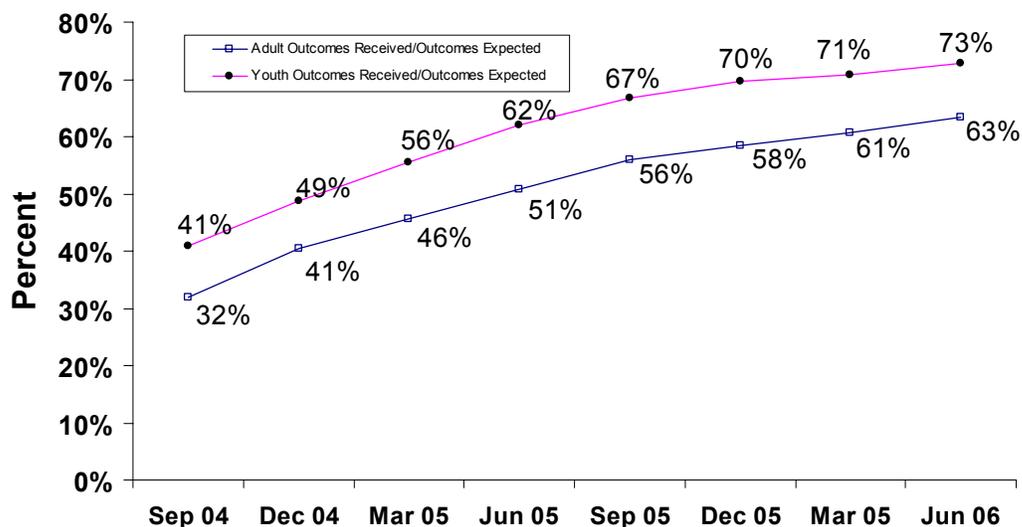




Missing Data Report Evolution

“The overall intent of the Ohio Mental Health Consumer Outcomes System is to measure how people change in treatment, and determine if the services they receive have an impact. To achieve that end, the Outcomes System is designed to capture information at the beginning and the end of treatment, and if there is long enough in between, to capture information at additional intervals between the beginning and the end.¹” Additionally, the Outcomes Rule says that Outcomes must be used in treatment planning. The intent of that provision of the Outcomes Rule is that Outcomes data provide a means for consumers to have input on the course of treatment, and to provide a mechanism for the ongoing review of the effectiveness and appropriateness of each consumer’s treatment. The Missing Data Report (MDR) series was created by Office of Program Evaluation and Research (OPER) staff to be a measure of the collection of Outcomes data to help understand how well data could address the purposes stated above. Specifically, the MDR is used for the purposes of Quality Improvement at a board and agency level and Certification at a state level. The Outcomes Rule requires that agencies collect 100% of data required in the Outcomes Rule and the Consumer Outcomes System Procedural Manual. However, OPER recognizes that there exist some circumstances outside the control of the agency that can result in an inability to acquire completed administrations from some consumers and/or parents/guardians. For this reason, a minimum compliance production requirement of 80% has been employed for Certification reviews. As can be seen in Figure One, the amount of

Figure One: Statewide Percentage of Outcomes Submitted from each Missing Data Report

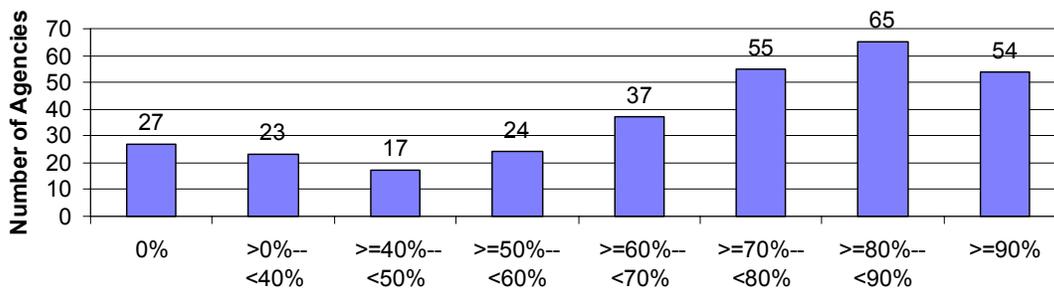


¹ Page 1-1, Ohio Mental Health Consumer Outcomes System Procedural Manual, Eighth Edition (Revised), Release Date: January 1, 2007

data has steadily risen and now stands at 63% for Adults and 73% for Youth, with a range at agencies from 0% to above 99%. The 80% standard may be changed in the future, but no current plans exist to change the standard.

Viewing performance by average is revealing, but does not tell the whole story. Some agencies are primarily child- or adult-serving, and their performance with the population that is not primary is often significantly lower than with their primary population. When viewed by the agencies' overall data reporting rate, a much different picture emerges. Figure Two shows the number of agencies at various levels of compliance on an overall reporting rate. The overall percentage is calculated as the (Adult Received + Youth Received) divided by (Adult Expected + Youth Expected). From this picture, it is quite clear that an 80% rate is not an extreme standard to set. It is also clear that a relatively few agencies pull down the overall report rates shown in Figure One.

Figure Two: Frequency of Agencies by Overall Outcomes Submission Rate



As the official standard of data reporting compliance, the MDR has also been a stimulus for agencies and boards to collect and report Outcomes data. Currently, the MDR is a measure of the people for whom at least one Outcomes record is present in a year-long report period divided by the number of persons for whom an Outcomes record is expected based on Outcomes-qualifying services having been delivered. Only records where at least one consumer-completed or provider-completed Outcomes data element (as opposed to Tracking Sheet or Demographic) is present are counted. This measure has been faulted for not showing where agencies are and are not collecting data. Instead, agencies are credited with data being present even if only one instrument is present. For example, if an Ohio Scales Youth instrument is present, but the Parent and Worker are not, credit is given to the agency. Further, agencies are credited even if only one administration is included. This could mean that agencies are given full credit for a single record when as many as six are expected². Moreover, this does not take into account a measure of the completeness of the record, except that a single consumer-response or provider-response item must be completed.

Such discussion is important, for what gets measured matters. As a stimulus for collecting and reporting data and as a Quality Improvement mechanism, the current form of the MDR

² In the case of a youth between the ages of 12 and 17 who starts treatment in the beginning half of the report period, Ohio Scales Youth, Parent, and Worker administrations are expected at Admission and at six months. Beginning July 1, 2007, a three-month administration is expected for youth.

has limited value because the measures provide little information about where improvement is needed. Some agencies have adopted the Missing Data Report as their target for data collection. The current format suffers as a target for the reasons discussed above. OPER recognizes this, and intends to revise the MDR so that it is a more sensitive measure of data reporting and a better reflection of the requirements of the Outcomes Rule. Because the MDR is used in the Certification process, these changes will be made deliberately, incrementally, and with advance notice, so that agencies and boards can make adjustments to their operations accordingly. The remainder of this report discusses the intended MDR revisions and timelines. Table One shows the schedule of Missing Data Report versions that will be produced. Tables Two and Three show the data collection rates that will be used in each Missing Data Report version. Note that each new version will be available for some period of time before that version becomes the official version used in Certification review.

Some characteristics of the MDR will not change.

1. Outcomes will only be expected for those consumers who receive Outcomes-qualifying services. These services are defined in the Consumer Outcomes System Procedural Manual in the various instrument chapters in the section titled: Respondent Eligibility and Characteristics.
2. Outcomes administrations that are received but that have no eligible claim are added to both the numerator and denominator of the data collection rates.
3. The Adult expected rates are reduced for those people for whom Youth instruments are received. This adjustment reflects that it is typical and appropriate that some transition-age individuals continue in youth treatment settings. Similarly, the Youth expected rates are reduced for those people for whom Adult instruments are received. This adjustment reflects that for some transition-age youth, it is appropriate to begin adult services.

MDR—Classic

This version of the Missing Data Report, described above, is the one currently in production that has been used since the beginning, and further information about its construction is included at the beginning of each report. This report's numerators are the numbers of people with at least one administration, and the denominators are the numbers of people for whom at least one administration is expected. One important feature of this version is that the "Agency-sorting algorithm" is used to select the agency from which Outcomes are to be expected when the person received Outcomes-qualifying services at more than one agency.

MDR—Instruments

This report provides a received and expected data collection rate for each instrument: Adult Consumer, Adult Provider, Ohio Scales Youth, Ohio Scales Parent, and Ohio Scales Worker. The expected and received frequencies are based on the number of people who have or are expected to have each instrument in the reporting period. The MDR—Instruments version implementation overlaps with the implementation of the requirement to use the Adult Consumer Form (formerly known as the Adult Consumer A Form) for all consumers who were to complete the Adult Consumer B Form. The latest date that the Adult Consumer Form will be accepted is June 30, 2007. MDR #17, which has report

dates of October 1, 06 through September 30, 07, will count all Adult Consumer A Forms, Adult Consumer Forms, but only Adult Consumer B Forms from the first three quarters of the reporting period. Likewise, MDR—Instruments #18 will only count Adult Consumer B Forms from the first two quarters of the reporting period. This report will provide more information about where agencies' strengths and weaknesses are in collecting data.

MDR—All Consumers

The assumption of the Outcomes Task Force in 1997 was that agencies would share Outcomes data among providers as needed, along with all other clinical information. In recognition of the lack of Outcomes data-sharing among agencies, the Outcomes System Quality Improvement Group (OSQIG) recommended and ODMH approved a decision that each agency must have and use Outcomes data for all consumers served regardless of their treatment status at other agencies. Accordingly, expected frequencies must be based on the total number of people who receive Outcomes-qualifying services rather than the frequency adjusted by the agency-sorting algorithm. In all other respects, this version is the same as the MDR Instrument version.

For more information about getting Outcomes data for consumers served at multiple agencies, see Appendix C to the [Consumer Outcomes System Procedural Manual](#).

MDR—Administrations

Historically, the most difficult Outcomes data to collect has been follow-up data. The MDR versions described above are only sensitive to follow-up data when consumers are in their second or subsequent year of service. This version will set expected frequencies of administrations for the reporting period based on service start and end dates at the agency. No more than one administration per period administration time period (admission, three months, six months, annually or termination) will be counted. For example, for a youth who begins treatment in the first half of a reporting year and continues in treatment through the end of the reporting year, an initial, three-month (under the revised expectations taking effect July 1, 2007) and a six-month administration would be expected. Therefore, three would be added to the denominator. However, if two initial (within 30 days of admission) Worker administrations were submitted for that youth, only one would be counted in the numerator. This version will better measure how often follow-up information needed for ongoing monitoring of treatment is reported.

Beyond Administrations

The Missing Data Report versions described above focus on the rate of submitting Outcomes administrations rather than on the quality of the data contained in the administration. However, to accomplish the stated purpose of determining the impact of treatment over its course, it is necessary to not only submit administrations, but to submit completed administrations. Therefore, agencies and boards should also be concerned about how much of each instrument is completed. This will largely be a function of the way the consumers are engaged in completing the instruments, and how much the instruments are used in treatment planning and monitoring.

Our hope is that agencies and boards find ways to get ahead of the Missing Data Reports. One of the most important ways that provides can assure that required data are collected is to use an upcoming Outcomes administration reminder system, or “Tickler” system. The Outcomes System Quality Improvement Group recommended that ODMH find and distribute information about good tickler system models, though none have come forward since then. Additionally, OSQIG described some of the information that would be required to create an ideal Tickler system. At least three types of data would be useful in setting expectations about when an administration is due:

- Enrollment data (such as the MACSIS enrollment data or a MACSIS Behavioral Health Admission record) could signal the expectation for an Initial administration, and the time elapsed since then would signal the expectation for subsequent administrations.
- Discharge—or termination—data (such as a MACSIS Behavioral Health Termination record) might signal the expectation for a Termination administration.
- Level-of-Care Change data might signal the need to conduct an Outcomes administration that serves a clinical purpose, but is not required by the Outcomes System administration schedule.

Additionally, upcoming Administration Reminder Systems should add a rule to find cases that have been closed with three or more Outcomes-eligible services having occurred on separate days since the last administration.

One of the most important ways that boards can assist agencies in tracking down where Outcomes data are not present are by providing agencies with a list of those consumers for whom administrations are missing.

Focus on Results

The public mental health system should have its focus on the Outcomes of treatment for consumers, as should the Consumer Outcomes System. However, the Outcomes System also needs to provide assurance that the data results reports are as complete as possible so that sound decision can be made using the information for treatment, agency Quality Improvement, or system planning. Hopefully, the Missing Data Report will give agencies and boards a means to obtain complete information so that the system can keep its focus on the outcomes of treatment.

Table One: Schedule for Missing Data Reports

Report Number	Report Period		Report Run Time	Classic	Missing Data Report Version:		
	Start Date	End Date			Instruments	All Consumers	Administrations
12	1-Jul-05	30-Jun-06	Oct-06	<u>X</u>			
13	1-Oct-05	30-Sep-06	Jan-07	<u>X</u>	x		
14	1-Jan-06	31-Dec-06	Apr-07	<u>X</u>	x		
15	1-Apr-06	31-Mar-07	Jul-07	<u>X</u>	x		
16	1-Jul-06	30-Jun-07	Oct-07	<u>X</u>	x	x	
17	1-Oct-06	30-Sep-07	Jan-08		<u>X</u>	x	
18	1-Jan-07	31-Dec-07	Apr-08		<u>X</u>	x	
19	1-Apr-07	31-Mar-08	Jul-08		<u>X</u>	x	
20	1-Jul-07	30-Jun-08	Oct-08		<u>X</u>	x	
21	1-Oct-07	30-Sep-08	Jan-09			<u>X</u>	x
22	1-Jan-08	31-Dec-08	Apr-09			<u>X</u>	x
23	1-Apr-08	31-Mar-09	Jul-09			<u>X</u>	x
24	1-Jul-08	30-Jun-09	Oct-09			<u>X</u>	x
25	1-Oct-08	30-Sep-09	Jan-10			<u>X</u>	x
26	1-Jan-09	31-Dec-09	Apr-10			<u>X</u>	x
27	1-Apr-09	31-Mar-10	Jul-10			<u>X</u>	x
28	1-Jul-09	30-Jun-10	Oct-10			<u>X</u>	x
29	1-Oct-09	30-Sep-10	Jan-11				<u>X</u>
30	1-Jan-10	31-Dec-10	Apr-11				<u>X</u>
31	1-Apr-10	31-Mar-11	Jul-11				<u>X</u>
32	1-Jul-10	30-Jun-11	Oct-11				<u>X</u>
33	1-Oct-10	30-Sep-11	Jan-12				<u>X</u>
34	1-Jan-11	31-Dec-11	Apr-12				<u>X</u>

x=Report will be run for this period

Bold Underline indicates which reports will be the source of official numbers for Certification status.

See the body of the paper for a description of each report.

Table Two: Adult Instrument Data Collection Rates for Current and Future Missing Data Reports

Missing Data Report Version	Outcomes Reporting Rate	Numerator	Denominator	Unit of Measure	Certification Threshold for	Use Agency-Sorting Algorithm
Classic	Adults	Number of Adults for whom at least one Outcomes administration has been received	Number of Adults for whom an Outcomes is expected	Consumer	80%	Yes
Instruments	Adult Consumer	Number of consumers having at least one Consumer administration*	Number of consumers for whom a Consumer instrument is expected	Instrument by Consumer	80%	Yes
	Provider Adult	Number of consumers having at least one Provider administration	Number of consumers for whom a Provider instrument is expected	Instrument by Consumer	80%	Yes
All Consumers	Adult Consumer	Number of consumers having at least one Consumer administration	Number of consumers for whom a Consumer instrument is expected	Instrument by Consumer	80%	No
	Provider Adult	Number of consumers having at least one Provider administration	Number of consumers for whom a Provider instrument is expected	Instrument by Consumer	80%	No
Administrations	Adult Consumer	Number of Consumer administrations received	Number of Consumer instruments expected	Administration by Instrument by Consumer	?	No
	Provider Adult	Number of Provider administrations received	Number of Provider instruments expected	Administration by Instrument by Consumer	?	No

† **Agency Sorting Algorithm** is a method to determine which agency has responsibility to collect Outcomes data when more than one agency is serving a consumer. The Agency sorting algorithm is described here: http://www.mh.state.oh.us/oper/outcomes/reports/rpt.missing_data.procedures.pdf

* The MDR—Instruments version implementation overlaps with the implementation of the requirement to use the Adult Consumer Form (formerly known as the Adult Consumer A Form) for all consumers who were to complete the Adult Consumer B Form. The latest date that the Adult Consumer B Form will be accepted is June 30, 2007.

Table Three: Youth Instrument Data Collection Rates for Current and Future Missing Data Reports

Missing Data Report Version	Outcomes Reporting Rate	Numerator	Denominator	Unit of Measure	Certification	Threshold for	Use Agency-Sorting Algorithm†
Classic	Youth	Number of Youth for whom at least one Outcomes administration has been received	Number of Youth for whom an Outcomes is expected	Consumer	80%	80%	Yes
Instruments	Ohio Scales Youth	Number of youth having at least one OS Youth administration	Number of consumers for whom an OS Youth instrument is expected	Instrument by Consumer	80%	80%	Yes
	Ohio Scales Parent	Number of youth having at least one OS Parent administration	Number of consumers for whom an OS Parent instrument is expected	Instrument by Consumer	80%	80%	Yes
	Ohio Scales Worker	Number of youth having at least one OS Worker administration	Number of consumers for whom an OS Worker instrument is expected	Instrument by Consumer	80%	80%	Yes
All Consumers	Ohio Scales Youth	Number of youth having at least one OS Youth administration	Number of youth for whom an OS Youth instrument is expected	Instrument by Consumer	80%	80%	No
	Ohio Scales Parent	Number of youth having at least one OS Parent administration	Number of youth for whom an OS Parent instrument is expected	Instrument by Consumer	80%	80%	No
	Ohio Scales Worker	Number of youth having at least one OS Worker administration	Number of youth for whom an OS Worker instrument is expected	Instrument by Consumer	80%	80%	No
Administrations	Ohio Scales Youth	Number of OS Youth administrations received	Number of OS Youth administrations expected	Instrument by Consumer	?	?	No
	Ohio Scales Parent	Number of OS Parent administrations Received	Number of OS Parent administrations expected	Instrument by Consumer	?	?	No
	Ohio Scales Worker	Number of OS Worker administrations Received	Number of OS Worker administrations expected	Instrument by Consumer	?	?	No

† Agency Sorting Algorithm is a method to determine which agency has responsibility to collect Outcomes data when more than one agency is serving a consumer. The Agency sorting algorithm is described here: http://www.mh.state.oh.us/oper/outcomes/reports/rpt.missing_data.procedures.pdf.