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89 Tracking Resident and Program Patient Encounters by Clinically Meaningful Disease Categories

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Background: In emergency medicine (EM), we track resident procedures, such as central lines, but do not track encounters for diseases, such as myocardial infarction. It is unclear how many patient encounters of a disease category are necessary for a resident to become competent but to date there has been no way to reliably obtain this information. Residency programs may also be unaware of how their institution's patient encounters reflect the model practice of EM. While programs have ready access to data from their electronic medical record (EMR), there is no unified or simple method of tracking the specific conditions a resident sees in the EM training period.

Objective: Develop a software tool that provides an easy method to track types of patient conditions during resident patient encounters.

Design: The Healthcare Cost and Utilization Project (HCUP) developed the Clinical Classifications Software (CCS) as a categorization scheme of the diagnoses and procedures found in the ICD-9 coding system. Over 15,000 diagnosis and 3,900 procedure codes have been condensed into a smaller number of clinically meaningful categories. We used the single level and multilevel CCS and grouped them into the five key EM patient types: Trauma, OB/Gyn, Medical, Psychiatric, and Pediatric. The CCS was further categorized by the EM model practice areas, resulting in 13 subcategories of patient disorders.

Outcome: This new package was used with ICD-9 discharge diagnoses obtained from EPIC (Verona, WI, 2011) and simple queries with Microsoft Access (Redmond, WA, 2010) to easily demonstrate the number and type of patient encounters seen by individual residents. This easy-to-use open source product can be used by any residency program to track patient encounters. Results from this tool can provide data for summative competency assessments. This software may also be used to identify encounter type deficiencies in an individual resident or program and provides us with a new research tool.