Medicine

Clinical Academic Group

KING'S HEALTH PARTNERS

King's Health Partners has:

- three of the UK's leading NHS Foundation Trusts
- a university ranked 19th in the world
- 3.6m patient contacts each year
- 31,000 staff
- 25,000 students
- a combined annual turnover of £2.8bn
- clinical services provided across central and outer London locations, including seven mental health and physical healthcare hospitals and many community sites;
- a comprehensive portfolio of excellent quality clinical services with international recognition in cancer, diabetes, mental health, regenerative medicine, cardiac and clinical neurosciences;
- a major trauma centre and two hyper-acute stroke units.

About King's Health Partners

King's Health Partners Academic Health Sciences Centre brings together one of the world's top research-led universities, King's College London, and three of London's most successful NHS Foundation Trusts – Guy's and St Thomas', King's College Hospital and South London and Maudsley.

The partnership provides an unrivalled combination of complex clinical specialties that cover a wide range of physical and mental health conditions and a breadth of research expertise that spans disciplines from medicine and biomedical sciences to the social sciences and humanities.

Our mission is to integrate clinical care, research and education and training in order to improve healthcare for people with physical and mental health care problems. We are uniquely structured to deliver our mission for integration – our 21 Clinical Academic Groups (CAGs) bring together all the clinical services from the three trusts with the relevant academic departments of King's College London.

Foreword

Professor John Moxham, Director of Clinical Strategy

Across King's Health Partners we are committed to providing accurate and timely information about patient care and believe that identifying, measuring and publishing healthcare outcomes results in a culture of improvement and increased value. This is why we are publishing a series of outcomes books that will help patients and referring clinicians make informed decisions and drive up the quality of the care we deliver.

The books report key outcomes for treatments that are provided by our 21 Clinical Academic Groups (CAGs). They are designed for a clinical and lay audience and contain a summary of patient volumes and measures (e.g. length of stay, re-admissions, and patient experience), clinical outcomes, technological and research innovations, educational achievements and publications. CAGs form the building blocks of our Academic Health Sciences Centre. We believe that by bringing together our clinicians and academics across teaching, training and research, we can achieve better outcomes for patients. The primary purpose of King's Health Partners is to improve health and well-being locally and globally. We must deliver this goal against a challenging economic environment, with rising demand for, and costs of healthcare. We will only achieve sustainable health improvement if we strive always to increase value. We define value in terms of outcomes that matter to patients, over the full cycle of care, divided by the cost of producing those outcomes. By publishing outcomes books we have more information to support us measuring the value of the healthcare we provide.

These books are a work-in-progress. Our goal is to increase the depth and breadth of reporting each year. Books will be updated annually to demonstrate progress across the tripartite agenda. We hope you find these data valuable, and we invite your feedback.

Please send comments and suggestions to us at kingshealthpartners@kcl.ac.uk For more information please visit our website at www.kingshealthpartners.org.

Yours faithfully,

Professor John Moxham, Director of Clinical Strategy, King's Health Partners
June 2014

Contents

Integrating Mental and Physical Healthcare with King's Health Partners (KHP)

Mental and physical integrated healthcare

King's Health Partners' aims to create a centre where world-class research, education and clinical practice (the 'tripartite mission') are brought together for the benefit of patients.

We want to make sure the lessons from research are used more swiftly, effectively and sympathetically to improve healthcare services for people with physical and/or mental health care problems.

In transforming healthcare for the whole person, we will achieve this through our commitment to integrated mental and physical healthcare research, education and clinical delivery, across our breadth of services and from conception to the last days of life.

We aim to:

- transform outcomes for patients with both mental and physical health conditions, to ensure that care in all healthcare settings address the whole person, and is patient centred;
- expand our international programme of research and provide comprehensive innovative staff education programmes;
- develop and evaluate novel and integrated mental and physical healthcare pathways in

collaboration with commissioners, patients and primary care colleagues.

More specifically, we will:

- address underlying physical health risk factors which contribute to the excess mortality experienced by patients with enduring mental health problems;
- reduce the adverse impact of mental health disorders on outcomes of long-term conditions and medically unexplained symptoms;
- integrate service provision for the whole person throughout all of our specialties.

Academic integrated care system

We are committed to working with our partners across local boroughs to integrate services at a local level to improve patient care. To this end we will use 2014/2015 to test the provider offer and new models of care to enable a more integrated academic health system.

We are a founder member of Southwark and Lambeth Integrated Care (SLIC), a movement for change aiming to genuinely shift how care services are delivered so they are coordinated around the needs of people, treating mental health, physical health and social care needs holistically.

This programme is vital to address the crisis of value within our healthcare economy: quality must improve significantly so people receive effective care and experience it positively.

A lot has already been achieved. Work to date has built an ever deepening shared understanding of the issues, a commitment to action, and an understanding of the options to reduce avoidable emergency admissions, speed up delays in discharge, improve mental and physical health liaison and reduce admission to residential care.

KHP's urban Public Health collaborative

Public health has been identified as a priority and is one of our grand challenges. We have developed a strategy approved by our Executive – 'Over the next five years we aim to be recognised internationally for our academic and service innovation in urban Public Health in addressing local and international issues, with a focus on inequalities in health and healthcare delivery, particularly with regard to ethnicity and deprivation.

Through our Clinical Academic Groups (CAGs) and the south east London sector will be an innovative test bed to develop and test solutions in prevention and management of long term conditions of Public Health importance, thereby achieving academic, training and service delivery to improve public health excellence.

In order to reduce morbidity, improve mortality and reduce health inequalities in south east London all CAGs have responded to a call for increased action in the following areas, with emerging progress. We have implemented both an alcohol and tobacco strategy which has so far:

KHP alcohol strategy

- Developed appropriate resources for clinical staff and patients
- Developed and implemented training for all staff on excess alcohol early identification and intervention
- Established ourselves as a centre of excellence for integrated research, training and practice in the management and prevention of alcohol misuse
- Attracted funding for future alcohol clinical, training and research initiatives
- Monitored the impact of the strategy on indicators of alcohol related harm.

KHP tobacco strategy

- Is now smoke-free in 1 CAG since 2013
- Developed an informatics structure for routinely and systematically recording smoking status
- Support referrals and treatment uptake for smoking cessation across the partnership
- Co-produced clinical care pathway for nicotine dependence treatment
- Co-produced nicotine dependence record card for service users
- Developed and implemented training packages for smoking cessation interventions for all our healthcare professionals
- Monitored the impact of our smoking cessation strategy in relation to knowledge and uptake of skills by staff, uptake of smoking intervention, outcomes of intervention, user satisfaction, prevalence of smoking, cost effectiveness of interventions.


St Thomas'

Introduction to Medicine CAG

The Medicine CAG has four specialities:

- Emergency Medicine
- Acute/General Medicine
- Geriatric Medicine
- Clinical Toxicology

The clinical focus of the Medicine CAG is to provide a response to patients who need emergency or urgent/timely treatment. In many cases this requires admission to a hospital bed however, there are also out of hospital and ambulatory responses provided by the CAG that support both emergency care and the acute management of long term conditions, The nature of this work requires very close integrated working with other clinical services both within the hospital and the community. Up until October 2013 the Medicine CAG had responsibility for two Emergency Departments and 21 wards. With the acquisition of the Princess Royal University Hospital, King's College Hospital NHS Foundation trust and the Medicine CAG has grown by 50%, covering an additional Emergency Department, a further 11 wards and associated medical nursing and administrative staff.

This publication is primarily focussed on the period prior to the acquisition and the services provided at Guy's Hospital, St Thomas Hospital and King's College Hospital plus associated community settings.

Staff

- Our CAG is large with over 1000 nurses as well as clinical support staff, managers and administration/clerical staff.
- We have over 55 consultant medical staff many of whom have roles in hospital urgent and acute care but have parallel specialty roles in other CAGs. Doctors in training are an important part of our workforce and this includes doctors training in our main specialities as well as those who are in early generic training posts (foundation school,

core medical trainees) and other staff whose main speciality lies within another CAG.

- There are 105 KCL based staff including 33 academics and 15 PhD students.
- Allied Health Professionals (therapists, pharmacists, dieticians) and community based staff are key to delivering our services but linked to other CAGs.

Collaborative working

Our hospital based clinical services interface with other services within the hospitals and the community including primary care, community care, social care and the third sector. The NHS development agenda for acute (emergency) care focuses on reduction in acute hospital care, shortened stays in hospital through the development of integrated care, ambulatory emergency care or a community acute response.

We have developed close working relationships with other CAGs: Mental Health of Older Adults and Dementia, Addictions, Palliative Care, Psychosis CAG and Psychological Medicine CAG. Our executive has representation from Therapies, Pharmaceutical Sciences and the Guy's and St Thomas' Community Directorate.

Respiratory Medicine is a core medical specialty and closely integrated with Emergency Medicine and General/Acute Medicine. There is a significant programme of work associated with Respiratory Medicine being managed jointly by the Medicine CAG and the Respiratory, Critical Care, Allergy, Perioperative Medicine (Anaesthetics and Theatres), Pain and Therapies CAG. Some of the service developments undertaken by the Medicine CAG require a whole system approach rather than an individual hospital approach, as there are multiple interfaces. **The structure of King's Health Partners has made it much easier to analyse and address these issues and make changes at a population level compared to what could be achieved through a single hospital or borough.**

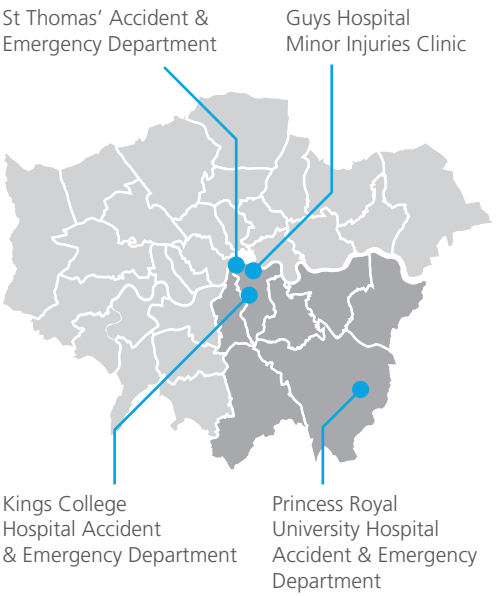
The CAG is closely involved in the integration of local community services with our acute hospitals. There are close operational, research and education links between all CAG departments, community services and social care. These links need to be consolidated through the emerging management plans within King's Health Partners for community services, to ensure that opportunities for efficiency, innovation and quality improvement are realised. There are particular opportunities in relation to out of hospital care for patients with complex needs, which will need to be linked to new ways of working via the education and training of community and hospital staff.

The CAG will be central to any changes in emergency care which will emerge in south London and be informed by healthcare policy proposals such as the Future Hospital Commission, the Emergency Care Standards for London which

is linked to a wider move towards a "7 day hospital" where senior clinical staff are available to assess and treat patients in a similar way both at weekends and weekdays.

A close and clear relationship with local primary care will be fundamental to these changes and will be supported by the local integrated care programme.

Figure 1 | Map showing location of Accident & Emergency Departments



Population figures

Figure 2 | Total population across our adjacent 8 boroughs (2012)

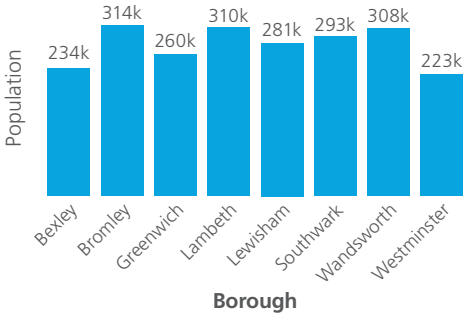
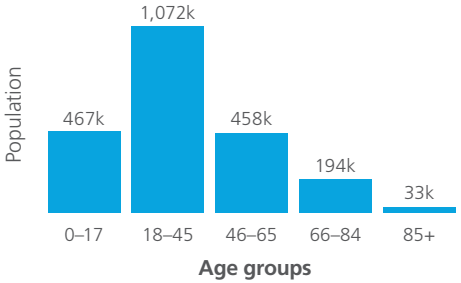


Figure 3 | Population by age group for the 8 boroughs (2012)



Public health data for South East London

The population of London is set to grow by 14 % over the next ten years (Office for National Statistics); equivalent to over one million people which is higher than any other region in the UK. The overall population growth is projected to be faster in the inner London boroughs (Lambeth, Lewisham, Southwark) than outer London. The number of adults 18–45 years is projected to grow more in London than the rest of the UK. There will, however also be a very significant increase in the number of older persons > 85 years where issues of long term conditions and frailty management are common.

Figure 4 | Key health indicators Public Health England (2012)

	Hospital stays for alcohol related harm over 18	Smoking related deaths	Obese adults	Deprivation	Drug misuse	People diagnosed with diabetes	Statutory homelessness which are those entitled to accommodation
Bexley							
Bromley							
Greenwich							
Lambeth							
Lewisham							
Southwark							
Wandsworth							
Westminster							

Better than the England average Worse than the England average Not significant

Figure 4.gives a picture of health in the 8 boroughs served by Kings Health Partners. It is designed to help local government and health services understand their community's needs, so that they can work to improve people's health and reduce health inequalities.

The figure shows overall that homelessness, smoking, drug misuse and deprivation are health indicators that are concentrated in the local area to our hospitals and are particularly important for the planning and development of new services.

Patient activity

Figure 5 | Hospital activity for King's College Hospital and Guy's and St Thomas' Hospital CAG medical specialities

Statistics	Total for KHP 2012/13
Number of patient attendances: Accident & Emergency	294,930
Number of patients admitted: General Medicine	16,663
Number of patients admitted: Geriatric Medicine	3,596
Outpatient attendances	20,000

Figure 6 | General Medicine admissions for the last 3 years

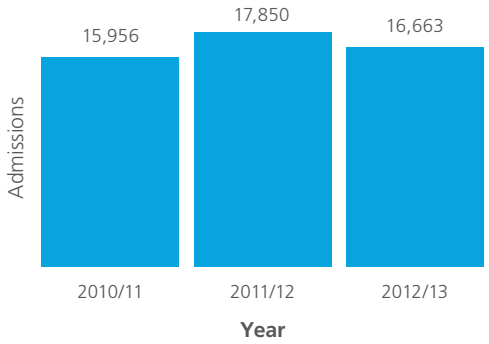


Figure 7 | Geriatric Medicine admissions for the last 3 years

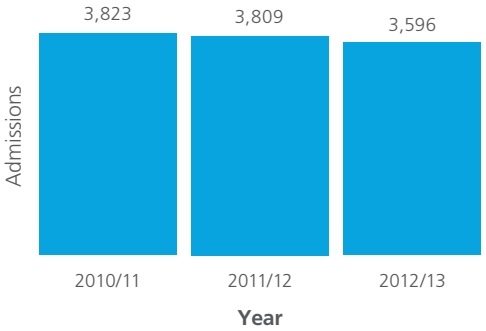
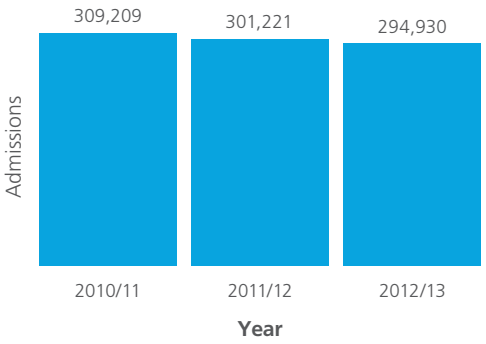


Figure 8 | Accident and Emergency attendances



Both Accident and Emergency departments serve an inner London population. The number of patients seen at each hospital ranks them as very busy departments compared to other departments in London or England. The A&E Departments at King's and St Thomas' currently see over 10% of all A&E attendances within London.

Directory and team structure

Medical Clinical Academic Group

Mrs Sue Bowler
CAG Lead

Dr Adrian Hopper
CAG Lead

Charles Wolfe
Research Lead

Vivek Srivastava
Education Lead

Ed Glucksman
Richard Leach
Malcolm Tunnicliff
Clinical Directors

Cathy Ingram
Community Lead

Guys and St Thomas' Hospital	Kings College Hospital*
Emergency Medicine (A&E) Elderly Care / Clinical Gerontology General and Acute Medicine Clinical Toxicology	Emergency Medicine (A&E) Elderly Care / Clinical Gerontology General and Acute Medicine

* King's College Hospital and Princess Royal University Hospital

Range of services

Elderly care/clinical gerontology

St Thomas' Hospital and Kings College Hospital run specialist geriatric medicine services with seven wards dedicated to the care of frail older patients. In addition there are Older Person's Assessment and Treatment Units on both sites plus outreach specialist community based services in several satellite locations. Both hospitals are developing plans in this area which will be increasingly aligned to the Southwark and Lambeth Integrated Care (SLIC) programme and the interface with acute medicine.

We also provide a range of specialist medical services across the hospital sites and in the community which include:

- inpatient acute care and rehabilitation
- outpatient clinics for older persons including comprehensive geriatric assessment
- an older persons assessment and liaison team who assess all emergency medical admissions aged 70+
- an older persons assessment unit providing outpatient, rapid access and ambulatory assessment and treatment
- proactive care for older people undergoing surgery – specialist older persons surgical liaison service
- inpatient and outpatient continence service for older people
- early diagnosis and treatment of older persons with dementia, falls, osteoporosis, movement disorders and heart failure
- medical care and consultant support for older residents of care homes in Lambeth and Southwark

General/acute medicine

Patients are assessed and treated in this service mostly following attendance at an A&E department, although patients are also referred by their GPs and from other teams within the hospital and community. The service sees many ill patients including those who are approaching end of life, therefore patient safety and quality is paramount. There is an increasing emphasis on early senior clinical decision making, admission avoidance, seven day working and ambulatory emergency care.

The London Commissioning Standards for Acute Medicine are an important framework for the development of general and acute medicine and will inform resourcing and planning in the next 1–2 years.

Clinical toxicology

Our clinical toxicology service is based at St Thomas' Hospital and is led by three consultant clinical toxicologists, junior doctors, two dedicated clinical toxicology database scientists, and a number of research assistants/fellows. We have close links to the information, liaison psychiatry and laboratory services.

We work closely with the Liaison Psychiatry Team at South London and Maudsley NHS Trust and have recently been awarded a trustees grant to further develop the self-harm care pathway across all 3 hospitals. This grant will also support audit and research work looking at more efficient data collection on patients who self-harm.

We are actively involved in research at the Biomedical Research Centre, the Drug Control Centre at King's College London, the Analytical Toxicology Unit at St. George's University of London and the HfL Sports Science Laboratory to improve the management of poisoned patients and to prevent poisoning The HfL Sports Science Laboratory is the organisation chosen to undertake drug testing for sports regulators since 1963. We also work with a number of clinical, analytical and academic collaborators not only in the UK, but also in Europe, Australasia, North America and the Far East.

Nursing

Nursing in the Medicine CAG has developed a 'twinning' concept to take the AHSC and CAG mission to all staff on the wards. Each ward is twinned and reciprocal visits occur to have an initial overview. We then consider and compare specific areas of quality and learning.

A Nursing Board has been established and key actions agreed, including King's Health Partners falls work, education around Sage & Thyme training which was developed to teach the core skills of dealing with people in distress and

comparing data on degree based professions. The next step for the Nursing Board is to use internal data records and analysis for sharing and understanding patient experience. We also need to make sure we have the right staff levels and skill mix to ensure the quality agenda is not only high on the Medicine priorities but to make sure significant steps are being taken to improve consistency and to make contact with our SLaM partners to start twinning work with the Maudsley to progress the dementia agenda.

Outpatients

We run a large number of outpatient services which include specialty consultation with a consultant, multidisciplinary assessment clinics e.g for patient with falls, memory loss or having planned surgery, clinics run by nurse specialists or therapists and clinics in community settings. We provide telephone clinics and offer a "hot clinic" for frail older persons where GPs can get a rapid specialist geriatric multidisciplinary team assessment for frail older persons.

Ambulatory emergency care / out of hospital care

Some medical problems may need a hospital assessment followed by a short stay admission in a hospital bed as long as effective follow up can be arranged. We have a range of rapid access specialist clinics within our specialties e.g falls, incontinence, catheter care, delirium and dementia and some, where we partner with other specialties, to provide an effective specialist review e.g first fit, COPD, diabetes. We are developing a range of new services to support patients out of hospital which include gstt@home, rapid response team and reablement team. We are closely involved in the development of these innovative services and provide specialist clinical input.

There are two inpatient units run by Guys and St Thomas Hospital which are out of the main hospital. The Amputee Rehabilitation Unit and the Pulross Intermediate Care Unit for frail older persons. The Medicine CAG provides specialist input into these units.

Accident and Emergency departments

We run three distinct A&E departments at St Thomas' Hospital, King's College Hospital and Princess Royal University Hospital. We treat patients who have suffered a recent injury or accident or who have developed a sudden illness. All emergency departments use a priority system where the most seriously ill patients are seen first. The department at King's College Hospital is a Major Trauma Centre and the departments at St Thomas' and the Princess Royal are trauma units. The departments at King's and the Princess Royal both receive acute strokes as part of the Hyper Acute Stroke Network.

Urgent Care Services are run at St Thomas and King's and offer an alternative to accident and emergency for a range of minor injuries and urgent medical problems. It is an NHS service for patients whose condition is urgent enough they cannot wait for the next GP appointment (usually within 48 hours) but who do not need emergency treatment.

At the Princess Royal University Hospital, a third party provider runs the Urgent Care Service. All three departments run Clinical Decision Units (CDUs), short stay units designed to manage conditions which can be treated within 24 hours.

24 Hours in A&E

24 Hours in A&E is Channel 4's largest ever documentary series. Based at King's, it lays bare the reality of working in a busy, inner city Emergency Department; the life and death decisions, as well as the hard work of the dedicated team.

Each episode portrays the highs and lows of emergency medicine within a 24-hour period and shows how the staff work together to treat the 400 patients who arrive at the department each day. From road traffic accidents and violent assaults to scrapes and bruises, the King's team has to be ready for whatever comes through the door.

The fifth series of *24 Hours in A&E* has just finished broadcasting on Channel 4, with the sixth and final series going out this summer. The series has won critical and ratings success – described by The Times as 'a magnificent advert for the NHS', it regularly attracts between 2.5 and 3 million viewers. It also won best documentary series at the Royal Television Society Awards in 2012.

Dr Malcolm Tunnicliff, Consultant in Emergency Medicine and Clinical Lead for the Accident and Emergency Department at King's, said the series helped educate the viewers about the work of staff in the department:

> "*24 Hours in A&E* gives viewers a real insight into the work we do every day at King's to treat and care for patients who come to our Emergency Department. Our work is unpredictable and fast-paced so the series is a unique way of showing the public the daily challenges we face and the high quality, compassionate care we always strive to deliver."


Bessemer Wing
Variety Club

Aims and ambitions

Aims

Our aim is to be recognised as one of the best services both nationally and internationally for urgent and emergency care combining high quality of service delivery as well as research and teaching, training and education that supports this ambition.

South east London has many challenges which include marked health inequalities and demographic changes including a growth in the number of older persons. This combined with medical innovation and financial constraints means the CAG will need to support changes which will include more out-of-hospital healthcare and closer integration with primary, community and social care.

We aim to have a strong research base that covers these aims from, research into Primary Care and informatics, Public Health, patient safety to clinical and policy related research into acute and long term care of patients. We also want to devise an education agenda to enable our staff to develop and improve and support the healthcare transformation as outlined above.

Continue our focus on patient safety and quality

Our patients, many of whom suffer from serious illness, suffer from dementia and in some cases are approaching the end of their life. These are a high risk group where patient safety and quality are particularly important. The current performance of the CAG using measures such as Standardised Mortality Index (SHMI), which is a comparative measure of risk of death following hospital treatment, suggests that our services are of high quality although there remains an ongoing need to improve and develop. This requires an approach to quality improvement whereby we make sure known interventions which provide high quality or safe care are implemented consistently. We also seek to develop innovative ways to introduce new approaches to the management of common problems. Examples of innovations include the AMBER care bundle, the Frail safe checklist and the work with delirium and dementia teams. As both of our major hospitals have similar services we have the opportunity to share and learn from best practice between the two. We are closely involved with the KHP collaborations that

support quality development (Health Improvement Network for south London, the south London CLAHRC (Collaboration for Leadership in Applied Health Research), King's Improvement Science and Safety Connections.

Value based healthcare

A challenge for healthcare is to deliver higher quality patient centred care at lower costs. This requires measurement of patient centred outcomes across the whole of a patient journey through hospital including outpatient, hospital rehabilitation and the costs of that treatment. King's Health Partners is collaborating with other Academic Health Sciences Centres in London to develop a value based approach to healthcare. The Medicine CAG is closely involved with a Frailty group that is developing a London wide approach to value based measurement on the treatment of older persons.

Collaborating with the Mental Health CAGs

Patients' mental and physical health needs hugely overlap and therefore collaboration with mental health services both around patient decision making and service development is key. For example, roughly a third of our patients over 65 experience delirium, the confusion that follows acute illness and in many cases this is linked to dementia. Patients with the physical complications of alcohol addiction – liver failure, seizures etcetera may have mental health problems. We are developing close links between acute medicine and the inpatient services within South London and Maudsley NHS Foundation Trust to optimise a patient centred approach to treatment.

Care is better delivered proactively rather than reactively, which is why we have worked closely with the Addictions CAG on the KHP Alcohol Strategy to help reduce harmful drinking out of hospital, the Psychological Medicine CAG to develop the KHP Homeless Persons Service and the Mental Health of Older Adults and Dementia (MHOA) CAG on the KHP Dementia and Delirium Strategy.

Dementia and delirium

We work in close collaboration with the Mental Health of Older Adults and Dementia (MHOA) CAG on dementia and delirium. Dementia is one of the major clinical themes for the Integrated Care Programme (Southwark and Lambeth Integrated Care – SLIC)

Our key aims are to:

- Develop a single-point-of-access memory service with the main hub at Denmark Hill;
- Have combined quality improvement work on the management of delirium at King's College and Guy's and St Thomas' Hospitals through the Dementia and Delirium (DaD) teams;

- Develop a joint dementia strategy with the MHOA CAG;
- Develop a comprehensive care pathway for patients with dementia and link implementation of this with the Southwark and Lambeth Integrated Care Programme;
- Develop a joint education and training programme between CAGs over the care of people with dementia

Figure 9a | Showing the delirium checklist for Guy's and St Thomas

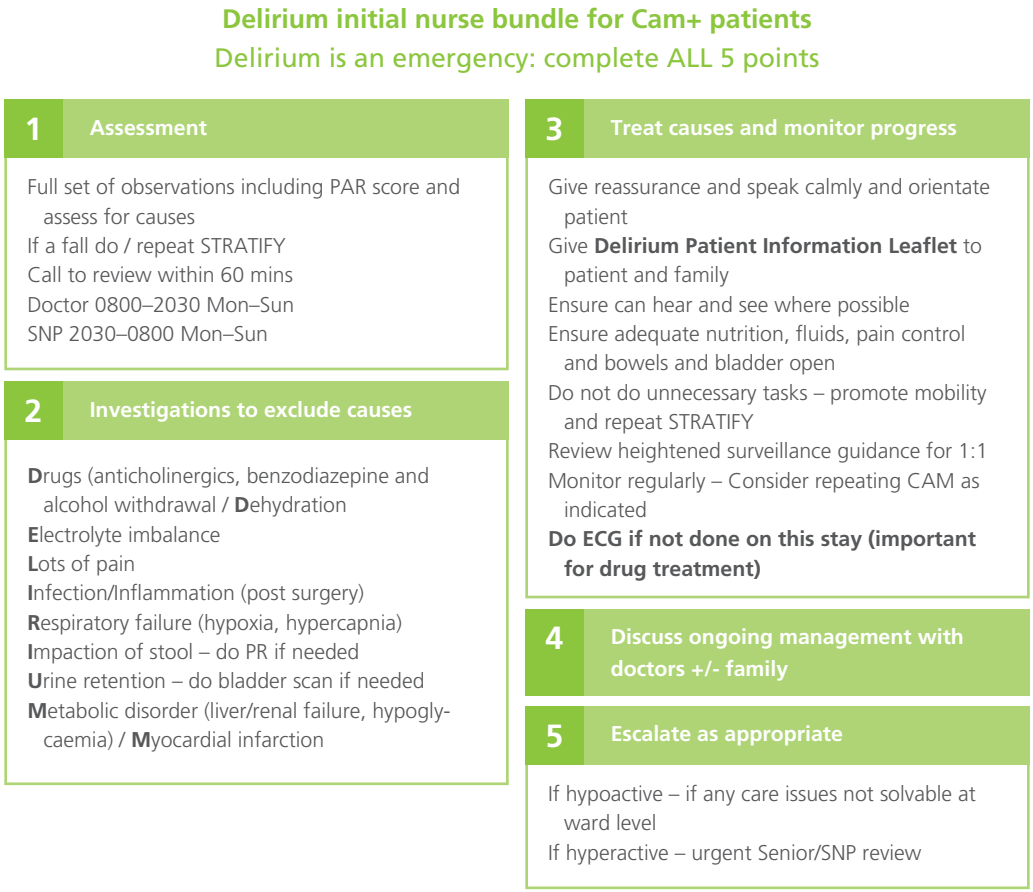


Figure 9b | Showing the delirium checklist for Guy's and St Thomas

Delirium initial medical bundle for Cam+ patients

Delirium is an emergency: complete ALL 5 points

1 Assessment

Full set of observations including PAR score incl. if a fall do / repeat STRATIFY, clinical examination including:
Signs of infection, level of consciousness, AMT/MMSE
Review drug chart and previous interventions

2 Investigations to exclude causes

Drugs (anticholinergics, benzodiazepine and alcohol withdrawal / **D**ehydration
Electrolyte imbalance
Lots of pain
Infection/Inflammation (post surgery)
Respiratory failure (hypoxia, hypercapnia)
Impaction of stool – do PR if needed
Urine retention – do bladder scan if needed
Metabolic disorder (liver/renal failure, hypoglycaemia) / **M**yocardial infarction

3 Treat cause and monitor progress

Give reassurance and speak calmly and orientate patient
Write up on PRN side – Haloperidol 0.5–1mg or Lorazepam 0.5–1mg for use after other interventions have failed as indicated (check other drugs)
Monitor – ensure Handover to doctors and request review as needed
Alcohol and toxic / OD patients are managed differently

4 Discuss ongoing management with nurse in charge +/- family

5 Escalate

If hypoactive – if any care issues not solvable at ward level
If hyperactive – urgent Senior/SNP review

Acute Medicine Pathway for South London and Maudsley NHS Trusts inpatients with acute illness

Previously when inpatients at the South London and Maudsley developed acute medical illness they were transferred by ambulance to King's College Hospital. This was an inefficient system which led to congestion in the accident and emergency department and delayed access to acute medical care.

In 2013 we developed and piloted an Acute Medicine Pathway in collaboration with the Psychosis CAG. It provided junior doctors with direct telephone access to the medical registrar, which allowed early management and decision on best place of care for patients. In comparing the before and after data from the pilot, we found a drop in admissions to King's College Hospital and a shorter length of stay. We are not aware of similar work across other mental health and acute trusts, and our results were commended at the annual conference of the Society for Acute Medicine. This pathway is still developing, with plans to roll it out to other South London and Maudsley sites.

Medicine CAG at the interface

OPAL (Older Persons Assessment and Liaison Team) and KOPAL (King's OPAL), POPS (Proactive Care of Older People Undergoing Surgery) and KOPS (King's POPs) liaison teams for frailty, sharing best practice across King's Health Partners.

These are services which link a comprehensive assessment of frail older persons linked to effective treatment. The Medicine CAG developed these models of specialist liaison for medical patients (OPAL and KOPAL) and surgical patients (POPS and KOPS). Both services have been influential and widely copied across the NHS as effective models of care for frailty care in hospital.

King's Health Partners' two elderly care departments worked together and shared experiences to extend Guy's and St Thomas' innovative service model OPAL (Older Persons Assessment and Liaison Team) and 'POPS' (Proactive Care of Older People Undergoing Surgery) on the King's College Hospital site. This is an excellent example of inter-hospital and inter-CAG working involving Medicine, Orthopaedics and Surgery, and Therapies.

The medical teams screen older persons following emergency admission to identify and intervene in issues that are important for immediate treatment such as delirium, falls and risk, as well as chronic issues which need to be managed following hospitalisation.

In surgery, patients aged 65 and over undergoing elective surgery that are identified as frail, receive a comprehensive geriatric assessment and multidisciplinary review before surgery to assess and plan for managing complex co-morbidities and functional problems. The teams (POPS/KOPS) then input into the wards to make sure that post-operative care follows the plan. Education of staff and clear protocols of care are an important part of the role of these liaison teams.

The POPS team at St Thomas' demonstrated reductions in length of stay, hospital complications and mortality, and KOPS at King's aims to replicate this. A business case

is being developed to expand the service to other surgical specialities at King's College Hospital and Guy's and St Thomas' Hospital.

King's Health Partners needs assessment and pathway service for homeless patients

The CAG secured Guy's and St Thomas' Charity funding to scope the impact of homelessness across King's College Hospital, Guy's and St Thomas' and South London and Maudsley sites. This showed a large unmet need for medical and social care for homeless patients within our local inpatient services, one of our most vulnerable groups of patients. Work with a charity that has established experience in this field (Pathway) has led to the introduction of a single service to provide care coordination for homeless patients across King's Health Partners with one multi-agency, multi-professional team providing patient-centred, integrated care across physical and mental health providers, drug and alcohol services, hospital and community care. This started in January 2014. Initial data has shown a very encouraging early impact.

There is strong evidence that an individualised discharge plan for inpatients is more effective than routine discharge care, both improving quality and also reducing the need to stay in hospital beds and subsequent readmissions. Our Pathway approach introduces GP and nurse led care coordination for homeless patients in hospital, combining integrated care with improved discharge planning.

This initiative has only been possible because of the commitment of King's Health Partners to public health and because King's Health Partners provides a framework to allow co-operation so that a single team can be established across all our partners.

> "You've done more for me in a 48 hour period, than other organisations have done in 23 years"

Frailty

Effective care of frail older persons is a central challenge for emergency care in the NHS. The Medicine CAG is closely involved in innovative approaches to frailty care from hospital admission to out of hospital care particularly through the local integrated care programme. This ranges from prevention of illness with the falls programme, contributing to quality of life with the specialist part of the continence service to innovative work with care homes where the Medicine CAG supports a specialist team that provides input into local care homes.

The Medicine CAG jointly with four other NHS hospitals developed a checklist tool to support effective and safe acute treatment of frail older persons (Frail safe). Working with the British Geriatrics Society we have received a grant from the Health Foundation to spread this throughout the NHS.

Falls service (SLIPS – slips-online.co.uk)

Falls (one of the commonest reasons to being admitted to hospital) can be prevented by targeted intervention which includes exercises to improve balance, improving safety in the home and medical diagnosis and management. Starting in 2004 we have run a single falls service between both hospitals and the local community in Lambeth and Southwark where we have a single pathway, single approach to assessment and a shared exercise programme. This includes a consistent approach to exercise: 14 community exercise groups, exercise programmes in our specialist day hospitals (King's, Guy's and the Whittington centre) and in our community therapy and rehabilitation teams.

We aim to extend this approach with the Southwark and Lambeth Integrated Care Programme to provide more rapid and easier access to exercise interventions to our local residents so that falls, anxiety about falls and loss of independence because of falls are reduced.

End of life care

High quality end of life care needs to combine effective treatment with effective patient centred decision making. More than half of the adult patients who die in hospital are treated on wards run by the Medicine CAG although some patients choose to spend their last days at home.

The Medicine CAG has been central to two important innovations to improve the quality of end of life care

- AMBER care bundle (jointly with Palliative Care). This is a simple decision making system (ambercarebundle.org) to support better teamwork and patient centred decision making in patients who may be in the last 1–2 months of life. It was developed at KHP and is one of the tools recommended by

the National End of Life Care Programme in NHS England to be used for supporting end of life care in an acute setting. It is in use in approximately 30 hospitals in England and an implementation programme in New South Wales, Australia has just started.

- PEACE – (Proactive Elderly Advance Care) is an advisory document developed by the Medicine CAG for care home residents. A PEACE document is completed on discharge to support ongoing clinical management in the home through individually tailored advice on potential health developments, their management and appropriate escalation. For residents who are frail, near the end of life or are unlikely to respond to hospital treatment, PEACE advice has been shown to reduce inappropriate hospital readmission and promote care in the appropriate environment.

Care home support team

Care homes are a very important service for the support of our patients who have a high level of need. Support by specialist teams from the Medicine CAG has been provided through the Care Home Support Team for many years. They work jointly with the care homes to improve quality of care and have helped implement the use of the PEACE document.

Alcohol

The CAG has been at the forefront of delivering new and innovative models of care in tackling the rising burden that alcohol dependency places on acute medical services. Services at both acute Trusts have worked with colleagues in the Addictions CAG at South London and Maudsley NHS Trust to implement pathways for rapid entry into substance misuse services.

At King's College Hospital, over 80% of acute medical admissions are screened for alcohol dependency, and at St Thomas' the A&E department has completed an Alcohol Recovery Service pilot study. We will take forward a unified King's Health Partners approach to the management of alcohol dependent patients which focuses on designing the optimum pathways for acute intoxication, designing best practice tariffs for commissioners and establishing a foundation programme module for patient screening, intervention and onward referral.

Southwark and Lambeth Integrated Care

Southwark and Lambeth Integrated Care (SLIC) is a partnership between members of King's Health Partners, local GPs, Lambeth and Southwark Local Councils and Commissioners.

The project is funded through contributions from all partners, but mainly through the Guys and St Thomas charity.

SLIC's stated mission is:

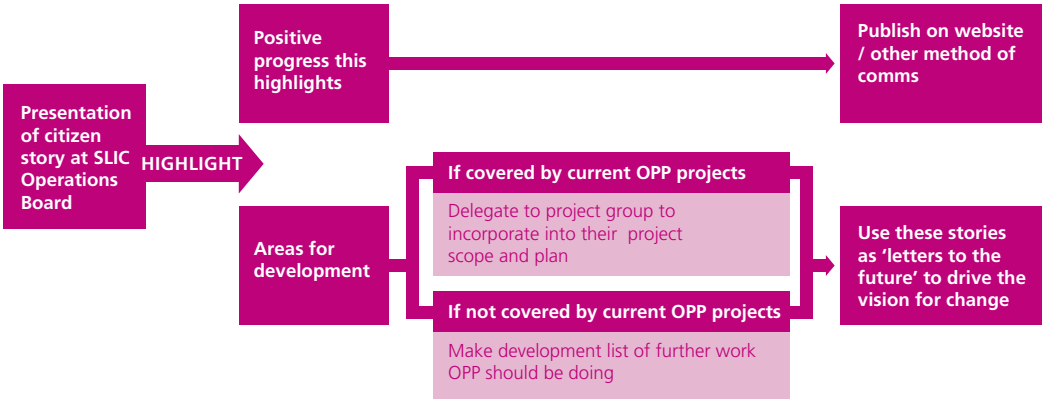
- Build a community with assets, skills and capabilities to support self-care
- Ensure people reliably receive the right care, in the right place at the right time
- Ensure we are treating the whole person with care centred around the empowered individual
- Ensure professionals are best able to deliver this new approach

The programme of work at SLIC is split into three components, the Older People's Programme, the Long Term Conditions Programme and System Enablers. The majority of work to date has been through the Older People's Programme where specifically the aims have been to reduce hospital admissions and length of stay to save 43 beds across King's Health Partners by March 2015.

The projects currently underway include rapid access clinics to geriatrics, telephone advice and liaison services for direct advice from Geriatricians to GPs, development of the virtual ward (@Home) a simplified discharge process and four clinical developments Falls, Infections, Nutrition and Dementia. There is a co-ordination and sharing of all our activities through seven Community Multidisciplinary Teams which cover all of Lambeth and Southwark and are a forum for GPs, social services, hospital specialists, community team nurses and therapists and mental health teams.

Researchers in the CAG are developing a 'Learning Healthcare System' for the SLIC programme, integrating data from health and social care information systems in primary and secondary care, along with tools for more personalised decision making during consultations with guideline support.

How we can develop the use of citizen stories



How stories could be presented

Meet Norman: Norman is 82 years old and lives alone in a warden controlled flat. He attends A&E regularly but never requires admission. He was referred to and discussed at a CMDT. The Integrated Care Manager (ICM) looked into the pattern of Norman's A&E attendance; they were always on Sunday afternoons. The ICM spoke with Norman and found out that Norman has meals on wheels Mon–Fri lunchtimes. He has no other cooking facilities in his home, so in the evenings and on a Saturday, Norman goes to his local cafe.

The cafe is not open on Sundays. Norman told the ICM that he goes to A&E on a Sunday as he likes the lunch they give him and the company. The ICM arranged for Norman to have meals on wheels changed so that he received lunch and dinner on a Sunday and the ICM will now talk to him about his loneliness and together they will plan how he can chat with more people.

"The ability to work with Norman and colleagues and then proactively look at the situation meant that we picked up some relatively minor issues that were having a bigger effect on Norman and our local A&E department, it was a very satisfying piece of work all round."

Sonia – Norman's ICM

What a letter to the future could look like

Dear 2017 Diary,

Today has been an interesting day, something I am grateful to be able to say at my age. My health still gets me down from time to time but I know I am not alone. I had a call from the GP surgery because they were worried that I hadn't asked for a repeat prescription for my heart pills, but I assured them I was going to call in for it when I go out to my excercise class. Listen to me, meeting new people and excercising!

Anita called in from the local school for her weekly cooking lesson. It's so rewarding to help kids as well as enjoying the company, even if I have no idea who half the TV personalities she talks about are. Anita now eats vegetables not just those rubbish takeaways.

Today is six months since I had a cigarette. I joined a great group to quit. Unfortunately they found something wrong with my lung at my last health check. That's the reason I always ended up with a bad cough and fever when I got a cold. Now I know. Since I stopped smoking, had this lung rehab, and know what to do when I get a cold, I have not been in hospital with bad chest infections anymore. Anyway, that's enough for tonight. I still miss the rest of the girls I used to hang out with, but life goes on and I want to make the most of it.

Marlene Brown, 85

Trauma network

The A&E at King's College Hospital is the front door to the KHP Major Trauma Centre (MTC) seeing over 1,300 trauma related patients each year. King's also hosts the south east London, Kent and Medway Trauma Network (SELKaM): a partnership between the KCH MTC and seven Trauma Units (TU) spread across the south east of London and England. The MTC at KCH and the TU at St Thomas' are is (delete is) also accredited to NHS London England service standards. These departments alongside other contributing CAGs at KCH are performance managed to the standards agreed by the London Trauma Office at NHS England on a quarterly basis. The Trauma Unit at St Thomas' Hospital is now being assessed against agreed Trauma Unit standards through the South East London Trauma network in conjunction with the London Trauma office. Both departments submit clinical data to the National Trauma Audit and Research Network (TARN) database. This provides valuable benchmarking data across the trauma pathway.

In reach Domestic Abuse Service

The REACH Domestic Abuse Service is based at St. Thomas A&E department and accepts referrals from any patient or staff member who discloses any form of family abuse. Family abuse includes any incident or pattern of controlling, coercive or threatening behaviour, including both mental and physical abuse.

The REACH service offers specialist, confidential support and advice to male and females who are at risk of being hurt or have been hurt by someone known to them.

Working very closely with the A&E team we provide support at the time of crisis and work with clinicians to ensure all needs are met holistically. We continue our support if the patient is admitted, or we offer follow-up appointments and ongoing work with the patient that can last up to two years depending on their needs or their children's needs.

Readmissions and length of stay

Scorecard – value based healthcare

The Medicine CAG has been one of the first CAGs to develop a scorecard as we have the advantage of having two hospital services that have similar inpatient services and community interfaces. We are continuing to analyse this data from the scorecard from both hospital sites to learn from each other.

Readmissions

A readmission is defined as unplanned hospitalisation within 30 days following discharge. Readmissions can be unrelated to the original problem for which the patient was admitted but can be caused by deterioration in a patient's health after discharge which may be due to inadequate management of their condition or lack of access to appropriate services in the community.

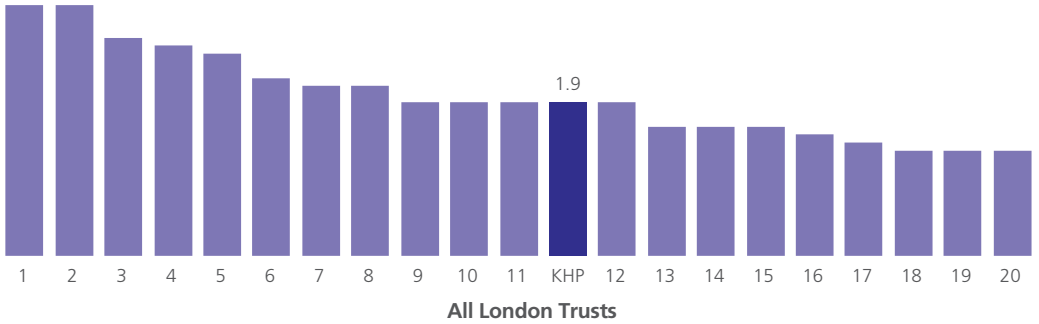
Interventions to reduce readmissions target both inpatient care through efforts to improve the quality and safety of care, and the transition to out of hospital care which includes efforts to ensure continuity and coordination between out of hospital providers and timely access to follow-up services.

The following charts show how we compared to other Trusts in London in 2012–13:

Figure 10 | Mean readmission rates for all London Trusts

Mean readmission rates 2012/13 within 30 days for patients discharged from Emergency Medicine General Medicine and Geriatric Medicine compared to those for other London acute hospitals.

Figure 11 | Mean length of stay (in days) for patients admitted to the Medicine CAG specialities in 2012/13 compared to other acute hospitals in London



The length of stay of patients in hospital is an overall measure (combined with quality measures) of the performance of a service. It is determined by a range of factors from rapid discharge of short stay patients to the management of complex long-stay patients.

Clinical outcomes

Clinical outcomes are measurable changes in the health or quality of life of patients that result from the care they have received. The constant review of clinical outcomes establishes standards against which we can continuously improve all aspects of clinical practice.

Mortality benchmarking: Medicine CAG specialities compared to other London general hospitals

Mortality Data : The overall chance of dying in hospital can be compared with other hospitals using benchmarking indices such as the SHMI and HSMR. The scores depend upon many factors and as only a very small proportion of our patients (about 2%) die following a hospital admission and in most cases this is expected as a result of serious underlying illness, we only use this data as a partial guide to the quality and safety of our services.

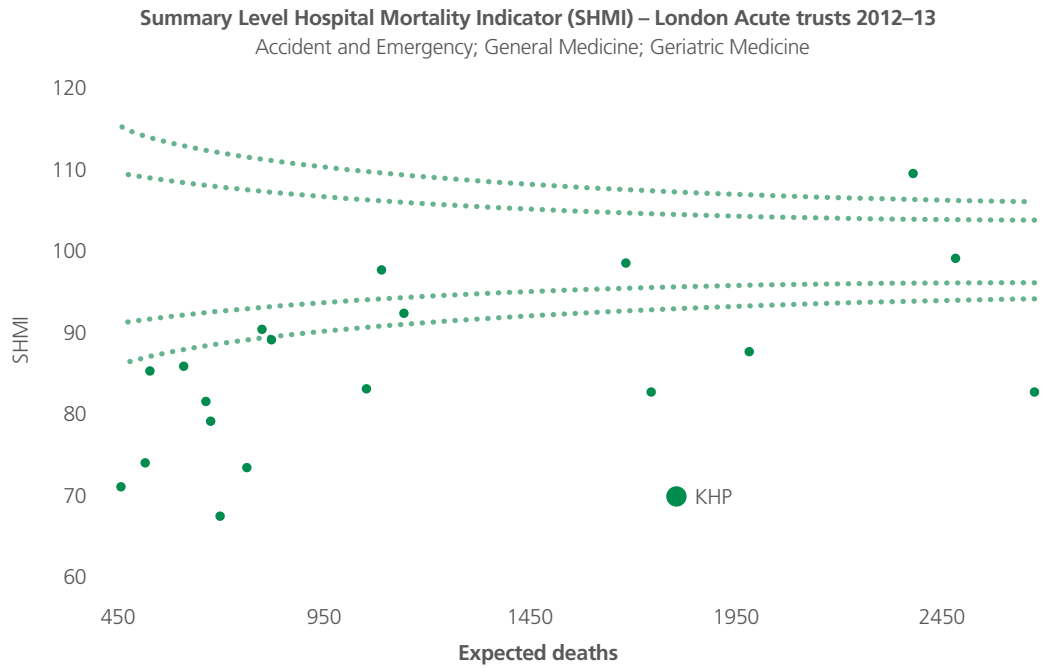
The SHMI (Standardised Hospital Mortality Index) is a measure of the chances of death during treatment in hospital and within 30 days of discharge from hospital corrected for the type of patients (case mix). The index compares hospitals in England where a SHMI of 100 is average. Major hospitals in London tend to have low SHMI when compared to non-London hospitals.

In a funnel plot the dotted lines give a threshold where the differences from average are unlikely to be due to chance.

If the points on the graph are within the funnel then you can conclude these Trusts results are not significantly different to the average benchmark. If the points on the graphs are outside of the funnel then you can conclude these Trusts results are significantly better or worse than the benchmark.

The graph shows that KHP has a lower mortality value than average which suggests we are better than average for NHS England.

Figure 12 | Summary Level Hospital Mortality Indicator (SHMI)

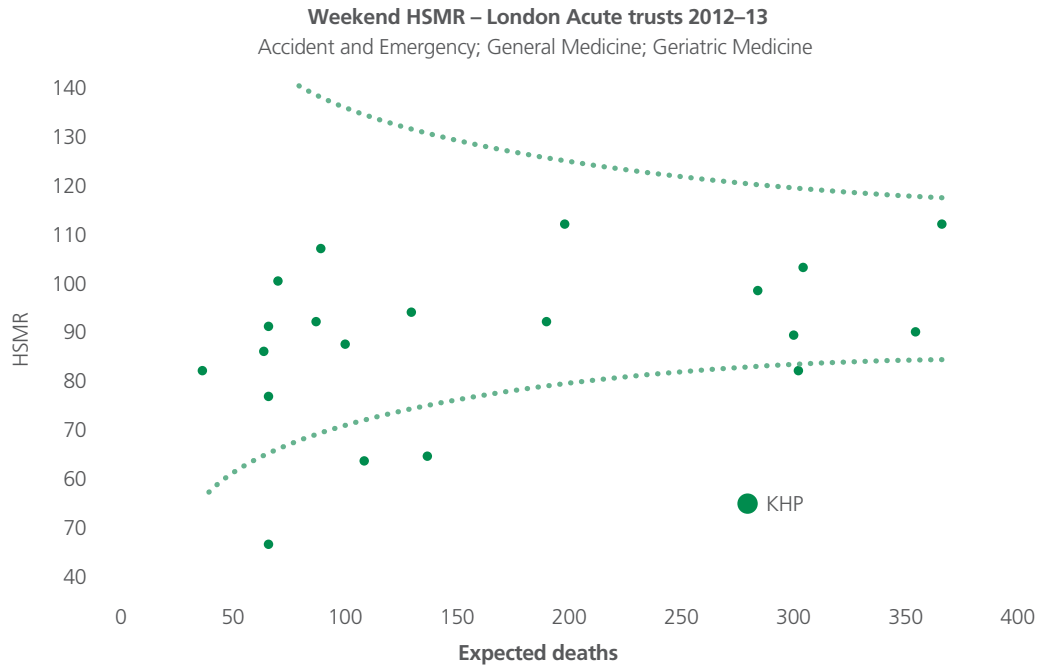


Source: HED

There is particular concern about the safety of acute care over weekends where hospitals are largely staffed by an on call service. KHP has particularly low mortality for weekend emergency admissions when compared to other acute hospitals in London.

The Hospital Standardised Mortality Ratio (HSMR) is another benchmarked measure of the chances of dying following admission to hospital where an HSMR of 100 is average. Figure 13 shows the HSMR for the Medicine CAG services for patients whose admission was at weekends compared to other acute hospitals in London.

Figure 13 | Hospital Standardised Mortality Ratio; Medicine CAG Specialities for patients admitted at a weekend compared to other London General Hospitals



Source: HED

If the points on the graph are within the funnel then you can conclude these Trusts results are not significantly different to the average benchmark. If the points on the graphs are outside of the funnel then you can conclude these Trusts results are significantly better or worse than the benchmark.

Seven day working

One of the priorities of the NHS is to make sure that hospitals are just as safe for patients who are admitted at weekends as for those admitted during weekdays. This transformation will involve many changes into the way we organise care in the Medicine CAG with a particular focus on making sure senior decision makers such as consultant medical staff are available quickly seven days a week.

Older patients returning home following emergency admission

Following an emergency admission not all patients recover sufficiently to return to their own home. In some cases patients are discharged to community rehabilitation before going home. The following chart shows at KHP the chances of returning directly home is the highest in London, although the differences with other hospitals are partly explained as some hospitals have more community rehabilitation beds where patients are discharged to instead of going directly home.

Figure 14 | Percentage of the over 65s admitted who have been discharged to their usual place of residence 2012/13

Trauma care and survival rates

The Trauma Audit and Research Network, provides information about the rates of survival for patients who have been injured and treated at different hospitals across England and Wales.

Every year across England and Wales, 10,000 people die after injury. It is the leading cause of death among children and young adults of 44 years and under. In addition, there are many millions of non-fatal injuries each year. Understanding the benefits and the risks associated with different types of treatment is important for all patients. However it is not generally appreciated that there are variations in the success of treatment in different hospitals. It follows that there are probably opportunities to improve care. It is important to review how injured patients are cared for at regular intervals since treatment and practice at the hospital may change. Therefore we show the rates of survival in 2 year intervals so hospital staff are able to closely monitor the effectiveness of their trauma care.

Outcome is best measured by the number of patients who actually survive compared with the number who are expected to survive.

Figure 15 | The measure of unexpected survivors (figure above 0%) or deaths (figure below 0%) that can be used to highlight parts of the trauma care system that requires improvement (in the case of additional deaths) or establish as best practice (additional survivors)


Dr Jacqui Butler
CONSULTANT
EMERGENCY DEPARTM

Patient safety outcomes

The quality of our clinical service is central to all our work. This includes making sure our services are safe but also that they coordinate with other teams both within the hospital and out of hospital and the care experienced by our patients is constantly reviewed and improved.

Quality can only be improved if it is assessed and measured so we refer to the NHS groups of outcomes listed below to focus our efforts on improvement.

NHS outcome framework

The NHS has an outcomes framework with 5 Domains used for measurement and action. Some of the domains are linked to longer term care that is not directly in our CAGs.

Domain 1 Preventing people from dying prematurely;

Domain 2 Enhancing quality of life for people with long-term conditions;

Domain 3 Helping people to recover from episodes of ill health or following injury;

Domain 4 Ensuring people have a positive experience of care;

Domain 5 Treating and caring for people in a safe environment; and protecting them from avoidable harm.

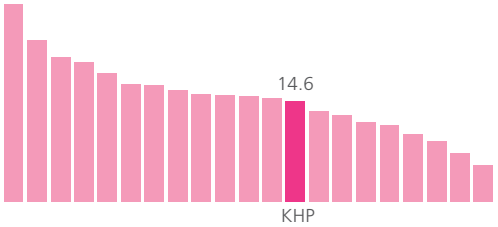
The domains we particularly focus on are: 3, recovery of patients following illness or injury particularly so that they remain fit, independent and living in their preferred place of care 4, the experience of patients treated in our services and 5 the safety of our treatment.

In 2013 there were several very important reports into the central role of patient centred care, patient experience and quality of care for hospital patients. Both hospitals have comprehensive plans to implement the recommendations of these reports and these will provide a key organising principle for the future plans of the Medicine CAG.

Trust wide data on infection control

Figures 20 to 21 show trust-wide outcomes. Patients who are at high risk of these infections are commonly treated in medicine beds so these data partly reflect practice by the Medicine CAG.

Figure 16 | Clostridium Difficile (CDiff) rates compared to other acute trusts in London (the lower the figure the better)



KHP compared to all other London Trusts

Figure 17 | Clostridium Difficile trend over the last 3 years

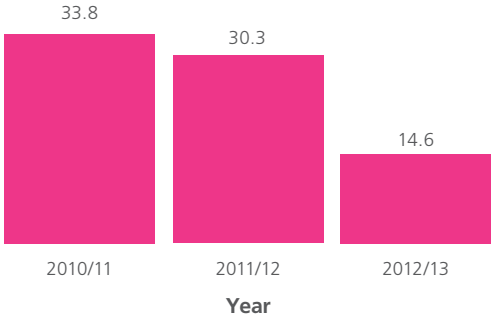
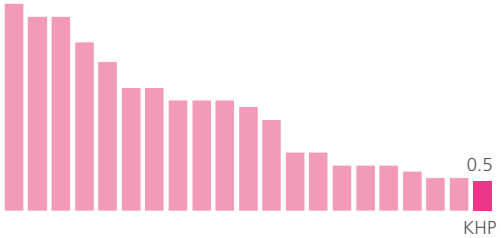
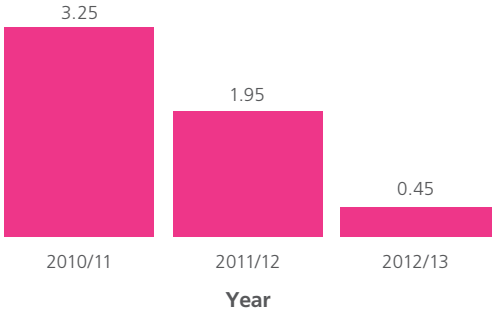


Figure 18 | MSRA bacteraemia rates compared to other acute Trusts in London (the lower the figure the better)



KHP compared to all other London Trusts

Figure 19 | MSRA bacteraemia trend over the last 3 years

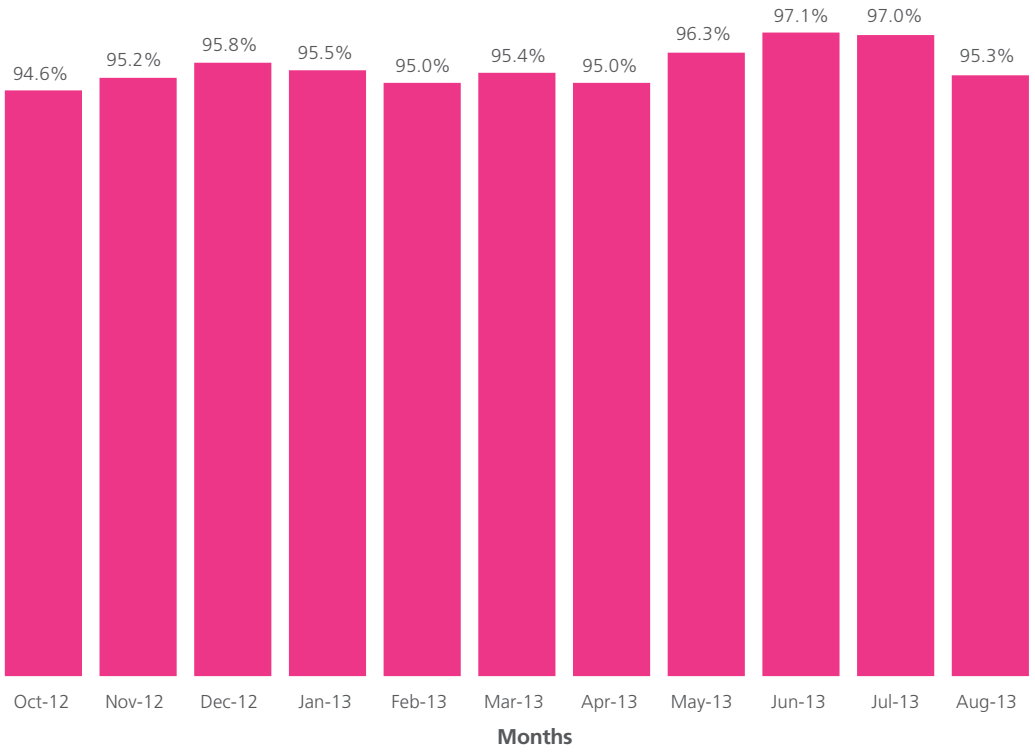


Prevention of Venous Thrombosis

Figure 24 shows the number of admitted patients where risk of Venous Thromboembolism (VTE) was assessed in the Medicine CAG.

Venous thrombosis (which is usually in the legs) can result in serious harm to patients when it causes embolism to the lungs (pulmonary embolism). Identification of patients at high risk leads to treatment (usually anticoagulant injection) to prevent hospital acquired venous thrombosis.

Figure 20 | Average percentage of patients that were VTE assessed from October 2012



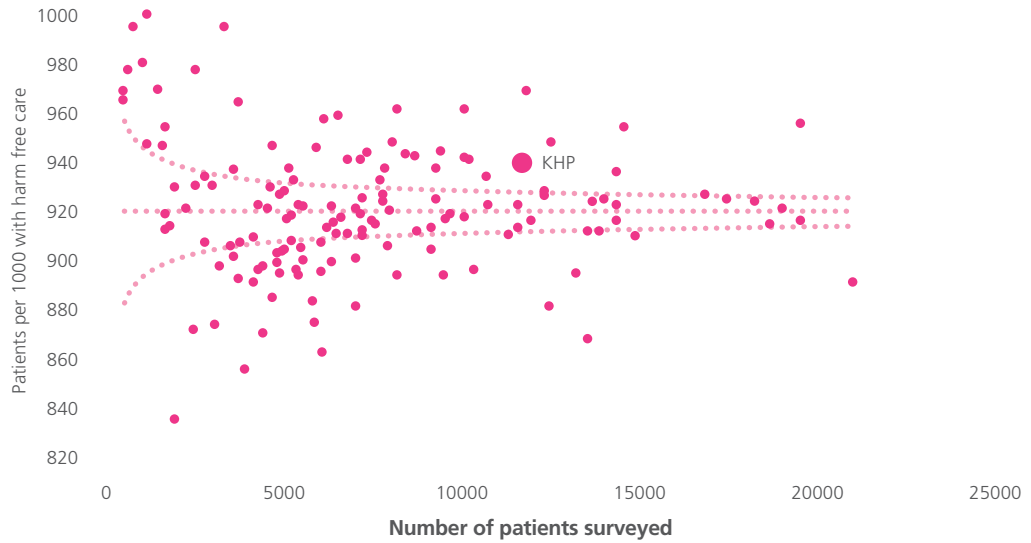
Safety thermometer for acute Trusts

Each month the majority of wards in Guys and St Thomas' and King's College Hospital sample their patients on a day, to assess whether patients that are free from developing a pressure sore, had a fall in hospital, acquired a urinary infection from a catheter or developed a hospital venous thrombosis.

All NHS hospitals collect similar data and the chart below shows the position of King's Health Partners compared to all other NHS organisations. Many of these hospitals will not be acute general hospitals and therefore do not have the same number of high risk patients so unlike the mortality data the results are not directly comparable.

If the points on the graph are within the funnel then you can conclude these Trusts results are not significantly different to the average benchmark. If the points on the graphs are outside of the funnel then you can conclude these Trusts results are significantly better or worse than the benchmark.

Figure 21 | Harm-free care for KHP compared to all other Trusts in England (the higher the score, the less hospital harm)



Blue Book standards

Fragility fractures and their care are a challenge to our health care system. The National Hip Fracture Database is a clinically led, web based audit of hip fracture care and secondary prevention with 186 eligible hospitals in England, Wales and Northern Ireland now regularly uploading data. This care is audited against 6 standards defined by the collaboration of the British Orthopaedic Association and the British Geriatrics Society. The Medicine CAG is not the primary CAG providing treatment for these patients but has an important role in the initial assessment of patients in the A&E Department, a liaison role by our geriatricians in the prevention of future falls by inpatient and post discharge assessment and follow up.*The bold figures highlights where we have done better than the national average.

Figure 22 | The 6 Hip fracture Blue Book standards and how KHP compares to other trusts nationally

Blue Book Standard	National 2012/13	KHP Average 2012/13
1. Admission to orthopaedic ward within 4 hours from A and E	50%	**55%**
2. Surgery within 48 hours and during working hours	86%	**87%**
3. Pre-operative assessment by an orthogeriatrician	49%	43%
4. Patients developing pressure ulcers	3.5%	**2.3%**
5. Discharged on bone protection medication	69%	**71%**
6. Received a falls assessment prior to discharge	94%	**99%**

Clinical incidents

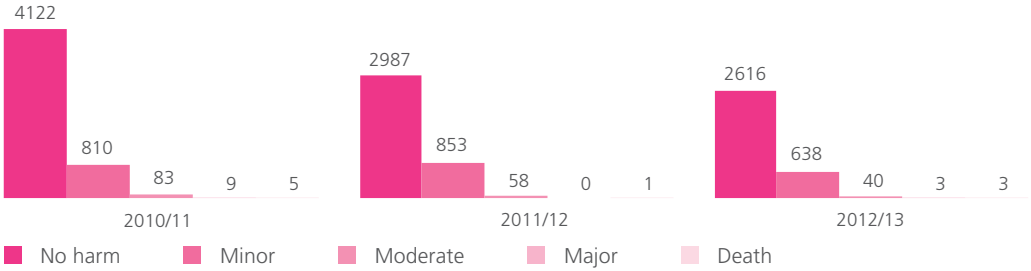
A clinical incident may range from deviation of a recommended standard of treatment where there was no harm or problem to the care of a patient to serious harm or death. Many incidents are not reported so a hospital that reports incidents frequently and encourages its staff to report incidents without blaming or disciplining staff is likely to be a safer hospital with a safer culture.

Any serious incident will be thoroughly investigated in order to learn how to prevent anything similar in the future. However other incidents such as "near miss" events are much more common and give an opportunity for learning about reducing future harm to our patients.

Incidents linked to the use of medicines (prescription, dispensing or administration) is the most common patient incidents in the Medicine

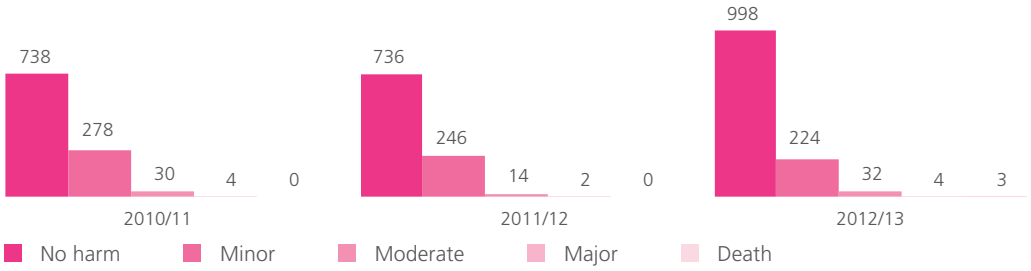
CAG and occur particularly in a small number of high risk drugs (opiates, insulin and diabetic medicines, anticoagulants and antibiotics). The number of harm events is small compared to the total number of patients we see. Both hospitals have quality programmes to reduce harm and risk.

Figure 23 | Medication incidents by severity for the last 3 years



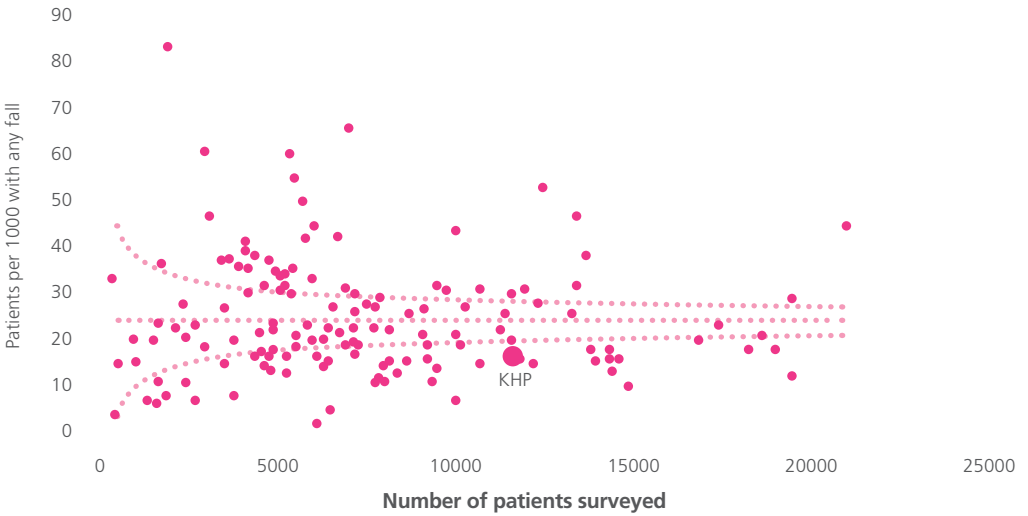
Falls in inpatients commonly occur. They are particularly common in frail patients who are unsteady and confused which can often be caused by delirium. Both hospitals and the South London and Maudsley Trust have set up a joint inpatient falls improvement group where we meet and share best practice and compare data. The overall falls rate in hospital is low in KHP compared to other hospitals in England (see Safety Thermometer data).

Figure 24 | Slips and falls numbers by severity over the last 3 years



Key: No harm – No injury or harm requiring intervention; Minor – harm requiring first-aid level treatment, or extra observation only (e.g. bruises, grazes); Moderate harm – harm requiring hospital treatment or a prolonged length of stay but from which a full recovery is expected (e.g. fractured clavicle, laceration requiring suturing); Major – Permanent physical/emotional injuries or trauma; Death – Incident leading to death; Source: KHP Informatics

Figure 25 | Falls rate for KHP compared to all other trusts in England



Tackling youth violence

The King's Emergency Department Youth Violence Project which is run in partnership with charity Redthread has won two awards at the National Children and Young People Now Awards.
The team at King's is led by the Emergency Department Consultant Doctor Emer Sutherland and Emergency Department Head of Nursing Tricia Fitzgerald.

Doctor Emer and Tricia work in partnership with John Poyton and his Redthread team to help gang members and young people break free from the cycle of violence that many find themselves in.

As a major trauma centre, the wider ED team treat many young people affected by violence, either directly or indirectly. Emer, Tricia, John and his team provide extra help and support to this particular group of patients when in the Emergency Department and beyond after their physical injuries have been addressed by the trauma team.

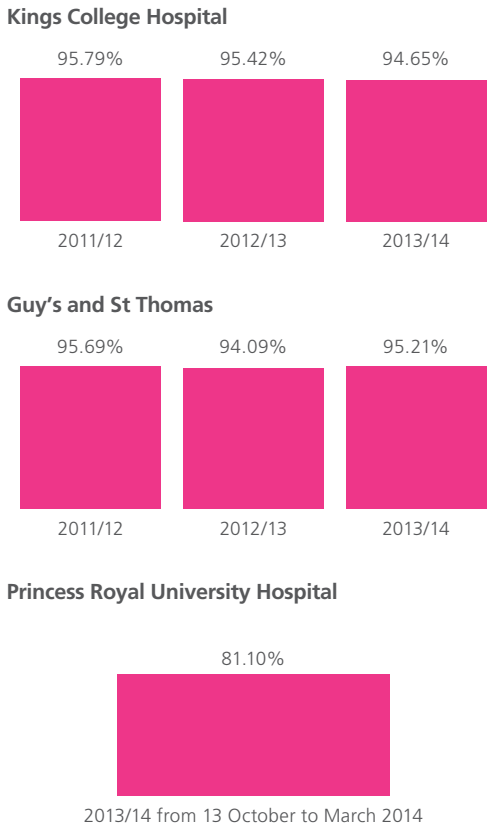
Accident & Emergency waiting times

The Accident and Emergency Departments across Kings' Health Partners continue to work towards making improvements in peoples experiences of our services. One of the most important quality measures is to ensure that our patients are seen and treatment completed or the patient admitted within four hours of arrival.

Figures 26 opposite demonstrates the performance of all three A&E departments of the Medicine CAG.

Both King's College and Guy's and St. Thomas continue to achieve and exceed the emergency target of 95% of patients seen in less than four hours. The Princess Royal University Hospital has not been meeting the target. Following acquisition in October 2013, Kings College Hospital NHS Foundation Trust has made significant investment in the department to embed change and improve the service and experience for local patients.

Figure 26 | Percentage of patients waiting less than 4 hours in A&E, against the national NHS target of 95%



Patient experience

Collecting and analysing data about patients' experiences of healthcare is essential to achieving high quality care. Across King's Health Partners we are committed to using patient experience data to improve the quality of the care we provide.

The following charts show average scores out of 100 for all respondents regarding their experience of being treated in both King's and Guys and St Thomas' Hospital inpatient wards.

Figure 27 | Were you involved in the decision about your care and treatment?

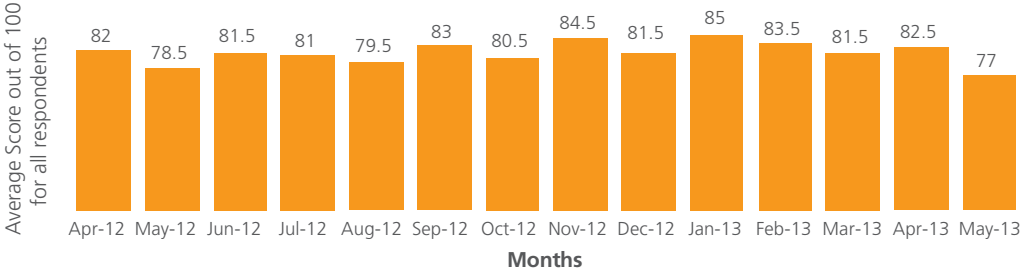


Figure 28 | Were you treated with dignity and respect during your hospital stay?

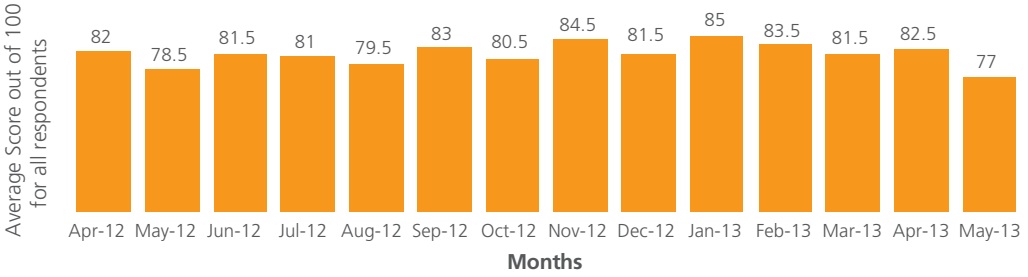


Figure 29 | Did you speak to a member of staff about your worries and fears?

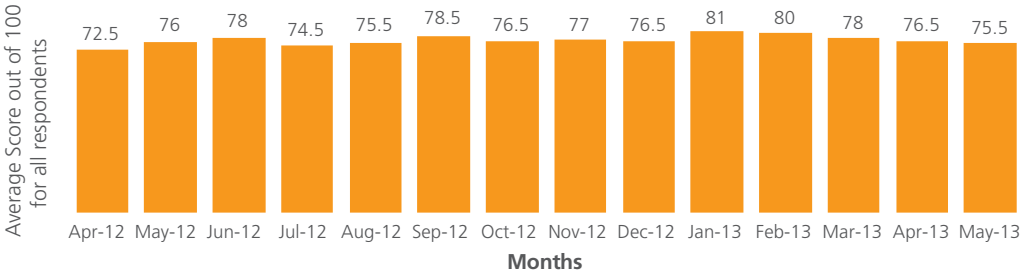
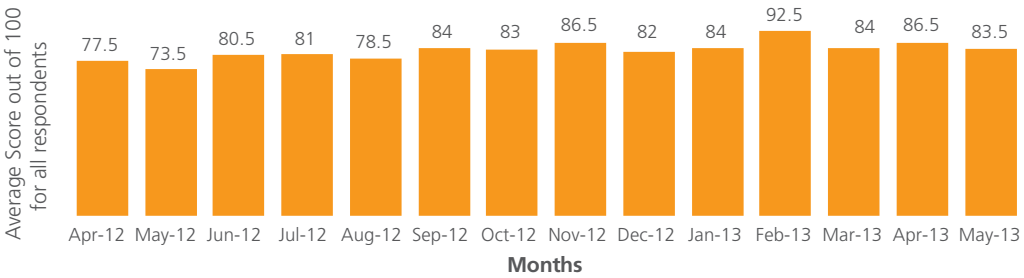


Figure 30 | Did staff give you a contact should you have any worries about your condition post discharge?



A citizen's story

Mr C, who attended a flu clinic with his wife in December 2012. Mr C needed help from his wife to take his coat off and to get in and out of his chair, and it was his wife who made sure he was able to get to the clinic.

Mr C attended the practice infrequently and there was no mention of this frailty in the medical record. He had last attended in June 2012 for a chest infection for which he was prescribed antibiotics, but his symptoms returned. He had been diagnosed with multiple sclerosis in 1996 at the John Radcliffe Hospital but had no follow up, he also had trigeminal neuralgia treated surgically in 2003 and had a history of seizures.

During the visit to the flu clinic he was offered a Holistic Health Assessment (HHA). The HHA identified a number of key concerns including,

reduced mobility and falls, a persistent cough, difficulty with speech, right hemi- facial numbness with mild dribbling, cognitive impairment, occasional urine incontinence, and dry skin. Clearly he needed a comprehensive medical review and a multi professional approach.

Mr C was reluctant to have further investigations and found hospital appointments confusing and inconvenient. The HHA approach was explained to him and he agreed to give it a try. As a result, he was referred to a community occupational therapist and physiotherapist and district nurse for continence assessment. Whilst not depressed, he naturally found the loss of his physical well-being upsetting, and he worried about the burden on his wife.

In a follow up visit Mrs C described an episode where her husband was sitting on the sofa, slouched to one side with eyes opened but unfocussed, he was drowsy with his back and arms rigid in extension, no seizure activity noticed. The family managed to get him to bed and no health care practitioner was contacted.

Mr C agreed to have an assessment at the HOT rapid access clinic, and with transport organised he, along with his wife and daughter were seen within a week with an MRI scan, chest X-ray and further investigations carried out. He was referred to a neurologist and multiple sclerosis nurse, speech and language therapy team and discharged back to the community team.

They are now managing well at home with no further falls, hospital admissions or GP appointments required. His medication is now managed with a phone call and Mrs C knows how to restart case management A carer assessment was also done which received good attendance from all partners. This was overall a very good experience for Mr & Mrs C who felt they were really listened to and treated as partners in their health care.

Mindfulness – an innovative stress reduction programme for patients and staff

The Mindfulness Based Stress Reduction (MBSR) programme by Dr Jon Kabat-Zinn was originally developed to treat the symptoms of chronic disabling diseases. Mindfulness based cognitive therapy (MBCT) is a convenient alternative to cognitive behavioural therapy as it can be carried out at home. Dr Thomas Ernst and team in the falls/syncope service have treated >500 patients with recurrent fainting using MBSR/CT over the last two years with excellent feedback from patients and referring clinicians.

Mindfulness stress reduction for staff

The King's Health Partners Health and Wellbeing Project assesses the wellbeing of all our staff. Mindfulness based stress reduction (MBSR) is an evidence based intervention to improve staff ability to cope with stress at work and improve their compassion and situational awareness at work. Our social work department has taken on MBSR and the coronary care unit at St Thomas' Hospital is including MBSR into their portfolio of stress management for their staff.

As part of this project in the Older Person's Unit MBSR was used during an eight week course which had excellent uptake and participants reported an improved ability to cope with work related stresses.

Patient story suffering from fainting

A 19 year old patient was suffering from three to four faints per week since starting their 'A' level exams. Tilt table testing confirmed vasovagal syncope (simple faint).

Patient was very sceptical about trying MBSR but fainting completely stopped during daily MBSR.

Patient feedback "I was very sceptical but it really works. I had tried stopping it and the faints came back, I started again and I am fine again".

Education and training

The aim of our CAG is to establish innovative teaching which is accessible to all members of staff and is focused on four principles:

- Innovation in care delivery,
- Improved patient safety – to rank with the best nationally and internationally,
- Clinical effectiveness and productivity,
- Staff knowledge, morale and satisfaction.

Our CAG provides a large amount of education to undergraduates and postgraduates in medicine, nursing and allied health professions. This ranges from case teaching at the bedside to courses and seminars.

Some highlights/ developments

Undergraduate education

- Supporting the development of a student selected component in acute medicine as part of a quality improvement project
- Pairing year three medical students with Senior House Officer level trainees which has had positive feedback from students, and Deanery funding has been secured for coaching skill development

Postgraduate education

- We have a role in training a large number of doctors in acute, emergency and general medicine. Training grades include registrars, foundation, GP trainees, acute care common stem and core medicine
- MSc teaching in Gerontology, Analytical Toxicology
- Multi-professional training to improve early recognition and the management of dementia and delirium, with a webpage for easy access to learning materials
- Joint teaching sessions by core medical and core psychiatry trainees, with feedback showing trainees value peer led and delivered teaching

- The pan London lead provider for Core Medical Training, Geriatric Medicine and Acute Medicine
- We organise consultant led teaching sessions for the College of Emergency Medicine Fellowship and membership exams for emergency medicine trainees and similar sessions for MRCP exam preparation
- Regional training days for registrars Faculty development courses for College of Emergency Medicine
- Simulation training is now mandatory for core medical and emergency medicine trainees
- Annual Major Incident training for emergency department staff (doctors and nurses) and also Metropolitan Police officers.

Other education and training initiatives include:

- Lead of simulation training for King's Health Partners. Simulation training continues to grow and demonstrate its value in training not just doctors in training but also other staff. CAG members are involved in delivering modules that provide better multi-disciplinary team working
- The CAG provides ultrasound simulation training for King's Health Partners
- Joint geriatric medicine and old age psychiatry Specialist Registrar training sessions
- Reciprocal training of Specialist Registrars in geriatric medicine, nephrology and clinical pharmacology/toxicology
- Training for doctors from elsewhere in the UK and internationally in clinical toxicology
- Rotational experience with Limerick/Cork in geriatric medicine
- Training modules being delivered in multi-professional groups for safeguarding, infection control and managing delirium
- Foundation for Polish Science and EU – five PhD students supervision (KCL and Medical University of Gdansk)

Nursing education and training

- Twinning medical wards across King's College Hospital and Guy's and St Thomas'. We have an emergency department/acute medicine nurse exchange pilot underway to increase understanding and improve communication across these areas. We are sharing best education and training practice by practice development nurses working together across sites and this is an important theme for the CAG Nursing Board
- The effectiveness and development of nursing will be key to the success of the CAG. A Nursing Board has been established to give a focus to research, education and quality improvement in nursing

Division of health and social care/KCL

The Division delivers 15% of the total medical curriculum through King's Medical Education in the Community (KUMEC) and Public Health, Medical Statistics and Sociology are taught in years one and two. Postgraduate training opportunities include Masters' in Public Health and Physiotherapy and research design courses and consultancy/clinical trials unit advice in statistics and clinical research methods. We plan to strengthen the links between our educational and research programmes.

Identify education and training needs across the CAG

With KCH taking over the PRUH we are exploring education and training needs across sites and possibilities for future collaboration. A first meeting with educational supervisors has taken place and we plan to develop this work further to identify education and training needs.

Future plans

- To introduce e-learning modules as a part of induction for our junior doctors so they are familiar with the conditions they might encounter in the A&E department
- We are working with SLaM colleagues and the Psychosis CAG to develop teaching and multi-disciplinary training in managing patients with mental health and medical illness


KING'S
PATIENTS
ENTRANCE

Research and innovations

The CAG research agenda is broad, reflecting our various clinical specialties and locations we practice in primary, secondary, community and social care. The work is predominantly applied in nature and supported by the KCL Division of Health and Social Care brings Primary Care, Public Health, Physiotherapy research and methods to the CAG. The strengths of research are in the empirical areas of older people, stroke, toxicology, public health and primary care more broadly. The methodological underpinning of CAG research is in the applied sciences of health services and implementation research, statistics, epidemiology, health economics, clinical informatics, social sciences, physiotherapy.

The CAG has a unique research infrastructure to deliver on our research and innovation agenda with the following services hosted in the Division at KCL: NIHR accredited Clinical Trials Unit; NIHR Research Design Service; Statistical consultancy service; south London Urban Public Health Collaborative (with boroughs of Lambeth, Southwark and Lewisham); NIHR Biomedical Research Centre Population Sciences Cluster.

Governance: We have developed a multi-professional forum for developing and discussing research proposals which meets quarterly with representation from KCH, GST and KCL, our focus is to increase accrual to the NIHR portfolio studies in the CAG as well as develop capacity in the following areas of research:

- Acute medicine
- Ageing and Frailty, including stroke
- Clinical toxicology
- Patient safety

Highlights of research

The Comprehensive Local Research Network (CLRN) recruitment has improved considerably particularly in studies in the care of the elderly and stroke. Research income has been attracted in

Toxicology, Occupational Health, Stroke, Geriatrics, Primary Care and Public Health. The CAG has been involved in the Informatics and Public Health Grand Challenges and we have attracted funding for developing a Public Health Collaborative and evaluating the implementation of NICE guidance in alcohol and other areas of public health.

Health and Social Care Division, KCL

This is a multidisciplinary Division that has grown significantly in the last few years with the Divisional ranking in respect to grant income and PhD studentships in the School of Medicine improving to 3–4th across metrics and in the Research Excellence Framework 2013 we returned 26 principal researchers, who have brought in over £34 million of research income since 2008. Our South London urban context provides an important motivation for our research strategy, focusing on: early translation, the use of population sciences to promote the movement of research from bench to bedside; and later translation, the development and application of research for the benefit of communities and individual patients, locally, nationally and internationally.

- We aim to create substantial impact on public health, and on the quality and safety of primary care, informed by active programmes of patient involvement, community engagement and education
- We are the academic hub for the Medicine CAG
- Lead on the KHP Research Grand Challenge for Public Health and Primary Care
- Lead the Population Science Cluster of the NIHR Biomedical Research Centre
- Lead two themes in the NIHR Collaboration for Leadership in Applied Health Research and Care (Stroke and Public Health)
- Lead the Primary Care Informatics component of the MRC Informatics Collaboration (Farr Institute)
- We are internationally leading in Stroke Health Services Research, trial methodology, large dataset analysis and PC Informatics and Decision Making
- Over the next five years we aim to be recognised internationally for our academic excellence and service innovation and implementation in Public Health with a specific emphasis on Urban Public Health by investing in these specific areas.

Innovation

New ways of working – the challenge of frailty

Global demographic trends show increasing longevity with a resultant rapidly ageing population (United Nations. World Population Prospects: The 2006 Revision, Highlights Working Paper no. ESE/P/WP.202. New York, 2007). The number of people aged over 85, living in the U.K. alone, is expected to quadruple to four million by 2051, (Office for National Statistics. Mortality Statistics; Deaths Registered in 2008. London, UK. 2009).

Although some older people will continue to experience good health into late old age, many will live with decreasing functional capacity, increasing acuity and dependency on health and social care agencies. Thus older people are, and will continue to be, the greatest users of acute services in the U.K. They occupy 70% of hospital bed days, account for 60% of all hospital admissions, and 80% of emergency admissions and hospital deaths. Overall, 70% of the health budget and 80% of medical bills is spent on older people (Tadd, W., Hillman, A. Calnan, S. Calnan, M., Bayer, T., Read, S. Dignity in Practice: An exploration of the care of older adults in acute NHS Trusts. 2011).

The Medicine CAG has developed a number of models which have spread widely in the NHS (e.g. OPAL and KOPAL) based around the use of Comprehensive Geriatric Assessment to recognise and respond to the needs of older persons in Acute Medicine, Surgery and Oncology based at GSTT Medicine (Ageing and Health), plans are advanced to establish a KHP wide "Frailty Research Collaborative".

Supportive care

Devising a supportive care model and ward based intervention will have both a direct impact on the quality of care for older persons in acute care and economic benefit for the NHS.

The CAG is central to a study titled 'Establishing Supportive Care needs for frail elders and developing an intervention to address these in older adult acute medical settings' (SCIOaS). This study aims to improve the assessment and delivery of such supportive care in acute medical settings. Literature reviews and a Delphi study, involving patients, lay carers and professionals will be used to reach consensus regarding what and how supportive care can be put into practice. The Delphi technique is a method of consensus building through collecting data from a panel of selected subjects using a series of iterative questionnaires.

This evidence will be employed, alongside participatory methods, to design an innovative ward-based intervention to improve patient experience and care. The intervention will be piloted on older adult medical wards with frail elders and their carers.

Southwark and Lambeth Integrated Care

Researchers in the CAG are developing a 'Learning Healthcare System' for the SLIC programme, integrating data from health and social care information systems in primary and secondary care, along with tools for more personalised decision making during consultations with guideline support.

Stroke

The King's South London Stroke Register is the world's longest running, population-based stroke research register, assessing the incidence of stroke; the acute and long-term needs of stroke patients; and quality of stroke care. The South London Stroke Register provided data and analyses which informed the Parliamentary Public Accounts Committee report on stroke, the National Strategy for Stroke, and contributed to two National Audit Office reports on acute and longer-term stroke care. The latter contributed to a major service reconfiguration in London, which has led to lower mortality and more efficient use of health care resources for stroke, Professor Rudd (Professor of Stroke Medicine within Medicine at St. Thomas') won a BMJ award for innovation and is in the top 50 NHS Innovators in the HSJ 2014. The King's South London Stroke Register provides a platform for designing and evaluating new models of stroke care, including the largest trial of Early Supported Discharge, a cost-effective intervention which is now provided in 66% of hospitals in England, as well as being rolled out internationally.

Trauma & emergency medicine research

Over the last three years, there has been good support for research in the Emergency Department. Consultants, Senior Nurses, Trauma Nurse Coordinators, the Research Team and the Emergency Department Technicians have all been GCP trained and we are becoming established as a research-active department in the UK. We have completed one industry study and are due to start two more this year attracting £20,000 and we have attracted a grant from Healthcare for England worth £25,000.

Portfolio studies

Title	Description	Status
Ahead	Head injury in warfarinised patients	Completed
IMPRESS	Point prevalence study of sepsis	Completed
SIPS Junior	Alcohol use in adolescents	Completed
PROMISE	Protocolised management of severe sepsis & septic shock	Active
CRASH 3	Tranexamic acid in isolated head injury	Active
PAINTED	Pandemic influenza	Active
Halt-it	Tranexamic acid in upper GI bleed	R&D
WHITE	Fractured neck of femur	IRAS

In addition to the studies listed there are several internal research projects either completed but not yet published or active, and five projects taking place as part of MSc nursing degrees.

NHS clinicians' grant income

The following are programmes which have been funded since 2008:

- NIHR PGfAR (National Institute for Health Research – Programme Grants for Applied Research) Program Grant. Pre-operative Enhanced Recovery hip Fracture Care of patients with Dementia (PERFECTED). £2.2 million. 2013–2018. Co-applicant PI Dr Chris Fox (UEA).
- NIHR RfPB (National Institute for Health Research – Research for Patient Benefit) Program. Prevention Of Falls in Cognitively impaired older adults living in residential care (PROF-COG). A pilot multi-factorial intervention to prevent falls in older people living in care homes tailored towards risk factors related to cognitive impairment. £247K. 2012–2014. Co-applicant with Dr Julie Whitney.
- Wellcome Trust Program Grant. The genetic and environmental determinants of ageing in women. £2.1 million. 2007–2012. Co-applicant PI Prof T Spector.
- Wellcome Trust Clinical Training Fellowship for Dr Claire Steves. Cognitive Ageing in Women: A Twin Study to identify Determinants and Imaging Correlates. £264,190 2009–2013. Supervisor Professor Stephen Jackson. (KCH)
- MacMillan Cancer Support / Department of Health funded grant for "A pilot study evaluating impact of geriatric-oncology liaison in patients aged 70+ with cancer undergoing assessment for chemotherapy and/or radiotherapy". £159K. 2011–2013 PI Danielle Harari, MD supervisor Finbarr Martin (GSTT)
- AgeUK/British Geriatrics Society grant "Evaluating the impact of preoperative Comprehensive Geriatric Assessment (CGA) to improve postoperative outcomes in older vascular surgical patients" (RCT) £94K, 2012–2013. PI Danielle Harair and and PhD supervisers Jugdep Dhesi and Finbarr Martin (GSTT)
- Health Foundation Frailsafe: a safety checklist for patients entering acute care £450,000 2014–16. Dr A Hopper co-appliicant PI Prof Tom Downes Sheffield with British Geriatrics Society

Research and Development funded activity with the Medicine CAG clinicians as collaborators/ supervisors

- GSTT Charity and NIHR RfPB with PhD studentship for pharmacist Jennifer Stevenson working in STH with PI Rebekah Schiff and PhD supervisor Finbarr Martin, as collaborators, on "Developing a tool to stratify the risk of medication harm in the elderly (PRIME)"
- NIHR Clinical lectureship for principal dietician Dr Elizabeth Weekes (£239K over 4 years) -research collaborator Finbarr Martin, working on "The impact of malnutrition on patient-centred outcomes and health and social care resources in elderly people accessing healthcare services in the community"
- NIHR Clinical lectureship for senior nurse Dr Caroline Nicholson (KCL National nursing research unit) working on developing ward based work with frail older inpatients at STH.

Toxicology: Example grants over the last 5 years, 2010–2014

- 2009–2011: US$98,500, McNeil Pharmaceuticals, UK Home Stores of Paracetamol, PI: Paul Dargan and David Wood
- 2010–13: £324,000, Guy's and St Thomas' Charity (GCF – G100113), SHIELD: Self-harm: improving patient experience
- 2011–2014: £50,000 World Health Organisation and Department of Health Policy Research Programme (Reference 088/0013) Development of WHO Guidelines for the Prevention and Management of Lead Poisoning, PI: Paul Dargan
- 2013–2015: €464,220.49: European Commission Directorate General Justice. Grant Agreement: JUST/2011/DPIP/AG/3591 European Drug Emergencies Network (Euro-DEN) PI: Paul Dargan and David Wood
- 2013–2015: £245,043: National Institute for Health Research (NIHR) Research for Patient Benefit (RfPB) Programme. Grant Agreement: PB-PG-0212-27068. Improving GHB withdrawal with baclofen. Co-applicants: Paul argan and David Wood,
- 2014–2016: £63,652: Maudsley Charity. Grant Reference: 867 "SHIELD Transitional Database Linkage Project" Co-applicants: Paul Dargan and David Wood

Division of Health and Social care – major grants since 2008

Grant	PI	Funder	Award
Collaboration for Leadership in Applied Health Research (Themes 6 & 7)	Charles Wolfe/ Peter Littlejohns	NIHR	£1,026,522
Modelling, evaluating and implementing cost effective services to reduce the impact of stroke	Charles Wolfe	NIHR Programme Grant	£1,134,665
Donation, Transplantation and Ethnicity (DonaTE)	Myfanwy Morgan	NIHR Programme Grant	£634,809
Translational Research and Patient Safety in Europe (TRANSFoRm)	Brendan Delaney	European Commission	£1,123,484
European Implementation Score (EIS). For measuring implementation of research into healthcare practice.	Charles Wolfe	European Commission	£1,464,625
Role of primary care in translating effective lifestyle modification strategies	Martin Gulliford	MRC	£408,001
Cluster randomised trials using a primary care database: utilising electronic patient records for intervention research	Martin Gulliford	Wellcome Trust	£297,530

Publications

List of books		
Author	**Title**	**Publisher**
Janet Peacock and Philip Peacock	Oxford Handbook of Medical Statistics (2010)	Oxford University Press 2010
Dargan PI, Wood DM	Novel Psychoactive Substances: Classification, Pharmacology and Toxicology.	Academic Press 2013

Examples of academic publications	Journal
McKevitt C & Wolfe C, Addo J, Ayis S, Leon J, Rudd A, (2012), 'Delay in Presentation After an Acute Stroke in a Multiethnic Population in South London: The South London Stroke Register', 2012	Journal of the American Heart Association
McKevitt C, Marshall IJ, Wolfe CDA (2012), 'Lay perspectives on hypertension and drug adherence: systematic review of qualitative research' vol 345, no. 7867, e3953.	British Medical Journal
Wolfe CDA, Redfern J, Rudd AG, Grieve AP, Heuschmann PU & McKevitt C (2010), 'Cluster Randomized Controlled Trial of a Patient and General Practitioner Intervention to Improve the Management of Multiple Risk Factors After Stroke Stop Stroke', vol 41, no. 11, pp. 2470–2476.	Stroke
Peacock JL, Sauzet O, Ewings SM & Kerry SM (2012), 'Dichotomising continuous data while retaining statistical power using a distributional approach', vol 31, no. 26, pp. 3089–3103.	Statistics in Medicine
Hajat C, Heuschmann PU, Coshall C, Padayachee S, Chambers J, Rudd AG & Wolfe CDA (2011), 'Incidence of aetiological subtypes of stroke in a multi-ethnic population based study: the South London Stroke Register', vol 82, no. 5, pp. 527–533.	Journal of Neurology, Neurosurgery and Psychiatry
Wolfe CDA, Crichton SL, Heuschmann PU, McKevitt CJ, Toschke AM, Grieve AP & Rudd AG (2011), 'Estimates of Outcomes Up to Ten Years after Stroke:, vol 8, no. 5, e1001033.	Analysis from the Prospective South London Stroke Register' *PL o S Medicine*
McManus J, Pathansali R, Ouldred E, Stewart R, Jackson SHD (2011) Association of delirium post-stroke with early and late mortality. 40: 271–4.	Age and Ageing

Examples of academic publications	Journal
Pope, G, Wall M, Peters CM, O'Connor M, Sanders J, O'Sullivan C, Donnelly T, Walsh T, Jackson SHD, Clinch D, Lyons D. (2011) Specialist medication review does not benefit short term outcomes and nett costs in continuing care patients. 40: 307–311.	Age and Ageing
McMurdo MET, Roberts H, Parker S, Wyatt N, May H, Goodman C, Jackson SHD, Gladman J, O'Mahony S, Ali K, Dickinson E, Edison P, Dyer C on behalf of the Age and Ageing Specialty Group, NIHR, (2011) Comprehensive Clinical Research Network. Improving recruitment of older people to research through good practice. 40:659–65.	Age and Ageing
Dapp U, Anders JA, von Renteln-Kruse W, Minder CE, Meier-Baumgartner HP, Swift CG, Gillmann G, Egger M, Beck JC, Stuck AE (2011); PRO-AGE Study Group. A randomized trial of effects of health risk appraisal combined with group sessions or home visits on preventive behaviours in older adults. 66:591–8.	UCL Discovery
Whitney J, Close JCT, Lord SR, Jackson SHD (2012). Identification of high risk fallers among older people living in residential care facilities: A simple screen based on easily collectable measures. 55:690–5.	Archives of Gerontology and Geriatrics – Journal
Whitney J, Close JCT, Jackson SHD, Lord SR (2012) Understanding risk of falls in people with cognitive impairment living in residential care. 13:535–40.	Journal of the American Medical Directors Association
Kharicha K, Iliffe S, Harari D, Swift CG, Goodman C, Manthorpe J, Gillmann G, Stuck AE (2012) Feasibility of repeated use of the Health Risk Appraisal for Older people system as a health promotion tool in community-dwelling older people: retrospective cohort study 2001–05. 41:128–31.	Age and Ageing
Whitney J, Jackson SHD, Close JCT Lord SR (2013) Development and validation of a fall-related impulsive behaviour scale for residential care. 42:754–8.	Age and Ageing
Steves CJ, Jackson SHD, Spector TD (2013). Cognitive Change in Older Women Using a Computerised Battery: A Longitudinal Quantitative Genetic Twin Study. 43:468–79.	Behavioural Genetics
Mukhtar O, Jackson SHD (2013) Risk: benefit of treating high blood pressure in older adults. 2013 75, 36–44.	British Journal for Clinical Pharmacology
Mangoni AA, Jansen PA, Jackson SHD (2013). Under-representation of older adults in pharmacokinetic and pharmacodynamics studies: a solvable problem? 6:35–9.	Expert Review
Jackson SHD, Jansen PAF, Mangoni AA (2012) Off-label prescribing in older patients 29:427–34.	Drugs Aging
Steves CJ, Spector TD, Jackson SHD (2012) Ageing, genes, environment and epigenetics: what twin studies tell us now, and in the future 4: 581–6.	Age and Ageing
Jackson SHD, O'Sullivan F (2012) Prescribing medicines for older patients 40, 382–385.	Medicine
Navaratnarajah A, Jackson SHD (2012), The physiology of ageing, Medicine 41, 5–8.	Medicine

Examples of academic publications	Journal
Wolber LE, Steves CJ, Spector TD, Williams FM (2012) Hearing ability with age in northern European women: a new web-based approach to genetic studies. 2012;7(4):e35500. doi: 10.1371/ journal. pone.0035500.	PLoS One
Biddulph JP, Iliffe S, Kharicha K, Harari D, Swift C, Gillmann G, Stuck AE. Risk factors for depressed mood amongst a community dwelling older age population in England: cross-sectional survey data from the PRO-AGE study. 2014	BMC Geriatrics
Partridge JS, Harari D, Martin FC, Dhesi JK. The impact of pre-operative comprehensive geriatric assessment on postoperative outcomes in older patients undergoing scheduled surgery: a systematic review. 2014	National Centre for Biotechnology Information
Partridge JS, Harari D, Dhesi JK. Frailty in the older surgical patient: a review. 2012	Age and Ageing
Kharicha K, Iliffe S, Harari D, Swift CG, Goodman C, Manthorpe J, Gillmann G, Stuck AE. Feasibility of repeated use of the Health Risk Appraisal for Older people system as a health promotion tool in community-dwelling older people: retrospective cohort study 2001–05.2012	Age and Ageing
Wagg A, Duckett J, McClurg D, Harari D, Lowe D. To what extent are national guidelines for the management of urinary incontinence in women adhered? Data from a national audit. 2011	International Journal of Obstetrics & Gynaecology
Raymond M, Iliffe S, Kharicha K, Harari D, Swift C, Gillmann G, Stuck AE. Health risk appraisal for older people 4: case finding for hypertension, hyperlipidaemia and diabetes mellitus in older people in English general practice before the introduction of the Quality and Outcomes Framework. 2012	Primary Care Research and Development
Norton C, Whitehead WE, Bliss DZ, Harari D, Lang J; Conservative Management of Fecal Incontinence in Adults Committee of the International Consultation on Incontinence. Management of fecal incontinence in adults. 2010	Neurourology and Urodynamics
Iliffe S, Kharicha K, Harari D, Swift C, Goodman C, Manthorpe J. User involvement in the development of a health promotion technology for older people: findings from the SWISH project. 2010	Health Social Care Community
Bakshi P, Partridge J, Dhesi J (2013). Indications for and use of inferior vena cava filters in the preoperative phase.	British Medical Journal
Feehally J, Gilmore I, Barasi S, Bosomworth M, Christie B, Davies A, Dhesi J, Dowdle R, Gibbins C, Gonzalez I, Harding S, Lamont D, Murphy G, Ostermann M, ParrJ, Stevens PE. (2013) RCPE UK consensus conference statement: Management of acute kidney injury: the role of fluids, e-alerts and biomarkers.	Journal of the Royal College of Physicians of Edinburgh
Garbharran U, Chinthapalli S, Hopper I, George M, Back DL, Dockery F. (2013) Red cell distribution width is an independent predictor of mortality in hip fracture.	Age Ageing
Laybourne AH, Biggs S, Martin FC. (2011) Predicting habitual physical activity using coping strategies in older fallers engaged in falls-prevention exercise.	Journal of Ageing and Physical Activity

Examples of academic publications	Journal
Pollock RD, Provan S, Martin FC, Newham DJ. (2011) The effects of whole body vibration on balance, joint position sense and cutaneous sensation.	European Journal of Applied Physiology
Martin FC (2011). Falls risk factors: assessment and management to prevent falls and fractures.	Canadian Journal of Ageing;
Laybourne A, Martin FC, Whiting D, Lowton K. (2011) 'Could Fire and Rescue Service identify older people at risk of falls?	Primary Health Care Research & Development,
Liston MB, Pavlou M, Hopper A, Kinirons M, Martin FC (2012) The physiological profile assessment: clinical validity of the postural sway measure and comparisons of impairments by age.	European Geriatric Medicine
Pollock RD, Martin FC, Newham DJ. (2012) Whole-body vibration in addition to strength and balance exercise for falls-related functional mobility of frail older adults: a single-blind randomized controlled trial	Clinical Rehabilitation
Giannoulis MG, Martin FC, Nair KS, Umpleby AM, Sonksen P. (2012) Hormone replacement therapy and physical function in healthy older men. Time to talk hormones?	Endocrine Reviews
Liston MB, Bamiou DE, Martin F, Hopper A, Koohi N, Luxon L, Pavlou M. (2014) Peripheral vestibular dysfunction is prevalent in older adults experiencing multiple non-syncopal falls versus age-matched non-fallers: a pilot study.	Age Ageing
Liston M, Alushi L, Bamiou DE, Martin FC Hopper A, Pavlou M. (2014) The effect of a modified OTAGO falls exercise programme with and without additional multisensory balance exercises on falls risk, gait, and balance confidence in older adult fallers: A pilot randomised control trial.	Clinical Rehabilitation
Adamis D, Treloar A, Gregson N, Macdonald AJ, Martin FC. Delirium and the functional recovery of older medical inpatients after acute illness: The significance of biological factors. 2010 May 12. [Epub ahead of print] 52(3):276–80. PubMed PMID: 20471115.	Archives of Gerontology and Geriatircs
Cruz-Jentoft AJ, Baeyens JP, Bauer JM, Boirie Y, Cederholm T, Landi F, Martin FC, Michel JP, Rolland Y, Schneider SM, Topinková E, Vandewoude M, Zamboni M. Sarcopenia: (2010) European consensus on definition and diagnosis: Report of the European Working Group on Sarcopenia in Older People.	Age Ageing
Adamis D, Treloar A, Martin FC, Macdonald AJ. (2010) Ethical research in delirium: arguments for including decisionally incapacitated subjects.	Science and Engineering Ethics
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Publications relevant to training and workforce development

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Birns J, Bhalla A, Rudd A. (2010) Telestroke: a concept in practice.	Age Ageing.
Layne K, Nabeebaccus A, Fok H, Lams B, Thomas S, Kinirons M. (2010) Modernising Morning report: innovation in teaching and learning.	The Clinical Teacher
Gordon AL, Blundell A, Dhesi JK, Forrester-Paton C, Forrester-Paton J, Mitchell HK, Bracewell N, Mjojo J, Masud T, Gladman JR. (2014) UK medical teaching about ageing is improving but there is still work to be done: the Second National Survey of Undergraduate Teaching in Ageing and Geriatric Medicine.	Age Ageing

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Wood DM, Dargan PI. (2010) Putting cocaine use and cocaine associated cardiac arrhythmias into an epidemiological and clinical perspective. 69:443–447. [DOI: 10.1111/j.1365-2125.2010.03630.x]	British Journal of Clinical Pharmacology
Shihana F, Dissanayake DM, Dargan P, Dawson AH. (2010) A modified low cost colourimetric method for paracetamol (acetaminophen) measurement in plasma. 48:42–46	Clinical Toxicology
Hudson S, Ramsey J, King L, Timbers S, Maynard S, Dargan PI, Wood DM.The use of high resolution accurate mass spectrometry to detect reported and previously un-reported cannabinomimetics in 'Herbal High' products. (2010) 34(5):252–260.	Journal of Analytical Toxicology
Wood DM, English E, Butt S, Ovaska H, Dargan PI. (2010) Patient Knowledge of the Paracetamol Content of Over-the-Counter (OTC) Analgesics, Cough-Cold Remedies and Prescription Medications. 27:829–833.	Emergency Medicine Journal
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Kalsi SS, Wood DM, Dargan PI. (2011) The epidemiology and patterns of acute and chronic toxicity associated with recreational ketamine use. 4:7107.	Emerging Health Threats Journal
Hunter L, Gordge L, DarganP,WoodDM. (2011) Methaemoglobinaemia associated with the use of cocaine and volatile nitrites as recreational drugs: a review. 72:18–26.	British Journal of Clinical Pharmacology
Wood DM, Greene SL, Dargan PI. (2011) Clinical pattern of toxicity associated with the novel synthetic cathinone Mephedrone. 28:280–282.	Emergency Medicine Journal
Dargan PI, Sedefov R, Gallegos A, Wood DM. (2011) The pharmacology and toxicology of the synthetic cathinone mephedrone (4-methylmethcathinone). 3:454–63.	Drug Testing and Analysis
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2,4-Dinitrophenol (DNP): A weight loss agent with significant acute toxicity and risk of death. 7:205–12.	Journal of Medical Toxicology
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Dooyema CA, Neri A, Lo Y, Durant J, Dargan PI, Swarthout T, Biya O, Gidado SO, Haladu S, Sani-Gwarzo N, Nguku PM, Akpan H, Idris S, Bashir AM, Brown MJ. (2012) Outbreak of fatal childhood lead poisoning related to artisanal gold mining in northwestern Nigeria, 2010. 120:601–607.	Environmental Health Perspectives
Lavergne V, Ghannoum M, Hoffman RS, Roberts DM, Gosselin S, Goldfab DS, Kielstein JT, Mactier R, Maclaren R, Mowry JB, Bunchman TE, Juurlink D, Megarbane B, Anseeuw K, Winchester JF, Dargan PI, Liu KD, Hoegberg LC, li Y, Calello DP, Burdmann EA, Yates C, Laliberte M, Decker BS, Mello Da Silva CA, Lavonas E. (2012) The EXTRIP (EXtracorporeal Treatments In Poisoning) Workgroup: Guideline Methodology 50:403–413.	Clinical Toxicology
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Archer JR, Dargan PI, Hudson S, Wood DM. (2013) Analysis of anonymous pooled urine from portable urinals in central London confirms the significant use of novel psychoactive substances. 106:1 47–152	Quarterly Journal of Medicine
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Chan WL, Wood DM, Hudson S, Dargan PI. (2013) Acute psychosis associated with recreational use of the benzofuran 6-(2-aminopropyl) benzofuran (6-APB) and cannabis. 9:278–281.	Journal of Medical Toxicology
Hunter LJ, Dargan PI, Benzie A, White JA, Wood DM. (2014) Recreational drug use in men who have sex with men (MSM) attending UK sexual health services is significantly higher than in non-MSM. ;90:133–138	Postgraduate Medical Journal
Yamamoto T, Spencer T, Dargan PI, Wood DM. (2014) Incidence and management of N-acetylcysteine (NAC) related anaphylactoid reactions during the management of acute paracetamol overdose. 21:57–60.	European Journal of Emergency Medicine
Menzies EL, Hudson SC, Dargan PI, Parkin MC, Wood DM, Kicman AT. (epublication ahead of print) Characterising metabolites and potential metabolic pathways for the novel psychoactive substance methoxetamine. Nov 5. doi: 10.1002/dta.1541.	Drug Testing and Analysis
Lee HM, Archer JRH, Wood DM, Hudson S, Dargan PI. (2014) Trend analysis of anonymised pooled urine from portable street urinals in central London identifies variation in the use of novel psychoactive substance [Epub ahead of print] PMID: 24506433	Clinical Toxicology

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Cross J, Dhesi J. (2011) Clinical Practice question. Peri-operative care. How can ward nurses improve the care of older surgical patients	Nursing Older People
Partridge JS, Martin FC, Harari D, Dhesi JK. (2013) The delirium experience: what is the effect on patients, relatives and staff and what can be done to modify this?.	International Journal for Geriatric Psychiatry
Lawrence V, Samsi K, Murray J, Harari D, Banerjee S (2011). Dying well with dementia: qualitative examination of end-of-life care.	British Journal of Psychiatry
Harari D, Igbedioh C. (2009) Restoring continence in frail older people living in the community: what factors influence successful treatment outcomes.	Age Ageing
Lawrence V, Samsi K, Murray J, Harari D, Banerjee S. (2011) Dying well with dementia: qualitative examination of end-of-life care.	British Journal of Psychiatry
Wagg A, Duckett J, McClurg D, Harari D, Lowe D. (2011) To what extent are national guidelines for the management of urinary incontinence in women adhered? Data from a national audit.	International Journal of Obstetrics & Gynaecology
Briggs R, Robinson S, Martin F, O'Neill D (2012). Standards of medical care for nursing home residents in Europe.	European Geriatric Medicine
Banerjee J, Benger J, Treml J, Martin FC, Grant R, Lowe D, Potter J, Husk J. (2012) The National Falls and Bone Health Audit: implications for UK emergency care.	Emergency Medical Journal
Martin FC (2011) and the Panel on Prevention of Falls in Older Persons, American Geriatrics Society and British Geriatrics Society. Summary of the updated American Geriatrics Society/British Geriatrics Society clinical practice guideline for prevention of falls in older persons.	Journal of the American Geriatrics Society
Buttery AK, Carr-White G, Martin FC, Glaser K, Lowton K. (2013) Limited availability of cardiac rehabilitation for heart failure patients in the United Kingdom: findings from a national survey.	European Journal of Preventative Cardiology

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Pallett JR, Sutherland E, Glucksman E, Tunnicliff M, Keep JW (2014). A cross-sectional study of knife injuries at a London Major Trauma Centre	Annals of The Royal College of Surgeons of England
Meiser-Stedman R, Shepperd A, Glucksman E, Dalgleish T, Yule W, Smith P (2014). Thought control strategies and rumination in youth with acute stress disorder and posttraumatic stress disorder following single-event trauma	Child adolescent psychopharmacology
Manawadu D, Bodla S, Keep J, Kalra L(2013) Influence of age on thrombolysis outcome in wake-up stroke	Stroke
Freeman D, Thompson C, Vorontsova N, Dunn G, Carter LA, Garety P, Kuipers E, Slater M, Antley A, Glucksman E, Ehlers A (2013). Paranoia and post-traumatic stress disorder in the months after a physical assault: a longitudinal study examining shared and differential predictors	Psychological Medicine
Manawadu D, Bodla S, Keep J, Jarosz J, Kalra L (2013) An observational study of thrombolysis outcomes in wake-up ischemic stroke patients	Stroke
Manawadu D, Bodla S, Keep J, Jarosz J, Kalra L (2013) A case-controlled comparison of thrombolysis outcomes between wake-up and known time of onset ischemic stroke patients	Stroke
David J McQuade, Paul I Dargan, Jeff Keep, David M Wood (2012) Paracetamol toxicity: What would be the implications of a change in UK treatment guidelines?	European Journal of Clinical Pharmacology
Keep J, Adelasoye Q, Pallett J (2013). Is the policy of "no active re-warming in the emergency department" adequate for therapeutic hypothermia after cardiac arrest?	Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine
JR Pallett, J Olding, T Hurst, M Tunnicliff, JW Keep(2013). Have patient pathways for penetrating chest injuries improved since designation as a London Major Trauma Centre?	Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine
Pallett J, Tunnicliff M, Keep J (2013). Should serum creatinine kinase levels and an ECG be routinely obtained in low voltage electrical burn injuries?	Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine
Pallett J, Gibbon A, Keep J(2013). Is there a role of hepatic enzymes in the management of penetrating hepatic injuries?	Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine
Noble AJ, Goldstein LH, Seed P, Glucksman E, Ridsdale L (2012). Characteristics of people with epilepsy who attend emergency departments: prospective study of metropolitan hospital attendees	Epilepsia

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Beynon T, Gomes B, Fliss E, Glucksman E, Parfitt A, Burman R, Edmonds P, Carey, I, Keep J, Higginson I. (2011) How common are palliative care needs among older people who die in the emergency department?	Emergency Medical Journal
Strizha L, Manawadu D, Jarosz J, Keep J, Kalra L (2011). Safety and clinical outcome of thrombolysis in ischaemic stroke using a perfusion CT mismatch between 3 and 6 hours.	PLoS ONE (Peer Review Scientific Journal)
Salmond CH, Meiser-Stedman R, Glucksman E et al(2011). The Nature of Trauma Memories in Acute Stress Disorder in Children and Adolescents.	J Child Pychological Psychiatry
Davies M, Kerins M, Glucksman E(2011). Inner-city Gunshot Wounds – 10 years on.	Injury
Kleim B, Wilhelm FH, Glucksman E, Ehlers A (2011). Sex differences in heart rate responses to script-driven imagery soon after trauma and risk of posttraumatic stress disorder.	Psychosomatic Medicine
Ehlers A, Suendermann O, Boellinghaus I, Vossbeck-Elsebusch A, Gamer M, Briddon E, Martin MW, Glucksman E (2011). Heart rate responses to standardized trauma-related pictures in acute posttraumatic stress disorder.	International Journal of Psychophysiology
Suendermann O, Ehlers A, Boellinghaus I, Gamer M, Glucksman E (2011). Early heart rate responses to standardized trauma-related pictures predict posttraumatic stress disorder: a prospective study.	Psychosomatic Medicine
Locke T, Kendal L, Lasoye T (2011). A New Head Injury Proforma for the Emergency Department.	Hertfordshire Journal of Medicine

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