

## Reaching the Quality Benchmark - Case Study

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*Tales from the Field, a monthly column, consists of reports of evidence-based performance improvement practice and advice, presented by graduate students, alumni, and faculty of Boise State University's Instructional and Performance Technology department.*

### The Setting

MedTech, Inc. (a pseudonym) is a Medical Transcription Service Organization (MTSO) that provides transcription services to clients in the medical community. Recently, MedTech's clients have demanded that the accuracy standard for transcribed reports be raised from 98% to 99%. This reflects the medical community's need to maintain more accurate patient records. To remain competitive in this demanding industry, MedTech must strive to comply, which means that medical transcriptionists (MTs) must now maintain a monthly quality average of 99% or better.

### Description of Request

Many MTs consistently achieved 99% or greater accuracy in their transcriptions; however, some MTs fell below the desired performance levels. MedTech requested a team of three Boise State University graduate students to conduct a needs assessment to identify areas where interventions could help all MTs both improve and maintain their overall quality scores. MedTech was interested in answering three questions:

- What competencies did exemplary MTs have that other MTs could develop?
- What barriers prevented MTs from achieving the quality standard?
- Why did one client have lower quality scores at one branch location than another?

### The Performance Analysis Plan

The assessment team identified the following as the main objectives of this needs assessment:

- Identify the competencies necessary for superior job performance as an MT.
- Create a composite picture or best-practice model of the competencies necessary for transcribing medical reports.
- Define incompetence and determine the knowledge, skills, attitudes and behaviors that should be avoided for optimum performance as an MT (Gupta, Sleezer, & Russ-Eft, 2007).

The team used Harless' (1973) Front-End Analysis and Chevalier's (2003) revised version of Gilbert's Behavior Engineering Model (BEM) as the primary analysis models. The answers to Harless' *13 Smart Questions* guided the systematic conduct of the needs assessment. Chevalier's revised BEM (2003) was used as an organizational tool for obtaining and analyzing more detailed data on exemplary MT performance. The BEM assisted the team in distinguishing between an MT's repertory of behavior and the environmental factors that encourage or hinder the MT's performance (Gilbert, 1978). The BEM provided a framework for both discovering and communicating the underlying causes of performance problems (Chevalier, 2008). The factors of the BEM were labeled in the order of easiest to improve and potential for greatest impact on performance (Chevalier, 2003). Competencies, best practices, findings, and recommendations were all organized around these factors (see Table 1). Note that Knowledge and Skills were the last category of factors that were analyzed. Chevalier emphasized that a solution based on the knowledge level of the individual would not only be expensive but also have substantially less impact than solutions addressing environmental issues (Chevalier, 2003). This would especially be true

for this target audience, since MedTech’s MTs were fully trained and already achieving high performance levels.

Table 1: Updated Behavior Engineering Model (Chevalier, 2003). Reprinted with permission from the author (arrows added).

<b>Environment</b>	<b>1</b> 	<b>Information</b>	<b>2</b> 	<b>Resources</b>	<b>3</b> 	<b>Incentives</b>
	<ol style="list-style-type: none"> <li>1. Roles and performance expectations are clearly defined; employees are given relevant and frequent feedback about the adequacy of performance.</li> <li>2. Clear and relevant guides are used to describe the work process.</li> <li>3. The performance management system guides employee performance and development.</li> </ol>	<ol style="list-style-type: none"> <li>1. Materials, tools and time needed to do the job are present.</li> <li>2. Processes and procedures are clearly defined and enhance individual performance if followed.</li> <li>3. Overall physical and psychological work environment contributes to improved performance; work conditions are safe, clean, organized, and conducive to performance.</li> </ol>	<ol style="list-style-type: none"> <li>1. Financial and non-financial incentives are present; measurement and reward systems reinforce positive performance.</li> <li>2. Jobs are enriched to allow for fulfillment of employee needs.</li> <li>3. Overall work environment is positive, where employees believe they have an opportunity to succeed; career development opportunities are present.</li> </ol>			
<b>Individual</b>	<b>6</b> 	<b>Knowledge / Skills</b>	<b>5</b> 	<b>Capacity</b>	<b>4</b> 	<b>Motives</b>
	<ol style="list-style-type: none"> <li>1. Employees have the necessary knowledge, experience and skills to do the desired behaviors</li> <li>2. Employees with the necessary knowledge, experience and skills are properly placed to use and share what they know.</li> <li>3. Employees are cross-trained to understand each other’s roles.</li> </ol>	<ol style="list-style-type: none"> <li>1. Employees have the capacity to learn and do what is needed to perform successfully.</li> <li>2. Employees are recruited and selected to match the realities of the work situation.</li> <li>3. Employees are free of emotional limitations that would interfere with their performance.</li> </ol>	<ol style="list-style-type: none"> <li>1. Motives of employees are aligned with the work and the work environment.</li> <li>2. Employees desire to perform the required jobs.</li> <li>3. Employees are recruited and selected to match the realities of the work situation.</li> </ol>			

To determine what exemplary MTs do or avoid doing that leads to consistently reaching or exceeding the 99% accuracy rating, the assessment team collected and analyzed several types of data. The process included the following steps:

1. *Gathered existing performance data.* The team gathered three months of MedTech’s audit reports, which provided summary data on MT quality scores.
2. *Drafted interview questions.* The interview questions were grouped into sections that corresponded to the BEM performance factors.

3. *Conducted interviews and analyzed interview data.* Data from the interviews were then analyzed for competency traits.
4. *Developed a Competency Dictionary and a Competency Model.* Competency traits were grouped by BEM categories to develop a Competency Dictionary and then a Competency Model.
5. *Developed survey questions based on interview data.*
6. *Piloted the survey and then finalized the survey questions.*
7. *Conducted the survey and then analyzed the results.*
8. *Compiled findings and analyzed the data for trends and key findings.*
9. *Presented recommendations for improving MT performance.*

## Findings

The findings answered the three needs assessment questions:

- *What competencies did exemplary MTs have that other MTs could develop?*  
The primary characteristics of exemplary MTs combine diligence and speed with excellent listening and researching skills. In other words, exemplary MTs had the Knowledge and Skills as well as the Capacity to perform at 99% accuracy rates or better.
- *What barriers prevented MTs from achieving the quality standard?*  
The primary barriers to meeting quality goals included dictator issues, confusing client specifics, new accounts and dictators, unfamiliar work types and specialties, and sacrificing accuracy to meet production goals. These barriers all relate to the BEM categories of Information, Resources, and Incentives.
- *Why did one client have lower quality scores at one branch location than another?*  
The assumption that one branch of MedTech was performing better than the other branch proved to be inaccurate. An analysis of three months of production data showed that both branches performed similarly. Since the assumption was wrong, no amount of intervention would have corrected the performance gap.

The survey responses seemed to validate that the MTs generally had the skills and knowledge required to meet performance expectations, but were facing barriers to performance in other areas of the BEM. The potential for improving performance (PIP) (Gilbert, 2007) was very small to begin with. Whereas some difficulties involved infrequent or unfamiliar specialties and work types, the majority of MT challenges were related to external barriers rather than to internal factors. These results were consistent with those from a 2007 national survey, released in 2010, involving 3,800 medical transcriptionists (David, 2010).

## Recommendations

The recommendations were also organized around the BEM categories. The recommended categories, from Information to Knowledge and Skills, were presented in the order which would have the most impact on the MTs' performance and generally be the easiest and most cost-effective to implement. The primary recommendations resulting from the Needs Assessment were for MedTech to:

- Create an online resource with sample reports, client specifics checklists, transcription procedures, recommended research sites, and other helpful information (BEM categories – Information and Resources).
- Provide dictators with a job aid on how to produce the highest quality recordings (to improve the quality of MT Resources).

- Update client specifics in a timely manner. Notify MTs of updates (Resources).
- Provide MTs new to an account with a limited number of initial dictators; add dictators as MTs gain experience and demonstrate proficiency on that account (Resources).
- Review current quality vs. quantity performance incentive plans (Incentives).
- Provide opportunities for limited but consistent exposure to unfamiliar specialties and work types. Develop training for especially critical or difficult tasks (Knowledge/Skills).

## References

- Chevalier, R. (2003). Updating the Behavior Engineering Model, *Performance Improvement*, 42(4), 8-13. Retrieved from <http://www.aboutiwp.com>
- Chevalier, R. (2008). The Evolution of a Performance Analysis Job Aid, *Performance Improvement*, 47(10), 9-18. Retrieved from <http://www.aboutiwp.com>
- David, G. C. (2010). MTs on the Radar: 2007 MT Survey Summary Report. *Association for Healthcare Documentation Integrity*. Retrieved from <http://ehealthrecords.files.wordpress.com/2010/08/2007-mt-survey-final-portrait.pdf>
- Gilbert, T. (2007). *Human competence: Engineering worthy performance (tribute edition)*. San Francisco, CA: Pfeiffer.
- Gupta, K., Sleezer, C., & Russ-Eft, D. (2007). *A practical guide to needs assessment* (2<sup>nd</sup> ed.). San Francisco, CA: Pfeiffer/ASTD.
- Harless, J. (1973). An analysis of front-end analysis. *Improving Human Performance: A Research Quarterly*, 4, 229-244.

## Author Bios



Ellen Lemanski has worked in the medical transcription industry for over 20 years. She is currently a Quality Compliance Specialist for a national transcription service with extensive experience in the medical transcription industry as a trainer, quality manager, and transcription account manager. Ellen is a graduate student in Instructional and Performance Technology (IPT) at Boise State University. She looks forward to completing her MS in IPT in 2012. She can be reached at [elemanski8527@charter.net](mailto:elemanski8527@charter.net).



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