

# Diabetes Audit Results, Portland Area, 2004-2015

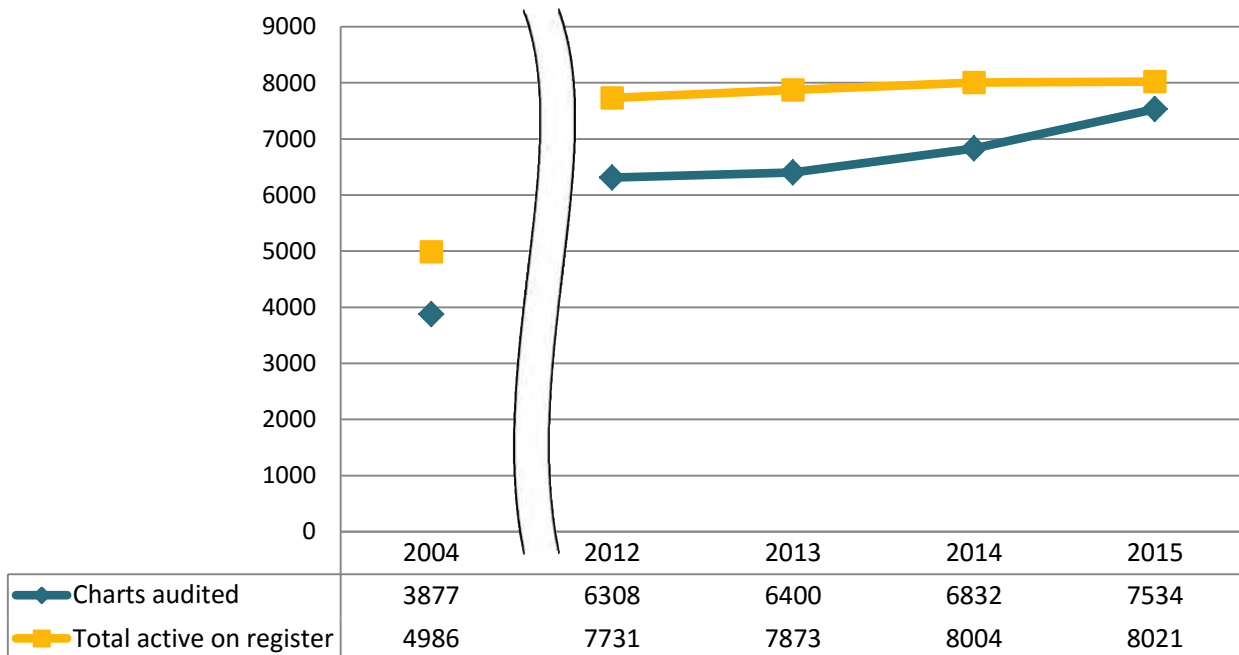
## Site-Specific Trends

The following report contains information from your program's annual diabetes audit submission to the Indian Health Service over the past few years. The report was prepared for your site by the Western Tribal Diabetes Project at the Northwest Portland Area Indian Health Board, which receives Special Diabetes Program for Indians (SDPI) funding to assist Northwest tribes in managing their diabetes information. If you have any questions about the report, or if you would like this report in Excel format, please contact the Western Tribal Diabetes Project at [wtdp@npaihb.org](mailto:wtdp@npaihb.org) or (800) 862-5497.

### Notes:

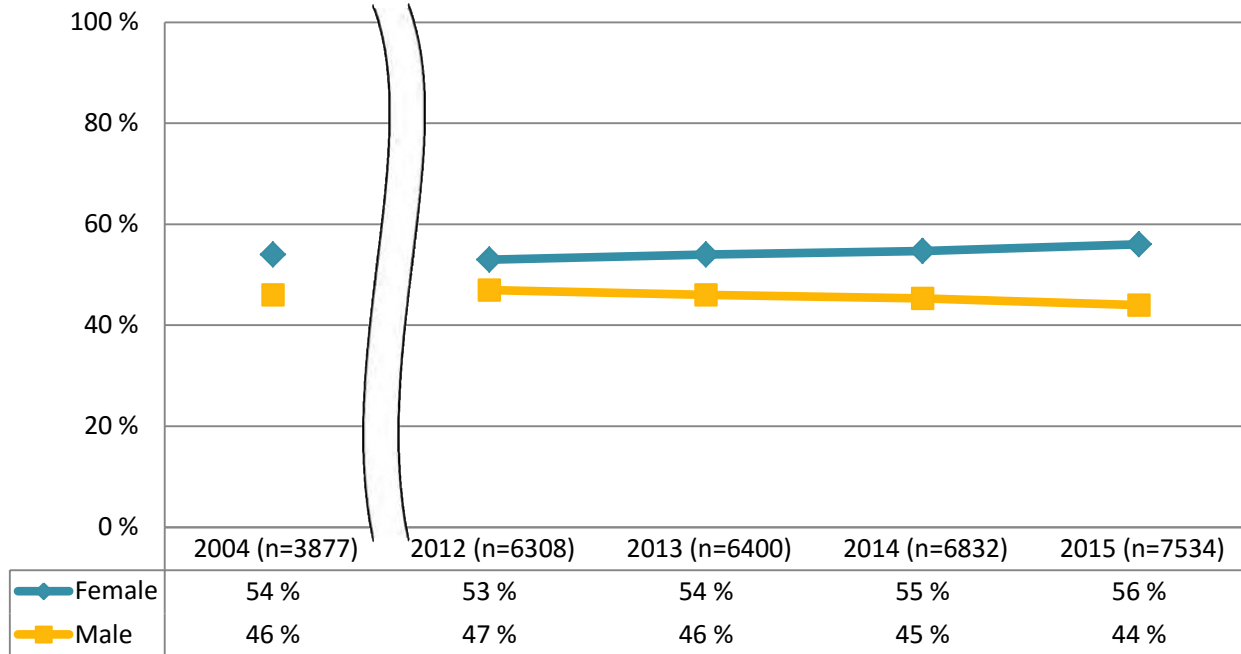
- Due to rounding, charts will occasionally not add up to 100%.
- Data are presented by the year in which the data were submitted. Most likely, the patient care reflected in the audit was delivered in the previous year. For example, the columns 2013 in these charts reflect care that was delivered in 2012.
- Blank spaces have been left for some indicators in years when information was not reported.

### Patients in the Diabetes Register

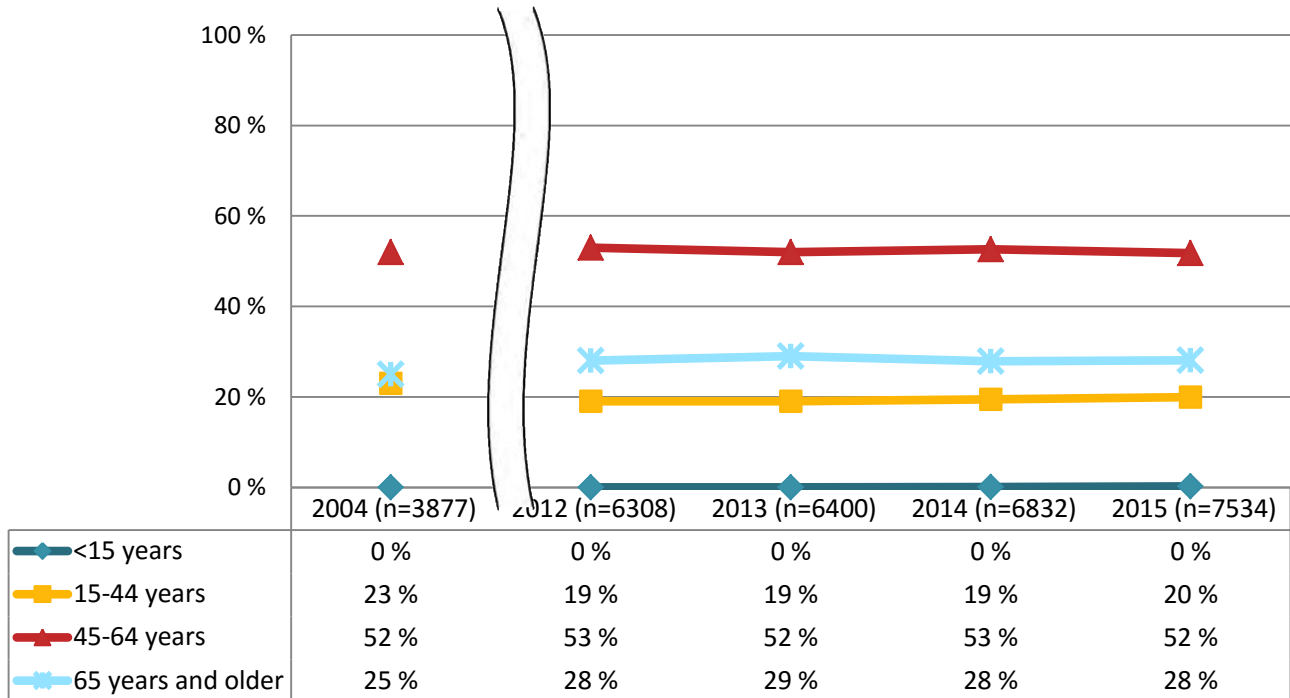


## Diabetes Audit Results, Portland Area, 2004-2015

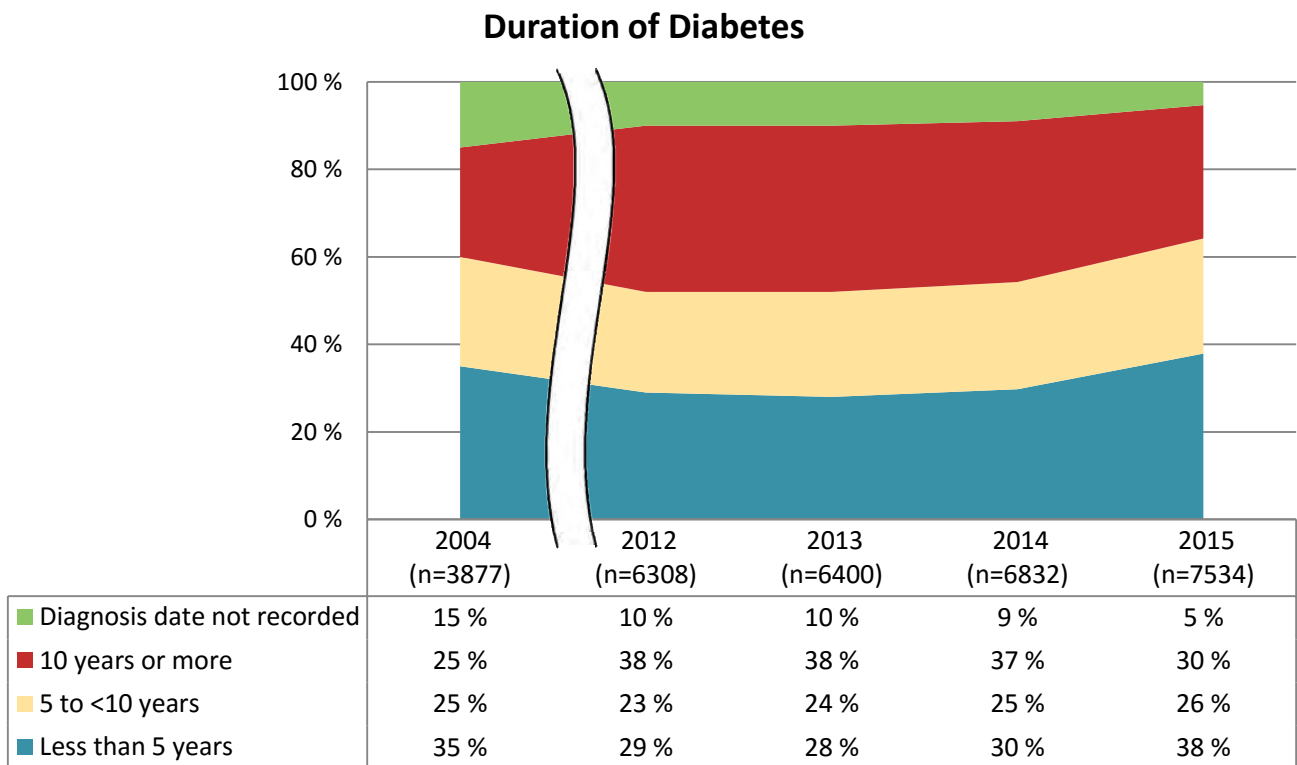
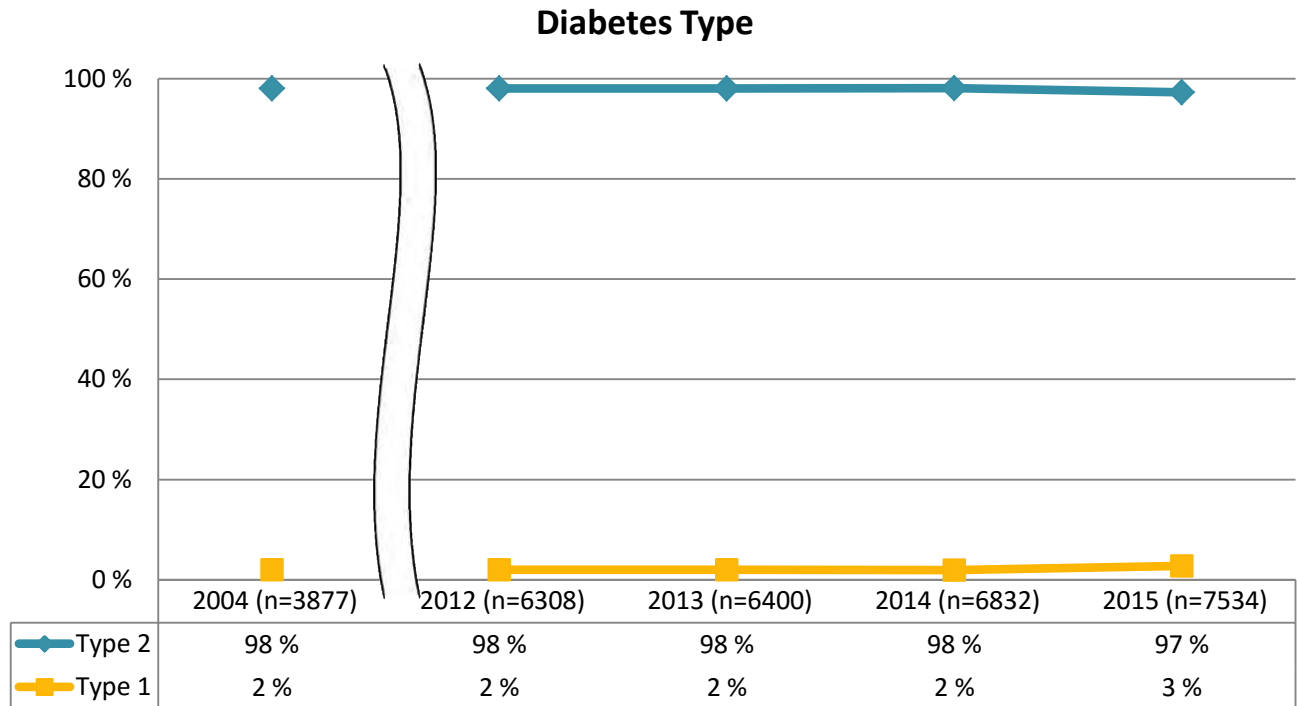
### Gender of Patients with Diabetes



### Age of Patients with Diabetes



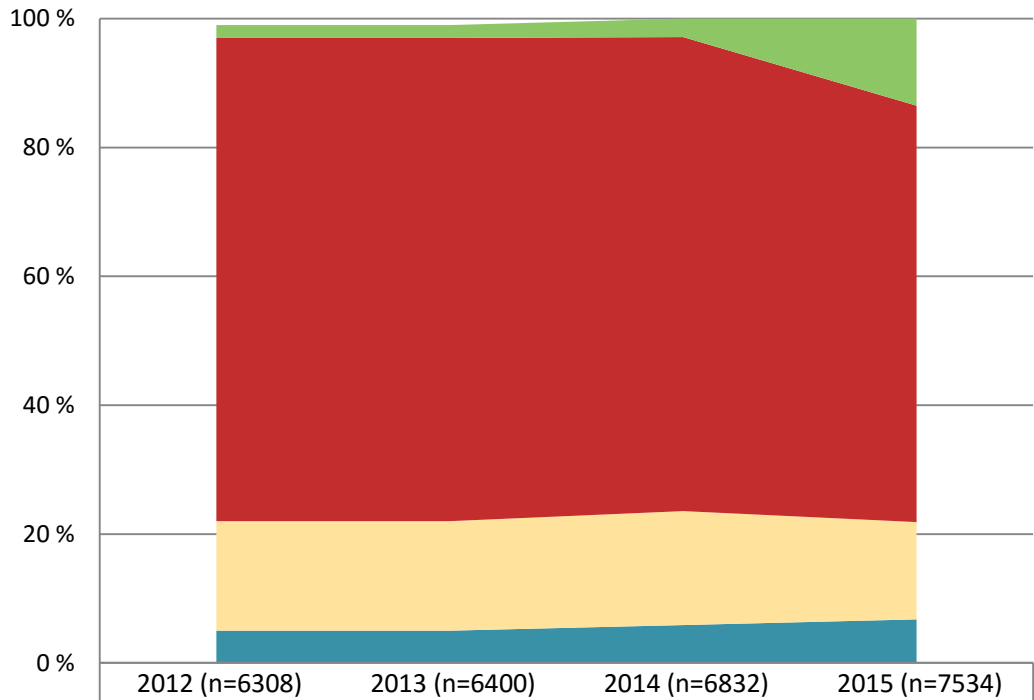
## Diabetes Audit Results, Portland Area, 2004-2015



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## Diabetes Audit Results, Portland Area, 2004-2015

### Weight Control



Height or weight missing	2 %	2 %	3 %	14 %
Obese (BMI 30.0 or above)	75 %	75 %	74 %	65 %
Overweight (BMI 25.0-29.9)	17 %	17 %	18 %	15 %
Normal (BMI < 25.0)	5 %	5 %	6 %	7 %
Overweight or obese (BMI 25 or above)	92 %	92 %	91 %	80 %

#### Notes

Body Mass Index (BMI) is calculated using the last weight in the audit year recorded on a non-prenatal visit, along with the most recent height measured since the patient's 19th birthday. The formula is

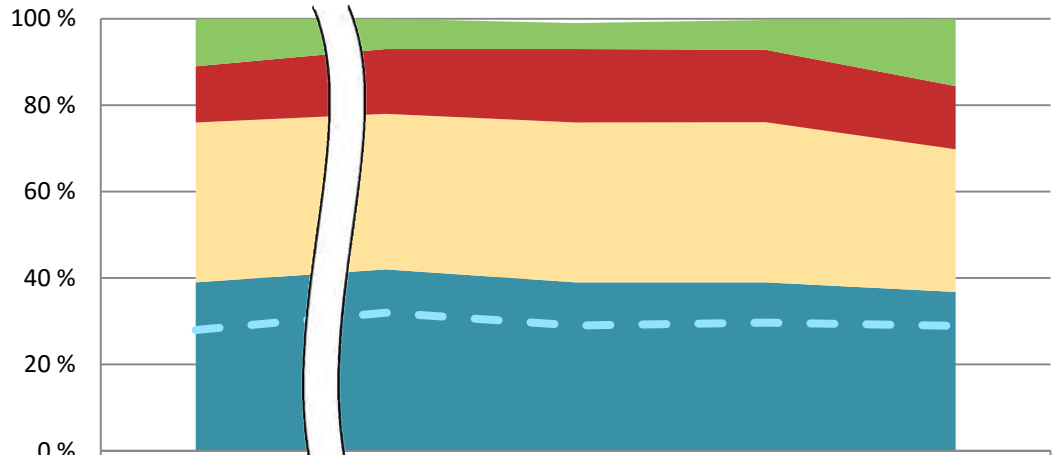
$$\text{BMI} = \text{weight (lbs)} \div \text{height (inches)} \div \text{height (inches)} \times 703$$

Before 2005, overweight and obesity were reported from the audit using cutoffs from the National Health and Nutrition Examination Survey (NHANES). Women were considered overweight with a BMI of 27.3 or higher and obese with BMI 32.3 or higher. Men were overweight at a BMI of 27.8 and obese at 31.1 or higher. These results are still calculated from audit data but are not presented here for the sake of clarity in the chart.

The bars in the graph reflect current cutoffs, which are the same for men and women. Overweight is defined as a BMI of 25 or higher and obesity is 30 or higher. Using these standards, more patients are considered overweight than with the older standards.

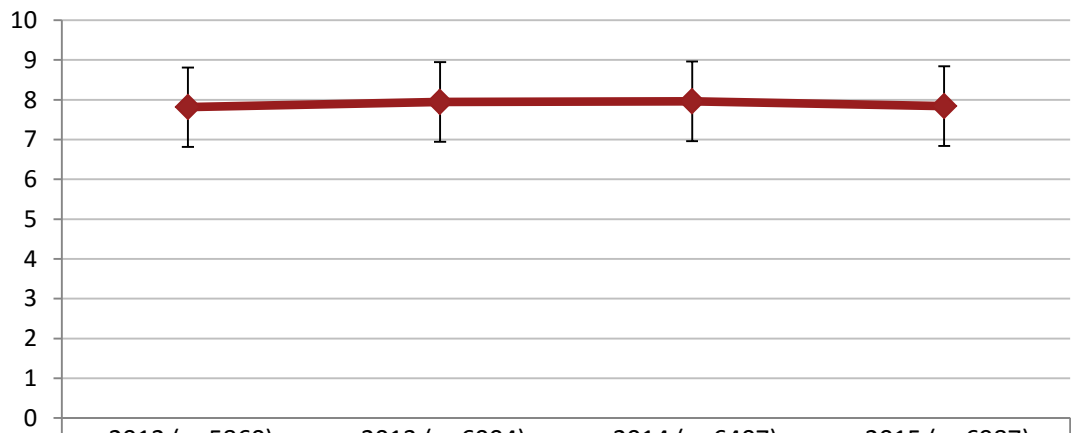
## Diabetes Audit Results, Portland Area, 2004-2015

### Hemoglobin A1c



	2004 (n=3877)	2012 (n=6308)	2013 (n=6400)	2014 (n=6832)	2015 (n=7534)
HbA1c missing	11 %	7 %	6 %	7 %	16 %
HbA1c 10.0 or higher	13 %	15 %	17 %	17 %	15 %
HbA1c 7.0-9.9	37 %	36 %	37 %	37 %	33 %
HbA1c <7	39 %	42 %	39 %	39 %	37 %
HbA1c ≤6.5	28 %	32 %	29 %	30 %	29 %

### Average Hemoglobin A1C



	2012 (n=5860)	2013 (n=6004)	2014 (n=6407)	2015 (n=6987)
Mean HbA1c	7.81	7.94	7.96	7.84
Standard error	0.03	0.03	0.09	0.08
95% CI upper limit	7.866	7.997	8.137	7.995
95% CI lower limit	7.760	7.889	7.789	7.691

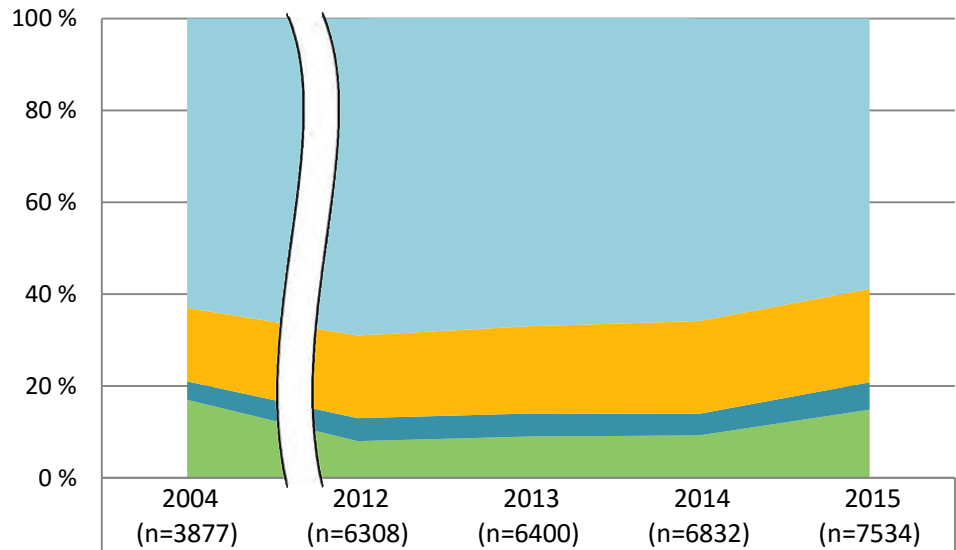
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## Diabetes Audit Results, Portland Area, 2004-2015

**Before 2010:** Based on the average of the last 3 blood pressure measurements taken within the audit year. If <3 measurements were taken, blood pressure control is undetermined.

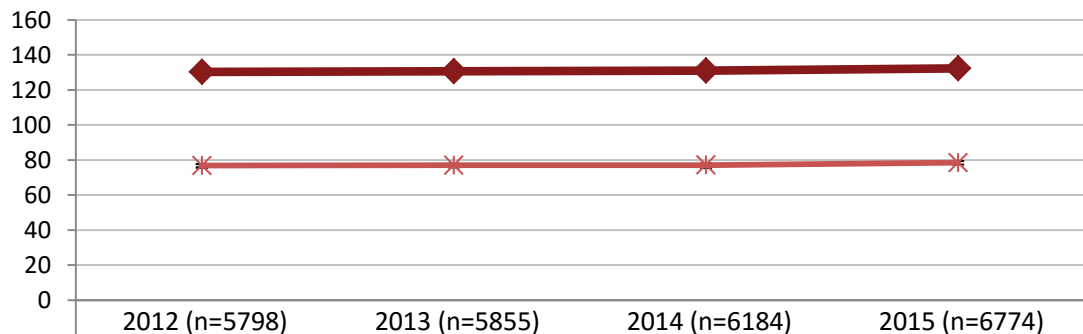
**After 2010:** Based on the average of the last 2 or 3 blood pressure measurements taken within the audit year. If <2 measurements were taken, blood pressure control is undetermined.

### Blood Pressure



	2004 (n=3877)	2012 (n=6308)	2013 (n=6400)	2014 (n=6832)	2015 (n=7534)
■ Adequate BP <140/<90	63 %	69 %	68 %	66 %	59 %
■ Inadequate (140/90 - <160/<95)	16 %	18 %	19 %	20 %	20 %
■ Markedly poor (160/95 or higher)	4 %	5 %	5 %	5 %	6 %
■ BP control undetermined	17 %	8 %	9 %	9 %	15 %

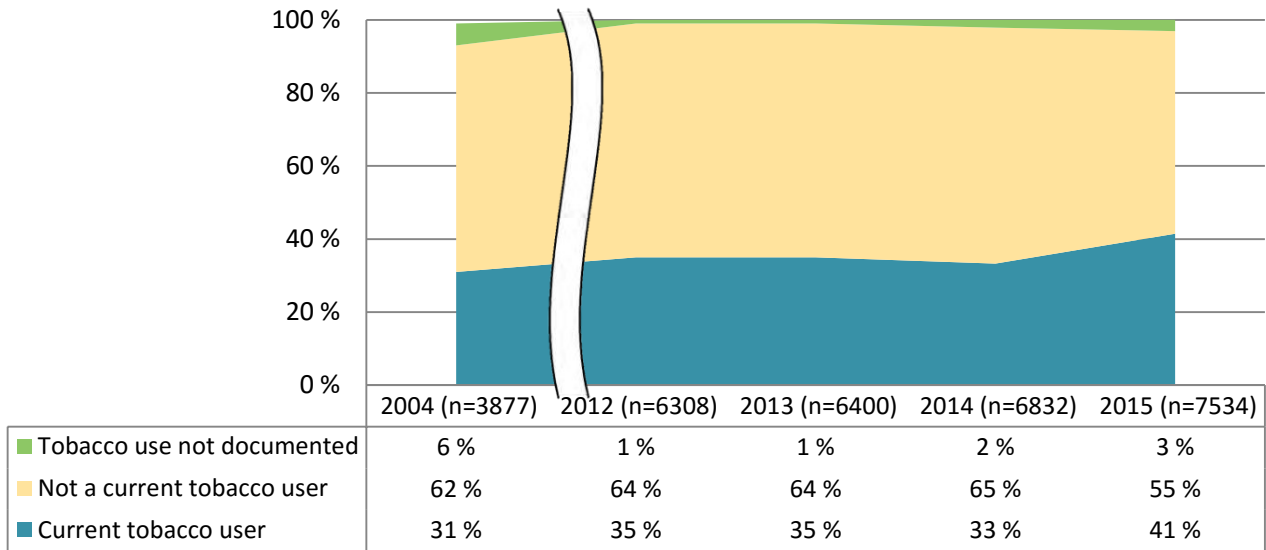
### Average Blood Pressure



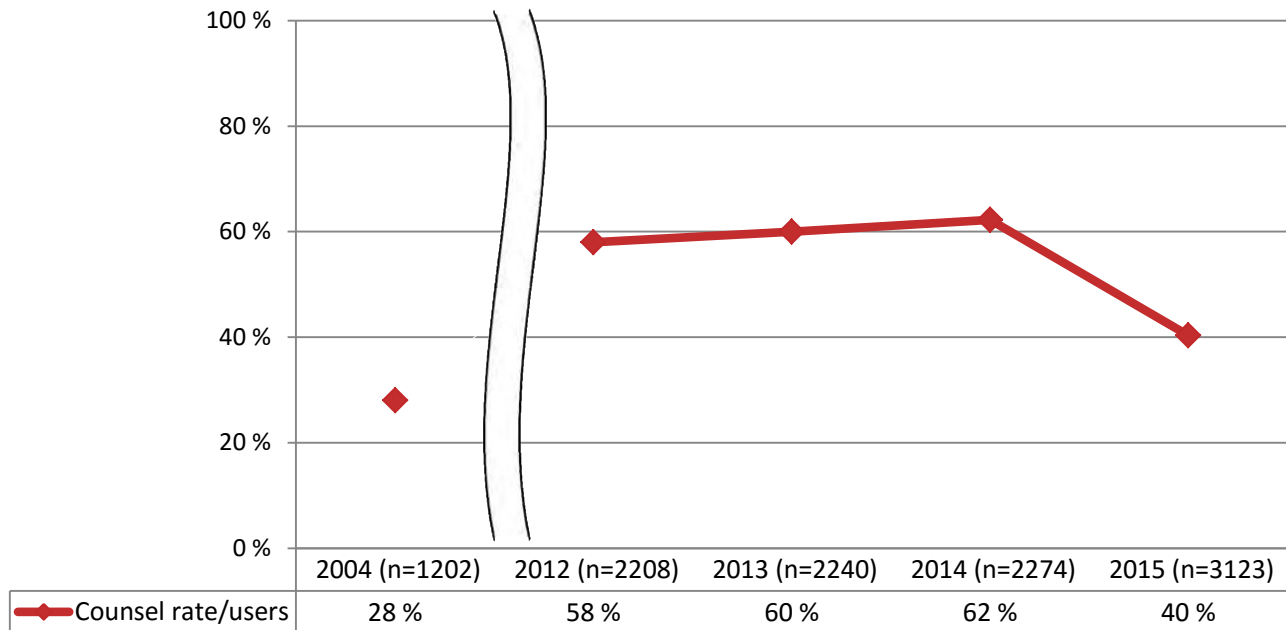
	2012 (n=5798)	2013 (n=5855)	2014 (n=6184)	2015 (n=6774)
◆ Mean systolic BP	130.35	130.65	130.98	132.36
Standard error	0.18	0.18	0.55	0.73
95% CI upper limit	130.701	131.004	132.056	133.792
95% CI lower limit	130.003	130.294	129.908	130.930
✱ Mean diastolic BP	76.79	76.99	77.06	78.44
Standard error	0.12	0.12	0.36	
95% CI upper limit	77.031	77.230	77.774	
95% CI lower limit	76.559	76.755	76.350	

## Diabetes Audit Results, Portland Area, 2004-2015

### Tobacco Use



### Tobacco Cessation Referrals

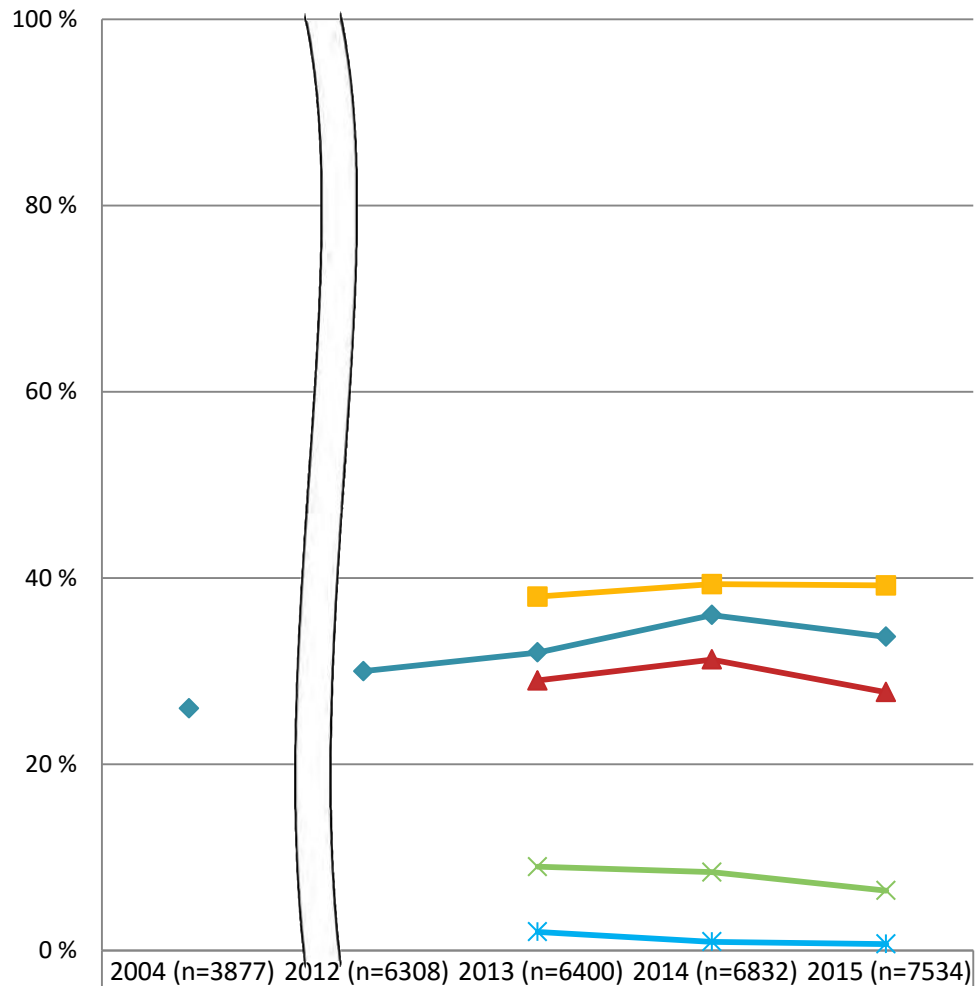


Note: The 'n' in this graph refers to the total number of tobacco users included in the audit.

A blank indicates a category not reported on in a given year; FY = Fiscal Year, the year in which data were submitted.

# Diabetes Audit Results, Portland Area, 2004-2015

## Diabetes Medications



	2004 (n=3877)	2012 (n=6308)	2013 (n=6400)	2014 (n=6832)	2015 (n=7534)
Insulin alone or in combination	26 %	30 %	32 %	36 %	34 %
One Med			38 %	39 %	39 %
Two Meds			29 %	31 %	28 %
Three Meds			9 %	8 %	6 %
Four + Meds			2 %	1 %	1 %

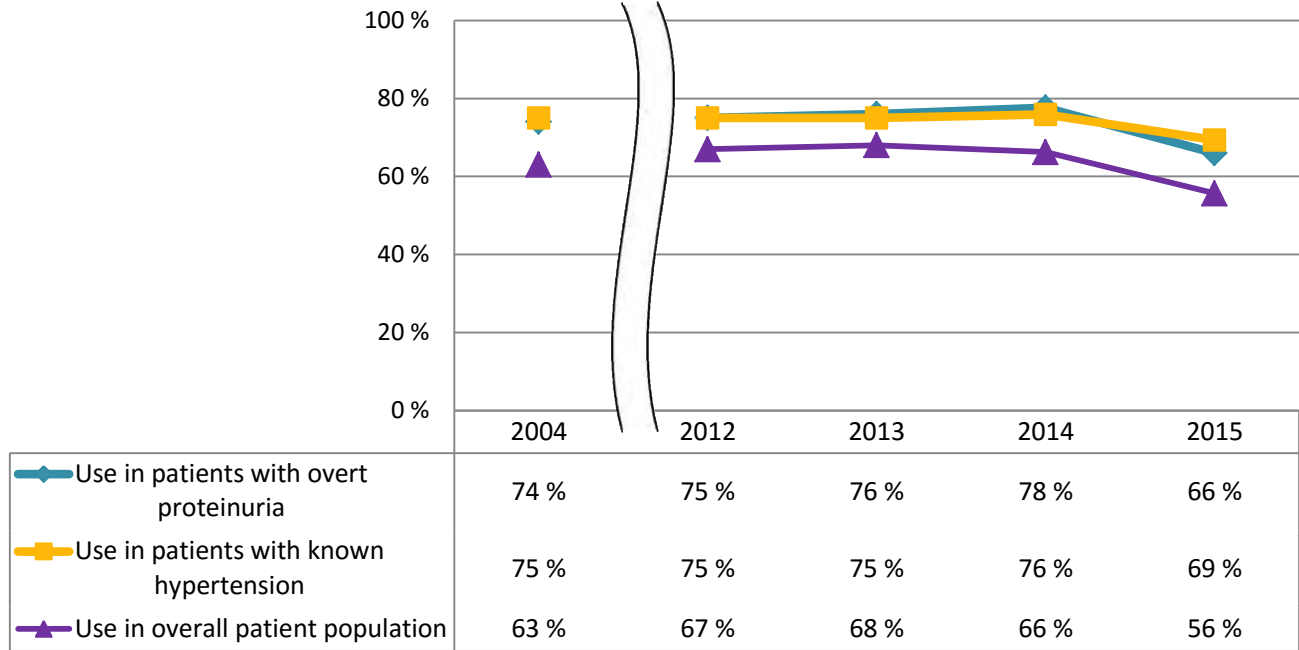
### Notes

"Diet and exercise alone" is the default selection in RPMS. If no records are found in the patient's chart of medications prescribed or dispensed in the last six months of the audit year, the patient is classified as being treated with "diet and exercise alone." The percentages for this category may be inflated if patients did not refill their prescriptions at the clinic in the last six months of the audit year. You can enter medication reviews as historical RXs so that the audit report will reflect those prescriptions.

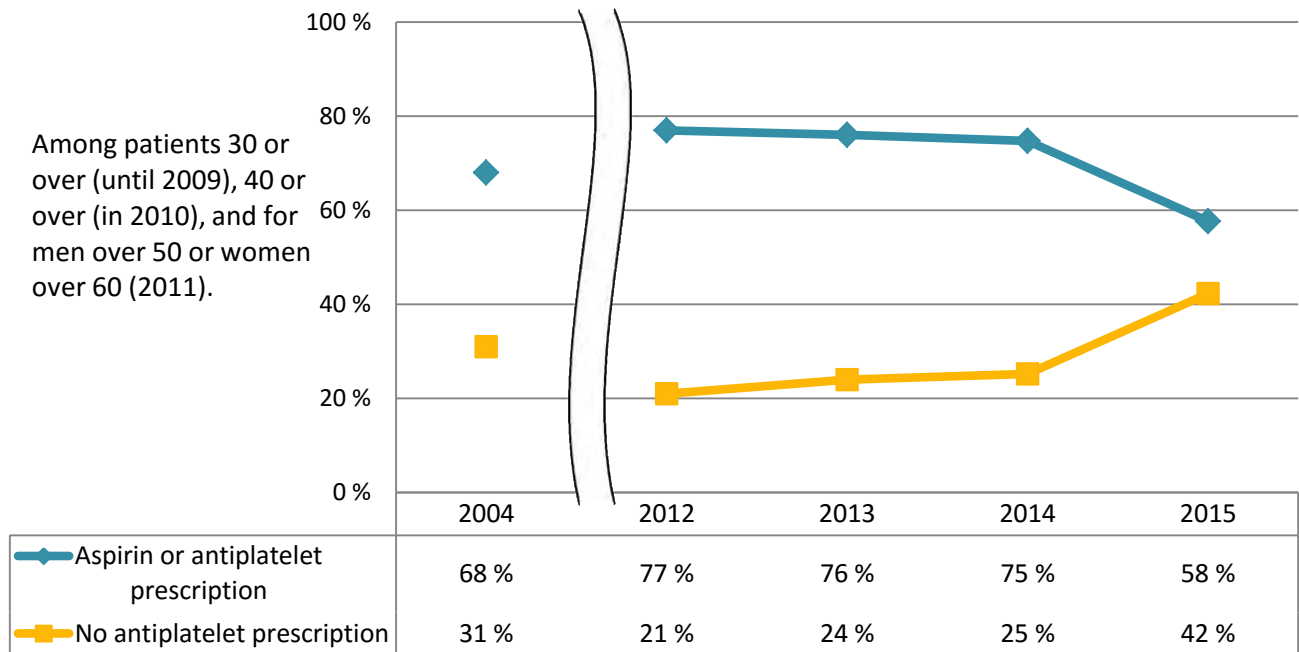


## Diabetes Audit Results, Portland Area, 2004-2015

### ACE Inhibitor or ARB Prescriptions



### Antiplatelet Therapy

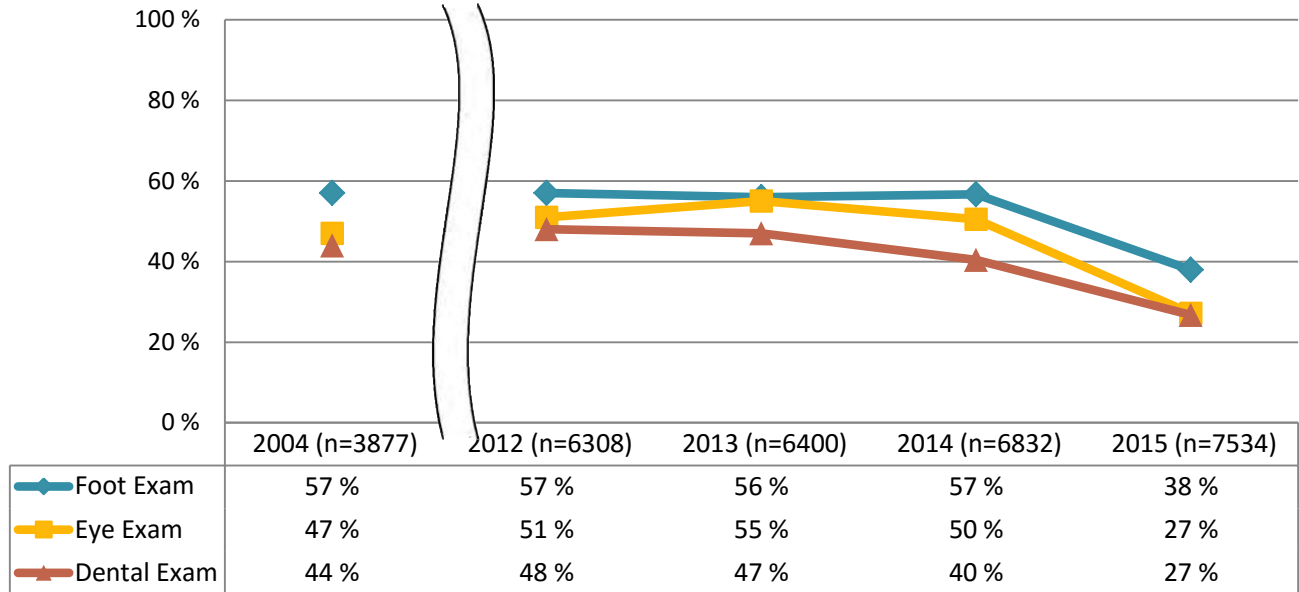


Denominators (n=) are not displayed on this page. These charts represent various subsets of patients, and not the entire population included in the audit.

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## Diabetes Audit Results, Portland Area, 2004-2015

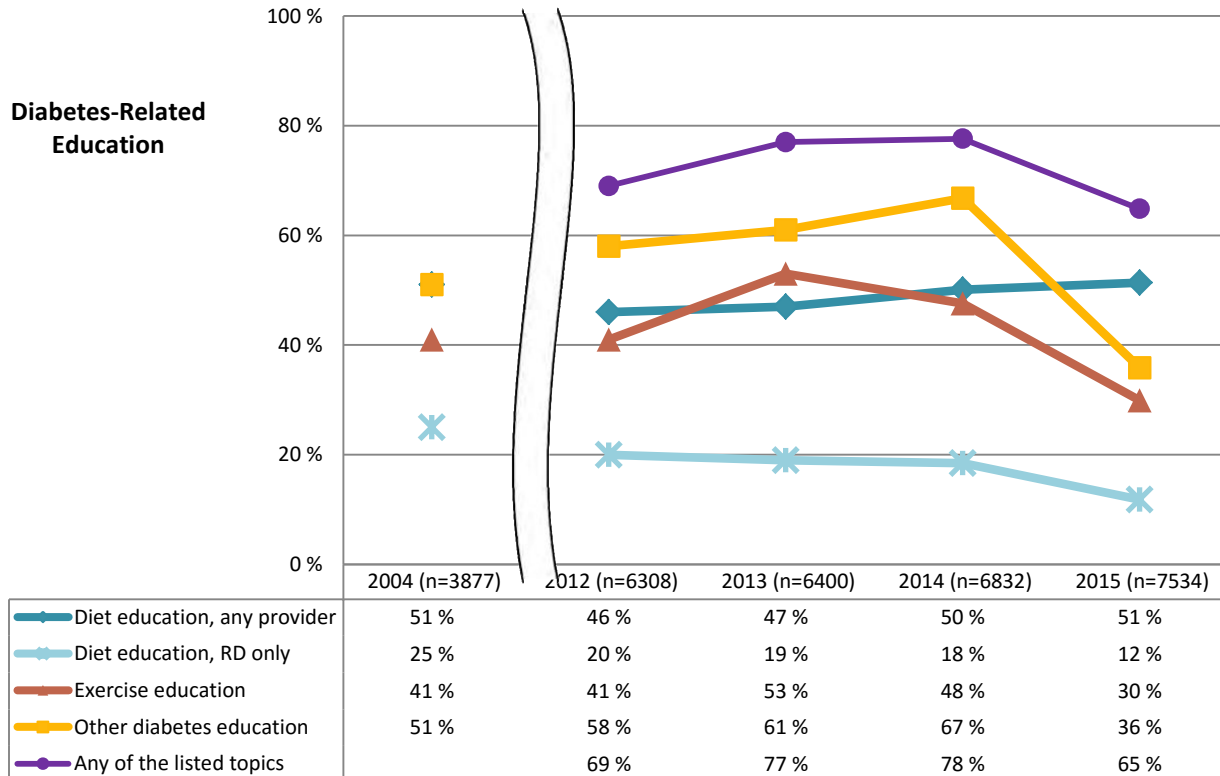
### Annual Examinations



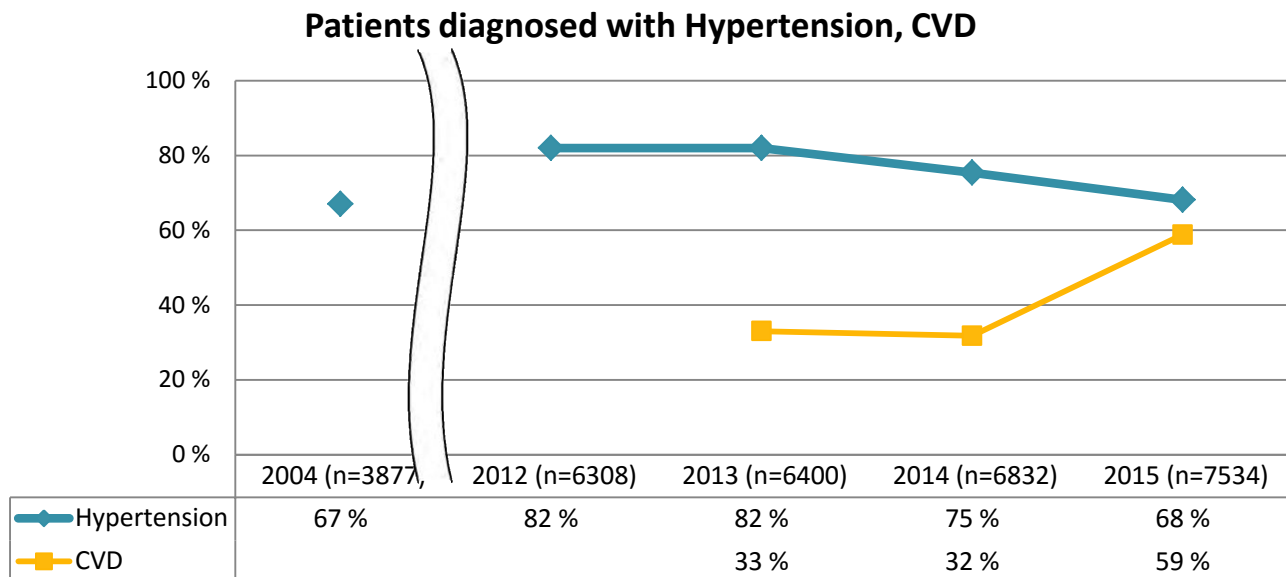
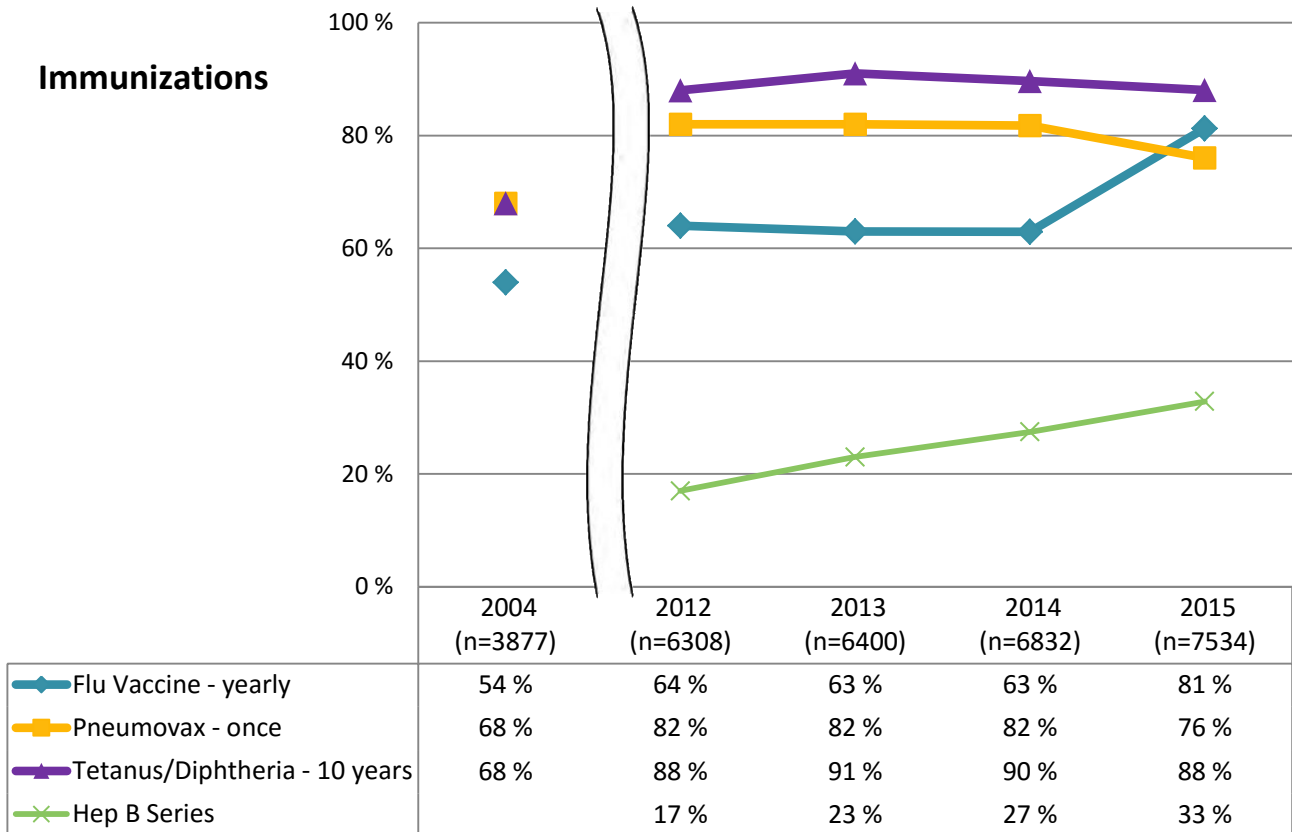
**Eye Exam:** A dilated fundoscopic exam conducted by a primary care provider, optometrist or ophthalmologist, or fundoscopic photographs reviewed by an ophthalmologist.

**Foot Exam:** An examination of the feet that includes neurologic and vascular evaluation as well as visual inspection for deformities or lesions.

**Dental Exam:** The dental examination is one that includes evaluation of the teeth (if present), gingiva and mucosal surfaces.



## Diabetes Audit Results, Portland Area, 2004-2015



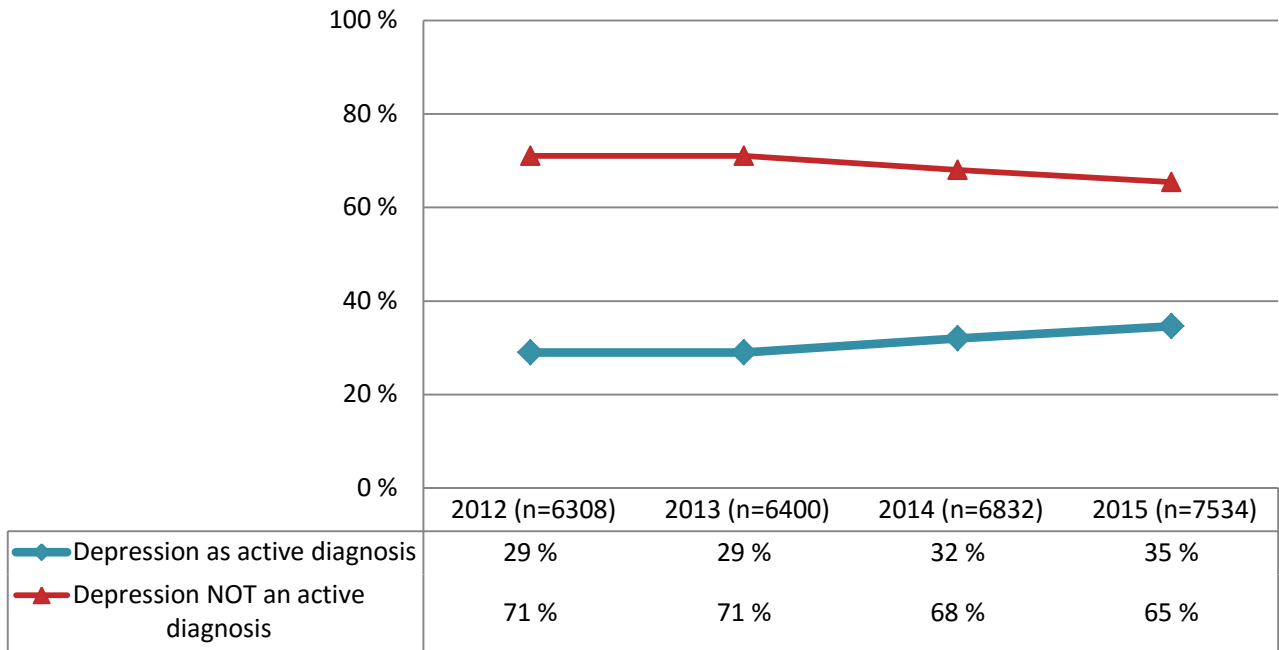
Patient has "known hypertension" if hypertension is on the problem list or the patient has had at least 3 visits with a diagnosis of hypertension.

Patient has CVD if CVD is found on the problems list or patient had at least two diagnoses ever of CVD.

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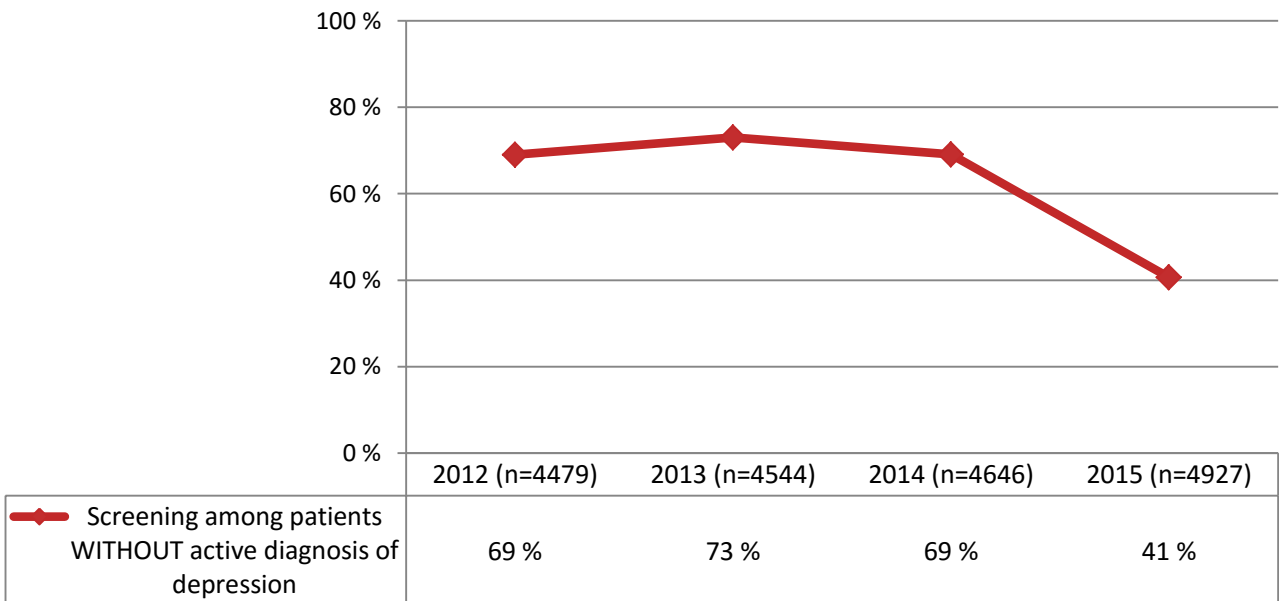
## Diabetes Audit Results, Portland Area, 2004-2015

### Diagnosed Depression

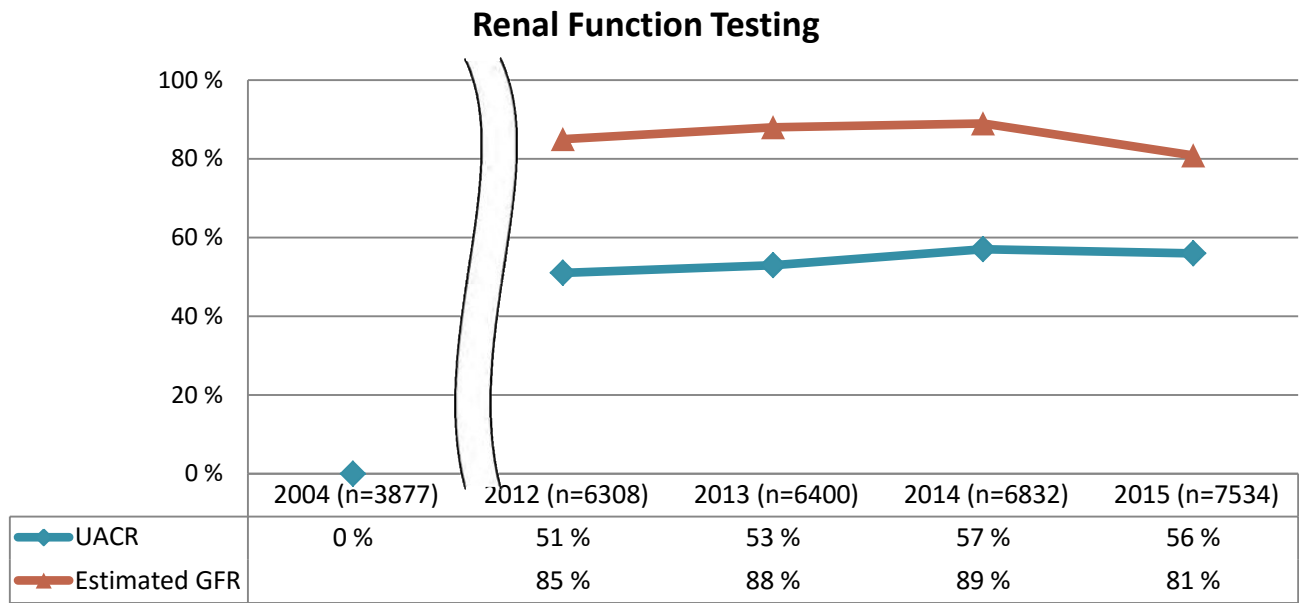


**Note:** Depression and depression screening were added to the audit in FY2005.

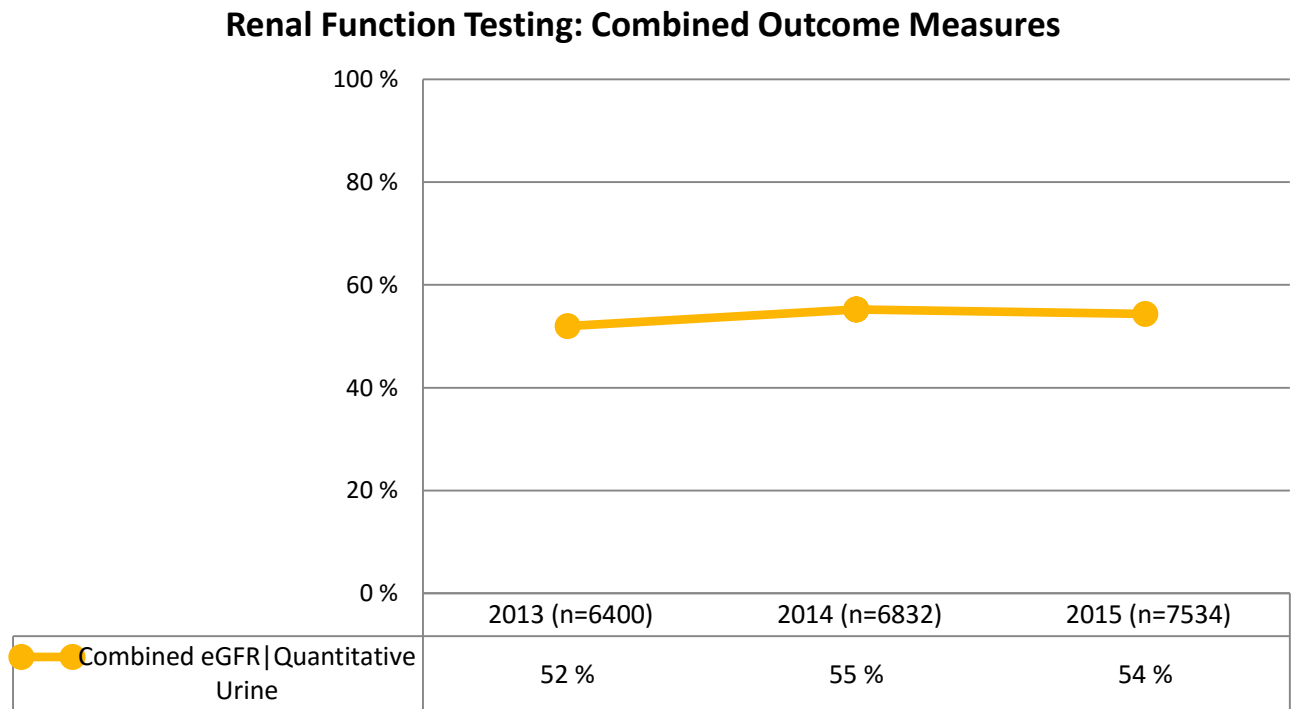
### Depression Screening among Patients without Active Depression Diagnoses



## Diabetes Audit Results, Portland Area, 2004-2015



Urinalysis results before 2014 included what type of urine protein testing was conducted. In 2014, tracking the types of urinalysis was discontinued and replaced by tracking whether the patient has had a urine albumin/creatinine ratio.

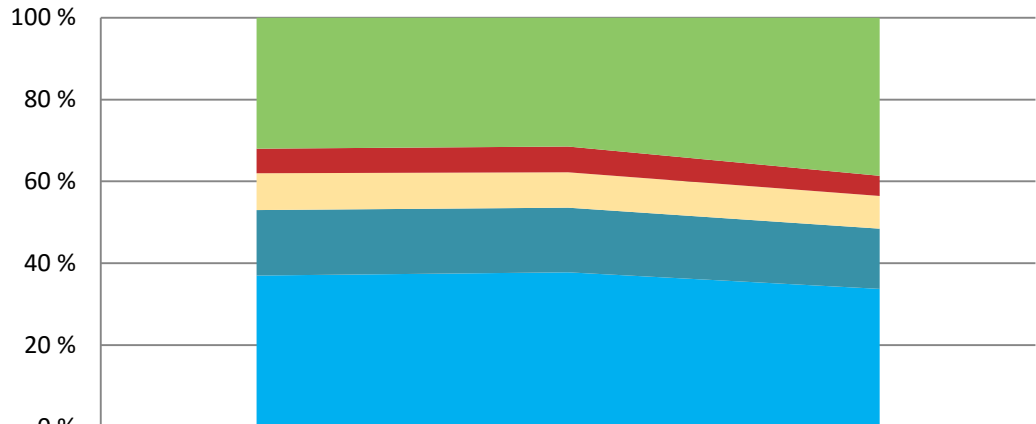


For this measure, these are records with both an eGFR and a quantitative urine protein test.

A blank indicates a category not reported on in a given year; FY = Fiscal Year, the year in which data were submitted.

## Diabetes Audit Results, Portland Area, 2004-2015

### non-HDL Cholesterol



	2013 (n=6400)	2014 (n=6832)	2015 (n=7534)
Non-HDL no test or result	32 %	31 %	39 %
Non-HDL >190	6 %	6 %	5 %
Non-HDL 160-190	9 %	9 %	8 %
Non-HDL 130-159	16 %	16 %	15 %
Non-HDL <130	37 %	38 %	34 %

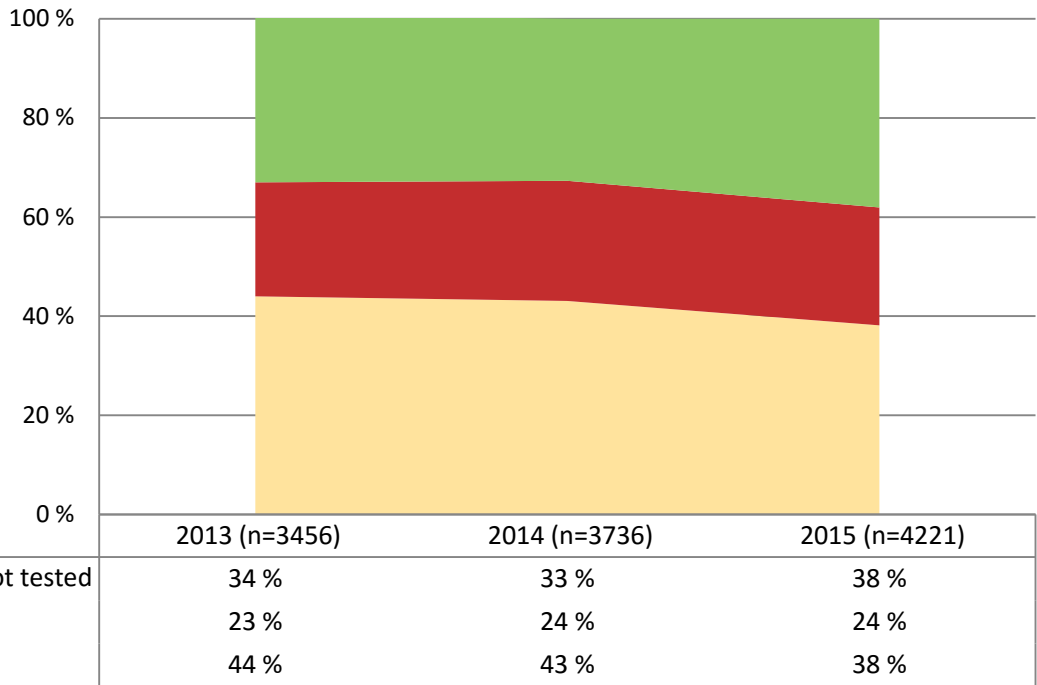
### Average non-HDL Cholesterol



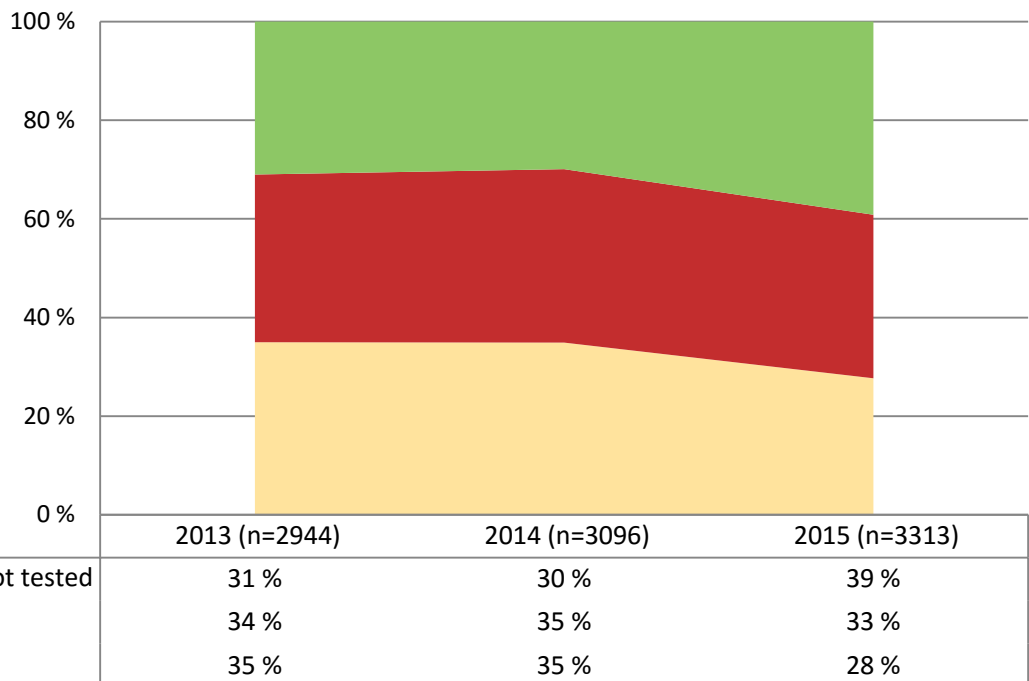
	2013 (n=4328)	2014 (n=4631)	2015 (n=5292)
Mean non-HDL cholesterol	130.58	129.80	129.78
Standard error	0.64	1.29	1.76
95% CI upper limit	131.839	132.321	133.242
95% CI lower limit	129.325	127.276	126.324

## Diabetes Audit Results, Portland Area, 2004-2015

### HDL Cholesterol (Females)



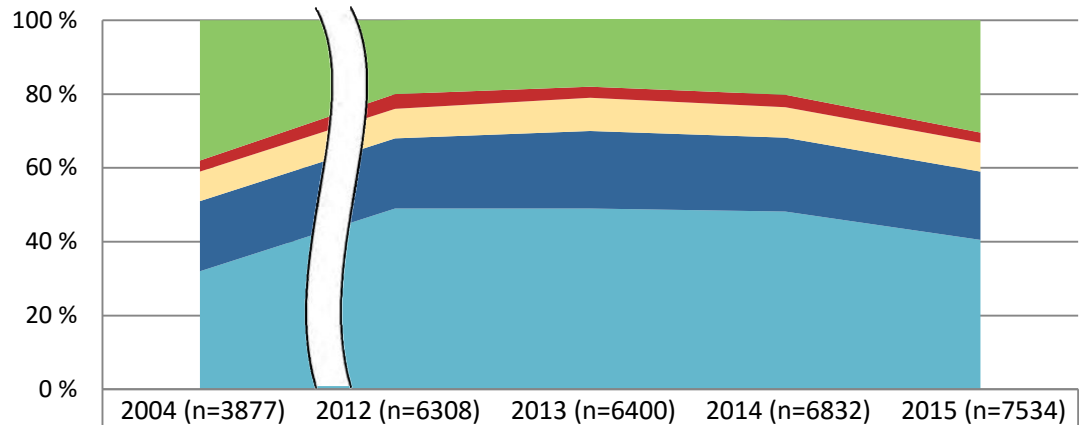
### HDL Cholesterol (Males)



A blank indicates a category not reported on in a given year; FY = Fiscal Year, the year in which data were submitted.

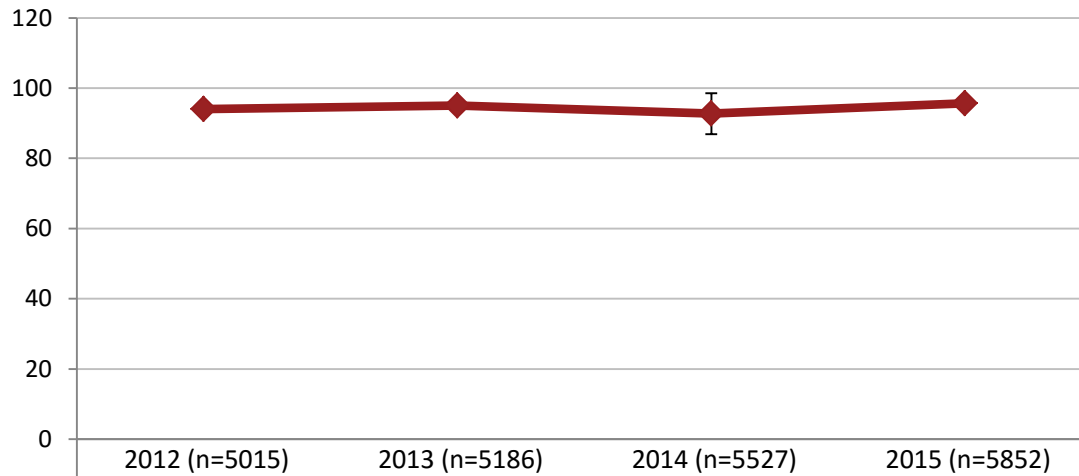
## Diabetes Audit Results, Portland Area, 2004-2015

### Low-Density Lipoprotein (LDL) Cholesterol



	2004 (n=3877)	2012 (n=6308)	2013 (n=6400)	2014 (n=6832)	2015 (n=7534)
Not tested	38 %	20 %	19 %	20 %	30 %
LDL >160	3 %	4 %	3 %	3 %	3 %
LDL 130-160 mg/dl	8 %	8 %	9 %	8 %	8 %
LDL 100-129 mg/dl	19 %	19 %	21 %	20 %	18 %
Desirable (<100 mg/dl)	32 %	49 %	49 %	48 %	40 %

### Average LDL Cholesterol

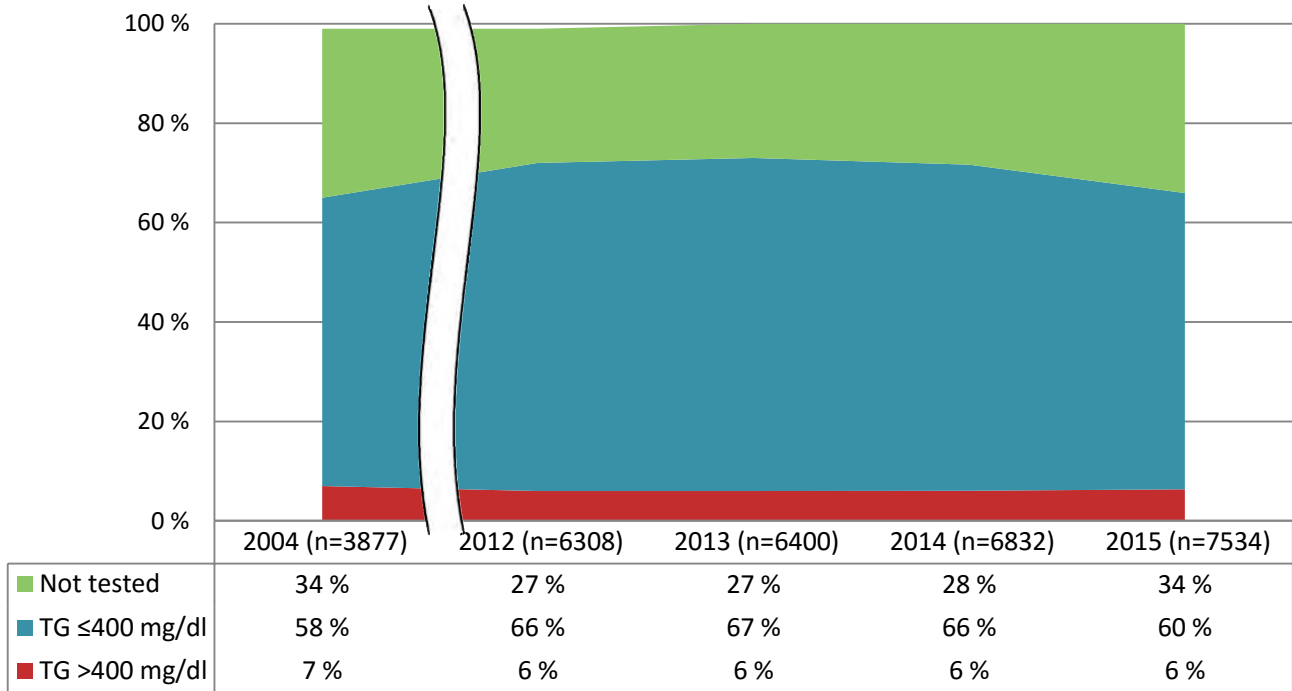


	2012 (n=5015)	2013 (n=5186)	2014 (n=5527)	2015 (n=5852)
Mean LDL	94.05	95.04	92.75	95.66
Standard error	0.49	0.47	2.98	1.31
95% CI upper limit	95.004	95.955	98.597	98.220
95% CI lower limit	93.100	94.126	86.902	93.097

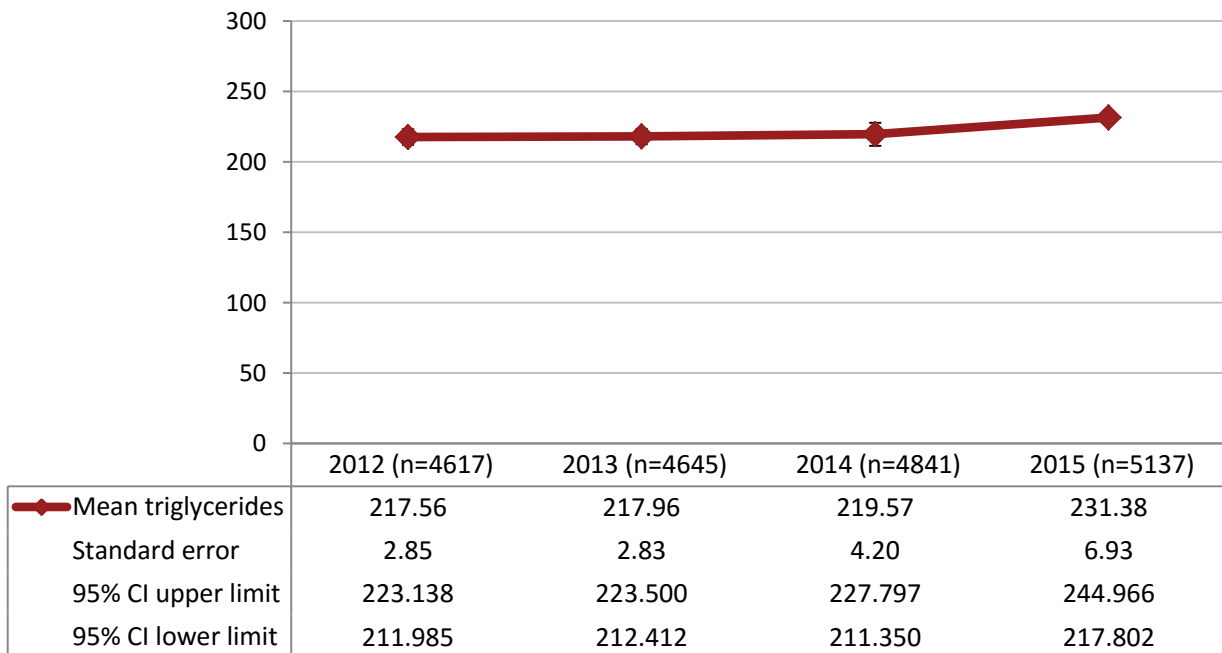


## Diabetes Audit Results, Portland Area, 2004-2015

### Triglycerides



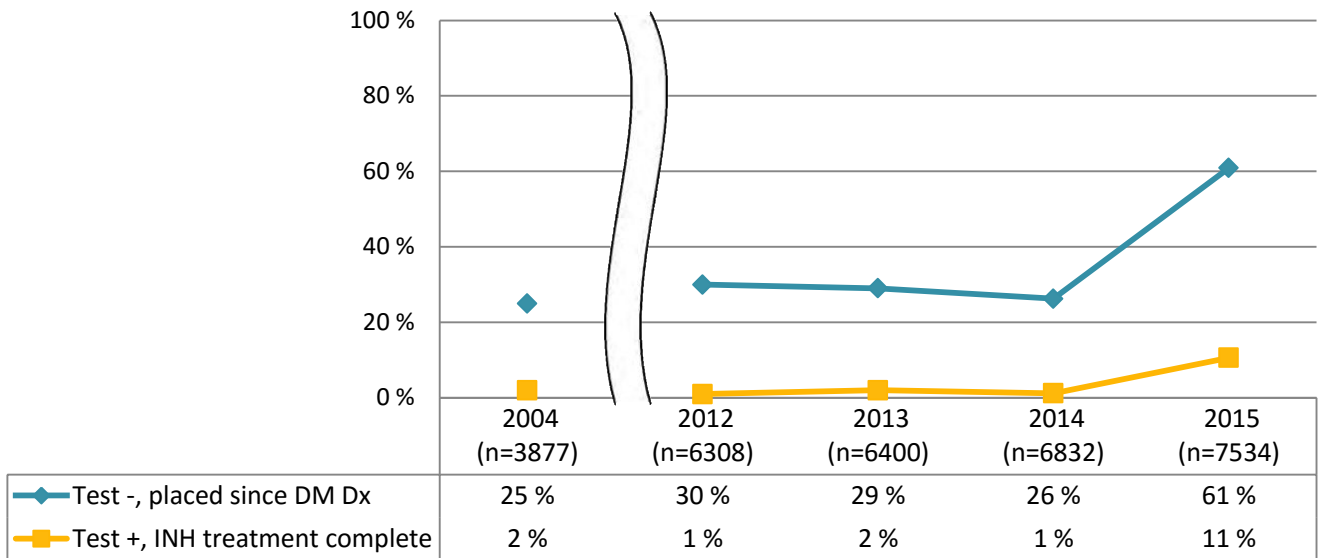
### Average Triglyceride Levels



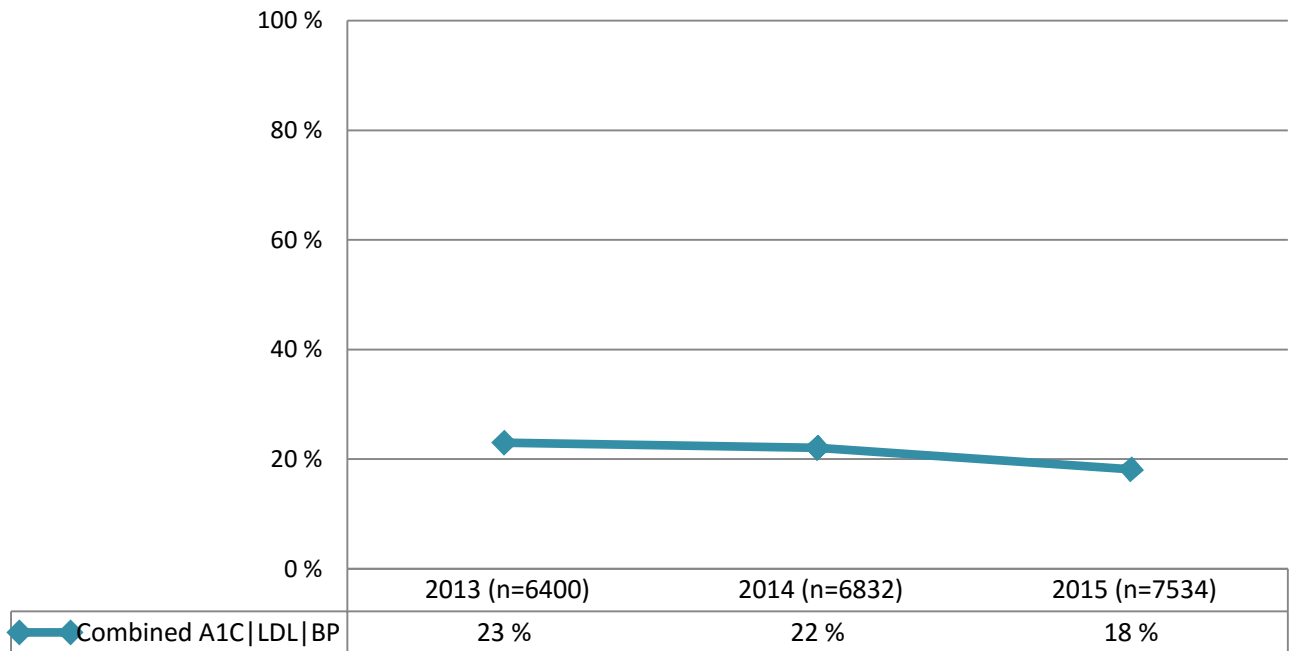
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## Diabetes Audit Results, Portland Area, 2004-2015

### Tuberculosis or PPD History



### Pilot Element: Combined Outcome Measure



For this measure, the following criteria have been met: Hemoglobin A1c < 8.0, LDL < 100, BP <140/<90.

## 2015 Diabetes Audit: Dates of Service Calendar Year 2014

This information is for the following groups:

**Portland Area (n=7534 patients)**

7534 sampled from 8021 active patients with diabetes (94%)

**All IHS (n=7534 patients)**

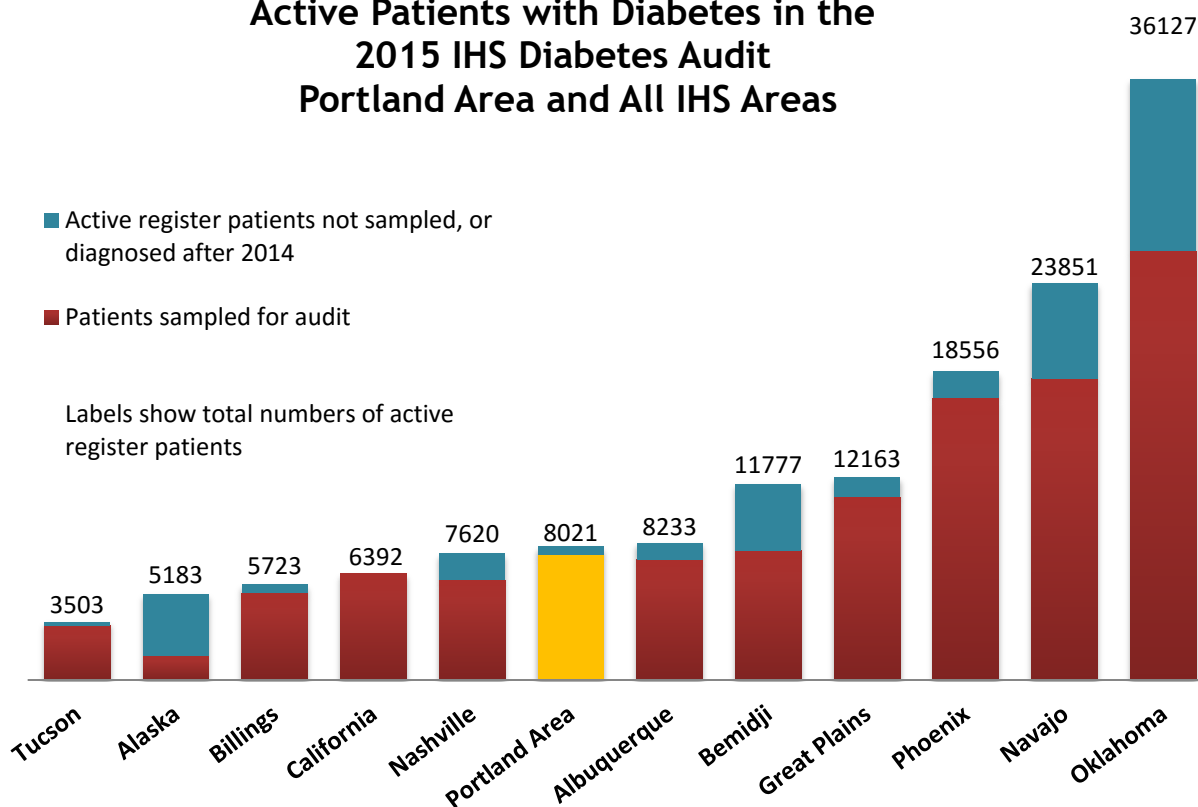
116743 sampled from 154949 active patients with diabetes (84%)

The following report contains information from your clinic's Annual IHS Diabetes Audit submission. It also includes summary data from all reporting tribal, IHS and urban facilities in the Portland Area. The audit information is displayed side by side so that you can see how your site compares to the overall Portland Area. If you have any questions about the report, please contact the Western Tribal Diabetes Project at (800) 862-5497.

### Who is this report about?

Patients identified by local Diabetes Program staff as having **type 1** or **type 2** diabetes and part of the **active** patient load, with **at least one primary care visit** in the calendar year. Only **American Indian and Alaska Native** patients are included in the audit.

### Active Patients with Diabetes in the 2015 IHS Diabetes Audit Portland Area and All IHS Areas



\*The Audit performed in 2015 covers services delivered in 2014

## 2015 Diabetes Audit: Dates of Service Calendar Year 2014

This information is for the following groups:

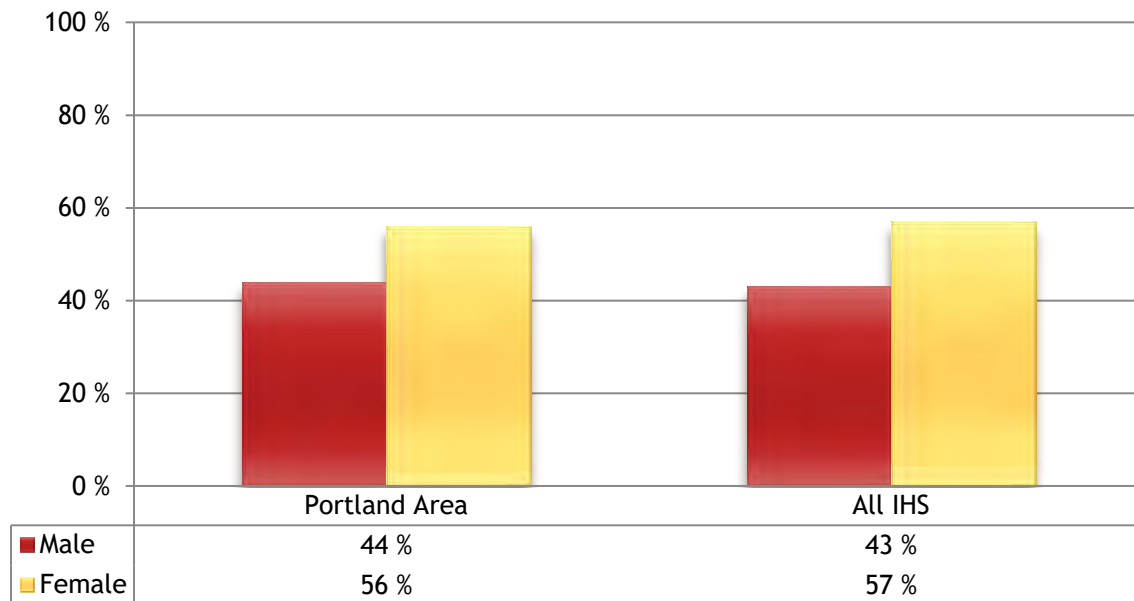
**Portland Area (n=7534 patients)**

**All IHS (n=7534 patients)**

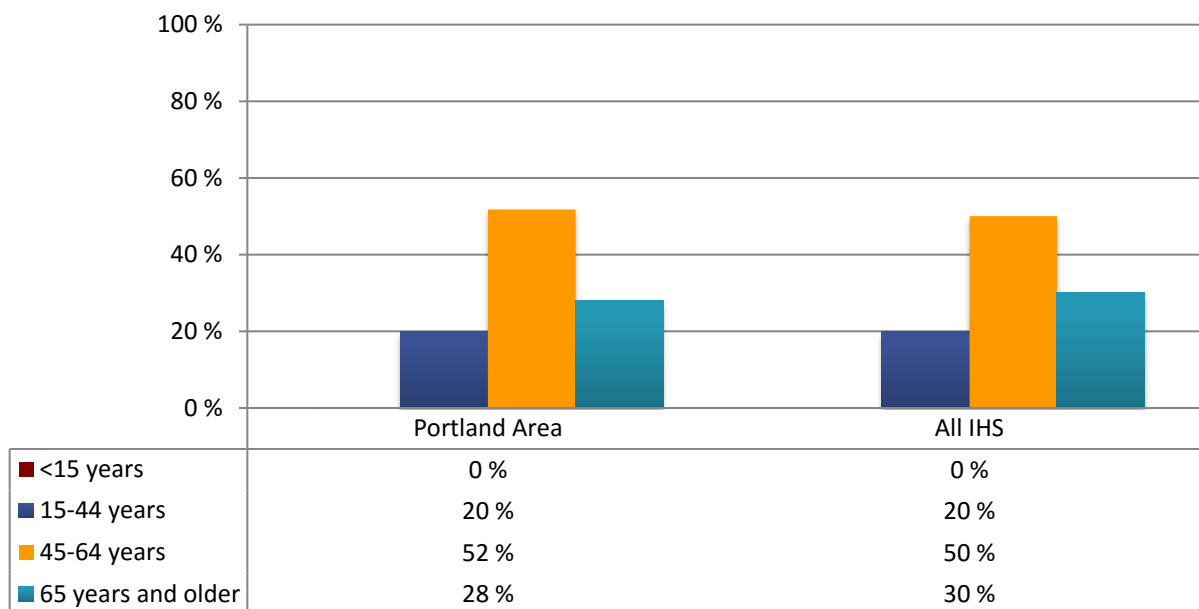
7534 sampled from 8021 active patients with diabetes (94%)

116743 sampled from 154949 active patients with diabetes (84%)

### Gender of Patients with Diabetes



### Age Distribution of Patients with Diabetes



## 2015 Diabetes Audit: Dates of Service Calendar Year 2014

This information is for the following groups:

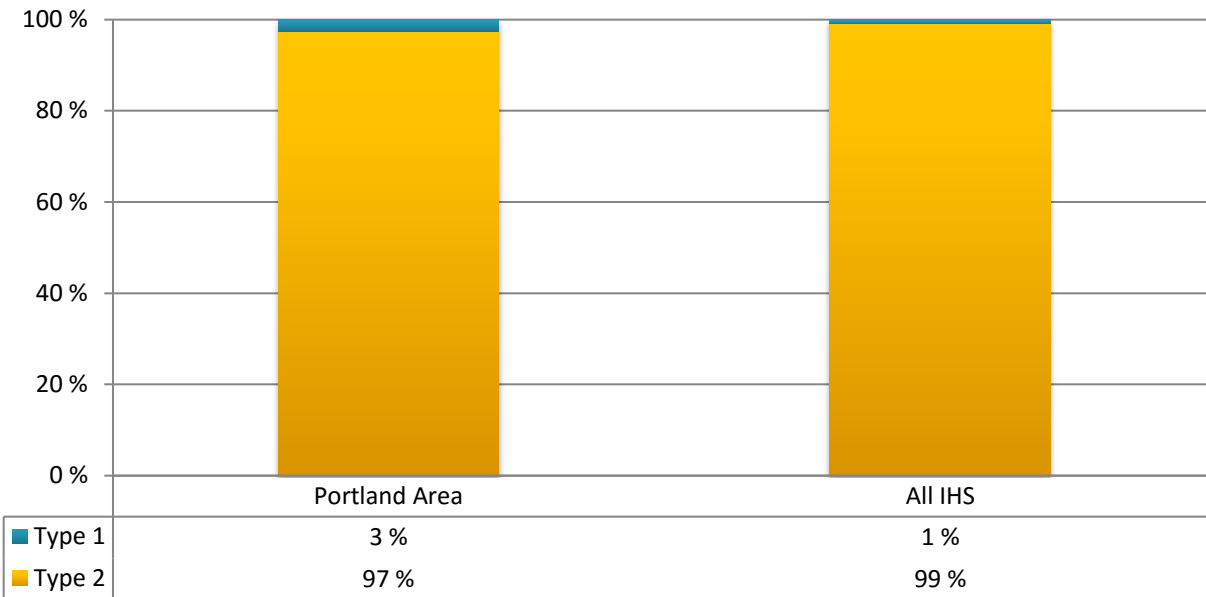
**Portland Area (n=7534 patients)**

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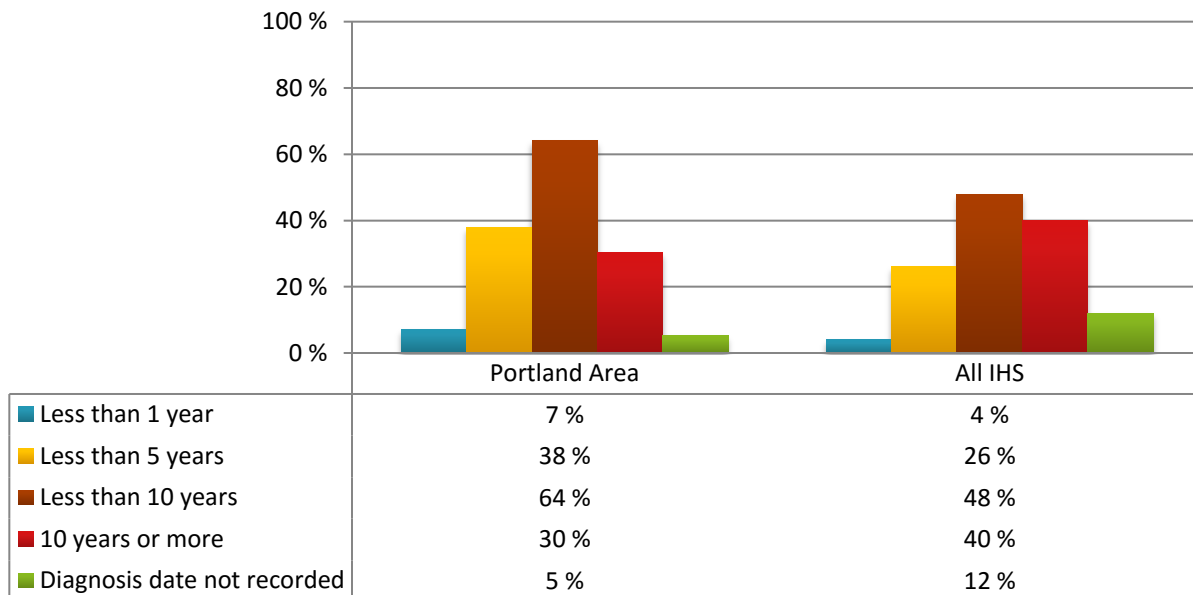
7534 sampled from 8021 active patients with diabetes (94%)

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### Type of Diabetes Diagnosed



### Duration of Diabetes



## 2015 Diabetes Audit: Dates of Service Calendar Year 2014

This information is for the following groups:

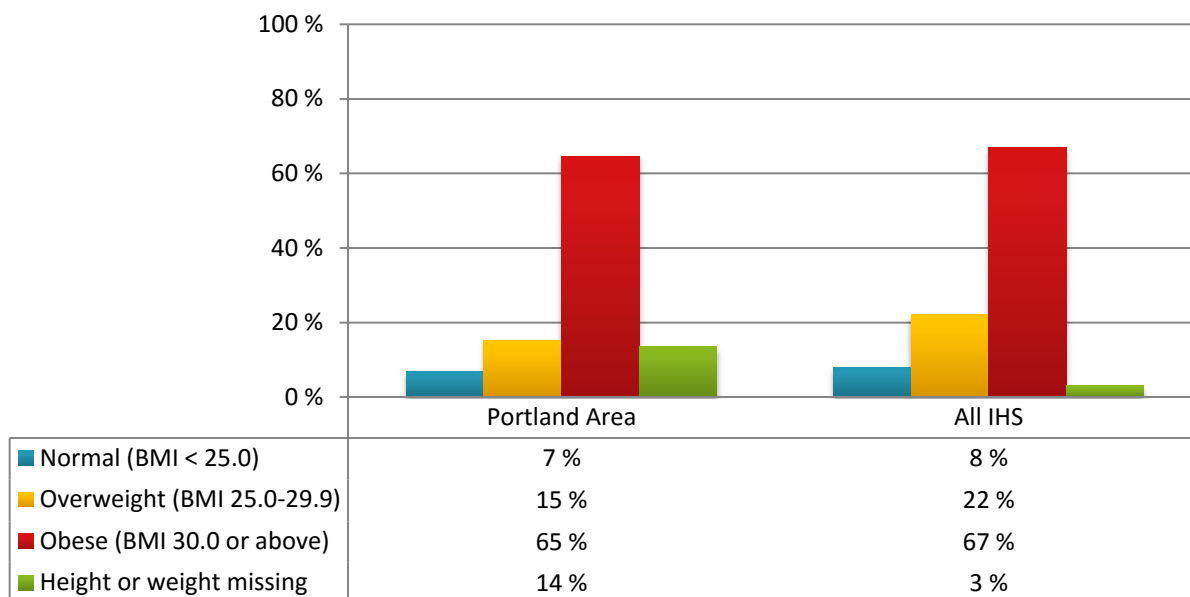
**Portland Area (n=7534 patients)**

**All IHS (n=7534 patients)**

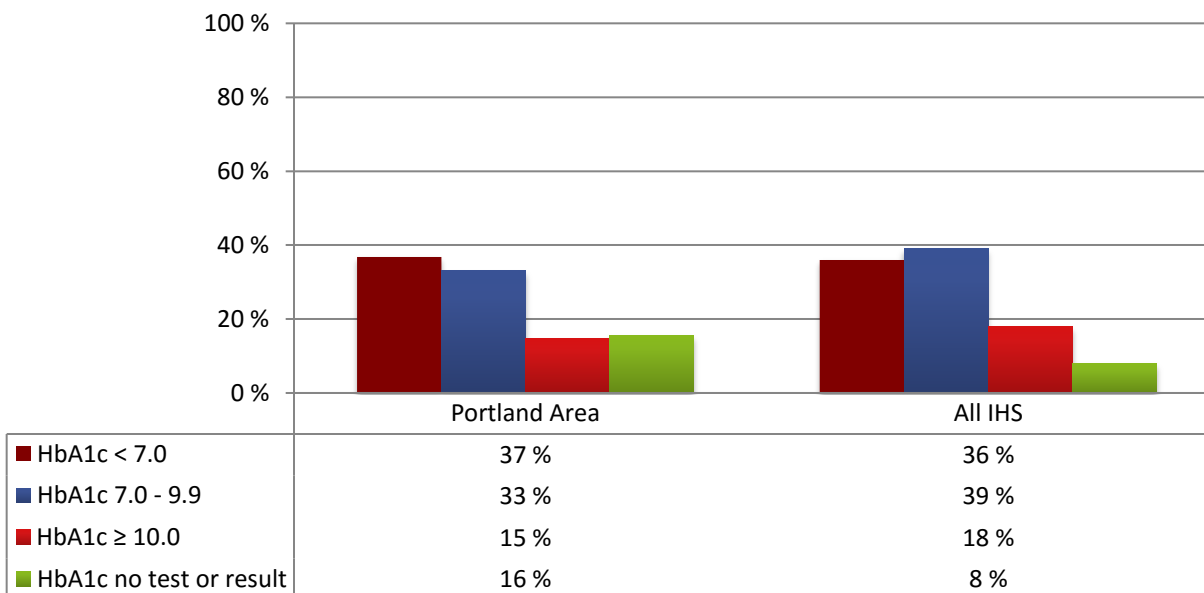
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### Weight (Body Mass Index)



### Hemoglobin A1C



## 2015 Diabetes Audit: Dates of Service Calendar Year 2014

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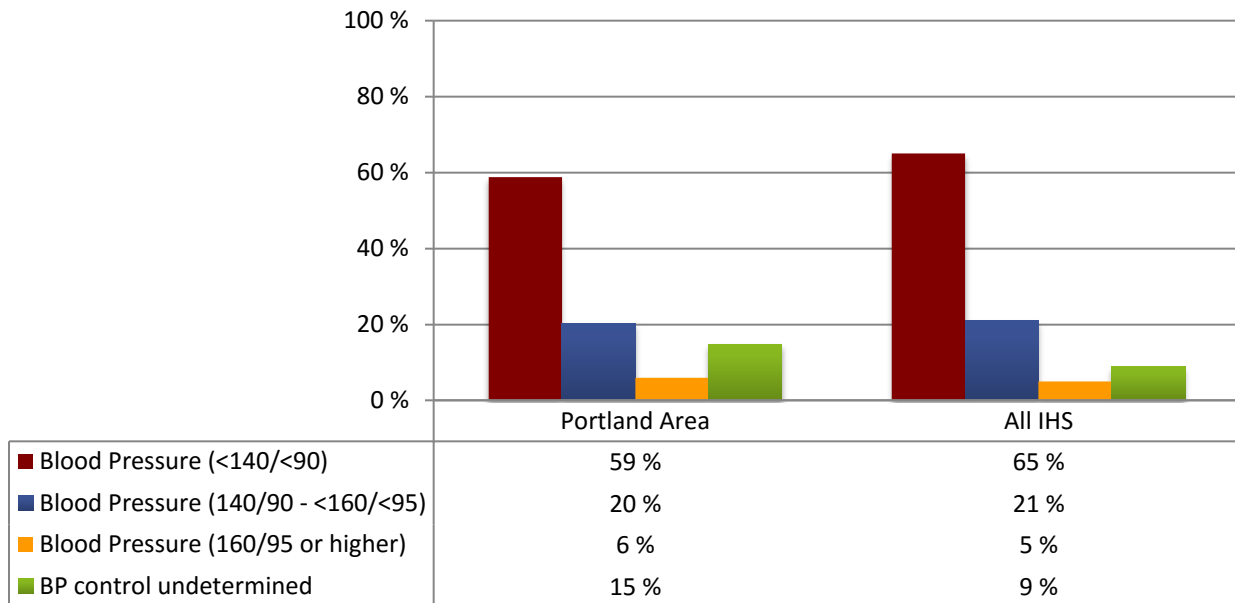
**Portland Area (n=7534 patients)**

**All IHS (n=7534 patients)**

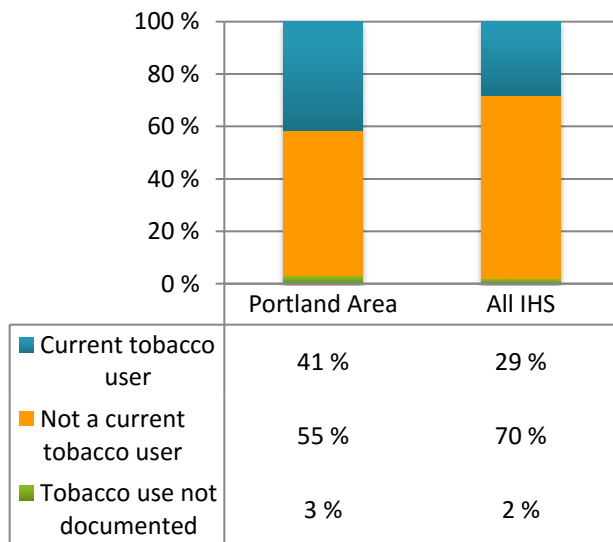
7534 sampled from 8021 active patients with diabetes (94%)

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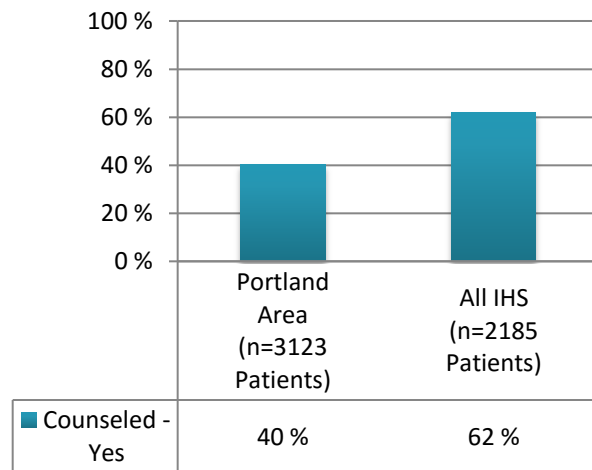
### Blood Pressure



### Tobacco Use



### Tobacco Cessation Counseling for Current Tobacco Users



# 2015 Diabetes Audit: Dates of Service Calendar Year 2014

This information is for the following groups:

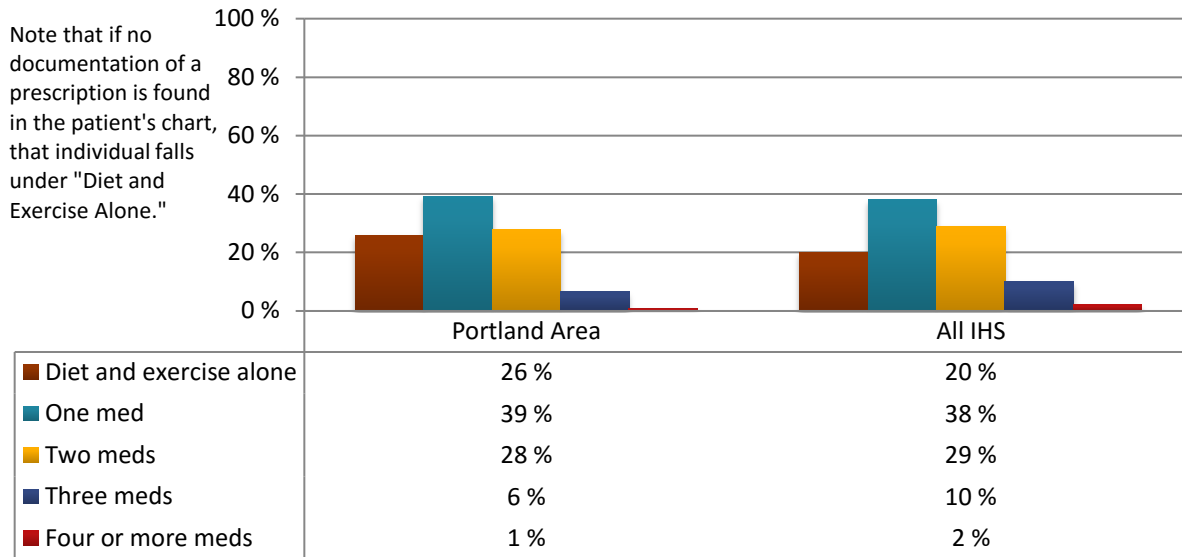
**Portland Area (n=7534 patients)**

**All IHS (n=7534 patients)**

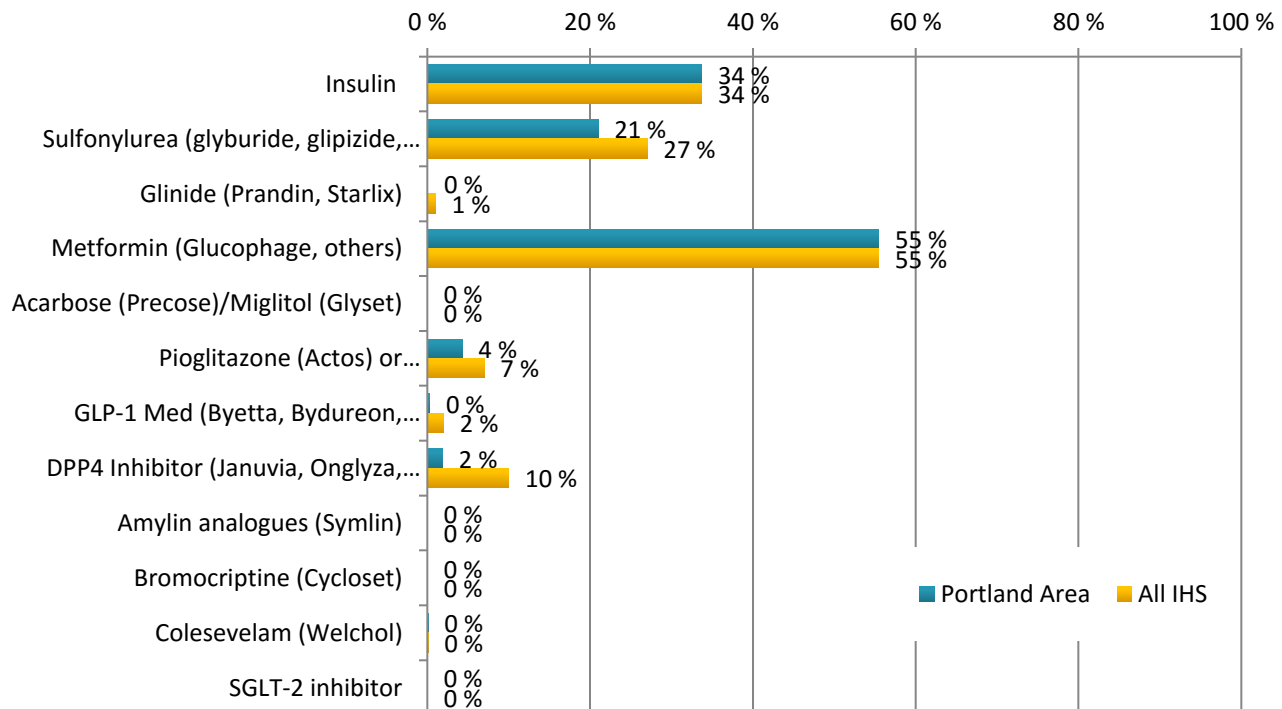
7534 sampled from 8021 active patients with diabetes (94%)

116743 sampled from 154949 active patients with diabetes (84%)

## Patients with Diabetes-Related Prescriptions



## Diabetes Medications, Alone or in Combination





## 2015 Diabetes Audit: Dates of Service Calendar Year 2014

This information is for the following groups:

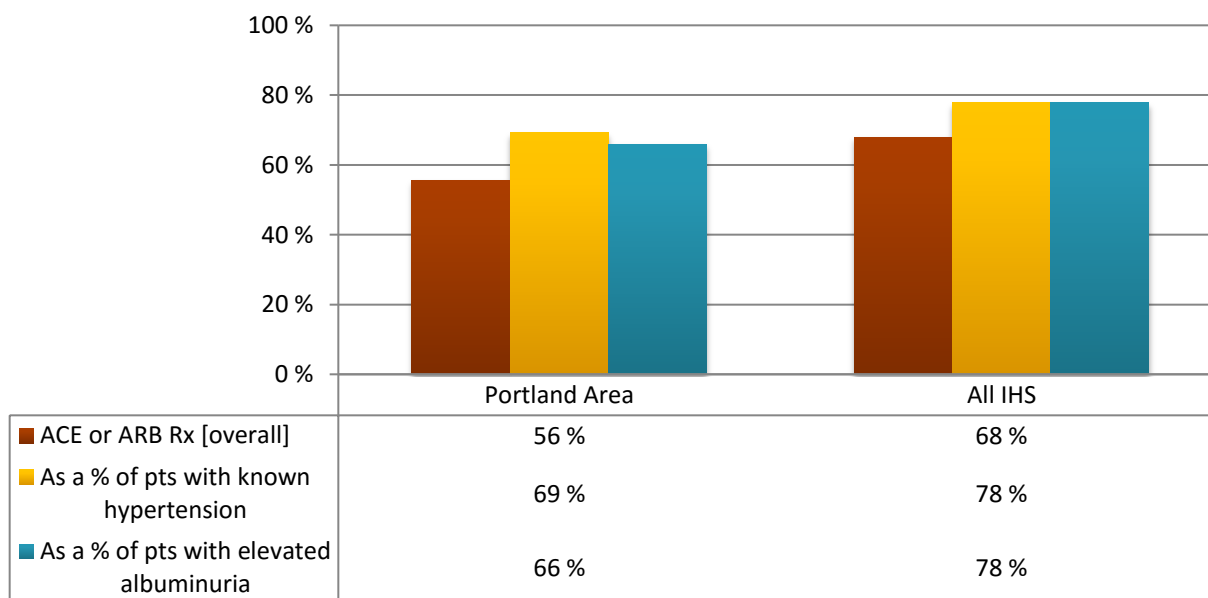
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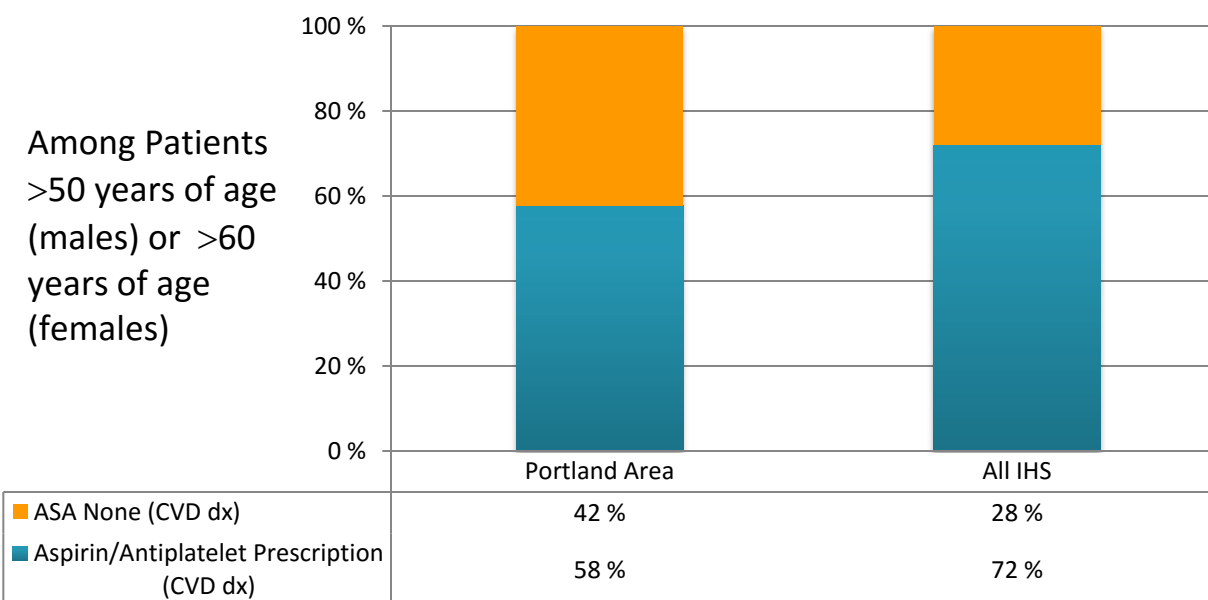
7534 sampled from 8021 active patients with diabetes (94%)

116743 sampled from 154949 active patients with diabetes (84%)

### Ace Inhibitor (or ARB) Prescriptions



### Anti-Platelet Therapy



## 2015 Diabetes Audit: Dates of Service Calendar Year 2014

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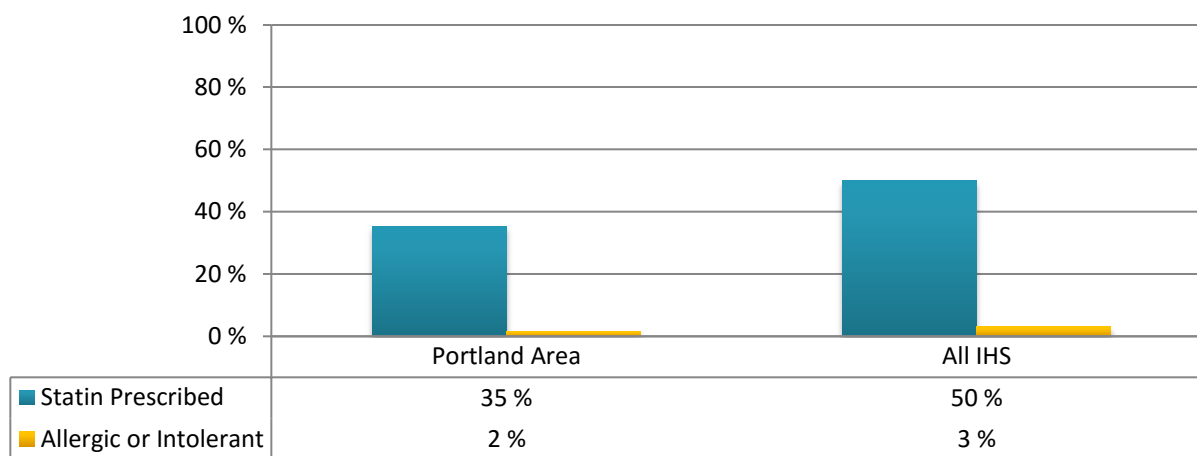
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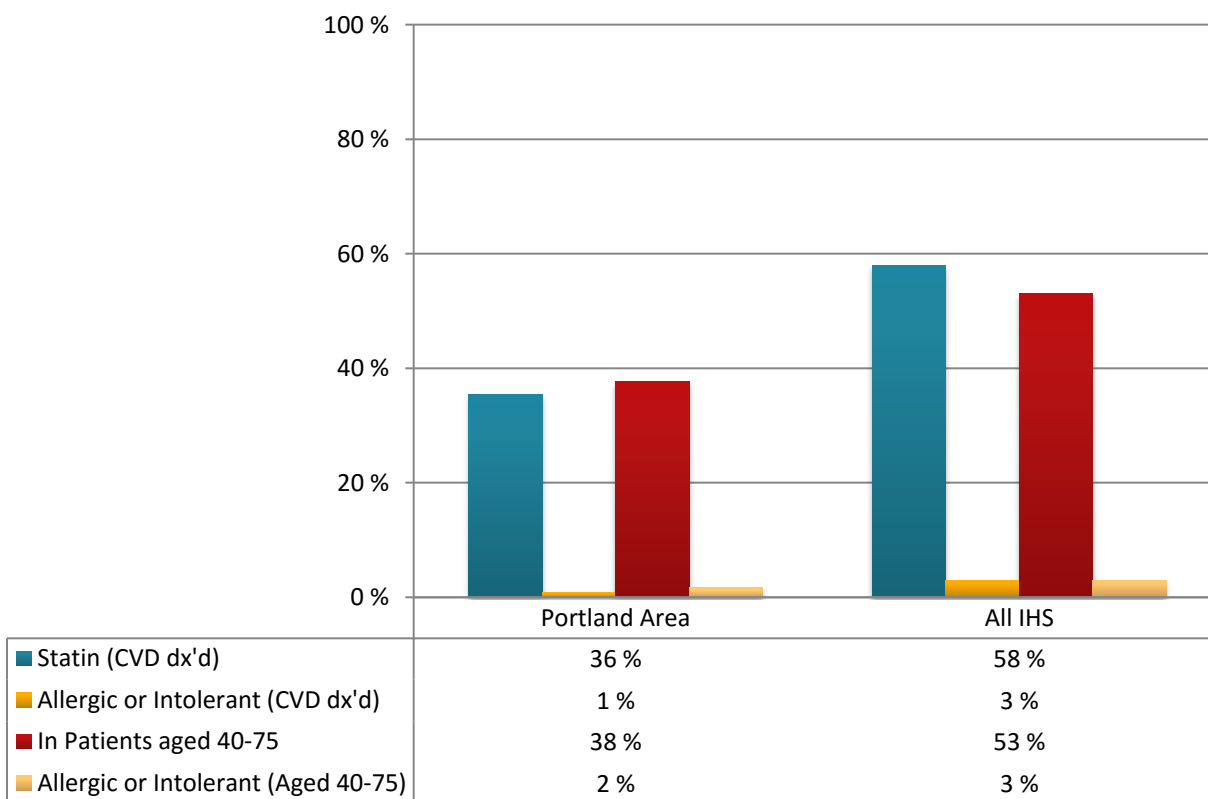
7534 sampled from 8021 active patients with diabetes (94%)

116743 sampled from 154949 active patients with diabetes (84%)

### Statin Prescribed



### Statin Use in Patients dx'd with CVD and Patients aged 40-75



## 2015 Diabetes Audit: Dates of Service Calendar Year 2014

This information is for the following groups:

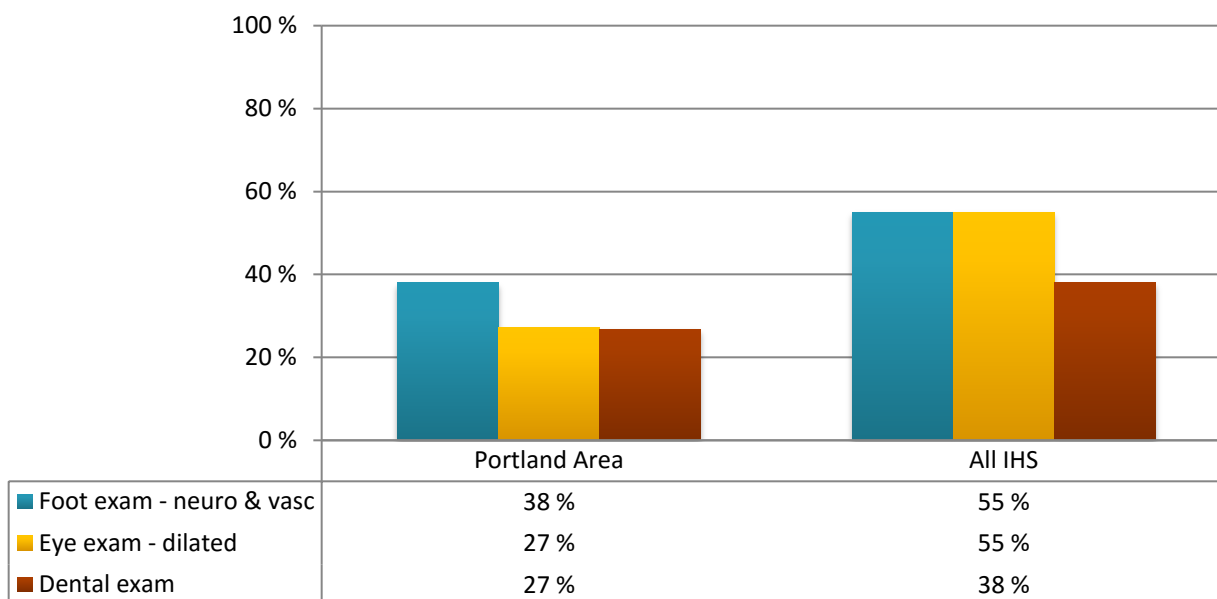
**Portland Area (n=7534 patients)**

**All IHS (n=7534 patients)**

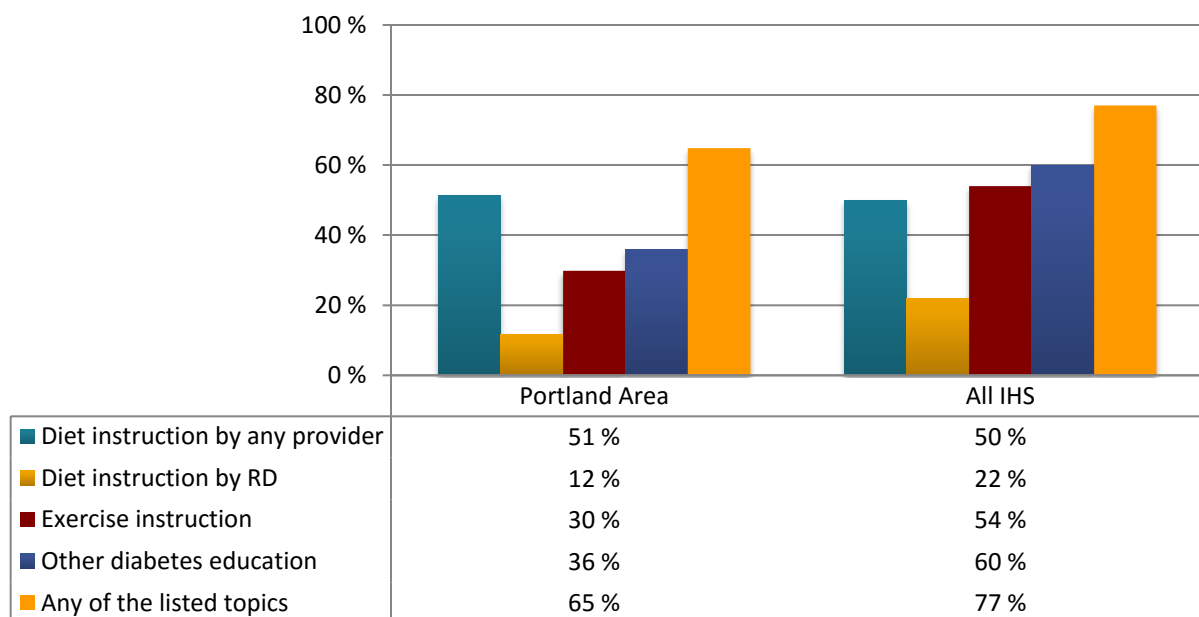
7534 sampled from 8021 active patients with diabetes (94%)

116743 sampled from 154949 active patients with diabetes (84%)

### Yearly Exams



### Yearly Diabetes Education



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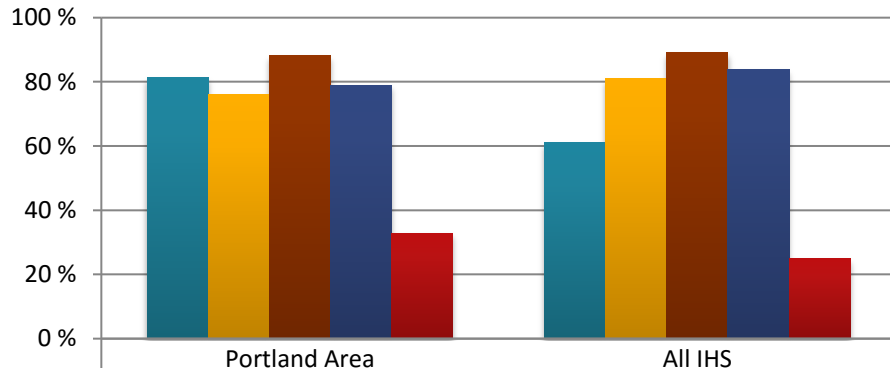
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**All IHS (n=7534 patients)**

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### Immunizations



■ Flu Vaccine - yearly	81 %	61 %
■ Pneumovax - once	76 %	81 %
■ Tetanus/Diphtheria (q 10 yrs)	88 %	89 %
■ Td/Tdap ever	79 %	84 %
■ Hepatitis B series ever/not immune	33 %	25 %

#### Portland Area

Flu Vaccine refused: 3.99454082344686%

Pneumovax refused: 2.45300677939044%

Tetanus/Diphtheria refused: 0.872862338579139%

Hepatitis B series refused/not immune: 1.2173579457%

#### All IHS

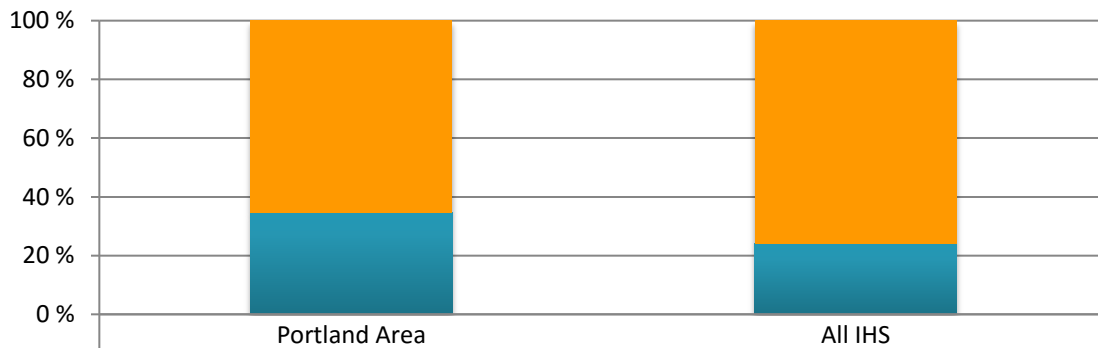
Flu Vaccine refused: 8%

Pneumovax refused: 4%

Tetanus/Diphtheria refused: 1%

Hepatitis B series refused/not immune: 2%

### Depression Identified as Active Diagnosis



■ Depression No	65 %	76 %
■ Depression Yes	35 %	24 %

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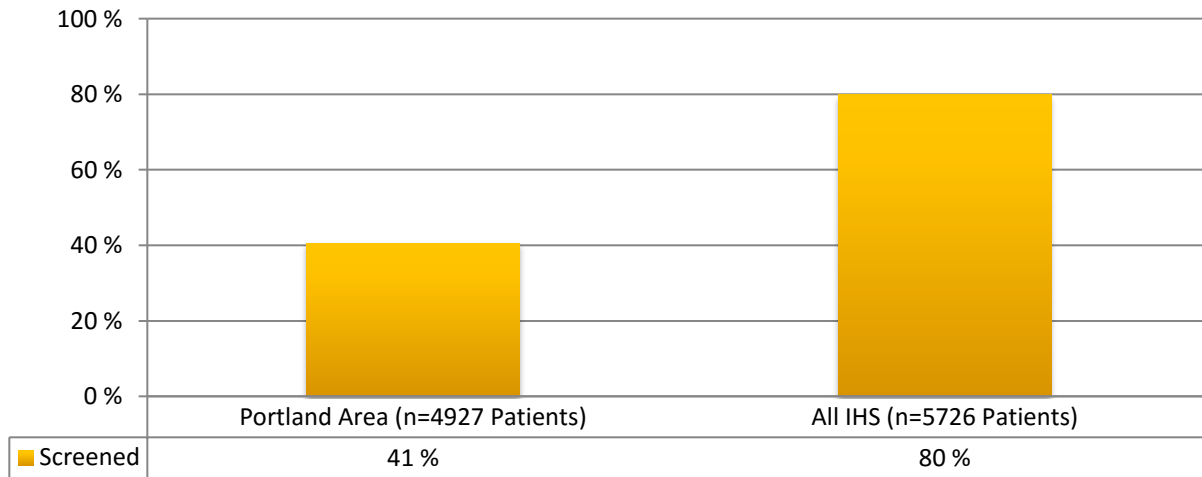
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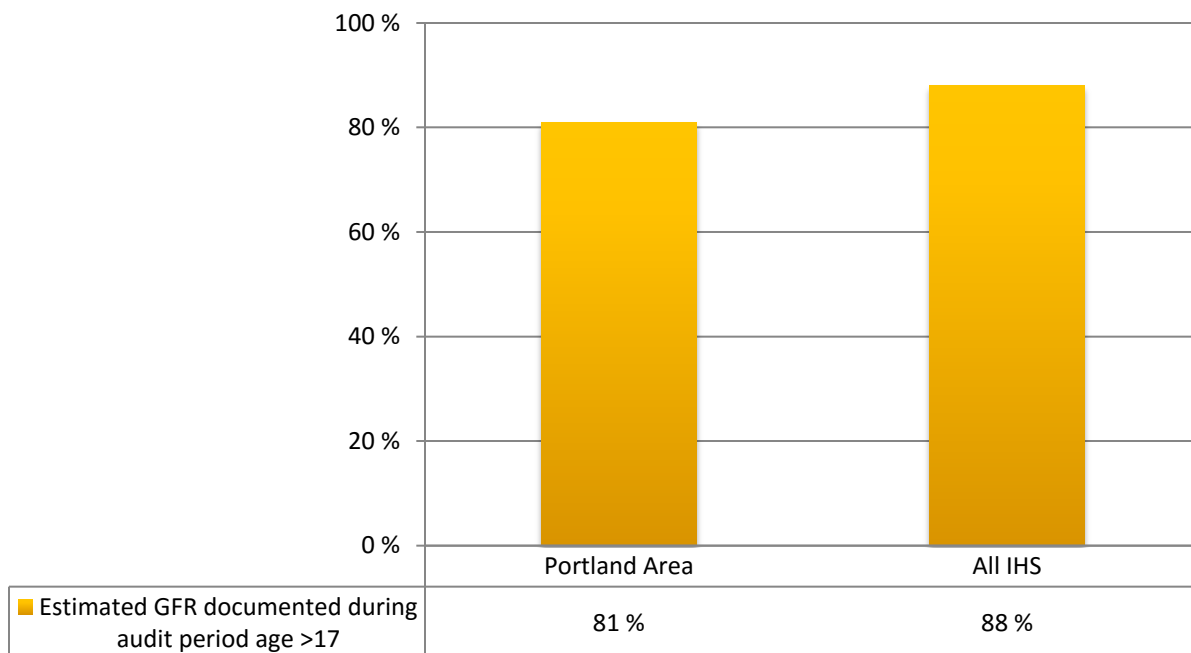
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### Of Patients Without Active Depression Diagnosis, Proportion Screened for Depression in Past Year



### Estimated GFR Testing



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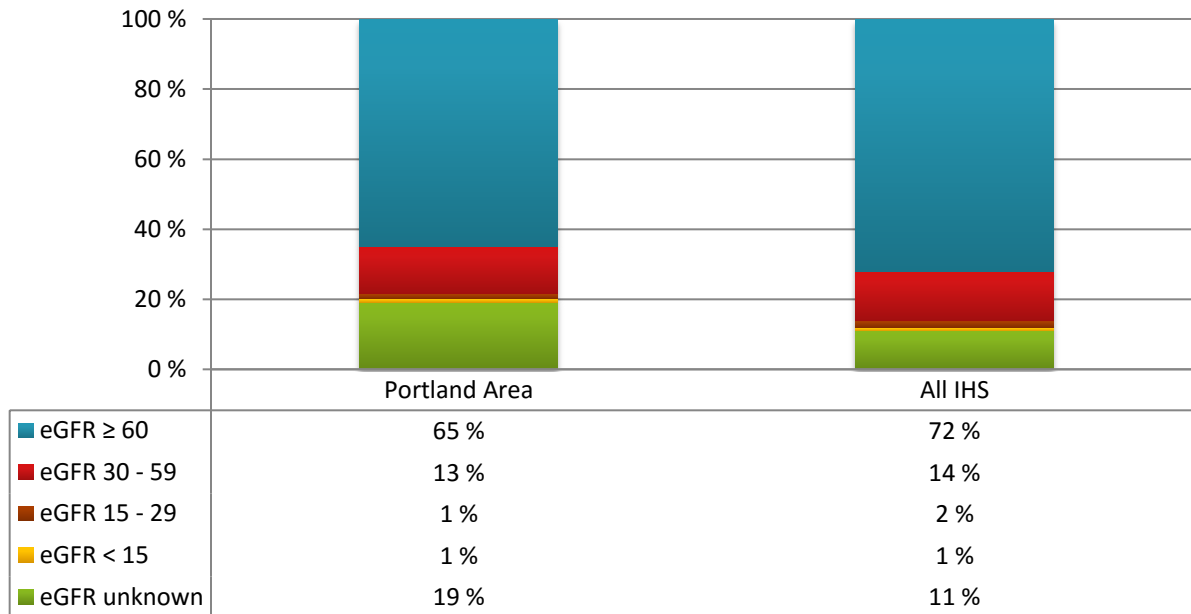
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**All IHS (n=7534 patients)**

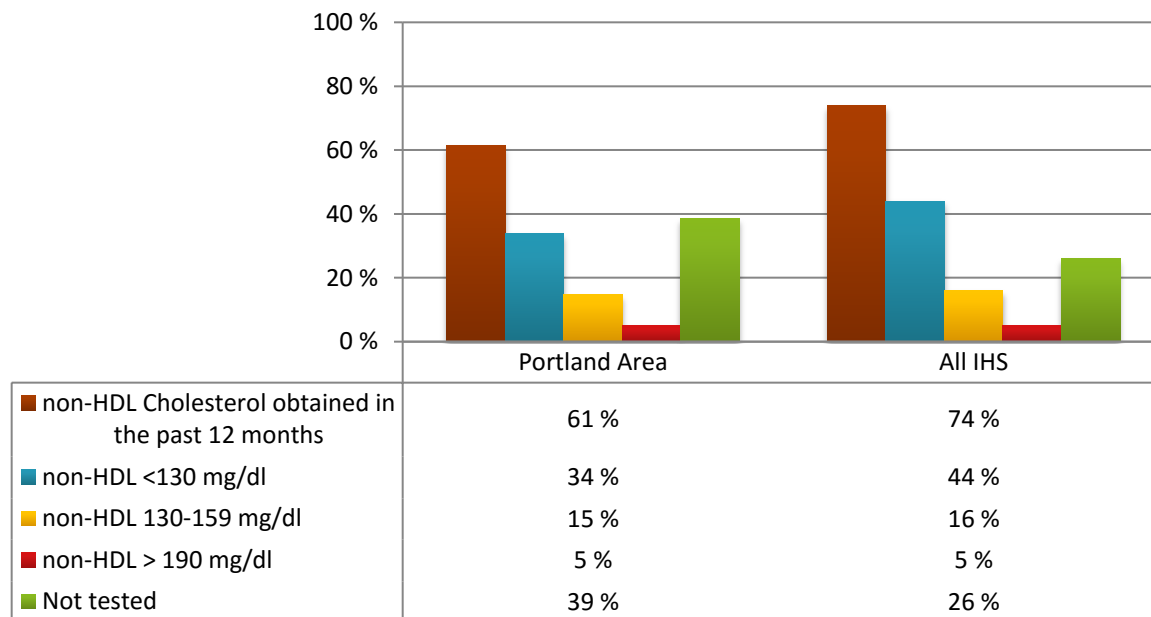
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### Estimated GFR results



### Non-HDL Cholesterol



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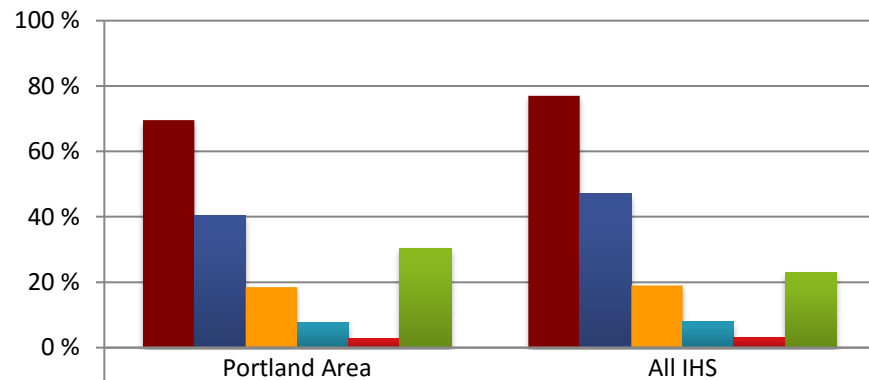
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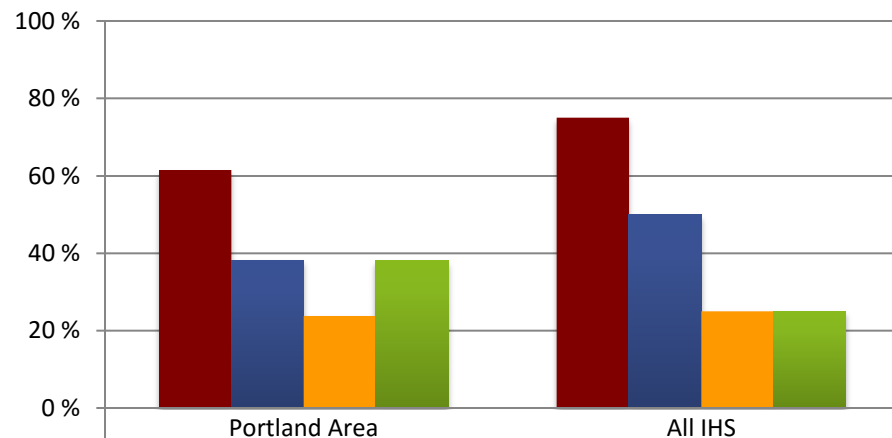
116743 sampled from 154949 active patients with diabetes (84%)

### LDL Cholesterol



■ LDL obtained in the past 12 months	70 %	77 %
■ LDL <100 mg/dl	40 %	47 %
■ LDL 100-129 mg/dl	18 %	19 %
■ LDL 130-160 mg/dl	8 %	8 %
■ LDL >160	3 %	3 %
■ Not tested	30 %	23 %

### HDL Cholesterol Females



■ HDL obtained in the past 12 months (all patients)	61 %	75 %
■ HDL ≤ 50 mg/dl	38 %	50 %
■ HDL > 50 mg/dl	24 %	25 %
■ HDL not done	38 %	25 %

## 2015 Diabetes Audit: Dates of Service Calendar Year 2014

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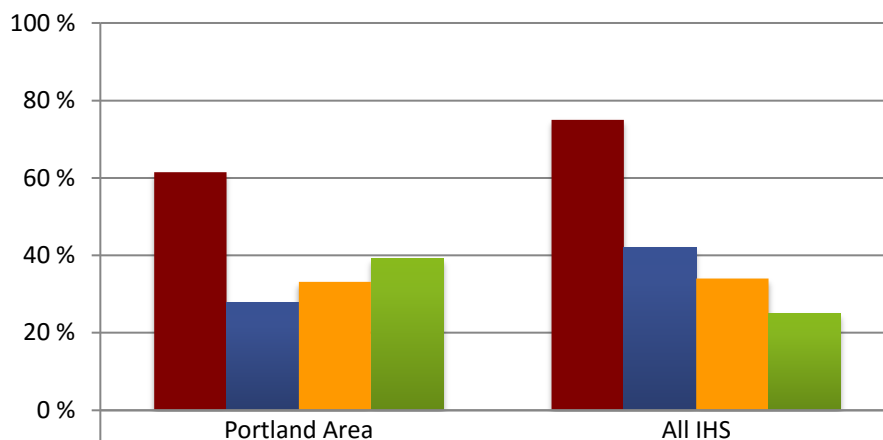
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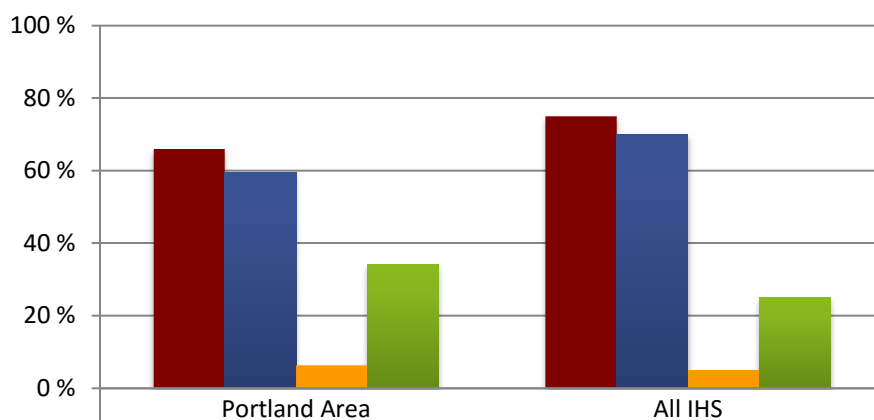
116743 sampled from 154949 active patients with diabetes (84%)

### HDL Cholesterol Males



- HDL obtained in the past 12 months (all patients)
- HDL ≤ 40 mg/dl
- HDL > 40 mg/dl
- HDL not done

### Triglyceride Distribution



- Triglycerides obtained in the past 12 months
- TG ≤ 400 mg/dl
- TG > 400 mg/dl
- TG not tested



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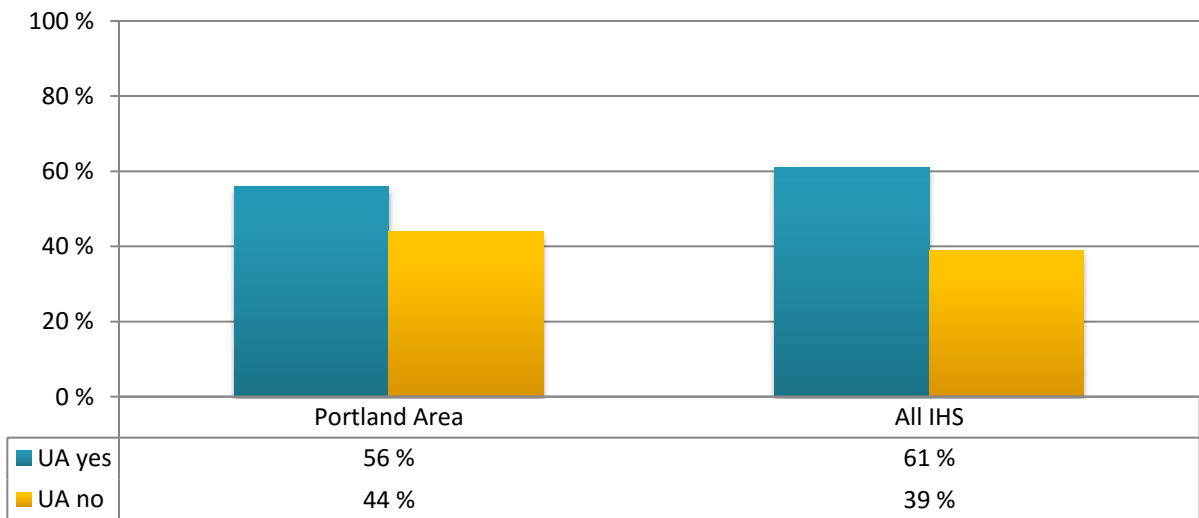
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**All IHS (n=7534 patients)**

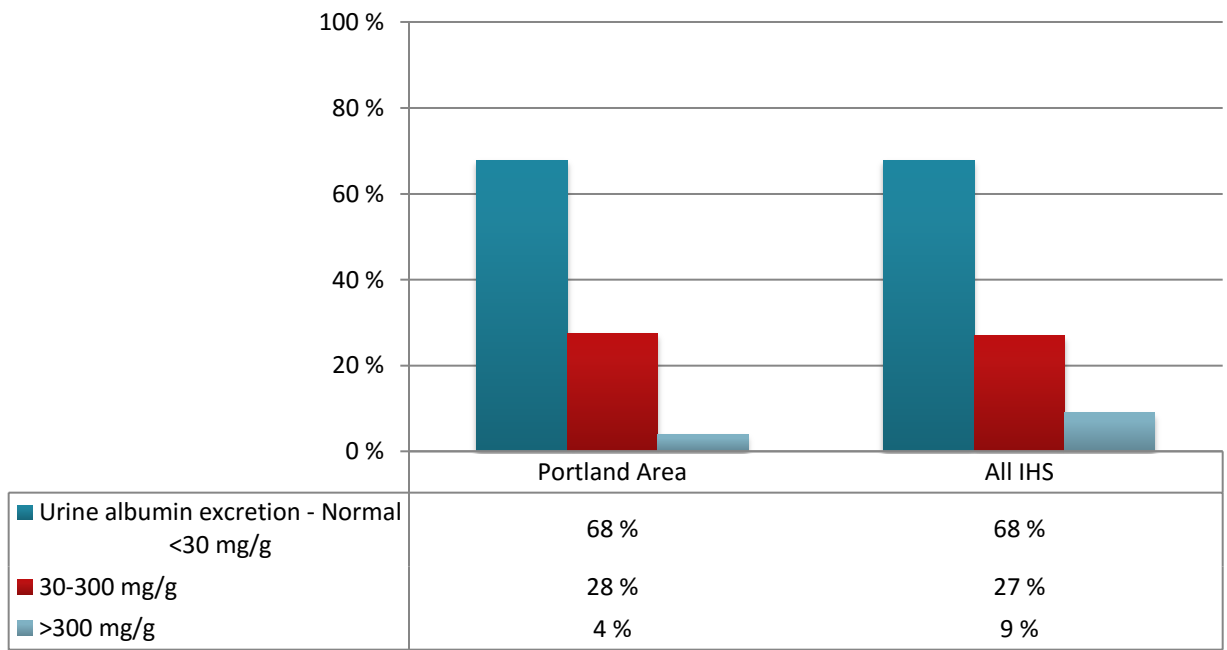
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### Urinalysis Performed



### UACR results



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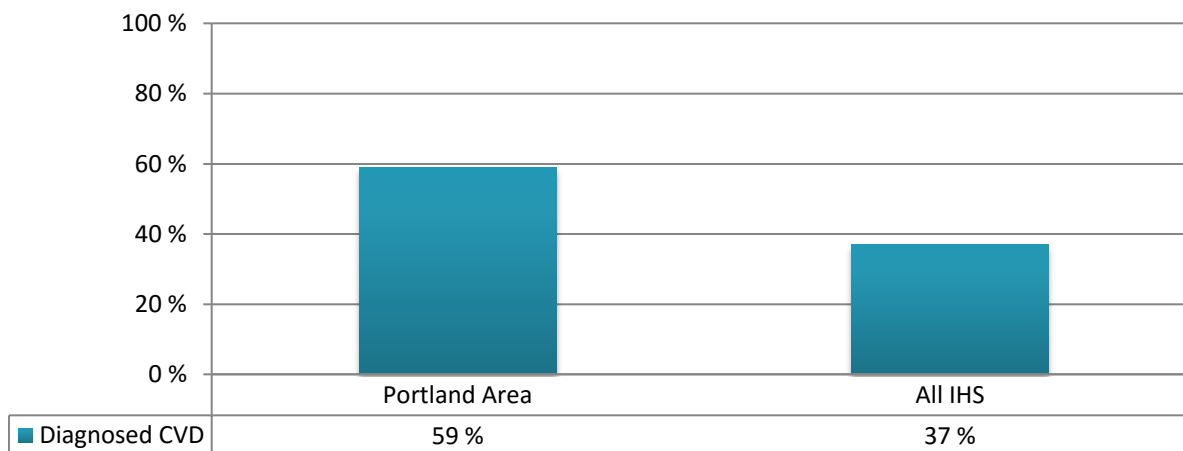
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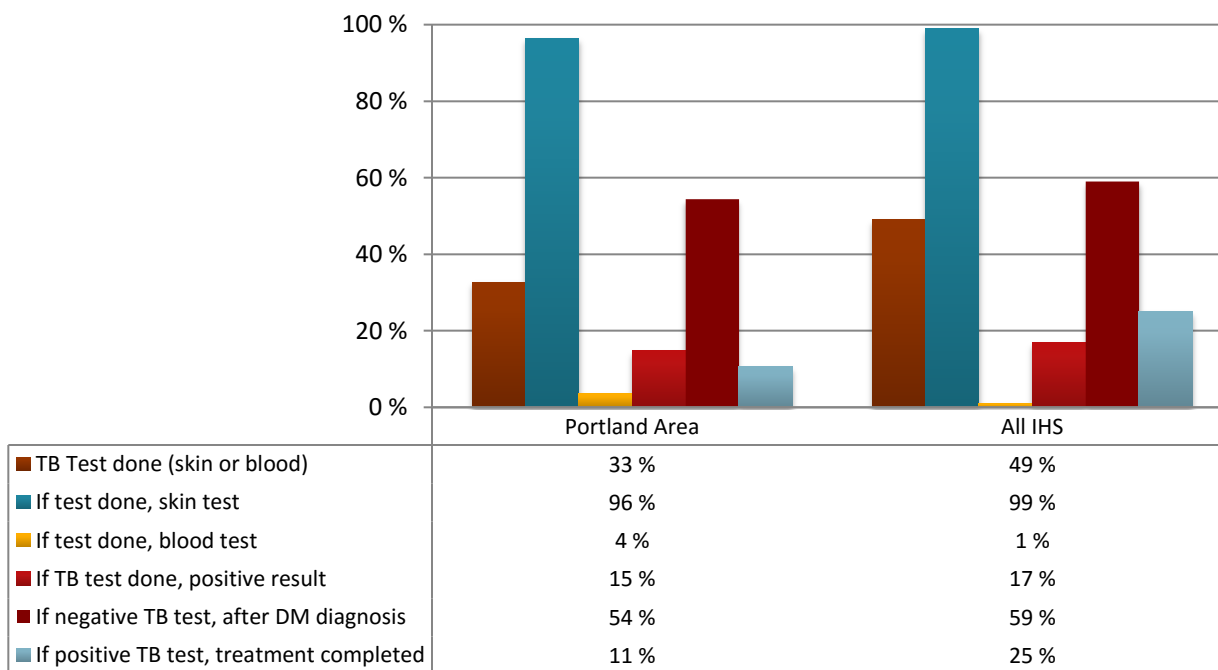
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### Patients diagnosed with CVD



### Tuberculosis Status



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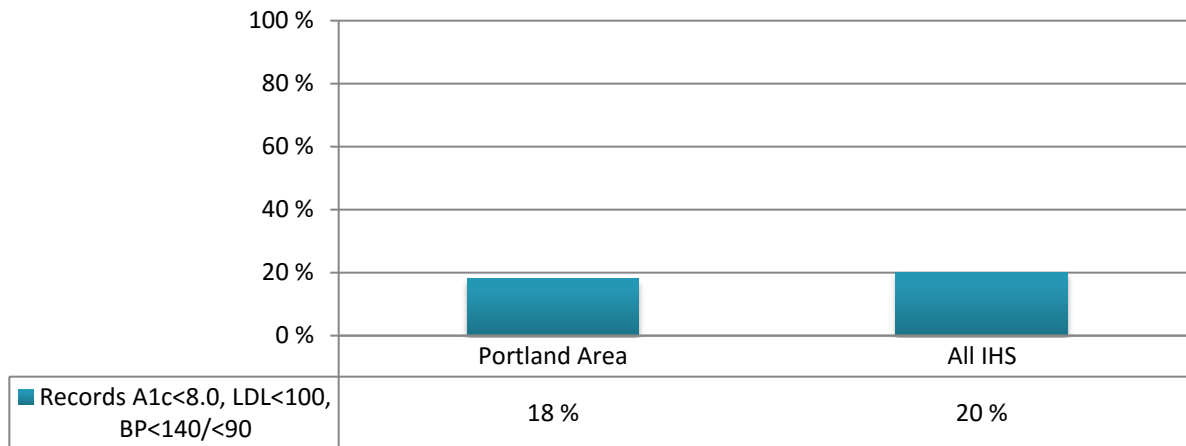
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### Records meeting ALL of the criteria: A1c < 8.0, LDL < 100, and mean BP <140/<90



### Records with eGFR and quantitative protein test

