Addiction Relapse Prevention Programs in the Commonwealth

Joint Commission on Health Care
October 15, 2018 Meeting

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Study Mandate

• By letter of request, Delegate Kory asked the JCHC to study addiction relapse prevention, with a particular focus on opioid addiction, and address the following questions:
  • What programs exist in Virginia that offer assistance to persons who have successfully completed substance abuse recovery regimens and been released to the community?
  • How do former addicts maintain addiction-free or relapse-free lives?
    • What are reported rates of success and failure and how is success defined and tracked?
  • Is there a best practices model for relapse prevention programs?
  • What is needed to “cure” addiction in terms of pharmaceutical management?
  • What role does counseling play and what are the requirements for success?
    • What training/technical assistance is needed for peer counselors?
    • What are the costs?
  • What cost-effectiveness data exist? (e.g., Is there a formula to equate time out in the community addiction-free with any savings as compared to the cost of recidivism?)
  • If Virginia data are scarce, what does the national picture indicate (e.g., States with similar demographics to Virginia)? If data is insufficient in Virginia, how can we effectively collect it?
# Outline

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## Background
Definitions – Addiction and Substance Use Disorders*

- General consensus that addiction is a complex, chronic, relapsing condition/disease
  - American Psychiatrists Association
    - “Addiction is a complex condition, a brain disease that is manifested by compulsive substance use despite harmful consequence”
    - Addiction equates with “severe Substance Use Disorder” (SUD) (6+ indicative symptoms as described in the Diagnostic and Statistical Manual (DSM-5))
  - National Institute on Drug Abuse
    - “Addiction is a complex but treatable disease that affects brain function and behavior…This may explain why drug abusers are at risk for relapse even after long periods of abstinence.”
- Evidence suggests that “remission” from SUD is possible
  - Recent (2016) meta-analysis found that 33% to 50% of individuals with SUDs achieved remission after a 17-year average follow up period

* See slide 68 of the Appendix for DSM-5 definition of SUD

Definitions – Relapse

- No consensus on definition of relapse from conceptual or empirical perspectives (“relapse” not defined in DSM-5). Example definitions:
  - Continued substance use following initial lapse after initial period of abstinence
  - Process that gradually leads to substance use after initial period of abstinence
  - Return to substance use requiring treatment after period of abstinence (recidivism)
- Many consider departure from “continuously abstinent” and/or recurrence of use requiring medical care to constitute “relapse”

Relapse is commonly viewed as an expected part of the recovery process and an opportunity to evaluate the appropriateness of intensity and/or frequency of SUD treatment services received
Prevalence of Substance Use Disorders – Nationally*

- An estimated 7.2% of the U.S. population 12 years or older (19.7 million people) have a SUD, with adults representing 95% of that population.

- Of adults with a SUD:
  - 74% have an alcohol use disorder
  - 38% have an illicit drug use disorder
  - 11% have an opioid use disorder (OUD)

- Polysubstance use is common, particularly among opioid users (e.g., 45% - 93% of opioid users also use other substances)

- Around 45% of adults 18+ years of age with a SUD also diagnosed with mental disorder.

Note: Individuals with SUD for more than one substance can be counted more than once in the chart.

Source: SAMHSA (2018)

* See slide 69 of the Appendix for SUD prevalence data of Virginia Medicaid population.

Prevalence of SUD Treatment

- Nationally, of individuals meeting SUD criteria:
  - Around 20% (4.0 million individuals) received any SUD treatment in 2017*
  - Around 13% (2.5 million individuals) received treatment at specialty facilities (e.g., residential facilities; outpatient care)

- In Virginia, around 80% of those admitted to specialty facilities received SUD treatment on an outpatient basis in 2015 (around 20% received residential treatment)

* Around 95% not receiving treatment felt they did not need treatment.

Source: SAMHSA (2014)
Prevalence of SUD Treatment

Intake for SUD services at CSBs: All substances

Source: DBHDS (2018)

* See slide 70 of the Appendix for maps on OUD intake

Relapse – Data and Statistics
Relapse Metrics

• Direct measure: urine drug screen
  • Federal 42 CFR Part 2’s confidentiality requirements governing SUD patient records create significant barriers to urine drug screen results data collection (by SUD services payers, funders, etc.)

• Indirect measures: no gold standards
  • Survey self-reported substance use behaviors
  • Service utilization measures commonly cited risk factors for increased risk of relapse:
    • Treatment discontinuation
    • Readmission for SUD treatment at specialized SUD treatment facilities
    • Failing to follow up for treatment after Emergency Department visit for SUD

SUD Relapse Rates – National Estimates

• Nationally, an estimated 40% to 60% of those with a SUD relapse, in line with other chronic diseases

Source: NIDA (2018)
SUD Relapse Data in Virginia – Positive Urine Drug Screens

- The Department of Medical Assistance Services (DMAS) does not currently capture urine drug screen results in its data systems
  - Capturing data would require providers to obtain patient authorization to release SUD records to DMAS
- Concerns raised by DMAS with regards to requiring patient consent to share drug screen results with DMAS include:
  - A “chilling effect” on patient initiation or continuation of SUD services
  - Increased administrative costs (up to 14 additional FTEs; increased capititated payments to the health plans to account for additional administrative costs, modifications to Electronic Health Records data elements)
  - Extensive Managed Care Organization contract modifications
  - Legal liabilities and data security issues
  - Lack of perceived positive effects for patients

SUD Relapse Data in Virginia – Readmission for SUD treatment

- Between 2010 and 2015, around 58% of admissions at SUD residential / inpatient SUD treatment facilities in Virginia were repeat admissions, compared to 70% nationally and 23% to 77% among neighboring States*

*Substance use disorders are chronic and remitting conditions that often require multiple treatment episodes before they are effectively managed*

* See slide 71 of the Appendix for further detail on TEDS
SUD Relapse Data in Virginia – Medicaid

- As part of the ARTS waiver, the Department of Medical Assistance (DMAS) is participating in a pilot to review required Center for Medicare Services (CMS) indicators, including:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Expected relationship to relapse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuity of pharmacotherapy for OUD (% adults with OUD pharmacotherapy with at least 180 days continuous treatment)</td>
<td>Inversely correlated</td>
</tr>
<tr>
<td>Readmission for SUD (acute inpatient readmission for SUD within 30 days of initial inpatient admission)</td>
<td>Positively correlated</td>
</tr>
<tr>
<td>Follow-up after ED discharge for Mental Health or SUD (% ED visits with mental illness/SUD diagnosis with follow-up visit within 7 and 30 days)</td>
<td>Inversely correlated</td>
</tr>
</tbody>
</table>

- DMAS is currently awaiting draft versions of indicators from CMS to review and provide feedback.

SUD Relapse Data in Virginia – Continuity of OUD Pharmacotherapy (Medicaid)

- Since the introduction of ARTS benefit, continuity of pharmacotherapy for OUD is 2% - 3% higher than previously.

Source: VCU (2018)
SUD Relapse Data in Virginia – Commercially Insured Populations

- According to commercial insurer claims data submitted to the All Payer Claims Database between 2015 and 2016:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Continuity of pharmacotherapy for OUD</strong> (% adults with OUD pharmacotherapy with at least 180 days continuous treatment)</td>
<td>37.5%</td>
</tr>
<tr>
<td><strong>Readmission for SUD</strong></td>
<td></td>
</tr>
<tr>
<td>- 14-day hospital readmission</td>
<td>24%</td>
</tr>
<tr>
<td>- 180-day residential readmission</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Follow-up after ED discharge for Mental Health or SUD</strong></td>
<td></td>
</tr>
<tr>
<td>- Within 7 days</td>
<td>76%</td>
</tr>
<tr>
<td>- Within 30 days</td>
<td>80%</td>
</tr>
</tbody>
</table>

Treatment/Relapse Prevention for SUDs – Best Practices
Selected “Principles of Drug Addiction Treatment”*

• “Detoxification is only the first stage of addiction treatment and by itself does little to change long-term drug abuse…”
• Treatment varies depending on the type of drug and the characteristics of the patients…[T]he earlier treatment is offered in the disease process, the greater the likelihood of positive outcomes…
  • Recovery from drug addiction is a long-term process and frequently requires multiple episodes of treatment…
  • Lapses during treatment do occur…As with other chronic illnesses, relapses to drug abuse can occur and should signal a need for treatment to be reinstated or adjusted…
• Behavioral therapies are the most commonly used forms of drug abuse treatment…
  • Medications are an important element of treatment for many patients…
• Continuity of care is essential for drug abusers re-entering the community…
• Many drug-addicted individuals also have other mental disorders…”
• Treatment must address the individual's drug abuse and any associated medical, psychological, social, vocational, and legal problems…

* Sources: NIDA (2014, 2018); emphases added

Specialized SUD Treatment – American Society of Addiction Medicine (ASAM) Criteria and Levels of Care

• ASAM addiction treatment criteria are based on patient assessment over six dimensions (e.g., withdrawal potential, readiness to change, recovery / living environment)
• Criteria are used to place patients in most appropriate level of specialized SUD care
• Compared to other criteria to determine appropriate level of SUD treatment, use of ASAM criteria associated with improved substance use outcomes (i.e., predictive validity) and lower resource utilization (e.g., # inpatient hospital days)

ASAM Levels of Care

* Includes Opioid Treatment Programs (OTPs) Adapted from: ASAM (2018)
Pharmacological Interventions for SUD Treatment / Relapse Prevention*

- FDA-approved medicines**
  - Opioid Use Disorders: Methadone, Buprenorphine/Naloxone, Naltrexone
  - Alcohol Use Disorders: Acamprosate, Disulfiram, Naltrexone
- Evidence base on treatment retention/substance use suppression
  - Opioid Use Disorders: strong evidence of effectiveness of methadone and buprenorphine maintenance therapies (MMT and BMT), growing evidence base to compare extended-release naltrexone to MMT and BMT
  - Alcohol Use Disorders: evidence of moderate effects of naltrexone on relapse compared to placebo, mixed evidence for acamprosate, inconsistent evidence for disulfiram
  - Stimulants, cannabis, other substances: little evidence of efficacy of any pharmacological treatments

** While FDA-approved medicines also exist for smoking, Tobacco Use Disorders are not a focus of this report

* See slides 73-76 of the Appendix for further detail on pharmacological interventions

Psychosocial Interventions for SUD Treatment / Relapse Prevention

- Definition: interpersonal or informational approaches targeting behavioral, social and/or environmental factors
- No widely accepted categorization exists
- Clinical/non-clinical examples include:

**Clinical**
- Brief Interventions (e.g., Motivational Interviewing)
- Clinical counseling / medical management
- Cognitive Behavioral Therapy (e.g., Relapse Prevention, Community Reinforcement Approach)
- Behavioral Couples Therapy

**Non-clinical**
- Contingency Management
- Peer support
- Vocational Rehabilitation
- Mutual Support/12-Step Groups
- Therapeutic Communities
- Recovery Housing
Psychosocial Interventions for SUD Treatment – Evidence Base*

- Meta-analyses of clinical psychosocial interventions tend to find positive associations with treatment retention/reduced substances use with effect sizes that:
  - Range from “small” (e.g., for Cognitive Behavioral Therapy) to “moderate” (e.g., for Contingency Management)
  - Vary by intervention and substance

Evidence suggests that appropriateness of specific psychosocial interventions is highly individualized

* See slides 77-81 of the Appendix for further detail on psychosocial interventions

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Combined Pharmacotherapies and Psychotherapies for OUD

- Role of psychosocial interventions in Medically Assisted Treatment (MAT) recognized in Federal requirements requiring counseling for methadone and ability to refer to counseling for buprenorphine
  - However, there is little evidence that specialized psychosocial approaches (e.g., CBT) improve OUD outcomes beyond general clinical counseling
- Under Medicaid in Virginia:
  - ARTS incentivizes provision of psychotherapies alongside buprenorphine- and/or naltrexone-based MAT through higher reimbursement rates for “preferred OBOTs” – settings with co-located psychotherapeutic services – compared to other settings
  - Between April – September, 2017, approximately 20% more patients received psychotherapeutic OUD services at preferred OBOT locations compared to other providers

<table>
<thead>
<tr>
<th>OUD Service received (April – September, 2017)</th>
<th>Setting where buprenorphine received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any other OUD service</td>
<td>Preferred OBOT 72%</td>
</tr>
<tr>
<td>Counseling / psychotherapy / physician evaluation</td>
<td>Preferred OBOT 63%</td>
</tr>
<tr>
<td>Urine drug screen</td>
<td>Preferred OBOT 55%</td>
</tr>
</tbody>
</table>

Source: VCU (2018)
Case Management

• Case management services assist patients and family members in accessing clinical, social, educational, vocational, recovery and other supports

• Evidence base
  • Effective as a strategy linking individuals with SUD to community/treatment (however, as expected, no clear association with reduced substance use compared to other psychosocial interventions)
  • Knowledge base on extent and sustainability of case management on outcomes remains limited

Source: NIDA (2018)

SUD Recovery/Relapse Prevention Programs in Virginia
### Overview of SUD Recovery Resources in Virginia – Programs for General Population

<table>
<thead>
<tr>
<th>SUD Resource*</th>
<th>Provider/Setting</th>
<th>Consumer Funding Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic-based treatment programs (e.g., residential treatment, outpatient pharmacological and psychosocial services)</td>
<td>Various private providers, CSBs, etc.</td>
<td>Insurance (public / private), State / Federal funds, self-pay</td>
</tr>
<tr>
<td>Recovery housing and/or Recovery Support Organizations</td>
<td>Various private providers (including peer support)</td>
<td>Self-pay</td>
</tr>
<tr>
<td>Mutual support/12-step groups</td>
<td>Alcoholics Anonymous, Narcotics Anonymous, etc.</td>
<td>Self-pay</td>
</tr>
<tr>
<td>Peer support services</td>
<td>Registered Peer Recovery Specialists</td>
<td>Insurance (public/private), Federal funds, self-pay</td>
</tr>
</tbody>
</table>

* Underlined recovery resources are described in detail in the main body of this report

### Overview of SUD Recovery Resources in Virginia – Programs for Targeted Populations

<table>
<thead>
<tr>
<th>SUD Resource*</th>
<th>Setting</th>
<th>Funding Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justice-involved population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Therapeutic Communities</td>
<td>Prisons</td>
<td>DOC</td>
</tr>
<tr>
<td>Community Corrections Alternative Programs</td>
<td>Probation</td>
<td>DOC</td>
</tr>
<tr>
<td>Prison MAT pilot</td>
<td>Prison/Community</td>
<td>DOC/DBHDS</td>
</tr>
<tr>
<td>Day Reporting Centers (discontinued in 2008)</td>
<td>Community</td>
<td>DOC</td>
</tr>
<tr>
<td>Model Addiction Recovery Programs</td>
<td>Jails</td>
<td>DCJS</td>
</tr>
<tr>
<td>Residential Substance Abuse Treatment Program</td>
<td>Jails</td>
<td>DCJS</td>
</tr>
<tr>
<td>Drug Treatment Courts</td>
<td>Community/Courts</td>
<td>Federal/State/Local</td>
</tr>
<tr>
<td>High-need Medicaid beneficiaries</td>
<td></td>
<td></td>
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<tr>
<td>Housing/employment supports</td>
<td>Community</td>
<td>DMAS</td>
</tr>
<tr>
<td>Pregnant/parenting women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent Supportive Housing</td>
<td>Community</td>
<td>DBHDS</td>
</tr>
<tr>
<td>Project Link/SAMHSA pilot sites</td>
<td>Community</td>
<td>DBHDS</td>
</tr>
<tr>
<td>Individuals with significant barriers to employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substance abuse vocational rehabilitation counselors</td>
<td>CSBs/local DARS offices</td>
<td>DARS/DBHDS</td>
</tr>
<tr>
<td>Vocational/job training</td>
<td>Community</td>
<td>DSS</td>
</tr>
</tbody>
</table>

* Underlined recovery resources are described in detail in the main body of this report; non-underlined resources are described in the Appendix
Recovery Housing*

• Range of residential environments intended to promote recovery through self-help, peer support and social reinforcement members transitioning back into communities
  • Least structured (“peer run”): no paid positions, democratically-run, services include house meetings, encouragement to attend self-help groups
  • Moderately structured (“monitored” or “supervised”): paid managerial positions, documented policies and procedures, in-house peer run groups and outside clinical services
  • Most structured (“service provider”): Credentialed staff, may be licensed by State, in-house clinical services/programming

• Statewide prevalence is largely unknown due to limitations on States to license and zone recovery residences

• Evidence on substance use
  • Review (2014) found moderate level of evidence for the effectiveness of recovery housing on decreased substance use and increased employment
  • However, review also found that it is difficult to draw conclusions based on limited literature with few methodologically rigorous study designs

* See slide 82-83 in the Appendix for further detail on recovery housing

Recovery Housing in Virginia – State-Level Regulation

• Multiple States and the federal government have investigated concerns expressed about misleading practices and exploitation of residents by some recovery residence operators in recent years
  • Since 2003, 14 States have passed legislation related to recovery residences, including:
    • Nine States provide a definition of recovery housing
    • Seven States require State-operated/-funded and/or -licensed treatment providers to refer patients only to voluntarily certified recovery residences
    • Five States require recovery residences to voluntarily certify to receive State reimbursement for eligible services
    • Three States require a registry or website of voluntarily certified recovery residences
    • Three States require recovery residences to be certified, although all are facing legal challenges to this requirement
  • In Virginia, DBHDS:
    • Is convening stakeholders to consider increased State-level oversight measures, including creating universal recovery housing definition for Virginia and voluntary registry
      • Support for recovery housing is an allowable cost under federal State Opioid Response (SOR) grant
    • Plans to use State Opioid Response (SOR) grant funds to support recovery environments in higher education institutions
Recovery Community Organizations

- Recovery Community Organizations (RCOs) are self-labeled independent, non-profit, organizations led/governed by people in recovery and providing non-clinical recovery services and supports
  - Currently, 4 Virginia organizations self-identify as RCOs*
- Examples of services can include: recovery housing, peer support counseling, forum for mutual support meetings

While a national RCO association exists:
  - No DBHDS licensing mechanism currently exists for non-clinical services
  - RCOs in Virginia have no pathway to become Medicaid providers for reimbursement of peer support services
- However, some RCOs are exploring Medicaid reimbursement for peer support services through contractual arrangements with current Medicaid providers

* Based on Web search

Peer Support Services

- Approach: non-clinical activities provided by peer with “lived experience” in substance abuse
- Evidence of effectiveness
  - 2014 review found “moderate” evidence of effectiveness of peer support services on reduced SUD relapse and increased treatment retention. However:
    - Studies of peer providers in the context of SUD services are less common than in mental health
    - Methodological weaknesses of most studies “temper our ability to draw strong conclusions”
Peer Support Services and Programs in Virginia

- Individuals who pass DBHDS training and complete supervised experience requirements can be certified as Peer Recovery Specialists (PRS)*
- Medicaid-reimbursed PRS services (ARTS)
  - PRS registered with DHP are eligible for Medicaid reimbursement under certain conditions**
- SUD Warmlines
  - Non-emergency, listening lines staffed by PRS
  - Through DBHDS Opioid Prevention Treatment and Recovery (OPT-R) Year 1 funding (2017), 764 calls have been fielded statewide across 10 Warmlines
- Hospital ED placement of Peer Recovery Specialists
  - Through OPT-R funding, DBHDS has established Memoranda of Understanding with 6 hospitals to support PRS services
  - 208 ED follow-up calls were made in OPT-R Year 1

* See slide 93 of the Appendix for further detail on certification requirements
** Services must be delivered under supervision of a credentialed addiction treatment professional in a Medicaid provider organization

SUD Treatment and Recovery Programs for Justice-Involved Populations*

- DOC: Community Corrections Alternative Program (CCAP) (2017)
  - Structured residential environment providing programming in treatment motivation, cognitive restructuring, and substance abuse for non-violent, medium/high risk offenders
  - Two CCAPs specialize in intensive (9 – 12 month) substance use programming for 150 offenders
  - Graduates eligible for MAT pilot if released to one of 3 DOC districts (see below)
- DOC/DBHDS: MAT pilot (2018)
  - 1-year pilot to provide MAT (Vivitrol) and aftercare services to inmates released to three DOC probation and parole districts (Richmond City, Norfolk City, Buchanan / Tazewell) which have been identified as high-need for OUD services based on rates of positive opioid drug tests results and overdoses among individuals on state probation supervision (all 3 districts rank in top 5 positive tests for opioids)
  - Recovery support navigators (Masters-level clinicians) will provide case management services to facilitate re-entry/uptake of SUD treatment and recovery services
- DCJS: Model Addiction Recovery Program (2017)
  - VA Code §9.102(53) directs DCJS to develop a model addiction recovery program to be in local and regional jails
  - Awards ($48,000 per jail) are 75% State GFs and 25% local funds
    - In SFY 2018, 110 inmates received recovery services in 4 jails (Franklin, Newport News, Norfolk, Riverside)
  - Given current funding level and recentness of program initiation, no formal evaluation of effectiveness is currently being planned by DCJS

* See slides 84-88 for detail on additional programs for justice-involved populations
SUD Treatment and Recovery Programs for Justice-Involved Populations (2)

- **Day Reporting Centers (DRCs)**
  - **Approach:** community-based facilities into which offenders report daily/regularly for rehabilitative programming (non-SUD-specific) and supervision
  - **History in Virginia**
    - 1993-1994: DOC DRC pilots established with GFs in Fairfax, City of Richmond and Norfolk to serve 300-400 offenders in each ($375k per DRC); 2 additional DRCs funded by federal sources
    - 2000s: DRC services available in 12 districts (capacity: 1,150 offenders)
    - 2009: DRC program closed due to DOC budget reductions
  - **Evidence base**
    - **Nationally:**
      - Mixed evidence exists on associations between DRC participation and reduced recidivism
      - Knowledge base on DRCs remains limited, especially on substance use outcomes
    - In Virginia, DCJS evaluations of all three DRCs concluded that:
      - DRCs were largely achieving goals (e.g., ensuring public safety; providing treatment/rehabilitative services)
      - Expansion and/or prioritization of SUD treatment services was needed to improve program effectiveness

Housing Support / Permanent Supportive Housing (PSH)

- **Context**
  - SUDs are the most common behavioral health conditions among the homeless population
  - Co-occurring psychiatric disorders associated with: higher SUD severity, more intensive treatment needs, lower treatment participation

- **Approach:** direct service that helps adults with mental and substance use disorders who are homeless or disabled identify and secure long-term, affordable, independent housing

- **Evidence base**
  - Meta-analyses and reviews have found PSH to be associated with improved outcomes on housing (e.g., lengthened tenure) and non-behavioral health measures (e.g., reduced hospitalizations)
  - However, existing evidence has not found consistent associations between PSH and reduced substance use
Housing and Employment Supports for High-Need Medicaid Beneficiaries

- HB5002 directs DMAS to develop a supportive housing and employment benefit targeting high-need Medicaid beneficiaries with mental illness, SUD, or other complex, chronic conditions
- DMAS’ proposed Section 1115 Demonstration Waiver (Medicaid expansion) application – currently available for public comment – details anticipated eligibility criteria and scope of included services

<table>
<thead>
<tr>
<th>Housing Services</th>
<th>Employment Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Included</strong></td>
<td><strong>Included</strong></td>
</tr>
<tr>
<td>Transition (e.g., budgeting assistance for living expenses)</td>
<td>Education (e.g., subsidies for industry certification)</td>
</tr>
<tr>
<td>Sustaining tenancy (e.g., entitlement assistance)</td>
<td>Pre-employment (e.g., pre-vocational assessment)</td>
</tr>
<tr>
<td><strong>Excluded</strong></td>
<td><strong>Excluded</strong></td>
</tr>
<tr>
<td>Rent, utilities, etc.</td>
<td>Wages, personal care services, etc.</td>
</tr>
</tbody>
</table>

Permanent Supportive Housing for Pregnant and Parenting Women

- Through GFs in SFY 2019/2020 ($8.26K and $1.7M, respectively), DBHDS will provide PSH services (e.g., housing stabilization assistance, treatment support, rental assistance) for up to 75 pregnant and parenting women with SUDs
- DBHDS anticipates:
  - Leveraging experience with current PSH initiatives for individuals with Serious Mental Illness and national experts to adapt model to SUD context
  - Exploring connections between PSH services with Project Link* services
  - Drawing from pregnant/parenting women who have completed residential treatment programs but face barriers to relocating to permanent housing
  - Collecting data from participants on self-reported substance use practices

* See next slide
SUD Programs for Pregnant and Parenting Women

- **Project Link** ($250k [GFs], $600k [SAMHSA] annually since 2001)
  - **Approach:** Local interagency team (e.g., CSBs, DSS office, health department) coordinates care to pregnant and parenting women at risk of – or currently abusing – substances through intensive case management and support services (e.g., home visiting, prenatal care, SUD treatment, social supports)
  - **Results:** Teams in 9 CSB regions provided services to 1,215 women and families in SFY 2017, including 2,200 home visits (studies have found statistically significant associations between parental substance use education during home visiting and improved parental behaviors)
  - **CSB SUD service utilization by pregnant and parenting women is higher in Project Link sites compared to non-Project Link sites**
  - **State funding for Project Link ($75k - $100k / CSB region) has remained unchanged since 1992**

- **Project Link for Pregnant and Post-partum Women (SAMHSA pilot grant: $1.1M for 3 years beginning 2017)**
  - **Approach:** Increase engagement and retention in SUD treatment – including peer support services and MAT/psychosocial services for women with OUDs – in Project Link CSB regions
  - **Results (Year 1 [2017]):** Around 800 women served and 243 children treated

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Employment and SUD Recovery

- **Research on substance use and employment outcomes has generally found negatively reinforcing associations**
  - SUDs/problematic substance use associated with increased unemployment and decreased likelihood of finding/retaining employment
  - Unemployment is a risk factor for substance use/development of SUD and relapse after treatment
  - **Research on role of vocational-focused interventions on employment outcomes remains under-developed**
    - 2004 review highlighted difficulties in identifying characteristics of more vs. less effective vocational rehabilitation; sparse body of literature has since emerged
Programs in Virginia for SUD-Diagnosed Individuals with Barriers to Employment

- Specialized Substance Abuse (SA) Vocational Counselors*
  - Since 1988, SA Vocational Counselors have provided vocational rehabilitation services for clients served by both DARS and CSBs
  - There are currently 19 SA Counselors providing services to clients with a SUD diagnosis that – along with or without other disabilities – constitutes a barrier to employment
  - Caseload data indicate that clients served by specialized SA Counselors have favorable outcomes

- DARS data indicate that SA counselor caseloads are not at full capacity, in part due to limited federal funding – which accounts for 78% of Vocational Rehabilitation program funds

- However, federal funding requirements would limit ability to serve more SUD-diagnosed clients through increased State funds for SA counselors

* See slides 89-90 in the Appendix for further detail on SA Vocational Counselors and additional programs

Source: DARS (2018)

State Coordination and Public Awareness of SUD Recovery/Relapse Prevention Programs in Virginia
State Coordination of Cross-Agency Initiatives Addressing SUD Recovery

- Governor’s Advisory Commission on Opioids and Addiction established September 26, 2018
  - Supported by five workgroups (treatment and recovery, harm reduction, justice-involved interventions, prevention, supply prevention) represented by 16 State agencies and 5 associations

- DBHDS/DCJS developing a statewide plan to engage jail-involved individuals in OUD treatment and recovery, focusing on re-entry into community from jail and community corrections*

- ABC leading Institutions of Higher Education Substance Use Advisory Committee to develop statewide strategic plan for substance use education, prevention, and intervention at public/private higher education institutions**

* See slide 88 in the Appendix for further detail
** See slide 83 in the Appendix for further detail

Awareness of SUD Recovery/Relapse Prevention Programs in Kentucky
Awareness of SUD Recovery/Relapse Prevention Programs in Virginia

• Around 263 SUD treatment/recovery resources are listed by three State-connected websites: Virginia 211 (205 resources), Hardest Hit VA (126), and Disability Navigator (107)
  • Of those resources, fewer than 20% are listed by all three websites:
    • % resources listed by three sources: 19%
    • % resources listed by two sources: 30%
    • % resources listed by one source: 51%
  • Excluding CSB listings, fewer than 10% are listed by all three websites:
    • % resources listed by three sources: 10%
    • % resources listed by two sources: 31%
    • % resources listed by one source: 60%
• Criteria for vetting and listing of resources are not uniform
Awareness of SUD Recovery/Relapse Prevention Programs in Virginia – Hospital Discharge

- SUD inpatient admissions have high rates of readmissions compared to those without SUDs
- Lack of awareness of where to go for continuing care is a risk factor for readmission
  - One study of general admissions found lack of awareness of whom to contact after discharge accounted for 6% of preventable readmissions
- Evidence from chronically ill/general patient populations indicates that:
  - Transitional care programs (e.g., coaches, enhanced patient education, comprehensive discharge planning) can modestly reduce risk of readmissions
  - Improved discharge planning can reduce risk of readmission by 15%
- To improve post-inpatient continuity of care, Rhode Island Code requires all hospitals and free-standing EDs to implement minimum comprehensive discharge planning standards, including:
  - SUD assessment for patients with indication of a SUD
  - Recovery planning tools for patients with substance-use disorders
  - Providing the patient information about clinically appropriate inpatient and outpatient SUD services, including recovery coaches

Cost-Effectiveness of SUD Treatment and Recovery Interventions
## Cost-Effectiveness of SUD Treatment

- Challenges in conducting economic analyses of substance use treatment include:
  - Lack of comparability of treatment approaches due to their high variability
  - Multitude of potential treatment outcomes (e.g., substance use, health status, crime, employment)
  - High drop-out rate of participants in substance use treatment interventions, reducing generalizability of findings
- For OUDs, a 2016 systematic review found:
  - Consistent evidence that Methadone Maintenance Therapy is cost-effective by US valuation standards
  - Less consistent findings of – and limited evidence base on – cost-effectiveness for Buprenorphine Maintenance Therapy and Naltrexone

## Cost-Benefits of SUD Treatment

- Widely cited study from early 2000s of a demonstration project in CA indicated that every $1 invested in SUD treatment associated with $7 in benefits (75% due to crime reduction)
- Since 2008, the Washington State Institute for Public Policy (WSIPP) has modeled costs and benefits associated with State-level policies and programs at the direction of its State legislature
- Slides 51-53 summarize WSIPP cost-benefit analysis estimates for specific pharmacological and psychosocial SUD interventions that are based on:
  - Washington State-specific costs
  - Benefits monetized from outcomes published in peer-reviewed literature
### Cost-Benefit Estimates – Pharmacological Interventions for OUD

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Costs</th>
<th>Cost:Benefit Ratio*</th>
<th>Chance benefits &gt; costs</th>
<th>Level of Evidence**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methadone maintenance treatment</td>
<td>$3,769</td>
<td>$2.19</td>
<td>88%</td>
<td>EB</td>
</tr>
<tr>
<td>Buprenorphine maintenance</td>
<td>$4,633</td>
<td>$1.75</td>
<td>86%</td>
<td>NC</td>
</tr>
<tr>
<td>treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injectable naltrexone</td>
<td>$17,409</td>
<td>-$0.05</td>
<td>0%</td>
<td>NC</td>
</tr>
</tbody>
</table>

* Benefits monetized: Crime; labor market earnings; property loss; health care

** EB: Evidence-Based; RB: Research-Based; P: Promising; NC: No Classification; see Slide 91 of the Appendix for further detail

Sources: Washington State Institute of Public Policy (2018); Miller et al (2016)

### Cost-Benefit Estimates – Psychosocial Interventions for SUDs

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Costs</th>
<th>Cost:Benefit Ratio*</th>
<th>Chance benefits &gt; costs</th>
<th>Level of Evidence**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingency management†</td>
<td>$250 - $356</td>
<td>$9 - $23</td>
<td>59% - 100%</td>
<td>RB – EB</td>
</tr>
<tr>
<td>(opioids, substances broadly)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingency management††</td>
<td>$19,455</td>
<td>$34</td>
<td>77%</td>
<td>EB</td>
</tr>
<tr>
<td>(substances broadly)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recovery housing</td>
<td>$287</td>
<td>$5</td>
<td>70%</td>
<td>NC</td>
</tr>
<tr>
<td>Motivational Interviewing /</td>
<td>$367 - $342</td>
<td>$17 - $26</td>
<td>61% - 63%</td>
<td>P – RB</td>
</tr>
<tr>
<td>Motivational Enhancement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBT (alcohol, amphetamines)</td>
<td>$210 - $266</td>
<td>$22 - $34</td>
<td>60% - 61%</td>
<td>RB</td>
</tr>
<tr>
<td>12-step therapy</td>
<td>-$323†</td>
<td>n/a</td>
<td>60%</td>
<td>RB</td>
</tr>
<tr>
<td>Relapse prevention (CBT)</td>
<td>$0</td>
<td>n/a</td>
<td>56%</td>
<td>RB</td>
</tr>
<tr>
<td>Peer support</td>
<td>$2,815</td>
<td>$1</td>
<td>51%</td>
<td>RB</td>
</tr>
<tr>
<td>CBT (opioids)</td>
<td>$538</td>
<td>-$1</td>
<td>42%</td>
<td>P</td>
</tr>
</tbody>
</table>

† Lower-cost interventions; †† Higher-cost intervention; ‡ comparison: 1-hour individual CBT

* Benefits monetized: Crime; labor market earnings; property loss; health care

** EB: Evidence-Based; RB: Research-Based; P: Promising; NC: No Classification; see Slide 91 of the Appendix for further detail

Sources: Washington State Institute of Public Policy (2018); Miller et al (2016)
### Cost-Benefit Estimates – Justice-Involved Population

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Costs</th>
<th>Cost : Benefit Ratio†</th>
<th>Chance benefits &gt; costs</th>
<th>Level of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outpatient/non-intensive drug treatment (community-based)</td>
<td>$768</td>
<td>$13.47</td>
<td>100%</td>
<td>EB</td>
</tr>
<tr>
<td>Outpatient/non-intensive drug treatment (during incarceration)</td>
<td>$749</td>
<td>$14.10</td>
<td>99%</td>
<td>EB</td>
</tr>
<tr>
<td>Inpatient/intensive outpatient drug treatment (during incarceration)</td>
<td>$1,289</td>
<td>$10.18</td>
<td>98%</td>
<td>EB</td>
</tr>
<tr>
<td>SUD Therapeutic Communities (during incarceration)†</td>
<td>$2,199</td>
<td>$5.03</td>
<td>96%</td>
<td>EB</td>
</tr>
<tr>
<td>SUD Therapeutic Communities (community-based)</td>
<td>$3,783</td>
<td>$2.51</td>
<td>79%</td>
<td>EB</td>
</tr>
<tr>
<td><strong>Day reporting centers</strong></td>
<td>$3,987</td>
<td>$1.95</td>
<td>75%</td>
<td>EB</td>
</tr>
<tr>
<td>Injectable naltrexone (criminal justice population)</td>
<td>$16,671</td>
<td>-$0.01</td>
<td>0%</td>
<td>NC</td>
</tr>
</tbody>
</table>

* Benefit monetized: Crime ** EB: Evidence-Based; RB: Research-Based; P: Promising; see Slide 91 of the Appendix for further detail
† See slide 92 of the Appendix for 2008 cost-benefit estimates for Virginia

### SUD Treatment and Recovery: Access and Workforce Considerations
Access to SUD Treatment/Recovery Services – Insurance

- Virginia Medicaid’s ARTS benefit covers services delivered at all ASAM levels of care, as well as for SUD case management (with or without clinical services) and peer support services
- Commercial insurers in Virginia report:
  - Universally covering almost all ASAM levels of care
  - Variation in coverage of substance use case management, peer support services, and clinically managed low-intensity residential services (Level 3.1)

Availability of SUD Treatment / Recovery Providers in Virginia

- 48 physicians across the State are currently Board-certified in an addiction sub-specialty
- In 2017, between 3% to 19% of licensed clinical psychologists, clinical social workers and professional counselors specialized in SUDs
- 86 PRS are currently registered by DHP
Addiction/SUD Workforce in Virginia – Clinician Prescribers

• Pre-service health institutions core competencies
  • HB 2161 (2017) directed HHR Secretary to develop pre-service core curricula for health professions with prescription authority in safe and appropriate use of opioids in pain management while minimizing risks of addiction and substance abuse
  • DHP plans to distribute core competencies developed with health training institution input to Deans of all relevant professional schools
  • DBHDS, DHP, and VCU are also developing 4-hour on-line version for in-service instruction

• In-service
  • Board of Medicine Continuing Education (CE) requirements
    • HB 829 (2016) requires 2 hours of CE for physicians in pain management and diagnosis/management of addiction
    • 99% of renewing physicians reported fulfilling CE requirements, but DHP does not collect data on the number of physicians whose CE hours included CE on pain management/addiction
  • Project Echo: Addiction telehealth mentoring between 3 academic hubs and practicing primary care clinicians

Peer Recovery Specialists (PRS) in Virginia – Barriers to Certification

• While 825 PRS have received DBHDS training for certification (as of January, 2018), stakeholders cite several barriers to increasing the supply of PRS services:
  • 500 supervisory experience hours (3 months full-time/6 months part-time) required for certification are not reimbursable by Medicaid
  • Some potential employers (e.g., hospitals) concerned about liability implications of contracting or employing PRS
  • Medicaid’s level of reimbursement for PRS services is not incentivizing*
  • DBHDS applied for U.S. Department of Labor (DOL) grant ($3.2M) to support PRS in obtaining required supervisory experience hours
    • Application was not approved; workgroup that applied for grant is exploring other funding opportunities

* See slide 94 of the Appendix for further detail on Medicaid reimbursement rates
Peer Recovery Specialists in Virginia – Barriers to Employment in CSBs and Private Providers

- §§ 37.2-416 and 37.2-506 prohibit employment by DBHDS-licensed private providers and CSBs, respectively, for job applicants convicted of most barrier crimes
  - From January, 2015 to January, 2018, 632 job applicants had convictions for barrier crime listed in §§ 37.2-416 and 37.2-506
- Exceptions exist for job applicants seeking employment at substance use or mental health treatment programs:
  - Some barrier crime convictions are eligible for screening review, with the candidate determined eligible for employment if: the crime was related to substance use; the individual has been rehabilitated and is not a risk to others
  - Barriers to two sets of crimes are removed after 5 years (felony possession of a controlled substance) and 10 years (misdemeanor assault and battery)
  - In 2017, only 5 job applicants to substance use or mental health programs had reviewable barrier crime convictions
- Currently, three State-designated screeners contract with individuals convicted of barrier crimes to determine their employment eligibility
- Only 11 other States have codified barrier crimes lists applicable to employment in CSB-equivalent facilities

Summary

- Addiction is a chronic condition/disease in which relapses are common during any stage of treatment and recovery
- While availability of direct Substance Use Disorder (SUD) relapse measures is limited, DMAS plans to collect multiple proxy indicators through ARTS
- Successful SUD treatment/recovery is highly individualized and evidence-based programs make use of a wide range of pharmacotherapies and psychosocial interventions
- In Virginia, a wide range of programs and services with SUD recovery components exist for both the general population and targeted populations
- Several SUD programs focused on targeted populations may provide a basis upon which to build or expand additional recovery-focused initiatives
- Numerous SUD programs, services and initiatives with recovery components have been recently initiated by several State agencies
- Provision of information to the public on SUD treatment/recovery resources is not consistent across State agencies
- Cost-benefit data suggest that the majority of commonly used pharmacological and psychosocial interventions are cost-effective and either evidence- or research-based
- While recent workforce initiatives have begun to address barriers to increasing the reach of clinical addiction/SUD services, there are continuing barriers to accessing non-clinical recovery services (e.g., peer support, case management)
## Policy Options

<table>
<thead>
<tr>
<th>Policy Focus</th>
<th>Policy Option(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>--</td>
<td>Option 1: Take No Action</td>
</tr>
</tbody>
</table>
| Programs for targeted populations    | Option 2: Introduce a budget amendment to support the placement of Day Reporting Centers in 3 DOC probation and parole districts (Richmond City, Norfolk City, Buchanan/Tazewell) that experience the highest rates of positive opioid drug tests results and overdoses among individuals on state probation supervision, with the Day Reporting Centers offering non-pharmacological SUD treatment and recovery services as well as wraparound supports to offenders in need of initial or ongoing SUD services.  
  • DOC estimates an annual cost of $660,000 per Day Reporting Center ($1,980,000 total)  
  • DOC anticipates seeking funding for additional Recovery Support Navigators in 11 probation and parole districts identified as high-need for OUD services |
|                                      | Option 3: Introduce a budget amendment to expand Project Link into 5 new CSB sites that have the highest rates of Neonatal Abstinence Syndrome (Mount Rogers, New River Valley, Northwestern, Horizon, Crossroads)  
  • DBHDS estimates an annual cost of $100,000 each ($500,000 total) |
### Policy Options (2)

<table>
<thead>
<tr>
<th>Policy Option(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Awareness of SUD treatment / recovery resources</strong></td>
</tr>
<tr>
<td>Option 4: Introduce a budget amendment for 1 VDH FTE to align and coordinate information made available through State agencies on opioid use disorder treatment and recovery resources on the Curb the Crisis website</td>
</tr>
<tr>
<td>Option 5: Introduce legislation (Uncodified Act) requiring the Secretaries of HHR and PSHS to convene a workgroup that includes representatives of DBHDS, DHP, DMAS, VDH, DARS, DSS, DCJS, DOC, the Attorney General's Office, VSP and DVS to study the current alignment and coordination of information made available through State agencies on substance use disorder treatment and recovery resources, making recommendations to the General Assembly and JCHC by November 1, 2019 on legislation and/or budget amendments required to improve alignment and coordination of SUD treatment/recovery resource information made available by State agencies</td>
</tr>
<tr>
<td>Option 6: Introduce legislation (Uncodified Act) requiring DBHDS to convene a workgroup that includes representatives of VDH, DHP, the VHHA, and other stakeholders as appropriate, to develop minimum comprehensive discharge planning standards for inpatient admissions with indication of a substance-use disorder, opioid overdose, or chronic addiction at all hospitals and free-standing Emergency Departments. The workgroup will report the outcomes of its activities to the JCHC by October 1, 2018 with recommended policy options</td>
</tr>
</tbody>
</table>

### Policy Options (4)

<table>
<thead>
<tr>
<th>Policy Option(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access to SUD recovery services</strong></td>
</tr>
<tr>
<td>Option 7: Introduce legislation to amend Title 38.2 of the Code of Virginia to require that plans regulated by the Bureau of Insurance include as covered services, for members diagnosed with a Substance Use Disorder: 1) SUD case management services provided by DBHDS-licensed case management providers; and 2) peer support services provided by Registered Peer Recovery Specialists, with reimbursement rates at least equivalent to those the plan has for case management/peer support services for non-SUD diagnoses (e.g., mental health diagnoses). For plans that do not currently cover case management and/or peer support services for its members, reimbursement rates would be at least equivalent to those provided by the Medicaid ARTS benefit.</td>
</tr>
</tbody>
</table>
Policy Options (5)

<table>
<thead>
<tr>
<th>Health Workforce – Peer Recovery Specialists</th>
<th>Policy Option(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR</td>
<td>Introduce legislation to amend Title 37 of the Code of Virginia to limit the duration of the barriers to employment eligibility of barrier crimes listed in § 37.2-506 and § 37.2-416 to: • Option 8a: 5 years for all crimes; OR • Option 8b: 5 years for crimes that currently are of limited duration (possession of controlled substances); 10 years for all other crimes</td>
</tr>
<tr>
<td>Option 9: Introduce legislation to amend Title 37 of the Code of Virginia to: • Remove all barrier crimes listed in § 37.2-506 and § 37.2-416; and • Require DBHDS to: 1) develop agency-specific barrier crime regulations through Administrative Code that balance public safety/health concerns with maximizing access to qualified SUD service providers; 2) summarize its rules to the JCHC by October 1, 2019; 3) include data on the outcomes of candidates with barrier crimes – including the number of candidates disqualified in that SFY because of barrier crimes; the number of candidates with barrier crimes that were not disqualified in that SFY; and a characterization of the types of barrier crimes in either case – in its annual reports thereafter.</td>
<td></td>
</tr>
</tbody>
</table>

Public Comment

Written public comments on the proposed options may be submitted to JCHC by close of business on October 26, 2018. Comments may be submitted via:

- E-mail: jchcpubliccomments@jchc.virginia.gov
- Fax: 804-786-5538
- Mail: Joint Commission on Health Care
  P.O. Box 1322
  Richmond, Virginia 23218

Comments will be provided to Commission members and summarized before they vote on the policy options during the JCHC’s November 7th decision matrix meeting.

(All public comments are subject to FOIA release of records)
Appendix

Severe SUD – DSM-5 definition

- Criteria for a severe SUD diagnosis is met if at least 6 of the following symptoms are present:
  - Taking the substance in larger amounts or for longer than you're meant to.
  - Wanting to cut down or stop using the substance but not managing to.
  - Spending a lot of time getting, using, or recovering from use of the substance.
  - Cravings and urges to use the substance.
  - Not managing to do what you should at work, home, or school because of substance use.
  - Continuing to use, even when it causes problems in relationships.
  - Giving up important social, occupational, or recreational activities because of substance use.
  - Using substances again and again, even when it puts you in danger.
  - Continuing to use, even when you know you have a physical or psychological problem that could have been caused or made worse by the substance.
  - Needing more of the substance to get the effect you want (tolerance).
  - Development of withdrawal symptoms, which can be relieved by taking more of the substance.
Prevalence of SUD diagnoses – Medicaid Population

Medicaid Members with Substance Use Disorder Diagnosis

Source: Neuhausen (2017)

Prevalence of SUD Treatment in Virginia – Opioids

Intake for SUD services: non-heroin opiates

Intake for SUD services: heroin

Source: DBHDS (2018)
### Relapse Metrics – Treatment Episode Data Set

- Treatment Episode Data Set (TEDS) data includes records for approximately 1.5 million substance abuse treatment admissions from facilities that receive State alcohol and/or drug agency funds.
- Facilities excluded from TEDS include: those not licensed through the State substance abuse agency (e.g., private for-profit agencies, hospitals, State correctional system) and facilities operated by Federal agencies (the Bureau of Prisons, the Department of Defense, and the Veterans Administration).

### SUD Relapse in Virginia – Additional Relapse-related Data

- DBHDS collected admission and discharge data on 1,001 individuals receiving OUD treatment services funded by OPT-R.
- Data collected include indicators reported to the Substance Abuse and Mental Health Services Agency (SAMHSA), such as:
  - Substances used
  - Retention in treatment
  - Employment/education status
  - Criminal justice involvement
- DBHDS will be using admissions/discharge data to evaluate program implementation.
Illustrative Clinical Practice Guidelines Recommendations on Pharmacological and Psychosocial SUD Interventions

<table>
<thead>
<tr>
<th>Pharmacological Intervention</th>
<th>Opioids</th>
<th>Alcohol</th>
<th>Stimulants</th>
<th>Cannabis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acamprosate</td>
<td>++</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disulfiram</td>
<td>++</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methadone</td>
<td>++</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buprenorphine</td>
<td>++</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naltrexone</td>
<td>+*</td>
<td>++</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Extended Release injectable formulation recommended only if methadone or buprenorphine not available/acceptable

<table>
<thead>
<tr>
<th>Psychosocial Intervention</th>
<th>Opioids</th>
<th>Alcohol</th>
<th>Stimulants</th>
<th>Cannabis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Couples Therapy (BCT)</td>
<td>++</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Behavioral Coping Skills Training (CBT)</td>
<td>?</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Contingency Management (CM)</td>
<td>+</td>
<td>?</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Community Reinforcement Approach (CRA)</td>
<td>++</td>
<td>++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Drug Counseling</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivational Enhancement Therapy (MET)</td>
<td>++</td>
<td>?</td>
<td>++</td>
<td></td>
</tr>
<tr>
<td>12-Step Facilitation (TSF)</td>
<td>++</td>
<td></td>
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</tr>
</tbody>
</table>

Pharmacotherapies for OUDs

- **Pharmacological treatment**
  - Methadone more effective than non-pharmacological approaches in treatment retention and abstinence from heroin use
  - Buprenorphine effective in treatment retention for heroin (but methadone more effective)
  - Naltrexone
    - Sustained release: Clinical trials indicate injectable formulations reduce return to heroin use, research on real-world effectiveness and in comparison to methadone/buprenorphine is growing
    - Oral form: poor retention inhibits real-world effectiveness
**Pharmacotherapies for AUDs**

- **Disulfiram**: Few gold standard studies of its effectiveness exist despite its application to AUD for over 60 years.
- **Naltrexone**: Meta-analyses consistently indicate modest efficacy effect sizes on reducing heavy drinking (standardized mean ranging from 0.15 to 0.2) although not in promoting complete abstinence.
- **Acamprosate**: variable evidence of effectiveness between studies conducted in US and Europe.

**Pharmacotherapies for other SUDs**

- **Stimulants**
  - Systematic review (2016) found no clear evidence of efficacy of any pharmacological treatment for cocaine dependence.
  - Meta-analyses (2011, 2016 and 2017) found no evidence supporting use of antidepressants modafinil or topiramate in increasing abstinence or retention for cocaine use.
  - Review (2017) found little/no effect of pharmacotherapy on Methamphetamine-Related Disorders on the basis of low-quality studies.

- **Cannabis**
  - Review (2016) found four of six classes of pharmaceutical agents used to treat cannabis use with non-significant associations with abstinence.
Psychotherapies for SUDs – Motivational Interviewing/Enhancement

• **Approach**
  - Series of brief counseling sessions (e.g., 1 to 4 sessions of 1-hour each) to explore/reinforce client’s intrinsic motivation to change behaviors
  - Purpose is not to impart information/skills

• **Evidence**
  - Meta-analysis (2011) found motivational interviewing (MI) associated with decreased substance use compared to no treatment, although:
    - Effect sizes were modest and short- and medium-term follow up
    - No statistically significant difference between MI and other active treatments
    - Quality of evidence is low
  - Meta-analysis (2011) on MI for adolescents found effect sizes on substance use tend to be small

Psychotherapies for SUDs – Cognitive Behavioral Therapy (CBT)

• **Approach**
  - Orient clients towards a meaningful goal
  - Teach skills to successfully achieve goal
  - Establish plans to address potential relapses

• **Evidence**
  - Meta-analysis (2009): Small effects on substance use across range of substances
    - 58% of patients receiving CBT had better substance use outcomes than comparison approaches
Psychotherapies for SUDs – Contingency Management (CM)

- **Approach**
  - Provision of financial incentives (e.g., vouchers) contingent on evidence of changed behavior

- **Evidence**
  - Extensive literature indicates strong degree of evidence of moderate to large effect sizes on substance use during treatment, and small effect sizes after CM discontinuation

Psychosocial Interventions for SUDs – Mutual Support/12-Step Groups

- **Approach**: non-treatment-oriented/non-clinical self-help groups offering participants social, emotional and informational support and model of abstinence

- **Evidence**
  - Data from long-term observational studies indicate that participation in mutual support groups is associated with better 16-year outcomes compared to non-participants
  - However, meta-analyses of experimental studies indicate that “there is no conclusive evidence to show that [mutual support groups] can help to achieve abstinence, nor is there any conclusive evidence to show that it cannot”

* Evidence drawn primarily from the context of alcohol use disorders
Pharmaco- and Psychosocial Interventions for Justice-Involved Populations – Evidence Base

• **MAT**
  - Mixed evidence: some reviews conclude that there is consistent evidence that MAT associated with reduced substance use/recidivism – especially when there is continuity of care post-incarceration – others conclude that there is little evidence on reduced substance use

• **Psychosocial interventions**
  - Consistent evidence that Therapeutic Communities are associated with short-term reductions in recidivism, less consistent evidence on short-term reductions in substance use
  - Little evidence that other psychosocial interventions are associated with reduced substance use/recidivism
  - Most studies have significant methodological limitations and/or of are low quality, making it difficult to draw firm conclusions

Recovery Housing in Virginia – Oxford Housing

• DBHDS contract with Oxford House International (OHI) (approximately $100k/year to support administrative costs) provides a limited set of datapoints on recovery housing in Virginia:
  - Approximately 800 individuals / month reside in OHI units
  - 91% - 94% residents abstinent for one-month
  - 43% monthly departures due to relapse

Recovery Housing in Virginia – Higher Education Setting

- Initiatives at Virginia’s higher education institutions
  - VCU “RAMS in Recovery”: 50-60 students participate in recovery support services and 1-credit course; 6 students currently live in recovery housing
  - Washington & Lee University’s Washingtonian Recovery Community: 10-15 students participate in recovery support services; 4 students currently live in recovery housing
  - Challenges: recovery housing alone not likely to meet goals unless embedded in broader recovery program/environment with associated resource requirements; low level of student demand for housing; trade-offs in reserving high-demand campus space for students in recovery

- Virginia Institutions of Higher Education Substance Use Advisory Committee (§ 4.1-103.02)
  - Established in 2018 to develop statewide strategic plan for substance use education, prevention, and intervention at public/private higher education institutions
    - In process of convening stakeholders to develop workplan

Justice-Involved Population – Therapeutic Communities

- Approach: TCs are drug-free residential settings for non-violent offenders that emphasize adherence to community norms to change behavior

- TCs in Virginia
  - Two TCs provide non-medication-assisted SUD treatment services to male offenders (capacity of 979 individuals) and female offenders (capacity of 159 individuals); treatment duration is 2 years
  - In recent years, between 3% and 4% of total offenders have been are eligible for participation in TCs
### Justice-Involved Population – Heroin Addiction Recovery Program (HARP)

- Chesterfield County established HARP in 2016 to provide clinical and peer support services to inmates with OUDs
- Approximately 600 inmates have received HARP services since 2016, with around 80 inmates currently participating
- Funded by Sheriff’s office through an annual budget of approximately $95,000

### Justice-Involved Population – Residential Substance Abuse Treatment (RSAT) Program

- The federal Bureau of Justice Assistance (BJA) RSAT grant funds are used by DCJS to support residential substance abuse treatment services in correctional settings, community re-integration, and community-based aftercare services for offenders
  - RSAT programs can implement three types of programs: residential, jail-based, and aftercare
  - In SFY 2017, DCJS awards of approximately $324k supported SUD services for 147 inmates in two jails (jails provide 25% matching funds)
- RSAT aftercare programs are required to report on standardized performance measures (e.g., # individuals who complete jail- or prison-based RSAT program and released to community referred to an aftercare program)
  - Federal Code (42 U.S. Code § 3796ff–1(C)) defines specific requirements of an “aftercare component” (e.g., coordination of correctional facility treatment program with other human service and rehabilitation programs, such as educational and job training programs)
- While DCJS requires grantees to coordinate and provide aftercare service, current RSAT grantees do not receive BJA aftercare funds and do not report on BJA aftercare indicators
Justice-Involved Population – Drug Treatment Courts (DTCs)

• In SFY 2017, 49 drug treatment dockets are operating in Virginia
  • Since 2016, State budget language has authorized funding for MAT (Vivitrol) pilots, with Norfolk, Henrico and Bristol Adult Courts currently taking part (since 2017, MAT has been provided to 16 participants)
• Body of evidence indicates that DTC participation is associated with reduced recidivism, and DTCs to be cost-effective in terms of recidivism
  • Virginia’s DTCs estimated to save $20,000 in costs per participant due to lower recidivism
• Seminal multi-State DTC study found that DTC participation was associated with reduced substance use relapse (i.e., fewer self-reported use days per month)
• However:
  • There are few studies assessing substance use outcomes following DTC participation
  • Most literature on DTCs is methodologically weak

Justice-Involved Population – DBHDS Programs

• Comprehensive Addiction Recovery Act (CARA)
  • DCJS awarded $100K Bureau of Justice Assistance (BJA) grant to develop statewide plan with DBHDS to engage individuals in OUD treatment and recovery at five “intercept” points, with a focus on:
    • Intercept 4: Re-entry into community from jail
    • Intercept 5: Community corrections
  • DBHDS currently leading stakeholder process to map availability of services for offenders and local priorities
    • Five regional meetings will be completed by end of October
    • DCJS/DBHDS anticipates submitting BJA implementation grant by end of 2018
• Forensic Discharge Planners
  • HB5002 (2018) provides funds for forensic discharge planners for offenders in two jails with the highest percentage of offenders with Serious Mental Illness (SMI)
    • Given SUD-SMI co-occurrence, some offenders with SUD may benefit from services
Employment-related Programs in Virginia – Vocational Rehabilitation

- SA counselors are funded through $1.1M in GFs (SFY 2019) and $350,000 for case services (e.g., vocational evaluation; job coaching)
- Outcomes for clients served by specialized SA Counselors compared to clients with a SUD disability served by generalists:

  ![Graph showing Median Hourly Earnings at Case Closure and Median Cost of Cases](source: DARS (2018))

- SA counselor caseloads are not at full capacity: according to DARS data, current average caseload for SA counselors is 68 clients, with a reasonable counselor caseload capacity of around 100 clients (ranging from 20 to 154)
- Because of limited federal funding, around 1,970 eligible participants are currently waitlisted due to funding limitations, with around 15% of those with a SUD diagnosis (around 4,000 clients were served in SFY 2017)
- However, additional State Vocational Rehabilitation program funds in excess of the State’s 22% match for eligible participants with a SUD diagnosis would be required to be used for highest-priority clients, who may not have a SUD diagnosis.

Employment-related Programs in Virginia – Virginia Initiative for Employment Not Welfare

- For program participants experiencing problems obtaining/retaining employment, including those in a SUD treatment program, Virginia Initiative for Employment Not Welfare (VIEW) program authorizes local DSS offices to place in education, vocational, or apprenticeship training
- In SFY 2017, around 265 participants per month received vocational education/training or job skills training
- However, DSS does not have data on how many participants receiving training had SUD

- 2008 JLARC study “Mitigating the Costs of Substance Abuse” found the following results relative to inmates not receiving or completing SUD services:

<table>
<thead>
<tr>
<th>Department of Corrections</th>
<th>Net Cost Impact</th>
<th>Recidivism</th>
<th>Employment and Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inmates in Therapeutic Communities</td>
<td>+</td>
<td>+2</td>
<td>-</td>
</tr>
<tr>
<td>Inmates in Transitional Therapeutic Communities</td>
<td>-</td>
<td>-2</td>
<td>+2</td>
</tr>
<tr>
<td>Adults on State Probation</td>
<td>+</td>
<td>+2</td>
<td>-</td>
</tr>
<tr>
<td>Local and Regional Jails</td>
<td>+</td>
<td>+2</td>
<td>-</td>
</tr>
<tr>
<td>Inmates in Therapeutic Communities</td>
<td>+</td>
<td>+2</td>
<td>-</td>
</tr>
<tr>
<td>Inmates in Other Services</td>
<td>-</td>
<td>-2</td>
<td>-</td>
</tr>
<tr>
<td>Inmates in Therapeutic Communities vs. Other Services</td>
<td>+</td>
<td>+2</td>
<td>-</td>
</tr>
</tbody>
</table>

Outcome of Population that completed treatment:
- Better: improved lower costs, had lower recidivism rates, or had higher employment rates and earnings.
- Worse: improved higher costs, had higher recidivism rates, or had lower employment rates and earnings.
- Mixed: had an average difference of less than 5 percentage points across three measures of recidivism or had mixed employment and earnings outcomes.
Peer Recovery Specialists – Certification Requirements

- Required education and training:
  - 1+ year of recovery from mental health or substance use disorder(s) or lived experience as a family member of someone with above disorders
  - 72 hours training and successful examination score from Virginia Certification Board
  - 500+ hours supervised experience
  - 20+ hours continuing education every 2 years

- Certification steps:

<table>
<thead>
<tr>
<th>Credentials</th>
<th>Classification</th>
<th>Eligible to bill Medicaid*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed 72-hour DBHDS PRS training</td>
<td>Peer Recovery Specialist (PRS)</td>
<td>N</td>
</tr>
<tr>
<td>PRS credentials + certified by Virginia Certification Board</td>
<td>Certified Peer Recovery Specialist (CPRS)</td>
<td>N</td>
</tr>
<tr>
<td>CPRS credentials + registered with DHP</td>
<td>Registered Peer Recovery Specialist (RPRS)</td>
<td>Y</td>
</tr>
</tbody>
</table>

* If services provided in a Medicaid provider setting

Peer Support Services – DMAS Reimbursement Rates

- While hourly rates for PRS vary from employer to employer, a national PRS compensation analysis found average PRS compensation to be:
  - $14.72/hour in neighboring States
  - $15.42/hour nationally (ranging from approximately $13.50 - $17.75)
- In Virginia, Medicaid reimburses Medicaid providers for peer support services delivered by PRS

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Class</th>
<th>Provider</th>
<th>Medicaid</th>
<th>Psychologist</th>
<th>Master’s</th>
<th>Clinical Nurse Specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Support (individual)</td>
<td>ARTS/MH</td>
<td>$26</td>
<td>MD</td>
<td>$107.98</td>
<td>$72.89</td>
<td>$72.89</td>
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<tr>
<td>Peer Support (group)*</td>
<td>ARTS/MH</td>
<td>up to $108</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Psychotherapy (individual)</td>
<td>non-ARTS</td>
<td></td>
<td></td>
<td>$19.49</td>
<td>$14.62</td>
<td>$14.62</td>
</tr>
<tr>
<td>Group Psychotherapy</td>
<td>non-ARTS</td>
<td></td>
<td></td>
<td>$21.66</td>
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</tr>
</tbody>
</table>

* Group size ranges from 2 – 10 individuals

- $26/hour for individual peer support would allow for a 46% overhead for the Medicaid provider to pay the PRS $17.75/hour (67% overhead for the Medicaid provider to pay the PRS for $15.42/hour)
  - Overhead charged by Magellan of Virginia – Virginia’s Behavioral Health Services Administrator – is 25%

* DMAS - Department of Mental Health and Substance Abuse Services
<table>
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<tr>
<th>References</th>
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<tbody>
<tr>
<td><strong>Slides 5, 68</strong></td>
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<tr>
<td><strong>Slide 6</strong></td>
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<tr>
<td><strong>Slide 7</strong></td>
</tr>
<tr>
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</tbody>
</table>

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</tr>
<tr>
<td><strong>Slides 9, 70</strong></td>
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<td><strong>Slide 12</strong></td>
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<tr>
<td><strong>Slide 14</strong></td>
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**Slide 23**


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