



**U.S. Department of Health and Human Services  
Assistant Secretary for Planning and Evaluation  
Office of Disability, Aging and Long-Term Care Policy**

**BEST PRACTICES AND  
BARRIERS TO ENGAGING  
PEOPLE WITH  
SUBSTANCE USE DISORDERS  
IN TREATMENT**

**March 2019**

## **Office of the Assistant Secretary for Planning and Evaluation**

The Office of the Assistant Secretary for Planning and Evaluation (ASPE) is the principal advisor to the Secretary of the Department of Health and Human Services (HHS) on policy development issues, and is responsible for major activities in the areas of legislative and budget development, strategic planning, policy research and evaluation, and economic analysis.

ASPE develops or reviews issues from the viewpoint of the Secretary, providing a perspective that is broader in scope than the specific focus of the various operating agencies. ASPE also works closely with the HHS operating agencies. It assists these agencies in developing policies, and planning policy research, evaluation and data collection within broad HHS and administration initiatives. ASPE often serves a coordinating role for crosscutting policy and administrative activities.

ASPE plans and conducts evaluations and research--both in-house and through support of projects by external researchers--of current and proposed programs and topics of particular interest to the Secretary, the Administration and the Congress.

## **Office of Disability, Aging and Long-Term Care Policy**

The Office of Disability, Aging and Long-Term Care Policy (DALTCP), within ASPE, is responsible for the development, coordination, analysis, research and evaluation of HHS policies and programs which support the independence, health and long-term care of persons with disabilities--children, working aging adults, and older persons. DALTCP is also responsible for policy coordination and research to promote the economic and social well-being of the elderly.

In particular, DALTCP addresses policies concerning: nursing home and community-based services, informal caregiving, the integration of acute and long-term care, Medicare post-acute services and home care, managed care for people with disabilities, long-term rehabilitation services, children's disability, and linkages between employment and health policies. These activities are carried out through policy planning, policy and program analysis, regulatory reviews, formulation of legislative proposals, policy research, evaluation and data planning.

This report was prepared under contract #HHSP23320100022WI between HHS's ASPE/DALTCP and Truven Health Analytics. For additional information about this subject, you can visit the DALTCP home page at <https://aspe.hhs.gov/office-disability-aging-and-long-term-care-policy-daltcp> or contact the ASPE Project Officers, Laurel Fuller and D.E.B. Potter, at HHS/ASPE/DALTCP, Room 424E, H.H. Humphrey Building, 200 Independence Avenue, S.W., Washington, D.C. 20201; [Laurel.Fuller@hhs.gov](mailto:Laurel.Fuller@hhs.gov).

**The opinions and views expressed in this report are those of the authors. They do not reflect the views of the Department of Health and Human Services, the contractor or any other funding organization. This report was completed and submitted on September 29, 2017.**

# Final Project Report: Best Practices and Barriers to Engaging People with Substance Use Disorders in Treatment



Peggy O'Brien • Erika Crable • Catherine Fullerton  
Lauren Hughey

Truven Health Analytics, an IBM company

March 2019

Submitted to:  
Office of Disability, Aging and Long-Term Care Policy  
Office of the Assistant Secretary for Planning and Evaluation  
U.S. Department of Health and Human Services  
Project Officer: D.E.B. Potter  
Contract # HHSP23320100022WI  
Task # HHSP23337006T

# TABLE OF CONTENTS

<b>ACKNOWLEDGMENTS</b> .....	v
<b>EXECUTIVE SUMMARY</b> .....	vi
<b>INTRODUCTION</b> .....	1
Epidemiology of Substance Use and Substance Use Disorders in the United States.....	2
Substance Use Disorder Treatment Access and Uptake in the United States .....	7
Initiation and Engagement in Treatment .....	20
Initiation and Engagement Measures.....	20
Interventions Designed to Improve Initiation and Engagement .....	26
<b>STUDY OBJECTIVES AND HYPOTHESES</b> .....	36
<b>METHODS</b> .....	37
Quantitative Methods .....	37
Qualitative Methods.....	47
<b>RESULTS</b> .....	52
Quantitative Results .....	52
Qualitative Results.....	71
<b>SYNTHESIS OF FINDINGS AND STUDY IMPLICATIONS</b> .....	94
Individual Influences on SUD Treatment Participation .....	94
Provider Influences on SUD Treatment Participation .....	96
Market and Environmental Influences on SUD Treatment Participation.....	97
Health Plan Influences on SUD Treatment Participation.....	100
Study Limitations .....	105
<b>CONCLUSION</b> .....	107
<b>REFERENCES</b> .....	109
<b>APPENDICES</b>	
APPENDIX A. Glossary and Acronyms .....	A-1
APPENDIX B. Opioid, Alcohol, and Other Substance Use Disorder Diagnoses .....	A-10
APPENDIX C. Algorithm for Identifying Members with Alcohol or Other Substance Use Disorders.....	A-13
APPENDIX D. Site Visit Discussion Guide.....	A-14
APPENDIX E. List of Nodes Used for Qualitative Coding.....	A-36
APPENDIX F. Deidentified Summaries of Health Plan Visits .....	A-37

## LIST OF FIGURES AND TABLES

FIGURE 1.	Theoretical Model to Explain Participation in Substance Use Disorder Treatment .....	9
FIGURE 2.	IET for Commercial HMO and PPO Plans, 2005-2014 .....	24
FIGURE 3.	IET for Medicaid HMO Plans, 2005-2014 .....	25
FIGURE 4.	IET for Medicare HMO and PPO Plans, 2005-2014 .....	26
FIGURE 5.	Tripartite Mixed Methods Study Design .....	37
FIGURE 6.	Initiation Rate Calculation Process.....	41
FIGURE 7.	Engagement Rate Calculation Process.....	42
FIGURE 8.	Health Plan Site Visit Selection Process .....	49
FIGURE 9.	Spectrum of Governance Structures and Factors Affecting Health Plan Organization.....	72
FIGURE 10.	Quality Improvement Activities Used by Health Plans .....	77
FIGURE E.1.	Coding Tree for Qualitative Coding.....	A-36
TABLE 1.	Summary of 30-Day Prevalence Rates of Substance Use and Annual Prevalence Rates of Dependence or Abuse of Alcohol and Illicit Drugs Among People Aged 12 Years and Older in 2015 .....	2
TABLE 2.	Alcohol Use and Disorder Prevalence in 2015 by Selected Demographic Characteristics.....	3
TABLE 3.	Illicit Drug Use and Disorder Prevalence in 2015 by Selected Demographic Characteristics.....	4
TABLE 4.	Percentages of Heroin Use Disorders and Past-Year Heroin Use Over Time.....	5
TABLE 5.	Prescription Opioid Misuse and Disorder Prevalence in 2015 by Selected Demographic Characteristics .....	6

TABLE 6.	Themes from Multisite Improvement Efforts to Enhance Initiation and Engagement .....	31
TABLE 7.	Number of Employer Health Plans with more than 10, 20, 30, and 50 Beneficiaries Meeting the Denominator Criteria for the IET Measure, Overall and Limited to Those with OUDs, 2013-2014.....	39
TABLE 8.	Outcome Variables.....	40
TABLE 9.	Covariates.....	43
TABLE 10.	Characteristics of Employer Health Plans Included in the Analysis of NCQA IET Measures for SUD Treatment.....	53
TABLE 11.	Mean NCQA IET Measures for SUD Treatment by Employer Health Plan Characteristics.....	54
TABLE 12.	Employer Health Plan Characteristics by Performance on the NCQA Initiation Measure for SUD Treatment .....	57
TABLE 13.	Employer Health Plan Characteristics by Performance on the NCQA Engagement Measure for SUD Treatment.....	58
TABLE 14.	Multivariate Regression Results Examining the Effect of Health Plan and Environmental Characteristics on Employer Health Plan Performance on the NCQA IET Measures for SUD Treatment.....	59
TABLE 15.	Characteristics of Employer Health Plans Included in the Analysis of NCQA IET Measures, Limited to OUDs .....	61
TABLE 16.	Mean NCQA IET Measures by Employer Health Plan Characteristics, Limited to OUDs .....	62
TABLE 17.	Employer Health Plan Characteristics by Performance on the NCQA Initiation Measure, Limited to OUDs .....	66
TABLE 18.	Employer Health Plan Characteristics by Performance on the NCQA Engagement Measure, Limited to OUDs.....	68
TABLE 19.	Multivariate Regression Results Examining the Effect of Health Plan and Environmental Characteristics on Employer Health Plan Performance on the NCQA IET Measures, Limited to OUDs.....	69
TABLE A.1.	Glossary of Terms and Definitions .....	A-1
TABLE A.2.	Definitions of Acronyms and Abbreviations .....	A-8

TABLE B.1.	OUD Diagnoses.....	A-10
TABLE B.2.	Alcohol and Other SUD Diagnoses .....	A-11
TABLE C.1.	Algorithm for Identifying Members with Alcohol or Other SUDs .....	A-13
TABLE D.1.	Site Visit Agenda .....	A-15
TABLE D.2.	Interviewer/Notetaking Process .....	A-34
TABLE D.3.	Template for Site Visit Notes .....	A-35
TABLE F.1.	Site Visit Interviewees for Health Plan ID 2010 .....	A-37
TABLE F.2.	Site Visit Interviewees for Health Plan ID 2006 .....	A-40
TABLE F.3.	Site Visit Interviewees for Health Plan ID 2003 .....	A-44
TABLE F.4.	Site Visit Interviewees for Health Plan ID 9522 .....	A-48
TABLE F.5.	Site Visit Interviewees for Health Plan ID 8200 .....	A-51
TABLE F.6.	Site Visit Interviewees for Health Plan ID 4019 .....	A-54

## ACKNOWLEDGMENTS

Truven Health Analytics, an IBM company, prepared this report under contract to the Office of the Assistant Secretary for Planning and Evaluation (ASPE), U.S. Department of Health and Human Services (HHS) (HHSP23320100022WI/HHSP23337006T). The authors appreciate the guidance of D.E.B. Potter, Laurel Fuller, and Alexis Horan (ASPE). Richard Bizier and Timothy L. Bullock (Truven) contributed to the data programming and analysis. Paige Jackson, Lucy Karnell, and Linda Lee (Truven) provided editorial support. Shirlene T Harris and Quita Mullan provided assistance with appendix preparation. Mustafa Karakus and Brian Burwell (Truven) provided feedback on this report and guidance throughout the project. Pamela Greenberg and Mady Chalk provided additional assistance.

The views and opinions expressed here are those of the authors and do not necessarily reflect the views, opinions, or policies of ASPE or HHS. The authors are solely responsible for any errors.

## EXECUTIVE SUMMARY

### Background

In 2015, 20.8 million people aged 12 years or older (7.8 percent of the United States population) had a substance use disorder (SUD) in the previous year.<sup>1</sup> Approximately 75 percent of this group, or 15.7 million Americans, had an alcohol use disorder,<sup>1</sup> 2.0 million had a prescription opioid use disorder (OUD),<sup>2</sup> and about 0.6 million had a heroin use disorder.<sup>1</sup> Since 1999, opioid-related overdose deaths in the United States have quadrupled, with more than 15,000 individuals experiencing prescription drug-related overdose deaths in 2015.<sup>3</sup> Even though evidence-based SUD treatments are effective, rates of treatment receipt are quite low. In 2015, only 18 percent of the population with SUDs, or 3.7 million people, received SUD treatment--a number that has not increased significantly since 2002.<sup>1,4</sup> Only about 48 percent of patients who enter SUD treatment actually complete it.<sup>5</sup>

SUD TREATMENT ACCESS
In 2015, only 18% of the population with SUDs received treatment--a number that has not increased significantly since 2002. For the definition of SUD and other key terms, see Table A.1. Glossary of terms and definitions. Terms and Definitions.

One measure of treatment receipt is the Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET) performance measure, which is commonly reported by health plans and used by health systems and Medicaid and Medicare programs. Reported rates of initiation and engagement vary significantly among health plans, and national rates of initiation and engagement have not improved over time. This variation indicates that some plans are more effective than others at initiating and engaging their members in SUD treatment.<sup>6</sup>

In response to the stagnating rates of initiation and engagement, the U.S. Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation initiated a study to determine how higher-performing health plans improve initiation and subsequent engagement in SUD treatment. Previous research has shown that many variables may contribute to patients' initiation and engagement in treatment, including individual, provider, health plan, and market and environmental factors. This study examines how these factors affect health plan performance on the IET measures for both commercial and Medicaid health plans and how initiation and engagement may be improved.

## Study Objectives and Hypotheses

This study has two overarching objectives:

- Determine the models of care, quality improvement interventions, and best practices used by higher-performing health plans to improve initiation and engagement in SUD treatment.
- Describe the provider, beneficiary, and market factors that affect their ability to successfully initiate and engage beneficiaries in substance use treatment services.

On the basis of existing literature, the research team hypothesized that health plans that performed well on the IET measures would be highly integrated behavioral and physical health service models; they would reimburse for a variety of substance use treatment-related services including case management, routine outreach, peer supports, outpatient, inpatient, partial hospitalization, and residential treatment; they would have high network adequacy and provide financial incentives for providers; and they might be more likely to serve smaller markets in a community-oriented model rather than be plans with large beneficiary enrollment covering diverse populations and geographic areas.

## Methodology

To determine factors that contribute to health plan success in engaging plan members in SUD treatment, we used a sequential, explanatory mixed methods study design where quantitative data were analyzed before qualitative data were collected, to help explain results observed in the quantitative analyses. We initially conducted an environmental scan to provide background on: (1) the epidemiology of substance use, SUDs, and treatment; (2) factors associated with treatment initiation and engagement; (3) interventions designed to improve initiation and engagement; and (4) the development and use of the IET measure. The results of the scan informed both the quantitative and qualitative research that followed.

<b>INITIATION AND ENGAGEMENT</b>
We used the NCQA measure of IET in much of this study to define and measure initiation and engagement, which are two separate rates within the measure. A simplified definition of <i>initiation</i> is the percentage of members with an alcohol or other drug diagnosis who had at least one instance of treatment within 14 days of diagnosis. <i>Engagement</i> is the percentage of members who initiated and had at least two additional substance use treatment visits within 30 days of initiation.

For the quantitative analysis of factors associated with initiation and engagement among adults, we used the 2013 and 2014 Truven Health MarketScan® Commercial Claims and Encounters Research Database, linked to geographic information that provided state-level

market characteristics. The unit of analysis for this study was the employer health plan. We analyzed initiation and engagement rates for SUD treatment and for OUD treatment. We included 321 health plans in our analysis of the rates for SUD treatment, with a mean of 50,585 beneficiaries, and 82 plans for the analysis of the rates for OUD treatment, with a mean of 92,521 beneficiaries. Covariates examined in the quantitative analyses included those related to: (1) health plan structure; (2) reimbursement factors; (3) benefit design; (4) beneficiary characteristics aggregated to the plan level; and (5) state-level market and environmental characteristics. We calculated descriptive statistics separately, and we completed four multivariate regressions to examine the relationship between the selected covariates and the initiation and engagement measure outcomes. Separate analyses addressed initiation and engagement measure outcomes for SUD treatment and for OUD treatment.

For the qualitative research component, we selected potential health plans to study through interviews of their representatives. We chose these plans on the basis of their performance on IET and other behavioral health measures reported in National Committee for Quality Assurance (NCQA) Quality Compass data for commercial plan performance from January 1, 2015, through December 31, 2015, and for Medicaid plan performance from January 1, 2014, through December 31, 2014. The NCQA Healthcare Effectiveness Data and Information Set measure data capture at least 75 percent of health plans in the United States. Outreach to top-ranked plans resulted in six site visits--one with a commercial plan and five with Medicaid plans.

To guide the health plan interviews, we developed a site visit protocol and semi-structured discussion guide. Research team members conducted qualitative, semi-structured group interviews with health plan staff and affiliates in spring 2017. Interviews were analyzed using a thematic framework analysis approach in combination with more inductive strategies to enable novel themes to emerge within the analysis.

## Quantitative Results

The quantitative multivariate analyses indicated that, among other findings, higher rates of SUD treatment initiation were associated with providing higher numbers of intensive outpatient (IOP) and partial hospitalization services per beneficiary ( $\beta = 2.06408$ ,  $p = 0.0103$ ). Results also suggested that having higher out-of-pocket costs for outpatient SUD services per user may be associated with higher rates of SUD initiation per beneficiary ( $\beta = 0.000517$ ,  $p = 0.0007$ ). Higher rates of SUD engagement were associated with similar characteristics, specifically providing higher numbers of IOP and partial hospitalization services per beneficiary ( $\beta = 3.82326$ ,  $p < 0.0001$ ) and higher numbers of SUD outpatient services per beneficiary ( $\beta = 4.13869$ ,  $p < 0.0001$ ). Higher rates of engagement were negatively associated with having more beneficiaries in the plan with an identified SUD ( $\beta = -12.6598$ ,  $p = 0.0001$ ) and more beneficiaries who are female ( $\beta = -0.20293$ ,  $p = 0.0497$ ).

Characteristics associated with higher rates of initiation of OUD treatment included providing higher numbers of IOP and partial hospitalization services per beneficiary ( $\beta = 4.47344$ ,

p = 0.0409) and being in a state with a higher prevalence of opioid prescriptions relative to the state population ( $\beta = 0.00228$ , p = 0.024). Higher rates of engagement were associated with providing higher numbers of SUD IOP and partial hospitalization services per beneficiary ( $\beta = 4.07017$ , p = 0.0001). Higher engagement was negatively associated with, for example, having a higher percentage of beneficiaries with an identified OUD ( $\beta = -10.549$ , p = 0.0089) or a higher percentage of beneficiaries who are female ( $\beta = -0.1958$ , p = 0.0233).

## Qualitative Results

Representatives from six health plans participated in interviews. The plans served geographically diverse populations across the United States, and all were ranked in the top 5 percent (nationally) for performance on initiation and/or engagement rates using the IET measure. The intent was to have a mix of commercial and Medicaid plans; ultimately representatives from one commercial and five Medicaid plans participated in the study.

HEALTH PLAN STRUCTURE
Some level of local decision-making is critical to implementing behavioral health policies and procedures in ways that respond to local population needs, whether the plan is small and local or large and national.

**Governance and structure.** Our interviews included representatives of large and small health plans. Representatives of smaller, locally governed plans described the importance of a “feet on the street” approach, whereas interviewees from a national insurance company with a centralized corporate leadership felt that their approach enabled them to streamline decision-making and ensure consistency across business lines. For all but the smallest plan, however, interviewees typically described a multilevel governance approach, including corporate and local oversight of behavioral health care, although the extent of plan emphasis on local governance represented a spectrum. Because these were all higher-performing plans, it is impossible to determine whether one approach more consistently translates into improved initiation or engagement. A locally focused approach may be one of the ways that the selected plans differentiate themselves from others that may fare more poorly on initiation and engagement, if lack of local governance and local initiatives are more limited among the latter. Interviewees also highlighted the importance of regular communication between plan levels and between different groups within plan levels regarding beneficiary needs or challenges to accessing health services.

**Care model and culture.** Interviewees from every health plan described their plan’s care model and culture as integral to their success with initiating and engaging beneficiaries in treatment. Care models were described as focused on care coordination, including coordination of physical, mental, behavioral, and substance-use-specific services. All health plan representatives described their case managers, care coordinators, and community health workers as promoting beneficiaries’ use of services included within the plan’s benefit array.

Health plan leadership and contracting staff also described efforts to convey the health plan’s mission statement when meeting with new providers to reinforce the plans’ commitment to continuous engagement with beneficiaries, knowing that beneficiary receptiveness will vary over time.

**Benefit design.** Health plan interviewees described significant differences in their plan benefit arrays. All plans cover outpatient treatment services without prior authorization. All cover medically monitored and medically managed detoxification services, often requiring prior authorization or notification, but one only covers these services for pregnant women.

A ROLE FOR PRIOR NOTIFICATION
Prior notification may play a role in allowing health plans to coordinate care and ensure follow-up after hospitalization or detoxification by alerting the plan to the patient’s admission in a timely fashion.

Inpatient, IOP, and partial hospitalization services frequently require prior authorization. Coverage of peer and recovery support services was sparse among Medicaid plans. The commercial plan provides members access to peer supports as part of their “service buffet” offered at all affiliate SUD treatment clinics. All health plans provide members with coverage of at least two medication-assisted treatment (MAT) options and cover naloxone. Most representatives do not require prior authorization for MAT.

Representatives of Medicaid plans described limitations on their ability to reimburse for residential treatment services because of state Medicaid policy, with four of the five interviewees indicating that their (four separate) state Medicaid agencies did not include residential treatment in Medicaid benefits for non-pregnant beneficiaries. The one Medicaid plan with a residential treatment benefit was able to approve only limited residential services. Conversely, the commercial plan reported residential services as a covered benefit.

None of the Medicaid plans required beneficiaries to pay for covered services out-of-pocket. The commercial plan representative described their benefit array as an “all you can eat buffet” of services, free of prior authorization or utilization management review but requiring payment of a deductible.

**Quality improvement.** Health plan interviewees reported investing significant resources in quality improvement activities, expressing a concern that poorly managed SUDs would result in higher overall costs for the plan as well as inadequate care for beneficiaries. Quality improvement efforts include developing new staff positions to support activities, investing in software to develop data analytic capabilities, and facilitating secure communications with beneficiaries and providers. To maximize returns, two of the Medicaid plans reported focusing their time and financial investments on initiatives that targeted activities related to quality measures for which they were financially at risk under the state Medicaid plan. Types of quality improvement initiatives vary, in part because of the different levels of resources available to plans.

All representatives described open communication within the plan and between the plan and their membership or providers as key to achieving improvements in SUD treatment. Communication strategies included using secure electronic messaging services to maintain real-time communication with providers. Outreach teams are trained on effective communication techniques to encourage members to engage in treatment. Health plan interviewees expressed a substantial interest in maintaining communication between physical health and behavioral health providers. Some interviewees also described co-locating behavioral health counselors in primary care practices as critical to treatment initiation for patients who would not attend services provided in a behavioral health facility.

HEALTH PLAN MEMBERS AT MODERATE RISK OF SUD
Health plans are increasingly using data analytics to identify members misusing opioid prescriptions, enabling outreach to and treatment for individuals who may not have any previous indicator of risk.

**Barriers affecting health plan initiation and engagement rates.** Health plan interviewees described several factors that influence their plans’ effectiveness at initiating and engaging members in substance use treatment services.

Federal and state policies were identified as major factors affecting health plans’ ability to provide comprehensive services to meet membership needs. Interviewees described federal confidentiality requirements of 42 Code of Federal Regulations (CFR) Part 2 as challenging to coordinating care for members admitted to detox and other inpatient facilities. Health plan stakeholders described learning of beneficiary detox admissions only after the beneficiary had been discharged. Another federal policy they mentioned was the restriction on Medicaid coverage of care in Institutions for Mental Diseases (IMD), which precludes Medicaid reimbursement for residential facilities with more than 15 beds, although some states are obtaining Section 1115 waivers to allow reimbursement for residential care.

Representatives from each of the five Medicaid plans also identified policies emanating from their state Medicaid agency as factors limiting their ability to initiate and engage members in SUD treatment. They viewed restrictions on the types of services included in the state Medicaid benefit array, such as for residential treatment or peer and recovery supports, as a substantial barrier. Some expressed a desire to cover additional treatment services not reimbursable by the state, but ultimately felt doing so was beyond their financial capabilities.

Medicaid plan representatives said that state Medicaid policies allowing beneficiaries to switch plans negatively affected their ability to coordinate services or meaningfully use pharmacy or prescriber lock-in programs. A few representatives described placing beneficiaries in lock-in programs to monitor their prescription use while conducting outreach and case management efforts, only to have the beneficiary switch mid-year to another plan. Similarly, plan inability to access Prescription Drug Monitoring Program (PDMP) data prevents plans from learning if beneficiaries are evading lock-ins by paying for controlled substances with cash.

All health plan representatives explained that network adequacy for SUD treatment services was a current concern and a major barrier to future access to treatment. Although each of the health plans is meeting network requirements set by the state Medicaid agency and their governance boards, interviewees repeatedly described having additional network needs. First, the growing need for treatment coincides with decreases in the number of substance use providers. Second, there is limited access to Drug Addiction Treatment Act of 2000-waivered buprenorphine prescribers willing to treat Medicaid beneficiaries. Third, prescribers often will not take Medicaid beneficiaries because of preconceived notions about that population, or because they accept only cash for services. Fourth, in addition to reimbursement constraints, there is a lack of beds available in residential treatment facilities. Fifth, low reimbursement rates limit plans' ability to recruit providers to their network and expand network adequacy for necessary services, and ultimately to ensure access to care. Providers withhold open spots from Medicaid beneficiaries to receive greater reimbursement from commercial plans and individuals paying out-of-pocket.

<b>COMBATING STIGMA &amp; IMPROVING CARE COORDINATION</b>
Co-location of SUD counseling and other services with primary care reduces the stigma of accessing a facility identified as treating SUDs, catches members in locations where they are more comfortable, and permits improved coordination between physical and behavioral health care.

Stigma around substance use and behavioral health treatment repeatedly was cited as a barrier to treatment, hindering effective initiation and engagement. Stigma may manifest in patients, their families, their communities, and providers. Interviewees reported supporting community education about SUDs and the positive impact of treatment as ways to reduce stigma in the community and among those who might need treatment. They also described investing resources in reducing provider stigma related to SUDs. Interviewees also said that providers often hesitate to conduct substance use risk screenings because they had not received adequate addiction training and were uncertain about how to speak with their patients about such issues.

Plan members are not always ready to abstain from substance use or other related risk behaviors, which may result in unwillingness to initiate traditional substance use treatment. Health plans are more frequently promoting harm reduction techniques and “no wrong door” and “no wrong time” approaches to engage members in SUD treatment.

Interviewees also described plan members' competing priorities such as housing, child care, and accessing treatment for comorbid physical and behavioral health conditions as factors affecting initiation or engagement in SUD treatment services. They identified beneficiaries who are homeless or transient as challenging to engage because they do not have stable addresses or phone numbers to maintain outreach. They described efforts to provide members with transportation to follow-up appointments as a means of ensuring attendance. Despite being

able to offer these supports, case managers indicated that beneficiaries' attendance at follow-up appointments still was impeded by competing demands.

## Discussion

The opioid epidemic has worsened a pre-existing failure to provide SUD treatment to many people in the United States who desperately need it. Many of those in need of treatment do not attempt to access it, and many who try find access difficult or impossible. The aim of this study was to determine how some health plans successfully get beneficiaries into SUD treatment and keep them there. Our environmental scan identified many potential influences on initiation and engagement, falling into the four categories of individual, provider, environmental or market, and health plan factors. Our quantitative analyses linking beneficiary, plan, and market characteristics to commercial health plans, as well as subsequent semi-structured interviews with high performing plans, elucidated a variety of key influences, many of which are summarized above.

**Individual influences.** The literature indicates that many individual influences can affect initiation and engagement. Among those influences, some, including the individual's sex,<sup>7,8,9,10</sup> co-occurring conditions,<sup>11</sup> and stigma,<sup>12</sup> were addressed in the quantitative or qualitative components of this study. The literature indicates that being female decreases the likelihood of treatment participation.<sup>7,8,9,10</sup> Our quantitative research indicated that plans with larger percentages of females are less likely to do well on the engagement rate, and our qualitative research allowed us to elaborate on why (e.g., competing needs such as child care and transportation). Some successful plans have implemented initiatives designed to address these needs, but effects of these efforts were mixed. The qualitative part of this study also identified ways in which plans seek to better integrate SUD and mental health treatment and to address stigma among patients, families, communities, and providers. It seems that efforts to integrate care, co-locate services, and provide education all can help alleviate stigma and address conditions that co-occur with SUD.

**Provider influences.** Consistent with previous research, health plan interviewees reported that provider expertise,<sup>13,14,15</sup> attitudes,<sup>16</sup> and shortages<sup>17,18,19</sup> can influence treatment initiation and engagement, and they described steps plans have taken to address problems in these areas. These include efforts aimed at improving expertise and comfort and decreasing provider stigma about individuals with SUDs. However, at least one plan representative expressed hesitation about developing provider-focused initiatives such as educational activities for fear of overwhelming providers with information on new initiatives, tools, and other SUD-related information. Interestingly, such plans may focus quality improvement efforts more extensively on patients than on providers. Most take both approaches. Within the qualitative sample of only six high performing plans, however, neither approach stood out as particular to the plans with the highest performance.

Efforts to address provider expertise and attitudes should somewhat alleviate provider shortages. Although plan representatives described outreach and other approaches to induce providers into their networks, solving the problem of provider shortages is not simple. Shortages of individual providers such as addiction specialists, psychiatrists, and buprenorphine prescribers, as well as of residential treatment, detox facilities, or opioid treatment programs, combine to make access to the right level of care at the right time difficult for many plan beneficiaries.

**Market and environmental influences.** The qualitative part of this study most clearly identified market and environmental factors that influence SUD treatment initiation and engagement, some of which are addressed in previous literature. Health plan interviewees identified both federal and state policies that can be barriers to initiation and engagement. The two primary perceived federal impediments were: (1) the regulation at 42 CFR Part 2, which may be met with prior authorization requirements or efforts to build relationships with facilities; and (2) the IMD restriction on reimbursement, which now may be ameliorated with a Section 1115 waiver.<sup>20</sup> State policies that prevent plans from accessing PDMP data or that allow beneficiaries to switch plans easily were seen as impeding the effectiveness of pharmacy lock-ins. State Medicaid plans that do not reimburse for certain services,<sup>21,22</sup> such as peer or recovery supports, or state Medicaid programs with budgetary problems that result in low or delayed reimbursement,<sup>18</sup> can impede the ability of Medicaid plans to engage providers and serve their beneficiaries. Plans struggle with the repercussions of these policies, trying to find ways to serve their beneficiaries while accommodating the policy or law.

**Health plan influences.** Health plans take many approaches to improving initiation and engagement in SUD treatment. Health plan structure; benefit design and reimbursement;<sup>21,22,23,24,25</sup> network adequacy; and the culture of care and approach to care integration, coordination, and management<sup>26,27</sup> all play roles in how health plans influence initiation and engagement. Quantitative and qualitative analyses identified organizational interventions as factors in increasing treatment uptake. The health plan staff members we interviewed were invested in a variety of quality improvement initiatives at both the enterprise and local plan level, including initiatives with providers and beneficiaries and internal plan initiatives such as data mining and communication strategies. The plans viewed these quality improvement initiatives as important to further treatment access, to improve the quality of care, and, given the high costs that can be associated with undertreated SUDs, to conserve resources.

**Implications.** This study has many implications, which include the following:

1. Expanding treatment options to cover the care continuum, including peer and recovery specialists, may help provide access to care when it is needed and at the level most relevant to a particular patient. Among other things, expanding Section 1115 waivers to allow Medicaid reimbursement of residential treatment may have the secondary effect of increasing the number of residential placements available for everyone.

2. Finding ways to either modify or provide better education regarding 42 CFR Part 2 could assist plans in their efforts to enhance care coordination and follow-up. Allowing plans access to PDMP data will provide them with better information about their beneficiaries' access to controlled substances.
3. Various aspects of health plan structure such as size, decision locus, and communication strategies play an apparent role in the health plans' ability to ensure treatment initiation and engagement. These same factors also may play a role in follow-up after hospitalization or emergency department visits and in other care coordination efforts. Better understanding of the influence of these factors in lower-performing plans will be important as we move to a health care system that is more coordinated and integrated across settings and disciplines.
4. Making certain that there are mechanisms to pay for care coordination and management, as well as cross-system integration, will be important to improve SUD treatment initiation and engagement.
5. Finding ways to encourage co-location of behavioral and primary care services--where there can be a warm hand-off, where stigma is reduced, and where varied services are close by--will help increase initiation and engagement, as well as integrate SUD treatment into the general health care system.
6. By addressing human needs that compete with treatment, we also may be able to address initiation and engagement differences between men and women, as well as treatment disparities related to socioeconomic differences.
7. By addressing workforce shortages, adequacy of reimbursement, and provider stigma, we may help alleviate some of the provider shortages described in the study. By finding ways to incentivize providers not to require cash payment, additional providers may be brought into payer networks.
8. Researchers and policymakers should consider whether alternative approaches to measuring network adequacy can help maximize health plan networks when provider shortages create an obstacle.
9. When there are financial incentives for health plans, those plans tend to focus quality improvement efforts on the metrics for which they may be paid. This can have repercussions for beneficiary care, and the metrics should be selected carefully.

**Study limitations.** Like all studies, this one has limitations. First, the rapid change that has taken place in recent years in health care means that health plans identified for potential interviews on the basis of 2014 results on the IET measure were somewhat different when staff members were interviewed in 2017. Both IET rates and plan strategies for improving SUD treatment participation may have continued, grown, or decreased. Second, the quantitative

analyses used commercial insurance data, whereas the qualitative interviews were primarily with Medicaid plans. Although this represents a difference between the quantitative and qualitative aspects of the study, it may provide the benefit of balancing the information gathered. Third, some variables used in the quantitative analyses may not have completely captured the sort of information that was intended. For example, some of the market and environmental variables intended to indicate level of state support for SUD treatment may be an imperfect proxy for market or policy realities.

**Conclusion.** Identifying mechanisms to enhance SUD treatment initiation and continued engagement in care is a public health priority. As both administrators and coordinators of health care benefits, health plans are positioned to play a crucial role in mitigating potential access barriers and developing mechanisms that bring beneficiaries into care and keep them there. Understanding the role that health plans can play, as well as the role that other factors have in health plans' ability to improve SUD treatment initiation and continued engagement, is important to facilitate improvement in care increasingly reimbursed by these private organizations.

For the reader's convenience, we include a glossary of some terms used in this report and a list of common acronyms and abbreviations in Table A.1 and Table A.2.