

Profile of Chronic Disease in Nevada's FQHCs

STEVEN MESSINGER, DAWN GENTSCH, KIMBERLY LAMBRECHT

Prepared for the Nevada State Division of Public and Behavioral Health through grant 5 NU58DP004820-03-00 from the Centers for Disease Control and Prevention



Overview

- Introduction
- Data
- Results
- Meaningful Use Reporting
- Questions

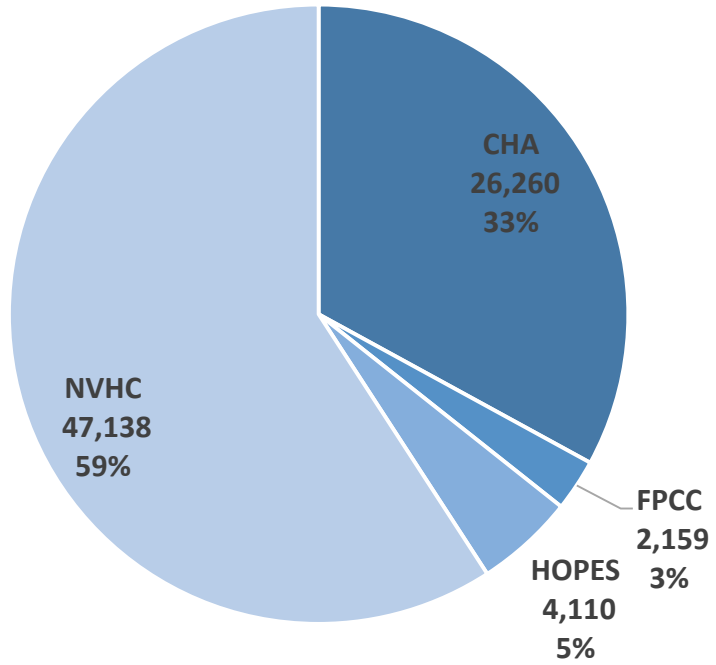
Introduction

- Project funded by CDC 1305 grant
- Objective: To utilize UDS and CHC EMR systems to showcase the burden of
 - pre-diabetes
 - diabetes
 - heart disease
 - stroke
 - tobacco use

- Data for this report was collected from four Federally Qualified Health Centers (FQHCs) in Nevada:
 - Community Health Alliance (CHA) in Washoe County
 - Northern Nevada HOPES (HOPES) in Washoe County
 - First Person Care Clinic (FPCC) in Clark County
 - Nevada Health Centers (NVHC) in Clark County, Carson City, and throughout rural Nevada.
- This data is inclusive of the 79,667 patients served by these FQHCs during 2015.

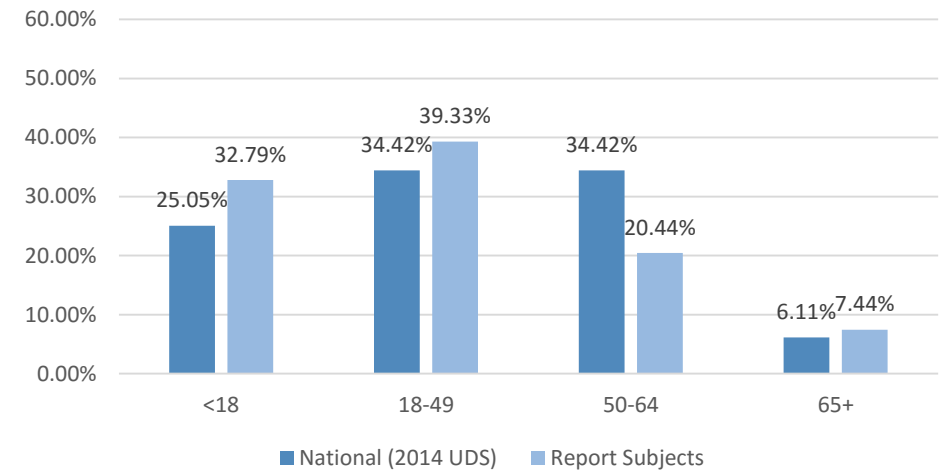
Data

Patients by Health Center



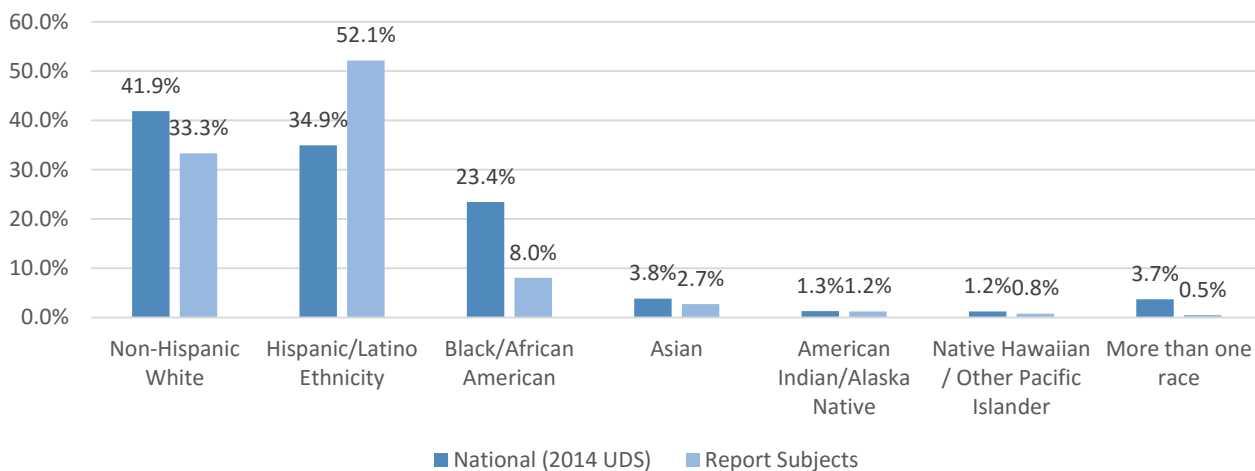
Gender		
	National (2014 UDS)	Report Subjects
Male	41.7%	40.3%
Female	58.3%	59.7%

Patient Age



Data

Patient Race/Ethnicity



Patient Race/Ethnicity (as a share of total patients in subject FQHCs)				
Patient Race	Hispanic or Latino	Not Hispanic or Latino	Unreported	Total Race
American Indian or Alaska Native	0.61%	0.62%	-	1.23%
Asian	0.08%	2.62%	-	2.70%
Black or African American	0.42%	7.60%	-	8.02%
Multiple Races	0.27%	0.24%	-	0.50%
Native Hawaiian or Other Pacific Islander	0.17%	0.60%	-	0.77%
White	42.73%	33.27%	-	76.01%
Unreported	7.87%	1.12%	1.78%	10.75%
Total Ethnicity	52.15%	46.07%	1.78%	100.00%

Results--Diabetes

- 6,756 patients diagnosed
- Higher rates among men than women
- Low rates among patients aged 18-49, but more than a quarter of diagnoses are in this age range
- Nearly 3 in 10 patients over 65 diagnosed

Diabetes Rates by Gender		
Gender	% of Total Patients	% of Total Diabetes
Male	9.61%	45.71%
Female	7.72%	54.29%
Total	8.48%	100.00%

Diabetes Rates by Age		
Age	% of Total Patients	% of Total Diabetes
<18	0.11%	0.44%
18-49	5.80%	26.89%
50-64	19.48%	46.95%
65+	29.31%	25.71%
Total	8.48%	100.00%

Results--Diabetes

- Unreported non-Hispanic/Latino rate is due to an EHR mapping issue uncovered by this report
 - The vast majority if not the entirety of this category belongs in White non-Hispanic which would increase this rate by a small amount
- Highest rates among Asian and NHOPI non-Hispanics
- Lowest rates among Black and American Indian Hispanics

Diabetes Rates By Race and Ethnicity (highest rates in red, lowest in blue)

Patient Race	Hispanic or Latino	Not Hispanic or Latino	Unreported	Total Race
American Indian or Alaska Native	2.48%	7.26%	-	4.90%
Asian	6.56%	16.83%	-	16.54%
Black or African American	1.79%	6.90%	-	6.63%
Multiple Races	10.38%	8.51%	-	9.50%
Native Hawaiian or Other Pacific Islander	9.42%	15.97%	-	14.50%
White	7.29%	8.85%	-	7.97%
Unreported	10.62%	29.70%	2.96%	11.35%
Total Ethnicity	7.71%	9.56%	2.96%	8.48%

Results--Diabetes

- The largest share of diabetic patients are White Hispanics followed closely by White non-Hispanics
- A significant number of the remainder are Unreported Hispanics

Race and Ethnicity of Diabetic Patients				
Patient Race	Hispanic or Latino	Not Hispanic or Latino	Unreported	Total Race
American Indian or Alaska Native	0.18%	0.53%	-	0.71%
Asian	0.06%	5.21%	-	5.27%
Black or African American	0.09%	6.19%	-	6.28%
Multiple Races	0.33%	0.24%	-	0.56%
Native Hawaiian or Other Pacific Islander	0.19%	1.12%	-	1.32%
White	36.74%	34.74%	-	71.48%
Unreported	9.86%	3.91%	0.62%	14.39%
Total Ethnicity	47.44%	51.94%	0.62%	100.00%

Results--Diabetes

- More than half of the diabetic patients were also diagnosed with hypertension or obesity
- Nearly a third had both these diagnoses

Comorbidities of Diabetic Patients			
	Hypertension	Obesity	Tobacco Use
Diabetes and	55.46%	54.87%	19.17%
Diabetes, Obesity and	32.08%	-	16.62%
Diabetes, Tobacco Use and	11.89%	16.62%	-
Diabetes, Obesity, Tobacco Use and	9.55%	-	-



Results—Pre-Diabetes

- 2,174 patients diagnosed
- Higher rate in females—opposite of the diabetes rate
- The largest share of pre-diabetic patients are aged 18 to 49

Pre-Diabetes Rates by Gender		
Gender	% of Total Patients	% of Total Pre-Diabetes
Male	2.41%	35.69%
Female	2.94%	64.31%
Total	2.73%	100.00%

Pre-Diabetes Rates by Age		
Age	% of Total Patients	% of Total Pre-Diabetes
<18	0.02%	0.23%
18-49	3.02%	43.51%
50-64	5.48%	41.03%
65+	5.58%	15.23%
Total	2.73%	100.00%

Results—Pre-Diabetes

Pre-Diabetes Rates by Race Ethnicity (highest rates in red, lowest in blue)

Patient Race	Hispanic or Latino	Not Hispanic or Latino	Unreported	Total Race
American Indian or Alaska Native	1.24%	1.01%	-	1.23%
Asian	1.64%	2.06%	-	2.14%
Black or African American	1.19%	3.85%	-	3.74%
Multiple Races	4.72%	3.19%	-	4.00%
Native Hawaiian or Other Pacific Islander	0.00%	1.05%	-	0.98%
White	2.50%	2.49%	-	2.52%
Unreported	3.43%	12.15%	0.56%	3.86%
Total Ethnicity	2.62%	2.89%	1.83%	2.73%



Diabetes Rates By Race and Ethnicity (highest rates in red, lowest in blue)

Patient Race	Hispanic or Latino	Not Hispanic or Latino	Unreported	Total Race
American Indian or Alaska Native	2.48%	7.26%	-	4.90%
Asian	6.56%	16.83%	-	16.54%
Black or African American	1.79%	6.90%	-	6.63%
Multiple Races	10.38%	8.51%	-	9.50%
Native Hawaiian or Other Pacific Islander	9.42%	15.97%	-	14.50%
White	7.29%	8.85%	-	7.97%
Unreported	10.62%	29.70%	2.96%	11.35%
Total Ethnicity	7.71%	9.56%	2.96%	8.48%



- White Hispanics still the largest share of pre-diabetic patients followed by White non-Hispanics

Race and Ethnicity of Pre-Diabetic Patients				
Patient Race	Hispanic or Latino	Not Hispanic or Latino	Unreported	Total Race
American Indian or Alaska Native	0.28%	0.23%	0.05%	0.55%
Asian	0.05%	1.98%	0.09%	2.12%
Black or African American	0.18%	10.72%	0.09%	10.99%
Multiple Races	0.46%	0.28%	0.00%	0.74%
Native Hawaiian or Other Pacific Islander	0.00%	0.23%	0.05%	0.28%
White	39.14%	30.40%	0.55%	70.10%
Unreported	9.89%	4.97%	0.37%	15.23%
Total Ethnicity	50.00%	48.80%	1.20%	100.00%

- About 3/5 of pre-diabetic patients are obese
- 2/5 are hypertensive
- More than 1/4 use tobacco products

Comorbidities of Pre-Diabetic Patients			
	Hypertension	Obesity	Tobacco use
Pre-diabetes and	43.19%	59.38%	26.95%
Pre-diabetes/Obesity and	26.59%	-	15.82%
Pre-diabetes/Tobacco Use and	14.08%	15.82%	-
Pre-diabetes/Obesity/Tobacco Use and	8.19%	-	-

Results—Hypertension

- 10,365 patients diagnosed
- Men are much more likely to be diagnosed with hypertension
- Women make up the majority of hypertensive patients
- The risk of hypertension rises with age
- About half of hypertensive patients are aged 50 to 64

Hypertension Rates by Gender		
Gender	% of Total Patients	% of Total Hypertension
Male	14.90%	46.21%
Female	11.73%	53.79%
Total	13.01%	100.00%

Hypertension Rates by Age		
Age	% of Total Patients	% of Total Hypertension
<18	0.10%	0.26%
18-49	7.84%	23.69%
50-64	31.46%	49.43%
65+	46.55%	26.62%
Total	13.01%	100.00%

Results—Hypertension

- Highest rates among non-Hispanic Asians, NHOPIs, Whites, and Blacks
- Lowest rates among Hispanic American Indians and Blacks, and non-Hispanic American Indians

Hypertension Rates by Race and Ethnicity (highest rates in red, lowest in blue)

Patient Race	Hispanic or Latino	Not Hispanic or Latino	Unreported	Total Race
American Indian or Alaska Native	1.24%	7.86%	-	4.60%
Asian	11.48%	26.30%	-	25.93%
Black or African American	5.36%	15.45%	-	15.06%
Multiple Races	12.74%	14.36%	-	13.50%
Native Hawaiian or Other Pacific Islander	11.59%	19.54%	-	18.24%
White	9.41%	15.68%	-	12.20%
Unreported	9.90%	66.59%	2.40%	14.56%
Total Ethnicity	9.39%	17.42%	5.22%	13.01%

Results—Hypertension

- Largest share of hypertensive patients are non-Hispanic Whites followed by Hispanic Whites and non-Hispanic Blacks

Race and Ethnicity of Hypertensive Patients				
Patient Race	Hispanic or Latino	Not Hispanic or Latino	Unreported	Total Race
American Indian or Alaska Native	0.06%	0.38%	0.00%	0.43%
Asian	0.07%	5.31%	0.01%	5.38%
Black or African American	0.17%	9.03%	0.09%	9.29%
Multiple Races	0.26%	0.26%	0.00%	0.52%
Native Hawaiian or Other Pacific Islander	0.15%	0.90%	0.03%	1.08%
White	30.92%	40.08%	0.26%	71.26%
Unreported	5.99%	5.71%	0.33%	12.03%
Total Ethnicity	37.62%	61.66%	0.71%	100.00%

Results—Hypertension

- Over half of hypertensive patients are obese
- More than a third are diabetic
- More than a quarter use tobacco
- A fifth are obese and diabetic

Comorbidities of Hypertensive Patients				
	Diabetes	Pre-Diabetes	Obesity	Tobacco Use
Hypertension and	36.15%	9.06%	51.95%	27.79%
Hypertension/obesity and	20.90%	5.58%	-	18.98%
Hypertension/tobacco use and	7.75%	2.95%	18.98%	-
Hypertension/obesity/tobacco use and	6.22%	2.35%	-	-

Results—Obesity

- 9,315 patients diagnosed
- The rate of obesity is relatively even between women and men, however, women make up the majority of obese patients
- The rate of obesity is relatively even between patients aged 50-64 and 65 and over
- The rate of obesity among patients aged 18 to 49 is about half the rate of older patients

Obesity Rates by Gender		
Gender	% of Total Patients	% of Total Obesity
Male	11.37%	39.24%
Female	11.91%	60.76%
Total	11.69%	100.00%

Obesity Rates by Age		
Age	% of Total Patients	% of Total Obesity
<18	0.17%	0.47%
18-49	11.98%	40.28%
50-64	24.67%	43.13%
65+	25.32%	16.11%
Total	11.69%	100.00%

Results—Obesity

- The highest rates of obesity are among NHOPI of both ethnicities followed by non-Hispanic Whites
- The lowest rates are among Hispanic Asians, American Indians, and Blacks

Patient Race	Hispanic or Latino	Not Hispanic or Latino	Unreported	Total Race
American Indian or Alaska Native	3.11%	10.08%	-	6.74%
Asian	1.64%	7.65%	-	7.53%
Black or African American	5.36%	11.64%	-	11.42%
Multiple Races	13.68%	12.23%	-	13.00%
Native Hawaiian or Other Pacific Islander	15.94%	20.80%	-	20.03%
White	8.77%	15.31%	-	11.67%
Unreported	10.67%	48.59%	1.20%	13.05%
Total Ethnicity	9.00%	15.06%	3.31%	11.69%

- The largest share of obese patients are non-Hispanic Whites followed by Hispanic Whites

Race and Ethnicity of Obese Patients				
Patient Race	Hispanic or Latino	Not Hispanic or Latino	Unreported	Total Race
American Indian or Alaska Native	0.16%	0.54%	0.01%	0.71%
Asian	0.01%	1.72%	0.01%	1.74%
Black or African American	0.19%	7.57%	0.08%	7.84%
Multiple Races	0.31%	0.25%	0.00%	0.56%
Native Hawaiian or Other Pacific Islander	0.24%	1.06%	0.02%	1.32%
White	32.06%	43.57%	0.20%	75.83%
Unreported	7.18%	4.64%	0.18%	12.00%
Total Ethnicity	40.15%	59.35%	0.50%	100.00%

Results—Obesity

- The majority of obese patients are also hypertensives
- 2 out of 5 are diabetic
- 1 in 4 uses tobacco

Comorbidities of Obese Patients				
	Diabetes	Pre-Diabetes	Hypertension	Tobacco use
Obesity and	39.80%	13.86%	57.81%	25.98%
Obesity/hypertension and	23.26%	6.21%	-	14.30%
Obesity/tobacco use and	7.56%	3.69%	14.30%	-
Obesity/hypertension/tobacco use and	4.87%	1.91%	-	-

Results—Tobacco Use

- Data from one FQHC are excluded
- Men are much more likely to use tobacco, and they make up a majority of tobacco users
- Tobacco use is most common among patients aged 50 to 64 and the largest share of tobacco users is with this group

Tobacco Use Rates by Gender		
Gender	% of Total Patients	% of Total Tobacco Use
Male	9.84%	50.80%
Female	6.33%	49.20%
Total	7.73%	100.00%

Tobacco Use Rates by Age		
Age	% of Total Patients	% of Total Tobacco Use
<18	0.03%	0.12%
18-49	7.75%	38.51%
50-64	18.65%	47.62%
65+	14.29%	13.75%
Total	7.73%	100.00%

Results—Tobacco Use

- Non-Hispanic Whites are most likely to use tobacco, followed by non-Hispanics of Multiple Races, NHOPIs, and Blacks
- Hispanics of all races are much less likely to use tobacco than non-Hispanics

Tobacco Use Rates by Race and Ethnicity (highest rates in red, lowest in blue)

Patient Race	Hispanic or Latino	Not Hispanic or Latino	Unreported	Total Race
American Indian or Alaska Native	0.21%	6.22%	-	3.23%
Asian	3.28%	5.59%	-	5.52%
Black or African American	1.81%	9.61%	-	9.22%
Multiple Races	6.13%	13.83%	-	9.75%
Native Hawaiian or Other Pacific Islander	3.79%	10.18%	-	8.90%
White	2.26%	15.65%	-	7.95%
Unreported	3.10%	35.80%	0.93%	6.02%
Total Ethnicity	2.38%	14.28%	2.37%	7.73%

Results—Tobacco Use

- A large majority of tobacco users are non-Hispanic Whites
- There are more than five times as many non-Hispanic tobacco users than Hispanic

Race and Ethnicity of Patients Using Tobacco				
Patient Race	Hispanic or Latino	Not Hispanic or Latino	Unreported	Total Race
American Indian or Alaska Native	0.02%	0.51%	-	0.53%
Asian	0.03%	1.93%	-	1.97%
Black or African American	0.10%	9.67%	-	9.81%
Multiple Races	0.22%	0.45%	-	0.67%
Native Hawaiian or Other Pacific Islander	0.09%	0.79%	-	0.89%
White	12.72%	64.52%	-	77.53%
Unreported	3.24%	5.14%	0.22%	8.60%
Total Ethnicity	16.42%	83.01%	0.57%	100.00%

- Nearly half of tobacco users are hypertensive, and more than 40% are obese

Comorbidities of Patients Using Tobacco				
	Diabetes	Pre-Diabetes	Hypertension	Obesity
Tobacco Use and	22.05%	9.95%	48.84%	40.84%
Tobacco Use/Hypertension and	13.66%	5.22%	-	22.57%
Tobacco Use/Obesity and	11.97%	5.87%	22.57%	-
Tobacco Use/Hypertension/Obesity and	7.71%	3.05%	-	-

- Health centers reported inconsistent diagnoses for heart disease that made aggregation impossible
- Rates for these diagnoses were unreasonably low
- NVPCA will work with health centers to improve their coding and reporting

Results—Cardiovascular Disease

- Health centers report on two measures related to cardiovascular disease for the Uniform Data System (UDS) required by HRSA
- These data exclude First Person Care Center, which has not had FQHC Look-Alike status long enough to submit to UDS
- 77,508 patients in this sample

2015 UDS Measures of Cardiovascular Disease		
	Compliance Rate	Incidence Rate
Coronary Artery Disease (CAD): Lipid Therapy		
Total Patients 18 and Older with CAD Diagnosis	-	1.46%
CAD Patients prescribed a lipid-lowering medication	78.64%	-
Ischemic Vascular Disease* (IVD): Aspirin or Antithrombotic Therapy		
Total Patients 18 and Older with IVD Diagnosis	-	1.50%
IVD Patients with Aspirin or other Antithrombotic Therapy	57.71%	-

*This measure also includes acute myocardial infarction, coronary artery bypass graft, and percutaneous transluminal coronary angioplasty patients.

Meaningful Use Reporting

- Clinic's EHR vendor is in the process of developing MU reporting capability
- Clinic is interested in staff training for accurate MU reporting which is being provided by NVPCA

Clinic A			
Meaningful Use Stage 1 Year 2015			
Measure	2015	Goal for 2016	Action
Antiplatelet Therapy (NQF 67)	Report Not Available	50%	<ul style="list-style-type: none">• Develop Report with EHR Vendor• Provide Staff Training
Current Medications (NQF 419)	79.86%	95%	<ul style="list-style-type: none">• Provide Staff Training
Medication Reconciliation (NQF 97)	No Data Reported	50%	<ul style="list-style-type: none">• Provide Staff Training
BMI (NQF 421)	Report Not Available	50%	<ul style="list-style-type: none">• Develop Report with EHR Vendor• Provide Staff Training
Tobacco Screen (NQF 28)	Report Not Available	50%	<ul style="list-style-type: none">• Develop Report with EHR Vendor• Provide Staff Training

Meaningful Use Reporting

- Clinic B has most of their eligible providers enrolled in the MU program at the Adopt, Implement, Upgrade (AIU) stage
- Clinic has not submitted for 2016 in part due to problems configuring their EHR to interface with the state Immunization Information System
- Fixing this is a priority

Clinic B Meaningful Use Reporting				
Measure	2016 Q1	CY2015 UDS Data	Goal for 2016	Action
Antiplatelet Therapy (NQF 67)	7.14%	41.56%	50%	<ul style="list-style-type: none"> • Provide Staff Training • Data validation to ensure structured field for this measure in EHR is populating report accurately.
Current Medications (NQF 419)	82.13%	--	95%	<ul style="list-style-type: none"> • Provide Staff Training
Medication Reconciliation (NQF 97)	94.28%	--	stable	<ul style="list-style-type: none"> • Provide Staff Training
BMI (NQF 421)	94.97%	94.58%	stable	<ul style="list-style-type: none"> • Ensure each Eligible Provider exceeds the threshold %.
Tobacco Screen (NQF 28)	*	87.74%	stable	<ul style="list-style-type: none"> • Develop Report with EHR Vendor • Provide Staff Training

Meaningful Use Reporting

- In 2015, Clinic C reported for AIU using 2014 data
- In October 2015 this health center changed to a new EHR
- They are working to attest in 2016 for Stage 1

Clinic C Meaningful Use Reporting			
Measure	2014	Goal for 2016	Action
Antiplatelet Therapy (NQF 67)	63.86%	50%	<ul style="list-style-type: none">• Validate report with EHR• Provide Staff Training
Current Medications (NQF 419)	NA	95%	<ul style="list-style-type: none">• Validate report with EHR• Provide Staff Training
Medication Reconciliation (NQF 97)	NA	50%	<ul style="list-style-type: none">• Validate report with EHR• Provide Staff Training
BMI (NQF 421)	45.65%*	Stable	<ul style="list-style-type: none">• Validate report with EHR• Provide Staff Training
Tobacco Screen (NQF 28)	84.95%*	Stable	<ul style="list-style-type: none">• Validate report with EHR• Provide Staff Training

Steven Messinger

Performance Improvement Analyst

Nevada Primary Care Association

smessinger@nvzca.org

