

# NEBRASKA STATEWIDE PROVIDER SURVEY RESULTS

September 2017

#### **Chronic Disease Prevention and Control Program**

About half of all adults (117 million people) have one or more chronic health conditions. This assessment specifically explored the disease management and community-clinical linkage strategies employed by primary care providers among patients with the chronic conditions of diabetes, hypertension, and obesity. 539 providers responded to the survey and 491 providers were included in the analysis.

Suggested Citation: Sedani, A. (September 2017). Nebraska Statewide Provider Survey Results. Lincoln,
NE: Nebraska Department of Health and Human Services.  Statement of Support: This report was supported by Cooperative Agreement Number 3U58DP004819-02S1, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention
or the Department of Health and Human Services.
1

# **Table of Contents**

Background	3
Key Terms	
Methods	
Data Analysis	4
Results	
Response Demographics	5
Electronic Health Records	8
Clinical Quality Measures (CQMs)	10
Standard Practice Screening	11
Management and Support of Diabetic and Hypertensive Patients	12
Team-based Care	14
Healthcare Extenders: Community Health Workers	15
Referrals	17
Community Resources	18
Evidence-Based Programs	20
Appendix A: Survey	

### **Background**

#### **Burden of Chronic Disease**

About half of all adults (117 million people) have one or more chronic health conditions, with one in four adults having two or more chronic health conditions.<sup>1</sup> Chronic diseases are currently the leading causes of death and disability in the United States and accounts for approximately 84% of our nation's health care costs.<sup>23</sup>

#### **Coordinated Approach**

The rise in prevalence of chronic diseases, the presence of multiple chronic conditions in majority of adults, the presence of common risk factors, and the need to reduce duplicative efforts prompted a movement to create a coordinated approach to chronic disease prevention practices.<sup>4</sup>

Guiding principles for a coordinated approach to chronic disease prevention practices were jointly formed by chronic disease prevention directors, CDC, and the National Association of Chronic Disease Directors in 2006.<sup>4</sup> This led to a cooperative agreement from CDC, awarded to the Nebraska Chronic Disease Prevention and Control (CDPC) Program, along with 49 other states to promote a coordinated approach to addressing heart disease, diabetes, stroke and obesity.

#### **Purpose of Study**

This assessment specifically explored the disease management and community-clinical linkage strategies employed by primary care providers among patients with the chronic conditions of diabetes, hypertension, and obesity.

#### **Key Terms**

Clinics were classified based on CDC's Evaluation and Program Effectiveness Team within the Division of Heart Disease and Stroke Prevention's guidance of Health Systems and adapted based upon the Nebraska landscape as perceived by the Nebraska Department of Health and Human Services Chronic Disease Control and Prevention team.

- "Health System Type" include: Indian Health Services (I.H.S), Veterans Affairs (V.A), Federally Qualified Health Centers (F.Q.H.C), Rural Health Centers (R.H.C), Larger Health Systems/Hospitals, and Independent Clinics Classification of "health system" type was conducted by completing the health systems flow chart.<sup>5</sup>
- "Health System" is one or more facilities owned or operated by the same entity, and provide health care to individuals (i.e multiple clinics can be part of one larger health system).
- "Clinic" is the facility that provides care to an individual.
- For purposes of this report, the term "**provide**r" is used for physicians and nurse practitioners.

<sup>&</sup>lt;sup>1</sup> Ward BW, Schiller JS, Goodman RA. Multiple chronic conditions among US adults: a 2012 update. Prev Chronic Dis. 2014;11:E62.

<sup>&</sup>lt;sup>2</sup> Gerteis J, Izrael D, Deitz D, LeRoy L, Ricciardi R, Miller T, Basu J. Multiple Chronic Conditions Chartbook.[PDF – 10.62 MB] AHRQ Publications No, Q14-0038. Rockville, MD: Agency for Healthcare Research and Quality; 2014.

<sup>&</sup>lt;sup>3</sup> Centers for Disease Control and Prevention. Leading causes of death and numbers of deaths, by sex, race, and Hispanic origin: United States, 1980 and 2014 (Table 19). Health, United States, 2015. https://www.cdc.gov/nchs/data/hus/hus15.pdf#019[PDF – 13.4 MB].

<sup>&</sup>lt;sup>4</sup> Allen P, Sequeira S, Best L, Jones E, Baker EA, Brownson RC. Perceived Benefits and Challenges of Coordinated Approaches to Chronic Disease Prevention in State Health Departments. Prev Chronic Dis 2014;11:130350. DOI: http://dx.doi.org/10.5888/pcd11.130350

<sup>&</sup>lt;sup>5</sup> For more information contact Nebraska Department of Health and Human Services, The Chronic Disease Prevention and Control Program

#### **Methods**

The Nebraska Health and Human Services System (NHHSS) Physician and APRN Nurse Practitioner (NP) licensure datasets were utilized to identify the total number of providers of all specialty types, active or retired in Nebraska. As of March 2016, these datasets indicated a total of 8,684 physicians and 1,563 nurse practitioners. Additionally, a member listing for Nebraska Medical Association (NMA), which included provider's primary and secondary specialties was obtained to identify providers with specialties associated with primary care. Approximately half of providers in the licensure dataset were also NMA members and had their specialties listed. The combined dataset identified primary care providers within their primary employment sites, and further identified those sites as either independent (unaffiliated with an organized health system) or grouped within an identifiable organized health system. The total number of primary care providers with independent practice authority who care for Nebraskans was estimated for physicians (n=645), and nurse practitioners (n=261).

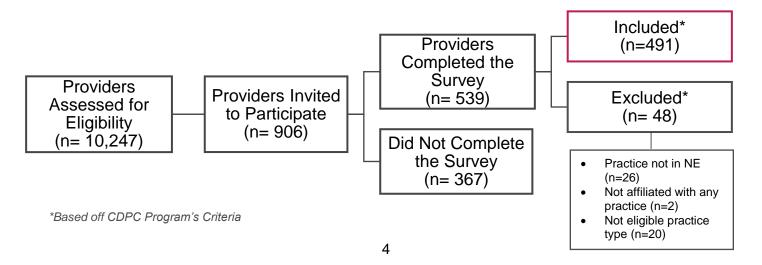
Survey was designed in collaboration with the Health Services Research and Patient Safety Team (CHRP) at Creighton University. A cover letter and survey were sent by CHRP through U.S mail to a total of 906 providers: individuals identified as a primary care provider in their practice and the remaining licensed providers who were not in the NMA database. The cover letter asked the physicians and NPs to answer two questions to determine that they met the initial inclusion criteria for the survey: (1) Do you care for patients from the state of Nebraska; (2) Are you a primary care provider. Providers answering "yes" to both questions were invited to complete a five- page survey (Appendix A) regarding their practice site, care and treatment strategies, and community-clinical linkages to care services.

A 60% response rate from primary care providers was achieved overall (539 of 906) with a 59% response rate from physicians (383 of 645) and a 60% response rate from nurse practitioners (156 of 261). The IBM Statistical Package for the Social Sciences (SPSS) Statistics software package was used to process and document the dataset.

#### Data Analysis

Statistical Analysis System (SAS) 9.4 software was used to manage the survey database and to generate the descriptive statistics for each survey question. For purposes of this analysis, only providers who are located at a facility physically located in Nebraska and at a facility that provided primary care, family medicine, or internal medicine to patients 18 years and older were included in the CDPC Program's analysis. Additionally, correctional facilities, facilities that only practiced Obstetrics/Gynecology or Cardiology, and providers not associated with any practice were excluded at this time. After the CDPC Program's exclusion criteria, a total of 491 providers were included in the analysis.

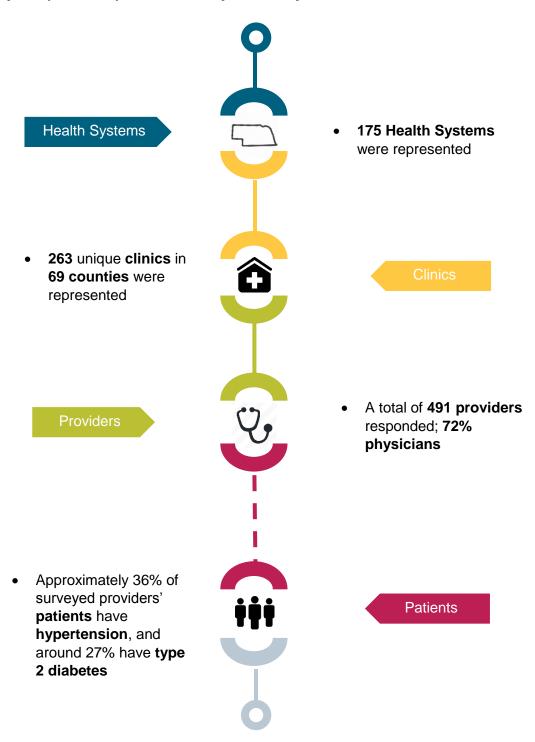
Figure 1: Survey Methodology



## **Results**

#### Response Demographics

Figure 2: Survey Response Representation by Health System Classification



# Clinics

Table 1: Characteristics of Responding Clinics (n=263)

	# of facilities (%)			
Health System Type				
Indian Health Services (I.H.S.)	3 (1.1%)			
Veterans Affairs (V.A.)	6 (2.3%)			
Federally Qualified Health Centers (F.Q.H.C.)	8 (3.0%)			
Rural Health Clinic (R.H.C.)	58 (22.1%)			
Larger Health System (H.S.)/ Hospital	97 (36.9%)			
Independent Clinic	91 (34.6%)			
Geographic Density				
Urban <sup>6</sup>	120 (45.6%)			
Rural <sup>7</sup>	143 (54.4%)			
Total Number of Staff				
1-5 Staff	60 (22.8%)			
6-15 Staff	93 (35.4%)			
16-50 Staff	74 (28.1%)			
More than 51 Staff	17 (6.5%)			
Estimated Number of Active Patients at Practice Site				
Less than 500 patients	22 (8.4%)			
500-4,999 patients	78 (29.7%)			
5,000-14,999 patients	90 (34.2%)			
More than 15,000 patients	22 (8.4%)			
No Response	37 (14.0%)			
NCQA Recognized or Joint Commission Certified Patient Centered Medical Home (PCMH) <sup>8</sup>				
Yes	66 (25.10%)			
No	197 (74.90%)			
Operate as a PCMH				
Yes	101 (38.4%)			
No	162 (61.6%)			

<sup>&</sup>lt;sup>6</sup> Urban (Medium/small metro) – 13 counties: Cass, Dakota, Dixon, Douglas, Hall, Hamilton, Howard, Lancaster, Merrick, Sarpy, Saunders, Seward, Washington

<sup>&</sup>lt;sup>7</sup> Rural (Non-metro) – remaining 80 counties

<sup>&</sup>lt;sup>8</sup>The Patient-Centered Medical Home is a model of care that puts patients at the forefront of care. PCMHs build better relationships between people and their clinical care teams

# **Providers**

Table 2: Characteristics of Responding Providers (n=491)

	# of Providers (%)
Credentials	
Physician	355 (72.3%)
APRN-NP	136 (27.7%)
Health System Type	
I.H.S.	5 (1.0%)
V.A.	20 (4.1%)
F.Q.H.C.	14 (2.9%)
R.H.C.	98 (20.0%)
Larger H.S./ Hospital	189 (38.5%)
Independent Clinic	165 (33.6%)
Geographic Density	
Urban	279 (56.8%)
Rural	212 (43.2%)
Primary Specialty	
Family/General Practice	384 (78.2%)
Internal Medicine	91 (18.5%)
Geriatrics	6 (1.2%)
Obstetrics/Gynecology	6(1.2%)
Other <sup>9</sup>	4 (0.8%)
Part of Accountable Care Organization (ACO)	
Yes	197 (40.1%)
No	294 (59.9%)

<sup>&</sup>lt;sup>9</sup> Other includes: Psychiatry, Surgery

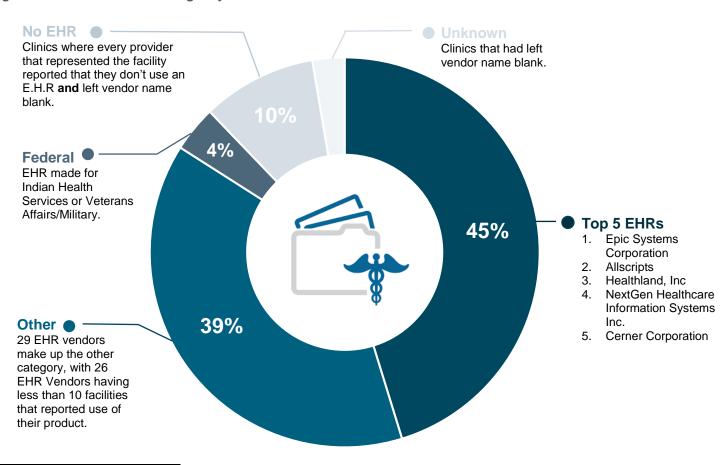
#### **Electronic Health Records**

An **Electronic Health Record (EHR)** is a digital version of a patient's paper chart health records, going beyond standard clinical data collected in the provider's office and inclusive of a broader view on a patient's care, with information moving with the patient to be accessed by all people involved in the patient's care.<sup>10</sup>

In 2008, only 17% of physicans in the United States had at least a basic EHR. By 2015, 78% percent of physican offices and 96% of hospitals used a certified EHR.<sup>11</sup> Furthermore, there were over 600 vendors supplying certified health IT in the United States, with Epic Systems, Allscripts, eClinicalWorks, Athenahealth, and NextGen Healthcare supplying certified health IT to 60% of all providers (n=256,072).<sup>12</sup>

- 78% of Nebraska health systems have an Office of the National Coordinator for Health Information Technology (ONC) certified EHR.<sup>13</sup>
- Surveyed providers in Nebraska reported a total of 38 different EHR vendors, with 5 EHR Vendors making up 45% of Nebraska's clinics.

Figure 4: EHR Vendors Usage by Clinic



<sup>&</sup>lt;sup>10</sup> Garrett, P & Sheidman, J. (January 2011). EMR vs EHR – What is the Difference?. Office of the National Coordinator for Health Information Technology.

<sup>&</sup>lt;sup>11</sup> Jamoom, E. & Yang, N. (July 2016). Table of Electronic Health Record Adoption and Use among Office-based Physicians in the U.S., by State: 2015 National Electronic Health Records Survey. http://www.cdc.gov/nchs/data/ahcd/nehrs/2015\_nehrs\_web\_table.pdf

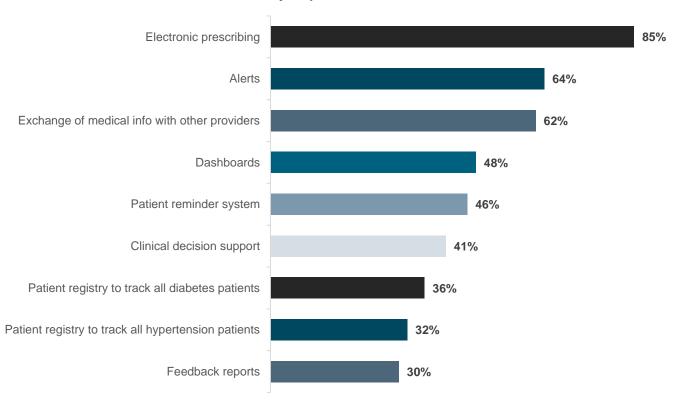
<sup>&</sup>lt;sup>12</sup> Office of the National Coordinator for Health Information Technology. 'Certified Health IT Vendors and Editions Reported by Health Care Professionals Participating in the Medicare EHR Incentive Program,' Health IT Quick-Stat #30. dashboard.healthit.gov/quickstats/pages/FIG-Vendors-of-EHRs-to-Participating-Professionals.php. September 2016.

<sup>&</sup>lt;sup>13</sup> CMS and the Office of the National Coordinator for Health Information Technology (ONC) have established standards and other criteria for structured data that EHRs must meet in order to qualify for use in the Medicare and Medicaid EHR Incentive Programs.

Some of the benefits of EHR use include: improved patient care, improved care coordination, practice efficiencies and cost savings, increased patient participation, and improved diagnostics and patient outcomes.<sup>14</sup>

- **Electronic prescribing** (e-Prescribing or eRx) is a quick and efficient way to write, re-order and transmit prescriptions to a pharmacy. As of 2014, 70% physicians e-prescribe through an EHR, representing a ten-fold increase since 2008.
  - o Currently 85% of providers reported using their EHR for e-Prescribing.
- Clinical decision support (CDS) can alert providers to clinical guidelines at the point of care, facilitate an enhanced diagnosis or treatment path, and alert providers to potentially harmful drug interactions.<sup>17</sup>
  - Only 41% of providers reported utilizing clinical decision support.
- Patient reminders can be established within EHR systems to remind patients about upcoming appointments, preventative care needs to better able to improve the health and health care of patients.<sup>18</sup>
  - 46% of providers reported using a patient reminder system.

Figure 5: EHR Functions Related to Quality Improvement



<sup>&</sup>lt;sup>14</sup> HealthIT.gov. Benefits of EHRs. Office of the National Coordinator for Health Information Technology. July 2015.

<sup>&</sup>lt;sup>15</sup> HealthIT.gov. e-Prescribing (eRx). Office of the National Coordinator for Health Information Technology. February 2014.

<sup>&</sup>lt;sup>16</sup> Gabriel MH, Swain M. E-Prescribing Trends in the United States. ONC Data Brief, no.18. Washington, DC: Office of the National Coordinator for Health Information Technology, July 2014.

<sup>&</sup>lt;sup>17</sup> HealthIT.gov. Clinical Decision Support Rule. Office of the National Coordinator for Health Information Technology. February 2014.

<sup>&</sup>lt;sup>18</sup> HealthIT.gov. Patient Reminders. Office of the National Coordinator for Health Information Technology. March 2014.

#### Clinical Quality Measures (CQMs)

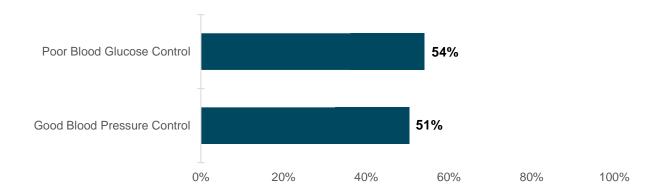
CQMs use data from EHRs to measure providers' ability to deliver high-quality care or relate to long term goals for quality health care. 19 CQMs measure many aspects of patient care including:

- health outcomes
- clinical processes
- patient safety
- efficient use of health care resources
- care coordination
- patient engagements
- population and public health
- adherence to clinical guidelines

Originally, CQMs did not have thresholds that you had to meet instead providers voluntarily reported data on them.

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) replaced a patchwork collection of CQMs programs with a single system, the Quality Payment Program (QPP), where Medicare clinicians have a chance to be rewarded for quality of care.20

Figure 6: Percent Of Providers Reporting On Clinical Quality Measures For Glucose and Blood Pressure Control<sup>21</sup>



<sup>&</sup>lt;sup>19</sup> HealthIT.gov. Clinical Quality Measures (CQMs). Office of the National Coordinator for Health Information Technology. November 2013.

<sup>&</sup>lt;sup>20</sup> CMS. Quality Payment Program. https://qpp.cms.gov/

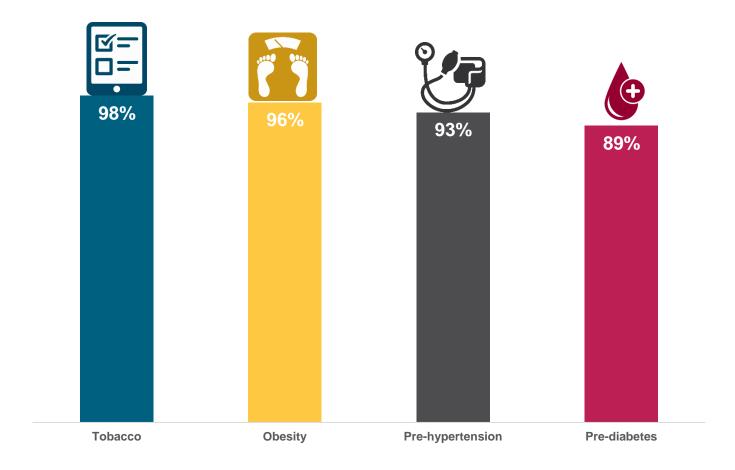
<sup>&</sup>lt;sup>21</sup> Since the survey was distributed prior to QPP, providers were asked on their reporting for PQRS and NQF measures. Poor Hemoglobin A1C control: PQRS1, NQF0059; Controlling High Blood Pressure: PQRS236, NQF0018.

#### Standard Practice Screening

In instances where previous diagnosis may have been missed, another opportunity exists whereby clinical indicators can be used to routinely screen patients and identify high risk patients.<sup>22</sup> Implementation of such strategies has been shown to be effective in helping to reduce poor cardiovascular outcomes such as heart attack and stroke.<sup>23</sup>

High blood pressure, high LDL cholesterol, and smoking are key risk factors for heart disease and stroke. Several other medical conditions and lifestyle choices can also put people at a higher risk for heart disease, including: diabetes, overweight and obesity, poor diet, physical inactivity, and excessive alcohol use.

Figure 3: Percentage Of Providers That Reported It Is Standard Practice To Screen For The Following Conditions



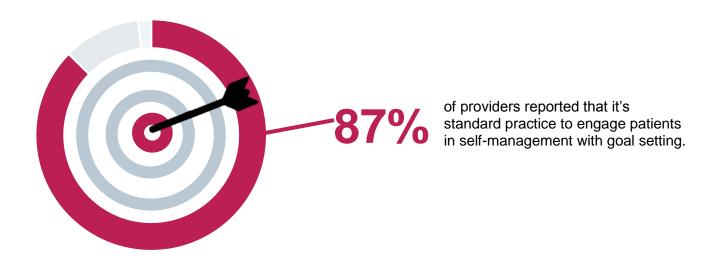
<sup>23</sup> Association of State and Territorial Health Officials. Million Hearts State Learning Collaborative to Improve Blood Pressure Control. ONLINE. 2014. Association of State and Territorial Health Officials. Available: http://www.astho.org/Million-Hearts/State-Learning-Collaborative-to-Improve-Blood-Pressure-Control/?terms=undiagnosed+hypertension [3 Dec 2014]

<sup>&</sup>lt;sup>22</sup> Rakotz MK, Ewigman BG, Sarav M, Ross RE, Robicsek A, Konchak CW, Gavagan TF, et al . A Technology-Based Quality Innovation to Identify Undiagnosed Hypertension Among Active Primary Care Patients.

#### Management and Support of Diabetic and Hypertensive Patients

Patient-centered care involves transforming the relationship between providers and patients from the traditional model, in which a provider prescribes the same treatment for most patients with similar diagnoses or conditions, into a patient-provider partnership that considers treatment options based on a patient's unique concerns, preferences, and values. Actively engaging patients in their care can has been found to lead to better compliance to treatment and prevention of complications.<sup>24,25</sup> Patients are encouraged to set goals, identify barriers and challenges, and monitor their own conditions.

- While 95-96% of providers educate their patients on the importance of self-monitoring, only 48-77% of providers' practices actually provide "drop-in" services for monitoring, and even fewer providers document the readings in the patient's charts.
- More practices provide "drop in" monitoring and group education for high blood pressure than diabetes; however, more providers report on clinical quality measures for diabetes.
- Approximately 40% of providers participate in a multidisciplinary approach or team-based approach.
- Less than 40% of providers are familiar with Community Health Workers; those aware of CHWs are using them for a wide range of services.



<sup>25</sup> Schottenfeld L, Petersen D, Peikes D, Ricciardi R, Burak H, McNellis R, Genevro J. Creating Patient-Centered Team-Based Primary Care. AHRQ Pub. No. 16-0002-EF. Rockville, MD: Agency for Healthcare Research and Quality. March 2016.

<sup>&</sup>lt;sup>24</sup> World Health Organization. mHealth: New Horizons for Health through Mobile Technologies. Second Global Survey on eHealth. Global Observatory for eHealth Series. (World Health Organization: Geneva, Switzerland), 2011; 3.

Figure 6: Percent of Providers That Offer the Following Support for Diabetic and Hypertensive Patients

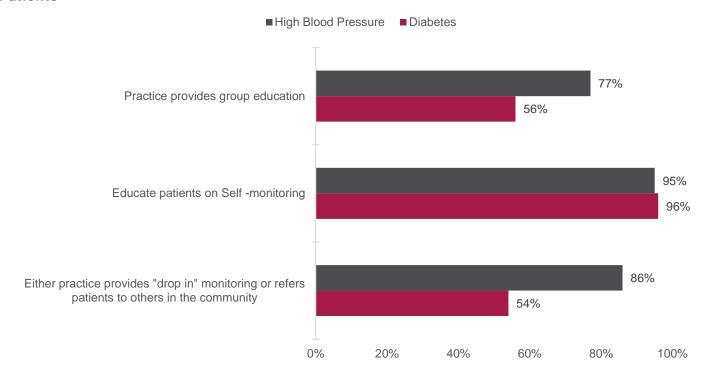


Figure 7: Percent Of Providers That Provide Drop-In Services And Document It In Their Patients' Charts



**77%** of providers' practices provide **blood pressure** monitoring "drop-in" services for patients, with 44% of providers **documenting** readings in the patient's charts.



**48%** of providers' practices provide **blood glucose** monitoring "drop-in" services for patients, with **23%** of providers **documenting** readings in the patient's charts.

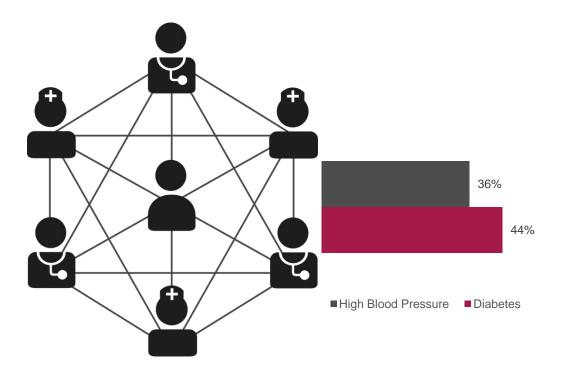
#### **Team-based Care**

Team-based care offers many potential advantages including:

- Expanded access to care (more hours of coverage, shorter wait times);
- More effective and efficient delivery of additional services;
- An environment in which all medical and nonmedical professionals are encouraged to perform work that is matched to their abilities.

Fundamental to this approach is the belief that when practices draw on the expertise of a variety of provider team members patients are more likely to get the care they need.<sup>26</sup> With effective team communication and problem solving, practices can engage in data-driven, continuous quality improvement.

Figure 8: Percentage of Providers That Participate In a Multi-Disciplinary Team Approach



<sup>&</sup>lt;sup>26</sup> Schottenfeld L, Petersen D, Peikes D, Ricciardi R, Burak H, McNellis R, Genevro J. Creating Patient-Centered Team-Based Primary Care. AHRQ Pub. No. 16-0002-EF. Rockville, MD: Agency for Healthcare Research and Quality. March 2016.

#### Healthcare Extenders: Community Health Workers

**Community Health Workers (CHWs)** are members of a community who have been shown to serve as a liaison between diverse ethnic, cultural, low-income or geographic communities and health care service providers. CHWs are frontline public health workers who are trusted members of and/or have a close understanding of the community/population being served.

Research and practice evidence indicates that CHWs help reduce barriers to care and increase treatment adherence. Additionally, integration of CHWs into care delivery has been shown to lower health care costs by reducing the number of emergency room visits and hospitalizations.<sup>27,28</sup>

CHWs may also be referred to, for example, as:

- Promotor(a) de Salud (health promoter),
- community care coordinator,
- community health information specialist,
- community health worker hotline,

- lay health advisor,
- community health advocate/educator, and
- community outreach worker.

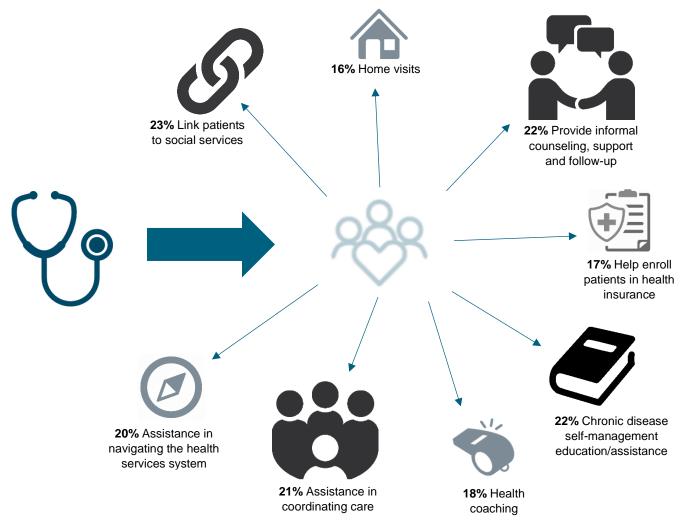
Table 3: Providers Awareness of Community Health Workers(CHWs) And Their Pratice Involvement

	Yes	No
Familiar with CHWs	192 (39.8%)	291 (60.2%)
Urban	106 (38.3%)	171 (61.7%)
Rural	86 (41.7%)	120 (58.2%)
I.H.S.	5 (100%)	0
V.A.	14 (70.0%)	6 (30.0%)
F.Q.H.C.	12 (85.7%)	2 (14.3%)
R.H.C.	36 (38.3%)	58 (61.7%)
Larger H.S./ Hospital	73 (39.2%)	113 (60.8%)
Independent Clinics	52 (31.7%)	112 (68.3%)
CHWs involved in patient practice	85 (17.3%)	364 (74.1%)
Urban	47 (18.6%)	206 (81.4%)
Rural	38 (19.4%)	158 (80.6%)
I.H.S.	4 (80.0%)	1 (20.0%)
V.A.	10 (55.6%)	8 (44.4%)
F.Q.H.C.	10 (76.9%)	3 (23.1%)
R.H.C.	14 (15.9%)	74 (84.1%)
Larger H.S./ Hospital	27 (16.1%)	141 (83.9%)
Independent Clinic	20 (12.7%)	137 (87.3%)

<sup>&</sup>lt;sup>27</sup> Brownstein, J. N., Bone, L. R., Dennison, C. R., Hill, M. N., Kim, M. T., & Levine, D. M. (2005). Community health workers as interventionists in the prevention and control of heart disease and stroke. American journal of preventive medicine, 29(5), 128-133.

<sup>&</sup>lt;sup>28</sup> Martinez, J., Ro, M., William Villa, N., Powell, W., & Knickman, J. R. (2011). Transforming the delivery of care in the post–health reform era: what role will community health workers play?. American Journal of Public Health, 101(12), e1-e5.

Figure 9: Percent Of Providers That Refer Patients To Community Health Workers For Selected Services



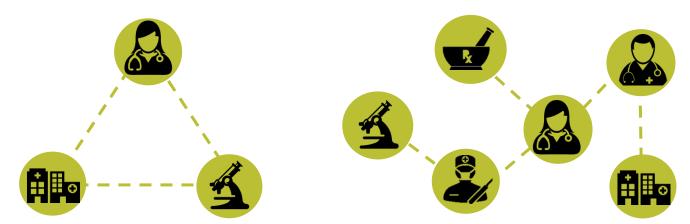
#### Referrals

Primary Care Providers use referrals for a magnitude of reasons such as to supply additional opinions from subject matter experts, order laboratory tests, or imaging studies. Referral utilization and management varies by provider and even health system, and is dependent upon several variables including provider factors and specialty, patient characteristics, practice size, and health plans.<sup>29,30</sup> Referrals can have significant effects on medical costs, quality of care, and access to the health system.<sup>31</sup>

Utilizing an EHR system to make referrals has numerous benefits including the reduction of errors and the ability to capture many more referrals as revenue are much more important.<sup>32</sup> Additionally, a high percentage of paper referrals are either physically lost by the patient or by the facility thus incurring a huge liability to both the primary care and specialist provider. <sup>33</sup>

However, there are still multiple barriers to providers achieving care coordination through their EHR. A key barrier is the lack of practices' ability to exchange data electronically with unaffiliated practices.<sup>34</sup>

Figure 10: Percent of Providers Utilizing Their EHR to Make Referrals Inside and Outside of Their Organization



61% of providers use their E.H.R to make referrals INSIDE their organization. 51% of providers use their E.H.R to make referrals OUTSIDE their organization.

<sup>&</sup>lt;sup>29</sup> Shea D, Stuart B, Vasey J, Nag S. Medicare physician referral patterns. Health Serv Res 1999;34(1):331-48.

 $<sup>^{30}</sup>$  Kassirer JP. Access to specialty care. N Engl J Med 1994;331(17):1151-3.

<sup>&</sup>lt;sup>31</sup> Bertakis, K. D., Callahan, E. J., Azari, R., & Robbins, J. A. (2001). Predictors of patient referrals by primary care residents to specialty care clinics. Fam Med, 33(3), 203-9.

<sup>32</sup> Referral MD. Benefits of a Electronic Patient Referral System Vs A Paper System. https://getreferralmd.com/2012/02/electronic-dental-referrals/

<sup>&</sup>lt;sup>33</sup> Woodworth, Glenn. "2003: The Year of Medical Paperwork Simplification," Journal of Healthcare Information Managament Winter 2003, vol. 17. no. 1, pp. 12-13.

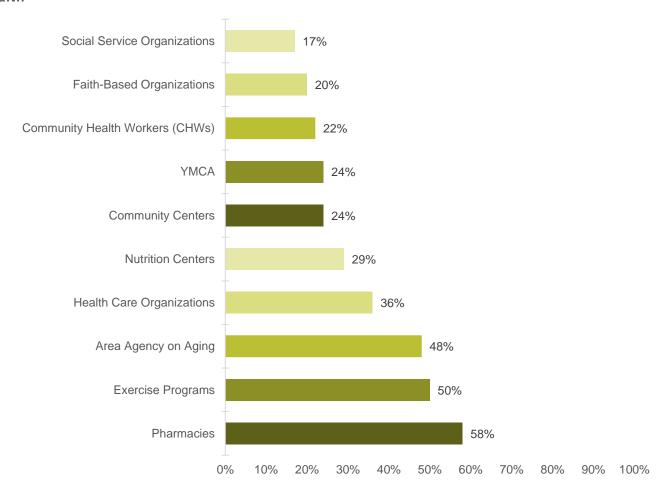
<sup>&</sup>lt;sup>34</sup> Genna R Cohen, Julia Adler-Milstein; Meaningful use care coordination criteria: Perceived barriers and benefits among primary care providers, Journal of the American Medical Informatics Association, Volume 23, Issue e1, 1 April 2016, Pages e146–e151, https://doi.org/10.1093/jamia/ocv147

#### **Community Resources**

Ideally, a medical neighborhood encourages population health and shares resources and infrastructure (for such efforts as health information technology and performance measurement).<sup>35</sup> Community resources, from school to government, non-profits and faith-based organization, bolster health systems' efforts to keep patients supported, involved and active.

- Pharmacies are the most common entity that providers reported referring individuals to for assistance in managing their health.
- 50% of providers reported referring individuals to an exercise program, while only 29% of providers refer individuals to nutrition centers.

Figure 11: Percentage Of Providers That Refer Individuals For Assistance In Managing Their Health

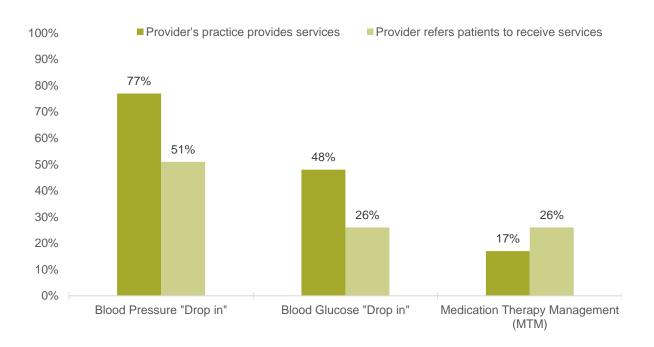


<sup>&</sup>lt;sup>35</sup> Taylor EF, Lake T, Nysenbaum J, Peterson G, Meyers D. Coordinating care in the medical neighborhood: critical components and available mechanisms. White Paper (Prepared by Mathematica Policy Research under Contract No. HHSA290200900019I TO2). AHRQ Publication No. 11-0064. Rockville, MD: Agency for Healthcare Research and Quality. June 2011.

An estimated 1.5 million preventable adverse events occur each year as a result of medication-related problems and medication mismanagement.<sup>35</sup> Medication Therapy Management (MTM) services include: medication therapy reviews, pharmacotherapy consults, anticoagulation management, immunizations, health and wellness programs and many other clinical services to help patients achieve the most benefits from their medications through actively managing drug therapy and identifying, preventing and resolving medication-related problems.<sup>36</sup>

• Only 26% of providers refer their patients to receive Medication Therapy Management (MTM) services.

Figure 12: Percentage Of Providers That Offer And/Or Refer Individuals For Selected Diabetic and Hypertensive Services



19

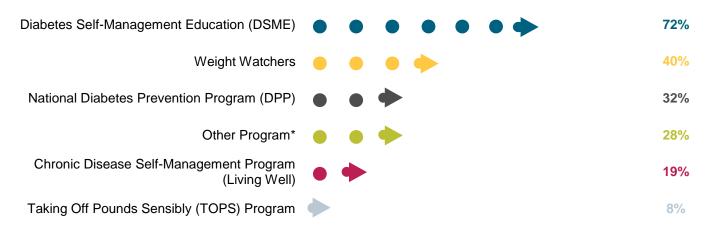
<sup>&</sup>lt;sup>36</sup> American Pharmacist Association. (2007). APhA MTM Central.

#### **Evidence-Based Programs**

While physicians can facilitate chronic disease prevention and control attempts among patients, physican counseleing alone can rarely provide interventions of sufficient intensity needed to promote long-term lifestyle changes in patients.<sup>37</sup> Evidence-based programs offer proven approaches to promote health and prevent disease among individuals. They are based on research and provide documented health benefits.

• Diabetes Self-Management Education is the most commonly referred (72%) evidence-based program by surveyed providers.

Figure 13: Percent Of Providers That Reported Referring Patients To The Following Chronic Disease Prevention And Control Evidence-Based Programs<sup>38</sup>



\*Other answered included: Individualized education from (a) Dieticians/Nutritionist, (b) Endrocrinologist, (c) Diabetes Educator or (d) Health Coach; Inhouse weight loss or nutrition program.

<sup>38</sup> For more information of evidence-based programs for hypertensive and diabetic patients visit: <a href="www.partnersNhealth.com">www.partnersNhealth.com</a> or contact Nebraska Department of Health and Human Services, Control Disease Prevention and Control Program

<sup>&</sup>lt;sup>37</sup> Kreuter MW, Chheda SG, Bull FC. How does physician advice influence patient behavior? Evidence for a priming effect. Arch Fam Med. 2000:9(5):426–433

# **Appendix A: Survey**



## **Community Health Care System Comprehensive Survey**

Creighton
UNIVERSITY
Center for
Health Services Research

3. Please

review and update your professional information.

Name (first, last, credentials):	
Email:	
Primary Specialty:	
Additional Specialty(s):	
4. Please provide/update y	our primary practice site information.
Primary Practice Site Name:	
Primary Practice Address:	
City, State, Zip:	
Phone:	
Fax:	
Practice Administrator Name:	
Type of Facility (check one):	☐ Solo provider practice ☐ Multi-provider owned clinic ☐ Health System Owned Clinic ☐ Certified Rural Health Clinic ☐ Federally Qualified Health Center
How many of each staff type at this facility (enter number):	MDDONPPANursesCNACMADieticianPharmacistSocial WorkerMental/behavioral health professionalLactation consultantCommunity Health Worker <sup>a</sup>
Larger Health System Name:	
the health system and community names for this type of health care community health advocate, outre	is a trusted member of and/or has a good understanding of the community and serves as a liaison/link to to facilitate access to services and improve the quality and cultural competence of service delivery. Other provider include promotor (a) de salud, community health representative, lay health ambassador, each worker and lay health advisor.
Second Practice Site Name:	
Second Practice Address:	
City, State, Zip:	
Phone:	
Fax:	
Practice Administrator Name:	

<b>Pre-Hypertension:</b> $\Box_1 Yes \Box_2 No$ <b>Hypertension:</b> $\Box_1 Yes \Box_2 No$ <b>Pre-Diabetes:</b> $\Box_1 Yes \Box_2 No$ <b>Diabetes:</b> $\Box_1 Yes \Box_2 No$	
7. The nature of this survey is both quantitative and qualitative in determining the current and self-management practices in place for people at risk for or diagnosed with hypertensic response generates baseline data to better understand the gaps in IT, care, and referral procedures can be used to bridge gaps and reduce disparities. Please tell us if you wish to reduce and assistance with process improvement in these areas:   \[ \square\$ \square\$ \square\$ \square\$ \square\$ \square\$ No \]  YOUR PATIENTS – MANAGEMENT OF DIABETES AND HYPERTENSION	on and diabetes. Your esses so our program
8. Please answer to the best of your ability. A rough estimate is acceptable.	Estimate the Number
a. How many adult patients are active in your practice site?	
b. As a provider, how many patients do you actively manage?	
9. Please answer to the best of your ability. A rough estimate is acceptable.	Estimate the Percent
a. What percentage of your adult patients would you estimate have high blood pressure/hypertension? (High is >140mmHg/90mmHg)	
<ul> <li>b. What percentage of those patients with hypertension would you estimate have achieved an acceptable level of BP control? (Controlled is ≤140mmHg/90mmHg)</li> </ul>	
c. What percentage of your adult patients do you estimate have pre-hypertension?	
d. What percentage of your adult patients do you estimate have type I diabetes?	
e. What percentage of your <b>type I</b> DM patients would you estimate have poor blood glucose control (HgbA1c at 9 or greater)?	
f. What percentage of your <b>type I</b> DM patient would you estimate have achieved an acceptable level blood glucose control (HgbA1c= 7 or less)?	
g. What percentage of your adult patients would you estimate have type II diabetes?	
h. What percentage of your patients with type II DM would you estimate have poor blood glucose control (HgbA1c at 9 or greater)?	
i. What percentage of your patients with <b>type II</b> DM do you estimate have achieved an acceptable level blood glucose control (HgbA1c= 7 or less)?	
j. What percentage of your adult patients do you estimate have pre-diabetes? (Pre-diabetes (BMI at or greater than 24kg/m2; fasting plasma glucose of 100-125 mg/dl; A1c of 5.7-6.4))	

6. Do you manage patients with any of the following conditions?

#### YOUR PATIENTS - SCREENING AND LIFE STYLE MANAGEMENT

10. Please answer the following questions.		
a. Is it standard practice to screen for pre-hypertension in your practice?	□₁yes	□₂no
b. Is it standard practice to screen for pre-diabetes in your practice?	□₁yes	□₂ no
c. Is it standard practice to screen for obesity in your practice?	□₁yes	□₂ no
d. Is it standard practice to screen for tobacco use in your practice?	□₁yes	□₂ no
e. Does your practice have policies or protocols to refer patients with prediabetes or a high risk for type II diabetes to the National Diabetes Prevention Program?	□₁yes	□ <sub>2</sub> no
f. Is it standard practice to refer patients with hypertension or diabetes to any of the following:		
f <sub>1</sub> . Living Well program?	□₁yes	□₂ no
f <sub>2</sub> . Take Off Pounds Safely (TOPS) program?	□₁yes	□₂ no
f <sub>3</sub> . Weight Watchers?	□₁yes	□₂ no
f <sub>4</sub> . Diabetes Self-Management Education	□₁yes	□₂ no
f <sub>5</sub> . Other :	□₁yes	□₂ no

#### YOUR PATIENTS - EXTENDED SERVICES

11. Please answer the following questions.		Select one	
a. Are there diabetes group education classes available through your practice?	□₁yes	□₂no	
b. Are there hypertension group education classes available through your practice?	□₁yes	□₂no	
c. Does your practice have a Diabetes Self-Management Education (DSME) program?	□₁yes	□₂no	
d. Does your practice provide formal Medication Therapy Management Services (MTMS)?	□₁yes	□₂no	
e. Is there a contracted service that provides MTMS for your patients that you make available through your practice?	□₁yes	□₂no	
f. Does your practice provide blood glucose monitoring drop in service for patients?	□₁yes	□₂no	
g. Does your practice provide blood pressure monitoring drop in service for patients?	□₁yes	□₂no	

#### YOUR PATIENTS - USE OF COMMUNITY HEALTH WORKERS

12. Please answer the following questions.		Select one	
a. Are you familiar with Community Health Workers (CHWs)?	□₁yes	□₂no	
b. Are there CHWs involved in your patient practice?	□₁yes	□₂no	
c. Do you refer patients to CHWs for any of the following:		STATE OF	
c1. Linking patients to social service resources	□₁yes	□₂no	
c2. Helping enroll patients in health insurance	□₁yes	□₂no	
c <sub>3</sub> . Assistance in navigating the health services system	□₁yes	□₂no	
c4. Assistance in coordinating care	□₁yes	□₂no	
cs. Provide informal counseling, support and follow-up	□₁yes	□₂no	
c₅. Health Coaching	□₁yes	□₂no	
c <sub>7</sub> . Home visits	□₁yes	□₂no	
cs. Chronic disease self-management education/assistance	□₁yes	□₂no	

#### YOUR PATIENTS -SELF HELP

13. Please answer the following to the best of your ability.	Select o	ne
<ul><li>a. Is it standard practice to engage patients in self-management with a goal setting plan?</li><li>b. Is this documented in the patient chart?</li></ul>	□₁yes □₁yes	□₂no □₂no
c. Do you educate patients to self-monitor their blood pressure between visits?	□₁yes	□₂no
d. Is it standard practice to refer patients to others in the community for blood pressure "drop in" measurements and monitoring?  e. Is this documented in the patient chart?	□₁yes □₁yes	□₂no □₂no
f. Do you educate and support patients to self-monitor their blood sugar/or HbgA1c between visits with you?	□₁yes	□₂no
g. Is it standard practice to refer patients to others in the community for blood glucose "drop in" measurements and monitoring? h. Is this documented in the patient chart?	□1yes □1yes	□2no □2no
i. Is it standard practice to refer patients to receive Medication Therapy Management Services (medication reviews) to anyone?	□₁yes □₁yes	□₂no □₂no

#### YOUR PRACTICE ORGANIZATION

14.	Please check all of the services you provide in your personal practice.
	a. Same day appointments
	b. Timely clinical advice by telephone
	c. Routinely planned visits for chronic disease management
	d. Use dashboard data in daily practice
	e. Panel management for chronic diseases (i.e. hypertension or diabetes)
	f. Formal procedure for making referrals
	g. Written policy guiding the process of how referrals are made
	h. Document referrals in the patient's record
	i. Participate in continuous quality improvement - review information from my practice to improve daily work
	j. Include planned care visits for preventive services
	k. provide intensive care management for patients at high risk for chronic diseases (e.g. hypertension, diabetes)
	I. My practice is part of an Accountable Care Organization (ACO)
	m. My practice operates as a Patient Centered Medical Home (PCMH)
	n. My practice is an NCQA Recognized or Joint Commission Certified PCMH
	o. Report to Medicare PQRS 1 (Poor Diabetes Control)
	p. Report to Medicare PQRS 236 (Hypertension control)
	q. Report National Quality Forum Measure 0059 (Poor Diabetes control)
	r. Report National Quality Forum Measure 0018 (Poor blood pressure control)
	s. I participate in a multi-disciplinary team approach to control blood pressure.
	t. I participate in a multi-disciplinary team approach to control diabetes.

#### YOUR PRACTICE AND THE ELECTRONIC HEALTH RECORD

<b>15.</b> What is the name of the product and vendor? (E	.g. Healthland Centriq Clinic by Healthland)
Write in here product <sub>c1</sub> :	Vendor <sub>c2</sub> :

16.	Please ch	eck all that apply.	
	a. I use an	electronic health record	
	b. I use a cl	nronic disease registry	
	d. I use an EHR to make referrals to other practitioners or services INSIDE my organization.		
	e. I use an EHR to make referrals to other practitioners or services OUTSIDE of my organization.		
	f. I use the following functions in my EHR:		
	□ <sub>f1</sub>	Clínical decision support	
	□ <sub>f2</sub>	Alerts	
	□ <sub>f3</sub>	Feedback reports	
	□f4	Dashboards	
	□ <sub>f5</sub>	Patient reminder system	
	□ <sub>f6</sub>	Patient registry to track all HTN patients in your practice	
	□ <sub>f7</sub>	Patient registry to track all DM patients in your practice	
	□ <sub>f8</sub>	E- prescribing	
	□ <sub>f9</sub>	Exchange of record information with other providers	

#### ABOUT YOUR COMMUNITY

<b>16.</b> There are a variety of community resources in Nebraska meant to help individuals in managing their health. For each of the following organizations, please indicate if your clinic partners with or refers individuals for assistance in managing their health.		
	a. Health care organizations	
	b. Area Agency on Aging	
	c. YMCA	
	d. Community centers	
	e. Faith-based organizations	
	f. Pharmacies	
	g. Nutrition centers	
	h. Exercise programs	
	i. Social services organization	

17. If you wish to receive further assessment and assistance with process improvement in these areas please provide the name of the person to contact: \_\_\_\_\_

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY. YOU WILL RECEIVE A SUMMARY OF THE FINAL RESULTS IN THE NEXT TWO MONTHS.