

Calculating the Cost of Prior Authorization in Mental Health

At first glance, prior authorization (PA) may seem like a reasonable way for states to control pharmacy costs. A deeper look, however, shows that any potential New York Medicaid savings generated through PA may be more than offset by additional, related costs in other areas.

The savings

New York estimates annual savings in pharmacy costs from requiring PA in mental health at: \$12,000,000*

The hidden costs

Based on national averages, there are 556,967 people 18 years and older in New York with schizophrenia or bipolar disorder.**1.2 Of these, 115,512 are disabled and enrolled in Medicaid.1.3 Of these, 34,654 receive their medications through the state's fee-for-service (FFS) program and 80,858 in managed care programs.

PA in mental health is associated with a 6% higher likelihood of treatment gaps, which, in 80% of cases, are associated with relapse.*** Relapse is likely to result in additional physician visits, emergency department visits, and hospitalization. One recent study presents the following cost estimates¹:

Marginal cost of relapse for patients with schizophrenia:	\$21,500
Marginal cost of relapse for patients with bipolar disorder:	\$16,125

Given the patient population at risk in New York, a reasonable estimate of additional annual costs associated with PA, which include the cost to treat relapse, would be:

Medical costs of patients receiving medications through the state's FFS program under proposed change to the preferred drug list (PDL):	\$29,764,608
Medical costs of managed care patients if PA plan is extended to them as well:	\$69,450,753

The bottom line

Estimated Annual Savings	Potential Annual Additional Cost	Net Change
\$12,000,000	\$99,215,361	\$-87,215,361

Additional considerations

In addition to calculable costs, there are additional potential liabilities associated with PA****:

Additional administrative cost associated with PA review	\$10 to \$25	per review⁴
Cost of lost wages of the severely mentally ill	\$16,000	per person per year¹
Emergency shelter cost	\$12,000	per person per year¹
Average total prison cost	\$22,650	per inmate per year⁵
Inmate mental health services	\$10,000	per inmate per year¹
Nursing home cost	\$82 to \$160	per day⁶
Cost of additional psychiatrist visits	\$72	per visit⁷
Average dispensing fee of appropriate prescription	\$4.81	per prescription⁸
Societal costs of potentially tragic consequences	\$	Immeasurable

* This amount may be pre-rebate. ** This calculation incorporates the number of state Medicaid lives based upon known data as of December 2011. This number is subject to change and variability at the state level. *** Relapse is defined as any 2-point change on any of the 3 BPRS psychotic items (hallucinations, unusual thought content, and conceptual disorganization) leading to a score > 3 and psychotic relapse: a rating of 6 or 7 on any of the 3 items.**** Please note that these numbers are not specific to your state, but rather are generalized from Fleeter, et al.¹ or national averages.

References

1. Fleeter, et al. Estimate of the net cost of a prior authorization requirement for certain mental health medications. August 2008. Available at: <http://www.namiohio.org/images/publications/Publications/EstimatedCostofPriorAuthorizationAugust20Final1.pdf>. 2. United States Census. 2010. Available at: http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_SF1_QTP1&prodType=table. 3. The Henry J. Kaiser Family Foundation. statehealthfacts.org. Medicaid & CHIP. Available at: <http://www.statehealthfacts.org/comparecat.jsp?cat=4>. 4. LaPensee KT. *J Manag Care Pharm.* 2003 Jan-Feb;1(9):36-44. 5. U. S. Department of Justice. State prison expenditures, 2001. June 2004: NCJ 202949. Available at: <http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=117>. 6. Federal Register. Vol. 76, No. 152. Monday, August 8, 2011:48486. 7. Machlin, et al. Medical Expenditure Panel Survey Statistical Brief No.166. March 2007. 8. Menges, et al. Potential Federal and State-by-State Savings if Medicaid Pharmacy Programs were Optimally Managed. December 2010. Available at: www.lewin.com/publications/Publication/436/. 9. Gitlin, et al. Clinical outcome following neuroleptic discontinuation in patients with remitted recent-onset schizophrenia. *Am J Psychiatry.* 2001;158:1835-1842. 10. Agency for Healthcare Research and Quality. Healthcare Cost and Utilization Project. 2009 National Statistics. Available at: http://hcupnet.ahrq.gov/HCUENet.app/HCUENet.jsp?Id=26597588866F4642&Form=MAINSEL&JS=Y&Action=%3E%3ENext%3E%3E%3E_MAINSEL=Mental Health Statistics.

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What's behind the numbers

As shown on the previous page, calculating the financial impact of PA is more complex than estimating pharmacy savings. Studies have shown that PA is associated with treatment gaps, relapse, additional physician visits, emergency department visits, and hospitalization, all of which can increase Medicaid costs significantly. For example¹⁰:

- Median Medicaid cost of hospitalization for schizophrenia: \$13,188
- Median Medicaid cost of hospitalization for mood disorders: \$9,508

The calculations featured on the previous page estimate the medical cost of relapse. Here are the steps taken to arrive at the results:

1. The adult Medicaid population with schizophrenia and bipolar disorders was estimated using prevalence statistics from the National Institutes of Health (NIH) and a Georgia study, and Kaiser Family Foundation (KFF) statistics on the adult disabled Medicaid population in your state^{1,2}
2. For each of these populations, the number was multiplied by 6%, representing the number of people likely to experience a treatment gap as a result of PA¹
3. Each resulting figure was multiplied by 80%, representing the likelihood of relapse following treatment interruption¹
4. The resulting numbers were multiplied by \$21,500 for people with schizophrenia and by \$16,125 for people with bipolar disorder, which are figures derived as representative of the marginal cost of relapse for each condition¹

Additional potential costs resulting from relapse, like lost wages, prison costs, nursing home costs, and societal costs are not included in these numbers.

A simple example

Here is a hypothetical example of a state with 100,000 disabled adults on Medicaid, and a projected savings of \$5,000,000 from PA implementation.

Factor	Step	Result
# of adults on Medicaid		100,000
# of covered adults with schizophrenia	Multiply by 6% $100,000 \times 0.06 =$	6,000
# likely to experience treatment interruption	Multiply by 6% $6,000 \times 0.06 =$	360
# likely to experience relapse	Multiply by 80% $360 \times 0.80 =$	288
Cost of relapse	Multiply by 21,500 $288 \times 21,500 =$	\$6,192,000
# of covered adults with bipolar disorder	Multiply by 12% $100,000 \times 0.12 =$	12,000
# likely to experience treatment interruption	Multiply by 6% $12,000 \times 0.06 =$	720
# likely to experience relapse	Multiply by 80% $720 \times 0.80 =$	576
Cost of relapse	Multiply by 16,125 $576 \times 16,125 =$	\$9,288,000
Combined cost of relapse	$6,192,000 + 9,288,000 =$	\$15,480,000
Projected savings from PA		\$5,000,000
Net savings (cost)	$5,000,000 - 15,480,000 =$	(\$10,480,000)