SOuRCe
Triennial Report 2010 – 2012
Celebrating 10 years of SOuRCe
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I am pleased to present to you this Triennial Report covering 2010-2012. This report also celebrates a significant milestone with the Surgical Outcomes Research Centre (SOuRCe) celebrating 10 years of operation. Our mission in 2012 remains unchanged from when we formed in 2002 where we continue to operate as a multi-disciplinary academic research unit dedicated to the advancement of evidence-based surgical practice through the conduct of outcomes orientated research. SOuRCe’s research agenda is diverse with our research themes covering surgical effectiveness, health services research, health outcomes and quality of life, evidence-based practice and methodological studies. Details of our research program over the last three years can be found within the Report as well as on our website www.source.org.au.

SOuRCe is a conjoint unit of the Sydney Local Health District and the University of Sydney. Our location at Royal Prince Alfred Hospital ideally places us to make collaborative and multi-disciplinary research a reality. This approach to research is reflected by the backgrounds of our Directors whose specialities cover surgery, epidemiology, medical psychology and health economics. In addition to their continued and active participation in SOuRCe, each Director has made significant achievements in their academic careers since our last annual report which warrant mention and congratulations. For example, Professor Jane Young became the inaugural Cancer Institute NSW Chair in Cancer Epidemiology where she now also leads a dedicated group of cancer epidemiologists at the University of Sydney whilst Prof Phyllis Butow was awarded the Tom Reeve Oration for Outstanding Contribution to cancer by COSA in 2011 and the 2012 Premier’s Award for Outstanding Cancer Researcher. Prof Glenn Salkeld continued in his role as Head of School at the Sydney School of Public Health and a chief investigator of the highly successful NHMRC funded Screening Diagnostic Test Evaluation Program (STEP). The greatest satisfaction as Head of SOuRCe has been to witness the academic careers of Professors Young, Butow and Salkeld flourish in the last 10 years while remaining integral to SOuRCe and our research program. A young, academic surgeon, Charbel Sandroussi has joined the Directors to enhance the value of surgical research at SOuRCe and SOuRCe will include a variety of young academic surgeons from diverse specialities to lead academic evidence-based research over the next decade.

During 2009-2012 we have made considerable progress with our research agenda. We have successfully completed two of our largest programs of work-to-date. The CONNECT Program, funded by a Health Services Research Grant from the Cancer Institute NSW, has included the development and validation of a patient and medical record audit tool to measure cancer patients’ experience of care coordination. The centre piece however of this Program was the evaluation of the CONNECT intervention, which is a nurse-delivered telephone intervention that aims to improve post-operative care for people with cancer. CONNECT has been evaluated in a randomised controlled trial managed from SOuRCe which involved over 750 people with cancer across 23 public and private hospitals across metropolitan and regional centres in NSW. The results of this trial will soon be available. The CONNECT Program has also led to new and exciting directions for SOuRCe which have been funded by the Cancer Institute NSW and NHMRC. This includes work to translate the CONNECT intervention into practice, a state-wide population based assessment of patients’ experiences of cancer care coordination and the adaption of the CONNECT telephone intervention to assist the care-givers of people with upper gastrointestinal cancer. Research to improve the outcomes of care-givers now has a dedicated team within SOuRCe.
Our second major program grant has been the completion of a surgical trial of pelvic exenteration for people with recurrent rectal cancer in collaboration with surgeons at the Peter MacCallum Cancer Centre in Melbourne. This Cancer Australia funded study is one of the first and by far the largest in the world to compare the quality of life trajectories of people who proceed to surgery with those that do not. As with all of our major programs a number of subsequent studies have evolved. These studies are investigating quality of life, nutrition, plastic surgery, urological and orthopaedic aspects of pelvic exenteration, and include supervision of local and international medical students, residents and fellows giving them the opportunity to offer their first research manuscripts for peer-reviewed publication.

SOuRCe has continued to work collaboratively on research projects with a variety of surgical disciplines, including vascular, head and neck, upper gastrointestinal, transplant, neurosurgery, gynaecology and obstetrics, in addition to those mentioned above.

On the subject of students, the Directors and staff at SOuRCe have continued their leadership of the Masters of Surgery Program at the University of Sydney. This is in addition to supervising and mentoring undergraduate and postgraduate students completing higher degrees or honours projects. To date we have supervised 13 PhD, 37 Masters and 16 Honours students whereby we hope to train future generations of clinical, public health and health services researchers. SOuRCe continues to offer its broad based and multi-disciplinary expertise to surgeons of all disciplines in retrospective and prospective research methodology while researching up to date and novel methods of evidence based surgical research.

Also at this time I would like to make a special note of thanks to James Harrison, our Deputy Executive Director, who joined us as a Research Officer in 2003 and through his work at SOuRCe was awarded his PhD in 2010 and his research reputation has flourished during his time at SOuRCe. He now moves to take up a position at the University of California San Francisco and I would like to thank him for all his dedication and commitment to SOuRCe and wish him all the best.

I would also like to welcome Heather Shepherd as Deputy Executive Director and look forward to the fresh influence and direction she will bring to SOuRCe for the next decade, with the expansion of SOuRCe into Lifehouse at Royal Prince Alfred Hospital as a satellite “SOuRCe/Cancer” and our strong collaborations with Cancer Epidemiology and Services Research (CESR) and Psycho-Oncology Cooperative Research Group (PoCoG). This combined with the redirection of federal budgets to support research within DRG funding clinical practice and at a time when the Wills Report in New South Wales dictates the enhancement of clinical research will suggest an interesting and potentially successful decade.

I would also like to take this opportunity to thank all of our stakeholders within the SLHD and University of Sydney who continue to support our research agenda, our interested and enthusiastic collaborators and also our hard working staff. I look forward to working with you all in 2013 and beyond.

Michael Solomon
Head of SOuRCe

Jane Young
Executive Director
AIMS AND OBJECTIVES

SOuRCe promotes evidence-based clinical practice and patient choice by:

- working with professional surgical and community organisations to improve clinical practice and patient outcomes
- promoting and performing clinical trials of surgical operations and diagnostic tests related to surgery
- measuring patient outcomes, including quality of life, following surgery
- conducting methodological research into randomised and non-randomised study designs to evaluate surgical procedures
- conducting economic evaluation of surgical procedures
- developing methodology for measuring patient choice
- undertaking evaluation of cancer screening programs
- providing assistance and expert advice to surgical groups on trial design, economic evaluation and health outcome (quality of life) analysis
- providing education and training for surgeons in clinical trial and evaluation methodology
GOAL

The primary goal of SOuRCe is to promote an evidence-based approach to improving clinical practice and achieving the best possible outcomes for patients.

Health Outcomes & Quality of Life Assessment
- Measure patient outcomes, including quality of life.
- Develop and test new methodology pertaining to surgery.

Evaluation of Surgical Effectiveness
- Perform and support clinical trials in surgery. Generate evidence for the effectiveness of surgical procedures.
- Review and appraise existing evidence for the effectiveness of surgical procedures.

Health Services Research
- Develop and test methods to value patient outcomes.
- Describe patterns of service utilisation.
- Evaluate the cost effectiveness of surgical procedures.

Education & Training for Surgeons
- Research methods, EBM, economics and outcome analysis.

Implementation of Evidence-based Practice
- Describe patterns of evidence-based practice.
- Investigate appropriateness.
- Develop and evaluate interventions to promote EBM.

Evidence-based Decision-making
- Measure patients’ treatment preferences.
- Develop and evaluate decision aids.

Celebrating 10 years of SOuRCe
PROF MICHAEL SOLOMON
MBBCh BAO MSc FRACS FRCSI(Hons)
Director and Head

Professor Michael Solomon is a consultant surgeon and Academic Head of the Department of Colorectal Surgery at the Royal Prince Alfred in Sydney. He is a Clinical Professor of Surgery and Director of Colorectal Research, both for Royal Prince Alfred Hospital and the University of Sydney and is a past the President of the Colorectal Surgical Society of Australia & New Zealand (CSSANZ). He is the immediate past Chairman of the Post-FRACS Training Board in Colorectal Surgery of RACS & CSSANZ of which he has remained a member for 16 years. He has been on the editorial board of Diseases of the Colon and Rectum, Colorectal Disease & International Journal of Colorectal Diseases for the past decade.

Professor Solomon has extensive experience in clinical surgical research and has published over 180 papers and obtained over 9 million dollars in peer reviewed research grants. He is the Founding Director and Head of the Surgical Outcomes Research Centre (SOuRCe) at the University of Sydney which was established as a multi-disciplinary, academic research unit dedicated to the advancement of evidence-based surgical practice through the conduct of outcomes-orientated surgical research. Professor Solomon’s surgical expertise is in multi-disciplined complex pelvic surgery for advanced and recurrent malignancy, inflammatory bowel disease and pelvic floor disorders as well as laparoscopic colorectal surgery. His current research interests lie in developing maximally invasive techniques for advanced pelvic malignancy, clinical trials of minimally invasive colorectal surgery and the assessment and performance of randomised and alternative clinical trial designs for surgical operations.

PROF JANE YOUNG
MBBS MPH PhD FAFPHM
Executive Director

Professor Jane Young is an epidemiologist with a medical background and specialist training as a public health physician. She holds the Chair in Cancer Epidemiology at the University of Sydney and is the Scientific Director of the Cancer Institute NSW.

Professor Young has major research interests in the generation and synthesis of evidence for the effectiveness of health care interventions, the uptake of evidence-based practice and strategies to improve the quality of health services delivery. She is the Principal Investigator of several randomized trials, including trials of a novel, nurse-delivered, telephone-based intervention to improve quality of life for post-operative patients with cancer and their families (the CONNECT Program). She is a member of the Effective Practice and Organisation of Care (EPOC) Cochrane Review Group and has been a member of the Sydney South West Health Service Ethics Review Committee (RPAH Zone) since 2000.
DIRECTORS

PROF PHYLLIS BUTOW
M Clin Psych MPH PhD
Co-Director

Professor Phyllis Butow is an NHMRC Senior Principal Research Fellow and also Chair of the Australian Psycho-Oncology Co-operative Research Group (PoCoG) and Co-Director of the Centre for Medical Psychology and Evidence-based Medicine (CeMPED) at the University of Sydney. She has worked for about 20 years in the areas of Psych-Oncology and doctor-patient communication and plays an active role in promoting these issues within the cancer community.

Professor Butow was awarded the Bernard Fox award for outstanding contribution to Psycho-Oncology research by the International Psycho-Oncology Society in 2009, the Tom Reeve award for outstanding research in cancer care by the Clinical Oncology Society of Australia in 2011 and the Premier’s award for NSW Cancer Researcher of the Year in 2012. Particular interests include health professional-patient communication, shared decision-making, psychosocial predictors of the development and outcome of cancer and support needs of patients with cancer.

PROF GLENN SALKELD
GDipHealthEcon MPH PhD
Co-Director

Glenn Salkeld is Professor of Public Health and Head of the Sydney School of Public Health. He has a PhD in health economics and received more than $24 million in peer reviewed grants, including three 5 year NHMRC program grant in screening and diagnostic test evaluation. Prof Salkeld brings conceptual and methodological expertise in the elicitation of citizen and patient preferences, applied to two major research streams – one in preventive health and the other in surgical care. His current research work with the Screening Test Evaluation Program (STEP) has focussed on developing a conceptual framework for screening and diagnostic test evaluation based on the implementation of multi-criteria decision analysis.
DR CHARBEL SANDROUSSI
MBBS(Hons) MMSc FRACS
Co-Director

Dr Sandroussi is a consultant surgeon at Royal Prince Alfred Hospital in the Departments of Hepatobiliary, Upper Gastrointestinal and Transplantation Surgery. His clinical interests are live donor liver transplantation, complex liver and pancreas resection including major vascular resection and organ preservation techniques in oncology. He has published and presented on transplantation and hepatobiliary surgery. His research interests are in complex vascular resection for cancer, the impact of neoadjuvant and adjuvant treatment on recurrence of hepatocellular cancer after resection and transplantation and downstaging of pancreas cancers that are borderline for resection.
**Research Staff, Affiliates & Collaborators**

**SOuRCE Affiliates (in alphabetical order)**

**Dr Kirk Austin**  
BSc MB BCh BAO LRCP & SI AFRCSI FRACS  
Dr Kirk Austin is a colorectal surgeon at the Royal Prince Alfred Hospital in Sydney who has sub-specialised in pelvic exenteration surgery. His interest in recurrent rectal cancer led him to a research fellowship at SOuRCE as part of the CONNECT Program in 2008. He has continued his work with SOuRCE as an investigator in pelvic exenteration surgery outcomes, particularly for locally advanced primary and recurrent rectal cancer.  
This work has led to the publication and presentation of work both nationally and internationally; and has also led to the development of an ongoing prospective trial in pelvic exenteration surgery outcomes and quality of life funded by Cancer Australia (Grant No. 570860). In addition, he has co-authored several book chapters with Professor Michael Solomon on various surgical approaches in such radical ablative pelvic surgery. Currently he is involved in two research projects: the technique of pre-emptive vascular control to sacrrectomy; and the approach to anterior pelvic tumours in order to achieve a clear resection margin.

**Dr Christopher Byrne**  
BSc(Med) MBBS MS FRACS  
Chris Byrne is a colorectal surgeon at RPAH and Mater Hospital Sydney and co director of the trauma department at RPAH. His training has included working at St Marks Hospital in the United Kingdom and Mt Sinai in Toronto, Canada. He has an interest in advanced colorectal cancer, perianal sepsis and pelvic floor disorders and has published and co-authored papers on a variety of surgical and trauma topics. He has research interests in colorectal surgery and trauma and has recently supervised two masters students treatise in perianal sepsis. He has established a 6 unit subject in the Master of Surgery curriculum - Cancer Epidemiology. He is currently a Councillor of the Colorectal Surgical Society of Australia and New Zealand.

**Ms Pauline Byrne**  
RN, Grad Cert Stomal Therapy Nursing  
Pauline is a Research Nurse in the Department of Colorectal Research. She has worked as a Clinical Nurse Specialist in colorectal surgery at RPAH and is involved in a variety of projects in collaboration with SOuRCE.

**Ms Emily Chew**  
BSc (Hons) MPH  
Emily is a Research Officer with Department of Colorectal Research working on a number of different projects including the A La Cart trial, the Stent trial and the biofeedback study. She has a Masters degree in Public Health from the University of Sydney. She is also managing the Colorectal Cancer Database at the Royal Prince Alfred Hospital. This information will be used for CSSANZ clinical audit of the surgical practices of members for the purpose of quality assurance.

**Dr Elizabeth Dennett**  
BMedSci MBChB GradDipMed(ClinEpi) MMedSci(ClinEpi) MAppMgt(Hlth) FRACS  
Dr Elizabeth Dennett is a colorectal surgeon from Wellington, New Zealand. She underwent her general surgical training in New Zealand and further sub-speciality training in colorectal surgery in Australia at the Royal Prince Alfred Hospital and at the Royal Melbourne and Western General Hospital.  
Whilst in Sydney she undertook post-graduate studies in clinical epidemiology, leading to a Masters in Clinical Epidemiology (Molecular/Genetic Epidemiology) and a Masters in Applied Healthcare Management (Public Health). She works closely with the Department of Public Health, University of Otago, Wellington where she is part of a research group focussed on ethnic disparities in cancer outcomes. She is currently on sabbatical at SOuRCE working towards completing a doctorate.
MS SUSAN DONOVAN  
BA Communications; Grad Dip Med. Studies  
Susan Donovan is the Colorectal/Upper Gastrointestinal Research Co-ordinator for the following studies: Australasian Laparoscopic Cancer of the Rectum Trial (A La CaRT); Effect of gum-chewing on postoperative recovery of gut function RCT; Biofeedback guided anal sphincter exercises in the treatment of faecal incontinence RCT; Effectiveness of rectal balloon training in obstructive defaecation RCT; and, Audit of patient participation in colorectal cancer surgical research.  
The initial stages of Susan’s career were in the commercial sector. She has held senior marketing and promotions positions for national co-operative retail travel networks and other travel and tourism related service providers. With this background she joined the University of Sydney to manage the staging of international joint marketing ventures, with other partner universities, to recruit foreign students. Susan’s career path took a new direction when she came to Royal Prince Alfred Hospital to assist with the development and co-ordination of multidisciplinary cancer case conferences. There she developed a keen interest in surgical oncology which has drawn her to the role she now fills in SOuRCe. Susan is currently progressing towards a Master of Health Service Management under a scholarship she was awarded by Sydney Local Health District.

MS AISHA HARUN  
BSC MD  
Aisha was a visiting medical student from Johns Hopkins, Baltimore who completed a Fulbright Research Fellowship with SOuRCe in 2011. Aisha’s research gained a greater understanding of the interaction between multiculturalism and health outcomes in Australia. Specifically, her research involves investigating quality of life trends in multicultural patients with head and neck cancer and describing interventions to improve patient participation in the treatment process for culturally and linguistically diverse cancer patients. Her research was published in the Asia-Pacific Journal of Clinical Oncology and in Cancer.

DR JONATHAN HONG  
MS, BMed Sci (Hons) MBBS FRACS  
Dr Jonathan Hong, University of Sydney, a Notaras Scholar (2011–2014). He previously received the Covidien/Tyco Research Scholarship from the Colorectal Surgical Society of Australia and New Zealand. He completed a Master of Surgery degree with the University of Sydney and SOuRCe in 2010. Jonathan’s interests include factors that influence decision making when using radiotherapy in the treatment of rectal cancer and hopes to apply the outcomes of this project to other areas of colorectal surgery. He will complete the overseas clinical year of his Notaras Scholarship at the University of Toronto for two years and enrol in a Masters of Philosophy fulltime in collaboration with SOuRCe and Toronto Surgical Education.

DR BENJAMIN JONKER  
MBBS MMed(Clin Epi), FRACS  
Benjamin Jonker is a neurosurgeon with fellowship training in stereotactic and functional neurosurgery, including stereotactic radio-surgery for brain tumours as well as a variety of other conditions. He has an interest in evidence-based surgery, and completed a Master’s degree in Clinical Epidemiology through the University of Sydney. As well as working as a neurosurgeon at Royal Prince Alfred Hospital he is undertaking a PhD through SOuRCe looking at quality of life issues in patients with trigeminal neuralgia.
DR PETER J LEE
MBBS BSc(Med) FRACS

DR ALISON LYON
BSc Med Sc (Hons) MBChB MRCS
Dr Alison Lyon completed a Master of Surgery degree with the University of Sydney and SOuRCe in 2012. Alison is a general surgical trainee from Scotland and is the recipient of an Ethicon Travelling Fellowship from the Royal College of Physicians and Surgeons of Glasgow. Alison’s research interest is in Enhanced recovery after surgery programmes in colorectal surgery, and she is currently exploring barriers to the implementation of these programmes for her Masters’ dissertation and is developing the protocol at SOuRCe for a RCT testing ERAS and insulin resistance in a factorial design with regional anaesthetic blocks.

MS RACHEL ROBERTS
Dip HealthSc, BA Nursing
Rachael is a long term Research Officer in the Department of Colorectal Research specialising in clinical studies involved with surgical outcomes, genetic mutations, drug trials and biofeedback functional monitoring programmes. Her background is in surgical nursing with experience in data management and establishing trial protocols. More recently she has focused on implementing telephone based interventions to improve patient outcomes and quality of life for patients who have had cancer surgery in the CONNECT study with SOuRCe.

Currently Rachael is working on a longitudinal study looking at quality of life, clinical outcomes and survival of patients undergoing pelvic exenteration surgery over a five year study period. Her main responsibilities involve patient recruitment, face to face interviews and postoperative monitoring.

ASSOCIATE PROFESSOR CHRISTOPHER YOUNG
MBBS, MS, FRACS
Christopher Young is a Colorectal Surgeon at Royal Prince Alfred and Concord Hospitals. His research interests include decision making in surgery, the use of colonic stents, and improving surgical training, especially in laparoscopic surgery. He is currently Head of Department to the Royal Prince Alfred Hospital Department of Colorectal Surgery, and the Chairman of the Royal Australian College of Surgeons Board in general Surgery.
DR JAMES HARRISON
BSc(Hons) MPH PhD
James Harrison is an early career researcher who joined SOuRCe in 2003. He developed as the Senior Research Officer at SOuRCe and his work blended both public health and health services research with a strong focus on patient outcomes particularly supportive care and quality of life. James completed his doctorate at the University of Sydney. The central theme of his thesis is the identification and reduction of unmet supportive care needs of people with cancer. This involved both qualitative and quantitative studies including a randomised controlled trial of a nurse-led telephone intervention for post-operative patients with colorectal cancer. James became the Deputy Executive Director of SOuRCe in 2010 and led SOuRCe with great distinction prior to his recent move to the University of California San Francisco.

DR HEATHER SHEPHERD
BA(Hons) Dip HE RN PhD
Heather Shepherd is a health researcher with qualifications in health and language studies, a clinical background in nursing and a doctorate in Psychological Medicine. She was awarded her PhD from the Faculty of Medicine at Sydney University in 2008, thesis entitled “Involving patients in treatment decision-making: the views and attitudes of Australian cancer doctors to shared decision-making”.

In 2009 she won a full-time NHMRC Public Health Postdoctoral Fellowship. Heather holds a conjoint appointment as a clinical lecturer at the School of Public Health, University of Sydney. Heather’s research focuses on shared decision-making, health professional patient communication, evidence-based medicine, health professionals’ perspectives, development and evaluation of tools to support health literacy, patient empowerment and improving safety and quality in healthcare. Heather’s skills include design and coordination of multicentre trials using both qualitative and quantitative methods, as well as experience and skills in senior and stakeholder management grant administration, ethics and clinical governance.
MS MADHU PRASAD  
Dip Eng (Telecom), Dip (Travel & Tourism/Secretarial Studies)  
Madhu joined SOuRCe in August 2009 as an administrative assistant. She has held similar positions with the Registrar’s office at the University of the South Pacific and the Faculty of Medicine, University of Sydney. Madhu’s superb administrative skills co-ordinate the smooth running of staff at SOuRCe, co-ordinating meetings and conferences, running the Masters of Surgery course as well as the multiple surgeons completing their masters dissertations through SOuRCe supervisors. Madhu is integral to the success of SOuRCe as a research and education centre.

(in alphabetical order)

MR TIM BADGERY-PARKER  
BSc(Hons) MPychol(Org) MBiostat  
Tim Badgery-Parker is a Senior Research Officer (Biostatistics). Before joining SOuRCe, Tim worked in the NSW Ministry of Health Biostatistical Officer Training Program while completing his Master of Biostatistics degree through the University of Sydney and the Biostatistics Collaboration of Australia. In the training program Tim worked on projects in Clinical and Population Perinatal Research at the Kolling Institute of Medical Research as well as various projects within the Ministry. At SOuRCe, Tim is analysing quality of life outcomes after pelvic exenteration surgery.

MS KATIE DE-LOYDE  
BSc MSc  
Katie is a Research Officer with SOuRCe working on a number of different projects including the design and implementation of a decision aid for pelvic exenteration patients; and the CONNECT program. She has a Masters degree in Public Health from the University of Chester in the UK. Prior to joining SOuRCe she worked for the Prince of Wales Hospital in Randwick as a Research Officer for Head and Neck Cancer Research. Katie’s main interest is statistics and she is currently completing statistical analysis for a number of different databases here at SOuRCe.

MS IVANA DURCINOSKA  
BBiotech, MPH  
Ivana is a Research Officer with SOuRCe working on the CONNECT program; a series of telephone based interventions to improve the outcomes and quality of life for patients who have had cancer surgery and their families. Prior to joining SOuRCe, she worked in the community sector in various public health research and advocacy roles. Ivana is also completing her PhD with SOuRCe. Her PhD focuses on understanding variations in the adequacy of cancer care coordination for people with colorectal cancer in NSW. She will also investigate the utility of social network theory to understand how networks and social technology use impact cancer care coordination. This knowledge will provide a framework for the development of an intervention to improve this aspect of cancer care.

MS MIKAELA JORGENSEN  
BAppSc (SpPath) Hons  
Mikaela is completing a PhD with SOuRCe, having received a Postgraduate Scholarship for Cancer Services Research through the CONNECT Program. She has a background in providing care for the elderly and coordinating programs for GPs and allied health practitioners in residential aged care. Mikaela’s PhD involves the investigation of strategies to improve the care of older patients following cancer surgery, particularly the exploration of clinician-based, patient-based and structural barriers to evidence-based care. Mikaela is also working on other projects within the SOuRCe team.

From left to right:  
Emily Chew, Lucy Attard, Anouk Rombouts, Vera Bozinovska, Sue Lee, Eileen Geraghty
DR CHERRY KOH  
MBBS(Hons), MS(Colorectal Surgery), FRACS

Dr. Cherry Koh is a Colorectal Surgeon who underwent general surgical training in Australia, following which she undertook further subspecialty training in Colorectal surgery at the Royal Prince Alfred Hospital in Sydney and the John Radcliffe Hospital in Oxford, United Kingdom. Her fellowship in Sydney exposed her to laparoscopic colorectal surgery as well as the intricacies of pelvic exenteration for recurrent rectal cancers. In Oxford, she worked on the Inflammatory Bowel Disease (IBD) unit which allowed her to consolidate her laparoscopic skills in addition to learning about TEMS (Transanal Endoscopic Microsurgery) and the management of complicated re-operative surgery for IBD.

Dr. Cherry Koh has a wide academic interest. As part of her post-graduate training, she completed a Masters of Surgery in Colorectal Surgery researching the value of anorectal physiology in the treatment of faecal incontinence as well as the effectiveness of biofeedback in alleviating symptoms of obstructive defaecation. Following her fellowship in Oxford, she returned to Sydney where she continues both her clinical and academic careers. As she is the current recipient of the Notaras fellowship, she will embark on a PhD working at SOuRCe looking at the quality of life of patients following exenterative surgery for locally advanced and locally recurrent rectal cancer. She will also examine the cost effectiveness of such radical surgery.

MS MARYANN VINEETA KURIEN  
BSc(Biotech) MPH MHServMgt

Vineeta is a Research Assistant with SOuRCe working on the Family CONNECT project, a supportive care intervention for caregivers of people diagnosed with upper gastrointestinal cancer. Prior to joining SOuRCe, Vineeta worked for the NSW Department of Health, Public Health Unit as a Data Quality and Surveillance Support Officer. With a keen interest towards health services research, she was also previously a part of other research projects at the ANU, ACT Health-UNSW, and was also actively involved with the University’s Office for Global Health, in the coordination of development programs in health, involving international research collaboration.

MS LINDY MASYA  
BSocSci (Chons)

Lindy Masya is a Research Officer working on a five year longitudinal study which aims to investigate patient quality of life and clinical outcomes for those patients diagnosed with cancer in the pelvis who have undergone pelvic exenteration surgery. With over 330 patients, this study involves the large cohort of these patients to date. Supported by a Sydney Local Health District scholarship, Lindy is currently also completing her Masters of Business Administration specialising in Health Management at the University of Tasmania. Previously, Lindy has been involved in the implementation and management of projects investigating decision support tools, cancer care coordination and review of clinical practices related to parental nutrition.

Lindy has had previous research experience in the commercial sector where she was involved in a variety of projects focusing on, international and domestic visitation patterns, policy development, campaign evaluation and customer and stakeholder satisfaction for a range of clients including NHMRC, NSW Health, the Cancer Institute NSW. Prior to working at SOuRCe, Lindy also worked for Health Technology coordinating the development and evaluation of Patient Administration Systems for three NSW Area Health Services.

DR JOANNE SHAW  
BAppiSc BPsysch(Hons) PhD

Joanne joined SOuRCe in 2010 and is the Research Coordinator for studies addressing the supportive care needs of informal caregivers caring for patients with gastrointestinal cancer supported by an NHMRC project grant. Prior to joining SOuRCe, she worked with Pam McLean Cancer Communications Centre at the University of Sydney and was involved in research investigating psychosocial factors that impact on patient care as well as strategies to improve doctor-patient communication. Joanne has also worked in the private sector, project managing multinational drug trials. She completed her doctorate at the University of Sydney investigating psychological and physiological stress associated with doctors breaking bad news. This involved both qualitative and quantitative studies to investigate doctors’ stress responses when breaking bad news and the impact this stress has on doctors’ communication.
MS JENNIFER WALSH  
BSc MPH  
Jennifer gained her initial public health research experience in the United Kingdom, working in the areas of nicotine addiction and passive smoking. Jennifer joined SOuRCe in 2007 as Project Manager for the CONNECT program’s multi-centre randomised control trial of centralised remote access cancer care coordination. The aim of CONNECT was to improve processes and outcomes of care for those who have had colorectal cancer surgery. Jennifer also undertook qualitative research involving patients, carers and health professionals to identify the key components and barriers to effective cancer care coordination. Jennifer is now Project Manager of the CONFIRM Program (Consortium for the Investigation of Renal Malignancies) at the Cancer Council Victoria.

DR CAROLINE WRIGHT  
MBBS FRACS  
Caroline Wright is a Senior Lecturer in Surgery at the University of Sydney and a Colorectal Surgeon at the Royal Prince Alfred Hospital. Her major research interests are pelvic floor disorders and genetic aspects of colorectal cancer. She has completed a Master of Surgery by Research; her thesis explored the prognostic significance of microsatellite instability in sporadic colorectal cancer. Dr Wright has a strong interest in teaching and is joint co-ordinator of the Central Clinical School Stage 3 Medical Student Surgical Programme; she is also Chair of the Clinical Training Committee at RPAH.

From left to right:  
Susan Donovan, Heather Shepherd, Anouk Rombouts, Vineeta Kurien, Madhu Prasad, Cherry Koh
RESEARCH COLLABORATORS

(In alphabetical order)

INTERNATIONAL

Dr Min Hoe Chew
Department of Colorectal Surgery,
Singapore General Hospital

Professor Jack Dowie
Professor Emeritus of Health Impact
Analysis, London School of Hygiene &
Tropical Medicine.

Dr Flores Ferenschild
Department of Surgery, UMC St
Radboud, Nijmegen, The Netherlands

Professor Paul Finan
Consultant General and Colorectal
Surgeon, Leeds General Infirmary,
United Kingdom

Professor Frank Frizelle
Consultant Colorectal, Christchurch
Hospital, New Zealand

Professor Alexander Heriot
Peter MacCallum Cancer Institute/St
Vincent’s Hospital, Melbourne

Dr Eddie Myers
Colorectal & General Surgeon,
Portinucula Hospital & Galway
University Hospitals, Dublin

Dr Ker Kan Tan
Department of Colorectal Surgery,
National University Health System,
Singapore

Professor Dr Hans Van De Wilt
Department of Surgery, UMC St
Radboud, Nijmegen, The Netherlands
LOCAL

Associate Professor Ned Abraham
Colorectal & General Surgeon, Barina Private Hospital & Coffs Harbour Health Campus

Professor Michael Boyer
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Dr Graham Ctercteko
Head of Colorectal Surgery Unit, Westmead Hospital.

Dr Austin Curtin
General & Laparoscopic Surgeon, St Vincent's Private Hospital, Lismore

Dr Brian Draganic
Head, Colorectal & Surgical Department, John Hunter Hospital, Newcastle.

Dr Toufic El Khoury
Colorectal Surgeon, Westmead Public and Norwest Private Hospitals

Dr David Eisinger
VMO, Department of Urology, Royal Prince Alfred Hospital

Professor Anthony Eyers
Colorectal Surgeon, Royal Prince Alfred Hospital

Dr Dean Fisher
General Surgeon, Dubbo

Dr Andrew Gilmore
General Surgeon, Orange Base Hospital

Professor Ian Harris
Director of Orthopaedic Surgery, Liverpool Hospital

Dr Henry Hicks
General and Colorectal Surgeon, Wagga Base & Calvary Hospitals

Dr Bruce Hodge
General Surgeon, Port Macquarie Base & Port Macquarie Private Hospitals

Associate Professor Lisa Hovarth
Head of Medical Oncology, Royal Prince Alfred Hospital

Associate Professor George Hruby
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Dr Stephen Jancewicz
General & Colorectal Surgeon, Wagga Wagga

Dr Greg Longfield
General & Colorectal Surgery, Port Macquarie

Dr Matthew Morgan
Colorectal Surgeon, Bankstown Hospital

Dr Alan Meagher
Colorectal Surgeon, St Vincent's Clinic, Darlinghurst

Dr Geoff O'Connor
General Surgeon, Dubbo Base Hospital

Dr Nim Pathman-Nathan
General & Colorectal Surgeon, Westmead Public & Private Hospitals

Dr David Rangiah
General & Colorectal Surgeon, Calvary & Canberra Hospitals

Dr Philip Rome
Plastic & Reconstructive Surgeon, VMO Royal Prince Alfred Hospital

Dr Stephen Smith
Colorectal Surgeon, Newcastle Private Hospital

Dr Paul Stalley
Clinical Director Orthopaedics, Royal Prince Alfred Hospital

Dr Andrew Sutherland
Colorectal Surgeon, Coffs Harbour

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Dr Catherine Turner
Colorectal Surgeon, Bankstown Hospital

Dr Arthur Vasilaras
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The late Professor Geoffrey White
Vascular surgeon, Royal Prince Alfred Hospital
RESEARCH ACTIVITIES 2010-2012

EVALUATION OF SURGICAL EFFECTIVENESS

Surgery versus stent insertion for the management of non-curable large bowel obstruction

Christopher Young1, Katie De-loyde, Jane Young, Michael Solomon, Emily Chew2, Christopher Byrne1, Ian Faragher3.
1 Department of Colorectal Surgery, Royal Prince Alfred Hospital
2 Department of Colorectal Research, Royal Prince Alfred Hospital
3 Department of Colorectal Surgery, Western Hospital, Melbourne, Victoria, Australia

For patients with a malignant bowel obstruction that cannot be cured, management to relieve the obstruction usually involves surgery to resect a part of the large bowel and formation of a stoma where the bowel is brought to the surface of the skin. An alternative to this major surgery is the placement of a metal stent via colonoscopy, through the obstruction to allow the passage of faecal matter. As both of these interventions are palliative, the most important outcomes are those relating to Quality of Life.

This study aims to determine whether patients’ Quality of Life is greater following stent insertion. An economic evaluation will determine the relative cost-effectiveness of the two procedures. Patient recruitment and study follow-up has been completed. A total of 56 patients from Royal Prince Alfred Hospital and Western Hospital, Victor were enrolled in the study.

Status: Analysis underway and manuscript in preparation.

Audit of patient participation in colorectal cancer surgical research

Michael Solomon, Jane Young, Susan Donovan1, Emily Chew1.
1 Department of Colorectal Research, Royal Prince Alfred Hospital

This is an ongoing audit database of patients’ research participation to monitor clinical research activity within the department. It also enables us to assess the characteristics of patients who are not involved in any clinical research. This type of information assists us to plan future studies and coordination of patient recruitment.

All patients admitted to RPAH for surgery related to the treatment of colorectal cancer from 1 January 2009 to the current date, are included in the audit. There are no exclusion criteria. Demographic and clinical information on patients are collected as are details of the number of studies patients are enrolled in.

In 2012, 41% of cancer patients who underwent surgery, participated in a clinical research study.

Status: Audit underway.
A randomised control trial examining the effect of preoperative carbohydrate loading on incidence of infectious complications after surgery within an enhanced recovery protocol.

Michael Solomon, Ewan MacDermid, Mark Hayman1, Jane Young.

While Enhanced Recovery After Surgery (ERAS, or “fast-track”) protocols have been shown to improve a variety of patient outcomes, including a reduction in length of hospital stay, considerable debate about the relative impact and value of individual interventions continues. One component of ERAS, carbohydrate loading, has not been tested rigorously to assess any effect it may have on incidence of post-operative infection.

All eligible patients undergoing colorectal, gynaec-oncological or hepatic resection will be approached for study inclusion. Patients will be randomised to either an ERAS protocol with carbohydrate loading in the form of a carbohydrate-rich beverage (Nutricia PreOp™, 400mls evening before and 200mls three hours before surgery), or ERAS alone. Primary outcome measures shall include incidence of infectious complications including wound, urinary tract and pulmonary infection, as well as all other complications. Secondary outcome measures shall include length of hospital stay, time until return of bowel function, time until return to independent mobilisation and length of hospital stay.

Status: A proposal for ethical approval for a pilot study is currently in progress.

Quality of life outcomes and cost effectiveness of patients with pelvic cancer: a prospective study

Michael Solomon, Jane Young, Alexander Heriot1, Lindy Masya, Rachael Roberts, Madeleine King2, Tim Badgery-Parker1, Frank Frizelle1, Glenn Salkeld, Rosemary Smith, Emily Chew4, Kirk Austin3, Christopher Byrne4, Peter Lee5.

This study involves patients with locally advanced primary or recurrent pelvic cancer with no evidence of metastatic disease and compares the outcomes for patients who undergo pelvic exenteration surgery and those patients who do not.

Pelvic exenteration involves the removal of the entire pelvic contents as well as some of the bony pelvis. It is a complex surgery and carries substantial morbidity and mortality risks. At present there is little information regarding the patient’s quality of life outcomes after this procedure.

The information collected will compare clinical and quality of life outcomes between these two groups. The information collected will be important to those clinicians and to the patients themselves facing the decision regarding treatment options.

All patients once consented into the study are asked to complete a quality of life questionnaire. These questionnaires are then repeated at five time points during the following twelve months. Information is also obtained during this time to ascertain an evaluation of health services utilisation which will assist in the economic analysis of the procedure which will be invaluable to healthcare and policy planning.

Numbers so far recruited into study at Royal Prince Alfred Hospital include 198 patients. The second site at The Peter MacCallum Cancer Centre in Melbourne has commenced recruitment with 37 patients recruited so far.

Status: Recruitment and follow-up underway.

Funding: Cancer Australia and The Cancer Council Australia The NHMRC Priority Driven Collaborative Research Grants Scheme

From left to right: Emily Chew, Rachael Roberts, Sally Auld (Colorectal Research)
A La CaRT: Australasian phase III randomised trial comparing laparoscopic assisted versus open resection for rectal cancer

Andrew Stevenson1, Michael Solomon, Peter Hewett2, John Lumley3, James Fleshman4, Andrew Clouston5, Wendy Hague6, Peter Lee7.

1 Royal Brisbane and Women’s Hospital Queensland
2 Department of Colorectal Surgery, Royal Prince Alfred Hospital
3 The Wesley Hospital, Queensland
4 Department of Colorectal Surgery, Royal Prince Alfred Hospital
5 ErasmusMC, Rotterdam
6 NHMRC Clinical Trials Centre, University of Sydney
7 Department of Colorectal Surgery, Royal Prince Alfred Hospital

This is a prospective phase III randomised trial evaluating the safety and efficacy of laparoscopic resection for rectal cancer. Patients who have had a diagnosis of primary cancer of the rectum or lower bowel (stage T 1-3 N 0-1 M 0-1) requiring surgery are eligible. Participants will be randomised to either open laparotomy and rectal resection or laparoscopic-assisted rectal resection. The multi-centre study is sponsored by the Australasian Gastro-Intestinal Group.

The study objectives are to determine whether laparoscopic assisted resection is not inferior to open rectal resection as a safe effective oncolgic approach to rectal cancer and to determine whether the laparoscopic resection is not inferior to open resection in relation to morbidity and mortality which is associated with surgery, disease free survival and disease recurrence and quality of life.

Recruitment commenced in 2010 and so far there have been 26 patients recruited to the study at Royal Prince Alfred Hospital.

Status: Recruitment and follow-up underway

Urological leaks after pelvic exenteration

Suzana Teixeira1, Floris Ferenschild1, Michael Solomon, Laura Rodwell, James Harrison, Jane Young, Arthur Vasilaras1, David Esinger1, Peter Lee2, Christopher Byrne2

1 ErasmusMC, Rotterdam
2 Department of Colorectal Surgery, Royal Prince Alfred Hospital
3 Department of Urology, Royal Prince Alfred Hospital

The aim of this study was to assess possible risk factors for urinary leakage of a newly formed urinary conduit after a partial or total pelvic exenteration. An analysis was conducted from prospectively collected data of patients who underwent a pelvic exenteration with conduit formation for advanced and recurrent pelvic cancer.

Of 232 patients undergoing a pelvic exenteration, 74 (32%) had a conduit formed. Of these, 47 (64%) had an ileal conduit compared with 27 (36%) a colonic conduit. Twelve (16%) patients developed a leak, of which nine occurred within the first month. Factors associated with a conduit leak included involvement of R2 surgical margins (43%), the magnitude of the exenteration and a current cardiovascular medical history (27%). Leaks were not found to be associated with either chemotherapy or radiotherapy. The 30-day leak rate for ileal conduits was 17% (8/47) and 4% (1/27) for colonic conduits with enterocutaneous fistula only occurring in the ileal conduit group (2/47). Fistula, drained collections and sepsis occurred in 40% of ileal and 19% of colonic conduits (p<0.01). Patients with a conduit leak had a longer length of stay (59 versus 23 days, p<0.001).

Urinary leaks after conduit formation in association with exenterations are relatively common with a prolonged length of hospital stay. Cardiovascular risk factors, positive surgical margins and exenterations involving all four quadrants of the pelvis were associated with higher leak rates.

There was no evidence of a difference between ileal and colonic conduits and number of leaks. However colonic conduits had less sepsis and pelvic collections including comparatively no complications of a small bowel fistula.

Status: Project completed.


The effect of anastomotic technique on surgical recurrence rates in Crohn’s disease - A NSW data linkage study

Kelvin Kwok1, Laura Rodwell, Jane Young, Michael Solomon
1 Master of Surgery student, University of Sydney

The peak age of onset of Crohn’s disease (CD) is between the second to fourth decades of life. The majority of CD patients will require a bowel resection during their lifetime, with 30 to 55% requiring a second operation for CD recurrence, or surgical recurrence (SR) within 10 years. Accurate long-term follow-up is difficult to acquire due to the mobile patient demographic.

To examine the impact of anastomotic technique in CD on SR rates, using data linkage techniques to identify additional SR performed outside of the study centres.

Patients undergoing initial bowel resection and anastomosis for CD from 1996 to 2008 at Royal Prince Alfred Hospital, Gosford and Wyong Hospitals were retrospectively reviewed. Data linkage of this cohort with the NSW Admitted Patients Data Collection and the Registry of Births Deaths and Marriages deaths records was conducted by the Centre for Health Record Linkage. Procedural codes were used to identify SR performed for CD. Survival analysis was performed to assess differences between anastomotic technique and the time to first SR.
Of 105 eligible patients, 13 had at least one SR (12%). 5 of 22 hand-sewn anastomoses (23%) compared with 8 of 83 stapled anastomoses (10%) developed SRs, (mean follow-up: 7.8 vs. 5.3 years respectively). 4 of 21 end-to-end anastomoses (19%) compared with 9 of 84 side-to-side anastomoses (11%) developed SRs (mean follow-up: 7.7 vs. 5.3 years respectively). Survival analysis did not demonstrate any significant difference in SR between anastomatic techniques (Log-rank test, p>0.5).

After accounting for the differences in follow-up, anastomotic technique does not seem to be a predictor of SR.

Status: Project completed.
Published: Manuscript in preparation

Prospective assessment of the selection process for myocutaneous flap repair and surgical complications in pelvic exenteration surgery

Anita Jacombs1, Philip Rome2, James Harrison, Michael Solomon
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This study aimed to explore and quantify the selection process to guide the decision on closure type (myocutaneous flap repair or primary closure) for people undergoing pelvic exenteration.

Retrospective analysis of prospectively collected data of patients who had pelvic exenteration at Royal Prince Alfred Hospital, Sydney. Associations between four risk factors were individually and collectively assessed as predictors of closure type and wound complications (previous radiotherapy or abdominoperineal resection, the need for a total exenteration or sacrectomy). Post-operative morbidity was analysed.

203 pelvic exenteration procedures were reviewed (79 primary and 122 recurrent cancers). Thirty nine (19%) patients had myocutaneous flap reconstruction (MFR) and 164 (81%) primary closure. MFR patients were significantly more likely to exhibit each risk factor confirming the selective decision process. MFR had higher rates of complications across all four risk factors, individually and combined. In the primary closure group, there was a significant correlation between the number of risk factors and the proportion of patients with a complication (r=0.25, p=0.01). In contrast no relationship was found for the MFR group (r=0.01, p=0.97). The primary closure group had significantly lower rates of any wound dehiscence (23% versus 61%, p<0.01) and total infection (25% versus 50%, p=0.02) compared to the MFR group.

This paper suggests wound and septic complications in pelvic exenteration are low for patients with <2 risk factors and a primary closure. MFR has significantly higher complication rates and should be reserved for patients with ≥2 risk factors or extensive skin involvement.

Status: Project completed.
Published: British Journal of Surgery 2012; DOI: 10.1002/bjs.9002

Quality of life of survivors after pelvic exenteration for rectal cancer

Kirk Austin, Jane Young, Michael Solomon

There is little information about the impact of pelvic exenteration on patients’ quality of life. This study aimed to measure quality of life for longer term disease-free survivors after pelvic exenteration.

A retrospective review to identify patients who underwent pelvic exenteration for locally advanced primary or recurrent rectal cancer was performed. Telephone interviews to assess quality of life were performed using the Short Form 36 version 2 and Functional Assessment of Cancer Therapy-Colorectal instruments. Responses were compared with normative data from the general Australian population and patients with rectal cancer who underwent low anterior resection or abdominopereineal excision.

Of 75 patients with rectal cancer, 44 were alive and 37 (84%) completed the quality-of-life assessment a median 47 months after pelvic exenteration.
Pelvic Exenteration with En-bloc Iliac Vessel Resection for Lateral Pelvic Wall Involvement

Kirk Austin, Michael Solomon

Lateral pelvic recurrence is considered a poor prognostic variable and a relative contraindication to surgery because of the difficulty in achieving clear margins. The aim of this study was to outline our surgical approach to lateral pelvic wall involvement and assess the oncological and long term outcomes.

A retrospective review of a prospective database was performed. Patient demographics, cancer and operative details, intent, margins, lymph node status, re-recurrence at resection site, follow-up, living and death details were assessed.

En Bloc lateral pelvic wall dissection and vascular resection with pelvic exenteration was performed in 36 patients out of 107 exenterations. All patients underwent surgery with curative intent. Negative margins were achieved in 19 patients (53%). 10 patients (28%) developed recurrence at the site of resection compared to 26 patients (72%) who remain disease free at the site of surgery. 16 patients (46%) are disease free with the average disease free interval of 30 months. 25 patients (69%) are alive with a mean follow up of 19 months. There were no mortalities in this cohort of patients. Despite the complexity of this technique, it is safe and feasible. Careful preoperative radiological assessment and a multidisciplinary approach are paramount to achieving clear margins.

Status: Project completed
Published: Diseases of the Colon & Rectum 2009; 52:1223-1233

Accuracy of pre-operative techniques to localize colorectal lesions; Systematic review and Meta-analysis

Anil Kshy, Jane Young, Michael Solomon

Laparoscopic surgery is becoming the standard surgical approach for colorectal cancer surgery, particularly for early-stage disease. Localization of small T1 tumours and those removed during polypectomy can be particularly challenging for laparoscopic resection. To investigate the accuracy of pre-operative colonoscopy and pre-operative colonoscopic tattooing with India ink to localize colorectal tumours, and to identify other techniques that have been used for this purpose. A comprehensive search of Medline and other electronic databases and abstracts were screened and two independent reviewers applied study inclusion criteria and abstracted data.

A one-group meta-analysis using comprehensive meta-analysis software was conducted to calculate the pooled estimate of the proportion of patients in whom the tumour was incorrectly localized (the ‘error rate’ for the localization technique), with 95% confidence intervals.

For pre-operative colonoscopy, error rates ranged from 3% to 21% with a pooled point estimate of 10.7% (95% Confidence Intervals 7% to 16.1%). For pre-operative colonoscopic tattooing with India ink, the error rate ranged from 0% to 31.5% percent with a pooled point estimate of 9% (95% Confidence Intervals 4.9% to 16.1%). Eighteen additional localization techniques were described in the literature.

There were no randomised controlled studies. The studies mainly were retrospective and prospective in nature, therefore biased. And, another limitation was that non-English studies were excluded.

The Error rates for pre-operative colonoscopic India ink and pre-operative colonoscopy were similarly high. Further studies to improve the accuracy of pre-operative localization of colorectal tumours are needed.

Status: Project completed
Manuscript in preparation

Qualitative assessment of enhanced recovery after surgery programme in Royal Prince Alfred Hospital

Alison Lyon, James Harrison, Michael Solomon

Enhanced Recovery After Surgery (ERAS) programmes are increasing in popularity as they have been shown to promote safe early discharge following major surgery. This programme has been running in the Department of Colorectal Surgery, Royal Prince Alfred Hospital since June 2011.

In this study, we aimed to explore the views of the clinical teams involved within the ERAS care pathway, with respect to the implementation and daily functioning of the programme. This study involved interviewing key stakeholders from the clinical care teams involved in the care of patients enrolled in the ERAS programme.

Analysis of the data identified four key themed areas of practice which presented barriers: patient related factors, staff related factors, practice related issues and resources.

We concluded that for the ERAS programme to be implemented successfully and function efficiently with high levels of element compliance all of these areas need to be addressed. This should occur ideally prior to programme launch.

As barriers to ongoing effective care become apparent these should be managed in order to optimise the synergistic effects of this multimodal programme of patient care.

Status: Project completed
Under editorial review
Assessment of Outcome following extended resection for T4 rectal cancer

Sameer Memon, Jonathan Hong, Alexander Heriot, Michael Solomon
1 Peter MacCallum Cancer Institute/St Vincent’s Hospital, Melbourne

The aim of the study is to assess the outcome and factors influencing outcome following surgery with curative intent for T4 rectal cancer

Patients with T4 rectal cancer were identified from individual surgeon databases. The patient’s notes were review retrospectively and data entered into a de-identified data collection form. This data was then combined with data from Peter MacCallum Cancer Centre.

Data will be analysed for recurrence of rectal cancer, the development of metastatic cancer, and the rates of disease free and overall survival.

Data collection has been completed at RPAH. Data collection is ongoing at Peter MacCallum Cancer Centre.

Status: Data collection

Effect of Chewing-Gum on Postoperative Recovery of Gut Function: A Randomised Controlled Trial

Christopher Byrne1, Emily Chew2, Susan Donovan1, Anthony Eyers, Peter Lee1, Michael Solomon, Christopher Young1, Caroline Wright1.
1 Department of Colorectal Surgery, Royal Prince Alfred Hospital
2 Department of Colorectal Research, Royal Prince Alfred Hospital

This randomised clinical trial is being conducted to determine whether gum chewing in the postoperative period after elective open abdominal or pelvic surgery involving bowel resection reduces the duration of postoperative ileus (gut stasis), accelerates return of bowel function and reduces hospital stay.

Participants are required to chew sugar-free peppermint flavoured chewing gum for 15 minutes each time, four times a day, commencing after their discharge onto the general ward following their surgery.

The nurse will complete a data collection form until a bowel motion (Bristol Stool Form Scale – types 1 to 6) has occurred and they are able to tolerate a postoperative light diet for 24 hours.

There have been no previous RCT trials with adequate numbers of participants to study the effect of chewing gum. Most of the studies previously conducted have been of a small scale and have produced conflicting results. This study is aiming to recruit 162 patients.

Any reduction in the duration of postoperative ileus would benefit patients due to less discomfort as well as earlier resumption of nutritional intake which helps to promote wound healing and enhance immune function.

A reduction in the overall duration of postoperative ileus and length of stay, in patients undergoing bowel resection, would benefit Sydney Local Health District from a financial perspective as well as freeing up valuable hospital bed space for other needy patients.

The study commenced in early 2010 and we have currently recruited 130 patients (September 2012).

Status: Ongoing recruitment and data collection.

Assessing the impact of a sacral resection on morbidity and survival after extended radical surgery for locally recurrent rectal cancer.

Tony Milne1, Michael Solomon, Peter Lee2.
1 Medical student, Sydney School of Public Health, University of Sydney
2 Department of Colorectal Surgery, Royal Prince Alfred Hospital

The aim of the study was to describe the experience of sacrectomy with extended radical resection in the treatment of locally recurrent rectal cancer.

Resections of the bony pelvis, especially the sacrum are becoming more common as part of extended radical exenterations for patients with recurrent rectal cancer. However, sacrectomy has been shown to carry a significant decrease in survival. Morbidity rates have been associated with the level of the sacrectomy (i.e. >S3 junction).

An analysis was conducted using prospective data from patients with recurrent rectal cancer who underwent pelvic exenteration involving a sacrectomy from July 1998 until June 2011. The impact of the proximal level of sacrectomy (low (<S3)) versus high (≥S2-3 disc) was compared.

Of 240 exenteration patients, 79 underwent a sacrectomy with 49 for recurrent rectal cancer. An R0 margin was achieved in 36 (74%) of patients. Achievement of clear operative margins (R0) conferred a large and significant benefit for disease-free survival compared to R1 and R2 resections (median 46 months versus 19 and 8 months respectively (p<0.045)). Complications were reported in 40 (82%) of patients, with major and minor complications in 19 (39%) and 38 (78%) of patients respectively. The proximal level of the sacrectomy (high versus low) did not significantly impair the ability to achieve a clear margin and was not associated with an increase in major or minor complications.

This large single centre series has demonstrated that extended pelvic exenteration involving sacrectomy has excellent R0 margins and survival rates for recurrent rectal cancer. A high sacrectomy has comparable results to a more distal abdomino-sacral resection.

Status: Project completed.
In press: Annals of Surgery
Second manuscript in preparation
Effectiveness of Rectal Balloon Training in Obstructive Defaecation: A Randomised Controlled Trial

Cherry Koh, Christopher Young1, Michael Solomon, Christopher Byrne1, Peter Lee1, Caroline Wright, Jenny Rex2, Janet Candido2, Emily Chew3, Susan Donovan3

1 Department of Colorectal Surgery, Royal Prince Alfred Hospital
2 Prince Alfred Hospital; Biofeedback and Continence Centre (BAC)
3 Department of Colorectal Research, Royal Prince Alfred Hospital

Obstructive defaecation (OD) is a challenging clinical problem not uncommonly encountered in colorectal practice. OD is associated with depression, anxiety and impaired quality of life (QOL). Unfortunately, because the underlying anatomic and pathophysiology of OD is poorly understood, large number of medical, surgical and behavioural treatment have been described with no panacea. A recent meta-analysis suggests that biofeedback is effective in the treatment of OD, although only a handful of randomized trials, each with different biofeedback regime have been completed to date. Most trials have also focused on symptomatic improvement with relative neglect of impact of treatment on QOL or psychological state. In amongst the seemingly vast literature surrounding OD and its treatment, some fundamental questions remain unanswered.

This randomized controlled trial is proposed to: 1) determine if biofeedback improves QOL and psychological state of patients with OD; 2) to determine if balloon retraining as a biofeedback modality is effective; 3) to determine if balloon retraining confers any additional benefit to patient receiving conservative management.

Participating patients will be randomly allocated into Group 1: Conservative management and counselling or Group 2: Conservative management plus balloon retraining. Participants will be asked to complete a series of questionnaires relating to quality of life, psychological distress and severity of disease symptoms before and after the treatment.

This study is being run in conjunction with the Royal Prince Alfred Hospital Biofeedback and Continence (BAC) Centre.

Status: Recruitment underway

Pelvic exenteration for primary and recurrent gynaecological malignancies

Nima Ahmad1, Michael Solomon, Jonathan Carter2

1 Sydney School of Public Health, University of Sydney
2 Sydney Cancer Centre, Royal Prince Alfred Hospital

To report our experience with pelvic exenteration for gynaecological malignancies and analyse the morbidity and survival associated with these procedures.

We retrospectively reviewed 59 patients who underwent pelvic exenterations from January 1982 to June 2011, for gynaecological malignancies at the Royal Prince Alfred Hospital in Sydney, Australia.

Pelvic exenteration was performed on cancer of the ovaries (27 patients), cervix (17 patients), vulva (7 patients), endometrium (6 patients), mixed mullerian (1 patient) and sarcoma of uterus (1 patient). Median age was 52. We performed 24 total pelvic exenterations and 35 partial pelvic exenterations. Median blood loss and length of stay were 1500 mL (571 – 2429) and 18 days (13 – 24) respectively. Microscopically clear margins were obtained in 57% of patients.

No postoperative deaths were observed. There were 31 complications in 28 (44%) patients. 65% of these occurred within 30 days post operatively. The majority (45%) occurred in the urinary tract. Survival at 5 years was 28%, 29%, 43%, 83% for ovarian, cervical, vulvar, endometrial cancers respectively.

Pelvic exenteration is a viable method of achieving significant cure rates for locally advanced or recurrent gynaecological malignancies. This procedure is accompanied by significant morbidity, however our data demonstrates that with improved operative technique and patient selection these can be minimised.

Definitive Surgical Closure of Enterocutaneous Fistula

Praveen Ravindran1, Nabila Ansari1, Michael J. Solomon1

1 Department of Colorectal Surgery, Royal Prince Alfred Hospital

Enterocutaneous fistulas (ECFs) present a complex management problem with significant associated mortality and morbidity, mainly sepsis, malnutrition and fluid and electrolyte imbalances. Many ECFs require definitive surgical repair. The aim of this study is to assess outcomes of patients undergoing surgical cure for ECF and to predict factors that relate to increased postoperative morbidity.

Medical records of all patients who underwent definitive surgery for cure of an ECF within our colorectal surgery unit between 2000 and 2010 were reviewed. A total of 41 patients (18 male, 23 female) were identified, in whom 44 definitive procedures were performed. The median age was 54 (17-81) years. The median post operative length of stay in hospital was 14 (2-213) days.

The majority of ECFs occurred in the post operative setting (55%). Surgical management involved perioperative control of sepsis, correction of electrolyte disturbances, nutritional support followed by surgical resection of ECF. Time to definitive surgery was significantly influenced by the aetiology of the fistula. Median time to surgery for fistulas that occurred in the post operative period was 240 days (7.9 months).

There was no 30-day post operative mortality. There were 2 recurrences (4.5%) at 3 months, one of which required further surgical closure. While there was no mortality, thirty eight (86%) suffered post operative morbidity as defined by the Clavien-Dindo classification. High grade morbidity occurred in 32% of patients. On univariate analysis, factors identified as being significantly associated with high-grade morbidity include blood transfusion ≥ 2 units (p=0.007), presence of high output
fistula (p=0.03), albumin at presentation < 31g/L (p=0.02) and being malnourished at presentation (p=0.05).

The majority of persistent, complex ECFs can be cured surgically with low mortality and recurrence rates in a multidisciplinary setting. Post operative morbidity however remains a significant burden and management of ECFs should involve the early identification and correction of factors that predispose to high grade morbid events in an effort to further improve patient outcomes. An approach that involves a willingness to wait before embarking on surgery and optimal peri operative stabilisation of the patient is ideal.

**Status:** Project completed  
**Manuscript in Preparation**

**Pelvic Exenteration for recurrent squamous cell carcinoma of the pelvic organs – A single institution’s experience over 16 years.**

Ker-Kan Tan1,2, Sudipto Pal1, Peter J Lee1, Laura Rodwell, Michael J Solomon. 
1 Department of Colorectal Surgery, Royal Prince Alfred Hospital  
2 AW Morrow Department of Gastroenterology and Liver Unit, Royal Prince Alfred Hospital

Minimal data is available on the role of pelvic exenteration in patients with recurrent squamous cell carcinoma (SCC) of the pelvic organs, especially in those who have undergone previous salvage surgeries. This study aimed to highlight our experience of pelvic exenteration in patients with recurrent SCC of the pelvic organs.

A retrospective review of all patients who underwent pelvic exenteration for recurrent squamous cell carcinoma of the anus, cervix, vagina and vulva from 1994 to 2010 was performed. Twenty-four patients, median age 59 (range, 27 – 79) years, underwent pelvic exenteration for the recurrences of the SCC of the pelvic organs. Eighteen (75.0%) patients had anal cancer, while the other 6 SCC arose from gynaecological organs. Nine patients with anal SCC had abdomino-perineal resection performed prior to the pelvic exenteration. Ten (41.7%) patients underwent a complete pelvic exenteration procedure, while the other 14 (58.3%) underwent partial pelvic exenteration. Sacrectomy was performed in 13 (54.2%) patients. There was no 30-day inpatient mortality. An R0 resection was achieved in fifteen (62.5%) patients. Three (12.5%) had R1 resections while six (25%) had R2 resections. In the 15 patients who had a R0 resection, 7 (46.7%) developed metastatic disease over a median of 18 (10 – 131) months.

Over a median follow up of 26 (4 – 169) months, the one- and two-year overall survival rates were 64% (95% confidence interval (CI), 44 – 84%) and 57% (95% CI, 35 – 79%), respectively.

Pelvic exenteration for recurrent SCC of the pelvic organs is safe and feasible even after previous salvage surgeries. An R0 resection can be achieved in 62.5% of the patients.

**Status:** Project completed  
**Manuscript in Preparation**

**Delayed approach for definitive Surgical Closure of Enterocutaneous Fistula.**

Praveen Ravindran1, Nabila Ansari1, Christopher JYoung1, Michael Solomon  
1 Department of Colorectal Surgery, Royal Prince Alfred Hospital

Enterocutaneous fistulas (ECFs) present a complex management problem with significant associated mortality and morbidity, mainly sepsis, malnutrition and fluid and electrolyte imbalances. Many ECFs require definitive surgical repair. The aim of this study was to assess outcomes of patients undergoing surgical cure for ECF and to predict factors that relate to increased postoperative morbidity.

Medical records of all patients who underwent definitive surgery for cure of an ECF within our colorectal surgery unit between 2000 and 2010 were reviewed. A total of 41 patients (18 male, 23 female) were identified, in whom 44 definitive procedures were performed. The median age was 54 (17-81) years. The median postoperative length of stay in hospital was 14 (2-213) days. The majority of ECFs occurred in the postoperative setting (55%). Surgical management involved perioperative control of sepsis, correction of electrolyte disturbances, nutritional support followed by surgical resection of ECF. Time to definitive surgery was significantly influenced by the aetiology of the fistula. Median time to surgery for fistulas that occurred in the postoperative period was 240 days (7.9 months). There was no 30-day postoperative mortality. There were 2 recurrences (4.5%) at 3 months, one of which required further surgical closure. While there was no mortality, thirty eight (88%) suffered postoperative morbidity as defined by the Clavien-Dindo classification. High grade morbidity occurred in 32% of patients. On univariate analysis, factors identified as being significantly associated with high-grade morbidity include blood transfusion ≥ 2 units (p=0.007), presence of high output fistula (p=0.03), albumin at presentation < 31g/L (p=0.02) and being malnourished at presentation (p=0.05).

The majority of persistent, complex ECFs can be cured surgically with low mortality and recurrence rates in a multidisciplinary setting. Postoperative morbidity however remains a significant burden and management of ECFs should involve the early identification and correction of factors that predispose to high grade morbid events in an effort to further improve patient outcomes. An approach that involves a willingness to wait before embarking on surgery and optimal peri operative stabilisation of the patient is ideal.

**Status:** Project completed  
**Manuscript in Preparation**

**RESEARCH ACTIVITIES**

2010-2012

Celebrating 10 years of SOuRCe
Reducing disparity in outcomes for immigrants with cancer: a qualitative assessment of the feasibility and acceptability of a culturally targeted telephone-based supportive care intervention

Joanne. Shaw, Phyllis. Butow, Ming Sze¹, Jane. Young, David Goldstein²

¹ Psycho-oncology Collaborative Research group (PoCoG), University of Sydney
² South Eastern Sydney Local Health District

This qualitative study explored the experiences of Chinese and Arabic-speaking cancer patients. The study aimed to identify cultural sensitivities important to the acceptability of a telephone-based supportive care intervention and ascertain potential cultural barriers to participation. Focus groups conducted in the participants’ own language were conducted with Chinese and Arabic speaking patients and carers attending cancer support groups.

Overall such an intervention was viewed favourably as a means of providing information and support in the patient’s language, particularly at diagnosis. Cultural considerations included assurances of confidentiality. An initial face-to-face contact was highlighted as the most important factor facilitating participation. Participants recommended the inclusion of patient-initiated calls as part of the intervention.

This study will inform the study design and intervention focus of a culturally sensitive intervention to improve the quality of life and reduce psychological distress among immigrants with cancer.

Status: Project completed

Under editorial review (Supportive care in cancer)
Unmet supportive care needs in colorectal cancer: Differences by age
Mikaela Jorgensen, Jane Young, James Harrison, Michael Solomon.

This study explored how unmet needs differ by age over the three months following colorectal cancer surgery. Participants from control groups of pilot phases of an ongoing randomised trial (n=57) completed the Supportive Care Needs Survey (SCNS) at one and three months after hospital discharge. Multiple regression analysis was used to investigate whether age was an independent predictor of unmet need in each of the SCNS domains (psychological, health system/information, physical/daily living, patient care/support, sexuality).

Unmet needs of all patients decreased over time. Older patients had significantly lower levels of unmet need in all SCNS domains except patient care/support at both time points, after adjusting for other factors (e.g. sex, co-morbidity, adjuvant therapy use). However, 48% of older patients had unmet needs at one month, and 52% had unmet needs at three months. These results suggest that age-specific intervention to decrease unmet needs may be beneficial, and that patients’ needs should be monitored throughout their cancer journey.

Status: Project completed
Published: Supportive Care in Cancer 2012; 20:1275-81

Randomised control trial of biofeedback guided anal sphincter exercises in the treatment of faecal incontinence
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² Department of Anorectal Facility, Royal Prince Alfred Hospital
Biofeedback and Continence Centre (BAC) Department of Colorectal Research, Royal Prince Alfred Hospital

Faecal incontinence becomes increasingly prevalent as patients age and previous mild sphincter dysfunction becomes unmasked. Incontinence is a more common problem in women with the most common predisposing factor being childbirth which damages the pelvic floor, anal sphincter mechanism and/or pudendal nerves. There are numerous surgical treatments for faecal incontinence, but the indications and results of these operations mean that relatively few patients are suitable for surgical intervention therefore the use of biofeedback benefits the quality of life of these patients.

Biofeedback involves the use of anal manometry and trans-rectal ultrasound. This allows the participant to watch the contractions of their anal sphincter in ‘real time’ in order to develop better control of their bowel function. The purpose of this trial is to determine the optimal type and number of biofeedback sessions needed to obtain good results.

This is a prospective randomised controlled trial. Patients will be stratified according to place of residence (within / outside metropolitan Sydney).
The aims are to determine whether a single biofeedback treatment session with monthly telephone follow-up is as effective as standard monthly clinic-based biofeedback treatment for people with faecal incontinence and then to determine whether a single biofeedback treatment session with monthly telephone follow-up is more effective than a single biofeedback treatment session alone.

The primary outcome measures are patient assessment of view of the effectiveness of treatment and change in quality of life index as measured by using the Direct Questioning of Objectives technique. The Secondary outcome measures are resting, cough, maximal and fatigue of squeeze anal canal manometric pressures in millimetres of mercury and isotonic fatigue time & isometric fatigue contraction number – as assessed by ultrasound.

This study is being run in conjunction with the Royal Prince Alfred Hospital Biofeedback and Continence (BAC) Centre.

Status: Recruitment and follow-up underway

Quality of life in Perianal Crohn’s Disease
Srihari Mahadev1, Jane Young, Warrick Selby2, Michael Solomon,
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2 Department of Gastroenterology, Royal Prince Alfred Hospital

The study is a mailed survey of patients with perianal Crohn’s disease. The aim of the study was to identify the quality of life issues associated with perianal disease that patients consider most important and most adverse. Participants were asked to rate the importance of various symptoms, and were also surveyed regarding depression and overall quality of life. In addition, biographic data and clinical data were collected from medical records. Of the eligible patients, 69 (53%) responded to the survey. Physical symptoms of pain and discomfort were rated as most important. A significant minority (41%) indicated they would be willing to trade part their life expectancy to be cured of perianal symptoms.

Depressive symptoms were reported by 73% of patients, and an alarming 13% reported feeling suicidal due to their perianal disease. Perianal drains were associated with high importance scores for a majority of quality of life factors.

Status: Data analysis is ongoing
Published: Diseases of the Colon & Rectum 2011:54:5:579-585

Quality of life of people with head and neck cancer: Assessing the role of ethnicity
Aisha Harun1, James Harrison, Justine Oates2, Jane Young, Jonathan Clark2.
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2 Sydney Head and Neck Cancer Institute, Sydney Cancer Centre, Royal Prince Alfred Hospital

This study aimed to determine the effect of ethnicity on quality of life (QOL) of head and neck cancer patients over the first twelve months following diagnosis.

An observational cohort study was conducted. Eligible patients were diagnosed with head and neck cancer and treated with curative intent. QOL data were prospectively collected using the EORTC QLQ-C30 and H&N35 at diagnosis (baseline) and at 3, 6, and 12 months. Patients’ ethnicity was classified by either English or non-English speaking country of birth. Predictors of baseline QOL, changes in global and domain QOL scores were compared between groups.

Of 331 patients, 262 patients were born in an English speaking country and 69 in non-English speaking countries. Generally global and functional QOL scores were comparable between groups. Random effects modelling of all global, domain and change scores found no differences between groups. Country of birth was found not to be a significant predictor of baseline QOL (p =0.94) however age (p=0.04) and advanced stage of disease (p=0.05) were. Country of birth was also not associated with a clinical significant change any QOL score however advanced stage of disease resulted in significant reductions in the physical, emotional and cognitive domains.

The similarity in QOL scores across ethnic groups is promising, as it suggests that ethnicity does not play a major role in patient perception of disease status or function. In this study age and stage of disease were more important predictors of QOL than ethnicity.

Status: Project completed.
Manuscript under preparation
Comparison of surgical flap repairs for complex anal fistula: analysis of long term outcomes

Min Hoe Chew1, James Harrison, Ker Kan Tan1,2, Verinder Sidhu1, Shafqat Inam3, Michael Solomon.
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2 John Moro Department of Gastroenterology and Liver Unit, Royal Prince Alfred Hospital

The surgical management of high anal fistulae remains a challenge. Randomised studies of varying techniques remain difficult due to the low prevalence of complex fistulae. Varied surgical procedures have been described, the two most commonly performed involve a Mucosal advancement flaps (MAF) or anocutaneous flap (ACF) repair. No single technique has been shown to be suitable for all types of anal fistula and concerns regarding recurrence, adequate control of sepsis and a risk of post operative faecal incontinence remain for each procedure.

A previous study at SOuRCE has described our early experience of sixteen patients who underwent an ACF procedure and noted one recurrence, 70% improvement of continence scores as well as improvements in quality of life in 15 patients. Given these findings, this study will make a direct comparison between the MAF and ACF surgical techniques. A retrospective analysis will be performed using patients with high cryptoglandular complex anal fistulas who underwent these two procedures.

The objective of this study is to determine if the management of complex fistula using the ACF procedure may provide a superior outcome for patients.

Participants will be those in ongoing follow-up due to surgery for an anal fistula and identified from the records of a single surgeon. Participation is via informed consent and voluntary. Demographic and operative outcomes of the study sample will be described from participants’ medical records.

Quality of life and functional outcome measures such as Perianal Disease Index (PDAI) and St Mark’s continence scores will determined via a telephone interview conducted by clinical interviewers.

The results of this study may provide guidance to selection of flap repair methods for patients undergoing future complex fistula surgery.

Status: Recruitment in progress

Factors influencing donor and recipient decision making in adult-to-adult living donor liver transplantation: a survey using hypothetical scenarios.
Joshua Lansom1, Michael Crawford2, Michael Solomon.
1 Medical student, University of Sydney
2 Surgical Director, Australian National Alfred Hospital

In Australia there is a shortage of deceased organs for those in need of liver transplantation. One solution to this shortage is adult-to-adult living donor liver transplantation (AALDLT). AALDLT has been available in Australia for several years now but has only been performed twice. It was thought that patient preferences and understanding might be part of the reason for the low take-up of AALDLT. There is no published research done on potential live liver donor decision making in Australia. This study uses hypothetical scenarios to ask people from the general population what factors would influence their decision to donate or not to donate if they had a loved one who required a liver transplant. This study also seeks to determine from whom someone would be willing to consider receiving a living donation from if they needed a liver transplant.

The results of this study will inform the clinicians which factors are more important than others in the decision to be a living donor. This will allow clinicians to engage with patients and their families on issues that have been shown to be of concern to other people.

Status: Data analysis and Manuscript in Preparation

Preoperative and postoperative nutritional status of patients following pelvic exenteration surgery for rectal cancer.
Jessica Beaton1, Sharon Carey1, Michael Solomon, Jane Young.
1 Department of Nutrition & Dietetics, Royal Prince Alfred Hospital

The aim of this prospective observational study was to determine the nutritional status of patients undergoing pelvic exenteration surgery. Data collection was completed in March 2012. Eighty eight patients were recruited to the study. The prevalence of malnutrition as determined by the subjective global assessment was 24% on admission and 51% at the time of discharge. Percentage weight change significantly deteriorated during their admission and continued after discharge. Preoperative BMI was the only significant factor in predicting percent weight loss at both discharge and one month after discharge. A scientific paper has been written and submitted and we are awaiting acceptance.

Status: Study completed. Manuscript under editorial review
Quality of life trajectories in patients with colorectal cancer following surgery
Ivana Durcinoska, Jane Young, Tim Dobbins, Phyllis Butow, Michael Solomon

1 Cancer Epidemiology & Services Research, University of Sydney

Surgery is the mainstay of treatment for people with colorectal cancer. Following surgical resection, physical, emotional and functional recovery varies between patients. Understanding who is most at risk of poor quality of life (QoL) following surgery is crucial for the development of support services. This study investigated factors predictive of decreased quality of life in the first 6 months following surgery for colorectal cancer.

The ‘usual care’ control group (n=369) in the ‘CONNECT’ multi-centre randomized trial comprised the study sample for this analysis. QoL was assessed using the Functional Assessment of Cancer Therapy-Colorectal (FACT-C) questionnaire before surgery (at baseline) and then at 1 month, 3 months 6 months after surgery. Multivariate analyses will be used to identify significant, independent predictors of decreased QoL at each time point.

The results of this study will identify specific patient groups which could benefit from additional support post-operatively and provide a focus for future interventions or services to improve patient outcomes.

Status: Study completed
Manuscript under review
(ANZ Journal of Surgery)

Home-based online decision support for patients with Inflammatory Bowel Disease (IBD)
Mette Kjer Kaltoft, Warwick Selby, Michael Solomon

1 University of Southern Denmark (SDU)
2 Royal Prince Alfred Hospital, Gastroenterology and Liver centre
3 University of Sydney

The call for greater patient involvement in decision making and attention to patient preferences, as well as increasing demand for more effective ‘translation’ of research evidence into patient-centred practice, is being acknowledged, but in the context of increased pressure on health service resources and clinician time.

The aim of the study is to explore the feasibility, contributions, and resource implications of introducing online Multi-Criteria Decision Analysis (MCDA)-based decision support into cross-disciplinary settings. The specific focus is on the role of (nurse’s) online preparation of patients prior to a consultation in the management of Inflammatory Bowel Disease (IBD), chosen for its complexity, preference-sensitivity, and public health impact due to rising incidence and costs.

MCDA provides an integrated way of supporting, evaluating, and documenting the clinical decision by separating the evidence base for the decision and the patient’s importance weights in relation to relevant outcomes and attributes. The decision aid provides an opinion based on their transparent integration, not as a medical opinion per se but one produced by the involved health professionals; in the present case of patients living with IBD, physicians and surgeons.

Evaluation is via a decision quality instrument MyDecisionQuality (MDQ). The importance weights over 8 criteria for a good decision are entered at the point of decision, along with ratings once the decision is taken, to provide personalisation. The documentation, including a graphic picture of the decision can be saved and printed for future communication, and act as a basis for an assessment of concordance, if also completed by the professionals.

Mixed methods, including weblog analysis of the respondent’s use of IBD links, is part of the formative evaluation outlined in the study, which includes related and concurrent field work at St. Mark’s Hospital in London, involving IBD nurse specialists and their telephone advice line.

The findings will feed into a protocol for translation and transfer into the Danish context as part of a PhD project at the University of Southern Denmark (SDU). It is being undertaken in collaboration with SOuRCe and Sydney School of Public Health, and is funded by The Region of Southern Denmark, SDU, and Helsefonden.dk.

Status: Recruitment underway

Susan Donovan and Emily Chew (Colorectal Research)

SOuRCe Triennial Report
CSSANZ Bi-national Colorectal Cancer Audit
Christopher Byrne, Michael Solomon, David Ong, Christopher Young, Caroline Wright, Peter Lee, Cherry Koh, Emily Chew.
1 Department of Colorectal Surgery, Royal Prince Alfred Hospital
2 Universiti Kebangsaan Malaysia Medical Centre, Malaysia
3 Department of Colorectal Research, Royal Prince Alfred Hospital

The Bi National Colorectal Cancer Audit is a clinical audit established by the Colorectal Surgical Society of Australia and New Zealand (CSSANZ). Patients undergoing resection or treatment for colorectal cancer will be recorded into the auditing system. The audit is an ongoing project. RPAH has collected data for the audit since 2006.

The data will be used for clinical audit of the surgical practices of Australian and New Zealand colorectal surgeons for the purpose of quality assurance. The audit will also work towards creating a large dataset containing Australian and New Zealand data that can be used for research and quality improvement purposes with the aim of advancing knowledge and understanding of treatment for colorectal cancer.

Status: Audit underway since inception in 2006

Quality of life following pelvic exenteration for pelvic malignancy: outcomes for cancer carers: An interview study
1 Department of Upper Gastrointestinal Surgery, Royal Prince Alfred Hospital
2 Department of Upper Gastrointestinal Surgery, Concord Repatriation General Hospital
3 Centre for Cardiovascular and Chronic Care, Curtin University of Technology

The purpose of the Carer Interview study was to explore and articulate the issues and experiences of family caregivers of people who have undergone surgery for newly diagnosed gastrointestinal cancer or stage Duke's D colorectal cancer. Specifically, the study investigated family members’ perceptions of their role in the ongoing care of a patient with cancer. The study also identified the supportive care needs relevant to family caregivers as well as potential barriers to acceptance of supportive care. The study involved two semi-structured interviews, one within three weeks of the date of surgery and a second interview three months later.

Status: Study completed.
Published: Asia Pacific Journal of Clinical Oncology 2011; 7: 117-195
Improved psychosocial outcomes for cancer carers: a randomised controlled trial (Family CONNECT)

Jane Young, Phyllis Butow, Michael Solomon, Patricia Davidson, James Harrison, David Martin, David Story, Joanne Shaw

1 Centre for Cardiovascular and Chronic Care, Curtin University of Technology
2 Department of Upper Gastrointestinal Surgery, Royal Prince Alfred Hospital
3 Department of Upper Gastrointestinal Surgery, Concord Repatriation General Hospital

This is a randomised controlled trial to assess whether a structured telephone delivered intervention for cancer carers will reduce psychological distress and improve their quality of life in the first three months following diagnosis. It is also designed to investigate whether this intervention directed at carers can also improve psychosocial outcomes (quality of life, psychological distress) for patients themselves and reduce the number of unplanned contacts with health services such as hospital admissions and emergency department visits. Specifically the primary aim of this research is to ascertain the effectiveness of a structured telephone intervention for the principal family or friend providing care and support to post-operative patients with poor prognosis gastrointestinal cancer to improve carers’ quality of life in the first three months following the patients’ discharge from hospital.

Status: Recruitment in progress
Funding: NHMRC project grant

Quality of life following pelvic exenteration for pelvic malignancy: prospective, comparative study

Jane Young, Tim Badgery-Parker, Lindy Masya, Madeleine King, Alexander Heriot, Michael Solomon

Pelvic exenteration (PE) is highly radical surgery offering the only potential cure for locally advanced pelvic cancer where there is no evidence of metastatic spread. The quality of life (QOL) impacts of this surgery are largely unknown. This study compared QOL trajectories for patients who did and did not undergo PE at the two centres performing significant numbers of these procedures in Australia.

Consecutive patients referred for consideration of pelvic exenteration completed clinical and QOL assessments at baseline, hospital discharge (PE patients only), 1, 3 and 6 months. The SF-36v2 and FACT-C instruments were used to measure generic and cancer-specific QOL respectively. Linear mixed modelling compared QOL trajectories and identified predictors of poor QOL, using multiple imputation to account for missing QOL data.

Among 182 patients (41 primary rectal, 91 recurrent rectal, 13 other primary and 37 other recurrent cancer), 146 (80%) proceeded to PE. There were no baseline differences between groups in demographic, clinical or QOL measures. In the PE group, there were no peri-operative deaths but 87% (95% CI) developed at least one complication.

Mean FACT-C score at baseline (93.2) reduced by 14.3 points by hospital discharge, increased to 86.8 by 1 month postsurgery and continued to improve towards 6 months. In the non-PE group, mean baseline FACT-C (91.2) also decreased by 1 month. At 1, 3 and 6 months, the differences between groups in mean FACT-C scores were 0.39, 0.45 and -1.1 points respectively. These differences were neither statistically significant nor clinically important.

Patients undergoing PE have an immediate decrease in QOL after surgery, but within a month of hospital discharge have recovered to the same level as people who did not have the procedure. Ongoing follow up is needed to compare the longer term clinical and QOL outcomes for these patients.

Status: Study completed.
Manuscript in preparation
Randomised evaluation of the supportive care intervention “CONNECT” for people following surgery for colorectal cancer: pilot study

James Harrison, Jane Young, Michael Solomon, Phyllis Butow, Robyn Secomb1, Lindy Masya

1 Department of Colorectal Surgery, Royal Prince Alfred Hospital

Internationally cancer policy now recognises the importance of addressing patients’ supportive care needs as well as clinical needs. Evidence suggests however that people with cancer can have a range of unmet supportive care needs. Within cancer services, there is increasing interest in needs assessment and specifically the measurement of unmet need to ensure health systems are responsive to patients’ needs.

The CONNECT telephone intervention, delivered by a nurse, has been designed to reduce colorectal cancer patients’ unmet needs following discharge from hospital after surgery. The content of each call was standardised to address supportive care domains of unmet need. Patients were randomised to receive the telephone intervention or usual follow-up care. Outcomes of this study included unmet supportive care needs, quality of life (QoL) and health service utilisation. These were assessed at baseline then at 1, 3 and 6 months post-discharge. Process evaluation of the nurse intervention was also conducted.

39 participants were randomised to the intervention group and 36 to usual care. Of 87 eligible patients, 75 consented (86% consent rate). n=39 were randomised to CONNECT and n=36 to standard follow-up. There was a reduction in presentations to emergency departments (12%) and readmission rates to hospital (10%) among intervention participants.

These differences were not statistically significant. At six months, there were no significant differences between groups for unmet supportive care needs, however greater reductions in unmet need change scores, more than double, were noted for intervention group compared to a controls. Intervention group participants reported better quality of life compared to controls and the size of the difference between groups was clinically meaningful. CONNECT has shown promising indications on health system and patient outcomes. Despite non-significant differences between groups in relation to outcomes assessed, larger studies should be conducted to investigate CONNECT’s potential further.

Status: Project Completed

Published: Diseases of the Colon and Rectum 2011; 54: 622-631

CONNECT: A randomised multi-centre trial of centralised remote access cancer care coordination to improve processes and outcomes of care

Jane Young, Phyllis Butow, Michael Solomon, Glenn Salkeld, Kate White1, Jennifer Walsh, James Harrison, Ivana Durcinoska,

1 Faculty of Nursing and Midwifery, University of Sydney

Patients with colorectal cancer are often required to navigate a complex system involving a diverse range of medical, nursing and allied health practitioners in both hospital and community settings. Improving care coordination, patients’ experience of care and patient outcomes are widely recognised as priorities for the improvement of cancer services.
Therefore, the objective of this multi-centre trial is to assess the effectiveness of a centralised telephone-based ‘remote access’ care coordination service delivered by a specialist cancer nurse to improve care coordination and patient outcomes in the six months following colorectal cancer surgery.

Ethics and research governance approvals for this study have been obtained and patient recruitment has been completed. Twenty-three public and private hospitals throughout NSW and ACT including Sydney, Wagga Wagga, Newcastle, Dubbo, Orange, Port Macquarie, Lismore, Coffs Harbour and Canberra recruited for the study. Participating patients were randomly allocated into the ‘intervention’ group and received the telephone care coordination service after they were discharged from hospital or the ‘control’ group and received usual care. All participants completed a series of questionnaires relating to quality of life, psychological distress, unmet supportive care needs, care coordination and health service utilisation. A total of 775 patients were enrolled in the study.

Status: Study completed
Data analysis & manuscript in preparation

Funding: Cancer Institute NSW Health Services Research Program Grant

Localised versus centralised nurse delivered telephone services for people in follow up for cancer: Opinions of cancer clinicians
James Harrison, Ivana Durcinoska, Phyllis Butow, Kathryn White, Michael Solomon, Jane Young

There is uncertainty about how best to translate evidence-based psychosocial oncology and supportive care interventions into practice. This study explores cancer clinicians’ views about the value of a nurse-delivered supportive care telephone service, the preferred delivery method (either locally or from a centralised location) and operational aspects relating to implementation.

Interviews were conducted with 16 surgeons and cancer nurses across NSW Australia. Content analysis was conducted independently by two reviewers. Data were analysed inductively, responses were organised into categories and then higher order themes.

All clinicians valued the role of additional telephone follow-up as it would allow patients to ask questions and receive reassurance. Clinicians believed these services could hospital presentations and provide equity and standardised care, particularly to those living outside metropolitan centres.

Although all clinicians accepted a centralised model of delivery would be cost-effective, the majority (n=15) indicated a preference for local delivery. This preference was based on the perception that local nurses would have superior knowledge of the local context. Despite the promise of telephone supportive care services, clinicians felt some face-to-face contact with patients was essential.

All clinicians stated that new funding was required given such services did not exist or current staff was overstretched.

Key at risk groups where limited resources could be targeted included the elderly, those at high risk of recurrence and culturally and linguistically diverse populations. The timing and intensity of support would depend on tumour type and treatment pathways. Clinicians acknowledged there could be overlap with cancer nurses locally requiring local decisions about implementation.

There was clear endorsement of the benefits of additional telephone support for patients, with a greater preference for a local model of service delivery. The opinions ascertained in this study can be used to translate services into practice.

Status: Project completed
Under editorial review (BMJ Supportive & Palliative Care.)

Development of communication skills training for nurses delivering telephone-based supportive care interventions for people with cancer or their families
Joanne Shaw, Jane Young

This research aimed to: identify the communication skills training needs of nurses conducting telephone-based supportive care interventions for people with cancer or their families; compare previously published communication skills assessment measures to determine which tool (if any) is most applicable to assessment of telephone-based communication and if necessary, develop a telephone-communication specific coding system; develop and pilot a standardised training methodology for telephone communication skills training. Communication skills training needs of nurses has been identified based on analysis of a series of telephone calls by nurses delivering supportive care to colorectal patients post-surgery
Status: Analysis of calls underway

Development and feasibility assessment of telephone-delivered supportive care to improve outcomes for patients with colorectal cancer: the CONNECT intervention
Jane Young, James Harrison, Michael Solomon, Phyllis Butow, Rebecca Dennis, Diane Robson, Sally Auld

1 Pre-Admissions Unit, Royal Prince Alfred Hospital
2 Department of Colorectal Surgery, Royal Prince Alfred Hospital

This study aims to describe a pilot study of the feasibility, acceptability and likely impact of a nurse-delivered, telephone intervention to reduce unmet need and improve quality of life for surgical patients with colorectal cancer. The CONNECT intervention comprises five standardised calls over 6 months commencing on day 3 post-discharge. A prospective non-randomised control trial with patients who had surgery for colorectal cancer at Royal Prince Alfred Hospital, Sydney between July
and December 2006 was conducted. Patients completed a telephone interview with an independent researcher at 1, 3 and 6 months to assess study outcomes, including unmet need (Supportive Care Needs Survey), psychological distress and quality of life (FACT-C). Patients’ views of the intervention were ascertained.

Forty-one patients participated, 20 in the intervention period. Intervention calls were successfully completed with 85% or more of patients at each of the five time points. Mean call duration ranged from 14–19 min with the highest number of needs (27 for 20 patients) identified on day 3. Patients indicated that the timing of the calls was appropriate and the majority (85%) felt the number of calls was sufficient. There were promising trends in outcomes. For both patient groups, there were clinically meaningful improvements in FACT-C scores over time, with a larger improvement in the intervention group (20.4 points) than the control group (11.7).

The CONNECT intervention was found to be feasible and acceptable to patients. A larger randomised trial is underway to establish its effectiveness to improve patient outcomes.

Status: Project complete
Published: Supportive Care in Cancer 2010; 18: 461-4

Parenteral nutrition with standard solutions: not the best solution for everyone?

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²Division of Surgery, Royal Prince Alfred Hospital

This observational retrospective cohort study was designed by the Specialised Nutrition Advisory Group (SNAG) at RPAH. A research grant was obtained by Baxter Health Care, and SOuRCe collected the retrospective data for this research. The aim of the research was to assess the use of a single 3-in-1TPN solution in a major teaching hospital. Results indicated that most patients had one single occasion of TPN, median duration was 8 days, interquartile range 6-14 days. Twenty-seven patients died while they were receiving parenteral nutrition. There were 30 occasions of line sepsis in 22/300 patients, representing 0.67 infections per 1000 catheter days, or 7.33% of patients. No patient experienced critically high triglycerides; 16% of patients had a metabolic adverse event including raised bilirubin, urea, creatinine or liver enzymes.

Status: Project completed
Manuscript under review

Measuring cancer care coordination: development of questionnaires for patients and carers

Jane Young, Jennifer Walsh, Phyllis Butow, Michael Solomon
International and Australian cancer strategic plans identify the coordination of care as a priority area for improvement. In order to be able to measure improvements in care co-ordination, this concept must first be clearly defined and then measured accurately. Currently, there are no validated measures of cancer care coordination. Patients and their carers are ideally placed to rate the adequacy of care coordination. Therefore, this study aimed to develop questionnaires for patients and carers, to define their underlying factor structures and to assess their psychometric properties.

Questionnaire items were developed on the basis of literature review, focus groups and interviews with cancer patients, carers and clinicians. Draft questionnaires were completed by adult patients in metropolitan, regional and rural areas of NSW who had been treated for any form of cancer between 3 and 12 months previously. Patients’ carers completed a carer version. Exploratory factor analysis was used to define the underlying factor structure of the instruments. Internal consistency was assessed with Cronbach’s alpha. Test-retest reliability was assessed using weighted kappa for individual items and the intra-cluster correlation coefficient (ICC) for scales.

Status: Project Completed
Published: BioMedCentral Cancer 2011; 11:298

What is important in care coordination? A qualitative investigation.

Jennifer Walsh, Jane Young, James Harrison, Phyllis Butow, Michael Solomon, Lindy Masya Kate White¹
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Although it is widely recognised that better coordination of cancer care holds considerable potential to improve patients’ experience of care and their outcomes, there is no agreed definition of the term ‘care coordination’ or consensus as to what it entails. An explorative descriptive qualitative study was undertaken to explore the views and experiences of key stakeholders to identify the key components of cancer care coordination. We conducted semi-structured individual and focus groups interviews with patients (n=20) who have been treated for any cancer and carers (n=4) as well as clinicians (n=29) involved in cancer care, using open-ended questions. Data were collected until saturation of concepts was reached. A phenomenological approach based on grounded theory was used to explore the participants’ experiences and views.
Seven key components were identified: organisation of patient care, access to and navigation through the healthcare system, the allocation of a “key contact” person, effective communication and cooperation amongst the multidisciplinary team and other health service providers, delivery of services in a complementary and timely manner, sufficient and timely information to the patient and needs assessment.

The components of cancer care coordination identified provide an empirical basis for the development of metrics and interventions to improve this aspect of cancer care.

**Status:** Project completed

**Published:** European Journal of Cancer Care 2011:20:220-227

### Improving colorectal cancer care coordination: Population-based assessment of patients' needs and preferences (The NSW Bowel Cancer Care Survey)

Jane Young, Ivana Durcinoska, Phyllis Butow, Lindy Masya, James Harrison

Effective coordination of care between different clinicians, services and health sectors throughout the patient journey is fundamental to the provision of high-quality care. People with cancer are particularly at risk of receiving poorly organized and fragmented care due to the complex nature of the disease and its management, which often involves multidisciplinary care from a large team of health professionals, in both hospital and community settings over extended periods of time.

The objective of this study is to assess the experience of cancer care coordination during primary treatment among a population-based sample of people with colorectal cancer in NSW. In addition, it will investigate the coordination of patients’ ongoing clinical follow up, as this is critical for the early diagnosis, assessment and management of recurrent disease. Ethics and research governance approvals for this study have been obtained and patient recruitment is in progress.

This study will provide new information about the adequacy of cancer care coordination and ongoing follow up across the NSW population. This information could then be used to develop strategies and target resources toward people at most risk of poorly coordinated care.

**Status:** Recruitment in progress

### Clinician preferences in treatment of trigeminal neuralgia

Benjamin Jonker, Jane Young, Michael Solomon

Trigeminal neuralgia is a condition causing severe facial pain which can be controlled by surgery, focused radiation and by medication. Each treatment has its own side effect profile and risks. We are seeking to understand better how clinicians currently make decisions in this area by conducting a survey of neurologists and neurosurgeons. The purpose is to understand whether there is currently equipoise between different treatment types, which outcomes are considered most important, and finally what barriers there might be to a randomized trial.

**Status:** In progress

### Interventions to improve patient participation in the treatment process for culturally and linguistically diverse people with cancer: A systematic review

Aisha Harun1, James D Harrison, Jane M Young,

1 The Johns Hopkins University School of Medicine

Disparities in cancer outcomes for people from culturally and linguistically diverse (CALD) groups are well known. Improving CALD patients’ active participation in treatment processes holds potential to improve outcomes, but little is known of effective strategies to facilitate this. This systematic review investigated interventions to improve three aspects of participation in cancer care among CALD groups, namely involvement in decision-making, communication with health providers and treatment adherence.

A comprehensive search of electronic bibliographic databases was conducted to identify intervention studies which reported outcomes relevant to patient participation for CALD groups. Two reviewers independently critically appraised studies and abstracted data.

Of 10,278 potential articles, seven met the inclusion criteria, including three randomised controlled, three non-randomised and one mixed-method experimental designed studies. Interventions included the use of patient navigators, videos and decision aids. The impact on patient participation was varied. The effect of a decision aid and patient navigator interventions on communication with health providers was positive. Whilst the use of a decision aid successfully facilitated shared decision-making and patients’ perception of treatment adherence, the use of patient navigators was ineffective. A computer support system was found to improve general patient participation however little clarification of what this involved was provided.

This systematic review identified few rigorous evaluations of interventions to improve treatment participation for CALD people with cancer, highlighting the lack of a robust evidence base to improve this crucial aspect of care. The development and evaluation of interventions for diverse populations remains a priority.

**Status:** Project completed.

**Published:** Asia-Pacific Journal of Clinical Oncology 2012; doi:10.1111/j.1740-8745.2012.01531.x
The unmet needs of partners and caregivers of adult diagnosed with cancer: A systematic review

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1 Translational Cancer Research Unit, Ingham Institute for Applied Medical Research, UNSW
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4 School of Psychology, The University of Sydney

A partner or caregiver is typically the patient’s primary support person and is also deeply affected by the cancer diagnosis. Recognition of the impact of cancer on partners and caregivers has prompted efforts to document their unmet supportive care needs. This review aimed to: 1) quantify the prevalence of unmet needs reported by partners and caregivers, 2) categorise their unmet needs by domain, and 3) identify the main variables associated with reporting more unmet needs.

Manuscripts were identified through systematically searching electronic databases, perusing reference lists of retrieved publications, online searching of key journals, and contacting researchers in this field.

Unmet need items across 29 manuscripts were clustered into six domains: comprehensive cancer care (prevalence = 11% - 96%), emotional and psychological (2% - 93%), partner or caregiver impact and daily activities (3% - 79%), relationship (3.7% and 58%), information (2.2% – 86%), and spiritual (6.7% - 43%). Studies of caregivers of adult diagnosed with cancer: A Delphi Study

Clinical, MRI and PET-CT criteria used by surgeons to determine suitability for pelvic exenteration surgery for recurrent rectal cancers: A Delphi Study

ChewMin-Hoe1, Wendy E Brown2, Lindy Masya, James D Harrison, Eddie Myers3, Michael J Solomon

1 Department of Colorectal Surgery, Royal Prince Alfred Hospital
2 Department of Radiology, Royal Prince Alfred Hospital

Surgical resection with clear margins is the major predictor of long-term survival in recurrent rectal cancer. The extent of pelvic exenteration surgery is dependent on many factors including clinical and radiological criteria.

The aim of this study was to establish which clinical and/or radiological factors were considered important by surgeons who perform pelvic exenteration surgery for recurrent rectal cancer. A two-stage Delphi study was conducted among an international panel of 36 colorectal surgeons recruited via a snowball sampling method. Surgeons rated the importance of 99 clinical and radiological criteria using a nine-point scale.

Main outcome measures: Consensus was attained when at least 85% of the panel rated criteria within three points.

Clinical factors suggestive of systemic disease, symptoms of advanced local recurrence, surgical fitness, and cognitive impairment were considered important by the panel when considering suitability for surgery. Agreement regarding indication for surgery was reached for 20 radiological factors. Strong agreement was achieved for factors associated with tumour involvement in the axial and anterior compartments. For only 16 of these 20 radiological factors was there agreement that a clear resection margin was likely to be achieved.

Limitations: Further rounds of Delphi may have yielded greater consensus.

This study has identified a set of criteria considered by experts to be important in evaluating patients’ suitability for pelvic exenteration surgery. Evaluation of these criteria is required to determine their clinical utility in predicting a negative resection margin at pelvic exenteration surgery.

Status: Project completed

Clinical, MRI and PET-CT criteria used by surgeons to determine suitability for pelvic exenteration surgery for recurrent rectal cancers: A Delphi Study

ChewMin-Hoe1, Wendy E Brown2, Lindy Masya, James D Harrison, Eddie Myers3, Michael J Solomon

1 Department of Colorectal Surgery, Royal Prince Alfred Hospital
2 Department of Radiology, Royal Prince Alfred Hospital

A Reliability study of three tumour regression grades for rectal cancer treated without preoperative radiotherapy

Jin Hee Cho1, Jane Young and Michael Solomon

1 Colorectal surgery, Concord Repatriation General Hospital
2 Department of Radiology, Royal Prince Alfred Hospital

Current treatment for locally advanced rectal cancer (LARC) involves preoperative chemoradiotherapy (CRT) to decrease the tumour size (downstaging). There are currently many different tumour regression grades (TRG) that are used to indicate the chemoradiotherapy effect. There are few studies that look at their reliability. This study was done to compare the interobserver and intra-observer reliability of three TRG.

One slide only from 30 patients with rectal cancer was reviewed by two blinded pathologists on two separate occasions. The three grades used were a descriptive grade (Mandard’s), a quantitative grade (Dworak’s) and a new simplified grade. The intra-observer and inter-observer reliability were compared.
Intra-observer reliability for Mandard’s showed a weighted kappa of 0.83 and 0.91 (p = 0.4) for the two pathologists, Dworak’s 0.67 and 0.91 (p = 0.07) and the simplified grade 0.85 and 0.95 (p = 0.3). Inter-observer reliability for Mandard’s was 0.83 and 0.74 for the first and second round respectively, Dworak’s was 0.72 on both occasions and the simplified grade was 0.85 on both occasions.

There was no significant difference in the reliability of the different TRGs. The new TRG was as reliable. A TRG should be recorded for all who received pre-operative radiotherapy. The new grade requires further prospective evaluation to determine its significance and usefulness as a prognostic indicator.

Status: Manuscript in preparation

Quantifying supportive care needs: Clinical audit of non-admitted patient occasions-of-service
James Harrison, Jane Young, Sally Auld, Lindy Masya, Michael Solomon, Phyllis Butow
1 Department of Colorectal Surgery, Royal Prince Alfred Hospital

Cancer patients are at risk of having unmet supportive care needs following surgery and discharge from hospital. The trend towards shorter length of hospital stay may exacerbate this problem as there is less time for patient education and discharge planning. Nurse specialists are often the first point of contact for patients who are experiencing unmet need after discharge. Therefore, we conducted a clinical audit of nurse specialists’ records to quantify patients’ supportive care needs and to investigate predictors of need.

Nursing records for patients discharged from a quaternary referral colorectal cancer surgical unit were reviewed. All non-admitted patient occasions of service (NAPOOS) were identified. Methods of, and reasons for, contact were recorded. Associations between patients’ characteristics and the number and type of NAPOOS were investigated.

Of 521 eligible patients, 219 (42%) received 988 post-operative NAPOOS. Overall, 1369 specific needs were identified during these NAPOOS. Ongoing reassurance and monitoring were required for 186 patients (85%). Physical needs (wound care and bowel function) were prevalent for 15-20%, information needs for 20% and assistance organising follow-up appointments for 36% of the sample.

Older patients (>65 years) were significantly less likely to record a NAPOOS whilst people with rectal cancer were significantly more likely to report multiple NAPOOS and physical needs. This study highlights a range of needs facing patients when they return home after surgery. These data can be used to plan health service interventions to improve patient well-being.

Status: Project Completed Manuscript in preparation

Improving evidence based care for locally advanced prostate cancer – a randomised phased trial of clinical guideline implementation through a clinical network
Mary Haines, Prof Dianne O’Connell, Jane Young, Dr David Smith, Andrew Kneebone, Andrew Brooks
1 The Sax Institute and University of Sydney
2 The Cancer Council NSW
3 Royal North Shore Hospital and University of Sydney
4 Agency for Clinical Innovation, Westmead Hospital

Prostate cancer is the most common cancer registered in Australia and is the second most common cause of cancer death in males. There is an urgent need to improve care for men with advanced prostate cancer if we wish to improve their survival. Compelling evidence suggests we need to alter current practice by offering radiotherapy to high-risk men – but will clinicians change their practice?

Clinical networks are increasingly being viewed as vehicles through which evidence-based care can be embedded into our healthcare system, but we still don’t know if the time and resources spent on networks result in better care. This study will be one of the first randomised trials to test the effectiveness of clinical networks to lead changes in clinical practice in hospitals with high-risk patients to improve evidence based care in Australia.

The aim is to develop and trial a locally tailored intervention, that harnesses the NSW Agency for Clinical Innovation Urology Network in NSW hospitals, to implement a clinical practice guideline for the management of men with high-risk prostate cancer.

Development of a multi-faceted intervention, with elements informed by: a nationwide quantitative survey of members of the Urological Society of Australia and New Zealand (n=400) to assess attitudes and beliefs - qualitative semi-structured interviews with identified local opinion leaders in the hospitals to identify barriers to change in care that will be targeted by the intervention.

Phased randomised trial of a locally tailored intervention rolled out across all 12 hospitals within the Urology Network that have multi-disciplinary teams using a stepped wedge design: Phase 1: outcome data to assess changes in healthcare practice will be collected through medical audit of patient records; Phase 2: before and after mixed methods study to elucidate the mechanisms of change.

Status: Awaiting Ethics approval
IMPLEMENTATION OF EVIDENCE-BASED PRACTICE

Older patients and adjuvant therapy for colorectal cancer: Surgeon knowledge, opinions and practice
Mikaela Jorgensen, Jane Young, Michael Solomon

Two-thirds of colorectal cancer cases occur in those over 65 years in Australia; however cancer care issues in older patients are relatively under-researched. Appropriate adjuvant therapy is underutilised in older patients, and surgeons may play a critical role. A survey was sent to all Australian and New Zealand colorectal surgeons to investigate knowledge, opinions and self-reported practice regarding referral of older cancer patients for adjuvant therapy. 70% of surgeons responded. Surgeons were significantly less likely to refer older patients than younger patients for adjuvant therapy in self-reported practice questions. This difference was greatest for patients from rural/remote areas, followed by patients with little social support or poor general health status. Surgeons with greater knowledge and more positive opinions towards older patients were significantly more likely to refer older and younger patients similarly. Findings suggest that socio-demographic factors are important determinants of evidence-based care of older patients, and that interventions targeting surgeon knowledge may improve this aspect of patient care.

Status: Project completed
Published: Diseases of the Colon & Rectum 2011; 54:335-41

What do older colorectal cancer patients want? Age differences in factors influencing chemotherapy treatment decisions
Mikaela Jorgensen, Jane Young, Michael Solomon

Older colorectal cancer patients are less likely than younger patients to receive stage-appropriate adjuvant chemotherapy. This study aimed to explore barriers to adjuvant therapy use by examining the associations between patient age, factors of importance in chemotherapy decisions, and information and decision-making preferences. 68 patients who underwent surgery for colorectal cancer within the previous 24 months completed a self-administered survey. Factors that were significantly more important to older participants were fear of dying, maintaining quality of life, age, health status, and understanding benefits and side effects. Reducing the risk of cancer returning and physician trust were factors of highest importance for both age groups. Treatment cost, duration and travel were rated lowest. Participants who preferred less information and less involvement in treatment decision-making were more likely to be older. However these participants still rated many factors as important in their decision-making. For older patients, balancing the risks and benefits of treatment may be made more complex by the impact of emotional motivators (e.g. fear), greater health concerns, and conflicts between preferences for information and decision-making. Where perceived barriers to treatment and motivators for treatment choice are better understood, older patients may be supported to make optimal decisions about their care.

Status: Manuscript in preparation
The decision-making process behind defunctioning ileostomies

Ewan MacDermid, Christopher Young¹, Jane Young, Michael Solomon.
¹ Department of Colorectal Surgery, Royal Prince Alfred Hospital

In patients undergoing anterior resection the decision whether or not to create a defunctioning stoma is one that can have significant consequences. Decisions under uncertainty like these are made with a variety of conscious and unconscious tools, known as heuristics. Past experience has been shown to be a powerful heuristic tool in other domains, and we wished to ascertain its effect in the decision to create a defunctioning stoma.

Our aim was to identify whether the propensity to defunction a range of anastomoses scenarios. A survey questionnaire was sent to members of the Colorectal Surgical Society of Australia and New Zealand. Participants were asked for demographic information, a series of questions about their propensity for taking risks, when their last anastomotic leak was and whether they would defunction a range of hypothetical rectal anastomoses grouped according to height, age, ASA grade and the use of preoperative radiotherapy.

Results: 110 (75.3%) of 146 surveyed surgeons replied. 72 of these (65.5%) reported an anastomotic leak within the last 12 months. Surgeon’s measured propensity for risk-taking in everyday life was statistically comparable (24.6 vs 27.53, 95% CI, Mann-Whitney U) to previously studied participants in economic models.

The hypothetical patient scenario with the greatest degree of equipoise with 49.1% of respondents choosing to create a stoma was that of a mid rectal anastomosis, in a 60 to 70 year old ASA grade III smoker, who had not received any preoperative radiotherapy.

Hypothetical patient ASA grade, preoperative radiotherapy and anastomotic height were all independent predictors of stoma formation on regression analysis. Surgeon age (<50 years) (p = 0.0379) and lower propensity for risk-taking (p = 0.04) were demonstrated to be independent predictors of stoma formation on hazard regression analysis.

Conclusion: Our survey suggests that older colorectal surgeons and those with a higher propensity for risk-taking in their adult lives are less likely to create de-functioning stomas for patients undergoing anterior resection. Although the decision to create a stoma after anterior resection may made in the belief that its foundation derives from evidence base and rational thought, it appears other unrecognised operator factors may exert an effect.

Status: Project completed
Manuscript in preparation

Decision making when using radiotherapy in the treatment of rectal cancer

Jonathan Hong, Christopher Young¹, Michael Solomon, Jane Young
¹ Department of Colorectal Surgery, Royal Prince Alfred Hospital

There is a vast volume of evidence that supports and refutes the multiple roles of radiotherapy in the treatment of rectal cancer. To make a recommendation for an individual patient the surgeon must assess not only the probability of effectiveness (the evidence and experience) but also the patient’s wishes and fitness, the available resources and the features of the tumour. It is difficult to assimilate all this information to make a decision. Humans tend to use information selectively when confronted with a large volume of variables.

This project seeks to identify which variables carry most weight with surgeons when making decisions about radiotherapy in the treatment of rectal cancer. It also seeks to assess if surgeon age, place of training, site of practice impacts the . Knowledge of areas of uniform agreement and areas of equipoise can direct future research. It is also hoped that these preferences may be incorporated into a patient decision making tool.

Status: Project completed
Manuscript in preparation

Decision making in pelvic exenteration. Patient, surgeon and societal perspectives

Cherry Koh, Michael Solomon, Jane Young, Glenn Salkeld.

Recurrent cancers of the pelvis are a management challenge because of the poor prognosis and severity of symptoms that frequently accompanies it. In the absence of co-existing distant metastasis, radical surgery to remove all pelvic viscera contiguously involved by cancer may be considered provided no other contraindicating patient or surgical factors exist.

Such radical surgery, also known as pelvic exenteration, is the only curative option available to these patients as neither chemotherapy nor radiotherapy in isolation or in combination is curative. Provided a clear resection margin (R0) is obtained, 5 year survival of 38% has been reported. Although the oncological role of pelvic exenteration is established, data on quality of life is relatively scant. Further, although mortality from pelvic exenteration has declined dramatically over the years, morbidity rates remain high with 25-70% of patients experiencing at least one complication in the post-operative period.

Coupled with the potential need for prolonged rehabilitation, double stomas and an up to 70% risk of further local or systemic recurrence, pelvic exenteration therefore presents challenging decision making for patients with recurrent pelvic malignancies.
From a clinician perspective, surgery is generally only offered if R0 is likely because it is the single most important factor in predicting long term survival. Although most clinicians rely on MRI to determine respectability, predictive factors on MRI that would support or preclude surgery are not well studied. The aim of this study is to determine the utility of decision aids in facilitating patient decision making and to identify predictive factors on MRI that would guide surgical decision making.

**Status:** Data collection underway.

**Patient and Clinician Preferences For Surgical & Medical Treatment Options in Ulcerative Colitis**

Christopher Byrne1, Ker-Kan Tan2, Jane Young, Warwick Selby2, Michael Solomon

1 Department of Colorectal Surgery, Royal Prince Alfred Hospital
2 AW Morrow Department of Gastroenterology and Liver Unit, Royal Prince Alfred Hospital

When treating patients with refractory ulcerative colitis (UC), the choice between escalating medical management or surgery is not always distinct. This study was performed to quantify the preferences of patients and clinicians on the various treatment options in UC, and in particular the preferences for surgery resulting in permanent stoma versus restorative procedures.

UC outpatients were interviewed to measure their preferences for five scenarios using the prospective measure of preference (PMPt) method that generates two utility scores, willingness to trade or willingness to gamble. An identical self-administered questionnaire was mailed to Australian and New Zealand colorectal surgeons and gastroenterologists.

Fifty-five of 162 patients, 91 of 127 surgeons and 78 of 272 gastroenterologists responded. In the acute setting, 89% of patients, 69% of gastroenterologists and 55% of surgeons were willing to trade parts of their remaining life expectancy to avoid a permanent stoma.

The PMPt was 0.10 for patients, 0.07 for gastroenterologists and 0.05 for surgeons. In addition, 71% percent of patients were prepared to trade to avoid the operation with the permanent stoma compared to 55% for the operation with the pouch ($X^2 = 6.31, 1$ df, $p=0.01$).

The preferences of the patients with regards to the option of a permanent stoma or J-pouch surgery were similar to that of the gastroenterologist. But both groups were more prepared to gamble or trade to avoid any surgery compared to the colorectal surgeons. The differences were statistically significant. But all groups were aligned in their decision to undergo yearly colonoscopy surveillance than to undergo any definitive surgery that will result in a stoma.

This study into preferences for treatment of UC reveals that higher proportions of patients and gastroenterologists than surgeons were prepared to gamble or trade life expectancy to avoid surgery resulting in a stoma.

**Status:** Project completed

Manuscript in preparation

**When Do Surgeons Prefer Stent or Surgery in Colorectal Obstructions?**

Michael Suen, Christopher Young, Jane Young, Laura Rodwell, Michael Solomon

The use of colorectal stents has been a management option in obstruction for almost 20 years. This study investigated the current clinical equipoise and the surgeon-related barriers to a randomised controlled trial of colorectal stent insertion for obstruction in patients with colorectal cancer.

A national survey of current members of the Colorectal Surgical Society of Australia and New Zealand was conducted by a mailed questionnaire which addressed surgeons’ treatment preferences in 16 hypothetical clinical scenarios and also perceived barriers to adoption of colonic stents and their willingness to participate in trials.

96 of 148 (65%) eligible surgeons responded and colonic stenting was available to 98% of the respondents. When patients presented with colorectal obstruction, more than 70% of surgeons preferred the use of stent on unfit patients for palliation, and preferred surgery in the fit patients with curable disease. In the curative setting, few respondents considered colonic stents to be cost effective (10%) and few believed that their patients preferred stents over surgery (20%). Only 29% of surgeons expressed willingness to participate in a randomised controlled trial involving colonic stents in the curative setting.

Colonic stents were perceived by colorectal surgeons to have a well-established role in managing colorectal obstruction, making it difficult to conduct future trials, especially in the curative setting.

**Status:** Project completed

Manuscript in preparation
Concordance between two methods of eliciting patient preferences for the treatment of rectal cancer

Rebecca Dennis, Lindy Masya, Jane Young, Michael Solomon, James Harrison

Decision support tools can assist patients to make better quality decisions about their treatment pathway; however, few studies have compared different methods by which patient preferences for the potential outcomes are incorporated into treatment decision-making. This study investigated concordance treatment between two methods of eliciting preferences, namely the Prospective Measure of Preference (PMP) and the computer based Annalisa© software.

The sample comprised 80 post operative patients with colorectal cancer. For the majority, the PMP was not able to identify a clear preference for one of the four potential treatment options and for 73% there were at least two treatment options that were equally ranked as first preference. Indeed the PMP was not able to discriminate between any of the four potential treatment options for 57% of Patients. In contrast, Annalisa© was able to determine a single preferred treatment option for all patients. There was concordance in the treatments selected by the two methods for 73% of patients. There were no significant differences in the patient characteristics of the groups with and without concordance. Given the plethora of decision support tools that are currently being developed, this study has demonstrated that the format of the tool can influence the decision outcome and that this should be considered in clinical practice and future research.

Status: Manuscript in preparation
Funding: University of Sydney Cancer Research Fund

Older cancer patients and item non-response in quality of life questionnaires

Mikaela Jorgensen, Jane Young, Michael Solomon

For older cancer patients, treatment decision-making involves careful consideration of the predicted impact of treatment on quality of life (QOL). However, issues may exist in the measurement and management of QOL data. This study aimed to determine whether increasing age was associated with item non-response in the Functional Assessment of Cancer Therapy – Colorectal (FACT-C) and whether methods commonly used to manage missing data produced unbiased QOL estimates.

Control groups from pilot phases of a randomised trial completed the FACT-C at baseline, one and three months following hospital discharge (n=57). Older patients were significantly less likely to respond to the items “sex life”, “diarrhoea”, and “body appearance”. Those missing two or more items were also significantly older than those missing none or one item. There was a clinically meaningful difference in mean domain score when using simple mean imputation for the “sex life” item compared to multiple imputation, which takes into account patient characteristics and uncertainty about imputed values (23.6 vs. 21.6, p<.001). Older age appears to be a risk factor for missing data in QOL questionnaires. Further exploration of reasons for item non-response and routine checking of missing data patterns and imputation methods is needed.

Status: Manuscript in preparation
Agreement between three data sources: medical records, clinician reports and patient questionnaires, on seven co-morbidities and adjuvant therapy.

Jane Young, Michael Solomon, James Harrison, Katie De-loyde.

Information for scientific studies is collected in a variety of ways. There is frequent use of patient administered questionnaires and clinician reports, as well as data that has been extracted from the patient’s medical records. There are however few studies that look at the agreement of such sources. The purpose of this study is to assess the agreement between these 3 sources of information on a number of patient co-morbidities and treatment information.

A convenience sample of 775 patients was taken as a subset from a larger study (CONNECT program) for analysis. Percentage agreement will be considered first then the kappa coefficient will be calculated to determine the correlated agreement between variables. Logistic regression will be used to investigate predictors of non-agreement.

Status: Analysis underway
### RESEARCH GRANTS

<table>
<thead>
<tr>
<th>Grant Title</th>
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<tr>
<td>Shaw J, Young JM. Development of communication skills training for nurses delivering telephone-based supportive care interventions for people with cancer or their families. Cancer Institute NSW Research Innovation Grant: 2011 $48,431</td>
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<tr>
<td>Young JM, Solomon MJ. Improving psychosocial outcomes for cancer carers: pilot study of a novel telephone intervention. Cancer Institute NSW Research Innovation Grant: 2010 $49,381</td>
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<td>Young JM, Solomon MJ, Frizelle FA, Heriot AG, King MT, Salkeld G. Quality of life outcomes and cost effectiveness of pelvic exenteration for people with advanced rectal cancer. Cancer Australia and Cancer Council through the 2008 Cancer Australia Priority-driven Collaborative Cancer Research Scheme in conjunction with the NHMRC $385,050 (2009 $102,850; 2010 $102,850; 2011 $179,350)</td>
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<td>Solomon MJ, Young JM. Cancer Surgery Trials Unit. Cancer Institute NSW Clinical Trials Nurses and Data Managers Grant $336,674 (2009 $169,232; 2010 $167,442)</td>
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<tr>
<td>Young JM, Solomon MJ. From theory to practice: implementing patient decision support tools into everyday clinical practice. University of Sydney Cancer Research Fund 2007 $49,350</td>
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<td>DOCTOR OF PHILOSOPHY, UNIVERSITY OF SYDNEY</td>
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<td>Lateral sentinel node sampling in rectal cancer</td>
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Masters of Medicine, University of Sydney (continued)

Jin Cho - Tumour regression grading following radiotherapy for rectal cancer
Cherrie Koh - Anorectal physiology for decision-making in faecal incontinence
Peter Aquilina - Investigation into patient and professional delay in the diagnosis of head and neck cancer.
Miriam Habib - Measuring the quality and safety of colorectal cancer surgery
David Rangiah - A prospective, comparative study of the quality of life of people with reflux affecting the upper oesophagus after laparoscopic surgery.
Shing Wong - Cure or incontinence in treatment of fistula-in-ano.
Rohan Gett - A prospective blinded controlled trial of ultrasound versus MRI in the investigation of anal fistulas and perianal abscesses.
Catherine Turner - Preferences for elective caesarean section
Ellis Choy - Involvement of women in multidisciplinary team meetings: a randomised trial
Stephen Smith - Long term functional outcomes following laparoscopic rectopy for the treatment of rectal prolapse
Christopher Young - Evaluation of colonic stenting for patients with colorectal cancer
Christopher Byrne - Measurement of patients’ preferences for surgical management of inflammatory bowel disease
Anil Keshava - Prospective cohort study of the Zassi Bowel Management System tube
Caroline Wright - Microsatellite instability in Stage III Colorectal Cancer

Masters of Surgery, University of Sydney

Ian Harris - Investigation of publication bias in the orthopaedic literature
Wendy Brown - Pre-operative imaging to predict outcomes of pelvic exenteration surgery
Tony Milne - Sacral resection with pelvic exenteration for advanced primary and recurrent pelvic cancer: a single institution experience of 100 sacrectomies.
Joshua Lansom - Barriers to living donor organ transplantation
Brooke Fishley - Surgical RCTs - analysis of participation rates and types of interventions
Hari Mahadev - Measuring patient utilities in peri-anal Crohn’s disease
Winnie Foo - Completeness of family history records for people at high risk of familial colorectal cancer syndromes
Sarah Torabi - Role of follow up colonoscopy for people admitted to hospital with acute diverticulitis
Stacey Swinkles - Surgical outcomes following aortic root surgery
### RESEARCH AWARDS, UNIVERSITY OF SYDNEY

**Andrew Sherrah**
Thoracic and abdominal aortic aneurysm surgery: preferences and practices of surgeons and physicians

### OVERSEAS MEDICAL STUDENTS

**Anouk Rombouts**
(Radboud University, The Netherlands)
Prognosis of recurrent rectal cancer in previously (non-) irradiated patients.

**Suzana Teixeira**
(Erasmus University, The Netherlands)
Urological complications after pelvic exenterations with conduit formation.

**Aisha Harun**
(Havard Fullbright Scholarship)
Racial disparities in quality of life outcomes following head and neck cancer surgery.

**Hazel Mitchie**
(University of Aberdeen, Scotland)
Exploring patient preferences and quality of life factors in decision making in perianal Crohn’s disease

### OTHER RESEARCH PROJECTS

**Anita Jatan**
Laparoscopic management of rectal endometriosis.

**Tanya Hossack**
Ano-cutaneous flap repair for complex and recurrent suprasphincteric anal fistulae

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*Dr Cherry Koh (Phd candidate & surgeon at RPAH) with Ms Anouk Rombouts (medical student from Radboud University, The Netherlands)*
1. MASTERS OF SURGERY

SOuRCe continued to contribute to the Masters of Surgery Program at the University of Sydney. This Masters degree by dissertation and coursework is available to surgeons who wish to develop their academic and research skills. Candidates can study either full or part time. SOuRCe has developed the curriculum and delivered the following two coursework subjects:

- Development and measurement of surgical health outcomes.
  Part 1: Theory (6 credit points, compulsory)
  This module introduces students to sources of bias in surgical research, study designs for surgical effectiveness research, RCTs and problems with surgical RCTs, development and evaluation of outcome measures, cost effectiveness analysis, evaluation of screening and diagnostic tests and systematic reviews and meta-analyses.

- Development and measurement of surgical health outcomes. Part 2:
  Application to surgical research (6 credit points, elective)
  Throughout this course, students develop their own grant application for submission to a peer-reviewed funding agency such as the NHMRC. Each week, the course focuses on a different aspect of grant development, such as the aims and hypothesis, primary and secondary endpoints, study design, recruitment and follow up and statistical analyses and sample size calculation.

SOuRCe directors also contribute to teaching in the Masters of Public Health, Masters of Clinical Epidemiology and Graduate Medical Programs at the University of Sydney.

2. LAPAROSCOPIC ABDOMINAL, PELVIC & RETROPERITONEAL ADVANCED ANATOMY (ASSOCIATE PROFESSOR CHRISTOPHER YOUNG)

The overall aim of this course is to provide participants with an applied knowledge of the key anatomical and perceptual issues involved in laparoscopic surgical procedures. Throughout the course, students develop an audiovisual teaching tool on the advanced laparoscopic anatomy of a specific operation of interest to them.

3. SURGICAL CANCER EPIDEMIOLOGY ENDEMOCOLOGY (DR CHARBEL SANDROUSSI AND DR CHRISTOPHER BYRNE).

The overall aim of this course is to provide participants with an applied knowledge of the key concepts of cancer epidemiology with special reference to surgery. Participants who have undertaken SURG 5023 Epidemiology of Cancer will be able to apply knowledge and skills gained in this course to better understand the important concepts of cancer epidemiology particularly with a surgical flavour. Topics cover basic cancer epidemiology, biomarkers and genetics, a session on incidence and prevalence of cancers, a session on surveillance, measurement of outcomes including effectiveness, survival analysis and sessions on medical decision making in cancer.
BOOK CHAPTERS


5. Solomon MJ, Lee PJ, Austin KKS. Surgery for Recurrent Rectal Cancer In: Reconstructive surgery of the rectum, anus and perineum Edited by Andrew Zbar, Robert Madoff and Steve Wexner Springer


PRESENTATIONS 2012


Cho JH, Young JM, Solomon MJ. A reliability study of three tumour regression grades for rectal cancer treated with pre-operative radiotherapy. The Royal Australasian College of Surgeons Annual Scientific Congress, Kuala Lumpur, Malaysia, 6-10 May 2012


Durcinoska I, Jane Young JM, Dobbins T, Butow P, Solomon MJ. Who is at risk of poor quality of life after surgery for colorectal cancer? a prospective study. Joint Meeting of the Clinical Oncology Society of Australia (COSA) 39th Annual Scientific Meeting and IPOS 14th World Congress of Psycho-Oncology, Brisbane, 13-15 November 2012. (Oral presentation)

Harrison J, Durcinoska I, Butow PN, White K, Solomon MJ, Young JM. Localised versus centralised nurse delivered Telephone services for people in follow up for cancer: Opinions of cancer clinicians. Joint Meeting of the Clinical Oncology Society of Australia (COSA) 39th Annual Scientific Meeting and IPOS 14th World Congress of Psycho-Oncology, Brisbane, 13-15 November 2012. (Oral presentation)


Jorgensen M, Young JM, Solomon MJ. A matter of opinion: age differences in colorectal cancer patients’ and physicians’ views on chemotherapy treatment decisions. Joint Meeting of the Clinical Oncology Society of Australia (COSA) 39th Annual Scientific Meeting and IPOS 14th World Congress of Psycho-Oncology, Brisbane, 13-15 November 2012. (Poster Presentation)


Shaw J, Young JM, Butow PN, Davidson P, Harrison J, Solomon MJ. Family connect: a randomised controlled trial to improve psychosocial outcomes for cancer carers. Joint Meeting of the Clinical Oncology Society of Australia (COSA) 39th Annual Scientific Meeting and IPOS 14th World Congress of Psycho-Oncology, Brisbane, 13-15 November 2012. (Poster Presentation)

Shaw J, Sze M, Butow PN, Young JM, Goldstein D. Reducing disparity in outcomes for immigrants with cancer: a qualitative assessment of the feasibility and acceptability of a culturally targeted telephone-based supportive care intervention. Joint Meeting of the Clinical Oncology Society of Australia (COSA) 39th Annual Scientific Meeting and IPOS 14th World Congress of Psycho-Oncology, Brisbane, 13-15 November 2012.


Solomon MJ. Training, academic surgery and private practice. RACS 81st Annual Scientific Congress, Kuala Lumpur 6 – 10 May 2012 [Keynote lecture]

Solomon MJ. Selective use of myocutaneous flap after pelvic exenteration. RACS 81st Annual Scientific Congress, Kuala Lumpur 6 – 10 May 2012

Solomon MJ. Modern treatment of rectal cancer. RACS 81st Annual Scientific Congress, Kuala Lumpur 6 – 10 May 2012 [Chair]


Solomon MJ. Rectal prolapse - Fix it with a Laparoscope. 75th Annual Colon and Rectal Surgery Principles Annual Course, Division of Colon & Rectal Surgery, University of Minnesota, Minneapolis, USA. 25 October, 2012.

Solomon MJ. Surgery for Recurrent Rectal Cancer. Howard Frykman Memorial Lecture. 75th Annual Colon and Rectal Surgery Principles Annual Course, Division of Colon & Rectal Surgery, University of Minnesota, Minneapolis, USA. 26 October, 2012

Solomon MJ. Perianal Crohn’s: Assessment, Setons, Quality of life, and Depression. 75th Annual Colon and Rectal Surgery Principles Annual Course, Division of Colon & Rectal Surgery, University of Minnesota, Minneapolis, USA. 27 October, 2012.


Walczak A, Henselmans I, Clayton JM, Tattersall MHN, Davidson PM, Young JM, Epstein RM, Butow PN. A qualitative analysis of advanced cancer patient and carer responses to a communication support intervention prompting early discussion of prognosis and end-of-life care. Joint Meeting of the Clinical Oncology Society of Australia (COSA) 39th Annual Scientific Meeting and IPOS 14th World Congress of Psycho-Oncology, Brisbane, 13-15 November 2012.

Young JM. Writing a successful Ethics application. RACS 81st Annual Scientific Congress, Kuala Lumpur 6 – 10 May 2012 [invited presentation]

Young JM. Outcomes measures of bariatric surgery. RACS 81st Annual Scientific Congress, Kuala Lumpur 6 – 10 May 2012 [Keynote speaker]

Young JM. Future of the cancer problem facing Australia and New Zealand: using data to inform surgical service re-design. General Surgeons Australia Annual Scientific Meeting, Hobart, Tasmania, 23 September 2012 [Invited Plenary Presentation]


Young JM. Colorectal cancer care, can we use record linkage to inform policy and practice? The Crown Princess Mary Cancer Centre Symposium, Novotel Sydney Olympic Park - 23rd November 2012.

PRESENTATIONS 2011


Harun A, Harrison JD, Young JM. Interventions to improve patient participation in the treatment process for culturally and linguistically diverse people with cancer: A systematic review. Clinical Oncology Society of Australia 38th Annual Scientific Meeting, Perth, 15th-17th November 2011 (Poster presentation)


MacDermid E, Young C, Solomon MJ, Young J. Decision-making with rectal anastomoses and defunctioning stomas. Tripartite Colorectal Meeting, Cairns, 3-7 July 2011. (Poster presentation)


Harun A, Harrison JD, Young JM. Interventions to improve patient participation in the treatment process for culturally and linguistically diverse people with cancer: A systematic review. Clinical Oncology Society of Australia 38th Annual Scientific Meeting, Perth, 15th-17th November 2011 (poster presentation)

Rodwell L, Young JM. What to consider when analysing repeated measures quality of life data. Clinical Oncology Society of Australia 38th Annual Scientific Meeting, Perth, 15th-17th November 2011 (poster presentation)

Rodwell L, Young JM, Walsh J. Present but unaccounted for: Exploring the issue of missingness in repeated measures quality of life analysis. Australasian Epidemiology Association Annual Scientific Meeting, Perth 19-21 September 2011 (oral presentation)

Shaw J, Harrison JD, Young JM, Butow P, Sandrousi C, Martin D, Solomon MJ. Improving psychosocial outcomes for cancer carers: An interview study. Clinical Oncology Society of Australia 38th Annual Scientific Meeting, Perth, 15th-17th November 2011 (oral and poster presentation)

Shaw J, Young JM, Butow P, Davidson P, Harrison JD, Duncinoska I, Solomon MJ. Improving psychosocial outcomes for cancer carers: A randomised controlled trial. Clinical Oncology Society of Australia 38th Annual Scientific Meeting, Perth, 15th-17th November 2011 (poster presentation)


Shaw J, Young JM, Harrison JD, Solomon MJ, Butow PN. Recruiting difficult to reach groups to supportive care interventions: The challenges and strategies of recruiting newly diagnosed poor prognosis upper gastrointestinal cancer patients and their families. Australasian Epidemiology Association Annual Scientific Meeting, Perth 19-21 September 2011 (oral presentation)

Solomon MJ. Pelvic exenteration: survival and quality of life [Plenary Lecture] 22nd Annual Colorectal Course, Cleveland Clinic Ft Lauderdale, Florida, February 16-20, 2011

Solomon MJ. Series of 3 lectures: Surgical Grand Rounds: Pelvic exenteration techniques and results; Complex perianal Crohn’s and suprasphincteric fistulae; and Laparoscopic rectal surgery and colorectal training. [Guest Professorship] Cleveland Clinic Foundation Cleveland Ohio May 2011

Solomon MJ. Surgical training at University of Sydney and University of Toronto. University of Toronto 34th Annual Scientific Meeting, Department of General Surgery, Bruce Tovee Memorial Lecture, May 2011

Solomon MJ. Pelvic Exenteration: survival quality of life and complex techniques. [Guest Professor] Surgical Grand Rounds. Mount Sinai Hospital, Toronto Canada, May 2011

Solomon MJ. The Australasian training programme. (Invited Guest Plenary Lecture). Tripartite Colorectal Meeting, Cairns, 3-7 July 2011 Abs#125

Solomon MJ. Multidisciplinary approach to rectal cancer. (Plenary session, Moderator) Tripartite Colorectal Meeting, Cairns, 3-7 July 2011.


Young JM, Dobbins T, Solomon MJ, Currow D. Translating evidence into practice at the population level: is laparoscopic surgery for colorectal cancer an open and shut case? 7th Health Services & Policy Research Conference, Adelaide 5-7 December 2011
PRESENTATIONS 2010


Harrison JD, Masya L, Butow PN, Solomon MJ, Young JM, Salkeld G, Whelan T. Implementing patient decision support tools: moving beyond academia? Clinical Oncology Society of Australia 37th Annual Scientific Meeting, Melbourne, 9-11 November 2010

Harrison JD, Masya L, Young JM, Solomon MJ, Butow PN. Quantifying colorectal patients’ health care provider, transport and medication related out-of-pocket expenses following discharge after cancer surgery. Clinical Oncology Society of Australia 37th Annual Scientific Meeting, Melbourne, 9-11 November 2010 (poster presentation)

Harrison JD, Young JM, Butow PN, Jorgensen M, Solomon MJ. Nurse-delivered telephone supportive care interventions: A systematic review. Clinical Oncology Society of Australia 37th Annual Scientific Meeting, Melbourne, 9-11 November 2010 (poster presentation)


Jorgensen ML, Young JM, Solomon MJ. Older patients and adjuvant therapy for colorectal cancer: Surgeon knowledge, opinions and practice. Clinical Oncology Society of Australia 37th Annual Scientific Meeting, Melbourne, 9-11 November 2010. (poster presentation)

Jorgensen M, Young J, Solomon M. Older patients and adjuvant therapy for colorectal cancer: surgeon knowledge, opinions and practice. Royal Australasian College of Surgeons, Annual Scientific Meeting, Perth, May 2010 (poster presentation)


Kwok K, Young JM, Solomon MJ. Hand-sewn anastomoses are associated with increased surgical recurrence in small bowel & ileocolic crohn’s disease. Royal Australasian College of Surgeon’s Annual Scientific Congress, Perth 4-7 May 2010.


Shaw J, Young JM, Harrison JD, Butow P, Sandroussi C, Martin D, Solomon MJ. Improving psychosocial outcomes for cancer carers: An interview study. Clinical Oncology Society of Australia 37th Annual Scientific Meeting, Melbourne, 9-11 November 2010 (poster presentation)

Solomon MJ. Pelvic exenteration masterclass. [Guest Professorship] RACS ASC Surgical Oncology Section, Perth, May 2010

Solomon MJ. Pelvic exenteration: survival, quality of life and techniques [Guest Professorship] Colorectal Surgical Society and Royal College of Surgeons of Thailand, July 2010


Solomon MJ. The role of pelvic exenteration. [Invited Guest Plenary Lecture] Clinical Oncology Society of Australia 37th Annual Scientific Meeting, Melbourne, 10 November 2010

Solomon MJ. Order of surgery – a colorectal approach. [Invited Guest Plenary Lecture] Clinical Oncology Society of Australia 37th Annual Scientific Meeting, Melbourne, 10 November 2010

Young JM, Butow PN, Solomon MJ, Salkeld G, White K, Walsh J, Harrison JD et al. CONNECT: A multi-centre randomised controlled trial of remote access cancer coordination to improve patient outcomes. Clinical Oncology Society of Australia 37th Annual Scientific Meeting, Melbourne, 9-11 November 2010 (poster presentation)
PRESENTATIONS 2009


Jorgensen M, Young JM, Harrison JD, King M, Solomon M. Older patients and missing data in quality of life questionnaires. Clinical Oncological Society of Australia (COSA) 2009 Annual Scientific Meeting, Gold Coast, 17-19 November 2009. (Poster Presentation).


Jorgensen M, Young JM, Harrison JD, King M, Solomon M. Older patients and missing data in quality of life questionnaires. Clinical Oncological Society of Australia (COSA) 2009 Annual Scientific Meeting, Gold Coast, 17-19 November 2009. (Poster Presentation).


Solomon MJ. Radical pelvic exenteration for advanced and recurrent rectal cancer: Techniques and outcomes [Invited Guest Plenary Lecture]. Hong Kong Society for Colon & Rectal Surgeons Annual Scientific Meeting, Hong Kong, China, February 2009

Walsh J, Harrison JD, Young JM, Butow P, Solomon MJ, Masya L. What are the current barriers to cancer care coordination? Clinical Oncological Society of Australia (COSA) 2009 Annual Scientific Meeting, Gold Coast, 17-19 November 2009.


The development and pilot of a decision aid to improve communication and decision making about treatment options for asymptomatic ovarian cancer patients with rising CA-125. Clinical Oncological Society of Australia 2008 Annual Society Meeting. Sydney, 18-20 November 2008


Harrison JD, Masya L, Butow P, Young JM, Solomon MJ, Butow P, Salkeld G. Implementing decision support tools: Moving beyond academia? School of Public Health, University of Sydney, Research Presentation Day, 13 June 2008


Harrison JD. The CONNECT Program Pilot Study [Invited]. Australian association of stoma therapy nurses (NSW Branch) annual meeting. Sydney, June 2008


Harrison JD, Young JM, Prince M, Butow PN, Solomon MJ. What are the unmet supportive care needs of cancer patients? A systematic Review. Clinical Oncological Society of Australia 2008 Annual Society Meeting. Sydney, 18-20 November 2008


Juraskova I, Anderson C, Harrison JD, Carter J et al. Improving communication and decision making about treatment options for asymptomatic ovarian cancer patients with rising CA-125: The development and pilot of a Decision Aid. The 10th World Congress of the International Psycho-Oncological Society (IPOS), Madrid, June 2008 (poster)


Juraskova I, Anderson C, Harrison J, Carter J et al. Improving communication and decision making about treatment options for asymptomatic ovarian cancer patients with rising CA-125: The development and pilot of a Decision Aid. The Biannual Scientific Meeting of the European Association for Communication In Healthcare (EACH), Oslo, Norway, September 2008 (presentation)


Koh C, Young C, Young JM. Effectiveness of surgeon advice and conservative management in faecal incontinence. Conjoint annual scientific meetings of Royal Australasian College of Surgeons & The College of Surgeons of Hong Kong, Hong Kong, May 2008


Koh C, Young C, Young JM. Relationship between a novel anorectal physiology score and anal incontinence. Conjoint annual scientific meetings of Royal Australasian College of Surgeons & The College of Surgeons of Hong Kong, Hong Kong, May 2008

Koh C, Young C, Young JM. The effectiveness of biofeedback in adults with pelvic floor dysfunction. Conjoint annual scientific meetings of Royal Australasian College of Surgeons & The College of Surgeons of Hong Kong, Hong Kong, May 2008

Koh C, Young JM, Young C, Wright C, Byrne C. Internal sphincter morphology in scleroderma. Conjoint annual scientific meetings of Royal Australasian College of Surgeons & The College of Surgeons of Hong Kong, Hong Kong, May 2008


Solomon MJ. Equipoise in surgical clinical trials [Invited visitor]. Conjoint annual scientific meetings of Royal Australasian College of Surgeons & The College of Surgeons of Hong Kong, Hong Kong, May 2008

Solomon MJ. Improving the Quality of Care Through the Use of Population Data: A Comparison of Four Countries [Invited]. American Society for Colon & Rectal Surgeons Tripartite Meeting, Boston, June 2008


Solomon MJ. Staging and treatment of locally advanced rectal cancers [Invited visitor]. Conjoint annual scientific meetings of Royal Australasian College of Surgeons & The College of Surgeons of Hong Kong, Hong Kong, May 2008.

Solomon MJ. Treating complex anal fistula [Invited visitor]. Conjoint annual scientific meetings of Royal Australasian College of Surgeons & The College of Surgeons of Hong Kong, Hong Kong, May 2008.

Solomon MJ. Pelvic exenteration and consequences of salvage surgery for recurrent rectal cancer. Plenary Kuala Lumpur, Malaysia, 5-6 March 2009

Solomon MJ. Radical pelvic exenteration for advanced and recurrent rectal cancer: Techniques and outcomes [Invited Guest Plenary Lecture]. Hong Kong Society for Colon & Rectal Surgeons Annual Scientific Meeting, Hong Kong, China, 17-20 February 2009

Turner C. Vaginal delivery versus caesarean section: The views of pregnant women and clinicians”. Presentation grand round St Marks Hospital London 30 May 2008

Turner C. Vaginal delivery versus caesarean section: The views of pregnant women and clinicians. Podium presentation Boston ASRS Meeting 10 June 2008


Walsh J, Young JM, Butow P, Harrison JD, Masya L, White K, Solomon MJ. What is important in care coordination? A qualitative investigation. School of Public Health, University of Sydney, Research Presentation Day, 13 June 2008


Young JM. The CONNECT Program: improving cancer care coordination and patient outcomes. Sydney Cancer Conference, University of Sydney, 26 July 2008

Young JM. Evidence in surgery -when RCTs are not possible. Australian and New Zealand Hepatic, Pancreatic and Biliary Association (ANZHPBA) ’Surgical conditions of the liver: assessment, management and outcomes. Coolum, Queensland: 19-22 October 2008 [Invited presentation]

Young JM. Harrison J, Walsh J, Dennis R. Overview of CONNECT Program. School of Public Health Lunchtime Seminar Series. University of Sydney, 28 October 2008

Young JM. Cell to Society, Faculties of Health Research Conference. Leura, 11-12 November 2008

Young JM. Evidence in Surgery. From Cell to Society 6’ 6th Biennial Health Research Conference, Faculties of Health, University of Sydney, Leura, November 11-12 2008
PRESENTATIONS 2007

Harrison JD. Evaluating a telephone based intervention to reduce cancer patients’ unmet supportive care needs following discharge after cancer surgery. Joint Scientific Meeting of the Australasian Epidemiological Society & International Epidemiological Association Western Pacific Region. Hobart, August 2007 *Student Award*


Solomon MJ. Plenary Lecturer National Cancer Centre & National Cancer Hospital Tokyo, Japan. February, 2007.

Solomon MJ. Surgeon choice, patient preference and quality of life. 13th Annual Conference of the International Society of Quality of Life Research, Lisbon, Portugal, 10-14 October 2006

Solomon MJ, Salkeld G. The role of health economics in surgical decision making. 10th Anniversary Sydney Cancer Centre Symposium, Sydney, 3 November 2006

PRESENTATIONS 2006


Jamtvedt G, Young J, Tove Kristoffersen D, Oxman A, O'Brien MA. Analysing and presenting results from systematic reviews of complex interventions. Cochrane Colloquium, Melbourne, 23-26 October 2005

PRESENTATIONS 2005


Byrne CM, Solomon MJ, Young JM, Selby W. Patient Preferences for Surgical Treatment Options in Inflammatory Bowel Disease. Tripartite Colorectal Meeting, Dublin, Ireland, July 2005.


Huilgol RL, Young J, Thursby P. Patient satisfaction, illness intrusiveness and clinical outcomes after thoracoscopic sympathectomy for hyperhidrosis. ANZSVS meeting Vascular 2005 (Sydney).

Jamtvedt G, Young J, Teve Kristoffersen D, Oxman A, O'Brien MA. Analysing and presenting results from systematic reviews of complex interventions. Cochrane Colloquium, Melbourne, 23-26 October 2005

Solomon MJ. Laparoscopic resection colorectal cancer; Overview of RCT’s. Tripartite Colorectal Meeting, Dublin, Ireland, July 2005.

Young JM, Solomon MJ, Armstrong K, O’Connell D, Armstrong B, Loong D. Which patients with colorectal cancer are treated according to national guidelines? Results from a population-based study. Tripartite Colorectal Meeting, Dublin, Ireland, July 2005


Huilgol RL, Young JM, Thursby P. Patient satisfaction, illness intrusiveness and clinical outcomes after thoracoscopic sympathectomy for hyperhidrosis. ANZSVS meeting Vascular 2005 (Sydney).

Byrne CM, Solomon MJ, Young JM, Selby W. Patient Preferences for Surgical Treatment Options in Inflammatory Bowel Disease. Tripartite Colorectal Meeting, Dublin, Ireland, July 2005.


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Huilgol RL, Young JM, Thursby P. Patient satisfaction, illness intrusiveness and clinical outcomes after thoracoscopic sympathectomy for hyperhidrosis. ANZSVS meeting Vascular 2005 (Sydney).

Byrne CM, Solomon MJ, Young JM, Selby W. Patient Preferences for Surgical Treatment Options in Inflammatory Bowel Disease. Tripartite Colorectal Meeting, Dublin, Ireland, July 2005.


Huilgol RL, Young J, Thursby P. Patient satisfaction, illness intrusiveness and clinical outcomes after thoracoscopic sympathectomy for hyperhidrosis. ANZSVS meeting Vascular 2005 (Sydney).


Solomon MJ. Laparoscopic resection colorectal cancer; Overview of RCT’s. Tripartite Colorectal Meeting, Dublin, Ireland, July 2005.

Young JM, Solomon MJ, Armstrong K, O’Connell D, Armstrong B, Loong D. Which patients with colorectal cancer are treated according to national guidelines? Results from a population-based study. Tripartite Colorectal Meeting, Dublin, Ireland, July 2005


Huilgol RL, Young JM, Thursby P. Patient satisfaction, illness intrusiveness and clinical outcomes after thoracoscopic sympathectomy for hyperhidrosis. ANZSVS meeting Vascular 2005 (Sydney).

Byrne CM, Solomon MJ, Young JM, Selby W. Patient Preferences for Surgical Treatment Options in Inflammatory Bowel Disease. Tripartite Colorectal Meeting, Dublin, Ireland, July 2005.


Huilgol RL, Young J, Thursby P. Patient satisfaction, illness intrusiveness and clinical outcomes after thoracoscopic sympathectomy for hyperhidrosis. ANZSVS meeting Vascular 2005 (Sydney).


Solomon MJ. Laparoscopic resection colorectal cancer; Overview of RCT’s. Tripartite Colorectal Meeting, Dublin, Ireland, July 2005.

Young JM, Solomon MJ, Armstrong K, O’Connell D, Armstrong B, Loong D. Which patients with colorectal cancer are treated according to national guidelines? Results from a population-based study. Tripartite Colorectal Meeting, Dublin, Ireland, July 2005
PRESENTATIONS 2004


Young JM, D’Este K, Ward JE. Improving GPs’ use of evidence-based smoking cessation strategies: a cluster randomisation trial. 8th International Congress of Behavioural Medicine, Mainz, Germany, 28 August 2004 (Invited presentation)

PRESENTATIONS 2003


Harris I. The association between compensation status and outcome after orthopaedic intervention - a metaanalysis. 63rd Annual Scientific Meeting of the Australian Orthopaedic Association, Adelaide, 12-16 October 2003


JOURNAL ARTICLES PUBLISHED IN 2012


Jorgensen ML, Young JM, Harrison JD, Solomon MJ. Unmet supportive care needs in colorectal cancer: difference by age. Supportive Care in Cancer 2012; 20:1275-81


JOURNAL ARTICLES PUBLISHED IN 2011


JOURNAL ARTICLES PUBLISHED IN 2010

Abraham N.S. Byrne C.M. Young JM. Solomon M.J. Meta-analysis of well-designed non-randomised comparative studies of surgical procedures is as good as randomised controlled trials. *J Clin Epidemiol* 2010;63:238-45.

RA, Bagshaw PF, Frampton CM, Frizelle FA, Hewett PJ, Rieger NA, Solomon MJ, Stevenson ARL. Australian Laparoscopic Colon Cancer Study shows that elderly patients may benefit from lower postoperative complication rates following laparoscopic versus open resection. *British Journal of Surgery* 2010; 97: 86-91


JOURNAL ARTICLES PUBLISHED IN 2009


Harrison JD, Young JM, Price MP, Butow PN, Solomon MJ. What are the unmet supportive care needs of people with cancer? A systematic review. *Supportive Care in Cancer* 2009;17:1117–1128.


Young JM, Solomon MJ. How to critically appraise an article. [Invited article]. *Nature Clinical Practice Gastroenterology* 2009; 6:82-91.

JOURNAL ARTICLES PUBLISHED IN 2008


Harris IA, Khoo O, Young JM, Rae H, Jalaludin B, Solomon MJ. Lottery incentives didn’t improve response rate to a mailed survey: a randomized controlled trial. *Journal of Clinical Epidemiology* 2008; 61: 609-610

Harris IA, Young JM, Rae H, Jalaludin B, Solomon MJ. Physical and psychosocial factors associated with neck pain after major accidental trauma. *European Journal of Trauma*, 2008; 34: 498-503


Harris IA, Young JM, Rae H, Jalaludin BB, Solomon MJ. Predictors of general health after major trauma. *Journal of Trauma-Injury Infection & Critical Care* 2008; 64: 969-74


Young JM, Girgis S, Bruce TA, Hobbs M, Ward JE. Acceptability and effectiveness of opportunistic referral of smokers to telephone cessation advice from a nurse: a randomised trial in Australian general practice, *BMC Family Practice* 2008; 9


**JOURNAL ARTICLES PUBLISHED IN 2007**


Byrne CM, Harrison JD, Young JM, Selby WS, Solomon MJ. Including the questionnaire with a letter of invitation did not improve a telephone survey’s response rate. *Journal of Clinical Epidemiology* 2007; 60:1312-1314


Choy E, Chiu A, Butow P, Young JM, Spillane A. A pilot study to evaluate the impact of involving breast cancer patients in the multidisciplinary discussion of their disease and treatment plan. *The Breast* 2007; 16: 178-189

Harris I, Dao ATT, Young JM, Solomon MJ, Jalaludin BB, Rae H. Factors predicting patient satisfaction following major trauma. *Injury* 2007; 38:1102-1108


Harris IA, Young JM, Solomon MJ, Rae H. Predictors of health after major trauma. *Journal of Trauma* 2007; 38: 1102-1108


JOURNAL ARTICLES PUBLISHED IN 2006

Abraham NS, Durairaj R, Young JM, Young CJ, Solomon MJ. How does an historic control study of a surgical procedure compare with the “gold standard”? *Diseases of the Colon & Rectum* 2006; 49:1141-1148

Abraham NS, Hewett P, Young JM, Solomon MJ. Non-entry of eligible patients into the Australasian Laparoscopic Colon Cancer Study. *Australian and New Zealand Journal of Surgery* 2006; 76:825-829

Abraham NS, Young JM, Solomon MJ. A systematic review of reasons for non-entry of eligible patients into surgical randomized controlled trials. *Surgery* 2006; 139:469-483


Harris IA, Mourad MS, Kadir A, Solomon MJ, Young JM. Publication bias in papers presented to the Australian Orthopaedic Association Annual Scientific Meeting *Australian and New Zealand Journal of Surgery* 2006; 76(6):427-431


JOURNAL ARTICLES PUBLISHED IN 2004


Solomon MJ, Smith SR. Medical therapies are less effective than surgery for anal fissure. Evidence Based Medicine 2004; 9:112


JOURNAL ARTICLES PUBLISHED IN 2003


Solomon MJ, Pager CK, Young JM, Roberts R, Butow P. Patient entry into randomized controlled trials of colorectal cancer treatment: factors influencing participation. Surgery 2003; 133:608-613


Young JM, Solomon MJ. Improving the evidence-base surgery: sources of bias in surgical studies [Invited article]. Australian and New Zealand Journal of Surgery 2003; 73:504-506


Young JM, Ward JE. GPs’ views of which professions should conduct academic visits in general practice to promote preventive care. Australian Family Physician 2003; 32:189-190

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