Michigan Peer Review Organization

Behavioral Health Team Analysis

University of Michigan
Industrial and Operations Engineering

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Jens Abbariao
Kevin Mantovani
Scott Oosterbaan

University of Michigan Health System
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EXECUTIVE SUMMARY

It was the purpose of this project to examine the Michigan Peer Review Organization’s Behavioral Health Team. The current environment of the Behavioral Health Team was analyzed for the sole purpose of obtaining a price per case cost of the department, and detailing the processes utilized to complete a product.

To accomplish this, specific tasks were observed. We narrowed our scope to include tasks that were beneficial to the Behavioral Health Team. Existing flow-charts were used to aid in this process. In instances where there were no existing ones available, flow-charts were created in order for the company to view the individual processes. After breaking down each task and timing the various steps, costs were allocated based on the duration of the task and the type of personnel that were involved.

After acquiring a price for the Behavioral Health Team telephonic authorization product, we then attempted to come up with a way to make the current tasks more efficient. The price that was derived from the telephonic process was $93.38. The determined cost is slightly below the bid price of $125. One must take into account that the cost only refers to telephonic, and therefore it is believable that the Behavioral Health Team as a whole operates at a cost of more than $125 per case. After analyzing the current procedures of operation we determined there is little that can be done to improve the existing process. Mandatory procedures dictated by State and CMHB requirements are partly responsible for the current work practices. Due to our findings, we concluded that it would not be beneficial to modify the current system to make it more efficient. In response, our solution attempts to make the core product more efficient. Re-engineering the entire organizational structure will allow the process improvements required to ensure success within the Behavioral Health Team. There is little low hanging fruit within this part of the organization.

We propose the implementation of a Web page for the Behavioral Health Team. As we will further explain, this will reduce the number of man hours required and ultimately reduce the associated costs.

We also highly recommend that another Industrial and Operations Engineering 481 consulting group be assigned to further analyze the potential of creating a web page for both the Behavioral Health Team and the Michigan Peer Review Organization as a whole.
INTRODUCTION and BACKGROUND

Michigan Peer Review Organization (MPRO) exists to insure and approve health-care for patients all over the state of Michigan.

MPRO is divided up into four customer teams (Medicare Team, State Government Team, Behavioral health Team, and MPRO Affiliates) that market different products. Currently, MPRO receives most of their business from the state and federal government insuring that patients with Medicare and Medicaid are receiving a quality service appropriate for their specific condition.

In 1988, MPRO obtained the contract to perform utilization reviews (UR) for Medicaid recipient patients in the state of Michigan. Due to MPRO’s successful implementation of this program, the state asked MPRO to perform UR for patients with and receiving Medicaid admitted to exempt, non-DRG units. The Behavioral Health Team handles this program. The process is mostly done telephonically, with some retrospective review done on site with the patients’ complete medical records.

Due to a movement in managed care, control of UR was moved from state to local control under the Community Mental Health Boards (CMHBs). This change, which took place on January 1, 1996, instigated the creation of MPRO’s Behavioral Health Team. Review and changes were made in the products that the Behavioral Health Team offers, as a result of the trends in health care. With the sweeping changes in the programs offered and the current contracts that have been created, there is a great need to insure profitability.

CURRENT ENVIRONMENT

The current environment alleviates the need to insure profitability for the MPRO Behavioral Health Team. As consultants, we have segregated the major components of the products offered by the Behavioral Health Team, and collected data in order to propose assumptions and conclusions regarding the current products and trends. The data references the time required for each task, who the task was performed by, and how many times the task had to be performed for each case. The data will be compiled and presented in this report with all the statistics and costs associated. Flow charts displaying the methods for the related products will also be included.

The other responsibility that we are bound to as consultants is to provide insight as to areas of opportunity, or areas where costs could be cut in the future. We flowcharted some steps within of the Behavioral Health products (when needed) and assigned costs to the various steps involved in each process. Lastly, we conferred with the Chief Financial Officer, Gary Guetshow, in order to add the necessary overhead costs and direct/indirect charges to the telephonic authorization product.
APPROACH and METHODOLOGY

We collected data regarding to process flows, time studies, and cost accounting of the targeted products. Flow charts were generated for those instances where there was no current flow chart of activities for the process in place. Through observation, collection of data, and statistical determination, we were able to place times on various steps of the processes. Finally, after obtaining financial information from the Chief Financial Officer, Gary Geutshow, we were able to cost out the products. The results of the telephonic authorization cost analysis can be seen in the Findings section of the report.

PRODUCT BACKGROUND

Telephonic Review

Telephonic review is the largest segment of the products offered by the Behavioral Health Team. The telephonic review reaches out to two different population segments: PHP and Inpatient (IP). PHP Telephonic Review handles patients who receive Partial Hospitalization care and the IP Telephonic Review handles patients receiving inpatient care. The telephonic review, whether it is PHP or IP, follows the same basic path.

1. Incoming Call
   A. Enter/Check Demographic data
   B. Hand off to Review Coordinator line
      1. Perform Review
      2. Approve or answer Maybe
         A. Approval
            1. Given # of days and verification number
         B. Maybe
            1. Physician Review
               A. Consults Attending Physician
               B. Reviews case
               C. Administers decision
                  1. Yes – Given # of days and verification number
                  2. No – County called and informed

The telephonic review currently involves many levels of staff. Technicians are responsible for entering the demographic data and insuring that the current data is correct for repeat patients. The calls are then routed from the technicians to the review coordinators. The review coordinators handle the utilization reviews, whether it is inpatient or outpatient. Review coordinators could either be registered nurses that have experience working with mentally ill patients, or individuals with degrees in social work or psychology with experience working with mentally ill patients as well. The Behavioral Health Team functions under two supervisors. One directs the administrative personnel in the Behavioral Health Team, which would include technicians. The other supervisor, who directs the review coordinators, insures that all cases are getting through in a timely and accurate manner.

The following page contains a flow chart that we created from an existing Behavioral Health Team flow chart, and through our own observation.
Medicaid & Uninsured Initial Inpatient Review/ Medicaid Partial Hospital Program Preadmission Review

Telephone call is received by technician

Fax is received by technician

Technician enters patient's demographic data

Transfer caller to review coordinator

RC enters patient's medical data

Approves Admission
- Gives number of days authorized
- Gives authorization number
- Give next review date

Approve Patient?

Yes → Refer to physician reviewer

Maybe
Retrospective Review

Retrospective Review is another product offered by the Behavioral Health Team. The product entails the receiving of a medical record of a case that has already been through the authorization system, or may be caught currently in this process. The nature of the product requires lengthy process times due to the transmittal of records from one facility to another, and then one department to another.

The retrospective reviewing process performs a similar function as the telephonic review. The difference being that it requires the use of a physical copy of a patient’s medical records. There are several reasons why a medical record would arrive at M-Pro:

1. Never seen or heard of case (post discharge)
2. Untimely or CSR (caused by hospital missing a CSR)
3. Chart arrives and is identified as having been previously denied
4. Hospital sends in random charts (marked “VALIDATION”)
5. Uninsured patient

The flow chart for the Retrospective Review process can be found on the following page, it was created through our own observations and discussion with the people directly associated with the process.
Retrospective Review with Medical Record

1. Medical record received (Clare) → Stamp w/ arrival date → Look up record in Qualitrack
   - In Q-track? Yes → In Excel? Yes → Shred Charts
   - No → Enter into Qualitrack
     - Enter into Excel tracking sheet
     - Triage Chart
     - Missing parts → Yes → Contact Hospital
     - No → Put Chart in Hick Folder

2. PR reviews charts → (Clare) Put chart on cart for physician reviewer
   - Is chart marked "denied"? No → Send to RC for Review
      - RC reviews charts
      - Not approved
   - Yes → Approve

3. Send chart to Clare
   - Send denial letter and file chart in room
     - Chart remains until an appeal is requested
   - Approve
   - Send back to Clare
     - File chart away
     - Generate letter
     - Mail letter
     - Shred chart
Physician’s Review

The physician’s review is performed when a review coordinator feels there is insufficient evidence to approve days of stay with the institution of care. The physician reviewer reviews all available information on the case and attempts to make a determination as to whether or not the patient should receive funded care. The physician may also contact the patient’s attending physician to acquire other information to help formalize the physician reviewer’s decision. When sufficient information is given, there is either an approval or denial and the appropriate reasoning is established. If the reviewer does determine that there is a need for additional day’s stay in the institution of care, then the physician reviewer approves the days and an authorization is given.

The physician reviewer has final say on whether or not additional days are required by the patient. The chart on the following page was provided by the Behavioral Health Team, and is the correct path that is currently being followed.
Physician Review Process
(Medicaid Inpatient, Medicaid PHP, and Uninsured Inpatient)

Case Referred by RC

PR reviews available information

Meets medical necessity?

Yes

Approves
- Gives number of days authorized
- Gives next review date
- Facility notified telephonically of authorization
- Authorization letters sent at discharge with authorized numbers

Return to CSR Process #2

No

Requests phone call from AP

Call back within timeframes?

Yes

PR discusses case with AP

Meets medical necessity?

Yes

Provides reasons for denial
Offers reconsideration

No

No

Denial by PR using available clinical information
- Verbal notification of facility
- Letter sent to AP & facility

CMHSP called on 2nd day & with denial recommendation

Facility may request reconsideration

Key:
AP = Attending Physicians
CSR = Continued Stay Review
PR = Physician Reviewer
RC = Review Coordinator
**Letter Generation**

The Behavioral Health Team generates letters for the patients' hospital's files for various reasons. There are currently 23 different types of letters that are generated by the Behavioral Health Team, classified into eight distinct groups. The main letters that are generated are approval letters and referral letters. Each case is issued one of these letters, whichever is appropriate to that specific case's needs. If the Behavioral Health Team approves the hospital stay of a patient, then when the patient discharges, an approval letter is sent. If the hospital stay of the patient is denied, then one of two referral letters is sent out, depending on the type of case (either admissions or continued stay). Any of the other letters may be generated and sent out depending on the needs of the case and how it progresses. Before the letters are sent out, they are proofread and revised (if necessary), logged into a journal, and saved on a to-print file. Also, the number of copies of the letter sent depends on the nature of the letter and the customer needs.

The flow chart on the next two pages was provided by the Behavioral Health Team, and has been adhered to by the people directly performing the operations.
**Letter Writing Process**

BHC identifies need for letter

Open Word & minimize

BCH begins process from a specific case in QT, enters into the case, clicks on Treatment tab, then Activity tab. (Note case #)

BHC selects "Reports" from QT menu bar

Click on automated letter, select correct letter, then click on open. System will merge information into letter. (If it is not visible, click on Word)

BHC checks for accuracy (type of letter, correct names, dates, etc.) and customizes letter as needed

BHC names the letter using the **case number** followed by an alphabetical letter e.g. 1234a, 1234b, 1234c

Does the letter need to be proofed?

Yes

BHC saves letter in **drafts file**

Sends e-mail message to designated proofing BHC

Proofing BHC reviews letter

No

BHC saves letter in **to-print file**

BHC logs letter in personal letter log—Temp.

Go to BHT Process
Proofing BHC makes revisions using Revisions Tool and saves (in draft file)

Sends e-mail message to originating BHC

Originating BHC reviews, accepts/rejects revisions, conferring as necessary and saves.

Originating BHC logs in personal letter log (Jan. only) and moves to to-print file. Add note in "case notes" when letter is completed.

Go to BHT process

Proofing BHC sends e-mail message to originating RC

Originating BHC logs in personal letter log (Jan. only) and moves to to-print file. Add note in "case notes" when letter is completed.

Go to BHT process
FINDINGS

Telephonic Authorization

The current environment entails that technicians and the Behavioral Health Coordinator's
to follow a format to go through the process. The technician runs through and records the
following information to insure that the case is ready to be reviewed by the coordinator:

- Social Security Number (SSN) or Pseudo SSN
- Medicaid Identification Number
- County of Medicaid Enrollment
- Medicaid Effective Date
- Status of Medicaid Eligibility
- Patients Managed Care Plan Type
- Patient's Address
- County of Residence
- Patient Date of Birth
- Patient Sex
- Attending Physician Name
- Attending Physician Medicaid Identification Number
- Admit Date
- Admitting Hospital
- Admitting Hospital Provider Number
- Verification of Preadmission Review (PAR) and Certification, PAR Date and Time
- Screening Center Authorization Number
- DSM-IV Diagnostic Codes, Axis I-V, including general medical conditions
- Discharge Diagnosis, Axis I
- CMHB Case Manager Assigned to Case (if applicable)
- Telephonic Verification of Patient Admittance to PHP

The technician enters the above information as the contact at the CMHB provides the
information. The information could take anywhere from 2 to 4 minutes to enter
depending on job familiarity and CMHB representative readiness.
The CMHB representative is then put back into the telephone system and directed to a review coordinator. The review coordinators handle the calls in the order they are received, with the exception noted that one call could entail 5 reviews. The review coordinator begins the call by requesting the following information that is deemed pertinent to the case:

- Patient history and/or presence of Substance Use Disorder symptoms
- Detailed patient history of previous inpatient, outpatient treatment
- Patient risk factors
- Precipitating factors for current admission
- Reasons for admission or re-admission, when applicable
- Any pre-existing condition which is pertinent to the admission
- Diagnostic tests or procedures performed and results, where applicable
- Patient level of functioning/impairments in behavioral terms
- Community supports identified to assist patient
- Specific information regarding discharge plan (e.g. appointment dates, site patient discharged)
- Risk factors for potential harmfulness to justify requested length of care
- Patient goals for treatment/hospitalization
- Treatment Plan information and how it relates to the hospitalization goals (Meds, and other)

The above information is currently entered either in specific fields or in the general note section of the case. With each new case the coordinator will look back at one, two, or all the notes entered for the preceding reviews to prepare for the current review. A review could range anywhere from 12 to 15 minutes, depending on the whether or not the patient is in the system, how many reviews the case has had, etc.

The following information is a direct result of review of the telephonic process:

### Partial Hospitalization

<table>
<thead>
<tr>
<th>Task</th>
<th>Personnel</th>
<th>Time for Task</th>
<th>Wage</th>
<th>#Performed</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Entry</td>
<td>Technician</td>
<td>4</td>
<td>$0.21</td>
<td>1</td>
<td>$0.86</td>
</tr>
<tr>
<td>Initial Review</td>
<td>Coordinator</td>
<td>15</td>
<td>$0.39</td>
<td>1</td>
<td>$5.85</td>
</tr>
<tr>
<td>Utilization Review (Post Initial)</td>
<td>Coordinator</td>
<td>12</td>
<td>$0.39</td>
<td>1.08</td>
<td>$5.06</td>
</tr>
<tr>
<td>Physician Referral/Review</td>
<td>Physician</td>
<td>25</td>
<td>$1.00</td>
<td>0.06</td>
<td>$1.50</td>
</tr>
<tr>
<td>Discharge</td>
<td>Technician</td>
<td>5</td>
<td>$0.21</td>
<td>1</td>
<td>$1.05</td>
</tr>
<tr>
<td>Letter Generation</td>
<td>Technician</td>
<td>5</td>
<td>$0.21</td>
<td>1</td>
<td>$1.05</td>
</tr>
</tbody>
</table>

**TOTAL COST**

$15.37

The **Time For Task** is in minutes.
The **Wage** is calculated per minute.
In Patient

<table>
<thead>
<tr>
<th>Task</th>
<th>Personnel</th>
<th>Time for Task</th>
<th>Wage</th>
<th>#Performed</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Entry</td>
<td>Technician</td>
<td>4</td>
<td>$0.21</td>
<td>1</td>
<td>$0.86</td>
</tr>
<tr>
<td>Initial Review</td>
<td>Coordinator</td>
<td>15</td>
<td>$0.39</td>
<td>1</td>
<td>$5.85</td>
</tr>
<tr>
<td>Utilization Review (Post Initial)</td>
<td>Coordinator</td>
<td>12</td>
<td>$0.39</td>
<td>0.79</td>
<td>$3.69</td>
</tr>
<tr>
<td>Physician Referral/Review</td>
<td>Physician</td>
<td>25</td>
<td>$1.00</td>
<td>0.06</td>
<td>$1.50</td>
</tr>
<tr>
<td>Discharge</td>
<td>Technician</td>
<td>5</td>
<td>$0.21</td>
<td>1</td>
<td>$1.05</td>
</tr>
<tr>
<td>Letter Generation</td>
<td>Technician</td>
<td>5</td>
<td>$0.21</td>
<td>1</td>
<td>$1.05</td>
</tr>
</tbody>
</table>

**TOTAL COST** $14.00

After reviewing one hundred cases in both Partial Hospitalization and In-Patient Care the average number of reviews that took place after the initial review were 1.09 and .73 respectively.

The times were found in the following manner:

**Demographic Entry** – Daily charts were reviewed along with personal review done while listening on calls as they took place. The time varied with the individual but we found that the majority of the calls could be done in 4 minutes.

**Initial Review** – The initial review performed by the review coordinator took 15 minutes due to the complexity involved. The initial review requires that the coordinator enter information pertinent to the subject that will not be entered in subsequent reviews for that case. The time was determined by reviewing the information supplied by the coordinators in the provided field on the Qualitrac System. After finishing a review the coordinator indicates the time to completion. We went through one hundred cases checking the time field, and the average initial review took 15 minutes.

**Utilization Review** – The Utilization Review is any review a case requires after the initial review. As discussed above this will vary accordingly to the type of care the individual is receiving. The time of 12 minutes is an average taken from over 100 samples reviewed on the Qualitrac system, and through personal observation.

**Physician Referral** – The information was taken from the forms that the physician completes after finishing his/her review. The time field was read on nearly 50 samples and the average was determined to be 25 minutes. The length of the review could be caused by length of the case information or need to call the attending physician to confer on information in the report.

**Discharge** – The discharge takes place when the CMHB calls to inform MPRO of a patient’s dismissal and to confirm the number of days covered for care. This is performed by a technician a majority of the time, and reviewing one hundred cases was determined that it could be completed in 5 minutes.
Letter Generation – Through personal observation of the process, it has been determined that 5 minutes is a sufficient length of time to perform the task.

The following salary information was given to us directly from Gary Geutshaw:

<table>
<thead>
<tr>
<th>Salary</th>
<th>Benefits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technicians - $8.55/Hour</td>
<td>$4.28/Hour</td>
<td>$12.83/Hour</td>
</tr>
<tr>
<td>Coordinator - $15.56/Hour</td>
<td>$7.78/Hour</td>
<td>$23.34/Hour</td>
</tr>
<tr>
<td>Physician - $60.00/Hour</td>
<td>$0.00/Hour</td>
<td>$60.00/Hour</td>
</tr>
</tbody>
</table>

To determine the weight of the In-Patient Review versus the Partial Hospitalization the following numbers have been taken from the Concurrent Aggregate Reports for the three month period of 8/01/97 – 10/31/97, created by Mary Martus.

<table>
<thead>
<tr>
<th>Site</th>
<th>Payment</th>
<th>In-Patient Cases</th>
<th>Partial Hospitalization Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detroit Wayne County</td>
<td>Medicaid</td>
<td>2118</td>
<td>482</td>
</tr>
<tr>
<td></td>
<td>Uninsured</td>
<td>1021</td>
<td>0</td>
</tr>
<tr>
<td>Macomb County</td>
<td>Medicaid</td>
<td>142</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Uninsured</td>
<td>79</td>
<td>30</td>
</tr>
<tr>
<td>Summit Pointe County</td>
<td>Medicaid</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Uninsured</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>3379</td>
<td>558</td>
</tr>
</tbody>
</table>

The ratio shows that we will use 16.5% of the cost associated with Partial Hospitalization and 83.5% of the cost associated with In Patient cases.

The following information is a result of the direct cost

Telephonic Authorization Cost per Case

<table>
<thead>
<tr>
<th>Component</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Charges</td>
<td>$18.00</td>
</tr>
<tr>
<td>Direct Labor</td>
<td>$14.23</td>
</tr>
<tr>
<td>Supervisory Labor</td>
<td>$18.47</td>
</tr>
<tr>
<td>Other Directs</td>
<td>$19.59</td>
</tr>
<tr>
<td>Indirects</td>
<td>$23.09</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$93.38</td>
</tr>
</tbody>
</table>

IT Charges – These costs are associated to the software, technical guidance, and consulting due to the implementation of the new Qualitrac software. Total direct IT charges divided by the total number of cases.

Direct BHT Labor – As previously indicated, total salaries and fringe benefits of coordinators and technicians and other costs that directly influence the Telephonic Review product.
Supervisory Labor — Total monthly salaries and fringe benefits associated with the leadership of the BHT divided over the total number of cases.

Other Directs — Direct charges effecting the BHT, including such items as supplies, recruiting, physician fees, travel, postage, and software costs. Total other direct costs incurred divided by the total number of cases.

Indirects — Costs associated with the daily activities of MPRO. A few examples of these costs are rent, utilities, and indirect supplies.

These costs are real time and reflect current product volume. Gary Geutshaw provided information stating that the year-to-date cost of the Behavioral Health Team product is actually $183.56. This shows an increase from the previous year’s income statement that stated a cost of $127.76 per case. The high cost per case for year-to-date is due in part to the implementation of the Qualitrac software package and consultant fees. Gary’s information only relates cost per case rather than cost per telephonic review or cost per retrospective review. The cost of $93.38 refers to only the cost of the Telephonic Review product. There are other costs in the Behavioral Health Team that impacts the final cost of the products. These costs include Retrospective Review, Physician’s Referral Process, follow-up on discharges, and various CMHB required reports.
Retrospective Review

The medical records are currently being handled by Clare. Using the last year as a sample size, a statistical estimation of 74 retrospective reviews and 76 validation reviews are performed each month. She controls the handling and tracking of medical records. She is also one of only a few people in the company that actually know the status of a medical record at any given time. The majority of the retrospective reviews are performed as a result of an untimely or CSR. When a patient is admitted and approved for 5 days, the review coordinator will tell the hospital to call back in 5 days to reevaluate the patient if additional time is needed. If the hospital does not call M-Pro back and the patient is still under care by the hospital, they are required to send a complete medical record of the case to M-Pro and await approval or denial.

The CMHB (Community Mental Health Board) requires that the medical records be used in this manner if the hospital is untimely in their response to a telephonic review deadline. This operates as an incentive to meet the deadlines by telephone, so they might be spared the hassle of organizing and mailing a medical record.

The best solution to improving the medical records segment of M-Pro’s business is to eliminate it. However, this is not possible at the current time because of CMHB regulations requiring M-Pro to handle the physical medical records as they are now. Beyond eliminating it, there are several improvements that could be made to this process.

1. Looking at the flow chart for retrospective review on the following page you will see its complexity. The flow of medical records revolves around one person... Clare. One way to improve this process is to empower the RC and PR to handle the records themselves. This would be possible if the excel spreadsheet that is currently only accessible to three employees be available to everyone. Now, the charts would not have to keep coming back to Clare to update its tracking status.

2. Eliminate the Excel tracking sheet and work with Qualitrac to update the software. The updated software should have a medical record tracking function that replaces the need for the Excel spreadsheet.
Letter Generation

The time spent on generating letters varies depending on whether or not revisions are needed. The amount of time spent on creating and enveloping a letter (without revisions) is approximately four minutes (through observation). As it is, there is not much that can be changed on the current process to improve the efficiency of the product, short of defining a totally new process.

The areas that are possibly the most inefficient (time wise) are as follows:
- Letter revision by another Review Coordinator
- Creating extra copies of the letter and addressing and mailing out the letters

One change that could be implemented is a system, or computer program, that electronically sends out the letters to the desired institution, without going through the hassle of dealing with generating and mailing out hard copies. This would save on the cost of materials and postage and may also reduce the time it takes for the documents to be received. One potential drawback to this is that the institutions that currently employ the Behavioral Health Team may not have the necessary equipment to undertake this change.

RECOMMENDATIONS

Telephonic Authorization

The telephonic authorization products that make up 98% of the revenue have a huge cost associated with direct and supervisory labor. To alleviate some of the financial burden associated with high labor tasks, one looks to technology or process revision. Finding a solution within the current process is not feasible due to the directness with which all the current tasks are being performed. To find a solution we have taken a step back and with a fresh eyes approach, offer a suggestion that could possibly alter the way MPRO operates its telephonic authorization process. We propose that MPRO initiate a technological change in the way current operations are performed. Through the use of the World Wide Web and the appropriate software, MPRO could have the opportunity to eliminate all the previously necessary tasks involved with the products, and reduce the number of people required to perform the work. Rather than have CMHBs call in with information, they will have the freedom to access the MPRO WebSite at any convenient time and enter the data required to review a case. MPRO will benefit in the fashion that technicians will no longer be required to enter demographics. The number of coordinators required will diminish as well, due to the fact that a review will take only a few minutes, rather than 12 – 15 minutes. The CMHBs will benefit in that they can enter the information at any time, rather than having to call during business hours and possibly spend time on hold.
Not to mislead, there are setbacks involved with such a program. Employees will have to be trained or moved to other positions, as theirs are removed from the current structure. The initial cost of the information system will cause a loss in revenue as the program is initiated. Also, the information that hospitals fill in may not be to standards, and require call back to determine the missing information. Although, a three minute review and a five minute call back still is less amount of time than the current review operates at.

Direct Effect on MPRO

Pros:
- Direct staff reduction (no technicians and fewer coordinators)
- Streamline Operation (Coordinator handles all functions)
- Operate at convenience (no business hours only for CMHBs)
- Website easily adapts to change

Cons:
- Reduction in staff
- High start-up cost
- Inability for MPRO and CMHBs to interact (more detail through conversation)
- CMHBs may not be technically capable

Suzanne Shaw, the President from Cyberzone, had the following information to offer when considering the applicability of a WEB resource for a corporation. Noting also that not all pros or cons are applicable to the environment that exists at MPRO.

Pros:
- Typically start-up costs are less than $50,000, to create the software
- More dependable and secure than the telephone – offer encryption or other security devices
- Stable environment – data entry is a trend that will be short lived
- At the turn of the Century a redundant labor force will be replaced
- Not replacing people, retraining to make people and system more efficient
- Better management of information
- System with no paper trail
- Increase utilization of space will offer savings
- Maintenance costs involved with a WEB page are minimal, generally less than the salary of one individual
- Changing or altering the WEB page requires little effort
Cons:

- Internet is inexpensive to use and operate on at this point in time – could change drastically in the future
- Requirement of keeping up with technology
- Upgrading computers will be a necessity

Physician Review

The physician review/referral process that stems from retrospective review and telephonic authorization appears to offer no room for improvement. The process merely entails the physician reviewing the case, which could include making calls the CMHB, and then assigning it a decision based on the present information. Upon receipt of a physician’s approval the review coordinator who will receive the case will handle the authorization number and according information.

Retrospective Review

The current situation with retrospective review is similar to that of an example located in a process re-engineering book. IBM has retailers who would work to make sales to businesses, small and large. After the businesses needs were assessed, and the person had placed an order with a sales representative, the sales rep would in turn send the paperwork to the IBM finance department. The finance department centrally located at IBM headquarters would take the information and in turn send a finance package to the sales rep who could then make the sale. The problem was that sales reps were not seeing the finance packages for almost two weeks after they had sent in the initial paperwork, and as a result were losing business to competitors who could move the whole process faster. Investigating the matter, a Vice President in the finance division took an order from a sales rep over the phone and then walked the paperwork through the entire process finding it only took him 4 hours to go through the various departments and employees to get a finished good. What was the problem? How could something that took him 4 hours take 2 weeks? The paperwork had to go through several departments within the finance department. The flow of the paperwork was controlled by an administrator, who would receive the paperwork from one department and then she would send it to the next department. After eliminating the need for paperwork to travel to a central location, IBM reduced the time it took to process a finance package from 2 weeks to 2 days. Each department was responsible for its own part of the package, but it was also responsible to send it to the next step in the process.
In the case of retrospective review, the Behavioral Health team would benefit by allowing the paperwork to come in the proper channel, and then allow it to flow through the process with everyone being held responsible for its completion. As discussed in the findings section, process improvement could be reached by empowering the review coordinators and physicians to handle the records themselves. Including a check sheet with the paperwork at the beginning of the process, or making the tracking Excel spreadsheet available to all employees could make the process more efficient. The other possibility would be to eliminate the Excel tracking sheet, and handle the tracking function within the Qualitrac software itself.

**Letter Generation**

The letter generation process would be nothing more than the click of a button, if the WebSite approach was adopted to the telephonic authorization products. Much like in Excel or Word, one can create a macro that will take information from other places (i.e. databases, other documents) and print them in a form or other desired location. After receipt of information pertaining to the patient’s case, that would require an approval or discharge letter, the review coordinator would select the button to print the letter in the desired format. This can be done through programming, as it has in the past with letter generation.

In summation the following information offers a quick incite to our proposed recommendations:

- **Telephonic Review**
  - Internet Based Utilization Review (WebSite)
  - Relieve the process of data entry

- **Retrospective Review**
  - Improve Routing of Medical Record
  - Centralized Record Tracking

- **Letter Generation**
  - Automatic Generation through Macro development
### Appendix I. Data Referenced for Physician Review Time

**Data used for Physician Review**

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**Total** 505

**Average** 25

**Total** 685
Appendix II. Data Referenced for number of reviews/case

Data used for the number of reviews/case

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