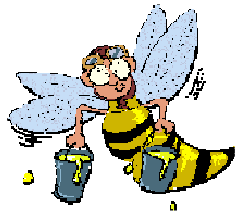
CIS from the Perspective of CIS Team Leader

Lau Lan, NO

ICU, PYNEH

22 April 2009

Preparation



- CIS Team formed in May 2006
  Members include Physicians and nurses, with the support of system engineer & product specialist
- Visited to 2 ICUs using CIS
- Location of Server
- Location of workstation, wall mounted / movable trolley
- Additional accessories needed:
  Webcam, barcode reader, printer, chair
- Collaborate with hospital IT, lab, pharmacy, medical record office.

Installation

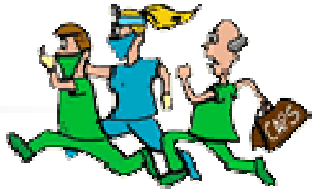
Configuration

- On going process
- Transfer various forms into CIS
  - ICU Flow Chart
  - Nursing Assessment
  - Nursing Order
  - Patient Notes
  - Ventilator Chart
  - Medication Administration Record
- Design new forms

Implementation

Stage I	May 07	-50% beds of ICU -Double charting x 5 days -MAR charting in both Computer & Paper base
Stage II	Sep 07	-50% beds with Medication Administration Record in CIS only
Stage III	Oct 07	Full Implementation

Training of users



- Prepare the training material
- Train the Trainer : by vendor
- Train the end users: by CIS Team members

Training of users (Cont'd)

ICU Nurse: 2 training sessions

1. 4 hours session on management of CIS: concept of computer, concept of CIS, hand on practice, individual practice on real patient.
2. 1 hour session focus on medication administration record.

Non ICU Nurse:

1 hour session for nurse specialists and infection control nurse, focus on view document and enter notes.

Training of users (Cont'd)

ICU Supporting Staff:

1. Handling and caring of CIS workstation / CIS trolley
2. Management of admission and discharge procedure
3. Workstation and print out management

Problems encountered at the beginning of CIS implementation

Intra-department

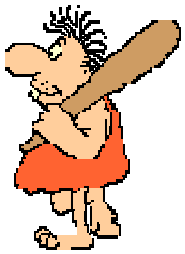
- Start from Zero
- Staff adaption:
  - Totally change of traditional workflow e.g. handover, perform 3 checks 5 rights during drug administration
  - Difficult to view different pages in one screen
  - Combine bedside trolley with CIS trolley
  - Prefer new admission in non-pilot ward (paper-based documentation) rather than the pilot ward (Computer-based documentation)
  - Address the invalid / wrong entry…
  - Log off after used

Intra-department

- Staff resistance:
  - All records are traceable
  - Legal document
- Staff allocation:
  - Implement of CIS in one ICU ward only (50% beds for 5 months)
- Interfacing Problem
  - Fail to interfacing occasionally (vital sign, ventilator reading)
  - Selection between different ventilator

Intra-department

- Computer
  - Not enough
  - Slow response time
- Monitoring
  - Who??
  - How??



Inter-department

- Non ICU staff resistance
  - Non ICU doctors
- Communication with other units
  - Not familiar with the new format
  - Print in a small font and in a compact A4 paper
  - Handover Process

How We Solve it?

- Reference Material
  - CIS Reference file
  - CIS Cue Card
  - CIS Q&A Book
  - CIS Log Book
  - CIS Board – 醒目提示
- CIS Team members available at every shift
- Sharing / discussion session daily (~15mins)

How We Solve it?

- Technical:
  - 24 hours technical back up by vendor
  - ↑ Computer
- ↑ Communication among departments
  - Sharing session on CIS
  - View CIS charting during handover
  - Add special reminder when handover of MAR
- Monitor Staff Compliance

Monitoring and Audit on Proper Use of CIS

- Develop Checklist in difference phase:

May/07	Trail run of CIS in D10	<1>
June – Aug/07	Weekly spot check	<2>
Aug/07	Complete CIS Checklist to all ICU nurse	<3>
Mar – Apr/08	Individual checking every shift by case nurse	<4>

- Continuous Monitoring by nurse supervisors: WM, NS, NO, APN & CIS team members

Configuration Change Management

- A difficult work
- An Ongoing Process
- Need communicating well with end users

Ongoing Modification

- Ongoing configuration
- Monitor staff compliance
- Provide training to new staff


Thank You