



# “Working Prudently”

Allied Health Professions and Healthcare Scientists

# “Gweithio’n Synhwyrol”

Proffersiynau Perthynol i Iechyd (PPI) a Gwyddonwyr Gofal Iechyd

Strategic Framework  
2014 - 2017

Fframwaith Stratadegol  
2014 - 2017



**GIG**  
CYMRU  
**NHS**  
WALES

Bwrdd Iechyd Prifysgol  
Caerdydd a'r Fro  
Cardiff and Vale  
University Health Board



# Foreword

Dear Colleagues,

I am delighted to present the Strategic Framework for Allied Health Professions (AHPs) and Healthcare Scientists. "Working Prudently" sets out the key goals for our staff groups for the next three years, along with some examples of our teams delivering high quality healthcare that contributes to the prudent agenda.

The prudent healthcare concept is defined as: "Healthcare which is conceived, managed and delivered in a cautious and wise way characterised by forethought, vigilance and careful budgeting which achieves tangible benefits and quality outcomes for patients." (Bevan Commission, 2013). Put simply, it is about doing the right thing, in partnership with the patient and/or public.

Healthcare is facing challenges in terms of demography, technology and economics. We all need to be mindful of the Mid Staffordshire Inquiry in England and the Andrews Report in Abertawe Bro Morgannwg University Health Board; patient safety and experience must be assured as we continue to innovate. In developing the framework for AHPs and Healthcare Scientists, I have drawn on work developed by our Nursing and Midwifery colleagues, to ensure that all staff in the UHB have consistency of approach in delivering the UHB vision. This should be incorporated into Clinical Board Integrated Medium Term Plans.

I hope that this framework will be used by the Health and Care Professions Council (HCPC) regulated and associated professions in the coming months and years. I look forward to working with you all and seeing improved services delivered prudently. We need to embrace the future opportunities and challenges that the NHS and our professions face, and celebrate the unique contribution of AHPs and Healthcare Scientists to improving the lives of the people we serve.

Fiona Jenkins

**Executive Director of Therapies and Healthcare Scientists**

# Cyflwyniad

Annwyl Gydweithwyr,

Mae'n bleser gennyf gyflwyno'r Fframwaith Stratadegol ar gyfer y Proffesiynau Perthynol i Iechyd (PPI) a'r Gwyddonwyr Gofal Iechyd (GGI). Mae'r ddogfen "Gweithio'n Synhwyrol" yn arddangos prif amcanion ar gyfer ein grwpiau staff am y tair mlynedd nesaf. Mae e hefyd yn rhoi rhai esiamplau o sut mae ein timau yn darparu gwasanaeth gofal iechyd o safon uchel sy'n cyfrannu tuag at yr agenda synhwyrol.

Fe ddiffinir y cysyniad gofal iechyd fel: "Healthcare which is conceived, managed and delivered in a cautious and wise way characterised by forethought, vigilance and careful budgeting which achieves tangible benefits and quality outcomes for patients." (Bevan Commission, 2013). Yn syml mae'n siarad am wneud y peth cywir mewn partneriaeth a'r claf a/neu'r cyhoedd.

Mae gofal iechyd yn gwynebu sialensau yn nhermau demograffeg, technoleg ac economeg. Rhaid i ni i gyd fod yn ymwybodol o'r 'Ymchwil Canolbarth Staffordshire' yn Lloegr ac 'Adroddiad Andrew's' yn Abertawe, Bwrdd Iechyd Prifysgol Bro Morgannwg. Rhaid i ddiogelwch a phrofiad y claf gael ei sicrhau wrth ein body yn symud ymlaen. Wrth ddatblygu'r fframwaith ar gyfer (PPI) a Gwyddonwyr Gofal Iechyd rwyf wedi tynnu ar waith a gafwyd ei ddatblygu gan ein cydweithwyr o fewn Nyrsio a Bydwreigiaeth. Mae hyn yn sicrhau fod gan staff yn y BIP gysondeb yn eu dull o gario allan syniadau y BIP a rhaid i hyn gael ei gynnwys o fewn Cynlluniau Term Canolog Bwydd Clinigol Intergetig.

Gobeithiaf y bydd y fframwaith yma yn cael ei ddefnyddio gan broffesiynau sydd wedi eu reoleiddio gan y Cyngor Proffesiynwyr Iechyd a Gofal (CPIG), yn ogystal a phroffesiynau sy'n gysylltiedig iddo, yn y misoedd a blynnyddoedd i ddod. Edrychaf ymlaen i weithio gyda chi i gyd ac i weld gwell wasanaethau a ymwaredir yn synhwyrol.. Rhaid i ni fanteisio ar unrhyw gyfleoedd, yn ogysatal ac ar anhawsterau fydd y GIG a'n proffesiynau yn gwynebu yn y dyfodol. Rhaid i ni hefyd ddathlu cyfraniadau unigryw y PIA a Gwyddonwyr Gofal Iechyd er mwyn gwella bywydau y bobl yr ydym yn eu cymorth.

Fiona Jenkins

**Cyfarwyddwr Gweithredol o Therapi a Gwyddonwyr Gofal Iechyd**



# Our Staff Groups

AHPs and Healthcare Scientists in the UHB comprise more than 40 different professions, largely regulated by the Health and Care Professions Council. The Heads of Professions report to the Executive Director and Assistant Directors of Therapy and Healthcare Science in our HCPC forum to progress our collective agenda, which predominantly focuses on workforce developments, horizon scanning for novel and emergent technologies, service quality, patient experience and regulatory assurance.

AHPs and Healthcare Scientists work in a wide variety of clinical settings. Their work forms an integral part of nearly every patient pathway. They are largely autonomous practitioners and also frequently provide care as part of multidisciplinary clinical teams. AHPs and Healthcare Scientists perform highly specialist roles and are able to work at advanced practitioner and consultant level to maximise use of their skills working at the peak of their scope of practice to benefit patient care delivering high quality outcomes.

The AHPs comprise a collection of distinct professions who share common values but provide uniquely different contributions to health, social care and education. AHPs work with all ages, from the new born to elderly and, working across most specialities and Clinical Boards, engage with virtually every aspect of the services the UHB provides, as well as promoting and delivering key public health messages.

Healthcare science staff are a grouping of diverse professions spanning clinical psychology and counselling, clinical engineers and those undertaking a wide range of diagnostics procedure. Many of these professions are involved in a significant re-design of education and training through the “Modernising Scientific Careers” framework. These staff groups play a central role in safe and effective patient care, with 80% of all clinical decisions in healthcare being dependent on their work.



# Cardiff and Vale University Health Board

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Cardiff and Vale UHB has defined our purpose as “Caring for people, keeping people well”. The high level vision statement is:

*“In 10 years’ time the UHB will be seen as the UK’s leading integrated care organisation. It will have a deserved reputation as a highly trusted, expert and supremely capable organisation, which attracts and retains the very best people. The UHB will be acknowledged as a leader in keeping people well at or near home. It will provide primary and community physical and mental health services which are focussed on delivering this, which are backed up by hospitals that maintain high standards and which are able to deliver the high technology medicine those patients require. IT will enable the delivery of technology solutions that will empower patients and clinicians who work with them to achieve the best possible health outcomes. The quality of our teaching, research and innovation will be commensurate with our status as a leading healthcare organisation.”*

The UHB Integrated Medium Term Plan sets out our ambition for change over the next three years. It has been developed from individual Clinical Board plans, the UHB’s commissioning intentions and national priorities and policies. In addition we have said that we will work to provide the right care, in the right place and the right time, co-produced with our patients and public. ‘Prudent Healthcare’ has, therefore, been adopted as a fundamental driving principle by the Board, and one which the AHP and Healthcare Science workforce has embraced and will continuously develop.

## To support the UHB vision

AHPs and Healthcare Scientists will have the patient and the public as their primary concern, reducing inequalities and working in partnership with patients and the public aiming to achieve positive health outcomes for all.

- The AHPs and Healthcare Scientists will be accountable, skilled and flexible, always striving to work effectively and efficiently to provide safe, accessible and equitable care.

- AHPs and Healthcare Scientists will work in partnership to maximise the use of everyone’s talents and skills to improve the outcome for patients.
- AHPs and Healthcare Scientists will practice in an atmosphere of continual learning and development, maintaining up-to-date knowledge and skills ensuring they go from good to great.
- AHPs and Healthcare Scientists will demonstrate their commitment to continuous quality improvement and an ability to learn from experience and accredited sources of evidence.
- AHPs and Healthcare Scientists will continue to work together with partners to educate one another and develop the future workforce.

## Our Values

“Caring for People; keeping people well”

- We care about people we work for and the people we work with
- We trust one another
- We respect each other
- We take personal responsibility
- We treat people with kindness
- We act with integrity

# Our Expectations of the AHPs and Health Science Workforce

## As an AHP or Healthcare Scientist your duties require that:

1. You must act in the best interests of service users.
2. You must respect the confidentiality of service users.
3. You must keep high standards of personal conduct.
4. You must provide (to the HCPC and any other relevant regulators) any important information about your conduct and competence.
5. You must keep your professional knowledge and skills up to date.
6. You must act within the limits of your knowledge, skills and experience and, if necessary, refer the matter to another practitioner.
7. You must communicate properly and effectively with service users and other practitioners.
8. You must effectively supervise tasks that you have asked other people to carry out.
9. You must get informed consent to provide care or services (so far as possible).
10. You must keep accurate records.
11. You must deal fairly and safely with the risks of infection.
12. You must limit your work or stop practising if your performance or judgement is affected by your health.
13. You must behave with honesty and integrity and make sure that your behaviour does not damage the public's confidence in you or your profession.
14. You must make sure that any advertising you do is accurate.

## Strategic Goals

The goals have been developed to ensure that our patients are our primary concern and the focus of all our work. It is recognised that, unlike AHPs, not all Healthcare Scientists directly interface with patients and the public. Even so, the goals are equally applicable and reflect the important contribution of all our staff.



## Goal 1.

### Professionalism

#### AHPs and Healthcare Scientists will:

- Demonstrate professional attitudes through their behaviour, communication and appearance, acting as a role model for others.
- Promote confidence in their own abilities clearly demonstrating their competence.
- Be responsible and accountable for the delivery of safe, timely and supportive care provided directly by them or that which they delegate to others.
- Work to ensure safe, confidential and compassionate care promoting and demonstrating dignity and respect at all times.
- Create a culture for effective team working through their openness and honesty and the trust they develop amongst colleagues and the public.
- Participate in the education and development of the workforce, constructively question practice and escalate concerns where necessary.

## Goal 2.

### Caring and Compassionate

#### AHPs and Healthcare Scientists will:

- Provide timely, personalised and dignified care.
- Actively engage colleagues, patients/service users, their carers and the public by listening to and understanding their needs and expectations.
- Involve patients/service users as equal partners in their care pathway.
- Ensure that patients/service users, their carers and the public are at the centre of their care by asking 'what is important to you'.
- Act upon feedback to improve the experience and outcomes of care.
- Ensure where appropriate that they have the knowledge and skills to meet the needs of people with multiple and long term conditions.
- Use key performance indicators, to provide assurance that care is safe, timely, effective and comparable with the highest standards.
- Provide feedback to colleagues in a timely and constructive manner, promoting improvement in the way care is delivered and services provided.

## Goal 3.

### Making Every Contact Count

#### AHPs and Healthcare Scientists will:

- Use every contact with patients/service users and the public to promote health, well-being and recovery.
- Empower people to be as independent as possible, to manage their own health, develop healthier lifestyles and be active partners in their care.
- Recognise mental health problems and work to reduce the impact they have on a person's physical health and well being.
- Focus on the reliable delivery of care pathways, for example dementia, diabetes and stroke.
- Recognise and work to reduce the differences in health outcomes for socially isolated and disadvantaged members of the population.

## Goal 4.

### Clinical Leadership at all levels

#### Lead and Senior AHPs and Healthcare Scientists will:

- Act as guardians of high quality, compassionate care.
- Be role models of exemplary professional standards.
- Provide visible leadership demonstrating corporate and professional values, working across departmental and organisational boundaries to ensure the best outcome for patients/service users and carers.
- Create and support a culture where there is equal opportunity for AHPs and Healthcare Scientists to realise their leadership potential.
- Create an environment and culture that welcomes everyone's contribution to deliver innovation and high quality care.
- Develop a climate of openness in which concerns can be raised when things are not right and use this to improve dignity, efficiency and productivity.

### **AHP and Healthcare Scientist team leaders will:**

- Act as guardians of high quality, compassionate care.
- Be visible clinical leaders providing supervision to our workforce to ensure best practice at all times.
- Uphold and monitor the agreed professional standards of practice expected of the therapist and healthcare scientist workforce, implementing improvement plans where practice fails to meet the agreed standard.
- Be known to all patients/service users in their area of practice.
- Promote and enable collaborative working at team and cross organisational level to ensure the best outcome for the patient/service user and their carer.
- Act upon feedback in a constructive and timely manner.
- Use agreed clinical indicators and measures to demonstrate that care is safe, effective and comparable with the best in the NHS.

### **AHPs and Healthcare Scientists will:**

- Take responsibility for the care and service that they provide and be prepared to challenge the practice of others.
- Act as a role model for others, providing leadership, supervision and support for junior members of staff.
- Provide training, education and monitoring for staff to promote best practice.
- Ensure that patients/service users and carers in their area know who they are and how to seek assistance when needed.
- Be responsive to patient/service user and carer needs in a timely and courteous manner enabling confidence to be expressed about the service provided at each stage of the pathway of care.
- Seek out opportunities to lead quality improvement activity at local level.

### **AHP and Healthcare Scientist Support Workers Will:**

- Accept delegated duties and escalate concerns to the registered AHP /Healthcare Scientist in a timely and informative manner.

## **Goal 5.**

### **Value and Develop the Workforce**

#### **Lead and Senior AHPs and Healthcare Scientists will:**

- Use a value based approach to recruitment and appraisal, ensuring that attitudes and behaviours are in keeping with professional standards and patient/service users/public expectations.
- Identify and support the development and introduction of new and changed roles which address the needs of patients/service users and the public in a variety of care settings.
- Use clinical academic career frameworks to develop staff and deliver excellence in care, ensuring that all staff know the pathway options available to them.
- Undertake annual appraisals (PADR) with all AHPs/Healthcare Scientists providing feedback, setting of objectives and the identification of personal and professional development needs.

#### **AHPs and Healthcare Scientists will:**

- Ensure that they have an annual appraisal (PADR) which provides an opportunity for feedback, the setting of objectives (goals) and the identification of personal and professional development needs.
- Maintain a portfolio of practice which will be reviewed annually at the PADR and which registrants can use in HCPC re-registration.
- Participate in staff surveys to inform workforce development needs.

#### **AHP and Healthcare Scientist Support Workers will:**

- Participate in the annual appraisal process (PADR) taking responsibility for their own identifying learning needs.
- Participate in staff surveys to inform workforce development needs.



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## Goal 6.

### Service Improvement and Innovation

#### **Lead and Senior AHPs and Healthcare**

##### **Scientists will:**

- Take a lead role in identifying opportunities for improvement and implementing quality improvement activities.
- Support others to participate in implementation of activity which leads to improvements in patient experience and care outcomes.
- Promote innovation which aims to improve standards of care.

#### **AHPs, Healthcare Scientists and Support**

##### **Workers will:**

- Be aware that improvement is the business of all staff and which improves quality and productivity.
- Take opportunities to lead and/or support the improvement of care in their workplace, demonstrating a reduction in harm, waste, and variation.

#### **AHPs and Healthcare Scientists will:**

- Extend Research and Development activities strengthening our research capability and capacity.
- Create a climate for innovation through improved team working, continual learning and development, and the use of quality improvement methods.
- Engage with patients/service users and carers through innovative means, such as tele-health and social media, in line with UHB frameworks.
- Continue to learn, share and celebrate good practice through conferences and celebration events.
- Work with information technologists to develop technological innovations.
- Be a key partner in using technology to create healthier connections and innovations in healthcare.

# AHPs and Healthcare Scientists Working Prudently

The Health Minister set out his intention to introduce 'prudent healthcare' as a fundamental driving principle to care in Wales in his speech to the Welsh Confederation in January 2014. He has set a challenge to the NHS to adopt this approach and use it to enable better care, better outcomes and better value from our systems. It is set in the context of rising public expectation and demand at a time when public sector resources are diminishing.

The UHB Board, has set our mission as 'Caring for people, keeping people well'. We have set out our vision for our population and the care we provide in our Integrated Medium Term Plan. As part of this we have said that we will work to provide the right care, in the right place and the right time, co-produced with our patients and public.

The prudent health care concept has been developed by the Bevan Commission which defines it as *'Healthcare which is conceived, managed and delivered in a cautious and wise way characterised by forethought, vigilance and careful budgeting which achieves tangible benefits and quality outcomes for patients'*. Put simply it is about doing the right thing, with involvement of the patient and or public.

There are 10 or 11 key strands which could be used to develop the scale and systematisation required of a prudent health care approach, all of which have some level of programmed work within the UHB and its partners:

1. Prevention of ill health
2. Early intervention
3. Managing illness and end of life well
4. Variation ( understand and minimise variation in healthcare provision/intervention)
5. Demand (management of demand, particularly using thresholds and evidence)
6. Reduce intervention (use the minimum necessary to confer benefit)
7. Simplify intervention and care pathways
8. Knowledge/skill development to self-manage
9. Waste – use lean principles
10. Co-production
11. Shared decision making

We have mapped our current services against these areas and have identified some examples of where our

staff already adopt this approach to the provision of healthcare. These illustrations detail the breadth of our work, and outline the potential we have to embrace this agenda to transform healthcare in Cardiff and Vale. This will enable us to have a conversation about what further opportunities we have; where a change in focus could give significant value by utilising the skills of the AHP and healthcare science professions.

## Workforce modernisation in delivering vascular screening in Podiatry – early intervention prevents ill health and simplifies interventions for patients

As the complexity of patients seen within Podiatry increases, new innovative ways of working and diagnostics tests are required to identify problems earlier, allowing interventions to be implemented before complications set in. This is certainly the case for lower limb arterial disease within the smoking and diabetic population, where early diagnosis, changes in lifestyle and pharmacological interventions could potentially save a limb and ultimately the patient, as peripheral arterial disease (PAD) has been linked as an indicator for Coronary Heart Disease (CHD) and Stroke. Podiatry has partnered with industry to design



*Podiatry Support Worker performing 'Dopplex Ability'*

new ways of diagnosing lower limb arterial disease, which has seen the introduction of an automated system called the 'Dopplex Ability' into practice.

This allows diagnostic tests of blood flow to be undertaken in less time and is carried out by a Podiatry Assistant rather than a registered podiatrist without any loss of quality or safety issues. The benefits to the service is that more patients can be seen within the available staffing and also improve the experience for patients by combining this testing with other clinic appointments. The podiatry service is continuing to look at new innovative service delivery of arterial screening and is currently looking at one stop vascular screening clinics for patients with diabetes alongside retinopathy screening.

### Frail Older Persons' Assessment and Liaison Service (FOPAL) supporting early intervention and assisting in managing demand within the Emergency Unit

Nationwide in the next 20 years the number of those aged 85 and over is going to increase by two thirds. (National Population Projection 2010). More older people than ever are attending emergency departments and accessing urgent care services. 18 - 20% of the patients attending Cardiff's University Hospital of Wales Emergency Department are frail older people.

FOPAL (Frail Older Persons Assessment and Liaison Service) is a multidisciplinary Consultant-led team based in the Assessment Unit of the Emergency Department,

UHW. This service mirrors the established Leicester FOPAL Model, and is the only one of its kind in Wales.

The aim of the team is to prevent unnecessary admissions to hospital and facilitate safe discharge by offering rapid comprehensive older person assessments and improved decision making at the front door of UHW.

The team consists of occupational therapists and physiotherapists, specialist doctors and nurses in elderly care. Daily screening of all patients in the Assessment Unit is undertaken to identify those who meet the criteria of FOPAL. Patients are then assessed by the appropriate professionals with a sense of urgency. By ensuring timely engagement with families and carers, the team tries to prevent the collapse of informal support and maintain established community services. In conjunction with the patient and their family/carer, the FOPAL team take positive steps to maximise the level of independence of the patient. To facilitate this, the team has rapid access to step-up services in the community provided by the third sector, ECAS (Elderly Care Assessment Service) and the CRTs (Community Resource Team).

FOPAL has been a driving force in the development of a Medical Decision Unit on ward A1 UHW, which now includes hyper-acute FOPAL beds. These beds improve the patients' journey by allowing continuity of care, streamlined treatment and rapid discharge planning for frail elderly patients who require 24 - 48 hours of hospital care following an acute illness, prudently reducing intervention and minimising waste.





Cardiac Physiology- Rapid Access Chest Pain Clinics (RACPC) manages demand in order to free up medical capacity and reduces waste by removing inappropriate referrals



*Cardiac Physiologist explains ECG to his patient*

Patients with implanted cardiac devices are reviewed in clinic by cardiac physiologists. Recent technology allows the function of these devices to be assessed remotely from the patient's home. Rapid Access Chest Pain Clinics (RACPC) are traditionally nurse-led services across the UK and were implemented as a result of the National Service Framework. The service is designed to fast track patients who conform to the NICE criteria for exertional angina into a one stop clinic from diagnosis to treatment plan. The target from referral to appointment is two weeks. This takes a large cohort of new patients out of the Consultant workload, enabling them to see more complex patients in a more expeditious fashion. The service is open to all GP practices across Cardiff and the Vale of Glamorgan, as well as the Medical Assessment Units at UHW and UHL. The cardiac physiologist joined the team approximately 12 months ago, which has both increased the capacity of the clinic and facilitated a move towards more of a Multi Disciplinary Team approach. As a result of this service, there has been a

decrease in the number of inappropriate referrals for cardiac investigations because of chest pain, allowing improved access to these services for those in real need.

As a result of the success of this model, the cardiac physiologist has been asked to lead the development of a Rapid Access Palpitations Clinic (RAPC) which will be rolled out gradually across the UHB in the coming months.

Speech and Language Therapy Video fluoroscopy providing a multidisciplinary approach to reduce variation and demand which gives capacity for radiologist to undertake more complex procedures

Video fluoroscopy is a dynamic X-ray of swallowing function. Speech and Language Therapy (SLT) and Radiology combine skills and knowledge to compile an in-depth profile of the patient's swallow. This single entry is now uploaded on to the Clinical Portal, where it can be easily accessed by all relevant health professionals. This streamlined, safer reporting system forms part of the future planning of joint SLT/Radiography-led Video Fluoroscopy Clinics, an innovation which will free up Consultant Radiologists' time for other UHB initiatives.



*Speech and Language Therapist and Radiologist reviewing image of a patient's swallowing function*



## Clinical photography in wound care



*Clinicians and Medical Photographer reviewing pressure ulcers on line*

Clinical photography plays a pivotal role in supporting the care of patients with simple and complex wounds. Clear, accurate, standardised photography provides strong visible evidence of the effects of treatment and management.

In Cardiff and Vale the images, delivered through a secure intranet system to clinicians desktops, allow for remote monitoring of patients across the Health Board by the wound team. World expert, Professor Keith Harding, says: “Access to high quality clinical photography has made a real difference to my practice.” For patients, having good photographs to review can reduce the number of times the patient’s dressing needs to be taken down, therefore improving their experience. In the clinic setting the images are often used directly with the patients, many of whom have lived with their slowly evolving wounds for months and even years, so any visible sign of improvement can make a significant difference to how they feel.

## Art Therapy Hafal – a project that gives clients the knowledge and skills to self manage through shared decision making and prevent further ill health.

The Cardiff and Vale UHB Art Psychotherapy service works innovatively with HAFAL Wales targeting individual need to promote recovery. Partnership working increases opportunities for people to access local community resources, increasing community-based support with the aim of decreasing the need for inpatient admission. Making art within a therapeutic group helps increase self esteem, builds coping skills and decreases isolation, enhancing the clients sense of self through social interaction. Alongside Art Psychotherapy groups, an Arts in Health project is being facilitated to create a unique garden space by Art Therapists and Hafal at the National Museum of Wales St Fagan’s site, based on the theme of ‘Mindfulness’.

Arts therapists offer prudent and cost effective psychotherapy, reducing input by other health professions and thus increasing effective care. Clients who are referred to an Art Psychotherapist need not have previous experience or skill in art. The Art Psychotherapist is not primarily concerned with making an aesthetic or diagnostic assessment of the client’s image. The overall aim of its practitioners is to enable a client to effect change and growth on a personal level through the use of art materials in a safe and facilitating environment, co-produced and delivering prudent care.



*Art Therapist in partnership with Hafal*

Physio Trak: A web-based approach to supported self-care for rehabilitation of musculoskeletal knee conditions which will provide patients with knowledge and skills to self manage, thereby reducing demand and need for visits to hospital sites



*Research Physiotherapist Kate Button and Physio TRAK*

Knee injuries are common and frequently develop into chronic conditions. Physiotherapy is recommended but better use of modern technology within treatment is required to meet increasing demand, maximise effectiveness and empower patients to self-care. Therefore, the aim was to develop an evidence-based web application to support knee rehabilitation in collaboration with Cardiff University.

A staged approach was used to create TRAK using a mixed methods design:

**Stage 1:** Systematic review of the effectiveness of physiotherapy modalities

**Stage 2:** Design and development of TRAK ontology, a framework to collect coded data that formally model information relevant for knee rehabilitation.

**Stage 3:** Creation of a user interface for TRAK that includes a knowledge base, recovery tracker, support group, self-care plan and link to an iPhone 'app'.

**Stage 4:** Usability and acceptability testing of TRAK on 38 individuals (patients, physiotherapists and computer experts). Participants completed a series of surveys, timed tasks and think aloud session using TRAK.

Initial findings were positive; 89% found it easy to use, 96% found it easy to understand, everyone found it useful and 89% would recommend it to someone else.

The emerging themes were that TRAK could support face to face physiotherapy, provide reassurance; avoid time wasting during appointments and all participants commented on its value to support home exercise prescription. Funding applications are being prepared to allow full feasibility assessment, piloting and implementation within Cardiff and Vale UHB. Future advancements for TRAK include; incorporation of exercise videos, direct communication link to physiotherapy, question-answering system, individualised self-care plans and an Android version of the Smartphone app.

The TRAK app can be accessed at:

**<https://apps.facebook.com/kneetrak/>**

A training video for TRAK is available at:

**<http://tinyurl.com/trakvideo>**

This development demonstrates the ability of technology to transform the way patients can be supported in their rehabilitation, reducing unnecessary attendance in outpatient clinics, by co-producing treatment programmes and making better use of resources with improved outcomes for patients.

Operating Department Practitioners (ODP) take on the role of supporting surgeon helps to reduce variation and waste, thereby increasing the safety of patient care.

Operating Department Practitioners (ODPs) are an integral part of the Operating Department Team. They deliver high standards of individualised patient care and skilled support to the multidisciplinary team during the peri-operative phase of the patient's journey.

The ODP's role encompasses the application of theory to practice in a vast variety of clinical settings with a broad knowledge and skills base.

The ODP, when in the scrubbed role, will work alongside the surgeon, providing and being accountable for the correct instrumentation and materials in order to ensure safe and efficient completion of surgical procedures.

ODPs play a vital role in the assessment, delivery and evaluation of peri-operative care and demonstrate excellent communication and management skills.



Although the ODP historically works within the Operating Theatre environment, the role is evolving and their skills are being recognised in other areas such as Emergency Care Settings, Radiology, Maternity, Radiotherapy and advanced practitioner settings.



*Operating Department Practitioners preparing for surgery*

Dietitians Delivering X-PERT provide clients with the knowledge and skills to self manage which, in turn, gives them confidence in shared decision-making and preventing complications in the future.



The X-PERT Programme is a six-week programme based on the prudent principles of patient empowerment, patient-centred care and discovery learning. It meets the key criteria to fulfil NICE Guidance on structured diabetes education, NICE Quality Standard [March 2011] and the 2013/14 QOF indicators for diabetes alongside implementing Welsh Government's Diabetes Delivery Plan.

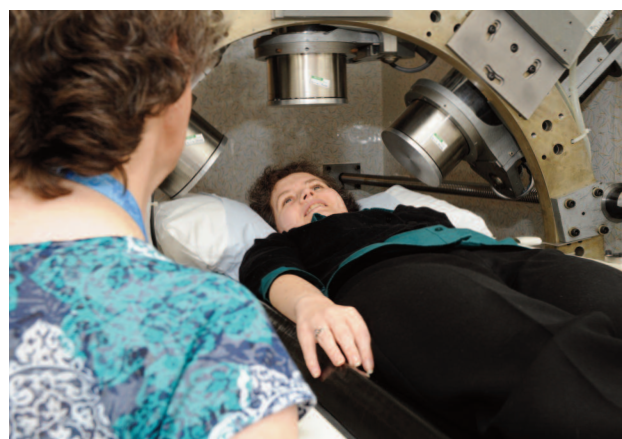


*Dietitians Delivering X-PERT*

The X-PERT Diabetes programme is a specially designed patient education programme to provide people with the knowledge, skills and confidence necessary to manage their diabetes. Participants are invited to attend 6 x 2 ½ hr sessions.

Implementation of the X-PERT programme has met audit standards. X-PERT is well attended and evaluated and results in improved clinical and empowerment outcomes amongst people with newly diagnosed and existing diabetes.

**Medical Physics' role in early intervention helps to prevent ill health and reduces interventions**



*Medical Physicist performing body radioactivity counter diagnostic test*

The measurement of bile salt absorption is important in the investigation of persistent diarrhoea. The test is done through the oral administration of a radioactive analogue whose presence in the body can be quantified accurately and precisely using a highly specialised whole body radioactivity counter. The counter in Medical Physics is the only functional one in Wales and one of only a few in the UK. Patient referrals come mainly from gastroenterologists and the referral rate has increased of late as a result, for example, of increased awareness of the side effects of pelvic radiotherapy. Bile salt absorption using a whole body counter is a non-invasive test whose results are used in the selection of the most appropriate management regime for patients who have a very distressing condition.

Speech and Language Therapist Memory Clinic provides clients with knowledge and skills early in their journey which improves quality of life and prolongs independence



*Speech and Language Therapist being observed, treating a patient with his carer in the memory clinic*

Speech and Language Therapists are key members of the multidisciplinary Memory Service at Cardiff & Vale UHB. The Speech and Language Therapist works closely with other team members, (specialist doctors, psychology, specialist nurses and a support worker), to carry out detailed assessment, contributing to timely differential diagnosis of dementia and other cognitive disorders.

For some people, difficulty with communicating and/or eating, drinking and swallowing can be a significant challenge. The Speech and Language Therapist will work closely with those individuals and their families/friends to maximise communication and provide support and advice on eating, drinking and swallowing; the overall aim always being to promote independence, empowerment and enable fulfilled lives. This is an example of how using the skills of the multidisciplinary team can enable people to live independently.

Stroke Rehabilitation Centre – Upper limb training using Saeboflex provides intervention to support upper limb rehabilitation, thereby supporting independence at an earlier stage.

Patients undergo upper limb task orientated rehabilitation with customised orthosis. This allows individuals suffering from neurological impairments, such as stroke, the ability to incorporate their hand functionally in therapy, in hospital and at home by supporting the weakened wrist, hand and fingers. This is a custom made fabricated orthosis that is non-electrically based and is purely mechanical.

The treatment principles are based on the latest advances in neuro-rehabilitation research documenting the brain's ability to "re-program" itself through intensive practice, task oriented arm training. This treatment is supported by evidence based research and allows patients to immediately begin using their hand for functional grasp and release activities. This demonstrates prudent healthcare, by modifying care pathways in the light of new evidence base which promotes improved outcomes for patients by increasing their independence and maximising their recovery, while also requiring patients to actively manage their recovery.



*Neuro - rehabilitation with an Occupational Therapist and Physiotherapist*

PRISM Therapy promotes independence and reduced interventions further along the care pathway.



*Physiotherapist treating visual neglect following stroke*

The above shows a patient undergoing prism adaptation therapy for visual neglect, which is a relatively common condition following right hemisphere stroke and associated with a poor functional outcome. This evidence-based therapy



requires the patient to wear prism glasses that induce a deviation of the visual field to the right, whilst carrying out a series of pointing tasks. Several studies have shown that this sensori-motor adaptation procedure improves neglect symptoms after two weeks of daily treatment. The box ensures that patients can see only their finger tips which has been associated with better outcome. Working with the patient to maximise recovery and reduce impairment, increases long term independence and self-care.

Skills for Life supports prevention of ill health and reduced interventions through delivery of health promotion messages by community based health and social care staff

**NUTRITION SKILLS FOR LIFE™** is an all-Wales service, developed and delivered by Registered Dietitians working in the NHS in Wales. It provides training and professional support to enable community workers from health, social care and third sector organisations to promote healthy eating and prevent malnutrition by incorporating evidence based, consistent food and nutrition messages into their work. **NUTRITION SKILLS FOR LIFE™** was a finalist in the NHS Wales Awards 2014. Promoting good nutrition is prudent in developing skills for the whole community to support healthy lifestyles.



**Nutrition Skills for Life™**



**Sgiliau Maeth am Oes**

SHINE/Back in Action providing patients with knowledge and skills to self manage through peer supported group work and a psychologically informed programme of exercise and support for people presenting with unremitting back pain.



*George Oliver and Graeme Paul-Taylor Physiotherapists with Jenny Moses Clinical Psychologist with their Health Foundation SHINE award and a back pain group.*

This back pain programme outlines collaborative projects involving patients, physiotherapists and clinical psychology. The Back in Action (BiA) Programme (or Functional Restoration Programme) is a multidisciplinary rehabilitation programme for people with persistent low back pain (LBP) advocated by NICE (2013). Aligned with prudent principles BiA embraces evidence based practice, enables people to self-manage their LBP, building their confidence and motivation to engage in activities important for their wellbeing and establishes a model of working in partnership.

The Shine project (funded by Health Foundation) aims to translate lessons learnt from BiA to physiotherapy services accessed from Primary Care. Adopting a similar model of care, where a patient's first contact is a 'rapid access' group intervention, it aims to ensure patients are aware of the options for therapeutic support and to build their confidence and understanding of self-care. Applying best current evidence it will use the START back tool to assess risk of disability. This tool has been shown to distinguish those who are at low risk of disability and require minimum intervention from those at high risk who need specialised support (Hill et al, 2010). The Health Foundation funding enables a major investment in evaluating this new service delivery approach and in training and mentoring physiotherapists whose attitudes and beliefs are known to influence clinical management of people at risk of disability with persistent pain.

Speech and Language Therapy Care Home Swallow Training is a simple intervention which enables early intervention to prevent ill health and hospital admission for frail older people and can support more dignified end of life pathway.



*Speech and Language Therapist undertaking swallow assessment*

The Speech and Language Therapists (SLT) in the Community Resource Teams devised a training programme for care home staff to raise their awareness of identifying swallowing difficulties in their residents and to know when to refer to SLT for a formal swallowing assessment. Residents in care homes in the Vale of Glamorgan requiring a swallowing assessment experienced delays because of poor recognition of swallowing difficulties and the need for care home staff to refer through their local GP.

A growing population of patients with dementia in nursing homes develop swallowing difficulties as part of their condition. This can cause aspiration pneumonia which is linked to patient mortality and can also lead to hospital admission. Nursing home staff had limited knowledge or awareness of how to recognise swallowing difficulties and what action to take.

The SLTs in the Vale Community Resource Service carried out this training over a year (April 2013-April 2014). 338 care home staff in 17 care homes were trained and an evening session was provided to capture further staff. Care homes are now quicker to identify swallowing difficulties in their residents, and

are able to refer directly to SLT rather than wait for GP referral. Although this resulted in an increase in referrals of 65%, care home staff are now referring 30% more than they were before and GPs are referring 32% less than they were before. This has ensured delay and hand over time is reduced and patient safety increased.

The swallowing awareness programme will be rolled out across the other Community Resource Teams, being prudent by reducing both harm to patients and variation in management.

### Flying start and speech & language

Early language development is one of the four core elements of the Flying Start programme. Indeed, it is outlined in the Flying Start Guidance Notes that there is wide evidence that early language development is the most critical factor to deliver the personal, social and emotional benefits of ALL the key measurable outcomes. As a multi-agency programme, the promotion of good speech, language and communication skills is acknowledged as being integral to the objectives of all team members and projects. Research evidence indicates that 50% of children from deprived backgrounds will have delayed language.

The Speech and Language Therapists (SLTs) are core members of the Flying Start team and their role is to;

- Ensure that other members of the team are able to identify and support speech, language and communication difficulties through training.



- Monitoring others in Flying Start in the promotion of good speech, language and communication skills.
- Provide parents with specific and practical strategies to develop language optimally through play.

SLTs have been working closely with staff within the child care settings. They have been running a course that provides a step-by-step approach to promoting children's social, language and literacy development during everyday activities. The adults learn how to create enriched interactive language-learning environments that include children with special needs, children who are second language learners and children who are developing typically.

The aim of the course is;

- To provide the adults with information on language, social and literacy development and on how best to promote these during everyday play activities, conversations and daily routines.
- To provide adults with opportunities to practice and apply newly learned strategies and approaches which promote children's language, social and literacy development, with feedback and guidance.
- To work together with adults as they plan and implement individual programs for children with specific needs.
- To give adults the opportunity to share ideas, issues and concerns with their colleagues.

The feedback from the child care staff has been very positive:-

"Of all the training I have received since working in childcare, it's the training that's had the biggest impact. The strategies were things we could implement straightaway and we have seen a real difference in the children."

"Some of the children who had language delay have now started speaking and are increasing their vocabulary."

"Since I have spent more time waiting I feel I have noticed attempts to interact and words they have attempted to say that I may have missed before."

"I am able to keep the children engaged in activities for longer and maintain conversations with them using techniques that I have learnt!"

"You get more interactions, language etcetera because they [the children] are not being pressured."

### Newborn screening laboratory develops test to reduce harm to newborn babies and reduces costs in the process

In 2013 the Wales Newborn Screening Laboratory developed and implemented a new testing protocol for the screening of babies for sickle cell disorders. The aim of screening is to identify babies with the disorder to ensure early treatment. The tests previously used identified babies with the disorder and those who were carriers of a sickle cell disorder. This approach had the potential to cause harm as well having significant cost implications.

This new testing protocol developed was based on tandem mass spectrometry and identifies only those babies who have the disorder. This protocol reduces the cost of the screening programme by preventing large numbers of carrier babies from being identified and avoids unnecessary follow-up testing and referral for genetic counselling.

The UK National Screening Committee endorsed the use of this new technology and testing protocol for the roll out of newborn screening for sickle cell disorders in Wales in June 2013. The findings from this work were published in *Clinical Chemistry*, the leading international journal of clinical laboratory science.





## Biomedical Scientists developing new roles to support personalised medicine.

Biomedical Scientists in Cellular Pathology have embraced role expansion including development of advanced skills in biomarker interpretation, tissue dissection and diagnostic cytology reporting. These skill sets have supported the further development of diagnostic, prognostic and treatment pathways and the move toward personalised medicine. Personalised medicine will ensure that medical decisions, practices and therapeutic regimes will be specifically tailored to the individual patient. This will improve overall health outcomes whilst simultaneously reducing health system costs through the effective use of drugs and a reduction in unnecessary healthcare interventions.

