MIDD 2018 Annual Report

Technical Supplement

King County Department of Community and Human Services

King County
MIDD Supporting behavioral health and recovery

Table of Contents

Results-Based Accountability (RBA) Framework and Technical Supplement Overview 4

How Much Was Done? 4

How Well Was It Done? 5

Increased Use of Prevention (Outpatient) Services 5

Increased Perception of Health and Behavioral Health Issues and Disorders 7

Increased Job Placement and Retentions 9

Is Anyone Better Off? 10

Policy Goal 1: Divert Individuals to Reduce Costly System Use 11

Overall Costly Systems Use Changes over Time 15

Adult Jail Use Changes over Time 16

Psychiatric Inpatient Hospitalization Changes over Time 19

Emergency Department Admission Changes over Time 21

Prevention and Diversion Statistics for Individuals with 2015 MIDD Service Starts 24

Adult Jail Prevention or Diversion 24

Psychiatric Inpatient Prevention or Diversion 25

Emergency Department Prevention or Diversion 26

Emergency Department Use Comparing Harborview Medical Center with Other Facilities in the Region 27

Juvenile Legal System Changes over Time 28

Policy Goal 2: Reduce Crisis Events 29

Crisis Reduction Statistics for Adults 29

Crisis Reduction Statistics for Youth and Young Adults 32

Policy Goal 3: Increase Culturally Appropriate, Trauma-Informed Behavioral Health Services 33

Policy Goal 4: Improve Health and Wellness 35

Positively Engaged in Treatment or Met Treatment Goals 35

Minimal Service Disruptions 35
Goal Attainment 35
Positive Exit Dispositions 36
Engagement in Ongoing Treatment or Successful Treatment Completions 37
Measures of Reduced Behavioral Risk Factors or Stressors 38
Patient Health Questionnaire (PHQ-9) and Generalized Anxiety Disorder (GAD-7) 38
Problem Severity Summary (PSS) 39
Children's Functional Assessment Rating Scale (CFARS) 41
Substance Use in the Past 30 Days 42
The Caregiver Strain Questionnaire 43
Policy Goal 5: Explicit Linkage with Other Initiatives 44
Updated Initiative Performance Measures 45
MIDD Population-Based Indicators 54

Results-Based Accountability (RBA) Framework and Technical Supplement Overview

King County Ordinance 18407 requires ongoing evaluation of the county's Mental Illness and Drug Dependency (MIDD) sales tax-funded services and programs. Using a Results-Based Accountability (RBA) framework, the MIDD evaluation seeks to measure **"How much?"** (Quantity), **"How well?"** (Quality), and **"Is anyone better off?"** (Outcomes) for all MIDD-funded initiatives. The current detailed matrix showing which RBA performance measures are aligned with each initiative begins on page 45. Population-based indicators have also been identified to gauge the potential contribution of MIDD programming toward improving the overall health and well-being of all King County residents. Where available, the most recent population data is shown beside previously-reported baseline measures beginning on page 54.

Most results presented in this technical supplement are meant to enhance the high-level evaluation findings presented in the MIDD 2018 Annual Report that is due to the King County Council in August 2019. All of the results shown here describe patterns observed in the data, but must be interpreted cautiously. Without benefit of a control or comparison group, it is difficult to tease out the impact of often overlapping interventions delivered through dozens of community-based providers and county agencies and departments in multiple locations across the county. Due to the ethical and cost considerations of adopting a control group evaluation methodology, the MIDD evaluation in general will not attempt to show causality, or to attribute observed outcomes to the MIDD interventions.

How Much Was Done?

A total of 53 MIDD initiatives, organized into the five strategy areas highlighted below, were included in the MIDD 2 Evaluation Plan (June 2017). Forty-three of these initiatives (81%) were implemented and had at least preliminary performance measurement data in 2018.

- In the **Prevention and Early Intervention** strategy area, "more than 85 percent of annual performance target" was met by six of nine initiatives (66%).
- In the **Crisis Diversion** strategy area, "more than 85 percent of annual performance target" was met by nine of 12 initiatives (75%) with determined targets. Another three initiatives in this category began serving youth in 2018. Targets will be determined after collection of adequate baseline data.
- For **Recovery and Reentry** strategies, "more than 85 percent of annual performance target" was met by seven of 10 initiatives (70%) with determined targets. Two additional initiatives served participants while awaiting a final determination on target setting.
- Two of four initiatives in the **System Improvements** strategy area were implemented in 2018 and targets had yet to be determined by year end.
- Four of the five **Therapeutic Courts** (80%) met "more than 85 percent of annual performance target." The community court pilot was newly implemented in 2018 and began serving participants; a target will be determined after collection of adequate baseline data.

For detailed 2018 performance results, please see tables beginning on page 14 in the MIDD 2018 Annual Report.

How Well Was It Done?

Increased Use of Prevention (Outpatient) Services

Increased use of prevention services was the most common service quality measure cited across initiatives, with the "percentage of participants linked to publicly-funded behavioral health treatment" serving as the most popular form of measurement. Table 1 below shows the behavioral health linkage rates for the 16 relevant initiatives that were fully implemented in 2018, were not undergoing significant redesign, and had at least 10 people eligible[1] for outcomes.

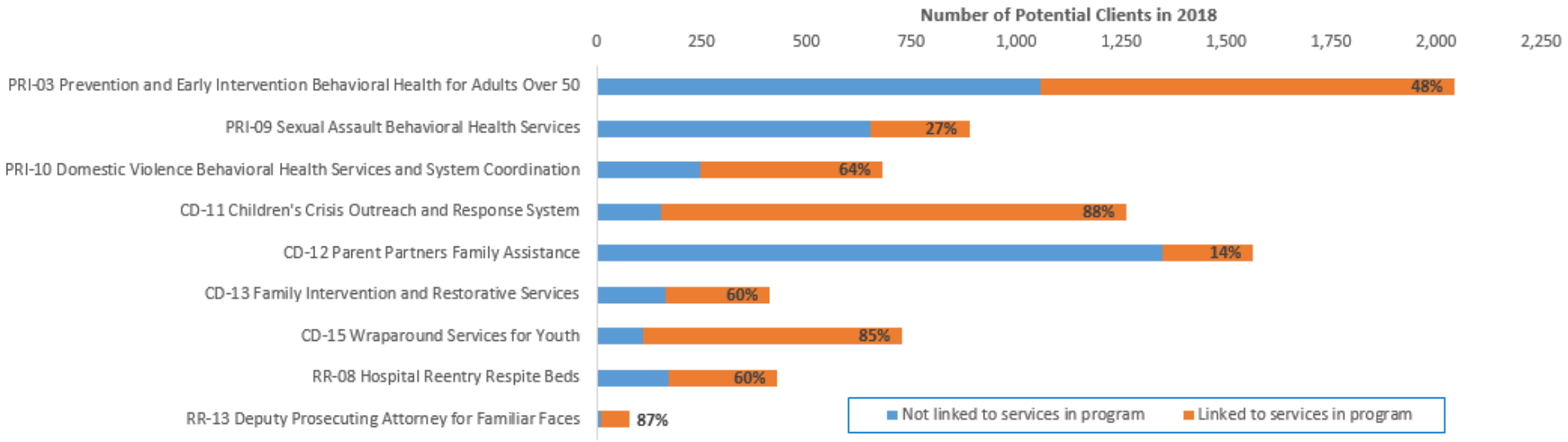
Table 1. MIDD Participants Linked to Publicly-Funded Behavioral Health Treatment at Rates as High as 84 Percent

Initiative	Number Eligible for Measure	Linked to Treatment in Year Before MIDD Start	Linked to Treatment in Year After MIDD Start	Any Linkage	Type of Linkage (Percent of Any Linkage)		
					Mental Health Only	Substance Use Disorder (SUD) Only	Both Mental Health and SUD
PRI-01 Screening, Brief Intervention and Referral to Treatment (SBIRT)	5,035	222 (4%)	866 (17%)	1,088 (22%)	428 (39%)	398 (37%)	262 (24%)
PRI-02 Juvenile Justice Youth Behavioral Health Assessments	719	24 (3%)	161 (22%)	185 (26%)	83 (45%)	81 (44%)	21 (11%)
CD-01 Law Enforcement Assisted Diversion	210	41 (20%)	81 (38%)	122 (58%)	16 (13%)	75 (61%)	31 (26%)
CD-03 Outreach and In Reach System of Care	1,180	80 (7%)	347 (29%)	427 (36%)	182 (42%)	174 (41%)	71 (17%)
CD-05 High Utilizer Care Teams	171	26 (15%)	65 (38%)	91 (53%)	47 (52%)	21 (23%)	23 (25%)
CD-06 Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	6,222	381 (6%)	1,617 (26%)	1,998 (32%)	1,378 (69%)	225 (11%)	395 (20%)
CD-07 Multipronged Opioid Strategies	1,189	131 (11%)	457 (38%)	588 (49%)	44 (7%)	426 (72%)	118 (21%)
CD-10 Next Day Crisis Appointments	1,322	11 (1%)	353 (27%)	364 (28%)	276 (76%)	36 (10%)	52 (14%)
CD-14 Involuntary Treatment Triage	104	12 (12%)	33 (32%)	45 (44%)	Over 75% were linked to mental health treatment.		
RR-01 Housing Supportive Services	385	69 (18%)	150 (39%)	219 (57%)	134 (61%)	44 (20%)	41 (19%)
RR-06 Jail Reentry System of Care	819	49 (6%)	334 (41%)	383 (47%)	83 (22%)	182 (48%)	118 (31%)
RR-11a Peer Bridger Programs	321	48 (15%)	195 (61%)	243 (76%)	186 (76%)	12 (5%)	42 (19%)
RR-11b Substance Use Disorder Peer Support	484	112 (23%)	188 (39%)	300 (62%)	137 (46%)	66 (22%)	97 (32%)
TX-FTC Family Treatment Court	96	24 (25%)	57 (59%)	81 (84%)	Over 75% were linked to SUD treatment.		
TX-JDC Juvenile Drug Court	200	<10	>50	64 (32%)	11 (17%)	43 (67%)	10 (16%)
TX-RMHC Regional Mental Health and Veterans Court	439	44 (10%)	183 (42%)	227 (43%)	102 (45%)	20 (9%)	105 (46%)

Another nine initiatives gauged service quality by the "percentage of participants linked to needed treatment or services *within* their programs." The number of potential participants was based on "positive" screenings, assessments, referrals, or outreach attempts done in 2018. Results are shown in Figure 1 below.

[1] For this measurement, individuals with service starts between 1/1/2015 and 12/31/2017 were eligible for inclusion.

Figure 1. Linkage Rates Ranged from 14 to 88 Percent in 2018 with Two Programs Linking Youth to Services at Rates of 85 Percent or Higher



For two other initiatives, the "percentage of participants completing or successful in ongoing treatment" was identified to measure service quality. For individuals served in **PRI-11 Community Behavioral Health Treatment**, Table 2 shows higher completion rates for participants in substance use disorder (SUD) treatment, but higher ongoing active engagement rates for participants in mental health treatment. Note that pre-2018 exits coded "whereabouts unknown/lost to contact" were more common for mental health treatment (n=514 of 1,612, 32%) than for SUD treatment (n=144 of 1,039, 14%).

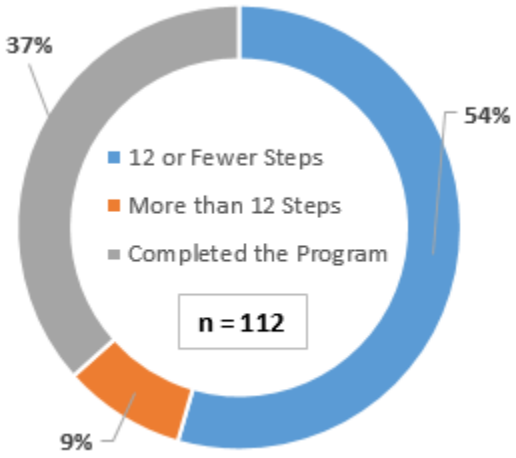
Table 2. Behavioral Health Treatment Completed by Up to 20 Percent, with Most Who Continued in Services Considered "Actively Engaged"

	Mental Health Treatment	SUD Treatment
Number of people enrolled in treatment with program starts between 2015 and 2017	4,191 people	1,440 people
People who exited from treatment prior to 2018	1,612 of 4,191 (38%)	1,039 of 1,440 (72%)
Pre-2018 exits coded as "completed treatment" (% of people completing treatment)	179 of 1,612 (11%)	211 of 1,039 (20%)
People who continued treatment into 2018	2,579 of 4,191 (62%)	401 of 1,440 (28%)
2018 exits coded as "completed treatment" (% of people completing treatment in 2018)	133 of 972 (14%)	75 of 259 (29%)
Served in at least three months in 2018 (Percent "actively engaged" in ongoing treatment)	1,476 of 1,607 (92%)	121 of 142 (85%)

For **RR-02 Behavior Modification at CCAP**,[2] completion and successful engagement in ongoing services was measured by the number of program steps achieved, with 24 steps indicating that the program was completed. Figure 2 shows the results for 112 individuals who began services between 2015 and 2017.

[2] Community Center for Alternative Programs offered Moral Reconation Therapy primarily for domestic violence offenders (DV-MRT) under this initiative.

Figure 2. About One in Three Behavior Modification Participants Completed the Program



Increased Perception of Health and Behavioral Health Issues and Disorders

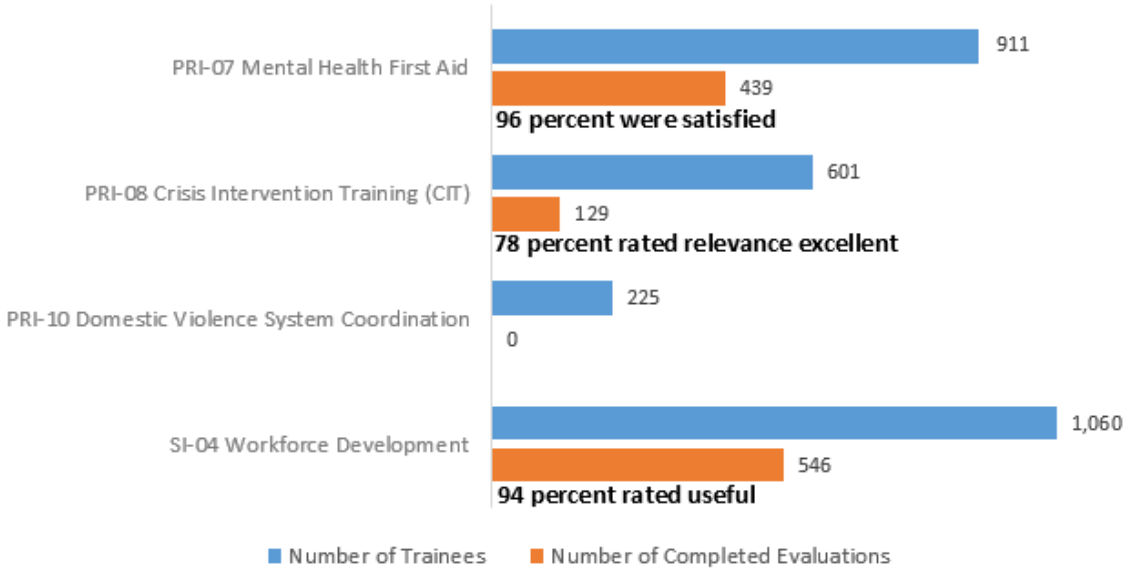
The "percentage of respondents rating courses relevant and useful" was a service quality indicator for many of the MIDD initiatives focused on providing training opportunities in the community. In 2018, **PRI-07 Mental Health First Aid** delivered 62 trainings with a total of 1,125 trainees. In post-training surveys completed by 439 people, 95 percent of participants agreed that they would recommend the training to others and 96 percent indicated overall satisfaction.

MIDD funding also supported 38 trainings delivered under **PRI-08 Crisis Intervention Training (CIT) – First Responders**. A total of 601 police, fire, and emergency personnel serving King County completed these trainings. The 40-hour basic CIT training was completed by 342 people. In post-training surveys, 104 of the 129 respondents who completed surveys (81%) rated the quality as "Excellent." These respondents also rated the relevance and usefulness of the training favorably, with 100 people (78%) giving an excellence rating.

Under **PRI-10 Domestic Violence Behavioral Health Services and System Coordination**, over 225 individuals received cross-systems training in 2018, including 130 staff from mental health treatment agencies, 50 from substance use disorder treatment agencies, and 42 from domestic violence advocacy agencies. Additionally, 43 system coordination events were documented, for a total of 56.75 consultation hours. Evaluation information was not available for these trainings and consultations.

Another 62 trainings were provided by **SI-04 Workforce Development** for 1,060 professionals whose work brings them into contact with individuals who may have a substance use disorder. In post-training surveys completed by 546 trainees, 91 percent of respondents indicated that they felt satisfied with the training overall. When asked how useful the training was, 94 percent responded that the training was useful and 89 percent felt that the training was relevant to substance use disorder treatment. Figure 3 below shows the number of trainees, the number of completed evaluations, and the percent of respondents who rated the courses highly.

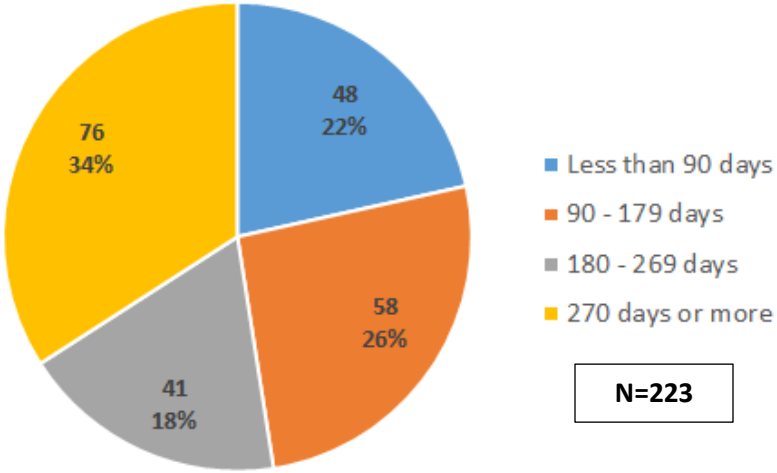
Figure 3. Training Evaluations Were Completed by 40 Percent of Trainees, Most of Whom Indicated Courses Offered Were Relevant and Useful



Increased Job Placement and Retentions

As in past years, **RR-10 Behavioral Health Employment Services and Supported Employment** showed job acquisition rates above 30 percent, with about one in three active[3] participants working in competitive jobs during 2018. Of the 817 people who completed vocational assessments prior to October 2018 and who had at least three months to find work, 302 (37%) were reportedly employed, with 218 (27%) being hired for at least one new job during 2018. Job retentions were relevant for a total of 262 people gainfully employed in both MIDD-funded job programs prior to October 2018, and 202 (77%) were known to have retained at least one job for 90 days or more. For the fidelity-based programs operated by select mental health treatment agencies throughout King County, maximum job retentions are shown below in Figure 4 for 223 retention-eligible participants.

Figure 4. Maximum Job Retentions for Participants in Fidelity-Based Supported Employment Programs



[3] To be considered active, participants had to have 2018 service hours in a fidelity-based supported employment program, or if participating in intensive employment services for individuals enrolled in substance use disorder treatment, an end date after 2017 plus a vocational assessment in 2017 or 2018.

Is Anyone Better Off?

A key aim of this evaluation is determining how MIDD-supported programs meet the five adopted policy goals: 1) divert individuals with behavioral health needs from costly interventions, such as jail, emergency rooms, and hospitals, 2) reduce the number, length, and frequency of behavioral health crisis events, 3) increase culturally appropriate, trauma-informed behavioral health services, 4) improve health and wellness of individuals living with behavioral health conditions, and 5) explicit linkage with, and furthering the work of, King County and community initiatives. For each MIDD initiative implemented before December 31, 2018, a primary policy goal and diversion priority, or expectation of greatest impact, was identified by MIDD staff as shown in Table 3 below. At a minimum, the MIDD evaluation seeks to explore relationships between each initiative and its primary policy goal, as outcomes information becomes available.

Table 3. Primary Policy Goal with Diversion Priority for Each Implemented MIDD Initiative

1. Divert individuals with behavioral health needs from costly interventions, such as jail, emergency rooms, and hospitals.

JAIL

CD-01 Law Enforcement Assisted Diversion
CD-03 Outreach and In Reach System of Care
RR-01 Housing Supportive Services
RR-02 Behavior Modification Classes at CCAP
RR-05 Housing Vouchers for Adult Drug Court
RR-06 Jail Reentry System of Care
RR-07 Behavioral Health Risk Assessment Tool for Adult Detention
RR-11b Substance Use Disorder Peer Support
RR-12 Jail-Based Substance Abuse Treatment
RR-13 Deputy Prosecuting Attorney for Familiar Faces
TX-ADC Adult Drug Court
TX-RMHC Regional Mental Health and Veterans Court
TX-SMC Seattle Municipal Mental Health Court
TX-CCPL Community Court Planning and Pilot

JUVENILE LEGAL SYSTEM

PRI-02 Juvenile Justice Youth Behavioral Health Assessments
CD-02 Youth Detention Prevention Behavioral Health Engagement
CD-13 Family Intervention and Restorative Services
CD-16 Youth Respite Alternatives
TX-JDC Juvenile Drug Court

EMERGENCY DEPARTMENT

PRI-01 Screening, Brief Intervention, and Referral to Treatment (SBIRT)
PRI-04 Older Adults Crisis Intervention / Geriatric Regional Assessment Team
CD-05 High Utilizer Care Teams
CD-06 Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team
CD-07 Multipronged Opioid Strategies
CD-10 Next Day Crisis Appointments
CD-14 Involuntary Treatment Triage
RR-08 Hospital Reentry Respite Beds

PSYCHIATRIC INPATIENT HOSPITAL

RR-03 Housing Capital and Rental
RR-11a Peer Bridger Programs

OTHER DIVERSION

PRI-08 Crisis Intervention Training – First Responders

2. Reduce the number, length, and frequency of behavioral health crisis events

CD-11 Children's Crisis Outreach and Response System
CD-17 Young Adult Crisis Stabilization

3. Increase culturally appropriate, trauma-informed behavioral health services

SI-04 Workforce Development

4. Improve health and wellness of individuals living with behavioral health conditions

PRI-03 Prevention and Early Intervention Behavioral Health for Adults Over 50
PRI-05 School Based SBIRT (Screening, Brief Intervention, and Referral to Treatment)
PRI-07 Mental Health First Aid
PRI-09 Sexual Assault Behavioral Health Services
PRI-10 Domestic Violence Behavioral Health Services and System Coordination
PRI-11 Community Behavioral Health Treatment
CD-08 Children's Domestic Violence Response Team
CD-12 Parent Partners Family Assistance
CD-15 Wraparound Services for Youth
RR-10 Behavioral Health Employment Services and Supported Employment
SI-03 Quality Coordinated Outpatient Care
TX-FTC Family Treatment Court

5. Explicit linkage with, and furthering the work of, King County and community initiatives

RR-04 Rapid Rehousing – Oxford House Model

Policy Goal 1: Divert Individuals to Reduce Costly System Use

Methods

Changes in the use of costly systems such as jails, psychiatric inpatient hospitals, and emergency departments (ED) are analyzed using a longitudinal methodology. Data collected over time from MIDD service providers and system partners for the same group of individuals are compared within individuals between various time periods, such as before vs. after services.[4] Data are typically reported as both **averages** (per person with any use in a given period) and **sums** (the total number of bookings, hospitalizations, admissions, or days in a given period).

Eligible Participants (Sample) and Individual Start Dates

Participants in programs that began prior to renewal of the MIDD and carried over to MIDD 2 without significant redesign have been included in the analyses of system use outcomes summarized in this report. Outcomes for participants with relevant program starts or index events[5] are tracked for up to three years, whereby earlier cohorts will be dropped as more recent cohorts become available to take their place. This approach will ultimately establish sample size parity and timeliness (relevance to current events). For the 2018 Annual Report, people who began MIDD services between 2014 and 2017 are eligible for inclusion in various time periods used to assess system use outcomes. Note that all 2014 cases have now been replaced by 2017 cases in the first post period results.

Time Periods, Case Inclusion, and Other Important Definitions

Table 4 below shows the definitions for each outcomes evaluation time period, along with the cases included for 2018 reporting purposes. All results are generated from data through December 31, 2018, based on availability in March 2019.

Table 4. Definitions of Evaluation Time Periods and Cases Included in Analyses of Each Period

Evaluation Time Period	Definition	Case Inclusion (If data available)
Pre Period	The one-year span of time leading up to (***before***) a person's individual MIDD start date or index event.	relative to below
Post 1	The ***first year after*** a person's individual start date or index event, also referred to as **short term** results.	2015-2017 starts
Post 2	The ***second year after*** a person's individual start date or index event.	2014-2016 starts
Post 3	The ***third year after*** a person's individual start date or index event, also referred to as **long term** results.	2014-2015 starts

The following definitions are commonly used in the results grids on pages 15 to 31. Note that at least one year must pass from the MIDD start date or index event before a person becomes eligible for most outcomes measurement. This means that people who began services in 2018 will typically not have reportable outcomes until 2020, which will be based on data collected through the end of 2019.

[4] Note that services may be delivered in a single encounter (service visit) or ongoing for an extended time, such as months or even years. Service delivery varies widely.

[5] An "index event" occurs when MIDD services begin *as a result of* being admitted to a costly system. A buffer is created around these events to prevent bias associated with counting them in any of the comparison time periods.

Eligible Sample: The number of people served by a relevant MIDD initiative, during a given window of time, who meet certain criteria such as age at start.

Number with Use: The number of MIDD participants with ***any*** use of a given system (e.g. jail or ED) over the time periods (pre and/or post) examined.

Use Rate in Sample: The percentage of people utilizing a given system out of all eligible people served by each MIDD initiative. For example, a jail use rate of 50 percent means that half of the people in a particular MIDD initiative had jail use and half of them did not.

Percent Change: The amount of increase or decrease observed over time. This is calculated by subtracting the measure in the earlier time period from the measure in the later time period, then dividing that result by the measure in the earlier time period. For example, a 50 percent reduction means that use of a given system was cut in half. A 100 percent increase means that use of a given system was doubled. Note that percent change results will often be summarized as "…reduced by 50% on average."

Percent with Reduced Use: The portion of the "Number with Use" who experienced any decreased use of a given costly system. For example, 50 percent with reduced use means half of the people with any use decreased their system use over time. Note that these results will often be summarized as "…50% of the participants reduced use." These types of results may also be referenced as "linkage rates," "engagement rates," "program completion rates," "job acquisition rates," "graduation rates," or "utilization rates."

Relevant System Use Events and Data Sources

Adult[6] **Jail Use** - Patterns and trends in jail utilization for the MIDD population are based on the number of cases where matches could be found within criminal justice data sources. In general, adult jail utilization is defined by bookings, and the associated days served, into any of the following:

- King County Correctional Facility in Seattle
- King County's Norm Maleng Regional Justice Center in Kent
- South Correctional Entity Multijurisdictional Misdemeanant Jail (SCORE) [7]
- Jails in these municipalities: Enumclaw, Kent, Kirkland and Issaquah

For the purposes of MIDD evaluation, jail use does not currently include counts for time spent in Washington State Department of Corrections facilities.

Psychiatric Inpatient (PI) Hospital Use - The MIDD evaluation counts hospitalizations at Western State Hospital, a large psychiatric facility administered by the State of Washington's Department of Social and Health Services, as well as admissions at community psychiatric inpatient facilities throughout the region.

[6] Only those 20 years or older at their MIDD service start are included in these analyses for 2018.

[7] This facility is a cooperative effort by the cities of: Auburn, Burien, Des Moines, Federal Way, Renton, SeaTac, and Tukwila.

Emergency Department (ED) Use – A data-sharing agreement with Harborview Medical Center (HMC) in Seattle provided the bulk of outcomes information used to assess changes in ED utilization over time. The HMC is owned by King County, governed by a county-appointed board of trustees and managed by the University of Washington. Use of this particular ED serves as a proxy for more general ED use by MIDD service recipients. See page 27 for more information.

Additional ED data was obtained for a smaller sub-sample of MIDD participants with valid social security numbers, who were served in MIDD initiatives where HMC was potentially an inadequate proxy. These data covered all known emergency department admissions from 2016 through 2018. The information was provided under a business associate's agreement with a private vendor, Collective Medical Technologies, who receives ED admissions data from hospitals throughout the western region of the United States, including HMC and other King County hospitals such as Swedish, Highline, and Valley Medical Center.

Initiatives that Contribute to Each System Use Outcome

Four of MIDD's five strategy areas, reflecting a service continuum from prevention to crisis and reentry, to the County's therapeutic courts, seek to reduce use of costly systems. These overarching strategy areas and their stated objects are:

- Prevention and Early Intervention (PRI) - *People get the help they need to stay healthy and keep problems from escalating.*
- Crisis Diversion (CD) - *People who are in crisis get the help they need to avoid unnecessary hospitalization or incarceration.*
- Recovery and Reentry (RR) - *People become healthy and safely reintegrate into community after crisis.*
- Therapeutic Courts (TX) - *People experiencing behavioral health conditions who are involved in the justice system are supported to achieve stability and avoid further justice system involvement.*

In the current report, the PRI strategy area has five initiatives seeking reductions in costly systems. The results for **PRI-11 Community Behavioral Health Treatment** have been broken down into two sub-groups: Mental Health (including "club house" only services) and Substance Use Disorder (including both outpatient and medication assisted treatment), because results vary markedly between these two types of behavioral health treatment.

For the CD strategy area, eight initiatives had served enough participants through the end of 2017 to begin assessing their impact on costly system use. Six of the eight interventions in the CD group had long-term outcomes in this reporting period, which means they served people in either 2014 or 2015.

Ten initiatives in the RR strategy area contributed to the current system use outcomes results, along with all of the fully-implemented therapeutic court programs. Note that while the 2017 Technical Supplement included historical data for **TX-SMC Seattle Municipal Mental Health Court**, that information is now excluded due to a substantial redesign of MIDD's contribution to this program during 2018.

Table 5 below lists all of the MIDD initiatives contributing to 2018 system use outcomes. The maximum sample is the number of people from each MIDD initiative who were eligible for outcomes based on time alone (not system use or age). To the right, "X" indicates the primary diversion priority of each initiative and "o" marks all secondary priorities. All data contributed to results, regardless of diversion priority status. Indexing, as explained on page 11, is marked in blue.

Table 5. Maximum Size of Eligible Outcomes Samples for Each Analysis Time Period and Relevant Systems Associated with Various MIDD Initiatives

MIDD 2 Initiative Number and Name		Maximum Sample Size Based on Time Alone			Relevant System Use Outcomes			
		Post 1 2015-2017 start dates	Post 2 2014-2016 start dates	Post 3 2014-2015 start dates	Adult Jail	Juvenile Legal System (NEW in 2018)	Psychiatric Inpatient	Emergency Department
PRI-01	Screening, Brief Intervention and Referral To Treatment (SBIRT)	5,035	4,977	3,423				X
PRI-02	Juvenile Justice Youth Behavioral Health Assessments	242	0	0		2017 only		
PRI-03	Prevention and Early Intervention Behavioral Health for Adults Over 50	1,804	1,785	1,119				o
PRI-04	Older Adult Crisis Intervention/ Geriatric Regional Assessment Team (GRAT)	683	867	571			o	X
PRI-11	Community Behavioral Health Treatment (Mental Health)*	4,248	3,580	1,684	o		o	o
PRI-11	Community Behavioral Health Treatment (Substance Use Disorder)	1,645	2,294	1,776	o			o
CD-01	Law Enforcement Assisted Diversion	210	153	84	X			
CD-03	Outreach & In Reach System of Care	1,180	845	614	X			
CD-05	High Utilizer Care Teams	171	154	96			o	X
CD-06	Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	6,222	5,645	3,732	o		o	X
CD-07	Multipronged Opioid Strategies	1,189	1,114	624	o			X
CD-10	Next Day Crisis Appointments	1,322	972	611			o	X
CD-13	Family Intervention and Restorative Services	191	0	0		2017 only		
CD-14	Involuntary Treatment Triage	104	0	0			o	X
RR-01	Housing Supportive Services	385	508	385	X		o	o
RR-02	Behavior Modification Classes at Community Center for Alternative Programs (CCAP)	132	182	137	X			
RR-03	Housing Capital and Rental	41	56	42	o		X	o
RR-05	Housing Vouchers for Adult Drug Court	50	0	0	X			
RR-06	Jail Reentry System of Care**	819	796	589	X			
RR-08	Hospital Re-Entry Respite Beds	887	856	521				X
RR-10	Behavioral Health Employment Services and Supported Employment	933	422	121	o			o
RR-11a	Peer Bridger Programs	321	104	52			X	o
RR-11b	Substance Use Disorder Peer Support	484	134	35	X			o
RR-13	Deputy Prosecuting Attorney for Familiar Faces	45	26	0	X			
TX-ADC	Adult Drug Court	1,069	982	617	X			
TX-FTC	Family Treatment Court	96	99	56	o			
TX-JDC	Juvenile Drug Court	19	0	0		2017 only		
TX-RMHC	Regional Mental Health and Veterans Court	439	419	279	X			
TX-SMC	Seattle Municipal Mental Health Court***	<10	0	0	X			

* Includes "clubhouse only" participants

** 2017 Technical Supplement included duplicated individuals served in multiple initiative programs

*** 2017 Technical Supplement included historical data

X Outcome is diversion priority for initiative

o Outcome is secondary for initiative, but included in findings

Index buffer applied to system use associated with relevant service starts

Overall Costly Systems Use Changes over Time

The results below combine contributions of all relevant MIDD initiatives for each system measured (adult jail, psychiatric inpatient care, and Harborview emergency department) after de-duplicating individuals by keeping the earliest MIDD start date per person. Overall increases in system use were common in the first year after service start, with use reductions showing in subsequent years and becoming greater over time[8].

* Average per person with any use in period
Significant increase ($p < .05$) with paired-samples T-testing
Significant decrease ($p < .05$) with paired-samples T-testing

				Adult Jail Bookings						Adult Jail Days					
				Average*		Sum		Percent Change		Average*		Sum		Percent Change	
	Eligible Sample	Number with Adult Jail Use	Rate of Adult Jail Use in Eligible Sample	Pre	Post	Pre	Post	Current Reporting Period	Reported in 2017	Pre	Post	Pre	Post	Current Reporting Period	Reported in 2017
First Year after Service Start	15,497	5,143	33%	2.0	2.0	10,241	10,350	1%	-1%	27.2	38.4	139,865	197,347	41%	41%
Second Year after Service Start	14,358	4,925	34%	2.0	1.6	10,005	7,856	-21%	-23%	29.3	33.0	144,482	162,521	12%	15%
Third Year after Service Start	9,109	3,201	35%	2.1	1.3	6,718	4,238	-37%	-35%	30.5	26.8	97,510	85,618	-12%	-12%

				Psychiatric Inpatient Hospitalizations						Psychiatric Inpatient Days					
				Average*		Sum		Percent Change		Average*		Sum		Percent Change	
	Eligible Sample	Number with Psychiatric Inpatient Use	Rate of Psychiatric Inpatient Use in Eligible Sample	Pre	Post	Pre	Post	Current Reporting Period	Reported in 2017	Pre	Post	Pre	Post	Current Reporting Period	Reported in 2017
First Year after Service Start	12,348	1,935	16%	0.8	1.4	1,551	2,643	70%	43%	15.2	27.1	29,393	52,470	79%	40%
Second Year after Service Start	11,178	1,355	12%	1.1	1.0	1,541	1,349	-12%	-20%	23.3	33.7	31,502	45,620	45%	25%
Third Year after Service Start	6,824	856	13%	1.2	0.9	1,048	766	-27%	-29%	24.8	32.8	21,267	28,083	32%	-3%

				Harborview Emergency Department (ED) Admissions					
				Average*		Sum		Percent Change	
	Eligible Sample	Number with Harborview ED Use	Rate of Harborview ED Use in Eligible Sample	Pre	Post	Pre	Post	Current Reporting Period	Reported in 2017
First Year after Service Start	22,122	7,061	32%	1.7	2.4	12,001	16,823	40%	5%
Second Year after Service Start	21,213	6,078	29%	2.2	1.6	13,197	9,895	-25%	-40%
Third Year after Service Start	13,590	4,024	30%	2.4	1.3	9,614	5,422	-44%	-53%

The patterns observed during 2018 analyses replicated those reported in the MIDD 2017 Annual Report, as shown above, with minor differences[9] appearing in the magnitude of percent change over time.

[8] The exception to this finding being in psychiatric inpatient days, which showed increases of one to two weeks on average, over all time periods studied.

[9] Sampling diversity (case inclusion) and de-duplication likely account for these small variations. Note that results reported in 2017 did not utilize the de-duplicating methodology used for 2018.

Adult Jail Use Changes over Time

Adult Jail Use in First Year after Service Start

The results below summarize the changes in adult jail use from the pre period to the first year after service start for all relevant MIDD initiatives. Results are reported separately for mental health and substance use disorder treatment, although they actually belong to the same initiative, to show the variance in results by type of treatment. Only people who were 20 years or older when their MIDD services began were included in these analyses. Short term reductions in jail bookings were achieved by eight of 17 relevant initiatives (47%), while jail days often increased during the first MIDD service year.

					Adult Jail Bookings						Adult Jail Days					
					Average*		Sum		Percents		Average*		Sum		Percents	
MIDD 2 Initiative Number and Name		Eligible Sample	Number with Use	Use Rate in Sample	Pre	Post 1	Pre	Post 1	Percent Change	% with Reduced Use	Pre	Post 1	Pre	Post 1	Percent Change	% with Reduced Use
PRI-11	Community Behavioral Health Treatment (Mental Health)	3,435	380	11%	1.8	1.5	664	570	-14%	54%	34.1	27.1	12,963	10,287	-21%	58%
PRI-11	Community Behavioral Health Treatment (Substance Use Disorder)	1,288	634	49%	2.0	1.2	1,262	772	-39%	65%	35.8	23.9	22,677	15,143	-33%	66%
CD-01	Law Enforcement Assisted Diversion	210	145	69%	2.4	2.4	347	351	1%	47%	28.3	39.9	4,103	5,787	41%	41%
CD-03	Outreach & Inreach System of Care	1,168	445	38%	2.2	2.0	992	896	-10%	49%	36.5	34.7	16,244	15,451	-5%	47%
CD-06	Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	6,049	1,743	29%	1.6	2.3	2,847	3,971	39%	36%	25.0	36.3	43,534	63,300	45%	39%
CD-07	Multipronged Opioid Strategies	1,179	477	40%	1.9	2.1	896	1018	14%	42%	22.2	25.4	10,582	12,093	14%	44%
RR-01	Housing Supportive Services	384	166	43%	2.2	1.2	371	193	-48%	68%	42.1	18.1	6,995	3,007	-57%	71%
RR-02	Behavior Modification Classes at CCAP	127	106	83%	2.0	2.1	209	220	5%	47%	34.6	52.4	3,671	5,554	51%	46%
RR-03	Housing Capital and Rental	40	10	25%	1.0	0.8	10	8	-20%	50%	14.8	45.5	148	455	207%	50%
RR-05	Housing Vouchers for Adult Drug Court	50	43	86%	3.2	1.8	139	77	-45%	65%	62.4	31.1	2,685	1,339	-50%	77%
RR-06	Jail Reentry System of Care	784	679	87%	3.2	2.5	2,146	1,727	-20%	53%	45.2	55.6	30,654	37,746	23%	46%
RR-10	Behavioral Health Employment Services and Supported Employment	923	145	16%	1.5	0.7	224	94	-58%	70%	30.0	13.2	4,348	1,911	-56%	70%
RR-11b	Substance Use Disorder Peer Support	482	152	32%	1.7	1.3	264	201	-24%	57%	32.8	18.3	4,990	2,779	-44%	61%
RR-13	Deputy Prosecuting Attorney for Familiar Face	45	40	89%	5.4	4.3	217	170	-22%	63%	112.4	81.2	4,494	3,247	-28%	60%
TX-ADC	Adult Drug Court	1,034	879	85%	2.7	2.5	2,361	2,202	-7%	44%	25.7	67.3	22,544	59,120	162%	31%
TX-FTC	Family Treatment Court	96	55	57%	1.9	1.1	105	59	-44%	62%	15.7	17.0	864	935	8%	62%
TX-RMHC	Regional Mental Health Court	424	320	75%	2.2	1.7	687	527	-23%	58%	28.4	48.1	9,081	15,382	69%	53%
TX-SMHC	Seattle Mental Health Municipal Court	<10	-	-	6.8	3.2	41	19	-54%	67%	77.5	87.7	465	526	13%	50%
All Cases Where Jail is Relevant (Unduplicated Keeping Earliest Start Date per Person)		15,497	5,143	33%	2.0	2.0	10,241	10,350	1%	46%	27.2	38.4	139,865	197,347	41%	45%

* Average per person with any use in period

Significant increase ($p < .05$) with paired-samples T-testing

Significant decrease ($p < .05$) with paired-samples T-testing

Adult Jail Use in the Second Year after Service Start

The results below show changes in adult jail use from the pre period to the second year after service start for all relevant MIDD initiatives. Eleven of the 15 initiatives (73%) with applicable information showed statistically significant decreases in adult jail bookings over this period. While only three initiatives showed similar reductions in adult jail days, the observed increases in jail days were less drastic than those observed over the short term (see page 16 for comparison purposes).

					Adult Jail Bookings						Adult Jail Days					
					Average*		Sum		Percents		Average*		Sum		Percents	
MIDD 2 Initiative Number and Name		Eligible Sample	Number with Use	Use Rate in Sample	Pre	Post 2	Pre	Post 2	Percent Change	% with Reduced Use	Pre	Post 2	Pre	Post 2	Percent Change	% with Reduced Use
PRI-11	Community Behavioral Health Treatment (Mental Health)	2,860	337	12%	1.8	1.3	601	448	-25%	58%	38.2	29.1	12,877	9,821	-24%	63%
PRI-11	Community Behavioral Health Treatment (Substance Use Disorder)	1,806	844	47%	1.9	1.0	1,632	870	-47%	69%	35.3	19.7	29,778	16,638	-44%	72%
CD-01	Law Enforcement Assisted Diversion	153	98	64%	2.4	2.4	230	230	0%	47%	28.9	34.1	2,827	3,343	18%	49%
CD-03	Outreach & Inreach System of Care	836	294	35%	2.2	1.7	633	485	-23%	54%	32.7	30.1	9,614	8,841	-8%	54%
CD-06	Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	5,476	1,474	27%	1.7	1.8	2,544	2,697	6%	48%	27.4	35.4	40,414	52,182	29%	49%
CD-07	Multipronged Opioid Strategies	1,104	458	41%	1.7	1.7	798	786	-2%	46%	21.9	22.9	10,038	10,497	5%	48%
RR-01	Housing Supportive Services	508	238	47%	2.1	1.1	488	256	-48%	65%	39.0	24.7	9,282	5,868	-37%	70%
RR-02	Behavior Modification Classes at CCAP	174	143	82%	2.1	1.4	303	203	-33%	60%	32.0	32.8	4,569	4,684	3%	57%
RR-03	Housing Capital and Rental	55	15	27%	0.9	1.2	14	18	29%	33%	14.5	32.1	217	482	122%	40%
RR-05	Housing Vouchers for Adult Drug Court															
RR-06	Jail Reentry System of Care	761	643	84%	3.1	2.1	2,016	1,343	-33%	61%	43.6	49.7	28,002	31,933	14%	57%
RR-10	Behavioral Health Employment Services and Supported Employment	418	68	16%	1.6	1.0	106	65	-39%	66%	37.6	14.1	2,558	958	-63%	69%
RR-11b	Substance Use Disorder Peer Support	134	37	28%	1.5	0.7	57	27	-53%	65%	32.9	23.0	1,218	850	-30%	68%
RR-13	Deputy Prosecuting Attorney for Familiar Face	26	24	92%	6.4	2.8	154	66	-57%	79%	121.9	82.5	2,926	1,981	-32%	67%
TX-ADC	Adult Drug Court	947	746	79%	2.6	1.7	1,920	1,248	-35%	60%	25.9	37.4	19,344	27,895	44%	52%
TX-FTC	Family Treatment Court	99	49	49%	1.9	0.7	94	33	-65%	74%	17.9	14.0	877	688	-22%	76%
TX-RMHC	Regional Mental Health Court	405	303	75%	2.1	1.5	646	441	-32%	65%	32.7	45.5	9,907	13,782	39%	63%
TX-SMHC	Seattle Mental Health Municipal Court															
All Cases Where Jail is Relevant (Unduplicated Keeping Earliest Start Date per Person)		14,358	4,925	34%	2.0	1.6	10,005	7,856	-21%	56%	29.3	33.0	144,482	162,521	12%	55%

* Average per person with any use in period

Significant increase ($p < .05$) with paired-samples T-testing

Significant decrease ($p < .05$) with paired-samples T-testing

Adult Jail Use in the Third Year after Service Start

The results below show changes in adult jail use from the pre period to the third year after service start for all relevant MIDD initiatives. Note that over the long term, the overall reduction in jail bookings reached 37 percent and the overall reduction in jail days became statistically significant (at 12 percent), with no significant increases in adult jail bookings or days remaining.

					Adult Jail Bookings						Adult Jail Days					
					Average*		Sum		Percents		Average*		Sum		Percents	
MIDD 2 Initiative Number and Name		Eligible Sample	Number with Use	Use Rate in Sample	Pre	Post 3	Pre	Post 3	Percent Change	% with Reduced Use	Pre	Post 3	Pre	Post 3	Percent Change	% with Reduced Use
PRI-11	Community Behavioral Health Treatment (Mental Health)	1,290	172	13%	1.7	1.0	295	176	**-40%**	63%	36.3	22.7	6,243	3,901	**-38%**	66%
PRI-11	Community Behavioral Health Treatment (Substance Use Disorder)	1,422	634	45%	2.0	0.8	1,263	527	**-58%**	76%	37.1	14.7	23,499	9,316	**-60%**	79%
CD-01	Law Enforcement Assisted Diversion	84	52	62%	2.1	2.0	107	103	-4%	44%	32.7	30.3	1,700	1,576	-7%	56%
CD-03	Outreach & Inreach System of Care	608	182	30%	2.0	1.3	357	232	**-35%**	59%	29.7	22.5	5,405	4,097	-24%	60%
CD-06	Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	3,618	929	26%	1.9	1.6	1,717	1,486	**-13%**	55%	29.5	31.6	27,415	29,359	7%	55%
CD-07	Multipronged Opioid Strategies	619	244	39%	1.7	1.4	415	350	-16%	53%	19.6	21.3	4,771	5,195	9%	53%
RR-01	Housing Supportive Services	385	185	48%	2.0	1.1	373	199	**-47%**	68%	38.7	23.7	7,153	4,378	**-39%**	69%
RR-02	Behavior Modification Classes at CCAP	132	101	77%	2.3	1.0	227	104	**-54%**	75%	36.7	24.7	3,706	2,499	-33%	71%
RR-03	Housing Capital and Rental	42	13	31%	1.1	0.9	14	12	-14%	62%	16.7	9.0	217	117	-46%	62%
RR-05	Housing Vouchers for Adult Drug Court															
RR-06	Jail Reentry System of Care	565	447	79%	3.2	1.7	1,407	746	**-47%**	69%	44.7	41.9	19,986	18,722	-6%	67%
RR-10	Behavioral Health Employment Services and Supported Employment	120	15	13%	1.9	0.1	29	2	**-93%**	93%	44.5	16.5	668	247	-63%	93%
RR-11b	Substance Use Disorder Peer Support	35	<10	-	1.0	0.8	6	5	-17%	50%	7.8	9.3	47	56	19%	50%
RR-13	Deputy Prosecuting Attorney for Familiar Face															
TX-ADC	Adult Drug Court	592	446	75%	2.8	1.3	1,233	593	**-52%**	70%	28.0	24.7	12,487	11,018	-12%	69%
TX-FTC	Family Treatment Court	56	29	52%	1.7	1.0	50	29	-42%	66%	17.3	14.7	501	427	-15%	69%
TX-RMHC	Regional Mental Health Court	267	200	75%	2.1	1.2	416	232	**-44%**	70%	32.9	28.5	6,579	5,704	-13%	71%
TX-SMHC	Seattle Mental Health Municipal Court															
All Cases Where Jail is Relevant (Unduplicated Keeping Earliest Start Date per Person)		9,109	3,201	35%	2.1	1.3	6,718	4,238	**-37%**	64%	30.5	26.8	97,510	85,618	**-12%**	64%

* Average per person with any use in period

Significant increase ($p < .05$) with paired-samples T-testing

Significant decrease ($p < .05$) with paired-samples T-testing

Psychiatric Inpatient Hospitalization Changes over Time

Psychiatric Inpatient Hospitalizations in the First and Second Years after Service Start

The results below show shorter term changes in community psychiatric inpatient hospital and Western State Hospital use. By the second year after services began, statistically significant reductions in hospitalizations were found for four of nine relevant initiatives (44%) and for all unduplicated cases.

* Average per person with any use in period
Significant increase ($p < .05$) with paired-samples T-testing
Significant decrease ($p < .05$) with paired-samples T-testing

MIDD 2 Initiative Number and Name		Eligible Sample	Number with Use	Use Rate in Sample	Psychiatric Inpatient Hospitalizations						Psychiatric Inpatient Days					
					Average*		Sum		Percents		Average*		Sum		Percents	
					Pre	Post 1	Pre	Post 1	Percent Change	% with Reduced Use	Pre	Post 1	Pre	Post 1	Percent Change	% with Reduced Use
PRI-04	Older Adult Crisis Intervention/ Geriatric Regional Assessment Team (GRAT)	683	23	3%	0.1	1.4	2	31	>200%	9%	0.4	63.8	10	1,468	>200%	9%
PRI-11	Community Behavioral Health Treatment (Mental Health)	4,248	373	9%	1.2	1.0	452	366	-19%	55%	35.1	25	13,084	9,319	-29%	60%
CD-05	High Utilizer Care Teams	171	53	31%	1.4	1.6	76	83	9%	40%	14.8	25.5	785	1,352	72%	47%
CD-06	Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	6,222	1,356	22%	0.7	1.5	987	2,020	105%	27%	11.7	28.3	15,872	38,322	141%	29%
CD-10	Next Day Crisis Appointments	1,322	163	12%	0.3	1.4	53	222	>200%	17%	2.6	13.9	425	2,272	>200%	20%
CD-14	Involuntary Treatment Triage	104	73	70%	0.9	2.2	63	160	154%	16%	23.8	63.8	1,738	4,660	168%	25%
RR-01	Housing Supportive Services	385	84	22%	1.6	1.1	135	96	-29%	61%	28.9	22.7	2,424	1,903	-21%	63%
RR-03	Housing Capital and Rental	41	25	61%	1.8	0.8	44	20	-55%	72%	49.4	20.0	1,234	499	-60%	68%
RR-11a	Peer Bridger Programs	321	236	74%	1.7	1.6	406	376	-7%	50%	25.6	31.4	6,040	7,403	23%	57%
All Cases Where PI is Relevant (Unduplicated Keeping Earliest Start Date per Person)		12,348	1,935	16%	0.8	1.4	1,551	2,643	70%	32%	15.2	27.1	29,393	52,470	79%	35%

MIDD 2 Initiative Number and Name		Eligible Sample	Number with Use	Use Rate in Sample	Psychiatric Inpatient Hospitalizations						Psychiatric Inpatient Days					
					Average*		Sum		Percents		Average*		Sum		Percents	
					Pre	Post 2	Pre	Post 2	Percent Change	% with Reduced Use	Pre	Post 2	Pre	Post 2	Percent Change	% with Reduced Use
PRI-04	Older Adult Crisis Intervention/ Geriatric Regional Assessment Team (GRAT)	867	11	1%	0.2	1.4	2	15	>200%	18%	0.9	91.4	10	1,005	>200%	18%
PRI-11	Community Behavioral Health Treatment (Mental Health)	3,580	307	9%	1.3	0.8	392	230	-41%	63%	39.0	31.8	11,959	9,756	-18%	66%
CD-05	High Utilizer Care Teams	154	44	29%	1.5	1.4	64	61	-5%	48%	16.2	26.4	711	1,161	63%	48%
CD-06	Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	5,645	924	16%	1.0	1.1	968	1,033	7%	49%	16.9	37.2	15,647	34,404	120%	49%
CD-10	Next Day Crisis Appointments	972	70	7%	0.6	0.8	40	57	43%	41%	5.3	21.4	373	1,496	>200%	44%
CD-14	Involuntary Treatment Triage															
RR-01	Housing Supportive Services	507	113	22%	1.8	0.9	205	104	-49%	67%	45.0	24.8	5,085	2,802	-45%	75%
RR-03	Housing Capital and Rental	56	32	57%	2.2	0.6	70	20	-71%	88%	59.5	21.0	1,903	672	-65%	88%
RR-11a	Peer Bridger Programs	104	71	68%	1.7	1.0	118	72	-39%	65%	25.7	25.3	1,825	1,795	-2%	62%
All Cases Where PI is Relevant (Unduplicated Keeping Earliest Start Date per Person)		11,178	1,355	12%	1.1	1.0	1,541	1,349	-12%	54%	23.3	33.7	31,502	45,620	45%	55%

Psychiatric Inpatient Hospitalizations in the Third Year after Service Start

The results below show changes in community psychiatric inpatient hospital and Western State Hospital use from the pre period to the third year after service start for all relevant MIDD initiatives. Over the long term, only three initiatives did not show statistically significant reductions in hospitalizations, and two of these were impacted by extremely small sample sizes. As outcome cohorts are added in the future, these results are expected to improve. Only one initiative, **RR-01 Housing Supportive Services**, showed a corresponding reduction in psychiatric inpatient days.

					Psychiatric Inpatient Hospitalizations						Psychiatric Inpatient Days					
					Average*		Sum		Percents		Average*		Sum		Percents	
MIDD 2 Initiative Number and Name		Eligible Sample	Number with Use	Use Rate in Sample	Pre	Post 3	Pre	Post 3	Percent Change	% with Reduced Use	Pre	Post 3	Pre	Post 3	Percent Change	% with Reduced Use
PRI-04	Older Adult Crisis Intervention/ Geriatric Regional Assessment Team (GRAT)	571	<10	-	0.1	1.1	1	8	>200%	14%	1.0	60.0	7	420	>200%	14%
PRI-11	Community Behavioral Health Treatment (Mental Health)	1,684	157	9%	1.4	0.7	212	105	-50%	66%	41.1	28.2	6,457	4,428	-31%	69%
CD-05	High Utilizer Care Teams	96	21	22%	1.6	1.6	34	34	0%	57%	17.0	18.2	356	382	7%	57%
CD-06	Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	3,732	577	15%	1.2	0.9	664	534	-20%	55%	18.4	36.6	10,593	21,132	99%	56%
CD-10	Next Day Crisis Appointments	611	49	8%	0.6	0.9	29	46	59%	39%	6.3	15.7	308	767	149%	39%
CD-14	Involuntary Treatment Triage															
RR-01	Housing Supportive Services	385	91	24%	1.8	0.7	163	63	-61%	75%	45.4	20.6	4,128	1,872	-55%	78%
RR-03	Housing Capital and Rental	42	30	71%	2.1	1.1	63	32	-49%	73%	54.2	28.0	1,627	839	-48%	73%
RR-11a	Peer Bridger Programs	52	31	60%	1.6	0.6	48	18	-63%	74%	25.6	23.1	792	717	-9%	77%
All Cases Where PI is Relevant (Unduplicated Keeping Earliest Start Date per Person)		6,824	856	13%	1.2	0.9	1,048	766	-27%	58%	24.8	32.8	21,267	28,083	32%	59%

* Average per person with any use in period

Significant increase ($p < .05$) with paired-samples T-testing

Significant decrease ($p < .05$) with paired-samples T-testing

Emergency Department Admission Changes over Time

Emergency Department Admissions in the First Year after Service Start

The results below show changes in emergency department (ED) admissions from the pre period to the first year after service start for all relevant MIDD initiatives. Four initiatives showed reductions in Harborview[10] ED use over the short term, but this finding was offset overall by the significant increases posted by two initiatives that had the most individuals who used this costly system, **PRI-01 Screening, Brief Intervention and Referral to Treatment (SBIRT)** and **CD-06 Adult Crisis Diversion**.

					Harborview Emergency Department (ED) Admissions					
					Average*		Sum		Percents	
MIDD 2 Initiative Number and Name		Eligible Sample	Number with Use	Use Rate in Sample	Pre	Post 1	Pre	Post 1	Percent Change	% with Reduced Use
PRI-01	Screening, Brief Intervention and Referral To Treatment (SBIRT)	5,035	2,484	49%	1.7	2.9	4,309	7,115	65%	26%
PRI-03	Prevention and Early Intervention Behavioral Health for Adults Over 50	1,804	358	20%	1.6	1.5	587	537	-9%	51%
PRI-04	Older Adult Crisis Intervention/ Geriatric Regional Assessment Team (GRAT)	683	107	16%	1.3	1.3	144	140	-3%	50%
PRI-11	Community Behavioral Health Treatment (Mental Health)	4,248	776	18%	1.8	1.7	1,401	1,340	-4%	48%
PRI-11	Community Behavioral Health Treatment (Substance Use Disorder)	1,649	331	20%	1.9	1.5	617	497	-19%	56%
CD-05	High Utilizer Care Teams	171	168	98%	14.8	10.6	2,490	1,773	-29%	65%
CD-06	Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	6,222	2,717	44%	2.1	3.0	5,793	8,019	38%	35%
CD-07	Multipronged Opioid Strategies	1,189	344	29%	2.4	2.4	826	838	1%	47%
CD-10	Next Day Crisis Appointments	1,322	320	24%	1.2	1.3	386	429	11%	53%
CD-14	Involuntary Treatment Triage	104	88	85%	1.9	2.5	170	222	31%	32%
RR-01	Housing Supportive Services	385	265	69%	5.5	2.7	1,447	709	-51%	66%
RR-03	Housing Capital and Rental	41	18	44%	2.1	1.2	38	21	-45%	50%
RR-08	Hospital Re-Entry Respite Beds	887	676	76%	2.7	3.5	1,851	2,343	27%	37%
RR-10	Behavioral Health Employment Services and Supported Employment	926	214	23%	1.7	1.6	367	342	-7%	51%
RR-11a	Peer Bridger Programs	321	211	66%	2.9	2.8	613	593	-3%	51%
RR-11b	Substance Use Disorder Peer Support	482	204	42%	2.8	1.9	563	382	-32%	52%
All Cases Where ED is Relevant (Unduplicated Keeping Earliest Start Date per Person)		22,122	7,061	32%	1.7	2.4	12,001	16,823	40%	36%

* Average per person with any use in period
Significant increase ($p < .05$) with paired-samples T-testing
Significant decrease ($p < .05$) with paired-samples T-testing

[10] As stated on page 13, ED use data was primarily available from Harborview Medical Center in Seattle and serves as a proxy for more general ED use. See page 27 for additional information.

Emergency Department Admissions in the Second Year after Service Start

The results below show changes in emergency department admissions from the pre period to the second year after service start for all relevant MIDD initiatives. All initiatives showed reductions in Harborview ED use over this period, the majority of which were statistically significant.

					Harborview Emergency Department (ED) Admissions					
					Average*		Sum		Percents	
MIDD 2 Initiative Number and Name		Eligible Sample	Number with Use	Use Rate in Sample	Pre	Post 2	Pre	Post 2	Percent Change	% with Reduced Use
PRI-01	Screening, Brief Intervention and Referral To Treatment (SBIRT)	4,977	1,799	36%	2.2	1.9	3,895	3,331	**-14%**	58%
PRI-03	Prevention and Early Intervention Behavioral Health for Adults Over 50	1,785	356	20%	1.7	1.3	598	458	**-23%**	55%
PRI-04	Older Adult Crisis Intervention/ Geriatric Regional Assessment Team (GRAT)	867	107	12%	2.1	1.2	225	131	-42%	64%
PRI-11	Community Behavioral Health Treatment (Mental Health)	3,581	658	18%	2.0	1.4	1,284	895	**-30%**	58%
PRI-11	Community Behavioral Health Treatment (Substance Use Disorder)	2,288	498	22%	1.8	1.4	908	717	**-21%**	56%
CD-05	High Utilizer Care Teams	154	151	98%	14.8	4.3	2,237	645	**-71%**	88%
CD-06	Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	5,645	2,238	40%	2.4	1.7	5,273	3,712	**-30%**	65%
CD-07	Multipronged Opioid Strategies	1,114	318	29%	2.0	1.7	627	540	-14%	48%
CD-10	Next Day Crisis Appointments	972	230	24%	1.5	0.7	349	160	**-54%**	75%
CD-14	Involuntary Treatment Triage									
RR-01	Housing Supportive Services	508	373	73%	5.5	2.1	2,034	774	**-62%**	68%
RR-03	Housing Capital and Rental	56	26	46%	2.4	1.3	63	35	-44%	77%
RR-08	Hospital Re-Entry Respite Beds	856	572	67%	3.4	2.2	1,929	1,272	**-34%**	62%
RR-10	Behavioral Health Employment Services and Supported Employment	419	82	20%	1.9	1.4	155	117	-25%	57%
RR-11a	Peer Bridger Programs	104	60	58%	2.6	1.5	155	88	**-43%**	63%
RR-11b	Substance Use Disorder Peer Support	134	51	38%	2.6	0.5	134	28	**-79%**	73%
All Cases Where ED is Relevant (Unduplicated Keeping Earliest Start Date per Person)		21,213	6,078	29%	2.2	1.6	13,197	9,895	**-25%**	59%

* Average per person with any use in period

Significant increase ($p < .05$) with paired-samples T-testing

Significant decrease ($p < .05$) with paired-samples T-testing

Emergency Department Admissions in the Third Year after Service Start

The results below show changes in emergency department admissions from the pre period to the third year after service start for all relevant MIDD initiatives. The combined reductions in Harborview ED use, for unduplicated individuals, over the long term reached 44 percent, meaning admissions there were nearly cut in half for this outcomes sample.

					Harborview Emergency Department (ED) Admissions					
					Average*		Sum		Percents	
MIDD 2 Initiative Number and Name		Eligible Sample	Number with Use	Use Rate in Sample	Pre	Post 3	Pre	Post 3	Percent Change	% with Reduced Use
PRI-01	Screening, Brief Intervention and Referral To Treatment (SBIRT)	3,423	1,244	36%	2.3	1.4	2,854	1,722	**-40%**	65%
PRI-03	Prevention and Early Intervention Behavioral Health for Adults Over 50	1,119	212	19%	1.8	1.0	389	208	**-47%**	65%
PRI-04	Older Adult Crisis Intervention/ Geriatric Regional Assessment Team (GRAT)	571	63	11%	2.5	1.1	157	71	**-55%**	62%
PRI-11	Community Behavioral Health Treatment (Mental Health)	1,682	306	18%	2.1	1.2	639	376	**-41%**	65%
PRI-11	Community Behavioral Health Treatment (Substance Use Disorder)	1,776	372	21%	1.9	1.2	708	430	**-39%**	62%
CD-05	High Utilizer Care Teams	96	92	96%	14.9	3.3	1,375	299	**-78%**	89%
CD-06	Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	3,732	1,514	41%	2.5	1.3	3,723	1,957	**-47%**	71%
CD-07	Multipronged Opioid Strategies	624	160	26%	1.9	1.5	305	244	-20%	48%
CD-10	Next Day Crisis Appointments	611	156	26%	1.5	0.7	238	104	**-56%**	80%
CD-14	Involuntary Treatment Triage									
RR-01	Housing Supportive Services	385	278	72%	5.5	1.8	1,542	499	**-68%**	74%
RR-03	Housing Capital and Rental	42	25	60%	2.2	1.4	55	35	-36%	68%
RR-08	Hospital Re-Entry Respite Beds	521	339	65%	3.6	2.0	1,219	672	**-45%**	68%
RR-10	Behavioral Health Employment Services and Supported Employment	119	29	24%	1.0	1.2	30	34	13%	52%
RR-11a	Peer Bridger Programs	52	20	38%	2.3	1.1	45	21	-53%	70%
RR-11b	Substance Use Disorder Peer Support	35	12	34%	1.5	0.9	18	11	-39%	50%
All Cases Where ED is Relevant (Unduplicated Keeping Earliest Start Date per Person)		13,590	4,024	30%	2.4	1.3	9,614	5,422	**-44%**	66%

* Average per person with any use in period

Significant increase ($p < .05$) with paired-samples T-testing

Significant decrease ($p < .05$) with paired-samples T-testing

Prevention and Diversion Statistics for Individuals with 2015 MIDD Service Starts

In order to identify patterns sustained over the longest term through the end of 2018, prevention/diversion[11] analyses were conducted for individuals who began relevant MIDD services in 2015. Pre period data for individuals who began services in January 2015 go back as far as January 2014.

Adult Jail Prevention or Diversion

A person was considered prevented/diverted from adult jail if they either 1) had ***no use*** in the year prior to their MIDD service start or index event and no use in the subsequent three years, or 2) ***stopped use*** for all three years after their MIDD service start or index event. The three initiatives with the highest rates of jail use stoppage were **TX-FTC Family Treatment Court** (32%), **TX-RMHC Regional Mental Health and Veterans Court** (31%) and **RR-02 Behavior Modification Classes at CCAP** (26%). These findings are highlighted in gold below, along with the three highest overall rates of prevention/diversion combined.

		Adult Jail Bookings from 2014 through 2018						Jail Prevention/Diversion	
			Prevented/Diverted		Not Diverted				
MIDD 2 Initiative Number and Name		Eligible Sample	No Use	Stopped Use	Started Use	Use Not Stopped	Total	Yes	No
PRI-11	Community Behavioral Health Treatment (Mental Health)	828	86%	4%	6%	4%	100%	**90%**	10%
PRI-11	Community Behavioral Health Treatment (Substance Use Disorder)	664	50%	16%	9%	25%	100%	66%	34%
CD-01	Law Enforcement Assisted Diversion	51	25%	8%	31%	36%	100%	33%	67%
CD-03	Outreach & Inreach System of Care	386	63%	4%	16%	17%	100%	67%	33%
CD-06	Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	1,964	65%	5%	17%	13%	100%	70%	30%
CD-07	Multipronged Opioid Strategies	431	48%	7%	24%	21%	100%	55%	45%
RR-01	Housing Supportive Services	150	43%	17%	16%	24%	100%	60%	40%
RR-02	Behavior Modification Classes at CCAP	31	3%	**26%**	29%	42%	100%	29%	71%
RR-03	Housing Capital and Rental	20	45%	15%	25%	15%	100%	60%	40%
RR-05	Housing Vouchers for Adult Drug Court								
RR-06	Jail Reentry System of Care	264	13%	10%	13%	64%	100%	23%	77%
RR-10	Behavioral Health Employment Services and Supported Employment	101	81%	10%	6%	3%	100%	**91%**	9%
RR-11b	Substance Use Disorder Peer Support	23	78%	4%	14%	4%	100%	**82%**	18%
RR-13	Deputy Prosecuting Attorney for Familiar Face								
TX-ADC	Adult Drug Court	343	15%	8%	19%	58%	100%	23%	77%
TX-FTC	Family Treatment Court	25	40%	**32%**	16%	12%	100%	72%	28%
TX-RMHC	Regional Mental Health and Veterans Court	120	18%	**31%**	14%	37%	100%	49%	51%
TX-SMC	Seattle Municipal Mental Health Court								
All Cases Where Jail is Relevant (Unduplicated Keeping Earliest Start Date per Person)		4,929	60%	7%	14%	19%	100%	67%	33%

[11] For the current report, **prevention** refers to avoiding all use of a costly system and **diversion** means use of a system stopped for three full years after MIDD services began.

Psychiatric Inpatient Prevention or Diversion

People were considered prevented or diverted from psychiatric inpatient use if they either 1) had ***no use*** in the year prior to their 2015 MIDD service start and no use in the subsequent three years, or 2) ***stopped use*** for all three years after their MIDD service start. Two programs, which appeared in the 2017 results, had very minimal use of psychiatric inpatient resources and were dropped from the 2018 analysis: substance use disorder treatment under PRI-11 and Public Health Seattle & King County Needle Exchange social work participants under CD-07. The initiatives with the highest percentage of participants who avoided psychiatric hospitalization for three full years after beginning MIDD services were those offering housing and housing support, plus **RR-11a Peer Bridger Programs**, as highlighted in gold below. Note that the eligible samples associated with these findings are quite small and results should be interpreted cautiously.

			Psychiatric Inpatient (PI) Hospitalizations from 2014 through 2018					PI Prevention/Diversion	
			Prevented/Diverted		Not Diverted				
MIDD 2 Initiative Number and Name		Eligible Sample	No Use	Stopped Use	Started Use	Use Not Stopped	Total	Yes	No
PRI-04	Older Adult Crisis Intervention/ Geriatric Regional Assessment Team (GRAT)	249	94%	0%	6%	0%	100%	**94%**	6%
PRI-11	Community Behavioral Health Treatment (Mental Health)	1,055	90%	3%	4%	3%	100%	**93%**	7%
CD-05	High Utilizer Care Teams	52	70%	8%	10%	12%	100%	78%	22%
CD-06	Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	2,031	71%	5%	18%	6%	100%	76%	24%
CD-10	Next Day Crisis Appointments	340	79%	3%	17%	1%	100%	82%	18%
CD-14	Involuntary Treatment Triage								
RR-01	Housing Supportive Services	150	71%	**12%**	8%	9%	100%	**83%**	17%
RR-03	Housing Capital and Rental	20	25%	**40%**	15%	20%	100%	65%	35%
RR-11a	Peer Bridger Programs	38	29%	**21%**	13%	37%	100%	50%	50%
All Cases Where Psychiatric Inpatient is Relevant (Unduplicated Keeping Earliest Start Date per Person)		3,691	81%	4%	11%	4%	100%	85%	15%

Emergency Department Prevention or Diversion

Preventions/diversions from emergency department (ED) admissions were coded for individuals who either 1) had ***no Harborview***[12] ***ED use*** in the year prior to their 2015 MIDD service start or index event and no use in the subsequent three years, or 2) ***stopped Harborview ED use*** for all three years after their MIDD service start or index event. Initiatives with the highest overall prevention/diversion rates are highlighted in gold at right below. For use stoppage, **RR-03 Housing Capital and Rental** (20%), **RR-11b Substance Use Disorder Peer Support** (13%), and **RR-01 Housing Supportive Services** (12%) recorded the highest percentages. For the results of an analysis examining potential ED use offsets, please see page 27.

			Harborview Emergency Department (ED) Admissions from 2014 through 2018					ED Prevention/Diversion	
			Prevented/Diverted		Not Diverted				
MIDD 2 Initiative Number and Name		Eligible Sample	No Use	Stopped Use	Started Use	Use Not Stopped	Total	Yes	No
PRI-01	Screening, Brief Intervention and Referral To Treatment (SBIRT)	1,821	37%	5%	32%	26%	100%	42%	58%
PRI-03	Prevention and Early Intervention Behavioral Health for Adults Over 50	544	72%	6%	10%	11%	100%	78%	22%
PRI-04	Older Adult Crisis Intervention/ Geriatric Regional Assessment Team (GRAT)	249	80%	5%	9%	6%	100%	**85%**	15%
PRI-11	Community Behavioral Health Treatment (Mental Health)	1,055	76%	5%	11%	8%	100%	**81%**	19%
PRI-11	Community Behavioral Health Treatment (Substance Use Disorder)	803	70%	6%	14%	10%	100%	76%	24%
CD-05	High Utilizer Care Teams	52	0%	4%	0%	96%	100%	4%	96%
CD-06	Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	2,031	48%	8%	19%	25%	100%	56%	44%
CD-07	Multipronged Opioid Strategies	433	65%	4%	16%	15%	100%	69%	31%
CD-10	Next Day Crisis Appointments	340	69%	11%	12%	9%	100%	**79%**	21%
RR-01	Housing Supportive Services	150	18%	**12%**	15%	55%	100%	30%	70%
RR-03	Housing Capital and Rental	20	40%	**20%**	20%	20%	100%	60%	40%
RR-08	Hospital Re-Entry Respite Beds	242	20%	6%	24%	50%	100%	26%	74%
RR-10	Behavioral Health Employment Services and Supported Employment	100	70%	7%	11%	12%	100%	77%	23%
RR-11a	Peer Bridger Programs	38	47%	5%	13%	34%	100%	53%	47%
RR-11b	Substance Use Disorder Peer Support	23	57%	**13%**	13%	17%	100%	70%	30%
All Cases Where ED is Relevant (Unduplicated Keeping Earliest Start Date per Person)		7,091	58%	6%	19%	17%	100%	64%	36%

[12] As stated on page 13, ED use data was primarily available from Harborview Medical Center in Seattle and serves as a proxy for more general ED use.

Emergency Department Use Comparing Harborview Medical Center with Other Facilities in the Region

As briefly described on page 13, data about the use of emergency departments (ED) throughout King County and the greater northwest region of the United States were provided for a sub-sample of MIDD participants with valid social security numbers. The analysis data set comprised 3,620 people who began MIDD services during 2017 in one of the following initiatives: **PRI-01 Screening, Brief Intervention and Referral to Treatment (SBIRT)** (n=1,444), **CD-05 High Utilizer Care Teams** (n=62), **CD-06 Adult Crisis Diversion** (n=1,293), **CD-07 Multipronged Opioid Strategies** (n=140), **CD-10 Next Day Crisis Appointments** (n=408), or **RR-08 Hospital Reentry Respite Beds** (n=273). All known ED admissions over a two-year period from 2016 through 2018 were used to generate comparison counts (pre and first post periods only) for three different locations: Harborview Medical Center ED, Other King County ED, and Non-King County ED. Results of the analysis answered three key questions, as shown below.

Is use of Harborview Medical Center (HMC) ED data a valid proxy for ED use in general for MIDD participants?

The correlation between pre period episodes at HMC and all pre period ED episodes was very high (Pearson = .703, $p < .01$). This means there was likely no significant tradeoff between HMC ED episodes and ED episodes at other locations. People did not show up at other EDs if they did not also go to HMC.

For the post period comparison, the correlation was even stronger (Pearson = .744, $p < .01$), further supporting the conclusion that use of the HMC ED is a good indication and representation of ED use elsewhere. In other words, ED use at HMC "drives" total ED use for MIDD participants.

How do total ED admissions at HMC compare to ED admissions elsewhere?

Although there were no apparent tradeoffs (people who reduced ED use at HMC *did not* increase ED use elsewhere), most of the ED use recorded was not at HMC. Pre and first post "volumes" (the sum of admissions in each period) by location supports this finding.

	Pre	Post 1
HMC ED	3,685 (25%)	5,853 (30%)
Other King County ED	7,625 (52%)	9,920 (50%)
Non-King County ED	3,291 (23%)	3,914 (20%)
Total	14,601	19,687

An example further emphasizes this point: Of the 933 people with any HMC ED use in their pre period, 528 had post period use at both HMC and other King County EDs (57%), compared to 162 with only non-HMC use (17%), 142 with HMC use only (15%), and 101 with no further use (11%).

What change over time conclusions can be drawn when comparing HMC counts with counts from other King County EDs?

In general, using all available ED data showed the same patterns of pre to first post increases documented on page 21. When other King County EDs were entered into the analysis, the magnitude of increase was more evident (due to the higher volume for these EDs as discussed above), but the direction of change and statistical significance remained the same. All of these findings were replicated when broken down by each initiative.

Juvenile Legal System Changes over Time

A new data sharing agreement with the King County Prosecuting Attorney's Office (PAO) allowed access to information on a set of juvenile legal system measures, which included referrals and filings for primarily felony charges[13], from 2016 through 2018. The dataset provided to evaluators included some misdemeanors and gross misdemeanors, but these charges were largely handled by the City of Seattle and many were thus unavailable through the PAO. Only the dates of referral s and/or filings of charges were provided, so actual "event" dates (law enforcement encounters) are unknown. Any given charge described by the data could be reflective of a single event or many, depending upon decisions made within the juvenile legal system about bundling of these events.

Matching the felony referrals and filings with 425 unduplicated youth served in three MIDD initiatives during 2017 proved to be a challenge, with about a 25 percent overall match rate for referrals and a 20 percent overall match rate for filings. Note that youth could be served in more than one initiative, so 451 total cases appear in the results. Because the MIDD evaluation was examining these data elements for the first time, results of the initial analysis are descriptive in nature and may inform future analyses by establishing a baseline. Please see the match rates by initiative below:

	Number Served	Juvenile Legal System Referrals Found	Juvenile Legal System Filings Found
PRI-02 Juvenile Justice Youth Behavioral Health Assessments	241	155 referrals for 65 youth (27% match rate)	114 filings for 49 youth (20% match rate)
CD-13 Family Intervention and Restorative Services (FIRS)	191	117 referrals for 52 youth (27% match rate)	65 filings for 27 youth (14% match rate)
TX-JDC Juvenile Drug Court	19	10 referrals for < 10 youth (<50% match rate)	<10 filings for <10 youth (<50% match rate)

In addition to the charge information received, dispositions (notes about how things turned out) were available to help cluster findings into general categories. Where the referral dispositions were categorized as "juvenile statutory referral only," this indicated that law enforcement was required to make the referral to the PAO due to the allegations made, but did not find evidence that the youth committed a crime. For future analyses, these referrals may be omitted. The most common disposition for referrals was "juvenile referred to FIRS or other diversion" (n=39). For filings, three common dispositions were: "juvenile plead guilty" (n=63), "juvenile dismissed with prejudice"[14] (n=53) and "juvenile dismissed without prejudice" (n=24).

[13] A charge is defined as a formal accusation brought through a given youth's encounter with law enforcement.

[14] "With prejudice" means the dismissal was final and charges for the same event cannot be reopened. By contrast "without prejudice" means the case could be opened again.

Policy Goal 2: Reduce Crisis Events

Crisis Reduction Statistics for Adults

"Crisis event" measurement under the MIDD evaluation, as developed in 2018, used individual-level interactions with publicly-funded programs providing crisis response services[15] as indicators of crisis events. A single crisis event could result in multiple services and program enrollments per person, so these services/enrollments were bundled in order to most accurately assess whether services were part of an ongoing crisis event or a new, distinct event.

The primary method for distinguishing unique events was ***time***. If services in one crisis program were provided concurrently or shortly after services in a different crisis program, it was considered unlikely that a person was undergoing a new crisis. The time cutoff varied based on the program since some are designed to serve participants for longer periods than others. Cutoff times were set based on the ***maximum allowable stay*** in each program to prevent potentially misleading duplication for programs that opened and closed authorizations multiple times during service delivery or when participants were referred to services from multiple providers during a crisis event.

Methods

Authorizations in publicly-funded programs providing crisis intervention services were counted for all participants served by MIDD-funded crisis reduction initiatives. The date of any given service was measured as the first day that a service was recorded in an authorization rather than the authorization start date. Only one date was attached to each authorization, regardless of the number of services recorded. For involuntary treatment events[16] (ITAs) the admit date was used as the event date.

Counts of authorization dates were adjusted to omit events that occurred too soon after the previous event. If any event was within the maximum time limit (ranging from one to 14 days) of the program in the preceding authorization, that event was excluded from the count. For involuntary treatment events, any other crisis events that fell between the admit date and discharge date were excluded. Once the necessary events were excluded, the remaining events were used to generate counts for each comparison time period (pre, post 1, post 2, and post 3) for participants. Each event was counted for the time period in which it began.

The frequency of crisis events was also explored in this analysis, as measured by the time between crisis events. Further development work is needed before these results can be incorporated into annual reporting.

[15] Programs included involuntary treatment events, adult crisis stabilization, adult diversion bed, crisis triage diversion bed, mobile crisis team, and crisis diversion facility.

[16] These events included involuntary treatment investigations and hospitalizations associated with Washington State's Involuntary Treatment Act.

Statistical Notes

Because responses to crises are designed for early intervention, participants often had little to no crisis system use in the period prior to their MIDD services against which to measure future reductions. Therefore, in this four-year analysis, crisis event counts in the first year after service start were compared to counts in the year before services, and then with both subsequent years. Some participants were served concurrently by multiple initiatives. When calculating the totals for each post period, participants were de-duplicated and only included in the initiative in which they first began services. Only those initiatives that had data for all time periods analyzed have been included in this MIDD 2018 Annual Report.

Crisis Events in the First Year after Service Start

In the first year after service start most initiatives showed an increase in crisis events as measured by enrollment in crisis response programs. Only **RR-01 Housing Supportive Services** showed an immediate significant reduction in the number crisis events, with a statistically significant 47 percent reduction in total crisis events. At the participant level, 63 percent of participants in RR-01 had fewer crisis events in their first post period than they had before services began. Note that the overall percentage of people with an immediate reduction in event count (17%) is driven by the contribution of the 1,667 people served in CD-06. This group accounts for 87 percent of the overall sample with any crisis events (n=1,921).

					Count of Crisis Events					
					Average*		Sum		% Change in Event Count	% with Reduction in Event Count**
MIDD 2 Initiative Number and Name		Eligible Sample	Number with Crisis	Use Rate in Sample	Pre Events	Post 1 Events	Pre Events	Post 1 Events		
PRI-04	Older Adult Crisis Intervention (GRAT)	683	100	15%	0.6	0.9	58	89	**53%**	32%
CD-03	Outreach and In Reach System of Care	1,180	129	11%	1.0	1.1	123	144	17%	44%
CD-05	High Utilizer Care Teams	171	89	52%	1.5	1.4	131	121	-8%	47%
CD-06	Adult Crisis Diversion	6,222	1,667	27%	0.4	1.5	686	2,508	**>200%**	17%
CD-10	Next Day Crisis Appointments	1,322	264	20%	0.5	0.8	139	217	**56%**	35%
RR-01	Housing Supportive Services	393	97	25%	1.5	0.8	141	75	-47%	63%
All Cases Where Crisis Relevant (Unduplicated Keeping Earliest Start Date per Person)		9,280	1,921	21%	0.40	1.40	743	2,732	**>200%**	17%

* Average per person with crisis in either period

** Percent of clients who had a crisis in either period

Significant increase ($p < .05$) with paired samples T-testing

Significant decrease ($p < .05$) with paired samples T-testing

Crisis Events in the Second and Third Year after Service Start

All but two of the initiatives showed significant reductions in the number of crisis events when comparing the first post period with the second and third post periods. **RR-01 Housing Supportive Services** showed less of a reduction in later time periods than the other initiatives due to its heavy reduction in the first post period. Over the long term, 78 percent of participants experiences a reduction in crisis events.

MIDD 2 Initiative Number and Name		Eligible Sample	Number with Crisis	Use Rate in Sample	Count of Crisis Events: Average* Post 1 Events	Average* Post 2 Events	Sum Post 1 Events	Sum Post 2 Events	% Change in Event Count	% with Reduction in Event Count**
PRI-04	Older Adult Crisis Intervention (GRAT)	867	111	13%	1.1	0.3	118	37	-69%	77%
CD-03	Outreach and In Reach System of Care	845	71	8%	1.5	1.0	104	72	-31%	61%
CD-05	High Utilizer Care Teams	154	61	40%	1.7	1.2	106	75	-29%	66%
CD-06	Adult Crisis Diversion	5,645	1,606	28%	1.5	0.6	2,451	983	-60%	75%
CD-10	Next Day Crisis Appointments	972	163	17%	1.1	0.3	171	43	-75%	81%
RR-01	Housing Supportive Services	513	90	18%	1.1	1.0	95	86	-9%	54%
All Cases Where Crisis Relevant (Unduplicated Keeping Earliest Start Date per Person)		8,534	1,924	23%	1.50	0.60	2,785	1,133	-59%	75%

MIDD 2 Initiative Number and Name		Eligible Sample	Number with Crisis	Use Rate in Sample	Count of Crisis Events: Average* Post 1 Events	Average* Post 3 Events	Sum Post 1 Events	Sum Post 3 Events	% Change in Event Count	% with Reduction in Event Count**
PRI-04	Older Adult Crisis Intervention (GRAT)	571	78	14%	1.2	0.2	90	17	-81%	83%
CD-03	Outreach and In Reach System of Care	614	45	7%	1.2	0.5	54	23	-57%	69%
CD-05	High Utilizer Care Teams	96	29	30%	2.3	1.5	66	43	-35%	66%
CD-06	Adult Crisis Diversion	3,732	1,083	29%	1.6	0.5	1,695	495	-71%	79%
CD-10	Next Day Crisis Appointments	611	92	15%	1.1	0.3	103	29	-72%	79%
RR-01	Housing Supportive Services	388	63	16%	1.2	0.8	75	48	-36%	59%
All Cases Where Crisis Relevant (Unduplicated Keeping Earliest Start Date per Person)		5,751	1,301	23%	1.50	0.50	1,948	604	-69%	78%

* Average per person with crisis in either period

** Percent of clients who had a crisis in either period

Significant increase ($p < .05$) with paired samples T-testing

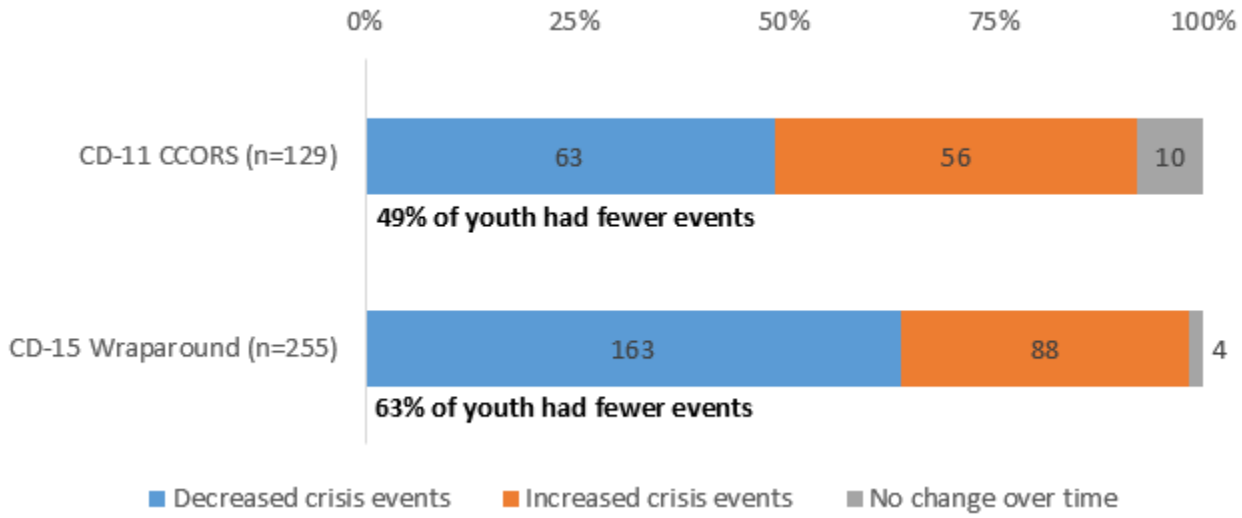
Significant decrease ($p < .05$) with paired samples T-testing

Crisis Reduction Statistics for Youth and Young Adults

Five MIDD initiatives seek to measure changes in the number, length and frequency of behavioral health crisis events among youth and young adults. For the current reporting period, two initiatives had adequate data to address these metrics: **CD-11 Children's Crisis Outreach and Response System (CCORS)** and **CD-15 Wraparound Services for Youth**. The methodology for assessing crisis event reduction for youth involved counting the number of crisis events, as measured by distinct service counts within each crisis response initiative, for participating individuals in 2018. Those counts were then compared with service counts from 2016 and 2017 for those same individuals.

For the 1,109 youth with 2018 CCORS services, a total of 129 (12%) had also been served by CCORS in 2016 or 2017, meaning that a small portion of participants experienced multiple crises over time as measured by repeated service encounters. Total distinct service counts per year were examined side-by-side within individuals and patterns were characterized as decreased, increased, or no change. Nearly half of the youth with CCORS services in multiple years had decreased crisis events, as shown in Figure 5 below. Of the 619 youth with 2018 Wraparound services, 255 (41%) were also served by Wraparound in 2016 or 2017. Sixty-three percent of these youth had fewer events over time. Combining these two initiatives, 59 percent of youth decreased events.

Figure 5. Change in Crisis Events per Youth over Time



For Wraparound youth with data at two time points, statistically significant reductions in crisis events were found within individuals. The average number of events/contacts in 2018 was 33, a reduction of 30 percent from the 47 average found in earlier comparison years. This result was not replicated for CCORS youth, as the 2018 average of 10.0 was nearly the same as the prior years' average of 10.2.

Policy Goal 3: Increase Culturally Appropriate, Trauma-Informed Behavioral Health Services

For **PRI-10 Domestic Violence and Behavioral Health Services and System Coordination**, the following evidence of increased culturally appropriate and trauma-informed behavioral health services was found:

- Among 780 individuals experiencing domestic violence who were screened to identify the behavioral health impacts of trauma, approximately 87 percent demonstrated significant behavioral health symptoms and were referred for treatment.
- Trauma-focused treatment (at least one session) was provided to 434 of the individuals referred.
- More than 53 percent of participants receiving services through this initiative identified as persons of color, 50 percent identified as refugees or immigrants.
- At least 45 percent of the survivors served reported a primary language other than English, with 35 percent needing an interpreter.
- Addressing gaps in services to frequently marginalized populations, this initiative provided multilingual services to 134 participants (31%) in their native language. Note that this is not through interpreters, but staff members who speak their clients' languages.

Additional evidence of increased culturally appropriate, trauma-informed behavioral health services was provided by **CD-08 Children's Domestic Violence Response Team:**

- Screening for over 350 individuals experiencing domestic violence to identify the behavioral health impacts of trauma.
- Over half of those screened demonstrated significant trauma symptoms and were referred for intensive behavioral health services.
- Approximately 44 percent of families served identified as persons of color.

Under **SI-04 Workforce Development**, 60 trainings were delivered in 2018, with at least 1,060 attendees. In addition to the motivational interviewing and clinical supervision topics that have been foundational to this MIDD initiative, 15 new trainings addressed topics of culture and trauma, as detailed in Table 6 below.

Table 6. New Training Topics Were Offered to Address Workforce Need for Information on Culture and Trauma

Culture/Trauma Training Topics in Alphabetical Order	Number of Courses Offered	Number of Attendees
African American/Black Male Trauma	1	8
Criminal Justice Trauma-Informed Care	1	19
Family, Men & Trauma and Male Trauma	2	122
Foundations of Cultural Competence	1	20
Historical Trauma	1	48
Providing Behavioral Health Interventions in the Framework of Cultural Humility	2	21
Racial Microaggressions and Cross Cultural Communication Skills	1	34
Self-Care for Professionals Working with Trauma	1	40
Trauma-Informed Care	3	34
Trauma-Informed Peer Support	2	29
Total Number of Culture/Trauma Trainings and Attendees	15	375
Percent of All Trainings and Known Number of Attendees	25%	35%

For the current reporting period, one in four trainings were focused on increasing culturally appropriate, trauma-informed behavioral health services, and one in three workforce development training participants received information with a primary focus on these topics. Reported figures will serve as a baseline for future determination of increases to participation in these offerings.

Note that many of these specialized trainings were attended by juvenile legal system staff, such as juvenile probation counselors, who work closely with youth involved in **CD-13 Family Intervention and Restorative Services** and **TX-JDC Juvenile Drug Court**.

Policy Goal 4: Improve Health and Wellness

The original MIDD policy goal of reducing behavioral health disorders and symptoms was replaced in during MIDD renewal with the concept of improving health and wellness. Analyses were conducted for several initiatives to determine the proportion of MIDD participants who likely experienced improved wellness due to treatment participation or completion and/or reduced behavioral risk factors and/or stressors. Detailed results, including methodologies employed, are summarized below.

Positively Engaged in Treatment or Met Treatment Goals

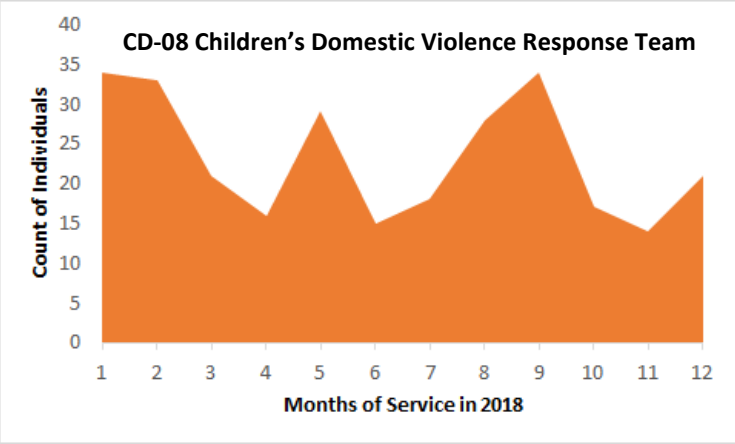
Minimal Service Disruptions

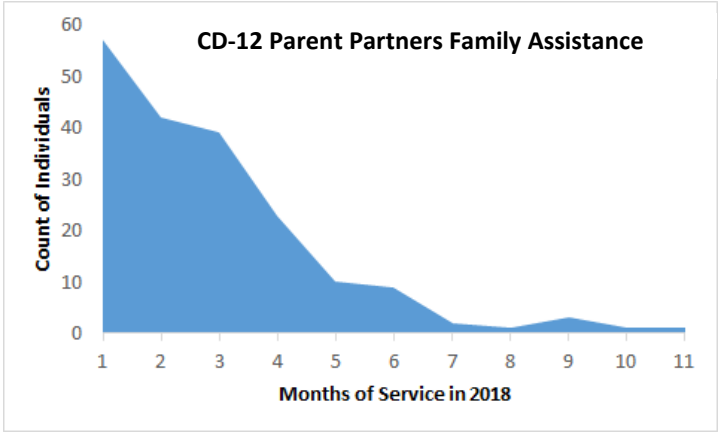
CD-08 Children's Domestic Violence Response Team submitted service data for 280 individuals with at least one service in 2018 and a service start date prior to September 2018. Half of these (n=141) were consistently engaged throughout the year, as measured by having service hours in at least five contiguous months.

In **CD-12 Parent Partners Family Assistance**, 209 people had 2018 services and a start date prior to December 2018. Of these, 140 (67%) were engaged in services without significant interruptions, as measured by having support hours in at least two contiguous months.

Engagement thresholds were based on typical service delivery patterns for each initiative, which varied greatly as shown in Figure 6 below.

Figure 6. Typical Service Delivery Patterns Varied Greatly Within Initiatives





Goal Attainment

For individuals served by **PRI-09 Sexual Assault Behavioral Health Services**, 93 of the 105 people for whom information was available (89%) reported meeting their self-directed goals or treatment objectives. Measures within this initiative included emotional stability, behavior change, and increased coping skills.

For participants in **RR-02 Behavior Modification Classes at CCAP**, about half of all participants who began services between 2015 and 2017 completed at least half of the steps. See results on page 7 for additional information.

Positive Exit Dispositions

Scores at two points in time were available for 347 youth served during 2018 in **CD-11 Children's Crisis Outreach and Response System (CCORS)** or **CD-15 Wraparound Services for Youth**. Sixty-eight percent had a final level of care below the threshold for concern, as measured by Child and Adolescent Level of Care Utilization System (CALOCUS).

Of the 249 youth with 2018 services in **CD-13 Family Intervention and Restorative Services**, 179 exited before year-end, with a successful completion rate of 57 percent. The average length of service was 164 days for successful completers vs. 121 days for those who opted-out, were involuntarily removed from the program, or required services beyond those available in the program.

A total of 69 people were served in **RR-04 Rapid Rehousing – Oxford House Model** during 2018. Of those served, 11 (16%) remained engaged at year-end. Of the 58 people who exited the program, 31 (53%) were considered positive departures or program completions. The most common exit disposition was leaving for other rental housing opportunities, with no ongoing housing subsidy (27 of 58, 47%).

Of the 96 parents served by **TX-FTC Family Treatment Court** in 2018, 43 (45%) exited the program. Of those who exited, 22 parents (51%) either graduated from the program or had their child dependency cases resolved or dismissed by the courts, resulting in 23 of the 48 impacted children (48%) returning home. Twenty-six of the exiting parents (61%) showed no illegal substance use after beginning the program.

RR-05 Housing Vouchers for Adult Drug Court serves a subset of **TX-ADC Adult Drug Court (ADC)** participants, providing specialized housing vouchers to increase stability during program participation. The results below show that for people served in 2018, housing vouchers, including RR-05 vouchers, helped boost engagement and graduation rates for ADC participants, as shown.

Measure	With Housing Vouchers	Without Housing Vouchers
Still Engaged in ADC at Year End[17]	64 of 112 (57%)	263 of 642 (41%)
Exited from ADC During 2018	36	301
Graduated from ADC	16 of 36 (44%)	61 of 301 (20%)
Graduates Unemployed at Entry Who Gained Employment by Exit	12 of 15 (80%)	28 of 48 (58%)
Graduates Without Housing at Entry Who Secured Temporary or Permanent Housing by Exit	12 of 12 (100%)	30 of 30 (100%)

RR-08 Hospital Reentry Respite Beds provided behavioral health services to 259 of the 431 unique individuals assessed in 2018 (60%), for a total of 403 recorded behavioral health encounters. Treatment completions at exit were recorded for 113 of the 259 people who received behavioral health services (44%). Of those who completed their treatment, 46 (41%) were known to be sheltered or transitionally housed at exit.

[17] "Still engaged" refers to those not exited in 2018 and not serving time on outstanding bench warrant(s).

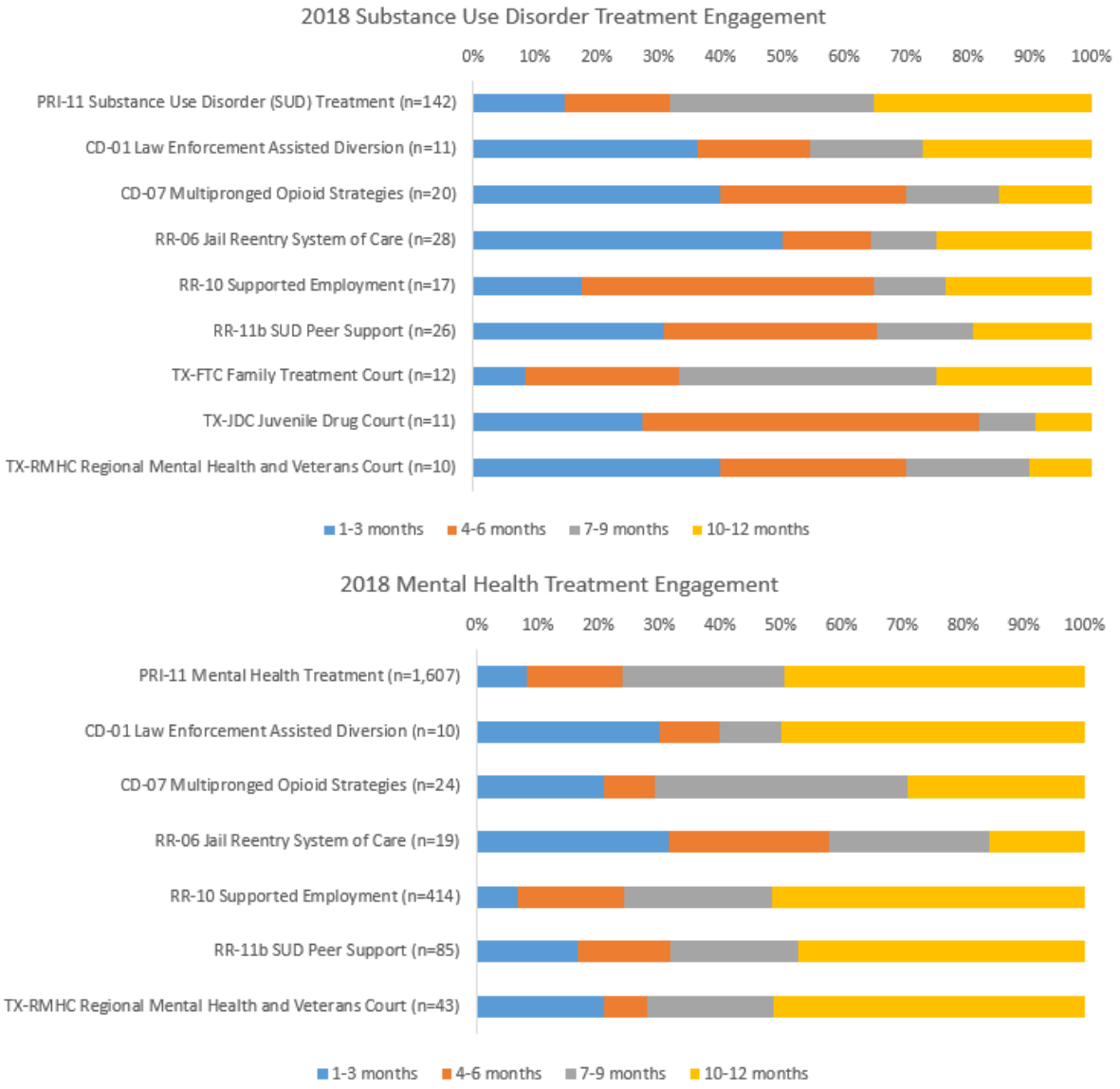
Engagement in Ongoing Treatment or Successful Treatment Completions

People who began services between 2015 and 2017 in nine different initiatives were included in an analysis to determine rates of engagement in ongoing behavioral health treatment (n=8,311). Of the 2,721 people who began substance use disorder (SUD) treatment first, 2,444 exited or had their authorization for treatment expire prior to the end of 2018 (90%). For the 5,590 people who began mental health treatment first, 3,381 exited or had their authorization expire prior to the end of 2018 (60%). For SUD treatment, 382 (16%) were coded as completing treatment, and for mental health treatment that figure was 365 (11%). Note that exit reason data is often missing, so the reported completion rates here are likely lower than actual completion rates.

Figure 7 at right shows variations in engagement rates by treatment type and MIDD initiative for the 2,486 people who were authorized for ongoing treatment throughout 2018. Those engaged over the shortest period are represented by the blue bars and those engaged for the longest period appear in gold. For SUD treatment, participants in Family Treatment Court showed the highest level of engagement in treatment lasting more than three months. For mental health treatment, over 70 percent of participants in PRI-11, RR-10, and TX-RMHC stayed actively engaged for at least seven months in 2018.

Mental health treatment engagement statistics were suppressed for TX-FTC and TX-JDC, because fewer than 10 people were eligible for inclusion.

Figure 7. 2018 Treatment Engagement Rates Varied by Treatment Type and MIDD Initiative



Measures of Reduced Behavioral Risk Factors or Stressors

Patient Health Questionnaire (PHQ-9) and Generalized Anxiety Disorder (GAD-7)

In an effort to characterize and quantify patterns in symptom measurements over time, individuals with four or more PHQ-9 (depression) or GAD-7 (anxiety) scores collected over time were entered into an analysis. Nearly 380 adults served in **PRI-03 Prevention and Early Intervention Behavioral Health for Adults over 50** were drawn from a sample of 3,997 people with at least one symptom score prior to May 2016. Steps in the analysis process were as follows:

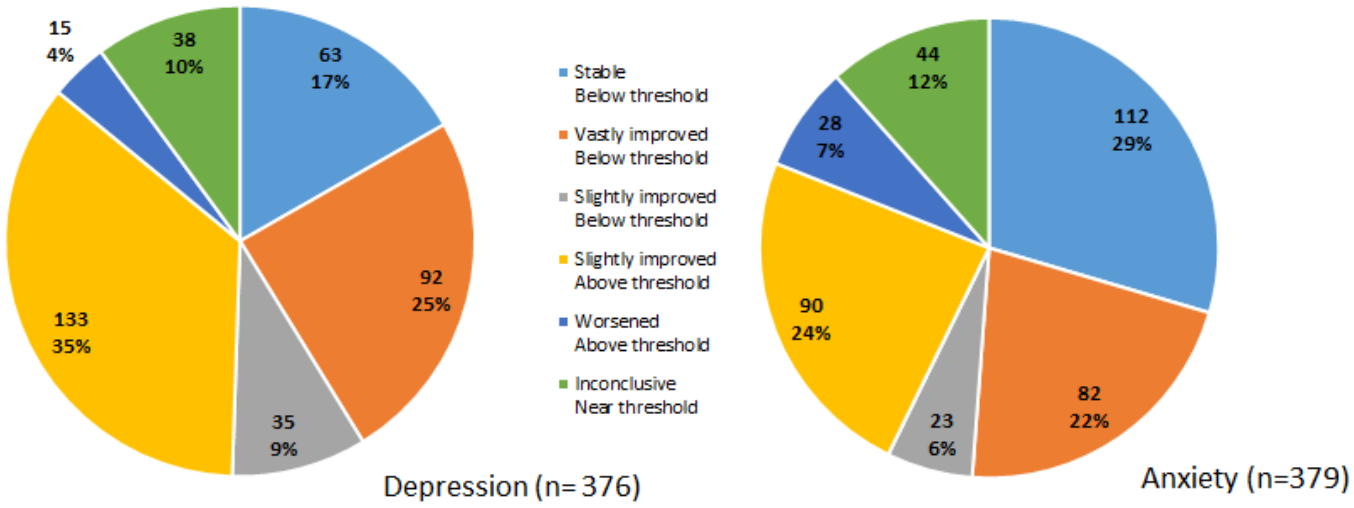
1) Use the 20 cases with the most scores to calculate the months between measures and plot out the PHQ-9 and GAD-7 scores (case studies)

2) Identify patterns from the case studies and other information (patterns reflected in the main body of data, but not included in the case study examples)

3) Quantify various patterns in the larger sampling.

Scores on both instruments that were less than 10 were considered below the "clinical threshold for concern" or below threshold, whereas scores of 10 or higher were labeled above threshold. The most common pattern found for PHQ-9 scores was for individuals who improved slightly over time, but remained above the clinical threshold for depression symptoms (35%). For the GAD-7, the most common pattern found was for individuals whose scores over time were low and stable, with anxiety symptoms remaining below the clinical threshold (29%). Note that about half of all people in the PHQ-9 analysis sample, regardless of baseline levels, experienced subsequent depression score averages that were below the clinical threshold of 10. Even more people in the GAD-7 analysis sample showed a trend toward clinical improvement over time. These results are shown in Figure 8 below.

Figure 8. Stabilization in Depression or Anxiety Symptoms Achieved by Half of Older Adults Included in a Symptom Pattern Analysis Study



Using these same measurement tools, similar results were found for another MIDD initiative, **PRI-10 Domestic Violence Behavioral Health Services and System Coordination**. Out of 434 participants served by PRI-10 in 2018, 76 (18%) completed at least two assessments to measure change over time. A total of 46 people

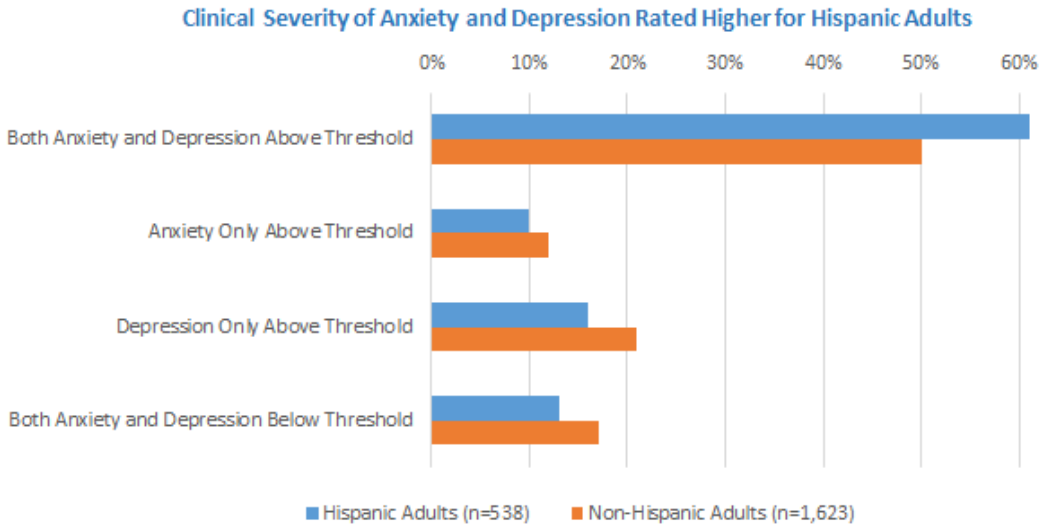
(61%) showed improved depression symptoms when comparing their first score to the average of all subsequent scores on the PHQ-9. Sixty-eight percent of this group showed improved anxiety on the GAD-7, using this same methodology.

Problem Severity Summary (PSS)

The PSS was used to measure the incidence and severity of depression and anxiety symptoms for 2,161 of the 2,920 adults (74%) who began services in **PRI-11 Community Mental Health Treatment** between 2014 and 2016. The PSS is a clinician-rated tool used to assess functioning over 13 domains, including symptoms of depression and anxiety. Ratings for each item range from zero (area of strength relative to average) to five (extreme impairment). Scores of three or higher are generally interpreted as meeting the threshold for concern, or obvious impairment with inadequate functioning. Symptoms at baseline were above the clinical threshold for 84 percent of adults with at least one measure: anxiety only (12%), depression only (19%), or both (53%) (n=2,161).

Analysis of the PSS data revealed demographic differences in both baseline scores and symptom improvement over time. At first measure, Hispanic adults had significantly higher ratings of concurrent anxiety and depression symptoms than non-Hispanic adults, as shown in Figure 9. Of the 20 people who endorsed non-binary gender, 65 percent had both depression and anxiety symptoms rated above the clinical threshold at baseline, compared to 675 of 1,183 females (57%) and 447 of 958 males (47%). Regional and homeless status differences were not evident, but a slightly higher percentage of adults for whom English was not their first language (n=733, 54%) had concerning scores for both depression and anxiety when compared to native English speakers (n=1,428, 52%).

Figure 9. Baseline Severity of Depression and Anxiety Symptoms by Hispanic Origin



Of the 2,161 cases with any PSS information, 1,839 (85%) had at least two scores collected through the end of March 2018[18]. To assess clinical improvement in depression and anxiety symptoms, baseline scores were compared against the average of all subsequently collected scores within individuals who had more than one score. For most cases, the difference in time between the first and last score was about 18 months.

Changes in depression symptoms over time differed significantly by ethnicity whereby 43 percent of non-Hispanic adults (n=1,395) improved their scores or remained stable below threshold over time, compared to 39 percent of Hispanic adults (n=444). See Table 7 below. Overall, 42 percent of adults had reduced or stable low depression symptoms over time (n=1,839).

Table 7. Changes in Depression Symptoms over Time by Hispanic Ethnicity

	Non-Hispanic Adults	Hispanic Adults
Above threshold at subsequent measure	793 (57%)	272 (61%)
Improved below threshold at subsequent measure	266 (19%)	98 (22%)
Remained stable below threshold	336 (24%)	74 (17%)
Total	1,395 (100%)	444 (100%)

For anxiety symptoms, a higher percentage of Hispanic adults showed improvement (23%), compared to non-Hispanic adults (16%), as shown in Table 8. Overall, 48 percent of adults had reduced or stable low anxiety symptoms over time (n=1,839).

Table 8. Changes in Anxiety Symptoms over Time by Hispanic Ethnicity

	Non-Hispanic Adults	Hispanic Adults
Above threshold at subsequent measure	717 (51%)	246 (56%)
Improved below threshold at subsequent measure	220 (16%)	103 (23%)
Remained stable below threshold	458 (33%)	95 (21%)
Total	1,395 (100%)	444 (100%)

Differences based on language, interpretation skills, and race all aligned with these ethnicity findings. Gender differences in symptom change were also evident. Males (n=823, 46%) were more likely to have improved or stable depression scores than females (n=999, 39%) or non-binary gendered individuals (n=17, 23%). For anxiety, 52 percent of males showed improvement or stabilization below the clinical threshold, compared to 45 percent of females and 12 percent of non-binary individuals. No significant differences were found by either King County region or homeless status.

[18] The requirement to collect PSS data ended on 12/31/2017, so new measures must be adopted if analysis of symptom reduction for the MIDD Evaluation is to continue in the future.

Children's Functional Assessment Rating Scale (CFARS)

The CFARS allows "documenting and standardizing impressions from clinical evaluations or mental status exams that assess cognitive, social and role functioning."[19] The CFARS is a clinician-rated tool used to assess current functioning in 16 behavioral health domains for children, including depression and anxiety symptoms. Scores to assess depression and anxiety were available for 544 of the 648 youth and children (84%) who began services in PRI-11 Community Mental Health Treatment between 2014 and 2016. Ratings for each item ranged from one (no problem) to nine (extreme problem). Scores above four are generally interpreted as meeting the threshold for concern, or showing problematic symptoms. Symptoms at baseline were above the clinical threshold for almost 60 percent of children/youth with at least one measure: anxiety only (17%), depression only (15%), or both (27%) (n=544).

Like the PSS results for adults, analysis of the CFARS data revealed statistically significant demographic differences in both baseline scores and symptom improvement over time for youth and children. At first measure, Hispanic youth had higher ratings of anxiety and depression symptoms than non-Hispanic youth. Significant gender differences were also evident whereby 92 of 303 females (63%) had both depression and anxiety symptoms rated above the concern threshold at baseline, compared to 54 of 241 males (37%). Youth in Seattle (n=219) were less likely to be rated with baseline symptoms above threshold (46%) than youth in all other King County regions combined (n=325, 69%). Note that the regional difference could be attributed to ethnic dispersion, as more Hispanic youth lived in the south region of the county (59%) than in Seattle (26%).

Of the 544 cases with any CFARS information, 267 (49%) had at least two scores collected through the end of March 2018.[20] To assess improvement in depression and anxiety symptoms, baseline scores were compared against the average of all subsequently collected scores within individuals who had more than one score. For most cases, the difference in time between the first and last score was about one year. Overall, reduced or stable low depression symptoms were evident for 75 percent of children/youth (n=267). Depression symptoms differed by ethnicity whereby the majority of non-Hispanic youth (106 of 146, 73%) remained stable below threshold at both baseline and subsequent measure, compared to Hispanic youth (52 of 121, 43%). The percentage of Hispanic youth who remained above threshold at subsequent measure (37%) was double that of non-Hispanic youth (16%).

Improved or stabilized anxiety symptoms over time were evident for 78 percent of non-Hispanic youth and 71 percent of Hispanic youth (or 75% overall), as shown in Table 9. Reducing demographic disparities in outcomes such as these is an important goal of King County's Equity and Social Justice Strategic Plan.

Table 9. Changes in Anxiety over Time by Hispanic Ethnicity

	Non-Hispanic Youth	Hispanic Youth
Above threshold at subsequent measure	32 (22%)	35 (29%)
Improved below threshold at subsequent measure	15 (10%)	34 (28%)
Remained stable below threshold	99 (68%)	52 (43%)
Total	146 (100%)	121 (100%)

[19] http://outcomes.fmhi.usf.edu/cfars.cfm

[20] The requirement to collect CFARS data ended in early 2018, so new measures must be adopted if analysis of symptom reduction for the MIDD Evaluation is to continue in the future.

Substance Use in the Past 30 Days

Ten MIDD initiatives (listed in Table 10 below) aim to reduce participants' substance use rates. The database of individuals enrolled in publicly-funded substance use disorder (SUD) treatment was queried to obtain data about client-reported use of substances in the past 30 days[21] (at baseline) and again after the passage of time (subsequent measure). If more than one subsequent measure had been collected, the modal response was entered into the change-over-time analysis. Note that the baseline measure was the first one available in the data, regardless of when MIDD services and/or SUD treatment began. All participants enrolled in MIDD initiatives where substance use reduction was relevant, who began MIDD services between 2015 and 2017, were eligible for inclusion in this analysis. The percentage of cases that had measures at more than one point in time ranged from a low of 3 percent for mental health treatment under **PRI-11** to a high of 50 percent for **TX-FTC Family Treatment Court**. Among the 1,120 unique individuals with repeated measures, the two most commonly reported primary substances were alcohol (n=442, 39%) and heroin (including switches[22] to or from heroin over time) (n=300, 27%). Cocaine (n=60, 5%) and marijuana (n=73, 7%) were the least common substances reported by those who entered treatment for SUD and had repeated measures. The overall rate of substance use reduction or stabilization at low levels was 45 percent for this analysis sample; the rate of reduction to no subsequent use (abstinence) was 34 percent.

Table 10. Reduced or Stable Low Substance Use over Time Was Evident for Nearly Half of MIDD Participants with Repeated Substance Use Measures

Initiative	Number Eligible for Analysis	Number with Repeated Measures	Percent with Repeated Measures	Reported Reduced Use or Stable Low Use over Time*	Reported No Use at Subsequent Measure*
PRI-01 Screening, Brief Intervention and Referral to Treatment (SBIRT)	5,035	390	8%	98 (25%)	71 (18%)
PRI-02 Juvenile Justice Youth Behavioral Health Assessments	719	35	5%	15 (43%)	<10
PRI-11 Community Behavioral Health Treatment (Substance Use Disorder)	1,651	375	23%	260 (69%)	191 (51%)
CD-01 Law Enforcement Assisted Diversion	210	42	20%	<10	<10
CD-13 Family Intervention and Restorative Services					
RR-05 Housing Vouchers for Adult Drug Court	50	12	24%	<10	<10
RR-11b Substance Use Disorder Peer Support	484	87	18%	43 (49%)	35 (40%)
TX-ADC Adult Drug Court	1,069	161	15%	72 (45%)	63 (39%)
TX-FTC Family Treatment Court	96	46	50%	22 (48%)	20 (44%)
TX-JDC Juvenile Drug Court	200	27	14%	10 (37%)	<10
All Cases Where Substance Use Reduction Relevant (Unduplicated Keeping Earliest Start Date per Person)	9,514	1,050	11%	477 (45%)	360 (34%)

*Percent of individuals for whom at least two measures were recorded. These measures are not mutually exclusive.

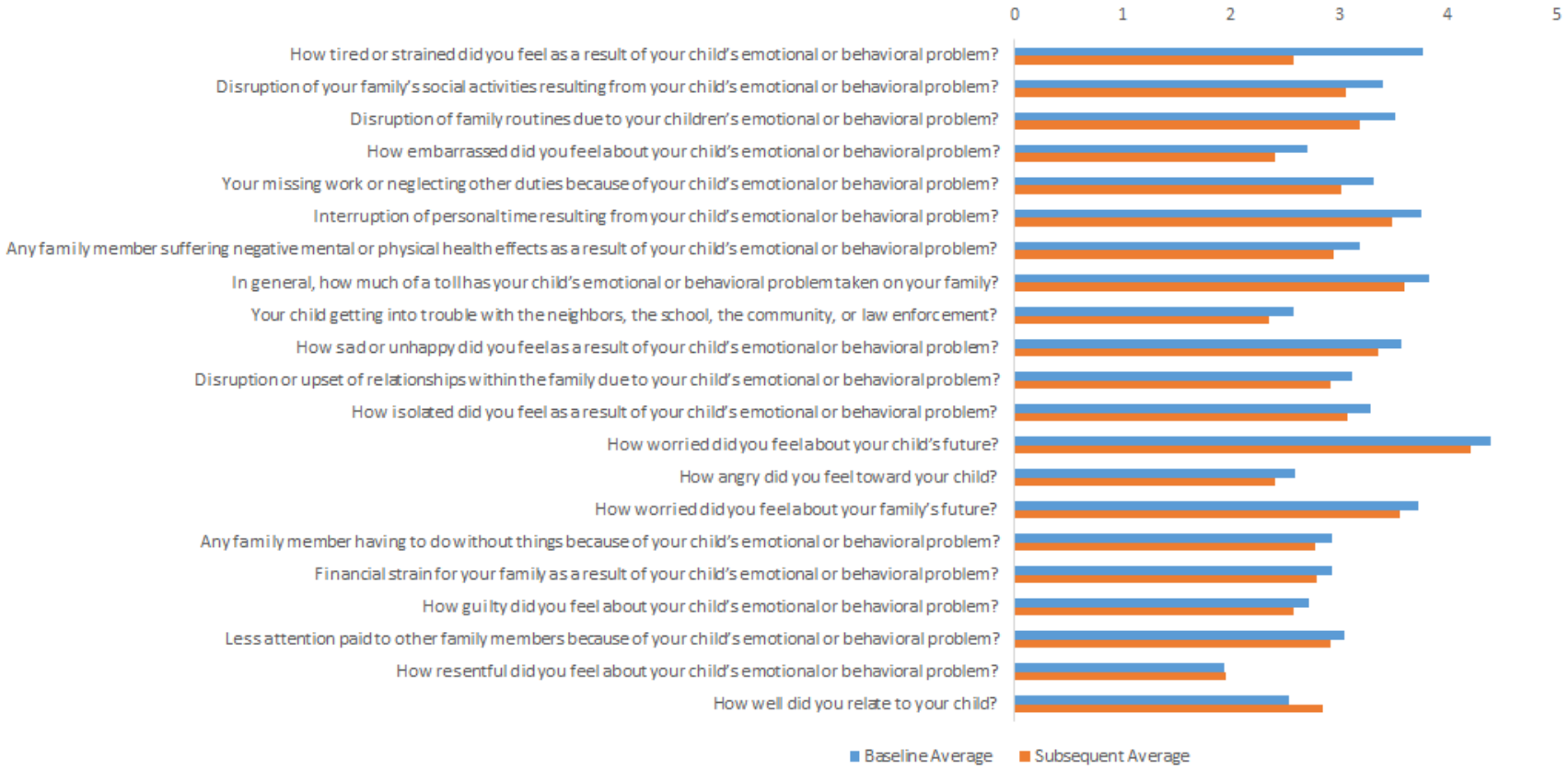
[21] Frequency of use for "the last 30 days in an uncontrolled environment" was substituted for frequency of use in the past 30 days, if available.

[22] People often switched from one primary substance to another between measures (n=185, 17%).

The Caregiver Strain Questionnaire

The Caregiver Strain Questionnaire collected data by self-report from caregivers of youth served during 2018 in **CD-15 Wraparound Services for Youth**. The questionnaire, as adapted by CD-15, has 21 questions, each scored: 1 "Not at all", 2 "A little", 3 "Somewhat", 4 "Quite a bit", and 5 "Very much." Higher scores on all items but one indicated more strain on the caregiver. Valid scores were available at two or more different time points for a total of 173 unique youth (28% of the 619 served). Statistically significant reductions in strain within individuals over time were evident for the first 13 questions shown below in Figure 10. Note that relating to their child also improved significantly, with an increased score over time. Altogether, 14 of 21 items showed significant improvement (67%). The item that indicated the area of most strain addressed worry about the child's future. Note that ordinal scale data was treated as interval scale in order to simplify this analysis, so results should be interpreted cautiously.

Figure 10. Caregiver Strain Questions in Rank Order of Improvement over Time



Policy Goal 5: Explicit Linkage with Other Initiatives

The MIDD endeavors to integrate its programs and services with a wide variety of other countywide policy initiatives and contributes to regional efforts to address major community priorities and challenges.

Coordinated Regional Homelessness Response

Initiatives **RR-01 Housing Supportive Services**, **RR-03 Housing Capital and Rental** and **RR-14 Shelter Navigation Services** (one-time funds) support the recommendations of the regional One Table approach to address homelessness and advance the goals of the All Home strategic plan to make homelessness rare, brief, and one-time. Multiple other MIDD initiatives (including **CD-05 High Utilizer Care Teams** and **RR-08 Hospital Re-Entry Respite Beds**) aim to reach unhoused people with behavioral health conditions, and work to support participants to achieve housing stability, as part of integrated services.

Physical and Behavioral Health Integration

MIDD plays a key role in our region's participation in statewide behavioral health system transformation, including the integration of physical and behavioral health care. For example, **PRI-11 Community Behavioral Health Treatment** provides outpatient services to people who are not eligible for Medicaid and **SI-03 Quality Coordinated Outpatient Care** supports the behavioral health system to deliver on outcomes and expanded non-Medicaid treatment access.

Heroin and Prescription Opiate Addiction Task Force

Initiative **CD-07 Multipronged Opioid Strategies** is implementing recommendations from the multisystem Heroin and Prescription Opiate Addiction Task Force, including programs that support prevention, substance use disorder (SUD) treatment, and overdose response.

Veterans, Seniors and Human Services Levy (VSHSL)

MIDD partnered with VSHSL in 2018 to enhance screening for depression, anxiety and SUDs for different populations of people receiving primary medical care in the health safety net system (**PRI-03 Prevention and Early Intervention for Adults Over 50**). Therapeutic court programs also collaborated across fund sources, especially in providing services for military veterans.

Best Starts for Kids Levy

Initiative **PRI-05 School-Based SBIRT** is aligned with BSK investments through a partnership with school districts to provide middle schools with behavioral health prevention services.

Zero Youth Detention

MIDD funds several initiatives that seek to reduce the use of juvenile detention. Initiatives **PRI-02 Juvenile Justice Youth Behavioral Health Assessments**, **CD-02 Youth Detention Prevention Behavioral Health Engagement**, **CD-13 Family Intervention Restorative Services**, **CD-16 Youth Behavioral Health Alternatives to Secure Detention**, and **TX-JDC Juvenile Drug Court** are all designed to further the work of Zero Youth Detention in King County.

Updated Initiative Performance Measures

The grids below and on the following pages show performance measurement plans for each MIDD initiative within the Results Based Accountability (RBA) framework, along with an explanation of changes made during 2018. Targets confirmed during 2017 and 2018 reflect the unique number of individuals receiving at least one relevant program service in the reporting period, unless otherwise specified. The acronym **ED** refers to available emergency department data.[23] The acronym **PI** refers to psychiatric inpatient data gathered from community inpatient psychiatric hospitals located within King County, plus Western State Hospital. Strike-through (removed text) and bold (inserted text) formatting highlights recent changes made.

Prevention and Early Intervention				
Initiative	**How much was done?**	**How well was it done?**	**Is anyone better off?**	**2018 Changes**
PRI-01: Screening, Brief Intervention and Referral to Treatment (SBIRT)	# of clients screened # referred for follow-up # engaged in services Target: screen 2,500	% linked to publicly-funded behavioral health treatment	% with reduced substance use ~~% with clinically-improved depression and anxiety~~ % diverted from ED % with reduced ED use	Current focus of initiative remained on substance use disorders
PRI-02: Juvenile Justice Youth Behavioral Health Assessments	# of clients screened # referred for follow-up # engaged in services Target: serve 300	% linked to publicly-funded behavioral health treatment	% with reduced substance use % with clinically-improved depression and anxiety % diverted from ~~detention~~ **juvenile legal system** % with reduced ~~detentions~~ **referrals and/or filings**	Newly adopted juvenile legal system measures became available
PRI-03: Prevention and Early Intervention Behavioral Health for Adults Over 50	# of clients screened # referred for follow-up # engaged in services Target: engage 1,200	% linked to needed treatment or services within program	% with clinically-improved depression and anxiety % diverted from ED % with reduced ED use	
PRI-04: Older Adults Crisis Intervention / Geriatric Regional Assessment Team	# of referrals staffed within one day and documented diversions (by provider) # of clients served Target: serve 340	% of referrals with provider documented diversions	% diverted from ED/PI % with reduced ED/PI use % with reduced crisis events	Redesign underway in 2019

[23] Current information focuses primarily on ED use at Harborview Medical Center in Seattle, with smaller subset analyses on data from other hospitals.

Prevention and Early Intervention (Continued)				
Initiative	**How much was done?**	**How well was it done?**	**Is anyone better off?**	**2018 Changes**
PRI-05: School- Based SBIRT (Screening, Brief Intervention and Referral to Treatment)	# of youth screened # referred for follow-up # engaged in services Target: screen 1,000 # of **2018** suicide prevention trainings and attendees	% linked to needed treatment or services within program ~~% linked to publicly-funded behavioral health treatment~~	~~% with reduced substance use~~ ~~% with clinically-improved depression and anxiety~~ Protective/risk factors in participating schools compared to whole county and statewide	The Best Starts for Kids (BSK) evaluation will adopt new measures for this blended-funding initiative, after transitioning to the new SBIRT model in 2018
PRI-06: Zero Suicide Initiative	# of trainings # of attendees Target: To be determined	% rating courses relevant and useful	Agency-level markers indicating suicide risk reduction	
PRI-07: Mental Health First Aid	# of trainings # of attendees Target: train 2,000	% rating courses relevant and useful	Emotional health and daily functioning comparing King County to WA state	
PRI-08: Crisis Intervention Training - First Responders	# of trainings # of attendees Target: train 600	% rating courses relevant and useful	Use-of-force and crisis response statistics	
PRI-09: Sexual Assault Behavioral Health Services	# of clients screened # referred for follow-up # engaged in services Target: serve 222	% linked to needed treatment or services within program	% positively engaged in treatment or met treatment goals	
PRI-10: Domestic Violence Behavioral Health Services and System Coordination	# of clients screened # referred for follow-up # engaged in services Target: serve 560 # of coordination activities # of coordination contacts Target: contact 160	% linked to needed treatment or services within program ~~%~~ # of agency staff who are trained across disciplines	% with clinically-improved depression or anxiety ~~% positively engaged in treatment or met treatment goals~~ Narrative reports demonstrating value of system coordination	More specific mental health symptom measures were kept as negotiated with providers
PRI-11: Community Behavioral Health Treatment	# of clients engaged in services Target: 3,500 served	% completing or successful in ongoing treatment	% with reduced substance use % with clinically-improved depression and anxiety % positively engaged in treatment or met treatment goals % diverted from **adult** jail/ED/PI % with reduced jail/ED/PI use	Specified that jail measure is for adults only (over 19 years at MIDD start) and clarified that PI measure is relevant for mental health clients only

Crisis Diversion				
Initiative	**How much was done?**	**How well was it done?**	**Is anyone better off?**	**2018 Changes**
CD-01: Law Enforcement Assisted Diversion	# of clients engaged in services Target: serve 350	% linked to publicly-funded behavioral health treatment % referred to needed social services	% with reduced substance use % positively engaged in treatment or met treatment goals % diverted from **adult** jail % with reduced jail use	
CD-02: Youth Detention Prevention Behavioral Health Engagement	# of clients engaged in services Target: To be determined **after 2019 baseline year**	% linked to needed treatment or services within program ~~% housed at exit~~	~~% with clinically-improved depression and anxiety~~ ~~% diverted from ED/PI~~ ~~% with reduced ED/PI use~~ % diverted from ~~detention~~ **juvenile legal system** % with reduced ~~detentions~~ **referrals and/or filings** % with reduced crisis events	Initiative redesign now aligns with explicit linkage to other community initiatives and newly adopted juvenile legal system measures
CD-03: Outreach and In Reach System of Care	# of clients engaged in services Target: serve 450	% linked to publicly-funded behavioral health treatment % with increased self-management skills % ~~housed at exit~~ referred to housing resources	% diverted from **adult** jail % with reduced jail use % with reduced crisis events	More appropriate measure was negotiated with stakeholders
CD-04: South County Crisis Diversion Services/Center	# of clients engaged in services Target: To be determined	% linked to publicly-funded behavioral health treatment % linked to needed social services	% diverted from **adult** jail/ED/PI % with reduced jail/ED/PI use % with reduced crisis events	
CD-05: High Utilizer Care Teams	# of clients engaged in services Target: serve 100	% linked to publicly-funded behavioral health treatment	% with clinically-improved depression and anxiety % diverted from ED/PI % with reduced ED/PI use % with reduced crisis events	
CD-06: Adult Crisis Diversion Center, Respite Beds and Mobile Behavioral Health Crisis Team	# of clients engaged in services Target: serve 1,875	% linked to publicly-funded behavioral health treatment % linked to needed social services	% diverted from **adult** jail/ED/PI % with reduced jail/ED/PI use % with reduced crisis events	

Crisis Diversion (Continued)				
Initiative	**How much was done?**	**How well was it done?**	**Is anyone better off?**	**2018 Changes**
CD-07: Multipronged Opioid Strategies	# of clients engaged in services Target: serve ~~700~~ **300 Public Health Seattle & King County Needle Exchange social worker clients only**	% linked to publicly-funded behavioral health treatment % with increased self-management skills	% positively engaged in treatment or met treatment goals % diverted from **adult** jail/ED~~/PI~~ % with reduced jail/ED~~/PI~~ use ~~% with reduced crisis events~~	Additional targets will be developed as new opioid programs complete baseline periods Removed measures were not appropriate due to low incidence rates
CD-08: Children's Domestic Violence Response Team	# of clients engaged in services # of unique families served Target: serve 85 families	% of survey respondents indicating improvement	% positively engaged in treatment or met treatment goals	
CD-09: Behavioral Health Urgent Care - Walk-in Clinic Pilot	# of clients engaged in services Target: To be determined	% linked to publicly-funded behavioral health treatment	% diverted from ED/PI % with reduced ED/PI use % with reduced crisis events	
CD-10: Next Day Crisis Appointments	# of clients engaged in services Target: serve 800 with blended funds	% linked to publicly-funded behavioral health treatment	% diverted from ED/PI % with reduced ED/PI use % with reduced crisis events	
CD-11: Children's Crisis Outreach and Response System	# of referrals staffed # of clients engaged in services Target: serve 1,000 with blended funds	% linked to needed treatment or services within program % of referrals with provider documented diversions	% with improved markers (harm to self/others) over time % with positive exit dispositions % with reduced crisis events	
CD-12: Parent Partners Family Assistance	# of clients engaged in services Target: serve 300	% linked to needed treatment or services within program % with increased self-management skills	% with knowledge of systems and how to access resources % with family empowerment and advocacy skills % positively engaged in treatment or met goals	

Crisis Diversion (Continued)				
Initiative	**How much was done?**	**How well was it done?**	**Is anyone better off?**	**2018 Changes**
CD-13: Family Intervention and Restorative Services	# of referrals staffed # of clients engaged in services Target: serve 300	% linked to needed treatment or services within program	% with reduced substance use % positively engaged in treatment or met treatment goals % with positive exit dispositions % diverted from ~~detention~~ **juvenile legal system** % with reduced ~~detentions~~ **referrals and/or filings**	Newly adopted juvenile legal system measures became available
CD-14: Involuntary Treatment Triage	# of clients engaged in services Target: serve 200	% linked to publicly-funded behavioral health treatment	% diverted from ED/PI % with reduced ED/PI use % with reduced crisis events	
CD-15: Wraparound Services for Youth	# of clients engaged in services Target: serve 650	% linked to needed treatment or services within program % with improved education markers (~~suspensions~~ **attendance**, grades) over time	% with improved markers (harm to self/others) over time % with reduced caregiver strain % with reduced crisis events	Error in stated measure was corrected
CD-16: Youth Respite Alternatives	# of clients engaged in services Target: To be determined	% linked to publicly-funded behavioral health treatment % linked to needed social services % housed at exit	% positively engaged in treatment or met treatment goals % diverted from ~~detention/ED/PI~~ **juvenile legal system** % with reduced ~~detentions/ED/PI~~ **referrals and/or filings** % with reduced crisis events	Newly adopted juvenile legal system measures became available
CD-17: Young Adult Crisis Stabilization	# of clients engaged in services Target: To be determined	~~% linked to publicly-funded behavioral health treatment~~ % linked to needed social services % housed at exit	~~% positively engaged in treatment or met treatment goals~~ % diverted from ED/PI % with reduced ED/PI use % with reduced crisis events	More specific measures were kept as negotiated with stakeholders

Recovery and Reentry				
Initiative	**How much was done?**	**How well was it done?**	**Is anyone better off?**	**2018 Changes**
RR-01: Housing Supportive Services	# of clients engaged in services Target: serve 690	% linked to publicly-funded behavioral health treatment % with increased self-management skills Housing retentions	% diverted from **adult** jail/ED/PI % with reduced jail/ED/PI use % with reduced crisis events	
RR-02: Behavior Modification Classes at CCAP	# of clients engaged in services Target: serve 40	% completing or successful in ongoing treatment	% positively engaged in treatment or met treatment goals % diverted from **adult** jail % with reduced jail use	
RR-03: Housing Capital and Rental	# of clients engaged in services Target: **N/A**	~~% with increased self-management skills~~ Housing retentions	% diverted from **adult** jail/ED/PI % with reduced jail/ED/PI use	
RR-04: Rapid Rehousing - Oxford House Model	# of clients engaged in services Target: serve 333	Housing retentions	% with reduced substance use % positively engaged in treatment or met treatment goals % diverted from **adult** jail/ED/PI % with reduced jail/ED/PI use	
RR-05: Housing Vouchers for Adult Drug Court	# of clients engaged in services Target: serve 30	% housed at exit % who graduate ADC by housing status at entry	% with reduced substance use % positively engaged in treatment or met treatment goals % diverted from **adult** jail % with reduced jail use	
RR-06: Jail Reentry System of Care	# of clients engaged in services Target: serve ~~350~~ **450**	% linked to publicly-funded behavioral health treatment % ~~linked~~ **referred** to needed social services % housed at exit	% positively engaged in treatment or met treatment goals % diverted from **adult** jail % with reduced jail use	Clarified with stakeholders that new target applies to unduplicated clients in both reentry case management and education services; Additional funds were made available to this initiative in the 2019-2020 biennial budget
RR-07: Behavioral Health Risk Assessment Tool for Adult Detention	# of clients screened # referred for follow-up # of clients engaged in services Target: screen 2,460	% linked to publicly-funded behavioral health treatment	% with reduced substance use % with clinically-improved depression and anxiety % diverted from **adult** jail % with reduced jail use	

Recovery and Reentry (Continued)				
Initiative	**How much was done?**	**How well was it done?**	**Is anyone better off?**	**2018 Changes**
RR-08: Hospital Reentry Respite Beds	# of clients engaged in services Target: assess 350	% linked to needed treatment or services within program % ~~housed~~ **sheltered** at exit	% positively engaged in treatment or met treatment goals % diverted from ED % with reduced ED use	More appropriate measure was negotiated with stakeholders
RR-09: Recovery Café	# of clients engaged in services Target: serve 300	% linked to publicly-funded behavioral health treatment % with increased self-management skills	% positively engaged in treatment or met treatment goals % with reduced crisis events	
RR-10: Behavioral Health Employment Services and Supported Employment	# of clients engaged in services Target: serve 800	% employed and retaining jobs	% positively engaged in treatment or met treatment goals % diverted from **adult** jail/~~PI~~ **ED** % with reduced jail/~~PI~~ **ED** use	Error in stated measure was corrected
RR-11a: Peer Bridger Programs	# of clients engaged in services Target: serve ~~200~~ **300**	% linked to publicly-funded behavioral health treatment **% enrolled in health insurance programs**	% diverted from ~~jail~~/ED/PI % with reduced ~~jail~~ /ED/PI use ~~% enrolled in health insurance programs~~	A higher target and more appropriate measures were negotiated with stakeholders to more accurately reflect the number of clients served annually
RR-11b: Substance Use Disorder Peer Support	# of clients engaged in services Target: ~~To be determined~~ **serve 1,000**	% with increased self-management skills % linked to publicly-funded behavioral health treatment	% with reduced substance use % positively engaged in treatment or met treatment goals % diverted from **adult** jail/ED % with reduced jail /ED use	A target aligned with expected program capacity and utilization was developed with providers
RR-12: Jail-Based Substance Abuse Treatment	# of clients engaged in services Target: serve 200	% linked to publicly-funded behavioral health treatment ~~% administered risk, need, responsivity tool~~	% with reduced substance use % positively engaged in treatment or met treatment goals % diverted from **adult** jail % with reduced jail use	More appropriate measures were kept as negotiated with stakeholders
RR-13: Deputy Prosecuting Attorney for Familiar Faces	# of clients engaged in services Target: To be determined	~~% housed at exit~~ % linked to needed treatment or services within program	% diverted from **adult jail**~~/ED/PI~~ % with reduced **jail**~~/ED/PI~~ use	More appropriate measures were negotiated with stakeholders
RR-14: Shelter Navigation Services	~~# of clients engaged in services~~ ~~Target: serve 200 homeless households~~	~~% linked to publicly-funded behavioral health treatment~~ ~~% housed at exit~~	~~% positively engaged in treatment or met treatment goals~~ ~~% diverted from jail~~ ~~% with reduced jail use~~	One-time funds in 2018 were not renewed in 2019-2020 biennium

System Improvement				
Initiative	**How much was done?**	**How well was it done?**	**Is anyone better off?**	**2018 Changes**
SI-01: Community Driven Behavioral Health Grants	# of participating agencies/programs # of clients engaged in services Target: To be determined	% rating activities or programs relevant and useful	Agency-level markers indicating improved behavioral health Protective/risk factors (local vs. county vs. state)	
SI-02: Rural Behavioral Health Grants	# of participating agencies/programs # of clients engaged in services Target: To be determined	% rating activities or programs relevant and useful	Agency-level markers indicating improved behavioral health Protective/risk factors (local vs. county vs. state)	
SI-03: Quality Coordinated Outpatient Care	To be determined Target: ~~To be determined~~ **not applicable**	~~To be determined~~	~~To be determined~~	The MIDD evaluation will leverage findings of robust, in-depth analyses to be fully implemented in 2019
SI-04: Workforce Development	~~To be determined~~ **# of trainings** **# of attendees** Target: To be determined	~~To be determined~~ **% rating courses relevant and useful**	~~To be determined~~ **% with increased skill in trauma-informed or culturally-appropriate services** **% with increased other relevant skills**	Targets will be determined as new programs complete baseline periods

Therapeutic Courts				
Initiative	**How much was done?**	**How well was it done?**	**Is anyone better off?**	**2018 Changes**
TX-ADC: Adult Drug Court	# of clients engaged in services Target: serve 700	% graduating and with positive exits % housed at exit	% with reduced substance use % positively engaged in treatment or met treatment goals % diverted from **adult** jail % with reduced jail use	
TX-FTC: Family Treatment Court	# of children in families served Target: serve 140 children	% linked to publicly-funded behavioral health treatment % graduating and with positive exits % with positive child placements at exit	% with reduced substance use % positively engaged in treatment or met treatment goals % diverted from **adult** jail % with reduced jail use	

Therapeutic Courts (Continued)				
Initiative	**How much was done?**	**How well was it done?**	**Is anyone better off?**	**2018 Changes**
TX-JDC: Juvenile Drug Court	# of clients engaged in services Target: serve 50 ~~new~~ **opt-in** youth	% linked to publicly-funded behavioral health treatment	% with reduced substance use % positively engaged in treatment or met treatment goals % diverted from ~~detention~~ **juvenile legal system** % with reduced ~~detentions~~ **referrals and/or filings**	A more accurate target was negotiated with stakeholders Newly adopted juvenile legal system measures became available
TX-RMHC: Regional Mental Health and Veterans Court	# of clients engaged in services Target: serve ~~130~~ **350**	% linked to publicly-funded behavioral health treatment % housed at exit	% with clinically-improved depression and anxiety % positively engaged in treatment or met treatment goals % diverted from **adult** jail % with reduced jail use	A higher target was negotiated with stakeholders to more accurately reflect the number of clients served annually
TX-SMC: Seattle Municipal Mental Health Court	# of clients engaged in services Target: serve 130	% linked to publicly-funded behavioral health treatment	% with clinically-improved depression and anxiety % positively engaged in treatment or met treatment goals % diverted from **adult** jail % with reduced jail use	Redesign underway in 2019
TX-CCPL: Community Court Planning and Pilot	**# of clients engaged in services** Target: To be determined	**% linked to publicly-funded behavioral health treatment** **% referred to needed social services**	**% positively engaged in treatment or met treatment goals** **% diverted from adult jail** **% with reduced jail use**	Measures were negotiated with stakeholders and a target will be determined when program completes baseline period

MIDD Population-Based Indicators

Population-based indicators are proxy measures to help quantify the result – conditions MIDD services aim to change to improve health and well-being of residents in King County. Over time, MIDD will work to **contribute** to turning the curves of population-level indicators, as defined through Results-Based Accountability. The population-based indicators track how various King County efforts and initiatives are collectively making an impact on the larger community of people in King County (KC).

As discussed in the MIDD 2 Evaluation Plan (June 2017), review of population-based indicators is a new component of the MIDD evaluation. Table 11 below uses the most recent available data to compare against baseline information first reported in the MIDD 2017 Annual Report. Each indicator was measured using the same data source and methodology as the baseline year, unless stated otherwise, to accurately reflect change over time.

Table 11. Observed Changes in Indicators of Well-Being Trending Away from Desirable Outcomes

Indicator	As Measured By	Baseline Data	Most Recent Available Data	Percent Change Over Time
Improved emotional health	• Average number of days adults in King County spent coping with stress, depression, and problems with emotions in the past 30 days, as measured by the Behavioral Risk Factor Surveillance System (BRFSS)[24] • Percent of students in grades 8, 10, and 12 (combined averages) who reported feeling depressed or having suicidal thoughts, as measured by Healthy Youth Survey (HYS)[25]	Adults: 3.2 days (2016) Youth: Depression 31% Suicidal Thoughts 17% (2016)	Adults: 3.7 days (2017) Youth: Depression: 33% Suicidal Thoughts: 19% (2018)	16% increase 6% increase 12% increase
Reduced suicide attempts and deaths	• Rate per 100,000 people aged 20+ living in King County with non-fatal self-inflicted injury (suicide attempts) and suicide fatalities, as reported by the Washington State Department of Health	Adult Attempts: 45/100,000 (2011-2015 average) Adult Fatalities: 15/100,000 (2016)	Age-Adjusted Suicide Rate 12/100,000 (2013-2017)[26]	More recent comparable data unavailable

[24] https://www.cdc.gov/brfss/annual_data
[25] http://www.askhys.net/FactSheets
[26] https://www.doh.wa.gov/Portals/1/Documents/8390/346-087-SuicideFirearmPrevention.pdf

Indicator	As Measured By	Baseline Data	Most Recent Available Data	Percent Change Over Time
Reduced opioid, alcohol, and other drug deaths	Number of times drug identified deaths occurred, as reported annually by the King County Medical Examiner	All-Age Overdose Deaths: 360 (2016)	All-Age Overdose Deaths: 397 (2018)	10% increase
Increase in daily functioning	• Percent of adults who report an average of 14 or more days with limitations due to physical and/or mental health in the past 30 days (BRFSS)	Mental distress: 9% Physical distress: 8% (2016)	Mental distress: 13% Physical distress: 16% (2018)	44% increase 100% increase
Reduced incarceration rate	• Number of people admitted and released from jail, based on data from Washington Association of Sheriffs and Police Chiefs and the Washington State Department of Corrections	Average Daily KC Jail Population[27] 2,774 (2016) Prison Admissions from KC: 1,310[28] Prison Releases to KC: 1,441(FY 2017)	Average Daily KC Jail Population 2,909 (2018) Prison Admissions from KC: 1,334 Prison Releases to KC: 1,497 (FY 2018)	5% increase 2% increase 4% increase
Reduced or eliminated alcohol and substance use	• Percent of adults who reported binge drinking alcohol in the past 30 days (BRFSS) • Percent of adults who reported using marijuana in the past 30 days (BRFSS) • Percent of students in grades 8, 10, and 12 (combined average) who reported having at least one drink in the last 30 days (HYS) • Percent of students in grades 8, 10, and 12 (combined averages) who reported marijuana, painkiller, or any illicit drug use in last 30 days (HYS)	Adults: Binge Drinking 19% Marijuana 15% (2016) Youth: Alcohol Use 18% Illicit Drug Use 15% (2016)	Adults: Binge Drinking 22% Marijuana 24% (2017) Youth: Alcohol Use 11% Illicit Drug Use 13% (2018)	16% increase 60% increase 39% decrease 13% decrease

[27] King County, SCORE, Enumclaw, Issaquah, Kent and Kirkland jails from http://www.waspc.org/crime-statistics-reports Annual Jail Statistics

[28] http://www.doc.wa.gov/docs/publications/reports/200-RE001.pdf