Projections of cancer incidence over the next decade are that there will be a 30% increase compared with the last. This can be attributed mainly to population ageing and growth. The information age has resulted in greater complexity of and expectations for service delivery.

This report documents how our cancer services have met the challenge of delivering high quality care for our patients through clinical services, education, research and administration. In an era of fiscal restraint we have responded by increasing our efficiency and developing innovative ways of working. This momentum must be maintained to respond to an ever increasing demand on our services.

The Liverpool and Macarthur management group met in May 2007 to review progress on our strategic plan, refine the plan to align with the area cancer services plan and to set the scene for a planning workshop in July 2007 that sought to involve all staff from our two treatment centers. The main issues identified at the staff workshop related to shortages of space, the need for training and development and workload. There were many constructive suggestions on ways to address these areas of concern that will be included in our operational plan; it was most encouraging to receive the feedback and to learn that the overwhelming majority of staff were happy with their job.

Although space issues have temporarily been relieved by relocation of the medical oncology department at Liverpool, the next few years will be difficult, until construction of the new building in the phase 2 expansion.

Our commitment to maintaining a strong education and research profile continues to reap benefits for our organisation. This report highlights the academic achievements of our staff with a number of research grants being awarded. We now have the capacity to increase our activity in clinical trials and our health services research (CCORE) is nationally and internationally recognized. Places in our training programmes are in high demand. Our information management system, which has been a major platform for our organization, continues to attract interest from many outside parties.

We are, as always, grateful for our many friends and volunteers who provide support and encouragement to our patients.

On reading this report I hope that you will join with me in congratulating all those people who have contributed to the ongoing success of our organization.

Associate Professor Martin Berry
Director, Liverpool Cancer Therapy Centre
Conjoint Associate Professor, UNSW
The Cancer Services Planning Day was held on 25 May 2007 at the NorthBeach Novotel in Wollongong and was facilitated by Helen Abouyanni.

In attendance standing was: Martin Berry, Stephen Della-Fiorentina, Amanda Walker, Di Adams, Allan Fowler, Janeane Hartum, Eugene Moylan, Jennifer Wiltshire, Cath Murray, Kate Tynan, Lynette Cassapi, Kathy Schofield, Narelle Barnett, Gary Goozee, Brianna Fulcher, Rosemary Craft, Jenella Cottle, Carol Ryman, Denise Burns, Michael Boyer, Richard Eek, Geoff Delaney, Felix Chan. Seated: Victoria Nesire, Denise Lonergan, Lenore Knapman, Zelja Jankovic and Sandy Avery.

**Director’s Report**

**Macarthur Cancer Therapy Centre**

Our fourth year of operation showed a further 20-25% growth in patients being seen and treated at both Macarthur and the Bowral Day Surgery. Additional medical, nursing, administration and allied health staff has helped achieve this growth. The Macarthur and Southern Highlands Cancer Service is now the third busiest behind Royal Prince Alfred and Liverpool within Sydney South West Cancer Service.

Inpatient cover for medical and radiation oncology continues to allow continuity of care for treatment related complications. Education of other medical and nursing staff within the hospital and emergency departments has increased this year with accreditation of nurses on wards and in emergency in some oncology procedures. Commencement of the University of Western Sydney Medical Course has seen Dr Diana Adams, Dr Denise Lonergan, Dr Amanda Walker and Associate Professor Della-Fiorentina provide teaching for first year students.

Our commitment to educating patients, their families and the community has continued with continuation of the relaxation and education programmes. The development of an education DVD for our patients explaining the services available and explaining radiation and chemotherapy won an Innovation Award at the annual Macarthur Health Awards. The commencement of meditation
and Reiki therapy to the massage therapy broadens our commitment to complementary therapies within the cancer centre.

The “24 Hour Fight Against Cancer, Macarthur” was held again in October. This is a community driven fundraiser and raised over $260,000 in their first two years. All funds go towards services and equipment for patients of the Macarthur Cancer Therapy Centre and the Camden Palliative Care Services. We are guided by our patient feedback and our members of the Macarthur Cancer Community Council and our staff for purchases from these funds.

The centre continues to show leadership in provision of patient focused cancer services and aims to improve experiences of patients within our centre. We have been awarded a NSW Cancer Institute Innovation Grant for an ambulatory care nurse aimed at reducing the reliance on emergency departments for our patients. We continue to develop the electronic cancer record to improve providing information to practitioners and patients and streamlining delivery of care.

Our volunteers continue their excellent and selfless work, and are all greatly appreciated. Our donors are recognised on our honour board.

I would like to thank all of the staff who have worked extremely hard and cohesively as a team during this year of ongoing growth whilst having to deal with staff vacancies and difficulties in timely recruiting. Their commitment to our patients, their carers and family and to the service we provide is essential to the continuing positive feedback we receive from our patient questionnaires.

Associate Professor Stephen Della-Fiorentina
Director, Macarthur Cancer Therapy Centre
The Department of Medical Oncology remains a strongly networked service across the Liverpool and Macarthur region extending consultative and treatment services from Bankstown in the east to Bowral in the south. The Medical Oncology Senior Medical staff currently consists of 6.4 FTE positions (4.4 at LCTC / 2.0 at MCTC). They are Dr Eugene Moylan, Associate Professor Stephen Della-Fiorentina, Dr Amanda Goldrick, Dr Richard Eek, Dr Elizabeth Hovey (resigned August 2007), Dr Patricia Kho and Dr Diana Adams. We have four Advanced Trainees (Drs Steven Kao, Belinda Kiely, Georgina Long and Kate Mahon), with all four positions accredited by the RACP for 24 months of core training in Medical Oncology. Dr Weng Ng, a 3rd year Advanced Trainee, is undertaking a research year within CCORE prior to completing his FRACP in Medical Oncology. Commencing January 2007 we have once again undertaken a role in supervising a Basic Physician Trainee in the care of Medical Oncology inpatients at Liverpool (usually 8-12 inpatients and 6-8 consultations per week) whilst continuing in the supervision and training of a JMO position (in conjunction with the Radiation Oncologists). The Basic Physician Trainee is scheduled to participate in two non-inpatient clinics per week and provides support to nursing staff providing chemotherapy services in the Cancer Day Centre.

Over the past 12 months the Medical Oncology Department has seen approximately 1,500 new patients and performed about 10,000 follow-up consultations. This represents an increase of about 15% over 2005-2006 service delivery levels.

Given the progressive increase in the demand for consultative services and the need for additional space to house new staff, the Medical Oncology Department of Liverpool has been granted permission by the Hospital and Area Executive to lease rooms off-site at 20-22 Bigge Street, Liverpool (adjacent to Sydney South West Private Hospital). Leasing these premises will assist the orderly expansion of Cancer Services prior to the Stage 2 Development over the next 4-5 years. The move will provide significant space on the Liverpool campus for the expansion of Radiation Oncology, Palliative Care and Haematology. It will also allow integration of the Cancer Care Coordinators into clinic structure, assisting front-line delivery of cancer care.

As previously, the Medical Oncology staff are integrally involved in providing education to nursing, allied health and medical undergraduates and post-graduates. During the past 12 months Stephen Della-Fiorentina has been appointed as an Associate Professor of the University of Western Sydney in recognition of his academic achievements and long-term commitment to teaching. Our Advanced Trainees have again undertaken significant projects resulting in presentations at the Medical Oncology Group of Australia (MOGA) Meeting, the Annual Clinical Oncological Society of Australasia (COSA) Scientific Meeting and at the American Society of Clinical Oncology (ASCO) Annual Meeting.
The Department of Medical Oncology currently has ten multi-centre clinical trials open to active recruitment and we continue to provide follow-up data on many patients previously entered into a broad range of clinical studies. Following recruitment of additional research staff over the past six months, it is anticipated that we will significantly increase our patient numbers entering studies and also expand our clinical trial portfolio to include a broader base of tumour sub-types and stages.

This year we have been successful in obtaining several grants from the Cancer Institute NSW Health Services Innovation Grant Program. These grants were:

i) Integrated Electronic Patient Reported Outcomes Measurement Tool, led by Dr Richard Eek.

ii) Implementation of an Acute Ambulatory Nursing Assessment Unit, led by Associate Professor Stephen Della-Fiorentina.

iii) Establishing the role of a Neuro-Oncology Nurse Coordinator, led by Dr Elizabeth Hovey.

Each of these projects has been funded on the basis of their innovative approach to the delivery of cancer care and the potential to benefit overall cancer services delivery in NSW through process redesign.

In the Medical Oncology move to the Bigge Street premises we have undertaken to extend LANTIS (electronic medical record system application) such that all patient information is now stored and accessed electronically without the need for a paper file. Chemotherapy charts continue to be generated from electronic care plans but it is anticipated that future developments will enable this process to be converted to electronic approval and nursing sign-off. We look forward to the upgrading of this information system to MULTI-ACCESS and subsequently MOSAIQ which provide improved functionality in the EMR domain.
Approximately three years ago, the average waiting time for radiation oncology at Liverpool Hospital was 12 to 14 weeks. Following expansion and growth of the service at Liverpool and Campbelltown, we are now able to treat most patients within four weeks of referral. This has been due to improvements in resources and efficiency in using resources.

Due to significant increases in radiation therapist university positions and the development of medical physics registrar positions, our service is in a much stronger position to be able to provide a timely radiation oncology service to the Sydney South West Area Health Service patients.

This is reflected in the activity statistics that show that there has been a steady growth in workload. We are now able to offer a radiation oncology service to most cancer patients in our area without patients having to travel to other areas for their radiation oncology. This has also meant a dramatic reduction in waiting times for radiotherapy. However, this work does not stop as research has identified that there are still patients requiring radiotherapy who are not currently receiving treatment. This is due to a large number of factors and our research group is active in this research area. In addition, we are faced with the exciting news that Liverpool and Campbelltown Hospitals will be undergoing significant growth over the next 5-10 years as part of the planning associated with large land releases planned for the Leppington and Bringelly areas that forecast an additional population of approximately 300,000 residents. In addition, we have an ageing population so overall cancer incidence is expected to grow. Strategies to try and address some of these issues include expansion of clinics in areas not serviced directly by the Cancer Therapy Centres (clinics in Bowral, Fairfield and expansion of clinics in Bankstown are planned), ensuring that treatments are treated according to protocols and ensuring timely access to radiotherapy given.

As the service expands new challenges arise. The service is organised across two geographical sites (Liverpool and Campbelltown) with one management structure and one patient database. This has pros and cons. It is particularly challenging to organise such a service and ensure that quality and equity for staff and patients occurs. However, the challenges are outweighed by the advantages of having common protocols, quality projects, databases and staff.

**Staffing**

The numbers of radiation therapists, medical physicists, radiation oncologists and radiation oncology nurses has risen over the past year. Staff retention remains a focus. We have had substantial uptake of graduate scholarship positions in radiation therapy which has led to the recruitment of high quality new radiation therapy graduates. In addition, we have participated in the
medical physics registrar training program and have attracted high quality medical physics trainees. Recently, we have encountered problems in retaining medical physics workforce and this has been for a variety of reasons. These include career advancement, statewide shortages and the option of taking up positions in overseas departments. Recruitment strategies have been developed to recruit additional staff and to try and retain staff.

**Education**

We have a very strong education program in radiation oncology, radiation therapy and medical physics. Two radiation therapy educators have enhanced the radiation therapy training program and help facilitate the whole education program. This is a big task over two geographical regions. Our most recent radiation oncology registrars have passed the final examination at their first attempt. This means that we have had a total of 11 radiation oncology registrars sit the final examination in the past 10 years and all have passed at their first attempt. This makes the radiation oncology service at Liverpool and Campbelltown Hospitals a highly sought position for trainees in radiation oncology. We have continued to arrange multi-disciplinary seminars for various radiation oncology groups to attend to improve knowledge. The most recent seminar in May was on advances in radiation oncology.

**Quality**

A significant focus remains on treatment quality and there has been a large number of initiatives that have been focussing on treatment quality. These include the development of a competency programme for radiation therapists and radiation oncologists in medical imaging assessment, the development of an imaging policy for the department, the development of workflow changes and a change management group to examine work processes. In addition, there has been a large number of quality projects as listed in the annual report.

**Research**

Our interest in radiation oncology research continues to strengthen and highlights are listed in the research section of this report.

We were able successful in funding a Chair in Radiation Oncology at the University of NSW. This position was joint-funded by the Liverpool Hospital, the NSW Cancer Institute and the University of NSW. Professor Michael Barton has been appointed as the inaugural chair.

We were delighted to be offered a research partnership with Siemens to investigate the benefits of Mega Voltage Cone Beam CT (MVBCT). MVBCT is an attachment on the Linear Accelerator (the machine that delivers radiation therapy) and allows staff to monitor the patient position throughout treatment and also the position of the area of the body that is being targeted.
with radiotherapy. It is potentially a significant technology improvement compared with traditional methods of visualisation. We are one of the first five departments in the world to have MVBCT and I believe that the reason why the partnership was formed is our growing reputation for innovative radiation oncology research.

Another major innovation that has occurred in our service in the past 24 months has been the availability of image fusion. This allows us to fuse the images that we obtain from CT scans, MRI scans and PET scans and to put them all together to give us the best image of the tumour that we are aiming the radiotherapy at. This program is now available clinically for appropriate patients (this technology is usually used in patients with lung cancer, lymphoma, brain tumours and head and neck cancers). This will allow us to better target the tumours and reduce side effects from treatment. We have started working on some research projects with the Department of Nuclear Medicine to further develop these tools.

Our radiation oncology service is also working towards complete electronic oncology records for all of our patients. We have had a program over the past five years of developing a radiotherapy and medical oncology information system that allows us to access all patient data electronically. This improves the timeliness of access to treatment and also allows consistency of data. This program has been recognised by other states and also international departments as being an innovative approach to record keeping and we continue working on this program.

In addition, our health services research arm – Collaboration for Cancer Outcomes Research and Evaluation (CCORE) goes from strength to strength under the leadership of Professor Michael Barton as shown in other parts of this annual report. The work done by this group was best reflected in the news that Professor Barton was awarded an Order of Australia Medal (OAM) in the recent Queen’s Birthday awards.

The challenges for the next 12 months include:

- Replacement of our oldest linear accelerator.
- Completion of our Intensity Modulated Radiotherapy Program.
- Replacement of our current radiotherapy information system with a new radiotherapy information system.
- Developing a structure for radiation oncology nursing positions including developing a training program.
The Medical Physics Team has been challenged by losing a number of key staff over the year who left to seek new opportunities and lifestyle changes. These vacancies have been difficult to refill and have impacted on the team’s ability to progress a number of initiatives while maintaining clinical throughput and safety. Nevertheless, a number of projects were progressed or completed, including:

- Intensity Modulated Radiation Therapy (IMRT) commissioning planning for IMPAC upgrade
- migration to DRR export from Treatment Planning System (TPS)
- expansion of the storage capacity for patient plans on the TPS
- a locally new mould HDR brachy treatment
- machine co-ordinate scale conversion planning

Three new physics registrars (Tony Young, Abdurrahman Ceylan and Jarrad Begg) have joined the team in 2007 and the physics team has, for the first time, offered scholarships to three physics undergraduate students to enable them to undertake their honours thesis project within the department. All three students have made great progress in developing their skills and progressing projects related to IMRT, image fusion, and machine quality assurance methods. The scholarships have been funded by Trust and co-ordinated by Lois Holloway.

The physics research group has expanded with the addition of a second research physicist. Philip Vial joins the research team to advance the Siemens collaboration project as well as his own research interests and brings a substantial clinical background to help progress the department's research goals.

Continuing Professional Development support funding from NSW Health for Medical Physicists was used this year to purchase MatLab analysis software as well as to bring out a visiting researcher from the University of Wisconsin.
Radiation Therapy

Lynette Cassapi
Director of Radiation Therapy, Liverpool and Macarthur Health Services

Radiation Therapy continues to help to underpin Radiation Oncology cancer management. SSWAHS has maintained full staffing for the Service (two Planning departments and five linear accelerators) during 2006/2007 despite some change-over of staff members. Anthony Arnold left SSWAHS in August 2006 to take up the post of Chief Radiation Therapist at the Illawarra Cancer Care Centre. His time spent with SSWAHS was during a period of great change, staff recruitment, service expansion and equipment development and we thank Anthony for all he has done for the Service. In his place Lynette Cassapi was appointed to the role of Director of Radiation Therapy and we also welcomed Daniel Moretti who was appointed into the role of Assistant Director of Radiation Therapy for the Liverpool facility. There have been other changes in senior Radiation Therapy staff during this year with the departure of Megan Tattersall and Justin Dixon and the promotion of Kirrily Cloak to the Head of Treatment position. Three Radiation Therapy staff also
successfully applied for personal regrades this year and so Annie Lau, Vikneswary Batumalai and Shivani Prasad are now Level 3 Specialist Radiation Therapists.

Nasreen Kaadan was also appointed to the post of the CTC Oncology Information Systems Manager in September 2006, recognising her immense contributions to the service in this role and drawing on her Radiation Therapy background. The Radiation Therapist numbers were further supplemented during the year by several locum Radiation Therapists on short term contracts recruited to fill the posts held by staff absent on maternity leave. The Radiation Therapy staff are currently a very fertile group with four staff becoming parents during 2006/2007 and a further six babies expected so far in 2007/2008. During 2006 there were also seven Professional Development Year (PDY) staff who successfully gained their full accreditation after spending the year with us and all seven of these staff were successfully retained at the end of the year. Thanks to supernumerary DoH funding we were able to take on six additional PDY Radiation Therapy staff in 2007.

Radiation Therapy staff has been working with all the other professional groups within the centre throughout the past 12 months to help improve patient care and develop better practices through quality projects. There have been numerous projects underway during the past year involving Radiation Therapists and many of these have been presented at National and International conferences. These include:

- At the Australian Institute of Radiography meeting five oral and five poster presentations were given. This is the most that has ever been submitted to any single conference from the SWSCS Radiation Therapy group and reflects their current enthusiasm and interest in advancing our patient care provision and practices. Many of the presentations include co-authors from other professions including Medical Physics, Medical Oncology, CCORE and Radiology. Topics covered were:
  - A Quality Assurance Survey of Gold Seed Fiducial Markers Insertion and Patient Education
  - Imaging Training and Assessment Program
  - PTV margin review and online correction protocols for image guided prostate radiotherapy
  - Staff competency training and assessment
  - Skin care meta-analysis
  - PET Directed Dose Escalation in Non-Small Cell Lung Cancer
  - Evaluation of planning target volume (PTV) margins for Prostate radiotherapy
  - The Introduction of Megavoltage Cone-Beam Computed Tomography at Liverpool Cancer Therapy Centre
  - A Review of Pacemaker Protocol at SSWAHS LCTC and MCTC
  - Skin care practice National Survey
  - At the Australian Brachytherapy group meeting one oral presentation was given by Radiation Therapy staff on the introduction of CT Planning for Brachytherapy treatments
At the RANZCR meeting in Singapore two poster presentations were given by RT staff on PTV margin review and online correction protocols and also a meta-analysis of Skin care practice

The Radiation Therapy Management group has actively encouraged all staff to get involved in research and development projects and all of these advances continue to carry the radiation therapy group forward. This team has continued to work on educational issues, professional development, new processes and technologies, quality systems and direct patient care improvements.

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<th>SENIORS</th>
<th>RT EDUCATORS</th>
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<td>Kylie Dundas</td>
<td>Melanie Rennie</td>
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<td>Matthew Fuller</td>
<td>Carly Ballard</td>
<td>Rylie Humble</td>
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<td>Odette King</td>
<td>Maysa Bassal</td>
<td>Josip Juresic</td>
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<td>James Latimer</td>
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<td>Sarah Keats</td>
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<td>Som Rattanavong</td>
<td>Syke Blakeney</td>
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<td>Megan Tattersall</td>
<td>Tania Butturini</td>
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<td>Steven Tran</td>
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<td>Eunice Wong</td>
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<td>Jim Yakobi</td>
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Below: Ewa Kucharska on the Cover of SPECTRUM
Australian Institute of Radiography, Volume 14, Number 3, April 2007
Poster on Skin care meta-analysis and presentation on Skin care practice National Survey
Radiation Therapists at the Macarthur Cancer Therapy Centre

Radiation Therapists at Liverpool Cancer Therapy Centre

GYNAECOLOGICAL ONCOLOGY

Dr Felix Chan
Director
Prof Roger Houghton
Visiting Medical Officer
Dr Cathy Lee
Clinical Fellow
Rosemary Craft
Clinical Nurse Consultant
Mariad O’Gorman
Clinical Psychologist
Parimalam Mohanvelu
Administrative Officer
Dr Amanda Goldrick
Medical Oncologist
Dr Diana Adams

The unit faced another busy year of clinical working, training and research. The number of new patients and follow up visits continue to rise in response to demand of the local population.

The team has been involved in the diagnosis, management and psychosocial support of women with gynaecological malignancies. Ovarian, endometrial and cervical cancers are the commonest gynaecological cancers we managed. We are also involved in the care of patients with other genital tract malignancies such as vaginal, vulval and gestational trophoblastic disease. The unit provides a consultative service to patients with familial cancer syndrome and facilitates the delivery of prophylactic surgery.

The unit has weekly multi-disciplinary team meetings to discuss the management of patients. The pathology of patients who are newly diagnosed, received recent surgery or developed recurrent disease are
discussed. The management plan is established and the on-going psycho-social follow up is carried out. A teleconference morbidity and mortality meeting is carried out between the west and the east zone every month to discuss the management of interesting cases. With the growing number of patients with complex health problems who presents with gynaecological cancer, this poses an ongoing challenge to the team in the future to come. Ongoing psychological support is paramount to ensure the patient recovers from the emotional impact of the diagnosis and treatment.

The patient support group has been meeting monthly, facilitated by experts to empower patients to help and support each other during this difficult time. The number of attendance to this meeting continues to grow. The social worker also assists them to access the community service and financial assistance available from the government. Clinical training and research is strongly encouraged within the unit.

The unit looks forward to another busy year within the constraint of limited resources available to the area.

The Collaboration for Cancer Outcomes Research and Evaluation

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<tr>
<th>Rotating Registrars</th>
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<tr>
<td>Standing: Mariad O’Gorman, Parimalam Mohanvelu, Deborah McAuley Seated: Felix Chan, Cathy Lee and Rosemary Craft</td>
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The Collaboration for Cancer Outcomes Research and Evaluation (CCORE) has had another productive year with many peer-reviewed publications, contributions to National Tumour Guidelines and commissioned reports. Our report on the optimal utilisation of radiotherapy has been published as a series of papers in Cancer and the benchmark we have set has been adopted by the European Union and the International Atomic Energy Agency for planning radiotherapy services in Europe and the developing world. We have also completed commissioned work on melanoma, chemotherapy service guidelines and radiotherapy for low and middle income countries.

One member of CCORE has completed his MD degree and another member has submitted his thesis for MD degree. Two additional members have enrolled for PhDs. This brings the number of CCORE staff currently enrolled for PhD or MD to six.

Professor Michael Barton was awarded the Medal of the Order of Australia (AOM) for his services to medicine, particularly radiation oncology, through a range of clinical, research, education and professional development roles. He was appointed a Professor of Radiation Oncology at the University of New South Wales. Professor Barton was also appointed by the Education Board of the Royal Australian and New Zealand College of Radiologists (RANZCR) to the Rohan Williams Travelling Professorship on a lecturing tour in UK during September-October 2007.

Our current and future projects include:

- **The distance learning course in the applied sciences of oncology:** The definitive CD-ROM set was delivered to the International Atomic Energy Agency (IAEA) in November 2006, and accepted as an official IAEA training resource. It will be disseminated to developing countries around the world in the second half of 2007 for use as part of radiation oncology training. An additional nine interactive modules will be developed during 2007/2008. In the longer term, the distance learning course may be translated into French, Spanish and Chinese.

- **Radiotherapy data linkage:** The Cancer Institute continued to fund CCORE to work with NSW radiation oncology departments to enable the departmental databases to be combined for the extraction of high level statistics. Together with the new data linkage unit of NSW Health we will create a powerful radiotherapy service use database that will allow us to examine actual radiotherapy utilisation in great detail.

- **Chemotherapy utilisation project:** We have received funding to develop a model of the optimum utilisation of chemotherapy. Two staff members (including a Medical Oncology Fellow) are currently working on this project upon which their PhD research theses are based.

- **Treatment utilisation for screen-detected breast cancer:** In a collaborative project with BreastScreen Victoria, we have developed optimal utilisation models for breast surgery, radiotherapy, chemotherapy and hormone therapy using the data from BreastScreen Victoria as a sample population. Our initial results have been presented at the Annual Scientific Meeting of RANZCR in Singapore in November 2006 and a related article is about to be published.

- **Bone metastasis ‘Quality of life’ project:** Internationally we are collaborating with groups in Canada to develop the bone metastases ‘Quality of Life’ Scale for the EORTC.
• **Touchscreen ‘Quality of Life’ project:** CCORE is providing a substantial contribution in implementation of the Touchscreen-based ‘Quality of Life’ assessment project for all patients attending the Cancer Therapy Centre, especially in development of the evaluation framework and data collection.

• **World Health Organisation (WHO) commissioned project on development of a radiation safety tool:** CCORE team led by Professor Barton has recently been commissioned by the WHO to do a literature review of radiation incidents worldwide and draft a safety tool for international use.

• **Medicare Benefit Scheme (MBS) Revenues for radiation oncology services in NSW 2000-2006:** The Cancer Institute NSW funded CCORE to conduct a study on MBS revenues for radiation oncology in NSW from January 2000 to June 2007. The study will help better planning for radiation oncology services in NSW.

• **Review of National Cancer Control Activity in Australia:** The Cancer Council Australia (TCCA) funded a Consortium of partners to review the Cancer Control Activity in Australia. The Consortium includes: The Cancer Council Australia, Cancer Institute NSW, Cancer Voices Australia, Clinical Oncological Society of Australia, CCORE, National Breast Cancer Centre, School of Public Health & Community Medicine at UNSW and Sydney Health Projects Group, University of Sydney. The draft of the report was submitted.

The year 2006-2007 has seen a broadening of our base of collaborators and an increase in involvement with Cancer Therapy Centre members resulting in more and better research. We hope that we continue to expand these alliances over the next year.

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**Clinical Trials**

Susannah Jacob, Kate Tynan, Denise Lonergan, Gabriel Gabriel, Richard Thode, Jesmin Shafiq, Weng Ng and Michael Barton
During 2006-2007 the Cancer Therapy Centre Clinical Trials Department was able to initiate 13 new studies, including:

**Six pharmaceutical sponsored clinical trials:**

- **EISAI** - A phase III, open label, randomised, two-parallel-arm, multicentre study of E7389 versus Capecitabine in patients with locally advanced or metastatic breast cancer previously treated with anthracyclines and Taxanes and refractory to the most recent chemotherapy. **Principal Investigator is Dr Richard Eek.**
- **Horizon II** - A Randomised, Double-blind, Phase III Study to Compare the Efficacy and Safety of AZD2171 when added to 5 fluorouracil, Leucovorin and Oxaliplatin (FOLFOX) or Capecitabine and Oxaliplatin (XELOX) with the Efficacy and Safety of Placebo when added to FOLFOX or XELOX in Patients with Previously Untreated Metastatic Colorectal Cancer. **Principal Investigator is Dr Richard Eek.**
- **Radiant** - A multicentre, randomised, double-blind, placebo controlled, phase 3 study of single agent Tarceva® (erlotinib) following complete tumour resection with or without adjuvant chemotherapy in patients with stage IB-IIIA Non Small Cell Lung Carcinoma who have EGFR-positive tumours. **Principal Investigator is Dr Stephen Della-Fiorentina.**
- **LOTESS** - A Phase IV Study of Zometa® (Zoledronic Acid) Therapy in Patients with Bone Metastases from Breast Cancer or Hormone Resistant Prostate Cancer, or Bone Involvement from Multiple Myeloma, Assessing Long-term Efficacy and Safety (LoTESS). **Principal Investigator is Dr Anne-Marie Watson.**
- **FASTACT** - A randomised, placebo-controlled, double-blind phase II study of sequential administration of erlotinib (Tarceva) or placebo in combination with gemcitabine/platinum as first-line treatment in patients with stage IIIB/IV non-small cell lung cancer (NSCLC). **Principal Investigator is Dr Patricia Kho.**
- **Vinflunine** - A phase II study of intravenous Vinflunine in patients with locally advanced or metastatic transitional cell carcinoma (TCC) of the urothelium. **Principal Investigator is Dr Elizabeth Hovey.**

**Four Multicentre Collaborative Group clinical trials:**

- **HOSTT ANZGOG** - A phase III study to evaluate the impact of maintaining haemoglobin levels above 120g/L versus above 100g/L in anaemic patients with carcinoma of the cervix receiving concurrent cisplatin and radiation therapy. **Principal Investigator is Dr Shalini Vinod.**
- **Watch & Wait** - An intergroup randomised trial of rituximab versus a watch and wait strategy in patients with advanced stage, asymptomatic, non-bulky follicular lymphoma (Grades 1, 2 and 3a). **Principal Investigator is Dr Anne Marie Watson.**
- **TROG Cervical** - Prospective study to determine the relationship between survival and FIGO stage, tumour volume and corpus invasion in cervical cancer. **Principal Investigator is Shalini Vinod.**
- **TROG POST** - Post-operative concurrent chemo-radiotherapy versus post-operative radiotherapy in high risk cutaneous squamous cell carcinoma of the head and neck. **Principal Investigator is Dr Dion Forstner.**

**Four Investigator Initiated studies:**

- **EISAI** - A phase III, open label, randomised, two-parallel-arm, multicentre study of E7389 versus Capecitabine in patients with locally advanced or metastatic breast cancer previously treated with anthracyclines and Taxanes and refractory to the most recent chemotherapy. **Principal Investigator is Dr Richard Eek.**
- **Horizon II** - A Randomised, Double-blind, Phase III Study to Compare the Efficacy and Safety of AZD2171 when added to 5 fluorouracil, Leucovorin and Oxaliplatin (FOLFOX) or Capecitabine and Oxaliplatin (XELOX) with the Efficacy and Safety of Placebo when added to FOLFOX or XELOX in Patients with Previously Untreated Metastatic Colorectal Cancer. **Principal Investigator is Dr Richard Eek.**
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- **Vinflunine** - A phase II study of intravenous Vinflunine in patients with locally advanced or metastatic transitional cell carcinoma (TCC) of the urothelium. **Principal Investigator is Dr Elizabeth Hovey.**
• **STARS** - A randomised comparison of Anastrozole commenced before and continued during radiotherapy for breast cancer versus anti-oestrogen therapy delayed until after radiotherapy. *Principal Investigator is Dr Geoff Delaney.*

• **Outpatient RIE** - Outpatient Ifosfamide, Etoposide plus Rituximab (R-IE) for salvage in patients > 60 years with relapsed or refractory CD20 positive diffuse large B-cell lymphoma who are not candidates for stem cell transplant. *Principal Investigator is Dr John Gallo.*

• **Outpatient PEG Auto** - Outpatient-based fractionated ICE chemotherapy supported with pegfilgrastim for salvage and stem cell mobilisation in transplant eligible patients with relapsed or refractory diffuse large B-cell lymphoma and Hodgkin lymphoma. *Principal Investigator is Dr John Gallo.*

• **CHeRP** - Needs Assessment Intervention Study. *Principal Investigator is Dr Dion Forstner.*

The CTC Clinical Trials department also continues to be recognised for its level of patient participation in clinical trials and have successfully met all the recruitment targets set by the NSW Cancer Council in its NSW Cancer Trials program. Commitment to promoting clinical trial participation and awareness continues to be the main focus of the CTC Clinical Trials Department.

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**SSWAHS Clinical Cancer Registry**

The SSWAHS Clinical Cancer Registry has been operational for just under 2 years. Initially the registry was a pilot project funded by the Cancer Institute and SSWAHS was one of five area health services in NSW that were participating. The good news is that the project has now become a Cancer Information Program with funding secured for the next three years and all registry staff being given permanent positions in SSWAHS.

The focus will still be on the registry and their role in collecting high quality cancer information to be made available to all clinicians involved in cancer care. The aim is to promote improvements in cancer care and cancer services by the provision and use of the registry data.
The registry is pleased to report the first year’s results in terms of the cancer cases that were identified as having diagnosis and any treatment or just any treatment in SSWAHS facilities.

<table>
<thead>
<tr>
<th>Tumour Site or Group</th>
<th>Bankstown</th>
<th>Bowral</th>
<th>Camden</th>
<th>Campbelltown</th>
<th>Fairfield</th>
<th>Liverpool</th>
<th>WZ Tumour Total</th>
<th>Tumour Total</th>
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<td>9</td>
<td>2</td>
<td>27</td>
<td>25</td>
<td>62</td>
<td>173</td>
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<td>24</td>
<td>73</td>
</tr>
<tr>
<td>Colorectal</td>
<td>108</td>
<td>18</td>
<td>9</td>
<td>51</td>
<td>46</td>
<td>66</td>
<td>298</td>
<td>581</td>
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<tr>
<td>Gynaecological</td>
<td>15</td>
<td>2</td>
<td>3</td>
<td>8</td>
<td>0</td>
<td>47</td>
<td>75</td>
<td>174</td>
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<td>1</td>
<td>16</td>
<td>6</td>
<td>148</td>
<td>196</td>
<td>403</td>
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<tr>
<td>Head &amp; Neck</td>
<td>16</td>
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<td>0</td>
<td>8</td>
<td>4</td>
<td>56</td>
<td>85</td>
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<tr>
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<td>1</td>
<td>9</td>
<td>21</td>
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<td>0</td>
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<td>7</td>
<td>9</td>
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<tr>
<td>Thoracic</td>
<td>60</td>
<td>13</td>
<td>6</td>
<td>28</td>
<td>4</td>
<td>121</td>
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<td>536</td>
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<tr>
<td>UGI</td>
<td>66</td>
<td>9</td>
<td>2</td>
<td>14</td>
<td>15</td>
<td>92</td>
<td>198</td>
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<td>34</td>
<td>1</td>
<td>1</td>
<td>31</td>
<td>12</td>
<td>44</td>
<td>123</td>
<td>465</td>
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<td>Notifiable Bone Marrow</td>
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<td>0</td>
<td>3</td>
<td>1</td>
<td>31</td>
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<td>72</td>
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<tr>
<td>Breast in situ</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>10</td>
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<td>1</td>
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<td>5</td>
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<td>Benign brain</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>32</td>
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<td>108</td>
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<td>Uink Primary</td>
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<td>0</td>
<td>4</td>
<td>6</td>
<td>15</td>
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<td>29</td>
<td>190</td>
<td>122</td>
<td>756</td>
<td>1,565</td>
<td>3,724</td>
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At this stage the dataset is very basic and generic for all notifiable cancers but the SSWAHS registry is actively piloting site specific data collections for breast and colorectal cancers. The registry encourages clinicians to assist in improving the accuracy and completeness of the data in order to make the information more useful and meaningful and any feedback is welcomed.

<table>
<thead>
<tr>
<th>Registry Team</th>
<th>Lung, Central Nervous System and miscellaneous</th>
<th>Breast and Gynaecological</th>
<th>Hematopoietic, Melanoma, Head and Neck</th>
<th>Breast Cancer Data</th>
<th>Colorectal Cancer Data</th>
<th>Upper Gastro Intestinal Tract and Colorectal</th>
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<tr>
<td>Dr Val Poxon</td>
<td>Kirsten Duggan</td>
<td>Christine MacDonald</td>
<td>Vacant</td>
<td>Angela Berthelsen</td>
<td>Carina Mok</td>
<td>Mahbuba Sharmin</td>
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<td>Project Manager</td>
<td></td>
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<td>Lung Cancer Data</td>
<td>Breast Cancer Data</td>
<td>Upper Gastro Intestinal Tract and Colorectal</td>
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<tr>
<td>Isobelle Anscombe</td>
<td>Administrative Assistant</td>
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<tr>
<td>Sandra Farrugia</td>
<td>Genito-Urinary</td>
<td></td>
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</table>

Pictured: Angela Berthelsen, Christine MacDonald, Carina Mok, Isobelle Anscombe, Mahbuba Sharmin and Kirsten Duggan
The focal point for performance during this year has been to manage increased activity levels of 37%, whilst improving the quality of data input, and development of staff through competency assessments and rotation.

The clerical support service had a 45% turnover of staff in 2006/2007. The long delays in recruiting to 21 vacancies has been managed by making workflow improvements such as introducing staff rotations across all administrative functions and allocation of clinics to dedicated staff. The team has stepped up to the challenge resulting in a more customer-focused service, and a higher skilled workforce.

In unison to these workflow changes, customized reporting tools have been used to re-engineer treatment summary letters and billing reports for radiotherapy. This has reduced a two hour process to 20 minutes, saving approximately 30 hours processing time per week, providing vital information on treatments to GPs in a much more acceptable timeframe. Macarthur took a leap into advancing on technology, piloting a “no paper record” consultative service, as a strategy to endure extended vacancies of administrative staff. This has worked so well that it is intended to roll this out for all consultative services in 2008.

Clerical staff development has continued, with the introduction of a standardised competency assessment programme for clerical staff at both sites. The level of training has increased this year, with team leaders in place to support supervision and training, and dedicated supervisory staff to achieve improved learning outcomes. With the introduction of stringent audits and data collection - output quality has been regularly reviewed to enable targeted training and early correction of potential problems.

A staff survey conducted prior to the centre’s planning day in July 2007 identified some areas to focus on for improvement in 2007/08, including staff development opportunities and building the profile of a social culture.

A review of Communications Meetings and Visible Management Meetings has reinforced the requirement for improved feedback, which is being addressed with the development of a new website that will host staff notifications, and a newsletter that will be released in 2008.

Development and implementation of the Cancer Services management dashboard links the executive team to activity, financial and staffing reports to assist them to manage their budget and resources.

Overall staff numbers have increased to 194 due to additional services commencing in Macarthur, and a surge of new project staff funded through cancer institute grants. Accommodating additional staff and services has been a challenge that has been resolved by securing a property in Bigge Street, Liverpool, to provide Medical Oncology consultative services. The official launch on Friday, 17 August 2007, was a welcome celebration of the extra-ordinary planning that went into this change.
The logistics of an offsite service presents us with an opportunity to rely on our electronic record – putting staff rotation and training programmes to the ultimate test of durability.

Cancer Services has been successful in obtaining equipment grants to upgrade the private patient network and additional videoconferencing equipment, which has assisted in-service education, research and training programmes, and bringing all our sites together as one service.

Our administrative team is always looking to improve processes in all areas. In an attempt to reduce turnaround times for travel and trust fund applications, and provide education to others about what we have learned over time, we mapped the process, and subsequently incorporated it into an area wide Financial Management Training Programme.

The Liverpool Centre got a clean look this year, with vinyl replacing the original carpet in the main entrance area. With minimal disruption to services over the 2006 Christmas period, the centre reopened looking fresh for the new year.

**Quality Committee**
The Cancer Services' Quality Committee meets monthly to review quality initiatives and changes implemented as a result of incidents. The committee oversees a calendar of quality projects, collates policies, and monitors progress for EQuIP Accreditation.

The committee met ten times during the year, and completed reviews of 13 policies. The following items were achieved from the business plan:
- Quality Minutes and Policies Reported to Management committee via hyperlinks.
• Patient satisfaction survey complete.
• Subsidised parking submission approved.
• Communication strategy staff survey and all dates published.

In addition, Radiation Oncology set the following targets for the Quality Committee to co-ordinate:
• Planning day completed on 25 May 2007.
• All staff Planning session held on 6 July 2007 - writing up plans.
• Standard reporting to management.
• Benchmark data reported through QA Committee.
• Version control and access for staff to quality reports achieved through hyperlinks on minutes.
• Patient satisfaction benchmarks captured in patient satisfaction survey.
• Master list of quality projects maintained on network.

Information Technology
Our Administrator and IT Support Staff have embarked on extensive planning and implementation of new equipment and upgrades of information systems and associated software this year. The team has drawn on a range of expertise to scrutinise the systems that connect our department and make our patient record a robust and reliable source of information.

We use the hospital’s PAS system for patient demographic information, and support an interface with LANTIS, which has been customised to suit our integrated oncology department. Our team attends many meetings on each of the upgrades and implementation, which assists with communication, but is time consuming as well.

Some of the projects undertaken this year to improve the LANTIS record and usability include:
• With the hospital’s PAS systems undergoing a major upgrade this year, this has added to the workload of our team.
• Re-engineering the Radiotherapy Treatment Summary, and subsequent billing reports; this has saved several days manual processing of each patient’s notes. In 2008, we hope to electronically transfer this data via hospital's debtors system, to medicare, which will save three weeks processing time.
• Multi-resource bookings were implemented at both sites, this enables flexibility in chemotherapy bookings, and individual care plans to be created.
• Winscribe is used for dictation and transcription of patient letters, and we have increased the server capacity to enable the additional memory required when we upgraded the software. This joint venture with Radiology Fairfield (who also required an improvement to their system) is now functional to 35 medical staff and 15 secretaries.
• Medical Director is used by Staff Specialists to assist with formulations for drug prescriptions. This is updated bi-monthly, as new drugs are added to the pharmaceutical databank. This requires a manual load onto every PC.
• LANTIS will be put to the test this year, as we pilot completely electronic consultations. This requires diligent scanning and capture of all relevant patient details and results to be made available prior to clinic appointments, so that the medical staff can review the detail electronically.
• MultiAccess 8.3 upgrade – preparations have included infrastructure design, sourcing and purchase; installation of a test environment and report transfer analysis; failover testing of backup systems and disaster recovery planning; software assurance; functional specification comparisons; regular communication with USA to establish compatibility with current radiotherapy treatment systems and network analysis; training workshops and superuser sessions; research, analysis and entry of FDB which stores drug allergies and reactions for chemotherapy orders that can be drawn upon for
examination of patient treatment regimes; implementation of enterprise reporting, which allows many users to run Crystal reports through an Infoview window.

- Wireless tablets will provide bedside notes, and this has presented a challenge for IT, to identify the risks to a secure network, so testing research and sourcing has been done this year.
- Website production - in 2008, we will completely upgrade the website for cancer services, enabling better access to information regarding the services provided, and outcomes. Updating our Website will also mean that we will be seeking input from our consumers to develop a comprehensive website with information and links for staff, patients and referring clinicians.

The Future
Administrative support staff are committed to continuous improvement. To achieve this, our policies and procedures, workflow and competency continue to be reviewed and audited.

- We will develop performance indicators to assist in developing better work practices and service provision.
- Competency based assessment and training program will be created to adequately up-skill staff.
- Orientation will be refined to better equip new staff and new patients in their interactions with the service, including generic trainee programs.
- Website will be updated and published, providing accessible and relevant information for staff, patients and referring clinicians.
Clinical Administration staff at Liverpool: Franca Serafini, Joanne Yeo, Dorella Lutzen, Dean Ralph, Brigida Sbezzi, Holanda Bentancor, Maree Cain and Leah Reynolds

Bigge Street Clinical Support Staff: Carol Doherty, Rosalie Atkin, Ashti Bibani and Kriston Nicholls

Narelle Barnett

Adam Stanzione, Phan Sayaloune and Nasreen Kadaan

Judith Walker and Lyn White

Despite the workload, Janice Warner and Adam Stanzione (IT support) found time to win the ‘fashion of the fields hat competition’ at our social club function at Harold Park in August 2006


<table>
<thead>
<tr>
<th>Month</th>
<th>Employee</th>
<th>Month</th>
<th>Employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2006</td>
<td>Rebecca Phillips</td>
<td>January 2007</td>
<td>Melanie Rennie</td>
</tr>
<tr>
<td>August 2006</td>
<td>Kerry Lowe</td>
<td>February 2007</td>
<td>Lois Holloway</td>
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<tr>
<td>September 2006</td>
<td>Beatrice Atwell</td>
<td>March 2007</td>
<td>Matthew Fuller</td>
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<td>October 2006</td>
<td>Rachel Newell</td>
<td>April 2007</td>
<td>Brigida Sbezzi</td>
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<td>November 2006</td>
<td>Nasreen Kaadan</td>
<td>May 2007</td>
<td>Joseph Gancia</td>
</tr>
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<td>December 2006</td>
<td>Kirrily Cloak</td>
<td>June 2007</td>
<td>Doris Dadic</td>
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Financial and Activity Summary
2006/2007

Cancer Services
Liverpool and Macarthur Cancer Services finished the year with a favorable balance of $1.9m. Cancer Institute grants of $1.6m were received, which enabled the cancer registry project and care co-ordination model to continue, as well as the appointment of lead clinicians and various project staff to develop improved patient care and outcomes. The average staffing over the year was 195 FTE, and there were 65,288 occasions of service recorded for the unit. The increased cost of the service this year reflects the 37% increase in activity and staff, a trend that is expected to continue throughout 2007/08 with additional space becoming available at Bigge Street.

The staff : patient ratio, shows a direct correlation to the number of patients seen, indicating that resources are directed appropriately.
The Palliative Care Service provides a consultancy service to the inpatients of Liverpool Hospital who have a life threatening illness which may be cancer or non-cancer. We are now also providing community medical consultative service to the residents of the Liverpool area. This includes attending community team meetings to facilitate enhanced continuity of care.

The service continues to grow and now includes a full-time Advanced Trainee Registrar, full-time Staff Specialist and part-time Staff Specialist, one Clinical Nurse Consultant and two Registered Nurses.

Outpatient clinics are increasing with the growing demand and now include a registrar clinic and plans to add a second Staff Specialist clinic by the end of the year.

The end of life care pathway project has evolved following the results of the audit of stage 1. This audit and subsequent report displayed improved end of life care for patient on the pathway. A second part-time project officer has been recruited to facilitate stage 2 of the project to include four new departments.
A weekly Palliative Care teaching program has been developed and is attended by Junior Oncology medical staff and the community nursing team members.

Colleen Carter, Clinical Nurse Consultant, undertook a secondment to the Area Palliative Care Service to develop manuals and policies for the Area Palliative Care Volunteer Service. This resulted in the development of two abstracts being submitted and accepted at the 9th National Palliative Conference to be held in Melbourne in August. Some of the Liverpool Hospital Palliative Care Volunteers were included in the Bankstown Area Australia Day Awards for service to the community. The recipients were Maureen Grinshaw, Peter Teng, Barbara Neville, Christine Jones and Janet Perry.

**Future Directions:**
- Improved presence in the A&E and ICU department.
- Increased attendance at multidisciplinary meetings.
- Expanded outpatient clinics.
- Collaboration with the ICU and MET departments to develop a new Palliative Care Intervention to improve end of life care in the patient group.
Allied Health staff of the Macarthur and Liverpool Cancer Therapy Centres include Social Workers, Dietitians, Occupational Therapists, Speech Pathologists, Clinical Psychologists and Physiotherapists. All play an integral part in providing care for Cancer Therapy Centre patients, their families and carers, and together with other Cancer Therapy staff, work as a team to meet the range of patient needs and continually strive to provide a quality service. Their work and achievements throughout the past year is outlined below.

PLANNING

- An Allied Health Representative from each site (Liverpool and Macarthur) attended the combined Cancer Therapy Centre Executive Committee Planning Day.
- Various Allied Health disciplines (Social Worker, Psychologist, Speech Therapist, Dietitian) attended the Psycho-Social Framework Planning Day.
- Allied Health representatives attend Executive Committee Meetings for Radiation Oncology and Medical Oncology.
- Allied Health staff are involved with the Education Working Group, and have contributed to the planning of the Common Orientation Program and package in the Cancer Therapy Centre.
- Regular Allied Health meetings have been consolidated both at a site level, and across Liverpool and Macarthur.
- Allied Health and psycho-social support representatives sit on the Area Cancer Services Council.
- Liaison has occurred between Liverpool Cancer Therapy Centre (LCTC) and Macarthur Cancer Therapy Centre (MCTC) Occupational Therapy and Physiotherapy, regarding lymphoedema service provision for patients living in SSWAHS.
- The Clinical Psychology Service continued to develop its services using its “Model of Psycho-social Service and Strategic Plan” as a blueprint to address patients’ and families’ psycho-social needs.
- Clinical Psychology services are being provided both at LCTC and one day a week at MCTC.
- Social work and Clinical Psychology at MCTC have set up a working party to look at collaborative and efficient service delivery.
- An electronic referral system has been developed in LANTIS, to facilitate Allied Health referrals. This process is being updated and continues to be reviewed and improved.
- Liverpool and Macarthur CTC psycho-social staff obtained the NSW Cancer Institute’s project to co-host the “Clinical Pathway for the Screening and Referral of Cancer Patients for Psycho-social Support Pilot Workshop” in June 2007 which was well attended by representatives from related disciplines.
- The Clinical Psychology Service continues to collaborate with stakeholders across the centre in establishing routine assessment of patients’ quality of life (QoL) and associated needs as an integral part of the centre’s standard clinical practice.
- Macarthur Allied Health has been able to order new equipment and resources to assist in their service development and patient care. Speech Pathology (MCTC) ordered and received equipment to better support patients who have had a laryngectomy, including electrolarynxes and voice prosthesis.
- Resources and clinical support packages continue to be developed and utilised. Some resources currently being developed include:
- A breast cancer poster for post-menopausal women to provide access to information for dietary management post therapy, being created by the LCTC Dietitian, Social Worker, and Breast Cancer Care Co-ordinator.
- A head and neck (H&N) patient education resource, which is a multidisciplinary project involving a range of Allied Health and co-ordinated by the H&N Care Co-ordinator, after identifying there is no resource currently available for this patient population. A working party was successful in securing Cancer Institute funding for a project to produce H&N education resources. A project officer is to be recruited.
- Education resources reviewed / in progress by the LCTC Dietitian eg for patients taking Procarbazine and requiring a Monoamine Oxidase Inhibitator diet, and dietary information and bowel obstructions.

PATIENT FOCUS

- Allied Health continue to provide individual consults, groups, and specialised clinics to service the wide range of patient groups that access cancer services – service provision has been steadily increasing.
- Referrals are made between MCTC and LCTC lymphoedema services to improve access and reduce waiting lists.
- Dietetic and Speech Pathology services for H&N patients are now established at both MCTC and LCTC. LCTC Dietitian and Speech Pathology continue to conduct joint clinics twice weekly for H&N patients.
- Cover of specialist Speech Pathology services (such as voice prosthesis management) is provided between LCTC and MCTC when required.
- Social work involvement in the Macarthur Cancer Community Council has opened lines of communication and input between MCTC and the community.
- LCTC Speech Pathology established a multidisciplinary voice clinic (in conjunction with ENT Department), allowing H&N cancer patients with associated voice disorders access to improved assessment and treatment using nasendoscopy.
- Continuing to build links with transport providers in the Macarthur area improves access and equity for patients.
- Both sites continue to conduct patient and family groups, involving a range of Allied Health disciplines as well as other staff, with evaluation leading to continual improvement. LCTC and MCTC run a number of programs including Health Education Program, Relaxation Program, Dealing with Cancer, Living with Breast Cancer, Carer’s Group, Fatigue Management and various Education Programs; and Lymphoedema, Gynaecological Oncology, Haematology, and Brain Tumour education and support groups. Complementary therapies of reiki and meditation are now available for patients and carers at MCTC.
- MCTC Social Work has been involved in producing a Patient Information DVD that will be provided to all new patients at MCTC. Other allied health staff and staff at both centres were also involved in this production.
- The Gynae-oncology support and education group continues to meet on a monthly basis with increasing attendance. This group provides a safe and supportive environment for women who have been diagnosed with gynaecological cancers to talk with other women who have been through similar experiences and obtain as well as provide peer support. The Clinical Nurse Consultant, Social Worker and Clinical Psychologist for gynae-oncology also attend the group and provide professional support and advice. The group is fortunate to have other health professionals donate their time in order to provide educational talks to members. Guest speakers have included CanTeen, Specialists, Dietician and we have an acupuncturist coming to discuss complementary therapies.
- Clinical Psychology services in gynae-oncology cover both inpatients and outpatients. The Clinical Psychologist position is funded for two and half days per week. Referrals for Clinical Psychology services in this tumour stream have continued to increase. One barrier to service provision has been the scarcity of a suitable space to see patients, one that is quiet and provides confidentiality.
• LCTC Social Worker is providing regular information in-services for nursing staff on the ward and outpatient areas.
• The Occupational Therapy service has been collecting Key Performance Indicators on patients seen within appropriate time frames at LCTC. Other Allied Health are collecting clinical indicators where appropriate.
• The Dietitian assessment template is in use and data being collected to assess patients’ nutritional status at various stages.
• Social Worker has been involved in establishing a project, with Cancer Institute funding, to address cognitive impairment and challenging behaviours amongst brain tumour patients.

PROFESSIONAL STANDARDS
• Policies and protocols have been developed by each Allied Health discipline in accordance with best practice guidelines, and are reviewed regularly.
• LCTC Social Worker provided representation on the End of Life Care Pathway Project, targeting palliative care on general medical and surgical wards.
• Planning stages have begun on the development of a network interest group across SSW Occupational Therapy Cancer Services.
• Occupational Therapy and Physiotherapy at LCTC are in the process of seeking clearance from the Forms Committee for the inclusion of the Australian Lymphoedema Association (ALA) measurement tool as an approved CR. This will allow for comparison across and between lymphoedema centres.

ORGANISATIONAL DEVELOPMENT
• Allied Health staff continue to use LANTIS to book patients and record documentation. As part of a Cancer Services decision in response to a technical issue, changes to this process have occurred, which Allied Health have worked on implementing.
• Allied Health representation at management level, and on various committees, assists communication channels, information sharing and advocacy.
• A number of Allied Health professionals attend various Multi-Disciplinary Team (MDT) meetings. For example, the Social Worker attends Lung and Breast MDT meetings, Speech Pathology and Dietetics are involved in the H&N MDT meetings thereby assisting in patient management.
• The recruitment process for addressing the Physiotherapy vacancy at MCTC has been commenced.
• The LCTC Dietitian position remains a concern for the continuity of service and specialist care, as it is a rotational position, and inadequately funded for the increasing demand for dietetics services. Regrading to a specialist position and increased staffing is recommended. Sources of funding need to be identified.
• Occupational Therapy at MCTC and LCTC are in the process of developing a standard documentation proforma that can be used in LANTIS for all Home Visits.

POPULATION FOCUS
• At LCTC, the Social Worker supervised the Biggest Morning Tea and Daffodil Day national fundraising activities.
• Haematology and CTC were involved in the shave for a cure campaign to raise money for the Leukaemia Foundation.
• Allied Health have been involved in various community groups and events, eg the MCTC Dietitian spoke to the Prostate Cancer Support Group, LCTC Dietitian spoke to the Vietnamese and Mandarin Cancer Support Groups, Occupational Therapy presented on Lymphoedema to Encore and Diabetes support group.
• Preventive information and education is provided to patients as relevant. For example, Physiotherapy providing early introduction shoulder exercises to post mastectomy patients to prevent post-operative stiffness.
• Occupational Therapy attended measurement courses for Lymphoedema.
• The Social Worker has actively participated at a state level being a member of NSWOG (Neuro-Oncology and H&N) at the Cancer Institute.

ACADEMIC FOCUS
• Allied Health have attended outside training and conferences, including national oncology conferences, around various topics including complementary therapies, nutrition and cancer, cancer cachexia, tracheostomy, end of life care planning, psycho-social aspects of oncology and care, lymphoedema, and student supervision.
• Allied Health Staff attend relevant CTC Education Programs and in-services.
• Allied Health attend H&N cancer, breast cancer, brain tumour, haematology, lymphoedema, general oncology, and palliative care related interest/support groups.
• Together with other haematology Social Workers, LCTC Social Work undertook an evidence based review of psychosocial issues around bone marrow transplants.
• The Clinical Psychology service has presented its “A Model of Psycho-social Service for Cancer Patients” and its pilot project on routine psycho-social screening at 2006 COSA Conference, and exchanged experiences and views with other cancer agencies in Victoria and Queensland on models of service and routine psycho-social assessment in cancer care.
• Allied Health has presented at in-services centre-wide and within separate allied health departments, around their service and issues faced by clients and their families. Some topics have included patient education and support programmes and promoting awareness and referrals among staff, communicating with grieving families, stress management, and conflict resolution.
• Allied Health has supported clinical education of students from their own and other disciplines, such as medicine and radiotherapy. Occupational Therapy has had students in both the inpatient and outpatient setting.

LIVERPOOL CANCER THERAPY CENTRE
Clinical Psychologists
Gerald Au
Astrid Przedziecki
Mariad O’Gorman
Occupational Therapist
Megan Jones
Monica Vasquez
Social Worker
Alison Pryor
Teresa Simpson
Terasa Gardner
Kim Brauer
Dietitian
Katherine Pronk
Physiotherapist
Josephine Tamara
Jerric Leav
Speech Pathologist
Katherine Kelly
Candice Baxter

MACARTHUR CANCER THERAPY CENTRE
Dietitian
Rebecca Phillips
Kit Lai
Social Worker
Jenella Cottle
Stuart Minton
Jacinta Humphries
Occupational Therapist
Clare Seidel
Rebecca Tyson
Speech Pathologist
Armalie Davidson
Physiotherapist
Vacant

Standing: Kim Brauer, Terasa Gardner, Megan Jones and Monica Vasquez
Seated: Katherine Pronk, Astrid Przedziecki, Gerald Au and Teresa Simpson

Pictured: Liz Mackay (Social Worker Student at MCTC) and Stuart Minton
Staffing has remained unchanged for the last 12 months. We continue our role in ordering chemotherapy for the Macarthur Cancer Therapy Day Centre and provide a clinical check of all chemotherapy prescribed. Additional services we provide are dispensing medications to the Radiotherapy department, patient counselling, advice on potential drug interactions and chemotherapy billing.

This year we developed some new work practices and procedures that we believe will further enhance safety and efficiency in the department. Pharmacy now holds all active chemotherapy charts until they are needed on the day of treatment, which has reduced the number of missing, misplaced and misfiled charts. Once completed, the charts are then logged back into Pharmacy.

Chemotherapy ordering procedures have also been reviewed and we now order using a newly created @LANTIS report called "Pharmacy Worklist." This is still being developed, but it has the potential to simplify the process and use a lot less paper.

The Pharmacy team has developed a new form for anti-emetic prescribing which has been well received by the Medical Oncologists. It has made it easier to ensure that the prescribed anti-emetics match those in the relevant chemotherapy care-plan and has reduced confusion. Also, several clinical trials have been implemented here at MCTC, which pharmacy continue to support and monitor.

The Cancer Therapy Centre has gone through another staff change with Neil Reynolds resigning in March 2007. Staff now include Vivien Tran, David House and Sugantha Thambadoo. Pharmacy has since seen a few changes to the provision of service. In addition to the usual services, we are providing a more complete pharmaceutical service to patients. Patients are now able to collect their medications (both oral and injectables) from the one pharmacy – CTC pharmacy. From October 2007, all new patients will be scheduled to have an interview with a pharmacist prior to treatment to receive education on their antiemetics.

The future aim is to provide a complete education to patients and their carers and make them aware that pharmacy is available and accessible for patients. We are also currently involved in fourteen clinical trials. We continue to ensure that clinical review occurs for cytotoxic medication orders and the pharmacy maintains its advisory roles for nursing, doctors and patients alike.
NURSING AND CARE COORDINATORS

Liverpool Cancer Therapy Centre

Carol Ryman
Acting Nurse Unit Manager

Over the past year there has been a number of senior staff either being seconded to other departments or going on maternity leave or both. For the rest of us it has created new challenges and presented obstacles which we have strived to overcome. Through improved communications between departments and together with our partners in crime, Grimson Ground East, these challenges have not disrupted our services too much, proving that teamwork and co-operation is the key to success.

Despite these ups and downs many nurses have still managed to gain accreditation with the following: Cannulation and Venepuncture, PICC line and port access/care and chemo delivery. Area Cancer Services now has an intrathecal register in which a number of our nurses are included. We have instigated the 'Treatment Co-ordinator' position in the daycentre which seems to be running smoothly in these early stages. Tania Luxford has instigated a Port/chemo initiative, which will include the training of Emergency Department staff with Portacath care.

- Lenore Knapman has completed her Certificate IV in Workplace Assessment and Training.
- Elizabeth Newman has completed her Masters as a Nurse Practitioner.
- Carol Ryman is undertaking her Certificate IV in Business Management.
- Aura Serrano has completed her Graduate Certificate in Oncological Nursing.
- Danielle Martens has commenced her Graduate Certificate in Oncological Nursing.
- Meghann Lang has commenced further tertiary studies in nursing.
- Joanne Bartley, Kim Kovac, Margaret Wilkes and Carol Doherty have all completed their Endorsed Enrolled Nurse’s course.
- Margaret Wilkes and Sladjana Starcevic are attending university for their Registered Nurse’s degrees.
- Amanda Baldwin is also attending distance education to complete her Registered Nurse’s degree.

With the refurbishment of Grimson Ground East completed, nurses and patients alike were glad to return to familiar territory. Now we just wait for the Apheresis unit to return home. Plans are in the works and this should happen soon. There have been a high number of undergraduate students coming through the unit and staff are working hard to engender a love of oncology and haematology in them.

Karen Robinson joins the ranks of the Care co-ordinators part time and Rosemary Craft joins us as the Gynae oncology Clinical Nurse Consultant. Liverpool is represented by nurses on a number of GMTT and Cancer Institute reference group and committees as well as Area policy committees.
## Staff at Liverpool Cancer Therapy Centre

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<thead>
<tr>
<th>Nurse Consultant</th>
<th>Clinical Nurse Educator</th>
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<tr>
<td>Vacant</td>
<td>Lenore Knapman</td>
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<tr>
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<tr>
<td>Amanda Baldwin</td>
<td>Diane Coller</td>
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<td>Carol Doherty</td>
<td>Rhonda Eke</td>
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<tr>
<td>Yvette Furney</td>
<td>Monica Fowler</td>
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Cath Murray  
Area Clinical Manager  
Cancer Services  
SSWAHS

**Pictured:** Danielle Martens, Amy Wholohan, Amanda Baldwin, Monica Fowler, Carol Ryman, Meghan Lang, Diane Coller and Rhonda Eke

### Care Co-ordinators

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<thead>
<tr>
<th>Breast</th>
<th>Colorectal</th>
<th>Haematology</th>
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<tr>
<td>Anne-Marie Griffin</td>
<td>Sharon Cassar</td>
<td>Patricia Ryan</td>
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<tr>
<th>Genito Urinary</th>
<th>Head &amp; Neck</th>
<th>Lung</th>
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<tr>
<td>Karen Robinson</td>
<td>Luci Dell’Armi</td>
<td>Doris Dadic</td>
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### Grimston Ground East Staff at Liverpool Hospital

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<tr>
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<tr>
<td>Karen Baker</td>
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<td>Sally Carey</td>
<td>Melissa Gil</td>
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<tr>
<td>Gail Fainnham</td>
<td>Sara jahi-Mohamed</td>
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<td>June McCleachern</td>
<td>Vanessa Sammut</td>
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<td>May Valdez</td>
<td>Meghan Sandoz</td>
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<td>Joanne Bartley</td>
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<td>Kim Doherty</td>
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<td>Nardy Lucero</td>
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<tr>
<td>Audrey Ahern</td>
<td>Kim Kovac</td>
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<tr>
<td>Viet Nguyen</td>
<td>Nardy Lucero</td>
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| Ward Clerk | |
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Macarthur Cancer Therapy Centre

The past year has been a time of further change and development within our nursing team. Our staffing levels have fluctuated periodically due to pregnancies and deliveries, staff transfers and resignations.
Achievements:
- Macarthur Cancer Therapy Centre nursing staff has provided ongoing support and input into the development and review of LANTIS care plans, assessment/toxicity fields, treatment scheduling, patient bookings, LANTIS generated Chemotherapy Charts and upgrades to the LANTIS system. The nursing staff has been trialling an electronic system for receiving and taking patient treatment bookings, this new system will eliminate the need for paper request forms. A LANTIS education package has been developed and implemented for nursing staff.
- A Vascular Access Device training program has been implemented within Emergency Department and various ward areas of Campbelltown Hospital. This has facilitated Emergency Department and ward staff being trained and accredited in the management of Vascular Access Devices, therefore providing the best quality care to cancer patients who have such devices.
- Patient Information Sheets have been developed and implemented by the nursing staff to provide standardised information to patients and carers in regards to the treatment they are receiving.
- A number of new policies and procedures have been developed and implemented. Monthly quality audits are completed and reviewed.
- Further development of the role of the nurse in clinic has resulted in both a medical and nursing continuum of care to achieve the best quality of care for the patient and their carers.
- Twice weekly nursing in-services have been conducted with presentations from the medical, nursing, allied health, community and pharmaceutical companies.
- Annual chemotherapy re-accreditation has commenced, this quality activity will ensure that the nursing staff who administer cytotoxic agents are aware of and are practicing current up to date best practice and also have demonstrated documented competency.
- Education packages/manuals have been developed and implemented for: Central Venous Access Device Accreditation, Implantable Venous Access Device Accreditation.
- The MCTC Nursing Orientation Manual has been reviewed and updated.
- A two day ‘Cancer Care for the Non Specialist’ education program was conducted in February 2007 and was attended by 17 staff from Western Zone Area.
- Kelly Bourke attended a five day Breast Care Nurse Practicum conducted by the College of Nursing.
- Karl Jobburn our Clinical Nurse Educator has commenced his Masters of Nursing with a sub-major in cancer nursing and a major in advanced nursing practice.
- Mary Causer successfully completed the Medication and Administration Course for Enrolled Nurses.
Pictured: Karl Jobburn, Kelly Bourke, Denise Burns, Jennifer Mitchell, Chong Noi Peacock, and Diana Aston

Jennifer Mitchell (part-time)
Chong Noi Peacock
Melanie Poyntz
Jodie Stewart (part-time)
MULTIDISCIPLINARY CARE

The services within the Cancer Therapy Centre have also been integral to the development of multidisciplinary care for most cancers presenting within the area. Most clinicians involved with the various tumour sites have developed multidisciplinary teams and treatment protocols to better standardise care and to allow a forum for discussion and debate about the latest innovations in cancer care. Each multidisciplinary group has been successful in achieving most of their aims and present short summaries below of their major achievements to date. Plans are already in place to improve most services and integrate our multi-disciplinary model with the plans of the NSW Cancer Institute.

**Breast Cancer**

Anne-Marie Griffin
Breast Cancer Care Co-ordinator

Breast cancer remains the most common cancer in women. Over the past 10 years our department has managed approximately 2,500 new cases of breast cancer. Our centre provides consultative services at Liverpool, Fairfield, Bankstown, Campbelltown and Bowral. Our multidisciplinary team meetings provide video-links between Liverpool and Macarthur Cancer Therapy Centres.

We are active in recruiting patients to clinical trials, both national and international, exploring the role of new drugs as well as different surgical and radiotherapy techniques. We are currently in the process of analysing the large database of patients treated in our centre. Our plan is to record this valuable information into an electronic format that will allow outcomes to be measured and foster ongoing research within the centre. This initiative will also allow us to perform quality control audits, which in turn, will allow us to better document the high standard of care that our patients deserve.

All newly diagnosed breast cancer patients have access to a Nurse Care Coordinator who provides coordination of care over the continuum of the cancer journey. Support programs available for patients include the ‘Living with Breast Cancer Education Program’ and ‘After Breast Cancer Treatment’. We have also developed a poster and take home brochure designed to inform patients of lifestyle recommendations and changes.

**Colorectal Cancer**

Dr Andrew Kneebone
Radiation Oncologist

The South Western Sydney (SWS) Colorectal Tumour group continues to progress though there are always ongoing challenges. The cornerstone of its success continues to be a prospective
database of all colorectal patients operated in Sydney South West Hospitals from 1997 onwards. More than 2,500 patients are registered onto the database documenting excellent outcomes for SWS patients compared to national averages. Outcome data has recently been updated and reports are planned for the 1997-2005 cohort of patients. The database is now managed by the new area registry though the resources of the new registry are very stretched. A lot of work is being performed to enable this to be a totally electronic system linking all existing area databases and electronic submission of data by surgeons.

High quality research is now being produced from this database with multiple publications looking at overall outcomes, the impact of emergency versus elective surgery, radiotherapy and chemotherapy utilisation and other factors impacting on outcome such as radial margins, ethnicity, surgeon experience and female menopause. With mature data now available, plans are underway to utilise the colorectal tumour bank in which fresh specimens from nearly 400 patients are collected.

The group has the services of a colorectal care co-ordinator and holds regular fortnightly multidisciplinary meetings at Liverpool Hospital. Since the formation of the new area health service, there has been excellent good will and collaboration with the colorectal units at Concord and Royal Prince Alfred Hospitals. The Western Zone is receiving due recognition for its experience in advanced surgical techniques such as laparoscopic colorectal surgery and Trans Endoscopic Micro Surgery (TEMS).

Significant challenges however still exist including the lack of stomal therapy resources in the Western Zone, the lack of funding for a colorectal surgical unit including a surgical fellow and no genetic counselling services for high risk colorectal families though funding for this has recently been obtained. Further work also needs to be performed in developing site specific protocols and promoting educational colorectal programmes.

**Gastro-intestinal Cancer**

There are both upper and lower gastro-intestinal tumour groups, both with regular multi-disciplinary meetings to discuss patient care. Upper gastro-intestinal meetings are held every Monday. Members are surgeons, surgical teams, oncologists, radiologists, nuclear medicine, pathology, gastroenterologist and surgical dietitian.

**Haematological Malignancies**

Multi-disciplinary care is an integral part of treatment planning in Haematology. The Haematology tumour group is lead by Dr David Rosenfeld, and Patricia Ryan is instrumental in streamlining care planning and documentation, and patient education since she joined the group in the role of Care Coordinator. The group holds a weekly meeting at Liverpool Hospital to discuss patient care and treatment planning for patients from across SSWAHS WZ. The group comprises of Haematologists, Radiation Oncologists, Nuclear Medicine, Radiologist, Registrars, social worker and specialist nursing staff.
The aim of the Haematology Tumour group is to provide a comprehensive service for people diagnosed with a haematological malignancy. The team endeavours not only to provide patients of the area with timely diagnosis, treatment and ongoing management, but also to deliver psychosocial assessment and support. Tom Lawson as our Data Manager is working tirelessly to facilitate our activity in clinical trails.

A haematology patient education group continues to be run monthly, thanks to our social worker Terasa Gardner. This year we have seen four of our staff specialists and our Clinical Nurse Consultant move on to other challenges; we are ever hopeful that these positions will be filled as quickly as possible.

Outside of the department, there is strong representation by various clinicians on state and national initiatives including the Cancer Institute Bone Marrow Transplant (BMT) and Haematology reference groups, NSWOG Haematology group, the Cancer Institute Patient Education working party and BMT Network committees and working parties. We have established area BMT meetings video-linked monthly with Royal Prince Alfred and Concord Hospitals and are working towards joint protocols and care pathways.

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**Head and Neck Cancer**

Dr Allan Fowler  
Radiation Oncologist

The Head and Neck Tumour Program underwent further development in 2006/2007. Multidisciplinary clinical meetings are now held weekly, and multidisciplinary discussion meetings held fortnightly. Patients referred to the clinic can be seen by a surgical oncologist, radiation oncologist, oral medicine specialist, care coordinator, speech pathologist and dietician at the initial visit. This team approach ensures that the patients are given appropriate options for treatment and also minimises waiting times. During the year visiting surgical fellows from the United Kingdom and Ireland have also participated in the multidisciplinary meetings. Rehabilitation following treatment has received greater emphasis.

Major challenges for the Head and Neck group are the continuing need to modernise treatment techniques, particularly with the delivery of radiotherapy. Intensity modulation radiotherapy is a more sophisticated means of delivering radiation and has been shown to have better outcomes with reduced side effects. IMRT is fast becoming a standard of care for head and neck cancer internationally and within Australia but is not yet available in Liverpool or Campbelltown.

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**Lung Cancer**

Doris Dadic  
Care Co-ordinator

The multidisciplinary lung cancer group meet weekly with video-conferencing between Liverpool and Campbelltown Hospitals. The group consists of respiratory physicians, cardiothoracic surgeons, radiation and medical oncologists, palliative care physicians, radiologists, nuclear medicine physicians, registrars, allied health care workers and the care coordinator.
Services for lung cancer patients include the introduction of image co-registration of PET and CT imaging, cardiothoracic surgery, respiratory medicine, radiotherapy (including endobronchial brachytherapy), chemotherapy, allied health and palliative care.

The group is active in lung cancer research and education, with the radiation and medical oncologists enrolling a large number of patients into clinical trials that test new drugs and radiotherapy treatments. Regarding education, the General Practitioner seminars in lung cancer and patient education and support sessions continue to be run regularly to ensure optimal care of patients with lung cancer and their carers.

Neuro-Oncology Multi Disciplinary Team

The Western Zone Neuro-Oncology Multi Disciplinary Team (MDT) continues to meet fortnightly with contributions from Pathologist Alar Enno and Radiologist Ramesh at each meeting starting from July. Teresa Simpson has taken up the role of coordinating the MDT to fill the gap created by the departure of Dr Karen Wong (Radiation Oncology Fellow). It is with regret that the MDT lost its Tumour Stream leader, Dr Hovey, who resigned from Liverpool Hospital. At the same time, the MDT welcomes its newest member, Dr Eng-Siew Koh (Radiation Oncologist). Professor Michael Barton and Dr Elizabeth Hovey have been successful in receiving funding from the Cancer Institute for a one year pilot project of a Care Coordinator. The position is currently being recruited.

The Brain Tumour support group continues to run on a monthly basis and is trialling new topics such as “Tai Chi and Relaxation”. Attendance during the winter months is low but the social night with pizza remains highly popular. The Brain Tumour group is planning an outing to the Blue Mountains in the coming October. The group is also planning to do a half hour walk to participate in the Walk Around the World for International Brain Tumour Week.

Members of the MDT continue to participate actively in Neuro-Oncology NSWOG at the Cancer Institute, chaired by Professor Michael Barton. The development of National Brain Tumour guidelines is making steady progress under the leadership of Professor Barton and Dr Hovey, and an initial draft has almost been completed. It is hoped that the guidelines will be ready for publication sometime in 2008. The Behaviour Consultancy Project managed by Kylie Wright (Neurosurgical CNC) and Teresa Simpson (Senior Oncology Social Worker) has commenced – ethics approval has been received, staff recruitment is almost completed, and initial data collection has commenced.

Urology Oncology Program

The Urology Oncology Program South West Sydney covers prostate, bladder, renal and testicular cancers and has a dedicated multidisciplinary group working to improve patient
outcomes. The team leader is Dr Lawrie Hayden. We welcomed a new addition to the team, Karen Robinson who has taken up the position of Genito Urinary care coordinator.

Our core Genito Urinary members are:

**UROLOGISTS**
- Dr Paul Gassner
- Dr Lawrie Hayden
- Dr David Jefferson
- Dr Nestor Lalak
- Dr James Wong

**RADIATION ONCOLOGISTS**
- Associate Professor Martin Berry
- Dr Andrew Kneebone

**CLINICAL PSYCHOLOGIST**
- Astrid Przedziecki

**MEDICAL ONCOLOGISTS**
- Dr Di Adams
- Dr Eugene Moylan

**CARE COORDINATOR**
- Karen Robinson

**PROJECT MANAGER**
- Kate Tynan

Some notable achievements this year were:

- The fortnightly multidisciplinary meeting which is well attended by specialists, trainees and students. The vast majority of cases have cancer of the prostate and these numbers are predicted to continue rapid growth. The management of prostate cancer patients will be one of the biggest challenges to our Genito Urinary cancer service in the coming years. A breakdown of the major cancers tabled at the Genito Urinary multidisciplinary meeting is given below:
  - 228 prostate cancers
  - 55 bladder cancers
  - 26 kidney cancers

- Continued development of the Genito Urinary radiotherapy cancer service. With the recruitment of a clinical psychologist and our care coordinator we have been able to commence work on a package of material for patients undergoing radiotherapy for prostate cancer. This will outline what they can expect at each point in their treatment, what information they should receive and who they can call if any problems arise. We are also planning a post treatment structured support program so patients have access to information and advice about possible early and late side effects.

  A Pattern of Care study in NSW has shown that 75% of patients under 65 have unmet need. The greatest gaps are in the domains of psychosocial support and sexual function. We aim to incorporate these research findings into ways of improving our routine practice.

- A report on “Outcome of conformal radiotherapy program for prostate cancer in South Western Sydney” by Dr Andrew Kneebone was undertaken to evaluate the safety of radiotherapy with a view to increasing the radiation dose and thereby improving rates of disease control. We are developing a patient version of this report to assist men in their treatment decisions for prostate cancer. From the data we are able to demonstrate the possible risk and severity of side effects and also how effective external beam radiotherapy can be for curative treatment.

- Continued development of the ‘fiducial marker’ program. A team of dedicated radiation therapists and radiation oncologists meet fortnightly to improve treatment for our prostate cancer patients through implementing new technology and process improvement. A treatment issue for prostate cancer radiotherapy is that the prostate is not a fixed structure and can move from day to day. The fiducial marker program involves placing three gold seeds into the prostate so that at each treatment the radiation therapists can easily visualise the prostate
and adjust the fields as necessary. This minimises radiation to adjacent organs such as the bladder and bowel to reduce side effects.

- We will be working with the Prostate Cancer Foundation Australia to develop and pilot evidence-based media resources to assist support groups and encourage a uniform syllabus appropriate to the patients various treatment stages. There is tremendous scope for e-learning and it has the potential to reach many more patients than traditional meetings. The pilot will be held between Concord and Liverpool to assess patient acceptability.

- Telephone follow-up for prostate cancer patients. Patients who have been treated in the centre are most commonly followed up for five years with regular PSA blood tests and specialist doctors appointments. Commencing in early 2006 patients were offered the choice of a ‘face to face’ consultation or a telephone consultation for follow-up. We now have more than 12 months experience and telephone follow-up has proven to be very popular saving patients a trip and the associated waiting time to visit the centre. A further modification has been to introduce the GU care coordinator to take over routine and uncomplicated follow-up and this is also proving to be well received by our patients.

- As the chair of the Education committee of the Urological Oncology Program (UOP) NSW Dr Andrew Kneebone has been very active in organising the highly successful Master Classes held in June 2007. This was attended by more than 190 clinicians from medical radiation oncology and urology both specialists and trainees. There were three international speakers and the focus was on current best practice in the treatment of prostate cancer. Associate Professor Martin Berry is the Deputy Chair of UOP and with the Executive is committed to providing a multidisciplinary rolling educational program to keep pace with developments in GU oncology.

FUNDRAISING AND DONATIONS

Fundraising and donations fill funding needs not supported by government grants and insurance reimbursement. The following are a few examples of how this support has helped:

- Research (Clinical Trial) Fund – support ongoing research into prevention, detection, treatment and supportive care for patients with cancer.
- Education Fund – sponsoring cancer staff to attend specialised training; funding cancer-training courses offered at Liverpool.
- Patient Care Fund – purchase of equipment and resources for patient and visitors comfort on the ward and CTC.

These organisations and people have generously donated to the Liverpool Cancer Therapy Centre:

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<th>Clinical Trials Donations</th>
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<tr>
<td>A &amp; R Bergamin</td>
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<tr>
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<td>Alphapharm Pty Limited</td>
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Novartis Pharmaceuticals Aust Pty Ltd

Patient Care Trust Fund Donations

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<td>Gloria Anderson</td>
<td>John &amp; Anetta Manduci</td>
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<td>E &amp; R Basso</td>
<td>Jean Mantle</td>
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<td>Frank Bergamin</td>
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<td>Cabra-Vale Ex-Active Servicemen’s Club Ltd</td>
<td>Ernest, Lina &amp; Dennis Mazzotti</td>
<td>Mabel &amp; Diana Santola</td>
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<td>John Carrao</td>
<td>Vicky McCarthy</td>
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<td>Kristine Czyrkowski</td>
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<td>Enid Earnell</td>
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<td>Orfiew &amp; Gerda Pellizon</td>
<td>Gabriel Zamprogno</td>
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7 Week Fatigue Management Programme

Laura Virginia Hatcher

These organisations and people have generously donated to the Macarthur Cancer Therapy Centre:

- Don & Elaine Aikman
- Beatrice Attwell
- G & A Bakkers
- Thelma Betts
- Maureen Booker
- Camden Golf Club
- M & N Carter
- Greg & Leonie Chew
- Linda Chew
- Ann Maree Cooke
- Country Women’s Assoc Ingleburn
- Lynn Crow
- Mary Dale
- Stephen Della-Fiorentina
- Veronica Duff
- Joanne Freeman
- Tracey Freeman
- Keith Glover
- Barbara Gough
- Leisa Henderson
- Nicole Jackson
- A Jones
- Macarthur Cancer Support Group
- Suzanne Marks
- Jean Mills
- Helen O’Toole
- David Paterson
- Pamela Randall
- Amy Rogers
- Trevor Simpson
- Geoff Thomas
- Brian & Janet White
- Arthur Wilson
- University of Newcastle
- Zonta

Volunteers

Teresa Simpson
Senior Oncology Social Worker

Liverpool Cancer Therapy Centre Volunteers Service

Liverpool Cancer Therapy Centre (CTC) has a team of dedicated volunteers. The volunteers are multi-talented and play a broad range of roles at the Cancer Therapy Centre. Tasks include supporting the patients and their families, providing tea and coffee, assisting with administrative tasks (such as helping make up new patient’s files), contributing to the general amenities to ensure the CTC remains a pleasant and homely environment (for example, by watering the plants and supplying magazines).

The volunteers play an important role in health promotion and fund raising for both the Cancer Council of NSW and the CTC. They host the CTC Patient Christmas morning tea, cooking all the cakes and biscuits. They participate in major public fundraising activities each year including the Biggest Morning Tea and Daffodil Day. As a result of their support, the Liverpool CTC is
consistently on the Cancer Council VIP list as one of the top fundraising centres across Western Sydney for Daffodil Day.

The volunteers have been with CTC for a number of years and have become an important part of the CTC ‘family’. They feel they are being appreciated and have found their work rewarding. Together, the CTC staff and volunteers work as a team offering a holistic service to patients and their significant others.

The Volunteers were presented with appreciation certificates at the Annual General Meeting 15 September 2006 by Teresa Anderson (General Manager) and Associate Professor Martin Berry, Director of Liverpool Cancer Therapy Centre

Carol Keogh Dutch Day Barbara Wright Vicky McCarthy Elizabeth Lowe Fawezia Daahd

Volunteers Liverpool Cancer Therapy Centre
Joan Blunt Fawezia Daahd Enid (Dutch) Day Carol Keogh Elizabeth Lowe

Volunteers Macarthur Cancer Therapy Centre
Beatrice Attwell Elvira Bertolissio Catherine Bourke Kathleen Forshaw

Keith Glover Dorothy Kwasniak Kerry Lowe Denise McCartney

The Wig Library

The Wig Library is a service that helps to retain patient self-esteem and relies on donations to maintain the service. This is one of the most appreciated services provided to chemotherapy patients who lose their hair as a result of their treatment. They are available to shave heads, keep the patients informed of what will happen and give advice. The volunteers see around 500

Wig Library

Fiona Gould Robyn Cavan
patients a year, matching them to wigs and ensuring there is a variety of quality wigs available.

**Look Good Feel Better**

Joanne Meehan  
NSW Manager, Look Good...Feel Better

The *Look Good...Feel Better* workshops are brought to the patients by the Cosmetic industry of Australia (*see fact sheet below*).

2005, 2006 Liverpool hospital had 12 workshops, a total of 175 patients were registered and 124 patients attended (*an average of 10 patients per workshop*).

In 2007, so far four workshops have been conducted and another two will be held before the end of the year. 64 patients were registered in 2007 and 58 attended (*an average of 14 patients per workshop*). To date 2005, 2006 and 2007, only 57 patients failed to attend the workshops for various reasons.

### Volunteers from Within Cosmetic and Hairdressing Industry

| Kim Cawthorne | Lyn Evans |
| Lyn Evans | Joanne Meehan, NSW Manager |
| Sandie Foreman | Sharon Kenny |
| Lyn Georgeson | Norah Raslan |
| Merrilyn Usher | Jan Wright |

**LOOK GOOD FEEL BETTER FACT SHEET**

Look Good...Feel Better workshops are held in comprehensive cancer centres, hospitals, Australian Cancer Council regional offices and other community settings.

All volunteers for Look Good...Feel Better are trained and certified prior to their participation in the workshops. Currently over 1500 volunteers assist the program.

Look Good...Feel Better workshops are expected to assist over 7,500 patients this year. Over 55,000 cancer patients have been through the program since its inception.

“Most of all I loved thinking that despite cancer, with or without makeup, I am still beautiful and still me, there is more to cancer than the treatment. Keep up the good work,” says workshop attendee Shanti.

The program is available in every state and in over 150 workshop locations. The cosmetic industry donates over 95,000 units of cosmetic products valued at around two million dollars to Look Good...Feel Better every year.

Look Good...Feel Better also conducts a special version of the women’s program for teenagers and men.

Look Good...Feel Better is also available in the USA, Canada, the UK, New Zealand, France, The Netherlands, Denmark, Argentina, Norway, Switzerland, Singapore, Ireland, Israel, Germany, South Africa and Sweden.
EDUCATION INITIATIVES

Alison Pryor
Senior Social Worker, Education Committee Chair

Educational activities at Liverpool and Macarthur Cancer Service have continued through the year for patients, carers, health staff and students.

Some of the highlights have been:
- 20-25 Multi-Disciplinary Team meeting sessions
- 18-20 staff in-service education sessions
- 6-8 patient and carer education or support group sessions

A major upgrade of the video conference facilities, with a much improved quality of picture and sound, now allows a greater number of cancer staff at both sites to participate in educational presentations and meetings.

There is a high consistency of Liverpool and Macarthur Multi-Disciplinary Team (MDT) meetings. The meetings involve doctors, care coordinators and allied health staff who specialise in particular tumour sites which make recommendations on the optimal cancer treatment plans. These meetings also serve as an informal education for the cancer staff to ensure treatments offered are up-to-date, based on good medical evidence, and take into account patient individual circumstances.

Regular calendar of staff in-service education – this includes a weekly oncology education session open to all cancer service staff, a weekly radiation staff in-service program and nursing in-service for haematology/oncology ward and Liverpool and Macarthur Cancer Therapy nurses.

In reviewing the cancer education calendar for the past 12 months, in any one month there were several staff successful in obtaining NSW Cancer Institute Grants to undertake postgraduate education or attend a cancer related cancer conference. A full year of new University of NSW medical student clinical education programs that have students observing in the cancer service around the theme of “Ageing and Endings”. In medical student education it is exciting to see the establishment of the University of Western Sydney Medical School at Campbelltown and the first intake of students – a number of cancer staff from Campbelltown are involved.

Liverpool and Macarthur Cancer Service continue to have a collaborative partnership with major cancer charities such as the NSW Cancer Council, the Leukaemia Foundation and the Prostate Cancer Foundation. Participating in state fundraising events such as Leukaemia Foundation’s ‘Cure for Shave’ or Cancer Council Biggest Morning Tea or Daffodil Day. The staff from the Cancer Service participate in the Western Sydney Regional Advisory Committee of the Cancer Council.

In terms of patient education:
- Macarthur Cancer Centre has produced an excellent DVD for patients about having cancer treatment. It is given to patients prior to starting their treatments and it is
reassuring information about what the experience is going to be like. Copies can be obtained from Macarthur CTC.

- Both cancer centres endeavour to ensure patients can access high quality information about cancer, about treatment and support by consultation with staff, in written or audiovisual materials and through group programs with other patients. The support and education groups for patients and carers continue to develop each year.
- The long term monthly education and support groups continue for people with the following cancers or conditions: Gynaecological cancer, Haematology, Prostate cancer, Brain tumour, Laryngectomy and Lymphoedema.
- Short term groups or education days have been held – in Breast cancer, Lung cancer and a relaxation group.
- Carers support day was run for the first time this year that we hope to look at again in 2008.
- Understanding Cancer programs have been conducted for patient whose main language is Mandarin and Italian – with assistance from the Cancer Council and SSWAHS multicultural health.
- Patient programs and education focusing on ‘survivorship’ or after treatment finishes have also been developed. New patient education materials and a short term group ‘After Breast Cancer’ was developed looking at education and support once women with Breast Cancer have finished their main treatments.
- The fatigue management and cancer rehabilitation program was also run again using the hospital gymnasium.
**ACHIEVEMENTS**

**JOURNALS/SCIENTIFIC PAPERS**


Barton M, Frommer M S, Shafiq J. *The role of radiotherapy in cancer control in low and middle income countries*. Lancet Oncology 2006;7:584-95


Barton M, Thode R. A distance learning course in the Applied Sciences of Oncology CD – ongoing. *International Atomic Energy Agency (IAEA)*


**BOOK CHAPTERS**

Delaney G P, French B. Decision making in lung cancer. In: Syrigos K N, Nutting C M, Roussos C. Tumours of the Chest; Biology, Diagnosis and
CONFERENCE PROCEEDINGS


INVIITED LECTURES

Barton M. Distance Learning Course of the IAEA for radiation oncologists. Workshop on Human Resources Development in Radiation Oncology in Griffiths S, Stanley S, Roberts N, Delaney G P. The effect of auto set-up and treatment room doors radiotherapy fraction time. Radiotherapy in Practice
the context of cancer control programs. 4-12-2006, Bangkok

Barton M. How do we measure the quality of cancer care? Sydney Cancer Centre 10th Anniversary Symposium. 2006. Sydney

Barton M. Radiotherapy in low and middle income countries. Royal Australian and New Zealand College of Radiologists (RANZCR). 15-11-2006. Singapore


Barton M. Scientific basis of clinical trials in oncology. Workshop on Human Resources Development in Radiation Oncology in the context of cancer control programs. 4-12-2006. Bangkok


Delaney G P. The impact that new technology has had on radiotherapy treatment throughput. Canadian Association of Radiation Oncologists (CARO). 13-9-2006. Calgary

LETTERS

Barton M, Frommer M S, Shafiq J. Radiotherapy might not be the answer in Africa – Author’s reply. Lancet Oncology 7(9), 705-706. 1-9-2006


REPORTS

Lonergan D. Barton M. A curriculum in oncology for medical students in Africa. 1-9-2006

Barton M B. Review of potential numbers of cases for proposed radiotherapy centre at Macquarie University. For Dalcross Private Hospital, Killara. March 2007

AWARDS


Barton M B. Order of Australia Medal (OAM) in the Queen’s Birthday Honours List
Estall V. Kaye Scott Medal – Best Registrar 2006

Sidhom M. Varian Prize – Best Registrar Research 2006

UNIVERSITY DEGREES


Ng W. Enrolled in PhD in Public Health, UNSW

Wong K. MD – Optimal fractionation patterns in radiotherapy


Gabriel S G. Enrolled in PhD – Factors affecting radiotherapy utilisation for rectal cancer - UNSW

GRANTS