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Northumberland Rural Health Advisory Commission

Tuesday 17 September 2019

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Welcome

To discuss:

- Terms of reference
- Current data
- ‘Miles travelled’ metric
- Areas to future research
- Forward plans
- Any other business

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What does the data tell us?

Debbie Freake,
Director of Integration

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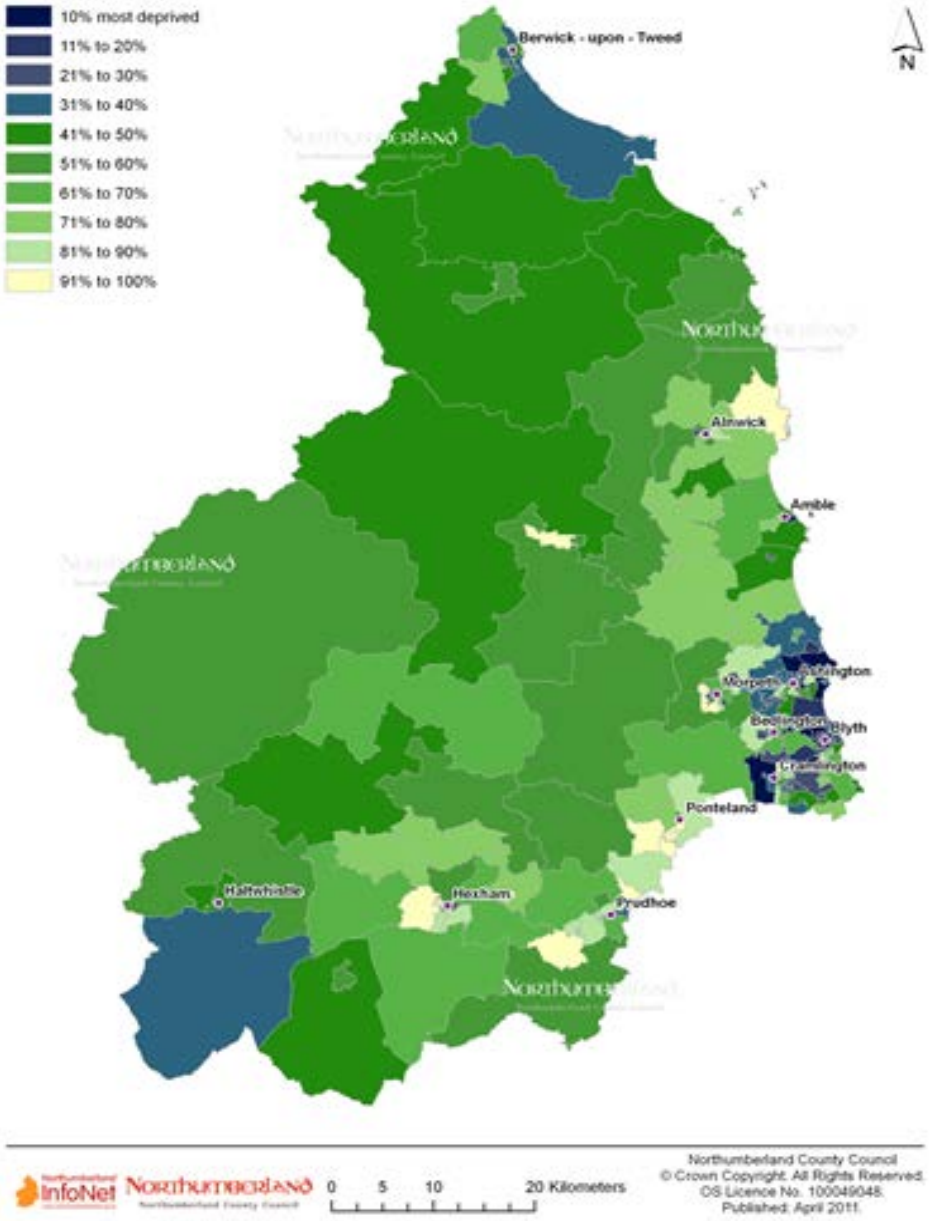
Northumberland

- Northernmost county
- Three of its Borders: Scotland, Cumbria, North Sea
- 316,000 population in 5,000 sq. km but with approximately half the population live in 3% of the geography in the south east
- Northumberland not homogenous – rural deprivation alongside relative prosperity; tourism vs industry, small towns vs dispersed populations



National context

- Our environment - including where we live - impacts on health inequalities
- 19% of population live in rural areas which make up 85% of land
- 10 million people across UK live in rural areas
- Diversity of rural environments: dispersed and farming communities, tourist and coastal resorts, market towns, ex-coal mining, commuter villages etc
- Diversity in wealth: affluent/disadvantaged with north/south divide plus pockets of disadvantage even within affluent areas – rural poverty highly concentrated amongst older people

(NB Coastal areas not always rural but evidence of issues for them in their own right)

Rural features 1

- Small specific groups e.g. migrants/BME lack social/community support available in urban areas
- Generally older populations (inward migration) with outward migration of younger people
- This is more marked the more rural the settlement-type with very high proportion of older people in most rural areas
- Employment opportunities reduced for younger people; low paid work
- Seasonal and/or part time workers – reduced household income

But also

- High employment in commuter areas (perversely adversely impacts on care workforce)

Rural features 2

- Reduced choice and availability of amenities – shops etc as well as health and care
- Potentially unfit housing stock; less council and housing association
- Fuel poverty (mains gas), house prices (+26%)
- Infrastructure challenges
  - Frequent and reliable public transport (daily living costs as well as access) - only 49% can access regular bus routes
  - Heavy reliance on cars with high car ownership
  - High speed internet and mobile phone networks -> digital gap NB older demographic
- Air quality – serious health risk in some rural areas
- BUT! Also advantages in some areas such as:
  - Strong sense of community in rural villages (ONS)
  - Low crime rates in rural areas – feeling of safety (ONS)
  - Access to green space – opportunities for exercise
  - Stress-reducing impact of ‘blue space’ – coastal

Health in rural populations

- On average health better in rural areas (infant mortality, life expectancy, PYLL from cancer/stroke/CHD)
- Realism re recovery times, more self-care for self-limiting illness

BUT!

- Older population with higher prevalence of long term conditions places greater strain on services
- Former coalfield communities also have high rates of long-term limiting illness
- Evidence that older people living in rural or coastal areas experience specific inequalities in physical and mental health
- Older people less likely to identify unmet need, proactively seek out care; may present late with evidence that diseases such as cancer are diagnosed later
- Other age groups may also take risks and present late
- Distance decay – service use decreases with increasing distance

Social exclusion and isolation

- Lack of community infrastructure
- Evidence that rural social networks are breaking down; loss of amenities pubs, shops etc
- Traditional reliance on family changing
- This, coupled with poor health, disability, life events such as bereavement leads to increase in social isolation leading to greater risk of mental health issues
- Loneliness can increase risk of premature death by 30%
- High risk of suicide amongst farming communities

Delivering healthcare in rural areas
(Nuffield January 2019)

Study of seven trusts with unavoidable small hospitals due to remote locations:

- 5.5 percentage point poorer performance against the A&E four-hour target
- 6.5 percentage point poorer performance against the 18-week elective wait measure
- 37 more delayed days per 1,000 admissions
- £27.8 million higher deficits
- six of the seven trusts ended 2017/18 in deficit: combined financial position £250m deficit
- represents 23% of the overall deficit for trusts in England for 3% of all trusts

Challenges to health and care providers

- Provision of extensive/full range of services with smaller user volumes +/- lack of local complementary supportive services
- Response times – e.g. mental health crisis
- Higher staff travel costs and unproductive staff time
- Scale of fixed costs associated with providing services within guidelines, such as safe-staffing levels
- Difficulties in realising economies of scale while adequately serving sparsely populated areas. In primary care, one study suggested that a 10% increase in list size was associated with a 3% reduction in cost per patient
- Difficulties in staff recruitment and retention, and higher overall staff costs
  - impact of small teams on care provision including 7 day working, case mix interest and strain on staff from onerous rotas
  - distance from amenities, schools, partner work opportunities
  - Consequent reliance on agency/locums
  - Care service providers moving out of rural areas
- Consequent user choice issues – both health and care; 2-tier services

Note success of The Northumbria/base sites/community hospital model in addressing a number of these

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How might we respond?

- Tackling social determinants of health
  - Use Health In all Policies (HIaP) place-based approach - social care, planning, housing etc.
  - Promote public and private transport opportunities
  - Create and maintain green areas
  - Support development of communities/community activities e.g. lunch clubs, men's sheds
  - Create/support physical activity and sport opportunities:
    - Walking groups/*Mobile Me* (Norfolk)
- Specific health and social care services
  - Model healthy employment practices
  - Work with small enterprises and third sector including volunteering
  - Maximisation of access to localised services and outreach; develop/make maximal use of hubs/leisure centres/community hospitals etc. as neighbourhood assets and hubs
  - Increase use of technology
    - Telehealth/telecare/telemedicine
    - eg Attend Anywhere, videoconferencing care home residents etc

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‘Miles travelled’ metric

Kate Martin,
Head of Information Services

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Scope

- Which cohort of patients are we interested in?
- Which patient contacts are we interested in?
- Distance travelled versus time spent travelling
- Changes over time
- What does ‘good’ look like?

Berwick residents

postcode sector areas TD15 1, TD15 2 and TD15 3

Methodology

- Currently limited to outpatient attendances that are recorded on **Northumbria** PAS system. This includes consultant-led attends, nurse-led attends, AHP-led attends (e.g. dietetics, podiatry, etc.)
- Physiotherapy excluded – large volume of patients, but recent changes to the way this is recorded may skew analyses in the short term
- Cancer 2 week wait attendances are excluded
- Includes activity recorded as hospital based only (but this includes some GP practice based activity – e.g. Ponteland HC and bariatrics at Monkseaton)
- Does not include contacts recorded on other systems (e.g. direct access radiology, community based contacts on SystmOne)
- Does not include patient journeys for other providers (e.g. outpatient clinics at Newcastle Hospitals)

Methodology (continued)

- Travel distances are based on distance from home to hospital and back
- Travel times are based on assumption that journey is made by car

Technical stuff

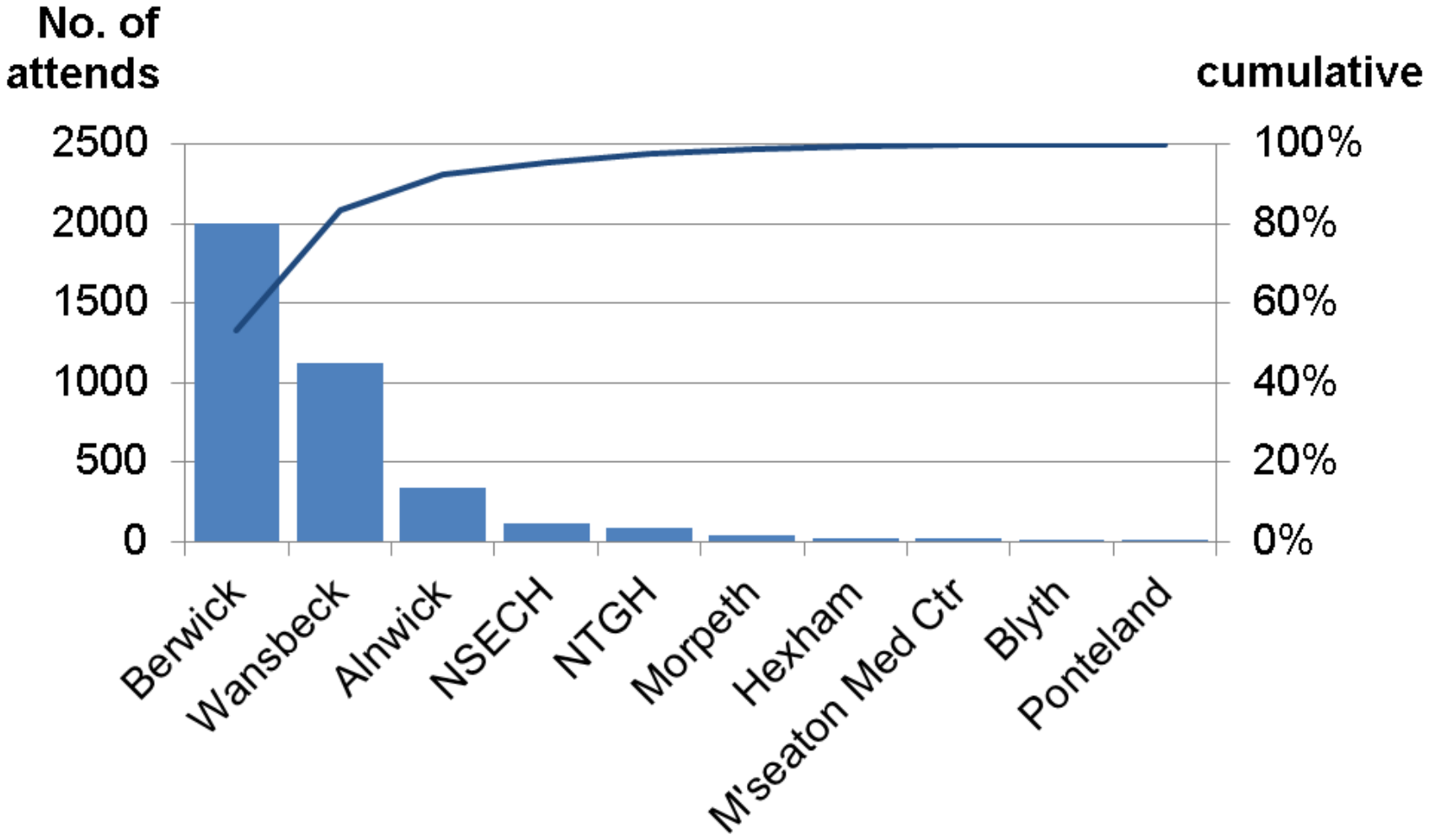
- Using Bing Maps Distance Matrix API
- Submit large number of records that include details of home postcode and hospital postcode (we do not upload person identifiable data)
- We extract the required travel distance and travel time from the returned data file
- Analyse data locally as required
- Free ‘not for profit licence’ – some restrictions on number of records we can submit
- We are able to re-submit multiple times, so we can add in additional patient activity cohorts retrospectively

Initial analysis attendances Oct-18 to Mar-19

Attendances at all hospitals:

- Total no. of attendances = 3,752
- Total distance travelled = 181,500 miles
- Average distance travelled per attendance (return journey) = 48 miles
- Maximum distance travelled for a single attendance (return journey) = 170 miles
- Average travel time (return journey) = 66 minutes

Where are patients being seen?



Average distance of return journey

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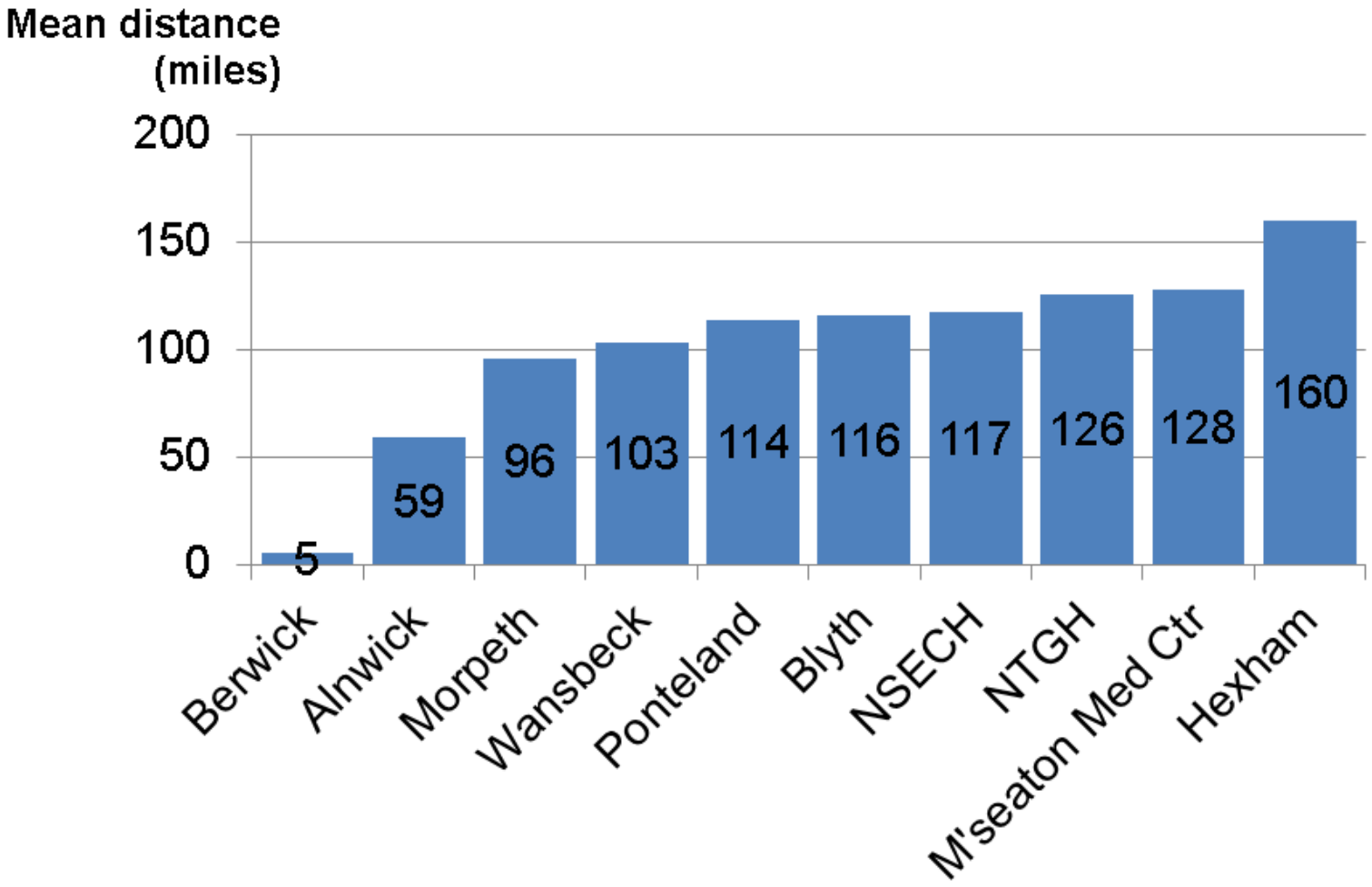
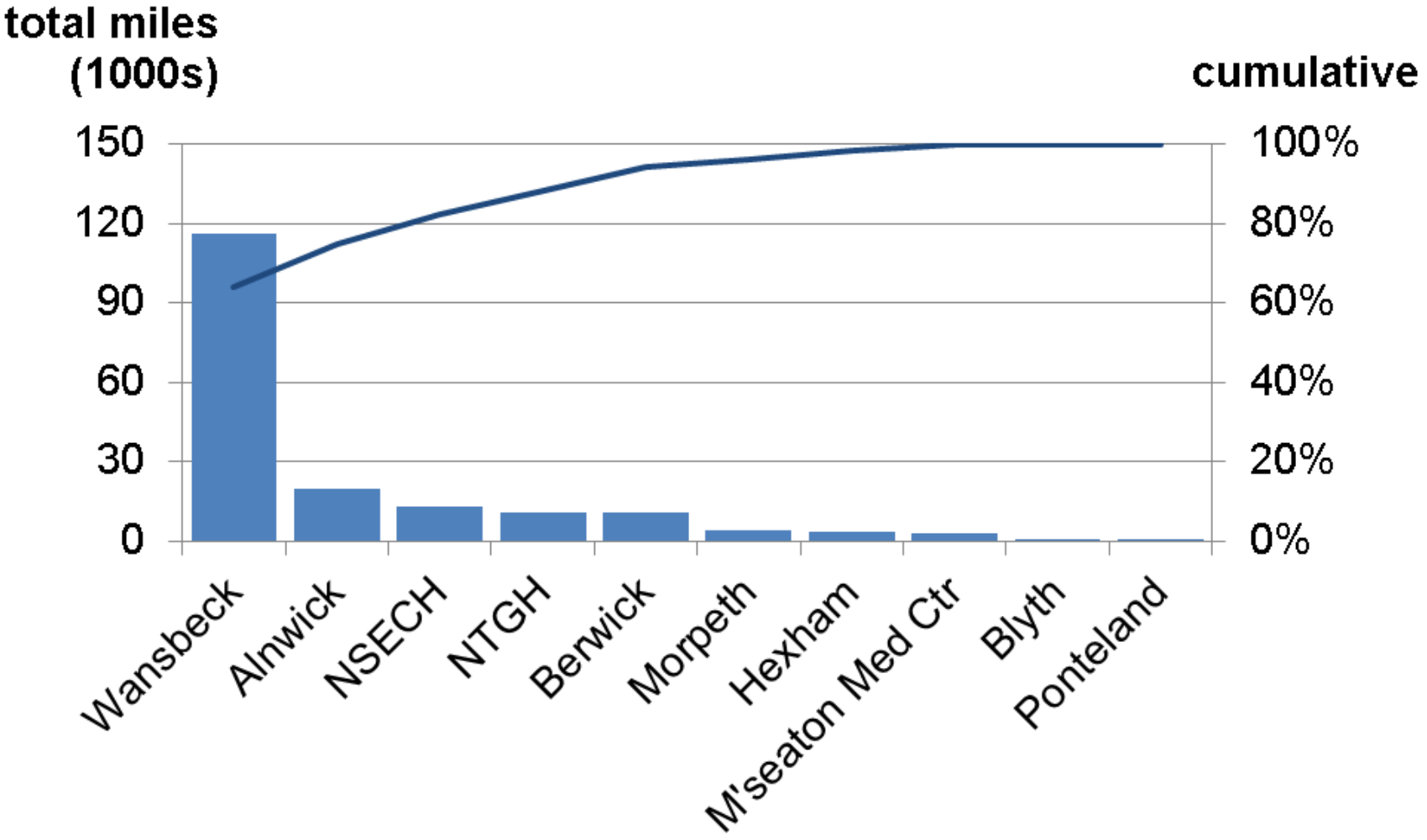
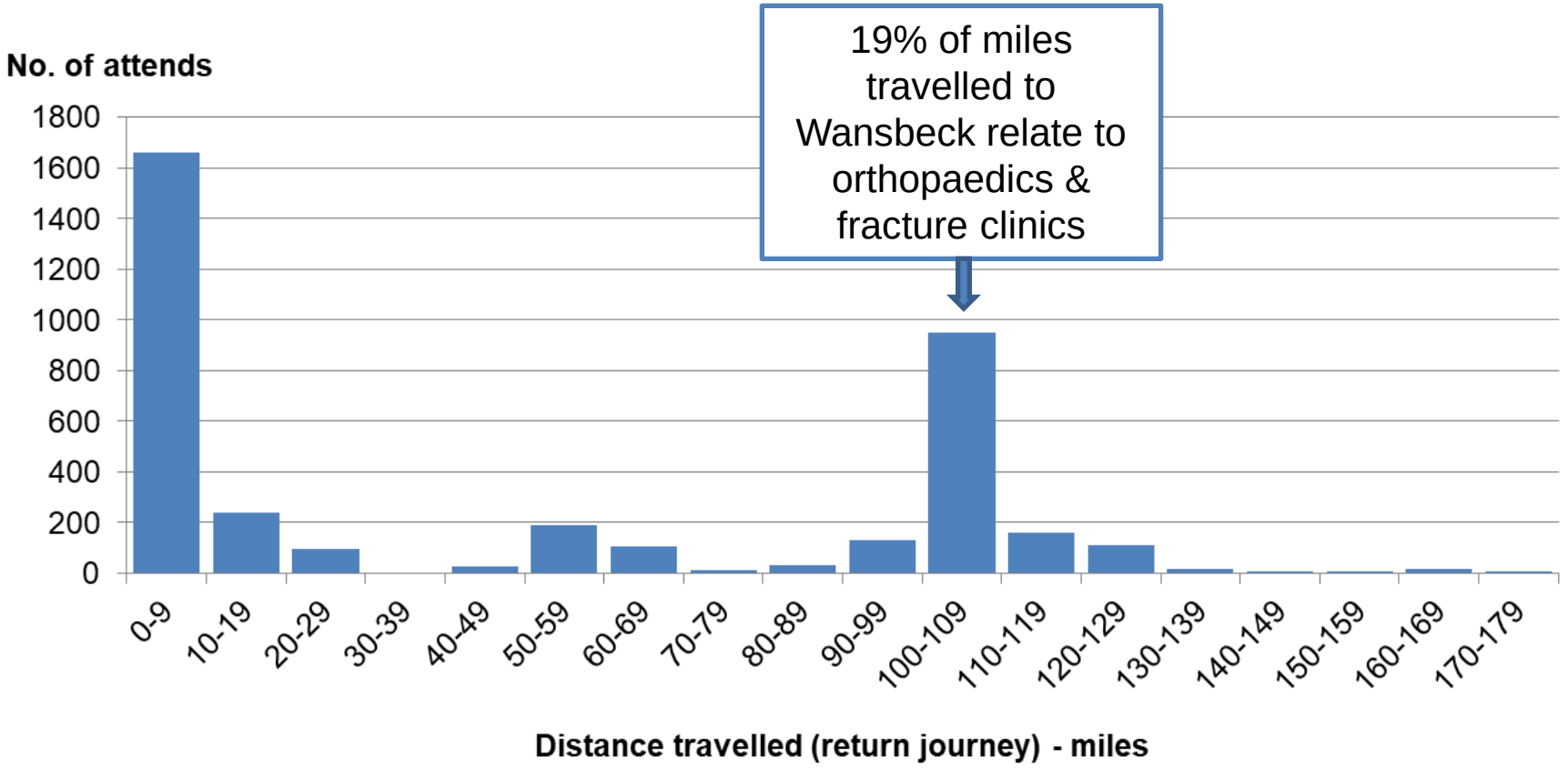


Total miles travelled



Total miles travelled (all hospitals)



Total miles travelled (by site)

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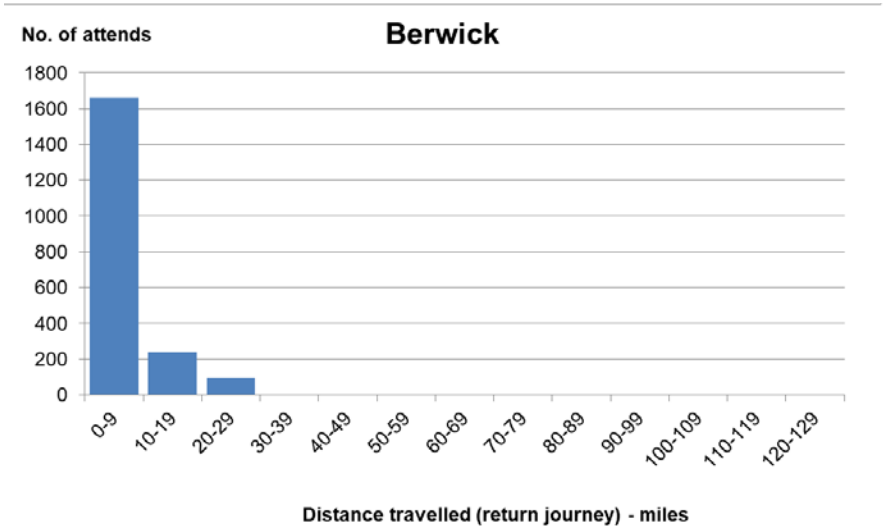

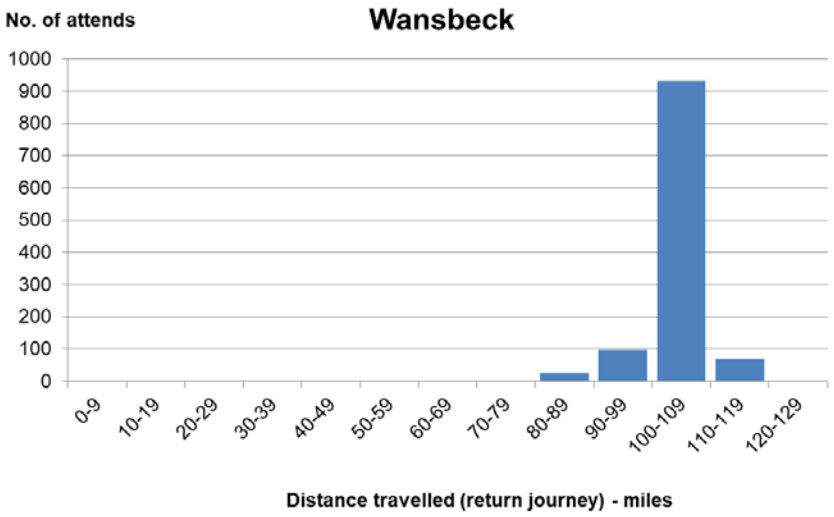

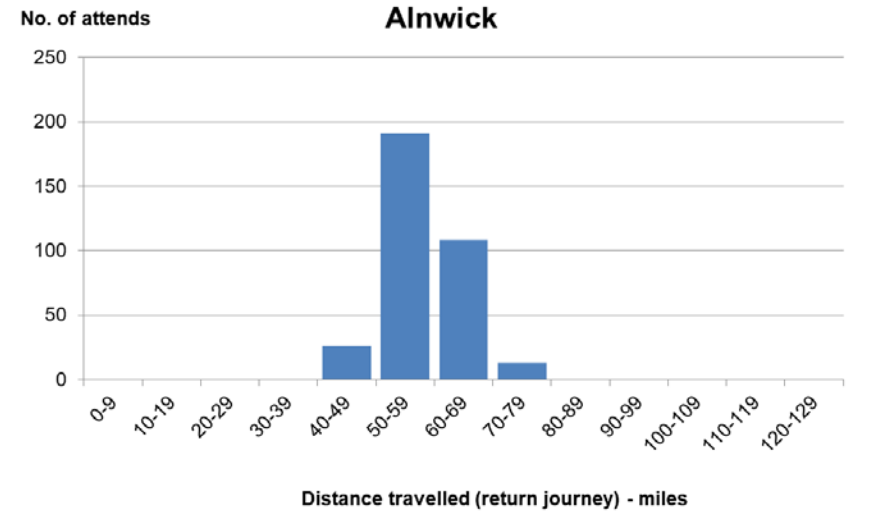

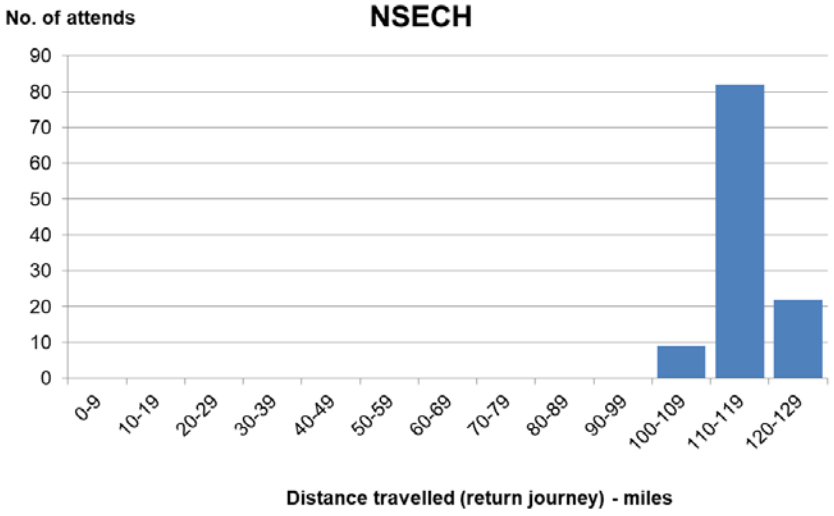

Next steps

- Refine cohort?
- Deep-dive into specific areas?
  - What about specialties that do not have outpatient clinics at Berwick (e.g. breast surgery, upper GI surgery, spinal surgery, bowel screening, haematology, rapid access chest pain, cardio devices, gynae)?
  - Specialties that have capacity issues?
- Changes over time – time series (quarterly updates)?
- What does ‘good’ look like?

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Research

Debbie Freake,
Director of Integration

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What more do we need to understand?

- Official statistics insufficiently fine-grained to necessarily identify pockets of disadvantage and deprivation
- IMD urban orientated measure: national research is increasingly looking at measures to better capture rural deprivation and ill-health
- Some evidence to date can be contradictory (e.g. association with mental health problems)
- Absence of much statistical information on health outcomes in rural areas
- We need to understand:
  - Where and who to target/prioritise
  - How best to design targeted interventions (including reducing the need to travel) using evidence based best practice from elsewhere
  - How to evaluate these

Research opportunities

- PHE setting up a repository for best practice examples for rural health and care (as they have done already in other areas e.g. community-based approaches)
- NIHR call for funding for Health Inequalities Research:
  - Research in coastal areas (nothing specific on rurality per se) NB known gap in research in coastal areas for older population
- Applied Research Collaborative (Also NIHR)
  - PHE is providing research gaps which will include rural areas
  - proposal put forward by NCC DPH in 2018 re access and outcomes
- PHE currently scoping work with voluntary sector partners
- Centre for Ageing Better – looking now for expressions of interest to partner work for rural or coastal locality
- NIHR Phinder – NIHR support academic community who may be approached to undertake project evaluations
- Applied Research Collaboration - dissemination

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Possible questions to ask ourselves:

- Do we know where the specific small pockets of deprivation in our rural communities are i.e. where to target our services?
- Do we understand patterns of demand for transport to health and care provision?
- Do we understand accessibility to any online services we may wish to promote?
- Do we understand areas where take up of services is low and access a problem?

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Thank you

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