Medicaid Redesign Team II Recommendations

February 21, 2020

NYASAP

New York Association of Alcoholism and Substance Abuse Providers (ASAP)

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Introduction

Substance Use Disorder (SUD), a perennial public health problem that turned into a true public health crisis with the advent of the opiate epidemic, has significant Medicaid cost implications when it is *untreated*. Persons with untreated SUD are associated with 80% of unnecessary hospitalizations and incur substantial medical expenses that impact their family and community. The good news is that unnecessary costs can be driven down by the effective, evidenced-based treatment available in communities across NYS. Not only is high quality treatment effective at addressing substance use disorder, but it is also effective at reducing overall societal and healthcare costs. The savings that can be created by SUD treatment has been proven time and time again in scholarly studies, a small example of which can be found in ***attachment A*** of this document. It is critical, during the opioid crisis and the budget challenges New York currently faces, that we more adequately utilize SUD prevention, treatment, and recovery services to not only drive down the cost of unnecessary hospitalizations related to untreated addiction, but also to improve health outcomes and achieve efficiencies.

In addition to the studies referenced in our ***attachment A,*** we should emphasize two other relevant data points which reinforce the wisdom of investing in treatment for substance use disorder. In January of 2018 the National Institute on Drug Abuse (NIDA) issued a report entitled "Is drug addiction treatment worth the cost?". That report concluded that every dollar invested in addiction treatment programs yields a return of between $4 and $7 in reduced drug-related crime, criminal justice costs, and theft. In that report NIDA further concluded that when healthcare savings are factored in, total savings can exceed costs by a factor of 12 to 1.

Another critical data point was released in September of 2016 by the Substance Abuse Mental Health Services Administration/Center for Behavioral Health Statistics & Quality. This report, based on a national survey, concluded that 8.1% of Americans, or 21.7 million people were in need of addiction treatment services. Of those only 10.8% (2.3 million) actually receive treatment.

Taken together these two data points lead to an obvious conclusion. Paying for more SUD treatment, and increasing the number of people who engage in SUD treatment, are guaranteed to result in significant savings, both in health care and the criminal justice systems.

In New York, we have the good fortune of a robust Medicaid program to help pay for that treatment. But there are ways we could be smarter about the use of Medicaid within our system, so that we improve outcomes and achieve efficiencies.

We have divided our recommendations into two parts. Part One focuses on solutions which have already been tried and proven to succeed. Part Two lists some common sense recommendations which we believe would simultaneously improve treatment outcomes and save costs.

There is much more that ASAP believes could be done to help the state achieve efficiencies and improve outcomes through the Medicaid program. Unfortunately, the truncated time for input under the MRT II process does not allow for our most comprehensive response or the dialog among experts necessary for a complete set of recommendations. ***ASAP formally requests that an ongoing advisory body be created, including the Executive Chamber, DOH, OASAS, consumer advocates, and representatives from the addiction services provider community*** that could drill down into more granular detail how to better address systemic problems facing the SUD treatment field and New York State's Medicaid program. Such a group could also address the differences between providing services in rural and urban settings. We believe that process could be very fruitful and we are eager to help the Medicaid program make these improvements.

Part I: Proven Solutions That Work

As New York State aims to achieve maximum efficiency and cost savings through Medicaid redesign, there are excellent examples of focused managed-care initiatives involving treatment for substance use disorder (SUD) that have achieved both improved outcomes and reduced cost. In fact, many of the promising practices included in the final DSRIP 2.0 report included SUD and integrated care initiatives.

Inefficiency and unnecessary Medicaid expenses result when people needing SUD treatment experience a system that is fragmented and where healthcare is delivered in an uncoordinated manner. This unacceptable, resource draining problem was successfully resolved by two pilot initiatives outlined below.

A DSRIP Pilot Project with Outstanding Results

The Western New York DSRIP Pilot used a collaborative partnership that brought multiple provider types together to identify and share best practices, share data, and to establish quality value-based targets. Vastly improved outcomes and cost savings were achieved. Working together, this network of Western New York service providers attained DSRIP metric targets associated with depression management, medication management, continuity of care, timely follow-ups for behavioral health discharges, appropriate diagnoses of SUD, depression, schizophrenia, and psychosis. The end result was significant savings in Medicaid expenditure and vastly improved outcomes resulting in a DSRIP bonus payment of $42 million. In Suffolk County similar outcomes were achieved where medication adherence for schizophrenia and bipolar disorder patients was dramatically improved. Similarly, diabetes screening increased to 86%.

Recommendation: Value based/incentive contracting should be expanded based upon the lessons learned in the Western New York pilot.

Using Health Home Care Coordination to Improve Outcomes

The New York State Health Home Coalition represents 34 Health Homes and several hundred Care Management agencies throughout NY State. Through Care Coordination and Care Management, high utilizers of Medicaid had a reduction in their hospitalizations and ED visits by as much as 40% and achieved successful lifestyle improvements in many of the social determinants of health. These cost savings and positive outcomes were accomplished by:

- Care coordination
- Bulk purchasing of pharmacy and other products
- Population health management
- Addressing social determinants of physical and mental health

The key outcomes they achieved include:

- Reducing costs by shifting utilization from inpatient hospitalizations and emergency departments to less expensive outpatient services
- Improving adherence to addiction and anti-psychotic medications
- Improving comprehensive diabetes care
- Improving follow-up after hospitalization for mental health disorders
- Improving rates of screening for chlamydia, HIV, and colorectal cancer

Outcome metrics are impressive. There was a 29% decrease in alcohol use, a 26% decrease in moderate to severe illicit drug use, and a 15% decrease in homelessness. Results also included a 47% decrease in the depression score and a 35% decrease in transmissible HIV ***(for a full write-up of this initiative, see attachment B)***.

Recommendation: The New York Health Home Collaborative Coalition should be expanded and incentivized with value-based bonus payments comparable to the DSRIP bonus system.

Part II: Other Common Sense Initiatives

In addition to the two care coordination initiatives outlined above, there are common sense initiatives that will improve treatment outcomes and thus reduce overall costs.

Incentivizing Take-Home Medication for SUD

Patients receiving medication through OASAS-certified opioid treatment programs (OTPs) gradually earn more take home medication as they progress in treatment. As patients need to visit the clinic less often, the clinic staff is freed up to treat additional patients. This, de-facto, increases treatment capacity. However, since there is no Medicaid rate for extended take-home medication, clinics are disincentivized to move patients to this less intense level of care.

Recommended Solution:

The Coalition of Medication Assisted Providers and Advocates (COMPA) and ASAP recommend that an APG code should be established, which is equivalent to the first medication dispensed per week using the KP modifier (i.e., 2x the OTP daily dispensing rate for methadone, plus the unit cost for buprenorphine). This code is only available to eligible patients and would be billed on a weekly basis for weeks 2-4. A provision for reimbursing take-home medication has been promulgated as part of the newly established CMS Medicare for OTP reimbursement.

Furthermore, any costs associated with this reimbursement will likely be offset by a reduction in transportation costs. A take-home reimbursement will incentivize providers to provide take-home medication to eligible patients who can receive medication up to 4 weeks, thus **reducing transportation costs**. Take-home medication reimbursement would be more convenient to patients who are stabilizing in their treatment, encouraging retention in treatment, while reducing the high costs associated with transportation.

Ending Prior Authorization for All Formulations of Medication Assisted Treatment

Through the Governor's leadership significant progress has been made in removing access barriers for addiction medications, under both the Medicaid program and private insurance. However, we need to eliminate those barriers which remain. Patients who would benefit from the use of medications for the treatment of SUD are often subject to prior authorization from Medicaid managed care plans before they can have access to the medication prescribed by their doctor. Delays in access can result in relapse, which can result in overdose and death. While some medications are available under the Medicaid program with no prior authorization, other medications – primarily specialized formulations of buprenorphine products – are subject to lengthy and onerous prior authorization protocols. These protocols create significant access barriers for patients, and an unnecessary administrative burden for health care professionals and treatment providers.

Recommendation:

Just as all forms of prior authorization for the treatment of SUD have been statutorily banned for private insurance plans, the same ban should be applied to the Medicaid program. It is incorrect, as some have contended, that this would result in an increase cost to the Medicaid program. The opposite is true. In a report prepared by the Legal Action Center (LAC) and RTI International, ***(see attachment C),*** significant savings to the Medicaid program have been documented.

Support Outpatient Stabilization for Those Suffering from SUD

Outpatient clinic services are not adequately resourced to provide stabilization services to high risk persons who are using drugs. These patients are at high risk for significant medical issues including overdose and death and they are very difficult to engage, requiring intensive clinical and medical support, community follow-up, and family intervention. Additionally, there are often multiple other stakeholders involved that require coordination and collaboration of the plan (PMDs, courts, schools, and employers). The lack of robust resources and follow up often result in patients having a crisis and presenting at hospitals either for an ED visit or an admission.

Recommendation:

Drive down unnecessary hospitalizations by providing a meaningful "add-on" for the engagement and treatment of high risk patients (against specific criteria) that will enable programs to increase resources and services, including medical support, follow-up, and engagement and coordination. Additionally, add acuity based factor to APG methodology, assuring access for those most in need of services.

Shortage of Supportive Housing

Many communities lack sufficient supportive and therapeutic housing for patients that are completing intensive residential treatment. The result is patients return to their "home" and neighborhoods where they were in active use and with little or no structure. Early signs and symptoms of relapse can go undetected as patients disengage from recovery supports. This can result in re-admission to the highest levels of care due to serious medical incident.

Recommendation:

Fund the development of recovery housing in every community to allow individuals in early recovery an opportunity to fully integrate into the community and work on their community recovery plan in supportive environment thereby reducing serious relapse and increasing the skills and abilities of individuals to maintain in the community based health and treatment system.

Need for Case Management Services for High Risk SUD That Are Connected but Not Engaged

Increasingly patients with serious and high risk SUD are connected to outpatient clinics but only marginally engaged (high no show rates, inconsistent use of MAT, continued high risk). These patients and their families require close follow up, outreach and case management. These patients may be eligible for Care Coordination but will not voluntarily agree, as required, to have a Care Coordinator or a Recovery Coach.

Recommendation:

Funding for case management should be a rate add on and part of the package of basic clinic services. Investment in these support services would actually improve outcomes and reduce health care costs across primary care, emergency room and hospitals. Case managers would also increase coordination and support to PMD's that are prescribing Medication Assisted Treatment (MAT).

Thank you for the opportunity to provide our suggestions to the MRT II team. ASAP stands ready to work with the Administration and the Legislature to ensure that the Medicaid redesign efforts will remedy past inefficiencies, and will provide the most effective services for the SUD population. Adequately funded, effective services for this population will provide significant offsetting savings, not only in the Medicaid program, but in other areas requiring governmental expenditures. This kind of investment is all the more critical as we continue to fight the huge public heath crisis of the opiate epidemic.

For additional information, please contact us at 518-426-3122.

COALITION FOR WHOLE HEALTH

ACCESS TO QUALITY ADDICTION/MENTAL HEALTH SERVICES IS COST-EFFECTIVE

Untreated Mental Health and Substance Use Disorders Are Costly to the Health System and Society

Mental health and substance use disorders cost American employers an estimated $17 billion annually in absenteeism and lost productivity.[i] The estimated annual costs of illicit drug use are over $11 billion in health costs, $61 billion in crime-related costs, and $120 billion in productivity – for a total of $193 billion.[ii] This is comparable to the annual direct and indirect costs of diabetes, an estimated $174 billion per year.[iii]

Mental health disorders are often associated with other chronic medical conditions, and can significantly increase the cost and difficulty of treating those other conditions. For example, studies have found depression in one-quarter of patients with diabetes, a rate twice as high as in the general population.[iv] For people with diabetes, depression is associated with poorer adherence to medication and dietary guidelines, and overall medical costs for diabetes patients with co-occurring depression are significantly higher than for those without depression.[v]

Many of the costs of mental health and substance use disorders fall on the Medicare and Medicaid systems. A 2009 study found that 52% of individuals with both Medicare and Medicaid coverage had a psychiatric condition.[vi] In March 2011, the first report from the Medicaid and CHIP Payment and Access Commission (MACPAC) found that Medicaid accounts for one quarter of all mental health and substance use disorder treatment spending. In seminal works on hospital readmission rates in both the Medicare and Medicaid population, Jencks et al found co-occurring schizophrenia and substance use problems is one of the highest predictors of readmission in both populations.[vii]

Mental Health and Substance Use Disorders Can be Prevented and Treated Cost-Effectively

Research indicates that in addition to effectively treating addiction, substance use disorder services can lower overall costs to the healthcare system and to society, including costs due to crime, and the criminal justice system.[viii] When implementing parity for mental health and substance use benefits in the federal employee health benefit (FEHB) system, the U.S. Office of Personnel Management stated:

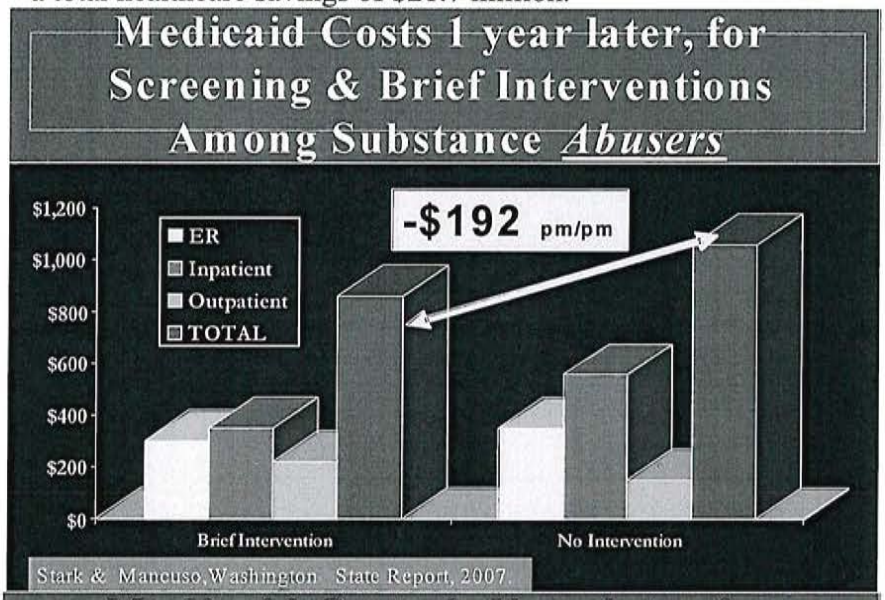
> Research has convinced us that the FEHB Program can expand mental health and substance abuse benefits cost effectively. We believe that this is important because adequate mental health and substance abuse benefits coverage has been shown to improve patient health, provide patients with greater financial protection against unseen costs, and to reduce work place absences and employee disabilities.[ix]

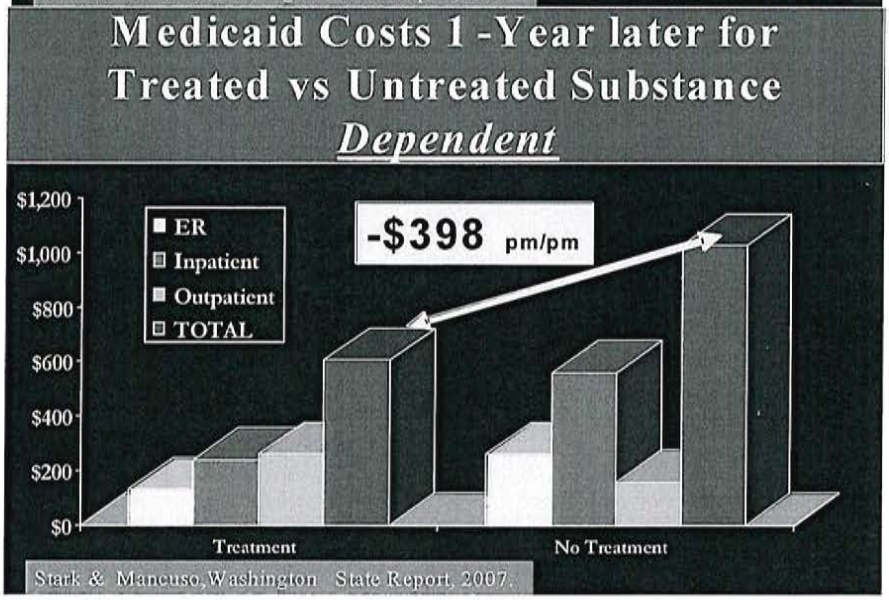
Findings of Cost-Effectiveness and Cost-savings Exist across a Range of Mental Health and Substance Abuse Prevention and Treatment Interventions

For example:

- ***Realizing savings through school-based prevention programs:*** According to SAMHSA's Center for Substance Abuse Prevention, effective school-based substance abuse prevention programs could save an estimated $18 for every $1 invested. Savings would be seen in educational costs, medical care, productivity, and other areas.[x]

- ***Reducing overall healthcare costs through Medicaid treatment expansions:*** In Washington State, targeted expansions of substance abuse treatment for the Medicaid population resulted in increased access as well as significant savings in other healthcare costs. For fiscal year 2008, treatment expansion expenditures of approximately $17 million resulted in an estimated $16.8 million in medical savings and $4.9 million in nursing home savings – a total healthcare savings of $21.7 million.[xi]





Reducing healthcare costs for family members:

- Family members of an individual with untreated addiction use 5 times more health care services than other individuals.[xii] Health care and other cost savings can be achieved by treating not only the individual, but also his/her family members. A study found that successful alcohol or other drug treatment for individuals was associated with reduced subsequent medical costs for family members.[xiii]

- ***Reducing healthcare costs through recovery support services***: A longitudinal study assessed the impact of recovery coach services on parents with children in Illinois's foster care system. It found that parents assigned to both regular substance abuse treatment and recovery coach services were more likely to enter, participate in, and complete treatment than parents assigned only to regular substance abuse treatment. The Department of Children and Family Services saved $5.6 million, in part due to fewer and shorter foster care placements, and faster family reunification.[xiv]

- ***Reducing healthcare costs through care coordination:*** Innovative coordination between a primary care provider, care coordination staff, and psychiatric consultants can significantly improve mental health while reducing costs. In one study, middle-aged and older adults who received such "collaborative care" for depression had significantly reduced healthcare costs compared to those in usual care, with a $522 initial investment yielding cost savings of $3,363 per patient.[xv] Studies of collaborative care for patients with comorbid depression and diabetes, and of those with severe anxiety, found similar savings.[xvi]

- ***Reducing costs through intensive case management.*** A study of a Connecticut initiative targeted at high utilizers of behavioral health care services found that intensive case management, combined with enhanced access to care, medication-assisted therapy, increased housing and employment, and basic needs and recovery supports, resulted in 24% decrease in average cost per person compared to usual services.[xvii]

- ***Reducing medical costs with effective outpatient treatment*:** A study of overall medical costs for men receiving outpatient chemical dependency treatment found that compared to 18 months before starting treatment, 18 months later, total medical costs declined by 26%, inpatient healthcare costs declined by 35%, and emergency room costs declined by 39%.[xviii]

It is important to note that efforts to trim healthcare costs by limiting access to mental health and substance abuse benefits can result in negative fiscal outcomes. One study looked at what happened when a large corporation instituted cost-containment mechanisms that sharply decreased utilization of outpatient mental health services. While there were some savings due to lower use of outpatient mental health services, these savings were entirely offset by increased use of other health services by the same patients, and by increased use of sick days.[xix]

Policy makers can greatly improve public health and save billions of dollars by ensuring that eligible enrollees have access to the full continuum of mental health and substance use disorder services. The evidence is clear that mental health and substance use disorders can be effectively prevented and treated, and millions of Americans are in recovery from these diseases.

[i] Hertz RP et al., "The impact of mental disorders on work," *Pfizer Outcomes Research* Publication No P0002981 (2002).
[ii] U.S. Department of Justice, "The Economic Impact of Illicit Drug Use on American Society" Product No. 2011-Q0317-002 (2011) (online at www.justice.gov/ndic/pubs44/44731/44731p.pdf).
[iii] National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, "National Diabetes Statistics, 2007 (online at http://diabetes.niddk.nih.gov/dm/pubs/statistics/).
[iv] Lustman and Clouse, "Depression in diabetic patients: the relationship between mood and glycemic control" Journal of Diabetes and its Complications (2005) Volume: 19, Issue: 2
[v] *Id.*
[vi] Kronick RG, Bella M, Gilmer TP. The faces of Medicaid III: Refining the portrait of people with multiple chronic conditions. Center for Health Care Strategies, Inc., October 2009.
[vii] Jenks, S.F., et al, "Rehospitalizations among Patients in the Medicare Fee-for-Service Program," The New England Journal of Medicine, 360 (2009): 1418-28.
[viii] National Institutes of Health, National Institute on Drug Abuse, "Principles of Drug Addiction Treatment: A Research-Based Guide (Second Edition)" (2009) (http://www.nida.nih.gov/pdf/podat/podat.pdf).
[ix] U.S. Office of Personnel Management, "Mental Health and Substance Abuse Parity Frequently Asked Questions" (2002) (online at www.opm.gov/insure/archive/health/consumers/parity/faq.asp).
[x] Substance Abuse and Mental Health Services Administation, Center for Substance Abuse Prevention, "Substance Abuse Prevention Dollars and Cents: A Cost-Benefit Analysis" (2009).
[xi] John Taylor et al, Washington State Department of Social & Health Services, "Using Cost Offsets to Fund Chemical Dependency Treatment Expansion: The Washington State Experience" (June 2009) (online at http://www.nasadad.org/resources/Brief%20DASA%20June%202009-v2.ppt).
[xii] Ray G.T., Mertens J., and Weisner C. (2007) The excess medical costs and health problems of family members of persons diagnosed with alcohol or drug problems. *Medical Care* 45(2): 116 – 122.
[xiii] Weisner, C., Parthasarathy, S., Moore, C. and Mertens, J. R. (2010), Individuals receiving addiction treatment: are medical costs of their family members reduced?. Addiction, 105: 1226–1234. doi: 10.1111/j.1360-0443.2010.02947.x.
[xiv] Joseph P. Ryan, "Illinois Alcohol and Other Drug Abuse (AODA) Waiver Demonstration Final Evaluation Report" (Jan. 2006) (online at www.cfrc.illinois.edu/publications/rp_20060101_IllinoisAODAWaiverDemonstrationFinalEvaluationReport.pdf).
[xv] Unutzer et al., "Long-term Cost Effects of Collaborative Care for Late-life Depression," *The American Journal of Managed Care* Vol. 14, No. 2 (Feb. 2008) (online at http://www.ajmc.com/media/pdf/AJMC_08feb_Unutzer_95to100.pdf).
[xvi] *Id.*
[xvii] Thomas A. Kirk, "Connecticut's Journey to a Statewide Recovery-Oriented Health-care System:Strategies, Successes, and Challenges," in J.F. Kelly and W.L. White (eds.), Addiction Recovery Management: Theory, Research and Practice, Current Clinical Psychiatry (2011)
[xviii] Parthasarathy et al, "Association of outpatient alcohol and drug treatment with health care utilization and cost: revisiting the offset hypothesis," *Journal of Studies on Alcohol* (Jan. 2001): 89-97.
[xix] Rosenheck et al, "Effect of Declining Mental Health Service Use on Employees of a Large Corporation," *Health Affairs* Vol. 18 No. 5 (Sept/Oct 1999).

A number of studies have confirmed a strong relationship between treating substance use disorders and reducing overall medical expenditures. These investments in SUD treatment result in considerable savings to the healthcare system. For example:

- A recent Washington State study of the impact of a 2005 investment by the State in targeted substance use disorder treatment for the Medicaid population conservatively estimates a return on investment of 2:1 over the next four years in direct healthcare related costs; that is, for every dollar invested in expanded alcohol and drug dependence treatment the State saved at least two dollars in avoided medical and nursing facility costs. (Washington State Department of Social & Health Services, "Bending the Health Care Cost Curve by Expanding Alcohol/Drug Treatment," http://publications.rda.dshs.wa.gov/1417/)

- For fiscal year 2008, Washington State's treatment expansion expenditures of approximately $17 million resulted in an estimated $16.8 million in medical savings and $4.9 million in nursing home savings – a total healthcare savings of $21.7 million. (John Taylor et al, Washington State Department of Social & Health Services, "Using Cost Offsets to Fund Chemical Dependency Treatment Expansion: The Washington State Experience," June 2009, http://www.nasadad.org/resources/Brief%20DASA%20June%202009-v2.ppt)

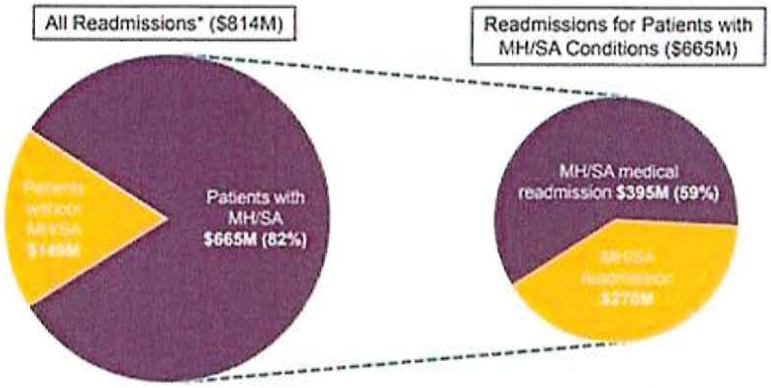
- The Washington State expansion of SUD treatment coverage for disabled Medicaid beneficiaries in 2005 resulted in an average cost savings of $287 per member per month just one year later. This cost savings exceeded expectations. (Washington State Department of Social and Health Services, "DASA Treatment Expansion: The First Two Years," October, 2007. http://www.dshs.wa.gov/pdf/ms/rda/research/4/65.pdf)

- A 2001 study of overall medical costs for men receiving outpatient chemical dependency treatment found that compared to 18 months before starting treatment, 18 months later total medical costs declined by 26%, inpatient healthcare costs declined by 35%, and emergency room costs declined by 39%. (Parthasarathy et al, "Association of outpatient alcohol and drug treatment with health care utilization and cost: revisiting the offset hypothesis," *Journal of Studies on Alcohol,* January 2001: 89-97. http://www.ncbi.nlm.nih.gov/pubmed/11271969)

- For patients with substance use disorder-related medical conditions, integrating medical and substance abuse treatment services results in decreases in hospitalization rates, fewer days of inpatient treatment, and fewer emergency room visits. Additionally, total medical costs per patient per month are more than halved, from $431.12 to $200.03. (Parthasarathy, S. et al, "Utilization and cost impact of integrating substance abuse treatment and primary care," Med Care. 2003 March; 41(3):357-67. http://www.ncbi.nlm.nih.gov/pubmed/12618639)

BH Statewide Overview

- Most Medicaid readmissions for patients with MH and Substance Abuse (SA) conditions are for medical reasons



*Readmissions within 30 day from original admission date

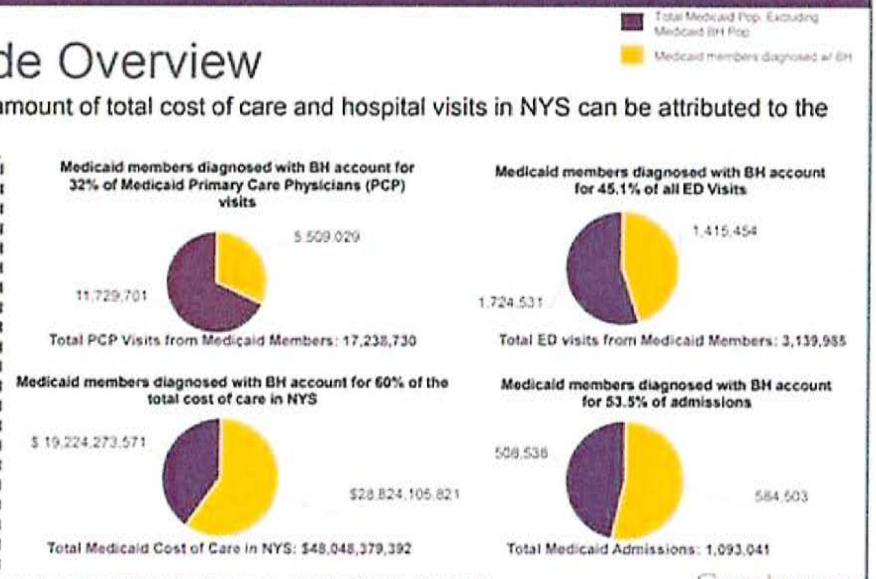
Department of Health

BH Statewide Overview

- A disproportionate amount of total cost of care and hospital visits in NYS can be attributed to the BH population

Overview:

- Medicaid members diagnosed with BH account for **20.9%** of the overall Medicaid population in NYS
- The average length of stay (LOS) per admission for BH Medicaid users is **30%** longer than the overall Medicaid population's LOS
- Per member per month (PMPM) costs for Medicaid Members with BH diagnosis is **2.6** times higher than the overall Medicaid population



*Source: SIM Database, 2014 Claims Data – analysis based on data from January – December 2014, New York State **

** This data includes Medicaid Members with 1+ Claims with primary or secondary diagnosis of behavioral health issues*

Department of Health

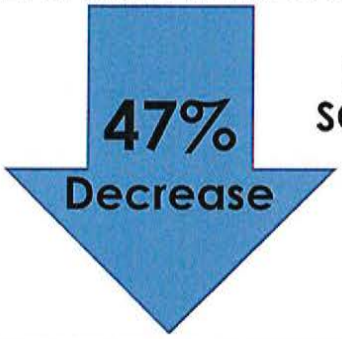
Attachment B

HEALTH HOME OUTCOMES

DEPRESSION

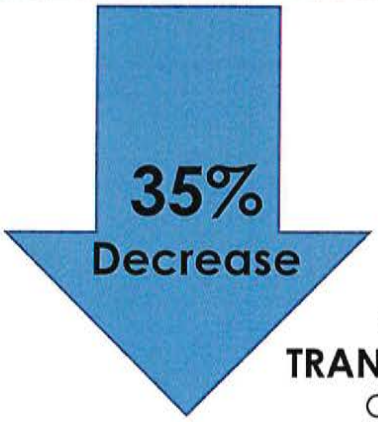
79%

OF MEMBERS WITH MAJOR DEPRESSIVE BEHAVIOR WERE **SIGNIFICANTLY LESS DEPRESSED** AFTER ONE YEAR[1]



IN **DEPRESSION SCORE** AMONGST MEMBERS WITH DEPRESSION SYMPTOMS[2]

HIV

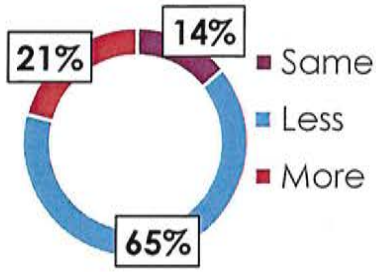


IN MEMBERS WITH **TRANSMISSIBLE HIV** OVER 18 MONTHS[3]

ALCOHOL USE

29% REDUCTION
IN **ALCOHOL USE** SCORE AMONGST MEMBERS WHO DRINK[5]

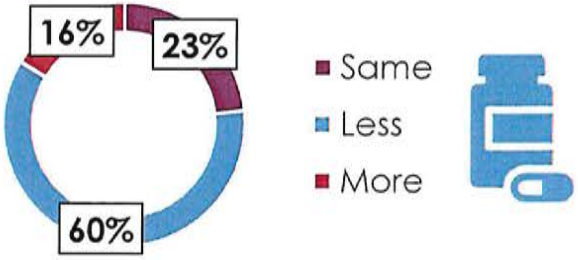
Change in Alcohol Abuse After 1 Year[4]



DRUG USE

26% REDUCTION

AMONGST MEMBERS WITH **MODERATE TO SEVERE DRUG USE**[7]

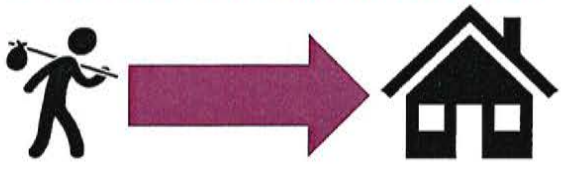


Change in Drug Abuse After 1 Year[6]

HOMELESSNESS

15% REDUCTION IN **HOMELESSNESS**[8]

273 MEMBERS HOUSED[9]



Community Care Management Partners
HEALTH HOME

What is a Health Home?

The Affordable Care Act of 2010, Section 2703 (1945 of the Social Security Act), created an optional Medicaid State Plan benefit for states to establish Health Homes (HH) to coordinate care for people with Medicaid who have chronic conditions. The Centers for Medicare & Medicaid Services (CMS) expects HH providers to operate under a "whole-person" philosophy. HH providers integrate and coordinate all primary, acute, behavioral health, and long-term services and supports to treat the whole person.

The goal of the HH program is to make sure its members get the care and services needed. This may mean fewer trips to the emergency room or less time spent in the hospital. It could mean getting regular care and services from doctors and providers, or finding a safe place to live, and a way to get to medical appointments.

What is CCMP?

Since January 2012, Community Care Management Partners, LLC (CCMP) has been providing Care Management services through the NYS HH initiative, and currently cares for more than 18,000 HH members throughout the five boroughs. CCMP helps chronically ill New Yorkers navigate and access healthcare and social services to improve their health and wellbeing. Through our comprehensive community-based network, we offer person-centered, high-quality, and cost-effective care coordination services that promote stability, autonomy, and dignity.

Where can I learn more?

http://ccmphealthhome.org/ | https://www.health.ny.gov/publications/1123/hh_brochure.pdf

Backup Details/Data Source

Relevant Health Home Electronic Health Home Record

- Biopsychosocial Assessment (BA)
    - PHQ-9 (Patient Health Questionnaire-9) Depression Scoring Tool
        - 4,153 Enrolled Members with an Assessment in 2017 & 2018
    - AUDIT (Alcohol Use Disorders Identification Test)
        - 972 Enrolled Members with an Assessment in 2017 & 2018
    - DAST (Drug Abuse Screening Tool)
        - 2,311 Enrolled Members with an Assessment in 2017 & 2018
- Billing Questionnaire (BQ)
    - HIV Viral Load
        - 1,357 Enrolled Members with a CCMP (BQ) Completed on 6/2017, 12/2017, 6/2018, and 12/2018
    - Members Housed/Not Housed
        - 5,969 Enrolled Members with a CCMP HML on 6/2017, 12/2017, and 6/2018
- Footnotes

1. PHQ-9 scores show 226 members belonged to the two highest depression severity groups at the time of their first (BA) in 2017. In 2018, 178 out of 226 members moved to a lower depression severity group. (178/226)=79%
2. Using PHQ-9 scores to calculate first and second weighted average score for depression severity groups mild to severe. First weighted avg-Mild(719 x 6.75)+Moderate(292 x 11.71)+Moderately Severe(144 x 16.62)+Severe(82 x 21.96)=10.07806791. Second weighted avg-Mild(719 x 3.989)+Moderate(292 x 6.123)+Moderately Severe(144 x 7.257)+Severe(82 x 10.354)= 5.29510348. Calculated percentage decrease=[(5.29510348-10.07806791)/(10.07806791)] x 100= 47%
3. The (BQ) viral load data shows 201 HIV members with detectable HIV in 6/2017. After 18 months 71 of those members become undetectable. Calculated percentage decrease= [(201-130)/(201)] x 100= 35%
4. AUDIT scores show 57 members scored in the harmful and severe/high risk range 2017. In 2018 37/57(64%) members had a score that was less than their first score. 8/57(14%) members scored the same, and 12/57(21%) members scored higher than their first score.
5. Using AUDIT scores to calculate first and second weighted average score for groups risky to severe/high risk. First weighted avg- Risky(65 x 11.05)+Harmful(19 x 17.11)+Severe/High-Risk(38 x 26.45)=16.7904918. Second weighted avg- Risky(65 x 7.86)+Harmful(19 x 13.84)+Severe/High-Risk(37 x 18.08)=11.95901631. Calculated percentage decrease=[(11.95901631-16.7904918)/(16.7904918)] x 100=29%
6. DAST scores show 164 members scored as having substantial and severe levels of substance use at their first (BA) in 2017. In 2018 99/164(60%) members had a score that was less than their first score, 38/164 (23%) members scored the same, and 27/164(16%) members scored higher than their first score.
7. Using DAST scores to calculate weighted average of scores for moderate to severe level groups to determine the percentage decrease from first to second score. First weighted avg-Moderate(197 x 3.838)+Substantial(116 x 6.853)+Severe(48 x 9.375)=5.54303047. Second weighted avg-Moderate(197 x 3.188)+Substantial(116 x 4.871)+Severe(48 x 6.021)=4.10548476. Calculated percentage decrease= [(4.10548476-5.54303047)/(5.54303047)] x 100=26%
8. The (BQ) homelessness data shows 1,127 members were homeless in 2017 and 960 members were homeless at the end of 2018. Calculated percentage decrease=[(960-1127)/(1127)] x 100=15%
9. The (BQ) homelessness data shows in 2017 1,127 members are homeless, in 2018, 273 of those previously homeless members are no longer homeless.

- Links to tools
    - PHQ-9 (Patient Health Queationaire-9) Depression Scoring Tool
        - http://www.cqaimh.org/pdf/tool_phq9.pdf
    - AUDIT (Alcohol Use Disorders Identification Test)
        - http://www.sbirtoregon.org/wp-content/uploads/AUDIT-English-pdf.pdf
    - DAST (Drug Abuse Screening Tool)
        - https://www.bu.edu/bniart/files/2012/04/DAST-10_Institute.pdf

NY Health Home Coalition

The Coalition of New York State Health Homes represents 34 Health Homes across every region of New York State, and covers 97% of all Health Home membership totaling over 175,000 Medicaid enrollees including both adults and children with the highest medical, behavioral health and social service needs and medical fragility. The Coalition seeks to improve the health and lives of all individuals served in health homes by enabling providers to deliver the highest quality, most cost-effective care management to all. We respectfully submit the following points for your consideration during the MRT process. We are happy to provide additional detail on any of the below positions.

Care Management is Foundational to any Value-Based Arrangement: As NY seeks to build on DSRIP, care management is not just an important component of achieving the goals of the value-based payment roadmap but is a necessary element of achieving any value-based outcomes. The criticality of effective care management for high-cost, high-need populations when it comes to achieving a substantive return on investment cannot be underestimated. Health Homes have experience in organizing the networks of care management agencies necessary to provide care management services. As networks of community-based providers they have demonstrated expertise in reaching high-need, high-risk individuals and successfully engaging them in care, and linking them to other social services. No accountable entity (ACO, IPA, or VMO) should build their care management capacity from scratch when they can build on the already-existing capacity that Health Homes have developed and can provide. Nationally, States have concurred that effective care management for high need high risk individuals can and should be provided most effectively by community-based providers. Additionally, Health Homes organize and aggregate networks of social service providers into meaningful interfaces with the healthcare system.

1. Health Homes are **saving money in the right places**, shifting utilization and costs from inpatient and emergency departments to outpatient services, medications, transportation and specialty care.

    - There was a 27% decrease in PMPM inpatient costs from 2016 to 2017 for Health Home members (most recent period for which the State has issued this data) which translates to approximately $309M in estimated savings from inpatient utilization.[1]
    - There was an 11.1% reduction in all-cause readmissions – the number of acute inpatient stays followed by a readmission from 2014 to 2017 for Health Home enrollees.[2]
    - Primary care costs are up 23 percent, and pharmacy costs are up 12 percent, according to the Department of Health – both of which indicate that individuals are going to their PCP and taking their medications – major goals of the program.[3]

2. Pharmacy. Rather than evaluate cutting valuable services and supports, we strongly recommend evaluating savings from **better managing and reducing pharmacy**

costs through bulk purchasing and other strategies including and especially those for specialty drugs such as long acting injectables, antipsychotics, opioid replacement therapies, hepatitis C and other medications critical to the recovery of these individuals. These costs are skewing total cost of care calculations for the individuals who take them, but they can have a profound impact on outcomes.

3. **Population health management.** Health Homes play a critical role in improving population health management across the State. Some are also already involved in VBP arrangements and others are moving in that direction. This includes Health Homes as critical partners with ACOs, IPAs and other accountable networks. It would be wasteful and inefficient to discard these and the infrastructure we've spent the last 8 years building rather than to continue to improve and enhance them. No accountable entity (ACO, IPA, or VMO) should build their care management capacity from scratch when they can build on the already-existing capacity that Health Homes have developed and can provide including revenue cycle management support, quality oversight, training and technical assistance, care management and data analytic support and much more.

4. **Social determinants.** Health homes are a critical tool for ending the (HIV) epidemic (ETE), reducing homelessness and incarceration and many other key social determinants of health. Some are also playing roles as organizing hubs for community-based organizations as they seek to connect with the healthcare system.

    - Based on a representative sample, there was a 29% reduction in homelessness and a 37.5% reduction in incarceration from 2018 to 2019 for the same cohort of individuals.[4]

5. **Outcomes:** Health Homes have demonstrated a significant impact on the lives of their members to date from 2013 to 2017.

    - There was an 8.4% improvement in adherence to antipsychotics for individuals with schizophrenia (State established measure) enrolled in health homes[5]
    - 86% of Health Homes improved comprehensive diabetes care rates with a corresponding statewide 4.5% improvement rate during that time period[6]
    - There was an 11.4% improvement in follow-up after hospitalization for mental illness within 30 days statewide for health home enrollees.[7]
    - Individuals enrolled in Health Homes also saw improvements in rates of chlamydia screenings, colorectal cancer screenings, follow-up after emergency department visits, engagement in comprehensive HIV/AIDS care including viral load monitoring, medication management for people with asthma and overall prevention quality of care (HEDIS measure).[8]

6. **Continuing improvements:** The Coalition is working with diverse stakeholders to reduce administrative burden, support Health Homes in entering into VBP arrangements, engage with the health plans to address gaps in care, evaluate streamlining rates, implement standardized best practices, and improve the overall efficacy of care management statewide. These efforts should continue in the correct

venues with changes being made in the nuanced and sophisticated way this complex service requires. We are happy to be partners in continued conversations about rightsizing the program, tightening eligibility so the program is reaching the right people at the right time, and do so on an ongoing basis with many other stakeholders.

7. **Expanding the role of Health Homes.** Expanding the role of Health Homes can provide a platform on which to aggregate a full continuum of care management beyond the narrow definition of Health Home eligibility and reimbursement. Many Health Homes are already doing so. They are knit into the fabric of health systems, PPSs, ACOs, IPAs, and other effective strategies. Health homes have been at the core of many successful DSRIP projects including the Millennium Hearts Initiative, the New York Presbyterian HIV efforts (featured in the UHF best practices report) and are critical to the sustainability of the gains of these projects. To cut or dismantle this program would have a domino effect that we do not believe is well understood.

8. **Children's Health Homes** have been critical to the Children's Transformation.

Collaboration with the Health Plans

- We've been working closely with plans across the state to improve workflows and collaboration, integrate and better use data, target priority populations including those with high utilization, gaps in care and with complex needs.
- We acknowledge that some plans are suffering from imperfect premium calculations and that there is a need to rebase the rates as they have not changed since 7/1/18 even though enrollment and composition of enrollment have. We have advocated on behalf to the plans to this end with the State and been told "they'll get back to us."

New York has demonstrated its commitment to the Health Home model by proposing a systematic effort to increase enrollment. Medicaid managed care plans have not been effective in identifying their most vulnerable, highest cost patients, and developing successful interventions for them. When dealing with a high-risk population, telephonic intervention is an important but not sufficient or adequate level of care to improve outcomes, and a community presence is needed to effectively engage consumers.

Health home care managers are located in communities where individuals live and provide both in-person and telephone support to their members. 73% of members have some type of behavioral health diagnosis, and at least 10% are diagnosed with HIV/AIDS. Of those members with a behavioral health diagnosis, at least 8% of these members had some type of hospitalization related to mental health or substance abuse in 2017.

Coalition Health Home Membership

Bassett Healthcare Networks
Best Self Behavioral Health (Formerly Lake Shore)
Brooklyn Health Home
Care Central - VNS Home Care of Schenectady
Central New York Health Home Network, Inc.

Chautauqua County Department of Mental Hygiene
CHHUNY (Children's Health Home of Upstate New York)
Circare
Cityblock
Collaborative for Children and Families, Inc. (CCF)
Community Care Management Partners Health Home (CCMP)
Community Healthcare Network (CHN)
Coordinated Behavioral Care, Inc. (CBC)
Encompass Health Home and Catholic Charities of Broome County
Greater Buffalo United Accountable Healthcare Network (GBUAHN)
Health Home Partners of WNY, LLC
Hudson River HealthCare Community Health Community Health Care Collaborative (CCC)
Huther Doyle Memorial Institute - Finger Lakes
HHUNY (Health Homes of Upstate New York)
Hudson Valley Care Coalition
Independence Care System
Institute for Family Health (IFH)
Kaleida Health
Montefiore Bronx Accountable Health Network Health Home
Mount Sinai St. Luke
New York Presbyterian Hospital
Niagara Falls Memorial Medical
Northwell
NYC Health + Hospitals
Queens CC Partners
Rochester Integrated Health Network, Inc. Greater Rochester Health Home Network, LLC.
Samaritan Hospital/Capital Region Health Connections
St. Joseph's Hospital, Syracuse
St. Mary's Healthcare

[1] Citizen Budget Commission Special Event. New York State Health Home Program. PPT delivered by Greg Allen, May 1, 2018. Slide 19.
[2] Health Home Update. 2018-2019 Legislative Briefing. October 17, 2018. PPT delivered by Greg Allen. Slide 18.
[3] Citizen Budget Commission Special Event. New York State Health Home Program. PPT delivered by Greg Allen, May 1, 2018. Slide 18-19.
[4] Coalition of NYS Health Home analysis of 14 Health Homes across the State totaling over half of all health home enrollment. Of those enrolled on 1/1/18 who were still enrolled on 1/1/19, significant reductions were seen in homelessness and incarceration rates according to the NYS Department of Health's HML system. All data are available for review.
[5] Health Home Update. 2018-2019 Legislative Briefing. October 17, 2018. PPT delivered by Greg Allen. Slide 17.
[6] Health Home Update. 2018-2019 Legislative Briefing. October 17, 2018. PPT delivered by Greg Allen. Slides 17 and 22.

[7] Ibid.
[8] NYS Department of Health 2018 Health Home Performance Report.

Attachment C

LEGAL ACTION CENTER

Study Finds that Removing Prior Authorization from all Medications to Treat Opioid Addiction Saves Lives and Reduces Medicaid Costs

RTI International's new study, *Economic and Health Effects of Removing Prior Authorization from Medications to Treat Opioid Use Disorders under New York State Medicaid,* finds that eliminating prior authorization would increase access to medications to treat opioid use disorder (OUD), immediately resulting in fewer lives lost to opioid related deaths as well as reductions in other health costs related to untreated addiction, including emergency room and inpatient care. New York would save lives and Medicaid dollars by removing prior authorization requirements on medications to treat OUD.

Prior authorization of medications for OUD is currently imposed on medications that are not on the preferred drug list or on a managed care organization's formulary. That creates a huge barrier to care for people prescribed those medications, including people who are doing well on a medication but then they change plans or their plan changes the medications on its formulary. This also is critical for individuals leaving incarceration on Riker's Island where they are often treated with the brand medication Zubsolv which is not on the preferred drug list. Because of this, they will have to wait during this critical time to obtain their treatment of choice, increasing their risk of overdose and death.

Actual prescription drug costs are not publicly available, nor is the specific criteria used to develop the preferred drug list and managed care formularies. Without this information, it is not possible to estimate the potential lives saved and decrease in costs from eliminating all prior authorization. That is why RTI has applied evidenced-based key assumptions to compare a hypothetical formulary with prior authorization on all buprenorphine products to a formulary with no prior authorization. Using this model, the study clearly demonstrates that eliminating prior authorization by enacting **A.7246B/S.5935A** and **S.4808/A.2904** will increase access to medications, save Medicaid dollars, and most critically, save lives.

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November 2019

Economic and Health Effects of Removing Prior Authorization from Medications to Treat Opioid Use Disorders under New York State Medicaid

Report

Prepared for

The Legal Action Center

Prepared by

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RTI Project Number
0217182

RTI INTERNATIONAL

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Executive Summary

Using data from New York State and the research literature, RTI International (RTI) estimated the differences between a Medicaid formulary that had prior authorization on medications to treat opioid use disorders (MOUD) and one that did not. Compared to a hypothetical formulary with prior authorization on all buprenorphine MOUD, a formulary without prior authorization would result in the following:

- 20% more people with opioid use disorders receiving MOUD;
- A 42% decrease in inpatient admissions and a 42% decrease in emergency department visits among persons receiving MOUD, which given the hypothetical formulary, translates to a $51.9 million decrease in inpatient and emergency department costs over 12 months (as derived using 2018 New York State data on MOUD utilization); and
- an 80% decrease in mortality among persons receiving MOUD, which translates into approximately 586 lives saved per year in New York (in 2016, 3,009 people died of opioid overdoses in New York) given the hypothetical formulary.

This report details the methods used to determine these findings. The analyses that follow are based on the following evidence-based key assumptions:

As documented in numerous studies, prior authorization significantly reduces access to and use of medications (Puig-Junoy & Moreno-Torres, 2007; Park et al., 2017) and, more specifically, use of MOUD (Mark et al., 2019; Andrews et al., 2019; Kermack et al., 2017).

As demonstrated in both randomized clinical trials and observational studies, once individuals with opioid use disorders receive MOUD their health and health care outcomes improve:

- Their chances of dying are cut by more than half (Ma et al., 2018).
- Their hospitalizations and emergency department visits both decline by 42% (Mohlman et al., 2016).

Contents

1. Introduction

Buprenorphine products to treat opioid use disorders have been demonstrated in randomized clinical trials and longitudinal observational studies to reduce mortality by more than half and to restore functioning in the major domains of life, such as family, work, and education (Ma et al., 2018). Ensuring access to medications to treat opioid use disorder (MOUD) is a key strategy for reducing the impact of the opioid epidemic. Prior authorization requirements on buprenorphine are a potential barrier to access. According to a 2019 analysis by the Medicaid and CHIP Payment and Access Commission (MACPAC), 30 state Medicaid programs had prior authorization on buprenorphine-naloxone, which is the most commonly used MOUD (MACPAC, 2019).

Numerous studies of prior authorization use in medications in general (Puig-Junoy & Moreno-Torres, 2007; Park et al., 2017), and psychiatric drugs specifically (Lu et al., 2010; Zhang et al., 2009; Brown et al., 2013) have demonstrated that when prior authorization is used, fewer people fill prescriptions for the medication. For example, Lu and colleagues found that prior authorization for bipolar medications was associated with a 32.3% reduction in treatment initiation (Lu et al., 2010). Using data from Medicare Part D, Mark and colleagues found that removal of prior authorization was associated with a 20% increase in the number of people initiating buprenorphine-naloxone, while addition of prior authorization was associated with a 10% decrease in the number of people filling prescriptions for buprenorphine-naloxone (Mark et al., 2019). Using data from the 2014 and 2017 National Drug Abuse Treatment System Survey, Andrews and colleagues found that the proportion of addiction treatment programs offering buprenorphine was higher in states that did not impose any drug utilization management policies (Andrews et al., 2019). A survey of New York City public sector buprenorphine prescribers found that prior authorization requirements were the highest-rated barriers to prescribing MOUD (Kermack et al., 2017). More generally, surveys of physicians find that prior authorization frequently leads to delays in care receipt and lack of treatment (American Medical Association, 2018)

The decision on which medications to include in the preferred Medicaid formulary and how to apply prior authorization is determined by each state Medicaid program's Pharmacy and Therapeutics (P&T) committee or each Medicaid managed care plan. P&T committees base their decisions on factors, such as price of the medication, the rebate negotiated with the manufacturer, the availability of alternative medications, the efficacy of the medication, and the medication's safety. P&T committee decision-making criteria are not made public. The negotiated rebate amount is also not public, which can lead to decisions that on the surface seem counter-intuitive, such as coverage of brand name medications rather than nominatively cheaper generics.

Managed care plans have the flexibility to maintain their own preferred drug lists or formularies. According to Medicaid regulations, if a state does not require a managed care plan to provide coverage of all medications, the state is required to provide the covered medication on a fee-for-service basis. Managed care plans can determine which medications to subject to prior authorization; however, authorization procedures must be administered in accordance federal regulations. The Social Security Act 1927 requires that managed care plans respond by telephone or other telecommunication device within 24 hours of a request for prior authorization and allow dispensing of at least a 72-hour supply of the medication in an emergency situation.

The specific criteria and reasons why prior authorization is or is not required on a specific medication is not known. For example, it is not known whether the P&T committee or managed care plan accounts for savings from reduced medical costs and lives saved by enhanced access to MOUD when making formulary decisions. It is also not known whether P&T committees or managed care plans compare the costs and benefits of alternative, less administratively disruptive means to achieve cost savings, such as mandatory generic substitution.

The objective of this study was to estimate the cost and health differences between formularies that do and do not require prior authorization on MOUD using data from New York Medicaid and a hypothetical formulary that included prior authorization on all buprenorphine products to treat opioid use disorders.

2. Methods

Overview. To estimate the impact of removing prior authorization, we started with the assumption that all buprenorphine products on the New York Medicaid prescription drug list were subject to prior authorization. We used information reported by New York on baseline MOUD use in New York Medicaid obtained from the 2018 Centers for Medicare & Medicaid Service State Drug Utilization Database.[1] Data on the percentage change in the number of MOUD prescriptions after removing prior authorization were obtained from a working paper by Mark et al. (2019) that measured the association between removing prior authorization from buprenorphine products in Medicare Part D and subsequent use of buprenorphine. Numerous other studies have demonstrated that prior authorization significantly reduces access and use of medications (Puig-Junoy & Moreno-Torres, 2007; Park et al., 2017).

Cost Impact

1 The 2018 State Drug Utilization Data are available at: https://www.medicaid.gov/medicaid/prescription-drugs/state-drug-utilization-data/index.html

To estimate the effect of increased buprenorphine use on costs of inpatient admissions and emergency department (ED) visits, we used the following formula:

$$MOUD_{new} \times \Delta(Utilization) \times Price, \quad (1)$$

where $MOUD_{new}$ denotes the number of new persons receiving buprenorphine as a result of removing prior authorization, $\Delta(Utilization)$ denotes the change in the number of inpatient admissions or ED visits per person receiving buprenorphine, and *Price* denotes the average cost of a substance use disorder–related hospitalization or ED visit. This calculation was repeated separately for inpatient admissions and for ED visits.

Data on the reduction of inpatient admissions and ED visits per person on MOUD were obtained from Mohlman et al. (2016), which compared hospitalization and ED visit rates across Vermont Medicaid beneficiaries with opioid use disorder diagnoses who were and were not on MOUD. Data on the prices of a substance use disorder–related hospitalization and ED visit were obtained from the Agency for Healthcare Research and Quality (AHRQ) Healthcare Costs and Utilization Project data (AHRQ, 2015) and a study by Rajvi et al. (2019) on costs associated with ED utilization among persons with opioid use disorders in New York State.

Mortality Impact. To estimate the decrease in mortality resulting from expanding access to buprenorphine, we used the following formula:

$$MOUD_{new} \times \Delta(Mortality), \quad (2)$$

where $MOUD_{new}$ denotes the number of new persons receiving buprenorphine as a result of removing prior authorization, and $\Delta(Mortality)$ denotes the change in the number of all-cause deaths per person on MOUD. Data on the change in the number of all-cause deaths per person on MOUD was obtained from a systematic review and meta-analysis conducted by Ma et al. (2018).

Sensitivity Analyses. To account for uncertainty with respect to parameters used in formulae (1) through (3), we conducted a Monte Carlo analysis. This analysis uses the parameter means and standard deviations to sample from the sampling distributions of these parameters. With this sample, we can then repeat the calculations many times, thereby obtaining a sampling distribution for each of the objective-specific estimates. We can then use this sampling distribution to directly calculate the endpoints of 95% confidence intervals as the 2.5th and 97.5th percentiles.

Baseline Context. To put the findings in context, we assembled data on current rates of opioid use disorders, opioid-involved mortalities, and pharmacy and non-pharmacy costs among New York Medicaid beneficiaries. Data on opioid-involved mortalities and non-pharmacy opioid-related health care events were obtained from the New York State Opioid Annual Report 2018 (New York State Department of Health, 2018). Data on current rates of

opioid use disorders among New York Medicaid beneficiaries were obtained from Neighbors et al. (2019), which documented MOUD use among Medicaid beneficiaries in New York. Pharmacy costs were obtained from the 2018 State Drug Utilization Data.

3. Results

Table 1 shows that Medicaid spending on buprenorphine for opioid use disorders was $64.4 million in 2018, and Medicaid spending on opioid-related health care events was $215.2 million in 2016.

Table 1. Estimates of the Medicaid Spending on MOUD and Opioid-Related Health Care Events, 2018

Medication/Utilization Type	Number of Fills/Events	Total Medicaid Spending
MOUD		
Buprenorphine-naloxone		
Generic buprenorphine-naloxone	38,003	$2,912,722
Brand name buprenorphine-naloxone		
Suboxone	350,096	$57,800,000
Bunavail	14	$2,965
Zubsolv	14,831	$2,532,539
Buprenorphine		
Generic buprenorphine	40,923	$1,150,818
Brand name buprenorphine		
Total	443,867	$64,399,044
Opioid-Related Adverse Health Care Events		
Opioid-related inpatient admissions	25,704	$195,350,400
Opioid-related ED visits	11,243	$19,832,652
Total	-	$215,183,052

Sources. Data on number of prescriptions and Medicaid prescription spending are from the 2018 State Drug Utilization Data, available at https://www.medicaid.gov/medicaid/prescription-drugs/state-drug-utilization-data/index.html. Note that these data to not include utilization of prescriptions under the 340b program or other prescriptions not subject to rebates. Data on opioid-related health care events are from the New York State Department of Health (2018). Data on the price-per-opioid-related event are from AHRQ (2015) (Inpatient) and Rajvi et al. (2019).

As shown in **Table 2**, we estimated that in 2018 111,033 Medicaid beneficiaries in New York had an opioid use disorder diagnosis. These data are based on an analysis of 2015 New York Medicaid claims (Neighbors et al., 2019). We estimated that in 2018, approximately 77,314 beneficiaries in New York were receiving medications for their opioid use disorders. This

estimate is based on the number of MOUD prescriptions filled in New York and assumes that, on average, persons on MOUD fill 6 prescriptions per year (i.e., we divided 463,884 prescriptions in 2018 by 6). Previous research has shown that about half of persons inducted on MOUDs remain on these medications for at least 6 months, with some persons staying on MOUDs for less than 6 months and some staying on for 12 months or more. The average length of an MOUD episode is approximately 6 months (Baxter et al., 2015; Lo-Cignac et al., 2016); accordingly, the assumption that people stay on medications for an average of 6 months is reasonable. The number of overdose deaths is from the New York State Opioid Annual Report 2018.

Table 2. Estimates of Current Prevalence of Opioid Use Disorders, Treatment, and Overdose Deaths in New York Medicaid

Characteristic	Estimated Number
Number of persons with an opioid use disorder diagnosis	111,033
Number of persons on MOUD	77,314
Number of persons with an opioid use disorder diagnosis not on MOUD	33,719
Number of overdose deaths involving opioids	3,009

Sources. Number of persons with an opioid use disorder diagnosis is from Neighbors et al. (2019). Number of persons on MOUD is based on the authors' calculations, which assume that persons on MOUD fill 6 prescriptions per year. Number of overdose deaths is from the New York State Department of Health (2018).

Table 3 shows that the results presented are based on an estimated 20% increase in buprenorphine use, a 42% decrease in inpatient admissions among persons on MOUD, a 42% decrease in ED visits among persons on MOUD, and an 80% decrease in all-cause mortalities among persons on MOUD (4 percentage point decline). Table 3 also shows the data generating assumptions for the Monte Carlo analysis. All parameters assumed a normal distribution because each of the parameters is asymptotically normally distributed under standard modeling assumptions.

Table 3. Parameter Estimates for Models and for the Monte Carlo Analysis

Parameter	Parameter Mean	Parameter Standard Error	Statistical Distribution Assumed
% change in MOUD use	20%	5%	Normal (20%, 5%)
% change in inpatient admissions	42%	NA	NA
Change in inpatient admissions	0.22	0.08	Normal (0.22, 0.08)
% change in ED visits	42%	NA	NA
Change in ED visits	1.04	0.40	Normal (1.04, 0.40)
% change in all-cause mortality	80%	NA	NA

% point change in all-cause mortality	4%	0.7%	Normal (4%, 0.7%)

Notes. NA = not available. Normal (a, b) denotes a normal distribution with mean = a and standard deviation = b.

Sources. The percentage change in MOUD use is based on a working paper by Market al. (2019).

The percentage change in inpatient admissions and ED visits is based on a study by Mohlman et al. (2016). We use the change in number of inpatient admissions and ED visits in calculations and provide the percentage change as a more interpretable statistic for context.

The percentage point change in all-cause mortality is based on a study by Ma et al. (2018) and is derived from the percentage of deaths per year in a MOUD treated group versus the percentage of deaths in an untreated group. Comparing these separate percentages also implies an approximate 80% reduction in deaths. We used the percentage point change in calculations and provided the percentage change as a more interpretable statistic for context.

As shown in **Table 4,** we estimated that removing prior authorization from MOUD products would decrease hospital and ED costs by $51.9 million per year (95% CI: $17.5 million to $94.5 million).

Table 4 Estimated Decreases in Hospital and Emergency Department Costs, Per Year

Measure	Estimate	95% CI
Decrease in Inpatient Admissions and Emergency Department Visit Costs		
Inpatient admissions	$24,760,444	($4,861,570, $50,457,159)
ED visits	$27,151,174	($5,626,266, $55,588,490)
Total	$51,911,618	($17,535,008, $94,544,848)

We estimated that removing prior authorization from all MOUD products would avoid 586 fatalities per year (95% CI: 265 to 970), which, relative to the number of opioid-involved overdose deaths reported in 2016, is approximately a 20% decrease in fatalities (**Table 5**).

Table 5. Estimated Number of Avoided Deaths, Per Year

Measure	Estimate	95% Confidence Interval
Estimated number of deaths avoided	586	(265, 970)

Notes. Includes all-cause mortalities.

4. Discussion

This study estimated that the absence of prior authorization on buprenorphine products in New York Medicaid would result in a 20% increase in the number of people using buprenorphine relative to a formulary with prior authorization on buprenorphine products. Greater access to buprenorphine would decrease hospitalizations and ED visits, resulting in

$51.9 million per year decrease in hospital and ED costs. Additionally, removing prior authorization would result in 20% fewer opioid use disorder–related deaths.

5. References

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