HEALTHY HERE

Wellness Referral Center Evaluation Report

ACKNOWLEDGEMENTS

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August 2017

This work could not have been accomplished without the dedication of these Wellness Referral Center partners:

This report was supported by Presbyterian Healthcare Services through Cooperative Agreement Number U58 P005868 from the Centers for Disease Control and Prevention (CDC). This is a Racial and Ethnic Approaches to Community Health (REACH) award. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC or the US Department of Health and Human Services.

Leigh Caswell, MPH, Director of Presbyterian Healthcare Services Center for Community Health, is the Principal Investigator of this project.

CONTENTS

TABLE OF CONTENTS

Healthy Here Wellness Referral Center Evaluation Report

INTRODUCTION & BACKGROUND

As the healthcare system becomes increasingly complex, clinics and providers seek tools to help navigate the system and improve patient care. Community-clinical linkages have been found to maximize healthcare provider time and resources and help ensure patients have access to health management programs (Sequist & Taveras, 2014). Creating such linkages represents an innovative approach to prevention that attempts to reduce pressures on the healthcare system and connect patients to community resources that may improve their quality of life (Brownson, O'Toole, Shetty, et al., 2007; Porterfield, Hinnant, Kane, et al., 2012). By building relationships with the community and sharing resources, healthcare professionals and clinics improve their ability to offer a comprehensive array of services that otherwise would not be readily available or accessible to their patients.

Healthy Here's strategy for addressing chronic disease disparities is to increase the use of community-based disease self-management programs by creating and enhancing a system for referring patients with diabetes, hypertension, high cholesterol, and obesity, and those at risk for those conditions. The Wellness Referral Center (WRC) was developed to connect healthcare and community access points by training providers and working with community groups to provide needed programs and resources.

Healthy Here aims to increase the number of clinics and providers who use a referral system to link their patients to community resources for chronic disease self-management, healthy food options, and physical activity opportunities. Clinic staff, healthcare providers, and members of the care team are engaged and trained to make referrals using the system. The WRC acts as the link between the healthcare system and community-based resources, providing patients with a customized list of appropriate resources in their area, based on the provider referral. The purpose of the WRC system evaluation is two-fold:

1. to measure the actual use of the referral system by clinics and healthcare providers; and,
2. to determine if patients (especially American Indian and Hispanic patients in the International District and South Valley communities of Bernalillo County) with diabetes, hypertension, high cholesterol levels, and obesity are being referred.

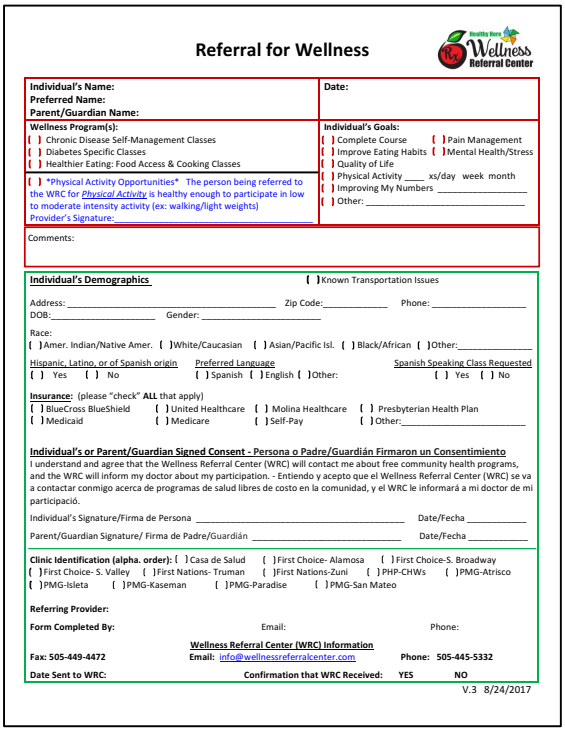
The evaluation is concerned with healthcare provider utilization of the system, rather than patient compliance. An important goal of the evaluation is to assess whether providers are referring patients with chronic diseases or related risk factors.

The purpose of this report is to compare referral data from the first quarter of 2016 to the first quarter of 2017 to determine if the actual use of the referral system is increasing, if it is reaching the intended populations, and if patients with chronic diseases and associated risk factors of interest are being referred.

METHODS

DATA COLLECTION

Providers referred interested patients to the WRC using a standardized referral form (right) developed in collaboration with clinic staff. The provider who referred the most patients from a given clinic was defined as the "champion" at that clinic.



Referral for Wellness

Healthy Here Wellness Referral Center

Individual's Name:
Preferred Name:
Parent/Guardian Name:

Date:

Wellness Program(s):
( ) Chronic Disease Self-Management Classes
( ) Diabetes Specific Classes
( ) Healthier Eating: Food Access & Cooking Classes

Individual's Goals:
( ) Complete Course ( ) Pain Management
( ) Improve Eating Habits ( ) Mental Health/Stress
( ) Quality of Life
( ) Physical Activity ____ xs/day week month
( ) Improving My Numbers _____
( ) Other: _____

( ) *Physical Activity Opportunities* The person being referred to the WRC for *Physical Activity* is healthy enough to participate in low to moderate intensity activity (ex: walking/light weights)
Provider's Signature: _____

Comments:

Individual's Demographics ( ) Known Transportation Issues

Address: _____ Zip Code:_____ Phone: _____
DOB:_____ Gender: _____

Race:
( ) Amer. Indian/Native Amer. ( ) White/Caucasian ( ) Asian/Pacific Isl. ( ) Black/African ( ) Other:_____

Hispanic, Latino, or of Spanish origin ( ) Yes ( ) No
Preferred Language ( ) Spanish ( ) English ( ) Other:
Spanish Speaking Class Requested ( ) Yes ( ) No

Insurance: (please "check" **ALL** that apply)
( ) BlueCross BlueShield ( ) United Healthcare ( ) Molina Healthcare ( ) Presbyterian Health Plan
( ) Medicaid ( ) Medicare ( ) Self-Pay ( ) Other:_____

Individual's or Parent/Guardian Signed Consent - Persona o Padre/Guardián Firmaron un Consentimiento
I understand and agree that the Wellness Referral Center (WRC) will contact me about free community health programs, and the WRC will inform my doctor about my participation. - Entiendo y acepto que el Wellness Referral Center (WRC) se va a contactar conmigo acerca de programas de salud libres de costo en la comunidad, y el WRC le informará a mi doctor de mi participació.

Individual's Signature/Firma de Persona _____ Date/Fecha _____
Parent/Guardian Signature/ Firma de Padre/Guardián _____ Date/Fecha _____

Clinic Identification (alpha. order): ( ) Casa de Salud ( ) First Choice- Alamosa ( ) First Choice-S. Broadway ( ) First Choice- S. Valley ( ) First Nations- Truman ( ) First Nations-Zuni ( ) PHP-CHWs ( ) PMG-Atrisco ( ) PMG-Isleta ( ) PMG-Kaseman ( ) PMG-Paradise ( ) PMG-San Mateo

Referring Provider:
Form Completed By: Email: Phone:

Wellness Referral Center (WRC) Information
Fax: 505-449-4472 **Email:** info@wellnessreferralcenter.com **Phone: 505-445-5332**
Date Sent to WRC: **Confirmation that WRC Received:** **YES** **NO**

V.3 8/24/2017

Clinic staff completed the form and sent it (by fax or electronically) to the WRC housed at Adelante Development Center's main office in northwest Albuquerque. WRC staff recorded provider and clinic information, patient demographic data, health insurance coverage information, and the type of community program(s) to which the patient was being referred. WRC staff then contacted patients and worked with them to determine which programs, activities, and resources matched the provider's referral and were also practical for the patient. WRC staff ensured that classes were language-appropriate, child care was available when necessary, and that class offerings worked with a patient's schedule. WRC staff also recorded reasons for non-participation, when appropriate.

WRC data were stored in a secure database using SalesForce® software, and the WRC staff sent aggregated, de-identified data to the Healthy Here evaluation team at the UNM PRC quarterly. In addition, a designated person at each referring clinic sent a monthly tally of de-identified diagnosis data to the UNM PRC evaluation team. Diagnosis data included the number of patients referred, by diagnosis and overall, in an Excel spreadsheet. Diagnosis data were not included on the referral forms or in the SalesForce® database. This method of data collection was used to protect personal health information associated with individual patients.

Referrals to the WRC began in January 2016. The data used in this report are for referrals made during the first quarter (January – March) of 2016 and the first quarter (January – March) of 2017.

ANALYSIS

The UNM PRC evaluation team analyzed data from SalesForce® and clinic diagnosis tallies using the statistical software package Stata (version 14.1). Frequencies and basic descriptive statistics (e.g., means, proportions), were generated. These data were analyzed to identify any potential data collection or coding errors, and to correct or exclude data where appropriate. The team then compared differences between the first quarters of calendar years 2016 and 2017. Differences were examined at the system level (e.g., number of providers, number of clinics), as well as the patient level (e.g., demographic characteristics, insurance type, diagnosis data).

RESULTS

PATIENT CHARACTERISTICS

DEMOGRAPHICS

Participating clinics referred three times as many people in the 1st quarter of 2017 compared to the 1st quarter of 2016. Women comprised two-thirds of those referred in both years. People who were referred in 2017 were younger and less likely to identify as white than those referred in 2016. Those referred in 2017 were also less likely to reside in areas defined by the project's focus ZIP codes. Table 1 presents demographic characteristics of referred patients by year. The proportion of Hispanic patients referred decreased between 2016 and 2017, while the proportion of American Indian/Alaska Native (AI/AN) patients increased.

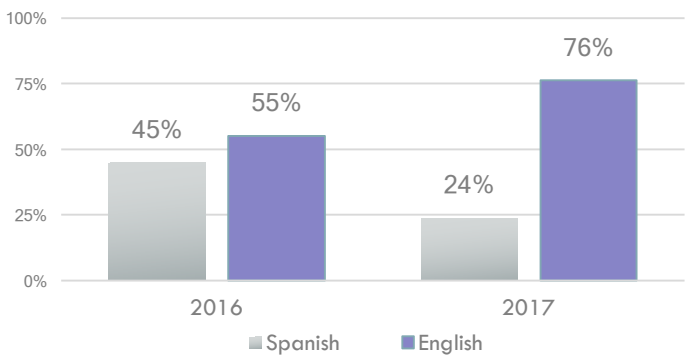
Table 1. Demographic characteristics of patients referred to prevention and chronic disease self-management programs in the first quarter of 2016 compared to the first quarter of 2017

Characteristic	2016, Q1 (N=71)	2017, Q1 (N=224)	p-value*
Gender			0.70
Female	46 (66.7)	153 (68.0)	
Male	23 (33.3)	70 (31.2)	
Mean Age	52.4	44.7	P<0.005
Race			P<0.005
AIAN	1 (1.9)	25 (12.0)	
Asian/Pacific Islander	0 (0.0)	2 (1.0)	
African American	0 (0.0)	8 (3.9)	
White	34 (65.4)	42 (20.1)	
Other	17 (32.7)	132(63.2)	
Hispanic	62 (92.5)	139 (73.9)	P<0.005
ZIP Codes			P<0.005
Focus	64 (92.8)	124 (55.4)	
Adjacent	1 (1.5)	44 (19.6)	
Other	4 (5.8)	56 (25.0)	

PREFERRED LANGUAGE

In the first quarter of 2016, nearly half (45%) of referred patients preferred communicating in Spanish. In 2017, the proportion of patients who preferred English increased by 55% to 76% (p<0.05) (Figure 1).

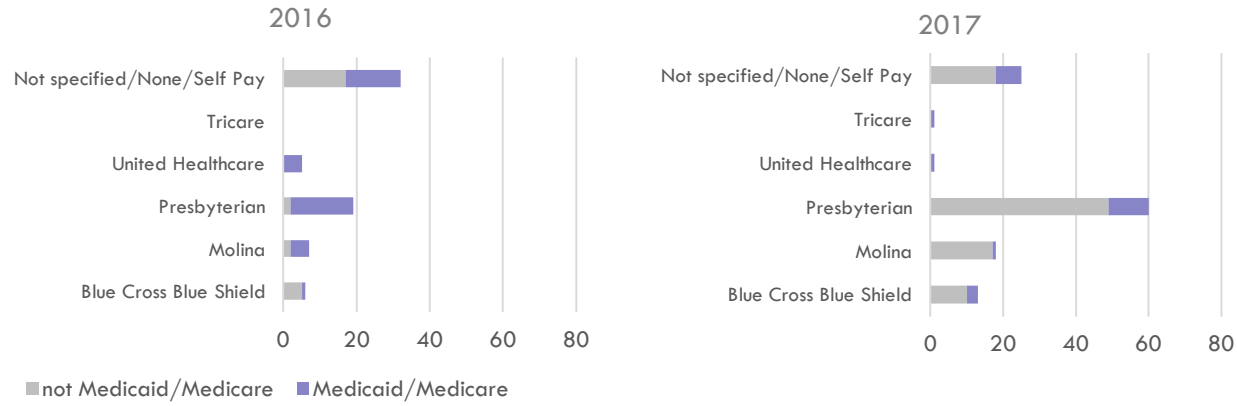
Figure 1. Change in patient's preferred language, Q1 2016 and Q1 2017



INSURANCE COVERAGE

During the first quarter of 2016, nearly half of WRC referred patients were uninsured, self-pay, or did not report their insurance coverage. This percentage decreased in 2017, as the number of referred patients with Presbyterian health insurance increased by a factor of three and the number of patients with Molina insurance more than doubled (Figure 2). The proportion of referred patients who were Medicaid or Medicare recipients decreased from 62% of all patients during the first quarter of 2016 to 20% of those referred in the first quarter of 2017.

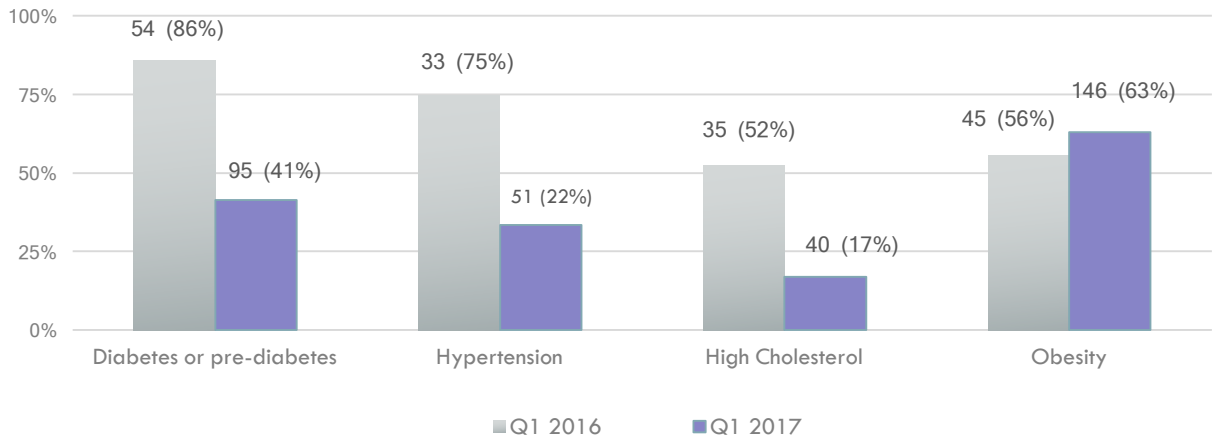
Figure 2. Number of patients by type of insurance coverage, by year



DIAGNOSES

Among the 71 people referred during the first quarter of 2016, 54 (nearly 9 out of 10) were diagnosed with diabetes or pre-diabetes, the most common referral diagnosis. In comparison, during the first quarter of 2017, 95 of the 224 patients referred (41%) were diagnosed with diabetes or pre-diabetes. While the number of referred patients diagnosed with the disease increased from 2016 to 2017, the proportion of referred patients with the disease decreased during the same period (Figure 3). This was true for hypertension and high cholesterol as well. By contrast, a larger number and larger proportion of referred patients had a diagnosis of obesity in 2017 compared to 2016.

Figure 3. Proportion of referred patients with each diagnosis*, by year



** Note: Percentages add to greater than 100% because patients could have more than one diagnosis.*

REFERRING CLINICS

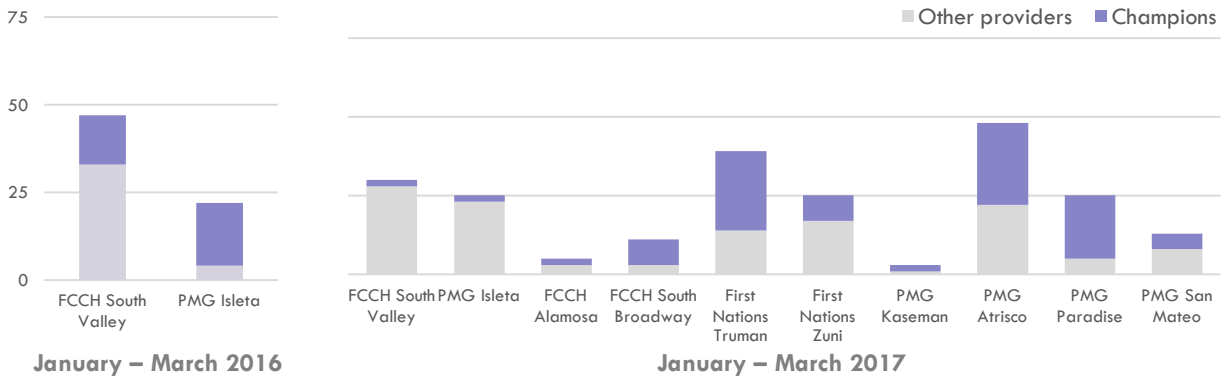
The number of clinics providing referrals increased five-fold, from 2 clinics during the first quarter of 2016 to 10 during the first quarter of 2017.

REFERRING PROVIDERS

The number of providers referring patients to community-based prevention and chronic disease self-management programs tripled from 17 providers in 2016 to 53 in 2017. The number of referrals made increased from 71 to 224 during the same time periods.

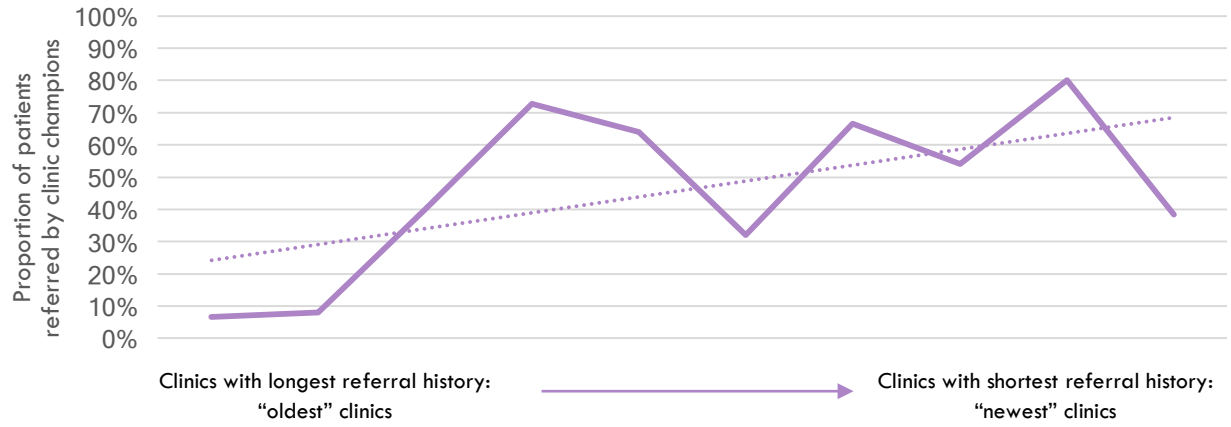
For the two clinics that referred in both the first quarter of 2016 and the first quarter of 2017 (FCCH South Valley and PMG Isleta) the proportion of patients referred by a single provider (i.e., clinic champion) decreased from 2016 to 2017 (Figure 4). For example, the champion at PMG Isleta clinic accounted for 82% of that clinic's referrals in 2016 but only 8% of that clinics referrals in 2017.

Figure 4. Number of patients referred by clinic, by champions and other providers, by year



As clinics participated in the WRC over time, the proportion of referrals made by the champion decreased. That is, referrals became more dispersed among clinic providers over time. Figure 5 shows how the proportion of referrals made by champions is lowest for clinics that have been referring for longer, and increases for newer referring clinics.

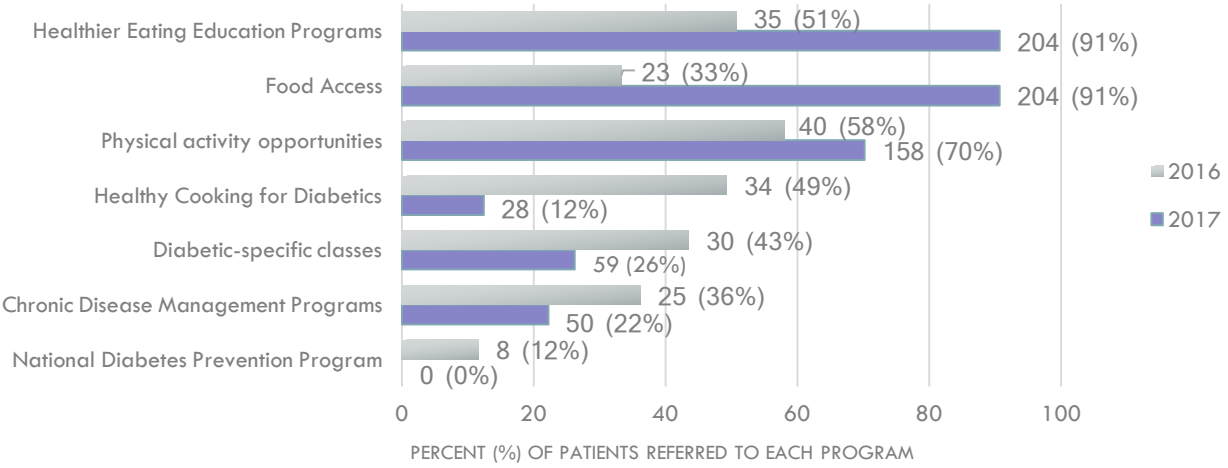
Figure 5. Proportion of patients referred by clinic champions in Q1 2017, by length of time clinics participated in WRC



COMMUNITY-BASED PROGRAMS

The most frequent types of referrals in 2016 were for physical activity opportunities followed by healthier eating education programs (Figure 6). In 2017, the most frequent types of referrals were for healthier eating education programs and food access, with more than 90% of patients referred to each. Notably, no patients were referred to the Diabetes Prevention Program in the first quarter of 2017.

Figure 6. Community-based chronic disease prevention and management programs to which patients were referred, by year



** Note: Patients could be referred to multiple programs.*

DISCUSSION

The WRC expanded dramatically between the first quarter of 2016 and the first quarter of 2017, from 2 clinics in the first year to 10 clinics in the second. A corresponding three-fold increase in the number of providers referring patients and the number of referrals made also occurred. The increase in the number of referring clinics was associated with a decrease in the proportion of referred patients who lived in or adjacent to *Healthy Here's* focus ZIP codes, and a reduction in the proportion of Hispanic patients referred. The initial participating clinics are located in the South Valley of Albuquerque where the population is predominantly Hispanic and reside within the focus ZIP codes. As referring clinics increased in number they expanded into different communities, and the proportion of Hispanic patients decreased as did the proportion of patients from the focus ZIP codes. At the same time, there was an increase in the proportion of AI/AN patients referred. This was likely due to the participation of First Nations Community Healthsource clinics (Truman and Zuni) in the first quarter of 2017. These two clinics serve a larger proportion of AI/AN patients.

While a decrease in Hispanic patients and an increase in AI/AN patients were expected due to the participation of clinics in communities with a different population base, we observed an unanticipated increase, 93.3% from 2016 to 2017, in the proportion of patients whose race was listed as "other". This difference is attributable to differences in how race was recorded on the referral form by referring clinic staff in 2017 compared to 2016. Specifically, race was recorded differently for individuals of Hispanic ethnicity with a greater proportion classified as "other" race in 2017 and a greater proportion classified as "White" in 2016.

The WRC's expansion may also be responsible for the changes observed in the proportion of referred patients who had one of the five diagnoses of interest. As the WRC expanded and more providers made referrals, and as more community-based resources associated with primary prevention became available, a greater proportion of patients with obesity and without other clinical diagnoses were referred. This may have been due to a greater interest in primary prevention by providers or to a better understanding of the primary prevention opportunities available. Or it may be that patients without these chronic disease diagnoses heard about the programming from friends or relatives and requested referrals.

At the same time, fewer people were referred to chronic disease specific programs, particularly programs related to diabetes self-management. It may be that the National Diabetes Prevention Program and other chronic disease self-management programs were less appealing because of their longer time commitment, location, or difficulty in getting patients placed. In addition, there may have been fewer program slots available. It may also be that specific providers had already referred many of their patients diagnosed with the chronic diseases of interest in 2016 and therefore there were fewer patients with these diagnoses available for referral in 2017.

Over time, the implementation and evaluation teams expected that additional providers within clinics would refer a greater proportion of patients so that referrals were not as centralized in one or two clinic "champions" at each location. The referral data analyzed for this report confirmed this expectation. The longer a clinic was part of the WRC, the smaller the proportion of patients referred by the champion. In other words, patient referrals were more dispersed among a clinic's providers over time, demonstrating uptake of the initiative. This is a positive indicator for future dissemination and sustainability of the effort.

Overall, the WRC continues to reach its communities of focus, specifically AI/AN and Hispanic populations living in the International District and South Valley communities of Bernalillo County.

CONCLUSION

Actual use of the WRC increased substantially from the first quarter of 2016 to the first quarter of 2017. It saw an increase in the number of participating clinics and providers, and in the number of referrals. The majority of referrals during both time periods were for Hispanic and AI/AN patients, and for patients residing within the focus ZIP codes. The majority of patients referred to the WRC were also diagnosed with diabetes, high cholesterol, hypertension, or obesity during both time periods. The number and proportion of patients diagnosed with obesity increased from 2016 to 2017, as did the number and proportion of patients being referred to healthy eating, food access, and active living opportunities. While the number of patients referred to the WRC for specific chronic disease self-management programs increased, the proportion decreased. The WRC is reaching its intended populations, and is increasing community-clinical linkages for patients with chronic diseases, as well as for patients at risk for chronic diseases, in the International District and South Valley communities of Bernalillo County.

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