

**State of Michigan**  
**1915(b) Waiver for Specialty Services and Supports**  
**ENCOUNTER DATA SYSTEM CORRECTIVE ACTION PLAN**  
***Status: May 2004***

This status report addresses contingency number seven in Ms. Cheryl Harris' December 9, 2003 letter approving Michigan's request to renew its Specialty Services and Supports Waiver Program. The contingency required that Michigan submit progress reports on the completeness and validity of plan encounter data, with the first report due May 7, 2004.

During the current fiscal year, Michigan Department of Community Health's (MDCH) Division of Quality Management and Planning (QMP) hired two staff who have extensive experience in systems' design, data processing and manipulation, and data management. These two staff have the responsibility of assessing and improving the completeness of the reporting of the quality improvement and encounter data submitted to the MDCH's data warehouse. QMP staff have begun this effort through comparisons to historical information, linkage comparisons between the quality improvement and encounter data, assisting PIHPs in resolving technical reporting issues, working with contractors to enhance system integrity, and developing approaches for linking the encounter data to external data systems.

I. Data Quality

A. Completeness

1. Quality improvement data

During 1997-2002, Michigan collected service utilization and demographic data for all consumers receiving services from the local public mental health system. FY'03 was the first year that this information was reported to MDCH's data warehouse using the HIPAA compliant 837 format. QMP staff created a monthly report of the number of consumers reported each year by the PIHPs from FY'00 through FY'03 using the FY'03 data reported to the warehouse (a sample is located in Attachment A). The report is sent to PIHPs who use these tables to compare the number of consumers currently reported to numbers reported during previous years.

Extensive work was done with each PIHP to determine an accurate count of the number of consumers served during FY'03. The data submission rules require that quality improvement data must be present in the warehouse before an 837 encounter data record may be accepted. This relationship is checked through a linkage of the following variables - agency (PIHP and their affiliate community mental health services program) identifiers, the date of the service, and the consumer's unique identifier. In addition to providing a check of the quality of these data linkage items, this linkage design provides a technique for determining

how many encounter records are missing based on the submission of the quality improvement record.

In order to use the counts from the quality improvement data to assess the completeness of the encounter records, it was critical to obtain an accurate and true count of consumers via the quality improvement records. Each PIHP was contacted to verify the number of consumers for FY'03 and provided with a listing of individuals in the quality improvement file, if necessary.<sup>1</sup> In working with the agencies, QMP staff found that five of the 18 PIHPs reported individuals to the quality improvement file who did not receive services during that period. Several other agencies had not yet completed their reporting to the quality improvement file for FY03.

In cases where there was a discrepancy between the number of individuals in the quality improvement file and the actual count determined by the agency, agencies either submitted the missing quality improvement records or provided QMP staff with an electronic listing of the subset of individuals to exclude, using key identifiers. It should be noted that there is no mechanism in the warehouse for removing or voiding quality improvement records as there is with the encounter records. All quality improvement records for all PIHPs have been submitted for fiscal year 2003 as of April 15, 2004.

## 2. Encounter 837 records

PIHPs receive tables that show the percentage of consumers, as determined by the quality improvement file, who have at least one encounter record. An example of this table is shown in Attachment B. The agencies are also given the report shown in Attachment C that lists the number of institutional and professional claims and services lines per PIHP that were stored in the warehouse by fiscal year. These tables allow the PIHP information system staff to quickly ascertain whether the warehouse contains the expected volume of encounter information. To assist PIHPs in resolving discrepancies between the warehouse counts and their own counts, QMP staff provide individual-level data to PIHPs to compare the MDCH 837 professional and institutional data against their records. In this way, PIHPs have been able to determine which encounter records have not yet been submitted to the warehouse, thus assisting them in completing their encounter reporting.

QMP staff, in conjunction with HIPAA implementation project contractors, helped several PIHPs resolve a situation in which the warehouse's processing of non-HIPAA compliant data resulted in PIHPs miscounting

---

<sup>1</sup> Staff consulted with the MDCH HIPAA Privacy Officer regarding the legality of providing data that contain Protected Health Information back to the PIHPs. This data is shared with PIHPs per Health Care Operations, 45 CFR 164.501 and 506.

the number of claims that had been accepted by the warehouse. QMP staff assisted the agencies in reviewing the 4,950 error reports to ascertain which claims and encounters were accepted and processed. QMP staff also work with the HIPAA implementation project contractors to provide guidance to the PIHPs in reformatting the problem records so they are HIPAA-compliant and to change edits for this formatting error.

### 3. Technical Assistance to PIHPs

QMP staff have worked with the HIPAA implementation project contractors since January 2004 to assist those PIHPs that had not yet been approved to submit 837 data to the warehouse. Through these efforts, the number of unapproved submitters of community mental health encounters and quality improvement data has decreased from nine to four. Attachments D, E and F show the improvement that has occurred in the submission of quality improvement and encounter records and the decrease in the number of unapproved submitters.

Work was done in different areas to provide help to the PIHPs. QMP staff partnered with the PIHPs and CMHSPs, Michigan's Department of Information Technology (MDIT) and the HIPAA implementation project contractors to review details and provide consultation and solutions on 837 and quality improvement data formats. This includes providing assistance, consultation, and review of transmission formats and error files generated from editing.

Staff also provided reference materials to the PIHPs to help the process of reading errors and submission of data, and developed templates for 837 institutional and professional data submission. In addition to providing this assistance over the phone and through e-mail, QMP staff provided site visits to two PIHPs.

A technical assistance session for PIHP staff who are involved in submitting encounter and QI data will be held May 21, 2004. The purpose of the session is to address implementation problems that have arisen since PIHPs have begun submitting production data. HIPAA implementation project contractors, MDCH's HIPAA Privacy officer, Bull Systems, and QMP staff will be on hand to answer questions.

### B. System Integrity and Functioning

In addition to the steps to review and improve the completeness of reporting, QMP staff are working with the HIPAA implementation project contractors to assure that the warehouse reporting system meets the needs of MDCH in order to insure complete, timely and accurate data. Prior to this fiscal year, MDCH contracted with the Michigan Public Health Institute to work with the warehouse

developers, Bull Systems, to insure that the warehouse system met the business needs of the Mental Health and Substance Abuse Administration within MDCH. During FY02, Bull Systems conducted extensive user acceptance testing sessions in order to validate the functioning of edits, review the effects of the translation systems on data integrity, and to test the ease of data extraction.

As PIHPs increased their reporting to the warehouse during 2003 fiscal year, QMP staff had extensive opportunity to use production data to test the system. Staff worked with HIPAA implementation project contractors to identify and resolve system's issues in order to improve data quality and increase the ease of using the system for analytical work. For example, in response to QMP staff request, the MDIT is adding a new field in the warehouse to record the date the quality improvement record was added or updated. This information will be extremely helpful in creating quarterly and yearly data extracts and will improve the accuracy of the linkages with the encounter records.

Staff also discovered that the edit that requires incoming encounter records to have a matching quality improvement record fails under certain circumstances. Bull Systems is fixing this edit in response to the staff review of the issue. In addition, QMP staff worked with the Bull Systems to improve the efficiency of the design of the Community Mental Health tables in the warehouse. For example, they added an index to a table that greatly speeds up the warehouse queries. Also, Bull Systems published a new rule for the formulation of temporary tables (which are necessary to produce the tables in the attachments) that greatly speeds up the process of creating and using the tables.

### C. Data Validation

#### 1. Through Linkage to Other Files and Analytical Work

One of the key strengths of MDCH's data warehouse is that it provides a mechanism to link data submitted by the PIHPs with other information for the Medicaid beneficiaries. Examples of this additional information include: physical health records from the Medicaid Health Plans (MHP), fee-for-service (FFS) claims information, pharmaceutical data, and information on Medicaid eligibility. Since these linkages will be essential for addressing analytical and research questions as well as provide useful information for validating encounter data, QMP staff developed the techniques for linking these various files.

While the capacity to link records exists in the system, developing the linkage algorithms required an extensive review of the system as well as extensive programming. In order to develop the linkage algorithms, QMP staff obtained assistance of staff from the Medicaid Services Administration (MSA) who are familiar with the details of the MHP, FFS, and Medicaid eligibility data.

Through this linkage with the FY'02 encounter data, staff were able to verify the Medicaid status for consumers as well as other variables including date of birth, gender, and social security number. The process for this linkage was documented extensively and will be used with the completed F'Y03 encounter data.

2. As part of the External Quality Review

The work statement in the request for proposals (RFP) for the external quality review (EQR) for FY03-04 includes a section on validating the PIHPs' encounter data. The external quality review organization (EQRO) has been selected, and a contract with it will be executed in early June 2004. Work will commence immediately. The EQRO will review MDCH's methods for validating data and conduct interviews of PIHP staff using CMS's Validating Encounter Data, Final Protocol, Version 1.0.

3. Through Site visits to PIHPs

Beginning this summer QMP staff will make annual visits to the PIHPs for the purpose of validating the encounter and quality improvement data. The protocol for the visits is being developed. The visits will coincide with the visits made by Quality Assurance staff, the schedule of which is in Attachment G.

D. Feedback to PIHPs

QMP staff are working with several PIHP information technology staff to develop a profile report that provides monthly feedback to PIHPs, and information to Mental Health and Substance Abuse Administration contract managers. It is anticipated that the profiles will be pilot tested in early summer.

Use of Data

As the encounter and quality improvement data have become available, MDCH has been able to take advantage of this rich resource. The annual Appropriations Act boilerplate report, due May 31<sup>st</sup>, used quality improvement data to create tables on the demographic characteristics of all of last year's (FY'02-03) public mental health recipients. The newly-created Governor's Mental Health commission and its five workgroups requested and received information and analyses that required linking mental health data with Medicaid Health Plan and fee-for-service data, as well as complicated analyses of the mental health data, and longitudinal comparisons. As part of the process for verifying that Habilitation Supports Waiver (HSW) beneficiaries receive an HSW service each month, QMP staff are working with the Mental Health and Substance Abuse Administration managed care staff to link encounter data information with the HSW eligibility files. Finally, there have been numerous ad hoc requests for simple and complex analyses of this encounter and quality improvement data.



Filename: encounterdataCAPStatusJW  
Directory: G:\COMMON\May17waivertraining  
Template: C:\WINDOWS\Application  
Data\Microsoft\Templates\Normal.dot  
Title: Status  
Subject:  
Author: Windows User  
Keywords:  
Comments:  
Creation Date: 5/13/04 10:53 AM  
Change Number: 2  
Last Saved On: 5/13/04 10:53 AM  
Last Saved By: Windows User  
Total Editing Time: 1 Minute  
Last Printed On: 5/16/04 9:59 PM  
As of Last Complete Printing  
Number of Pages: 6  
Number of Words: 1,904 (approx.)  
Number of Characters: 10,855 (approx.)