1. Introduction

1. Purpose

This paper gives a summary of Edinburgh’s population, its health and wellbeing, and variations across the city; levels of poverty and deprivation; the level of need for support and care and how we expect this to change in future; how the resources of the NHS and local authority are currently used and what the current pressures are.

This profile is based on analyses of published and local data. What we now need to do is to find out more from people who live in Edinburgh and from those who work in the voluntary and private sector, the Council, NHS Lothian and other members of the Edinburgh Community Planning Partnership.

The first section gives the background to the needs assessment – why it is needed and where it fits with decision making. The second section summarises the results of our analysis so far. Work on the needs assessment is ongoing and we aim to finalise the work by the end of December 2015.

2. Why do we need a joint strategic needs assessment (JSNA)?

The JSNA is needed to support the integration of health and social care. Integration will bring together the planning of adult social care services, NHS community services and some NHS hospital based services under a single body known as an “integration authority”. Each integration authority must produce a strategic plan that:

- divides the local authority area for which the integration authority is responsible into at least two localities – there will be four in Edinburgh
- sets out how the functions and services that the integration authority is responsible for will be delivered and how the related budget will be used
- explains how the integration authority intends to achieve a set of outcomes known as the national health and wellbeing outcomes

The JSNA will be used in developing the strategic plan to help decide what the priorities are in Edinburgh and the strategic plan will set out how these will be addressed.
2. Profile of Edinburgh’s population

1. There are big differences in life expectancy, life chances and health and wellbeing among the population of Edinburgh – these exist between but also within the four localities.

2. We know that there are a range of factors which contribute to these differences. These include:
   - **Poverty**: there is a clear link between income inequalities and inequality across a wide range of health outcomes. There are significant pockets of poverty within the city. Overall, 21% of children were living in low income households in 2013 and Edinburgh has the fifth highest proportion of low income households in Scotland.
   - **Living in an area with high levels of deprivation**: school leavers are less likely to have a positive destination (e.g. employment or further education); people are more likely to have poorer physical and mental health throughout their lives; but 50% of people experiencing poor health do not live in areas with high levels of deprivation.
   - **Being in a specific group**: there is clear evidence that being a looked after child, being disabled or being a person aged 85 or more increases the need for support. Looked after children, for example, are less likely to sustain a positive destination after school, increasing the likelihood of living in poverty etc.

3. Other risk factors include social isolation and loneliness which are associated with higher mortality rates among older people – we know that the number of single households in Edinburgh is increasing, and that a substantial proportion of older people live alone.

4. What do we know about the future?
   - Poverty rates are likely to remain high in the next few years
   - There will be an increase in the size of the population – this in itself will lead to an increase in the number of people needing support, even if everything else stays the same
   - In particular, there will be more older people – again leading to an increase in the numbers of people needing support

---

1. We have used the term ‘deprivation’ in this document to indicate problems that arise due to lack of resources or opportunities.
5. What are some of the challenges?
   - Persistently high levels of poverty and health inequalities impacting on the lives of individuals and families across the whole city.
   - The “inverse care law” – where the quantity of care provided may be lowest for those with the highest needs.
   - The workforce: the health sector is a major source of labour demand and the sector is expected to grow faster than any other sector. However, there are skill shortages and unfilled vacancies, even at present.
   - Edinburgh has a shortfall in supply of accessible and affordable housing with increased investment needed to meet the needs of an ageing population. Investment in affordable housing also provides housing for workers in the health and social care sector.
3. Locality Overview

This section provides an at-a-glance summary of the key characteristics of the four localities, using information from the detailed report.

It illustrates the sometimes stark differences between localities in terms of population size, age, health, unemployment etc, which are useful at a broad level for planning. However, as this report also highlights, there are significant differences within localities.

Some key points to bear in mind in considering these summaries:

- Both numbers and rates are used:
  - numbers will give the **volume of demand** e.g. the largest number of hospital admissions from falls in North West gives us information about the volume of support needed
  - rates allow us to make comparisons between the localities e.g. for mortality or poverty, allowing for the different sizes and age structures of the four areas - North East having the highest **rate** per 1,000 population (16+) for people being assessed or supported by Health and Social Care, tells us that the underlying level of need is higher compared with other areas
  - There are significant differences **within** localities as well as between them, and they are of as much interest for planning – for example, all localities in the city record areas of high poverty alongside areas of relative affluence.
North West

- **Population**
  - Largest population size: 138,995
  - One-third (33.2%) of Edinburgh's child population aged 0-15
  - A third of the city’s population aged 85+

- **Health**
  - Largest number of hospital admissions due to falls
  - Highest spend on health (directly related to the size of the area)
  - Highest number of persons with:
    - One or more health conditions (N = 36,591)
    - Deafness/Hearing loss (N = 8,322)
    - Blindness/Partial sight loss (N = 2,989)
    - Physical Disability (N = 7,032)
    - Other Conditions (N = 22,595).

- **Health and Social Care**
  - Highest number of individuals supported by Health and Social Care
  - Lowest rate of new legal orders (mental health, adult protection etc) granted
  - Highest proportion of unpaid carers (15.5%)

- **Other**
  - Diverse, containing the wards with:
    - the highest (27%) and lowest (17%) percentage of households on low income in the City
    - the highest and lowest employment rate
  - Lowest percentage of people living alone (35.7%)
  - Lowest percentage of students (4.9%)
  - Highest percentage of retired people (14.2%)
  - 7.7% of its datazones are in the 15% most deprived areas in Scotland

North East

- **Population**
  - Total population 110,550 – smallest of the four localities
  - Relatively young: lowest proportion of people aged 65+ (13%)
  - Almost half of population is in the 25 to 49 year old age group
  - Largest number of households from an ethnic minority background
  - Highest concentrations of people with White Polish ethnic origin

- **Health**
  - Poorest health across a wide range of measures
  - Highest percentage of people with long term health problem which limit day to day activity (8%)
  - Highest mortality rate (the only locality with a mortality rate higher than Scottish figure)
  - Largest number of unplanned inpatient admissions

- **Health and Social Care**
  - Highest rate per 1,000 population (16+) for people being assessed or supported by Health and Social Care
  - Highest proportion of people supported who are under age 75 years
  - Highest number of people supported who have learning disabilities, physical disabilities and addictions with implications for volumes of support needed
  - Highest average size of packages of care (hours per week)

- **Other**
  - Highest level of economic activity and employment (68.6%)
  - Highest percentage of people living alone (43.8%)
**South West**

- **Population**
  - Total population: 111,807
  - 16+ population: 94,093
  - Smallest 16+ population

- **Health**
  - Relatively low proportion of residents with long term health problems which limits day to day activities
  - Highest percentage of residents economically inactive due to limiting long term illness (15%)
  - Relatively high rates of women with dementia, but low concentration among men

- **Health and Social Care**
  - Highest proportion of Health and Social care open cases in under 24 year age group
  - Low take up of direct payments.
  - Lowest concentration of people providing unpaid care (see map series)
  - Highest concentration of people who cycle to work

- **Other**
  - 12.4% of its datazones are in the 15% most deprived areas in Scotland

---

**South East/Central**

- **Population**
  - Total population: 126,148 – second largest
  - 16+ population: 109,999 – 13% of the locality total, compared with 15% across Edinburgh
  - Largest proportion of persons aged 16 – 24 (40.3%) (students)
  - Highest concentration of people aged 85+
  - Highest concentrations of people with Chinese ethnic origin

- **Health**
  - The only locality showing an increase (albeit small) in stroke-related mortality
  - Sharper decline in under 75 year old mortality rates than other localities

- **Health and Social Care**
  - Highest number of individuals in care homes (based on the person’s original home address)
  - Lowest rate of unpaid carers provide 50+ hours per week (19.3%)
  - Highest number of people with Mental Health problems

- **Other**
  - Largest percentage of households on low incomes (23.5%)
  - Low level of economic activity (due to students?) – 57.5%
  - Highest percentage of students (20.9%)
  - Lowest percentage of retired people (9.6%)
  - 4.8% of its datazones are in the 15% most deprived areas in Scotland
4. Care groups – estimates of future need

This section provides a summary of the basis of estimates of future levels of need among specific groups of people.

1. Older People
Estimates of future numbers of older people are sourced from National Records of Scotland (NRS) population projections for local authority areas.

- The number of people aged over 85 is expected to double by 2032 to 19,294
- Within 20 years the number of people living with dementia could rise by 61.7% to 11,548 people

These are groups which tend to have high levels of need for support, and so these estimates tell us that the level of demand will increase considerably.

2. Mental Health
Population growth itself will bring about an increase in demand, assuming that underlying rates of mental health problems remain the same. For the purposes of estimating future levels of need, we have made a conservative estimate of a 1.4% increase each year, in line with the annual increase in the adult population. However, we know that this is likely to be an underestimate: factors linked with mental health problems, such as ongoing high levels of poverty, may increase the need for support.

3. Disabilities
Future levels of need among people with disabilities – including physical disabilities, sensory impairment, learning disabilities and autism - are expected to increase as a result of population growth and improved medical interventions, which increase survival rates and life expectancy. Again, we are using the conservative estimate of 1.4% growth in demand each year. As with mental health, this may be an underestimate, as increases in diagnosis rates for autism, for example, may lead to higher levels of demand.

4. Addictions
As with mental health, there is some evidence for an increase in addictions during periods of economic recession, low growth or insecurity. The way that future needs are estimated is being reviewed. In the meantime we are assuming that numbers will increase by an average of 1.4%, in line with the annual increase in the adult population.

5. People with complex needs
These are people who may struggle with homelessness, unemployment, drug and alcohol problems, mental or physical ill-health, who sometimes get involved in crime, and who are often the victims of violence. Future levels of need among this group are difficult to estimate, because there isn’t agreement about the size of the current group, with estimates ranging from 150-5,000 individuals. As with the other groups, demand may increase through national-level factors such as welfare reform and public sector cuts.
6. Carers
There are estimated to be 65,084 carers in Edinburgh, or 13.7% of the population. It is expected that the numbers of carers will rise in response to the rising population, but social factors such as changes in family composition make numbers hard to predict.

7. Palliative care
Future demand will be linked to death rates as well as the incidence of long term and multiple conditions, and also with changes in the focus of palliative care to include non-cancer conditions.

8. Blood borne viruses
The number of new cases of HIV infection in Lothian has been falling since 2005 and in 2013 totalled 88. However, the prevalence of people with HIV is increasing due to decreased deaths, antiretroviral therapies and new cases being diagnosed. At 31 March 2014 there were an estimated 1,479 people living with HIV in Lothian, up from just over 1,000 in January 2010.

There are around 5,500 people living in Lothian with HIV or Hepatitis C infection. Further planning work is required to estimate the numbers now and in the next five to ten years living in Edinburgh who are likely to require Health and Social Care services.

9. Alcohol related brain damage (ARBD)
If rates of alcohol consumption continue to rise, there will be an ongoing demand from this group of service users. As ARBD is often undiagnosed, we do not know how many people have the condition, and so it is not possible to provide estimates of future level with any confidence.

10. People with two or more long term conditions (multimorbidity)
The likelihood of having two or more long term conditions, such as asthma, diabetes, epilepsy and obesity, is higher in areas of deprivation and it increases with age. Population growth will lead to increases in demand, as will factors such as ongoing economic challenges and increases in poverty levels.

11. In summary
Population growth alone will increase the need for support. A number of wide ranging factors could increase demand further for all groups, and these include:

- The economy, levels of poverty and changes in welfare benefits
- Improved medical interventions and increases in diagnosis rates

Our conservative estimate of a 1.4% increase in demand each year presents a significant challenge for planners and providers of support.
5. Resource Use – Current Patterns of Spend and Activity in NHS and Social Care Services

This section summarises how the budgets for health and social care are used and factors linked to higher spend (including age and deprivation).

Summary

- The highest share of NHS and social care expenditure is on inpatient care, which accounted for a quarter of the total spend in 2012-13
- Three quarters of the acute inpatient care is on non elective (unplanned) admissions
- Among adults, spend per person increases with age – spend for people aged 85+ was on average 6 times the average for the total population
- Risk of emergency admission to hospital increases with the level of deprivation
- The average spend per person is similar across the four localities
- As noted elsewhere in this report, population size, old age and deprivation are key drivers of the need for social care: the North East locality had a higher rate of people supported than the other three localities, while in volume terms, the North West (the biggest sector) had the largest number.
- Similarly, older people formed the largest group of people being supported by social care services (60% of the total in the North East rising to 74% in the North West).
- A small proportion of the Edinburgh population accounts for a high proportion of costs:
  - 2.4% of the population account for 50% of total health care costs
  - 8.4% of the population account for 50% of all social care costs
- A large proportion of people in Edinburgh with long term health conditions are at low risk of admission to hospital, but because this is a large group, it accounts for a large proportion of the total cost. There is scope, through early interventions for people with long term conditions, to reduce this total cost.
- The main client group of the people being supported by Health and Social Care for the under 65 population in the four localities varied, with East locality having the highest number of people with learning disabilities, physical disabilities and addictions and South East/Central having the highest number of people with mental health problems.

What does this tell us?

- Knowing the pattern of spend at this baseline stage, before integration happens, and the things that drive these spending patterns (summarised above), and current variations between localities, will help to inform what changes we might want to make to make through the strategic plan to make resource use more effective.
6. Pressures

This section provides a brief overview of existing and future pressures in health and social care, including: delayed discharge, unscheduled care, waiting lists and staffing. These will need to be taken into account in deciding how to use the resources which will be brought together through integration.

Delayed discharge

- Delayed discharge happens when a person is ready to move on from hospital, but the support that they need is not yet fully in place
- Levels of delayed discharge are high in Edinburgh: the first chart on this page shows that the rate of hospital beds being used by someone who was ready to move on was the highest of the 32 local authorities in Scotland
- Levels of delayed discharge were highest among the 75+ age group
- The total cost of delayed discharge in Edinburgh was second highest in Scotland, at £7.4 million per 100,000 population in 2012/13

Unscheduled care

The rate of emergency admission to hospital in Edinburgh has remained consistent over the five years, and is lower than in other parts of Lothian. Deprivation is associated with emergency admissions, and Edinburgh North East has the largest number of people admitted to hospital in this way.

Domiciliary care

People may be waiting at home or in hospital while their support is arranged. The chart below provides a series of snapshots of the levels of unmet need – these are typically higher in number (people waiting) in the North West and South Central, while the average number of hours of support people are waiting for is higher in North East.

People waiting for domiciliary care service
Staffing

An increase in population size will require additional staff, including general practitioners, community nurses and social and care workers, if current staffing ratios are to be maintained. Supporting people with higher levels of need in the community, rather than in hospital, will add to the need for skilled staff.

The analysis of the labour market in Edinburgh shows:

- Skills shortages in the health sector
- Challenges in recruitment and addressing the ageing profile of the sector workforce will persist and increase in the future

Population growth, including the growing number of frail elderly people, and the shift in the balance of care to the community, is placing increasing pressure on primary care professionals. Whilst the number of GPs has increased, the numbers are not keeping pace with the population: since 2009 the number of GPs per head of population has fallen sharply. Although numbers on whole-time equivalent GPs are not robustly gathered, it is widely accepted that more GPs are working part-time due to a well evidenced proportional increase in the number of female GPs. All of this is placing increasing pressure on GPs, and making general practice an unattractive option for medical students.

Whilst the number of whole time equivalent community nursing staff (health visitors, community nurses and school nurses) has increased by 1% between 2009 and 2013, practice list size has increased by 3%.

There are also pressures within the social care workforce:

- The highest area of turnover is care workers employed with the home care service and residential care for older people
- The age profile of staff, shown in the diagram below, shows the need to ensure that younger people are recruited and stay within the caring workforce, as noted above

Key messages

An effective care system needs to provide the right care, in the right place at the right time. This section highlights some of the current pressures and blockages within the system, and the significant challenge of ensuring that there are sufficient numbers of suitably skilled staff.