What Does Your Transcription Format Cost?: Weighing the Costs and Benefits of Different Transcription Formats

by Rebecca A. McSwain, PhD, CMT

Choosing a different transcription format may save you hundreds of billable lines each day. But money isn't everything. Clarity and readability can be priceless.

Most of us who are concerned with the cost of producing a transcribed medical narrative have considered the cost of various formatting options. We all have our formatting preferences, which we feel contribute to the readability (and perhaps aesthetic qualities) of the document. But what do these preferences cost? This article quantifies the line counts for several formats in order to compare the cost of each.

This discussion is not intended to be a guide to efficient and effective formatting. Each healthcare facility must choose the format that meets its goals and needs. A facility with an electronic health record system, for instance, may choose a particular transcription format because users find it improves onscreen readability. What follows is intended to illustrate that there may be a significant potential for cost reduction in thoughtful analysis of format options for the dictated and transcribed medical narrative.

Examples of a Transcribed Narrative

To analyze the relative costs of formatting alternatives, I retyped a medical document in three formats. The text was borrowed from the "Coding Corner" column by Brian Bonanno, BA, CPC, in *Advance for Health Information Professionals* (January 19, 2004). The word processing program was Microsoft Word, and the program's word count function was used to determine differences in character and line counts. In this analysis, I divided the MS Word character counts by 65 to get the number of standard 65-character lines. The font is Times New Roman 12. Per line cost is considered to be $0.16 per 65-character line.

Version 1 is the text as it originally appeared in *Advance*. It is single-spaced, with indented paragraphs (and no blank lines between paragraphs). There are no headings. Retyped into MS Word, this text had a 3,300 character count, or 50.8 lines.

Version 1
3,300 characters, 50.8 lines

The patient is a 50-year-old female being seen for the first time in this office. She gives her history as follows.

Some eight to 10 weeks ago she noticed that it was becoming more difficult to pass dense solids, such as dry bread or solid meats, through her esophagus. Since then, this sensation has steadily progressed and has become frank dysphagia. She now avoids dense solids and eats soft or mushy foods such as mashed potatoes and soft ground meat. Her appetite has remained good. She has lost approximately nine pounds over this period of time. She is feeling well, without other complaints.

Her past history reveals that she is on no medications. Her only prior hospitalization has been for childbirth on two occasions. She is gravida 2, para 1, AB 0. There is no history of high blood pressure, heart disease, kidney disease, diabetes, or other significant medical problems or chronic illness.

Her family history reveals no familial or hereditary diseases or, in particular, gastrointestinal problems. Her personal habits reveal that she is currently a smoker and has smoked at least a pack of cigarettes a day since the age of 16. She regularly uses alcohol (either one to two beers daily or a highball before dinner and possibly one after dinner).

There is no history of headache, dizzy spells, blurred vision or any skin problems. The head, eyes, ears, nose and throat are negative. There is no chest pain, shortness of breath, swelling of the feet or ankles, or palpitations. There is no history of chronic cough, wheezing or frequent respiratory infections.

Gastrointestinal complaints are as noted above and for the present illness. She is menopausal. There is no history of genitourinary problems. The musculoskeletal system is negative. On the psychiatric side, she states that she has never had any psychological problems and feels that she has been well-adjusted throughout her adult life.

On physical examination, the vital signs are normal. She is a normally developed, adequately nourished female, of the stated age and in no distress. The head, eyes, ears, nose and throat are negative. There is no mucosal pallor. The neck is negative, with no masses or lymphadenopathy. The thyroid is normal. The trachea is in the midline. The lungs are clear and resonant. The heart is negative, with no murmurs. The abdomen is soft and nontender, without palpable organs or masses. No pelvic lymphadenopathy. The bowel sounds are normal. The bones, joints and muscles are negative in the four extremities with equal strength. The extremities are otherwise negative, with good pulses and no edema or clubbing. Neurologic exam is grossly physiologic. The skin is without rashes or induration, and lymphatics are negative, with no adenopathy. Rectal and pelvic exams are deferred at this time.

The onset of progressive solid food dysphagia in a patient who regularly uses alcohol and tobacco makes the possibility of an esophageal neoplasm a likely area of digestive syndrome. Routine laboratory studies will be obtained (CBC and chemical profile). She will be scheduled for an appropriate upper endoscopy.

An esophageal motility disturbance is also a possibility of the cause for progressive dysphagia. However, in this clinical setting, a neoplasm is more likely.

Transcription source: Bonanno, Brian. “Coding Evaluation and Management Services.” *Advance for Health Information Professionals* 13, no. 2 (2004): 15.

In **Version 2** I have added standard medical records headings. I have taken care that there are no extra spaces; that is, “hanging” spaces at the end of paragraphs or headings. You may note that I have combined the last two paragraphs. In fact, eliminating paragraphs does not reduce character or line count, at least not in MS Word, if two spaces are left between sentences. This is because the creation of the paragraph requires only one space (provided there is no hanging space left at the end of the preceding paragraph). The text contains 3,433 characters, or 52.8 lines.

Version 2
3,433 characters, 52.8 lines

HISTORY OF PRESENT ILLNESS
The patient is a 50-year-old female being seen for the first time in this office. She gives her history as follows.
Some eight to 10 weeks ago she noticed that it was becoming more difficult to pass dense solids, such as dry bread or solid meats, through her esophagus. Since then, this sensation has steadily progressed and has become frank dysphagia. She now avoids dense solids and eats soft or mushy foods such as mashed potatoes and soft ground meat. Her appetite has remained good. She has lost approximately nine pounds over this period of time. She is feeling well, without other complaints.
PAST HISTORY

Her past history reveals that she is on no medications. Her only prior hospitalization has been for childbirth on two occasions. She is gravida 2, para 1, AB 0. There is no history of high blood pressure, heart disease, kidney disease, diabetes, or other significant medical problems or chronic illness.
FAMILY HISTORY
Her family history reveals no familial or hereditary diseases or, in particular, gastrointestinal problems.
SOCIAL HISTORY
Her personal habits reveal that she is currently a smoker and has smoked at least a pack of cigarettes a day since the age of 16. She regularly uses alcohol (either one to two beers daily or a highball before dinner and possibly one after dinner).
REVIEW OF SYSTEMS
There is no history of headache, dizzy spells, blurred vision or any skin problems. The head, eyes, ears, nose and throat are negative. There is no chest pain, shortness of breath, swelling of the feet or ankles, or palpitations. There is no history of chronic cough, wheezing or frequent respiratory infections.
Gastrointestinal complaints are as noted above and for the present illness. She is menopausal. There is no history of genitourinary problems. The musculoskeletal system is negative. On the psychiatric side, she states that she has never had any psychological problems and feels that she has been well-adjusted throughout her adult life.
PHYSICAL EXAMINATION
On physical examination, the vital signs are normal. She is a normally developed, adequately nourished female, of the stated age and in no distress. The head, eyes, ears, nose and throat are negative. There is no mucosal pallor. The neck is negative, with no masses or lymphadenopathy. The thyroid is normal. The trachea is in the midline. The lungs are clear and resonant. The heart is negative, with no murmurs. The abdomen is soft and nontender, without palpable organs or masses. No pelvic lymphadenopathy. The bowel sounds are normal. The bones, joints and muscles are negative in the four extremities with equal strength. The extremities are otherwise negative, with good pulses and no edema or clubbing. Neurologic exam is grossly physiologic. The skin is without rashes or induration, and lymphatics are negative, with no adenopathy. Rectal and pelvic exams are deferred at this time.
DISCUSSION AND PLAN
The onset of progressive solid food dysphagia in a patient who regularly uses alcohol and tobacco makes the possibility of an esophageal neoplasm a likely area of digestive syndrome. Routine laboratory studies will be obtained (CBC and chemical profile). She will be scheduled for an appropriate upper endoscopy. An esophageal motility disturbance is also a possibility of the cause for progressive dysphagia. However, in this clinical setting, a neoplasm is more likely.

In **Version 3**, I added colons at the end of each heading and the subheadings in “Review of Systems” and “Physical Examination,” as shown. Further, I recreated the paragraph under “Discussion and Plan.” The rest of the report format matches version 2. This version has 3,633 characters, or 55.9 lines.

Version 3
3,633 characters, 55.9 lines

HISTORY OF PRESENT ILLNESS:
The patient is a 50-year-old female being seen for the first time in this office. She gives her history as follows.
Some eight to 10 weeks ago she noticed that it was becoming more difficult to pass dense solids, such as dry bread or solid meats, through her esophagus. Since then, this sensation has steadily progressed and has become frank dysphagia. She now avoids dense solids and eats soft or mushy foods such as mashed potatoes and soft ground meat. Her appetite has remained good. She has lost approximately nine pounds over this period of time. She is feeling well, without other complaints.
PAST HISTORY:

Her past history reveals that she is on no medications. Her only prior hospitalization has been for childbirth on two occasions. She is gravida 2, para 1, AB 0. There is no history of high blood pressure, heart disease, kidney disease, diabetes, or other significant medical problems or chronic illness.
FAMILY HISTORY:
Her family history reveals no familial or hereditary diseases or, in particular, gastrointestinal problems.
SOCIAL HISTORY:
Her personal habits reveal that she is currently a smoker and has smoked at least a pack of cigarettes a day since the age of 16. She regularly uses alcohol (either one to two beers daily or a highball before dinner and possibly one after dinner).
REVIEW OF SYSTEMS:
HEENT: There is no history of headache, dizzy spells, blurred vision or any skin problems. The head, eyes, ears, nose and throat are negative.
CARDIAC: There is no chest pain, shortness of breath, swelling of the feet or ankles, or palpitations.
RESPIRATORY: There is no history of chronic cough, wheezing or frequent respiratory infections.
GASTROINTESTINAL: Gastrointestinal complaints are as noted above and for the present illness.
GENITOURINARY: She is menopausal. There is no history of genitourinary problems.
MUSCULOSKELETAL: The musculoskeletal system is negative.
PSYCHIATRY: On the psychiatric side, she states that she has never had any psychological problems and feels that she has been well-adjusted throughout her adult life.
PHYSICAL EXAMINATION:
VITAL SIGNS: On physical examination, the vital signs are normal.
GENERAL: She is a normally developed, adequately nourished female, of the stated age and in no distress.
HEENT: The head, eyes, ears, nose and throat are negative. There is no mucosal pallor.
NECK: The neck is negative, with no masses or lymphadenopathy. The thyroid is normal. The trachea is in the midline.
LUNGS: The lungs are clear and resonant.
HEART: The heart is negative, with no murmurs.
ABDOMEN: The abdomen is soft and nontender, without palpable organs or masses. No pelvic lymphadenopathy. The bowel sounds are normal.
MUSCULOSKELETAL: The bones, joints and muscles are negative in the four extremities with equal strength. The extremities are otherwise negative, with good pulses and no edema or clubbing.
NEUROLOGIC: Neurologic exam is grossly physiologic.
SKIN AND LYMPHATICS: The skin is without rashes or induration, and lymphatics are negative, with no adenopathy.
RECTAL AND PELVIC: Rectal and pelvic exams are deferred at this time.
DISCUSSION AND PLAN:
The onset of progressive solid food dysphagia in a patient who regularly uses alcohol and tobacco makes the possibility of an esophageal neoplasm a likely area of digestive syndrome. Routine laboratory studies will be obtained (CBC and chemical profile). She will be scheduled for an appropriate upper endoscopy.
An esophageal motility disturbance is also a possibility of the cause for progressive dysphagia. However, in this clinical setting, a neoplasm is more likely.

Analysis

Let us begin by comparing the costs of versions 2 and 3. Version 3 contains 3.1 more lines than version 2, a 6 percent difference. Looked at another way, under the above assumptions, version 3 of the report cost $8.94, and version 2 cost $8.45.

To place these numbers in a real-world context, let us assume that 10 medical transcriptionists are producing 1,300 65-character lines per day each using format version 3, a total daily line count of 13,000 lines for X number of reports.

A switch to the version 2 format would reduce the line count required to produce X reports by 6 percent, a difference of 780 lines per day. Note that the amount and content of medical information produced that day is the same, regardless of line count.

If per-line cost is $0.16, then version 2 results in a daily savings of $124.80 (780 lines per day x $0.16). This interpolates to a savings of $45,552 per year ($124.80 x 365).

Discussion

Is this a significant savings? Organizations will answer this question differently depending on how they weigh varying reductions in line count with resulting changes in readability. Some organizations may find that subheadings add to the readability and clarity of the text. For these organizations, paying more for a format that includes subheadings is a worthwhile expense. Other organizations may consider that subheadings actually detract from clarity by shoe-horning data into artificial categories, with decisions about placement often left to transcriptionists who may have differing ideas about what goes where and whose opinions may or may not agree with those of the readers of the text.

The most economical format of the three is version 1. This format represents an impressive 9 percent reduction in line count compared to version 3. However, a text completely without headings may lose significant readability, especially in a relatively long narrative such as our example.

If our decision is that the straight text does not meet the needs of healthcare providers, we are then tasked with using a format that meets those needs in an efficient and cost-effective fashion. It is important, though, that there be a good analysis of the alternatives, perhaps along the lines laid out above, with variations according to the situation of each facility. Some formats that intuitively appear to be cost savers may in fact not be. The addition of paragraphs as described above is such an example.

Another example is the use of single spacing between sentences, which would potentially reduce line count. However, single-spacing may also significantly reduce readability. Is the cost savings benefit worth the potential loss of reading ease? In version 2, single spacing between sentences saves 39 characters, or 0.04 lines. Whether this results in significant savings will be appropriately judged by individual healthcare facilities.

In summary, an analysis of formatting options could point the way to a significant cost reduction for transcribed narratives. What formatting options are available, preferred, or mandated will vary among healthcare facilities, but regardless of individual circumstances, formatting decisions should be based on quantitative analysis of the options. Time given to considering format alternatives may be time well spent.

Rebecca A. McSwain *(rmcswain_985@fuse.net) holds a PhD in anthropology and has been a medical transcriptionist since 1977.*

Article citation:
McSwain, Rebecca A. "What Does Your Transcription Format Cost?: Weighing the Costs and Benefits of Different Transcription Formats." *Journal of AHIMA* 75, no.10 (Nov-Dec 2004): 40-43.