## Decision Support for Quality Improvement

Unit 6.2: Clinical Decision Support Systems that Help Improve Quality

Slide 2

# Objective

Compare decision support tools that help improve quality

Slide 3

#### Clinical Decision Support Meaningful Use

"...dvanced EHR systems with CDS functionalities have the potential to dfer numerous benefits to the safety and quality of patient care, including improving the rate at which patients receive preventive services recommended by clinical guidelines, as well as the potential to facilitate superior financial performance, based on the best return on investment models currently available. While the promise of CDS is great, trials of CDS have produced mixed results and a number of challenges in implementing CDS remain unresolved. Nevertheless, the potential of CDS to improve health care outcomes afiltims that truly meaningful use of elective CDS."

Health IT V

### Types of CDS

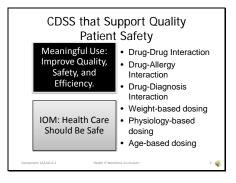
- · Relevant data displays
- Smart documentation forms
- Order facilitators (order sets, order consequents, order modifiers)
- · Extended-time guideline and protocol followers
- Targeted reference, including contextually relevant medical references or info buttons
- Reactive alerts

#### Slide 5

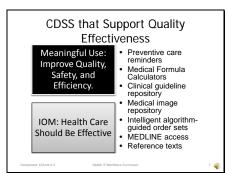
### Types of CDS

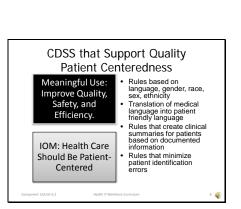
- Task assistants for tasks such as drug dosing and acknowledging laboratory results
  Diagnostic suggestions
- · Patient summaries for hand-offs between clinicians • Procedure refreshers, training, and reminders
- Performance dashboards with prompts for areas needing attention
- Tracking and management systems that facilitate task prioritization and whole-service management ٠

Slide 6

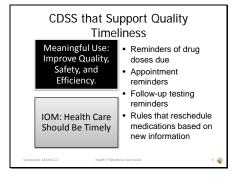




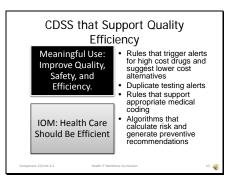




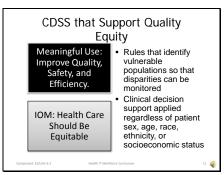
Slide 9













# Unintended Consequences of CDS

- Content
   Elimination or changing of roles of clinicians
   and staff
- Currency of CDS content
- Wrong or misleading CDS content
- Presentation
  - Rigidity of systems
  - Alert fatigue
  - Sources of potential error

## Summary

- Meaningful use of EHRs must include meaningful use of CDS.
  CDS supports quality, safety, efficiency, effectiveness, timeliness, and equity of care.
  Examples of CDS that support patient safety include: rules that alert the prescriber to drug-drug/drug-allergy and drug-diagnosis interactions and rules that support weight-based, physiology-based, and age-based dosing.
  There may be unintended consequences of CDS
- There may be unintended consequences of CDS that relate to both content and presentation.