

## Data Matrix

This Data Matrix is intended to highlight how data measurements can be reached with existing or new data points and/or agreements and protocols. The purpose of providing this matrix is to brainstorm data that can be used to support key decisions.

To support on-going decision making, programs and continuous data sharing on a set frequency would need to be established. This list does not include all of the data measurements or points that *could be* shared nor is this matrix a list of all the data points that *will be* shared.

Furthermore, this list does not suggest that it is possible or easy to share select data points, it is simply a tool to surface and raise awareness of the data that would be most impactful for decision making.

The data below is what has been collected or brainstormed to date and is subject to change. If you have questions or corrections, please contact blair.kerr@northhighland.com.

<b>Key Decision Legend:</b>	<b>2 - Are the service needs of those accessing behavioral care being met?</b>	<b>3 - Are the services provided impacting outcomes and making a difference for individuals and families served?</b>
<b>1 - Who is in need of or seeking behavioral health care and what are their overall service needs?</b>		

Key Decisions	Sector (s)	Service Provider Type within Sector	Data Measurement	Calculation (if needed)	Data Point	Available	Standardized	Comments and Potential Barrier to overcome
1	Healthcare	BH Provider	Individuals are receiving BH services (over the past month)	Total of behavioral health record with an initial service date but no close date (pulled the first or last data of the month)	Initial service date Close service date or Count service visits/encounters using claims data	N	N	BH Provider subgroup to agree on measure standardization Depending on the data sharing model selected, this could be capture through reports sent in by Providers or could be capture through a central repository
1	Healthcare	BH Provider	Individuals are receiving BH services (over the past month) <b>by payor</b>	Total of behavioral health record with an initial service date but no close date (pulled the first or last data of the month) by payor source	Initial service date Close service date Payor source or Count service visits/encounters using claims data	Y	N	BH Provider subgroup to agree on measure standardization Depending on the data sharing model selected, this could be capture through reports sent in by Providers or could be capture through a central repository
1	Healthcare	BH Provider	<b>NEW</b> individuals/families are accessing BH services (over the past month)?	Total of behavioral health record with an initial service date that falls within the last month	Initial service date or New patients using claims data	N	N	BH Provider subgroup to agree on measure standardization Depending on the data sharing model selected, this could be capture through reports sent in by BH Providers or could be capture through a central repository
1	Healthcare	BH Provider	Demographics	Total # of individuals by zip code	Zip code	Y	Y	
1	Healthcare	BH Provider	Referral sources	Total # of referral sources for each admit source compiled	Referral Source	Y	N	
1	Healthcare	BH Provider	Behavioral health conditions (including MH and BH)	# of individuals with dx	Diagnosis	Y	Y	
1	Healthcare	BH Provider	Co-occurring MH /SA	# of individuals with BH and SA diagnosis	Diagnosis	Y	Y	
1	Healthcare	BH Provider	Physical health conditions	# of individuals with physical health dx	Diagnosis	Y	Y	
1	Healthcare	BH Provider	Functioning level	# of individual per functioning level	Functioning scores	Y	N	BH group to explore and make decisions about what standardized functioning scores to use (e.g.. Consider functioning scores that are required by state for submission upon entry and exit of services)
1	Healthcare	BH Provider	Functioning level by special population	# of individual per functioning level with special population flag	Functioning scores Special populations flag	Y	N	BH group to explore and make decisions about what standardized functioning scores to use (e.g.. Consider functioning scores that are required by state for submission upon entry and exit of services) Consider using special ppopulation flags used by state
2	Healthcare	BH Provider	Timeliness of routine services - for an Assessment	Average length of time for an appointment % that are within 7 days	Date of service request Date of appointment Date of service request Date of appointment	Some providers	N	BH Provider subgroup to agree on measure standardization
2	Healthcare	BH Provider	Timeliness of routine services - for a medication assessment	Average length of time for an appointment % that are within 7 days	Date of service request Date of appointment Date of service request Date of appointment	Some providers	N	BH Provider subgroup to agree on measure standardization
2	Healthcare	BH Provider	Timeliness of routine services - for access to on-going treatment services (e.g. counseling)	Average length of time for an appointment	Date of service request Date of appointment	Y	Y	If not available in user-facing programs, available as time stamp data within the scheduling software.
2	Healthcare	BH Provider	Timeliness of routine services - for support services (e.g. living skills)	Average length of time for an appointment	Date of service request Date of appointment	Y	Y	If not available in user-facing programs, available as time stamp data within the scheduling software.
2	Healthcare	Service length of time	Average length of service duration for routine services	Total of (Date of entering services - current date in days)	Date of entering services	Y	Y	If not available in user-facing programs, available as time stamp data within the scheduling software.

				/ # of individuals actively receiving services	# of individuals actively receiving services	N	N	Providers to determine the definition of 'actively seeing' as the length of time inactive or archiving standards across hospitals and provider can differ.
1	Healthcare	BH Provider	Service Capacity - Routine Services - # psychiatrists/NP, PA per 100,000 lives	# psychiatrists/NP, PA per 100,000 lives	# psychiatrists/NP, PA # of MEB lives	Y	Y	an use a proxy such as an estimation based on national best practices May need to confirm definition across organizations relative to the services provided to have a standardized criteria for the population
2	Healthcare	BH Provider	Service Capacity - Routine Services- # of BH Professional providers per 100,000 (e.g. licensed SW, Counselor, MH therapist, SA	Professional availability : covered lives	# of BH Professional providers # of MEB lives	N	N	BH group to define the list to include in professional lives BH group to define how to identify these individuals across programs or to use proxies based on population data
2	Healthcare	BH Provider	Service Capacity - Routine Services - # of certified peer support specialists per 10,000 lives	Peer support : covered lives	# of certified peer support specialists # of MEB lives	Y	N	This information is likely known within each organization, but definitions should be compared across the community to arrive at a system level calculation and ensure high data quality This information may be defined within each organization but it needs to be defined across the community as well.
2	Healthcare	BH Provider	Service Capacity - Routine Services- # of certified family support specialists per 10,000 lives	family support : covered lives	# of certified family support specialists # of MEB lives	Y	N	This information is likely known within each organization, but definitions should be compared across the community to arrive at a system level calculation and ensure high data quality This information may be defined within each organization but it needs to be defined across the community as well.
1,2	Healthcare	Crisis Call Center	Volume (Daily, monthly)	Total call volume for a month / # days in month	Call volume	Y	U	No universal number for a crisis center across the county
1,2	Healthcare	Crisis Call Center	Recidivism - repeat service within 30/60/90 days	# of individuals with repeat calls within 30/60/90 days	% of individuals with repeat calls to the crisis line	N	N	program to measure call statistics including; caller source. incoming call time, time to answer, call duration, abandonment rates etc.
1,2	Healthcare	Crisis Walk-in	Volume (Daily, monthly)	Total # of admissions	Admissions	N	N	
1,2	Healthcare	Crisis Walk-in	Recidivism - repeat service within 30/60/90 days - % of individuals with repeat service in a crisis stabilization bed	# of individuals with repeat admissions within 30/60/90 days	Admissions	N	N	
2	Healthcare	Inpatient Facilities	In patient Psych Readmission rates	# of individuals with multiple inpatient psych claims / # of individuals who had inpatient psych claim	Claims data with inpatient psych service code	Y	Y	This information should be available within hospital EMRs, although historical information would be needed. It can also be identified through claims. Most accurate data would come from getting admits across hospitals not just within a single hospital.
1	Healthcare	Inpatient Facilities	Overall requests for BH inpatient beds (adults vs adolescents)?	count of requests for inpatient service	number of requests	N	N	may need a program to track this information as requests are received through a variety of mediums. Need to define a request and have a program to log the information
1,2	Healthcare	Inpatient Facilities	Overall wait time for BH inpatient beds (adults vs adolescents)?	Time from request to time of available bed at any facility	results of that request	N	N	need a standard list of results to capture the result of an incoming request
1,2	Healthcare	Inpatient Facilities	Overall wait time for BH inpatient beds (adults vs adolescents)?	Time from request to time of available bed at any facility	time and date of request	N	N	
1,2	Healthcare	Inpatient Facilities	Overall wait time for BH inpatient beds (adults vs adolescents)?	Time from request to time of available bed at any facility	time and date of request	N	N	wait times may vary by the service request and acuity, and this information will provide additional context for future analysis
1,2	Healthcare	Inpatient Facilities	Overall wait time for BH inpatient beds (adults vs adolescents)?	Time from request to time of available bed at any facility	request solution identified	N	N	the solution may be identified before action can occur and a key measurement can also be when the resolution is put in place
1,2	Healthcare	Inpatient Facilities	Overall wait time for BH inpatient beds (adults vs adolescents)?	Time from request to time of available bed at any facility	request resolution executed time and date	N	N	
1,2	Healthcare	Inpatient Facilities	Overall wait time for BH inpatient beds (adults vs adolescents)?	Time from request to time of available bed at any facility	time and date of transfer/admit/discharge	N	N	
2	Healthcare	Inpatient Facilities	Average length of stay in an inpatient level of care	Total of (Discharge date - admission date) / # admitted	Admission Date Discharge Date	Y	Y	Could be claims based or from and EHR
2	Healthcare	Inpatient Facilities	Service Capacity -Inpatient beds	Total of # of beds	# of beds available	Y	Y	Requires calculation across inpatient facilities
1	Healthcare	ED	# Individuals accessing care at ED	Total of admissions with DX of BH	# of admissions DX for behavioral health	Y	N	
1	Healthcare	ED	# of individuals by payor source	Total of admissions with DX of BH by payor source	# of admissions DX for behavioral health payor	Y	N	
1	Healthcare	ED	BH Conditions seeking services for	Total admissions by BH DX	# of admissions DX for behavioral health	Y	N	
1	Healthcare	ED	Co-occurring physical health conditions	Total admissions by physical health condition for those with BH DX	# of admissions DX for behavioral health	Y	N	
2	Healthcare	ED	Average response time to BH individual in emergency room	Time from admit in ED to receiving service	# of admissions DX for behavioral health			
2	Healthcare	ED	Average response time to BH individual in emergency room	Time from admit in ED to receiving service	Arrival time time seen by healthcare professional	U	N	An Emergency Department subgroup could develop how to standardize collection / reporting (e.g. use of indicators in EHR or claims data)
1	Healthcare	ED	Referral sources	Total # of referral sources for each admit source compiled	Admit Source	Y	N	An Emergency Department subgroup could develop how to standardize collection / reporting

1	Healthcare	ED	Demographics		Zip code			
2	Healthcare	ED	Average length of time to disposition out of emergency room for BH individual	Time from admit in ED to discharge	time/date of arrival	Y	N	An Emergency Department subgroup could develop how to standardize collection / reporting
					time and date of discharge from ED	Y	N	
2	Healthcare	ED	Disposition	Total by disposition type	Discharge Disposition	Y	N	An Emergency Department subgroup could develop how to standardize collection / reporting
2	Healthcare	ED	ED wait time to access in-patient psychiatric care	Average wait time in ED to transfer	Wait Time	N	N	Need to standardize how to measure unnecessary ED days when patients are waiting to be transferred to an inpatient bed. ED services are not the appropriate acuity level but this information needs to be captured in a uniform way within and across hospitals. Need to specify the reason for the delay in a transfer.
2	Healthcare	ED	# / % with high utilization	Total individuals with multiple admissions	Total individuals with multiple admissions with psych DX	N	N	Emergency Department subgroup could develop how to measure (e.g. use of indicators in EHR or claims data
1	Justice System	Law Enforcement	# of sworn officers who have completed CIT training	count of CIT training officer	CIT certifications	Y	Y	
1	Justice System	Law Enforcement	# of other law enforcement personnel who have completed CIT training?		CIT certifications	Y	Y	
1	Justice System	Jail	# of jail personnel who have completed CIT training	count of CIT training for jail personnel	CIT certifications	?	?	
1	Justice System	Jail	Inmate population with mental health, substance abuse, and crisis issues	% or list of inmates with mental health needs	Number of inmates on psychotropic drugs	Y	Y	If no MEB flag is within the program, consider adding it and the associated rules to it so that this data can more easily be pulled (i.e. if patient as an active prescription for a specific list of drugs then mark "MEB" check box should be automatically populated, but with a human override and reason code)
					high scores on select screening questions	Y	No	Establish a mental health screen that is not considered part of the health record and then have a scoring or flag that identifies individuals with BH need
					Past Screens from Probation for repeat offenders	Y	Y	Not captured in the shared program Service Point yet.
					Court screens from specialty court	Y	Y	Standard because there is a single entity, definitions need to be evaluated to applicability across organizations and sectors to see how they align
					ICD 10 discharge info related to mental health	Y	Y	Information is made available upon request. Armor can reach out for the information but there is no system whereby the hospital sends the information automatically upon learning of a booking and information is often sent via fax which is not the most efficient way to share information.
1	Justice System	Jail	Recidivism - repeat service within 30/60/90 days - % of individuals with repeat jail bookings	# of individuals with repeat jail bookings within 30/60/90 days	jail bookings			
1	Justice System	Probation	Prevalence of behavioral health needs for probationers	Total number of records in the probations data system that have the behavioral health flag checked	Behavioral Health flag	Caseload Explorer	N	Probation to identify if they are leady have a data point reflecting this measure or identify how they can collect this data