PROGRAMME

4TH ERAS UK CONFERENCE

THE HUB, CITY COLLEGE, SOUTHAMPTON

EXPANDING THE SCOPE AND EXPLORING THE JOURNEY
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Dear colleague,

On behalf of the University Southampton Hospital NHS Foundation Trust I would like to welcome you all to the 4th Enhanced Recovery after Surgery (UK) Society Conference.

This year we have an outstanding programme focused around sustainability, non-elective and non-surgical pathways and transitions in care as well as developments in technology and outcome measurement. Each of these themes is critically important as enhanced recovery matures and develops beyond the elective surgical context. There will also be two interesting breakout sessions allowing time to look at posters and explore the marketplace stands.

We thank those of you who took part in the pre-conference survey on measurement of ERAS outcomes. This will be reported on during the day and there will be an opportunity to vote on the next steps.

Please take every opportunity to engage with the faculty and other delegates through questions during sessions and in the breaks between sessions. We hope you will tweet about your thoughts and experiences today using #ERASUK.

On behalf of the organising committee, please enjoy your day and we look forward to meeting you and sharing ideas and discussion about ERAS.

Professor Mike Grocott, Conference Chairman

Local Organising Committee

Chair: Professor M Grocott
Co-Chair: Dr C Way
Local Organiser: Mrs I Fecher-Jones
Conference Admin: Mrs P Darty

Committee members:
Mr A Alzetani, Mr B Birch,
Mr P Nichol, Mr T Dudderidge,
Mr J Knight, Mr T Chapman,
MRS A Willis, Ms K Pearson,
Mr M AbuHilal

ERAS UK Steering Group

Chairman: Mr N Francis
Secretary: Dr M Scott
Treasurer: Mr T Wainwright
Manager: Dr F Carter
Scottish rep.: Mr D McDonald
Welsh rep.: Dr R Barlow

Members:
Professor K Fearon,
Ms Olga Tucker
<table>
<thead>
<tr>
<th>TIME</th>
<th>SESSION</th>
<th>VENUE</th>
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<tbody>
<tr>
<td>07:45</td>
<td>Registration and coffee</td>
<td>Atrium</td>
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<tr>
<td>08:25</td>
<td>Opening Address / Introduction, <strong>Mr John Trewby CB, Prof. M Grocott</strong></td>
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<td>08:30</td>
<td><strong>Session 1: Exploring transitions of care</strong> - Chairs: Mr T Wainwright, Dr M Scott</td>
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<td>● Role of primary care &amp; role of commissioners, <strong>Dr C Alessi</strong></td>
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<td>● Preoperative physiotherapy, <strong>Mr B Naidu</strong></td>
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<td>● Updates on current research and national initiatives, <strong>Dr R Barlow</strong></td>
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<td>● ERAS after discharge - does it happen? <strong>Mr N Francis</strong></td>
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<td>● 1411024 - Developing an 'ERAS plus' pathway for frail older surgical patients, <strong>Dr E McDonald</strong></td>
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<td>09:45</td>
<td><strong>Session 2: Non-elective/ non-surgical pathways</strong> - Chairs: Mr T Batchelor, Mr N Francis</td>
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<td>● Setting up an enhanced recovery hospital, <strong>Dr M Kuper</strong></td>
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<td>● Enhanced recovery following emergency laparotomy, <strong>Prof. M Grocott</strong></td>
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<td>● Re-design of pathways across a whole health board, <strong>Dr R Barlow</strong></td>
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<td>● Emergency thoracic surgery, <strong>Mr T Batchelor</strong></td>
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<td>● 1411013 - The national effect of applying enhanced recovery principles to fractured neck of femur patients, <strong>Mr T Wainwright</strong></td>
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<td>● 1411023 - Improving patient experience and outcomes through implementation of an elderly care enhanced recovery pathway at RBFT, <strong>Ms J Ockerse</strong></td>
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<td>11:00</td>
<td>Coffee break, marketplace and trade exhibition</td>
<td>Atrium</td>
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<td>12:00</td>
<td><strong>Session 3: Advances in technology</strong> - Chairs: Mr T Dudderidge, Mr B Birch</td>
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<td>● Recent advances in analgesia, <strong>Dr W Fawcett</strong></td>
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<td>● 1411017 - Evaluating the effect of the gekoTM device against TED stockings on post-operative oedema in a total hip replacement enhanced recovery pathway - a randomised controlled trial, <strong>Mr T Wainwright</strong></td>
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<td>● Technological advances in colorectal surgery and the impact on enhanced recovery, <strong>Prof. David Jayne</strong></td>
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<td>● Technological advances in gynaecology surgery and the impact on ERAS, <strong>Dr M Nobbenhuis</strong></td>
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<td>● Robotic urological surgery: impact on ERAS, <strong>Mr A Koupparis</strong></td>
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<td>13:15</td>
<td>Lunch, poster walk and trade exhibition</td>
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<td>14:15</td>
<td><strong>Session 4: Measuring outcomes</strong> - Chairs: Prof. M Grocott, Mr A Alzetani</td>
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<td>● 1411003 - Experiences of perioperative nutrition in people undergoing colorectal surgery: a qualitative study, <strong>Ms V Short</strong></td>
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<td>● 1411023 - Initial experience with a multimodal enhanced recovery programme in patients undergoing liver resection, <strong>Ms C Hitchens</strong></td>
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<td>● 1411030 - Factors predicting 30 days re-admission after laparoscopic colorectal surgery within enhanced recovery, <strong>Ms J Mason</strong></td>
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<td>● Update on Welsh reporting system, <strong>Dr R Barlow</strong></td>
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<td>● Update on Scottish national data collection, <strong>Mr D McDonald</strong></td>
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<td>● ERAS UK Survey: How, Why, What are you measuring?, <strong>Mr N Francis</strong></td>
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<td>15:30</td>
<td>Tea break and trade exhibition</td>
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<td><strong>Session 5: Tackling challenges of sustainability</strong> - Chairs: Mr P Nichols, Mr J Knight</td>
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<td>● How can trusts overcome the challenges and maintain momentum? <strong>Ms F Dalton</strong></td>
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<td>● Debate - &quot;What is delaying recovery?&quot;, <strong>Dr M Scott, Mr J Smith, Mrs I Fecher-Jones, Patient representative</strong></td>
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<td>16:50</td>
<td>Poster and oral presentation prizes, <strong>Ms F Dalton</strong></td>
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<td>16:55</td>
<td>Summing up, <strong>Prof. M Grocott</strong></td>
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Mohammed AbuHilal is a consultant Hepatobiliary Pancreatic surgeon at Southampton University Hospital trust. He has a specialist interest in laparoscopic live and pancreatic surgery and has led the development of the laparoscopic approach in the UK. Mr Hilal has dedicated a lot of effort to training and teaching and in 2007 has developed the first international laparoscopic liver and pancreatic course. So far 18 courses has been completed, more than 140 surgeons has attended from all over the world with excellent feedback. He has been also working on the development of enhanced recovery programs in hepatobiliary pancreatic surgery and has published the first UK paper on the topic. He has been invited to different centres in the UK and Europe to talk about the Southampton experiences and the protocol is now used in many other centres.

Charles Alessi is a GP in south west London. Dr Alessi has extensive experience of the NHS in a variety of senior positions in both primary and secondary care as well as PCTs and Health Authorities. Dr Alessi assumed the role of Chairman of NAPC in January 2012. He is also Chairman of NHS Clinical Commissioners. In July 2012, he was appointed Adjunct Research Professor at the Ivey School of Business, University of Western Ontario, Canada for the MBA in Health Innovation and in July 2013 was also appointed Adjunct Research Professor in Clinical Neurosciences at the Schulich school of Medicine and Dentistry at the University of Western Ontario, Canada.

In January 2013, he was appointed as Senior Advisor to Public Health England and was appointed lead for preventable dementia in January 2014. He also sits on the mental health Advisory Board of one of the largest Academic Health Networks, University College London Academic Health Partnership.

He has extensive experience of working at senior levels both nationally and internationally, in Europe and the Americas. As Chair of the NAPC, which represents the out of hospital sector in the NHS Confederation, he is very active in the development of policy in healthcare and internationally he has been active in advising both Governments and international organisations. He also has experience of military medicine until recently acting as Director of Medicine and Clinical Governance for the British Armed Forces in Germany.

Aiman Alzetani is a Consultant Cardio-thoracic Surgeon with an interest in minimally invasive surgery, lung cancer research & enhanced recovery, worked in UK & USA where he experienced different health care delivery system and practices. He has championed the introduction of enhanced recovery into thoracic surgery at University Hospital Southampton and the patient diary.

He believes in team work at all levels and working together towards achieving the common vision.

Rachael Barlow qualified as a dietician in 1994 and has many years’ experience as a Dietician and of service improvement. She has worked closely with surgeons and managers to raise the profile of nutritional care for surgical and high risk patients. In 2003, she won a Fellowship grant from the Health Foundation, entitled ‘Leading Practice through research’, which enabled Rachael to develop her clinical leadership skills, whilst conducting research. She obtained a PhD from Cardiff University School of Medicine in 2008.

She currently has a Clinical Academic role and is a Fellow of National Institute of Social and Healthcare Research (NISCHR) and teaches future health professionals about nutrition and ERAS. Rachael has won several National prizes including the British Journal of Surgery prize, The Nutrition Society prize and British Association of Parenteral and Enteral Nutrition prize and the UK Advancing Healthcare Award. She sits on several UK committees. Rachael was instrumental in the launch of the Enhanced Recovery after Surgery (ERAS) Programme in Wales in 2010.
**Faculty Details**

**Tim Batchelor** graduated from Edinburgh University Medical School in 1995 and completed his training in cardiothoracic surgery in Scotland and Yorkshire. In 2007 he was appointed as a consultant in thoracic surgery at Bristol Royal Infirmary. The following year he became head of department and oversaw a transformation in the way thoracic surgery was delivered.

A sophisticated pre-operative assessment service allowed the unit to pioneer ERAS. A minimally-invasive approach is integral to this. Bristol now has the highest rate of VATS major lung resection in the UK and has been designated a European training centre for VATS lobectomy by Covidien.

Mr Batchelor sits on the European Society for Thoracic Surgery clinical guidelines committee. He is the lead author for the ERAS Society guidelines on thoracic surgery, currently in development. Other roles include course director for Training the Trainers at RCSEng, and senate representative for the Thoracic Surgery CRG.

**Brian Birch** studied medicine at St Catharine’s College, Cambridge University and King’s College Hospital London. He then trained in Urology at London’s Institute of Urology and University Hospital Southampton. Brian is currently a Consultant Urologist and Honorary Senior lecturer in Southampton. Current research interests include enhanced recovery in urology; bladder and prostate cancer; chronic pain; bladder inflammation and the inflammatory and infective responses to indwelling catheters. Management roles include chairing both the local and regional specialist urological cancer MDT teams and acting as an expert advisor for the local Research Ethics Committee.

**Fiona Dalton** was appointed as chief executive of University Hospital Southampton in 2013. Prior to rejoining the Trust she held the combined position of deputy chief executive and chief operating officer at Great Ormond Street Hospital for Children. Fiona joined the NHS management training scheme after graduating from Oxford University with a degree in human sciences in 1994 and began her career in hospital management at Oxford Radcliffe Hospitals NHS Trust. She then spent four years at UHS as director of strategy and business development before moving to GOSH.

**Tim Dudderidge** is a Consultant Urologist at University Hospital Southampton. He specialises in bladder and prostate cancer, undertaking open, laparoscopic and robotic surgery as well as ablative procedures for prostate cancer. He has research interest in urinary cancer diagnostics.

**William Fawcett** is a Consultant in Anaesthesia and Pain Medicine, Royal Surrey County Hospital Guildford and Senior Fellow, Postgraduate Medical School, University of Surrey. His research interests include the use of regional anaesthesia and aspects of the stress response on patients undergoing cardiac surgery, liver and colorectal resections. He has lectured worldwide and has produced 120 publications, two textbooks and 9 book chapters. He sits of the Editorial Board of Continuing Education in Anaesthesia, Critical Care & Pain Medicine and is a National Assessor for MMBRACE-UK (Mothers and Babies - Reducing Risk through Audits and Confidential Enquiries). He has been closely involved with ER from its inception, as a National Clinical Adviser for NHS Improvement, running and lecturing on various ER courses, and as a faculty member of both ERAS UK, and the World ERAS society (where he is also Website Editor).
Faculty Details

Imogen Fecher-Jones qualified in 2001 with a BSc (Hons) from Oxford Brookes University. Following three years working within oncology and gastrointestinal medicine and surgery at the John Radcliffe and Churchill Hospitals, she moved to University Hospital Southampton. After two years working within surgical high dependency she took on the specialist role of colorectal nurse practitioner in 2007. Imogen co-ordinated the introduction of the Enhanced Recovery programme into colorectal surgery in 2008 and HPB surgery in 2012. In 2012 she completed a Masters in Advance Practice within GI Nursing with a distinction at Kings College London. Following this, she moved to the new acute surgical admissions unit at UHS as a band seven nurse practitioner. In 2013 Imogen commenced a one year secondment as Nursing Lead for Enhanced Recovery. Following the implementation of ten new enhanced recovery pathways across UHS, Imogen intends to return to her role as GI Advanced Nurse Practitioner with the acute surgical admissions team.

Nader Francis is a consultant colorectal surgeon at Yeovil District Hospital NHS Foundation Trust, Honorary Senior Lecturer (University of Bristol), Director of the South West Surgical Training Network and Chairman of ERAS-UK. Since taking up his post in 2006, Mr Francis has maintained the role of Yeovil as a training centre for laparoscopic colorectal surgery and enhanced recovery. Nader’s research background underpinned his involvement as a mentor in two national training programmes for colorectal surgery (lapco and LOREC) and his development of a ‘Training the Laparoscopic Colorectal Trainers’ course. Nader is the lead for surgery at the South West Peninsula CRN and sits on the research committee of the European Association of Endoscopic Surgery. Nader is the chief investigator of two NIHR randomised controlled trials (EWIC and STARRCAT) and has several publications in the fields of education and training including two text books on “Enhanced Recovery in Colorectal Surgery” (Springer 2012) and “Training in Minimal Access Surgery Manual” (Springer 2014).

Mike Grocott is the Professor of Anaesthesia and Critical Care Medicine at the University of Southampton (UoS) and consultant in Critical Care Medicine at University Hospital Southampton NHS Foundation Trust (UHS) where he leads the UoS Centre of Human Integrative Physiology and the critical care research area of the UHS-UoS NIHR Respiratory Biomedical Research Unit. Mike is the clinical lead for enhanced recovery (ER) at UHS and previously led the introduction of ER at the Whittington Hospital. He is Director of the NIAA Health Services Research Centre and chairs the National Emergency Laparotomy Audit. Mike also leads the Xtreme-Everest Oxygen Research Consortium and the Fit-4-Surgery Group. His research interests include human responses to hypoxia, measuring and improving outcome following surgery, acute lung injury, and fluid therapy.

David Jayne is Professor of Surgery at the University of Leeds and Leeds Teaching Hospitals NHS Trust. He trained in the UK with overseas fellowships at The Royal Perth Hospital, Australia, and Singapore General Hospital, Singapore. His clinical interests include laparoscopic and robotic surgery, with a focus on rectal cancer. His research interests include the development, application, and evaluation of new surgical technologies. He is Chief Investigator for several UK NIHR portfolio clinical trials, including ROLARR (robotic versus laparoscopic surgery for rectal cancer), FIAT (fistula plug versus surgeons preference for fistula-in-ano), GLiSten (next generation fluorescence lymph node staging for stratified colon cancer surgery), and Fenix (Magnetic anal sphincter versus sacral nerve modulation for adult faecal incontinence). He holds an NIHR Research Professorship to develop novel technologies for surgical application. He is Clinical Director for an NIHR Healthcare Technologies Cooperative, a UK national network to generate novel solutions to unmet clinical need in colorectal disease.
**Faculty Details**

**John Knight** is a Consultant Colorectal and Laparoscopic Surgeon at University Hospital Southampton since 2008. He studied medicine at St Bartholomew's Hospital Medical School, London graduating in 1996. His surgical training included a senior house officer rotation at Royal Berkshire Hospital, Reading, Specialist Registrar surgical training in Wessex and a sabbatical at one of the National Laparoscopic training units in Colchester. During his time at Southampton he has further developed laparoscopic colorectal surgery including the implementation of an enhanced recovery programme, and has a special interest in the treatment of patients with neuroendocrine tumours.

**Anthony Koupparis** is a consultant urological surgeon at The Bristol Urological Institute at Southmead Hospital. He trained and worked as a consultant at The University of British Columbia and Vancouver General Hospital, Canada and now specialises in robotic and open surgery of the prostate, bladder and kidney.

Anthony is an international trainer for robotic surgery and one of the few surgeons in the UK performing robotic cystectomy and intracorporeal reconstruction, salvage robotic prostatectomy and surgery for high-risk prostate cancer. He developed the local ERAS protocol for major pelvic surgery 10 years ago and continues to look for potential improvements.

**Martin Kuper** joined the Homerton University Hospital as Medical Director in 2014. Martin's clinical background is in anaesthesia and critical care medicine. Martin was appointed as National Clinical Advisor (Anaesthesia) in 2009, supported design and implementation of the national Enhanced Recovery Programme, and secured Regional Innovation Funding to lead implementation of Enhanced Recovery pathways across London. Martin is also medical lead of the UCL Partners ‘Deteriorating Patient’ quality improvement programme to reduce cardiac arrests across 17 hospitals in North-Central and North-East London, Essex and Hertfordshire. Martin was previously Medical Director at the Whittington, where he helped achieve the lowest national SHMI (Summary-level Hospital Mortality Indicator) for the past three years.

**David McDonald** graduated as a physiotherapist in 2001, from Glasgow and became the lead orthopaedic physiotherapist in 2005 at the Golden Jubilee National Hospital (GJNH) in Clydebank, Scotland. In 2007, David formed a key role in development of their ERP. From 2010 he supported the Scottish Government part-time to develop and implement ERP in orthopaedics across Scotland and improve the standards of care by decreasing variation around the country. The programme has enhanced the evidence base for ERP in orthopaedics with 85% of all patients in Scotland now following a local ERP. David has published a number of leading articles in the field and remains an active researcher in orthopaedics. David has completed his Doctoral Thesis which considered the impact of peri-operative analgesic techniques on rehabilitation outcomes following total knee arthroplasty. Recently he moved full time to the Whole Patient Flow Improvement Programme within the Scottish Government Health Directorate.

**Babu Naidu** is a Clinical scientist, University Of Birmingham and Consultant Thoracic surgeon Heart of England NHS foundation Trust. Qualified and trained in the UK, he undertook basic science research in lung injury at the University of Washington, Seattle, USA. His clinical and research interests include: Enhanced recovery/ rehabilitation for surgery; Mechanism, detection and therapy of post operative acute lung injury; Chest wall motion analysis novel technology and clinical uses; Bio markers in lung (primary and metastatic) cancer and mesothelioma; Novel Surgical treatment for Emphysema
Paul Nichols is the Lead for Colorectal Surgery at University Hospital Southampton NHS FT. Appointed as Colorectal Surgeon in October 2001, having graduated from Leeds University in 1989 and the Wessex Surgical Training Programme. Paul spent a year in a Tertiary Colorectal Unit in Sydney before taking up his current post. In Southampton he set up the laparoscopic colorectal service, and has personally performed over 500 cases. Paul was Chair of the local ERAS Focus group in the Trust which launched its colorectal pathway in 2008. He has particular interest in Surgical Education, currently the TPD in General Surgery for Wessex.

Marielle Nobbenhuis is a gynaecological oncology surgeon. She qualified in medicine from the University of Leiden in the Netherlands and continued to train in gynaecology and obstetrics at the Erasmus Medical Centre in Rotterdam. She completed the RCOG-recognised sub-speciality Gynaecological Oncology fellowship at The Royal Marsden in 2009. Ms Nobbenhuis obtained a PhD (cum laude) grade in research involving the natural history of pre-malignant cervical lesions and infection with human papillomavirus resulting in several peer-reviewed publications and presentations in this field. Her main research topics are cervical cancer and ovarian cancer screening in women with a family history of ovarian cancer. She has a special interest in minimally invasive surgery, cervical cancer and radical surgery for ovarian cancer. She is a certified robotic surgeon.

Katherine Pearson qualified in 2006 from the University of Nottingham Medical School with a BMedSci (Hons) and BMBS. Following initial training at the Queens Medical Centre, Nottingham she moved to Wessex in 2008, obtaining her NTN in General Surgery in 2010 in the region. Since then she has worked in Winchester, Dorchester and Southampton as a registrar and is currently out of programme undertaking an MD at the University of Southampton. Most of her enhanced recovery experience to date has been in GI surgery programmes (both lower and upper) but with the planning of this conference she has developed an interest in its use in other specialties. She intends to qualify as a Colorectal Surgeon on completion of her CCT. Other interests include medical education and she has just completed a Postgraduate Certificate in the field, awarded by the University of Dundee.

Mike Scott is a consultant in anaesthesia and perioperative care with an interest in Upper and Lower GI major cancer surgery. He was one of the first clinicians in the UK to adopt ERAS and has championed it ever since. He was a member of the working party for ER in Colorectal Surgery and co-organises the Association of Anaesthetists of Great Britain and Ireland (AAGBI) ‘Enhanced Recovery for Colorectal Surgery ‘ Seminars. He was appointed a Clinical Advisor in Enhanced Recovery for NHS Improvement in 2012. Mike has a keen research interest and has been investigator / Chief Investigator for multiple studies in analgesia, haemodynamic monitoring and fluid therapy within an ERAS Protocol. The BJS paper on analgesia in laparoscopic colorectal surgery won the Farndon Prize. He is supervisor for several MDs including 2 on the stress response in open and laparoscopic surgery. He has given over 30 National and International Lectures on Enhanced Recovery.

Julian Smith is a Consultant Urological Surgeon at University Hospital Southampton. His academic interests include transitional cell carcinoma, peri-operative care and process innovation. He is part of the British Association of Urological Surgeons (BAUS) study group on enhanced recovery who are currently drafting the national ERP guidelines for radical nephrectomy, prostatectomy and cystectomy.
**Faculty Details**

**Tom Wainwright** is a physiotherapist, clinical researcher and quality improvement specialist. He currently combines a clinical research role at The Royal Bournemouth Hospital, with working as an independent consultant, and academic work at Bournemouth University.

After working as a physiotherapist Tom moved into Clinical Research and has extensive experience of managing international randomised clinical trials in orthopaedics. He has published and presented internationally on orthopaedic research topics relating to surgical technique and bearing surfaces.

In addition to his clinical and research work he has held managerial roles within the National Health Service (NHS) including a crucial leadership role in the design, implementation, and delivery of an award winning orthopaedic enhanced recovery pathway. The results and methods of this work have been published and presented at peer-reviewed conferences internationally. He is passionate about improving the quality of healthcare systems and now works to help other healthcare providers improve the quality of their services.

**Allison Willis** qualified as a nurse in 1991 from the Royal Hampshire County Hospital, Winchester and has worked in orthopaedics ever since. As well as Winchester she has also worked at the Royal United Hospital, Bath until she undertook her orthopaedic nursing training at Lord Mayor Treloar Hospital, Alton in 1994. She then began working at Southampton General Hospital and progressed to senior sister, managing an orthopaedic ward for 14 years. During her career she undertook her BSc Honours Degree in health and social care and became an orthopaedic nurse practitioner and lead for enhanced recovery for total hip and knee replacement patients in 2010. She runs "joint" schools in order to educate patients regarding their arthroplasty surgery and the Enhanced Recovery Programme. She has since obtained her MSc in leadership and management, undertaking research examining patients’ experiences of urinary catheters/voiding issues post orthopaedic surgery.
Sponsors

We are very grateful for the generous support from the following companies and hope that you will visit their representatives at the trade exhibition:
**Marketplace Presentations**

**Hepatobiliary**
Clinical Lead: Mohammed AbuHilal, University Hospitals Southampton
We have been the first UK centre to establish a formal program for ER after Whipples. This was followed by widening our ER approach to liver surgery (laparoscopic and open) and to laparoscopic pancreatic surgery. We now have long term data with exciting results, our methods and protocols have gained excellent feedback in many presentation. We are sure attendees would hugely benefit from our experience which would encourage them to safely start their programs for the best of patients interest.
- Whipples Enhanced recovery pathway with full 2 years of data
- Laparoscopic distal pancreatectomy pathway
- 4 Liver Enhanced recovery pathway for open and laparoscopic procedures minor and major
- Patient feedback from pathways

*This stand will feature posters, pathways, patient feedback & team availability for discussion and guidance if needed*

**Colorectal**
Clinical Lead: Rachel Meskell, Salford Royal Foundation Trust
“No need to reinvent the wheel”
Showcase how a Colorectal Pathway written in 2008 for was utilised by several other Trusts in the North West to assist in their own specific pathway design. Also within our own Trust how the Colorectal pathway was the template for our Urology/Gynaecology, Upper GI and Orthopaedic pathways. Also how written patient information has been shared between Trusts and specialities. Other patient information in the form of a DVD giving information to the patient about their hospital stay, focusing on anaesthetic care, pain relief and preparing to come into hospital. Along with generic ERAS information.

*This stand will feature copies of a DVD containing patient stories of their ERAS journey.*

**Gynaecology**
Clinical Lead: Sarah Cherrill, Royal Berkshire NHS Foundation Trust
The Gynaecology ERP at the RBHFT has been running since 2010. Our stall will showcase our patient information leaflets, DVD, patient diary and ICP’s. You will be able to view posters relating to patient feedback for all our specialties and our patient satisfaction. You will have the opportunity to ask questions relating to the programme and leave contact details should you require copies of any of our documents.

*This stand will feature a patient DVD to view.*

**Vascular**
Clinical Lead: Sue Austerberry, Central Manchester NHS Foundation Trust
Introduction of ER in Vascular elective surgery and the role out to urgency surgery urgent AAA and lower limb amputations. Data pre and post introduction.
The e-learning package we have developed across specialities inc Obstetrics and Gynae ERAS + ICOUGH a pre op, post op implementation for patient who will have a stay in critical care.

*This stand will feature an E-learning package to try, I-cough videos and bags, posters and copies of the pathways*

**Urology**
Clinical Lead: Tim Dudderidge, University Hospitals Southampton
We will demonstrate with images + video the rectus sheath catheter insertion technique we use with some audit data.
We will have a selection of UHS and other Urology unit ERAS documentation to compare and contrast and we hope to stimulate networking and discussion of particular technical and pathway issues amongst urologists attending.
For non-urologists we hope that certain aspects of the cystectomy pathway may have parallels for other major procedures and we will look to discuss the use of the cell saver in cancer surgery as a particularly interesting issue. An audit of our experience will be presented.
Oral Presentations

1411003  Experiences of perioperative nutrition in people undergoing colorectal surgery: a qualitative study
Vaneesha Short, Eileen Sutton, Andy Ness, Steve Thomas, Sorrel Burden, Stephen J Lewis, Charlotte Atkinson. University of Bristol. vaneesha.short@bristol.ac.uk
Background: Randomised-controlled trials have demonstrated that Enhanced Recovery After Surgery (ERAS) can reduce length of hospital stay and complications, without increasing readmissions. Nutrition forms part of ERAS, but its contribution is unclear. The limited qualitative research regarding patients’ experiences of ERAS suggests that nutrition may be a key area requiring improvement. To date there are no studies considering patients’ views specifically of nutritional ERAS elements. The aim of this study is to qualitatively explore patients’ experiences of perioperative nutrition within an ERAS setting. Methods: 16 individuals scheduled for an elective colorectal resection participated in a postoperative semi-structured interview before hospital discharge. Topics included preoperative counselling, carbohydrate loading, fasting, and postoperative nutrition. The topic guide was piloted in the first four participants, and developed iteratively throughout the study. Demographic information and relevant medical data were collected to contextualise participants’ experiences.
Results: Data are currently being coded using NVivo software, and will be analysed with an inductive thematic approach. Four transcripts will be double coded to ensure validity of the coding scheme. The constant comparison technique will be employed to ensure consistency in coding application and to account for development of codes. Reflexivity was carried out throughout the research process by means of a research diary.
Conclusions: This study will describe the perioperative nutrition experiences of people having colorectal surgery. Data obtained could identify potential barriers and facilitators to feeding pre- and postoperatively. This may aid development of interventions encouraging nutrition ERAS components, and methods to emphasise the importance of perioperative nutrition.

1411013  The national effect of applying enhanced recovery principles to fractured neck of femur patients.
Tom Wainwright, Tikki Immins, Robert Middleton. Bournemouth University. twwainwright@gmail.com
Background: Enhanced recovery has been shown to be successful at improving outcomes such as length of stay (LOS), mortality, and discharge destination when applied to fractured neck of femur (FNOF) pathways.
Objective: To model the potential effect of applying Enhanced Recovery principles to all FNOF pathways across England.
Methods: Data extracted from Hospital Episode Statistics for 2012-2013 Q4 to 2013-2014 Q3 was analysed using a case mixed adjusted methodology. Modelling was applied to evaluate the number of bed days that could be saved if practice was changed in those hospitals in which: average LOS was below the mean, and average LOS was below that seen in the 25% of poorest performers.
Results: The mean length of stay (LOS) for patients was 19.3 days (range 5.0 – 50.6). The case mixed adjusted expected mean LOS was 19.6 days (range 18.4 – 21.8). 25% of hospitals had a mean LOS greater than 23 days. If this 25% of poorest performers improved their LOS to 23 days, then 38,535 bed days could be saved per year. Further if those with LOS less than current overall mean improved it to this mean, then 86,526 bed days could be saved per year.
Conclusions: FNOF is the most frequent emergency surgical pathway seen in most English hospitals. There is considerable variation in LOS between hospitals. The case-mixed adjusted data suggests that this is due to differences in practice and not patient case-mix. Considerable improvements to quality and efficiency of care in our hospitals could be achieved if clinicians experienced in enhanced recovery focused on FNOF pathways.
**1411017 Evaluating the effect of the gekoTM device against TED stockings on post-operative oedema in a total hip replacement enhanced recovery pathway – A randomised controlled trial.** Tom Wainwright, Tikki Immins, Robert Middleton. The Royal Bournemouth Hospital. twainwright@bournemouth.ac.uk

**Introduction:** Decreasing post-operative oedema in the thigh following THR remains a challenge. Oedema inhibits quadriceps muscle and increases pain, which can delay functional recovery. The gekoTM is a neuromuscular electro-stimulator effective at increasing venous flow and microcirculation.

**Methods:** 40 consecutive patients undergoing THR on an enhanced recovery pathway were randomised to receive either the gekoTM or TED stockings. The gekoTM and TEDS were used continually post-surgery until discharge. Circumference measurements of the ankle, knee and thigh were recorded pre-operatively, immediately post-operatively before the device was applied, and on every day of hospital stay. Nominal limb volumes were calculated using a truncated conical segment model and statistical tests were applied.

**Results:** In all patients limb volume prior to application of the device increased, post-operatively relative to pre-operatively (gekoTM \( p=0.0009 \), TEDS \( p=0.0003 \)). However, post application of the gekoTM there was no further apparent change to limb volume at discharge \( p=0.22 \). In the TEDS arm, there was a very highly significant increase in limb volume from application of the intervention until discharge \( p=0.004 \). Box plots showing increase in limb volume (ml), from application of device until discharge, with standard error of the mean; showed a pronounced and highly significant difference \( p=0.003 \) between the oedema outcomes for gekoTM and TEDS, with geko clearly superior.

**Conclusion:** The results of this study suggest that when choosing mechanical DVT prophylaxis modalities the geko should be considered by hospitals over TEDS as it offers the additional benefit of reducing oedema.

**1411021 Improving patient experience and outcomes through implementation of an Elderly Care Enhanced Recovery Pathway (ERP) at the Royal Berkshire NHS Foundation Trust (RBFT).** Josephine Ockerse, Katharine Young, Sharon Herring. Royal Berkshire NHS Foundation Trust. josephine.ockerse@royalberkshire.nhs.uk

**Enhanced recovery (ER) supports safe, timely, effective, patient-centred care.** Local Problem: Need to improve patient experience, multi-disciplinary team (MDT) working, reduce length of stay (LOS) and prevent inappropriate re-admissions across Elderly Care (EC) wards.

**Intended improvement:** Create a MDT pathway for implementation in EC

**Study question:** Does the introduction of a pathway improve patient experience, reduce LOS and inappropriate readmissions?

**Setting:** 5 elderly care wards: 3 Acute; 1 rehabilitation; 1 orthogeriatric rehab at RBFT

**Intervention:** A MDT working group was formed to develop the pathway including Consultant Geriatricians, Nurses – including Director of Nursing, Matron, ER Facilitators, Therapists, and Quality Improvement. A literature review was undertaken and experience sought from within and outside the Trust.

**Evaluation:** Measures included:
- Process: Documentation
- Outcomes: ‘Friends and Family’ test; length of stay.
- Balancing measure: number of complaints
- Combination of existing data and audits completed on a weekly basis by Facilitator.

**Outcomes**
- Documentation reviewed, revised pathway rolled out.
- Staff attitudes and team working improved
- Length of stay and inappropriate re-admissions reduced
- Patient experience improved, complaints reduced
- Patients are more independent, getting dressed in day clothes and engaging in social dining and other activity groups.
- Improved monitoring of patients food and fluid intake
Conclusion: This project has a positive impact in improving outcomes and experience. Further evidence needs to be collected to determine impact on length of stay and re-admissions.

Background: Enhanced Recovery After Surgery (ERAS) protocols are increasingly being introduced within HPB surgery to provide standardised post-operative care and facilitate recovery and safe discharge of patients after major surgery. A formalised ERAS protocol was introduced in our unit in January 2013. This study aims to compare outcomes “before” and “after” ERAS.
Methods: Two cohorts of patients who had undergone Liver resection during January to December 2010 and January to December 2013 were identified from a prospectively maintained database. The following outcomes were assessed: post-operative length of stay, complications, in hospital mortality and 30-day readmission rates.
Results: 85 patients underwent Liver resection during January to December 2010 and 93 during the same time period in 2013. The two groups were well matched in terms of age (median 66 in 2013 vs. 64 in 2010, P=0.275), gender, ASA grade, co-morbidity, pathology, type of resection and number of segments resected. Median length of post-operative stay was 2 days shorter in 2013 (6 days vs. 8 days in 2010, P<0.001). The rate of post-operative complications (28.0% in 2013 vs. 31.8% in 2010, P=0.579) and 30-day readmission rate (11.8% in 2013 vs. 5.9% in 2010, p=0.166) were similar in both groups. The in hospital mortality rate was 0% in both groups.
Conclusions: The introduction of an ERAS protocol in our unit has maintained safe discharge and reduced the length of stay by two days without any significant increase in the rate of readmissions or post-operative complications.

1411024 Developing an 'ERAS Plus' Pathway for Frail Older Surgical Patients. Elizabeth MacDonald, Susan Gordon, Irwin Foo, Gemma Alcorn. NHS Lothian. elizabeth.macdonald@luht.scot.nhs.uk
Older patients have poorer postoperative outcomes and it is recognised that frailty is an independent predictor of outcomes such as 30 day mortality, length of stay and institutionalisation. Despite this, key domains of frailty such as cognitive and functional status, and social needs are often poorly assessed at Preadmission Clinics, and proactive input of specialist Medicine of the Elderly (MOE) services is not routine in most UK hospitals.
We assessed the frailty level in 250 consecutive patients aged over 65 attending the Preadmission Clinic, Western General Hospital, Edinburgh using a simple patient administered questionnaire - the reported Edmonton Frailty Scale. 25% of patients were frail with frailty levels increasing with age. 52% of the frail group had functional impairment, 56% cognitive impairment, 56% polypharmacy. It was proposed that enhanced multidisciplinary management of this group could address aspects of frailty, prevent some postoperative medical complications and reduce unnecessary delays in discharge.
The activity and resource predicted by this audit has informed the development and implementation of a Surgical Frailty pathway - a collaboration between MOE, Surgery and Anaesthesia. A frailty Preadmission Clinic now provides enhanced multidisciplinary assessment (incorporating formal cognitive and functional measures, social needs assessment and frailty markers such as grip strength, gait speed); a multi modal individualised 'prehabilitation' plan aims to optimise the patient and proactive multidisciplinary input addresses domains of frailty following surgery. This pathway commenced in May 2014. Outcome data is being collected prospectively, and key learning points of implementing this interdisciplinary model of care collated.
Oral Presentations

1411030  Factors predicting 30 days re-admission after laparoscopic colorectal cancer surgery within enhanced recovery
Jennifer Mason, Nader Francis, Lucy Allanby, Emad Salib, David Messenger, Andrew Allison, Neil Smart, Jonathan Ockrim. Yeovil District Hospital NHS Foundation Trust. nader.francis@ydh.nhs.uk

Introduction: The combination of laparoscopic techniques and Enhanced Recovery After Surgery (ERAS) are proven to improve short terms outcomes for colorectal cancer surgery in terms of reduction of length of stay and postoperative complications. Compliance with ERAS elements is essential to ensure its success but it is not known if compliance with ERAS elements influences re-admission. The aim of this study was to investigate the factors that predict 30 days re-admission after colorectal cancer surgery within ERAS.

Methods: Prospective and retrospective data collection of consecutive patients undergoing laparoscopic surgery for colorectal cancer within ERAS programme at Yeovil Hospital between 2002 and 2010. Variables were collected related to patient demographic, preoperative chemo radiotherapy; compliance with each ERAS element; operative outcomes; length of stay and postoperative complications. Odds ratios (OR) with 95% CI & Chi square were used to test the association between study variables and occurrence of 30 day readmission of discharge. A logistic regression model was used to calculate the probability of readmissions after adjusting for potential effect of co-variables simultaneously.

Results: 275 patients underwent laparoscopic colorectal surgery for cancer with 34 patients were re-admitted (12.5%). Univariate analysis indicated longer length of stay, ERAS compliance with all variables, epidural failure, continuation of postoperative intravenous fluid, postoperative ileus and pre operative chemo radiotherapy were significantly associated with higher rate of re-admission. Multivariate Logistic regression model that included all variables which proved significant in univariate analysis, selected only 2 significant predictors of 30 day readmission which were; poor ERAS compliance (< 93% of total ERAS score) and having had preoperative chemo radiotherapy.

Conclusions: Re-admission after laparoscopic surgery for colorectal cancer with ERAS is significantly influenced by poor compliance with postoperative ERAS elements and having had preoperative treatment. Further research is required to enhance compliance with postoperative elements and to investigate the optimum pathway for patients requiring preoperative treatment.

Poster Presentations

1411001 Enhanced Recovery Programme for Laparoscopic Sacrocolpopexy (LSCP) at Hampshire Hospitals Foundation Trust, Basingstoke.
Mathew Learning, Sameena Muzaffar, Christian Phillips. University of Southampton. sameena.muzaffar@hhft.nhs.uk

Aim: The aim of this study was to evaluate the impact of introduction of ERP for patients undergoing sacrocolpopexy operation, in particular the effect of introducing minimal invasive technique on length of stay and recovery period.

Methods: Data was collected for: age, pre-operative assessment of the patient by operating surgeon, preoperative haemoglobin level, type of anaesthesia, use of intraoperative antibiotics, duration of catheterisation, length of stay, de-nova bladder and bowel symptoms after surgery and mesh erosion after surgery

Results: A total of 24 cases were identified between March 2011 to May 2013. All patients were operating by the same surgeon and 100% assessed by him before operation. None of our patients had minor or major anaemia pre-operatively. 100% patients had general anaesthesia and had intraoperative antibiotics. 100% patients had thromboprophylaxis.22 patients had catheter removed on day 1 am and 1 patient had catheter removed on day 2 am. 52% patients were discharged on day 1, 39% on day 2 and 9% on day 3.

Conclusion: Our study shows that using the minimal invasive technique further safely decreases the length of stay after sacrocolpopexy operation.
**Poster Presentations**

**1411004 Making the Enhanced Recovery Programme Work for Patients Undergoing Radical Cystectomy with Ileal Conduit Urinary Diversion.** Rebecca Martin, Pardeep Kumar, Bhagya Parkash. Royal Marsden Hospital. rebecca.martin@rmh.nhs.uk

The Enhanced Recovery Programme was introduced targeting patient’s undergoing radical cystectomy with the aim of improving outcomes. A pilot study was undertaken to determine the impact of this programme.

An audit of LOS and reported complication data was undertaken and additional qualitative questionnaire was obtained. The ERP was a one year pilot study, with comparative analysis from a matched cohort one year prior to introduction of ERP.

Over a one year period a total of 28 patients undergoing radical cystectomy with ileal conduit formation were entered into an ERP. Two patients (n=2) were removed from the programme due to requiring further laparotomy secondary to small bowel obstruction. A cohort analysis was undertaken of the remaining 26 patients with matched patients during the 12 month period prior. The programme was well tolerated with overall improvement in LOS. The median LOS for the ERP group was 11 days compared with 15 days in the 12 month period prior to the introduction of ERP. Overall a similar rate of post-operative complications were reported in both cohorts (2012/13 n=13 & 2011/12 n=15).

The pilot cohort took part in a post-surgery questionnaire. All of the responders (n=5) reported a positive experience and good compliance with the planned pathway.

In summary the ERP appears to reduce LOS and contributes to a positive experience in patients undergoing radical cystectomy. This programme is applicable to the majority of patients undergoing radical cystectomy with ileal conduit at our institution.

**1411005 Enhanced recovery programme for Pancreaticoduodenectomy (PD) not only reduces post operative stay hospital but also 30 day readmission rates.** Mohammed AbuHilal, Hannah Clarke. University Hospital Southampton hannah.clarke@uhs.nhs.uk

PD carries a significant mortality and morbidity risk. After surgery patients need to have confidence that they are suitable and supported in their discharge. Hospital readmissions can have negative physical, emotional and psychological impact on patients. Traditionally increasing readmission rates have been seen as a potential negative aspect of enhanced recovery programs and early discharge.

Aims : the aim of this study is to evaluate the feasibility of our Enhanced recovery (ER) protocol after PD especially focusing on hospital stay and readmission rates. The ER data is to be compared to the traditional outcomes before the wide adoption of ER.

Methods: Our enhanced recovery program has been launched in October 2010 initially by a single surgeon however from May 2012 it has become the gold standard approach for the management of all patients undergoing PD. As a multidisciplinary team we focused on the founding principles of enhanced recovery and identified the following changes to be made in order to have a pro-active patient management approach. We have focused on ensuring that there is good patient preparation minimising the risk of predictable complications as well as reducing physical and psychological stress pre and post operatively.

Results: From May 2012 till April 2014, 87 patients were included. Hospital stay and readmission rates were compared those of patients operated between May 2011 and April 2012.

- Median hospital stay was 9 vs. 8 days
- 26% were discharged within 7 days , 54% within 10 days versus 31% and 67% respectively on the enhanced recovery.
- Readmission rates were 16 % which is surprisingly lower than the traditionally managed Patients before the introduction of the ER program (35%)

Conclusion: Southampton’s experience of incorporating enhanced recovery principles into our care pathway for PD patients has provided positive results. Our data confirm that the ER program after PD dose not increase re admission rate after this complex surgery but it dose improve it. This can be explained to a better patient and staff education, communication and follow up. The role of ER nurse is essential to ensure a smooth application of this protocol. Our PD Enhanced Recovery Programme is a safe, proactive multidisciplinary
approach to patient care which has resulted in a considerable reduction in the length of stay as well as a significant reduction in 28 day readmissions without compromising patient safety or experience.

1411007 Results of Surgical Treatment of Colon Cancer with Implementation of a Multimodal Enhanced Recovery Programme. I.B. Shchepotin, O.O. Kolesnik, A.V. Lukashenko, D.E. Mahmudov, V.V. Priymak, A.P. Beznosenko. National cancer institute, Kiev, Ukraine. dmahmudoff@gmail.com

Background. Colorectal cancer remains to be one of the most worldwide spread malignancy. In Ukraine it tends to occupy first place in oncological morbidity among adults. More than 70% of patients are presented with stage I-III and require curative surgery. However, severe postoperative complications occur in 20-30% of cases, requiring a multimodal approach program for improving overall treatment results.

Methods. A randomised multi-centre study was provided with 280 patients included. Main group (MG) (115 patients) received curative surgery for colon cancer with implementation of a multimodal enhanced recovery program, control group 1 (CG1) and control group 2 (CG2) – with conventional approach. Overall recovery period, postoperative morbidity and mortality were assessed.

Results. There were no significant differences between anthropometrical parameters, tumour site, stage and type of surgery. Overall postoperative complications rate for MG, CG1 and CG2 was 10 (8,7%), 16 (20%) and 15 (18%), overall mortality – 1 (0,9%), 5 (6,25%) and 1 (1,2%) respectively. Relative risk for developing postoperative complications for CG1 and CG2 patients was 2,198 (95% CI 1.122-4.305). Overall recovery period after surgery for MG, CG1 and CG2 was 6,3±3,4, 18,4±8,7 and 15±7 days respectively.

Conclusions. Applying a multimodal enhanced recovery approach program in surgical treatment of patients with colon cancer reduces overall rate of postoperative morbidity and overall recovery period. Conventional care patients had increased relative risk of developing postoperative complications. In our study the influence on postoperative mortality was unconvincing.

1411008 The Aggregation of Marginal Gains: Applying Team Sky’s improvement methodology techniques to Peri-operative care. (The introduction of a database to collate and analyse peri-operative data in a tertiary referral centre for Oesophagectomy patients). Arun Nair, Jonathan Veitch, Adam Carney. Nottingham University Hospitals Trust. jveitch@doctors.org.uk

Nottingham University Hospital NHS Trust is the second largest single centre for Oesophagectomy surgery in the UK. We have previously presented reduced morbidity and length of stay after the introduction of our ERAS pathway. To further optimise care in this group of patients requires continual improvement in many small ways. To monitor outcomes, information needs to be collated continuously and thoroughly.

Methods: We have created a database which includes details of; patient demographics, operative duration, incidence of atrial fibrillation, fluid administration, vasopressor use, potassium levels & supplementation, mode of analgesia & pain scores. The information on fluids covers the operation and subsequent 48 hours. Pain scores are recorded for three days, potassium levels for seven days post-op.

Results: The database currently holds data for 108 patients and is being prospectively updated. The data have allowed us to make initial comparisons between sub-groups, highlighting areas for marginal improvements.

- We have compared noradrenaline use and pain scores between epidural and paravertebral catheters.
- We have analysed fluid given over a 48 hour peri-operative period, and gained valuable data on use of cardiac output monitoring.
- We have highlighted a potassium drift in post-operative fasting.

Discussion: Our database offers a sustainable, robust method of recording patient interventions, allowing analysis of trends and modification of peri-operative practice to ensure marginal gains. Current work includes correlating this peri-operative data to surgical outcomes.
1411012  Enhanced recovery after orthopaedic surgery reduces hypotension and improves pain control.
James Hanison, Simona Labor. North Western Deanery. jameshanison@nhs.net
Enhanced recovery programmes advocate a restriction of excessive crystalloid infusions perioperatively[1] in order to avoid fluid overload and the associated complications. There are concerns that this strategy may increase rates of hypotension in combination with intrathecal opioids.[2] As part of our enhanced recovery after orthopaedic surgery, we recommend judicious use of fluids, limiting to 500mls colloid if possible. We also advocate the avoidance of intrathecal opioids. We collected routine post operative outcome data from patients following knee and hip replacement surgery. Fifty-eight patients were in the enhanced recovery after surgery (ERAS) programme and 125 received routine care. 8.77% of patients experienced hypotension in the ERAS group compared to 19.67% in the non-ERAS group. Patients in the ERAS group experienced less breakthrough pain (47.37% to 57.02%) and received less supplemental analgesia (56.14% to 66.12%). Although there is a possibility of restrictive fluid strategies increasing hypotension, this does not seem to occur when intrathecal opioids are avoided. Our data demonstrates that a restrictive fluid strategy and the avoidance of intrathecal opioids as part of an ERAS protocol improves outcomes in blood pressure and pain control after surgery.

1411014  Patient Expectations of Length of Hospital Stay Following Arthroplasty: a Prospective Study. Chloe Scott, Ryan Miller, Angie Balfour, Paul Gaston. NHS Lothian. chloehscott@yahoo.co.uk
Background: Patient expectations of length of hospital stay (LoS) following surgery may influence their actual LoS.
Aims: The aim of this study was to investigate patient expectations of LoS following arthroplasty in a teaching hospital enhanced recovery setting.
Patients: Consecutive arthroplasty patients attending the pre-assessment clinic in May 2014 were recruited: 57 awaiting total hip replacement (THR) with mean age 66 (30-87), and 54 awaiting total knee replacement (TKR) with mean age 70 (53-91).
Methods: Prior to consultation patients completed a questionnaire asking how long they expected to spend in hospital following surgery; what sources of information had informed this; and would they be happy if discharged home sooner than expected.
Results: The median expected LoS was 4.5 for THR and 4 for TKR. For THR this was informed by information from an orthopaedic surgeon 36%, general practitioner 20%, friends and family 21%, other arthroplasty experience 9%, the internet 8% and other literature 6%. For TKR the figures were 47%, 24%, 20%, 3%, 6% and 0% respectively. Fourteen percent of THR patients and 18% of TKR patients would be unhappy or very unhappy if discharged sooner than expected. Expected LoS increased significantly with age (p=0.012) and males were more likely to be unhappy at early discharge (p=0.021).
Conclusions: Expectations of LoS are largely informed by orthopaedic surgeons. Managing these expectations from the time of initial consultation onwards may reduce expected and therefore actual LoS. We have introduced such interventions and will be re-auditing in the coming months.

1411015 The effect of an enhanced recovery programme on postoperative complications in head and neck patients undergoing free flap reconstructive surgery. Louisa Chrisman, Wendy King, Mike Bater, Jacob D'Souza, Martin Danford, Nigel Payne, Angela Bates. Royal Surrey County Hospital, Guildford. louiscrisman@doctors.org.uk
Introduction: Enhanced recovery after surgery (ERAS) programmes have been shown to reduce morbidity and shorten hospital stay 1. Having established the first multimodal ERAS pathway for maxillofacial free flap patients and demonstrated a reduction in median length of stay from 14 to 10 days (p=0.0006), we have evaluated postoperative complications.
Methods: Our programme includes optimisation of preoperative nutrition and physical status, carbohydrate pre-load, intraoperative goal directed fluid management, early postoperative nutrition and mobilisation. Prospective observational study data from 45
Poster Presentations

consecutive patients following the ERAS pathway, was compared to 40 consecutive patients undergoing free flap surgery with traditional care after surgery (TRAS), and examined to determine the rate and severity of postoperative complications using the Clavien-Dindo classification.

Results: Patient demographics were similar for both groups with respect to tumour staging, type of flap reconstruction and duration of surgery. The overall proportion of patients experiencing postoperative complications fell from 67.5% (TRAS) to 48.9% (ERAS). Surgical complications fell from 18 (45%) (TRAS) to 17 (38%) (ERAS); medical complications fell from 15 (38%) (TRAS) to 9 (20%) (ERAS). Using the Clavien-Dindo classification, the proportion of patients experiencing grade I and II complications fell (35% to 15.6%); Grade III or above have remained similar proportions (33%), however the median length of stay of patients experiencing these complications has reduced from 22 days (TRAS) to 14 days (ERAS).

Conclusions: ERAS programme is safe and effective for patients undergoing head and neck free flap surgery, potentially reducing the rate and severity of postoperative complications.

1411016 Introducing the principles of enhanced recovery to a fractured neck of femur pathway - 5 year results and experience. Tom Wainwright, Tikki Immins, Robert Middleton. The Royal Bournemouth Hospital. twainwright@bournemouth.ac.uk

Background: There is great potential for the principles of Enhanced recovery to be successfully applied to fractured neck of femur (FNOF) pathways in order to improve clinical outcomes.

Objective: To present the 5-year results and experience from Poole Hospital of applying the principles of enhanced recovery to FNOF patients.

Methods: A mixed-methods sequential explanatory design (QUAN emphasised) that consists of quantitative followed by qualitative data collection was used to evaluate the project. Quantitative outcome data was extracted from Hospital Episode Statistics for 2008/09 to 2013-2014 and analysed using a relative risk methodology. Relative Risk is the ratio of the observed number of outcomes to the expected number of outcomes and is case-mix adjusted. The NHS England average is calculated and 95% confidence intervals are applied to determine statistical difference from unit performance to the equivalent case-mix. Qualitative data was collected via staff interviews.

Results: A mean length of stay (LOS) of 12.3 days, a mortality rate of 5.7%, a 28-day readmission rate of 10.2%, and a discharge home rate of 55% achieved in the last year of the project are lower than expected for hospital case-mix. Staff interviews provide the commentary on the challenges faced and solutions found to achieve these exemplar results.

Conclusions: Enhanced recovery can successfully be applied to FNOF patients in order to improve patient outcomes. However, implementation may be more challenging and take longer than for elective orthopaedic procedures.


Introduction: This audit describes our results for an enhanced recovery program for joint replacement surgery based on the modification of the CALEDonian Pathway. Patients receive an educational program from physiotherapists before admission, and are premedicated with Gabapentin, dexamethasone, and transdermal fentanyl. IV tranexamic acid is administered at induction. Spinal anaesthetic block (SAB) is administered unless contraindicated. Postoperative analgesia consists of regular oxycodone with further doses for breakthrough pain and regular simple analgesics.

Methods: Retrospective data collection from electronic patient records was performed for 120 patients having undergone hip or knee replacement surgery in Milton Keynes Hospital over a 3 month period (Dec 2013-Feb 2014). Approval for the study was obtained from our clinical governance department.
Results: 39% of operations were hip replacements, 61% were knee replacements. Mean patient age was 67. In 45% of cases, all preoperative interventions were administered. In a further 33% all premedication was given but patients received no tranexamic acid. 82% had SAB, 2% had lumbar plexus block. Oxycodone was the only opiate received by 94% of patients postoperatively: 5% required no opiates whatsoever. Mean pain score in the first 4 days post op was 1.8/10 in patients receiving SAB, 1.8/10 for patients having GA alone. Postoperative nausea and vomiting was experienced by 21% and 5% of patients respectively. Mean length of hospital stay was 4.06 days.

Conclusion: Implementation of an enhanced recovery program for joint replacement surgery including the use of regional anaesthesia produces low postoperative pain scores, nausea/vomiting rates and length of stay.

1411019 Can an enhanced recovery programme further enhanced the benefits of laparoscopic distal pancreatectomy. Hannah Clarke, Mohammad AbuHilal, John Richardson, Francesco Di Fabio, Mohammed Bajalan, Joe Davids. University Hospitals Southampton NHS Trust. Hannah.clarke@uhs.nhs.uk
Reduced length of stay has long been held up as an advantage of a laparoscopic approach. In distal pancreatectomy the laparoscopic approach (LDP) has shown this improvement. Surprisingly median hospital stay is above 5 days in the majority of reported series.
Enhanced recovery (ERAS) is now considered routine across surgical specialties The aim of this observational case-control study was to assess the impact of ERAS in patients undergoing LDP.
A total of 79 patients undergoing LDP by a single surgeon between 06/2007- 02/2014 were reviewed.
Study group: 21 patients prospectively enrolled for the ERP-LDP
Control group: 42 consecutive patients prior to introduction of ERP (traditional postoperative management) 16 patients excluded due to learning curve.
The adoption of enhanced recovery programme in LDP can enhance the advantages of the laparoscopic approach without increasing postoperative complications and readmission rate, and by reducing costs.

1411020 Acceleration of development and implementation of ERP through new ways of working. Imogen Fecher-Jones, Amanda Barnes, Tristan Chapman. University Hospital Southampton NHS Foundation Trust. imogen.fecher@uhs.nhs.uk
Aims: To evaluate the impact of having a dedicated 8a enhanced recovery Nurse lead, and understand whether this approach is more effective than more traditional approaches in the development and implementation of enhanced recovery programmes (ERP).
Method: The post was funded as a 12 month pilot, the post holder was recruited with previous experience of working with ERPs. The role involved working with different care groups and specialties, seeking engagement and co-ordinating multiple pathways, whilst utilising expertise from the private sector within a joint working framework.
Results: During the 12 month pilot, the ERP nurse supported, co-ordinated, and facilitated the implementation of 11 surgical pathways both elective and non elective. There was a reduction in length of stay seen following the implementation of all the pathways, and an improvement in patient experience seen on the majority of pathways.
Discussion: This type of nurse role has been shown to be successful in leading and implementing change and achieving results in relation to patient experience and length of stay in a short timeframe. However its success also relies on the engagement of Trust management and stakeholders which was apparent within UHS.
Conclusion: An 8a Nurse Lead for ERP can improve engagement, productivity and outcomes with regard to enhanced recovery across multiple specialities. This new way of working may be a more effective approach than the traditional model of ERP pathways being designed and implemented by senior ward or specialist nurses within their own area in additional to their clinical role.
1411022  “I am not a number, I am not another joint replacement, I am an individual” The benefits of one to one prehabilitation clinics. Sue Roberts, Karen Palframen. Salford Royal NHS Foundation Trust. susan.roberts@srft.nhs.uk

It is well established that pre-operative information giving is the key to enhance recovery. It facilitates patient empowerment, patient and carers involvement and achieves faster recovery with reduced complications.

At Salford we ran a joint school for many years in different formats. An audit found that the only thing the patients remembered was what the prosthesis looked like! The therapy team recognised that each patient is an individual with their own physical, psychological and social needs so they organised an individual appointment system where each patient has a one to one interview with the therapy staff, and more recently the ERAS specialist nurse. By seeing each patient (and carer) on a one to one basis, individual needs can be explored and a detailed specific care plan can be agreed with each patient, this is then documented and reviewed and actioned by the whole team on admission.

We are currently re-auditing patients’ retention of information on admission, but on speaking to patients on admission, they generally recite everything to us from pain management to mobilising on the day to how long they need to keep their stockings on for!

We believe that this approach ensures each patient is provided with a realistic, individualised plan of care and one of which the patient remembers and feels part of. This then facilitates the philosophy and aims of enhanced recovery.


Background: Enhanced Recovery After Surgery (ERAS) protocols are being introduced in HPB surgery to provide standardised post-operative care and facilitate recovery and safe discharge of patients. A formalised ERAS protocol summarised on a single A3 sheet was introduced in our unit in January 2013. This study aims to compare outcomes “before” and “after” ERAS.

Methods: Two cohorts of patients who had undergone Pancreateo-duodenectomy during January to December 2010 and January to December 2013 were identified from a prospectively maintained database. Outcomes were assessed: post-operative length of stay (LOS), complications, pancreatic fistula, in hospital mortality and 30-day readmission rates.

Results: 44 patients underwent Whipple’s procedure during January to December 2010 and 52 during the same time period in 2013. The two groups were comparable in terms of gender, ASA grade, co-morbidity and tumour type. In 2013 median age was 4 years older (68 years vs. 64 years in 2010, P=0.051) and more patients required portal vein resection (26.9% vs. 2.3% in 2010, P=0.001).

The 2013 cohort had a significantly shorter LOS (9 vs. 12 days in 2010, P=0.047) and lower 30-day readmissions (9.6% vs. 11.4% in 2010, P=0.780), but increased rates of complications (50% vs. 43.2% in 2010, P=0.505), pancreatic fistula (13.5% vs. 11.4% in 2010, P=0.757) and mortality (3.8% vs. 0% in 2010, P=0.189). However, these were not statistically significant.

Conclusions: The introduction of an ERAS protocol has maintained safe discharge and reduced the length of stay despite an older population with worse pathology, without any increase in readmissions.
**1411026 Effect of visual aids on patient satisfaction in orthopaedic consultation: a single-blinded randomised controlled trial.**

Hammad Malik, Kapil Sugand, Simon Newman, Dominic Spicer, Peter Reilly, Chinmay Gupte. MSK Lab at Imperial College London.  

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**Background**

Patient satisfaction is a pillar of clinical governance and healthcare quality assessment. We aimed to observe the effect of a visual aid on patient satisfaction during informed consenting in a single-blinded randomised controlled setting.

**Method**

Fifty patients were recruited and randomised to be consented by three consultant surgeons for an elective orthopaedic operation with (intervention; n=26) or without (control; n=24) a visual aid in clinic consultation. The visual aid was a realistic phantom knee or shoulder joint model. Patients rated their satisfaction with the consultation on the validated Medical Interview Satisfaction Scale (MISS-26). Semi-structured interviews were conducted and analysed via thematic analysis to determine key factors influencing patient satisfaction.

**Results**

The intervention cohort rated satisfaction higher (+8.5%) than the controls on MISS-26 (intervention 4.70 ± 0.335 vs control 4.33 ± 0.646; p<0.05). The top three factors influencing satisfaction from thematic analysis included (i) the surgeon’s explanation, (ii) the surgeon’s interpersonal manner and (iii) the decision to operate. The entire intervention group identified factors contributing to their satisfaction, whereas 21% of the control cohort claimed nothing at all made them feel satisfied.

**Conclusion**

The model was well received by the interventional cohort. The use of visual aids increased patient satisfaction and enhanced the surgeon’s explanation during the consultation. Patients in the intervention cohort were also more likely to report factors contributing to satisfaction. The use of visual aids is feasible to implement easily and globally to enhance patient satisfaction and hence clinical governance.

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**1411027 Are Readmissions After Enhanced Recovery Avoidable?**

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**Background:** Enhanced recovery programmes (ERAS) facilitate early discharge so readmissions with late complications are inevitable. Median length of stay (LOS) in our ERAS programme is 4 days with an average readmission rate of 10%.

**Aim:** To assess whether some readmissions are avoidable and if re-admission LOS could be reduced.

**Method:** Retrospective analysis of a prospectively collected database from January 2012 to December 2013.

**Results:** 54/457 (12%) patients were re-admitted following discharge. 60% had an uncomplicated initial stay. Symptoms prompting readmission included pain (17%), bleeding (8%), vomiting (33%) wound problems (9%) and being generally unwell (17%). 48% were admitted between 2-7 days, 19% between 1 and 2 weeks and 16% more than 2 weeks after discharge. 9 patients (17%) were readmitted after 1 day, 4 with a leak despite the use of a discharge checklist. The re-admission diagnoses include ileus (17%) and anastomotic leak (24%). Readmission did not vary by day of week. 13 (24%) patients had either re-operation (17%) or radiological intervention (7%). 56% of readmissions had a CT. 16 re-admitted patients (30%) had LOS of 3 days or less. 40% had a LOS greater than 2 weeks. Seven readmitted patients had no diagnosis and 2 had wound problems suggesting that with better patient information, readmission could be avoided.

**Conclusion:** 80% of readmissions seem unavoidable and 30% have a short LOS which could be reduced. We have introduced an ambulatory care pathway with access to early CT for patients with post-discharge problems to either prevent re-admission or reduce LOS.
**1411028 Measuring Recovery-How ERAS Can Improve Quality of Post-Discharge Recovery.** Jodie Rogers, David Hocking, Dawn Gane, Lisa Hayward, Anne Pullyblank. North Bristol NHS Trust. anne.pullyblank@nbt.nhs.uk

Background: Surgical site infection (SSI) is a complication of major colorectal surgery but the measure requires follow-up for 30 days. With a median LOS of 4 days, this means that most wound problems occur after discharge.

Aim: Within our enhanced recovery (ERAS) programme all patients receive 4 follow-up phone calls post-discharge. The aim was to extend follow-up and develop a reliable method of determining 30 day patient reported SSI data for ERAS patients.

Method: This was a 5 year project. Prior to the ERAS programme in 2009, colorectal nurse specialists collected 30 day SSI data on colorectal cancer patients seen for nurse lead follow-up in clinic. This only included cancer patients and was a non-structured questionnaire. From 2010 ERAS nurses collected SSI data using the Health Protection Agency questionnaire via telephone follow-up. This was time-consuming so from 2011 the questionnaire was sent by post with the patient satisfaction questionnaire and only non-responders were phoned by ERAS nurses. This meant that calls were required for only 20-30% of patients. In 2012 follow-up call guidelines were developed enabling non-clinical staff to contact patients that did not respond to the postal survey. Response rates are consistently above 80%. The data is entered onto an ERAS database and uploaded onto the trust intranet system.

Conclusion: We have developed a robust system of measuring 30 day patient-reported SSI rates for ERAS patients. This has been crucial as the basis for a quality improvement project which has reduced SSI from 24% to 8% within 5 years.

**1411029 Standardising Care: A comparative study of outcomes after knee replacement surgery.** Megan Burton, J Lowe, B Mconnell, P Lewis, DHJ Davis. Cwm Taf NHS Wales Health Board. megan_burton@hotmail.com

Introduction: A standardised ERAS anaesthetic protocol for joint replacement surgery was introduced in Hospital A but not B. This included reducing fasting times, carbohydrate loading, spinal anaesthetic, opiate sparing multimodal analgesia, tranexamic acid, immediate oral intake post-op. This study looks at short and mid-term impact of this ERAS protocol on patients undergoing elective Total Knee Replacement(TKR) surgery.

Methods: We retrospectively collected prospective data on patients undergoing primary TKR by a single surgeon from May 2011-May 2013. Patients at Hospital A received the ERAS anaesthetic protocol performed by a single anaesthetist, there was no standardised anaesthetic in Hospital B. Surgeon and surgical technique was the same on both sites. The primary outcome was length of stay(LOS). The secondary outcomes were Readmission Rate(RR) and improvement in function assessed by Oxford Joint Score(OJS) over the subsequent 12 months.

Results: LOS was reduced in Hospital A. There was no significant difference in RR or OJS up 12 months post-op.

Discussion: The introduction of a standardised anaesthetic ERAS protocol reduced LOS, representing significant cost savings in care. This may reflect an expedited return to function allowing patients to manage in their home environment sooner. There was no significant difference between the two patients groups 12mths after surgery demonstrating that reduced LOS had no detrimental effect on function and there is no conflict between cost of care and quality of care in this patient group.
**Poster Presentations**

**1411031 Peri-operative anaesthesia in elective laparoscopic colorectal surgery: Time for a change in direction?**  
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**Objective** – Recent advances in elective colorectal surgery mean that more surgeons are utilising laparoscopic techniques. These are being successfully and safely combined with detailed Enhanced Recovery Protocols. However, there exists a paucity of research underpinning peri-operative anaesthetic techniques advocated for by enhanced recovery programs in those patients undergoing minimally invasive surgery. As much of the existing evidence originates from patients undergoing open surgery, this pilot study aimed to assess the efficacy of three commonly used anaesthetic adjuncts and their role in enhanced recovery.

**Method** – A retrospective analysis of 28 patients was undertaken. Patients were divided into two groups, according to whether they had epidural or spinal anaesthesia with patient controlled anaesthesia (PCA). Data collected included post-operative pain scores, PRN analgesia usage, date of mobilisation, catheter removal and length of hospital stay.

**Results** – Post operative pain scores were generally lower as was PRN analgesia usage in those patients that received spinal anaesthesia. Furthermore, in this group catheters were removed sooner (2.4 vs 3.1 days), patients mobilised sooner (1.7 vs 2.4 days) and had shorter stays in hospital (5.3 vs 7.8 days).

**Conclusion** – This pilot study suggests that spinal anaesthesia with PCA facilitates enhanced recovery better than epidural anaesthesia. There is a paucity of evidence in the literature with regard to various perioperative anaesthetic regimes in elective laparoscopic colorectal surgery and further research in this area is required.

**1411032 A pilot study investigating the effects of the Painkwell® local anaesthetic wound infusion system on post-operative opioid use and recovery time following major laparoscopic colorectal surgery.**  
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**Aims:** The enhanced recovery programme (ERP) following colorectal surgery is well established and minimising opioid use post-operatively is desirable. There is little consensus regarding the use of local anaesthetic wound infusion devices post operatively and previous studies focus on open surgery. This pilot study looked at the PainKwell® wound infusion system to determine if it reduced use of opioid based patient controlled analgesia (PCA) and allowed earlier mobilisation and discharge following laparoscopic colorectal surgery.

**Methods:** The PainKwell® bupivacaine infusion catheter was used in addition to the existing hospital ERP for 5 laparoscopic operations (PG). This was compared with 5 patients following the normal ERP (NG), matched for operation, operator, average operating time, age and ASA grade.

**Post-operative data was retrospectively collected.**

**Results:** Total use of PCA was less in the PG compared to the NG (89mg vs. 204mg). The PG sat out of bed on average one day sooner and mobilised on average one day sooner than the NG. The average length of stay was one day less in the PG versus the NG.

**Discussion:** Local anaesthetic infusion to abdominal wounds following laparoscopic colorectal surgery reduced the average amount of PCA required post-operatively and shortened time to mobilisation and discharge. A larger study will be carried out to ascertain any statistical significance, and may determine that devices such as PainKwell® have a role in improving the ERP for laparoscopic colorectal surgery.
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