



SPECTRUM HEALTH 

Implementing CPOE: The Impact on Nursing Practice

Summer Institute in Nursing Informatics
July 2009



1

SPECTRUM HEALTH 


Setting of the Project-Spectrum Health

Spectrum Health

- Tertiary Care Center covering 13 counties
- 14,000 staff members
- 1500 physicians
- Two adult acute care and a children's hospital
- Combined bed capacity of 1060

2


SPECTRUM HEALTH 

Project Journey

Computerized Provider Order Entry

- Started Sept 2007
- Anticipated Go-live- Spring, 2010
- All inpatient departments/units and procedural areas
 - Exclusions: Anesthesia; intra-operative; chemotherapy orders

3


SPECTRUM HEALTH 

Organizing Nursing Around CPOE

Advanced practice nurses for professional practice and manager of nursing informatics were assigned the accountability for representing nursing's involvement with CPOE

- Engage all departments and units of nursing
- Coordinate workgroups
- Represent the voice for nursing practice

4


SPECTRUM HEALTH 

Organizing Nursing Around CPOE

Workgroups created

- Clinical advanced practice nurses
 - Creating standardized patient care orders
 - Collaborating with physicians to create order sets
- Establish nursing end user workgroup
 - Developing an electronic tools – Kardex, PAL
 - Validate practice, make recommendations and decisions
- Unit Secretary
 - Role clarification and job description


5

SPECTRUM HEALTH 

Organizing Nursing Around CPOE

- Coordinate interdisciplinary workgroups
 - Process workflows
- Advise departmental workgroups
 - Pediatric, Perioperative Services, Radiology, Cath Lab, Women's Services
- Participate in physician workgroups
 - Physician Champion meeting
 - Physician content development of order sets
- Communication to senior level nursing executives
 - Nursing Executive Committee


6

SPECTRUM HEALTH 

Organizing Nursing Around CPOE

- Collaboration with technology information systems
 - CPOE Integration Group
 - CPOE TIS Workgroup

7


SPECTRUM HEALTH 

Impact of CPOE on Nursing

Leveraging CPOE to:

- Standardize Nursing Practice
 - Nursing care orders
 - Process & workflow
- Enhance Professional Model of Care
 - Timely communication between care providers
 - Access to patient specific Information
- Support Safety and Quality Initiatives
 - Nursing Sensitive Indicators
 - Decision support e.g. rules and alerts

8


SPECTRUM HEALTH 

Impact: Standardize Nursing Practice

Nursing Care Orders

- Building block for CPOE & electronic Kardex
 - e.g. patient activity, assessments, dressing and wounds
- Best practice content
 - Bedrest → Bedrest, turn and reposition 2 hrs.
- Negotiation with physicians especially related to nomenclature
 - Heparin lock → Saline lock & Intermittent Infusion Device

9

SPECTRUM HEALTH 

Impact: Standardize Nursing Practice (cont.)

Process and Workflow

Patient flow through-out the system

- Emergency Department transition beds
- Inpatient->Patient Holding-> OR->PACU-> Inpatient


Communication and hand-offs

- Electronic tools: Electronic Kardex
- Exchange report

Medication administration

- Electronic Medication Administration Record
- Barcode for Medication Administration

10

SPECTRUM HEALTH 

Impact: Enhance Professional Practice Model


Tenets of Professional Practice Model:

- Nurse-patient relationship
- Interpersonal relationships within the care team

CPOE and associated electronic tools provide:

- Timely communication between caregivers
- Access to patient specific information


11

SPECTRUM HEALTH 

Impact: Enhance Professional Practice Model

Timely communication between caregivers


12

SPECTRUM HEALTH 

Impact: Professional Practice Model & Safety

Access to Patient Specific & Nursing Sensitive Information


13

SPECTRUM HEALTH 

Impact: Safety and Quality


Decision Support: Rules and Alerts

14


SPECTRUM HEALTH 

The Role of Nursing in Order Set Development

- Is there a role ?
- What is the role?




15


SPECTRUM HEALTH 

The Role of Nursing in Order Set Development

- Physician orders
 - Not just words on paper
 - Translate paper to electronic
 - Terminology (e.g. protocols)
 - Misconceptions
 - Assumptions
 - Process
- Active role
- Drive the project




16

SPECTRUM HEALTH 

The Role of Nursing in Order Set Development

- Helen DeVos Children's Hospital nursing team formed
 - Clinical Nurse Specialist – CPOE Nursing Coordinator
 - 3 Staff Nurses
- Division champions identified
 - 40 subspecialties
 - Physician and/or mid-level providers
- Division champion manual developed
 - Stated project expectations
 - Defined terminology
 - Described process around order set development


17

SPECTRUM HEALTH 

The Role of Nursing in Order Set Development


- Nursing team collected content from division champions
 - Written orders translated to standardized order format
 - Standardized template used to develop order sets
 - Order sets developed on spread sheets
- Spread sheet was reviewed by division champions
- Order sets built into electronic format
- Meetings set up with division champions for hands on experience
- Total order sets 275

18

SPECTRUM HEALTH 

It is a Journey...

19

SPECTRUM HEALTH 

Contact Information

Cheryl Blackport RN BSN, Manager Nursing Informatics
cheryl.blackport@spectrum-health.org

David Sterken RN MN CPNP, Clinical Nurse Specialist
david.sterken@spectrum-health.org

Marie Vanderkooi RN BSN MSN,
Clinical Nurse Specialist Nursing Informatics & Practice
marie.vanderkooi@spectrum-health.org

20

