Rising to the challenge

Improving acute care, meeting patients' needs in Wales

Foreword

The NHS was established in July 1948. In the ensuing years, substantial changes have occurred, not least in the demography of the population that it serves. People are living longer, and frail, older patients are increasingly presenting with multiple comorbidities and, often, cognitive impairment. This has led to an inexorable rise in hospital admissions, while funding of the NHS and social services has been increasingly restricted.

The 2012 Royal College of Physicians (RCP) report Hospitals on the edge? The time for action set out the scale of these challenges; it was in response to these concerns that the RCP established the Future Hospital Commission, which published its independent report, Future hospital: Caring for medical patients, in September 2013. This document sets out a radical vision for how we should deliver care in the future for the acutely ill, how we should train and plan our workforce and communicate with our patients, and how we should work with colleagues in primary, community and social care services. The RCP's Future Hospital Programme is currently working to make this vision a reality.

Devolution in Wales is now a 'done deal'. Responsibility for the NHS in Wales rests with the Welsh Government and the minister for health and social services. Issues such as rurality and geographical remoteness have required doctors in Wales to adapt and evolve the way that we provide healthcare. The model of care provided in Bronglais Hospital, Aberystwyth, will, of necessity, differ from the model implemented in densely populated areas in, for example, south-east Wales. Transport requirements such as air and road ambulance provision will also clearly vary. Proposed models will need to fit the ongoing reorganisation of clinical services in Wales, which will increasingly require clinicians from different hospitals and health boards to work together to establish networks and care alliances.

The RCP in Wales has produced this paper to drive forward this debate. We aim to work with patients, the Welsh Government, politicians, local health boards and NHS trusts, and other health stakeholders to improve healthcare and meet the highest standards. I urge all fellows and members of the RCP to play their part in providing a strong clinical input into future medical services in Wales.

Dr Alan Rees

RCP vice president for Wales

Key calls to action

- Organising safe, effective care around the patient Change must be patient centred and evidence based. Politicians must listen to clinicians and allow them to lead. Health boards and NHS trusts must commit to using the Future Hospital model when redesigning medical specialist care. Service redesign must take a whole-system approach the NHS must no longer look at individual services in isolation. Decision-makers must consider whether their plans work effectively with acute and critical care medicine, as well as primary care and community services. Specialist medical care should reach from wards into the community. Supporting patients to recover and manage their conditions must be a priority in all policies.
- Removing barriers to patient-centred care
 It is time to invest in patient care. Our hospitals are
 under-resourced and under pressure. Improved efficiency
 and reconfiguration will not deliver all the savings we
 need to balance the books. A significant increase in
 funding will be needed to prevent a crisis in the NHS;
 this should include transitional funding to support the
 move to new models of integrated care. Health boards
 and local authorities must work together more effectively
 to provide high-quality patient care across all services.
 Integrated, standardised patient records must aid
 the collection of accurate information and data to
 improve care.
- Supporting and developing the medical workforce
 Workforce planning must be a key priority during the
 entire process of reconfiguration. The Welsh Government
 must work with NHS bodies and the Wales Deanery
 to develop a national medical workforce and training
 strategy to ensure that staff are deployed and trained
 effectively, now and in the future. Internal medicine
 must be valued and urgent action taken to ensure that
 more physicians contribute to the acute take. Numbers
 of trainees and medical undergraduates must be
 increased, and junior doctors must be supported and
 encouraged to stay in Wales by offering them innovative
 new training pathways, an improved workload and
 more opportunities to take part in clinical leadership and
 quality improvement programmes.

Facts and figures

- > People aged 65 years and over now make up almost one-fifth of the population of Wales, or around 563,000 people.¹ This number is projected to increase by around 181,000 between 2010 and 2026.² One-third of the adult population, or around 800,000 people, have at least one chronic condition² and Wales has the highest rates of long-term limiting illness in the UK.³
- > One-third of adults in Wales report that their day-to-day activities are limited because of a health problem or disability. Around one-half of adults are being treated for a condition such as high blood pressure, heart condition, arthritis, respiratory illness, mental illness or diabetes.⁴
- > The Longley review found that patients admitted to hospital in Wales over the weekend, and especially on Sundays, are more likely to die than those admitted between Monday and Friday.⁵ A 2012 study of more than 14 million NHS admissions in England showed increased mortality rates of 11% and 16% for patients admitted on Saturdays and Sundays respectively, compared with patients admitted on a weekday.⁶
- More and more people are using accident and emergency (A&E) departments to access health services in Wales, leading to a 6.8% increase in attendance year on year for the past 10 years.⁷
- > Between 2011–12 and 2012–13, the total number of NHS beds in Wales fell by 313 (3%) to 11,495, but the percentage occupancy increased from 85.2% to 86.3%. Over the decade from 2002–03 to 2012–13, the total number of NHS beds in Wales fell by 2,770 (19%).8
- > In general hospital settings, people aged 65 years and over currently account for 70% of the total bed days. An increasing number of patients are older and frail, and around 25% of inpatients have a diagnosis of dementia.9
- > There are 3.2 critical care beds per 100,000 people in Wales this is the lowest number of critical care beds per head of population in Europe, and yet demand for critical care is projected to increase, mainly as a result of an ageing population, at around 4–5% per year.¹⁰
- > There are high levels of poverty and health inequality in Wales: 680,000 people live in low-income households.¹¹ Research shows that people in the lowest socioeconomic groups have 7 years less life expectancy and live with 17 more years of ill health than those in the highest groups.¹² In Wales, 21% of adults smoke, and 58% of adults and 34% of children are overweight or obese.⁴

The NHS in Wales is facing a number of urgent challenges. Hospitals are struggling to cope with the combination of an ageing population and increasing hospital admissions.

The case for change in Wales

The NHS in Wales is facing a number of urgent challenges. Hospitals are struggling to cope with the combination of an ageing population and increasing hospital admissions. All too often, our most vulnerable patients – those who are old, who are frail or who have dementia – are failed by a system that is ill equipped and seemingly unwilling to meet their needs.

The RCP report *Hospitals on the edge? The time for action*¹³ set out the magnitude and complexity of the challenges facing healthcare staff and the hospitals in which they work, and the impact that this can have on patient care. It described:

- a health system ill equipped to cope with the needs of an ageing population with increasingly complex clinical, care and support needs
- > hospitals struggling to cope with an increase in clinical demand
- a systematic failure to deliver coordinated, patientcentred care, with patients forced to move between beds, teams and care settings with little communication or information sharing
- > health services, including hospitals, that struggle to deliver high-quality services across 7 days, particularly at weekends
- > a looming crisis in the medical workforce, with consultants and medical registrars under increasing pressure, and difficulties recruiting to posts and training schemes that involve general internal medicine.

The rural geography of much of Wales means that some of our specialist services are spread very thinly. This is having a negative effect on the quality of training and on workforce recruitment in some specialties. In addition, modern patient expectations grow higher as financial constraints grow ever tighter and, while advances in technology can save lives, the cost of running cutting-edge centres of excellent specialist acute care continues to rise.

The need for change is clear. The time has come to take action. Those working in the NHS have a responsibility to lead this change, supported by the organisations that represent them and empowered by national policymakers. Organisations and professionals involved in health and social care – including doctors, nurses, politicians, hospitals and national bodies – must be prepared to make difficult decisions and implement radical change where this will improve patient care.

Hospitals are more than bricks and mortar. They deliver expert care far beyond the walls of the building – the hospital is part of, not separate from, the community. Patients must have access to the expert care that they need, when they need it.

Guiding principles for the redesign of medical specialist care for patients

All service redesign must follow these basic guiding principles:

- > services should be as clinically effective as possible
- > services should be provided as safely as possible
- > services should be as convenient for patients as possible
- > services should be provided as equitably as possible
- > services should be as cost-effective as possible.

Organising safe, effective care around the patient

Tackling the unscheduled care crisis

Service reconfiguration in Wales must be clinically led and evidence based. Its implementation must lead to improvements in patient care and must not be primarily about cutting costs. These changes must be supported by measures which ensure that patients are still able to access high-quality services — including specialist, emergency and acute services — across Wales. This will require ongoing, genuine dialogue with clinicians and communities.

We know that a major cause of pressure in the unscheduled care system is the slow flow of patients through the acute hospital. Emergency department patients in Wales continue to suffer delays in receiving review by inpatient specialist teams and delays in being admitted to ward beds. A historical failure to invest in community services, the increase in complex transfers of care and changes to the provision of out-of-hours care have all contributed to fragmented pathways. Hospital services must now be redesigned using a whole-system approach that takes into account the impact of unscheduled care on other acute specialties. >>> continued on p 7

Caring for medical patients: The vision of the future hospital

In September 2013, the RCP published the final report from the Future Hospital Commission. This report, *Future hospital: Caring for medical patients*, laid out a vision of how hospital services should adapt to meet the needs of patients now and in the future.¹⁵

The RCP has established the Future Hospital Programme to implement the recommendations of the commission. These recommendations are based on the very best of our hospital services, taking examples of existing innovative and patient-centred services to develop a comprehensive model of care.

Putting patients first

In the future hospital, care should come to the patient and should be coordinated around their medical and support needs. Fundamental standards of care must always be met. The planning and delivery of care must be centred around the patient, not the organisation, and patient experience must be valued as much as clinical effectiveness: all targets should be driven by outcomes, not process. Access to clinical care should be as equitable as possible, and where effective specialist care can be delivered close to home, it should be.

Organising the future hospital

To coordinate care for patients, each hospital should establish a medical division. This new division should be responsible for all medical services across the hospital – from emergency departments and acute and intensive care beds, through to general and specialist wards. It should be led by a senior doctor (the chief of medicine), who would make sure that teams work together in the best interests of patients.

The responsibilities of the chief of medicine should include patient safety, staff deployment, patient movement and ensuring access to specialist and support services. They should be a practising, experienced clinician who will strengthen the links between physicians and the health board and they must be given sufficient financial and operational management authority to lead change, with strong cooperation from non-clinical managers.

The chief of medicine should be supported by a senior trainee – the chief resident – who will liaise between doctors in training and the chief of medicine and senior clinical managers. The chief resident will have a key role in planning the workload of trainees, medical education programmes and quality improvement initiatives.

Breaking down barriers

The medical division should work with partners in primary, community and social care services to put the patient at the centre of care, and its remit should extend to adult inpatients with medical problems, including those on 'non-medical' wards (eg surgical patients).

This will help us to work towards a new model of genuinely integrated care: that is, the 'free movement of information and expertise across the structural borders of primary, secondary, community-based and social care'. The NHS must now prioritise the development of health services that reach beyond hospital walls, with specialist medical teams working out into the community, in collaboration with professionals from primary and social care.

Patient-centred care should be coordinated through a new clinical coordination centre in each hospital. This should hold detailed, real-time information on patients' care needs and clinical status from hospital services, primary and community care, and mental health and social care, all held in a single electronic patient record.

Care for patients with multiple conditions should be coordinated by a single named consultant, with prompt input from a range of specialist teams when patients' clinical needs require it. Patients admitted in an emergency should receive a single initial assessment and ongoing care by a single team, with early review by a senior doctor, and they should be admitted to a ward that is appropriate for their medical needs. Hospitals should invest in more beds with access to high-intensity care and ensure nursing numbers that match patient requirements.

The right care, in the right place, at the right time

Once admitted to hospital, patients must not move beds unless their clinical needs demand it. All patient moves should be audited for clinical relevance and the audit results should be published on a monthly basis by hospitals. Patients should be transferred out of hospital accompanied by an electronic patient record, accessible by both hospital and community healthcare teams. This should describe any further care needed, as well as who is responsible for delivering this care. This patient record should be provided to the patient's named GP on the day of transfer.

Patients should have the same access to medical care at the weekend as on a weekday. Clinical staff and diagnostic and support services should be readily available on a 7-day basis, with a consultant presence on wards over 7 days, and ward care prioritised in doctors' job plans. Rotas for staff should be designed on a 7-day basis, and coordinated so that medical teams work together as a team from one day to the next.

Care for patients should focus on their recovery and enable them to leave hospital as soon as their clinical needs allow. Planning for this should begin as soon as the patient is admitted to hospital and should be reviewed throughout their hospital stay. Health and social care services in the community should be organised on a 7-day basis to enable patients to move out of hospital on the day when they no longer require an acute hospital bed.

To find out more about the future hospital, visit: www.rcplondon.ac.uk/futurehospital

Case study: Redesigning the local hospital

Some years ago, we found ourselves trying to provide acute medicine to a mainly urban, elderly population of approximately 100,000, including areas of major deprivation. Over the last 20 years, numbers of acute medical beds have decreased by 20% and community hospital beds by 50%, and emergency admissions have become more complex. Acute surgery, orthopaedics, major trauma and inpatient paediatrics were triaged some years ago to nearby regional hospitals. The hospital has faced major financial, clinical and medical staffing problems. We have had to constantly evolve to remain viable.

Prince Philip Hospital has 102 acute medical beds, 20 acute and rehabilitation stroke beds, and 25 rehabilitation beds. Our site includes the main hospital: front of house, the clinical decision-making unit, four acute medical wards, a combined acute and rehabilitation stroke unit, a general rehabilitation ward, elective minor surgery and day-case urology, an elective joint replacement service ward, a breast unit and a rheumatology unit. We also have a five-bed intensive treatment unit (ITU) / high-dependency unit (HDU) and a four-bed cardiac care unit (CCU), as well as onsite units for adult and elderly psychiatry.

The great majority of our work is unscheduled medical care. Although 'on-site' acute surgical support has not been present for 7 years, this has not been associated with any major clinical incidents. Major gastrointestinal bleeding and medical problems during pregnancy are diverted by the ambulance service to Carmarthen, which is 30 minutes away, and patients with ST segment elevation myocardial infarction or acute neurosurgical problems are triaged to units in Swansea or Cardiff.

We provide a mainly unselected acute medical intake, including 24-hour thrombolysis for stroke, 'collapse', out-of-hospital arrest and advanced respiratory disease. The acute take is managed by a team of ten physicians representing each of the five internal medical specialties. We are fully supported by a five-bed higher-care unit that is able to deliver advanced life support. This means that we are able to manage at least 90% of all medical emergencies, as well as facilitating discharge of these patients using well-developed links with the local community, social care and primary care staff.

We are replacing our emergency department with a model of joint working between GPs, emergency nurse practitioners and the medical team. This will provide more defined and efficient care for patients attending our hospital in emergencies. Consultant physicians are very involved with the emergency intake and approximately 60% of patients with emergency referrals are reviewed, investigated and discharged within 24 hours.

Rapid-access clinics and community services are well developed, although this means that the majority of acute medical beds are occupied by very frail patients with multi-pathology.

This is our main challenge at the moment, and one being faced at a time when social workers have been removed from secondary care and our level of therapy staff is possibly the lowest in Wales.

We run outpatient departments covering most medical specialties, including a rheumatology department for Carmarthenshire. We provide rapid-access outpatient services for neurovascular disease, chest pain, atrial fibrillation and suspected lung cancer, and we have recently introduced an emergency frailty service. We have well-developed interventional chest investigation and therapeutics services and our chronic obstructive pulmonary disease (COPD) service has won awards. All our services are fully supported by a radiology department providing emergency-access CT and MRI scanning, and elective coronary angiography takes place weekly. There is a full range of non-interventional testing for cardiorespiratory disease, including a sleep disordered breathing service for west Wales.

We have an active research unit with a dedicated clinical research centre. This has secured major pharmaceutical trials and has started bio-banking and biomarker studies. Clinical research fellows work alongside university researchers and we have appointed two postdoctoral fellows with Aberystwyth and Swansea universities.

Medical staffing concerns have had to be overcome. We do not have major recruitment problems, although, middlegrade cover for acute medicine has been challenging. We have tackled this by developing a hybrid of specialty registrars, 'home-grown' specialty doctors and clinical research fellows in respiratory medicine and in diabetes. We have also developed a highly specialist training post in interventional bronchoscopy to further support the rota.

Undergraduate teaching is recognised in all our job plans and we receive excellent feedback at all levels — from both Cardiff and Swansea medical schools and our junior doctors. Postgraduate studies are supported by regular MRCP(UK) teaching, and we try to make grand round and clinical teaching sessions inclusive and fun. Seven of the ten current consultant physicians were junior doctors at our hospital and have developed into a supportive team.

From a clinical point of view, it is often easier to introduce new treatments into a small hospital. For stroke, 24-hour thrombolysis was available at Prince Philip Hospital before most other hospitals in Wales. Attracting dedicated and high-quality consultants has allowed us to develop specialist skills and research.

After undergoing major reorganisational change over 20 years, Prince Philip Hospital has developed into a modern and sustainable district hospital with excellent training opportunities. Our experience has shown that you do not have to be in a major urban centre or have an on-site acute surgical presence to run a safe, effective medical intake.

Dr Granville Morris, consultant physician

Prince Philip Hospital, Hywel Dda University Health Board

Substantial investment in transport and emergency services, including the air ambulance service, will be crucial, and an all-Wales emergency transport plan must be a priority.

The district hospital of the future

In the future, there will be fewer hospitals with emergency departments in Wales. The wide range of specialist services that many hospitals now provide requires a critical mass of patients, which does not exist in many parts of Wales. Where this change is clinically led and leads to better patient care, we will support service redesign. However, patient access must not be compromised. Substantial investment in transport and emergency services, including the air ambulance service, will be crucial, and an all-Wales emergency transport plan must be a priority.

Excellent patient care will continue to be provided in district hospitals without an emergency department. These hospitals should routinely accept acute medical admissions, through minor injuries unit admissions or the ambulance service, or via GP referral. All acutely ill patients presenting for consideration of admission to hospital should be assessed for their suitability for outpatient and ambulatory (day-case) care.

Safe acute services for all hospitals

Any hospital with an acute take, whether selected or unselected, must provide level 2 and 3 critical care beds, including facilities for ventilation, and must have facilities to support patients in the event of sudden or unanticipated deterioration in their clinical condition. There must not be an unselected take without access to HDU/ITU facilities.

District hospitals with an acute take should ensure that they have at least two full-time equivalent consultants from each of the five acute specialties of cardiology, endocrinology and diabetes, gastroenterology, geriatric medicine and respiratory medicine to ensure robust cover arrangements and training opportunities.

Developing hub-and-spoke networks

Hospitals across Wales should work as a collection of formal, structured alliances operating hub-and-spoke, or integrated care, networks. However, remote and rural areas will still need district hospitals to provide acute medicine services, so health boards should prioritise patient safety by actively investing in these hospitals to secure confidence and attract high-quality physicians. Clinicians should share information and best practice within these networks, and those working at smaller hospitals must be able to access advice and support from colleagues working in the larger centres.

Minor injuries units must be actively supported by a nearby emergency department. This will help to relieve the pressure on the emergency department and acute medical unit at the regional centre, while ensuring a good flow of admissions to the district hospital.

A hospital with no acute surgery facilities can safely admit selected acute medical patients, provided that satisfactory transfer arrangements to another hospital are made for those inpatients who may require an urgent specialist review. Major regional hospitals must routinely accept transfers when requested without delay and health boards must closely monitor these transfer times. In practice, transfers from smaller district hospitals are very often delayed owing to the lack of available beds at regional hospitals. This can result in very ill patients being cared for in a hospital that does not have all the facilities necessary to manage their treatment safely.

Adapting to new ways of working

Hospitals without an acute take should replace their urgent and emergency work with increased elective and rehabilitation work. These hospitals must continue to provide the same high standard of care as acute units. Many physicians will need to work at more than one site, splitting their time between an acute medical unit in one hospital and their internal medicine and specialty work at another hospital. This will ensure that all physicians maintain their skills in acute medicine, wherever they are based.

Rising to the challenge: Three key calls to action

- > Service change must be clinically led and evidence based, and should be based on the Future Hospital model.
- > An all-Wales emergency transport plan must be a priority.
- > Health boards and politicians should invest in all hospitals with an acute take to ensure patient safety.

Physicians and specialist medical teams should spend part of their time working in the community, with a ... focus on caring for patients with long-term conditions and preventing crises.

Removing barriers to patient-centred care

Delivering specialist care in the community

Patients with complex and multiple conditions, including older patients with frailty and dementia, have the most to gain from greater collaboration and integration of services across professions and care settings. The focus of care should therefore be on the prevention of acute illness by providing more and better clinical care in the community.

Hospitals should be responsible for delivering specialist medical services for patients across the health economy, not only for patients who present to the hospital. Integrated working, shared outcomes and real-time communication of information with health and social care partners across traditional hospital and community boundaries should be the norm.

Increasingly, specialist care should be delivered in new and innovative ways beyond the walls of the traditional hospital. Physicians and specialist medical teams should spend part of their time working in the community, with a particular focus on caring for patients with long-term conditions and preventing crises. These teams will need to work more closely with community colleagues to provide direct patient care, advice and education.

In-hospital care should be for those patients who are too ill to be cared for in the community. However, this will require substantial investment in community healthcare. Currently, the older hospital inpatient with care needs can spend many days or weeks in hospital waiting for a start date for social care support at home, residential rehabilitation or a care home place. The inadequate provision of community social services in particular, along with a complex bureaucratic process, can mean that many patients, once admitted into hospital, experience problems in accessing social care support to help them move out of hospital. This can lead to loss of independence and a longer recovery time. 16

Planning for a patient's move from hospital should begin at the first consultant review, with a consistent emphasis on enabling patients to leave hospital as soon as they no longer need an acute medical bed. Integrated services in the community should support this objective, with continuing expert care delivered by hospital-based clinicians working outside the hospital in collaboration with primary and social care, if necessary.

Care of the older patient with frailty

Many older patients have multiple complex problems. Fragmented, disjointed care — with multiple ward moves, inconsistent teams and numerous clinical handovers — is bad for all patients, but poses a particularly high risk to this group. We know that older patients may be moved four or five times during their stay in hospital. This is a high-risk practice with known patient hazards.¹⁷ Furthermore, it can cause considerable distress and it is an inefficient and ineffective use of resources. Physicians report that a lack of continuity of care is their main concern.¹⁸

For the older patient, a prolonged period as an inpatient can be a life-changing event. Unfamiliar routines, noise, discontinuity of staff, uncertainties about their illness and leaving hospital, lack of sleep, and adverse effects of treatments can undermine physical recovery and functional independence. These patients are often, once they leave hospital, more dependent on long-term care in the community than they were prior to admission. Health boards should invest in alternatives to admission, including ambulatory (daycase) care and residential rehabilitation places, or rehabilitation provided to the patient at home.

When an older, frail patient is admitted, a comprehensive geriatric assessment should be carried out, and their acute care and rehabilitation managed by a specialist geriatric team. This would ensure that a detailed plan could be developed that will enhance their recovery. Carrying out one of these assessments has been shown to increase the chance of a patient returning home after admission.¹⁹

Patients who live in nursing or residential care and often have multiple morbidities and complex medical needs should have access to an enhanced primary care service from GPs, and to community services that should work closely with geriatric medicine physicians. Care plans should be shared between acute and community teams.

Rising to the challenge: Three key calls to action

- > More specialist care should be delivered in community settings outside the traditional hospital.
- > Integrated working and shared outcomes with health and social care partners should be the norm.
- > An increasing number of physicians and specialist medical teams should spend part of their time working in the community.

Supporting and developing the medical workforce

Tackling the medical workforce crisis

Physicians manage the bulk of adult emergency medical admissions into Welsh hospitals and almost all out-of-hours cover of adult wards. Most trainees combine internal medicine with another medical specialty (particularly geriatric medicine, gastroenterology, diabetes and endocrinology, respiratory medicine or cardiology) in order to gain dual accreditation. Physicians care for a wide variety of patients who may be suffering from any of a number of common disorders, may have multiple conditions or complex needs, or may represent a diagnostic puzzle; it is the physician's responsibility to coordinate these patients' continuing care.

However, in 2012, the majority of unselected acute and internal medicine in Wales was carried out by physicians practising in only six of the 30 physicianly specialties (Table 1).20

Table 1 Number of consultant physicians participating in the acute take in Wales²⁰

Acute medicine	19
Geriatric medicine	71
Diabetes and endocrinology	41
Cardiology	56
Gastroenterology	49
Respiratory medicine	56
Total	292

n=579 respondents in Wales

Internal medicine consultants are frequently referred to as 'generalists'. However, this term does not accurately reflect the substantial training and expertise required to do the job. Internal medicine should be recognised as one of the most important and most challenging specialties in acute care. >>> continued on p 10

... internal medicine should be recognised as one of the most important and most challenging specialties in acute care.

Case study: The chief of staff

Betsi Cadwaladr University Health Board (BCUHB) provides healthcare across north Wales to around 670,000 people with just over 16,000 staff members. It operates three district general hospitals and 18 community hospitals, with 121 GP practices in their area. The health board operates across 6,000 km² of rural and urban territory, and covers almost one-third of the landmass of Wales. It is the largest health board in Wales, in terms of both geography and population.

The position of chief of staff for primary, community and specialist medicine was created in 2009, after the formation of the new local health board. Eleven clinical programme groups were set up, each with a chief of staff. In this case, the aim was to bridge the historic gap between primary care, community and hospital services – indeed, the whole unscheduled care pathway - and the role was established to provide clinical leadership and to set a strategic direction for medicine, managing the day-to-day functions including finance, performance, governance, patient safety, health and safety, human resources and workforce.

BCUHB is divided into 14 localities, each with a GP locality lead, reporting to community-based clinical directors (and ultimately to the chief of staff). Each of the three district general hospitals also has a clinical director reporting to the chief of staff, who, in turn, reports to the chief operating officer. The health board has retained a board-level medical director alongside the clinical leadership model.

The chief of staff is responsible for 3,500 members of staff, including 110 consultants and 86 middlegrade doctors. This includes those working in medical specialties (including emergency departments) at the district general hospitals and community hospitals, and those working in GP out-of-hours care. The budget is around £189 million (2014/15). All 11 clinical programme groups work closely together and provide peer support to each other, as well as working with the primary care support unit, local authorities and the third sector.

The biggest challenge has been the sheer size of the role. There has been a real danger that the chief of staff for medicine is simply spread too thinly across a vast range of responsibilities and a large geographical area. To succeed, the role has to be 'doable' and attractive: it cannot be an 'add-on' to the day job. This is a senior leadership role and should be supported by personal development opportunities, including mentorship and coaching, as well as by managerial support and careful job planning. There has to be a clear career pathway that supports emerging chiefs of staff. >>>

Case study: continued

Being chief of staff has required an in-depth understanding of all services across primary, community and specialist medicine, as well as the ability to establish strategic partnerships with local authorities, the third sector and other stakeholders. We are moving towards more co-production in our service design, which means adopting a significantly different approach.

Being a budget holder can be liberating but, in a time of austerity, the need for savings can be a significant driver for change. This has been challenging at times because patient safety must always be the priority. It is also important to remember the difference between 'strategic' and 'operational' activity, and the chief of staff should not be asked to take on corporate responsibilities.

Over the past 5 years, we have implemented significant changes in community services and improved working between community and acute services. We are rolling out a telemedicine model of virtual clinics in rural areas, and end-of-life beds in community hospitals. The role, in effect, is that of a chief executive plus medical director – and it is both challenging and rewarding. Most importantly, it ensures that clinical leadership underpins the organisation.

Dr Olwen Williams, chief of staff for primary, community and specialist medicineBetsi Cadwaladr University Health Board

Comment: The chief of staff post for primary, community and specialist medicine at BCUHB is one possible model for the chief of medicine role described by the Future Hospital Commission.¹⁵ Many will approve of the clear operational responsibility as an opportunity to bring about change, and having budgetary responsibility is an important part of this. These chief of staff posts represent a serious commitment to clinical management by BCUHB.

However, asking one person to take on responsibility for hospital medicine and community services, while well intentioned, was probably over-optimistic. Furthermore, in a large health board such as BCUHB, it is important for the clinical leaders to remain closely in touch with their busy district general hospitals, which means that chief of medicine posts using this model will require adequate time in the job plan, with at least 50% of the week devoted to the management role.

Professor John Harvey, RCP service quality adviser, consultant physician

Wrexham Maelor Hospital, Betsi Cadwaladr University Health Board

Spreading the load of internal medicine

Internal medicine is increasingly perceived to be a high-stress specialty with an extremely high workload. In Wales, more than one-third of hospital consultants say that there are times when they feel as though they are working under excessive pressure, with one in eight saying this happens often.²¹ Almost two in five consultants tell us that they sometimes, often or always find themselves doing jobs that would previously have been done by a junior doctor.²¹

Urgent action must be taken to transform internal medicine into a high-status specialty. The workload of the acute take should be distributed more evenly between the medical specialties and not just in the few specialties that currently cover internal medicine. Health boards must take swift action to prioritise the acute take and ward cover in consultant job plans, although this will need careful planning to ensure that it does not come at the expense of specialty commitments.

More consultants with training in internal medicine would allow a more flexible acute service and would prevent the unmanageable workload of acute medicine falling on the few. In the future, consultants should be required by their employers to complete continuing professional development in internal medicine as well as their specialty²² and the majority of medical trainees should train dually in internal medicine and their specialty, supported by consultant supervision and feedback.

Case study: A 7-day consultant presence on the acute medical unit

The Royal Gwent Hospital in Newport has 700 beds, with 70–100 medical admissions every 24 hours. The hospital services a mainly urban population of 400,000.

Like many hospitals, our medical admissions unit (MAU) is facing the growing challenge of an increased number of admissions, a reduction in hospital beds, a decrease in junior doctors' hours, an ageing population, increased patient expectations and litigations, long waiting times, poor patient flow and the 4-hour A&E target.

Our solution, over 4 years, was to increase the consultant presence in our MAU and our emergency department to identify acutely ill patients earlier. By instigating a 7-day, 8am–8pm acute care physician presence in the MAU, we have improved the management of acutely ill patients and been able to facilitate early discharges to alleviate pressures in A&E and other specialties. We initiate clear management plans with escalation to level 2 or 3 if necessary, and we provide senior input at the front door on decisions about ceiling of care, resuscitation status, urgent radiological investigations and urgent specialty review.

Health boards must take swift action to prioritise the acute take and ward cover in consultant job plans ...

Physicians working in non-training middle-grade jobs should also be supported to develop their careers and enhance their professional skills.

Supporting the profession to deliver safe care

Patients deserve the same high-quality care in the evenings and at weekends as they receive during the week. Hospitals in Wales should move towards a 7-day consultant presence, especially in acute and emergency care.

Ward care should be prioritised in medical job plans, and a senior physician should be available to review acute admissions in the evenings and at weekends. Nursing staffing levels should be monitored and shown to meet NICE guidelines²³ and all hospitals should display both nursing and medical staffing data for each ward on a daily basis. Support and diagnostic services will also need to operate over 7 days to facilitate transfer out of the hospital setting as part of the move towards integrated health and social care. This will require substantial investment.

Rising to the challenge: Three key calls to action

- > The workload of the acute take should be more evenly distributed between the medical specialties.
- > Hospitals should move towards a 7-day consultant presence.
- > All hospitals should display both nursing and medical staffing data for each ward on a daily basis.

The acute medical team in the Royal Gwent Hospital has evolved from a team of two acute care physicians, one core medical trainee and one foundation year 2 doctor to a fully fledged team of six acute care physicians, one specialist registrar in acute medicine, one core medical trainee, one foundation year 2 doctor, two advanced nurse practitioners and three occupational therapists, with the support of the acute medical on-call team (which includes one foundation year 1 doctor, two core medical trainees and a specialist registrar).

The consultant body works in shifts of 4, 8 and 12 hours. Each consultant does one 12-hour consultant shift per week in MAU and one 8-hour shift in A&E, with a further 4-hour shift in our short-stay inpatient unit. At weekends, we provide 1:6 cover with a 4-hour shift on Saturday and the rest covered by the on-call consultant physicians. On Sundays, we provide a 12-hour presence in MAU and A&E.

There are specialty daily ward rounds by cardiology (including weekends), and neurology ward rounds three times a week. We can access fast-track radiology investigation follow-up clinics by acute care physicians on a weekly basis, rapid-response community teams and an intermediate care / frailty service provided by care of the elderly physicians.

The acute care physicians assess 70–80 patients daily, with a 25–35% same-day discharge rate. In addition, another 10% are discharged from our short-stay unit. Mortality rates within the unit during the first 24 hours of admission are between 0.1% and 0.3% and, most importantly, there is currently no difference in mortality during the week and at weekends.

The increased senior presence in the unit is providing a safe, high-quality service at the front door in one of the busiest district general hospitals in the UK. We have drastically improved the management of acutely ill patients in MAU and A&E, reduced mortality rates and ensured that there is no mortality difference at weekends, and we have ensured the early, safe discharge of stable patients. In addition, we have significantly reduced the pressures on A&E and other specialties.

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Dr Haris Saleem, consultant physician
Dr Mike Webberley, consultant physician
Royal Gwent Hospital, Aneurin Bevan University Health Board

Service reconfiguration in Wales will not be implemented successfully without transforming how we organise medical training posts in the future.

Training the next generation of physicians

Addressing the recruitment problem

Service reconfiguration in Wales will not be implemented successfully without transforming how we organise medical training posts in the future. Recruitment problems have resulted in unworkable junior medical rotas in some hospitals. This is the result of changes to junior doctor working hours under the European Working Time Directive (EWTD), a reduction in the length of training time due to the Modernising Medical Careers programme, and a fall in the number of international medical graduates coming to the UK due to changes in immigration rules. Between 2009 and 2012, the percentage of international graduates in core medical training (CMT) posts in Wales fell from 14% to 3%. Almost half of middle-grade trainee doctors in Wales think that, since the introduction of the EWTD, the quality of both training and patient care is either worse or much worse.

There are also geographical variations: while there are no difficulties recruiting in London, there are difficulties recruiting for many specialties in other parts of the UK. However, we do know that geography is important to trainees; most would like to gain a consultant post in the area where they have undertaken their specialist training.²¹

Improving the role of the medical registrar

The workload of the medical registrar is perceived to be greater than that of their contemporaries in other specialties. These perceptions actively discourage junior doctors from going into medical specialties that offer dual training with internal medicine. Regular gaps have begun to appear in medical training programmes – gaps that are filled by expensive locum staff. When asked whether financial incentives, improved use of technology or reduction in workload would make junior doctors more likely to become medical registrars, it is the reduction of workload that is cited by almost all as the most important factor.²⁴

It is time for the Welsh Government, the Wales Deanery, health boards and key stakeholders, including professional bodies such as the royal colleges, to draw up and implement a national medical workforce and training strategy. Without a strategic approach, workforce planning in Wales has become patchy and uncoordinated.

This will also help to address challenges of rotation: medical registrars tell us that the need to move between north and south Wales on rotation is very unpopular, especially for registrars who have families. The Wales Deanery must work with deaneries across the border to establish rotations with hospitals in England as a matter of priority.

Providing a world-class medical education

Hospitals in Wales must provide a suitable learning environment for trainees: junior medical rotas must have sufficient numbers of staff to be sustainable. The number of both medical undergraduate and CMT posts in Wales should be increased. Historically, there has been an inadequate number of CMT positions in the UK to subsequently fill specialist higher training posts. This shortfall is due in part to the progression of some CMT trainees into non-medical specialties such as general practice, radiology or clinical oncology. There is a deficit of around 250 posts each year at the core level in the UK, creating a specialist shortfall of 300 acute specialty posts.²⁵

Doctors of the future will need to be able to care effectively for older patients with complex conditions. Medical education and training should be designed to equip doctors with the expertise to manage older patients with frailty and dementia, and to lead and coordinate the 'whole care' of patients in hospital and the community. Training pathways specialising in rural and remote healthcare in Wales should be developed.

The Wales Deanery should continue to invest in medical leadership and training programmes such as the Welsh Clinical Leadership Training Fellowship scheme. More support should be offered for academic research and education training pathways, including the provision of requisite postgraduate courses. There should be research opportunities that are available to all trainees.

Rising to the challenge: Three key calls to action

- > The Welsh Government should lead the development of a national medical workforce and training strategy.
- > The number of medical undergraduate and CMT posts in Wales should be increased.
- > Training pathways specialising in rural and remote healthcare should be developed.

Case study: changes to core medical training

Service reconfiguration will not only affect where and how services are delivered to patients, but will also affect training sites by reducing the number of hospitals that provide training for doctors. In recent years, Wales has suffered from difficulties in recruiting junior doctors – in 2012, Wales filled only 72% of CMT posts. The CMT programme had previously been criticised for its lack of quality training, poor rotations and lack of support for trainees, so the Wales Deanery responded with a comprehensive reform of the entire programme.

The Deanery has developed self-contained CMT rotations in north, south-west and south-east Wales so that trainees no longer have to move from north to south Wales or vice versa. All trainees in south Wales will rotate through a tertiary centre in Cardiff or Swansea. Hospital reconfiguration has already allowed us to move some trainees into larger units, which has had major benefits for staffing levels in some areas.

The majority of CMT rotations are now based on 6-month placements. This allows the consolidation of experience in a single team. However, there are still some placements available for trainees to rotate in 3-month slots through some of the smaller medical specialties. We no longer place core medical trainees on emergency medicine rotas. Trainees told us that these postings were inappropriate for medical training, and limited their ability to pass the MRCP(UK) qualification. We have increased the opportunity for training in acute medicine for those interested in this specialty.

We have also reorganised educational governance, trainee assessment and support for core medical trainees. Each trainee now has a single educational supervisor for the 2-year programme. This provides continuity, better transfer of information at times of rotation and closer review of a trainee's development and training requirements. The supervisors have been selected for their interest in and commitment to training and are, in their turn, receiving specific training for their role. Each trainee now has two formal meetings with their college tutor and regional training programme director during their rotations. This helps us to identify any problems much earlier and gives us the opportunity to support trainees in preparing for exams.

We have also introduced new bimonthly, time-protected CMT training days in four centres across Wales. Each centre delivers its session on a different day of the same week, so, for those scheduled to be on call, there is the opportunity to attend in an adjacent region on a different day. Health boards and clinical and medical directors have been told that trainee attendance is mandatory and that their trainees must be permitted to attend. The training days are pre-approved for study leave by the Deanery and the material aligns to the CMT curriculum, providing training towards the requirements of the MRCP(UK) Part 1 and Part 2 written exams. We have also launched a new PACES training course that is repeated three times per year across Wales and will be available free of charge to all core medical trainees in Wales who have passed the Part 1 exam. In the last 2 years, 100% of CMT posts in Wales have been filled.

Finally, we have introduced a new academic CMT programme that offers 12 posts. These highly competitive posts offer a 3-year programme of standard clinical CMT, as well as training in research methodologies and the opportunity to carry out a research or educational project to Masters-level accreditation. This programme links CMT with the highly successful Welsh Clinical Academic Training (WCAT) posts and paves the way for trainees to pursue an academic career.

Dr Mike Page, outgoing head of the school of medicine Wales Deanery

... education and training should be designed to equip doctors with the expertise to manage older patients with frailty and dementia, and to lead and coordinate the 'whole care' of patients in hospital and the community.

Case study: Teleneurology in a rural area

In the more rural areas of Wales, the challenge of providing high-quality specialist services is not insignificant. Bronglais Hospital, in Ceredigion on the west coast of mid-Wales, serves a population of around 150,000 in Ceredigion, north Powys and south Gwynedd – our patients may travel for 2 hours or more to reach this site. There are eight physicians providing emergency medical care in the specialties of cardiology, respiratory medicine, diabetes and endocrinology, gastroenterology and stroke medicine.

Our tertiary referral centre for neurology is in Swansea – a round trip of about 150 miles. The road infrastructure is poor and, at many points in the year, the roads are full of heavy goods vehicles and holiday traffic. The consultant contract in Wales recognises travel from base to clinic time as a direct clinical care element; therefore, this round trip adds substantially to the allocation of direct clinical care time. To combat this, we have worked with colleagues in Swansea to establish a teleneurology clinic, which has been running for 6 years to date. Initially, we linked with one neurologist every 6 weeks and now we link with two neurologists roughly every fortnight. To date, two patients have also had an emergency teleneurology consultation.

The service is appreciated by patients, who do not have to travel, and by their carers (who do not have to take time off work in some cases). Also, the clinician does not have to travel for several hours to and from the clinic and this saves clinical time. An early survey to judge acceptability of this model showed that, of 36 patients on the waiting list who responded, 90% accepted and 10% declined – 5% preferring to travel and 5% preferring to see their own GP. After the service was established, a further survey of 24 patients who had used the service showed that, of 19 respondents, 100% were happy with the consultation and would use the service again.

From a local perspective, the service provides an invaluable educational opportunity. It means that a general physician can maintain a reasonable level of neurology knowledge to facilitate the local management of neurological emergency admissions. The clinics are, however, expensive (two consultants for each patient) and require the right environment to facilitate the videoconferencing medium used. The system is not suitable for all patients (eg those with hearing impairment or complex cases) but, for most patients most of the time, it provides a safe, efficient and effective means of bringing patient and clinician together. It is an innovative solution to the challenge of delivering a highly specialist area of medicine to a remote, rural community.

Dr Phil Jones, consultant physician

Bronglais Hospital, Hywel Dda University Health Board

Using information to support excellent care

The importance of accurate clinical data

Clinical data should be recorded in the patient record according to national standards²⁶ for structure and content; the patient's NHS number should be the universal identifier. The national standards for structure and content should be applied to data contained in case notes, handover documents and other formats.

A national terminology (preferably SNOMED-CT) should be used for clinical terms and, wherever possible, these should be automatically coded in electronic records made at the point of care. Where this does not yet happen, clinicians should ensure the quality of data by supporting clinical coding processes.

Processes should be in place to ensure that the clinical content of central returns is always validated by a clinician before release. To give clinical leadership, there should be a clinical lead for information and communication technology in every hospital, reporting to a chief clinical information officer at the health board level.

Developing a single, electronic patient record

All systems for recording data about patients should be electronic. As a priority, the NHS in Wales must invest in a standard electronic patient record and the electronic communication of referrals, outpatient letters and discharge summaries between primary and secondary care; this will save clinician time and improve patient safety.

Electronic records should focus on the individual patient, and not on their disease, intervention or the context of care, to support integrated care across disciplines and care sectors. Access to health records and alternatives to admission must be available 7 days a week.

Giving patients the information that they need

Patient records and information systems should be accessible to patients, and should enable patients and, where appropriate, carers to access and contribute to the information needed to manage their condition effectively. Patients should be able to communicate with clinicians and contribute to their record online if they choose to do so, in order to facilitate shared decision making and greater self-management.

Patients should also be able to book appointments, receive reminders and check test results online. They should be able to record and upload their own findings, such as weight or glucose levels. The development of an integrated record that is focused on the patient will also enable the development of a standardised summary of the patient record, thus ensuring that both the patient and their health and social care professionals are at all times fully aware of the essential aspects of diagnosis, investigation, treatment and advice given.

Clinicians should have full access to, and be fully trained in the use of, information systems and technologies deployed in the hospital so that they can make most effective use of patient records, aggregated patient data, peer-reviewed evidence and national guidelines at the point of care.

Performance targets should be driven by outcomes and not process, and derived from operationally recorded data. Clinicians at all levels should be educated regarding the importance of accurate record keeping, and the reasons that standards for structure and content are important. Hospital information departments should work with clinicians to understand and meet their information needs, which should be derived from structured, coded data.

Using new technology to improve care

Health boards should embrace innovation in information and communications technologies in order to improve communication with patients and between healthcare professionals, to develop new models of care and to improve quality of care and the patient experience.

Plans should be developed to ensure the appropriate use of technologies such as telehealth and teleconsultations to support people with chronic conditions, particularly those living in remote and rural areas, in order to enable them to better manage their condition at home, and to avoid unnecessary visits to hospital. A number of exciting telemedicine projects are taking place across Wales, including in the specialties of stroke medicine, dermatology and cardiology.

Rising to the challenge: Three key calls to action

- > The NHS must invest in a standard electronic patient record as a matter of priority.
- > Integrated patient records and information systems should be accessible to patients and carers.
- > Telehealth and teleconsultations should be more widely used to support people with chronic conditions, where this is appropriate.

Ensuring a culture of research and innovation

Recognising the value of research

Clinical research is an integral part of medicine, and a critical approach to the evaluation of evidence is a fundamental attribute for all doctors. All health boards should receive a regular report of research activity. An executive director should be made responsible for promoting research in the health board, coordinating activity across the hospital network, and reporting on research activity on a regular basis.

Clinical and research commitments of staff must be integrated. Careful planning and generation of capacity are essential in order to balance service delivery with high-quality training and to ensure that those undertaking research have protected time for this work, provided that the studies have full research governance approval. Academic opportunities should be available and attractive, and research skills promoted among medical trainees.

Patients should be made aware of all ongoing research activity in the hospital and should be given the opportunity to participate where appropriate. This includes observational studies, clinical trials and the use of data from patient records for research. The results of studies should be disseminated to patients who have participated.

Rising to the challenge: Three key calls to action

- > All health boards should receive a regular report of research activity.
- > Clinical and research commitments of staff must be integrated.
- > Patients should be given the opportunity to participate in ongoing research activity, where appropriate.

What next?

This RCP publication is just the first step in a wide programme of activity designed to achieve real change across hospitals and the wider health and social care economy in Wales. The RCP will take this forward by visiting hospitals across Wales as part of our 'local conversations' programme and meeting with as many fellows, members and trainees as possible to hear more about their work. The RCP is also developing its engagement with patients, placing them at the centre of all that we do.

On the RCP website, you can read about existing examples of innovative practice and listen to doctors talking about how they achieved change in their hospital. You can also inform the RCP's work in Wales by sending us your comments, ideas and examples of good practice.

Get involved

To help shape the future of medical care in Wales, visit:

www.rcplondon.ac.uk/wales

or send us your views: wales@rcplondon.ac.uk

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