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Assessing the Accuracy and Quality of Medication History Collection: Effect of Implementation of Electronic Health Record

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accompany data collection: effect of implementation of electronic health record. By providing benchmark data to the VAMCs in order to bring prescriber attention to preventable problems with prescriptions and increase the efficiency of the mail order system by reducing the number of prescription cancellations.

METHODS: Every month VAMCs serviced by the SW CMOP received a site progress chart showing the total number of monthly cancels over time, a progress chart with the top three reasons for site cancellation, and a cancellation rate chart comparing the different VAMCs. Decrease in average prescription cancellation rate was analyzed using a t-test.

RESULTS: Over a one year period (January 2012 to December 2012), the average number of prescription cancellations among all VAMCs fell from 48.8 cancels per 10,000 fills to 37.5 cancels per 10,000 fills. This represents a 23% decrease in the overall cancellation rate to VAMCs (p=0.006).

CONCLUSION: By providing benchmark data to the VAMCs for analysis, CMOP is able to play a more active role in promoting patient safety and improving the efficiency of the mail order service.

252. Assessing the accuracy and quality of medication history collection: effect of implementation of electronic health record. Kena Lanham, PharmD, BCPS; Lindsay Saum, PharmD, BCPS, CPG; David Reeves, PharmD, BCOP, Colleen Scherer, PharmD, MPA, BCPS, Beth Johnston, PharmD, BCPS; Anthony Antonopoulos, RB MBA, Suelyn Sorensen, PharmD, BCPS; (1)Department of Pharmacy, Saint Vincent Hospital, Indianapolis, IN (2)Department of Pharmacy Practice, Butler University, Indianapolis, IN

PURPOSE: We hypothesized that pharmacy staff auditing of previously recorded admission medication histories will identify significant and potential medication errors, and that implementation
of an electronic medical record [EMR] will not improve the quantity of discrepancies or the quality of admission medication histories, despite showing Joint Commission and Heart Failure Core Measure compliance.

**METHODS:** At our institution, medication reconciliation is completed at the time of admission through collaboration with prescribers and nursing staff. A pharmacy medication reconciliation team is utilized on the cardiac step down unit and employs pharmacy technicians to obtain an accurate and complete medication history. This history is verified by a pharmacist, compared to the initial medication history and inpatient medication orders. Identified discrepancies are reconciled with a licensed prescriber. A retrospective evaluation assessed the discrepancies identified by the pharmacy team medication history audits, as well as audits completed by clinical pharmacists on other hospital units, and compared the quantity of discrepancies before and after EMR implementation.

**RESULTS:** With support provided by the pharmacy team, medication reconciliation completion was 82% pre-EMR implementation and increased to 91% immediately post-EMR implementation; Core Measure compliance has remained above 90%. The average number of medication discrepancies per admission was reduced by 34% upon admission medication reconciliation was 0.55 pre-EMR implementation and increased to 2.32 post-EMR implementation. The average number of incorrect drugs/patient upon admission medication reconciliation was 0.16 (pre) and 0.61 (post); and incorrect doses/patient was 0.32 (pre) and increased to 0.63 (post).

**CONCLUSION:** Despite showing a decrease in medication reconciliation and core measure compliance with the implementation of EMR, our data shows discrepancies between the medication lists collected as a routine part of admission and those lists collected via the pharmacy team audit. In fact, more errors were identified after EMR implementation. The pharmacy team’s activities should be continued and expanded in order to prevent future discrepancies.

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**Other**

**254. A collaborative effort to develop clinical pharmacy services and Advanced Pharmacy Practice Experience (APPE) student exchange programs in Ethiopia and China.**

**Golden Peters, Pharm.D., BCPS; Shin-Yu Lee, Pharm.D; Kenneth Schafermeyer, Ph.D;**

**(1) St. Louis College of Pharmacy, Saint Louis, MO**

**RESULTS:** An initial visit was conducted to Mekelle, Ethiopia and Shanghai, China to discuss potential opportunities for collaboration between the St. Louis College of Pharmacy (STLCOP) and Mekelle University College of Health Sciences (CHS) School of Pharmacy (SOP) and Fudan University School of Pharmacy (SOP).

**METHODS:** One STLCOP faculty member visited Mekele University CHS SOP and Fudan University SOP in Spring of 2013. Discussions with current clinical pharmacists and faculty members centered around ways for further clinical pharmacy development, and parameters for implementing APPE student exchange programs.

**RESULTS:** Major outcomes identified as shared points of interest include: establishing a faculty exchange/sharing program, Advanced Pharmacy Practice Experience (APPE) rotation sites for students and a distance learning/educational series between STLCOP and the two schools of pharmacy. Basic clinical pharmacy services have been established with the associated hospitals near the SOPs. Services currently involve daily hospital rounds involving pharmacists and students. Cultural activities at Fudan University help round out APPE student experiences which include observing practices of traditional Chinese medicine (herbal medicine, coinng, cupping, acupuncture) at hospital based integrative medicine clinic.

**CONCLUSION:** This is a prime example of how US clinical pharmacy skills can be greatly utilized to advance global health initiatives. Based upon the relationships between these international pharmacy schools, there are plans for STLCOP/APPE student and faculty members to return to Mekele and Fudan University to further develop the relationships by increasing integration of interdisciplinary care teams in more specialized medical units. This will enhance both the quality of patient care provided and the educational experience for nursing, medical, and pharmacy students, and medical residents. One major limitation associated with this discussion is that only one School of Pharmacy was visited in each country, and may not be fully representative of the other Schools of Pharmacy in those countries.

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**255. A clinical decision support system facilitates appropriate prescribing and monitoring of epoetin alfa in the inpatient setting.**

**Danny McNatty, Pharm.D., MHA, BCPS; Ephi Yip, Pharm.D.; Denise Erickson, Pharm.D., BCPS; Banner Health, Phoenix, AZ.**

**PURPOSE:** A clinical decision support system (CDSS) that restricts orders for epoetin alfa (EPO) to appropriate indications and encourages patient monitoring will align use of this agent with evidence-based practice.

**METHODS:** A CDSS consistent with guideline and manufacturer recommendations for use of epoetin alfa was recently implemented. A pre-post analysis of patients who received EPO at one of three facilities between August 1, 2011 – October 31, 2011 (pre-CDSS) and August 1, 2012 – October 31, 2012 (post-CDSS) was performed. Indications for EPO, hemoglobin, ferritin, and orders for iron supplementation were collected for each patient. Indication for use, administration when contraindicated for

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**256. Integrative medicine clinic.**

**Golden Peters, Pharm.D., BCPS; Ephi Yip, Pharm.D.; Danny McNatty, Pharm.D., MHA, BCPS; Banner Health, Phoenix, AZ.**

**PURPOSE:** Establishing a faculty exchange/sharing program, Advanced Pharmacy Practice Experience (APPE) rotation sites for students and a distance learning/educational series between STLCOP and the two schools of pharmacy. Basic clinical pharmacy services have been established with the associated hospitals near the SOPs. Services currently involve daily hospital rounds involving pharmacists and students. Cultural activities at Fudan University help round out APPE student experiences which include observing practices of traditional Chinese medicine (herbal medicine, coinng, cupping, acupuncture) at hospital based integrative medicine clinic.

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