Parliamentary Inquiry: Rural Health and Social Care

Session One

30 October 2018

Introduction from Anne Marie Morris MP

Anne Marie Morris – Co-Chair of the Inquiry welcomed participants and the audience to the first session of the Parliamentary Inquiry. She indicated that the Bishop of London who is the Co-Chair of the Inquiry was unable to attend this session. She also introduced Professor Richard Parish who is providing technical support for the Inquiry and Ivan Annibal and Dr Jessica Sellick from the National Centre for Rural Health and Care who are providing the secretariat function for the Inquiry.

She explained the focus of the Inquiry was about ensuring health and care is accessible to all, whether they live in an urban area or a rural area. She explained that written submissions for session 1 have been received and more are forthcoming, and we welcome further contribution. This is not an adversarial grouping but a collaborative forum. The purpose of the first session is to set the scene for the whole inquiry (scheduled to last 2 years) by focusing on what do we mean by rural and what is it about rural that is not caught in current definitions and decision making about health and care?

Each expert witness in turn was invited to respond to the issues outlined for the first session of the inquiry.

Stephen Hall – Head of Statistics, Rural Policy Team, Department for Environment, Food & Rural Affairs

What do we mean by "rural"? There are different types of rural settings: Cumbria, Surrey and Devon are for example very different. How important is the spatial context of a place as a starting point for planning key services?

Stephen Hall works in the Defra rural policy team. He and his team produce, the Statistical Digest of Rural England, the Rural Economic Bulletin and bespoke analysis on rural issues. The team uses the official statistics rural urban classification. Stephen has also recently been given responsibilty for developing the approach to rural proofing across government. From a statistical perspective any settlement over 10,000 population is urban – defined by OS mapping backed up by census data. Density profiles are used to classify rural areas as rural towns, villages, hamlets, isolated dwellings and additionally in terms of sparsity.

This definition (the rural_urban classification) was originally co-sponsored by The Ministry of Housing Communities and Local Government (MHCLG), Defra and the Welsh Assembly Government in collaboration with the Office for National Statistics.

There is also a Local Authority definition based on the proportion of people in each Local Authority living in rural areas. This definition also includes hub-towns of up to 30,000 people, where these towns support rural hinterlands. Local Authorities with over 50% of their population in rural areas or hub towns are defined as predominantly rural.

These are statistical definitions but are blunt as instruments without context. These definitions should not to be used for planning or policy purposes without taking account of contextual factors. Stephen emphasized that there are various definitions, including those based on either population density or sparsity. The Office for National Statistics (ONS), DEFRA, and the Welsh Assembly Government all adopted different definitions, albeit based on many of the same criteria. Other Government departments also have their own definitions.

There is currently some work in train to look at the function of rural economies which may inform a more nuanced approach to the use of this definition.

The rural urban classification can to be used to inform funding decisions but different approaches can and should be used depending on the context. MHCLG are reviewing the local authority funding formula and are looking at a number of other variables including journey times for example.

Taking a still wider view Stephen Hall mentioned other factors, which help describe rural communities, these include – an ageing society, which is seen as likely to increase and deepen over time. This demographic trend is more acute in deeper rural settings.

Rural areas also face a net outward migration of young people although overall rural communities face a net in-migration of 70,000 people (many of them over 65) per year. By 2033 in some rural and rural coastal areas around 10% of the population of will be over 85.

It is recognised that a car is often needed to function in rural areas for many people. Car ownership overall is seen as a sign of relative affluence and this compromises the way the English Indices of Deprivation work in identifying deprivation in rural areas.

Identifying deprivation in rural areas is made more difficult owing to the geographic statistical building blocks. For determining deprivation the building block of Lower Super Output Area (LSOA) is used (average population 1,500). In urban settings this statistical building blocks are relatively densely packed and people in them tend to share the same characteristics . In rural settings, in order to cover 1,500 people LSOA tend to cover larger areas and that pockets of deprivation, can be masked, by pockets of affluence, co-existing in the same LSOA.

There is some variation in population thresholds in defining urban across the UK. At a local authority level the geography in Wales has led to a different approach taking

account of the typical population pattern in the otherwise rural setting of the South Wales Valleys. In Scotland a 3000 population threshold rather than 10,000 population is used for the definition of urban communities and in the definition of rural communities drive times are also considered. In Northern Ireland 5,000 is the urban threshold.

In the EU population the basic building blocks are determined by density and with much lower densities used, if applied to England then we don't come across as rural . Stephen Hall does not feel that the EU approach is more sophisticated or nuanced than the English approach – it just a matter of densities.

More widely than the EU Stephen Hall has limited knowledge of approaches to the definition of rurality.

Anne Marie Morris MP asked if Stephen Hall could "unpack" the nature of the ongoing problems in establishing a more nuanced definition of rural areas in England. He explained: data is only available at certain levels of geography – this limits the ability to identify characteristics such as deprivation in rural areas.

Anne Marie Morris MP asked how could this data challenge be overcome. Stephen Hall elaborated by saying that the challenge is that avoiding disclosure of individuals means that data are not available for very small geographies. There is no straightforward solution to the problem

Matthew Isom CEO of the Dispensing Doctors Association – explained that the Technical Steering Committee associated with his organisation uses very detailed tax information on a confidential basis and this might be a useful precedent.

Anne Marie Morris thanked Stephen Hall for his contribution.

Dr Rashmi Shukla – Regional Director Midlands & East, Public Health England

What is the relevance of sparsity, infrastructure and deprivation? What do we mean by deprivation in a rural setting? How do we currently take account of these issues in our planning and strategy development and do we do it effectively? Do we need improved identification of the "hidden" nature of isolated pockets of rural deprivation, which are masked by the relative affluence of surrounding areas?

Dr Rashmi Shukla explained that Public Health England (PHE) is an Agency of the Department of Health and Social Care. Dr Rashmi Shukla leads on rural health within the organisation. Much of the focus of the work of PHE is on the local level. There are many tools developed by PHE that have relevance.

Deprivation analysis is based on the English Indices of Deprivation (IMD). This is used at a range of health administration geographies. The key issue in terms of deprivation is whether the IMD indicators are equally all relevant to the issue of rural health. . Dr.Shukla emphasized that better measures would be helpful and the new and more sensitive indices are being developed, including at Imperial College and the University of East Anglia.

An overview of the data suggests a better environment in rural settings in terms of health and care. But drilling down into the housing and transport indicators within the IMD paints a more nuanced picture of the real lived lives of rural dwellers.

In essence there are 2 issues, which limit the usefulness of the IMD approach to describing deprivation. Firstly the aggregation of the data sources to create composite IMD measures which mask the more negative characteristics faced by rural areas. Secondly the fact that some of the indicators used are not as relevant to rural communities as to urban communities.

Dr Rashmi Shukla referenced two pieces of work in which PHE has had a significant role namely:

1. Work with the Small Area Health Statistics Unit at Imperial College using IMD and the Scottish Carstairs index to see if we can be better at describing in spatial terms the heteregenous nature of areas. This approach, which took out the data relating to urban small areas from both indexes– showed eastern and western coastal areas and the areas near the Scottish borders had the greatest amount of deprivation in rural areas in England. This pattern was confirmed locally by Directors of Public Health operating in these localities.

2. Advising the Work led by Professor Andy Jones at the University of East Anglia to explore the development of a more precise means of measurement for rural deprivation to complement the IMD. This approach uses Norfolk as a test bed. It uses some of the IMD data sets relevant to rural areas and adds in average travel time to essential services and a population factor – looking at the ONS mid year estimates of those aged 75years and over. This has led to the production of a new index , which is being published and shows promise but needs further analysis to test its utility. The idea is to help local areas to use this index to better plan their interventions.

In terms of resource allocation every Government Department takes a different approach to this issue. A generic approach may not be the answer. It might be as insightful to begin by looking at the distinctive needs of rural communities – starting from the outcomes required and then to look at what the statistics might have to offer in terms of interpretation and insight.

Dr Rashmi Shukla then offered a series of wider perspectives on the challenges facing rural settings in terms of health and care as follows:

Workforce challenges lend themselves to more innovation in rural areas due to a lack of critical mass– there is scope in this context for more developed thinking about digital and technological innovation. There are however limitations to this in areas where mobile and broadband connectivity is not as good as it might be.

Anne Marie Morris MP asked - Would you change the way you define rurality for different parts of the country or would you apply a second nuanced test to an initial generic indication of rurality? Dr Rashmi Shukla replied - we need a first layer of definition to allow comparisons – this is necessary but not sufficient at the local level where qualitative analysis also has an important role to play. She explained PHE have a number of statistical tools they use but they should always be complemented by local insights in terms of their application and taking account local contextual issues.

Anne Maris Morris MP followed up by asking - How do we take a consistent approach to qualitative issues – this is somewhat at odds with the role of Government which takes central, policy setting decisions in isolation from local circumstances.

Dr Rashmi Shukla identified a number of common themes: geographical access, digital exclusion, demographics and service challenges along with sparsity, and outcome/condition specific issues at the local level, all of which could be embraced by Government in sharpening its thinking about rural planning, helping to better nuance its approach.

Dr. Shukla explained that various planning tools are already available, including those provided by PHE.

Dr Robert Lambourn- Royal College of GPs, Rural Forum

There is a preponderance of over 65 year olds in rural areas - what are the impacts on health and care needs – and medical training?

Dr Robert Lambourn described himself as a GP by "foreground" rather than "background" based in north Northumberland. He is an established GP educator and is currently working on a the development of a new integrated training post role in rural GP practice. He chairs the Rural GP Forum of the Royal College of GPs –with 800 members overall 400 of whom are based in England.

Dr Lambourn began his evidence by stating that whilst there are some clear benefits to being a rural GP the downsides can be summarized in one word ***isolation*** - for both workers and patients. This includes difficulties in accessing education and training and support for health and social care workers; an inevitable emphasis on small scale interventions; and access to secondary care facilities and expertise.

In terms of GP practices the on the ground approach to assessing funding allocation is the Carr-Hill formula which does take account of remoteness and "unavoidable smallness."

Spouse employment, which is challenged by distance from access to key service centres, is a key issue for rural GPs.

Remote rural practices are often very small and have challenges in terms of their viability.

Distinctive workload aspects in rural practice include: more surgery and general practice, more contraception support, more emergency care, more home visits (these also take longer because of distance) and lower levels of secondary care admissions.

Rural GPs are often also required to respond to an older demographic arising from retired incomers especially when their health deteriorates as they age, often leading to the development of multiple morbidities. Dr Lambourn's practice in Wooller has highest morbidity for diabetes in Northumberalnd.

Patients in rural settings are more likely to be discharged early, counseling services by GPs and blood-taking are more frequent due to distance from services. Transfer to emergency care takes longer in relation to rural settings. Rural communities are often more close-knit with many individuals knowing each other, but this can create exacerbate problems associated with stigma and confidentiality, not least in relation to both mental and social health.

Rural patients are less likely to use A&E. Rural areas also have stigma and confidentiality issues, which affect patients in small communities where everyone knows each other seeking health support in relation to sensitive issues.

In terms of economics rural GPs need more equipment, have less opportunities for outside income, higher dependencies on prescribing to supplement their income, have higher qualification thresholds for staff because of the variety of issues they encounter and find it very difficult to cover absences. They also have to have a wider breadth of expertise.

Differential medical indemnity rates between England and Scotland (£8,000 in England vs £2,000 in Scotland) mean that in Dr Lambourn's geography it is hard to get locums from over the Scottish border.

In rural areas the demographics, which are skewed in terms of older patients – with a higher prevalence of age associated morbidities and co-morbidities, coupled with isolation drive more people to use primary care. The IMD focus on hospital admissions in the health domain misses this difference in how people with health challenges present in in rural areas.

Staffing issues especially in terms of recruitment and retention are challenges. Attracting people at an early age is key. Extended training programmes are important

– the University of Keele Medical Schools is an example of good practice in terms of medical students becoming G.P.s.

In England we are 5-6,000 GPs short across the board.

In conclusion remoteness and smallness are the key challenges. Rural proofing of healthcare is important – the previous rural health toolkit (developed by the former Institute of Rural Health) is now an old document which has fallen out of use.

Dr Lambourn feels there is still a future for Rural GPs but things are challenging (if rewarding) for those involved in rural practices.

Anne Marie Morris MP asked Dr Lambourn to keep the Inquiry up to speed with progress on the Integrated Training Post initiative. She also asked if mental health is a distinct issue in the experience of Dr Lambourn. He explained that this was the case and that he should have mentioned this and the way it manifests itself in terms of heavy alcohol consumption in some quarters as a key issue. Dr Rashmi Shukla explained that PHE have some emerging research on the theme of rural mental health.

George Bramley – University of Birmingham, City-REDI (Regional Economic Development Institute)

Rural areas suffer problems with recruitment across the spectrum of health and adult social care– how do these manifest themselves? What are the threats arising from them and how do we address them? Does this cover some occupations and services more than others and if so how?

George Bramley explained that he had worked in the Institution of Applied Health Research prior to his current role at the University of Birmingham. He explained that his evidence was based on a piece of research, recently completed, with support from Ivan Annibal and Dr Jessica Sellick of the National Centre for Rural Health and Care, led by Professor Anne Green at the University of Birmingham Regional Economic Development Institute.

This research had been supported by funding from Health Education England. It was inspired by the recent NHS Consultation on Workforce Issues. The research involves, statistical analysis of the spatial nature of NHS delivery settings, desk research of key literature and interviews with key informants. It identified 9 rural workforce challenges and 9 rural workforce opportunities. The challenges are:

1. Rural areas are characterised by disproportionate out-migration of young adults and in-migration of families and older adults.

2. This means that the population is older than averag***e*** in rural areas - this has implications for demand for health and care services and for labour supply

3. Relatively high employment rates and low rates of unemployment and economic inactivity mean that the labour market in rural areas is relatively tight
4. There are fewer NHS staff per head in rural areas than in urban areas.
5. A rural component in workforce planning is lacking.
6. The universalism at the heart of the NHS can have negative implications for provision of adequate, but different, services in rural areas and also means that rural residents can be reluctant to accept that some services cannot be provided locally.
7. The conventional service delivery model is one of a pyramid of services with fully-staffed specialist services in central (generally major urban) locations – which are particularly attractive to workers who wish to specialise and advance their careers
8. Rural residents need access to general services locally and to specialist services in central locations to provide best health and care outcomes
9. Examples of innovation/ good practice are not routinely mapped and analysed, so hindering sharing and learning across areas

The opportunities identified are as follows:

1. Realising the status/ attraction of the NHS as a large employer in rural areas (especially in areas where there are few other large employers)
2. This means highlighting the varied job roles and opportunities for career development available and that rural areas are attractive locations for clinical staff with generalist skills.
3. This means developing 'centres of excellence' in particular specialities or ways of working in rural areas that are attractive to workers.
4. This requires developing innovative solutions to service delivery and recruitment, retention and workforce development challenges.
5. This may provide opportunities for people who need or want a 'second chance' – perhaps because the educational system has failed them, or because they want to change direction; their 'life experiences' should be seen as an asset.
6. Finding new ways to inspire young people about possible job roles/ careers in health and care.

7. Drawing on the voluntary and community sector, including local groups, to play a role in the design and delivery of services, as well as achieving good health outcomes for rural residents.

8. Promoting local solutions foster prevention/ early intervention and enhance service delivery.

9. Using technology so face-to-face staff resources are concentrated where they are most effective.

Anne Marie Morris MP asked if it would be useful to separate out recruitment and retention in rural settings in a bit more detail than presented? George Bramley explained that there were more detailed references in the report.

Councillor Sue Wooley (Lincolnshire County Council Portfolio Holder and Local Government Association Health and Well-Being Board Member) raised an issue about nursing homes in rural areas losing their nursing capability due to the funding formula when they fall below a threshold of 25 beds. She suggested that part of the problem was that the CQC at the moment expects a nurse for each residence – she indicated that the use of IT could help spread the impact of nursing over more than one home and enable smaller nursing homes to remain viable. She asked if the Inquiry would consider the need for more flexibility in this context.

Professor Alison Marshall University of Cumbria – asked if the workforce research had identified if are there more people doing portfolio working or working below their skills levels in rural settings who might be engaged more substantively as part of the NHS workforce. George Bramley indicated that this had not been considered substantively as part of the report. He acknowledged it was a useful contribution to the debate.

Professor Clive Ballard – Pro-Vice Chancellor & Executive Dean, University of Exeter Medical School.

Could technology play a central role in rural health and care? What are the features of rural health challenges it could overcome? What are the practical issues to be addressed in using it? Where are there sustainable examples of good practice?

Professor Ballard explained that he was an old age psychiatrist by background and had been asked to give evidence by South West Academic Health Network. He explained that the South West is often thought of as affluent but characterized by some significant pockets of deprivation and a high incidence of older people – with a split between indigenous people and “incomers” many of whom don’t have local support networks.

He emphasized the importance of education in rural communities in maximizing the impact of technology. He also explained innovative models of practice are also important. There is an urgent need to address the dual but related issues of isolation and loneliness.

Professor Ballard has particular experience/interest in digital health. He has been substantively involved with an online platform called "Protect" – which has enabled 50,000 people to take part in clinical trials and delivered health based cognitive training to 20,000 people.

Professor Ballard's presentation concentrated on two aspects of Digital health – a)well-being and prevention and b) the delivery of services.

In terms of well-being the most substantive issue is isolation/loneliness. Digital technology can help ameliorate but not solve this challenge. Social media can be a positive element within this process, creating a new medium for engagement with people. There has been much stereotyping that older people don't use digital – this is often not true – there is a rise in the incidence of older people engaging with social media often characterized as "silver surfers".

Chat rooms are a positive factor in mental well-being for some groups – a dementia chat room experienced by Professor Ballard for example is a good example (run by Alzheimers Society).

In terms of other issues around well-being, digital technology can be used to highlight people who might have health risk factors – through well-being apps for example. There is increasing evidence that supported digital mental health applications are effective.

In terms of the delivery of services – Professor Ballard drew attention to pockets of well thought through tele-health approaches. He identified that there was still considerable scope to roll these examples of good practice out more substantively. Often these applications are developed by the private sector and this may account for the fact that they have not been taken up on a wider/more substantive level.

One example with real potential for implementation through digital approaches is support for people with mild cognitive impairments – this can be done very effectively online without travel.

In conclusion Professor Ballard indicated, that we need to think carefully about the application of technology, as it is not a panacea but it can make a very significant difference. Digital interventions should be a complement to, not a replacement for, personal interaction. His view was that systemised approaches are the key – a scoping exercise linked to the potential of digital technologies accompanied by pathfinder projects could make a real difference to realizing the potential of digital

health applications but it needs national policy attention. He emphasized the role of digital tools in both monitoring and for triggering personal interventions.

Anne Marie Morris MP indicated that a written submission on Professor Ballard's points more widely would be very useful. He confirmed that he would be happy to provide this evidence.

Professor Alison Marshall University of Cumbria – referred to the former rural health forum in Cumbria which mapped best practice in the context of the application of technology in that county and led to the development of the Cumbria Strategy for Digital Strategies in Health and Social Care. Professor Marshall indicated she was happy to share some examples of best practice – from that work. She explained that video conferencing is very powerful in terms of consultations and more widely in relation to tele-health. She explained that some of the apps and tele-monitoring systems, which have been developed require a change to the "care paradigm" and are more difficult to implement than something which is powerful but simple such as video-conferencing. She also indicated that the challenge of training staff to feel comfortable using technology is under-rated.

Martin Collett - Operations Director English Rural Housing Association – Chair of National Housing Federation Rural Housing Alliance.

What is the impact of housing on the key features of rural health and care? Is there enough of the right type of housing to enable people to stay at home into their old age in rural communities? What are the challenges to housing supply in the context of vulnerable old people and people with disabilities in rural settings? Are there examples of rural innovation?

Martin Collett introduced himself as Chair of the National Housing Federation Rural Housing Alliance responsible for some 200,000 homes - their website has some very useful case studies of good practice.

In terms of this agenda Housing Associations aren't the only solution to providing housing responses to health and care challenges in rural settings but they rather than private sector are leading this area of work.

Rural proofing is not being applied as effectively as it could be in the context of rural housing policy and health. It has not been effectively applied to ensuring that the National Planning Policy Framework (NPPF) requires developers to properly support people with multiple and complex housing needs in rural settings for example.

The issues facing rural areas are greater than urban areas . For example on average an 8% subsidy is required to make affordable homes available in urban areas compared to 20% in rural settings.

The range of stock, transport challenges and dispersed geographies are all issues linked to the strategic supply of housing in rural areas. He highlighted the importance of 'rightsizing', matching the distribution of housing stock to rural population need.

Rural housing and elderly friendly rural housing particularly are badly served by the planning policies of local authorities in terms of the allocation of land – there are some flexibilities in the National Planning Policy Framework which could be applied but are not being effectively pursued in this context.

Rural depopulation of settlements in terms of vulnerable older people is a key issue in terms of rural housing. The freeing up equity of for elderly residents with inappropriate housing is a key and useful issue in development of new housing strategies for older people in rural areas.

From a developer perspective the nature of homes designed for older people means they are less attractive than general housing and it is important to recognize this in the way housing is funded. Designing and adapting homes to meet the changing needs of the population justifies more attention and as a minimum all houses should be built to meet lifetime home standards. There are opportunities to strengthen this focus in the Housing Green paper.

Fuel poverty and access to broadband bring additional costs to the development of rural housing and this also needs to be acknowledged in housing strategies.

The rural criterion used to assess need in terms of housing is not satisfactory and this needs to be more widely understood.

It is harder in rural areas to realize the potential of technology due to challenges of connectivity.

Policy should also consider the best means of incentivising people to move to properties which best suit their needs as they grow older. Working households are forced by the benefit system to right size – through the application of policy in terms of the single room supplement, whilst pensioners are insulated from such pressures.

Stamp duty exemptions could also be applied to older people seeking to downsize.

The design of adaptations and aids to help people remain in their homes is often functional and "ugly" and this discourages some people from engaging with such applications– more imagination in the design of these facilities would make a difference in this context – encouraging more people to take up aids and adaptations and potentially increasing the number of people living independently for longer.

Evidence suggests that Extra Care and Assisted Living Solutions are better placed in rural towns – where they work best in more rural settings this often involves a hub and spoke approach.

Martin Collett agreed to provide more evidence and case study information linked to his evidence.

His final comments were that leadership and planning are required to improve rural housing solutions for particularly the elderly in the context of rural health and care along with a discrete understanding of rural issues.

Ann Marie Morris MP thanked Martin for his evidence.

Phil Confue, Lead for Strategy and Planning: Countywide Services – Chief Executive Officer, Cornwall Partnership NHS Foundation Trust – Cornwall and Isles of Scilly STP Programme Director and William (Billy) Palmer Senior Fellow in Health Policy – Nuffield Trust.

What are the cost drivers in rural settings? How do these apply to people's lives generally? How do they manifest themselves in relation to the health and care agenda?

Phil Confue

Phil Confue explained that the experience of Cornwall suggested that cost drivers in terms of rural health and care are multiple and varied. He explained that Cornwall is a target for people who want to wind down their careers and it has a net stream of incoming older people.

Remoteness is a key issue in Cornwall, travel time builds costs into the system. There is only one acute hospital in the County and one in Plymouth, with no opportunities to redirect patients more widely if there is a problem with a hospital.

"In-reitrees" without social networks are a real challenge for the health services when they become ill and vulnerable. It is important to look at how best to address this in terms of social care.

In 2010 Cornwall was a pilot in the application of digital health solutions but with no subsequent investment the systems established then have now become outdated. In remote rural locations capital allocations are small so there has been no opportunity to renew the technology and bring it up to date.

In Cornwall the lack of a training infrastructure discourages people from training due to travel times and costs. The Isles of Scilly are the most extreme example – you can lose your residents rights on the Islands if you choose to train for 3 years as a nurse.

Since May 2018 Cornwall has been losing 30 private sector care homes places per month. Adult Social Care training in the private sector should be integrated with

health service training – people from the private sector are seen too often as undertaking a low grade job.

Cornwall is experiencing an increasing trend of people with expensive care requirements being relocated to the county for their care. This puts pressure on the wider health service infrastructure in the county.

Small catchment sizes cause the loss of key disciplines within the health and care capacity of the county, which then undermine the viability of A&E.

Seasonality is a key driver around health in Cornwall in terms of costs.

The key issue is that the capitation formula, which is urban biased, mitigates against Cornwall. Weightings in the formula for Houses In Multiple Occupation, which have no prevalence in Cornwall, as an example, discriminate against the county. Assessments of health service productivity are also compromised by travel times but not recognized in the assessment of the effectiveness of service provision.

William (Billy) Palmer

Billy Palmer explained that his employer Nuffield Trust had been commissioned by the National Centre for Rural Health and Care to look at the additional costs of rural health and care service delivery in rural areas and how these are reflected in the current allocation of resources across the NHS/local government.

Billy Palmer outlined a number of areas of learning arising from the literature review at the core of this research. In terms of recruitment in the region of 75% of doctors and nurses start work where they trained (mainly in urban settings).

Rural cost issues are linked to small-scale operations. In the recent NHS Improvement consultation on the revised payment scheme – 80% of costs are deemed to be fixed and 20% to be flexible.

Also rural workforce issues are affected by temporary staff shortages with higher locum costs due to a lack of supply or market for these short-term staff.

Telecommunications and accessing training are other challenging costs in rural settings not picked up in funding formulas and, again, In many cases this can be put down to a lack of a sustainable market place for these resources in rural areas. This locks rural areas into an inequity linked to the current allocation strategies for resources.

Current rurality in the acute sector in England involves small adjustment in the allocation formula to 7 commissioners of remote trusts characterized by unavoidably smallness.

Travel in rural areas can be an additional cost due to unproductive time and Northern Ireland make an adjustment for travel costs in their funding assessment.

Overall it is hard to measure rurality consistently across the wide spectrum of Health and Care. Only small adjustments have been made in terms of these factors. An underlying analysis suggests that up to £55 million could be allocated in relation to the 7 trusts referenced above and only £33 million has been allocated. Morecambe Bay have been also been given a unilateral uplift to their tariff based on a consideration of rurality.

The study also considered cost pressures in primary care where it looked at economies of scale and workload – rural settings increase time demands by 4 minutes per patient per year – adding 10% of people to list size reduces cost per patient by 3%.

The key issue is making the distinctive case for addressing rural challenges in the allocation of funding. There is variation across the 4 administrative geographies in UK in how this is done. Looking at Acute Trusts in England – they are party to a sophisticated analysis but it's not without limitations. For example, there is no direct assessment of need or costs for community services, which you may expect to be particularly affected by rurality.

The funding allocations are also dependent on matters of judgment, which may result in rural areas losing out. There is a legal requirement to address health inequalities but the weight given to this – which is a matter of judgment rather than based on evidence – has a substantial impact as it has the effect of diverting money from rural to urban areas.

Professor Richard Parish

Professor Parish indicated that the Inquiry had got off to a good start. He identified the following key themes: the importance of appropriate definitions, the availability of the right level of expertise in rural health and care settings, the value of more analysis into the underpinning determinants of health and care which are multi-factoral. Professor Parish also identified the need for a more holistic approach to improve rural health and care involving a mix of solutions around the issues/ opportunities connected to: technology, a rurally focused workforce, a "what works" approach to shared solutions and networking and finally in terms of professional education the importance of emphasizing rurality early in the curriculum taught to students.

The importance of sharing expertise, solutions and tools should not be understated, emphasizing the need for effective exchange mechanisms.

Professor Parish also mentioned the value of volunteers, drawn from rural communities, who could also support medical staff and help with technical infrastructure in rural areas. An appropriate infrastructure is key to supporting

dispersed communities, despite the reduced economies of scale and funding formulae need to reflect this.