

---

# PSYCKES

## Polypharmacy Indicators

---

January 2024

---

Technical Specifications

---



**Office of  
Mental Health**

**PSYCKES**

## Polypharmacy Summary Indicator

**Description:** The percentage of Medicaid enrollees of all ages currently identified as meeting one of the following psychotropic polypharmacy indicators (Antipsychotic polypharmacy of 2 or more and 3 or more; antidepressant polypharmacy: 2 or more in same subclass or 3 or more; psychotropic polypharmacy: 3 or more in children/adolescent or 4 or more in adults) among enrollees currently on any psychotropic medication for longer than 90 days.

### Eligible Population:

- Age:** All ages.
- Inclusion Criteria:** Medicaid enrollee who is prescribed any psychotropic medication for longer than 90 days.
- Exclusion Criteria:** Current Medicare enrollee (dual eligibility).

Note: The algorithm measures time exposed to multiple agents and not the specific regimens. Individual agent trials are created, allowing for a possible 32 day gap between the last day with medication and the next pick-up date of the same agent (assuming less than perfect adherence and possible short inpatient stays). Polypharmacy trials are created by counting the number of agents available each day (constructed via the agent trials) and assigning corresponding start and end dates. A built-in allowance for polypharmacy trial gap of 15 days is permitted to allow for short periods of fewer medications, if enrollee returns to the same or higher status.

**For a list of psychotropic medications by drug class, please consult the Psychotropic Medication Reference Table.**

## Polypharmacy Indicators Documentation

### Polypharmacy Indicators - Antipsychotic polypharmacy of two or more agents (2AP)

**Description:** The percentage of enrollees of all ages who were prescribed two or more antipsychotic medications among enrollees prescribed any antipsychotic medication.

#### Eligible Population

**Age:** All ages.

**Inclusion Criteria:** Medicaid enrollee who is prescribed an antipsychotic medication for greater than 90 days.

**Exclusion Criteria:** Current Medicare enrollee (dual eligibility).

**Event/Diagnosis:** An enrollee is included in the eligible population if the enrollee has been prescribed an antipsychotic medication for longer than 90 days\* as of the report date.

#### Specification:

**Numerator:** Enrollees (from the eligible population) prescribed two or more concurrent antipsychotic medications during the previous 90 days or longer as of the report date.

**Denominator:** Eligible Population

\*Note: The algorithm measures time exposed to multiple agents and not the specific regimens. Individual agent trials are created, allowing for a possible 32 day gap between the last day with medication and the next pick-up date of the same agent (assuming less than perfect adherence and possible short inpatient stays). Polypharmacy trials are created by counting the number of agents available each day (constructed via the agent trials) and assigning corresponding start and end dates. A built-in allowance for polypharmacy trial gap of 15 days is permitted to allow for short periods of fewer medications, if enrollee returns to the same or higher status.

## Polypharmacy Indicators Documentation

### Polypharmacy Indicators - Antipsychotic polypharmacy of three or more agents (3AP)

**Description:** The percentage of enrollees of all ages who were prescribed three or more antipsychotic medications among enrollees prescribed any antipsychotic medication.

#### Eligible Population

**Age:** All ages.

**Inclusion Criteria:** Medicaid enrollee who is prescribed an antipsychotic medication.

**Exclusion Criteria:** Current Medicare enrollee (dual eligibility).

**Event/Diagnosis:** An enrollee is included in the eligible population if the enrollee has been prescribed an antipsychotic medication for longer than 90 days\* as of the report date.

#### Specification:

**Numerator:** Enrollees (from the eligible population) prescribed three or more concurrent antipsychotic medications during the previous 90 days or longer as of the report date.

**Denominator:** Eligible Population

\*Note: The algorithm measures time exposed to multiple agents and not the specific regimens. Individual agent trials are created, allowing for a possible 32 day gap between the last day with medication and the next pick-up date of the same agent (assuming less than perfect adherence and possible short inpatient stays). Polytrials are created by counting the number of agents available each day (constructed via the agent trials) and assigning corresponding start and end dates. A built-in allowance for polytrial gap of 15 days is permitted to allow for short periods of fewer medications, if enrollee returns to the same or higher status.

## Polypharmacy Indicators Documentation

### Polypharmacy Indicators - Antidepressant polypharmacy of two or more agents in the same subclass (2AD)

**Description:** The percentage of enrollees of all ages who were prescribed two or more antidepressant medications in the same subclass among enrollees prescribed any antidepressant medication.

#### Eligible Population

**Age:** All ages.

**Inclusion Criteria:** Medicaid enrollee who is prescribed an antidepressant medication.

**Exclusion Criteria:** Current Medicare enrollee (dual eligibility).

**Event/Diagnosis:** An enrollee is included in the eligible population if the enrollee has been prescribed an antidepressant medication for longer than 90 days\* as of the report date.

#### Specification:

**Numerator:** Enrollees (from the eligible population) prescribed two or more concurrent antidepressant medications in the same subclass for longer than 90 days as of the report date.

**Denominator:** Eligible Population

\*Note: The algorithm measures time exposed to multiple agents and not the specific regimens. Individual agent trials are created, allowing for a possible 32 day gap between the last day with medication and the next pick-up date of the same agent (assuming less than perfect adherence and possible short inpatient stays). Polypharmacy trials are created by counting the number of agents available each day (constructed via the agent trials) and assigning corresponding start and end dates. A built-in allowance for polypharmacy trial gap of 15 days is permitted to allow for short periods of fewer medications, if enrollee returns to the same or higher status.

\*Not counted as an antidepressant for antidepressant polypharmacy indicators, but included for psychotropic polypharmacy.

## Polypharmacy Indicators Documentation

### Antidepressants by Subclass

Subclass	Generic name	Brand name
TCA	Amitriptyline	Elavil
	Amoxapine	Ascendin
	Clomipramine	Anafranil
	Desipramine	Norpramin
	Doxepin	Sinequan
	Imipramine	Tofranil
	Nortriptyline	Pamelor
	Protriptyline	Vivactil
	Trimipramine	Surmontil
SSRI	Citalopram	Celexa
	Escitalopram	Lexapro
	Fluoxetine	Prozac
	Fluvoxamine	Luvox
	Paroxetine	Paxil
	Paroxetine controlled release	Paxil CR
	Sertraline	Zoloft
	SNRI	Duloxetine
SNRI	Desvenlafaxine	Pristiq
	Levomilnacipran	Fetzima
	Venlafaxine	Effexor
	MAOI	Isocarboxazid
MAOI	Phenelzine	Nardil
	Selegiline	Emsam transdermal patch
	Tranylcypamine	Parnate
Other	Bupropion	Wellbutrin SR
	Bupropion	Wellbutrin, Wellbutrin XL
	Bupropion	Aplenzin
	Bupropion	Zyban
	Esketamine	Spravato
	Maprotiline	Ludomil
	Mirtazapine	Remeron
	Nefazodone	Serzone
	Trazodone*	Desyrel
	Vilazodone	Viibryd
Vortioxetine	Brintellix, Trintellix	

\*Not counted as an antidepressant for antidepressant polypharmacy indicators, but included for psychotropic polypharmacy.

## Polypharmacy Indicators Documentation

### Polypharmacy Indicators—Antidepressant polypharmacy of three or more agents (3AD)

**Description:** The percentage of enrollees of all ages who were prescribed three or more antidepressant medications among enrollees prescribed any antidepressant medication.

#### Eligible Population

**Age:** All ages.

**Inclusion Criteria:** Medicaid enrollee who is prescribed an antidepressant medication.

**Exclusion Criteria:** Current Medicare enrollee (dual eligibility).

**Event/Diagnosis:** An enrollee is included in the eligible population if the enrollee has been prescribed an antidepressant medication for longer than 90 days\* as of the report date.

#### Specification:

**Numerator:** Enrollees (from the eligible population) prescribed three or more concurrent antidepressant medications in the same subclass for longer than 90 days\* as of the report date.

**Denominator:** Eligible Population

\*Note: The algorithm measures time exposed to multiple agents and not the specific regimens. Individual agent trials are created, allowing for a possible 32 day gap between the last day with medication and the next pick-up date of the same agent (assuming less than perfect adherence and possible short inpatient stays). Polypharmacy trials are created by counting the number of agents available each day (constructed via the agent trials) and assigning corresponding start and end dates. A built-in allowance for polypharmacy trial gap of 15 days is permitted to allow for short periods of fewer medications, if enrollee returns to the same or higher status.

## Polypharmacy Indicators Documentation

### Polypharmacy Indicators— Psychotropic polypharmacy in adults (four or more) (4PP(A))

**Description:** The percentage of enrollees 18 years and older currently on four or more psychotropic medications among enrollees 18 years old and older currently on any psychotropic medication

#### Eligible Population

**Age:** 18 years old and older.

**Inclusion Criteria:** Medicaid enrollee who is prescribed a psychotropic medication.

**Exclusion Criteria:** Current Medicare enrollee (dual eligibility).

**Event/Diagnosis:** An enrollee is included in the eligible population if the enrollee has been prescribed a Psychotropic medication for longer than 90 days\* as of the report date.

#### Specification:

**Numerator:** Enrollees (from the denominator) currently on four or more concurrent psychotropic medications for longer than 90 days as of the report date.

**Denominator:** Eligible Population

\*Note: The algorithm measures time exposed to multiple agents and not the specific regimens. Individual agent trials are created, allowing for a possible 32 day gap between the last day with medication and the next pick-up date of the same agent (assuming less than perfect adherence and possible short inpatient stays). Polypharmacy trials are created by counting the number of agents available each day (constructed via the agent trials) and assigning corresponding start and end dates. A built-in allowance for polypharmacy trial gap of 15 days is permitted to allow for short periods of fewer medications, if enrollee returns to the same or higher status.

## Polypharmacy Indicators Documentation

### Polypharmacy Indicators— Psychotropic polypharmacy in youth (three or more) (3PP(Y))

**Description:** The percentage of enrollees younger than 18 years old currently on three or more psychotropic medications among youth currently on any psychotropic medication

#### Eligible Population

Age:	Younger than 18 years old.
Inclusion Criteria:	Medicaid enrollee who is prescribed at least 1 psychotropic medication.
Exclusion Criteria:	Current Medicare enrollee (dual eligibility).
Event/Diagnosis:	An enrollee is included in the eligible population if the enrollee has been prescribed a Psychotropic medication for longer than 90 days* as of the report date.
Specification:	
Numerator:	Enrollees (from the denominator) currently on three or more concurrent psychotropic medications for longer than 90 days (as of the report date).
Denominator:	Eligible Population

\*Note: The algorithm measures time exposed to multiple agents and not the specific regimens. Individual agent trials are created, allowing for a possible 32 day gap between the last day with medication and the next pick-up date of the same agent (assuming less than perfect adherence and possible short inpatient stays). Polypharmacy trials are created by counting the number of agents available each day (constructed via the agent trials) and assigning corresponding start and end dates. A built-in allowance for polypharmacy trial gap of 15 days is permitted to allow for short periods of fewer medications, if enrollee returns to the same or higher status.

## Polypharmacy Indicators Documentation

### Revisions and Enhancements

This section of the PPI technical specifications summarizes the revisions made to the PSYCKES PPI algorithm since the original release of the indicator results in August 2008. The information below lists the date the revision was made, the component(s) affected by the change, a short summary of the changes that were made, and an analysis of the impact of the definitions changes from the older version to the newer one. This information is current as of the November 2009.

#### Changes implemented in June 2009:

The initial algorithm included medications that had been picked up within 133 days of the report date and the trial had to be active on the report date. The revised algorithm includes all psychotropics that are active within the 133 days by including medications that the date of pick-up plus the days supply is within the 133 day window. Furthermore, all medications that the days supply ran out within 35 days of the report date are included as well.

- The impact of this change was modest, with a small increase in the observed performance proportions

Production SAS/SQL syntax available upon request.