Giving Context to Health Informatics

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Outline

30 minute session - presentation and interactive demonstration of:

Clinical Information Systems for Patient Care (CIS4PC)

- How the University of Leeds interactively delivers health informatics teaching through CIS4PC content and
- how by working together we integrate health informatics and technology into clinical teaching
Health informatics and interactive use of technology are essential tools for health care providers/practitioners… yet there is still limited access for students in a safe learning environment.

The health professionals of tomorrow need to experience the technology as students in order to be better practitioners when qualified.

All Health Professional Bodies (GMC / HPC / NMC) have specifications for qualifying students that support this.
Health informatics technology is now common in both primary and secondary care settings.
To ensure healthcare professionals are better able to use Clinical Information Systems (CIS) and that the use of CISs to teach clinical medicine is maximised at undergraduate and postgraduate levels and in continuing professional development.
What we do

Give under/postgraduate students access to a live Clinical Information System *(TPP sistemone)*

Don’t “train to use the system”, but enable students to appreciate, access and navigate any Clinical Information System.

CIS4PC uses *rich patient records* developed with varying chronic diseases and backgrounds to aid the students’ ‘live’ learning experience.

Students access the live CIS, using individual patient records to support their learning.
Interactive sessions: focus

Introducing the CIS

Navigating the CIS & EPR

CIS & the Consultation

CIS & Chronic Disease Management

CIS & Prescribing
Example 1: Tool for Navigating CIS

Clinical Information Systems for Primary Care (CIS4PC)
Session 1 - TASK 1 - DATA ENTRY

New Patient Questionnaire

Welcome to the Worsley Medical Centre.
To allow us to offer the best service to you we need a few details about you and your health.

Patient Name: «Patient_Name», «Patient_Surname»
Address: 123 Main Street, Leeds
Date of Birth: 01/01/1990
Sex: Male
Ethnicity: British
Marital Status: Married
Next of Kin: Mrs. Smith
Mobile Number: 07912345678
Occupation: Retail buyer

Name and Address of previous GP: «Previous_GP_Name»
Address: 123 Main Street, Leeds

Height: 180 cm
Weight: 80 kg

Blood Pressure: 120/80 mmHg
Heart Rate: 70 bpm
Temperature: 37.2°C
Respiratory Rate: 12/min

Patient Information Highlighted: diet, exercise, smoking, alcohol

Information highlighted needs to be entered as indicated:
- Patient Profile template
- Summary & Family History
- BP button
- Urine Dip
- Drug (No Abnormality Detected, Negative)

Diagnosis: Hypertension
Medication: «Medication_Name», «Medication_Dose»

Consultation Date: 01/01/2023
Consultation Time: 10:00 AM
Consultation Duration: 30 minutes

The patient has already been registered with these details.
They can be found via the Administration tab to the left of the CIS screen.

Enter using READ CODE
Summary & Family History
Example 2: Tools used for exploring use of the CIS in a consultation

**Doctor – Role Play**
- How difficult was it to remain focussed *on the consultation & the patient* as opposed to the *consultation & the CIS*?
- Did the feedback raise issues you were *NOT* aware of?

**Patient/Observer – Role Play**
- How easy was it to construct feedback whilst playing the patient?
- What were the key issues that need to be addressed in order to *effectively use the computer in the consultation*?
Example 3: Tool used in Chronic Disease Management session

Input the log in details and specific PATIENT on your OWN log in sheet

<table>
<thead>
<tr>
<th>Task</th>
<th>Content</th>
<th>Advice</th>
<th>Done</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Access and interrogate the patient’s electronic record</td>
<td>Look into the patient record to find relevant details and basically how to navigate the system</td>
<td>Done</td>
</tr>
<tr>
<td>2</td>
<td>Complete the Diabetes template</td>
<td>This can be found in the table on the left of the screen titled ‘CLINICAL’. At the bottom is ‘QOF’. Click on the ‘+’ sign and you will find the template. Right Click on the template to open it.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Complete QRisk2 Calculation</td>
<td>In the titles header bar you will find ‘Clinical Tools’ select and complete BP 164/96 ECG Normal</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Send a referral to the Dietician</td>
<td>There are several ways this can be done: In the table on the left of the screen titled ‘CLINICAL’</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- select ‘Communication &amp; Letters’, Right Click select ‘New Letter’</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Sender ‘This organisation’</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Recipient ‘A SystmOne user’</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Select ‘OK’</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Type in (name of session lead) then search</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Select ‘OK’</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>RECIPENT pre filled in</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task</th>
<th>SENDER: Add your own name</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>WRITING:</td>
</tr>
<tr>
<td></td>
<td>- Letter Type: select ‘Referral’</td>
</tr>
<tr>
<td></td>
<td>- Editor: select ‘MS Word’</td>
</tr>
<tr>
<td></td>
<td>- Template: select ‘Diabetes Referral Form’</td>
</tr>
<tr>
<td></td>
<td>- Select ‘Write Now’</td>
</tr>
<tr>
<td></td>
<td>If any ‘error’ messages appear, click ‘okay’ until referral opens.</td>
</tr>
<tr>
<td></td>
<td>- select ‘Send’ or ‘Amend later’</td>
</tr>
<tr>
<td>6</td>
<td>Prescribe / Review appropriate medication</td>
</tr>
<tr>
<td></td>
<td>Consider the information gained at the consultation. What medication needs to be added to the patient’s current medication?</td>
</tr>
<tr>
<td>7</td>
<td>Send a task to another professional involved in the patient’s care</td>
</tr>
<tr>
<td></td>
<td>In the titles header bar you will find either the icon ‘Task’ or under the Workflow header ‘New Task’ Select: University Worsley Practice, Send to (name of session lead)</td>
</tr>
<tr>
<td>8</td>
<td>Generate a prescription and a ‘repeat medication template’</td>
</tr>
<tr>
<td></td>
<td>DO NOT PRINT</td>
</tr>
<tr>
<td></td>
<td>Record the consultation Apply clinical coding (QOF) as appropriate for audit purposes</td>
</tr>
<tr>
<td></td>
<td>Using the ‘Start Consultation’ box, record your experience with the patient</td>
</tr>
</tbody>
</table>
A new **patient** registers with the practice and completes a paper **“New Patient Questionnaire”**. **Administration staff** enter the **general information** and have **requested record access/transfer**.

**Access** to the record is achieved and the **form** is passed to a member of the **Medical Team** to enter **health information** from the **“New Patient Questionnaire”** prior to meeting the patient.

Your task is to enter this information!
Using the Patient’s **Electronic Health Record** and their “*New Patient Questionnaire*” form:

**Explore** the patient’s **record** as you might do prior to a **consultation/interaction**:

- ✓ Enter any new **health** information
- ✓ Check their **medical problems / history** and add any not listed
- ✓ Record any **comments / prompts** for the next practitioner who might see the patient
Logging on to TPP SystmOne

1st Enter the allocated user name

2nd Enter the allocated password
Searching for a Patient

1st Click on ‘Search’ box

2nd Type in patients name

3rd Left ‘click’ on ‘Select’
Inputting Patient Information

Template Entry: Patient Profile

<table>
<thead>
<tr>
<th>Previous Recordings</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 Oct 2010</td>
<td>1.68 m (5'6&quot;)</td>
</tr>
<tr>
<td>05 Oct 2010</td>
<td>67.0 Kg (10 st 8 lb)</td>
</tr>
<tr>
<td>05 Oct 2010</td>
<td>23.74 Kg/m²</td>
</tr>
<tr>
<td>05 Oct 2010</td>
<td>Smoker (137R.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient Profile</th>
<th>Blood Pressure</th>
<th>Smoking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peak Expiratory Flow Rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideal body weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waist circumference</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Recall Pathology Report Ok
Input during a consultation: guidelines and templates
Health Informatics teaching helps shape future health practitioners

The health professional as:

- a scholar
- a practitioner
- a professional

The teaching can combine the three essential disciplines of scholar, practitioner and professional.
Outcome: An effective health practitioner who can...

Apply the principles, method and knowledge of health informatics to medical practice

Access information sources and use the information in relation to patient care, health promotion, giving advice and information to patients, and research and education

Keep to the requirements of confidentiality and data protection legislation and codes of practice in all dealings with information

Use information effectively in a medical context

Make effective use of computers and other information systems, including storing and retrieving information

Use information effectively in a medical context
100% of PRIMARY CARE practitioners use a Clinical Information System

CIS4PC content is transferable/adaptable for all healthcare students:
Resources currently delivered within West Yorkshire
University of Leeds: MBChB & Nursing;
University of Bradford: Nursing, Midwifery, Radiography, Occupational Therapy, & Physiotherapy
2250 medical students, over 1000 nursing and allied health students …and counting!
Faculty of Medicine and Health University of Leeds

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