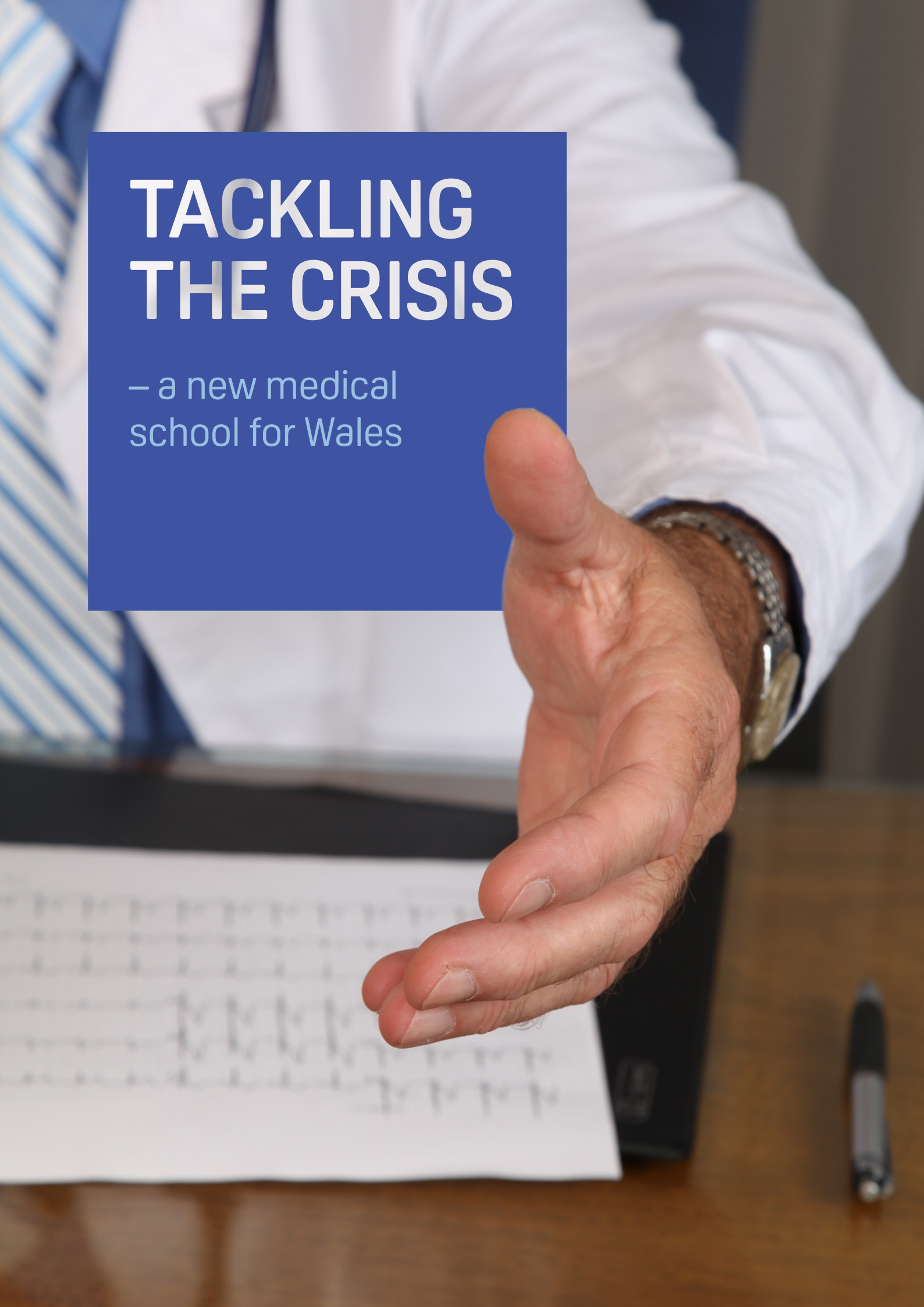


TACKLING THE CRISIS

– a new medical
school for Wales



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Headline points

- There is an acknowledged and long-standing shortage of doctors in many parts of the world, particularly general practitioners, and especially in rural areas.
- In rural Wales, GPs are on average older and closer to retirement than in other parts of the country and recruitment is lower.
- In countries across the world, medical training has been seen as fundamental both to recruitment and retention of general practitioners in rural areas.
- Similar solutions have been adopted where there are specific needs to meet the requirements of ethnic and linguistic groups.
- New rural medicine paths have been pioneered across the developed world, linked to long-term rural placements for medical students.
- Crucially, the most successful developments have involved establishing medical schools or campuses within the rural areas themselves.
- There are trainee vacancies in every acute hospital rota in Wales and NHS Wales is having difficulties in filling consultant posts.
- More hospital consultants are working flexibly or part-time.
- The number of students from Wales applying to study medicine has fallen by 15% in five years – a steeper drop than in the rest of the UK.
- A third of core medical training places were unfilled in Wales in 2016.
- A much lower proportion of Welsh medical school undergraduates are home-grown compared to the other UK nations.
- There is an opportunity to establish a medical school in north-west Wales, building on the resources of Bangor University's School of Medical Sciences and the resources of Betsi Cadwaladr University Health Board.
- A medical school at Bangor would help attract recruits from rural Wales, would embed students in rural areas at an early stage in their training and help retain practitioners in rural areas.
- The school could also specialise in rural medicine and train practitioners for work in bilingual communities.
- The school would be ideally placed to cater for the increasing demand for medical training aimed at outdoor pursuit emergencies.

1. 'Simply not enough doctors'

A consultant physician in Wales was quoted in The Royal College of Physicians report, *Physicians on the front line: The medical workforce in Wales* (2016). His comment captures much of the evidence in a wide range of documents published by the professions, the National Assembly and the Welsh Government itself: "Recruitment problems are threatening the existence of many hospitals and general practices in Wales. We need to train more doctors and nurses in Wales with the aim of retaining them to work here."

The Foundation Programme's Career Destination Report 2016 for medical students show a decline in successful F2 doctors opting for specialist training in the UK, from 71.6% in 2011 to 50.4% in 2016.

While much of the focus has been on general practice, there are shortages in hospitals too, in both general medicine and specialisms, despite an overall increase in consultants. These issues affect the whole of Wales, but are more acute in north and west Wales.

The National Assembly of Wales' Research Department encapsulated the overall issue in its document, *Key Issues in the Fifth Assembly*, May 2016: 'A sustainable workforce is the biggest challenge facing NHS Wales in the coming years... There are well-publicised concerns about staff shortages in some areas and whether the right numbers and roles of medical and healthcare staff are being recruited and retrained to provide care in the future.'

VACANCIES UNFILLED. In 2015-16 the annual census of consultants and higher speciality trainees showed that the NHS in Wales was unable to fill almost 40% of consultant physician posts advertised because of a lack of suitable candidates. In more than half of these, there were no applicants at all. In north Wales, 50% of such posts were unfilled. (*Focus on physicians: census of consultants and higher speciality trainees 2015-16*, December 2016)

Concerns have been expressed by professional bodies about recruitment in medical specialties such as paediatrics and general medicine and, even in the case of surgery consultants, 'on occasions there are issues with individual senior posts at some hospitals, especially smaller hospitals and those in more rural areas.' (Royal College of Surgeons, *The State of Surgery in Wales*, 2015)

EMPTY TRAINING PLACES – MUCH WORSE IN NORTH AND WEST WALES. The Royal College of Physicians reported that 'a third of core medical training [CMT] places in Wales were unfilled in 2016'. More detailed statistics show a major difference between hospitals in the health boards covering north and west Wales compared to the rest. A total of 54% of CMT training places were unfilled in hospitals in Betsi Cadwaladr University Health Board and Hywel Dda University Health Board compared to 23.6% in the other Welsh health boards. All seven hospitals in Betsi Cadwaladr and Hywel Dda health boards were above the national average. (RCP, *Physicians on the Front Line*, 2016)

MORE PART-TIME CONSULTANTS. More consultants are working flexibly or part-time, partly due to an increase in the number of female doctors – in 2015 33.3% of female consultants in Wales were working part-time compared with 8.8% of male consultants. (RCP, *Physicians on the front line*, 2016).

WORRIES FOR THE FUTURE. The prognosis is also serious as highlighted in NHS Wales's *Workforce Key Themes and Trends* published in January 2015:

- The report discusses 'concerns about age profiles of some parts of the medical workforce' and in the example it cites, Betsi Cadwaladr University Health Board and Hywel Dda University Health Board are both above the national average, Hywel Dda significantly so.
- 'Significantly more' Emergency Medicine consultants will be needed in Wales 'during the next few years. 'Wales' existing supply of new consultants would not be sufficient to meet an increased level of demand.'
- Modelling suggests a 'significant shortfall' too in consultant radiologists.
- The number of training places for much-needed experts in geriatric medicine fell in 2015. (*Physicians on the front line*, 2016)

FEWER TRAINEE DOCTORS. A shortage of trainee doctors is a major part of the problem, according to the Royal College of Physicians: 'Legislative changes to working hours mean that we need more junior doctors to cover hospital rotas... there are trainee vacancies in every acute hospital rota in Wales. RCP, *Physicians on the front line*).

THE COST OF AGENCY STAFF. Shortages cost. In order to make up for shortages in staff, NHS Wales spending on agency medical staff rose by 64% between 2014-15 and 2015-16 (RCP, *Physicians on the front line*) while the latest information suggests that Betsi Cadwaladr University Health Board will have spent more than £21 million on agency medical staff in the 11 months to the end of February 2017. (*Daily Post*, 18.4.17)

'SCANDAL' – DAMAGING MEDIA COVERAGE. Shortages often come to light in media reports which undermine confidence and staff morale. An example would be a report by the *Daily Post* 20.1.16, based on a Freedom of Information request suggesting that the three A&E departments in north Wales in one week in June 2015 were operating at below 50% of the recommended number of consultants.

Wide publicity was also given to concerns that the Obstetrics services in Betsi Cadwaladr University Health Board were becoming 'increasingly unstable', with shortages of doctors and difficulties in recruitment. (Gwynedd County Council *Cabinet Report*, September 2015)

NOT ENOUGH DOCTORS. The Royal College of Physicians summed up their conclusions in one sentence: 'There are simply not enough doctors out there'. (RCP, *Physicians on the front line*)



More training places, a medical school in north Wales

THE DOCTORS' VIEWPOINT

The Royal College of Physicians have made a series of recommendations in their report, *Physicians on the front line: The medical workforce in Wales in 2016*. They underline some of the problematic issues and offer clear solutions. Those recommendations include:

- Developing a national medical workforce and training strategy.
- Training a greater proportion of doctors in the skills of general medicine.
- Increasing the number of undergraduate and postgraduate training posts in Wales.
- Developing training pathways specialising in rural and remote healthcare in Wales
- Increasing the number of places offered to Welsh domiciled students.
- Rural medicine, especially in mid-Wales, should be developed as an advanced medical speciality.
- Increasing training numbers is clearly a long-term solution, as is the creation of a medical school in north Wales...

2. A crisis in general practice

Reports, anecdotal evidence and statistics all support the view that general practice is facing a crisis, especially in rural areas.

In Wales, the present training regime is not meeting the needs of many parts of north and west Wales for general practitioners in rural areas and for Welsh-speaking GPs because of a lack of uptake of training places by junior doctors.

In setting out to rectify shortages in GP recruitment the Welsh Government's Primary Healthcare Workforce Plan stated that 'practices in rural areas often have more pronounced recruitment issues'.

The difficulties recognized by the plan included a trend towards early retirement and part-time working, the popularity of selective locum work and poor perceptions of general practice.

MORE PART-TIME WORKING. The Welsh Government's *Statistical First Release, GPs in Wales 2006-2016* shows that, while the number of practitioners in Wales increased by 0.6% in 2015-16 and by 7% over the past decade, there is growing evidence that more current and future GPs wish to work part-time. This is supported by the British Medical Association's ninth Cohort Study which showed a 21.7% increase in part-time working between 2012-13 and 2013-14.

FEWER PARTNERSHIPS. The *Statistical First Release* shows that there has been an 11% fall in the number of GP partnerships in Wales over the last decade, from 496 in 2006 to 441 in 2016. This has led to an increase in the number of patients per partnership of 16.3% over the same period. Partnerships on average are dealing with more than 1,000 extra patients compared to ten years ago.

Whilst Hywel Dda University Health Board has only one practice with a lone partner, Betsi Cadwaladr University Health Board has 18. This represents 16.5% of all the practices in the board's area and is the highest percentage in Wales.

The campaign group GP Survival Wales reported that 20 practices were 'handed back' to local health boards in 2015-16. A total of 33 were handed back in 2010-2015.

Evidence taken from doctors working in north Wales suggests that the true precariousness of general practice partnerships is understated – practices are not admitting to capacity problems for fear of compromising recruitment. Dr Eamonn Jessup, chairman of the North Wales Local Medical Committee expressed fears for the sustainability of more than one-third of practices in the region. He also stated that another 70 GPs were urgently needed in north Wales (*Daily Post*, 6.3.16)

Other practitioners explain that larger practices are formed in part because of practice mergers as smaller practices collapse and there are concerns that single handed practices could cause isolation problems for the GPs concerned.

COMPARATIVELY FEWER GPs PER 10,000 PEOPLE. In the last year when figures are available for the four home countries – 2015 – Wales had the lowest number of GPs per 10,000 population at 6.4. The two Health Boards covering north and west Wales, Betsi Cadwaladr University Health Board and Hywel Dda University Health Board were both below the Welsh average on 6.3. (*Statistical First Release: GPs in Wales 2006-16*, 2016)

MORE LOCUMS. Both Betsi Cadwaladr and Hywel Dda have a higher than average level of GP locums. Betsi Cadwaladr University Health Board has the highest number of locums of all health boards in Wales – 150, a rise of 27 on 2015. (*Statistical First Release: GPs in Wales 2006-16*, 2016)

OLDER GPs. Wales has a higher proportion than the UK average of GPs over 55 at 22.2%. Both Betsi Cadwaladr and Hywel Dda have higher proportions than the Welsh average – Hywel Dda has the highest proportion of all the health boards at 28.4%. (*Statistical First Release: GPs in Wales 2006-16, 2016*)

The General Medical Council's 2016 *State of Medical Education and Practice* report stated that 43% of GPs in Wales were aged 50 years and over compared with a UK average of 39%.

In January 2015, the Royal College of General Practitioners warned that 47% of general practitioners in the Dwyfor region of Gwynedd were over 55 years old and expected to retire soon. In Wrexham, the figure was 33%. (*FOI reply 2016*)

TOO FEW WELSH-SPEAKING GPs. The all-Wales average for the number of Welsh-speaking GPs per 10,000 Welsh-speaking patients is 6.6 doctors. The numbers are below this average in rural county council areas where there are high numbers of Welsh speakers – Anglesey, Gwynedd, Conwy, Pembrokeshire and Carmarthenshire. The numbers for Betsi Cadwaladr and Hywel Dda health boards are 6.1 and 5.7. The three highest figures are in board areas close to the existing medical colleges – Cardiff and Vale University Health Board 7.8, Cwm Taf University Health Board 7.9 and Abertawe Bro Morgannwg University Health Board 9.1. *Statistical First Release: GPs in Wales 2006-16, 2016*

NEGATIVE ATTITUDES TOWARDS GENERAL PRACTICE. Many GPs have expressed concern about negative attitudes at medical school towards general practice. A report commissioned by the NHS in England underlines this perception and calls for a new emphasis on general practice training. A new medical school in north Wales could provide a similar focus. 'Medical students want a career in general practice to offer intellectual challenge, academic status and diversity. Their current experience of primary care at medical school fails to meet these expectations.' (*By choice – not by chance*, NHS, Health Education England, 2016)

Of 6736 respondents in The Foundation Programme's *Career Destination Report 2016*, only 15.4% opted for GP training in the UK at the end of their second Foundation Year, compared to 20.2% who had stated this as a preference at the start of their first Foundation Year.

INCREASING DEMAND. The King's Fund's report on the *Medical Workforce*, foresees even greater demand: 'The changing nature of primary care and demographic pressures indicate that more GPs will be required by 2035 to meet a doubling of the number of GP consultations ... The supply of GPs is under growing strain as the workforce ages.' (King's Fund Website, accessed April 2017)

FUTURE NEEDS UNMET. In January 2015, a NHS Wales report suggested that, according to a conservative estimate, Wales will need 30% more entry-level GP speciality training posts, while other estimates suggested an increase of 50% to match increases in England. (*Workforce Key Themes and Trends*, January 2015)

A VICIOUS CIRCLE. Unless addressed, the medical community is warning that the shortage of rural general practitioners will lead to greater strains on those in rural practice: 'There is a real problem in parts of Wales where it is almost impossible to recruit now, and in those areas there are real signs of despondency.' Dr David Bailey, deputy chair of the General Practitioners' College Wales, quoted on *GPonline*, March 2016.



Choice means a doctor or not

A DOCTOR'S VIEWPOINT

Dr Karen Penry, a GP in Aberystwyth and GP Training Programme Director for Aberystwyth's 3-year GP Vocational Training Scheme, including south Gwynedd.

"We have spaces to train 6 GPs per year. Of the 18 available places, only 4 have been taken up at present with another 4 due to take up places this autumn. Of these, one has a primary medical qualification from Cardiff, the other three from England, Pakistan and Romania. This reflects the recruitment problems we have had over the last few years. As well as changes in immigration laws, one reason had been a decline in interest in GP training by British graduates, with a high percentage either deferring entry, choosing other types of training or moving abroad to work.

This is disappointing as I estimate that there are probably about 10 young people a year from this area going to medical school but very few, if any, return.

There are serious recruitment issues locally - the last few times our practice has advertised, we have not had a single applicant. Attracting someone who speaks Welsh is even more difficult, even though we understand that communication in a patient's primary language is critical, especially with elderly people and small children. Recruitment in some practices is so poor that choice can mean seeing a doctor or not.

It is now much more difficult for international graduates to apply for training places in the UK, even though these doctors, after obtaining their further qualification, would often stay to work in and support medical care in rural areas.

Bronglais District General Hospital in Aberystwyth also has significant recruitment problems. Many of the staff are internationally trained.

One way to increase interest in rural working would be to encourage medical school applications from pupils from rural backgrounds. The current system for recruitment to medical schools varies widely. Some, eg Cardiff, have historically relied on GCSE results as one criteria for shortlisting which can bias against prospective students from rural areas – the high number of A* Grades required for shortlisting can be difficult even for bright children who are from comprehensive backgrounds where they are not specifically groomed and trained as public school pupils are."

3. The case for a new medical school

- There are 136 GP training places per year provided by NHS Wales. In its document *Transform General Practice, 2016*, the Royal College of General Practitioners Wales has recommended an increase to 200 places. Their aim is 500 more full time GPs in Wales by 2021-2022.
- NHS England is already responding to its own recruitment shortage with an increase of 1500 medical student places. New private medical schools are also coming on line in England – Buckingham University and Aston University are two examples.
- Across the world, governments are responding to similar shortages by increasing training opportunities. In rural areas, which face very similar problems to Wales, new training institutions are being founded.
- These medical schools are being established in the rural areas themselves – adapting existing structures does not work.
- The new medical schools are succeeding in recruiting students from rural areas and, to a greater degree than in other medical schools, are retaining them in general practice in rural areas.

TRAINING IN WALES. Only 25% of admissions to Cardiff Medical School in 2016 were from Wales. In 2016, 65% of admissions to the Medical School at Aberdeen University were from Scotland. A 2013 report for NHS Education in Scotland showed that Welsh medical schools had the lowest percentage of home-grown undergraduates – 30%, compared with 85% in Northern Ireland, 80% in England and 55% in Scotland. (*Domicile of UK undergraduate medical students*, March 2013)

FEWER APPLICANTS FOR MEDICAL SCHOOLS. There was a decrease of 13% in applications from Wales for places at medical schools in the UK in 2016, remaining steady for 2017. This contrasted with a fall of only 1% across the UK. The decrease in comparison with 2014 was almost 20% in Wales. Commentators have suggested that these statistics represent frustration at admissions criteria, especially in the two Welsh medical schools, and a lack of encouragement and information at secondary school level. UCAS figures show that applications from Wales fell by 15% in the five years to 2016. (UCAS cycle applicant figures 2016, 2017. RCP, *Physicians in the front line: The medical workforce in Wales in 2016*, 2016)

NORTH WALES LOSES OUT. The Royal College of Physicians has found evidence that trainee doctors are sometimes unhappy to move. As both medical colleges are at present in south Wales, this causes particular problems: ‘medical registrars report that moving between north and south Wales is very unpopular, especially when families are involved.’ (*Physicians on the front line*, 2016)

RURAL SOLUTIONS FOR RURAL SHORTAGES. Research into recent developments has shown that the shortage of GPs in rural areas is best met with specifically rural solutions.

‘Producing more physicians in the cities and expecting the excess to spill over from urban to rural areas has not solved rural medical workforce shortages ... One key series of initiatives that has been shown to be effective is rural-based medical education ... Studies in different countries have shown that the three factors most strongly associated with entering rural practice are: (1) a rural background; (2) positive clinical and educational experiences in rural settings as part of undergraduate medical education and (3) targeted training for rural practice at the postgraduate level.’ (The Northern Ontario School of Medicine: *Responding to the Needs of the People and Communities of Northern Ontario*, R Strasser, J. Lanphear, 2008)

SHORT RURAL PLACEMENTS NOT ENOUGH. ‘It seems that programs that offer short rural exposure will continue to be found ineffective on their own in shaping students’ career choices and practice location decisions, whereas programs with longer and more intense rural exposure and a more carefully designed rural curriculum will be found to be more effective.’ (*The Link between Rural Medical Education and Rural Medical Practice Location: Literature Review and Synthesis*, Raymond W. Pong, Ph.D Denis Heng, MSc Centre for Rural and Northern Health Research, Laurentian University, 2005)

The report refers to two successful examples:

- University of Washington, School of Medicine - Among the 24 graduates from rural training tracks, 83% were in rural practices.
- University of Calgary, School of Medicine - Students with a rural background who subsequently graduated from a rural family medicine clerkship at the undergraduate level were approximately 2.5 times more likely to enter rural practice than their urban background peers.

FUNDAMENTAL CHANGE. ‘The solution needs to be a fundamental change in the way that we select and prepare medical students for community service. Internationally, the countries that have successfully addressed these problems have done it by introducing a new medical education model rather than adjusting existing programmes.’ (Prof. Neil Quigley, Vice-Chancellor, University of Waikato, *New Zealand Herald*, 22.3.17)

FROM RURAL AREAS, IN RURAL AREAS, FOR RURAL AREAS. ‘Recognizing the three factors most strongly associated with entering rural practice after training, NOSM views its education and training programs as spanning the life cycle of the physician in Northern Ontario. This begins with programs that encourage Northern Ontario high school students to envision themselves as future doctors and therefore motivate them to work hard to achieve the academic requirements to enter university and medical school in Northern Ontario. The NOSM selection and admissions process favours applicants from Northern Ontario or targeted ethnic and remote backgrounds. Once admitted, students undertake an undergraduate medical program with a strong emphasis on learning medicine within the Northern Ontario community context. Postgraduate programs provide residency training targeted to practising in Northern Ontario and similar rural and remote areas.’ (*The Northern Ontario School of Medicine: Responding to the Needs of the People and Communities of Northern Ontario*, R Strasser, J. Lanphear, 2008)

NOT JUST POSTGRADUATE TRAINING. As well as evidence that students who come originally from rural areas are more likely to practice later in rural areas, the nature of a student’s training is also vital: ‘Although rural-based graduate medical education is critically important in the training of competent rural family physicians, the number of physicians selecting these programs is highly dependent on what happens earlier in the pipeline, i.e. during medical school.’ (*The Role of the Medical School in Rural Graduate Medical Education: Pipeline or Control Valve?* Howard K. Rabinowitz, Nina P. Paynter, 2000)

MEDICAL SCHOOLS IN THE RURAL COMMUNITIES. One of the most successful rural medical training programmes is WWAMI, which has been developed at the University of Washington in Seattle. Its name is an acronym of the five states involved – Washington, Wyoming, Alaska, Montana and Idaho. Its website states: ‘Today, this regional medical education program... is heralded as one of the most innovative medical education and training programs in the country.’

One of the most recent developments has been to establish a medical school class at Spokane in Eastern Washington State. Students spend the entire first two years of their undergraduate course at Spokane, seen as ‘clearly the most cost effective option to meet the needs of Eastern Washington’. The intention is to double the size of the class to 40 per year in the near future.

The Northern Ontario School report, *Responding to the Needs of the People and Communities of Northern Ontario*, 2008, says: ‘WWAMI graduates return to practice in rural and underserved areas in significantly higher rates than graduates of most other state medical schools in the U.S.’

THE AUSTRALIAN EXPERIENCE. Several Australian states have set up medical schools in remote and rural areas. They are hoping to replicate the success of James Cook University in Townsville Queensland where 59% of graduates between 2005-2011 remained working outside major cities. (*A scoping review of the association between rural medical education and rural practice location*, Jane Farmer, Amanda Kenny, Carol McKinstry and Richard D Huysmans, 2015)

THE NORWEGIAN EXPERIENCE. A postal questionnaire answered by almost 400 graduates of the medical school established at Tromsø University in northern Norway showed that 56.1% stayed in remote areas. Of those who had also been brought up in northern Norway, the proportion was 82%, while only 37.7% amongst those brought up in southern areas. (University of Tromsø, website, accessed April 2017)

BETTER RECRUITMENT. The Royal College of Physicians has called for medical schools to offer ‘more undergraduate places to Welsh domiciled students in order to grow and retain a homegrown workforce’. They have also recommended that medical schools should invest in ‘outreach programmes that encourage applications from rural, remote and Welsh-speaking communities.’ (*Physicians on the front line*, 2016) International experience suggest strongly that this would be best achieved by a medical school based in those communities.

SPECIFIC TRAINING PATHWAYS. Many countries have developed rural medicine as a specialism in its own right, citing the need for practitioners in rural areas to have a wide range of aptitudes and life-saving skills. In Scotland, for instance, specific rural training pathways have been developed providing ‘excellent education and training opportunities’. A two year remote and rural option at Aberdeen University ‘has been shown to deliver excellent clinical and academic results’. NHS Education for Scotland’s one year general practitioner rural fellowship ‘has been extremely successful in providing newly qualified GPs with the confidence to take up rural practice’. (*Training the rural GPs of the future*; Ronald MacVicar, Charles Sideerfin, Chris Williams, James Douglas; 2012)



Embedding works

A DOCTOR'S VIEWPOINT

Dr Dylan Parry is a campaigner for GP recruitment, a GP trainer and a NHS Champion. He practices in Old Colwyn.

“I have tried to attract GPs to north Wales by showing how attractive the area is to live and work and the high quality of life we enjoy here. If students were able to study here in the early phase of their training, that message could be conveyed more effectively. Evidence shows that embedding students in a rural community for a period of time increases the likelihood that they return there to work. As it is, the first rounds of recruitment in Wales tend first to fill training places along the M4 corridor.

The medical schools at Liverpool and Manchester attract many students from north Wales. Many of the trainees that come to our practice have gone from north Wales to train in Liverpool.

A comparatively low proportion of graduates from Cardiff Medical School end up in general practice. I know, from my time there, that the ‘cream’ of the students were expected to go into hospital work and general practice was looked down on. In my experience, such attitudes are more likely in urban settings in schools attached to ‘prestigious’ city hospitals.

There is a need too for specialists in rural medicine – general practitioners in rural areas need a very wide range of skills.”

4. A new Medical School for north and rural Wales

- Experience from across the world, including the UK, underlines the feasibility of establishing new medical schools in rural areas.
- A new medical school at Bangor University would build on the expertise of the School of Medical Sciences there and on the clinical training already offered at the region's three district general hospitals.
- A new school would provide a new emphasis on and new respect for general practice.
- A new medical school in north Wales would directly serve Wales' rural communities and cater for the needs and rights of Welsh-speakers.
- As well as specialising in rural medicine, a new medical school in north Wales could specialise in outdoor and extreme medicine, catering for the increase in outdoor activities across north, west and mid-Wales.
- A medical school would provide an economic boost to the whole of north Wales.

STEP BY STEP

A proven model suggests the need for the new school to work initially with an established medical school.

Keele University School of Medicine initially awarded University of Manchester degrees before awarding its own MBChB degrees in 2012.

Swansea University Medical School was founded in 2004, developing a 4-year fast-track graduate entry course in collaboration with Cardiff University.

In both cases, the new schools were building on the foundation of expertise in the medical sciences at their universities, similar to the School of Medical Sciences at Bangor University.

Bangor University is already training 12 Physician Associates and Betsi Cadwaladr University Health Board receives the second largest number of medical students on clinical placement in Wales.

ACADEMIC STAFF

Professor Dean Williams, Head of the School of Medical Sciences at Bangor University and Consultant Vascular and General Surgeon at Ysbyty Gwynedd, Bangor, estimates that relatively few extra academic staff would be needed as currently there are research scientists within the School of Medical Sciences and a large number of excellent clinical teachers already exist in North Wales. However, new appointments would be joint clinical/academic appointments, helping to attract high quality consultants to the north Wales hospitals.

The vast majority of clinical subjects, including all core specialties, are already provided in north Wales. Only two subjects are not catered for in North Wales – cardiothoracic surgery and neurosurgery. Both are comparatively minor elements in the training programme and could be provided through neighbouring universities, such as Liverpool, Manchester or Cardiff.

STUDENT NUMBERS

Ireland has 7 medical schools, Scotland has 5, suggesting that a ratio of one medical school per 1 million population is feasible.

Wales currently has one medical school offering undergraduate provision (Cardiff) and one offering graduate entry training (Swansea). Swansea Medical School was specifically established to serve the people of south-west Wales. A third medical school would match the structures in Scotland and Ireland.

Betsi Cadwaladr University Health Board covers the largest population of all the health boards in Wales – 694,473. Powys Health Board also covers a predominantly rural population of 132,642 while substantial parts of Hywel Dda University Health Board’s population is rural and Welsh-speaking.

Professor Dean Williams commented that in a similar fashion to Swansea, initially 40 to 70 students might be recruited annually – dependent on what solution for undergraduate medical education was forwarded for north Wales – a figure that is financially feasible and suitable for the communities it would serve.

RURAL SPECIALISM

A Medical School at Bangor University could actively recruit students from north and west Wales, especially from rural areas. Evidence from other rural medical schools suggests that attitudes and perceptions towards both general practice and rurality need to be addressed while prospective students are still at school. There is plenty of evidence too that students attracted from rural areas are more likely to enter practice in those areas.

OUTDOOR ACTIVITIES MEDICINE

A report in the *Wall Street Journal* (21.3.17) highlighted the growing demand in the United States for outdoor and extreme medicine and how medical schools there are responding to the demand. The same pattern can be seen in other parts of the world where outdoor activities are growing. An example in England is St James’s Medical School in the University of Exeter which offers an MSc in Extreme Medicine. A medical school at Bangor University would be ideally located for medical training in both mountain and water sports. The Faculty of Pre-Hospital Care at the Royal College of Surgeons, Edinburgh, uses the National Mountain Sports Centre at Capel Curig as one of its residential centres. (RCSE website, accessed April 2017)

WELSH LANGUAGE

Bangor University offers an opportunity to establish a medical school in a community where Welsh is still the predominant language. Bangor University has the largest Welsh-medium provision of all the Welsh universities and has strong cultural links with its hinterland. These links would be a great advantage in recruiting students from rural and Welsh-speaking areas.



Compete or lose ground

A DOCTOR'S VIEWPOINT

Professor Dean Williams, Head of the School of Medical Sciences at Bangor University and Consultant Vascular and General Surgeon at Ysbyty Gwynedd.

“Other countries are already expanding their medical schools to meet future needs and the shortage of doctors, particularly GPs. There is also a big expansion in new private medical schools. We must compete or lose ground, but as part of an all Wales approach. I estimate that we need an extra 120 medical student training places to meet our needs, particularly as most GPs in the future are going to be working part-time, providing that we in the North provide some of that training.

In responding to rural needs, international experience suggests that topping up existing structures does not work. New solutions are needed. A Rural Medical Campus would cater for the specific needs of the region.

Selection is key to recruiting GPs for rural areas. Bangor University is in an ideal position to foster and recruit students from rural Wales and Welsh-speaking communities. Evidence from school pupils suggests that they would be attracted to a medical school in the region.”

CONCLUSIONS

- A crisis in recruitment and training has been widely acknowledged both within and outside the medical sector.
- Training is seen as a crucial component in the solution, with calls for increased numbers of training places, particularly for home-grown students from Wales.
- Special problems have been identified in rural north and west Wales and in Welsh-speaking areas.
- Experience from countries across the developed world shows that the best solution lies in developing new medical schools based in the target communities.
- The basis for a new medical school already exists in north Wales, based on Bangor University's School of Medicine and the training places already provided by the region's three district general hospitals and community provision.



A REPORT BY GWASANAETHAU
GOLWG, COMMISSIONED
BY SIAN GWENLLIAN AM