Open Source Solutions for a Web-Based Intervention

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Importance of Improving Medication Management in Ambulatory Settings

- According to a Meta-analysis, 1 million patients were hospitalized from an ADR in 2004
  - (Lazarou et al. JAMA 1998; 279: 1200-1205.)
- Incidence of adverse drug events in community dwelling adults=27.4%
- Of the 181 reported ADR's, 51 (28.2%) were deemed to be ameliorable
- Of the ameliorable events, the source of failure was the prescribing physician 63% of the time
  - (Gandhi TK et al. NEJM 2003;348:1556-64)

Project Objectives

Improve patient safety outcomes related to medication use

Integration and utilization of medication history information provided via eRx

Improve patient-provider communication

Training Module Outline

Materials will include:

Leader notes and PowerPoint presentations

1. Trigger videos for discussion
2. Print materials for reference and review
3. Discussion cases
4. Web-based information to review and refresh and further optimize intervention dissemination

Open Source Software

▸ Comparison with other web-based systems

▸ Adaptability

▸ Usability

▸ Sustainability

Comparison

- Proprietary
  - Highly specialized & Generic
  - Frequently Expensive
  - Closed Systems

- Open Source
  - Generalized
  - No Software Fee
  - Open System

Open Source Usage & Adaptability

- Content Management System

- An Infrastructural Platform

- Template Selection

- Component Selection

Open Source Usage & Adaptability

- Components & Modules can be added to the system as needed
  - Contact Form
  - Comment Section for User Feedback
  - Speed test

Usability

- The Back End Administration Area

- The Front End Editing Area

- WYSIWYG Editors and Options

Sustainability

- Security Conscious Developers

- Site and Component Upgrading

- Editor to maintain site