The Impact of Scribes in the Emergency Department Setting

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Background – As organizations continue to adopt and refine the use of electronic medical records (EMRs) with computerized provider order entry (CPOE) and self-entry documentation modules, a common provider concern includes time required for clerical tasks versus time spent with the patient providing medical care. However, documentation is a key requirement of medical services driving hand-off communication, coordination of services, and patient billing.

In an effort to drive improved perception of clerical tasks, completeness of documentation, billing, and key operational metrics, the Mayo Clinic Hospital Department of Emergency Medicine completed a pilot on the use of non-medical scribes. Scribes are non-licensed allied health staff, who serve to assist physicians and other practitioners in completing medical record documentation, including: gathering and recording patient medical information, documenting physician-patient interactions, tracking laboratory results, radiology and consultant activity, and preparing and printing discharge materials.

Objective – To determine changes (if any) in the following metrics related to the use of non-medical scribes:

a) Patient Length of Stay
b) Cost of scribes versus transcription services
c) Capture of Critical Care Services/Billing
d) Clarity of documentation
e) Physician perception of clerical tasks

Planning/Research Methods – The Department of Emergency Medicine at Mayo Clinic in Arizona is a 23-bed unit staffed by 15 emergency medicine physicians, with an annual patient volume of approximately 26,000. Through a competitive RFP process, Mayo Clinic selected a firm that specializes in emergency medicine scribes to staff the pilot. All physicians were asked about their interest in participating and of those who responded positively, 7 were selected to use scribes and completed a one month training period prior to full implementation of a 90-day pilot. Surveys of all physicians occurred pre-, mid-, and post-pilot.

Results –

a) Patient Length of Stay (LOS) – For the scribe group, pre-pilot LOS was 236 minutes vs. 252 minutes during the pilot period; for the non-scribe group, pre-pilot LOS was 238 minutes vs. 223 minutes during the pilot period.

b) Cost of scribes versus transcription services – A comparison of the cost of documentation completion found that the scribe group was 48.3 percent more costly per billed visit than the non-scribe group. However, the scribe group was able to use transcription services at their discretion; had they not used transcription services, the cost per billed visit for the scribe group would have been 9.8 percent more.

c) Capture of Critical Care Services/Billing – The scribe group increased critical care billing 118 percent between the baseline and scribe periods, compared to 3 percent increase in the non-scribe group.

d) Clarity of documentation – Two independent hospitalists were asked to assess 10 scribe-completed and 10 physician-dictated randomly sampled records that were blinded and formatted to a common font. Reviewers were asked to rate the charts on a 0-100 numerical scale in which zero represented the absence of and 100 represented the presence of ideal syntax or clarity. The results demonstrated a difference with reduced syntax scores for scribed notes (64) when compared to dictated notes (79) and a reduction in clarity scores for the scribed notes (68.5) when compared to dictated notes (75).

e) Physician perception of clerical tasks – the use of scribes did not significantly change perception of percentage of time spent on clerical work, although improvements in perception of time spent in direct patient contact and ability to manage time during shift were noted.

In summary, this pilot indicated that the use of scribes in the ED setting resulted in an increased length of stay, higher cost for completion of documentation, improved capture of critical care billing, a reduction in documentation syntax and clarity, and some improved perception of time spent in direct patient contact and ability to manage time during the shift.

Largely due to the quality of documentation and low impact on perception of clerical work, scribes were not implemented throughout the Emergency Department.

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