those who have a **diagnosis of prediabetes, at high risk of prediabetes, or previously diagnosed with gestational diabetes**
  - Prediabetes diagnosis can be a clinical diagnosis with a lab result or a risk assessment that shows a high risk for prediabetes
  - There are limits on the percent of individuals who are in the program from risk assessment only

What does the Program Cover?

First 6 Months	Second 6 Months
Healthy Eating	Recipe Modification
Reading Labels	Stepping Up Physical Activity
Increasing Physical Activity	Maintaining Positive Thoughts
Calorie Monitoring	Preventing Relapse
Stress Management	Vacation and Holiday Prep
Staying Motivated	Heart Heath
Tips While Eating Out	Type 2 Diabetes Education

*Not an inclusive list, only a sample of the topics covered over the 1 year program

https://www.cdc.gov/diabetes/prevention/pdf/Curriculum_TOC.pdf

Who facilitates the program?

- **Everyone** facilitating DPP sessions has to be a trained lifestyle coach
  - You are not exempt from this if you are a CDE, health educator, RN, RD, physician, etc.
  - Several training options
    - Local, national and virtual programs
    - Master trainer options for organizational sustainability
- DPH is currently offering lifestyle coach trainings on the following dates:

May 14-16

June 27-29

August 14-16

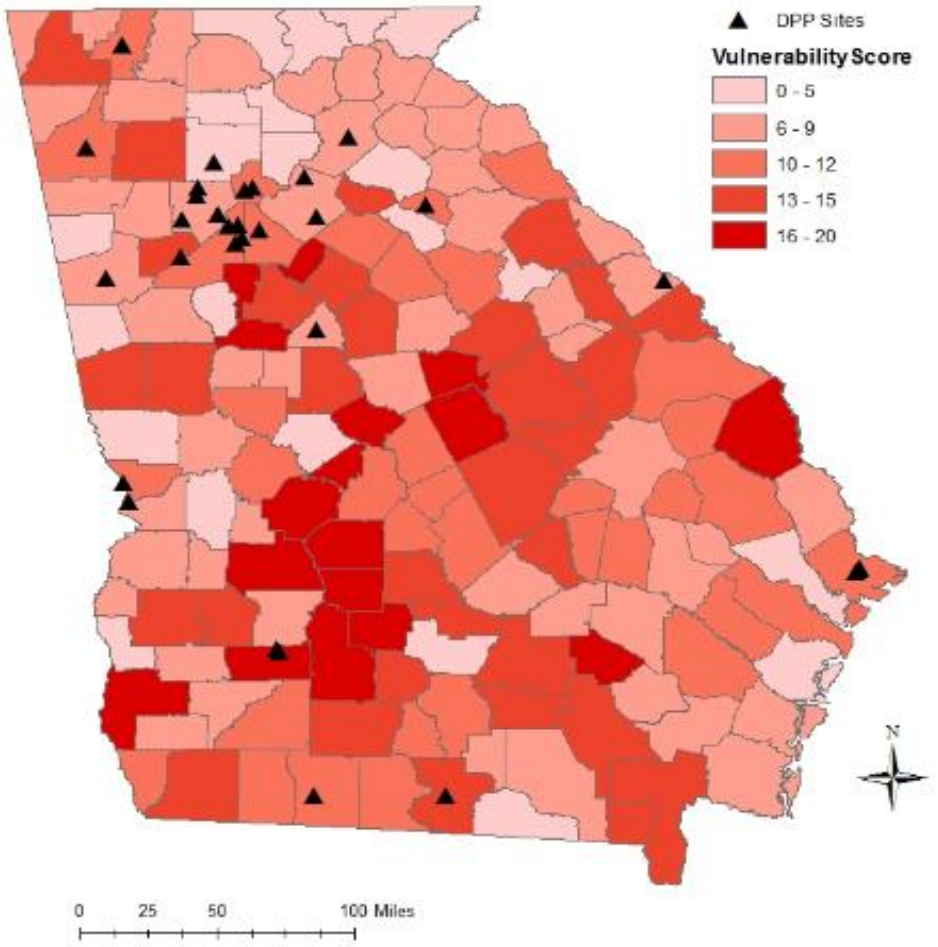
May 22-24

July 10-12

Recognition Requirements

- Must Complete Application with CDC:
  - Initial application asks for the general information about the program (address, primary contact, secondary contact, etc.)
  - Every 6 months you submit patient data and outcomes to demonstrate that you are running the program per CDC requirements.

Where are the current sites?



Diabetes Self-Management Education and Support Program

Diabetes Self-Management Education and Support

- Diabetes Self-Management Education and Support (DSMES) programs assist the participant in achieving better blood glucose control by self-managing diabetes through life choices.
  - Participants lean how to manage their diabetes through healthy behaviors and problem solving
  - Lessons include information on healthy eating, being active, effective monitoring, taking medications, problem solving, reducing risk and healthy coping

- For every $1 spent on DSMES, there is a net savings of up to $8.76.[1]

1. Klonoff DC, Schwartz DM. An economic analysis of interventions for diabetes. Diabetes Care. 2000 Mar;23(3):390-404. (http://www.ncbi.nlm.nih.gov/pubmed/10868871)

Diabetes Self-Management Education and Support

- Curriculum
  - You can use a Standard Curriculum developed by an accredited organization (AADE, ADA, Stanford, etc.)
  - You can develop your own Curriculum that follows AADE 7 Self-Care Behavior model and submit it for approval
  - The program site decides how often to hold classes and which approved curriculum to use.
  - 10 Hour Program
- National Standards Updated in 2017
  - Internal Structure
  - Stakeholder Input
  - Evaluation of Population Served
  - Quality Coordinator Overseeing DSMES Services
  - DSMES Team
  - Curriculum
  - Individualization
  - Ongoing Support
  - Participant Progress
  - Quality Improvement

Why is DSME Important?

- DSME is a critical element of care for all people with diabetes and is necessary in order to improve patient outcomes.
- DSME individualizes the program for the participant so that they participant can receive information in the most effective way.
- The participant learns: healthy eating habits, exercise, coping mechanisms, as well as how to manage their diabetes.
- DSME allows the participant to take charge and have control of their diabetes therefore lowering their A1C and also lowering the burden of diabetes in Georgia.

Source: AADE

Who is eligible to participate in DSMES?

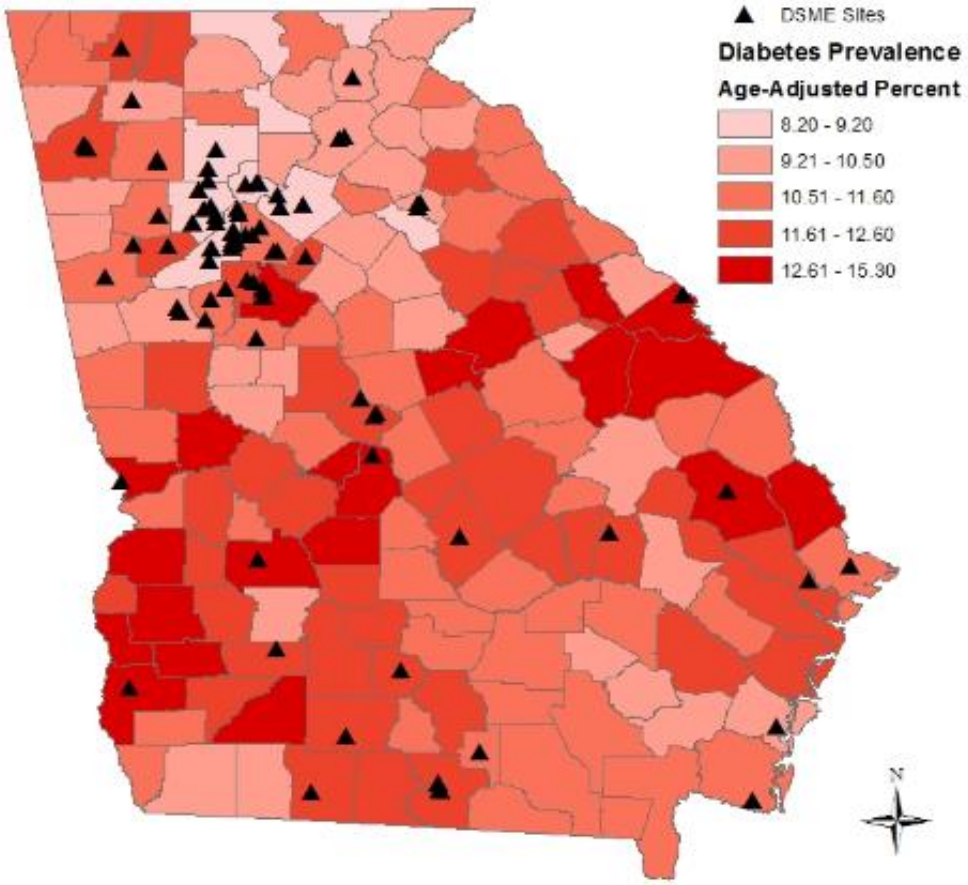
- Individuals who have a blood diagnosis of Type 2 Diabetes, Gestational Diabetes or Type 1 Diabetes.

- Participants must be referred to the DSMES program by a referring physician.

Recognition Requirements

- Must Complete Application with either ADA or AADE to become an accredited program. Application includes:
  - Completed Policy Manual
  - Credentialing certificates and CE credits for all instructors
  - Deidentified patient records demonstrating how the program will be run at the site.

Where are the current sites?



Diabetes Programs Quick Facts

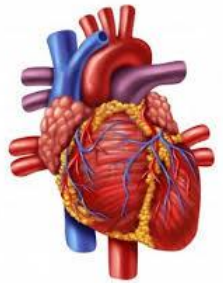
	Diabetes Self-Management Education and Support (DSMES)	National Diabetes Prevention Program (DPP)
Goal of Program	Improve Diabetes Control and Improve the Self-Efficacy of the patient to manage their Diabetes	Promote Lifestyle Change that will help delay or prevent the onset of Type 2 Diabetes
Target Audience	Individuals with a diagnosis of Type 1, Type 2 or Gestational Diabetes	Individuals who are 18+ and have a lab diagnosis of Prediabetes or a CDC Prediabetes Risk-Score showing a high risk for developing diabetes
Reimbursement	Medicare, some private insurers, Annex 170	Medicare starting in April 2018, Kaiser SHBP, some private insurers, Annex 170
Program Format	Individual Assessment followed by Group Classes	Group Classes
Program Length	Program Decides how often to hold the classes and which approved curriculum they would like to follow- Total 10-hour program	1-year total for each cohort: -16 classes in the first six-months (usually once per week) -6 classes in the second six-months
Referral Process	Must be officially ordered by a Physician	Can be self-referral
Coverage in Georgia	Private Insurance and Medicare -up to 10 hours in the initial year of education -Medicare: Up to 2 hours of annual training in subsequent years -PI: Follow-up in year after primary training only	Medicare (starting in April 2018) and some Private Insurance or Employee Benefit -You can bill through Medicare for eligible participants once you are a preliminary or fully recognized site (1-year process)
Instructor Credential Requirements	-Supervisory Instructor must be RN, RD, PharmD, CDE or BC-ADM -Paraprofessionals can contribute the program in their area of expertise	No Credentialing required to oversee the program or become a lifestyle coach
Instructor Training Requirement	No additional training required, must maintain 15 hours of CE related to DSMES annually	Must complete a recognized lifestyle coach training program
Accreditation Requirements	Must complete an application with ADA or AADE to become an accredited program. Application includes: -Completed Policy Manual -Credentialing certificates and CE credits for all instructors -Deidentified Patient Record demonstrating how the program will be run at the site	Must complete an application with the CDC -Initial application asks for the general information about the program (address, primary contact, secondary contact, etc.) -Every 6 months you submit patient data and outcomes to demonstrate that you are running the program per requirements.
Certifying Entity	ADA or AADE	CDC
Reporting Requirements	After accreditation, annual status reports are due to your accrediting agency. Must complete the reaccreditation process once every 5-years.	Reports are due to the CDC every 6 months. Once you complete one cohort and meet the outcome requirements (weight loss and participant retention) you can apply for preliminary recognition status. Once you have 24 months of data you can apply for full recognition.

How to get involved

- Apply to become a DPP lifestyle coach.
- Join a Diabetes Prevention Committee Workgroup to help drive the work of diabetes prevention throughout Georgia.
- Pursue DSMES Accreditation for your Organization.

Cardiovascular Disease Initiatives

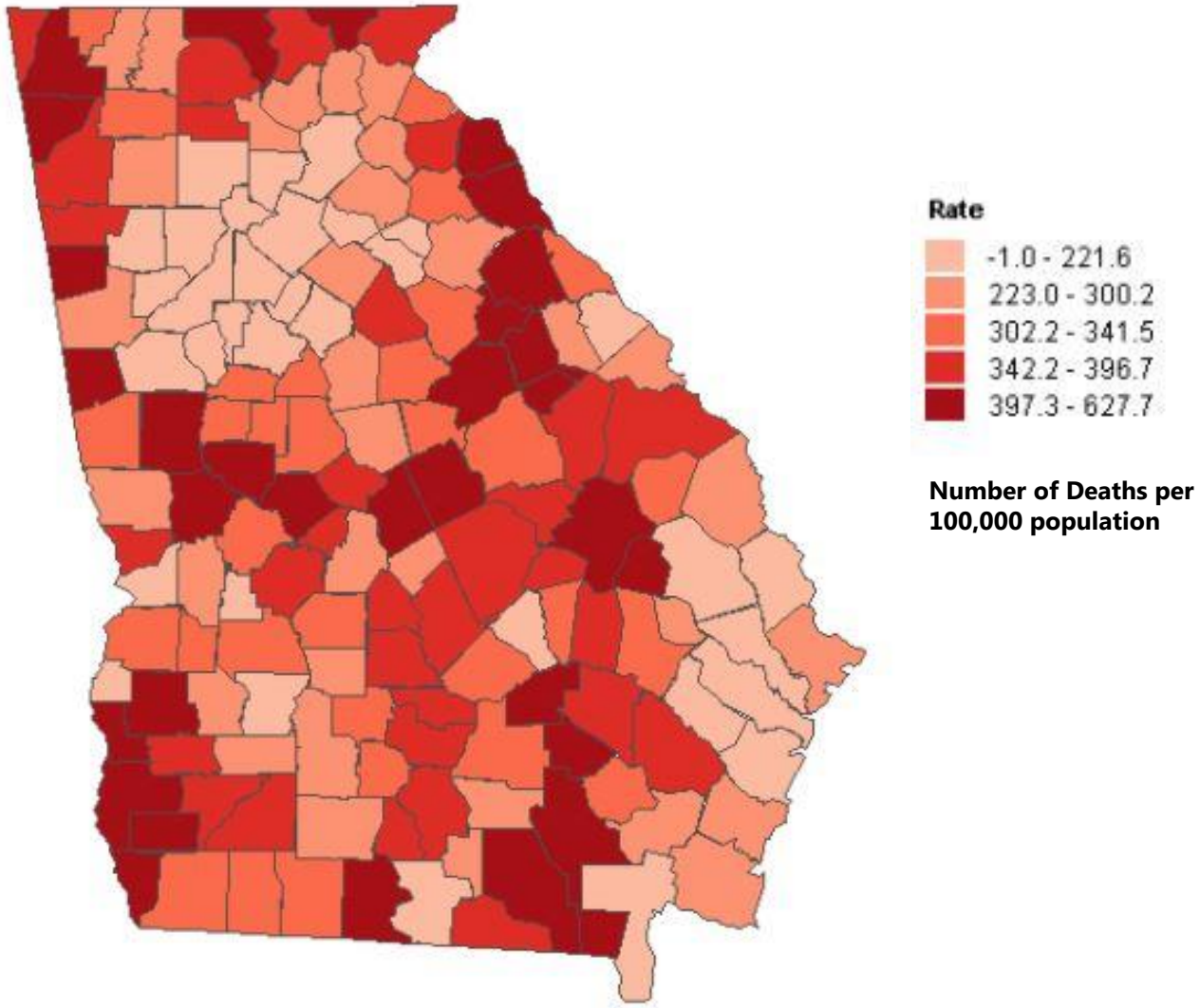
Cardiovascular Disease (CVD)



- Cardiovascular disease, also known as heart disease, refers to disease of the heart and blood vessels.
- Heart disease includes several types of heart conditions.
- The most common type is coronary artery disease, which is the #1 killer of men and women in Georgia.
- Cardiovascular disease accounted for 30% of deaths in Georgia during 2016 (24,241 deaths).
- In 2016, approximately 133,863 hospitalizations occurred among Georgia residents due to cardiovascular disease, resulting in $8.8 billion in total hospital charges.

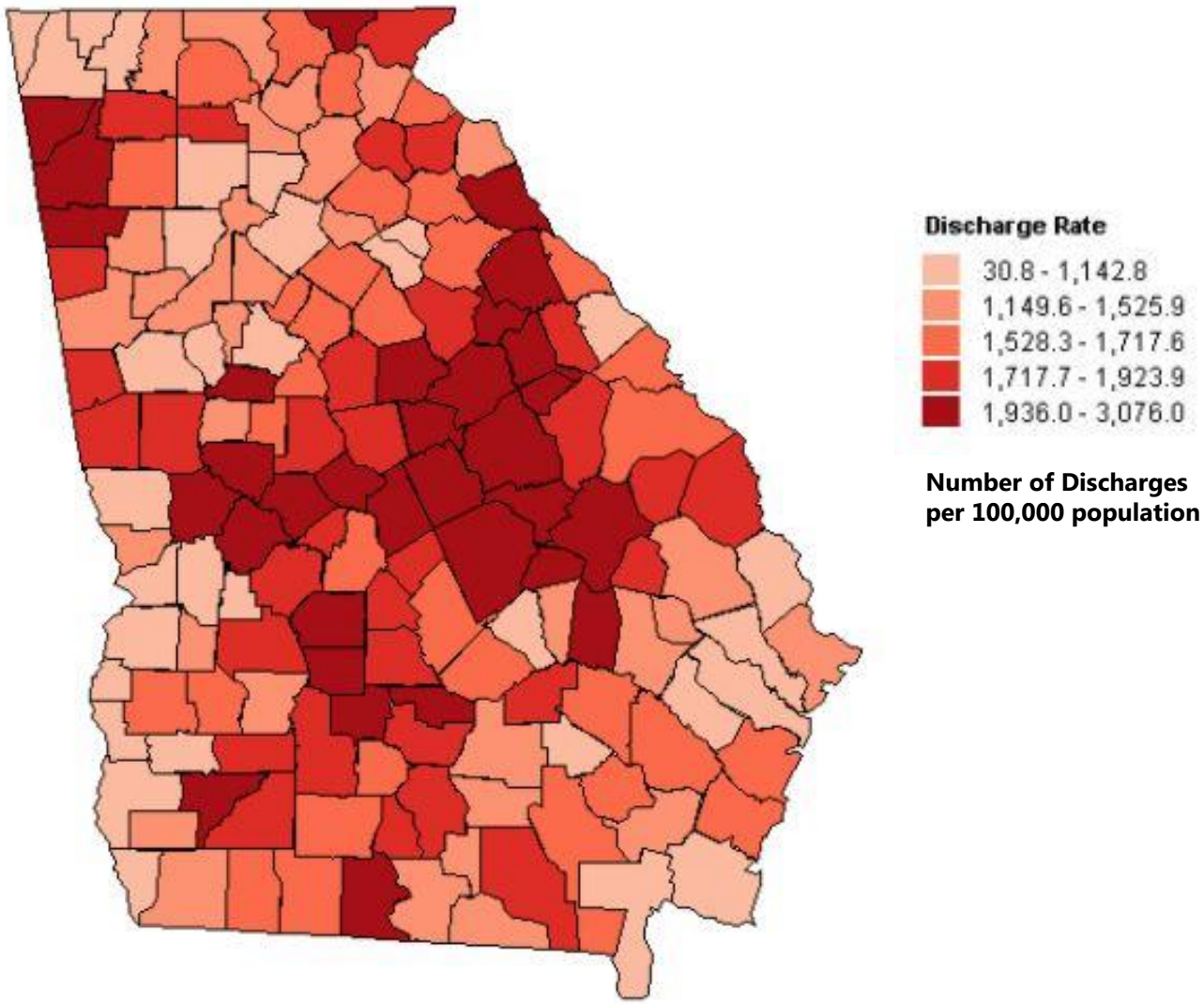
Source: Georgia Hospital Discharge Data System, Vital Statistics, DPH Office of Health Indicators for Planning (OHIP), Jan 2018

Mortality Rate from CVD in 2016



Source: Georgia Hospital Discharge Data System, Vital Statistics, DPH Office of Health Indicators for Planning (OHIP), Mar 2018

Discharge Rate from CVD in 2016



Source: Georgia Hospital Discharge Data System, Vital Statistics, DPH Office of Health Indicators for Planning (OHIP), Mar 2018

CVD Risk Factors

- Key risk factors (49% of Americans have one of the three)
  - High blood pressure
  - High LDL cholesterol
  - Smoking
- Additional risk factors
  - Diabetes
  - Overweight and obesity
  - Poor diet
  - Physical inactivity
  - Excessive alcohol use

Centers for Disease Control and Prevention, Heart Disease Fact Sheet. https://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_heart_disease.htm

CATAPULT

- Model for improving the diagnosis and quality of care for chronic conditions in health systems
- Aims to create a uniform and systematic approach to improve the control and management of hypertension, diabetes and related chronic conditions
- Collaboration with health systems

- **C**ommit to participating
- **A**ssess your practice or system
- **T**raining
- **A**ctivate your community resources
- **P**lan of Action
- **U**tilize your plan
- **L**everage data
- **T**est and implement approaches

CATAPULT

- Offers several Quality Improvement (QI) plans:
  - Improve management of patients with hypertension
  - Identify patients with undiagnosed hypertension
  - Improve management of patients with diabetes
  - Identify patients at risk for diabetes
  - Implement diabetes prevention lifestyle change programs

CATAPULT

- Framework incorporates evidence-based strategies for quality improvement
  - Use of Health Information Technology and Clinical decision-support systems
  - Self-measured blood pressure monitoring interventions
  - Team-based care to improve blood pressure control
  - Self-management support and education
  - Diabetes Prevention Program

CATAPULT

We Protect Lives.

Who can participate?

- Any health system is encouraged to utilize the CATAPULT framework
- Priority systems:
  - Federally Qualified Health Centers (FQHC)
  - Public Health Districts
  - Hospital-based health system with affiliated primary care practices (HPCP)
  - Health Plans and Health Maintenance Organizations (HMO)
  - Rural Health Centers (RHCs)
  - Care Management Organizations (CMO)
- Current implementation: 12 systems in Georgia

pEACHealth

- Collaboration between DPH, South University School of Pharmacy, and pharmacy sites
- Provide medication therapy management services to assist patients with monitoring and managing high blood pressure, high cholesterol and diabetes using a team-based care approach
- Implemented in eight locations in southern Georgia

pEACHealth

- Evidence-based strategies:
  - Team-based care to improve blood pressure control
  - Community pharmacists and Medication Therapy Management (MTM)
- Pharmacy sites are excellent locations to implement evidence-based lifestyle change programs, such as the Diabetes Prevention Program (DPP)

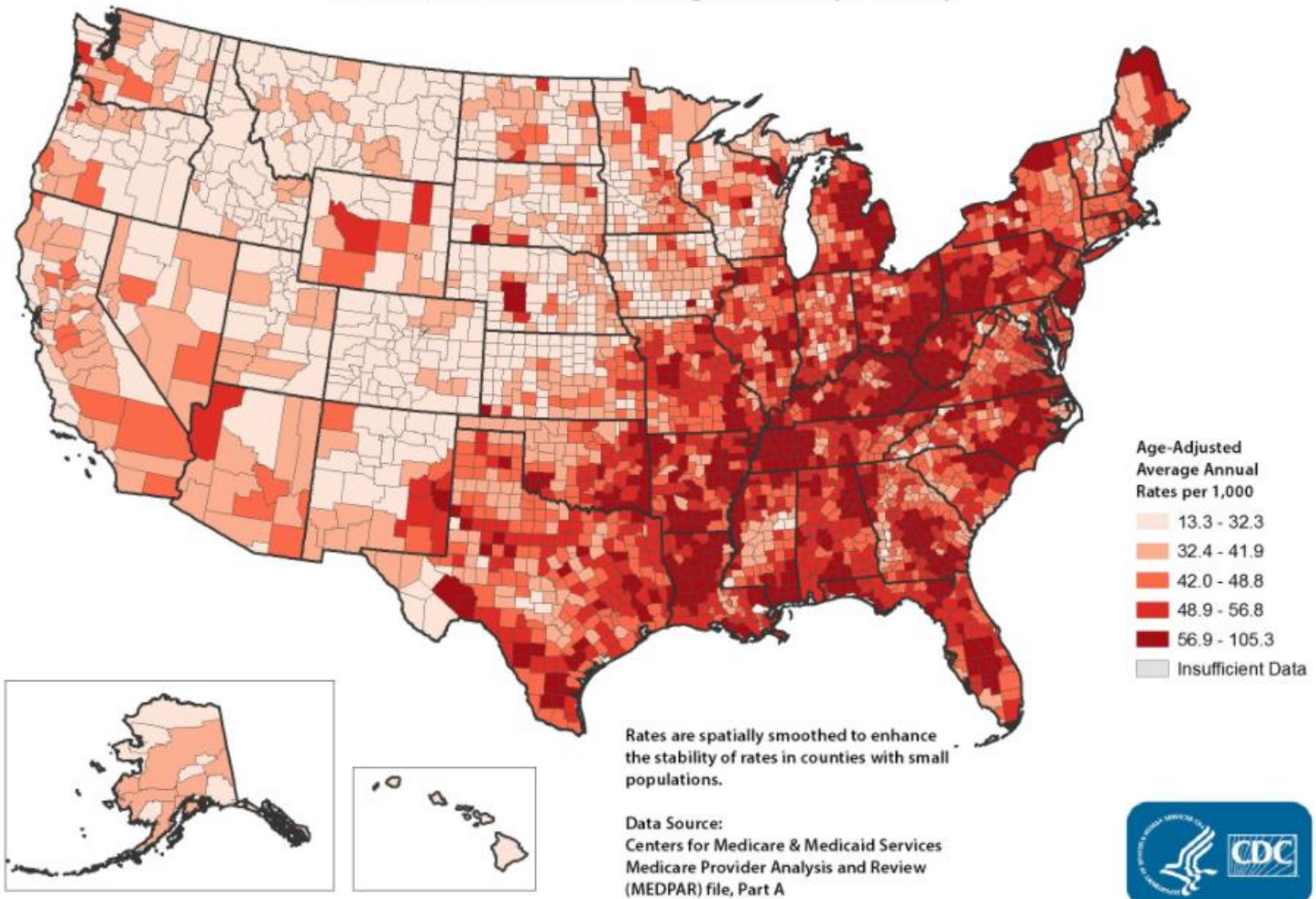
Target: BP

- Free program launched by the American Heart Association (AHA) and the American Medical Association (AMA) in 2015
- Goal to improve blood pressure control across the nation and reduce the number of Americans who have heart attacks and strokes
- Support for physicians and care teams – tools and resources
- Recognition for participation and for reaching 70% BP control
- Any health–related organization can join: pharmacies, YMCAs, employers who provide health screenings

Geographic Information Systems (GIS)

- New GIS team formed to create maps that can highlight and address blood pressure medication adherence needs in communities in Georgia
- The GIS project will focus on identifying geographic disparities in blood pressure medication adherence and gaps in clinical, community and public health services
- Team-based mapping approach involving internal and external partners in pharmacy, nursing, quality improvement, information technology, and public health

Heart Disease Hospitalization Rates, 2012-2014
Medicare Beneficiaries, Ages 65+, by County



How can you get involved?

- CATAPULT: Encourage health systems to adopt the framework to engage in quality improvement measures for hypertension and diabetes management
- Target BP: Encourage health systems, medical providers, and health-related organizations to join
- GIS: Stay tuned and utilize maps when published

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