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## **Evaluating Use of Maine All-Payer Claims Data (APCD) to Calculate Anti-Hypertension Medication Adherence**

Data Source—Maine All-Payer Claims Data (APCD), 2015 pharmacy claims dataset.

**Measure**—Percent of Maine adults aged 18-85 in adherence to medication regimens (had medication for 80% of days from the patient's start date until the end of the calendar year) based on 2015 APCD pharmacy claims.

**Numerator**—The number of total patients that had RASA (renin angiotensin system antagonists) medication for 80% days from the patient's start date until the end of the calendar year based on 2015 APCD pharmacy claims.

**Denominator**—The number of Maine adults recorded in APCD pharmacy claims aged 18-85 years who filled at least two prescriptions for RASA medication in 2015 that totaled at least 90 continuous days' supply, with the first prescription filled on or before September 30th, 2015.

	Total Patients	%	95% CI	
Maine Rate	105,663	85.5	85.3 - 85.7	
Sex				
Female	51,645	85.7	85.4 - 86.0	
Male	54,018	85.3	85.0 - 85.6	
Age				
18 - 24	180	75.6	69.3 - 81.8	
25 - 34	957	75.5	72.8 - 78.3	
35 - 44	4,044	78.7	77.4 - 80.0	
45 - 54	13,325	82.8	82.2 - 83.5	
55 - 64	27,038	85.4	84.9 - 85.8	
65 - 74	35,816	86.6	86.3 - 87.0	
75 - 85	24,303	87.2	86.8 - 87.6	
Rurality				
Urban	48,228	85.7	85.4 - 86.0	
Large Rural	19,205	85.6	85.1 - 86.1	
Small Rural	13,005	85.3	84.7 - 85.9	
Isolated Rural	25,223	85.3	84.9 - 85.7	

	Total Patients	%	95% CI		
Type of Healthcare Coverage, adults aged 18-85					
Any Private	90,509	86.4	86.2 – 86.6		
Any Medicaid	11,679	79.8	79.1 – 80.5		
Private and Medicaid	3,475	82.0	80.7 – 83.3		
Type of Healthcare Coverage, adults aged 65-85					
Any Private	54,626	87.5	87.2 – 87.8		
Any Medicaid	4,098	80.3	79.1 – 81.5		
Private and Medicaid	1,395	81.9	79.9 – 84.0		

## Results

- Increased medication adherence rate with each increase in age category
- Increased medication adherence rate in Maine adults on private insurance compared to Maine adults on Medicaid (all adults and those over 65)

## Limitations

- The PDC method measures access to medications based on pharmacy claims data. It does not measure whether a person took medication as prescribed.
- Not all Mainers included in APCD (Medicare, TriCare, small private insurers)
  - o Private insurers are not required to report if they have less than \$2 million per calendar year of adjusted premiums or claims.
- Results reflect one class of medication, not hypertension medication adherence in general
  - o RASA (renin angiotensin antagonists)medications only; does not include thiazide diuretics, calcium channel blockers, or beta blockers
- Differences in accurately measuring adherence based on varying fill periods (30-day, 60-day, 90-day fills). Each pickup is an opportunity for a coverage gap, therefore those with a fills of smaller supply are potentially more likely to be non-adherent
- Mail-order or retail pharmacy claims cannot be easily discerned. Mail-order claims might be on automatic refill and not a great proxy for medication adherence.