



ACACI

www.acaci.org.au

Austin Centre for
Applied Clinical Informatics

ACACI Staff

A/Prof Graeme Hart

Clinical Co-Director

Paul Oppy

CIO/Co-Director

Sofie Ioannidis

Executive Officer

Project Staff

Sean Conley

Heather Davis

Caitlyn Green

Anthea Ward

Training Staff

Andrew Chong

Anna Brazzale

Nursing Informatics

Janette Gogler

Research Associates

Dr. Carola Hullin

Dr. Sebastian Garde

PO Box 5555

Heidelberg

Vic 3084

03 9496 2687

acaci@austin.org.au

www.acaci.org.au

Welcome to the March edition of our newsletter

This newsletter is so you can see what's going on with our projects, staff, Informatics Seminars as well as extending our informatics network.

New staff

Sofie Ioannidis has recently joined us as the ACACI Executive Officer. Sofie has approximately twelve years of experience in the Health Industry in the areas of Health Information Management, Staff Management, Decision Support, Project Management, Clinical Costing and Consultancy including auditing both nationally and internationally.

The focus of Sofie's role is on clinical applications and other applications required to support clinical services. The main objective of the position is to support clinical practice improvement by planning and managing successful completion of a portfolio of concurrent IT projects.

Sofie will be based on Level 3 of the Tobruk Building at the Repat site and can be contacted on extension 2904 or via email on Sofie.ioannidis@austin.org.au



Students & Research

Twelve 4th year Software Engineering students from Melbourne University are using the clinical audit project as the foundation for their practical placement. The students will be with us until October and in that time will be working closely with a few departmental database managers to improve their electronic data management systems.

Key outcomes of their project are; migrating existing databases to SQL, ensuring database management standards are met and creating a 'web service' from Medtrak which will allow for users to enter the patient UR and all the demographic information held on Medtrak will automatically populate the database.

The students are on a steep learning curve as they have not worked in health industry before so are learning the language as well as understanding data requirements, processes and practices that exist. It's also given us the opportunity to look at how we do things from another perspective.

This project is a 'proof of concept' with the view of using the experience to enhance additional databases in future.

From ACACI Executive Officer

Sofie Ioannidis

Why work for ACACI? My immediate brief response is:

- to be challenged,
- to make a difference and ultimately;
- to improve patient outcomes.

I am excited and enthusiastic about joining the ACACI team and I am keen to be a part of a workforce that is ultimately committed to "promoting an innovative, safe and secure environment supporting superior patient care".

As a consumer and employee of the health care system, I have a unique opportunity to be a part of the initiative to improve health care delivery at

Austin Health. To that end I believe that informatics is an important support mechanism for health care and it is also a means of transforming health care. As previously commented by my peer A/Prof Graeme Hart, in an earlier newsletter "the only way for Austin Health to progress is to have help from specialists in informatics working with us in a pragmatic and collaborative environment". I support this and also would like to highlight that the expertise of clinical applications users at the local level is also pivotal in the way forward.

I look forward to meeting and working with many of you across the organisation and would like to ensure that the relationship between ACACI and key stakeholders is ongoing and strengthened by common goals.

Informatics Seminars 2007

We are pleased to announce the following presenters and topics for our seminars. Where possible we will post presentations on the [ACACI website](#).

Monday 21st May Room 4.5 ~ 4pm
Pathology & Medication Datasets
Presented by Vicki Moritz, HealthSMART
&
National Identification
Presented by Heather Grain, NEHTA

Wednesday 20th June Room 4.5 ~ 4pm
Data Agility
Presented by John Neville

Data Agility were the consulting implementation and management company for the Epworth Eastern electronic health activities such as PAS, PACS, results reporting, electronic medication management, wireless and document scanning. For more information visit:

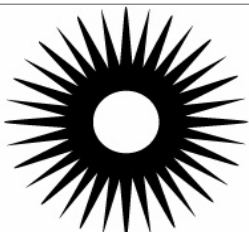
www.dataagility.com

If you have a suggestion for a topic or wish to present, please contact [ACACI](#).

Sessions will be held in the Education Precinct on Level 4 of the Austin Tower. Car parking is available via the Studley Road car park. A map of the Austin is available via www.austin.org.au/MapData/1.pdf

Seminar Dates 2007

| | | | |
|------|------------------------|------|------------------------|
| May | Mon 21 st | Aug | Tues 21 st |
| June | Wed 20 th | Sept | Mon 24 th |
| July | Thurs 19 th | Oct | Tues 23 rd |
| | | Nov | Thurs 29 th |



ACACI
www.acaci.org.au

Austin Centre for
Applied Clinical Informatics

Health Information Management Student Placements

We recently had two 3rd year Bachelor Health Information Management (HIM) students from La Trobe University with us for 5 weeks. The students, Jude Michel & Tung Nguyen, opted for a less traditional HIM placement to learn more about informatics in a health care setting. Below, they have written about their experiences. Their reports are available on the ACACI website [here](#)

Tung Nguyen's ACACI placement

I chose to work with ACACI as it combined my interests in both clinical informatics and IT.

Over the past five weeks, I've been working with Heather Davis and Caitlyn Green on the Nutrition Risk Assessment project. My roles have been centred on collecting forms from various areas at Austin Health and identifying nutritional data elements captured on these forms. I also did some work mapping out patient flow in these wards and clinics. I hope that my research will strengthen previous findings as well as identify other factors that may require more attention.

This experience has opened up my eyes to a world outside of Health Information Service (HIS). Having spent my previous placements in a HIS environment, this placement has shown me other avenues where our skills and knowledge can be applied. I have gained many skills over the course of my time here with ACACI. I would highly recommend other students experience practicals that focus on skills outside of our traditional HIM role.

Jude Michel's ACACI experience

I specifically chose this project as I understood [SNOMED-CT](#) to be terminology that would be used in the future as part of the electronic health record.

Therefore, being involved in a project that featured SNOMED-CT would be a valuable learning experience.

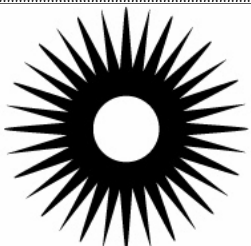
In theory the project was relatively simple; I had to search on a SNOMED-CT browser for a term that was the closest match to the clinical terms I had been given to map. However, understanding how the terminology in SNOMED-CT is organised and making sure the right term is selected, within the right context, is a little more difficult. When trying to select the most appropriate terms, those past pathology and medical terminology lectures did come in handy.

The clinical terms I had to map came from two sources. The first was oncology terms used by the Lung Cancer Multidisciplinary Team, which has as its members both Austin and NEMICS medical and allied health staff. The second source was renal oncology terms from a new renal cancer database being developed for [MMIM](#).

My aims were to map the clinical terms to SNOMED-CT and record the matching term. If there was not a match in SNOMED-CT I recommended an alternative term that could be used or I flagged the term as needing to be added to SNOMED-CT in the future.

One of the most difficult parts of this project was envisaging how SNOMED-CT would work in the real world as SNOMED-CT enabled software is not yet deployed at the Austin or in fact anywhere in Australia.

The other difficulty was my limited clinical knowledge. Consultation with clinicians was required to clarify the meaning of some terms and, therefore, to take this project to the next stage the clinicians should review the report I prepared and make some decisions based on its content. By the end of my placement at the Austin I felt I had a really good understanding of SNOMED-CT, however, I know there is still a long way to go and would be interested in staying involved with this project. Overall I had a very rewarding placement at ACACI and I hope the experience I gained will put me in a good position when I graduate.



ACACI
www.acaci.org.au

Austin Centre for
Applied Clinical Informatics

Project Overviews...

A brief overview of some of the ACACI project work

Electronic Discharge Summaries

Electronic Discharge Summaries have come to the fore again with the appointment of a new project officer [Sean Conley](#) who is leading the roll out of this Med Track based form to all clinical units.

The discharge summary project began in 2005 with a move towards replacing paper based and electronic word based documents with a single Medtrak based functionality. This process was championed by ACACI and over the following 18 months four versions of the electronic discharge summary were created; emergency, inpatient, psychiatry and rehabilitation. Over the following 18 months, 25 clinical units were converted to the Medtrak based electronic discharge summary.

In February 2006 the process of bringing more clinical units up to date began. The Clinical Summaries Steering Committee reconvened and with its help we have begun to trial the Rehabilitation version of the electronic discharge summary within the Orthopedic and Amputation unit at the Royal Talbot Campus and continued roll out within the acute units.

Recently Sean held discussions with interns and HMOs currently using the electronic discharge summaries. The staff that he spoke with found the electronic discharge summary easier to access than paper based versions previously used, the forms held relevant information and were an asset to the patient and medical staff in terms of follow up appointments, communication with specialists and GPs.

The use of electronic discharge summaries is picking up momentum. In March there were

- 1363 inpatient units summaries,
- 1795 emergency summaries
- 40 psychiatry summaries

Well done to everyone keep up the good work!

Clinical Audit

This project has been lead by [Anthea Ward](#) and will now be lead by [Sofie Ioannidis](#) until later this year.

The clinical audit project has been many years in the making with audit being an important part of clinicians work and addressing mandatory and professional requirements, coming in all shapes and sizes. As part of this project the aim of clinical audit is to improve patient care and outcomes by evaluating against best practice.

One concept of progressing clinical audit via electronic means (rather than just traditional record reviews) is to combine the existing data from various sources, to create richer patient information. This can be done via data warehousing or using a number of commercial software tools that could link data.

Prior to the project commencing in November 2006, what was known is that there were various local and departmental databases being used to fulfil operational and audit needs throughout Austin Health. However, the full extent of these databases was not known.

After much investigation we found that there were over 100 individual, standalone systems, mostly using Excel, Access or Filemaker. Most have been in use for a number of years and were developed locally to support their needs such as patient management, mandatory reporting requirements or for local research and audit purposes.

With these systems being developed in isolation few have links to Medtrak and consequently there is a lot of duplication of effort entering basic patient demographic information. Working with the Melbourne University students is giving us the opportunity to create a web service which will enable these local systems to pull the demographic data from Medtrak.

If the student's pilot is successful the next step could be looking at the possibility of having a similar function for episodic information as again, these details are regularly duplicated.

The foundation assessment work for the project has shown there are various pieces of work that do not sit solely within one department that are required to progress clinical audit.

Nutrition Risk Assessment Project Update

This project is being lead by [Heather Davis](#) & [Caitlyn Green](#)

In the last newsletter, we introduced you to the concept of nutrition risk assessment and why we thought it was important. Since that time we have been busily going about gathering more information for our project and introducing the concept of nutrition risk to the nursing staff.

Gathering Baseline Data

We have been looking at the following:

- Is height and weight being recorded upon admission?
 - What part of the electronic health record (Medtrak) do nurses use?
 - Are there enough scales, stadiometers and tape measures on the wards?
 - What is the work flow for the nursing staff in our pilot areas?
 - What is the information flow for nursing staff in the pilot areas?
- Is there any duplication of data entry that we can eliminate?

Testing Nutrition Risk Assessment using a paper based assessment.

We have tested the nutrition risk assessment process using a paper version in two pilot areas - Ward 7 East and Pre-admission clinics. The intention of this process was to look at nursing work flow and the impact of collecting the nutritional data on nurses daily work patterns.

Each area trialled the tool for a two week period during Feb & March. 36 nursing staff were trained on the use of the screening tool and all nurses were enthusiastic and keen to learn.

A total of 65 patients were screened, 37 from Pre Admission Clinic 4 and 28 from 7 East.

The feedback we have received from all of the staff involved has helped us adapt and modify the process of nutrition risk assessment and to plan for the exciting introduction of electronic nutrition risk screening.

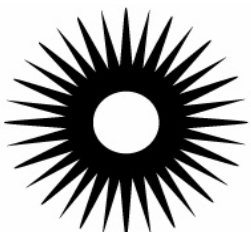
We would like to say a very big thank you to all of the liaison nurses, nurses in 7 East, ward clerks and nurse educators for their enthusiasm, dedication and support - we would not have got this far without you!!!

We are currently working with the programmers in the IT department to finalise the electronic version of the nutrition screening tool. We look forward to introducing this to our two pilot areas over the next few months.

Congratulations!

ACACI and Austin Health will be well represented at Medinfo 2007. Heather & Caitlyn's presentation about their nutritional risk project has been accepted Medinfo 2007. Carola, Sebastian and Janette will all be hosting workshops and presentations.

Medinfo is to be held in Brisbane in August 2007. Around 3000 participants from over 50 countries are expected to attend. For more information visit www.medinfo2007.org



ACACI
www.acaci.org.au

Austin Centre for
Applied Clinical Informatics