Implementing a virtual weight management program in rural primary care: Pilot results and insights

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INTRODUCTION

Rates of overweight and obesity in South Carolina (SC) remain high, and for those residing in rural areas, access to nutrition counseling and lifestyle change programs for weight management are limited. Collaborative care management (CoCM) is a multi-disciplinary approach that has improved access to healthcare in prior studies. The purpose of this study was to develop Primary Care Integrated Weight Management (PCIWM), an adapted CoCM model, designed to increase access to nutrition and weight management counseling via telehealth. To our knowledge, this is the first program to adapt CoCM for weight management.

PROJECT AIMS

1. Describe and evaluate the pilot primary care integrated weight management (PCIWM) program
2. Identify strategies to improve adoption and inform sustainability

METHODS

Our multidisciplinary care team included Registered Dieticians, Primary Care Providers, Practice Managers, and a Weight Management Consultant, and developed PCIWM workflow and patient registry. PCIWM was situated within an academic medical center and four affiliated rural primary care clinics.

Multiple data sources were used: electronic health records, PCIWM encounters, and survey responses (N=11). Descriptive statistics were used to examine patient characteristics at baseline, initial service utilization and survey responses.
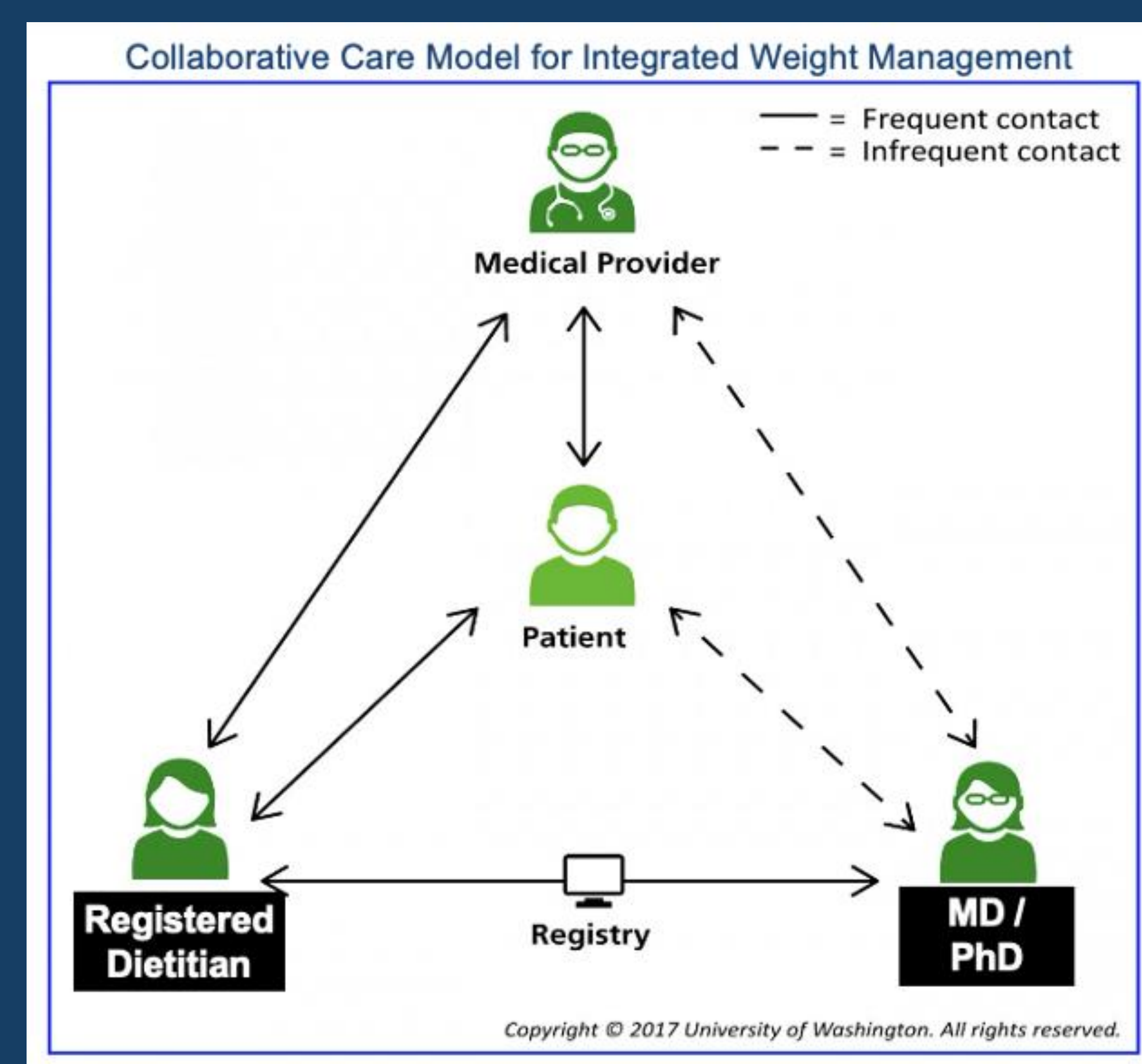

Figure 1: Primary Care Integrated Weight Management Program

PATIENT POPULATION

- From December 2022 to May 2024, 61 patients were enrolled in PCIWM
- Participants underwent a nutrition assessment, set goals, and received medical nutrition therapy from RDs, as part of their care plans
- Patients were offered monthly follow-up sessions with RD

Ages	Inclusions	Exclusions
Adults 18 years & older	BMI > 25	Eating disorder, ESRD
		Advanced age (75+)
		Pregnancy/breastfeeding
Pediatrics 2 to 22 years	BMI > 85th %	Disordered eating patterns
	Normal BMI but concerning trajectory (crossing to 95th %)	Abnormal thyroid studies
	Hypertension 2nd to obesity	Type 1 Diabetes Mellitus
	Dyslipidemia, High triglycerides, Prediabetes	Pregnancy

Figure 2: Inclusion/Exclusion Criteria for PCIWM.

This study is part of the Telehealth Centers for Excellence at the Medical University of South Carolina. Scan the QR code to learn more about this program and others.
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PILOT RESULTS

Overall, enrolled patients were an average of 46.8 years old (SD=12.5), and a majority were female (85.3%) and identified as White (65.5%). Additionally, enrolled patients identified as Black (26.2%) or Other/Unknown (8.2%). Many patients were married (63.0%) and/or worked full-time (42.6%).

The average base weight among enrolled patients was 115.0 kilograms (SD=32.0). Of PCIWM patients, 29% were actively engaged and had an average of 3.4 RD visits, with a mean duration of 100.7 minutes. Of the 11 patients who responded to the between session survey, the majority (63.6%) reported adhering to their nutrition goals "well" or "very well" the prior week.

Of the 61 patients who enrolled in PCIWM, 45.9% cancelled or did not attend their first appointment and did not reschedule and 8.2% overall did not have updated weights from referral. Still, of those who attended their scheduled follow-up appointments and had updated weights, 51.9% maintained (within 1 kg) or lost weight.

LESSONS LEARNED & PROGRAM INSIGHTS

- Among engaged patients, PCIWM demonstrates promising, preliminary results to support weight management

- More work is needed to consider patient readiness for behavior change to encourage improved uptake and sustained participation in dietary counseling

- Additional screening may inform the referral process for greater adherence to PCIWM