Transcription Turnaround Time for Common Document Types

American Health Information Management Association and Medical Transcription Industry Association

Joint Task Force on Standards Development
AHIMA/MTIA Joint Task Force Members

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The American Health Information Management Association (AHIMA) is the premier association of health information management (HIM) professionals. AHIMA’s 51,000 members are dedicated to the effective management of personal health information needed to deliver quality healthcare to the public. Founded in 1928 to improve the quality of medical records, AHIMA is committed to advancing the HIM profession in an increasingly electronic and global environment through leadership in advocacy, education, certification and lifelong learning. To learn more, go to www.ahima.org.

The Medical Transcription Industry Association (MTIA) is a not-for-profit trade association serving the needs of medical transcription companies, vendors, and health information management professionals. To learn more, go to www.mtia.com.

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I. Executive Summary

The American Health Information Management Association and Medical Transcription Industry Association (AHIMA/MTIA) Joint Task Force on Standards Development convened to examine and research the topic of turnaround time (TAT) of transcribed reports under the premise that currently there are very few standards for TAT. This white paper discusses the current state of the industry relative to TAT for selected work types. It also provides commentary on how changes to TAT may impact operational efficiency, enrich data capture and documentation, further empower clinical decision making, and enhance patient care.

The turnaround time for common document types (TAT4CDT) task force convened to conduct research on current technology, work force realities, current market practices, implementation considerations, and existing TAT guidelines established by the standard-setting and accrediting body the Joint Commission. The common document types discussed in this study are history and physical examinations, operative reports, discharge summaries, inpatient progress notes, consultations, and radiology reports. The findings and outcomes of that research are presented using a weighted average TAT for these work types.

Scope of project: The task force was charged with assessing the environment in a number of ways. Survey data was obtained to measure and analyze current conditions and real-world practices from both the health information management (HIM) and medical transcription service operator (MTSO) perspectives. In addition, journals, articles, and other publications were reviewed (see the “References” section for details). An intended byproduct of the effort was to create an environment in which “buyers” and “sellers” of medical transcription services can engage in dialogue and make informed purchasing and contracting decisions related to transcription TATs. The collaborative result of this research is to first examine and establish the state of the industry in the area of transcription TAT with an anticipated next project to establish standard TATs for common document types.

Summary: Research revealed that very few standards for performance currently exist in the area of transcription TAT. It is important to note that the very definition of turnaround time varies across the HIM and MTSO arenas. Because of the varying definitions, for consistency the task force chose to use the widely held definition of TAT, which states that TAT for transcribed reports is the elapsed time from completion of dictation to the delivery of the transcribed document either in printed medium or electronically to a repository. This state-of-the-industry white paper lays the foundational understanding of the elements, technological impacts, and factors that contribute to the current TATs in healthcare today, and this basis will help lay the groundwork for establishing standard TATs for common document types.

II. Current Environment

In the push toward adopting, integrating, and providing seamless access to streamlined electronic health records (EHRs), the use of dictation and transcription technologies to produce a permanent narrative of the patient’s story continues to be prevalent, if not expanding, as a significant data source in the electronic environment. Despite multiple replacement technologies, including point-and-click menus, front-end speech recognition (FESR), and documentation by exception, most industry experts and stakeholders believe that transcription services will not be fully replaced anytime soon. The need for a comprehensive free-thought narrative is integral to producing a record that supports continuity of care.

Even the most sophisticated healthcare institutions struggle with the integration and interoperability of multiple applications as well as the need for the output to be directed toward a single electronic source. The reality is that many electronic systems today still emulate a paper-based environment, with little consideration for the need to change data into usable interdisciplinary information that can be updated and modified by many users and immediately made available to healthcare professionals at the point of care. A patient’s allergies, for example, should be captured in one single area and displayed to all concerned providers without the need for subsequent fields, forms, captures, or additional attributes. While the
industry works to define new models for real healthcare information and create the architecture that will support it, dictation continues to be a communication tool that provides a relevant summation of the patient’s story and contributes to the legal record source, and when this information is transcribed in a timely fashion, the result is relevant patient information that contributes to improved communication and better patient care.

The Joint Commission does not comprehensively address transcription practices or specify the timeliness and TATs of transcribed documents. Standard P.C.2.120: History and Physical Completion, for example, requires a hospital to “define in writing the time frame(s) for conducting the initial assessment(s)” and requires a history and physical examination “to be completed within no more than 24 hours of inpatient admission” but falls short of recommending the use of dictation and transcription services or specifying the timeframes under which the result should be made available. Standard IM.6.10 goes on to stipulate that “the hospital has a complete and accurate medical record for patients assessed, cared for, treated, or served” and requires a “policy on the timely entry of information,” again without specifying the mechanism by which the records are to be produced.

Perhaps the requirement most closely resembling a standard relating to dictation and transcription comes in the case of operative or high-risk procedure reports as referenced in the Joint Commission’s Elements of Performance for IM.6.30, which suggests that reports be “dictated or written immediately after an operative or other high-risk procedure” and that they be “authenticated by the licensed independent practitioner and made available in the medical record as soon as possible after the procedure.” It could be argued that from a dictation and transcription perspective, it is always desirable to have the output available immediately or as timely as possible despite any contracted and defined guidelines or TATs otherwise specified.

Despite specific standards directed to dictation and transcription practices per se, the Joint Commission continues to advocate the strongest possible actions to support improved communication among care providers in its delineation of the 2008 National Patient Safety Goals. Included in these is the goal to “improve the effectiveness of communication among caregivers.” Among a standardized list of abbreviations, acronyms, symbols, and dose designations, the goals include a “standardized approach to ‘hand off’ communications,” where dictation and transcription could fit appropriately provided that standardized and defined TATs were developed.

Given the current lack of standards or benchmarks regarding TATs for dictation and transcription, it is not surprising to find a wide range of definitions. Commonly, transcription TAT is considered to be the elapsed time between when a dictated record is made available for transcription and when the transcribed report is returned for authentication. However, some organizations include the time to authenticate and finalize the record (as with radiology practices) or the time to distribute the record within the scope of turnaround, and others may include varying degrees of availability, such as when a report is pending quality assurance (QA) review but has not yet been distributed.

While the healthcare industry is beginning to adopt new EHR initiatives, transcription professionals and service providers have long since understood that in order to be successful, they must provide relevant information as quickly as possible to the many care providers who can benefit from it. This includes incorporating TAT deliverables in the overall evaluation of service quality. Disregarding TAT as a component of quality fails to address and support the demands of the industry and will surely result in consumers of documentation seeking alternatives to dictation and transcription practices. A discharge summary that is 100 percent accurate in its composition and capture of the patient’s course of treatment is of absolutely no value to ongoing clinical decision making if it arrives in the referring physician’s office after the patient’s follow-up visit. Similarly, a history and physical report, no matter how accurate, only supports acute-care evaluation and treatment if it precedes a surgical or medical intervention. Therefore, TATs and benchmark standards upon which the healthcare community can rely become critical considerations in the new and evolving environment of healthcare and in a documentation future that continues to include dictation and transcription practices.
III. Survey Findings

The task force sent out a survey to HIM managers and a separate survey to medical transcriptionists (MTs) and MTSO managers in order to analyze current technology being used, evaluate established TATs, and query work force realities in the marketplace.

Figure 1 shows the breakdown of the percentage of respondents to the survey by job title.

<table>
<thead>
<tr>
<th>Survey Respondents by Title</th>
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</thead>
<tbody>
<tr>
<td>Medical Records Director/Manager/Supervisor</td>
<td>52%</td>
</tr>
<tr>
<td>Medical Transcription Director/Manager/Supervisor</td>
<td>30%</td>
</tr>
<tr>
<td>Transcription Professionals</td>
<td>6%</td>
</tr>
<tr>
<td>Health Information Services Director/Manager/Supervisor</td>
<td>5%</td>
</tr>
<tr>
<td>Other Director/Manager/Supervisor</td>
<td>5%</td>
</tr>
<tr>
<td>Product Specialist</td>
<td>1%</td>
</tr>
<tr>
<td>Blank</td>
<td>1%</td>
</tr>
</tbody>
</table>

The first and second questions on the survey were as follows, respectively: “What are your contracted/expected TATs reported in whole hours for paper document output?” and “What are your contracted/expected TATs reported in whole hours for electronic document output?” The majority of the HIM manager respondents had contracted/expected TATs for both paper and electronic document output of 24 hours for history and physicals, operative reports, consultations, progress notes, and pathology and cardiology reports. For discharge summaries, the majority of them had a contracted/expected TAT for paper document output of 48 hours, while for electronic document output there was a tie between 48 hours and 72 hours.

MT/MTSO survey results were similar: the average TAT was 21 hours for paper document history and physicals, operative reports, consultations, progress notes, and pathology and cardiology reports. For discharge summaries, the most common contracted TAT was 40 hours. For radiology, the most common contracted TAT was 12 hours. For MT/MTSO managers who reported contracted TATs for electronic documents, the results varied only slightly compared to paper document TATs. For electronic document history and physicals, operative reports, consultations, progress notes, and pathology and cardiology reports, the average contracted TAT was 18 hours. For discharge summaries it was 35 hours for electronic documents. For radiology reports, the majority of the respondents reported a contracted TAT for electronic documents of 10 hours.

In addition, the task force collected data from four major MTSOs, collectively representing more than 1,200 customers, regarding the contracted turnaround times for each of the six major work types. The MTSOs reported data divided into four-hour increments for each work type (0–4 hours, 5–8, 9–12, etc.) and reported the percentage of customers that had contracted turnaround times within each of those categories. Figure 2 shows the wide range of contracted turnaround times by facilities outsourcing their transcription, including the high and low values as well as the mode (the most frequently occurring response).
<table>
<thead>
<tr>
<th>Work Type</th>
<th>Contracted TAT</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High  Low</td>
<td></td>
</tr>
<tr>
<td>History &amp; Physical</td>
<td>48 4</td>
<td>8 &amp; 12 (tie)</td>
</tr>
<tr>
<td>Operative Report</td>
<td>24 4</td>
<td>12</td>
</tr>
<tr>
<td>Discharge Summary</td>
<td>48 24</td>
<td>24</td>
</tr>
<tr>
<td>Progress Note</td>
<td>48 4</td>
<td>24</td>
</tr>
<tr>
<td>Consultation</td>
<td>48 4</td>
<td>24</td>
</tr>
<tr>
<td>Radiology</td>
<td>24 4</td>
<td>4</td>
</tr>
</tbody>
</table>

The HIM respondents were then asked, “Is the current TAT consistently meeting your needs?” The majority of the respondents, 52 percent, answered “Yes,” while 46 percent answered “No.” Two percent of the respondents did not answer the question.

The respondents whose needs were not being met by current TATs were given the opportunity in the next question to explain what factors impacted the noncompliance. The most common factor of noncompliance was staffing (32 percent), with changes in work volume (31 percent) close behind (Figure 3).

MT/MTSO managers were then asked, “What percentage of the time are you in compliance with contracted TAT?” In response to this question, 41 percent stated that they were in compliance 95–100 percent of the time, 31 percent stated that they were in compliance 90–94 percent of the time, and 11 percent stated that they were in compliance 85–89 percent of the time. The remaining 15 percent of respondents stated that they were in compliance less than 85 percent of the time (Figure 4).

The HIM respondents were then asked, “What actions are you taking to improve TAT performance?” The actions included increasing the number of in-house transcriptionists/editors, outsourcing work,
increasing support staff, implementing speech recognition technology (SRT), implementing new administrative technology, implementing new process technology, and reengineering the workflow/work process. Of these respondents, 29 percent listed outsourcing as an action taken to improve TAT performance. The second most used action to improve TAT performance was to reengineer the workflow/work process (Figure 5).

<table>
<thead>
<tr>
<th>Actions to Improve TAT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Outsource</td>
<td>29%</td>
</tr>
<tr>
<td>Re-engineer workflow/work process</td>
<td>18%</td>
</tr>
<tr>
<td>Implement SRT</td>
<td>17%</td>
</tr>
<tr>
<td>Add transcription staff</td>
<td>15%</td>
</tr>
<tr>
<td>Implement new process technology</td>
<td>12%</td>
</tr>
<tr>
<td>Add support staff</td>
<td>6%</td>
</tr>
<tr>
<td>Implement administrative technology</td>
<td>3%</td>
</tr>
</tbody>
</table>

MT/MTSO managers were then asked the same question, “What actions are you taking to improve TAT performance?” The number one answer, given by 60 percent of these respondents, was increasing the number of transcriptionists and editors to complete the work. A close second was reengineering the workflow/work process.

MT/MTSO managers were then asked, “If you are not consistently in compliance with your established TATs, what factors impact noncompliance?” The top three factors stated by respondents were change in work volume (30 percent) followed by staffing (28 percent) and transcription anomalies (i.e., poor dictation, blanks and missing information requiring review, etc.; 22 percent). These three items together accounted for 80 percent of stated impacts on noncompliance (Figure 6).

<table>
<thead>
<tr>
<th>Contributing Factors to TAT Noncompliance (MT/MTSO Managers)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Work volume changes</td>
<td>30%</td>
</tr>
<tr>
<td>Staffing</td>
<td>28%</td>
</tr>
<tr>
<td>Transcription anomalies</td>
<td>22%</td>
</tr>
<tr>
<td>Overflow or PRN clients</td>
<td>7%</td>
</tr>
<tr>
<td>New technology/equipment implementation</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
<tr>
<td>TAT expectation changes</td>
<td>2%</td>
</tr>
</tbody>
</table>

Speech recognition technology is finding its way into the mainstream HIM environment. This technology will have a positive effect on TAT as more and more healthcare facilities and MTSOs employ it. The next question on the HIM survey was “Are you using SRT?” Among 87 responses, 56 percent of respondents stated that they do not use SRT; 23 percent stated that they use back-end speech recognition (BESR); and 21 percent stated that they use front-end speech recognition (FESR).
A total of 130 MT/MTSO managers answered a similar question: “Are you currently using SRT?” Of these, 12 percent are using FESR; 24 percent are using BESR; and 64 percent are not using SRT at this time.

The HIM respondents that use SRT were then asked, “In what areas do you use SRT?” Of the 39 responses, radiology only and the combination of HIM and radiology were the areas where respondents most commonly used SRT (31 percent each), while 23 percent of the respondents use SRT within the HIM department only.

MT/MTSO managers who use SRT also gave the following information: 29 percent use it for radiology only; 33 percent use it for HIM only; 36 percent use it for both radiology and HIM; and 2 percent use it for emergency department reports only. Figure 7 shows the results for both survey respondent groups who reported using SRT.

<table>
<thead>
<tr>
<th>SRT Deployment</th>
<th>HIM Respondents</th>
<th>MT/MTSO Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiology only</td>
<td>31%</td>
<td>29%</td>
</tr>
<tr>
<td>HIM only</td>
<td>23%</td>
<td>33%</td>
</tr>
<tr>
<td>HIM &amp; radiology</td>
<td>31%</td>
<td>36%</td>
</tr>
<tr>
<td>ER only</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 7

In comparing both the HIM survey results and the MT/MTSO survey results with other findings on the prevalence of SRT use in the healthcare market, it was determined that these percentages align with other findings. According to the Healthcare Information and Management Systems Society (HIMSS) survey of 2002, 19 percent of information technology (IT) executives were currently using SRT and 46 percent planned to use that technology in the future. In the 2005 HIMSS survey, the percentage of actual use of SRT was not given, but 60 percent responded that they planned to implement this technology in the next two years. SRT was not mentioned in the 2007 HIMSS survey.

IV. Current TAT4CDT Findings

Based on the analysis of data provided from leading MTSOs, the task force used a weighted average methodology to calculate the findings of current TATs for common document types. MTSO-provided data represents TATs of over 1200 healthcare facilities nationally.

Current TAT4CDT findings are as follows:

- History & physical examination: 8 hours
- Operative report: 8 hours
- Discharge summary: 24 hours
- Inpatient progress note: 8 hours
- Consultation: 12 hours
- Radiology report: 4 hours

V. Healthcare Documentation—Active Role

Patient care reports serve a number of purposes during the course of a patient’s treatment. TAT of these reports is a critical contributor in impacting clinical decision making that directly influences patient
outcomes. These reports chronicle the reasons surrounding the events of a patient’s admission and treatment plan. In addition, they provide background information and history not only on the current hospitalization but also on previous medical and surgical events, treatments, social and family history, allergies, and current medications as well as other essential elements of the patient’s current condition.

Timely and accurate healthcare documentation facilitates continuity of care for the patient so that all caregivers have the same information to help them make the best healthcare decisions quickly and decisively. Patient reports that are slow or late in arriving, or those that contain errors or omissions, are clearly linked to delays in treatment and potential risk to patient safety.

VI. Work Force Realities

The increasing demand for medical transcription of patient care documentation has been particularly notable over the past 10 years. The reasons for the increasing demand include but are not limited to the following:

- An aging population
- A trend away from handwritten reporting
- Providers’ need for streamlined administrative tasks that allow for more patient care time
- Perceived greater efficiency
- Ease and speed of dictating versus other methodologies
- Correlation of improved accuracy and legibility to transcribed reports
- Belief that dictation allows clinicians to document a more comprehensive report in greater detail
- The need to integrate documentation with the EHR

The dilemma of keeping up with the increasing demand for healthcare documentation has not been readily solved, and this continues to be an obstacle, with increasing documentation volumes and the concurrent demand for faster TATs starkly juxtaposed against a critical work force shortage. There are almost as many reasons for the work force shortage as there are reasons for the increasing demand for documentation:

- An aging work force
- Limited access to medical transcription training
- Poor visibility of the profession to the general public and potential work force candidates
- The long-term learning curve to reach a significant level of expertise
- Competition for work force from other allied health professions
- Competition from other work-at-home professions
- Declining compensation

The typical laws of supply and demand have little correlation or evident application in medical transcription. When demand is up, prices typically increase, but demand for low-cost transcription deliverables has resulted in a paradoxical suppression of wages for those qualified to meet the demand. Pair that with the decreasing number of qualified professionals to do the job, and you have a significant economic conundrum. In reality, the price per unit (line, report, minute, page, character, etc.) of medical transcription has decreased significantly over the past 10 years, as have wages for MTs, despite high demand (increased documentation needs) and low supply (critical work force shortage).

VII. Administrative/Financial Dependencies

Financial consideration must be given to the price of technologies that may assist with expeditious processing of reports such as SRT, point-and-click documentation, templated systems (T-System), EHR systems, and those that include computerized physician order entry (CPOE), to name a few. These
advances in technology come with considerable potential for electronic gains of efficiency and interoperability, but they also come with significant costs. Planning for the costs to deliver significant process improvements in healthcare documentation is necessary. Determining the right fit of technologies that provide the right services and outcomes for each facility is a challenging process.

VIII. Fundamental Cost Elements

The Association for Healthcare Data Integrity (AHDI) reports that current global medical transcription service expenditures are estimated between $12 billion and $20 billion annually, with the United States being the largest market. About 50–60 percent of U.S. hospital and clinic transcription gets outsourced, and of that, only an estimated 10 percent is offshored to countries such as India and the Philippines.\textsuperscript{9} And in 2006 the \textit{HIPAA Compliance Journal} reported: “The latest Market Intelligence Service report of NASSCOM says that with at least 120–150 companies engaged in medical transcription in India, the sector is clocking an annual revenue aggregate of about $220–240 million. And this figure, analysts say, is predicted to see a meteoric rise in the coming years, given factors such as increasing healthcare costs in the US, its aging population, and increasing regulatory emphasis on digitization of medical records and documentation.”\textsuperscript{10}

The case can be made that outsourcing, and more particularly offshore outsourcing, can improve turnaround time for a number of reasons. One distinct reason is that India’s day, for example, is night in the United States. Utilizing offshore services in this manner may make an improved difference in TAT where 24/7 support is critical and access to second- and third-shift domestic MTs is difficult to find. With an outsourcing solution, contracts may carry penalties for failure to meet contractual TATs; however, it is important to note that delays in delivery of reports are not exclusively a work force or staffing issue. Often, delays are created by discrepancies due to input, missing information, difficult-to-understand dictation requiring rework, QA reviews, and missing patient identifiers in either voice or digital input, to name a few.

While several factors (both technological and resource related) that impact TAT have been documented, one additional factor that bears mentioning is the growing trend of detailed, account-specific instructions that need to be incorporated into transcribed documents. Cost, TAT, and quality are adversely impacted by the need to comply with an increasing number of varying organizational and physician-specific formatting instructions. Technology is emerging that is designed to address many formatting specifications, but many cannot be automated, and service providers continue to rely on the medical transcriptionist to remember instructions that vary from physician to physician, work type to work type, and facility to facility. These variables often result in inconsistent results and therefore inconsistent TAT and quality since the transcriptions often have to be reworked multiple times. This rework due to unclear or omitted information can cause obvious delays in report delivery for clinician use. Healthcare organizations should move swiftly toward standardization of formats and account-specific protocols for medical transcription in concert with the standardization required for successful implementation of EHR systems.

IX. Technology

Technological advances such as SRT and the EHR can contribute to achievement of faster turnaround times. There are certainly costs associated with these solutions, and care must be taken to select the right solution for each individual healthcare facility.

The flowchart below (Figure 8) depicts the flow of documentation from the time a report is dictated to when it enters the record in either a paper-based health information management (P-HIM) or an electronic health information management (e-HIM) environment.
The assumption (and expectation) is that with the successful implementation of certain technologies, the time from dictation to delivery will decrease. The task force considered the following categories of technology that might impact TAT:

- Portable dictation devices including personal digital assistants (PDAs), digital recorders, microcassettes, and others
- Speech recognition technologies including BESR and FESR
- Systems that operate on automatic collection of patient information that does not require the user to manually enter any data, such as barcode readers, handhelds with online patient lists, picture archival and communication system (PACS)/EHR integration, and others
- Document distribution technologies, including auto fax, distributed printing, and uploading/integration to an information system (EHR, document repository, document scanner, etc.)
- Solutions that provide easy access (by Web-based or other electronic means) to voice and text, including the ability to access voice files prior to transcription

While the basic technology available for dictation or voice capture has remained the same, many dictation solutions offer new options and added features. Most vendors that offer voice capture solutions
have portable dictation solutions, including digital voice recorders and applications for PDA dictation. A wireless environment ensures real-time transfer of voice files to the main voice server. This eliminates the delays that are encountered in facilities that rely on placing the portable device in a docking station to move voice files to the server. Additional delays in TAT may also be experienced if patient demographic information is not available in a digital format. Speech recognition technology on digital voice recorders is becoming more prevalent. In addition, many PDA solutions include demographic interfaces with the facility’s patient registration application. Both of these interfaces help to ensure the digital capture of patient demographics that accompany the voice file and thus contribute to a more accurate and timely transcribed document.

Directly related to the issue of accurate patient information and its the impact on TAT are emerging technology solutions designed to reduce the manual entry of patient information at the time of dictation. The availability of PC-based dictation, PDAs with imported patient lists, integration with the EHR, and other emerging solutions can reduce the number of voice files created with invalid or missing patient demographic information. Delivering a voice file with valid patient information and the correct, valid work type to the MT or medical text editor has a direct impact on TAT. Reducing the manual entry of information at the time of dictation can improve physician satisfaction and may impact the quality and TAT of the document.

Perhaps the most talked-about technology in the industry today is SRT and the potential impact it has or will have on dictation and transcription. There are obvious improvements in TAT through the implementation of FESR with real-time editing by the author (“once and done”). This technology is most commonly used today in specialty areas such as radiology because of (1) their repetitive and predictable terminologies, (2) the ease of integration into the current workflow, and (3) the wide implementation of PACS and PC dictation solutions that can be run from a single workstation. The biggest challenge with the wide deployment of FESR is convincing physicians to change their current behavior of dictating their reports and encouraging them to adopt the new technology, which does require voice input and subsequent editing time.

On the other hand, BESR requires minimal or no change to physician behavior and is viewed by most users as a productivity enhancement tool. The impact on TAT can be positive depending on the level of completeness and accuracy achieved. Many factors affect the level of success following the implementation of BESR technology. Even with current cases, often no more than 50–75 percent of the dictating medical staff can qualify for BESR due to a variety of reasons related to their current dictation practices. Also critical to the success of BESR is the editing tool that is integrated with the engine since the engine cannot operate independently of a text-editing application.

Finally, distribution options for speech and text are expanding. Many dictation and transcription applications as well as EHR/hospital information systems provide access to voice files as soon as they are dictated for physicians and other users who may need immediate access. This can ease the requirement of aggressive TATs for some work types.

The ability to more efficiently distribute transcribed documents to various locations throughout the healthcare facility eases the need for resources to manually distribute copies and originals. Documents are now most often uploaded directly to the hospital information system immediately upon completion, making them available for patient care without waiting for delivery to the patient floors.

X. Implementing Changes to TAT4CDT

There are three basic questions to ask when considering your organization’s TAT requirements in relation to the TAT4CDT task force’s findings: Should I implement changes? How should I implement changes? What should I expect following a successful implementation? The following sections will explore these questions.

Should I implement changes? Based on survey results, a substantial number of health information managers are underserved when it comes to meeting TAT expectations. However, the data also support the notion that much of the marketplace is currently satisfied with their TAT outcomes. As such, the task force has developed a simple test, the answers to which might suggest whether the TAT4CDT task force’s
findings represent the current state of the industry in your organization and should be a focus for your department, company, or enterprise (Figure 9).

<table>
<thead>
<tr>
<th>Current TAT Experience Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there any portion of transcribed reports that are out of TAT on a regular basis?</td>
</tr>
<tr>
<td>Are your overall expenses associated with report product through final delivery at or over budget consistently?</td>
</tr>
<tr>
<td>Do you anticipate increasing pressure from the customer(s)/provider(s) you serve to maintain or improve the timeliness of report delivery?</td>
</tr>
<tr>
<td>Do you see the further automation of the health record as driving the need for faster TAT of patient information (i.e., transcribed reports)?</td>
</tr>
</tbody>
</table>

While the questions are simplistic, they provide insight. If the answer is “yes” to any one of the four questions above, you may be likely to find yourself in a discussion regarding TAT. If the answer is “yes” to more than one question, your organization may already be discussing TAT. If the answer is “yes” to the fourth question, then implementing a change to these findings should be a focus for your enterprise. Finally, if the answer is “yes” to three or more questions including the fourth question, TAT is likely to be a big priority for your organization.

**How should I implement changes?** It should be noted that any healthcare enterprise considering a change in TAT standards should thoroughly analyze the impact and the requirements for a successful outcome. The supplier of transcription services (whether internal or external) should be a partner to the process and involved from the onset. Consider the following steps in every implementation:

1. Review existing TAT requirements, including the assumptions on which they were based.
2. Pick a representative sampling time and analyze actual TAT results.
3. Make a list of all parties affected by TAT (stakeholders). Discuss with them their level of satisfaction with the actual TAT results.
4. Assess the current needs of all stakeholders based on their actual work or practice patterns.
5. Conduct an impact analysis from each stakeholder’s point of view by evaluating the following (at least):
   a. Provider practice patterns
   b. Staffing
   c. Work flow
   d. Required technology or technology changes
   e. Costs
6. Do a thorough cost-benefit analysis of implementation.
7. Determine the best timing (and potential phasing) for the implementation.
8. Develop a communication plan to inform all stakeholders of the implementation.
9. Review documentation requirements. If services are provided internally, then assess the need to alter bylaws or other policy documentation and follow the process to revise them
accordingly. If services are provided by external supplier(s), then discuss amending existing contracts to reflect changes properly.

11. Review TATs from time to time to ensure that TATs are optimal for current patient care demands.

The steps above are critical to successful implementation in cases where existing expectations are being altered or where brand-new expectations are being set. It is also important not to implement a change until and unless all stakeholders are committed to the desired outcome or failure is likely.

**Post-implementation:** Once successfully implemented, a change to TAT requirements will have a material impact. At minimum, patient information should be available more consistently and in some cases more quickly. Patient information will become “usable” more readily in the EHR environment, perhaps providing a quicker return on investment (ROI) for purchasers of such technology.

External suppliers of transcription services (such as MTSOs) will be better aligned with the strategic intentions of their customers, making longer-term relationships more likely. Being a partner in deployment of changes to TAT will allow for better planning, and ongoing communication will be required to meet new expectations.

Successful adoption of TAT4CDT task force findings may or may not decrease costs for a healthcare enterprise. Often there is a desire to quicken TAT requirements and lower costs simultaneously. There is a direct correlation between shortening TAT and higher cost if the shortened TAT is achieved solely by adding staff. The most likely components of a successful strategy include technology and alternate production staffing models.

The indirect benefits of successful implementation are noteworthy. A consistently met TAT standard offers a predictable process outcome. A predictable process outcome can be the cornerstone of other predictable processes. Alternatively, the absence of a consistently met objective offers no foundational strength on which other important processes can rely. Thus the need to establish TAT standards is clearly evident.

**XI. Summary of Findings**

This state-of-the-industry white paper brings to the forefront the challenges that exist in the timely delivery of medical transcriptions and reveals the emerging technologies that can lead us closer to establishing standard TATs for common document types.

The relevant findings of this task force include the following:

- Medical transcription (including the editing of draft reports created with SRT) is currently the dominant and preferred method of creating narrative documentation in the U.S. healthcare system and is likely to remain a critical practice for at least 10 years.
- Fluctuating (unpredictable) dictation workloads and a critical shortage of skilled transcriptionists are factors affecting TAT in many instances.
- The evolution of the health record in emerging systems such as EHRs and PHRs (personal health records) will increase demand for quicker TAT of patient information to achieve desired financial and clinical benefits.
- SRT and perhaps other technologies will grow as documentation solutions in the marketplace can enhance TAT in some circumstances.
- Medical transcription production will continue to expand globally, which can in some cases improve TAT.
- Faster TAT on transcribed reports in cases where skilled workers are critical to the process will likely increase overall costs.
- Market recognition of the benefits of TAT standards in which expectations are properly set and managed will improve patient care/safety and provide a more efficient healthcare operation.
• In all cases, regular dialogue between all constituents affected by documentation TATs will result in a better outcome.

**XII. Conclusion**

The task force closely studied and examined the research and survey data on components and factors directly impacting TAT. Taking into account the development of new technologies, work force realities, current practices, and implementation considerations, as well as the few existing standards, the key discoveries revealed the need to first establish the state of the industry by providing a collection of such important findings.

Although there is a notable variance in current TATs for common document types as evidenced by the survey responses, the commonality brought forth throughout the study is the striking difference in the size and type of healthcare facility where the various TATs are in place. The needs and demands of healthcare facilities vary, and this is a major contributor that explains the wide range of the TAT results.

Because the ultimate goal of establishing TAT standards is a necessary (albeit currently missing) component in both the research and the industry dialogue generated around improved patient safety and quality patient outcomes in the age of the EHR, it will be an important next goal for the joint task force.
Glossary of Terms

AHDI—Association for Healthcare Data Integrity

AHIMA—American Health Information Management Association

BESR—Back-end speech recognition; the specific use of speech recognition technology in an environment where the recognition process occurs after the completion of dictation by sending voice files through a server

CPOE—Computerized physician order entry; a computer system that allows direct entry of medical orders by the person with the licensure and privileges to do so

E-HIM—Electronic health information management

EHR—Electronic health record

FESR—Front-end speech recognition; the specific use of speech recognition technology in an environment where the recognition process occurs in real time (or near real time) as dictation takes place

HIM—Health information management

HIMSS—Healthcare Information and Management Systems Society

IT—Information technology

MT—Medical transcriptionist

MTIA—Medical Transcription Industry Association

MTSO—Medical transcription service operator

NASSCOM—National Association of Software and Services Companies; the premier organization that represents and sets the tone for public policy for the Indian software industry

PACS—Picture archival and communication system; a computer or network dedicated to the storage, retrieval, distribution and presentation of medical images

PDA—Personal digital assistant

P-HIM—Paper-based health information management

PHR—Personal health record

PRN—Latin for “pro re nata” which translated means “when necessary”

QA—Quality assurance
ROI—Return on investment

SRT—Speech recognition technology; technology that converts spoken words to machine-readable input

TAT—Turnaround time; defined in this paper as the elapsed time from completion of dictation to the delivery of the transcribed document either in printed medium or electronically to a repository

TAT4CDT—Turnaround time for common document types
Notes


2. Ibid., Standard IM.6.10, IM-4, p. 428.

3. Ibid., Standard IM.6.30, IM-4, p. 428.


5. Ibid.


9. MTIA Market Assessment Study Database Report II, March 2000 #1064

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