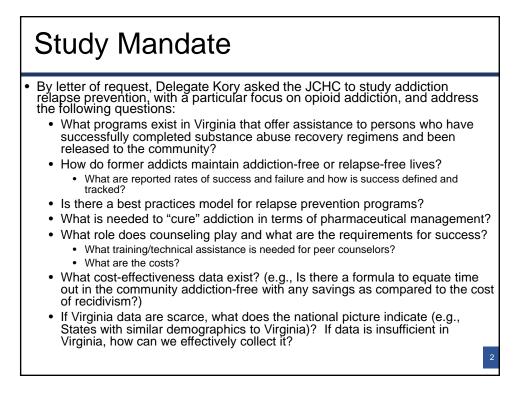


Joint Commission on Health Care October 15, 2018 Meeting

> Andrew Mitchell Senior Health Policy Analyst



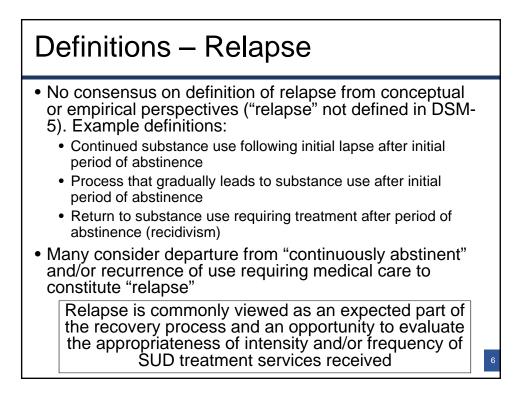
Outline	
Section	Slides
 Background on addiction/substance use disorder (SUD) and relapse 	5 – 9
Data on SUD relapse	11 – 17
Evidence base on clinical pharmacological and psychosocial interventions for SUD treatment and relapse prevention	19 – 25
 SUD recovery-/relapse prevention-focused programs in Virginia 	27 – 41
 State coordination and public awareness of SUD recovery/relapse prevention programs in Virginia 	43 – 47
 Cost-effectiveness of clinical and non-clinical SUD interventions 	49 – 53
• SUD treatment and recovery access/workforce considerations	55 - 59
Policy Options	62 - 65
	3

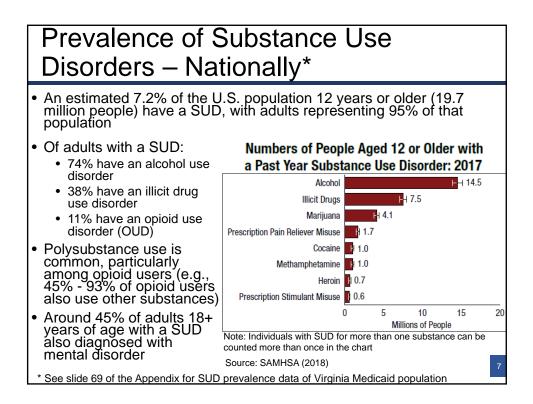


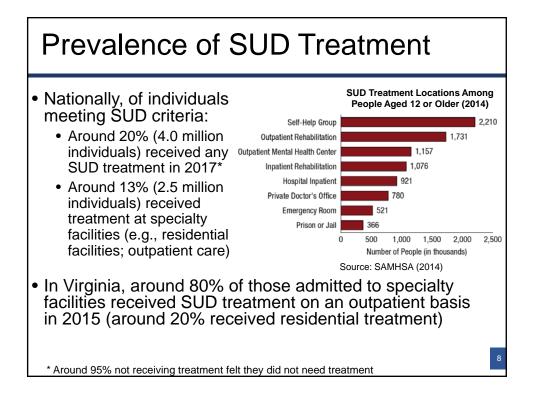
Definitions – Addiction and Substance Use Disorders*

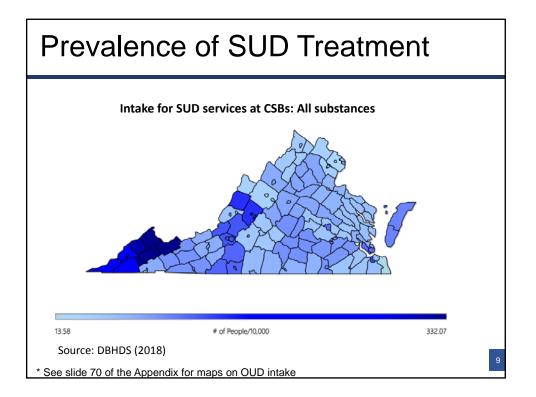
 General consensus that addiction is a complex, chronic, relapsing condition/disease

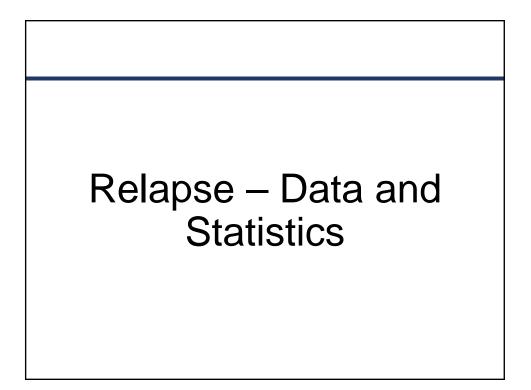
- American Psychiatrists Association
 - "Addiction is a complex condition, a brain disease that is manifested by compulsive substance use despite harmful consequence"
 - Addiction equates with "severe Substance Use Disorder" (SUD) (6+ indicative symptoms as described in the Diagnostic and Statistical 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





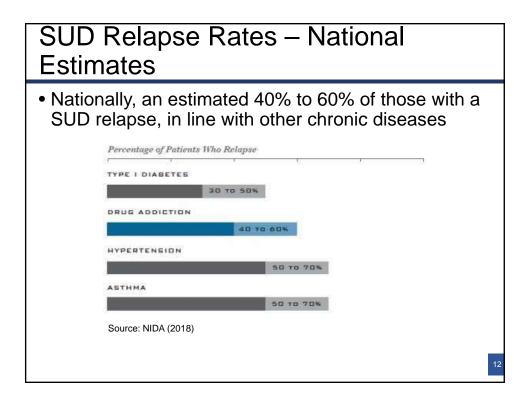






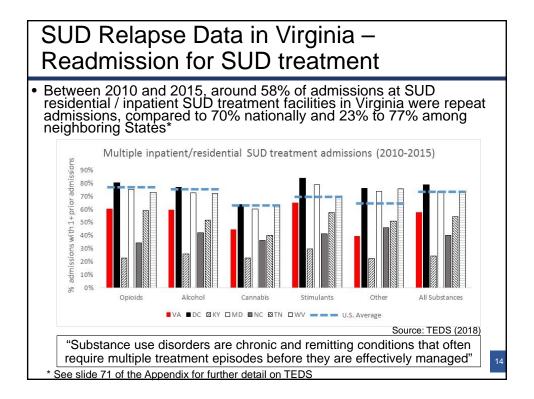
Relapse Metrics

- 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

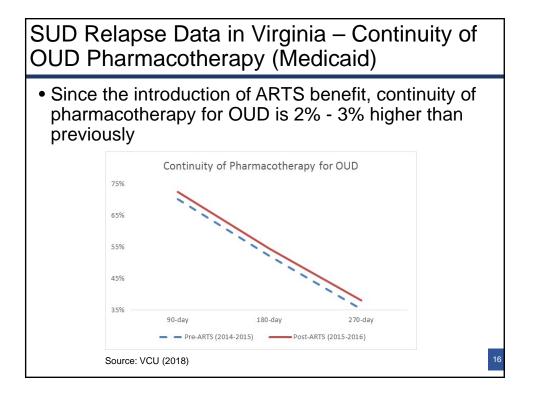


SUD Relapse Data in Virginia – Positive Urine Drug Screens

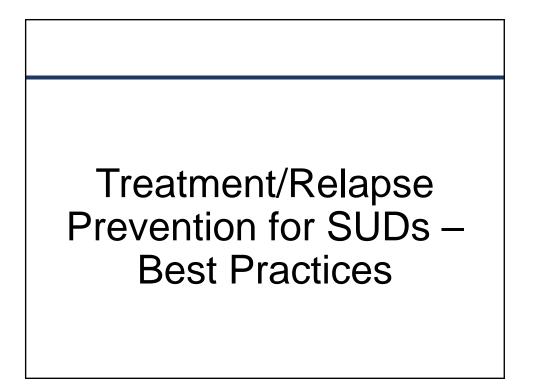
- The Department of Medical Assistance Services (DMAS) does not currently capture urine drug screen results in its data systems
 - Capturing data would require providers to obtain patient authorization to release SUD records to DMAS
- Concerns raised by DMAS with regards to requiring patient consent 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 capitated 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

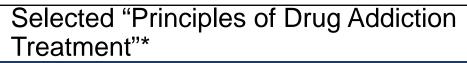


SUD Relapse Data in Virginia – Medicaid		
 As part of the ARTS waiver, the Department of Medical Assistance (DMAS) is participating in a pilot to review required Center for Medicare Services (CMS) indicators, including: 		
Indicator	Expected relationship to relapse	
Continuity of pharmacotherapy for OUD (% adults with OUD pharmacotherapy with at least 180 days continuous treatment)	Inversely correlated	
Readmission for SUD (acute inpatient readmission for SUD within 30 days of initial inpatient admission)	Positively correlated	
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)	Inversely correlated	
 DMAS is currently awaiting draft versions of indicators from CMS to review and provide feedback 		



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: 		
Indicator	Percentage	
Continuity of pharmacotherapy for OUD (% adults with OUD pharmacotherapy with at least 180 days continuous treatment)	37.5%	
 Readmission for SUD 14-day hospital readmission 180-day residential readmission 	24% 16%	
Follow-up after ED discharge for Mental Health or SUD • Within 7 days	76%	
 Within 30 days 	80%	17



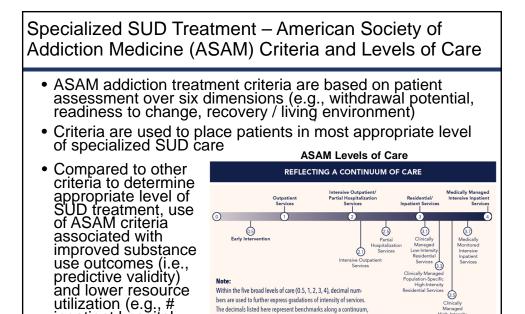


- "[D]etoxification is only the first stage of addiction treatment and by itself does little to change long-term drug abuse...
- <u>Treatment varies</u> depending on the type of drug and the characteristics of the patients...[T]he <u>earlier treatment is offered</u> in the disease process, the greater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

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

inpatient hospital

dáys)



meaning patients can move up or down in terms of intensity without necessarily being placed in a new benchmark level of care.

* Includes Opioid Treatment Programs (OTPs) Adapted from: ASAM (2018)



- 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 extendedrelease 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

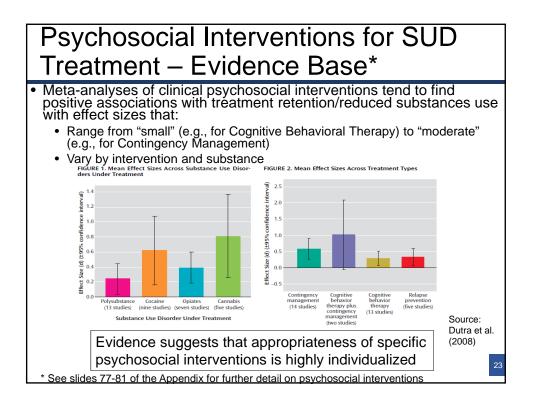
- Definition: interpersonal or informational approaches targeting behavioral, social and/or environmental factors
- No widely accepted categorization exists
- Clinical/non-clinical examples include:

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 RehabilitationMutual Support/12-Step
- Mutual Support/12-Step Groups
- Therapeutic Communities
- Recovery Housing

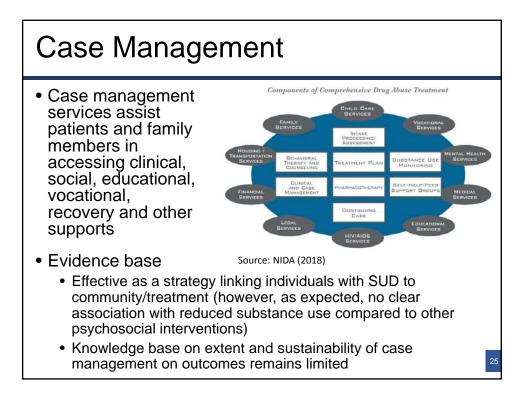


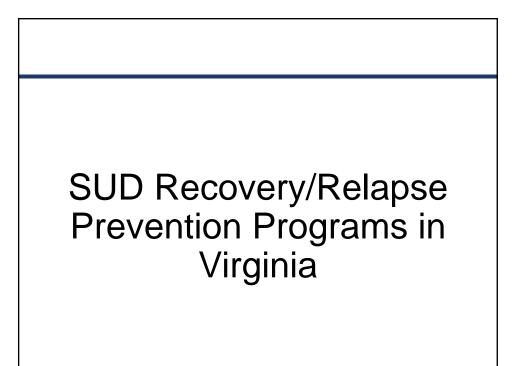
Combined Pharmacotherapies and Psychotherapies for OUD

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 buprenorphineand/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

OUD Semiles reseived	Setting w	Setting where buprenorpherine received			
OUD Service received (April – September, 2017)	Preferred OBOT	Other network provider	Out-of-network provider		
Any other OUD service	72%	51%	36%		
Counseling / psychotherapy / physician evaluation	63%	43%	23%		
Urine drug screen	55%	35%	26%		
Source: VCU (2018)					





Overview of SUD Recovery Resources in Virginia – Programs for General Population

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

SUD	Resource*	Setting	Funding Agency
Just	tice-involved population		
• T	herapeutic Communities	Prisons	DOC
• <u>C</u>	Community Corrections Alternative Programs	Probation	DOC
• <u>P</u>	Prison MAT pilot	Prison/Community	DOC/DBHDS
• D	Day Reporting Centers (discontinued in 2008)	Community	DOC
• <u>N</u>	Iodel Addiction Recovery Programs	Jails	DCJS
• R	Residential Substance Abuse Treatment Program	Jails	DCJS
• D	Orug Treatment Courts	Community/Courts	Federal/State/Local
High	n-need Medicaid beneficiaries		
• <u>H</u>	lousing/employment supports	Community	DMAS
Preg	gnant/parenting women		
• <u>P</u>	Permanent Supportive Housing	Community	DBHDS
• <u>P</u>	Project Link/SAMHSA pilot sites	Community	DBHDS
Indiv	viduals with significant barriers to employmer	nt	
• <u>s</u>	ubstance abuse vocational rehabilitation	CSBs/local DARS	DARS/DBHDS
<u>C</u>	ounselors	offices	
• V	ocational/job training	Community	DSS
* U	Inderlined recovery resources are described in detai	I in the main body of this	s report; non-
un	derlined resources are described in the Appendix		

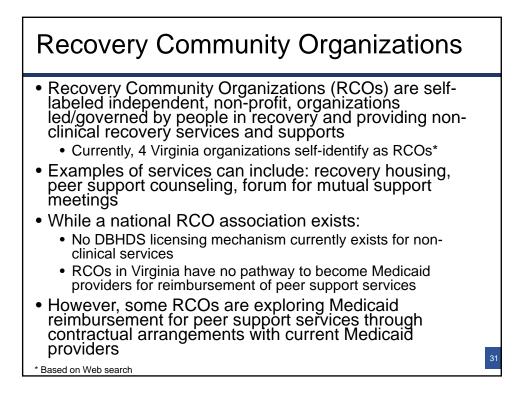
Recovery Housing*

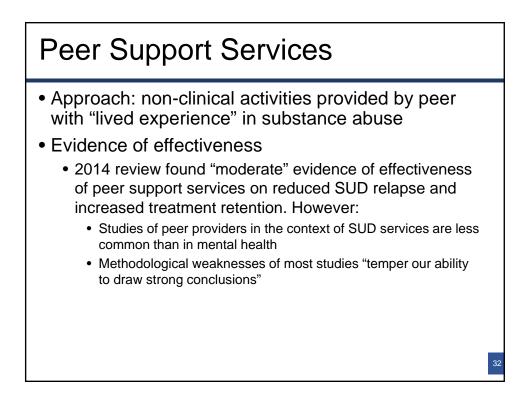
- Range of residential environments intended to promote recovery through self-help, peer support and social reinforcement members transitioning back into communities
 - Least structured ("peer run"): no paid positions, democratically-run, services include house meetings, encouragement to attend self-help 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

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

Recovery Housing in Virginia – State-_evel 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





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 ee slides 84-88 for detail on additional programs for justice-involved populations

SUD Treatment and Recovery Programs for Justice-Involved Populations (2)

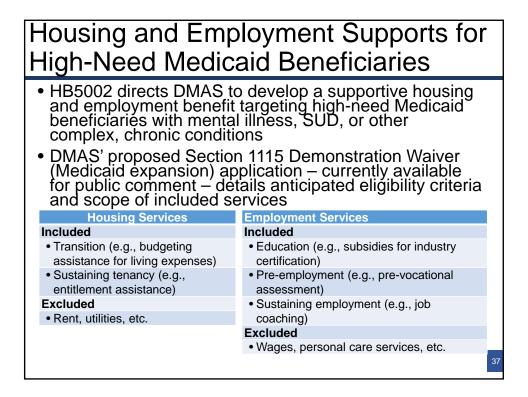
Day Reporting Centers (DRCs)

- 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

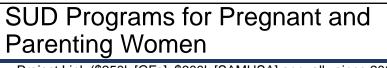
- SUDs are the most common behavioral health conditions among the homeless population
- Co-occurring psychiatric disorders associated with: higher SUD severity, more intensive treatment needs, lower treatment participation
- Approach: direct service that helps adults with mental and substance use disorders 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



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



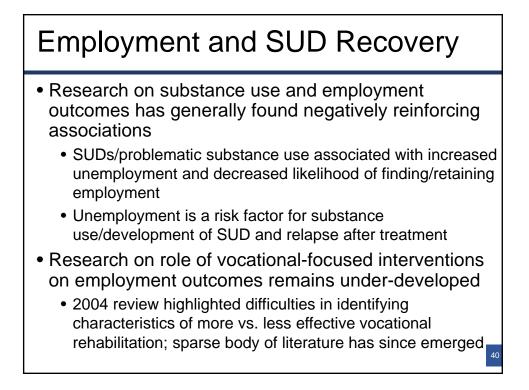
Project Link (\$250k [GFs], \$600k [SAMHSA] annually since 2001)

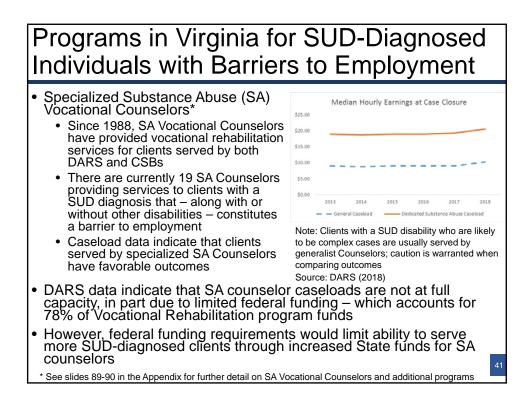
- Approach: Local interagency team (e.g., CSBs, DSS office, health department) coordinates care to pregnant and parenting women at risk of – or currently abusing – substances through intensive case management and support services (e.g., home visiting, prenatal care, SUD treatment, social supports)
- 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

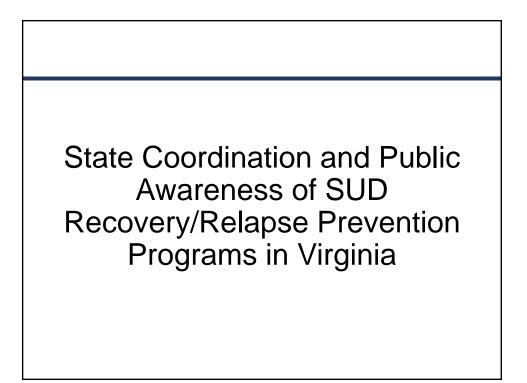
	CSB Regior	on Utilization		
CSB SUD Service	With Project	Without		
	Link	Project Link		
Case management	45%	33%		
Outpatient	37%	32%		
Residential treatment	40%	29%		
Note: Data are descriptive and	do not imply caus	ality		

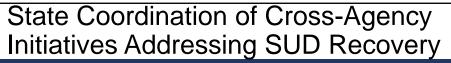
Note: Data are descriptive and do not imply causality Source: DBHDS (2018)

- 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





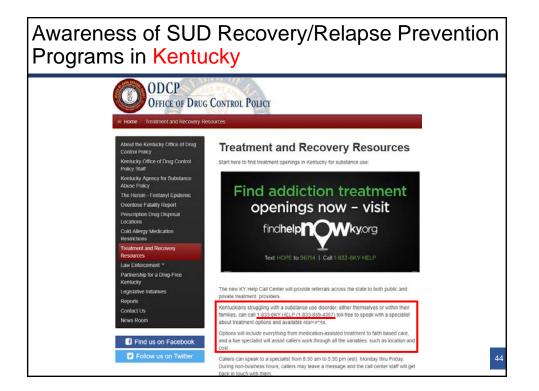


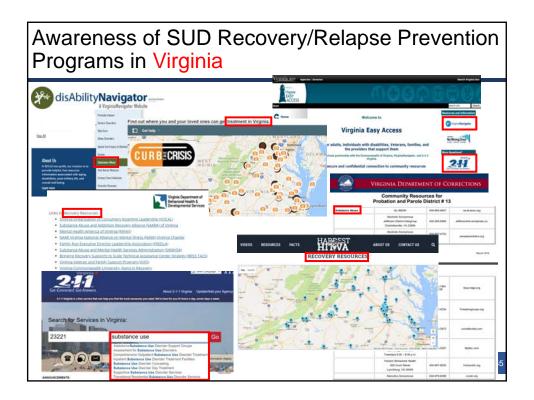


- Governor's Advisory Commission on Opioids and Addiction established September 26, 2018
 - Supported by five workgroups (treatment and recovery, harm reduction, justice-involved interventions, prevention, supply prevention) represented by 16 State agencies and 5 associations
- DBHDS/DCJS developing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

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



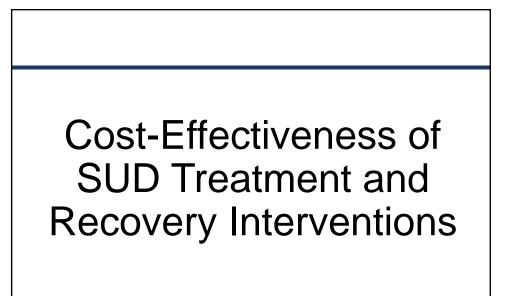


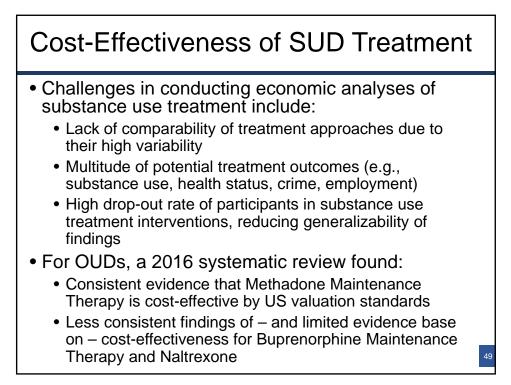
Awareness of SUD Recovery/Relapse Prevention Programs in Virginia (2)

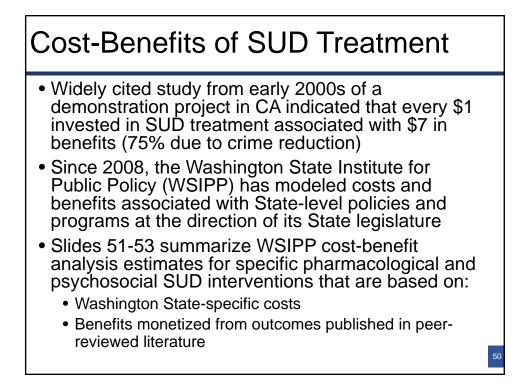
- Around 263 SUD treatment/recovery resources are listed by three State-connected websites: Virginia 211 (205 resources), Hardest Hit VA (126), and Disability Navigator (107)
 - Of those resources, fewer than 20% are listed by all three websites:
 - % resources listed by three sources: 19%
 - % resources 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-Benefit Estimates – Pharmacological Interventions for OUD

Intervention	Costs	Cost:Benefit Ratio [*]	Chance benefits > costs	Level of Evidence**
Methadone maintenance treatment	\$3,769	\$2.19	88%	EB
Buprenorphine maintenance treatment	\$4,633	\$1.75	86%	NC
Injectable naltrexone	\$17,409	-\$0.05	0%	NC

* 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

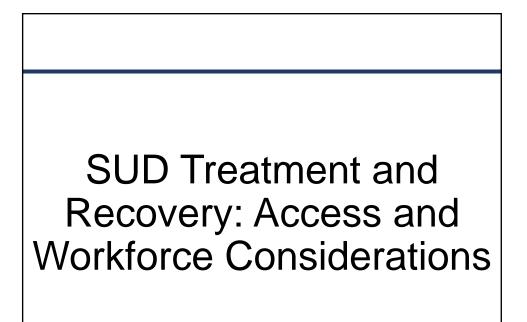
Interventions in bold referenced in SUD Recovery/Relapse Prevention Programs in Virginia section

Intervention	Costs	Cost:Benefit Ratio [*]	Chance benefits > costs	Level of Evidence**	
Contingency management [†] (opioids, substances broadly)	\$250 - \$356	\$9 - \$23	59% - 100%	RB – EB	
Contingency management ^{††} (substances broadly)	\$19,455	\$34	77%	EB	
Recovery housing	\$287	\$5	70%	NC	
Motivational Interviewing / Motivational Enhancement	\$367 - \$342	\$17 - \$26	61% - 63%	P – RB	
CBT (alcohol, amphetamines)	\$210 - \$266	\$22 - \$34	60% - 61%	RB	
12-step therapy	-\$323‡	n/a	60%	RB	
Relapse prevention (CBT)	\$0	n/a	56%	RB	
Peer support	\$2,815	\$1	51%	RB	
CBT (opioids)	\$538	-\$1	42%	Р	
[†] Lower-cost interventions; ^{††} Higher-cost intervention [‡] comparison: 1-hour individual CBT					
* Benefits monetized: Crime; labor market earnings; property loss; health care					
^{TEB:} 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)				52	

Cost-Benefit Estimates – Justice-
Involved Population

Interventions in bold referenced in SUD Recovery/Relapse Prevention Programs in Virginia section Chance **Cost : Benefit** Level of Intervention Costs benefits Ratio[†] Evidence > costs Outpatient/non-intensive drug 100% EΒ \$768 \$13.47 treatment (community-based) Outpatient/non-intensive drug \$749 \$14.10 99% EΒ treatment (during incarceration) Inpatient/intensive outpatient drug \$1,289 \$10.18 98% EB treatment (during incarceration) SUD Therapeutic Communities 96% EΒ \$2,199 \$5.03 (during incarceration)⁺ SUD Therapeutic Communities \$3,783 \$2.51 79% EB (community-based) \$3,987 \$1.95 75% EB Day reporting centers Injectable naltrexone (criminal \$16,671 -\$0.01 0% NC justice population) 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

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



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 Boardcertified in an addiction sub-specialty
- In 2017, between 3% Provider Substance Abuse Specialty* to 19% of licensed clinical psychologists, Licensed Clinical Psychologist 71 3% clinical social workers Licensed Clinical Social 627 13% and professional Worker COUNSEIORS SPECIAlized Licensed Professional 708 19% Counselor 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

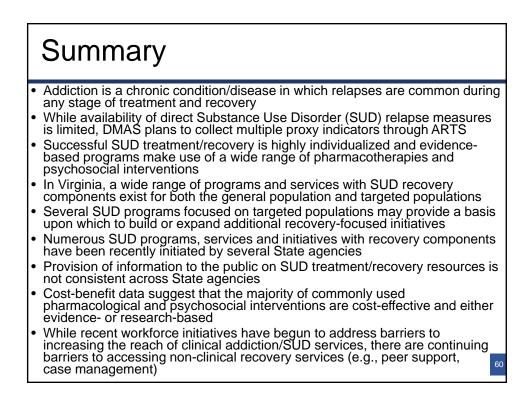
 While 825 PRS have received DBHDS training for certification (as of January, 2018), stakeholders cite several barriers to increasing the supply of PRS services:

- 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



Policy Options

Policy Options Policy Focus Policy Option(s) Option 1: Take No Action ---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 Programs for need of initial or ongoing SUD services. DOC estimates an annual cost of \$660,000 per Day Reporting Center targeted • (\$1,980,000 total) populations 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) 62

Policy Options (2)

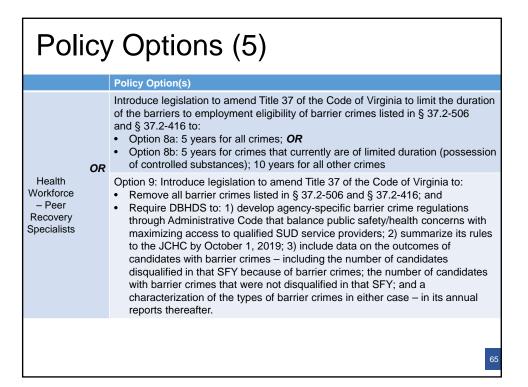
Policy Option(s)

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

Awareness of SUD treatment / recovery resources 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

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

Policy Options (4)		
	Policy Option(s)	
Access to SUD recovery services	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 rates would be at least equivalent to those provided by the Medicaid ARTS benefit.	
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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

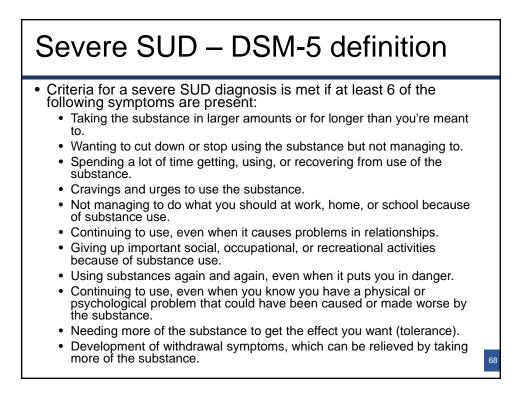
Mail: Joint Commission on Health Care

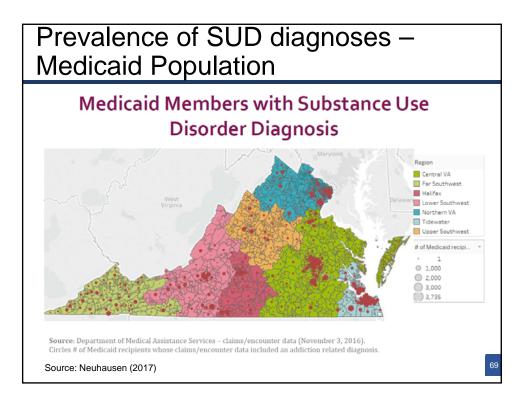
P.O. Box 1322 Richmond, Virginia 23218

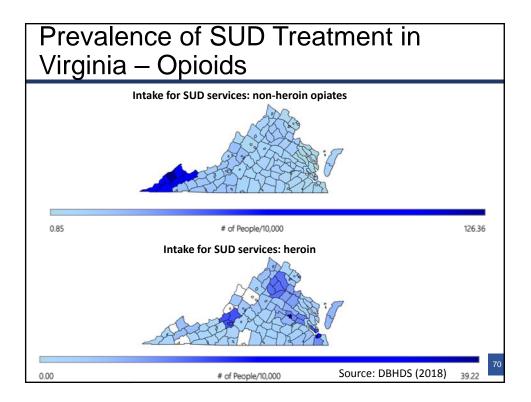
Comments will be provided to Commission members and summarized before they vote on the policy options during the JCHC's November 7th decision matrix meeting.

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

Appendix







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 Relapserelated Data

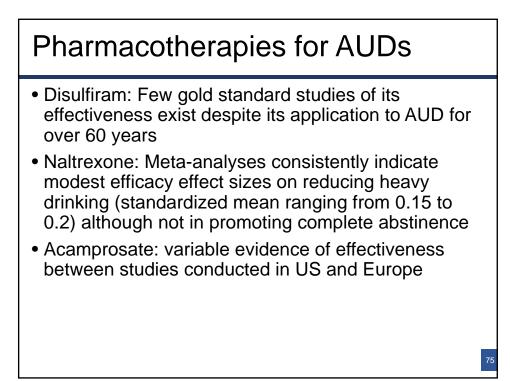
- DBHDS collected admission and discharge data on 1,001 individuals receiving OUD treatment services funded by OPT-R
- Data collected include indicators reported to the Substance Abuse and Mental Health Services Agency (SAMHSA), such as:
 - Substances used
 - Retention in treatment
 - Employment/education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

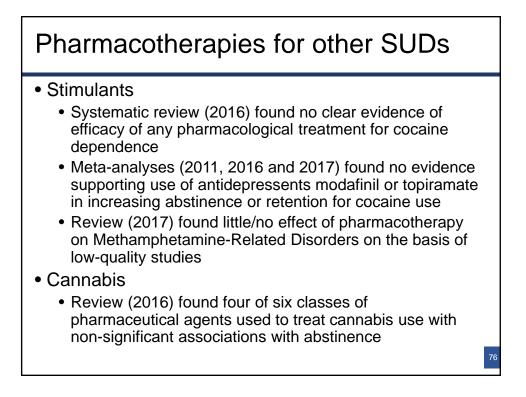
Illustrative Clinical Practice Guidelines Recommendations on Pharmacological and Psychosocial SUD Interventions

	Pharmacological Intervention	Opioids	Alco	hol	Stir	mulants	Cannabis	
	Acamprosate		++	F				
	Disulfiram		++	F				
	Methadone	++						
	Buprenorphine	++						
	Naltrexone	+*	++	F				
* Extended Release injectable formulation recommended only if methadone or buprenorphine not available/acceptable								
Psycho	Psychosocial Intervention				oids	Alcohol	Stimulants	Cannabis
Behavi	Behavioral Couples Therapy (BCT)					++		
Cognitive Behavioral Coping Skills Training (CBT)			7	?	++	++	++	
Contingency Management (CM)				H	F	?	+	+
Community Reinforcement Approach (CRA)						++	++	
Individual Drug Counseling							+	
Motivational Enhancement Therapy (MET)						++	?	++
12-Ste	12-Step Facilitation (TSF)					++		
								73

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





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

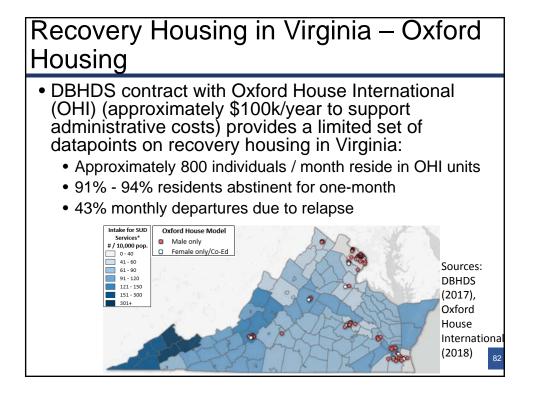
- Approach: non-treatment-oriented/non-clinical selfhelp groups offering participants social, emotional and informational support and model of abstinence
- Evidence*
 - Data from long-term observational studies indicate that participation in mutual support groups is associated with better 16-year outcomes 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

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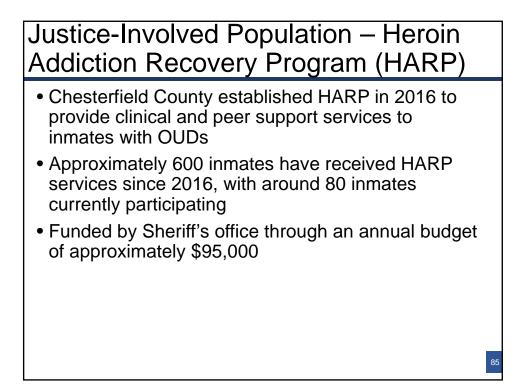


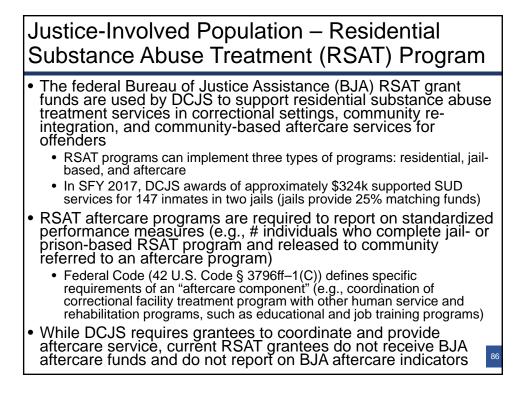
• Initiatives at Virginia's higher education institutions

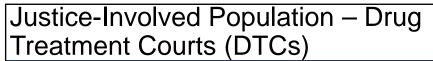
- VCU "RAMS in Recovery": 50-60 students participate in recovery support services and 1-credit course; 6 students currently live in recovery housing
- Washington & Lee University's Washingtonian Recovery Community: 10-15 students participate in recovery support services; 4 students currently live in 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



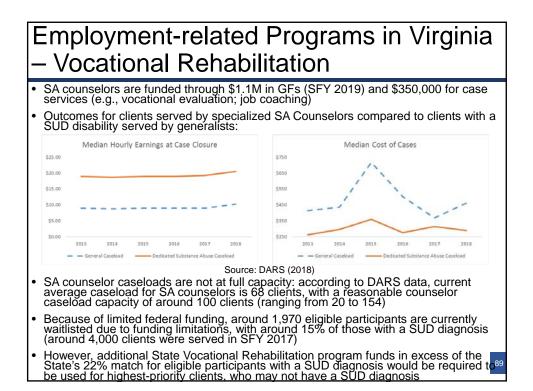




- In SFY 2017, 49 drug treatment dockets are operating in Virginia
 - Since 2016, State budget language has authorized funding for MAT (Vivitrol) pilots, with Norfolk, Henrico and Bristol Adult Courts currently taking part (since 2017, MAT has been provided to 16 participants)
- Body of evidence indicates that DTC participation is associated with reduced recidivism, and DTCs to be costeffective 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

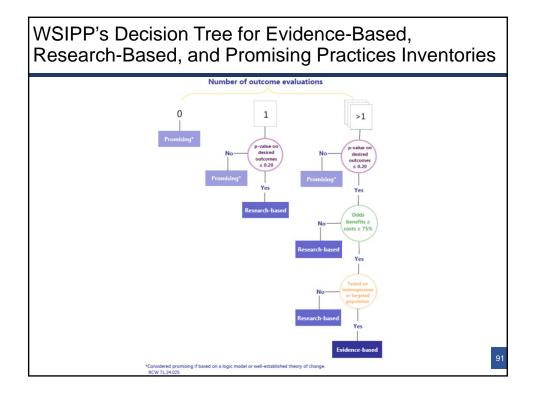
Justice-Involved Population – DBHDS Programs

- 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 – 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



Cost-Benefit Estimates – Justice-Involved Population in Virginia

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

	Other Indicators ^b			
	let Cost Impact ^a	Recidivism	Employment and Earnings	
Department of Corrections				
Inmates in Therapeutic Communities	\oplus	•••		
Inmates in Transitional Therapeutic Communities	Θ	•	()	
Adults on State Probation	\oplus	\oplus	œ	
Local and Regional Jails				
Inmates in Therapeutic Communities	\oplus	Ð	()	
Inmates in Other Services	Θ	Ð	Ð	
Inmates in Therapeutic Communities vs. Other Ser	vices 🕀	Θ	Θ	
Outcome of Population that completed trea Better: imposed lower costs, had lower n Worne: imposed higher costs, had higher Mixed: had an average difference of less or had mixed employment and examing s	ecidivism rates, or had higher r recidivism rates, or had lowe than 5 percentage points acr	r employment rates and e	earnings.	

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: 						
Credentials	Classification	Eligible to bill Medicaid*				
Completed 72-hour DBHDS PRS training	Peer Recovery Specialist (PRS)	N				
PRS credentials + certified by Virginia Certification Board	Certified Peer Recovery Specialist (CPRS)	N				
CPRS credentials + registered with DHP	Registered Peer Recovery Specialist (RPRS)	Υ				
* 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

Service	Provider							
Type (60 minutes)	Class	Medicaid provider	MD	Psychol -ogist	Master's Level	Clinical Nurse Specialist		
Peer Support (individual)	ARTS/MH	\$26						
Peer Support (group)*	ARTS/MH	up to \$108						
Psychotherapy (individual)	non-ARTS		\$107.98	\$97.18	\$72.89	\$72.89		
Group Psychotherapy	non-ARTS		\$21.66	\$19.49	\$14.62	\$14.62		
 \$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% 								
* Group size ranges from 2 – 10 individuals								

Slides 5, 68

- American Psychiatric Association, 2012. *Diagnostic and statistical manual of mental disorders: DSM-5.*, Arlington, VA: American Psychiatric Association.
- American Psychiatric Association, 2018. What is Addiction?
- Fleury, M.-J. et al., 2015. Remission from substance use disorders: A systematic review and meta-analysis. *Drug and Alcohol Dependence*, 168, pp.293–306.
- National Institute on Drug Abuse (NIDA), 2018. Principles of Drug Addiction Treatment: A Research-Based Guide 3rd ed.

Slide 6

- American Psychiatric Association, 2012. *Diagnostic and statistical manual of mental disorders: DSM-5.*, Arlington, VA: American Psychiatric Association.
- Maisto, S.A. et al., 2016. Do Alcohol Relapse Episodes During Treatment Predict Long-Term Outcomes?: Investigating the Validity of Existing Definitions of Alcohol Use Disorder Relapse. *Alcohol Clin Exp Res*, 40(10), pp.2180–2189.

Slide 7

- Substance Abuse and Mental Health Services Administration, 2018. Key Substance Use and Mental Health Indicators in the United States:Results from the 2017 National Survey on Drug Use and Health, Rockville, MD, USA: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
- Winkelman, T., Chang, V. & Binswanger, I., 2018. Health, polysubstance use, and criminal justice involvement among adults with varying levels of opioid use. JAMA Network Open, 1(3), p.e180558.

95

96

References

Slide 8

- Substance Abuse and Mental Health Services Administration, 2018. Key Substance Use and Mental Health Indicators in the United States: Results from the 2017 National Survey on Drug Use and Health, Rockville, MD, USA: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
- Substance Abuse and Mental Health Services Administration (SAMHSA), 2018. Treatment Episode Data Set Admissions (TEDS-A), 2010-2015,

Slides 9, 70

• Department of Behavioral Health and Developmental Services (DBHDS), 2018. Virginia Social Indicator Dashboard: Behavioral Health Services (2016).

Slide 12

 National Institute on Drug Abuse (NIDA), 2018. Principles of Drug Addiction Treatment: A Research-Based Guide 3rd ed.

Slide 14

- Batts, K. et al., 2014. Comparing and Evaluating Substance Use Treatment Utilization Estimates from the National Survey on Drug Use and Health and Other Data Sources, SAMHSA.
- Substance Abuse and Mental Health Services Administration (SAMHSA), 2018. *Treatment Episode Data Set Admissions (TEDS-A), 2010-2015.*

Slide 16

Virginia Commonwealth University, 2018. ARTS Evaluation Data on continuity of pharmacotherapy for OUD.

Slide 19

- National Institute on Drug Abuse, 2014. Principles of Drug Abuse Treatment for Criminal Justice Populations: A Research-Based Guide.
- National Institute on Drug Abuse (NIDA), 2018. Principles of Drug Addiction Treatment: A Research-Based Guide 3rd ed.

Slide 20

- American Society of Addiction Medicine, 2018. What is the ASAM Criteria?
- Magura, S. et al., 2003. Predictive Validity of the ASAM Patient Placement Criteria for Naturalistically Matched vs. Mismatched Alcoholism Patients. *The American Journal* on Addictions, 12(5), pp.386–397.
- Sharon, E. et al., 2004. Predictive Validity of the ASAM Patient Placement Criteria for Hospital Utilization. *Journal of Addictive Diseases*, 22(sup1), pp.79–93.

Slides 21, 74-76

- Carroll, K.M. & Weiss, R.D., 2017. The role of behavioral interventions in buprenorphine maintenance treatment: A review. Am J Psychiatry, 174(8), pp.738– 747.
- Castells, X. et al., 2016. Psychostimulant drugs for cocaine dependence. *Cochrane Database of Systematic Reviews*, (9).
- Fullerton, C.A. et al., 2014. Medication-Assisted Treatment With Methadone: Assessing the Evidence. *Psychiatric Services*, 65(2), pp.146–157.

References

Slides 21, 74-76 (continued)

- Gouzoulis-Mayfrank*, E. et al., 2017. Methamphetamine-Related Disorders. Dtsch Arztebl Int, 114(26), pp.455–461.
- Lee, J.D. et al., 2017. Comparative effectiveness of extended-release naltrexone versus buprenorphine-naloxone for opioid relapse prevention (X:BOT): a multicentre, open-label, randomised controlled trial. *The Lancet*, 391(10118), pp.309–318.
- Lott, D.C., 2017. Extended-release naltrexone: good but not a panacea. The Lancet, 391(10118), pp.283–284.
- Marshall, K. et al., 2014. Pharmacotherapies for cannabis dependence. *Cochrane Database Syst Rev*, 12, p.10.1002/14651858.CD008940.pub2.
- Mattick, R.P. et al., 2014. Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. Cochrane Database of Systematic Reviews, (2).
- Mattick, R.P. et al., 2009. Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence. *Cochrane Database of Systematic Reviews*, (3).
- Nunes, E.V. et al., 2015. Treating Opioid Dependence With Injectable Extended-Release Naltrexone (XR-NTX): Who Will Respond? J Addict Med, 9(3), pp.238– 243.
- Pani, P.P. et al., 2010. Antidepressants for cocaine dependence and problematic cocaine use. *Cochrane Database of Systematic Reviews*, (12).

98

Slides 21, 74-76 (continued)

- Pettinati, H.M., Anton, R.F. & Willenbring, M.L., 2006. The COMBINE Study—: An Overview of the Largest Pharmacotherapy Study to Date for Treating Alcohol Dependence. *Psychiatry (Edgmont)*, 3(10), pp.36–39.
- Sangroula, D. et al., 2017. Modafinil Treatment of Cocaine Dependence: A Systematic Review and Meta-Analysis. *Substance Use & Misuse*, 52(10), pp.1292–1306.
- Singh, M. et al., 2016. Topiramate for cocaine dependence: a systematic review and meta-analysis of randomized controlled trials. Addiction, 111(8), pp.1337–1346.
- Swift, R.M. & Aston, E.R., 2015. Pharmacotherapy for Alcohol Use Disorder: Current and Emerging Therapies. *Harv Rev Psychiatry*, 23(2), pp.122–133.
- Thomas, C.P. et al., 2014. Medication-Assisted Treatment With Buprenorphine: Assessing the Evidence. *Psychiatric Services*, 65(2), pp.158–170.
- U.S. Department of Health and Human Services (HHS), 2016. Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health, Washington, DC: HHS.
- Walther, L. et al., 2016. Evidence-based Treatment Options in Cannabis Dependency. Dtsch Arztebl Int, 113(39), pp.653–659.

99

Slide 22

 IOM (Institute of Medicine), 2015. Psychosocial interventions for mental and substance use disorders: A framework for establishing evidence-based standards, Washington, DC: The National Academies Press.

References

- Darker, C.D. et al., 2015. Psychosocial interventions for benzodiazepine harmful use, abuse or dependence. *Cochrane Database of Systematic Reviews*, (5).
- Davis, D.R. et al., 2016. A review of the literature on contingency management in the treatment of substance use disorders, 2009–2014. *Prev Med*, 92, pp.36–46.
- Davis, M.L. et al., 2015. Behavioral Therapies for Treatment-Seeking Cannabis Users: A Meta-Analysis of Randomized Controlled Trials. *Eval Health Prof*, 38(1), pp.94–114.
- Dutra, L. et al., 2008. A Meta-Analytic Review of Psychosocial Interventions for Substance Use Disorders. *American Journal of Psychiatry*, 165(2), pp.179–187.
- Hofmann, S.G. et al., 2012. The Efficacy of Cognitive Behavioral Therapy: A Review of Meta-analyses. Cognit Ther Res, 36(5), pp.427–440.
- Huhn, M. et al., 2014. Efficacy of pharmacotherapy and psychotherapy for adult psychiatric disorders: A systematic overview of meta-analyses. JAMA Psychiatry, 71(6), pp.706–715.
- Knapp, W.P. et al., 2007. Psychosocial interventions for cocaine and psychostimulant amphetamines related disorders. *Cochrane Database of Systematic Reviews*, (3).
- Magill, M. & Ray, L.A., 2009. Cognitive-Behavioral Treatment With Adult Alcohol and Illicit Drug Users: A Meta-Analysis of Randomized Controlled Trials. J Stud Alcohol Drugs, 70(4), pp.516–527.
- Mendola, A. & Gibson, R., 2016. Addiction, 12-Step Programs, and Evidentiary Standards for Ethically and Clinically Sound Treatment Recommendations: What Should Clinicians Do? AMA Journal of Ethics, 6, pp.646–655.

Slide 23 (continued)

• Smedslund, G. et al., 2011. Motivational interviewing for substance abuse. Cochrane Database of Systematic Reviews, (5).

Slide 24

- Amato, L. et al., 2011. Psychosocial combined with agonist maintenance treatments versus agonist maintenance treatments alone for treatment of opioid dependence. *Cochrane Database of Systematic Reviews*, (10).
- Department of Veterans Affairs & Department of Defense, 2015. VA/DoD Clinical Practice Guidelines for the Management of Substance Use Disorders.
- Dugosh, K. et al., 2016. A Systematic Review on the Use of Psychosocial Interventions in Conjunction With Medications for the Treatment of Opioid Addiction. *J Addict Med*, 10(2), pp.91–101.
- Virginia Commonwealth University, 2018. *Many Buprenorphine Users Receive No Other Services for Addiction Disorders*, Virginia Commonwealth University.

References

Slide 25

- National Institute on Drug Abuse (NIDA), 2018. Principles of Drug Addiction Treatment: A Research-Based Guide 3rd ed.
- Penzenstadler, L. et al., 2017. Effects of Case Management Interventions for Patients with Substance Use Disorders: A Systematic Review. *Frontiers in Psychiatry*, 8(51), pp.1–17.

Slide 29

- California Research Bureau, 2016. Sober Living Homes in California: Options for State and Local Regulation, CRB.
- National Association of Recovery Residences, 2018. Recovery Residence Levels of Support, NARR.
- National Council for Behavioral Health, 2018. Building Recovery: State Policy Guide for Supporting Recovery Housing.
- Reif, S. et al., 2014. Recovery Housing: Assessing the Evidence. *Psychiatric Services*, 65(3), pp.295–300.

- Reif, S. et al., 2014. Peer Recovery Support for Individuals With Substance Use Disorders: Assessing the Evidence. *Psychiatric Services*, 65(7), pp.853–861.
 Slide 34
- Department of Corrections, 2017. *Operating Procedure: Community Corrections Alternative Program*, DOC.
- Department of Corrections, 2017. Judicial Mapping Project: CY2016 Special Report on Substance Abuse among VADOC Populations, DOC.

Slide 35

- Carr, W.A., Baker, A.N. & Cassidy, J.J., 2016. Reducing criminal recidivism with an enhanced day reporting center for probationers with mental illness. *Journal of Offender Rehabilitation*, 55(2), pp.95–112.
- Department of Criminal Justice Services, 1996. Evaluation of the Fairfax Day Reporting Center (FDRC): Final Report, DCJS.
- Department of Criminal Justice Services, 1997a. Evaluation of the Norfolk Day Reporting Center (NDRC): Final Report, DCJS.
- Department of Criminal Justice Services, 1997b. *Evaluation of the Richmond Day Reporting Center (RDRC): Final Report*, DCJS.

Slide 36

- Douaihy, A. et al., 2011. Therapist's Guide to Evidence-Based Relapse Prevention: Relapse Prevention:Clinical Strategies for Substance Use Disorders A. Marlatt & K. Witkiewitz, eds., Elsevier Science & Technology.
- Rog, D.J. et al., 2014. Permanent Supportive Housing: Assessing the Evidence. *Psychiatric Services*, 65(3), pp.287–294.
- Smelson, D.A. et al., 2016. Integrating Permanent Supportive Housing and Co-Occurring Disorders Treatment for Individuals Who Are Homeless. *Journal of Dual Diagnosis*, 12(2), pp.193–201.
- Somers, J., Moniruzzaman, A. & Palepu, A., 2015. Changes in daily substance use among people experiencing homelessness and mental illness: 24-month outcomes following randomization to Housing First or usual care. *Addiction*, 110, pp.1605–1614.

References

Slide 39

 Filene, J.H. et al., 2013. Components Associated With Home Visiting Program Outcomes: A Meta-Analysis. *Pediatrics*, 132(0 2), pp.S100–S109.

Slide 40

- Compton, W.M. et al., 2014. Unemployment and Substance Outcomes in the United States 2002-2010. *Drug Alcohol Depend*, 0, pp.350–353.
- Henkel, D., 2010. Unemployment and Substance Use: A Review of the Literature (1990-2010). *Current Drug Abuse Reviews*, 4(1), pp.4–27.
- Hser, Y.-I. et al., 2015. Long-Term Course of Opioid Addiction. *Harvard Review of Psychiatry*, 23, pp.76–89.
- Magura, S. et al., 2004. The Effectiveness of Vocational Services for Substance Users in Treatment. *Substance Use & Misuse*, 39(13–14), pp.2165–2213.

Slide 41

 Department of Aging and Rehabilitative Services, 2018. DARS Program Data: 2011 - 2018 (personal communication), DARS.

Slide 47

- Auerbach, A., Kripalani, S. & Vasilevskis, E., 2016. Preventability and causes of readmissions in a national cohort of general medicine patients. *JAMA Internal Medicine*, 176(4), pp.484–493.
- Bauer, J. et al., 2014. Interventions to Promote Health and Increase Health Care Efficiency: A Review of the Evidence, Olympia, WA: Washington State Institute for Public Policy.
- McMartin, K., 2013. Discharge Planning in Chronic Conditions: An Evidence-Based Analysis. Ontario Health Technology Assessment Series, 13, pp.1–72.
- State of Rhode Island, 2016. Rhode Island General Laws 23-17.26-3. Comprehensive discharge planning,
- Walley, A.Y. et al., 2012. Acute Care Hospital Utilization Among Medical Inpatients Discharged With a Substance Use Disorder Diagnosis. *J Addict Med*, 6(1), pp.50–56.

Slide 49

- French, M.T. et al., 2002. Benefit-Cost Analysis of Addiction Treatment: Methodological Guidelines and Empirical Application Using the DATCAP and ASI. *Health Serv Res*, 37(2), pp.433–455.
- Murphy, S.M. & Polsky, D., 2016. Economic Evaluations of Opioid Use Disorder Interventions: A Systematic Review. *Pharmacoeconomics*, 34(9), pp.863–887.
- Sindelar, J.L. et al., 2003. Cost-effectiveness analysis of addiction treatment: paradoxes of multiple outcomes. *Drug and Alcohol Dependence*, 73(1), pp.41– 50.

References

Slide 50

 Ettner, S.L. et al., 2006. Benefit–Cost in the California Treatment Outcome Project: Does Substance Abuse Treatment "Pay for Itself"? *Health Serv Res*, 41(1), pp.192–213.

Slides 51-53

- Miller, M. et al., 2016. Updated Inventory of evidence-based, research-based, and promising practices prevention and intervention services for adult behavioral health, Olympia, WA: Washington State Institute for Public Policy.
- Wanner, P., 2018. Inventory of evidence-based, research-based, and promising programs for adult corrections, Olympia, WA: Washington State Institute for Public Policy.
- Washington State Institute for Public Policy, 2018. Benefit-Cost Results.

- Department of Health Professions, 2018a. Current Count of Licenses, Quarterly Summary: Quarter 4 - Fiscal Year 2018, DHP.
- Department of Health Professions, 2018b. Practitioner Profile Database, DHP.
- Healthcare Workforce Data Center, 2017a. Virginia's Licensed Clinical Psychologist Workforce: 2017, DHP.
- Healthcare Workforce Data Center, 2017b. Virginia's Licensed Clinical Social Worker Workforce: 2017, DHP.
- Healthcare Workforce Data Center, 2017c. Virginia's Licensed Professional Counselog Workforce: 2017, Richmond, VA: DHP.

Slide 69

 Neuhausen, K., 2017. Virginia Medicaid Perspective on Best Practices in the Treatment of Opioid Use Disorder, Department of Medical Assistance Services.

Slide 71

• Substance Abuse and Mental Health Services Administration, 2018. The Treatment Episode Data Set (TEDS).

Slide 73

 Department of Veterans Affairs & Department of Defense, 2015. VA/DoD Clinical Practice Guidelines for the Management of Substance Use Disorders.

Slide 80

- Beck, A.K. et al., 2016. Systematic review of SMART Recovery: Outcomes, process variables, and implications for research. *Psychology of Addictive Behaviors*, 31(1), pp.1–20.
- Ferri, M., Amato, L. & Davoli, M., 2006. Alcoholics Anonymous and other 12-step programmes for alcohol dependence. *Cochrane Database of Systematic Reviews*, (3).
- Moos, R.H. & Moos, B.S., 2006. Participation in Treatment and Alcoholics Anonymous: A 16-Year Follow-Up of Initially Untreated Individuals. *J Clin Psychol*, 62(6), pp.735–750.

References

Slide 81

- de Andrade, D. et al., 2018. Substance Use and Recidivism Outcomes for Prison-Based Drug and Alcohol Interventions. *Epidemiologic Reviews*, 40(1), pp.121–133.
- Perry, A.E. et al., 2015. Pharmacological interventions for drug-using offenders. *Cochrane Database of Systematic Reviews*, (6).

Slide 82

- Department of Behavioral Health and Development Services (DBHDS), 2017. FY2016 Individuals Receiving SUD services for all 40 CSBs, Richmond, VA: DBHDS.
- Department of Behavioral Health and Developmental Services, 2017. Oxford Houses of Virginia: House Activity Report (September, 2016 -August, 2017), DBHDS.
- Oxford House International, 2018. Oxford Houses of Virginia -Directory.

Slide 83

 State Council of Higher Education for Virginia, 2017. HB 1447 Report: Collegiate Recovery Programs, SCHEV.

8

Slide 84

- Department of Corrections, 2018a. Behavioral Correction Program (BCP), DOC.
- Department of Corrections, 2018b. Quarterly Report to the Governor and General Assembly (§53.1-10.7): Demographic, Offense and Health Information of Offenders Incarcerated in VADOC Facilities (CY2017), DOC.

Slide 86

• Department of Criminal Justice Services, 2018. *Residential Substance Abuse Treatment (RSAT) Grant Program Performance Measures*, DCJS.

Slide 87

- Cheesman, F.L. et al., 2016. Drug Court Effectiveness and Efficiency: Findings for Virginia. *Alcoholism Treatment Quarterly*, 34(2), pp.143–169.
- Jewell, J. et al., 2017. The Long Term Effectiveness of Drug Treatment Court on Reducing Recidivism and Predictors of Voluntary Withdrawal. International Journal of Mental Health & Addiction, 15(1), pp.28–39.

10 9

• Mitchell, O. et al., 2011. Assessing the effectiveness of drug courts on recidivism: A meta-analytic review of traditional and non-traditional drug courts. *Journal of Criminal Justice*, 40(1), pp.60–71.

References

Slide 87

- Office of the Executive Secretary, 2018. Virginia Drug Treatment Courts: 2017 Annual Report, Supreme Court of Virginia.
- Rossman, S. et al., 2011. *The Multi-Site Adult Drug Court Evaluation: The Impact of Drug Courts*, Washington, DC: Urban Institute.
- Wilson, J.L. et al., 2018. Identifying Predictors of Substance Use and Recidivism Outcome Trajectories Among Drug Treatment Court Clients. *Criminal Justice and Behavior*, 45(4), pp.447–467.

Slide 91

 Cramer, J., Bitney, K. & Wanner, P., 2018. WSIPP's Decision Tree for Evidence-Based, Research-Based, and Promising Practices Inventories, Washington State Institute for Public Policy.

Slide 92

• Joint Legislative Audit and Review Commission, 2008. *Mitigating the Costs of Substance Abuse in Virginia*, Richmond, VA: JLARC.

- Department of Medical Assistance Services, 2016. *Peer Rate Information: Letter to Stakeholders*, Richmond, VA: DMAS.
- Magellan of Virginia, 2018. Magellan VA Medicaid/DMAS Rates, Magellan o Virginia.