

Descriptive Analysis of Patients at the Georgia Heart Institute Center for Cardiovascular Prevention, Metabolism, and Lipids

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Background and Methods

Cardiovascular disease remains the number one killer among Americans despite continual advances in treatment options.¹

Primary prevention is critical, with a healthy lifestyle throughout life recognized as the most important way to prevent ASCVD, atrial fibrillation, and heart failure.²

A team-based care approach is acknowledged as an effective strategy for prevention of cardiovascular disease.² The Georgia Heart Institute launched the Center for Cardiovascular Prevention, Metabolism, and Lipids in March of 2022. The interdisciplinary care team now includes 3 cardiologists, 1 nurse facilitator, 1 dietitian, 1 wellness coach, and 2 medical assistants.

A descriptive analysis was conducted to illustrate characteristics of patients who visited the Prevention Center over a 12-month period.

The Slicer Dicer function in EPIC was utilized to identify patients who fit inclusion criteria between August 2022 to August 2023. The following variables were included in analysis:

- Patient age, sex, race, and ethnicity
- GHI location of service
- Most prescribed medications
- Relevant comorbidities, risk factors, and clinical characteristics

The purpose of the analysis was to identify population characteristics that will enhance the decision-making process of this new Center in meeting the needs and reducing CVD risk for current and future patients.

Results

There were **2,673 total encounters** with the Prevention Center between August 2022 to August 2023:

- New patients: 912
- Of the new patients, 352 proceeded to follow up with dietitian and wellness coach for one or more visits
- Nurse visits: 147

Demographic Characteristics:

- Slight majority of patients are female (52.2%)
- Overwhelming majority are non-Hispanic white (>88%)
- Over 85% of patients are age 50 years or older
- Majority of patients are seen in GHI Gainesville (56%) followed by GHI Buford (25%)

Clinical History:

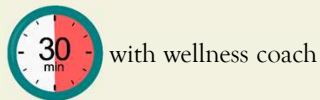
- Majority of patients have never smoked (59%)
- Strong family history of CVD (>50% of patients) and diabetes (34% of patients)
- Of the patients with family history of heart disease, 58% have hyperlipidemia, 41% have hypertension, and 32% have ASCVD.
- Dyslipidemia is most common diagnosis (67%) followed by hypertension (41%) and diabetes (37%)
- Lipid-lowering medications are most prescribed (statin therapy and adjunct therapies)
- Over 80% of patients fall within overweight or obesity category by BMI

Conclusions

This descriptive analysis revealed key characteristics of the current Prevention Center patient population. ASCVD is a progressive disease with risk factors emerging as early as childhood. However, only 15% of the current patient population is under the age of 50, suggesting a need to increase awareness of the Prevention Center to younger patients, especially those with existing risk factors.

Aggressive lifestyle therapy and risk factor reduction is warranted for the majority of patients, however only about 40% choose to follow up with the dietitian and wellness coach for lifestyle support therapies. With a healthy lifestyle throughout life recognized as the most important way to prevent ASCVD, care teams should encourage patients to seek support and accountability from qualified providers to reduce the risk of cardiovascular disease through lifestyle modification.

What happens during a visit with the Prevention Center?



During the 90-minute initial appointment, the patient and providers gain a comprehensive cardiovascular risk assessment based on the patient's lifestyle, family history, medical history, and clinical findings.

Patients can then opt in to regular lifestyle modification appointments, smoking cessation counseling, monthly group walks and educational classes, and weekly email updates.

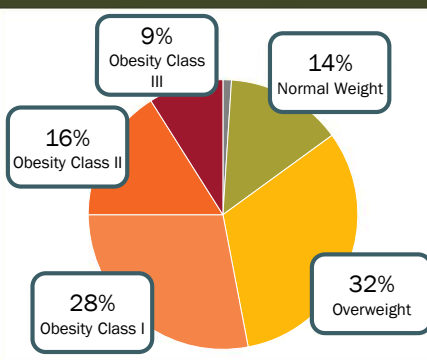
Patients follow up with the cardiologist after 3 months, then every 6 months thereafter.



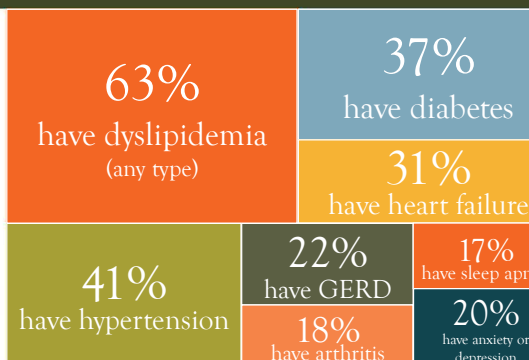
Clinical Characteristics of New Patients

	Percent of Patients	Presenting with Abnormal Lab Value
	59% (n=305)	HbA1c > 5.7% (prediabetes or diabetes)
	57% (n=412)	LDL > 100 mg/dL
	44% (n=330)	TG > 150 mg/dL
	38% (n=279)	HDL < 40 mg/dL
	41% (n=47)	Lp(a) > 30 mg/L or > 75 nmol/L

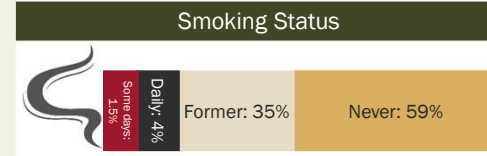
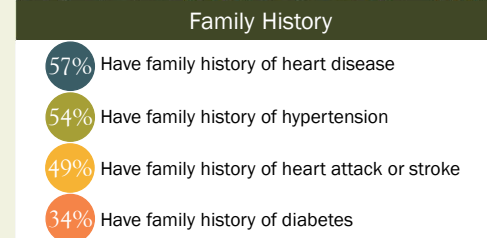
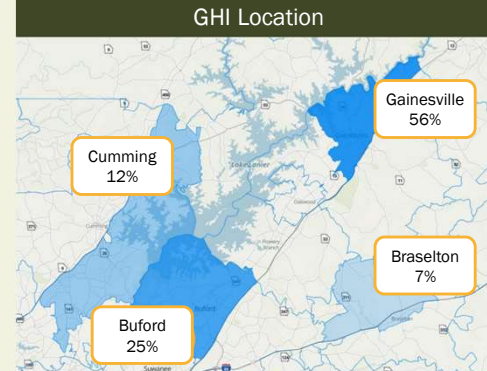
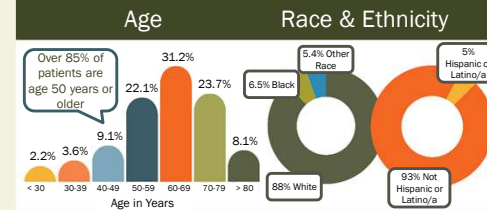
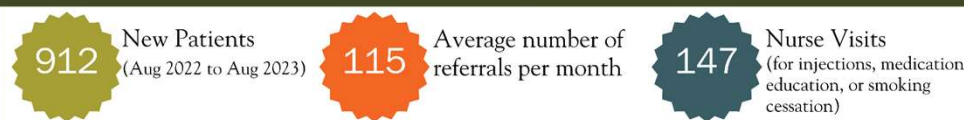
Overweight and Obesity Prevalence



Most Common Comorbidities



Prevention Center by the Numbers



References

1. National Center for Health Statistics. Multiple Cause of Death 2018-2021 on CDC WONDER Database. Accessed 30 August 2023.
2. Arnett, DK et al. 2019 ACC/AHA Guideline on the Primary Prevention of Cardiovascular Disease: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. 2019. <https://doi.org/10.1161/CIR.0000000000000678>

"So glad this program is available. I need a support group like this to keep me motivated!!"