

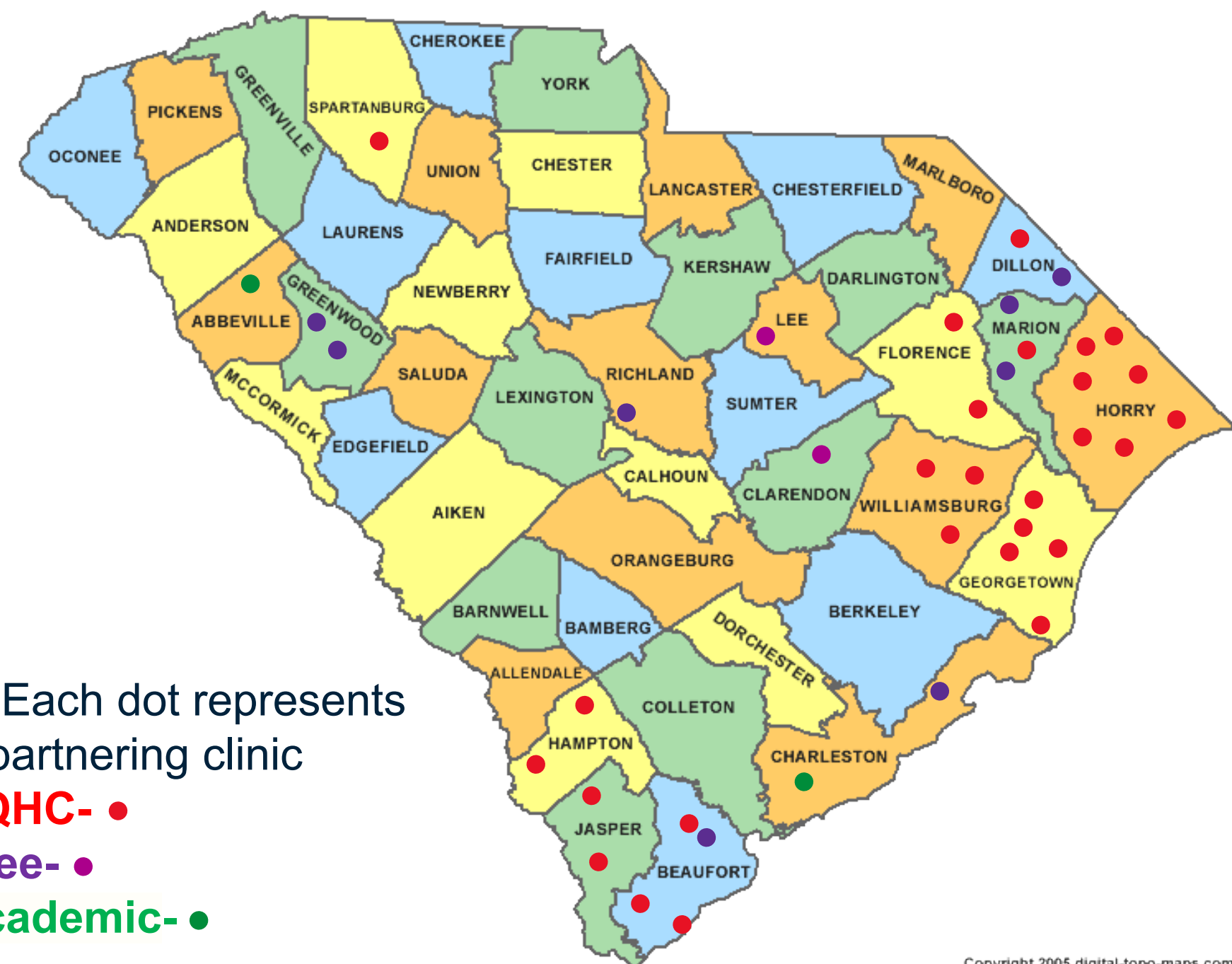
Introduction

- In 2014, our academic medical center (AMC) began working with community health clinics (CHCs) to implement a centrally-monitored Remote Patient Monitoring (RPM) program for patients with diabetes.
- AMC nurses recruited, trained, and supported community partners through regular communication. Community sites were responsible for enrollment, follow-up visits, and all medication adjustments.
- We demonstrate that RPM is an effective tool for diabetes control, as evidenced by hemoglobin A1c reduction over 6 and 12 months.

Objectives

- Summarize key steps to achieving a successful, collaborative RPM program through AMC - CHC partnerships
- Key lessons learned for implementation of an AMC - CHC partnership

Map of participating sites in South Carolina counties



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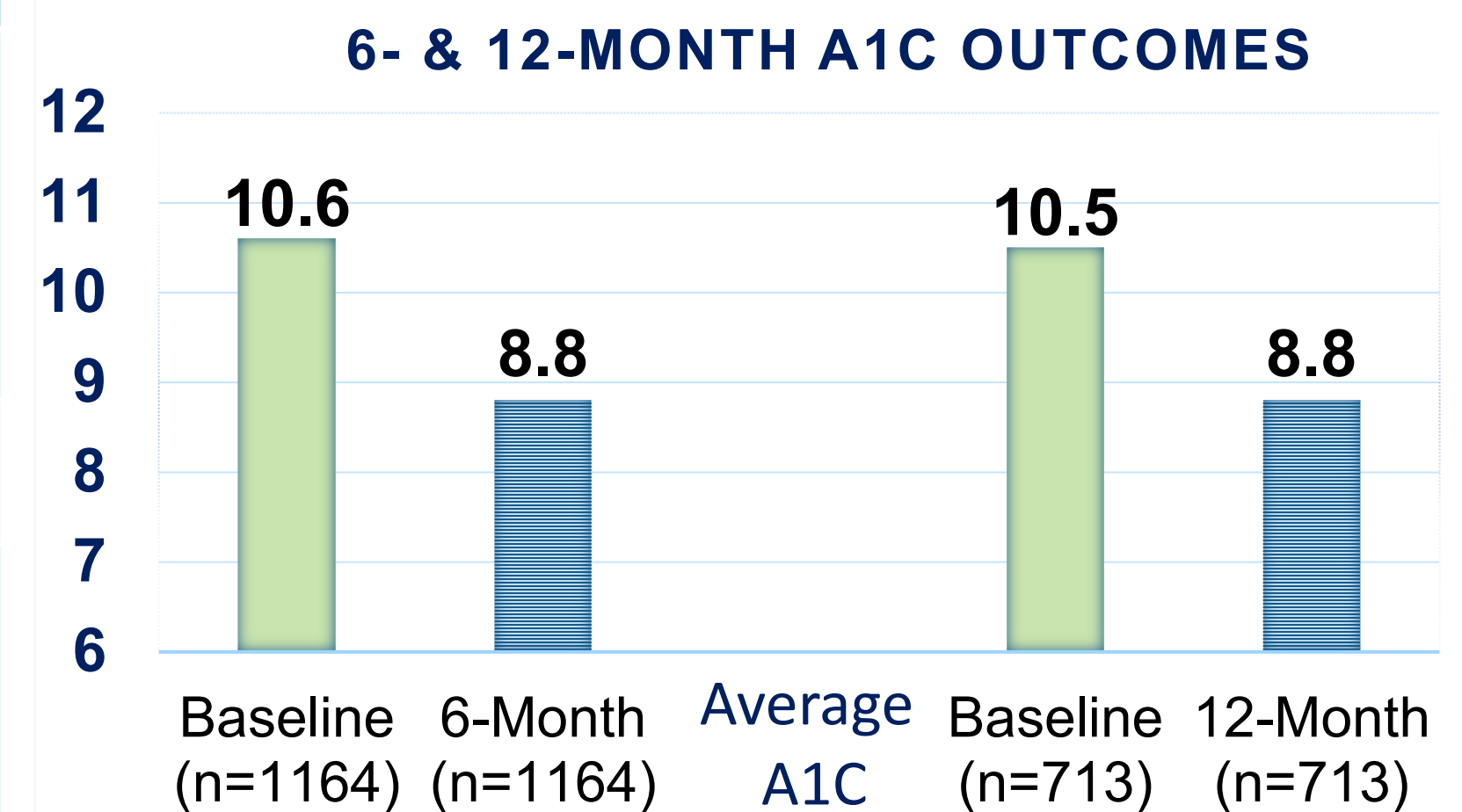
Methods

- Site selection:** We used county-level health statistics to choose counties with the highest rates of diabetes and identified CHCs in those counties to offer RPM to all eligible patients of providers willing to collaborate within the identified counties.
- Site recruitment:** Clinicians and administrators from our AMC reached out to staff of the identified CHC sites via telephone and email to share an overview of the program proposal. If mutual interest was present, site visits were scheduled to meet with the CHC's clinical leadership and legal and business partnerships were formalized through Business Associate Agreements (BAAs) and Professional Service Agreements (PSAs).
- RPM devices:** The program provides 2-in-1 monitoring devices (ForaCare D40g) for BG & BP monitoring, glucose testing supplies, and database fees for clinics and their patients for 12 months.
- Clinic training:** AMC nurses arrange clinic site visits to teach personnel how to set up, register, test, use, and troubleshoot the RPM devices and the data submission platform.
- Patient identification:** Patients are eligible to participate if they: a) have an HbA1c ≥ 8.0 within 21 days prior to enrollment, b) are 18 years or older, and c) have Type 2 Diabetes.
- Data management process:** Primary patient-level BG data are date- and time-stamped and stored on the HIPAA-compliant FORA[®] 24/7 HealthView server, organized by patient, clinic, and organization. AMC nurses monitor the data and send twice monthly alert reports to clinics for patients with mean BG values that are out of range.
- Data reporting:** Sites submit baseline demographic and clinical variables obtained at the enrollment visit and also submit 6- and 12-month follow-up clinical variables to the central site via a secure web platform, Research Electronic Data Capture (REDCap).
- Medication management:** Clinics are offered evidence-based algorithms for medication management in response to high BG values. PCPs and CHC nurses can adjust medications at the individual patient level in accordance with licensing and organizational regulations.
- Troubleshooting and feedback:** Clinic champions and AMC staff provide feedback to program leadership through formal and informal communication. Central AMC staff host quarterly webinars to share troubleshooting tips, foster inter-site collaboration, and gain feedback.

Results

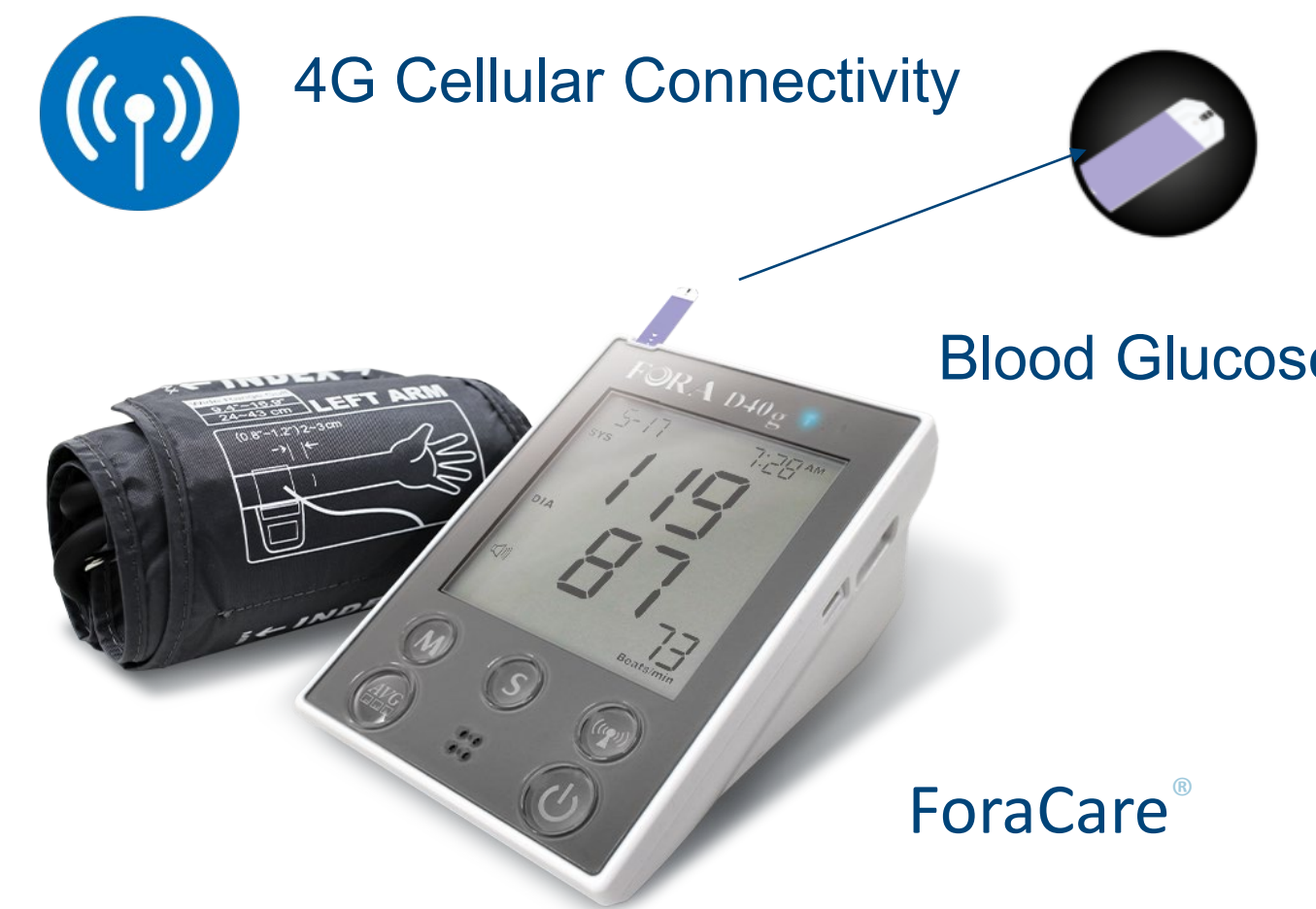
- As of July 2022, the RPM program has been implemented at 15 CHCs across 16 counties and over 1700 patients have been enrolled

	% (n)		% (n)
Total participants	100 (1752)	Annual household income	
Gender		< \$20,000/year	70% (1218)
Female	61% (1068)	< \$15,000/year	57% (995)
Male	39% (679)	< \$10,000/year	35% (613)
Race		Insurance status	
Black or African American	54% (952)	No insurance	41% (710)
White	42% (728)	Clinic type	
Asian, Native American, or other	4% (72)	Academic	18% (315)
Ethnicity		Free	12% (204)
Hispanic	15% (262)	FQHC¹	70% (1233)
Non-Hispanic	84% (1467)		



Key Lessons

- Identify the need
- Clearly define the target population
- Build relationships between sites, with leadership support
- Identify clinic champion(s)
- Perform a site-specific needs assessment
- Select technology based on patient needs and clinic capabilities
- Outline and implement efforts to maintain patient engagement
- Provide ongoing support by nurses to nurses and by providers to providers
- Schedule regular check-ins to review device or transmission pitfalls
- Support and enable partnering centers to assume responsibility for RPM over time
- Be willing to adapt to new technology



References

Elizabeth B Kirkland, Dawn Dericke, Chloe Cooper, Caroline Wallinger, Sabra Slaughter, James McElligott, and William P Moran. Dissemination of remote patient monitoring: An academic - community primary care partnership in South Carolina. *Journal of Public Health Management & Practice* 2022. (in press)