

## **Online Appendix for: Health Care Expenditures among Adults with Diabetes after Oregon's Medicaid Expansion**

### **Details on approaches**

#### **Imputation of missing expenditures**

We imputed missing expenditures using two separate procedures, one for claims paid on diagnosis related claims (DRG) basis in inpatient facilities and one for non-DRG claims in other settings.[1] Specifically, for inpatient facility claims paid on a DRG basis, we imputed spending with the average payment based on the DRG code and year of the inpatient stay if the amount allowed was missing. Spending was imputed for 6.7 percent of inpatient facility claims. For claims not paid on a DRG basis, we imputed the amount using the 2014 Oregon Medicaid Fee Schedule rate times the value in the quantity field on the claim if the allowed amount was less than \$0.05. We did not use the fee schedule for transportation-related services (CPT codes A0090, A0100, A0130, A0180, A0190, A0210, A0424, A0425, A0426, A0427, A0428, A0429, A0430, A0431, A0433, A0434 and A0998) because the fee schedule does not show reasonable reimbursement amounts for them (most prominently, the fee schedule reimbursement amount for services with CPT code A0100 (Non-emergency transportation; taxi) is \$999 per trip). For this service category, we used mean values of allowed amounts that were more than \$0.05. We imputed 19.3 percent of non-DRG claim lines.

#### **Information used to identify expenditure categories**

ED visits were identified using the HEDIS 2014 ED value set, ED procedure value set and the ED place of service value set. Inpatient visits were identified using a modified version of the HEDIS 2014 inpatient utilization measure. PCP and specialist visits were identified using health care provider taxonomy codes from the National Provider Identifier Database. We used Berenson-Eggers Type of Service (BETOS) codes for the remaining, service-related expenditure categories. Some claims related to inpatient stays, ED visits, PCP visits or specialist visits were assigned to multiple visit types.

#### **ICD codes for identification of mental and behavioral health conditions**

The following table shows ICD-9 and ICD-10 codes used to identify mental and behavioral health conditions.

# SUPPLEMENTARY DATA

**Supplementary Table 1:** ICD codes for mental and behavioral health condition

Condition	ICD Codes
Other Behavioral Conditions	290, 290.0, 290.00, 290.1, 290.10, 290.11, 290.12, 290.13, 290.2, 290.20, 290.21, 290.3, 290.30, 290.4, 290.40, 290.41, 290.42, 290.43, 290.8, 290.80, 290.9, 290.90, 293.00, 293.0, 293, 293.10, 293.1, 293.81, 293.82, 293.83, 293.84, 293.89, 293.90, 293.9, 294.0, 294, 294.00, 294.10, 294.1, 294.11, 294.8, 294.80, 294.9, 294.90, 300.10, 300.1, 300.11, 300.12, 300.13, 300.14, 300.15, 300.16, 300.19, 302.10, 302.1, 302.20, 302.2, 302.30, 302.3, 302.40, 302.4, 302.50, 302.5, 302.51, 302.52, 302.53, 302.60, 302.6, 302.70, 302.7, 302.71, 302.72, 302.73, 302.74, 302.75, 302.76, 302.79, 302.81, 302.82, 302.83, 302.84, 302.85, 302.89, 302.90, 302.9, 306.00, 306.0, 306, 306.10, 306.1, 306.20, 306.2, 306.30, 306.3, 306.40, 306.4, 306.50, 306.5, 306.51, 306.52, 306.53, 306.59, 306.60, 306.6, 306.70, 306.7, 306.80, 306.8, 306.90, 306.9, 307.10, 307.1, 307.40, 307.4, 307.41, 307.42, 307.43, 307.44, 307.45, 307.46, 307.47, 307.48, 307.49, 307.50, 307.5, 307.51, 307.54, 307.59, 307.80, 307.8, 307.81, 307.89, 307.90, 307.9, 310.00, 310.0, 310, 310.10, 310.1, 310.20, 310.2, 310.80, 310.8, 310.90, 310.9, 312.30, 312.3, 312.31, 312.32, 312.33, 312.34, 312.35, 312.39, 316.00, 316.0, 316, 327.02, 327.15, 327.30, 327.3, 327.31, 327.32, 327.33, 327.34, 327.35, 327.36, 327.37, 327.39, 327.53, 331.00, 331.0, 331, 331.10, 331.1, 331.11, 331.19, 331.20, 331.2, 331.82, 331.83, 648.40, 648.4, 648.41, 648.42, 648.43, 648.44, 780.50, 780.5, 780.51, 780.52, 780.53, 780.54, 780.57, 780.58, 780.59, 797.00, 797.0, 797, V11.0, V11.1, V11.2, V11.3, V11.8, V11.9, V15.4, V15.41, V15.42, V15.49, V15.82, V40.0, V40.1, V40.2, V40.3, V40.9, V62.84, V66.3, V67.3, V70.1, V70.2, V71.01, V71.02, V71.09, V79.0, V79.1, V79.2, V79.3, V79.8, V79.9
Alcohol Disorders	291, 291.1, 291.2, 291.3, 291.4, 291.5, 291.8, 291.00, 291.0, 291.10, 291.20, 291.30, 291.40, 291.50, 291.80, 291.81, 291.82, 291.89, 291.90, 291.9, 303.00, 303.0, 303, 303.01, 303.02, 303.03, 303.90, 303.9, 303.91, 303.92, 303.93, 305.0, 305.00, 305, 305.01, 305.02, 305.03
Substance Disorders	292.00, 292.0, 292, 292.11, 292.12, 292.20, 292.2, 292.81, 292.82, 292.83, 292.84, 292.85, 292.89, 292.90, 292.9, 304.00, 304.0, 304, 304.01, 304.02, 304.03, 304.10, 304.1, 304.11, 304.12, 304.13, 304.20, 304.2, 304.21, 304.22, 304.23, 304.30, 304.3, 304.31, 304.32, 304.33, 304.40, 304.4, 304.41, 304.42, 304.43, 304.50, 304.5, 304.51, 304.52, 304.53, 304.60, 304.6, 304.61, 304.62, 304.63, 304.70, 304.7, 304.71, 304.72, 304.73, 304.80, 304.8, 304.81, 304.82, 304.83, 304.90, 304.9, 304.91, 304.92, 304.93, 305.10, 305.1, 305.11, 305.12, 305.13, 305.20, 305.2, 305.21, 305.22, 305.23, 305.30, 305.3, 305.31, 305.32, 305.33, 305.40, 305.4, 305.41,

# SUPPLEMENTARY DATA

305.42, 305.43, 305.50, 305.5, 305.51, 305.52, 305.53, 305.60, 305.6,  
305.61, 305.62, 305.63, 305.70, 305.7, 305.71, 305.72, 305.73, 305.80,  
305.8, 305.81, 305.82, 305.83, 305.90, 305.9, 305.91, 305.92, 305.93

*(Continued on next page)*

**Supplementary Table 1 (Continued from previous page)**

Condition	ICD Codes
Schizophrenia and Other Nonmood Disorders	295.0, 295, 295.00, 295.01, 295.02, 295.03, 295.04, 295.05, 295.1, 295.10, 295.11, 295.12, 295.13, 295.14, 295.15, 295.2, 295.20, 295.21, 295.22, 295.23, 295.24, 295.25, 295.30, 295.3, 295.31, 295.32, 295.33, 295.34, 295.35, 295.4, 295.40, 295.41, 295.42, 295.43, 295.44, 295.45, 295.50, 295.5, 295.51, 295.52, 295.53, 295.54, 295.55, 295.60, 295.6, 295.61, 295.62, 295.63, 295.64, 295.65, 295.70, 295.7, 295.71, 295.72, 295.73, 295.74, 295.75, 295.80, 295.8, 295.81, 295.82, 295.83, 295.84, 295.85, 295.90, 295.9, 295.91, 295.92, 295.93, 295.94, 295.95, 297.00, 297.0, 297, 297.10, 297.1, 297.20, 297.2, 297.30, 297.3, 297.80, 297.8, 297.90, 297.9, 298.00, 298.0, 298, 298.10, 298.1, 298.20, 298.2, 298.30, 298.3, 298.40, 298.4, 298.80, 298.8, 298.90, 298.9
Bipolar Disorder	296.00, 296.0, 296, 296.01, 296.02, 296.03, 296.04, 296.05, 296.06, 296.10, 296.1, 296.11, 296.12, 296.13, 296.14, 296.15, 296.16, 296.40, 296.4, 296.41, 296.42, 296.43, 296.44, 296.45, 296.46, 296.50, 296.5, 296.51, 296.52, 296.53, 296.54, 296.55, 296.56, 296.60, 296.6, 296.61, 296.62, 296.63, 296.64, 296.65, 296.66, 296.70, 296.7, 296.80, 296.8, 296.81, 296.89, 301.13
Major Depression	296.20, 296.2, 296.21, 296.22, 296.23, 296.24, 296.25, 296.26, 296.30, 296.3, 296.31, 296.32, 296.33, 296.34, 296.35, 296.36
Dysthymia or Other Depressive	296.82, 296.90, 296.9, 296.99, 300.40, 300.4, 311.00, 311.0, 311
Disorders Originating in Childhood	299.00, 299.0, 299, 299.01, 299.10, 299.1, 299.11, 299.80, 299.8, 299.81, 299.90, 299.9, 299.91, 307.00, 307.0, 307, 307.20, 307.2, 307.21, 307.22, 307.23, 307.30, 307.3, 307.52, 307.53, 307.60, 307.6, 307.70, 307.7, 309.21, 312.00, 312.0, 312, 312.01, 312.02, 312.03, 312.10, 312.1, 312.11, 312.12, 312.13, 312.20, 312.2, 312.21, 312.22, 312.23, 312.40, 312.4, 312.80, 312.8, 312.81, 312.82, 312.89, 312.90, 312.9, 313.00, 313.0, 313, 313.10, 313.1, 313.21, 313.22, 313.23, 313.30, 313.3, 313.81, 313.82, 313.83, 313.89,

## SUPPLEMENTARY DATA

313.90, 313.9, 314.00, 314.0, 314, 314.01, 314.10, 314.1, 314.20, 314.2,  
314.80, 314.8, 314.90, 314.9, 315.00, 315.0, 315, 315.01, 315.02, 315.09,  
315.10, 315.1, 315.20, 315.2, 315.31, 315.32, 315.34, 315.39, 315.40, 315.4,  
315.50, 315.5, 315.80, 315.8, 315.90, 315.9

Anxiety Disorders	300.00, 300.0, 300, 300.01, 300.02, 300.09, 300.20, 300.2, 300.21, 300.22, 300.23, 300.29, 300.30, 300.3, 300.50, 300.5, 300.60, 300.6, 300.70, 300.7, 300.81, 300.82, 300.89, 300.90, 300.9, 308.00, 308.0, 308, 308.10, 308.1, 308.20, 308.2, 308.30, 308.3, 308.40, 308.4, 308.90, 308.9, 309.00, 309.0, 309, 309.81, 309.89
Personality Disorder	301.00, 301.0, 301, 301.10, 301.1, 301.11, 301.12, 301.20, 301.2, 301.21, 301.22, 301.30, 301.3, 301.40, 301.4, 301.50, 301.5, 301.51, 301.59, 301.60, 301.6, 301.70, 301.7, 301.81, 301.82, 301.83, 301.84, 301.89, 301.90, 301.9
Adjustment Disorder	309.10, 309.1, 309.22, 309.23, 309.24, 309.28, 309.29, 309.30, 309.3, 309.40, 309.4, 309.82, 309.83, 309.90, 309.9

# SUPPLEMENTARY DATA

**Supplementary Table 2:** Unadjusted mean difference in expenditures for the eligibility groups (newly - previously eligible) by calendar quarter, matched sample

	2014				2015				2016		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Total	-232.5**	-132.8**	-95.6	-135.6**	-103.3	-149.0**	-151.2*	-146.2*	-221.2**	-136.2	-99.6
Inpatient	39.6	11.5	-1.3	-23.8	-28.6	-65.9*	-39.3	-12.3	-88.2*	-29.2	-41.8
ED	-2.9	-2.8	-5.3	-11.3**	-11.9**	-14.3**	-12.3**	-8.3**	-11.5**	-13.2**	-12.2**
PCP	6.4**	11.4**	7.5**	3.9*	-0.9	0.6	-0.6	-1.2	0.6	2.1	0.9
Specialist	-9.8**	10.6**	8.9	16.4*	11.2	16.8*	11.0	10.3	1.7	-17.2	1.0
Prescription drugs	-169.1**	-120.5**	-68.3**	-90.2**	-48.5*	-53.9**	-52.8*	-58.3*	-57.4*	-10.5	-6.0
Transportation	-12.3**	-8.5**	-9.4**	-11.1**	-11.3**	-10.1**	-11.8**	-11.3**	-14.4**	-8.9**	-12.2**
Lab tests	-0.7	4.8**	5.3**	1.4	2.8*	0.3	-0.6	-0.8	-1.6	-0.8	-2.1
Imaging & Echography	-1.3	5.7*	1.1	-0.4	-3.2	-3.6	-4.4	-4.7	-3.7	-2.8	-6.6*
Procedures	-50.1**	-18.6	-24.9	-20.9	-15.1	-12.0	-29.3	-22.9	-23.8	-29.8	-6.0
Durable medical equipment	-12.85**	-22.26*	-4.81	-1.19	0.89	0.08	-1.82	-27.15	-13.73	-13.32	12.20
Evaluation & Management	0.2	3.0**	3.1*	5.0**	3.5**	3.4*	4.8**	2.8	4.5**	4.1**	3.6*
Other / unknown services	-19.8**	-7.1	-7.5	-3.2	-2.3	-10.4	-14.0	-12.6	-13.6	-16.7	-30.3*

Notes: The table shows regression coefficients of being in the newly eligible group in a linear regression with the outcome shown by the first column. Standard errors were clustered at the matched pair level. \*: p<0.05; \*\*: p<0.01

# SUPPLEMENTARY DATA

**Supplementary Table 3:** Logistic and quantile regression results for PMPM inpatient expenditures by calendar quarter, matched sample

	2014				2015				2016		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Logistic regression	0.039	0.026	0.004	-0.042	-0.180 <sup>*</sup>	-0.346 <sup>**</sup>	-0.139	-0.014	-0.318 <sup>**</sup>	-0.159 <sup>*</sup>	-0.170 <sup>*</sup>
Quantile regression for the 95th percentile	45.7	38.9	-834.9	0.0	-343.4	-1632.9 <sup>*</sup>	-123.8	-7.2	-1474.8	-641.7	-571.3
Quantile regression for the 96th percentile	1049.8	85.2	-98.8	-231.3	-373.5	-1793.9 <sup>**</sup>	-1142.7	-33.9	-1895.6 <sup>**</sup>	-404.2	-630.9
Quantile regression for the 97th percentile	58.7	62.0	247.6	-336.8	-173.4	-676.2 <sup>*</sup>	-250.8	166.5	-903.8 <sup>*</sup>	-209.9	-782.4 <sup>*</sup>
Quantile regression for the 98th percentile	380.6	445.4	217.7	-737.0	-90.6	-733.8	-758.6	-226.6	-504.7	92.6	-1075.7 <sup>*</sup>
Quantile regression for the 99th percentile	1367.6	-43.0	6.2	-627.4	-1384.0	-762.3	359.5	-843.9	-1632.9	1439.5	-741.9

Notes: The table shows regression coefficients of being in the newly eligibility group for a logistic regression with any PMPM inpatient spending as outcome (first row) and for quantile regressions with PMPM inpatient spending as outcome and the percentile as indicated in the first column (second to sixth row). Standard errors were clustered at the matched pair level. <sup>\*</sup>: p<0.05; <sup>\*\*</sup>: p<0.01

# SUPPLEMENTARY DATA

**Supplementary Table 4:** Changes in PMPM Medicaid expenditures between newly and previously eligible Medicaid recipients with diabetes overall and by categories, matched sample

Expenditures	Change first to third quarter (\$ PMPM)	Change third to last quarter (\$ PMPM)
Total	137	-4
Inpatient	-40	-40
ED	-2	-7
PCP	1	-7
Specialist	19	-8
Prescription drugs	100	63
Transportation	3	-3
Lab tests	6	-7
Imaging & Echography	2	-8
Procedures	25	19
Durable medical equipment	8	17
Evaluation & Management	3	1
Other / unknown services	12	-23

Notes: Numbers show the change in PMPM Medicaid expenditures for newly eligible Medicaid recipients with diabetes relative to the change in PMPM Medicaid expenditures for previously Medicaid recipients with diabetes for total PMPM expenditures and each of the expenditure categories and the matched sample. PMPM expenditure changes for the 12 expenditure categories sum up to changes in total PMPM expenditures.

# SUPPLEMENTARY DATA

**Supplementary Table 5:** Regression-adjusted mean difference in expenditures for the eligibility groups (newly - previously eligible) by calendar quarter, matched sample

	2014				2015				2016		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Total	-263.2**	-156.3**	-116.0*	-155.9**	-98.1	-164.2**	-146.9*	-147.2*	-234.7**	-163.7*	-88.3
Inpatient	28.8	9.0	-3.8	-26.3	-25.9	-70.9*	-33.4	-8.7	-88.9**	-30.9	-35.9
ED	-4.7*	-4.7*	-6.8*	-11.6**	-10.9**	-14.3**	-11.6**	-8.4**	-11.9**	-13.9**	-12.7**
PCP	5.0**	8.9**	4.5**	2.3	-1.8	-0.3	-1.1	-2.4	-0.2	0.7	0.2
Specialist	-11.5**	8.9*	7.5	14.6*	10.7	14.9**	9.7	9.5	0.4	-20.7	0.5
Prescription drugs	-174.2**	-125.4**	-75.3**	-98.1**	-46.9*	-59.9**	-56.9*	-64.2**	-64.8*	-23.8	-3.3
Transportation	-13.5**	-10.0**	-9.1**	-10.6**	-9.3**	-8.8**	-10.4**	-11.2**	-14.8**	-9.5**	-12.4**
Lab tests	-1.27	3.47**	3.92**	0.62	2.57*	0.01	-0.69	-1.12	-1.92	-1.27	-2.12
Imaging & Echography	-2.2	5.1*	0.3	-1.0	-3.1	-3.9	-4.7	-4.8*	-4.0	-3.6	-6.9*
Procedures	-52.1**	-21.6	-24.1	-23.8	-17.1	-16.7	-28.7	-18.6	-24.7	-32.2	-1.4
Durable medical equipment	-13.5**	-23.2**	-6.5	-2.5	-0.2	-1.2	-2.8	-28.4	-14.2	-14.9*	12.4



# SUPPLEMENTARY DATA

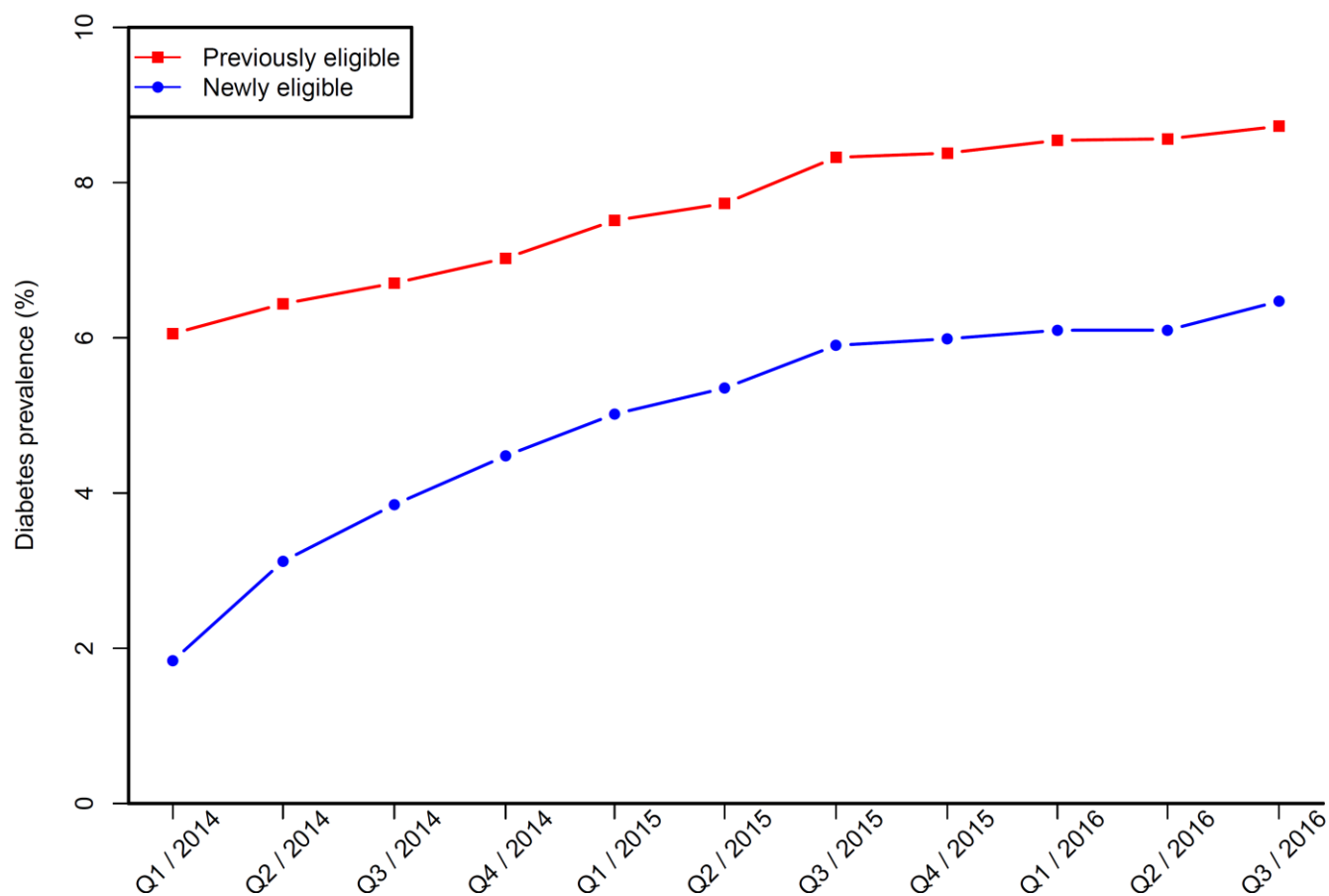
Evaluation & Management	-0.6	2.4 <sup>*</sup>	1.6	4.3 <sup>**</sup>	3.4 <sup>**</sup>	3.6 <sup>*</sup>	4.2 <sup>**</sup>	2.4	4.1 <sup>**</sup>	3.4 <sup>*</sup>	3.1
Other / unknown services	-23.4 <sup>**</sup>	-9.2 <sup>*</sup>	-8.1	-3.8	0.3	-6.6	-10.6	-11.3	-13.6	-17.0	-29.8 <sup>*</sup>

Notes: The table shows regression coefficients of being in the newly eligible group in a linear regression with the outcome shown by the first column and age, sex, race, ethnicity, urban residency status, the Charlson co-morbidity index and the 11 behavioral health conditions as other independent variables. Standard errors were clustered at the matched pair level. <sup>\*</sup>: p<0.05; <sup>\*\*</sup>: p<0.01

## SUPPLEMENTARY DATA

### **Supplementary Figure 1:** Trends in diabetes prevalence of previously and newly eligible Oregon Medicaid recipients

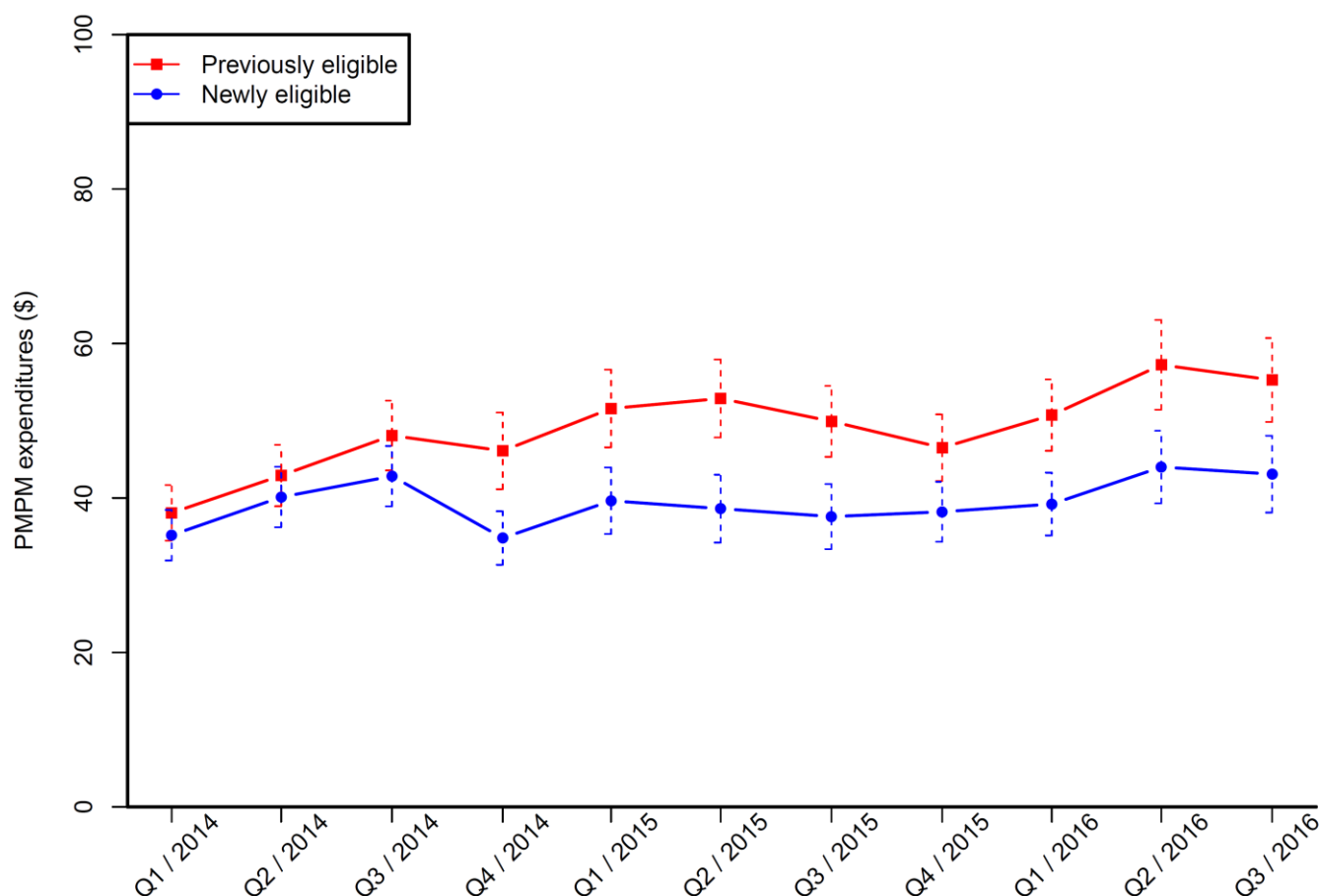
Notes: The figure shows diabetes prevalence for previously and newly insured Oregon Medicaid recipients between January 2014 and September 2016. Note that the sample for this figure includes all Medicaid enrollees, not only those included in the final sample used for the analysis.



## SUPPLEMENTARY DATA

### **Supplementary Figure 2:** Trends in ED expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample with full enrollment

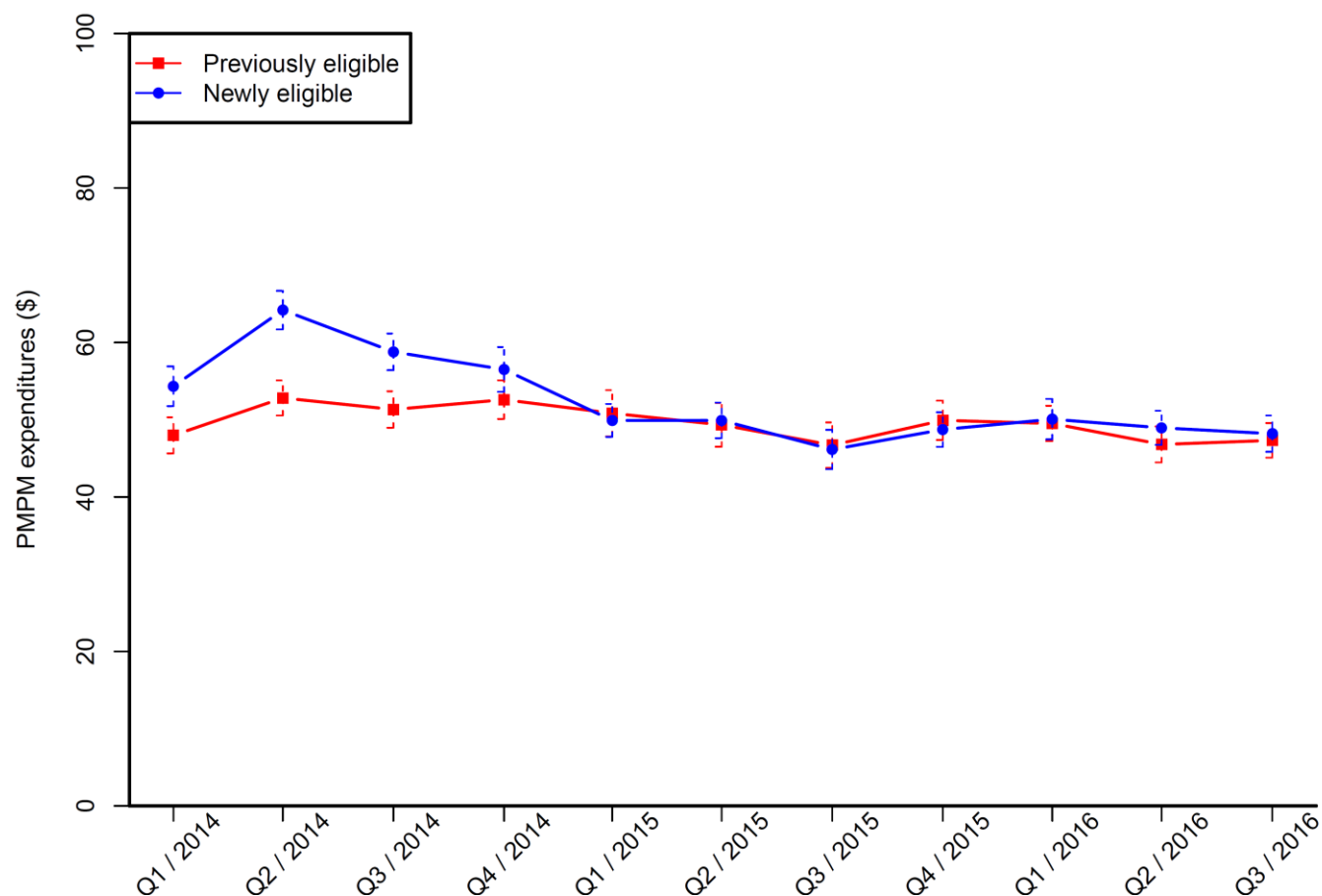
**Notes:** The figure shows ED Medicaid expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

### **Supplementary Figure 3:** Trends in PCP expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample with full enrollment

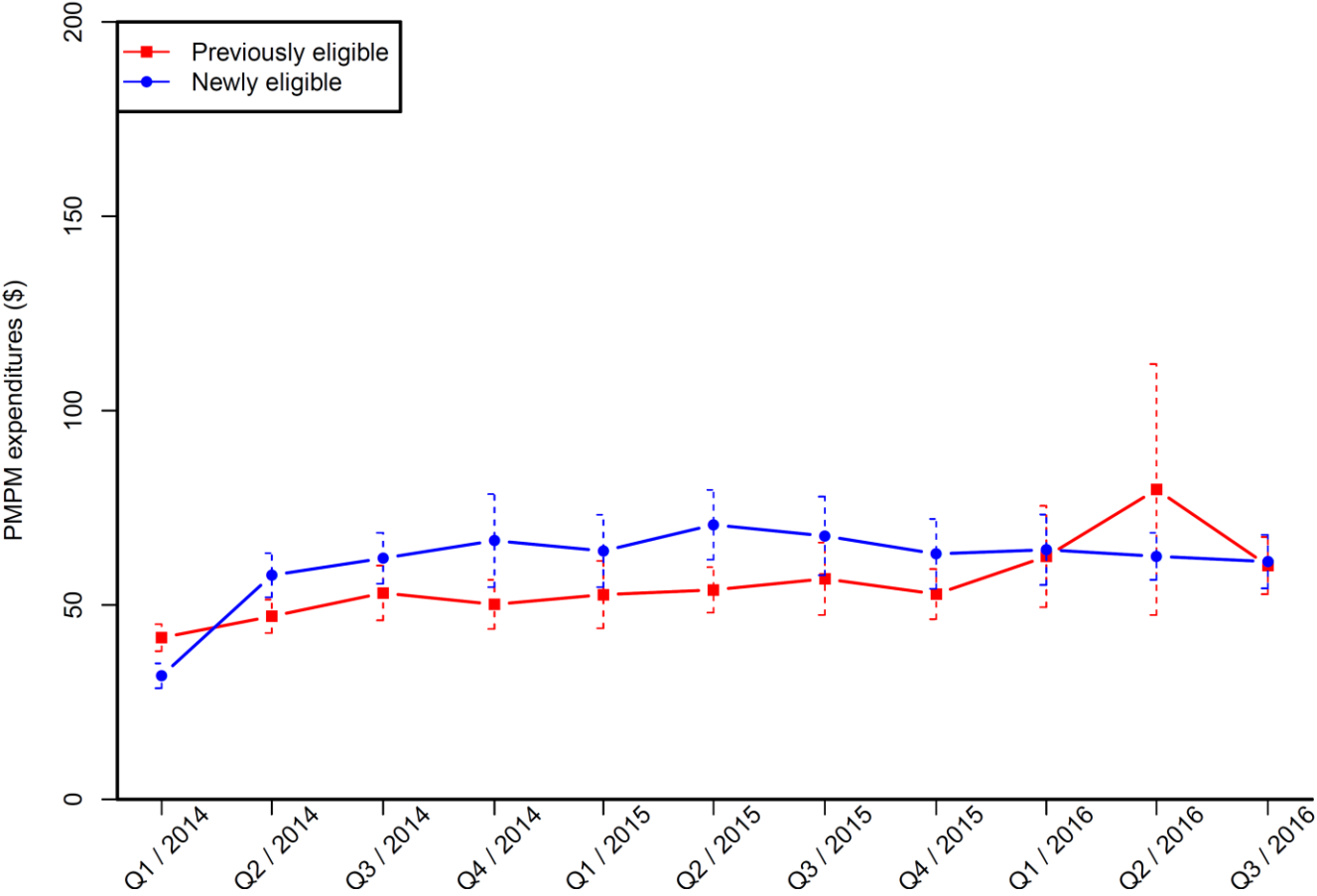
**Notes:** The figure shows PCP Medicaid expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



SUPPLEMENTARY DATA

**Supplementary Figure 4:** Trends in expenditures at specialists of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample with full enrollment

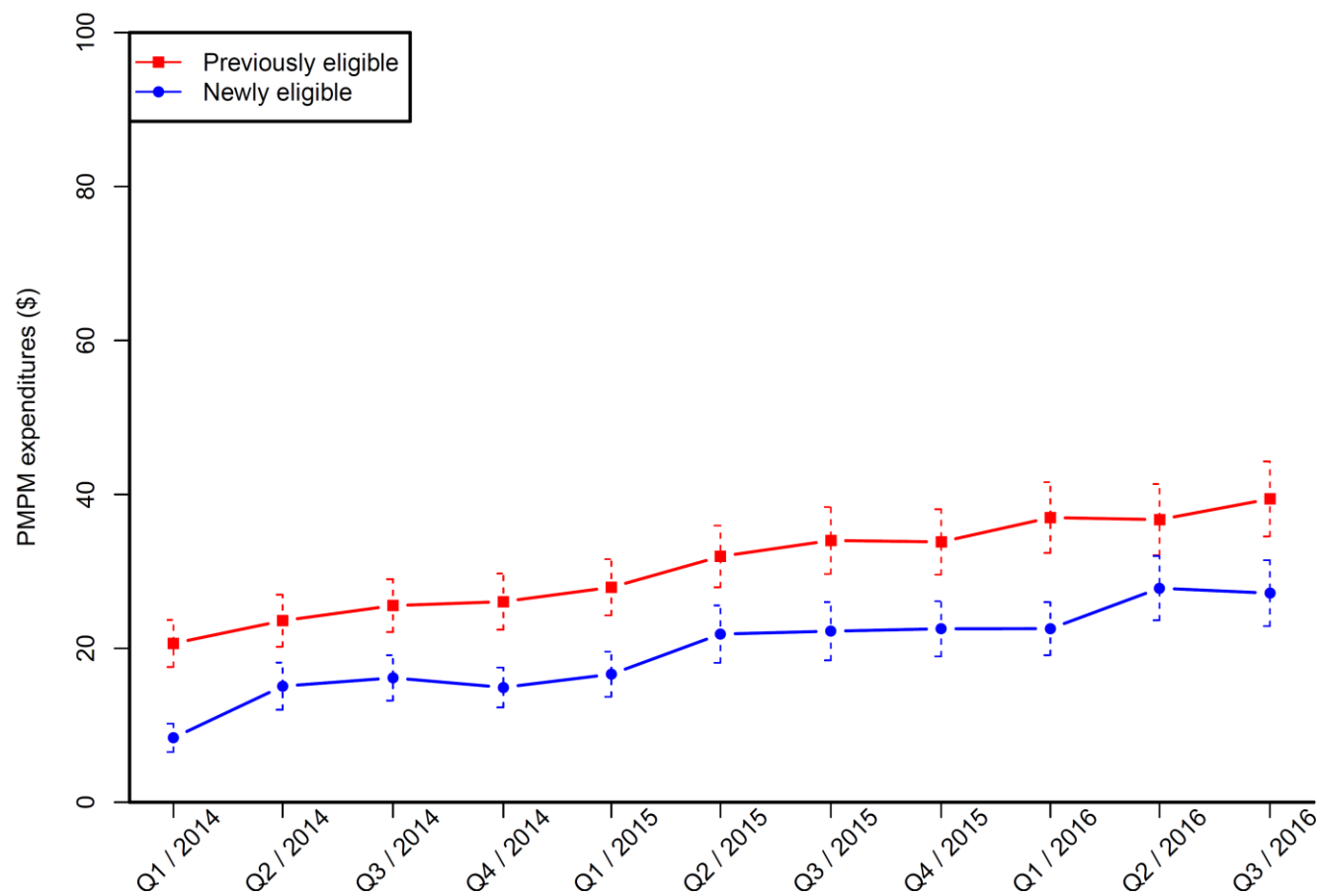
Notes: The figure shows Medicaid expenditures at specialists of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

### **Supplementary Figure 5:** Trends in transportation expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample with full enrollment

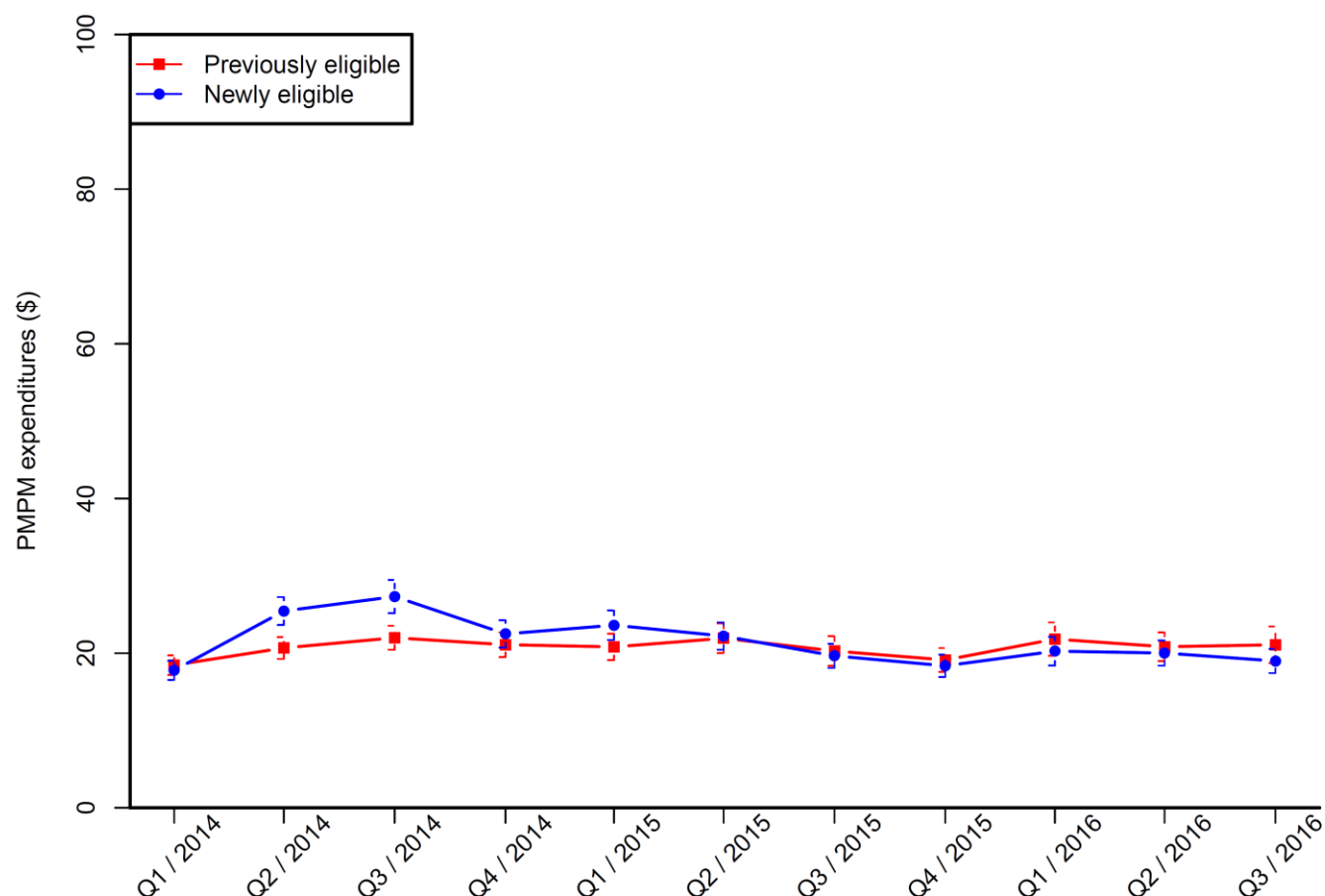
Notes: The figure shows Medicaid transportation expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

### **Supplementary Figure 6:** Trends in expenditures for tests of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample with full enrollment

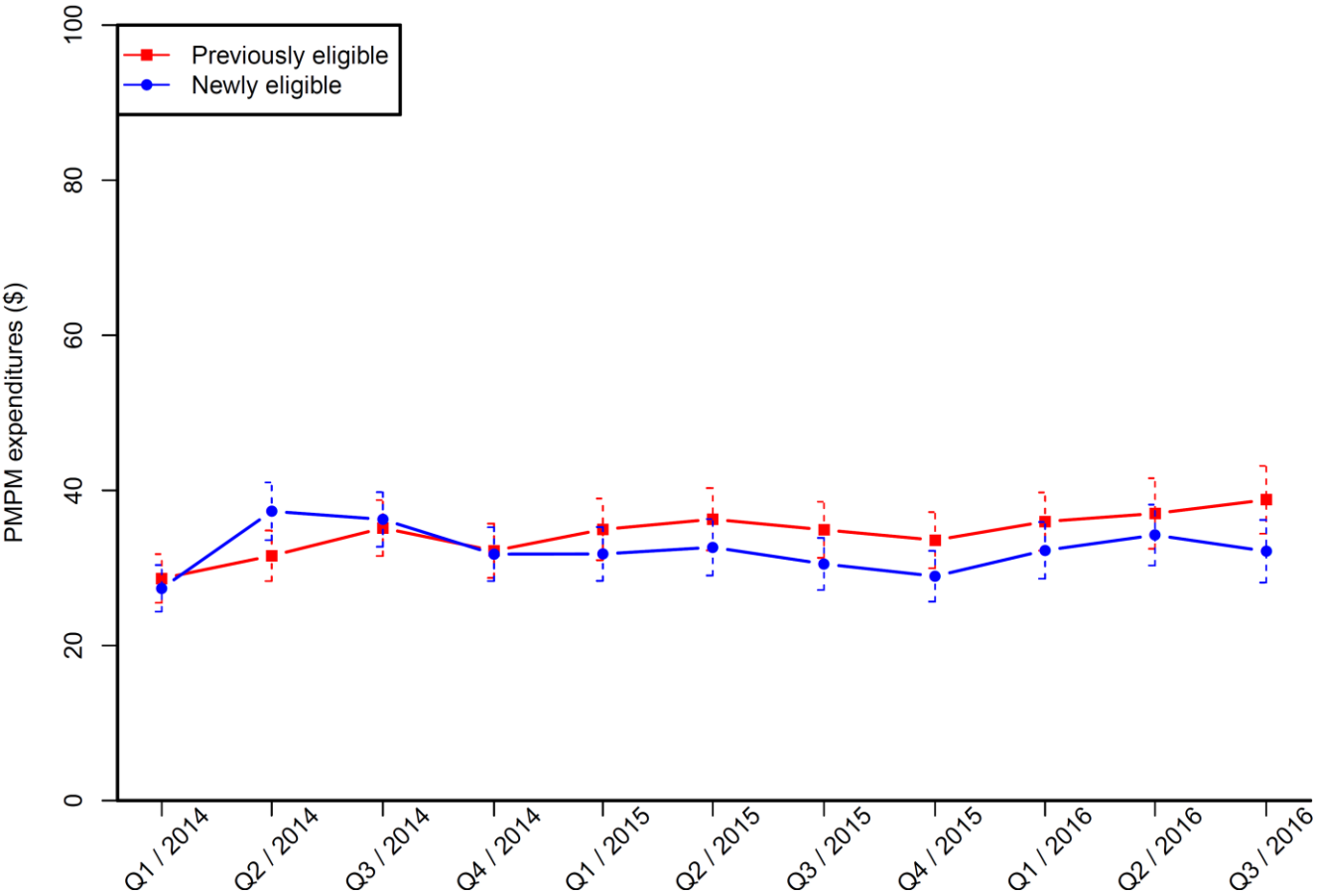
**Notes:** The figure shows Medicaid expenditures for tests of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



SUPPLEMENTARY DATA

**Supplementary Figure 7:** Trends in imaging and echography expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample with full enrollment

Notes: The figure shows imaging & echography Medicaid expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.

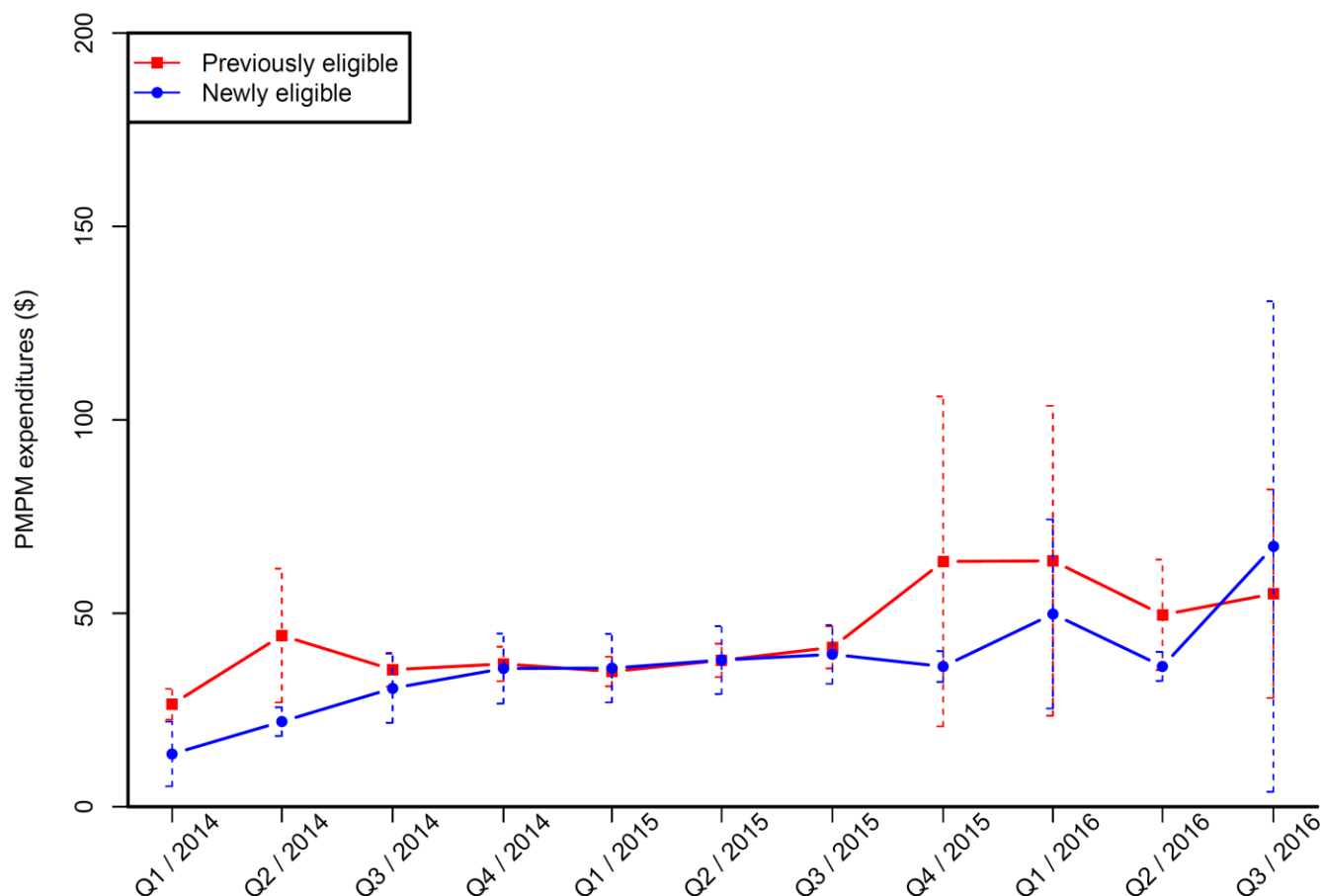




## SUPPLEMENTARY DATA

**Supplementary Figure 8:** Trends in expenditures for durable medical equipment of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample with full enrollment

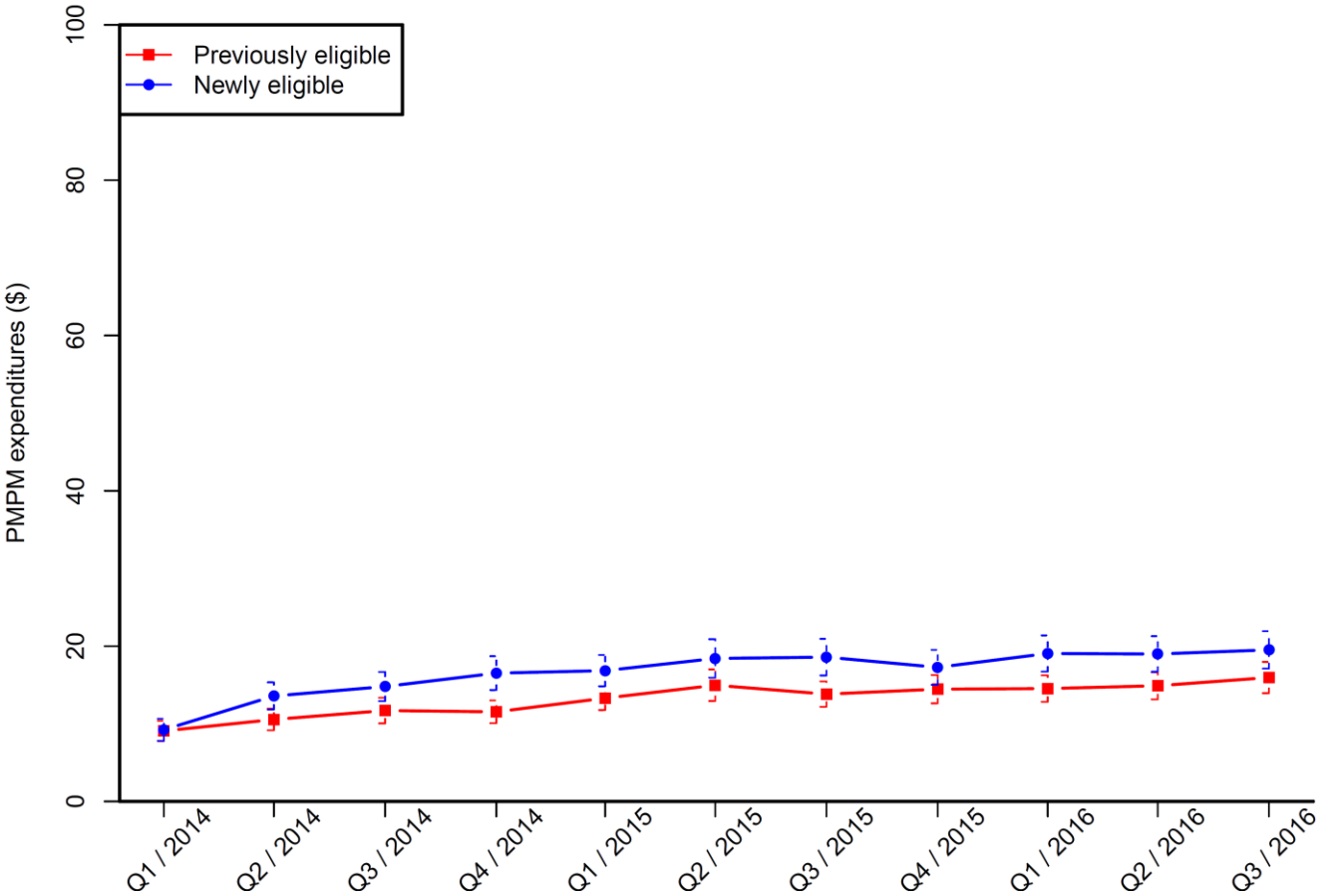
Notes: The figure shows Medicaid expenditures for durable medical equipment of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



SUPPLEMENTARY DATA

**Supplementary Figure 9:** Trends in evaluation and management expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample with full enrollment

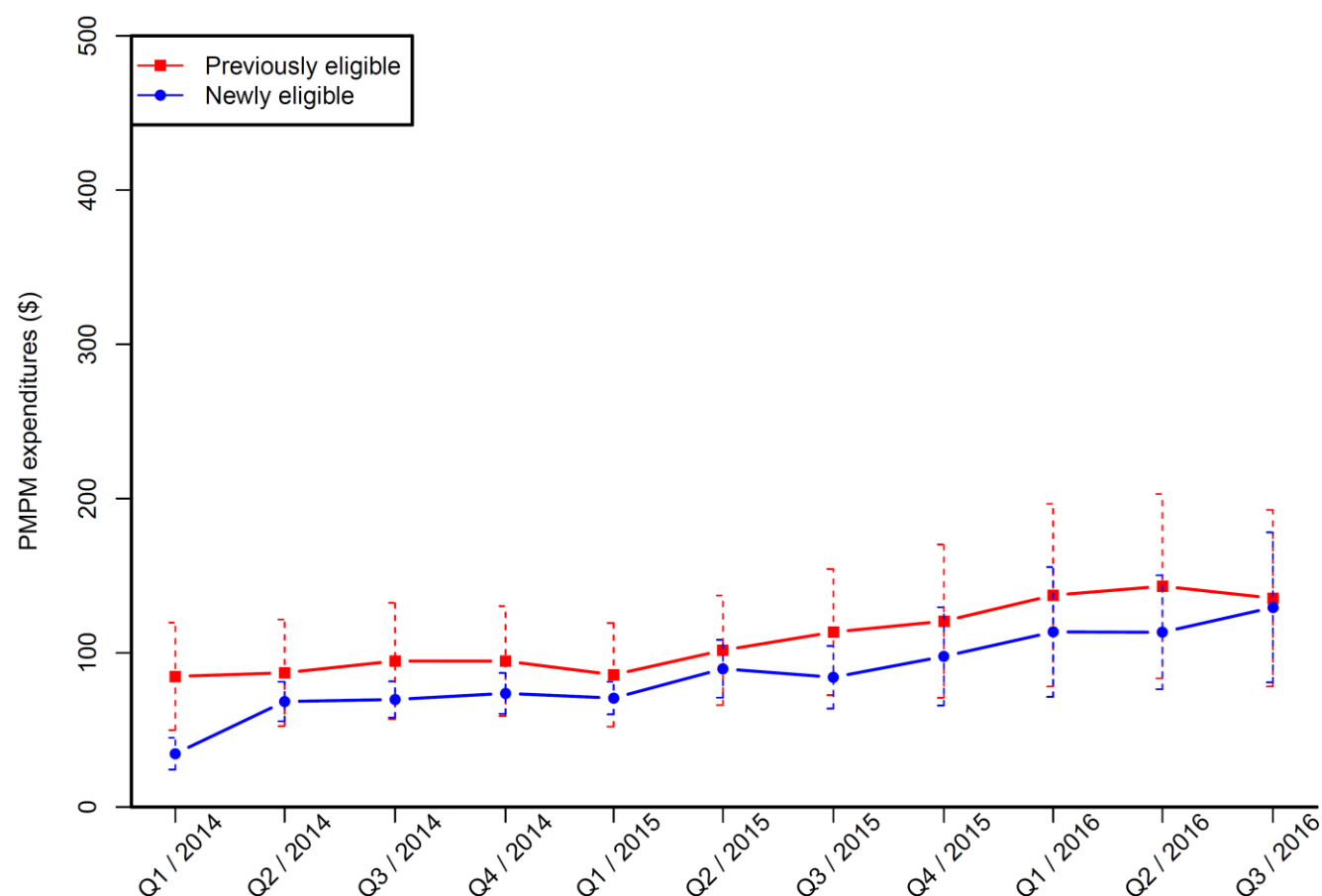
Notes: The figure shows Medicaid evaluation and management expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

### **Supplementary Figure 10:** Trends in expenditures for procedures of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample with full enrollment

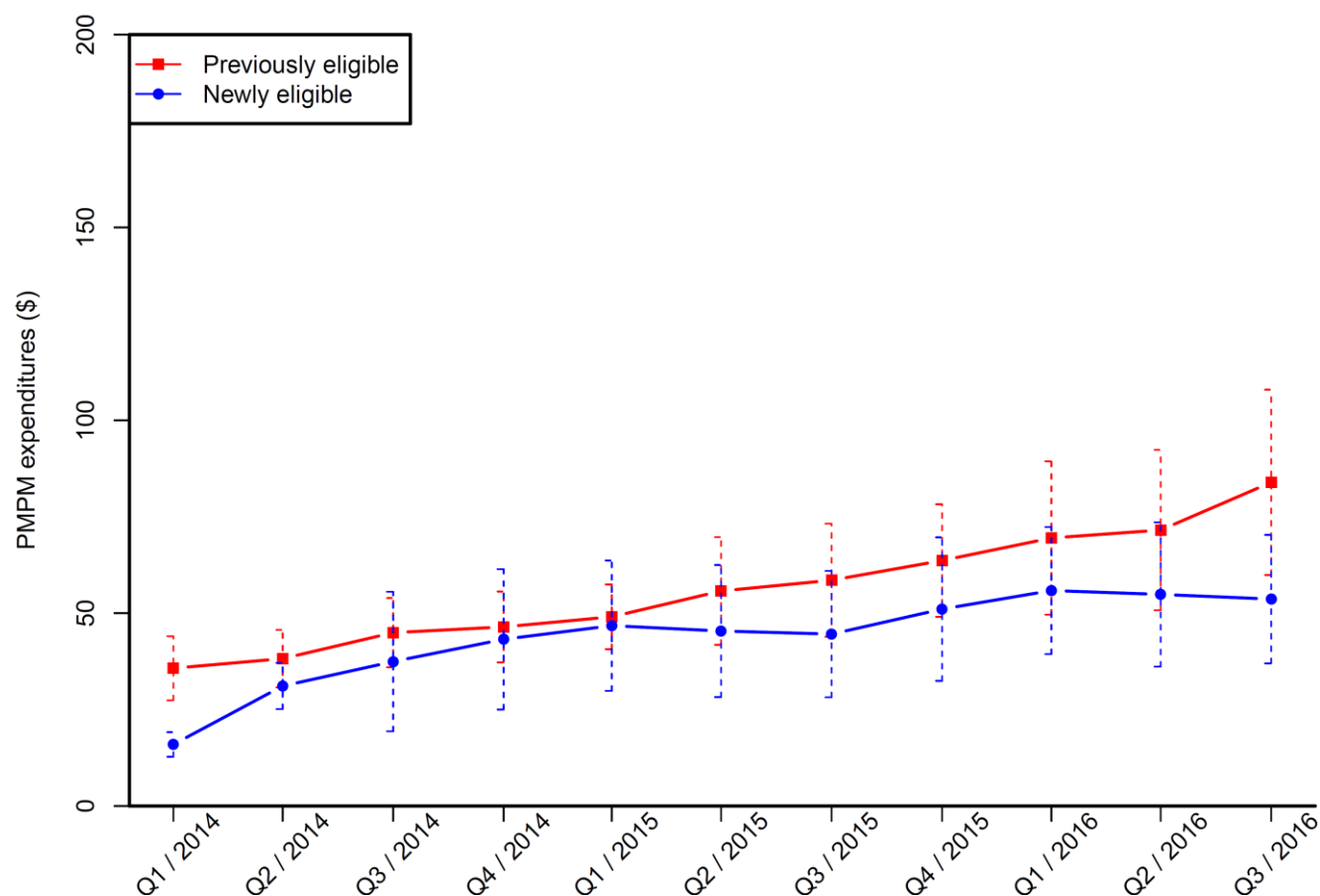
Notes: The figure shows Medicaid expenditures for procedures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

**Supplementary Figure 11:** Trends in expenditures for other or unknown services of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample with full enrollment

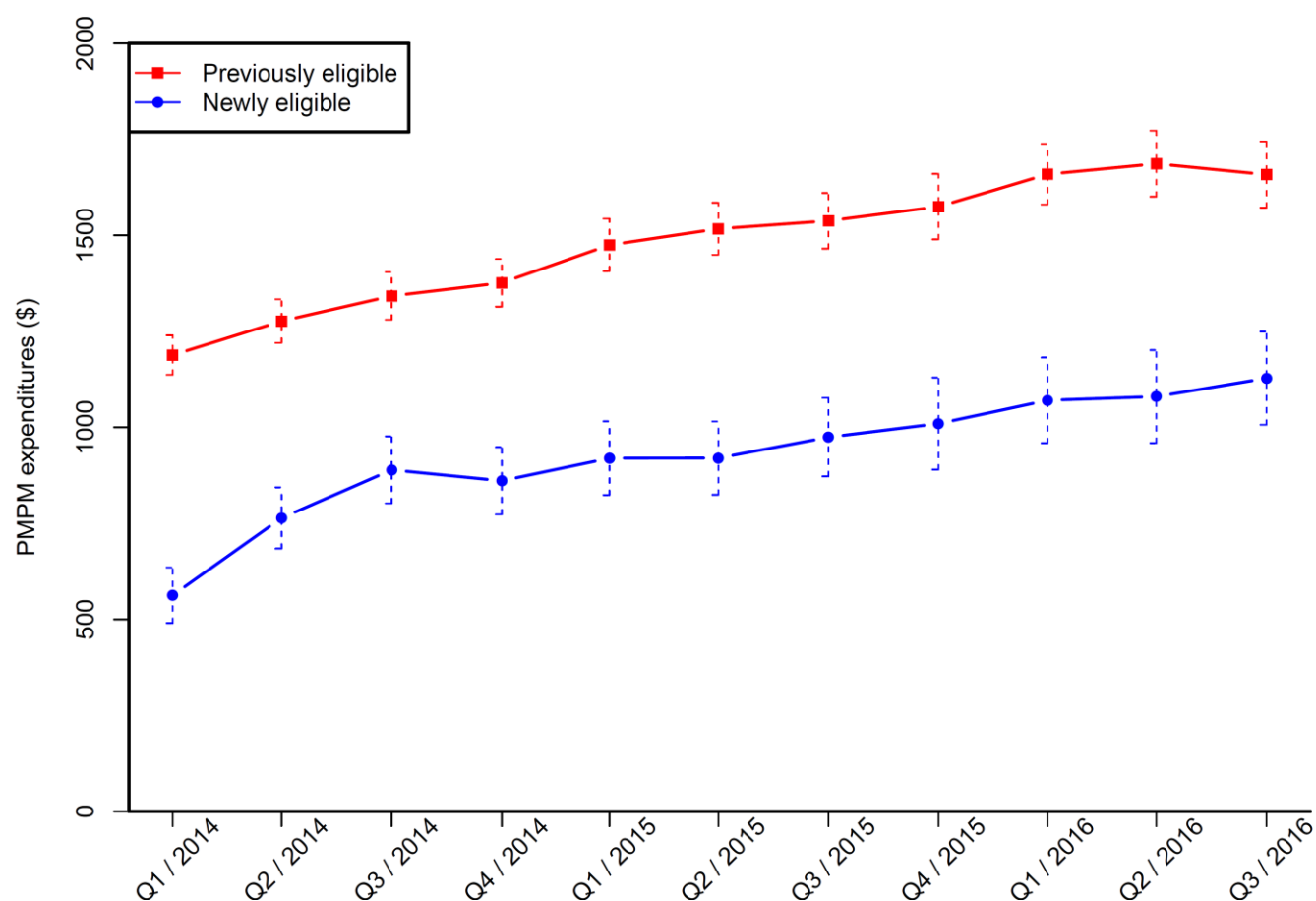
Notes: The figure shows Medicaid expenditures for other or unknown services of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

### **Supplementary Figure 12:** Trends in total expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, unmatched sample with full enrollment

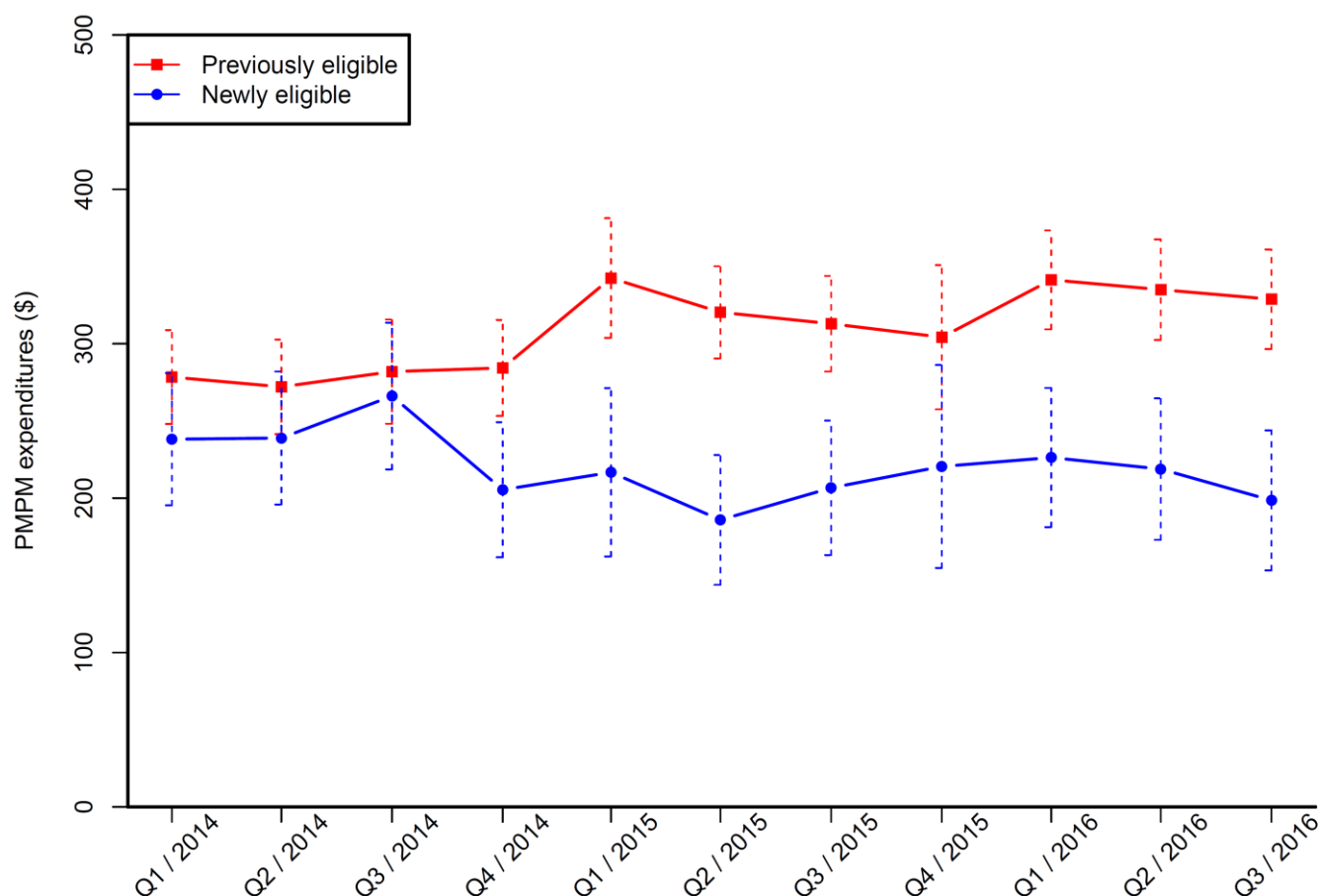
**Notes:** The figure shows total Medicaid expenditures for previously and newly insured Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the unmatched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

### **Supplementary Figure 13:** Trends in inpatient expenditures for previously and newly insured Oregon Medicaid recipients with diabetes, unmatched sample with full enrollment

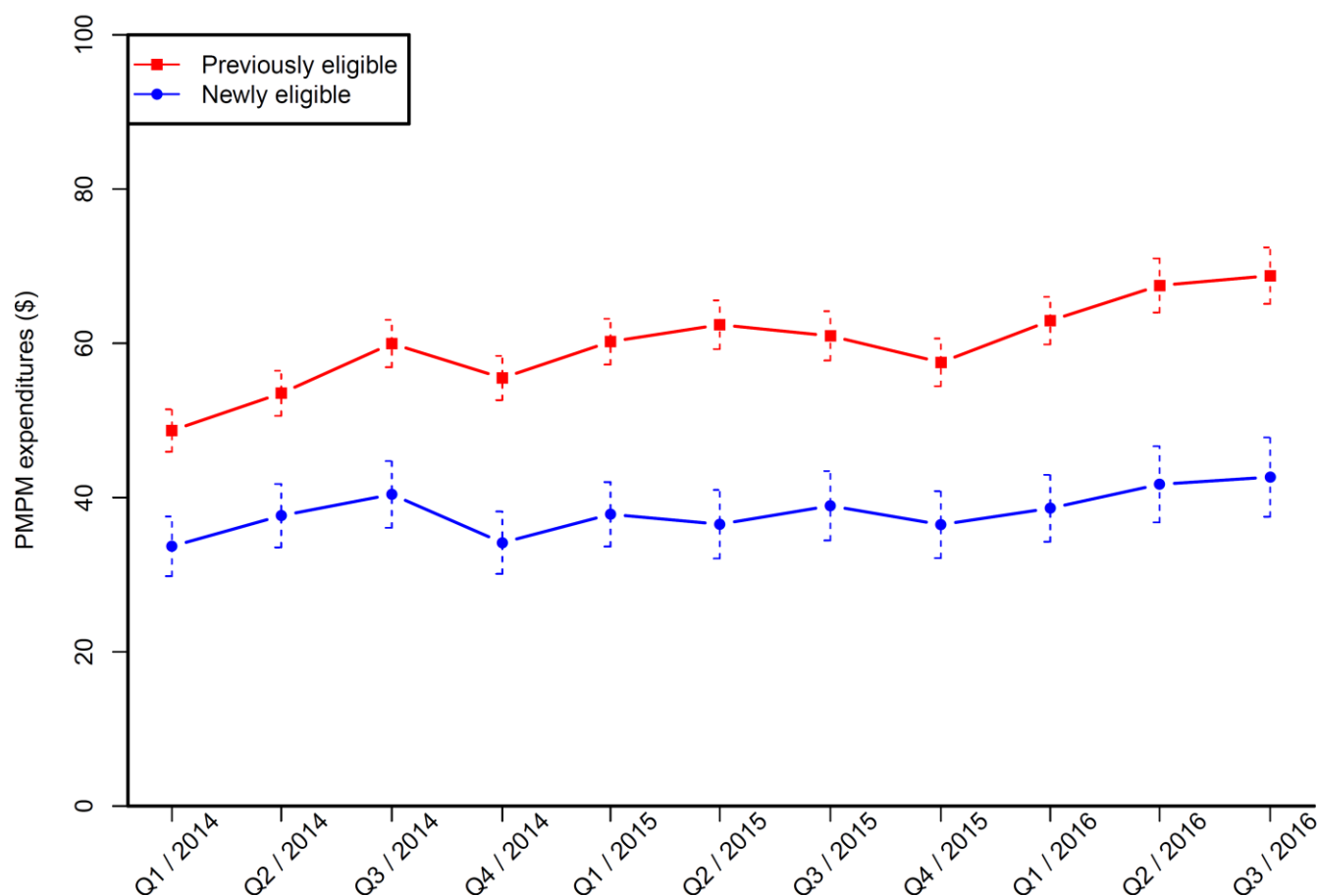
**Notes:** The figure shows total Medicaid expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the unmatched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

**Supplementary Figure 14:** Trends in ED expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, unmatched sample with full enrollment

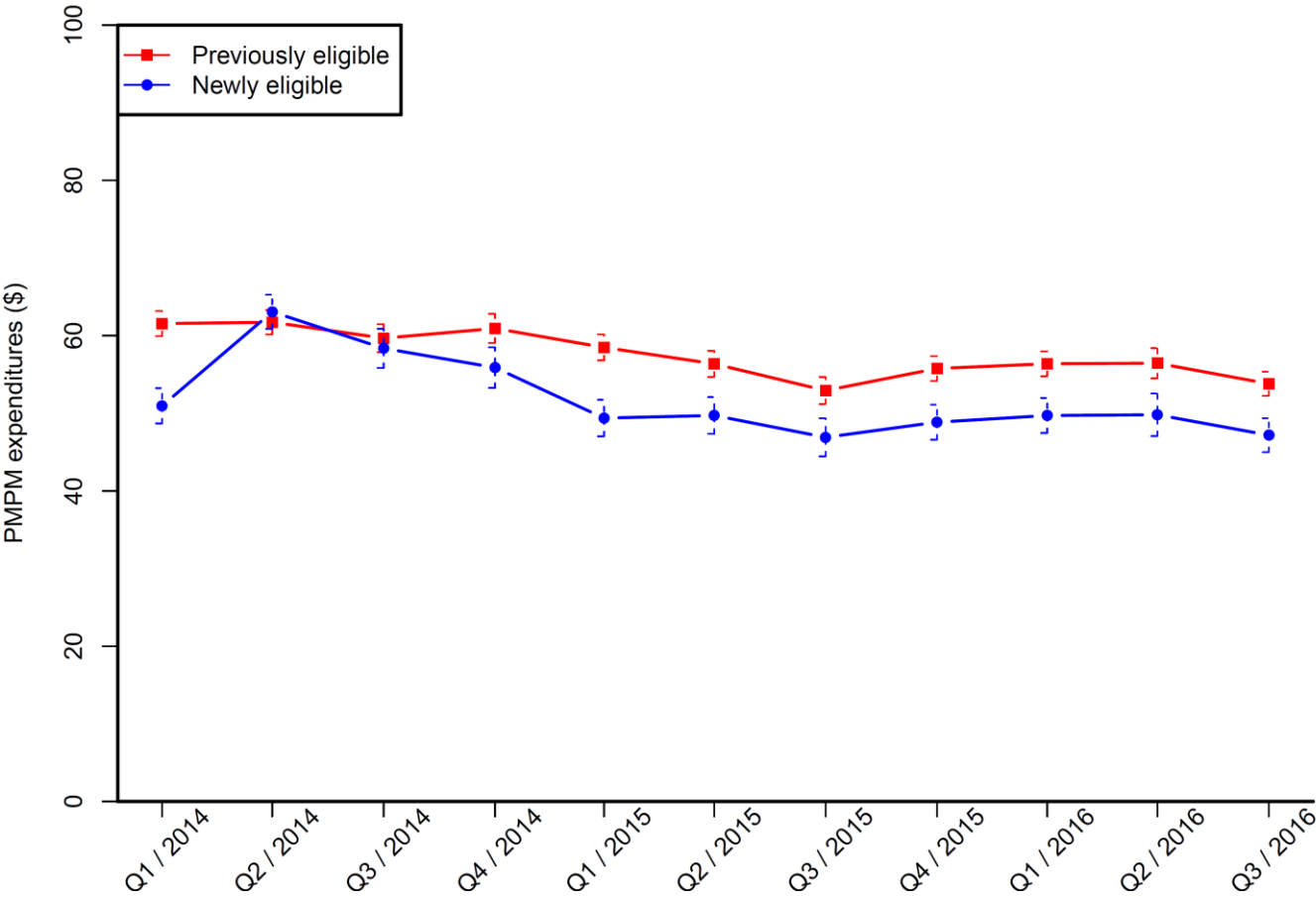
Notes: The figure shows ED Medicaid expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the unmatched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



SUPPLEMENTARY DATA

**Supplementary Figure 15:** Trends in PCP expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, unmatched sample with full enrollment

Notes: The figure shows PCP Medicaid expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the unmatched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.

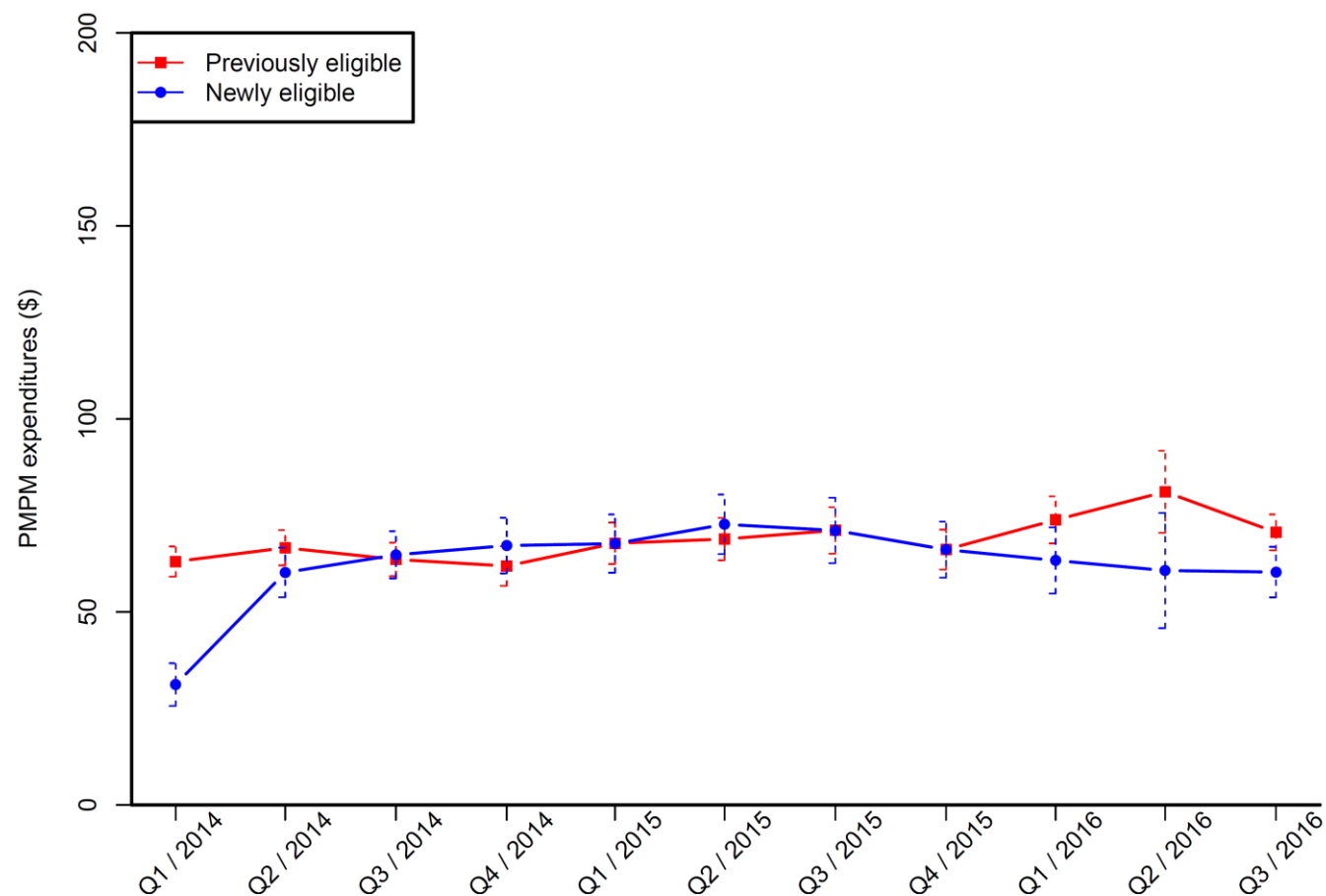




## SUPPLEMENTARY DATA

### **Supplementary Figure 16:** Trends in expenditures at specialists of previously and newly eligible Oregon Medicaid recipients with diabetes, unmatched sample with full enrollment

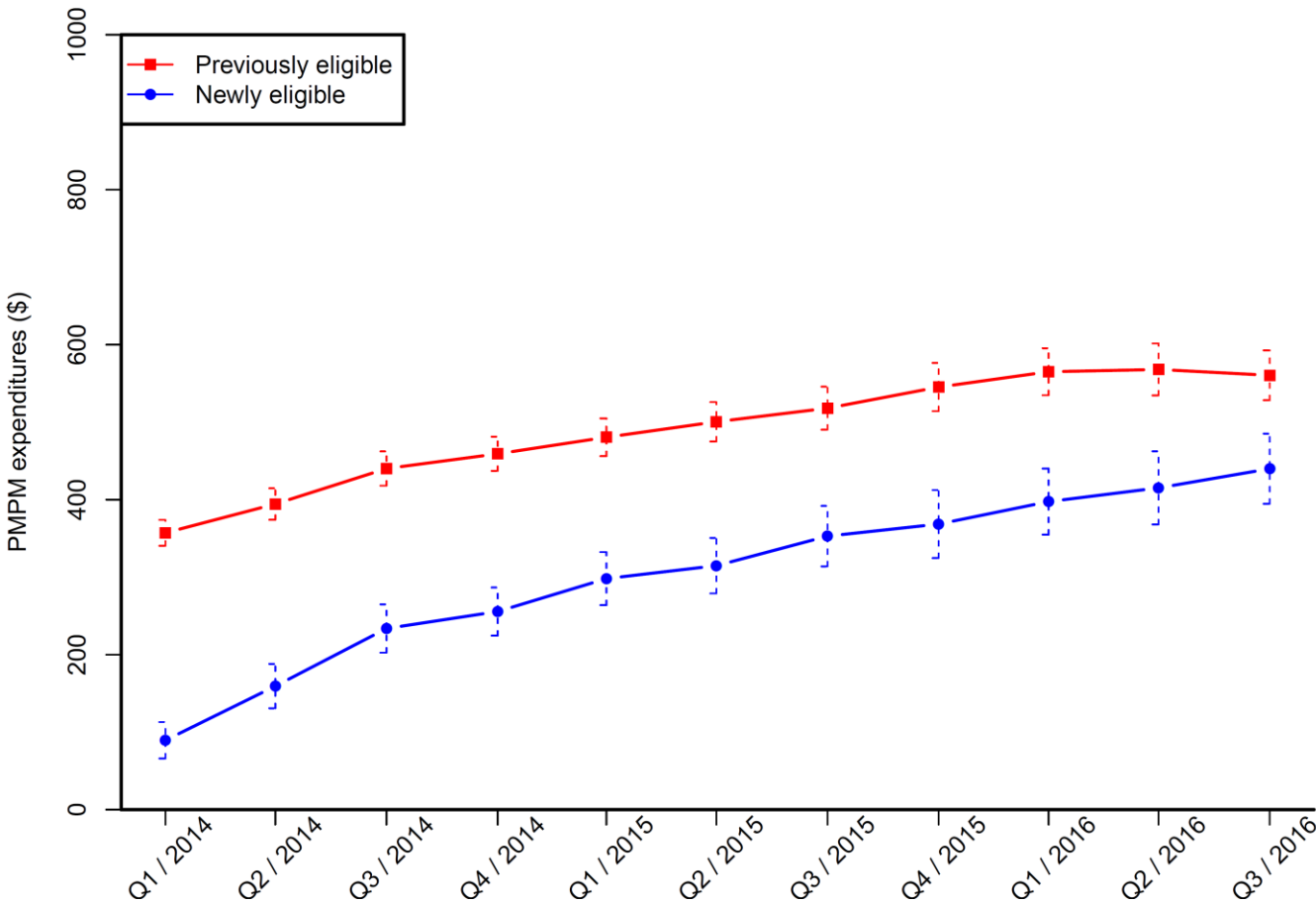
Notes: The figure shows Medicaid expenditures at specialists of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the unmatched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



SUPPLEMENTARY DATA

**Supplementary Figure 17:** Trends in prescription drug expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, unmatched sample with full enrollment

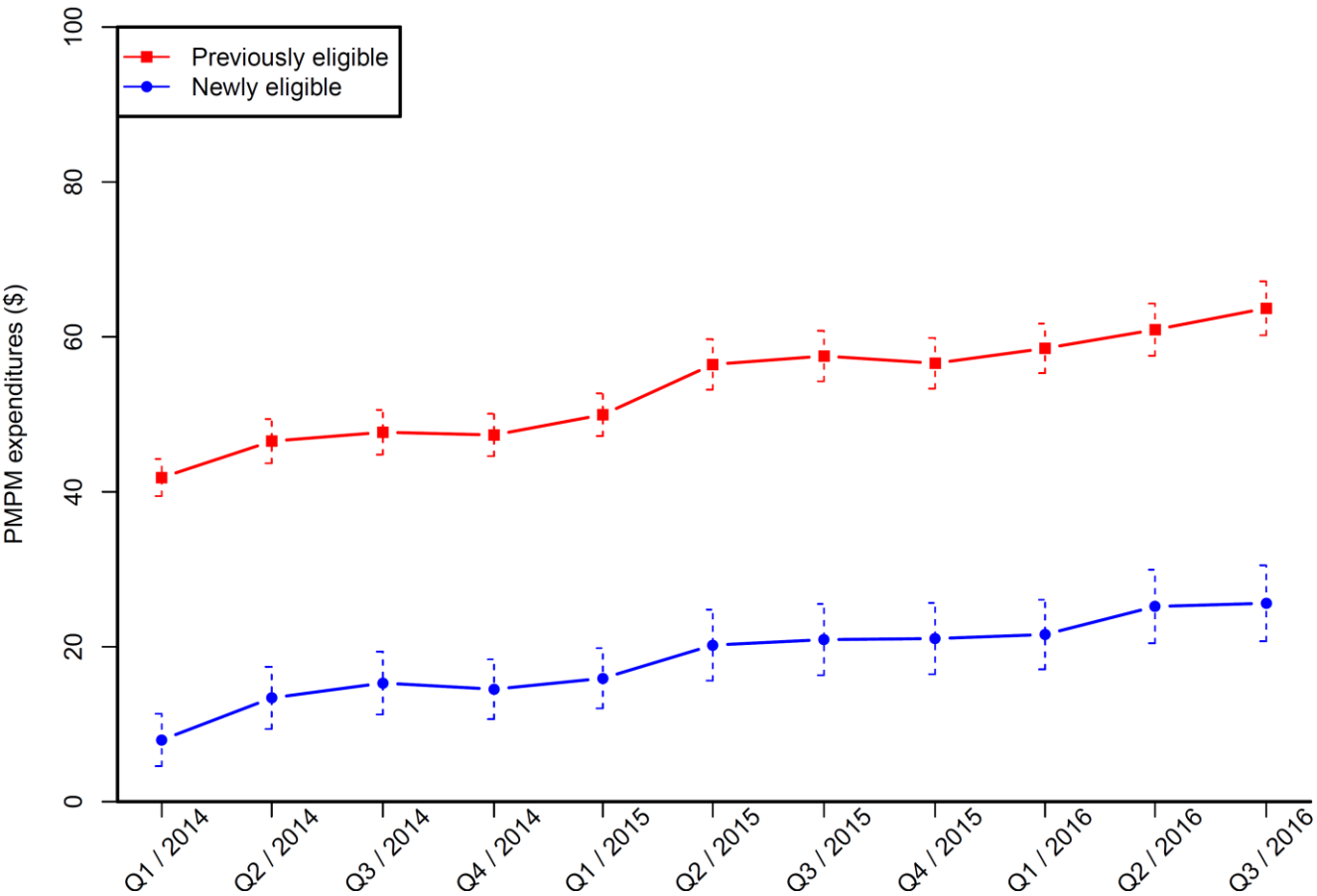
Notes: The figure shows prescription drug Medicaid expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the unmatched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



SUPPLEMENTARY DATA

**Supplementary Figure 18:** Trends in transportation expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, unmatched sample with full enrollment

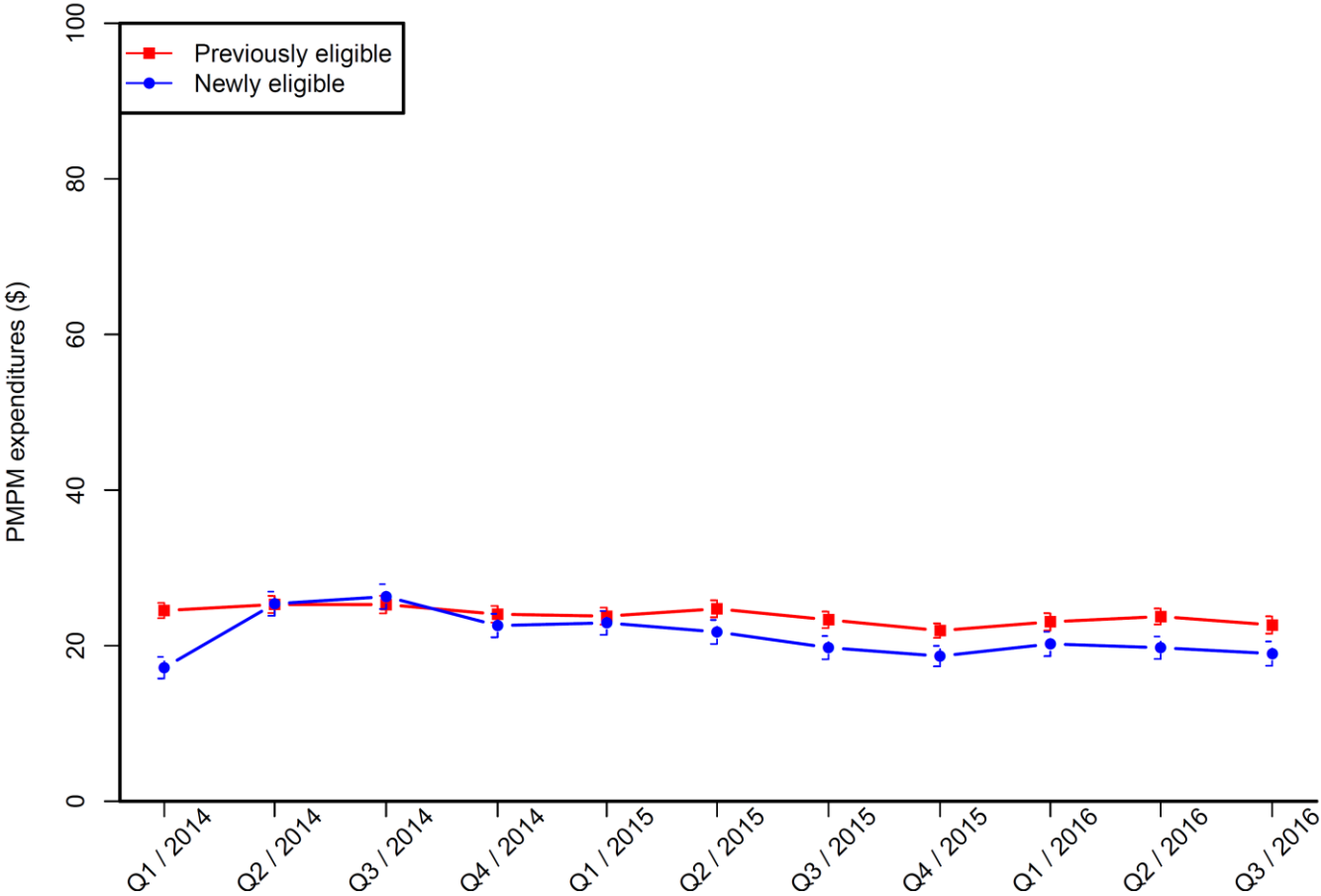
Notes: The figure shows Medicaid transportation expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



SUPPLEMENTARY DATA

**Supplementary Figure 19:** Trends in expenditures for tests of previously and newly eligible Oregon Medicaid recipients with diabetes, unmatched sample with full enrollment

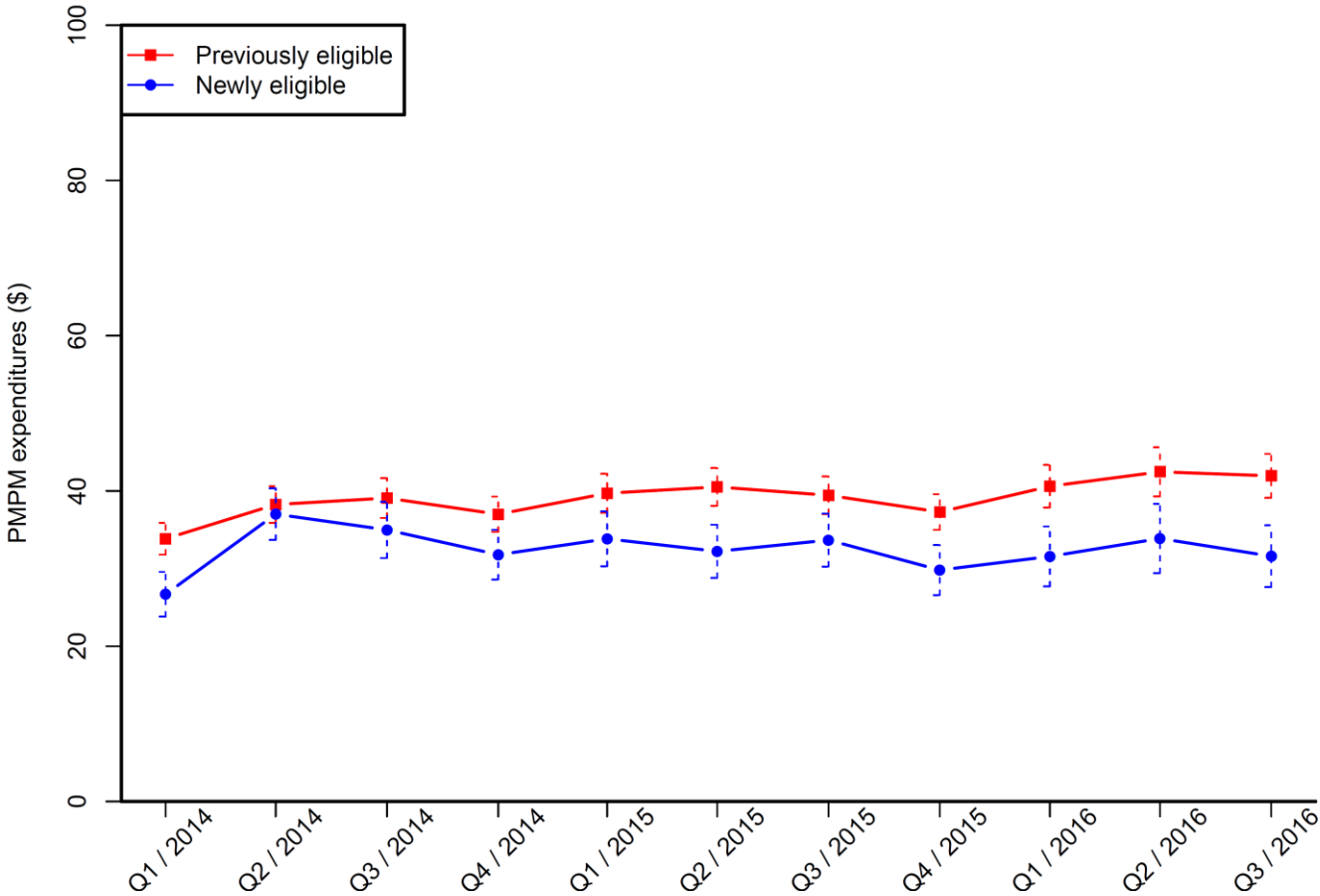
Notes: The figure shows Medicaid expenditures for tests of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the unmatched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



SUPPLEMENTARY DATA

**Supplementary Figure 20:** Trends in imaging and echography expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, unmatched sample with full enrollment

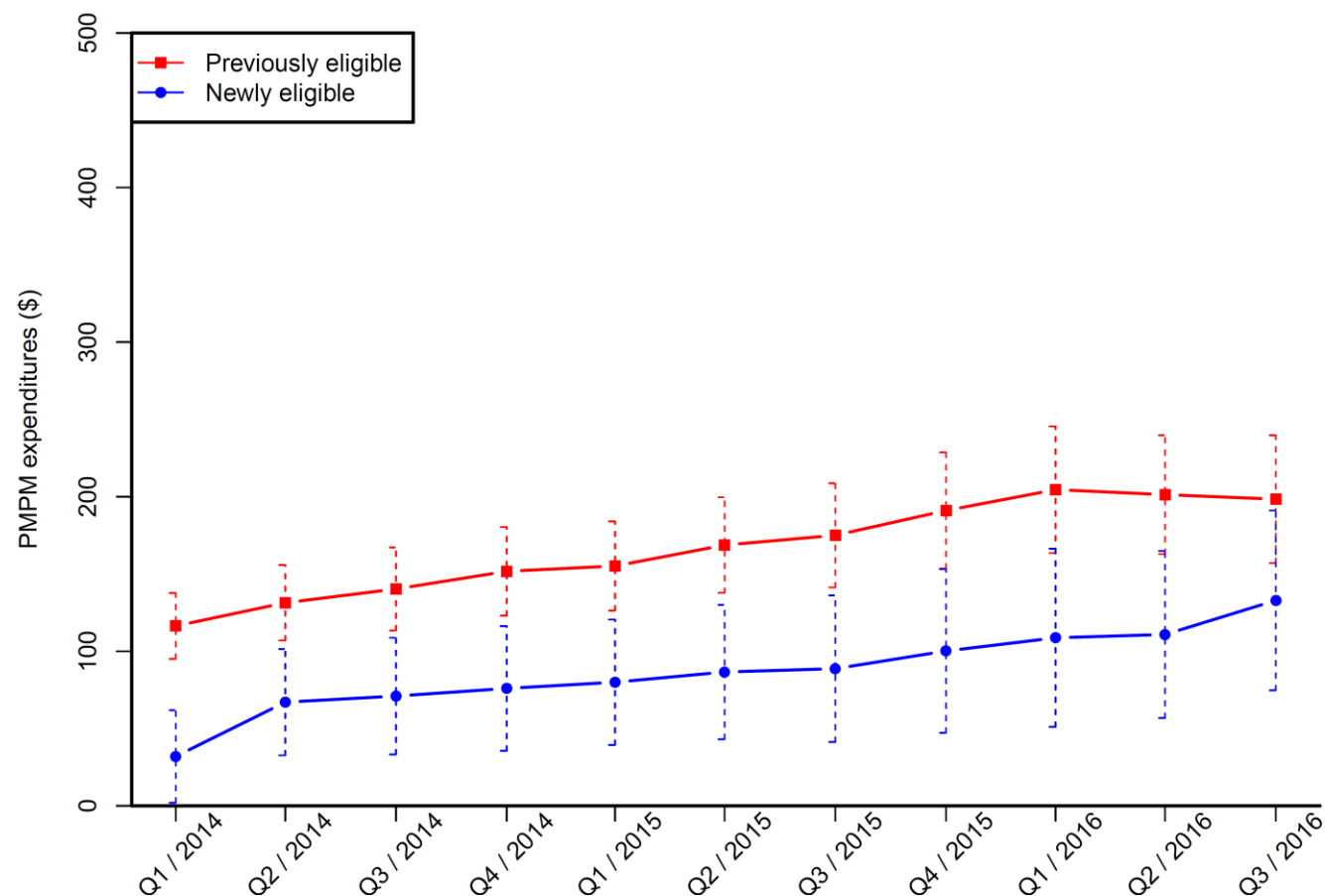
Notes: The figure shows imaging & echography Medicaid expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the unmatched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

**Supplementary Figure 21:** Trends in expenditures for procedures of previously and newly eligible Oregon Medicaid recipients with diabetes, unmatched sample with full enrollment

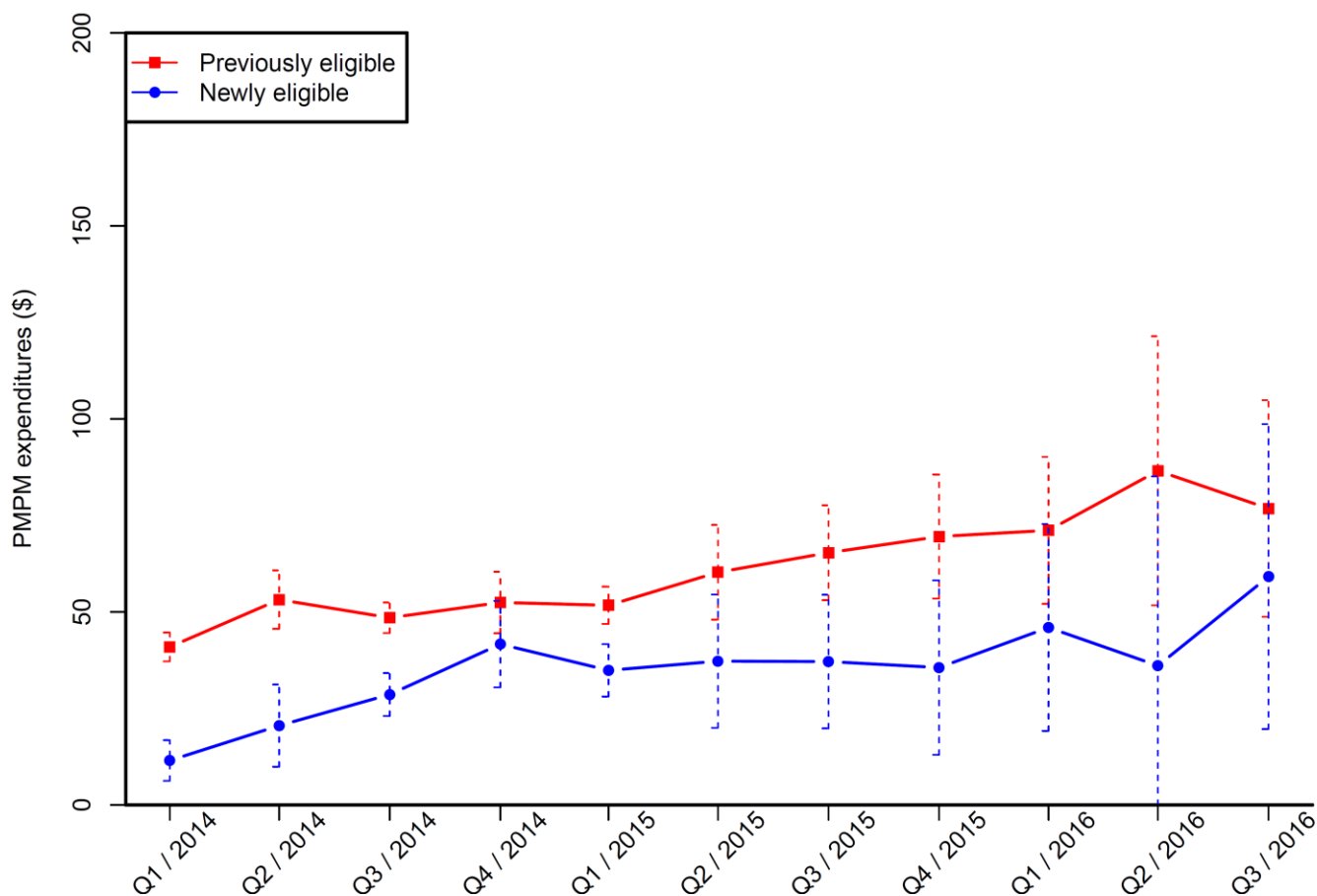
Notes: The figure shows Medicaid expenditures for procedures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the unmatched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

### **Supplementary Figure 22:** Trends in expenditures for durable medical equipment of previously and newly eligible Oregon Medicaid recipients with diabetes, unmatched sample with full enrollment

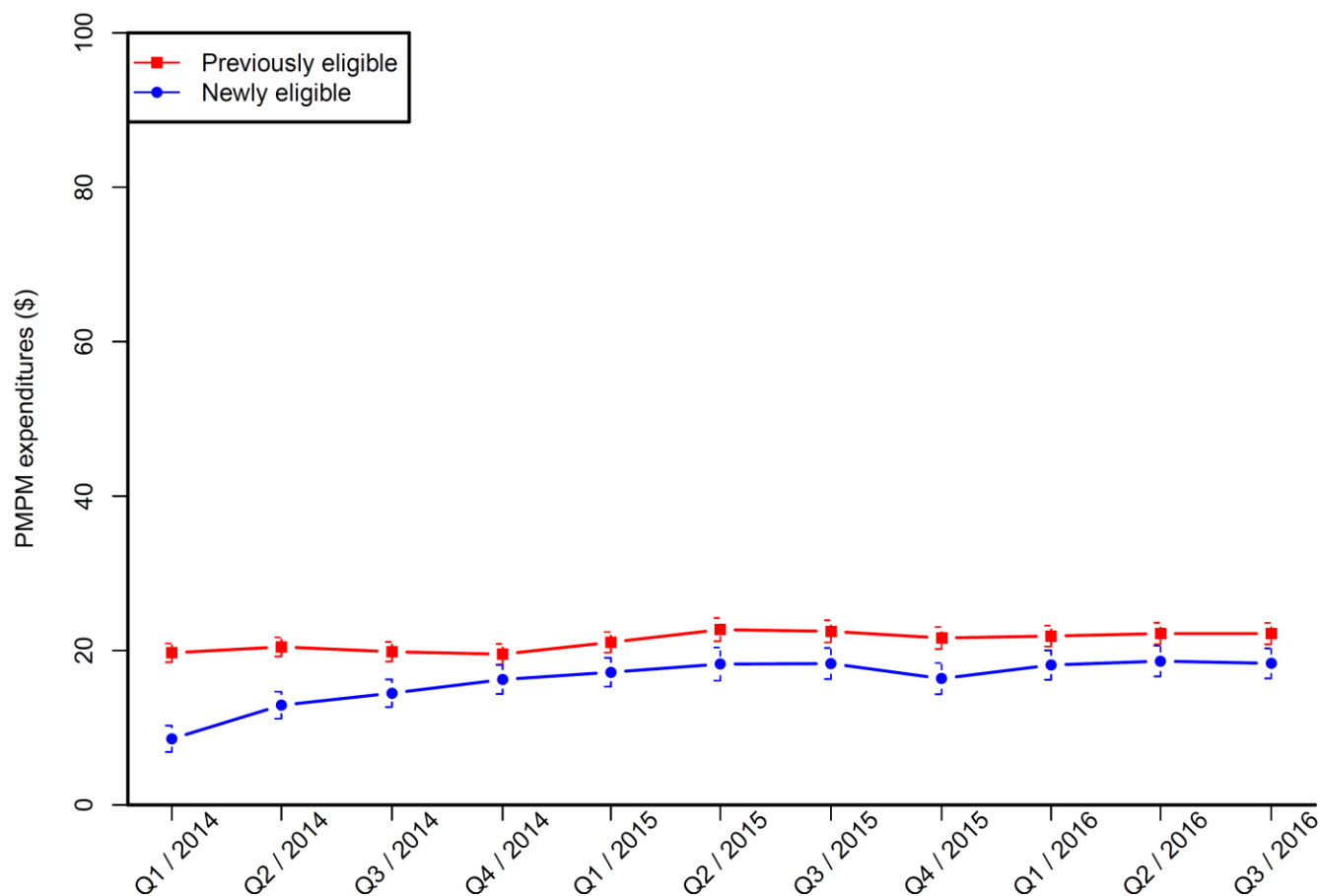
Notes: The figure shows Medicaid expenditures for durable medical equipment of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the unmatched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

**Supplementary Figure 23:** Trends in evaluation and management expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, unmatched sample with full enrollment

Notes: The figure shows Medicaid evaluation and management expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the unmatched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.

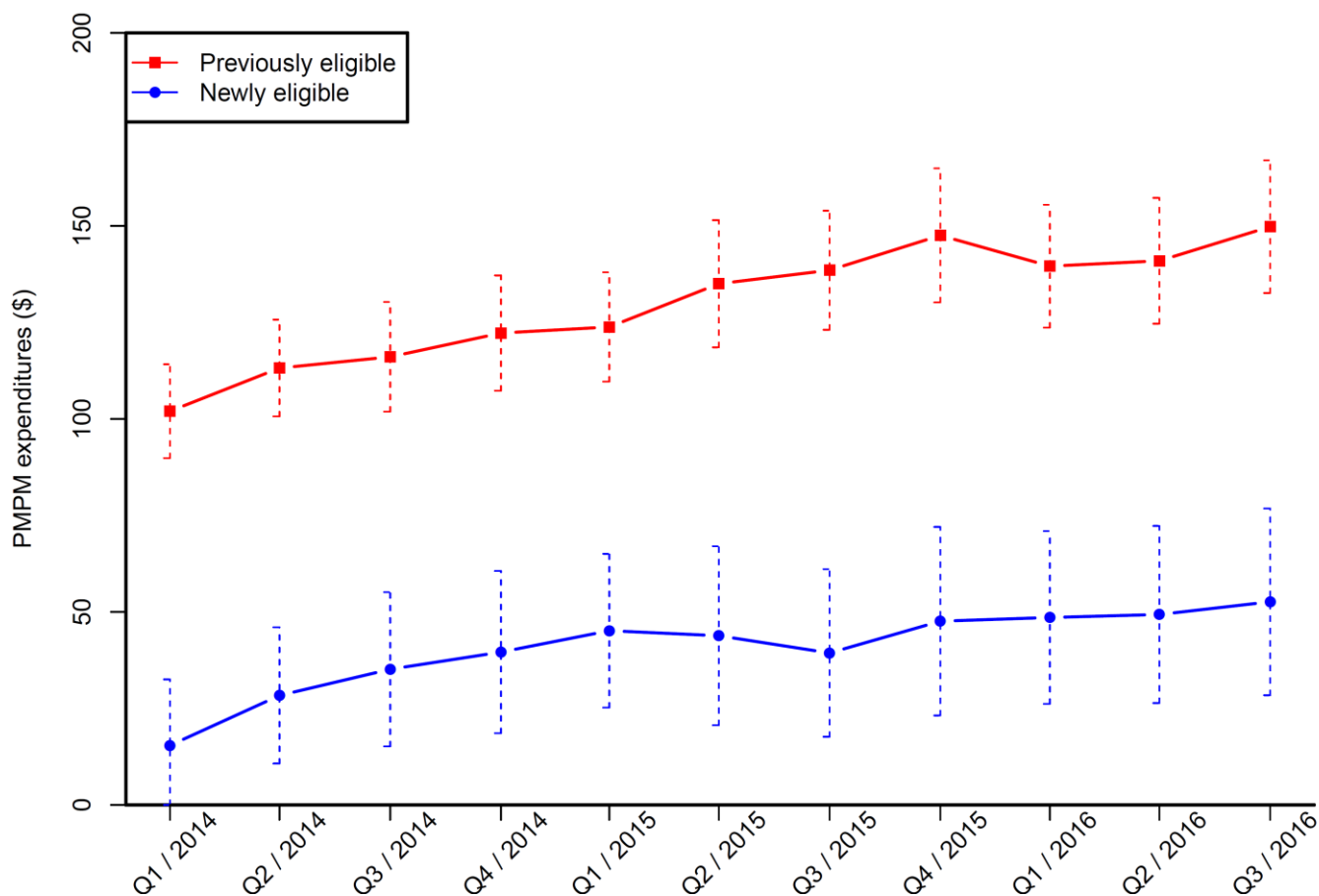




## SUPPLEMENTARY DATA

**Supplementary Figure 24:** Trends in expenditures for other or unknown services of previously and newly eligible Oregon Medicaid recipients with diabetes, unmatched sample with full enrollment

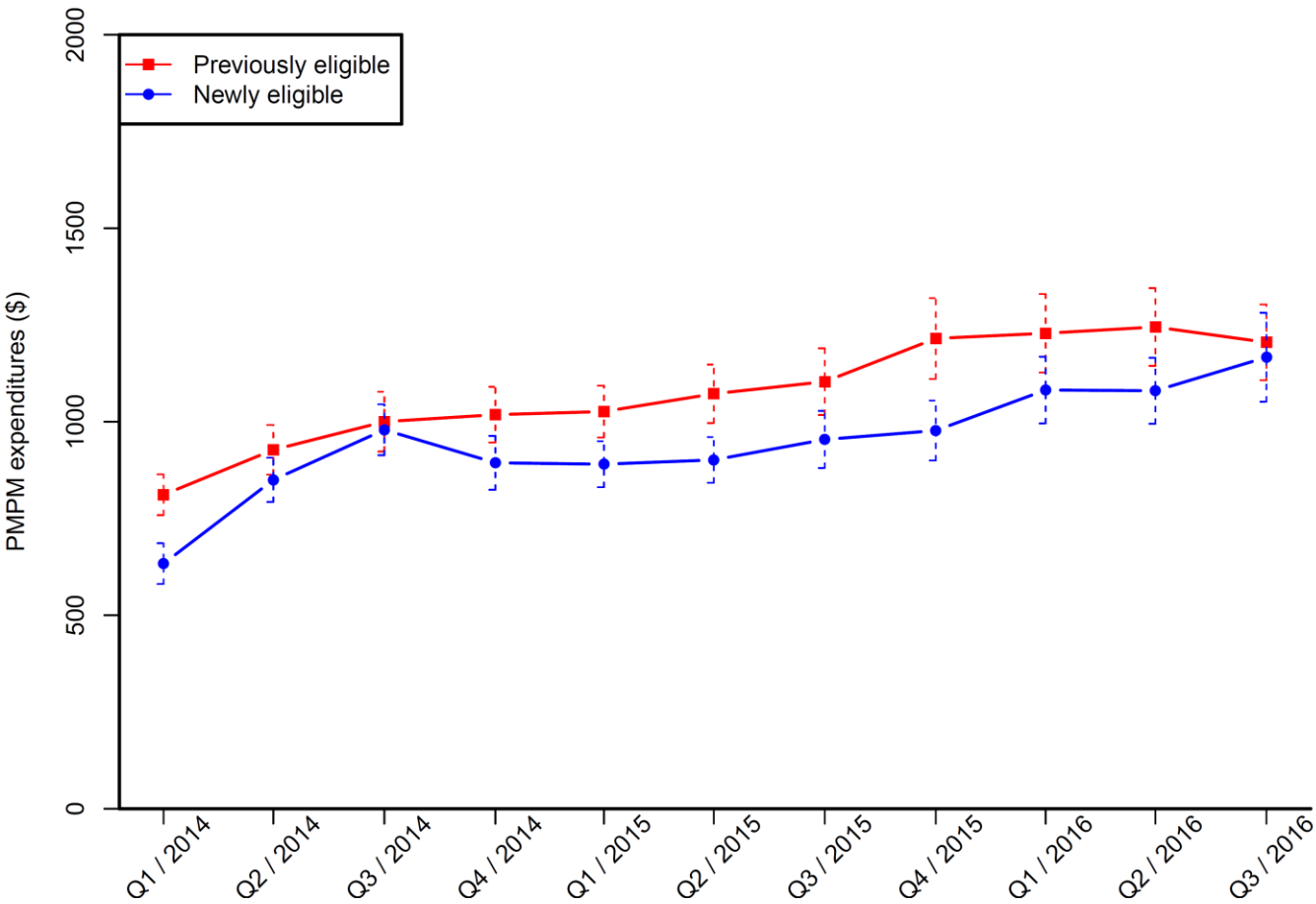
Notes: The figure shows Medicaid expenditures for other or unknown services of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the unmatched sample of those enrolled throughout the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



SUPPLEMENTARY DATA

**Supplementary Figure 25:** Trends in total expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample of those enrolled during some quarters of the study period

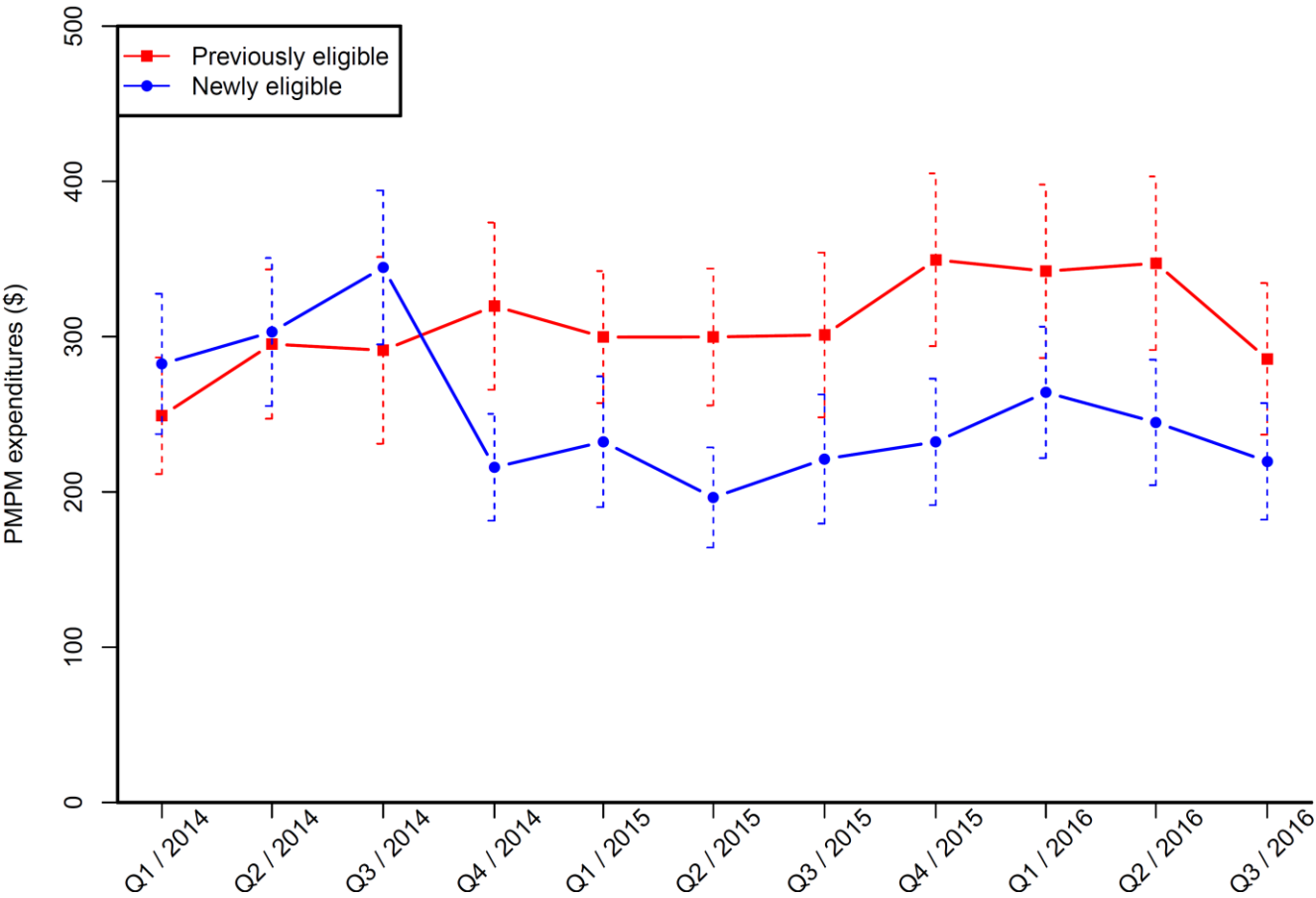
Notes: The figure shows total Medicaid expenditures for previously and newly insured Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled during some quarters of the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



SUPPLEMENTARY DATA

**Supplementary Figure 26:** Trends in inpatient expenditures for previously and newly insured Oregon Medicaid recipients with diabetes, matched sample of those enrolled during some quarters of the study period

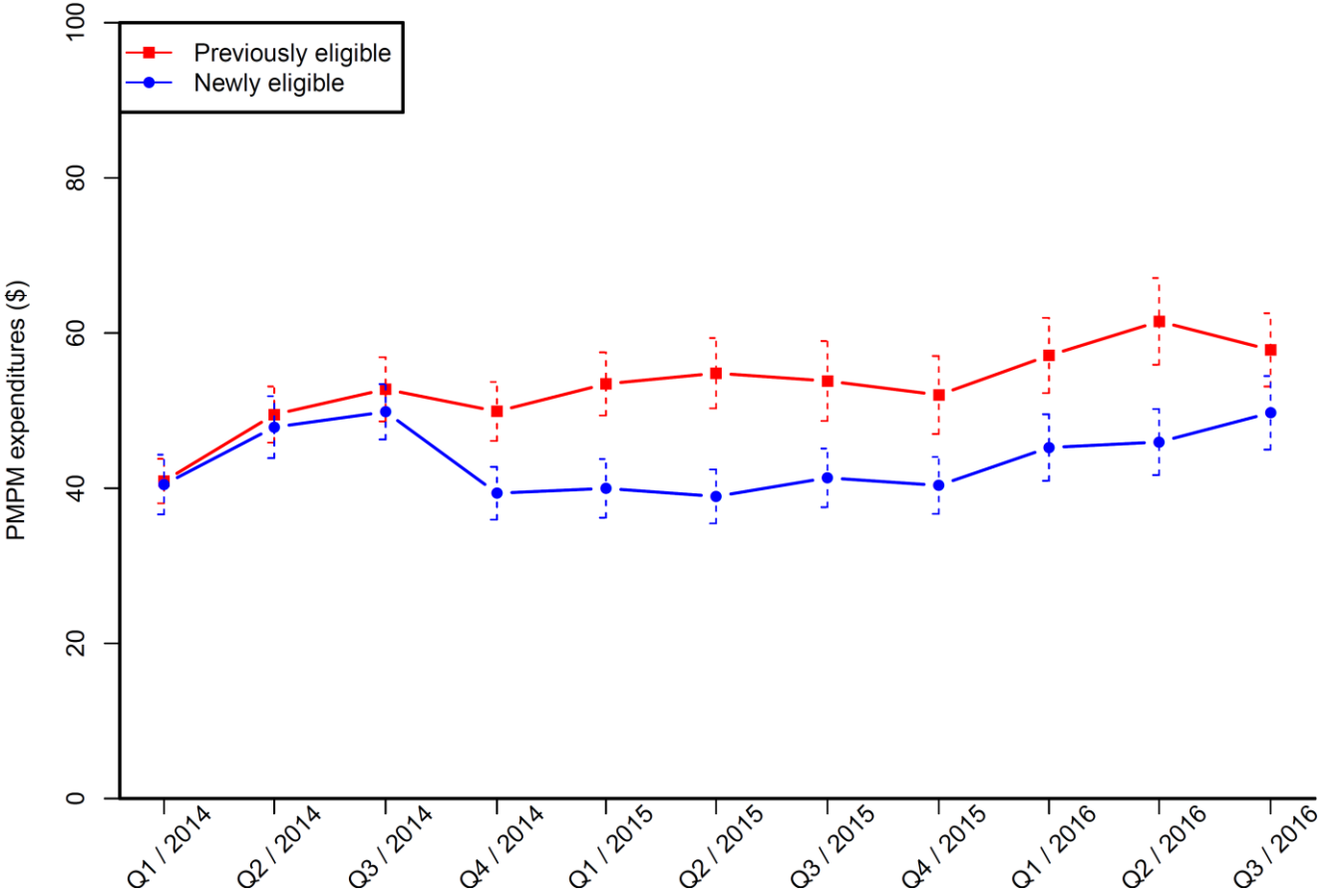
Notes: The figure shows total Medicaid expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled during some quarters of the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



SUPPLEMENTARY DATA

**Supplementary Figure 27:** Trends in ED expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample of those enrolled during some quarters of the study period

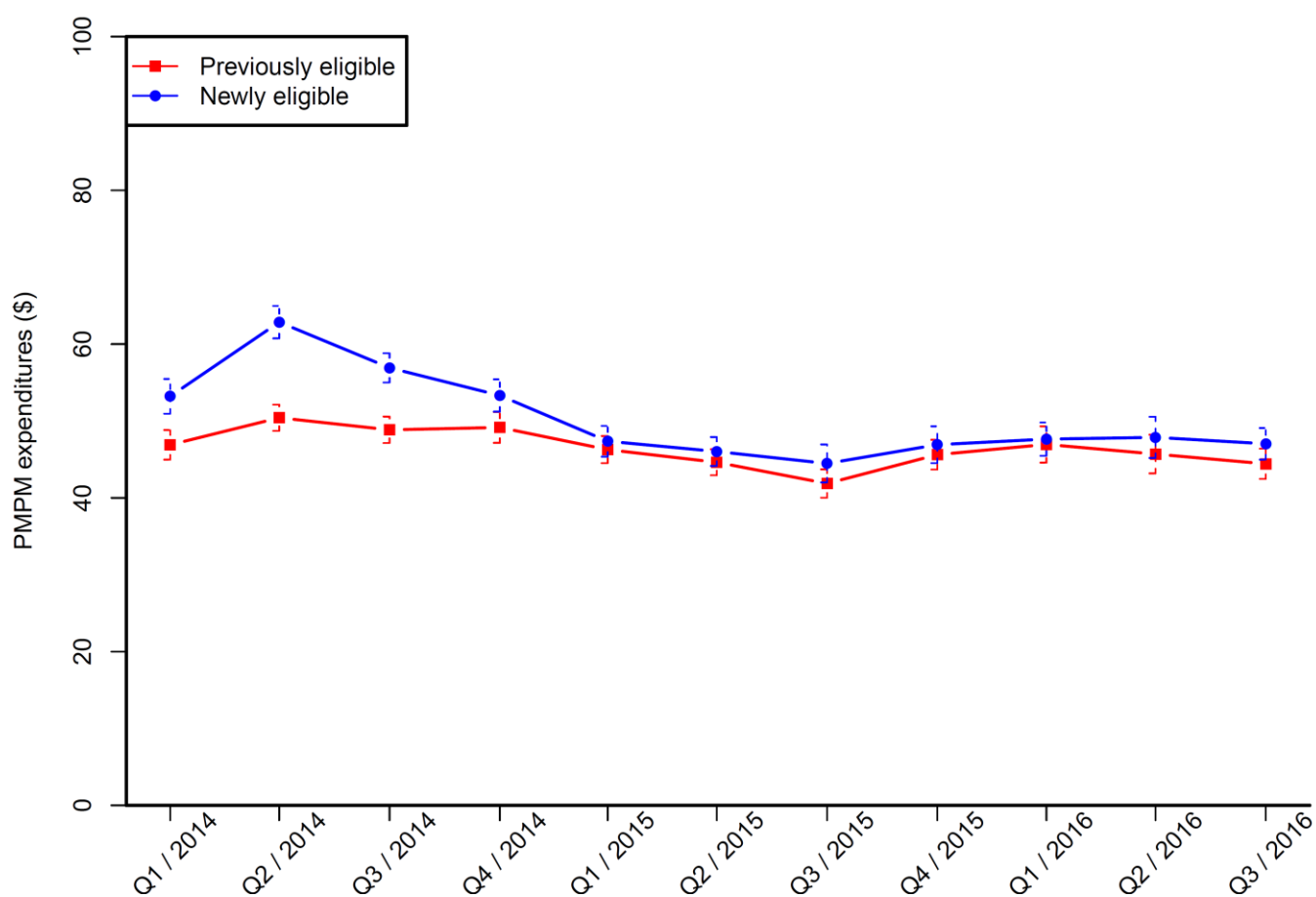
Notes: The figure shows ED Medicaid expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled during some quarters of the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

**Supplementary Figure 28:** Trends in PCP expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample of those enrolled during some quarters of the study period

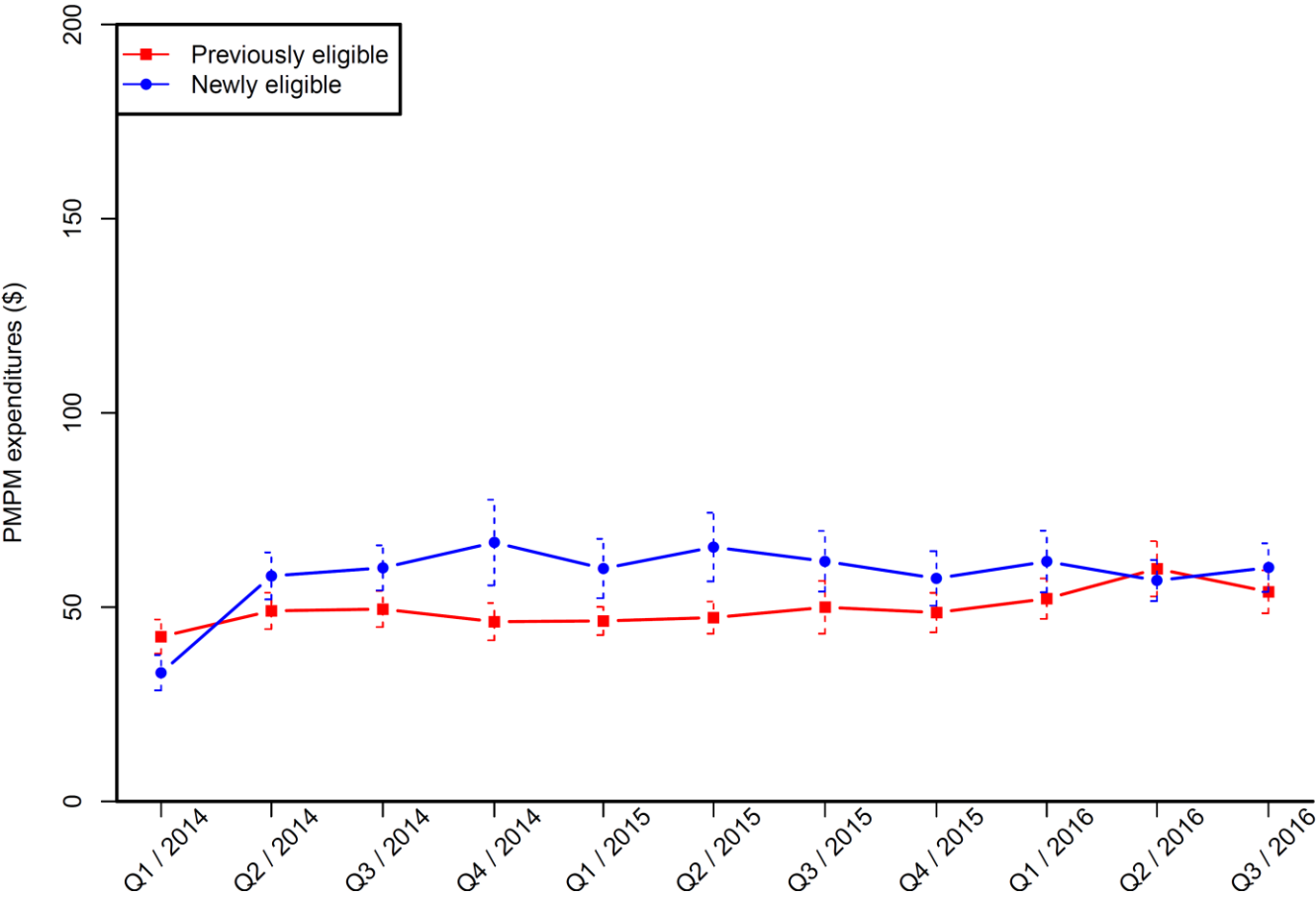
Notes: The figure shows PCP Medicaid expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled during some quarters of the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



SUPPLEMENTARY DATA

**Supplementary Figure 29:** Trends in expenditures at specialists of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample of those enrolled during some quarters of the study period

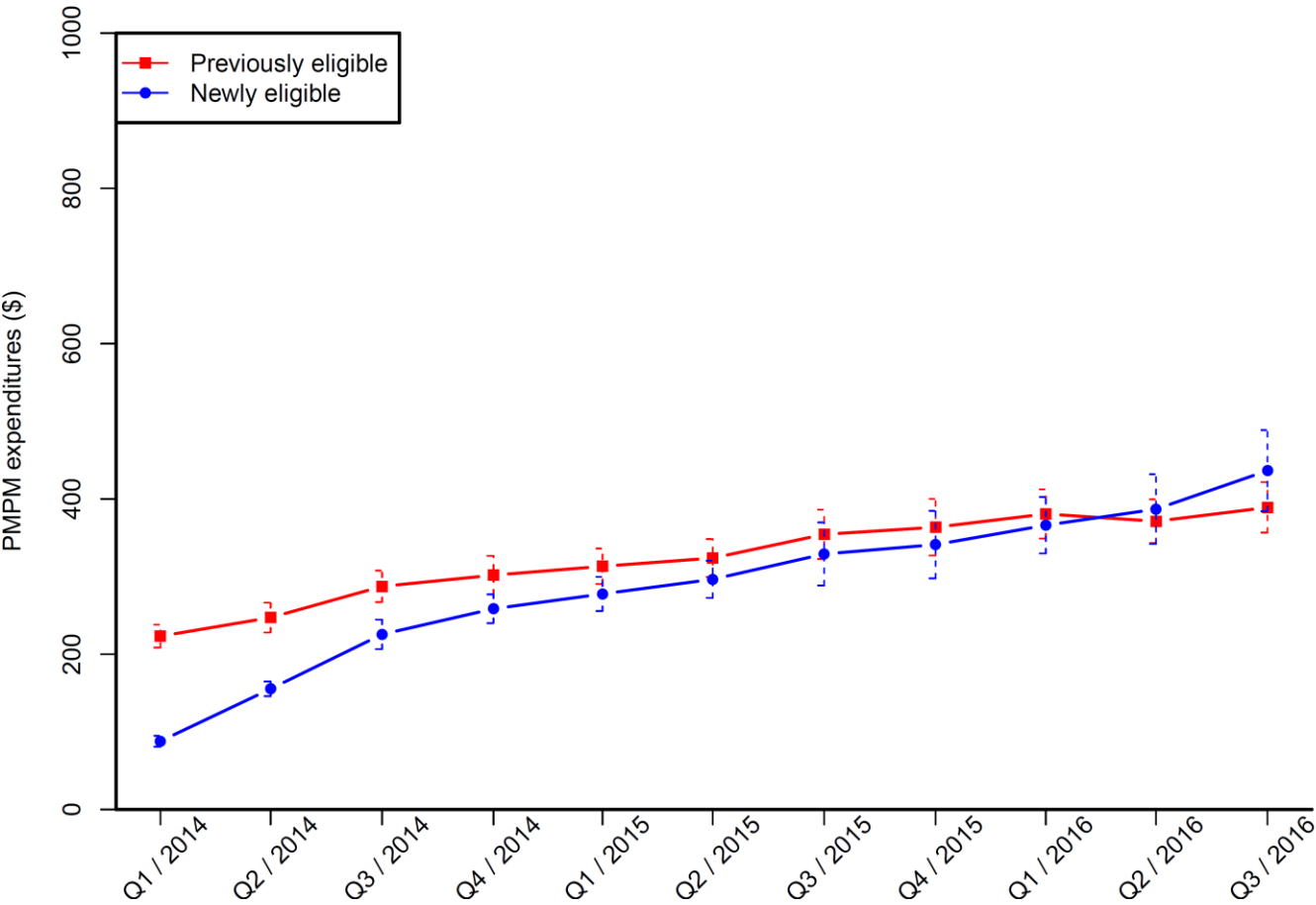
Notes: The figure shows Medicaid expenditures at specialists of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled during some quarters of the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



SUPPLEMENTARY DATA

**Supplementary Figure 30:** Trends in prescription drug expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample of those enrolled during some quarters of the study period

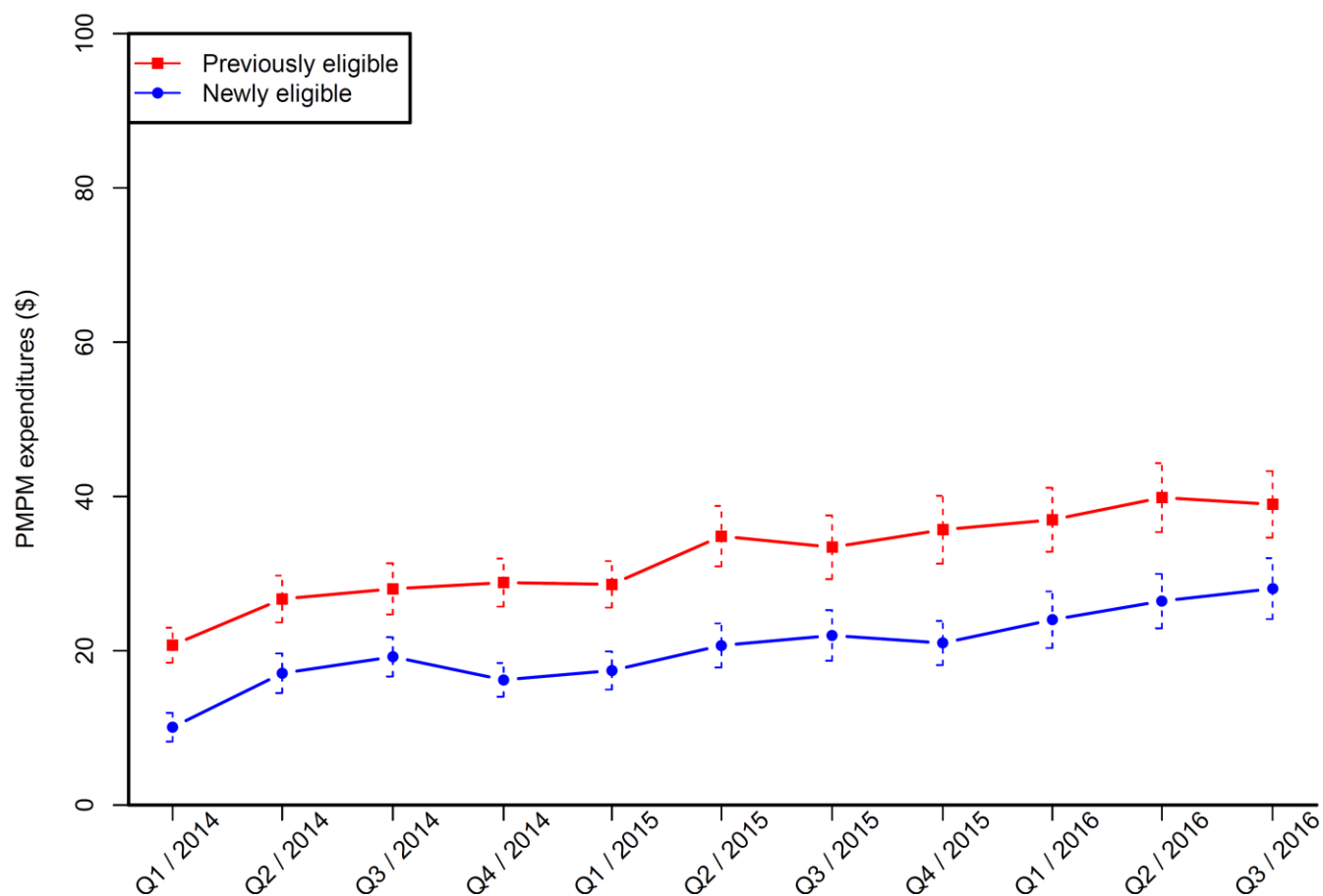
Notes: The figure shows prescription drug Medicaid expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled during some quarters of the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

**Supplementary Figure 31:** Trends in transportation expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample of those enrolled during some quarters of the study period

Notes: The figure shows Medicaid transportation expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled during some quarters of the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.

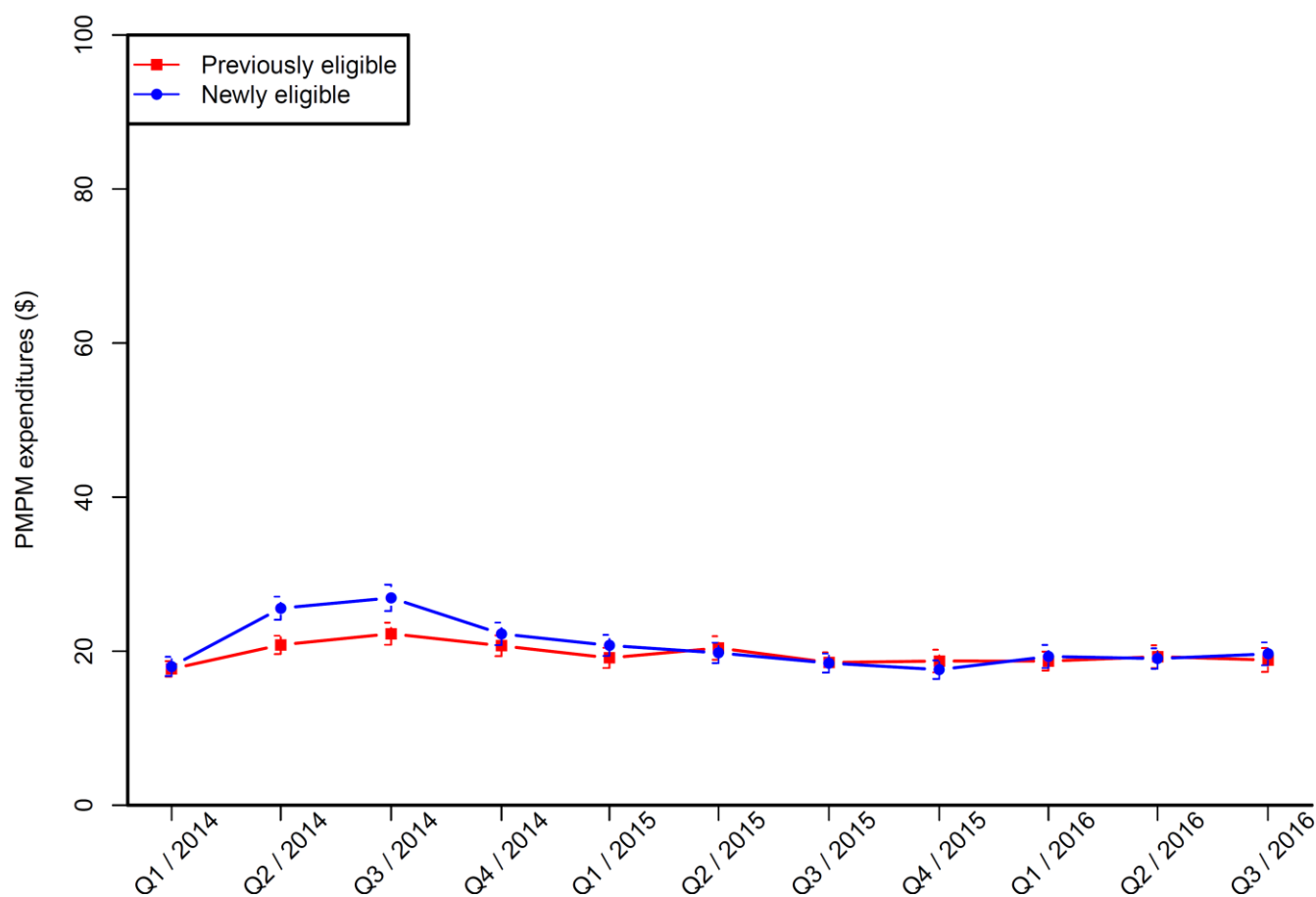




## SUPPLEMENTARY DATA

**Supplementary Figure 32:** Trends in expenditures for tests of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample of those enrolled during some quarters of the study period

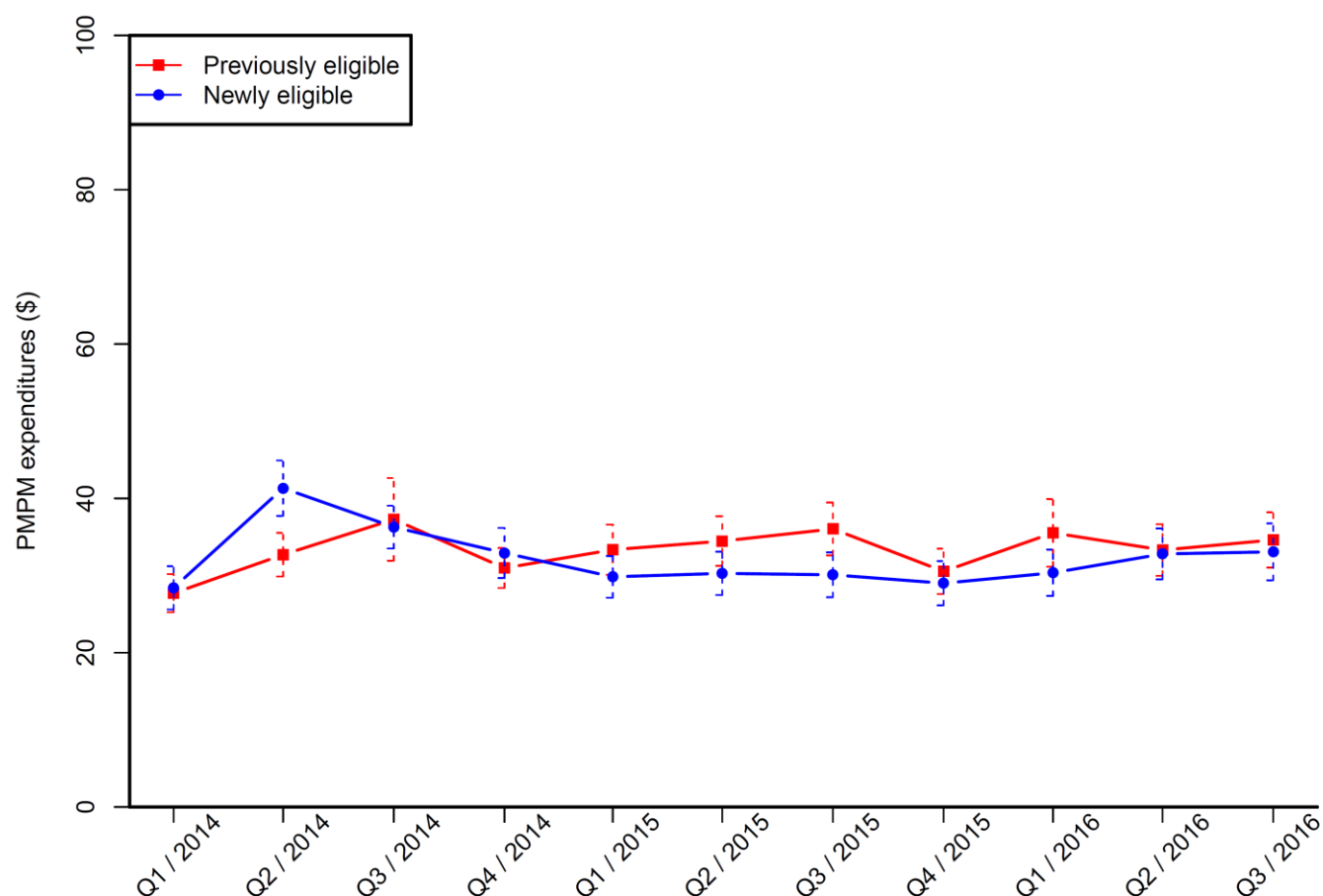
Notes: The figure shows Medicaid expenditures for tests of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled during some quarters of the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

**Supplementary Figure 33:** Trends in imaging and echography expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample of those enrolled during some quarters of the study period

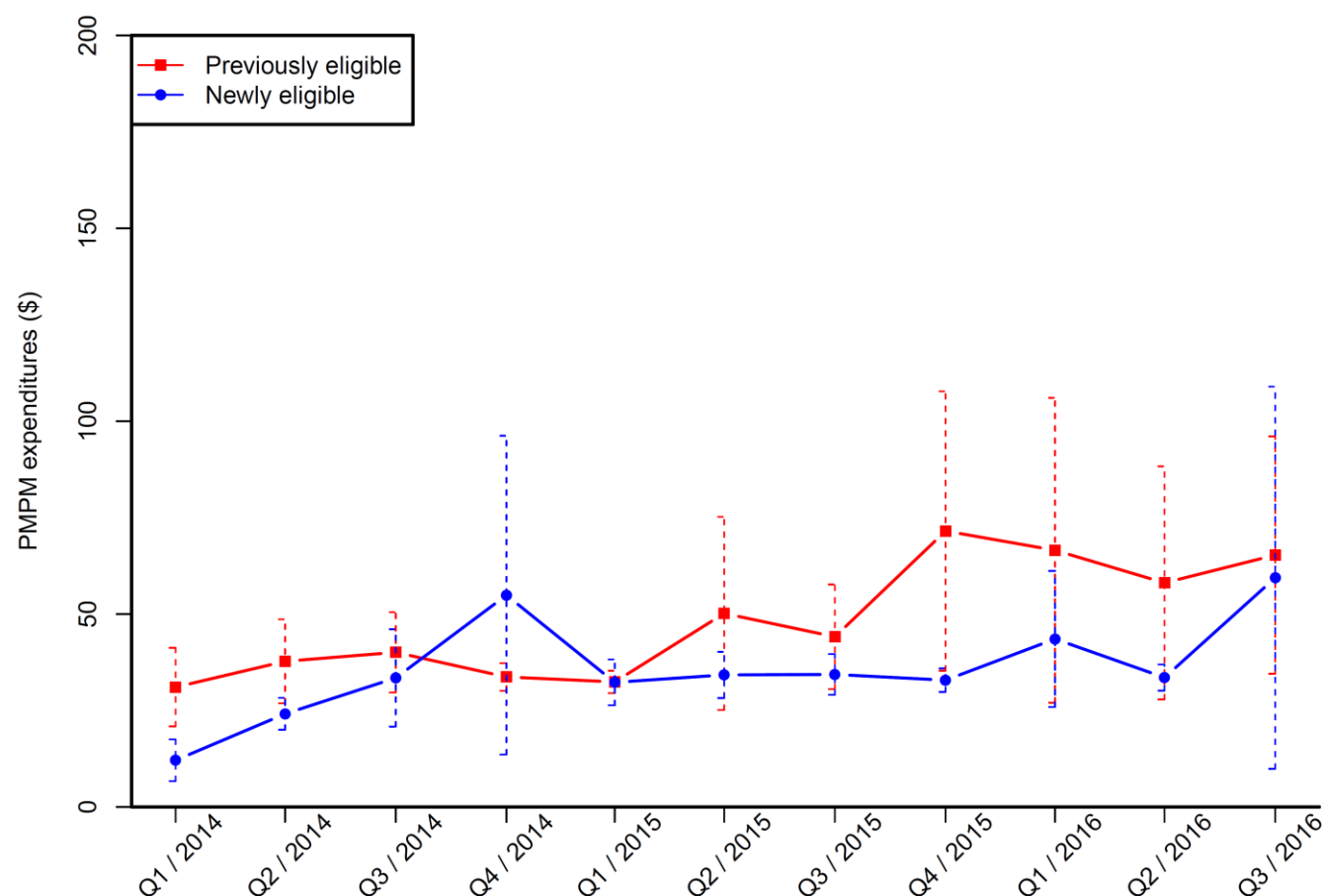
Notes: The figure shows imaging & echography Medicaid expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled during some quarters of the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

**Supplementary Figure 34:** Trends in expenditures for durable medical equipment of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample of those enrolled during some quarters of the study period

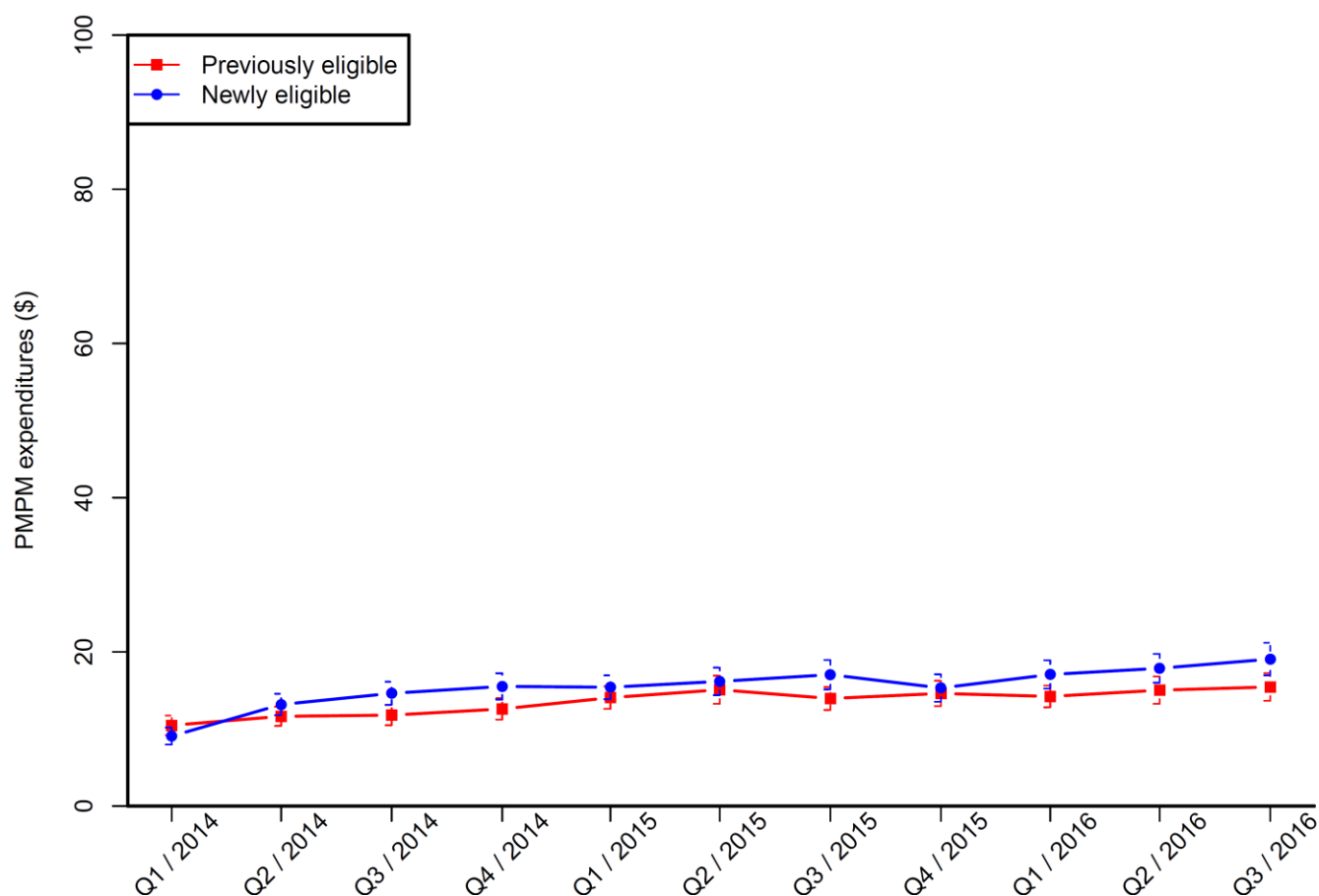
Notes: The figure shows Medicaid expenditures for durable medical equipment of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled during some quarters of the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

**Supplementary Figure 35:** Trends in evaluation and management expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample of those enrolled during some quarters of the study period

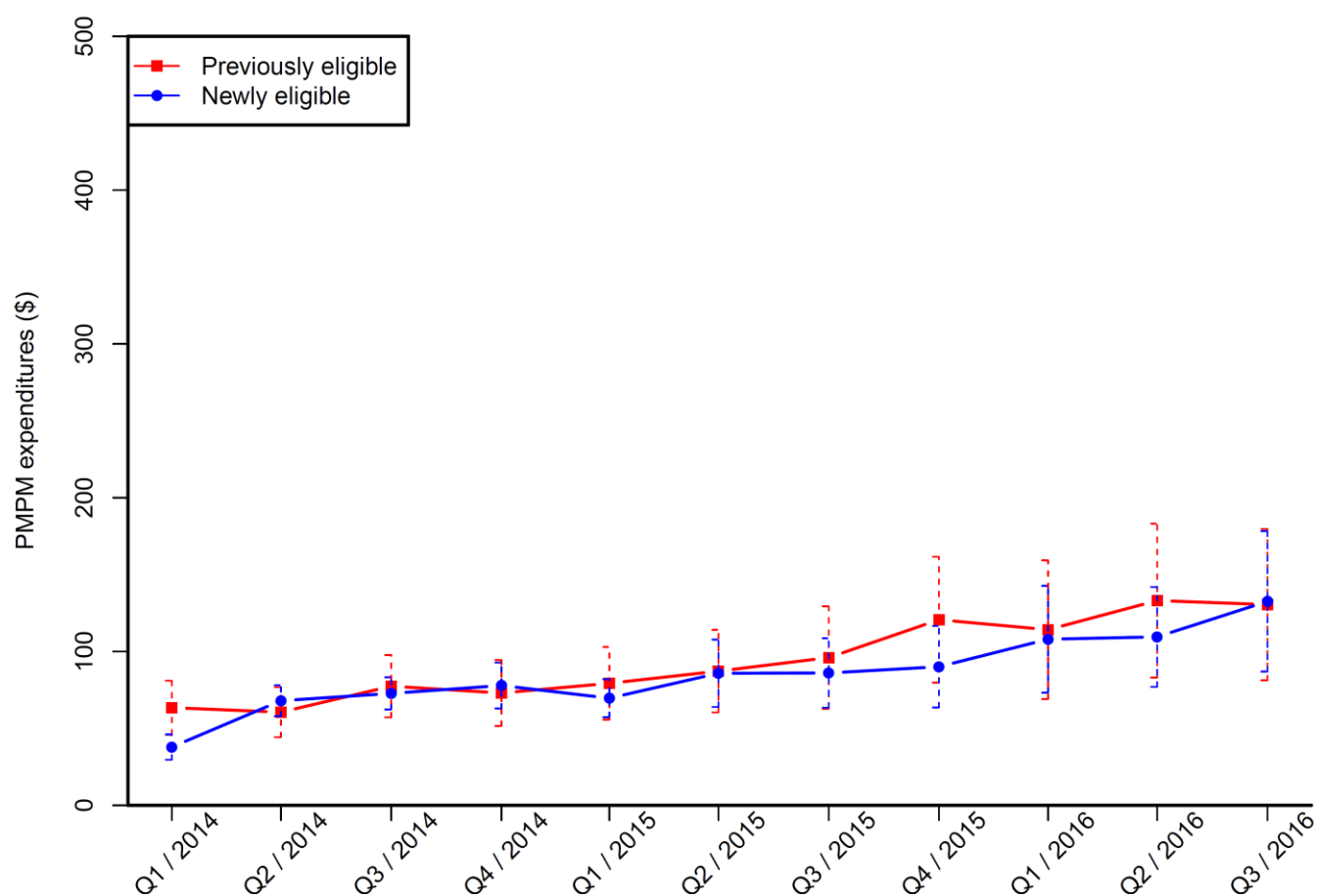
Notes: The figure shows Medicaid evaluation and management expenditures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled during some quarters of the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

**Supplementary Figure 36:** Trends in expenditures for procedures of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample of those enrolled during some quarters of the study period

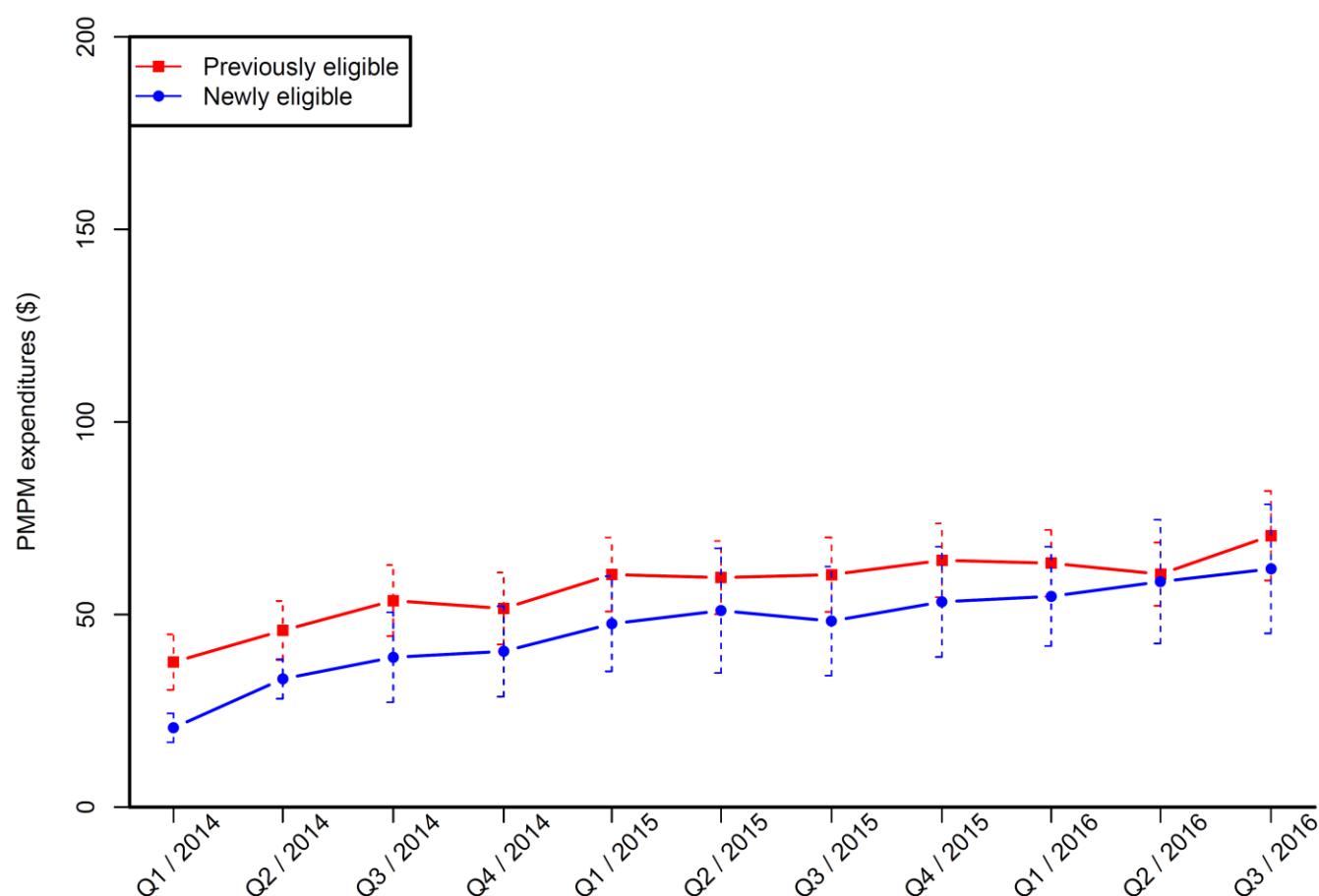
Notes: The figure shows Medicaid expenditures for procedures of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled during some quarters of the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

**Supplementary Figure 37:** Trends in expenditures for other or unknown services of previously and newly eligible Oregon Medicaid recipients with diabetes, matched sample of those enrolled during some quarters of the study period

Notes: The figure shows Medicaid expenditures for other or unknown services of previously and newly eligible Oregon Medicaid recipients with diabetes between January 2014 and September 2016 using the matched sample of those enrolled during some quarters of the study period. Vertical bars show 95% confidence intervals. Standard errors are based on regression models.



## SUPPLEMENTARY DATA

### References

- [1] McConnell K. John, Renfro Stephanie, Lindrooth Richard C., Cohen Deborah J., Wallace Neal T., Chernew Michael E.. Oregon's Medicaid Reform And Transition To Global Budgets Were Associated With Reductions In Expenditures *Health Affairs*. 2017;36:451-459.