**Activities**

**Unit 6: Decision Support for Quality Improvement**

Paper

Three case studies were included in Unit 6.4. Select one of these case studies and write a 2-3 page paper that discusses how you would assist clinicians to determine the best use of clinical decision support in the selected case. Use the questions presented on the slides and the assigned readings as a guide.

Case Studies 1

A semi-rural community hospital has bought a commercial inpatient computerized order entry system (CPOE). The hospital admits patients to its inpatient units from its emergency department (ED) and from ambulatory clinics and wants to assure and measure safe and timely admission and transition of patients from the ED to the inpatient unit. The hospital sees many cases of chest pain in the ED, which has been identified as an area in which it can improve management. There is a standard protocol for working up, diagnosing, and treating patients with chest pain, and the inpatient physician group would like to assure rapid initiation of the protocol once the diagnosis of chest pain is made in the ED.

Case Studies 2

A patient may come to the ED with clear diagnosis of a major event (heart attack) that requires immediate transfer to the cardiac intensive care unit (CICU). The cardiac care team has specific protocols for different cardiac diagnoses that depend on rapid evaluation and diagnosis in the ED, timely communication to the cardiac care team and coordination of care (diagnostic testing, interventions) and transfer of the patient to the CICU.

Case Studies 3

Ambulatory practices in the community want to keep track of patients who are admitted for chest pain (especially those who are diagnosed with heart disease). They would like to improve ongoing management of heart disease in their population by being alerted to patient admission to the hospital and hospital management and disposition of these patients (new medications, management by specialists, etc.). They have a good working relationship with the hospital and some of the ambulatory practices affiliated with the hospital already have a common electronic health record that connects to the hospital information systems.

Case Studies 4

The State Health Department has noticed the problem of cardiac disease in community and wants to implement programs to discover and intervene in both acute and preventive care. It would like to establish health information exchange (HIE) for cardiac care in the state. Public health policy makers would like to have decision support that would help improve cardiac care within the state. In meeting with clinical cardiologists from community hospitals and a tertiary university center in the state, public health officials are in discussion with an IT team to improve the functionalities of the local health information registries (primarily for immunizations, infant metabolic screening, and cancer).