

# CDS Intervention Typology\*

[content needs to be updated when this HIMSS content is finalized]

\*This content was adapted from a 2011 book published by the Healthcare Information and Management Systems Society (HIMSS) entitled "Improving Outcomes with Clinical Decision Support: An Implementer's Guide, Second Edition."

## ***CDS during data-entry tasks***

### ***Smart Documentation Forms***

- I. Includes checklists, risk assessments, facilitated documentation for a given problem, conditional workup sheet

### ***Order Sets, Care Plans and Protocols***

- II. Includes complex order variations like TPN
- III. Includes both regular order sets and conditional/intelligent ones
- IV. Includes helpers that take you to the various 'order sets' that are part of a multi-step pathway

### ***Parameter Guidance***

- V. Includes dosage guidance and recommended-dose lists (possibly adjusted for various patient conditions)
- VI. Includes displays that help guide an order, e.g., displays of hematocrit and crossmatch status when ordering blood products

### ***Warnings and Critiques***

- VII. Order warnings (e.g., drug-drug interactions, allergy warnings)
- VIII. Critiques and advice related to an immediate entry (e.g., additional fields to enter for complete radiology ordering, request for reason for ordering certain antibiotics)
- IX. Includes consequent (corollary) orders

## ***CDS during data-review tasks***

### ***Relevant Data Displays (Single-patient)***

- X. Includes health maintenance flowsheets, quality-metric status sheets – to tell you what is needed for this patient overall or for a certain aspect of care

### ***Multi-patient Monitors and Dashboards***

- XI. Includes whole-unit monitors, ED tracking systems, OR status displays, whole-panel immunization displays, etc.

### ***Predictive and Retrospective Analytics***

- XII. Retrospective displays of performance, control charts, benchmarks, for strategic guidance and problem-spotting
- XIII. Includes syndromic surveillance tools

### ***CDS during assessment and understanding tasks***

#### ***Filtered Reference Information and Knowledge Resources***

- XIV. Includes infobuttons, data- or event-sensitive reference information, patient-education programs

#### ***Expert Workup Advisors***

- XV. Includes diagnostic systems and antibiotic advisors, generally interactive processes that make broad recommendations based on data and/or user input

### ***CDS not triggered by a user task***

#### ***Alerts (Data-triggered) and Reminders (Time-triggered)***

- XVI. Focused advice and warnings triggered by non-user-entered data (e.g., lab results) or by the passage of relative or absolute time (no mammogram in two years, no hemoglobin A1C in one year)