Nurses & Informatics: Transforming Healthcare Conference

Pat McDonell RN

Carol Warren RN

Designing New Clinical Systems: Innovative Approaches to Support Practice

SickKids

Hospital for Sick Children, Toronto

300 bed Paediatric Academic Health Science Centre

Inpatient Visits	14,000
Ambulatory Visits	290,000
Surgical Procedures	12,000
Average Daily Census	270
Patient Days	97,000
ALOS	7 days
Staff	5500

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Main Clinical Application - Kidcom

- Inpatient areas
  - ADT (1992)
  - Order Entry
  - MAR
  - Patient Summaries
  - Results Retrieval
- Outpatient areas
  - ADT (1992)
  - Results Retrieval
  - Lab Order Entry (in some outpatient areas)

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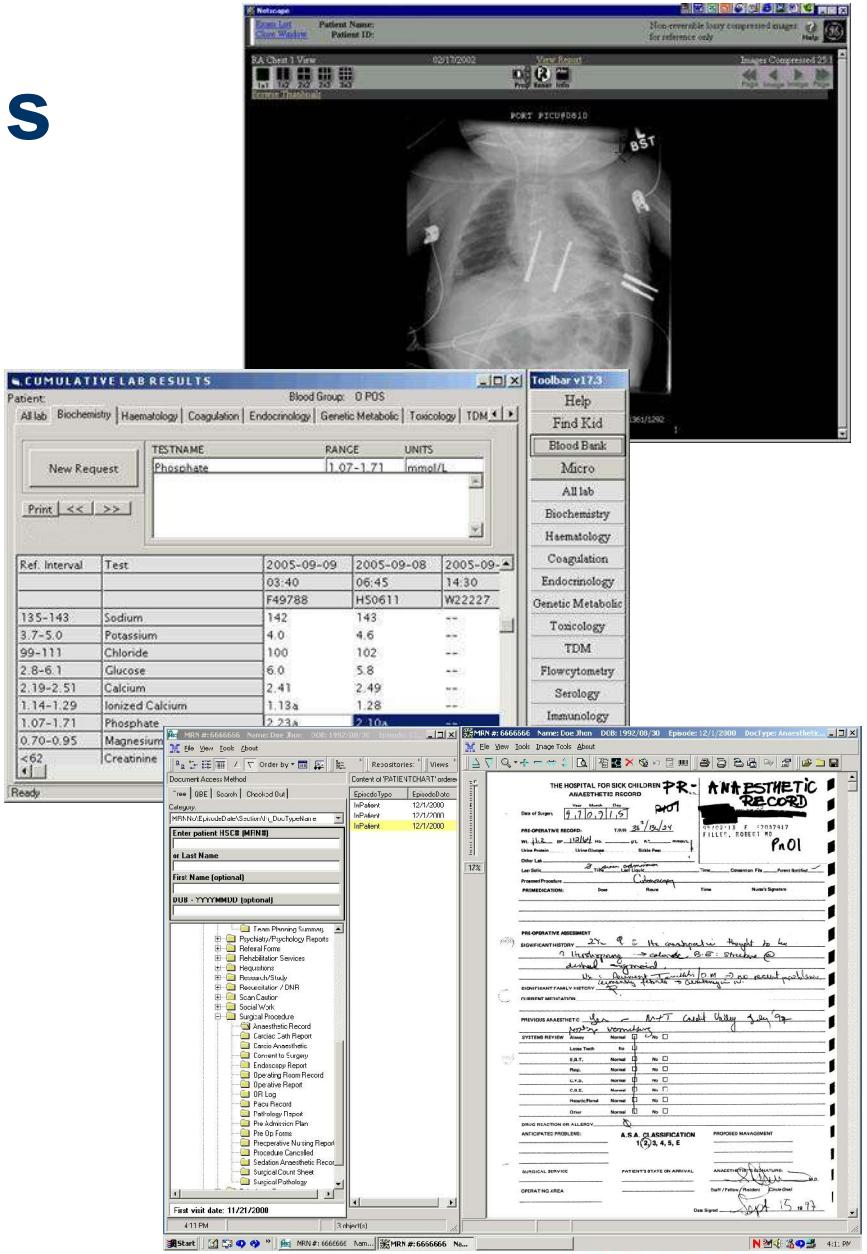
Supporting Applications

- Toolbar – lab results
- PACS
- EPC – image of paper chart
- Transcription/E-Signature
- Schedule Book
- Specialty-specific databases
- Data Warehouse



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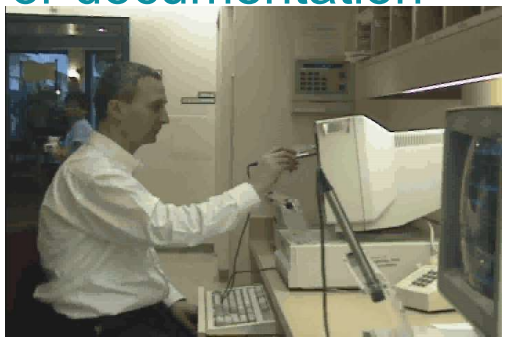
Why Change?

- Designed in 1970's and installed in 1992
- Efficient but outdated technology
- Continuing enhancements require complex programming
- Cannot handle "intelligent" orders or documentation



```
RN-INPATIENT                                NP
.RAKE, RANDY
2003          ORDERING FUNCTIONS

>ENTER ORDERS FOR MD (REQUIRES MD NAME)
 ***********************************
>STATUS CONSULT ORDERS AS IN PROCESS
>DELETE/REWRITE ORDERS
>COMPLETE ORDERS
>ACTIVATE SUSPENDED ORDERS
>MEDICAL DIRECTIVES-RN
>MEDICAL DIRECTIVES-RN CONSULT
>MEDICAL DIRECTIVES-CNS
 NURSING ORDERS:
 >LAB          >SPECIAL OBS
 >NUTR/FOOD    >REFERRAL
>NURSING-PHARMACY REQUEST
>HOLD/RESTART ORDERS
>CHANGE FORMULA/FEED
>ADJUST DAT OR CLEAR FLUID TO DAT ORDER
>MED SCHED CHANGE
```

```
RN-INPATIENT                                NP
.RAKE, RANDY 17:00
02558   SCHEDULED MEDICATIONS          NOT
                                     GIV GIV
8665A   RAKE, RANDY

U     AMPICILLIN INJ 250 MG, IV,
  Q8H, (05-09-01 17:00-..)......
```

```
U =UNVERIF
ERR
```

```
.RAKE, RANDY.
09:00
2009          CHARTING INDEX

>HEIGHT, WEIGHT, SURFACE AREA

>UNSCHEDULED (PRN) MEDS

>IV-MED INFUSIONS

>REPEATED MEDS

>CO-SIGN MEDS
>CO-SIGN IV'S

>IV'S, LOCKS, BLOOD PRODUCTS

>ADD A NOTE TO PATIENT RECORD
 (MAINLY USED BY 6C AND 7A)

                                      REVIEW
ERR
```

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Why Change? cont'd

- Clinician Order entry not designed for ambulatory care areas
- Too cumbersome for use in three high acuity areas
  - NICU, CCU, Emergency

```
DESKTOP 7000 HCM
File  Edit  View  Help
11020 AME LAB'S, FIR .        <DY--- ><  >

11020    GENERAL & SUPPORTIVE CARE

  ▸SPECIFY NAME & DATES FOR PROTOCOL
  ▸CHARTING (HT, WT, SURFACE AREA)
  ▸REPORTS 1        ▸REPORTS 2

▸COMMON/GENERAL ADMISSION ORDERS

▸'FULLY INFORMED' BLOOD PRODUCT STATUS
▸ANALGESIA        ▸FEVER & NEUTROPENIA
▸ANTI-EMETICS     ▸IMMUNOSUPPRESSIVE
                  ▸PROCEDURE, RELATED
▸CHEMO MEDS       ▸TRANSFUSION
▸HIGH USAGE MEDS  ▸TUMOUR LYSIS PREVENT'N
▸COMMON MEDS (PHARMACY)
▸DISCHARGE        ▸TOBRAMYCIN STUDY

▸BMT ORDERS          ▸HAEM/ONC PROTOCOLS
▸DEPARTMENT ORDERS   ▸HAEMATOLOGY
  RETURN              MASTER     REVIEW
```

```
DESKTOP 7000 HCM
File  Edit  View  Help
21077 AME LAB'S, FIR .        <DY--- ><  >

21077          MEDICATIONS

 DIMENHYDRINATE ____MG IV/PO Q6H PRN N/V
            (1.25MG/KG/DOSE Q6H)

 NO PROPHYLACTIC ANTIBIOTICS

 CEFAZOLIN INJ ____MG IV, ON CHART TO OR
            (40MG/KG/DOSE)
                 (SURGICAL PROPHYLAXIS)

 CEFAZOLIN INJ ____MG IV Q8H   X __DAYS
            (40MG/KG/DOSE)    X __DOSES

 GENTAMICIN INJ ____MG IV Q8H  X __DAYS
   (7.5MG/KG/DAY DIV Q8H)      X __DOSES


                          ▸BACK
▸ORTHO ORDERS             ▸NEXT
  RETURN                MASTER     REVIEW
ERR        TYPE      RETRIEVE
```

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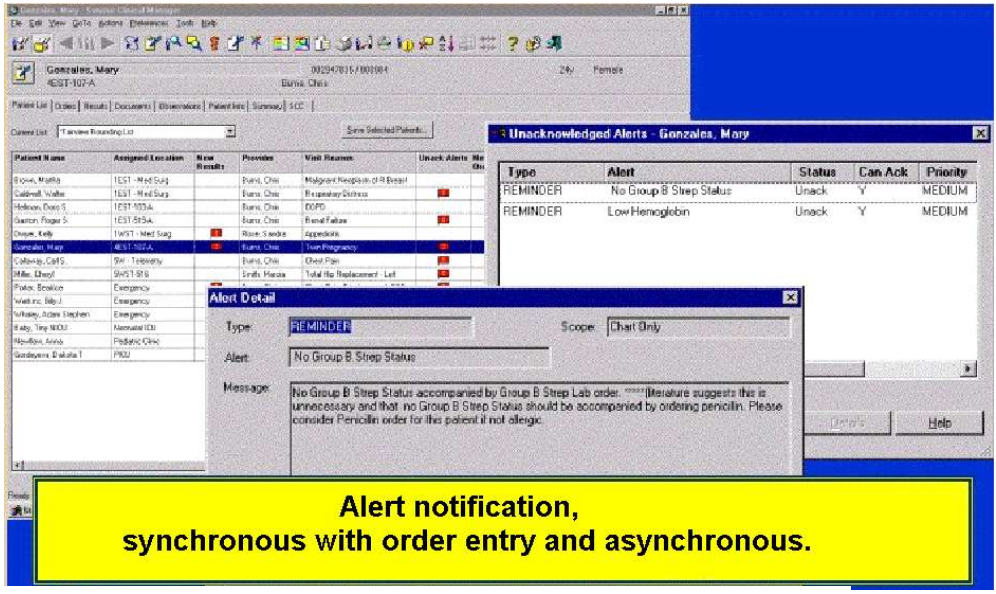
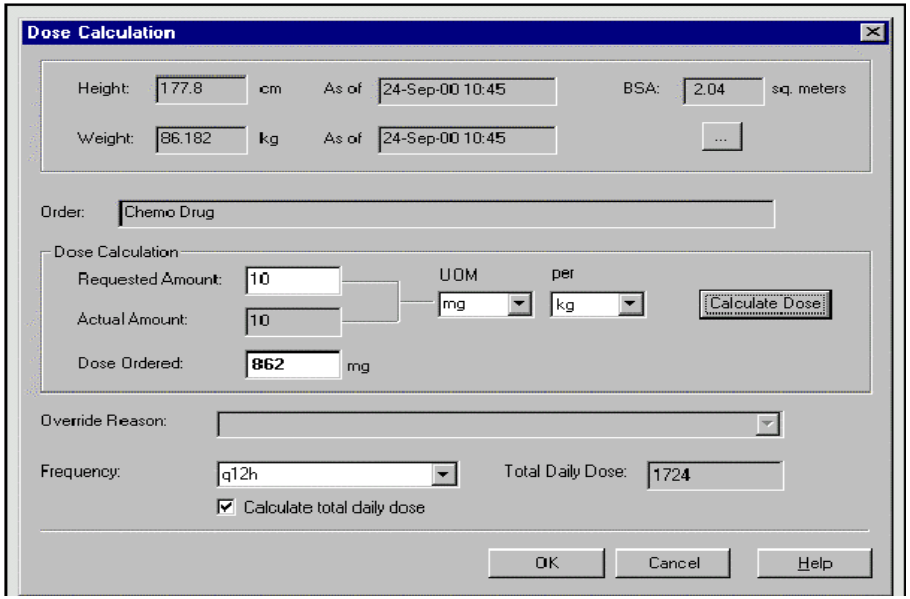
EPR Requirements

- Modern user interface
- Knowledge based orders
- Extension to ambulatory
- Full integration with other systems
  - Shared patient context
- Ability to integrate existing Kidcom data



Dose Calculation Dialog Box



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Staff Engagement and Communication

Staff Engagement and Communication

- Involvement in decision-making
- “Making SCM ours”
- Access to information

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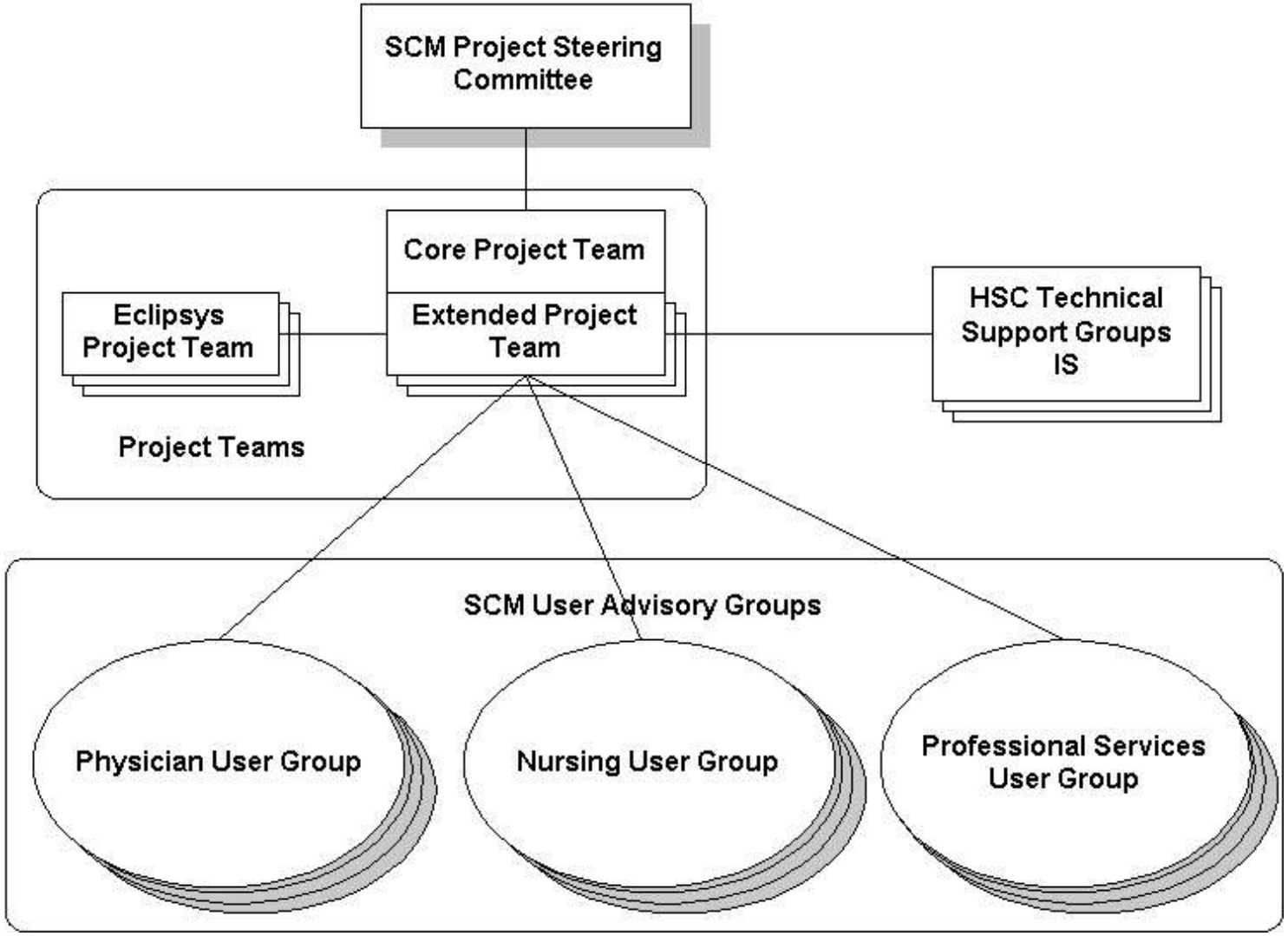
Engaging Staff: Decision-Making



Engaging Staff: "Making SCM Ours"

"Name the System Contest"

KidChart

K.I.D.S.

S.K.I.P.

K.I.S.

EChild

C.A.R.E.

CliniKid

KidLink

SmartChart

InfoChild

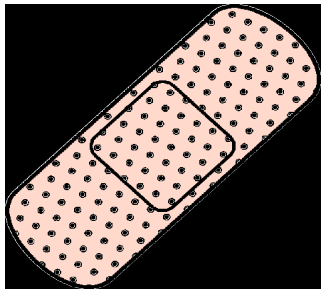
InfoKid

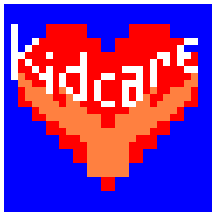
KidCare

SickKids

Engaging Staff: "Making SCM Ours"

"KidCare Logo Contest"





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Sunrise Clinical Manager Logon

Sunrise
Clinical Manager

ECLIPSYS

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THE HOSPITAL FOR SICK CHILDREN

KidCare

User:

Password:

This is the new KidCare system. This program will give you a much more user-friendly access to patient data. Eventually, this will be the core application that allows you access to all electronic patient data , PACS, EPC, eCHN, Toolbar, etc.

OK | Exit | Help

scmload5 Group

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department collection envelopes, in the cafeteria collection boxes, returned to your department's administrative assistant, or sent to the clinical systems educator via inter-departmental mail. The clinical systems education team will use the data collected to aid in planning the appropriate basic computer skills training classes in preparation for SCM. These classes will be offered before training on the new system begins to ensure that staff are able to use the new system effectively. If you have any questions or concerns contact the clinical systems educators via e-mail at clinical.systems.training @sickkids.ca or call 5462.

New name for SCM

The SCM Project Team and the SCM Steering Committee are looking for a name for SCM, the new KIDCOM replacement. The goal is to find a name that everyone will relate to, as staff currently do with KIDCOM. The name should reflect the system's role, and should not be long or difficult to pronounce. To submit your idea, go to the SCM Web site or contact Helen Edwards via e-mail or at 8302 with your name, idea, and how you can be reached. Deadline for submissions is October 10. Members of the SCM Project Team will review all submissions and the SCM Steering Committee will make the final selection. The winner will receive a gift certificate from Best Buy.

Join the Terry Fox Run Corporate Challenge

You are asked to join the hospital's efforts to raise funds for cancer research through the 2003 Terry Fox Corporate Challenge, part of the 23rd annual Terry Fox Run on Sunday September 14. For participants, there are two ways of collecting pledges. To register as an HSC participant for online pledging, visit the Terry Fox Web page at www.terryfoxrun.org/english/home/default.asp?c=. Click

Practice and Process Review

Why review Practices and Processes?

- “Old” system limitations
- Changes in processes not captured over the years
- Supporting and reflecting current, evidence based practice

Hentz, Alana - Sunrise Clinical Manager

File Registration Edit View GoTo Actions Preferences Tools Help

Hentz, Alana 2136641 / I4000948 16y Female

4D-4812-C Rossi, Miriam

Patient List | Results | Patient Info | Summary | Kidcom

Current List: 4D 6 Visit(s) Save Selected Patients...

Assigned Location	Patient Name	Provider	Service	Birthdate	Age	Admit Date	New Results	Flag New
4D-4824-A	Egnor, Clare	Khairallah, Eric	Cardiology	1989-Jul-15	16y	2005-Aug-10		☒
4D-4812-C	Hentz, Alana	Rossi, Miriam	Cardiology	1988-Nov-13	16y	2005-Aug-10		☒
4D Playbed-A	Ingwersen, Annabelle	Mccarthy, P.	Cardiology	1992-Mar-14	13y	2005-Aug-10		☒
4D Playbed-A	Luongo, Julio	Mccarthy, P.	Cardiology	1998-May-05	7y3m	2005-Aug-10	!	☒
4D Playbed-A	Rargam, Rita	Rossi, Miriam	Cardiology	2000-Jul-31	5y1m	2005-Aug-10		☒
4D Playbed-A	Vesey, Esmeralda	Johnphillips,	Cardiology	1993-Dec-08	11y	2005-Aug-10		☒

Ready Brown, Sally (RN) Tra

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SCM Questionnaire – Urinary Catheters/Tubes; Surgical Tubes/Drains and Enteral Tubes

Dear

Work is well underway in developing the screens and functions for SCM. We need your help in determining what is required on some of the new ordering screens to ensure that current practice is reflected. Your area has been chosen because of your knowledge/skill in providing care to patients with catheters, tubes or drains in place.

Please review each screen and provide input for those questions with which you have experience. Physicians will also be asked to provide input about current practices.

You can provide input in at least two ways:

Detach the word document and type your responses beside each question, indicating N/A if you cannot answer for that particular question. Return it to me via an enclosure in e-mail, or as a print-off via HSC mail, addressed to Helen Edwards, Room #4103C.

Print off the document and write your answers in. Put it in the HSC mail addressed to Helen Edwards, rm #4103C.

My thinking is that the area's expertise plays out as follows, but please provide input into anything you are comfortable with:

8C – urinary catheters/tubes, surgical tubes/drains

6A – urinary catheters/tubes, surgical tubes/drains, enteral tubes

5A/B – surgical tubes/drains

7B/C/D – enteral tubes, surgical tubes/drains (for chest tubes)

4D – surgical tubes/drains

On the SCM screens, we are tentatively planning to divide catheter/tube/drain associated orders into:

- Urinary Catheters/Tubes
- Surgical Tubes/Drains
- Enteral Tubes

For each of the questions below, indicate whether the items on the screen still reflect current practice by providing input for each of the questions. If you want to provide additional input about practice related to these topics just add it in after the question responses.

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1. Urinary Catheters/Tubes

1a) Indicate which of the following **urinary catheters/tubes** are still used.

Urology Catheters and Tubes	Yes	No	N/A
Red Rubber			
Mentor			
Foley			
Tiemann			
Coude			
Malecot			
Depezzar			
Feeding Tube			
Mushroom			

List any other types of Urology Catheters and Tubes you use that are not mentioned above: _____

1b) Indicate if there are any changes required to the sizes for **urinary catheters/tubes**.

Urology Catheters and Tubes sizes	Yes	No	N/A
#3			
#5			
#8			
#10			
#12			
#14			
#16			
#18			
#20			
#22			
#24			
#26			
#28			
#30			
#32			

List any other sizes of Urology Catheters and Tubes you use that are not mentioned above:

_____

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1c) Indicate if there are any changes required to the location options for **urinary catheters/tubes**.

Urology Catheters and Tubes Locations	Yes	No	N/A
Urethral			
Perineal			
Suprapubic			
Nephrostomy			
Ureteral			

List any other locations of Urology Catheters and Tubes
you use that are not mentioned above:
_____

1d) Indicate if there are any changes required to the uses listed below for **urinary catheters/tubes**.

Urology Catheters and Tubes uses	Yes	No	N/A
Catheter to be used for indwelling			
Catheter to be used for once only			
Catheter to be used for intermittent clean (CIC)			
Catheter to be used for intermittent sterile			

List any other uses of Urology Catheters and Tubes that are not mentioned above:

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2. Surgical Tubes/Drains and Enteral Tubes

2a) Indicate which **surgical tubes/drains and enteral tubes** are still used.

Phrase	Yes	No	N/A
Inflate and Clamp Gastric Balloon with ____ cc air			
Inflate and Clamp Gastric Balloon to a pressure of __ MM HG			
Inflate and Clamp Oesophageal Balloon with ____ cc air			
Inflate and Clamp Oesophageal Balloon to a pressure of __ MM HG			
Deflate Gastric Balloon			
Deflate Oesophageal Balloon			
Deflate both Balloons			
Deflate if no Bleeding for ___hrs			
Check Balloon Pressure Q1H			

Indicate if any additional tubes/drains should be added to the list for:

- Surgical Tubes/Drains
- Enteral Tubes

2b) The following are phrases on Kidcom for **Blakemore Tubes**; indicate which ones are used:

Types of Tubes, Drains and Enteral Tubes	Yes	No	N/A
Blakemore Tube			
Chest Tube			
Hemovac Drain			
Jackson-Pratt Drain			
Penrose Drain			
T-tube			
Nasogastric Tube			
Gastrostomy			
Jejunostomy			
Ileostomy			
Colostomy			

List any other phrases that are not mentioned above: ____

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3. Indicate if any changes in **clamp/unclamp** actions are required for:

- Urinary Catheters/Tubes
- Surgical Tubes/Drains
- Enteral Tubes

```
Win98-DT7000 - [Ctrl-Alt-F1] - VMware Workstation
File  Power  Settings  Devices  View  Help
Power Off   Power On   Suspend   Reset   Full Screen
DESKTOP 7000 HCM
File  Edit  View  Help
02280  D  FOR:  PHYSICIAN.        <DY---  ><  0>
JETSON,  GEORGE  ••••IRRIGATE
02280              CLAMP,  UNCLAMP

 CLAMP     UNCLAMP
                        IF  PT  HAS  PAIN
 NOW                    IF  PT  DISTENDED
 AT  __: __  HRS        IF  PT  VOMITS
                        IF  PT  DOES  NOT  VOMIT
 PRN                    IF  PT  NAUSEATED
 PRN--_________         AT  PT'S  REQUEST
                        IF  NOT  VOIDED  IN  __  HRS
 FOR  __  MIN           TO  MEASURE  RESIDUAL  PVR
 FOR  __  HRS           TO  MEASURE  DRAINAGE
  IN  __  HRS
                  TODAY
 Q1H   Q8H        TODAY  ONLY
 Q2H   Q__H       TOMORROW
 Q4H              OTHER--                          •
                                          ▶REMOVE
 X1    X3                                 ▶IRRIGATE
 X2    X__                                ▶NURSING
  RETURN                   MASTER          REVIEW
ERR          TYPE       RETRIEVE
Start   DynaComm/Elite   HCM   DESKTOP 7000 HCM   2:01 PM
```

Eclipsys 7000 - Voyager/CS

File Edit View Options Help

```
ENTERED FOR: PHYSICIAN.
JETSON, GEORGE

2333          UROLOGY CATHS/TUBES
                                                        [. ]
                        #03   #12   #20   #28
 RED RUBBER             #05   #14   #22   #30    RT
 MENTOR                 #08   #16   #24   #32
 FOLEY                  #10   #18   #26          LT
 TIEMANN              SPECIAL BALLOON SIZE ___ ML
 COUDE
 MALECOT                CATHETER TO BE USED FOR
 DEPEZZAR                INDWELLING
 FEEDING TUBE            ONCE ONLY
                         INTERMITTENT CLEAN (CIC)
                         INTERMITTENT STERILE
 URETHRAL                --_______________________
 PERINEAL                            >IRRIGATE
 SUPRAPUBIC                          >CONNECT TO
 NEPHROSTOMY                         >INSERT
 URETERAL                            >REMOVE
 --_____________________             >CLAMP/UNCLAMP
                     >STOMAL, OTHER TUBES/DRAINS

 RETURN                          MASTER                REVIEW
  ERR                             TYPE      RETRIEVE
```

MTX 2333 | 314 | Tue, Nov 09 2004 | 9:38 | C/P 15 07 | HELP | T

Order Entry Worksheet - Potts, James

Potts, James (Helen Edwards Nurse Analyst)

Allergies: Med: PENICILLINS

Requested By: Me Other: Source:

Date: Time:

Session

Type: Standard Reason:

Start Of Browse

Contents of '/Nursing/Catheters'

- Nursing
  - Activity
  - Airway Management
  - **Catheters**
  - Consent
  - Dressings/Wound Care
  - Elimination
  - Enteral Tubes
  - Hygiene
  - Observation
  - Restraints/Precautions
  - Tubes/Drains
  - Vascular Access
  - Visitors
- Parenteral Nutrition

Type here to enter order name

Order
Clean Intermittent Catheterization
Connect Urinary Catheter to Urine Meter
In and out Urinary Catheterization x1
Insert Indwelling Urinary Catheter connect to Straight Drainage
Sterile Intermittent Catheterization
Urinary Catheter

Add... View... Item Info... Message...

Edit... Delete Copy... Add Specimen... Indication...

Submit Cancel Hide Worksheet Help

Urinary Catheters Nursing Order - BREEN, AMANDA

Urinary Catheter

Order: Urinary Catheter

Order ID: 001BBY875

Requested By: Horodeckyj, Peter

Template Name:

Messages:

Conditional Order

Max # of activations:

Clear

Type: Foley

Size: #8

Insertion Point: Urethral

Connect: connect to Straight Dr

Irrigate Urinary Catheter with 0.9% NS:

Irrigation Volume (ml): 50

Clamp: clamp to Measure Res

Unclamp: unclamp if Patient Bla

Insert: insert PRN

Remove: remove if Residual les

Start Date: 09-Sep-2005

When: Routine

Frequency: Daily

Duration: 3 D

Clear

September, 2005

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2	3	4	5	6	7	8

Additional Info:

Item Info | Repeat | OK | Cancel

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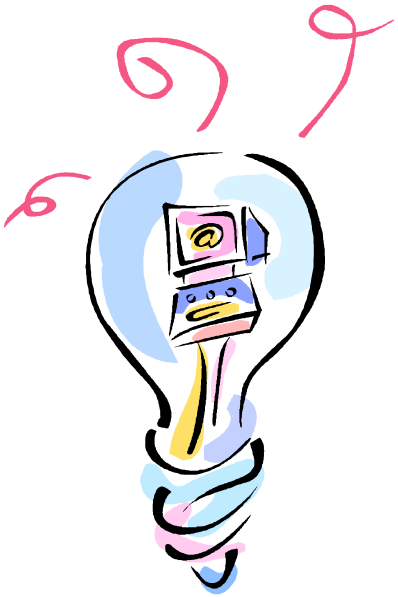
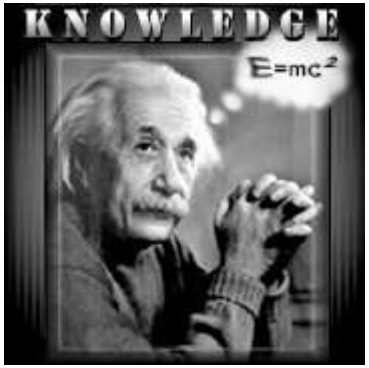
An Emerging Perspective …



Opportunity for New Ideas



Lara Varpio - PhD Candidate,

PhD Candidate, University of Waterloo, Department of English
PhD Fellow, Wilson Center for Research in Education, University of Toronto, Faculty of Medicine
PhD Fellow, Health Care, Technology and Place, University of Toronto, CIHR Strategic Initiative

Electronic Patient Records: "The Impact of Media and Interface Design on Medical Professionals' Practices"

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Background: Gaps in Research

- Importance of physical context (in situ research)
- Importance of interface context (i.e. design)

Central Research Questions

- What are some of the ways in which an EPR can have impact on the daily practices of professionals?

- How does user-interface design influence the practices of healthcare professionals when this technology is studied within the context of the EPR's setting of use?

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Research Design and Methodology

- Observations:
  - Non-participant observations of daily interactions with records
  - Began with descriptive observations then moved into more focused observations
- Interviews:
  - Semi-structured interviews, primarily with open-ended questions
  - Informal interviews during observations
- Rhetorical Analysis
  - Textual and Visual analysis of patient records

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Textual and Visual Analysis:

DESKTOP 7000 HCM

File Edit View Help

```
02002 ON, KRISTINE                    <NA---  ><N$>
VARPIO, ALICE
2002          NURSING MASTER GUIDE

   CHARTING                              ADD/DELETE
▸CHARTING INDEX                        ▸ALLERGIES
▸UNSCHEDULED MEDS                      ▸MEDICAL ALERT
▸SCHEDULED MEDS                        ▸ISOLATION CODE
▸RESOURCE/BRAN                         ▸FOOD PREFERENCE
   (UNIT 7A ONLY)                      ▸DIAGNOSES
                                       ▸PREEXIST COND'N
▸PT CARE COMMUNICATION
   (KARDEX INFO)                       ▸PRE-OP HOLD

                                 ▸LEAVE OF ABSENCE
▸ASSESSMENT FORM                 ▸DISCHARGE/EXPIRE
▸WORKLOAD SCORES                 ▸DISCH INSTRUCTIONS
▸ENTER FOR A NURSE                 (5C & 8C ONLY)
 ***********************************************
▸REMOVE CHARTING ERROR             ▸PT INFO-GRAM
▸LATE CHARTING                     ▸DIET INFO-GRAM
▸PATIENT REPORTS
                                                REVIEW
ERR          TYPE        RETRIEVE
```

Patient Care Summary

6AX -7247 THE HOSPITAL FOR SICK CHILDREN
2005-09-08 05:38 (QABSSN 000-000-ER ID) PAGE 001

PATIENT CARE SUMMARY

[redacted]

SEX: F **DOB:** 1995-08-04 **HEIGHT/CM:** **WEIGHT/KG:** 23.3 **HSC NO:** [redacted]
ADMIT DATE: 2005-09-01 **UNIT:** 6A **BED:** 6628A **ADMIT NO:** [redacted]
DIAGNOSIS: COLITIS **ISOLATION:** ROUTINE PRACT
HSC RESPONSIBLE PHYSICIAN: GRIFFITHS, ANNE MD **SERVICE:** GI/NUTRITION

SUMMARY: 2005-09-08 07:15 TO 19:15

LANGUAGE:
05-09-01 ENGLISH

PATIENT INFORMATION:
(IF REQUIRED)--ENTER HEIGHT ASAP
05-09-01 WEIGHT (KG): 23.3
(IF REQUIRED)--ENTER SURFACE AREA
05-09-07 **HSC CONTACT PERSON:** UNKNOWN

HISTORY:
05-09-01 CHIEF COMPLAINT/REASON FOR VISIT --THIS 10 YR OLD GIRL ADMIITED TO SCARBOROUGH CENTENARY ON FRI AUG 26 05 WITH LOOSE WATERY FRANK BLOOD STOOLS.PT HAS BEEN TRATED WITH IV FLUIDS AND TPN. PT TRANSFERRED TO 6A TODAY 01/09/05

IV LINE INFO:
05-09-05 TYPE OF LINE: PICC
05-09-05 TUBING CHANGE DUE ON: 09/08
05-09-05 DRSG CHANGE DUE ON: 09/12
05-09-05 INTERLINK CAP CHANGE DUE ON: 09/09

ALL CURRENT MEDICAL ORDERS:

MD TO NURSING ORDERS:

ACTIVITY/POSITION:
05-09-01 28 ACTIVITY- ACTIVITY AS TOL, <05-09-01>, (MMJI)

NURSING PROCEDURES:
05-09-02 45 FOR TPN & TNA (3 IN 1 TPN) USE 1.2 MICRON IN-LINE FILTER. NO ADDITIONS TO THE BURETROL WITHOUT PHARMACY APPROVAL, (MRCL)
05-09-02 81 CONTINUE PRE-PROCEDURAL ORDERS AS PER RESPONSIBLE SERVICE, (AMHU)
05-09-02 85 BED REST FOR 2HRS, (AMHU)
05-09-02 86 LEAVE DRESSING UNCHANGED FOR 1 DAYS, (AMHU)
05-09-02 87 CHANGE DRESSING EVERY 1DAYS, (AMHU)
05-09-02 88 CHANGE DRESSING IN A STERILE MANNER, (AMHU)
05-09-06 113 MD TO READ SKIN TEST AFTER 48 HRS: TUBERCULIN (PPD) 5TU/0.1ML INJ,, (MMJI)

VITAL SIGN/SPECIAL OBSERVATIONS:
05-09-01 33 T-P-R-BP Q6H, <05-09-01>, (MMJI)
05-09-01 34 NOTIFY MD IF TEMPERATURE >38.0C, <05-09-01>, (MMJI)
05-09-01 35 MEASURE HEIGHT WEIGH Q3D, <05-09-01>, (MMJI)
05-09-02 82 VS Q15MIN X4, THEN Q30MIN X4, THEN Q1H X4, THEN VSR IF STABLE, <05-09-02>, (AMHU)

CONTINUED

[redacted] [redacted] *PATIENT CARE SUMMARY*

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“Workaround”

TASK SHEET

RN: _____ DATE: _____

Name:	Name:	Name:
Weight: 47.8 kg	Weight: 9.1 kg	Weight: 56.2 kg
Age: 4/0	Age:	Age: 4/0
DX: UTI	DX: ↑ creat.	DX: HSP c̄ knee pain
Service: P.A.M.O.T	Service: Nephro.	Service: Rhemu
Rm #: 11	Rm #: 49	Rm #: 47.
Assessment, clear pump, I/O, V/S, Hand over, pagers, safety checks, commu., w/team, pts., and family		
08 IV Tazocin ☐ V/S; Meds (Po)	08 V/S	08 V/S
09 Meds (Po) IV – Pamo ☒ – Cipro ☒	09 IV Cefazolin ☐ Meds (Po)	09 Meds (Po)
10-	10-	10-
11	11	11
12 V/S	12 V/S	12 Meds (Po)
13	13	13
14	14	14 V/S
15 Meds (Po)	15	15
16 clear pumps; I/O; V/S; report; charting Morphine Syringe ☐ V/S; IV Tazocin ☐	16 clear pumps; I/O; V/S; report; charting V/S; PIV SIL ☐	16 clear pumps; I/O; V/S; report; charting
17	17	17
18	18	18 Meds (Po)
19	19	19
Labs: BW ☒	Labs: BW ☐	Labs: —
Procedure: Hemo? ☒; MRI? ☒; Gallium scan ☒	Procedure: Tyl last @ 0215 ☐	Procedure: Ambu ☐
Line Access: CVL ☒; PIV ☒	Line Access: PIV ☐; Foley ☐	Line Access: PIV ☐
Things to do: @ 1600 ↓morphine ☒	Things to do: urology consult ☐	Things to do:

Morphine Syringe ☐
Hemo ☐

Scan:
Dye ☐
Laxative for Gallium scan ☐
– ? effect on kidneys ☐

• Dsg (L) foot ☐
• IV Benadryl ☐ – @ 0715

• Pain? ☒
– morphine assess? ☒
• N/V? ☒
• Bleeding? ☒
• Ambu? ☒
• Skin? ☐ – same
• UF? — ∅

• U/O:
– 0800: ___
– 1600 ___
• Stool ☐
– # ___
– Consist. ___

• U/O:
– 8 hr: ___ cc/kg/hr
– 16 hr: ___ cc/kg/hr.
• Feeds? ☐
• ? Meds ☐
• urology consult ☐
• VCUG results ☐

Pain ☐

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Summary …

Designing New Clinical Systems: Innovative Approaches to Support Practice

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Your Turn is ……

Questions ?

Comments …

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