Table 1

Study Approach to Elements Affecting Productivity

Elements Affecting Productivity	**Study Approach**
Complexity of the case (severity of illness)	Controlled: Two groups of inpatient cases were carefully constructed to be of similar complexity.
Health record format (paper, hybrid)	Controlled: The same health record format was used for all inpatient cases.
Coder familiarity with record format	Controlled: All coding professionals were initially unfamiliar with the University of Cincinnati health record format, and all received the same amount of orientation and training to access University of Cincinnati inpatient health records electronically.
Coding methodology (book, logic-based encoder, book-based encoder, computer-assisted coding)	Controlled: All study participants used the same encoder to code cases in both ICD-9-CM and ICD-10-CM/PCS. All study participants were previously familiar with the encoder used.
System access (downtime)	Controlled: While downtime is often a factor in real-time production coding, for the purposes of the study downtime was to be subtracted from total coding time. In actuality, none of the participants in the preliminary analysis reported any downtime or delays due to system access.
Sufficiency of health record documentation	Measured: Participants recorded narrative notes on each case describing any issues related to lack of clinical documentation.
Individual gender, age, knowledge, education, and reading speed	Measured: Participant descriptive information was captured, including gender, age, highest education level, professional credentials/certificates, years of experience coding with ICD-9-CM, amount of ICD-10-CM/PCS training, and extent of experience coding with ICD-10-CM/PCS.