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Drug Use Evaluation: Prevalence of High-dose Initiation of Selective Serotonin Reuptake Inhibitors in the Oregon Medicaid Pediatric, Adolescent, and Young Adult Population

There is conflicting evidence in the literature regarding initiation of selective serotonin reuptake inhibitors (SSRIs) prescribed for major depressive disorder (MDD) and the increase of new-onset of deliberate self-harm thoughts and behaviors, or suicidality. The limitations of the existing evidence include short trial duration, the small number of suicide-related events observed, the different antidepressant types, doses administered and indications across trials and the confounding nature of the underlying mental illness.

As a result of case reports showing an increased risk of suicide-related events with fluoxetine and other SSRIs,[1] the FDA added a black box warning to the label of antidepressants for worsening of depression or suicidal thinking and behavior, suicidality, during initiation or dose titrations.[2] However, other studies disagree with this claim,[3] and the FDA warning led to fewer visits and prescriptions written for depression.[4,5,6,7] Clinicians have since argued the known risk of untreated depression is greater than the potential increased risk in suicidality.

To further evaluate the issue, the FDA conducted a meta-analysis to assess the risk of suicidality associated with antidepressant medication in pediatric and adolescent populations.[8] The rate of suicidality ranged from 0-8% across all trials with SSRIs, with only 1 trial demonstrating a statistically significant increase in suicidality between antidepressants and placebo.[9] SSRIs as a whole demonstrated a statistically significant increased risk for suicidality, (risk ratio [RR] 1.95 95% CI, 1.28-2.98), suicidal ideation, (RR 1.74 95% CI, 1.06-2.86) and suicidality in depression only, (RR 1.66 95% CI, 1.02-2.68).[8] From 17 trials that reported depression rating scales data at baseline and throughout study, there were no significant differences in worsening or emergence of suicidality.[8] Other meta-analyses have reported varying strengths of association[10,11] or no difference[12] between rate of suicide-related events with use of SSRIs compared to placebo. A more recent Cochrane review found an increased risk of suicide-related outcome for those on antidepressants compared to placebo (RR 1.58; 95% CI 1.02 to 2.45).[13]

One recent, large (n= 21,056), well-designed retrospective cohort study demonstrated a dose-related increase in deliberate self-harm among pediatrics, adolescents, and young adults (ages 10-24) initiated on high-dose SSRIs for MDD.[14] The rate of deliberate self-harm was found to be approximately double in the high dose group versus modal dose group (HR 2.2; 95% CI, 1.6-3.0). To date, no study has looked at the prevalence of high-dose initiation of SSRIs in Medicaid patients.

The primary objective of this drug use evaluation is to describe the frequency of high-dose (above modal dose for age group) SSRI initiation in the pediatric, adolescent and young adult Oregon Medicaid population by age group (<5, 5-9, 10-14, 15-19, and 20-24).

METHODS

A cross-sectional study of Oregon Medicaid patients was done. Patients were included if they had a paid claim for a SSRI (Appendix 1) with a service date of April 1, 2013 thru March 31, 2014. Patients were excluded if they were more than 24 years old on the date of the first SSRI claim, if they were covered by Medicare Part D (defined by benefit package BMM or BMD), if they were eligible for fewer than 75% of days in the 12 months prior to the first paid SSRI claim, or if they had a paid claim for any other antidepressant (Appendix 1) in the 12 months prior or concurrently. Patients <5 years old (n=19) or those on fluvoxamine (n=31) and paroxetine CR (n=10) were excluded from further analysis due to small numbers coupled with the lack of definitive dosing recommendations for these groups.

The daily SSRI initiation dose in milligrams was calculated for the first SSRI claim for each patient using the billed

quantity dispensed divided by the "days supply" entered by the pharmacy, resulting in units per day. The units per day were rounded to the nearest half-tablet as it is assumed a patient could only take units accurately in either whole or half-tablet quantity. Fluoxetine 90 mg was not subject to rounding as it is dosed weekly. The units per day were then multiplied by the unit strength to get the daily SSRI initiation dose.

The modal dose was then determined for the overall study population (i.e. pooled population modal dose) and then by age group, age-specific modal dose (Table 1). Patients were considered initiated at "high-dose" if their daily SSRI initiation dose was greater than the modal dose for their age group. The prevalence of high-dose initiation was then explored by age, sex, Caucasian race, SSRI, associated diagnoses, prescriber specialty (Appendix 2) and geographic location.

The recommended maximum daily dose for MDD or depression was determined from UpToDate, [15] Lexi-Comp Online,[16] and a pediatric guideline.[17] Patients were considered initiated at "above maximum recommended dose" if they were above the listed dose. In the case where there was a lack of recommendation for MDD, a recommended maximum daily dose for a different indication was used.

Patients found to be initiated above the recommended maximum dose were manually examined to verify the accuracy of SSRI initiation daily dose calculation by comparing the "days supply" entry to the number of days between fill dates. Those patients found to be entered incorrectly as high-dose or above maximum recommended dose were re-categorized appropriately.

RESULTS

There were 4,879 Oregon Medicaid patients newly initiated on a SSRI that met inclusion and exclusion criteria. Table 1 displays the recommended initial dose, recommended maximum dose, pooled population modal dose, and age-specific modal dose for each SSRI initiated. The pooled and age-specific modal doses did not exceed the recommended initial dose range. For those aged 20-24 years, the fluoxetine age-specific SSRI modal dose (20 mg) was greater than the pooled modal dose (10 mg).

Table 1 – Modal Dose by Medication [15,16,17]

SSRI	Recommended initial dose* (mg)	Recommended maximum dose* (mg)	Pooled population modal dose (mg)	Age – specific modal dose (mg)			
				Age range [years]			
				5 – 9	10 – 15	16 – 19	20 – 24
citalopram	10 – 20	40	20	10	10	20	20
escitalopram	5 – 10	20	10	5	10	10	10
fluoxetine	5 – 20	20 – 80	10	10	10	10	20
paroxetine (immediate release)	10 – 20	50	20	10	10	20	20
sertraline	12.5 – 50	200	50	25	25	50	50

*Doses for MDD or depression were used if listed and other indication doses were used if no MDD or depression dose was available.

Table 2 displays the demographic distribution. The mean age was 16.4 years and the majority was female (67.9%) and Caucasian (76.3%). The largest age group initiated on SSRI therapy was 10 to 15 years old (33.2%). Overall, 27.0% (n= 1301) of patients were initiated above the modal dose. Those ages 10 to 15 were initiated above the modal dose most often. After a manual review to verify the daily dose calculation, only three patients (0.06%) were identified as initiated above the recommended maximum dose. Two of these patients, one male and one female were between 20 and 24 years of age, and one was a female was between 16 and 19 years of age.

Table 2 – Initiation by Demographic Distribution

Demographic	SSRI initiated n (%)	SSRI initiated above the modal dose n (%)
Total population	4,819	1,301
Age (years)*		
Mean [min – max]	16.4 [5-24]	15.4 [5-24]**
5 - 9	410 (8.5)	63 (4.8)
10 - 15	1,601 (33.2)	700 (53.8)
16 - 19	1,542 (32.0)	389 (29.9)
20 - 24	1,266 (26.3)	149 (11.5)
Sex		
Male	1,547 (32.1)	462 (35.5)
Female	3,272 (67.9)	839 (64.5)
Ethnicity		
Caucasian	3,677 (76.3)	961 (73.9)**
Other	1,142 (23.7)	344 (26.4)**

*Age at time of index SSRI claim **Values unable to be adjusted after manual review and removal of 4 patients

Table 3 describes the distribution by medication. Fluoxetine, sertraline, and citalopram were the most frequent SSRI therapies initiated (86.9%). Fluoxetine was most frequently initiated above modal dose (47.2%). Of the three patients initiated above the recommended maximum daily dose, two patients received escitalopram and one citalopram.

Table 3 – Initiation by Medication

SSRI	SSRI initiated n (%)	SSRI initiated above the modal dose n (%)
	4,819	1,301
citalopram	961 (19.9)	167 (12.8)
escitalopram	440 (9.1)	69 (5.3)
fluoxetine	1,625 (33.7)	614 (47.2)
paroxetine (immediate release)	191 (4.0)	21 (1.6)
sertraline	1,602 (33.3)	430 (33.1)

Table 4 displays the number of patients with a claim for one or more of the selected diagnoses in the 12 months prior to the index claim. The three most common diagnoses for SSRI initiation were MDD or depression (30.7%), anxiety (29.6%), and adjustment reactions that includes post-traumatic stress disorder (PTSD) (21.4%). Those with a diagnosis of MDD or depression were most often initiated above modal dose (35.0%).

There were only three patients (0.06%) identified that were initiated on SSRI therapy above recommended maximum daily dose after manual review of the original eleven patients. One of these patients was a 22 year old male initiated on citalopram 60 mg daily. The maximum dose of citalopram was lowered to 40mg by the FDA in 2012 due to reports of heart arrhythmias associated with higher doses. The profile was sparse but included comorbid diagnoses of obesity, anxiety, and ADHD. A second patient was a 17 year old female initiated on escitalopram 40 mg daily with a diagnosis of PTSD. SSRIs are considered first-line therapy for PTSD and 30mg daily is a recommended therapeutic dose of escitalopram, however it is recommended to initiate at 10mg daily. The third patient was a 22 year old female initiated on escitalopram 30 mg daily. This patient did not have diagnoses codes reported, but was also taking atomoxetine, clonazepam, lamotrigine, and quetiapine under the care of a psychiatrist. This profile suggests a complex psychiatric situation with much missing information.

Table 4 – Initiation by Diagnosis

Diagnosis*	ICD-9 code	SSRI initiated n (%)	SSRI initiated above the modal dose n (%)
		4,819	1,301
With FDA indication for at least one SSRI			
MDD or Depression	296.2x – 296.3x 311.xx	1,480 (30.7)	455 (35.0)
Depressive episodes associated with bipolar disorders	296.0x – 296.1x; 296.4x – 296.9x	218 (4.5)	63 (4.8)
Anxiety disorders	300.xx	1,428 (29.6)	347 (26.7)
Personality disorders (includes OCD)	301.xx	20 (0.4)	6 (0.5)
Premenstrual tension syndromes	625.4x	13 (0.3)	5 (0.4)
Adjustment reactions (includes PTSD)	309.xx	1,029 (21.4)	286 (22.0)
Anorexia nervosa & eating disorders	307.1x; 307.5x	25 (0.5)	8 (0.6)
With off-label indications			
Alcoholism	303.xx	42 (0.9)	10 (0.8)
Pervasive development disorders (includes autism spectrum disorders)	299.xx	161 (3.3)	51 (3.9)
Disturbance of emotions specific to childhood and adolescents	313.xx	160 (3.3)	49 (3.8)
Migraine	346.xx	140 (2.9)	25 (1.9)
Fibromyalgia	729.1x; 729.2x	35 (0.7)	6 (0.5)
Hot flashes (male or female)	782.62	2 (<0.1)	1 (<0.1)
Insomnia	307.4x, 780.5x	132 (2.7)	35 (2.7)
Irritable bowel syndrome	564.1x	23 (0.5)	5 (0.4)
Nocturnal enuresis	788.36	12 (0.2)	2 (0.2)
Raynaud's syndrome	443.0x	2 (<0.1)	1 (<0.1)

* Patients could have more than one diagnosis and categories are not exclusive; MDD=major depressive disorder; OCD=obsessive-compulsive disorder; PTSD=post-traumatic stress disorder

Table 5 presents the distribution by provider specialty and geographic location by county of SSRI treatment initiation. Primary care providers initiated SSRI therapy most frequently at 31.2%. Pediatric providers initiated SSRI therapy at high-dose most frequently at 28.4%. No county had a significantly more prevalent high dose prescribing rate.

Table 5 – Initiation by Provider Specialty and Geographic Location

	SSRI initiated		SSRI initiated above modal dose	
Provider Specialty **	**n=4,819**	**%**	**n=1,301**	**%**
Pediatrics	960	19.9%	370	28.4%
Primary Care	1,505	31.2%	321	24.7%
Psychiatric	546	11.3%	185	14.2%
Other	1,192	24.7%	268	20.6%
Patient County ***				
Baker	27	0.6%	9	0.7%
Benton	73	1.5%	21	1.6%
Clackamas	367	7.6%	115	8.8%
Clatsop	52	1.1%	15	1.2%
Columbia	74	1.5%	20	1.5%
Coos	113	2.3%	33	2.5%
Crook	38	0.8%	9	0.7%
Curry	13	0.3%	8	0.6%
Deschutes	264	5.5%	78	6.0%
Douglas	172	3.6%	48	3.7%
Gilliam	0	0.0%	0	0.0%
Grant	12	0.2%	2	0.2%
Harney	19	0.4%	4	0.3%
Hood River	34	0.7%	9	0.7%
Jackson	295	6.1%	70	5.4%
Jefferson	34	0.7%	5	0.4%
Josephine	107	2.2%	27	2.1%
Klamath	102	2.1%	18	1.4%
Lake	7	0.1%	1	0.1%
Lane	559	11.6%	162	12.5%
Lincoln	91	1.9%	24	1.8%
Linn	220	4.6%	64	4.9%
Malheur	49	1.0%	11	0.8%
Marion	554	11.5%	149	11.5%
Morrow	10	0.2%	2	0.2%
Multnomah	690	14.3%	171	13.1%
Polk	100	2.1%	23	1.8%
Sherman	2	0.0%	0	0.0%
Tillamook	29	0.6%	7	0.5%
Umatilla	80	1.7%	25	1.9%
Union	56	1.2%	7	0.5%
Wallowa	12	0.2%	5	0.4%
Wasco	29	0.6%	5	0.4%
Washington	398	8.3%	130	10.0%
Wheeler	3	0.1%	1	0.1%
Yamhill	130	2.7%	24	1.8%

** Provider specialty definitions are located in Appendix 2; Counts reflect only those patients with an identifiable prescriber

***There were 4 patients whose county of residence was unable to be identified

DISCUSSION

These results demonstrate that a significant number (27%) of Oregon Medicaid patients aged 5 to 24 years were initiated on high-dose SSRI therapy during the study period thus, potentially putting these patients at risk for deliberate self-harm. Those aged 10 to 15 years were initiated at high-dose at a higher rate than any other age group. Patients in this age cohort comprised 53.8% of all patients initiated at high-dose. The mean age of all patients initiated at high-dose was slightly above 15 years of age.

Fluoxetine was most frequently prescribed (34%) and comprised 47.2% of all those above the modal dose. This could be due to a number of reasons. Compared with other SSRI therapies, fluoxetine is first line therapy, has a longer history of use, is FDA approved and has the most supporting evidence for treatment of MDD and additional indications. Therefore, practitioners may be more comfortable prescribing fluoxetine at higher doses because of past experience doing so. In addition, patients on fluoxetine may have diagnoses other than MDD that have recommended higher doses (e.g. OCD). Another potential explanation is the lower pooled modal dose (10 mg) obtained, which is in the lower range recommended by the manufacturer for heavier children 8 to 17 years old and half that typically recommended for adults (20mg). However, it is common practice to initiate adults on doses of 5 to 10 mg. The use of the lower pooled modal dose in the adolescent age groups could have led to an increased number of patients categorized as initiated above modal dose. Nonetheless, those prescribed fluoxetine were more likely to be initiated at high-dose and could increase the risk for suicidality.

Patients who had a diagnosis of MDD or depression were initiated at high-dose more often than other diagnoses. This is the population of most interest and similarity to the Miller paper linking risk of suicidality to initial dose of SSRI.

The Miller paper,[14] which the methods of this study were based upon, included only patients with a MDD diagnosis, only included citalopram, sertraline and fluoxetine and excluded patient under 10 years old. The rate of high-dose initiation (13.1%) in Miller[14] was significantly lower than in this study (27%). One possible explanation is the inclusion of patients with other diagnoses in this study. However, those with MDD were initiated at higher doses more prevalently than those with other diagnoses so it does not explain the higher prevalence of high dose initiation. The pooled modal doses in this study were similar to the pooled modes Miller[14] used for citalopram and sertraline but lower (10mg) for fluoxetine. Miller[14] used a pooled modal dose of 20mg to identify high dose initiation for all age groups. Additionally, given the long half-life of fluoxetine, prescribers may initiate at a higher dose to achieve steady state sooner. This study used an age-specific modal dose to determine high dose rather than the pooled population modal dose that Miller[14] used. The age-specific modes used in this study were lower than the pooled modes for patients less than 15 years old for citalopram, sertraline and paroxetine patients. Patients on fluoxetine and patients aged 10-15 were associated with the highest rates of high dose initiation and could account for the higher prevalence in this study compared to Miller.

One limitation is the method to calculate the daily SSRI initiation dose. The accuracy of calculating daily SSRI initiation doses correctly is dependent upon the correct entry of “days supply” by the pharmacy. This can ultimately lead to incorrect calculation of daily dose initiated, inappropriate categorization of the patient, and affect the validity of the results. However, with the exception of the few patients over the maximum dose, the pooled modal dose was similar to the Miller[14] paper and within recommended doses reported in the compendia, even when using an age specific modal dose. This suggests that overwhelmingly, pharmacies estimate and enter the days supply accurately. A second limitation is the extrapolation from the Miller[14] paper results to include a class effect for other SSRIs (i.e. paroxetine and escitalopram), to a younger population (i.e. 5-9 year olds), and to patients without a confirmed MDD diagnosis. The

vast majority (86.9%) of patients in this study were on the three drugs included in Miller[14] (i.e. fluoxetine, sertraline and citalopram) and were older than 9 (i.e. 91.5%). While only 30.7% carried a MDD diagnosis it has been documented previously that diagnoses are often absent from the administrative claims record and it was the most prevalent diagnoses reported.

This drug use evaluation identified 27% of Oregon Medicaid patients aged 5 to 24 years were initiated on high-dose SSRI therapy during the study period. The potential risk of self-harm due to SSRI use is still debated and relatively small (0-8%) in comparison to the burden of MDD. The Miller[14] paper suggests that limiting the dose at initiation is one way to limit the risk of self-harm while still treating the disease.

RECOMMENDATION

- Initiate a maximum dose prior authorization for patients less than 25 years starting citalopram, escitalopram, fluoxetine and sertraline (i.e. those with no prior antidepressant claim in the previous 102 days). Set the dose at the age-specific modal doses used in this study (Table 1) except increase the fluoxetine dose to 20mg for 16-19 year olds.
- Exclude child psychiatrists from the prior authorization requirement.
- Consider age edit to restrict use of paroxetine and fluvoxamine to adults (>18) per expert opinion.
- Prior to implementation, educate prescribers via Oregon State Drug Review

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Appendix 1 – Drugs Included and Classification

Therapeutic Class Spec Code & Desc	Generic Drug Name
H2S - SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRIS)	CITALOPRAM HYDROBROMIDE
H2S - SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRIS)	ESCITALOPRAM OXALATE
H2S - SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRIS)	FLUOXETINE HCL
H2S - SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRIS)	FLUVOXAMINE MALEATE
H2S - SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRIS)	PAROXETINE HCL
H2S - SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRIS)	PAROXETINE MESYLATE
H2S - SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRIS)	SERTRALINE HCL
H2S - SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRIS)	ST. JOHN'S WORT
H2U - TRICYCLIC ANTIDEPRESSANTS & REL. NON-SEL. RU-INHIB	AMITRIPTYLINE HCL
H2U - TRICYCLIC ANTIDEPRESSANTS & REL. NON-SEL. RU-INHIB	AMOXAPINE
H2U - TRICYCLIC ANTIDEPRESSANTS & REL. NON-SEL. RU-INHIB	CLOMIPRAMINE HCL
H2U - TRICYCLIC ANTIDEPRESSANTS & REL. NON-SEL. RU-INHIB	DESIPRAMINE HCL
H2U - TRICYCLIC ANTIDEPRESSANTS & REL. NON-SEL. RU-INHIB	DOXEPIN HCL
H2U - TRICYCLIC ANTIDEPRESSANTS & REL. NON-SEL. RU-INHIB	IMIPRAMINE HCL
H2U - TRICYCLIC ANTIDEPRESSANTS & REL. NON-SEL. RU-INHIB	IMIPRAMINE PAMOATE
H2U - TRICYCLIC ANTIDEPRESSANTS & REL. NON-SEL. RU-INHIB	MAPROTILINE HCL
H2U - TRICYCLIC ANTIDEPRESSANTS & REL. NON-SEL. RU-INHIB	NORTRIPTYLINE HCL
H2U - TRICYCLIC ANTIDEPRESSANTS & REL. NON-SEL. RU-INHIB	PROTRIPTYLINE HCL
H2U - TRICYCLIC ANTIDEPRESSANTS & REL. NON-SEL. RU-INHIB	TRIMIPRAMINE MALEATE
H7B - ALPHA-2 RECEPTOR ANTAGONIST ANTIDEPRESSANTS	MIRTAZAPINE
H7C - SEROTONIN-NOREPINEPHRINE REUPTAKE-INHIB (SNRIS)	DESVENLAFAXINE
H7C - SEROTONIN-NOREPINEPHRINE REUPTAKE-INHIB (SNRIS)	DESVENLAFAXINE FUMARATE
H7C - SEROTONIN-NOREPINEPHRINE REUPTAKE-INHIB (SNRIS)	DESVENLAFAXINE SUCCINATE
H7C - SEROTONIN-NOREPINEPHRINE REUPTAKE-INHIB (SNRIS)	DULOXETINE HCL
H7C - SEROTONIN-NOREPINEPHRINE REUPTAKE-INHIB (SNRIS)	LEVOMILNACIPRAN HYDROCHLORIDE
H7C - SEROTONIN-NOREPINEPHRINE REUPTAKE-INHIB (SNRIS)	VENLAFAXINE HCL
H7D - NOREPINEPHRINE AND DOPAMINE REUPTAKE INHIB (NDRIS)	BUPROPION HBR
H7D - NOREPINEPHRINE AND DOPAMINE REUPTAKE INHIB (NDRIS)	BUPROPION HCL
H7E - SEROTONIN-2 ANTAGONIST/REUPTAKE INHIBITORS (SARIS)	NEFAZODONE HCL
H7E - SEROTONIN-2 ANTAGONIST/REUPTAKE INHIBITORS (SARIS)	TRAZODONE HCL
H7J - MAOIS - NON-SELECTIVE & IRREVERSIBLE	ISOCARBOXAZID
H7J - MAOIS - NON-SELECTIVE & IRREVERSIBLE	PHENELZINE SULFATE
H7J - MAOIS - NON-SELECTIVE & IRREVERSIBLE	TRANYLCYPROMINE SULFATE
H8P - SSRI & 5HT1A PARTIAL AGONIST ANTIDEPRESSANT	VILAZODONE HYDROCHLORIDE
H8T - SSRI & SEROTONIN RECEPTOR MODULATOR ANTIDEPRESSANT	VORTIOXETINE HYDROBROMIDE
H2H - MONOAMINE OXIDASE(MAO) INHIBITORS	SELEGILINE

Appendix 2 – Provider Specialty Groupings

GROUP	PROVIDER SPECIALTY
OTHER	108 - Encounter Only
OTHER	115 - Oral Surgeon
OTHER	124 - Maternal Fetal Medicine
OTHER	216 - Sports Medicine
OTHER	218 - Radiation Oncology
PED	219 - Neonatal - Perinatal
OTHER	220 - Allergist
OTHER	221 - Abdominal Surgery
PED	222 - Adolescent Medicine
OTHER	223 - Allergy & Immunology
OTHER	224 - Aviation Medicine
OTHER	228 - Anesthesiologist
OTHER	229 - Otologist, Laryngologist
OTHER	230 - Blood Banking
OTHER	231 - Physician (Default Spec)
OTHER	232 - Cardiologist
OTHER	233 - Congregate Care Physician
OTHER	234 - Cardiovascular Diseases
OTHER	235 - Broncho-Esophagology
OTHER	236 - Child Neurology
OTHER	237 - Critical Care Medicine
OTHER	238 - Clinic
OTHER	239 - Clinical Pathology
OTHER	240 - Colon & Rectal Surgery
OTHER	241 - Cardiovascular Surgery
OTHER	242 - Dermatologist
OTHER	243 - Diabetes
PRIM	244 - Osteopathic Physician
OTHER	245 - Dermatopathology
OTHER	246 - Diagnostic Radiology
OTHER	247 - Emergency Med Practitioner
OTHER	248 - Forensic Pathology
PRIM	249 - Family Practitioner
OTHER	250 - Gastroenterologist
OTHER	251 - Geriatric Practitioner
PRIM	252 - General Practitioner
OTHER	253 - Gynecology
OTHER	254 - Hospital Administration
OTHER	255 - Hematology
OTHER	256 - Head & Neck Surgery
OTHER	257 - Hand Surgeon
OTHER	258 - Mobile Med. Care (HS CALL)
OTHER	260 - Infectious Diseases

OTHER	261 - Immunology
PRIM	262 - Internist
OTHER	263 - Industrial Medicine
OTHER	264 - Legal Medicine
OTHER	265 - Maxillofacial Surgery
OTHER	266 - Neuropathology
OTHER	267 - Neoplastic Diseases
OTHER	268 - Neurologist
OTHER	269 - Nephrologist
OTHER	270 - Nuclear Medicine
OTHER	271 - Nuclear Radiology
OTHER	272 - Neurological Surgeon
OTHER	273 - Nutritionist
OTHER	274 - Ophthalmology
OTHER	275 - Obstetrics
OTHER	276 - Obstetrics & Gynecology
OTHER	277 - Occupational Medicine
OTHER	278 - Oncologist
OTHER	279 - Orthopedic Surgeon
OTHER	280 - Otologist, Laryngologist, Rhinologist
OTHER	281 - Otologist, Laryngologist
OTHER	282 - Pathologist
PED	283 - Pediatrics
OTHER	284 - Pediatric Allergy
OTHER	285 - Pediatric Cardiology
OTHER	286 - Public Health
OTHER	287 - Pediatric Endocrinology
OTHER	288 - Pediatric Radiology
OTHER	289 - Pediatric Surgeon
OTHER	290 - Plastic Surgeon
OTHER	291 - Physical Medicine and Rehabilitation Practitioner
OTHER	292 - Pediatric Hematology-Oncology
OTHER	293 - Pediatric Nephrology
OTHER	294 - Pediatric Urology
OTHER	295 - Pulmonary Disease Specialist
OTHER	296 - Preventive Medicine
MH	297 - Psychosomatic Medicine
OTHER	298 - Pharmacology
OTHER	299 - Rheumatology
OTHER	300 - General Surgeon
OTHER	301 - Therapeutic Radiology
OTHER	302 - Traumatic Surgery
OTHER	303 - UOHSC Practitioners
OTHER	304 - Urologist
OTHER	305 - Rhinology

OTHER	306 - Thoracic Surgeon
OTHER	307 - Endocrinologist
OTHER	308 - Proctologist
MH	312 - Psychiatrist
OTHER	313 - Vascular Surgery
OTHER	314 - Student/Education
PRIM	328 - Primary Care - Federal Definition
OTHER	484 - Internal Medicine - Sleep Medicine
OTHER	108 - Encounter Only
PRIM	328 - Primary Care - Federal Definition
OTHER	360 - Advance Practice Nurse
OTHER	361 - Nurse Practitioner Clinic
PED	362 - Pediatric Nurse Practitioner
OTHER	363 - Obstetric Nurse Practitioner
PRIM	364 - Family Nurse Practitioner
OTHER	366 - Nurse Practitioner (default Spec)
OTHER	367 - Certified Nurse Midwife
OTHER	108 - Encounter Only
PRIM	328 - Primary Care - Federal Definition

Appendix 3

Initial Pediatric SSRI Antidepressant –Daily Dose Limit

Goal(s):

- Approve only for covered OHP diagnoses.
- Limit risk of new-onset of deliberate self-harm thoughts and behaviors, or suicidality associated with initiation of antidepressant therapy at above recommended doses

Length of Authorization:

- 12 months

Requires PA:

- Any SSRI above the doses in the table below for patients <25 years old on the date of the first antidepressant claim (i.e. no claim for any antidepressant in Specific Therapeutic Classes H2H, H2S, H2U, H7B, H7C, H7D, H7E, H7J, H8P or H8T in the 102 days prior)

GSN	SSRI	Age – specific modal dose (mg)			
		Age range [years]			
		5 – 9	10 – 15	16 – 19	20 – 24
70991, 46206, 46204, 46203, 46205	citalopram	10	10	20	20
50712, 51642, 51698, 50760	escitalopram	5	10	10	10
46219. 46216, 46217, 47571, 46215, 46214, 46213	fluoxetine	10	10	20	20
46222, 46224. 46225, 46223, 46226, 53387, 53390, 53389, 53388,	paroxetine (immediate release)	10	10	20	20
46229, 46228, 46227, 46230	sertraline	25	25	50	50

Covered Alternatives:

- Doses within recommended age-specific dose.

Approval Criteria		
1. What diagnosis is being treated?	Record ICD9 code.	
2. Is the client being treated for funded diagnoses on the OHP List of Prioritized Services?	Yes: Go to #3.	No: Pass to RPH; Deny, (Diagnosis not funded by OHP)

Approval Criteria		
3. Has the patient been treated previously with antidepressants and is the dose below the maximum recommended dose?	Yes: Approve x 12 months.	No: Go to #4
4. Is the requested dose above the recommended initial dose for the patient's age (i.e. was the days supply entered correctly, is the patient's age accurate)?	Yes: Pass to Pharmacist and Go to #5. .	No: Approve x 12 months
5. Are there clinical circumstances that justify an increased dose?	Yes: Pharmacist to evaluate on a case by case basis.	No: Deny, (Medical Appropriateness) Recommend lowering initial dose

P&T / DUR Action: *11/20/14*
Revision(s):
Initiated: *1/1/15??*