



Welsh Clinical Leadership Training Fellowships (WCLTFs)

Project Outlines 2021/22



Welsh Clinical Leadership Training Fellowships (WCLTFs)

Health Education and Improvement Wales in association with Welsh Government and the wider NHS in Wales, is offering an exciting opportunity to undertake a Clinical Leadership Training Fellowship in Wales, working closely with Medical Directors, or equivalent. These Fellowships are designed to develop high quality clinical leaders for the future NHS. Graduates from the Welsh Clinical Leadership Training (WCLT) scheme will be ideally placed to build and lead developments and improvements in the delivery of health care.

The Welsh Clinical Leadership Training Fellowship (WCLTF) scheme is a one year out of programme for doctors, dentists, pharmacists and optometrists, that is designed to provide training and experience in Clinical Leadership and Management that will equip health professionals with a range of knowledge and skills required to undertake clinical leadership roles in the modern NHS.

The posts will represent a cohort of 'WCLTF' who will be able to preference leadership projects from a selection of proposals submitted by a variety of Health Care Organisations. Following discussions with the WCLTF Director successful applicants will be offered an appropriate project. Fellows will also be able to continue clinical duties up to a maximum of 20% of their time. Prior to applying for the Fellowship, applicants are required to obtain the support of their Training Programme Director (or employing organisation if pharmacy and optometry) in writing.

Candidates wishing to train flexibly are welcomed and should indicate this on their application.

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Project Title: Development of a sustainable multidisciplinary simulation model to support improvements in patient care

Medical Director: Dr Stuart Walker

Organisation: Cardiff & Vale University Health Board

Project Description:

Cardiff and Vale University Health Board (CAVUHB) is committed to the continual education and professional development of its clinical staff. The delivery of quality-assured, curriculum-driven, simulation-based training to the multidisciplinary team provides a mechanism for integrating training with improving clinical outcomes for patients.

The clinical leadership fellow will steer the development of an integrated simulation and clinical skills model, embedding the learning from critical incidents into improved clinical practice, resulting in improved patient safety and quality of care. The model will also provide opportunity to integrate the training of undergraduate and postgraduate medical staff with other medical and nursing professionals.

Simulation training allows learning from mistakes to occur within a safe, controlled environment. It is also highly suited to the development of non-technical skills and improved team-working. Errors in clinical practice can be induced by high workload, distractions, ambiguous communication and other human factors as well as failures in declared knowledge. Simulation training of the multidisciplinary team has been shown to provide a rich opportunity to introduce these elements into simulation scenarios in order for teams to better understand their impact, address them and so improve patient care outcomes beyond the subject under study.

In order to meaningfully use simulation training to reduce clinical errors there is a need for appropriate simulation capacity both in terms of facilities and faculty. The Medical Education Department at C&V UHB has invested over the last few years in developing state of the art simulation facilities and is currently running a “train the trainer” programme to improve departmental capability in addressing patient safety concerns. In addition, the Quality and Safety strategy aims to collate departmental clinical incidents and patient safety concerns in order that individual departments are able to tailor their learning to address them.

Game theory and simulation scenarios will be applied to design specific multidisciplinary teambuilding exercises that will address areas identified for improvement. Improved outcomes will be demonstrated via an ongoing audit cycle.

Following evaluation of an initial pilot exercise the programme approach would be extended to other multidisciplinary teams aiming to promote other relevant bundles of care to our patients.

This programme will be developed around 5 phases of work:

1. Identifying recurring themes in clinical incidents in conjunction with the patient safety team and departmental Q&S leads and developing bundles of care relating to these incidents.
2. Facilitating teamwork in delivering these bundles by designing multidisciplinary teambuilding simulation scenarios; particularly looking at non-technical skills and care provision.
3. Continue the development of multidisciplinary team simulation capacity at a departmental level through “train the trainer” courses.
4. Establishing a model for the delivery of these multidisciplinary team building exercises thus creating a template for the continuation of this process.
5. Report the progress of delivery of this multidisciplinary training to the medical education department and relevant clinical boards.

Immediate supervisor(s) for the project:

Professor Ben Hope-Gill, Consultant Respiratory Physician and AMD Medical Education
Ben.Hope-Gill@wales.nhs.uk

Project Title: Sustainable Healthcare

Medical Director: Dr Stuart Walker

Organisation: Cardiff & Vale University Health Board & The Centre for Sustainable Healthcare

Project Description:

On 30th April 2019 the Welsh Government declared a climate emergency following a meeting with UK and Scottish Environmental Ministers in Cardiff. The announcement draws attention to the magnitude and significance of the latest evidence from the Intergovernmental Panel on Climate Change. We now need actions which directly reflect the degree of urgency this emergency requires, for us to mitigate against a greater than 1.5 rise in average global surface temperature and prevent runaway climate change.

Wales has committed to a carbon neutral public sector by 2030. Much work is focused on energy, materials in buildings and travel but less on the carbon footprint of the clinical sector.

We as a healthcare community need to start placing planetary health and its citizens at the heart of every discussion.

To have an impact the changes we make need to be significant, wide ranging and across all aspects of healthcare delivery.

We need to be informed about how we can best decarbonise the delivery of healthcare and mitigate against our carbon footprint to achieve carbon neutrality by 2030.

To do this we need to become carbon literate, we need to embed planetary health into our understanding of human health, we need to understand the impact on the planet and future generations of the clinical decisions we are making today.

This post aligns both the Welsh Government and NHS Wales' policy of prudent healthcare and complying with the Wellbeing of Future Generations (Wales) Act 2015, Environment (Wales) Act 2016 and the Climate Change Act 2008.

1. This project will deliver this by engaging with the Welsh medical school and assisting with the implementation of 'the GMC's Outcomes for graduates 2018 which states that *"newly qualified doctors must be able to apply the principles, methods and knowledge of population health and the improvement of health and sustainable healthcare to medical practice."* **Please note:** Medical schools have until summer 2020 to make sure their curriculum meets the new *Outcomes for graduates*.

2. Focusing on two already identified carbon hot spots identified in the NHS long term plan: Metre dosed inhalers and anaesthetic gases.

3. Work with key stakeholders in the NHS, Welsh Government and Industry to embed a culture of sustainable healthcare as 'the norm'.

The project will focus on:

1. Education: working closely with the Centre for Sustainable Healthcare the fellow will develop opportunities to engage, educate and enthuse medical students and medical school staff about Sustainable Healthcare and Sustainability in Quality Improvement. Ultimate aim to embed sustainable value in the undergraduate curriculum as a core value.
2. Already identified QIPs: Two highlighted areas of carbon intensity in the clinical setting featured in the NHS long term plan which need addressing
 - a. encourage the use of 'greener inhalers'
 - b. 'greener anaesthetic practices'

Immediate supervisors for the project:

Dr Fiona Brennan, Anaesthetics Consultant
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Dr Dan Morris, Ophthalmic Surgeon
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Dr Frances Mortimer, Medical Director for the Centre for Sustainable Healthcare

Project Title: Evaluation of Medical Educational Governance Frameworks in a University Local Education Provider

Medical Director: Dr Stuart Walker

Organisation: Cardiff and Vale University Health Board & Velindre NHS Trust

Project Description:

Cardiff and Vale UHB (CAV UHB) is one of the largest tertiary teaching hospitals in the United Kingdom set across several healthcare sites. It provides a broad range of acute and specialist services to the local population of Cardiff and the Vale of Glamorgan and tertiary services to the population of Wales. It also provides postgraduate medical education to 706 trainee doctors and 4,400 undergraduate medical student clinical placement weeks each year.

The organisation explicitly aims to make the provision of excellence in medical education a high priority.

In the educational standards document Promoting Excellence (2015) the General Medical Council (GMC) placed educational governance at the heart of delivery of medical education by LEPs and recognised that high quality medical education is linked to improved patient outcomes (1). Therefore, all LEPS were obliged to develop their own educational governance structures and processes and domains within the annual GMC Training Surveys relate to educational governance. Both C&V UHB and Velindre NHS Trust implemented medical educational governance frameworks which share a number of features and have been commended by Health Education and Improvement Wales (HEIW). However, the effectiveness of these frameworks in improving medical education has not been formally evaluated.

The delivery of high-quality medical education in clinical NHS environments involves complex institutional interdependencies. There are a variety of stakeholders such as academic institutions and medical Royal Colleges which determine curricula content, professional regulators such as the GMC, Welsh Assembly Government and the public which all claim a stake in the “final product” of medical education. In addition, there are also complex individual interactions between high-level educators who determine the curriculum, those who direct training and trainers who deliver it; many of the latter group are clinicians who “broadly agree” to sacrifice clinical time to train the next generation of clinicians. However, service and other income generating activity may place pressure on clinicians to reduce their training and teaching commitment, although despite this many are highly dedicated to excellence in medical education.

Governance has been defined as “the process of decision-making and the process by which decisions are implemented (or not implemented)” (1). Therefore, a medical education governance framework has to consider how decisions are going to be made and implemented. This raises questions about whose voice is heard, what are the structures and processes, how is effective communication achieved and where does accountability lie? There is scant information in the literature regarding the strengths, weaknesses and effectiveness of medical education governance within the NHS and particularly the mechanisms of medical education decision-making and implementation in and by departments at NHS clinical sites (2). Whilst discussion surrounding pedagogy and content, primarily as it relates to undergraduate medical training, is well-served in the published literature, unless this is accompanied by a clear governance structure that enables implementation and change, efforts at improving training will be inhibited (3).

CAV UHB is a large, complex and busy organisation with high numbers of trainees and trainers, many of whom rotate through different posts frequently. This facilitates a rich learning experience with broad opportunity but provides additional challenges with respect to developing relationships, providing a consistently high-quality training environment and effecting change. We have developed an educational governance framework that devolves the implementation of training and change to key stakeholders at a clinical departmental level including training leads, clinical service leaders, senior nursing staff and trainees. Therefore, evaluating the effectiveness of the medical education

governance framework provides an opportunity to better understand the relative contributions of relationships, trust, structures and processes to effective educational governance within the NHS (4).

In this context the proposed project has the following specific objectives:

1. Describe the medical educational governance framework at CAV UHB.
2. Evaluate the effectiveness of the educational governance framework within the organisation at improving the quality of postgraduate training.
3. Identify the characteristics of good educational governance and inhibitors of educational governance (5).

Immediate supervisors for the project:

Dr Ben Hope-Gill, Consultant Respiratory Physician & AMD Medical Education
Ben.Hope-Gill@wales.nhs.uk

Project Title: Developing and implementing phase 2 of the HEIW Non-Medical Prescribing (NMP) Post-qualification Competency Assurance and Support framework

Medical Director: Dr Push Mangat

Organisation: Health Education & Improvement Wales (HEIW)

Project Description:

HEIW vision is “Transforming the workforce for a healthier Wales”. To achieve the vision HEIW has 6 strategic aims, 4 of which are externally facing and 2 predominantly internally facing and about how we work with others. This project will mainly focus on the four externally facing objectives which are:

- To lead the planning, development and wellbeing of a competent, sustainable and flexible workforce to support the delivery of ‘A Healthier Wales’
- To improve the quality and accessibility of education and training for all healthcare staff ensuring that it meets future needs
- To work with partners to improve collective leadership capacity in the NHS
- To develop the workforce to support the delivery of safety and quality



The project will also align to the one of the aims and goals of Pharmacy: Delivering a Healthier Wales to increase the numbers of pharmacists who are independent prescribers. The General Pharmaceutical Council (GPhC) in addition are revising the initial education and training standards for pharmacists to enable pharmacists to register as independent prescribers at the point of registration to practice .

Non-medical prescribing has been in place in the UK since 1992, allowing certain healthcare professionals, who are not doctors or dentists, to prescribe medicines, appliances and dressings. The programme of study to become an NMP within the UK is accredited by each of the healthcare professions regulatory body, who also set standards for healthcare professionals to reach prescriber status.

Prescribing is a complex skill with multiple factors influencing the healthcare professionals prescribing practice, including knowledge, skills and attitudes. The number of NMP healthcare professionals with this qualification continue to increase year-on-year to match the drive to provide a flexible, prudent workforce with the skills and knowledge to support the future needs of the citizens of Wales. This is reinforced in policy, specifically detailed within the Welsh Governments long term plan for Health and Social Care, *A Healthier Wales*.

There are more than 5,300 NMP across Wales with the breakdown per profession detailed below, (noting in brackets the sources of the data and date the data was made available):

- Pharmacists: 500 (General Pharmaceutical Council, 29/10/19)
- Nurses: 4704 (Nursing and Midwifery Council, 28/11/19)
- Midwives: 70 (Nursing and Midwifery Council, 28/11/19)
- Optometrists: 19 (NWSSP, 21/11/19*)
- Physiotherapists: 25 (NWSSP, 21/11/19*)
- Paramedics: 8 (NWSSP, 21/11/19*)
- Podiatrist: 1 (NWSSP, 21/11/19*)

* Data source only covers those healthcare professionals with prescribing number i.e. working in Primary Care or Community Settings or in Outpatient Hospital departments or clinics.

However, in Wales there is inconsistency across Health Boards with respect to the support provided to NMP's post-qualification and there is a lack of a clear mechanism for assuring ongoing competency in terms of clinical governance. This variation has been noted further in discussions with colleagues across the healthcare professions as a significant concern and barrier to enhancing the capability of the workforce.

The scope of this project will support the proposed HEIW business case to move to phase 2 of the work completed by the pharmacy clinical fellow during 2019/20.

The project supports HEIW's objectives to lead the planning and development of a competent workforce to support the delivery of *A Healthier Wales*, to develop the workforce to support the delivery of safety and quality, improve accessibility of support for healthcare staff to ensure future needs are met, and to work with partners to influence cultural change within NHS Wales.

Phase 2 of project (Proposed timescale September 2021 to April 2022):

- Consultation with stakeholders on the potential model of peer support and clinical supervision/mentoring and the phased implementation plan;
- Pilot and evaluate the potential model for peer support and clinical supervision/mentoring;
- Complete scoping exercise for the potential models of support for the remaining two components, extension of scope of practice and annual competency assurance.

Immediate supervisor for the project:

Margaret Allan, Pharmacy Dean
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Project Title: Developing the post-registration educational career pathways for pharmacy technicians in line with the National Pharmacy Strategy *Pharmacy: Delivering a Healthier Wales*

Medical Director: Dr Push Mangat

Organisation: Health Education & Improvement Wales (HEIW)

Project Description:

Based within the HEIW pharmacy deanery and directly accountable to HEIW Pharmacy Dean, this project will contribute to the government's response to the Pharmacy vision to deliver a Healthier Wales.

This project will contribute significantly to shaping the planning and educational development of the pharmacy technician profession post registration. It is essential that the career pathways for pharmacy technicians are developed at pace and in parallel to the development of the pharmacist career pathways. The redistribution of key tasks and skills within the pharmacy team is essential to ensure that the workforce provide the optimum pharmaceutical services for patients and citizen across Wales.

The clinical fellow will have opportunities to contribute and influence Welsh and UK strategic planning and be involved in practical delivery of elements of the HEIW pharmacy technician agenda. In addition, the fellow will be encouraged to contribute to the multi-professional educational agenda within HEIW.

The proposal is to immerse the Clinical Fellow in the HEIW educational workforce planning and development agenda with a particular focus on pharmacy. The Clinical Fellow would work closely with the Head of Pharmacy Technician education and training. The Clinical Fellow would be expected and have opportunities to make effective relationships across HEIW and NHS service organisations in Wales and UK, regulators, Welsh Government and professional bodies to deliver the project. This approach will enable the fellow to develop leadership and quality improvement skills.

Pharmacy: Delivering a Healthier Wales has been welcomed by the Minister for Health and Social Services and describes an ambitious agenda for pharmacy contribution to the goals of the Welsh Government's long-term plan for health and social care. The 10-year vision includes three-year implementation goals.

The vision is wide reaching and requires effective engagement with a range of organisations across the profession in Wales. Creating opportunities for more effective use of skills of pharmacists and pharmacy technicians to deliver improved outcomes (better health and reduced harm) through seamless pharmaceutical care, is at the centre of the vision.

Pharmacy: Delivering a Healthier Wales identifies a theme for workforce development and planning which underpins the goals and ambitions of the whole vision. The development of the pharmacy technician workforce is a critical part of delivering the goals and ambitions.



The fellow will work closely with the Head of Pharmacy Technician training to:

- Scope potential skill gaps between the existing initial education and training standards for pharmacy technicians and the new standards that will be implemented across Wales in 2021
- Identify any existing educational resources that could support the workforce to meet their skills gaps
- Recommend and develop modules of learning to meet the skills gaps
- Propose additional modules to meet the development needs of pharmacy technicians along their career pathway.

The Clinical Fellow will take ownership of the project ensuring all stakeholders are engaged across Wales. In addition, HEIW will provide opportunities to attend relevant UK wide and Wales meetings which inform the project.

Immediate supervisor for the project:

Margaret Allan, Pharmacy Dean
Margaret.Allan2@wales.nhs.uk

Project Title: Resource interoperability of simulation based medical education in Wales

Medical Director: Dr Push Mangat

Organisation: Health Education & Improvement Wales (HEIW)

Project Description:

HEIW Strategic Objective 2.1, as described in the Integrated Medium-Term Plan, aims to lead the development and management of a multi-professional infrastructure and strategy for simulation-based education.

The strategy outlines the need for building a network for accessibility of resources. Historically, the infrastructure and equipment has been maintained and used by specific users in different parts of Wales. These facilities vary from standalone units facilitating in-situ sessions, undergraduate centres, postgraduate centres to more bespoke units built for simulation-based training.

It is widely recognised that whilst simulation equipment is widely distributed across the NHS organisation and excellent simulation-based education is being delivered, it is largely fragmented and uncoordinated across and within Health Boards, Trusts and education providers in Wales.

Learning through simulation has developed over recent years and now embraces new technology and digital/virtual learning approaches. There are also clear benefits for healthcare staff learning together rather than in professional silos and hence HEIW is advocating a multi-professional approach to simulation-based education.

This project will aim to enquire current practice of interoperability with specific focus on equipment, staff, faculty and inventories. The project will then aim to facilitate conversations across different regions and practices to see how Interprofessional education can be encouraged by interoperability of resources.

It is widely acknowledged that simulation-based education is expensive, but it is also cost effective if used properly. Individuals can use simulation to replicate clinical scenarios to allow the acquisition of clinical skills through deliberate practice and learning from their mistakes without the fear of harming the patient thus improving patient care and safety. It is also recognised that trained staff are then less likely to make errors or life-threatening costly errors and it can reduce healthcare costs through improvement of individual or team competencies.

Simulation-based education has also been shown to improve skills and attitudes of healthcare workers. It trains and promotes multi-disciplinary work and can raise awareness of human factors issues around team working.

The vision of HEIW is “Transforming the workforce for a healthier Wales” which was developed through engagement with staff, stakeholders and partners. The NHS staff are pivotal in building a sustainable health and care system that can meet our future needs. Simulation based education is an important aspect in engaging and developing staff as described in the PEOPLE principle (Planning, Educating, Offering opportunities, Partnership working, Leading, Enabling and empowering)

It is therefore important that interoperability of simulation practice is looked into with the principle of accessibility in mind. There are different curriculums being delivered, different sites and equipment used, and different stakeholders involved. There is a need for the conversation to start regarding how accessibility can be improved by interoperability of work patterns. This will not only reduce the high cost of funding equipment and resources, but also encourage interprofessional education across all aspects of healthcare.

During the tenure of this post, the fellow will be part of HEIW's simulation team. The simulation team at HEIW includes the three Associate Deans for Clinical Skills and Simulation with two Associate Deans joining for nursing and allied health professionals. The fellow will also have the

opportunity to take part in strategic level meetings across HEIW but particularly within the Quality Unit. There will be an opportunity to sit in the Curriculum Strategy group meetings and understand the challenges and solutions of the interoperability of resources and systems across the wide range of specialties.

Immediate supervisor for the project:

Dr Suman Mitra, Associate Dean for Clinical Skills and Simulation

Project Title: Scoping any differential attainment issues within pharmacy education and training and providing recommendations for improvements

Medical Director: Dr Push Mangat

Organisation: Health Education & Improvement Wales (HEIW)

Project Description:

Based within the HEIW pharmacy deanery and directly accountable to HEIW Pharmacy Dean, this project will contribute to the work within HEIW to understand and address the emerging evidence that performance in healthcare examinations suggested that examination success could be influenced by the students ethnicity and place of undergraduate qualification.

This phenomenon is known as differential attainment (DA); this is the notion that healthcare students who are from Black or Minority Ethnicity (BME) backgrounds perform less well in professional assessments than their White UK trained counterparts.

This project will contribute significantly to scoping the problem within pharmacy education and training and provide recommendations to adapt educational programmes to meet reduce the attainment gap. The project will build and learn from the work completed by the Clinical medical fellow in 2019/20.

The proposal is to immerse the Clinical Fellow in the HEIW educational workforce planning and development agenda with a particular focus on pharmacy. The Clinical Fellow would work closely with the Associate Dean and Head of Advanced practice. The Clinical Fellow would be expected and have opportunities to make effective relationships across HEIW and NHS service organisations in Wales and UK, regulators, Welsh Government and professional bodies to deliver the project. This approach will enable the fellow to develop leadership and quality improvement skills.

The pharmacy regulator, GPhC, has produced evidence that indicates that BAME students perform less well in the pharmacist registration assessment. The evidence tends to show that where the students access their learning is a key influencing factor to success.

The pharmacy school's council is currently working on measures to address inconsistency within the undergraduate programmes but currently little has been done to consider the pre-registration year where the registration assessments currently takes place. The aligning of the undergraduate and pre-registration will be become more critical when the regulator implements the new initial education and training standards for pharmacists in 2021. This change will set learning outcomes over the full five years of education to the point of registration with independent prescribing competence signed off at end of the five years. This learning continuum means that all five years will need to consider addressing any potential attainment gaps.

HEIW is accountable for fifth pre-registration pharmacist year and for the delivering of the pre-registration pharmacy technician programme. It is therefore essential that differential attainment issues are considered, and the educational programme adjusted to address any possible attainment gaps.

The Clinical Fellow will take ownership of the project ensuring all stakeholders are engaged across Wales. In addition, HEIW will provide opportunities to attend relevant UK wide and Wales meetings which inform the project.

Immediate supervisors for the project:

Margaret Allan, Pharmacy Dean
Margaret.Allan2@wales.nhs.uk

Project Title: Infection and Prevention Control – Supporting NHS Wales and Social Care to minimise nosocomial infections

Medical Director: Dr John Boulton

Organisation: Improvement Cymru, Public Health Wales

Project Description:

Improvement Cymru has recently reviewed its priorities and is seeking to establish a new piece of work in response to the Covid 19 Pandemic. The aim of the work of NHS Wales to bring patients safely into care settings and reduce nosocomial infections.

This new programme provides opportunities for improvement in many aspects of health, with all health and social care professionals and will be working closely with other programmes within Improvement Cymru.

Whilst this post won't commence until September 2021. Whether there is a vaccine for Covid by then, the effects of the experience of the Pandemic and its impact on patient management will be felt for some time.

The COVID-19 pandemic has highlighted the complex interactions between infection transmission, its complications, its management and the use of antimicrobials. There are considerable challenges to the prevention of infection and appropriate antimicrobial prescribing in a healthcare environment and there must be a clear focus on the work of Infection Prevention and Control (IP&C) and antimicrobial teams strategically guided via PHW HARP team. Improvement Cymru will work closely with multiple expert stakeholders including the Healthcare Associated Infection, Antimicrobial Resistance & Prescribing Programme (HARP) team located within Public Health Wales NHS Trust and respective HCAI and AMR delivery boards to support NHS Wales. Improvement Cymru is currently working to develop its entire programme structure to focus on safety and minimise harm. Work on IPC blends with other strands of work in priority areas on patient flow, care homes, and cancer services.

The Aims of the Improvement Cymru Infection Prevention and Control programme are-

- To support health boards to bring patients safely into clinical settings and discharge from healthcare back to their usual place of residence.
- lower the burden of healthcare associated infections
- To improve the appropriate use of antimicrobials.
- To contain, control and mitigate antimicrobial resistance in order to maintain our ability to deliver health services.

The Improvement Cymru approach is to use small scale, Quality Improvement cycles with an emphasis on local engagement and measurement of process.

The Clinical Fellow would be integral in establishing and overseeing their own project in this area.

1. Work with and report to the nosocomial Delivery boards and CMO (Wales) led steering group.
2. Work with clinical / multi-disciplinary teams to undertake an improvement project working with clinical services to make a demonstrable change that will have a positive outcome on the patient experience – particularly during the pandemic.
3. Promote and communicate innovative practices in service improvement in clinical and managerial arenas – especially learning from Covid – this would include learning at a UK level and not just from NHS Wales.
4. Contribute to the embedding of antimicrobial stewardship and infection prevention and management as cornerstones of quality healthcare in Wales.
5. To work in collaboration with each organisation to develop a unified approach in supporting local change and improvement
6. To contribute to national workshops and events which will support services improvements.
7. To build relationships with Local Clinical leads and management

8. To meet with Health Board executive leads to discuss implementation of nosocomial strategy and interventions. To work with Improvement Cymru and Public Health Wales colleagues to ensure unity of purpose.
9. To report to Improvement Cymru on progress and outcomes.
10. To work effectively with the HARP team engaging with the national surveillance programmes for HCAI & Antimicrobial Resistance
11. Take opportunities to learn from COVID and develop the successes.
12. To represent Improvement Cymru at national and international forums.

Given the large scope of the nosocomial programme the actual project undertaken by the Fellow will depend, in part, upon their own clinical background. Possibilities include:

- Improvements introduced through the introduction and measurement of safety care bundles
- Improvements in sepsis treatment at the hospital 'front door' by implementing 'DRIPS' methodology and ensuring effective review of antimicrobial therapy and outcomes.
- Improving clinical behaviours around antimicrobial prescribing in primary care to support further reductions in total use of antimicrobials.
- Improving clinical behaviours around antimicrobial prescribing in secondary care using the 'start smart then focus' principles.
- Improving clinical behaviours around Standard and Transmission based precautions (SICP & TBP) against national guidance.
- Improving clinical behaviours in the management of invasive devices
- Utilise the all Wales sepsis registry to improve outcomes for sepsis survivors following hospital discharge.
- Focus on interventions to reduce Gram negative blood stream infections through evaluation of strategies to improve the diagnosis and management of urinary tract infections.
- Develop and implement strategies to effectively detect and manage Carbapenemase producing organisms, taking account of enhanced surveillance of CPO.
- Develop strategies to reduce infections and improve antimicrobial prescribing in primary/community and nursing home settings.

Work with academic institutions to develop education and training programmes that impact on the HCAI & AMR strategies.

Immediate supervisors for the project:

Dr John Boulton, Director of NHS Quality Improvement & Patient Safety/Director of Improvement Cymru
John.boulton2@wales.nhs.uk

Project Title: Improving the well-being of doctors in training

Medical Director: Dr Push Mangat

Organisation: Health Education & Improvement Wales (HEIW)

Project Description:

There is increasing emphasis on promoting wellbeing amongst the workforce, which has been crystallized as part of the quadruple aim in the Healthier Wales Strategy. The wellbeing of doctors in training remains high on the agenda, with recent GMC NTS demonstrating significant issues with burnout in trainees. With the current unprecedented impact of the coronavirus pandemic on the wellbeing of all healthcare staff, it is of critical importance to develop and implement coherent wellbeing strategies for the workforce.

Many studies estimate the prevalence of burnout in the trainee doctor population at about 30%. Furthermore, increasing numbers of trainees are taking breaks from training related to wellbeing with increasingly significant numbers taking time out following foundation training.

The aim of this leadership project is to scope out and develop appropriate interventions to support the wellbeing of trainees and reduce the prevalence of work-related stress and burnout. The successful fellow will be working closely with the Director of Medical Professional Support and Development and the Professional Support Unit of the Medical Deanery in HEIW.

The impact of any interventions is likely to be significant in terms of increasing wellbeing but also improving patient outcomes and safety.

This would be with a view to making Wales an even more attractive place to *#trainworklive* and supports the culture of looking after and valuing trainees.

The project aligns well to HEIW strategic aims in the 2020-23 Integrated Medium-Term Plan to lead the planning, development and **wellbeing** of a competent, sustainable and flexible workforce to support the delivery of 'A Healthier Wales'



The 2019 and 2020 GMC National Training Surveys highlighted concern regarding wellbeing in junior doctors, citing

“Long and intense working hours, heavy workloads and the challenges of frontline medical practice are affecting doctors’ training experience and their personal wellbeing.

Nearly a quarter of doctors in training and just over a fifth of trainers told us they’re burnt out because of their work.

Almost a third of trainees said that they are often or always exhausted at the thought of another shift.

*Well over a half of trainees, and just under a half of trainers, reported that they often or always feel worn out at the end of their working day.
A fifth of doctors in training and trainers told us they feel short of sleep when at work.”*

Numerous strategies and reports have been published looking at this important issue and making recommendations for improvement. These include amongst others:

- BMA Wales Fatigue and Facilities Charter
- Enhancing Junior Doctors Working Lives
- BMA Supporting Health and Wellbeing at Work
- GMC Caring for Doctors Caring for Patients

With the numerous strategies that have been published the aim of this project is to analyse the recommendations and plan a well-defined approach, working with the wider NHS in Wales, to implement these recommendations.

Immediate supervisor for the project:

Dr Ian Collings, Director of Medic Professional Support and Development
ian.collings@wales.nhs.uk

Project Title: Changing the System: Developing a national programme for rapid diagnostic centres in Wales to support early diagnosis of cancer for people presenting with vague symptoms.

Medical Director: Professor Tom Crosby

Organisation: NHS Wales Collaborative (Wales Cancer Network)

Project Description:

This proposal supports the QIPP strategic areas of **quality, innovation and productivity.**

- **Quality**

Evaluation of the Rapid Diagnostic Centre (RDC) pilots has demonstrated good outcomes for cancer patients, as well as positive patient and referrer experience. Currently there is no pathway for this population in Wales, which results in a longer time to diagnosis. Earlier diagnosis for this patient cohort leads to earlier treatment and improved patient outcomes.

- **Innovation**

The RDC model is underpinned by learning from international practice and has been modelled on the Danish 'three-legged' strategy¹ to support earlier diagnosis. The RDC model has been piloted in two health boards in Wales through funding via the Wales Cancer Network Pathway Innovation Funding.

- **Productivity**

Patients with vague symptoms that could be cancer are more likely to be identified through an emergency route or incidental finding, be at a later stage of diagnosis, and have longer primary care and diagnostic intervals². The Rapid Diagnostic Centre approach aims to provide rapid access to a range of diagnostic tests in a one-stop clinical setting.

Developing systems which expedite cancer diagnoses and treatment provide the foundation for strategies aimed to improve cancer outcomes. The Rapid Diagnostic Clinic/Centre (RDC) provides rapid access to a range of diagnostic tests in a one-stop clinical setting for patients with vague non-specific but concerning symptoms that could be indicative of cancer. A pathway for this population is currently lacking in Wales, which results in a longer time to diagnosis. Earlier diagnosis could result in identifying cancer at an earlier stage, leading to earlier treatment and improved patient outcomes.

The RDC is an innovative concept supported by a multi-professional team, integrated across primary and secondary care, and underpinned by learning from international practice modelled on the Danish 'three-legged' strategy introduced to support early cancer diagnosis.

Swansea Bay and Cwm Taf Morgannwg UHBs have successfully developed and delivered a 2-year pilot based on the RDC concept for their health population. Evaluations of the pilot have demonstrated that the model is both cost effective and vastly more efficient in reaching a diagnosis, leading to better outcomes and an improved patient experience.

The Clinical Fellow will be introduced to the Wales Cancer Network team and will work closely alongside the RDC project manager to further understand the value of this service within the NHS in Wales. They will support the national roll-out of the service through evaluation of individual health board models that have adopted the implementation specification and contribute to the development of a National Optimal Pathway aligned to the metric of the Single Cancer Pathway.

Context

Only 35 – 45 % of all cancers in Wales are diagnosed via the accelerated USC route. The majority of cancer patients present via other non-accelerated routes with a significant proportion having vague symptoms that do not fit the NICE Suspected Cancer Referral Guidance (NG12) recommended 'red flag' symptoms. Other patient groups present late as an emergency or are found to have cancer whilst being investigated for other signs/symptoms.

The introduction of RDCs provides a "low risk, not no risk" pathway where primary care has a gut instinct something serious is wrong, possibly cancer but no USC red flags for primary care to refer this cohort of patients.

Immediate supervisors for the project:

Professor Tom Crosby, Consultant Clinical Oncologist & National Cancer Clinical Director, Wales
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Project Title: The role of primary clusters and primary care optometry

Medical Director: Sali Walker (Chief Exec)

Organisation: Optometry Wales

Project Description:

Based within HEIW office, this project will contribute to the strategic work of the Welsh Government Sensory Policy Team who are currently undertaking a review of primary eye care services, including a review of all other National and Global systems of ophthalmic care.

The strategic programme for primary care (2018) describes 'Community optometric contractual reform rebalancing the need for cross subsidy of clinical services' as a priority and yet primary care optometry is not integrated in the least in local, cluster-based decision making

This work will support HEIW strategic objectives and will follow the current piece of work being delivered by a past Clinical Fellow who has looked at mapping the optometric workforce in Wales (also never done before).

The emerging themes in the Health and Social Care Workforce strategy are around Leadership, Education and Learning, Attraction and Recruitment, Valuing and Retaining the Workforce and Seamless Working are areas that have not been explored in detail within the profession. They need to be as a priority as challenges facing the eye care sector such as online sales of spectacles, auto refraction are threatening to change the delivery of optometric care. Whilst there are many opportunities to ensure the workforce are operating at the top end of their licence we need to re-visit the current way of working – which currently does not encompass local, cluster based commissioning and to look at what is possible when the optometric profession operates at the top end of their license. The National Wales Eye Care Service allows optometrists to detect, refer and manage most acute eye care presentations but at present, unless an Independent Prescriber is within a cluster area, that patient then needs to be sent to the GP for their prescription, to pay for it themselves or to go to the pharmacist and pay there. Clearly most patients are reluctant to do this and end up having to make an appointment with the GP when this could be done by using a cluster-based approach to commissioning. Many GPs still see patients with eye problems despite the fact they will probably not even have a slit lamp in their practice. The fellow would look at local and national 'best practice' approaches to better integration, to look at how cluster funding might be used to better develop pathways using optometrists and their underutilised skill sets.

This project would contribute significantly to shaping the way services are delivered, looking at existing models of practice and other primary care contractors and identifying ways in which we can offer parity across these service areas and better represent the wider multi-disciplinary primary care teams

The fellow will have opportunities to contribute to strategic, policy and relationship management and practical delivery elements of work across the 64 clusters of Wales

Immediate supervisor for the project:

Nik Sheen, Optometry Transformation Lead
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Project Title: Modelling the future needs for eye care in Wales and developing a service plan to meet the need

Medical Director: Dr Quentin Sandifer/Push Mangat

Organisation: Public Health Wales & HEIW

Project Description:

Based between HEIW and PHW, this project will contribute to the strategic work of HEIW to lead, develop and implement a sustainable national workforce plan for key shortage professional areas to achieve a better match between demand and supply in Wales. It also aligns with current work in the Welsh Government Sensory Policy Team to review primary eye care services, including a review of all other National and Global systems of ophthalmic care. Additionally, it will help inform contract reform work that is being carried out by Welsh Government in optometry, in line with other healthcare professionals such as dentistry. This work will support HEIW current pieces of work being delivered by a Clinical Fellow who has looked at mapping the optometric workforce in Wales.

Whilst there is increasing workforce intelligence of the optometric workforce, there has been very little modelling of the eye care needs of the population now and in the future. Indeed, across the UK there is a need to understand the future eye needs of the population as summarised in a recent paper (Buchan et al, 2019). There has been no modelling for the whole of Wales looking at each individual health board area and cluster. If new services are to be developed or existing ones expanded, particularly in Primary Care, then this modelling is required. Like all planned hospital operations and services, eye care has been hit badly by Covid-19 meaning patients with preventable sight loss are at risk of blindness.

This project would contribute significantly to shaping the way services are both being delivered, looking at existing models of practice and other primary care contractors and identifying ways in which we can offer equity of access to eye care services for our population.

The document will deliver a project that is in line with 'A Healthier Wales' and will emphasis what can be done at a local cluster level as well as in keeping with the aims of patients co-production and accessing primary care, closer to home instead of hospitals.

Reference

Buchan et al (2019). Failing to plan and planning to fail. Can we predict the future growth of demand on UK Eye Care Services? *Eye*. 33: 1029-1031. Accessed at <https://doi.org/10.1038/s41433-019-0383-5>

Immediate supervisor for the project:

Nik Sheen, Optometry Transformation Lead
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Project Title: Acute Medical Services Redesign: Maximising Ambulatory Emergency Care

Medical Director: Dr Dougie Russell/Dr Richard Evans

Organisation: Swansea Bay University Health Board

Project Description:

Ambulatory care is clinical care not provided in a traditional bed base that would otherwise have required a hospital admission¹. Ambulatory Emergency Care (AEC) applies this principle to acute care for patients with acute illness at risk of hospital admission who can be safely be managed via an outpatient management plan.

All GP referred medical emergencies for Swansea and Neath Port Talbot are admitted to Singleton Hospital. Unique in Wales, Singleton has the Acute GP Unit (AGPU) as a central element of the unscheduled care (USC) pathway. This unit already manages 30% of patients without the need for an admission. In addition to this a significant number of patients assessed by medicine are also discharged home the same day. The overlap of these same day (ambulatory) patients and those more seriously ill patients with physiological instability means that both groups can experience problems and leads to overcrowding of the Singleton Assessment Unit (SAU, the medical admission unit).

Analysis of current admissions case mix suggest a considerable opportunity for significantly increasing the number of patients on an ambulatory pathway, thereby improving the service for all patients. This will be the main focus of this project.

SBUHB has a developing clinical strategy, the Clinical Services Plan (CSP) which has design principles based upon the quadruple aims of Welsh Government's A Healthier Wales:

- Improve population health and wellbeing through a focus on prevention;
- Improve the experience and quality of care for individuals and families;
- Enrich the wellbeing, capability and engagement of the health and social care workforce;
- Increase the value from funding of health & care through improvement, innovation,
- Best practice and eliminating waste.

SBUHB design principles are:

- One system of care
- My home first
- Right person, right place right time
- Better together

Enhanced ambulatory pathways across SBUHB are aligned with these aims and principles to achieve better outcomes for patients

Enhanced Ambulatory Emergency Care is a fundamental plank of the Acute Medical Services Redesign (AMSR) component of Swansea Bay University Health Board's Clinical Service Plan. Singleton Hospital has a crucial role in delivering the CSP aim for increasing ambulatory care. This will build upon the AEC already delivered by:

- AGPU
- SAU.

There are other pockets of AEC that exist otherwise e.g.

- Medical Day Unit (MDU)
- Medical hot clinics in specialities
- Gastroenterologist of the day (GoD)
- Integrated Care of Older People (iCOP) the front door acute frailty service operating within SAU

But there has been no systematic approach to developing AEC as the default approach to care delivery.

Two recent pilots of increased AEC activity have sought to combine the AGPU, AEC consultants and a review of the Welsh Ambulance Service Trust (WAST) "stack". The stack is the list of calls made to WAST that have yet to be responded to. During the pilots an Advance Paramedic Practitioner, co-located with and supported by AGPU and AEC, was able to find alternatives to Emergency Department attendance for many patients.

Since these pilots, Swansea Bay is developing the Phone First service to schedule ED attendances by triage of potential attendees by experienced GPs to identify the most appropriate service for patients, including a much-expanded capacity for delivering AEC.

The overall objective will be to triage all unscheduled care cases by a combination of:

- Core General Practice
- Paramedics review at the scene
- WAST stack review
- Phone First
- AGPU
- AEC

This will enable to most suitable service for all the patients, improving the experience and outcome for patients and improving unscheduled care flow.

There are several elements that need to be addressed in order to achieve this goal.

- Capacity. Space in which to undertake AEC: Ambulatory Emergency Care Unit (AECU)
- Workforce. Developing a dedicated medical, nursing and other staff to deliver the service.
- Clinical engagement. Clinicians are key to running any service and supporting them to grow their AEC services is vital to securing success. The fellow will be vital in establishing senior and junior engagement with the AEC project.
- Pathways. Condition specific pathways are one element of AEC, another is the process approach where, regardless of condition, patients can be managed on an ambulatory pathway. To allow this to flourish we need to separate those patients expected to have same day discharge from those more unwell who are destined for more prolonged hospital admission.
- Integration. Close working of all the elements of the unscheduled care pathway is an essential pre-requisite of an integrated acute cares system.

The fellow will lead the establishment of effective ambulatory care.

- Characterising current provision
- Confirming the degree of unmet need in patients not currently receiving this pattern of care
- Defining the vision for the service to ensure an effective quality service. Review this in relation to
- Space requirements
- Workforce e.g. medical, nursing including advanced nurse practitioners, physician associates etc.
- Quality and performance indicators
- Describe a system, supported by digital solutions, that will lead to AEC being the default pathway
- Establish metrics to describe outcome
- Build this into a business case as a central component of departmental, unit and health board planning

Immediate supervisors for the project:

Dr Chris Hudson, Consultant Physician and Clinical Director of Medicine
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Project Title: Radiotherapy Quality Improvement and Hypofractionation in the South West Wales Cancer Centre, Singleton Hospital, Swansea

Medical Director: Dr Dougie Russell

Organisation: Swansea Bay University Health Board

Project Description:

Radiotherapy is a key treatment for cancer, responsible for achieving improved patient survival and quality of life. It can be used to: · try to cure the cancer completely (curative radiotherapy) · make other treatments more effective – for example, it can be combined with chemotherapy (chemo radiation) or used before surgery (neo-adjuvant radiotherapy) · reduce the risk of the cancer coming back after surgery (adjuvant radiotherapy) · relieve symptoms if a cure isn't possible (palliative radiotherapy). Delivering radiotherapy is a complex, multi-step pathway involving a wide multi-disciplinary team. The schema below shows the steps involved:



With demand for RT rising by approx. 3% year on year there have been considerable effort made to improve the pathways to increase capacity on the machine and considerable work has already been undertaken by a QI radiographer, who has been in post for the last 24 months in the SWWCC. They have identified and addressed issues that may be causing inefficiency and delays across the multi-disciplinary team. Some of the remaining issues require clinical (medical) input to resolve and the fellow will work with the management team to help address some of these issues.

As the capacity on the treatment machines has increased, the rate limiting step has become the clinician outlining and approval steps. Clinician job plans have traditionally included only one RT planning session a week and this does not fit with the change to shorter treatment pathways. In addition to the outlining time, there needs to be time to undertake peer review in keeping with recent Royal College of Radiologists guidance, which creates further time pressure. The fellow will work with the clinical lead and management team to look at how individual clinicians/tumour site team job plans would need to be modified to allow for more frequent radiotherapy planning time and peer review. They will also work with the clinicians to implement peer review in one or two additional tumour sites and work on the documentation to support the audit of these meetings.

The COVID 19 pandemic forced the UK radiotherapy community to look at what steps could be taken to reducing treatment times for common tumour sites such as breast and prostate cancer. Following the rapid publication of the Fast Forward trial, which had been open and recruiting in the SWWCC, we were able to reduce breast radiotherapy treatments from 15 fractions to 5 fractions ('hypo-fractionation'). The previous trial involvement meant we already had done most of the preparatory work and the changes could be made relatively quickly and easily. The move to hypofractionation for other tumour sites will require additional work, including clinician input. Radiotherapy is a complex process, requiring input from 3 main staff groups (Consultant Clinical Oncologists, Radiographers and Medical Physics Staff) for a safe and effective service. Although SWWCC specifically continues to lead the way in developing radiotherapy dosimetrist, physics and radiographer skill mixed roles in the radiotherapy pathway (review radiographers, radiographer and dosimetrist outlining, delegated approval of plan), the role of the clinician remains a key integral part of the radiotherapy team. Move to hypofractionation in tumour sites such as prostate, pancreas and lung require consultant expertise but the presence of a clinical fellow with the flexibility to support the different parts of the pathway when required will aid the implementation of these techniques much more quickly, as has been this, and neighbouring cancer centre's experience, in the past with other radiotherapy techniques. The fellow will work within the multi-disciplinary team together to provide the necessary clinical and leadership input to complete the necessary work.

There will be an outpatient clinic per week and the opportunity to participate in the on-call rota.

Immediate supervisors for the project:

Dr Sarah Gwynne, Consultant Clinical Oncologist, Clinical Lead & Radiotherapy Research Lead
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Project Title: Development of a national independent prescribing service and support in community pharmacy in line with the National Pharmacy Strategy *Pharmacy: Delivering a Healthier Wales*

Medical Director: Andrew Evan, Chief Pharmaceutical Officer, Wales

Organisation: Welsh Government

Project Description:

Based within the Welsh Government's Pharmacy and Prescribing branch and directly accountable to the Chief Pharmaceutical Officer, this project will contribute to the government's response to the Pharmacy vision to deliver a Healthier Wales. It will support the government to maximise the role of pharmacy professionals to deliver the aspirations of its long-term plan for health and social care.

This project will contribute significantly to shaping the development and consolidation of independent prescribing services within community pharmacies across Wales and how partners are successfully engaged to ensure the actions set out in *Pharmacy" Delivering a Healthier Wales* are progressed.

Additionally, the project will scope the development of community pharmacy teams providing wellbeing ambassador roles with skills in health coaching, health literacy, behaviour change and cultural awareness, including taking into account the patients language preference, so they are able to make every contact count for patients in Wales.

The Clinical Fellow will have opportunities to contribute to strategic, policy, legislation and relationship management and practical delivery elements of work as a full member of the Welsh Government's Department of Health and Social Services (DHSS).

The proposal is to immerse the Clinical Fellow in the Welsh Government DHSS working closely with the Chief Pharmaceutical Officer and Head of Pharmacy and Prescribing. The Clinical Fellow would be expected and have opportunities to make effective relationships across DHSS and NHS bodies in Wales and UK regulators and professional bodies to deliver the project. The approach will enable them to understand the Government's approach to leadership and quality improvement.

Pharmacy: Delivering a Healthier Wales has been welcomed by the Minister for Health and Social Services and describes an ambitious agenda for pharmacy contribution to the goals of the Welsh Government's long-term plan for health and social care. The 10-year vision includes three-year implementation goals.

The vision is wide reaching and requires effective engagement with a range of organisation across the profession in Wales. Creating opportunities for more effective use of skills of pharmacists and pharmacy technicians to deliver improved outcomes (better health and reduced harm) through seamless pharmaceutical care, is at the centre of the vision. The fellow will work closely with the Chief Pharmaceutical Officer and Welsh Government's Head of Pharmacy and Prescribing Policy to develop a plan, which ensures the aspirations of the vision are delivered appropriately. Specifically, the goals relating to the development of community pharmacy services and the implementation of wellbeing ambassador role.

The Clinical Fellow will take ownership of the project ensuring all key stakeholders are engaged across Wales. In addition, we will provide opportunities to attend relevant UK wide and Wales meetings which inform the project. The Clinical Fellow will be provided opportunities to fully understand the role of clinical leaders in a Government environment.

Immediate supervisors for the project:

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