Overview

Medication-Assisted Treatment (MAT) is considered the gold standard of care for opioid use disorder (OUD). MAT consists of medication, counseling, and other psychosocial and recovery supports. One of the most commonly prescribed OUD medications in Virginia and nationwide is buprenorphine. It is most effective when accompanied by other treatment, especially psychotherapy and counseling. There are also risks to improper use of buprenorphine, including when co-prescribed with certain medications, such as benzodiazepines (used to treat anxiety disorders).

Virginia implemented the Addiction and Recovery Treatment Services (ARTS) program in April of 2017 to increase access to evidence-based treatment for Medicaid members with opioid or other substance use disorders. This report examines Medicaid members who received buprenorphine pharmacotherapy during the first five months of ARTS, focusing on their utilization of other OUD treatment services and co-prescription of other medications.

Key Findings

- Nearly half (48 percent) of buprenorphine users received some other type of addiction disorder treatment service during the first five months of ARTS.
- Nearly one in four (23 percent) buprenorphine users also received a prescription for a benzodiazepine, which can increase one’s risk of an opioid overdose.
- More than half (52 percent) of buprenorphine prescriptions occurred in Far Southwest Virginia, despite the fact that only 8 percent of Medicaid members live in this region.
- Members receiving buprenorphine from the new Preferred Office-Based Opioid Treatment clinics are more likely to receive counseling and other services compared to patients using other providers.

Increase in Use of Buprenorphine

More than 4,000 Medicaid members received buprenorphine pharmacotherapy during the first five months of ARTS (between April 1 and August 31, 2017), a 25 percent increase from the previous year. Nearly half (48 percent) of buprenorphine users received at least one other OUD treatment service, such as psychotherapy, counseling, physician evaluation or management, intensive outpatient, partial hospitalization, residential treatment, or inpatient detoxification. Less than half (45 percent) received counseling or psychotherapy, suggesting that most did not receive care consistent with MAT standards. Still, this represents a substantial improvement in the use of opioid treatment and support services since before ARTS.
Several medications are often co-prescribed with buprenorphine. Benzodiazepines, used to treat anxiety disorders, are risky when co-prescribed with buprenorphine because of their high potential for abuse, addiction, and increased risk of overdose. Gabapentin, a popular non-opioid alternative to treat nerve pain and withdrawal symptoms, may exaggerate the effect of opioids, although the risks of co-prescribing with buprenorphine are less well-understood. About one-quarter of buprenorphine users (23 percent) received a prescription for benzodiazepines, while more than one-third (34 percent) received a prescription for gabapentin. Since the implementation of ARTS, prescribing for benzodiazepines has decreased among buprenorphine users, while prescriptions for gabapentin have increased.

Naloxone, on the other hand, a rescue drug used to treat opioid overdoses, is generally recommended to be prescribed alongside buprenorphine and required by the Virginia Board of Medicine for patients at-risk of an overdose. However, only 9 percent of members using buprenorphine as pharmacotherapy received a prescription for naloxone during the first five months of ARTS.2

Outpatient Treatment Services Lacking in Far Southwest

More than half of all buprenorphine prescriptions for Medicaid members in the Commonwealth were obtained in the Far Southwest region, despite the fact that only 8 percent of Virginia Medicaid members live in the Far Southwest. Rates of prescribing in the Far Southwest (166 buprenorphine prescriptions per 1,000 members) are more than 10 times higher than that in other Virginia regions.

Despite much higher rates of pharmacotherapy, buprenorphine users in the Far Southwest are less likely to receive psychotherapy and counseling and more likely to be co-prescribed benzodiazepines and gabapentin compared to other regions. Only one-third of buprenorphine users in the Far Southwest received any counseling, psychotherapy or physician evaluation related to their addiction, compared to 57 percent in other regions of the state.

Similarly, compared to 45 percent of members in the rest of the state, only a quarter of members with a buprenorphine prescription in the Far Southwest received a urine drug screen, which is required by the Board of Medicine for monitoring medication compliance.2 Co-prescribing of gabapentin in the Far Southwest was nearly double that in other regions, and slightly more than double for benzodiazepines, which raises concern about prescribing additional medications of abuse. While some members may receive services through other avenues, the findings suggest concerning patterns of lower quality care in the Far Southwest region.
Patients of Preferred OBOT and In-Network Providers Receive Higher Quality of Care

<table>
<thead>
<tr>
<th></th>
<th>Far Southwestern*</th>
<th>All Other Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of buprenorphine prescriptions per 1,000 members</td>
<td>166</td>
<td>13</td>
</tr>
<tr>
<td>Percent received any other OUD treatment services**</td>
<td>32%</td>
<td>60%</td>
</tr>
<tr>
<td>Percent received counseling/psychotherapy/physician evaluation</td>
<td>31%</td>
<td>57%</td>
</tr>
<tr>
<td>Percent received urine drug screen</td>
<td>27%</td>
<td>45%</td>
</tr>
<tr>
<td>Percent received benzodiazepines</td>
<td>33%</td>
<td>15%</td>
</tr>
<tr>
<td>Percent received gabapentin</td>
<td>47%</td>
<td>25%</td>
</tr>
<tr>
<td>Percent received naloxone</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>Percent received buprenorphine mono-product (without naloxone)</td>
<td>13%</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Other treatment includes all ASAM levels 1-4 services: psychotherapy, counseling, physician evaluation and management, intensive outpatient services, partial hospitalization, residential treatment, and inpatient detoxification.

Outpatient Treatment Services Lacking in Far Southwest (cont.)

However, in terms of buprenorphine prescribing practice, we see little difference in the use of mono-product (without naloxone) compared to the dual product (with naloxone) by region. The dual-product buprenorphine contains a trace amount of naloxone, a blocking agent that reduces the possibility of abuse. The mono-product does not have this blocking agent, leaving it somewhat more easily abused. The use of mono-product buprenorphine is similar regardless of region of residence.

In the first five months of ARTS, patients of Preferred OBOT providers were most likely to receive care consistent with guidelines, while patients of providers who were not part of health plan networks were least likely to receive such high quality care. Out-of-network providers likely charge Medicaid members cash for physician visits and other services as opposed to billing Medicaid. Nearly two-thirds of patients at Preferred OBOT clinics who were prescribed buprenorphine also received counseling or a physician evaluation compared to nearly half of patients receiving services through other network providers, and less than one-quarter of patients of out-of-network providers.

Preferred OBOT patients are also more likely to receive a urine drug screen and less likely to receive benzodiazepines. While only 12% of Preferred OBOT patients received the mono-product version of buprenorphine, a product that is generally not recommended due to higher abuse potential, 32% of patients of out-of-network providers received this version of the medication. Although patients may be receiving services through other avenues, these findings suggest that patients of Preferred OBOTs are receiving care that is more consistent with accepted treatment protocols compared to out-of-network providers.
**Conclusions**

Medication-assisted treatment, the gold standard of opioid use disorder treatment, consists of medication (especially buprenorphine) alongside counseling and other support services. The use of buprenorphine pharmacotherapy to treat opioid use disorders has greatly increased since the implementation of ARTS, as has the likelihood that members will receive other treatment services in addition to medication. However, still fewer than half of members receiving buprenorphine for OUD treatment are receiving counseling or psychotherapy as recommended by current standards of care. As envisioned by the goals of the program, the results suggest that the quality of treatment services is higher among patients receiving care through Preferred Office-Based Opioid Treatment providers and other providers who are part of health plan networks. The Far Southwestern region of the state stands out as an area with much higher levels of buprenorphine prescriptions, higher co-prescribing of benzodiazepines, and lower use of other treatment services consistent with professional guidelines. While all areas of the state would benefit from improvements in treatment for OUD, a special focus on the Far Southwestern region may be warranted.

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**Virginia Commonwealth University ARTS Update**

**ARTS Overview**

Virginia implemented the Addiction & Recovery Treatment Services (ARTS) program in April, 2017 to increase access to evidence-based treatment for Medicaid members with opioid or other substance use disorders. ARTS benefits cover a wide range of addiction treatment services which are based on American Society of Addiction Medicine criteria. ARTS services include the following: inpatient withdrawal management, residential treatment, partial hospitalization, intensive outpatient programs, opioid treatment, care coordination, and peer recovery supports. ARTS services are carved into Medicaid managed care plans to support full integration of behavioral and physical health.

**ARTS Evaluation**

The Department of Medical Assistance Services contracted with Virginia Commonwealth University to conduct an independent evaluation of the ARTS program. This policy brief highlights developments across the first five months of the evaluation period, from April 1st, 2017 through August 31st, 2017.

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3A member is considered to use buprenorphine if a prescription is billed to Medicaid during the evaluation time frame.
4These results are based on claims submitted between April and November, 2017. Patients may receive services that are not billed to Medicaid. The conclusions in this report are the authors, and no official endorsement by the VCU School of Medicine or Virginia Department of Medical Assistance Services is intended or should be inferred.