Curricular Assessment: Using an Online System to Document Patient Encounters during Advanced Pharmacy Practice Experiences

Vos SS, Currie JD, Johnson SJ, Seyfer JL, Umlah LB, Draus KA
The University of Iowa College of Pharmacy, Department of Pharmacy Practice and Science

Background
Providing patient-centered care is an important aspect of learning which occurs during Advanced Pharmacy Practice Experiences (APPE). Documenting patient encounters allows students to appreciate the breadth of their patient care experience, and provides an opportunity for assessing the quantity and variety of direct patient care contact for each student in the experiential curriculum.

Objective
Establish a mechanism for student documentation of patient care encounters and assess the breadth of student exposure during APPE

Methods
- Students complete eight, five-week APPE (Acute Care Medicine, Ambulatory Care, Advanced Community, Advanced Hospital, and four electives)
- Students document patient care via an online case documentation system (E*Value™ PxDx Case Logger)
- Student requirements:
  - A minimum of 70 individual patient encounters
  - A minimum of three entries for each of the 11 pharmacist categories
- Patient encounter documentation includes:
  - Type of APPE
  - Patient demographics
  - Pharmacotherapy category(s) addressed based on organ system
  - Drug therapy problem(s)
  - Medication(s) involved
  - Type of intervention(s)
- Students are provided guidelines and directions at APPE orientation and periodically throughout the year
- Data were analyzed from the class of 2012 and 2013 respectively
- Data were generated from E*Value™ reports and descriptive statistics were calculated in Excel®

Results
- A total of 21,221 individual patient encounters were documented, mean = 96 per student (Fig. 1)
- A total of 40,099 pharmacotherapy category entries were reported over the 2 years
  - Average of 191 and 167 pharmacotherapy category entries per student for the classes of 2012 and 2013 respectively
- Cardiology and ID were the most prevalent pharmacotherapy categories documented (Fig. 2)
- Dermatology, neurology, urology and respiratory were the least common pharmacotherapy categories (Fig. 2)
- Entries varied by rotation type and year (Fig. 3)
- Most common interventions: MTM, education, and provider consultation (Fig. 4)
- Least common interventions: device fitting, insurance, professional development (Fig. 4)

Limitations
- Students may have stopped documenting once the minimum requirements were met
- Courses listed as required may have been taken as an elective inflating the numbers for that APPE
- Some electives provided little or no direct patient care opportunities
- Real-time documentation was encouraged, but not required

Conclusions
- All students were able to document that they met or exceeded the APPE requirements
- E*Value™ PxDx Case Logger was an effective tool for documenting patient encounters
- The distribution of the encounters was dependent on the type of APPE
- Future analysis of minimum requirements is needed to determine the individual breadth of exposure