



ELYSIAN

RESIDENCES

13-15a Alderton Hill, Loughton

Economic Statement

July 2018

Volterra

1 Executive summary

- 1.1 Elysian Loughton Site Limited (the Applicant) develop and operate homes for the elderly, providing accommodation specifically designed for older people looking to downsize to a solution with integrated healthcare, across a full continuum of care. Elysian is proposing a new scheme on Alderton Hill in Loughton, Epping Forest. The site is on previously developed land and so does not involve any of the green belt.
- 1.2 The Proposed Development would include: the demolition of 13, 15 and 15a, Alderton Hill, and the erection of **89 residential assisted/independent living units, as well as 24-hour nursing care and a medical treatment/examination room.**
- 1.3 Not only will the scheme provide the elderly with excellent quality accommodation, **it will reduce the infrastructure burden.** The integrated care model **reduces the strain on the NHS** (an estimated saving of £210k per year) and the scheme **reduces the strain on housing supply** not only through its direct provision of elderly housing but also indirectly through the family housing that is released as a result. The scheme is therefore **a more efficient way to build new homes** – through providing good quality elderly housing that encourages people to downsize, thus releasing their family units back into the market, meaning the demolition, land take, and environmental costs of building the homes are better than the alternative of directly delivering family housing.
- 1.4 The specific benefits resulting from the scheme are:
- Contributing to the need for elderly housing***
- The units are expected to accommodate c. 120 residents. The proportion of over 65s in Epping Forest is expected to increase sharply compared to other age bands between 2015 and 2025¹ and the Epping Forest Draft Local Plan² acknowledges the need to provide ‘**supported housing for elderly people** and other groups with special needs.’
 - There are no specific targets for elderly housing in Epping Forest, however the West Essex and Hertfordshire Strategic Housing Market Assessment³ (SHMA) which informs the Epping Forest Draft Local Plan forecasts a net increase of 535 people aged over 75 in Epping Forest who would live in communal establishments over the plan period (2011 to 2033). Therefore, **the Proposed Development is expected to provide c. 22% of this additional need.**
 - In reality, we estimate that demand could be over 1,500⁴ since it is likely that there is some pent-up demand from people who may choose to live in accommodation such as the proposed scheme if it existed but have continued to live at home. The majority (82%) of the 65+ population in Epping Forest live in houses with at least one spare bedroom – this may be a lifestyle choice but equally it may be that these people would downsize if the appropriate options were available.

¹ A profile of people living in Epping Forest, Essex County Council, 2016

² Draft Local Plan, Epping Forest District Council, 2017

³ West Essex and East Herefordshire Strategic Housing Market Assessment, 2015

⁴ The UK (0.2%) has a very low proportion of the elderly living in elderly accommodation compared to New Zealand, Australia and The USA. Here the proportion of elderly living in elderly accommodation ranges between 4% and 12%.

Relieving the housing crisis through freeing up family homes

- In Epping Forest **82% of people aged 65+ live in houses with empty bedrooms**. If, as the proposals are designed to do, Elysian provides an option for people which allows them to downsize; this **indirectly frees up larger homes for families**: 53% of the 65+ population in Epping Forest live in houses with two or more spare bedrooms and 29% live in houses with one spare bedroom. This totals **at least 20,000 spare bedrooms in Epping Forest within homes currently occupied by people aged 65+**.⁵
- An insufficient supply of housing has resulted in an unaffordable residential market within the local authority: the median **house price to income ratio in Epping Forest was 12.2 in 2017**; this is significantly higher than the average for Essex (9.3) and for England (7.9), and is almost reaching London's level of unaffordability (13.2)⁶. Indeed, Epping Forest is the joint 14th least affordable local authority of the 314 local authorities outside of London.
- A step change in housing delivery in Epping Forest is needed: historic delivery (an average of c. 250 net additional units have been delivered per year since 2001/02) would need to **more than double in order to meet the housing delivery target** identified in the Draft Local Plan. This target requires c. 520 units to be delivered per year of the plan period with 68% (350) of this identified need being for family housing.
- It is estimated that the Proposed Development would result in the release of c. 75 family houses. This is based on both Elysian evidence, which suggests that **at least 90% of the units will be elderly people downsizing from family homes** and occupancy statistics for the 65+ population of Epping Forest. This indirect release of family homes would represent over a fifth of the 350 annual target for new family housing in Epping Forest.
- Based on UK, US and Australian residency statistics, it is estimated that Elysian residents tend to move into Elysian accommodation **eight years earlier than they would have otherwise downsized**; this means that family housing is freed up earlier while residents also benefit from the facilities and support at the Elysian accommodation.
- Building smaller units that encourage elderly people to downsize, thereby freeing up family houses, is a **more efficient use of resources** than directly providing the equivalent number of family houses. Smaller units tend to be more efficient to build, to service with utilities and require less energy to heat. This means that the **environmental costs of building the homes are lower than the alternative of directly delivering family housing**.

Reducing the burden on the NHS

- The Proposed Development would reduce the impact on the NHS through its integrated health model. The scheme would include 24-hour nursing care and a treatment/medical examination room (allowing for GPs and specialists to see patients onsite) which would cater for many of the health needs of the residents. Elderly people make up a disproportionately high number of GP appointments and

⁵ Assuming households with 2+ spare bedrooms only have 2 spare bedrooms, the most conservative assumption

⁶ Ratio of house price to residence-based earnings (lower quartile and median), 2002 to 2017, ONS 2018

it is estimated that the scheme would **reduce the residents' demand for GP appointments by c. 620 GP appointments per year.**

- Evidence of similar schemes suggests that the cost burden of residents to the NHS can be reduced by up to 38%⁷. It is estimated that **the total saving to the NHS of the Development will be c. £210k per annum.**
- It is acknowledged that this is the national NHS context, and that if the Proposed Development results in additional elderly population in the local area, there will be an increase in demand for GPs (and therefore burden on the local NHS), albeit smaller than if the same elderly people were living in independent accommodation in the local area.

Creating employment opportunities

- The Proposed Development would support **18 FTE jobs directly onsite**. Further jobs would be created through supply chain impacts and workers spending money in the local area. It is expected that the total employment impact (including direct, indirect and induced employment) would be **25 net additional FTE jobs**. Whilst the Elysian properties offer a variety of onsite services, the 120 residents would be expected to spend money outside of the Proposed Development. Based on current spending patterns for over 65s, it is estimated that **the residents would spend £610k each year** outside of the Proposed Development, supporting further local economic activity and jobs.
- The construction of the Proposed Development would also support employment: it is expected that there would be **an average of 225 people onsite during the 26-month construction period, spending c. £265k per annum in the local area.**

Benefits to residents

- The main benefit of an Elysian development to the residents is that it allows them to continue **living independently for as long as possible in a supportive environment** with high quality facilities and services. The aim is to improve the quality of life of residents, both through quality of care, but also through a communal atmosphere which helps to combat loneliness, mental health problems and promote physical wellbeing. Based on Elysian experience elsewhere, we expect that residents will move into Elysian accommodation eight years earlier than when they would have otherwise downsized, and therefore this allows them to maximise their quality of life for as long as possible.

⁷ Aston University (2015), Collaborative Research between Aston Research Centre for Healthy Ageing (ARCHA) and the ExtraCare Charitable Trust

2 Introduction

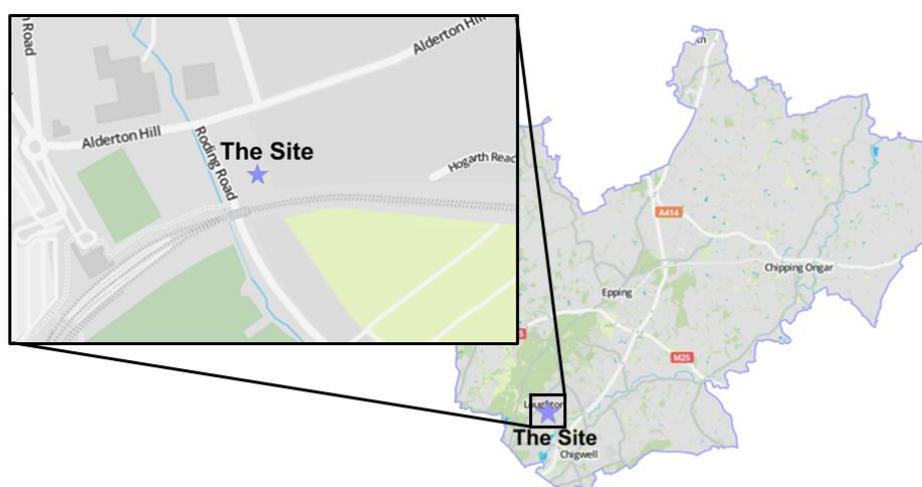
The Elysian model

- 2.1 Elysian develop and operate homes for the elderly, providing accommodation specifically designed for older people looking to downsize.
- 2.2 The Elysian model has been developed to give residents the opportunity to live an active and fulfilled lifestyle in purpose built, well designed homes, with healthcare support. To this end, Elysian properties offer activities such as fitness classes, an onsite restaurant, guest speakers and arts and crafts as well as 24-hour medical provision. This model differs from traditional care home provision by allowing residents to live in their own homes, but with onsite access to healthcare and amenities. The homes are designed so that the scale of support can change over time as and when the residents require more healthcare services and support.

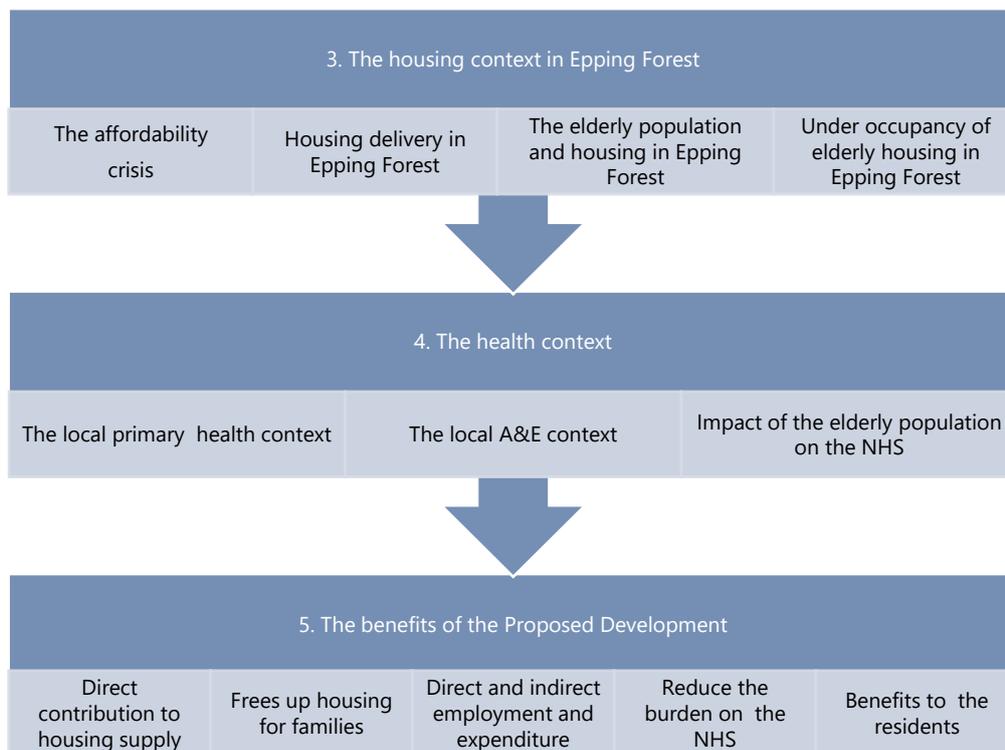
The Proposed Development

- 2.3 Elysian Loughton Site Limited (the Applicant) is currently proposing a new scheme at 13 – 15A Alderton Hill (the Site) in Loughton, Epping Forest. The Proposed Development would include 89 residential assisted/independent living units. There would also be 24-hour nursing care and a medical treatment/examination room which would allow GPs and specialist to visit patients onsite.
- 2.4 The Proposed Development is located in a predominantly residential area, adjacent to the McCarthy and Stone Care Home, Roding Valley High School and Loughton Underground Station.
- 2.5 The location of the Site means that it is technically in Essex but is very close to the north-east border of Greater London. It is connected to the London Underground Network via Loughton Underground Station. The Site is on previously developed land and so does not involve any of the green belt.

Figure 1: Site Location



- 2.6 This report provides an assessment of the economic impact of the Proposed Development. This includes both the direct benefits of the scheme (benefits to the residents, employment creation, contribution to housing supply, reduction in the burden on the NHS) as well as indirect benefits (such as the freeing up of family housing).
- 2.7 The remainder of this report is structured as follows:



3 The housing context in Epping Forest

The affordability crisis

- 3.1 A lack of housing delivery in Epping Forest has resulted in an unaffordable residential market: there is insufficient supply to meet the increasing demand for housing caused by population growth, resulting in rising rental and capital costs.
- 3.2 The median house price in Epping Forest was £440k in the year to Q4 2017, having increased by 64% over the last decade. This is substantially more than the median house price in Essex (£300k) and England (£235k) over the same period and is more in line with prices in London (£465k).
- 3.3 The lack of affordability is also reflected in house price to income ratios⁸: the median house price to income ratio in Epping Forest was 12.2 in 2017; this means that the median house price in Epping Forest is over 12 times the earnings of a resident of Epping Forest who is in full time employment. This is significantly higher than the average for both Essex (9.3) and England (7.9). Again, Epping Forest is not far from London's level of unaffordability (13.2) and is the 39th least affordable local authority of the 346 local authorities in England and Wales for which data is available⁹, and 14th of the 314 local authorities outside of London.
- 3.4 Mortgage providers will currently typically consider lending homebuyers a maximum of 4.5 times earnings, hence a couple who both earn the median wage for Epping Forest would still require a deposit of over three times their (individual) median fulltime income in order to buy a median priced house - equating to a deposit of over £110k. A person buying on their own would require a deposit of over £270k - or equivalent to almost eight times their annual earnings - this is prohibitively high for the majority of first time buyers.

Table 1: Median property price and price to income ratios

	Median House Price (Q4 2017)	House price to income ratio (Tax year 2017)	House price growth (Q4 2007 to Q4 2017)
Epping Forest	£440k	12.2	64%
Essex	£300k	9.3	50%
London	£465k	13.2	77%
England	£235k	7.9	31%

Source: Ratio of house price to residence-based earnings (lower quartile and median), 2002 to 2017; House price statistics for small areas Median price paid, both from ONS 2018

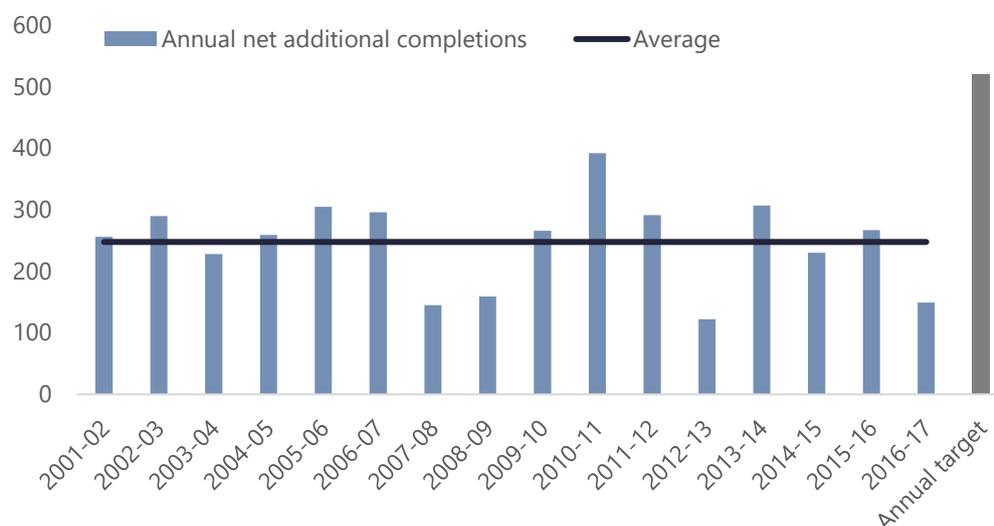
⁸ Ratio of house price to residence-based earnings (lower quartile and median), 2002 to 2017, ONS 2018

⁹ There are 348 local authorities in total, but data is not available for the Isles of Scilly or the City of London

Housing delivery in Epping Forest

- 3.5 The Epping Forest Draft Local Plan¹⁰ sets out the need for 11,400 new homes to be delivered over the plan period (2011 to 2033) – this is equivalent to c. 520 units per year. Since 2001/02, there have been an average of c. 250 net additional units delivered per year¹¹; even in the six years since the plan period started, there has only been an average of c. 230 net additional units per year. Historic housing delivery would therefore need to more than double to meet the housing target set out in the Draft Local Plan.

Figure 2: Net additional dwellings



Source: Housing Supply; net additional dwellings by local authority district, England: 2001-02 to 2015-16, ONS

- 3.6 The Housing Background Paper (2015) of the Epping Forest Draft Local Plan sets out the number of required units by number of bedrooms: 68% of the identified need¹² is for units of three or more bedrooms – i.e. family units. This equates to c. 350 new family units required per annum. Schemes that provide alternative accommodation options for the elderly, such as the Proposed Development, contribute to this identified need for family housing by allowing elderly people to downsize, thus releasing existing family units into the market.
- 3.7 It is estimated that the Proposed Development would result in the release of c. 75 family houses. This is based on both Elysian evidence, which suggests that at least 90% of the units will be elderly people downsizing from family homes, and occupancy statistics for the 65+ population of Epping Forest. Further information on these calculations is set out in the next section. This indirect release of these family homes would represent c. 21% of the 350 annual target for new family housing in Epping Forest.

¹⁰ Draft Local Plan, Epping Forest District Council, 2017

¹¹ Housing Supply: Net Additional Dwellings (Table 122), ONS, 2016

¹² Note that this was of the 11,300 units assessed as needed in Epping Forest in the SHMA

- 3.8 Contributing to the need for family housing through releasing under occupied existing family housing can be a more efficient and sustainable method than directly building new family housing. Using the Site for the development of family sized houses would use a greater amount of material and resources whilst not addressing the fact that a large number of family houses exist within Epping Forest which are under occupied. There are c. 20,000 empty bedrooms¹³ (associated with households of 65 plus) in Epping Forest as a result of 82% of people aged 65+ living in houses with empty bedrooms. Furthermore, the release of family housing would be distributed across the wider area and as a result would not lead to any sudden increases in the need for school places in one concentrated local area. This would have been the case if the site was used for a residential development for family sized dwellings.
- 3.9 The submission version of the Epping Forest Draft Local Plan is expected to be submitted for independent examination by the Secretary of State for housing, Communities and Local Government, with expected adoption in Autumn 2019. Therefore the Authority Monitoring Report¹⁴ is based on the target from the former East of England Plan – 230 homes per year of the plan period (2001/02 to 2020/21). Of the years in the plan to date (2001/02 to 2016/17), the target of 230 units has been achieved (average of c. 250 units per annum) but this will need to substantially increase to meet the targets set out in the new local plan.

The elderly population and housing in Epping Forest

- 3.10 In 2011, there were 14,800 households in Epping Forest where the household reference person (HRP) was over 65. This is 28% of all households¹⁵ which compares to an Essex average of 29% and a national (English) average of 26%.

Table 2: Households where the HRP is 65+

	Epping Forest	Essex	England
Living in a couple	8,000	87,100	3,157,000
Not living in a couple	6,800	80,300	2,565,000
Total	14,800	167,400	5,722,000
Percentage of all households	28%	29%	26%

Source: Census 2011, ONS; NB figures are rounded

- 3.11 There were 25,400 people over the age of 65 in Epping Forest in 2016. Figure 3 shows that the 65+ population has grown significantly faster than the total population since 2007 (between 2000 and 2007 growth of the total population and the 65+ population were broadly in line).
- 3.12 A report by Essex County Council forecast the proportion of over 65s is expected to increase sharply compared to other age bands between 2015 and 2025¹⁶ – over 65s will increase by 20% from 25,400 to 30,500 which is double the expected growth for total population (10%).

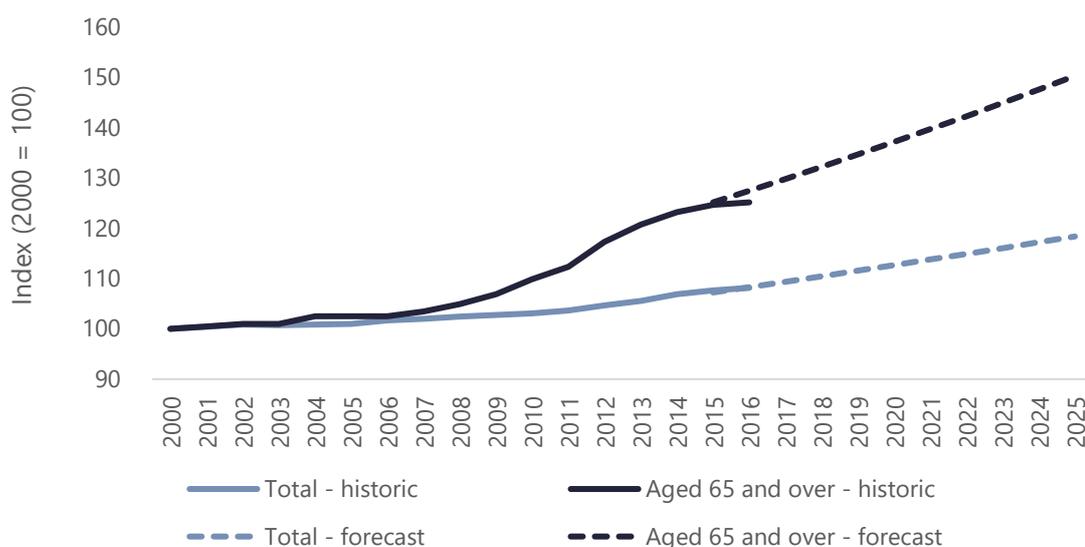
¹³ Census 2011

¹⁴ Authority Monitoring Report 2014/15, Epping Forest District Council

¹⁵ Household Reference Person, 2011 Census, Office for National Statistics

¹⁶ A profile of people living in Epping Forest, Essex County Council, 2016

Figure 3: Population growth – historic and forecast



Source: Mid-year population estimates, ONS; A profile of people living in Epping Forest, Essex County Council, 2016

- 3.13 The local authority acknowledges that this will put greater demand on health, social care services and housing needs.

The Epping Forest Draft Local Plan Objective – Housing

“To ensure that new homes provide an appropriate mix of sizes, types, forms and tenures to meet local needs and create balanced, mixed and well-integrated communities. This includes supported housing for elderly people and other groups with special needs.”

Source: Draft Local Plan, Epping Forest District Council, 2017

- 3.14 There is no specific target for the delivery of housing units suitable for the elderly population. However, the West Essex and Hertfordshire SHMA¹⁷ which informs the Epping Forest Draft Local Plan¹⁸ forecasts a net increase of 535 people aged over 75 in Epping Forest who would live in communal establishments over the plan period (2011 to 2033). Based on an occupancy ratio of 1.4¹⁹, this suggests that there would need to be c. 380 units to accommodate this new demand.
- 3.15 The SHMA acknowledged that it is difficult to predict whether older people will be living in communal (C2) accommodation or within their own homes, and so in reality the number could be higher or lower than this figure. It is likely that a lack of options has, to some extent, led to pent-up demand as people choose to stay at home rather than moving into assisted living units.

¹⁷ West Essex Strategic Housing Market Assessment, 2015

¹⁸ Draft Local Plan, Epping Forest District Council, 2017

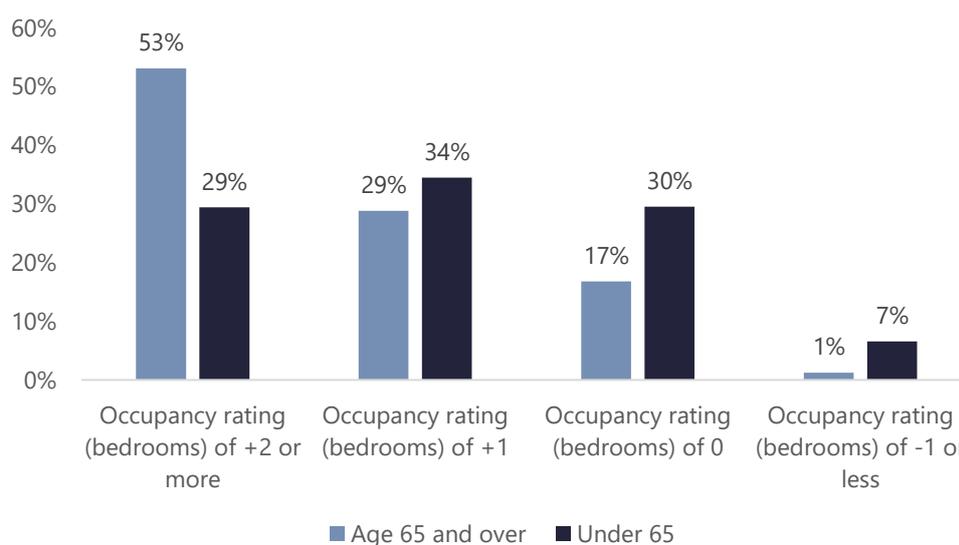
¹⁹ Based on the living arrangements of the over 65s in Epping Forest in the 2011 Census

- 3.16 The majority (82%) of the 65+ population in Epping Forest live in houses with at least one spare bedroom²⁰ – this may be a lifestyle choice but equally it may be that these people would downsize if the appropriate options were available. Under occupancy of housing by elderly people in Epping Forest is covered in more detail in the next section.

Under occupancy of elderly housing in Epping Forest

- 3.17 Under-occupancy is defined as having one or more spare bedrooms than is required by the household, and is common amongst older people.
- 3.18 Figure 4 shows that the 65+ population is more likely to have a spare room than the under 65 population²¹: 53% of the 65+ population live in a house with two or more spare bedrooms and 29% live in a property with one spare bedroom – this means that 82% of the elderly population live in a property with at least one spare room, equating to c. 20,000 spare bedrooms²². This compares to 63% of the under 65 population living in homes with spare bedrooms.

Figure 4: Population by occupancy – Epping Forest, 2011



Source: ONS, census 2011

²⁰ ONS (2011), Census 2011 - General health by long-term health problem or disability by occupancy rating (bedrooms) by age

²¹ ONS (2011), Census 2011 - General health by long-term health problem or disability by occupancy rating (bedrooms) by age

²² In order to be conservative, this assumes that all people living in homes with 2+ spare rooms only have 2 spare rooms per home

4 The health context

The local primary health context

- 4.1 West Essex Clinical Commissioning Group (WECCG) is the NHS body responsible for ensuring quality care provision to patients in Epping Forest, Harlow and Uttlesford. WECCG manages 33 general practices, 14 of which are in Epping Forest.²³
- 4.2 Typically, individuals register with GPs close to their place of residence, however since January 2015, GPs have been allowed to accept patients who are living outside of their practice boundaries, although it is for the practice to decide whether this is appropriate. A GP can refuse to accept patients because:
- It has no capacity to take on new patients;
 - It is not accepting patients that do not live within its practice boundary; and
 - It is not appropriate for a particular patient to register with a practice that is a long way from where they live.
- 4.3 For this assessment, we considered GP provision within both a 1km and 3km radius of the site. A report conducted by Deloitte in 2006 shows that across Great Britain patients on average travel 3.3km to their GP practice²⁴, although, on average a patient's nearest GP practice is only 1.9km away. 1 km is considered to be a typical walking distance.
- 4.4 Based on information from the NHS, there are two GP surgeries within a 1km catchment area of the site. They are managed by WECCG and have a total list of 22,918 patients which are supported by 18 doctors giving an average ratio of registered patients per GP of 1,273. This falls within the target patient list size of 1,800 patients per GP recommended by the Department of Health and Social Care (DHSC) and therefore primary health care in the very local area is not deemed to be constrained. The McCarthy and Stone retirement apartments, to the Site, are estimated to support c. 55 new residents²⁵. Even with this increase in the population the primary health care in the very local area would not be constrained.
- 4.5 The average ratio of registered patients per GP across the four GP surgeries within 3km of the site is 1,446, slightly higher than the one across the initial 1km catchment area but still within the target list size set out by the DHSC. Despite the total ratio for all six surgeries being within the recommended target, two of the six GP surgeries slightly exceed the recommended target: the ratio at The Forest Practice is 1,855 patients per doctor and Kings Medical Centre is also just over the target with 1,894 patients per doctor. These surgeries are more than 1km away (but within 3km); none of the surgeries in the very local area (within 1km) exceed the recommended target.

²³ NHS, West Essex Clinical Commissioning Group, GP Practices, 2018

²⁴ Deloitte, Report to NHS Employers: Adjusting the general medical services allocation formula for the unavoidable effects of geographically dispersed populations on practices sizes and locations, 2006

²⁵ This estimation is based on applying the same expected occupancy rate as Elysian of 1.4 to the 38 units that the McCarthy and Stone development will consist of, rounded to the nearest 5.

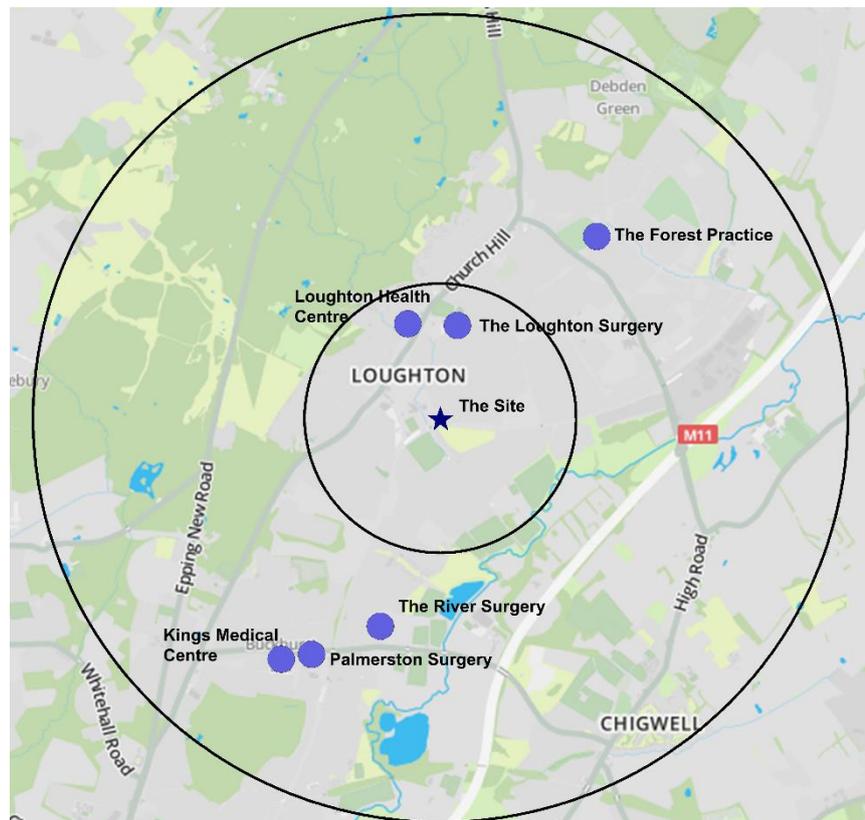
4.6 This analysis suggests that while on average there are sufficient GPs to serve the needs of the local population, there are some GP surgeries that are constrained with slightly higher ratios of patients to GPs than is recommended.

Table 3: GP provision within 1km and 3km radius

	Distance (km)	No. GPs	Currently accepting patients?	List size	Patient/GP ratio
The Loughton Surgery	0.5	8	Yes	11,138	1,392
Loughton Health Surgery	0.8	10	Yes	11,780	1,178
Total (1km)	-	18	-	22,918	1,273
The Forest Practice	1.4	6	Yes	11,132	1,855
The River Surgery	1.9	4	Yes	4,259	1,065
Palmerston Rd Surgery	2.4	3	Yes	4,748	1,583
Kings Medical Centre	2.6	4	Yes	7,574	1,894
Total (3km)	-	35	-	50,631	1,446

Source: NHS Choices, 2018

Table 4: Location of GP surgeries around the site (1km & 3km radius)



Source: NHS Choices, 2018

The local A&E context

- 4.7 The closest Accident & Emergency (A&E) department to the Site is at the King George Hospital located 4.8 km away and operated by the Barking, Havering and Redbridge University Hospitals NHS Trust.
- 4.8 The A&E target is that 95% of patients who attend an A&E department are to be admitted to a hospital bed, discharged from the department or transferred to another hospital within four hours of arrival.²⁶ The standard recognises that for some patients it may not be clinically appropriate to manage them within four hours of arrival in the department.
- 4.9 In the last quarter (ending April 2018) 85% of patients across England and Wales were admitted within the four-hour target time.²⁷ The Barking, Havering and Redbridge University Hospitals NHS Trust achieved a maximum wait time of four hours in 74.5% of cases. This is below the NHS A&E target as well as below the national average which indicates the A&E provision for the local area is of a poor standard.

Impact of the elderly population on the NHS

- 4.10 Advances in modern medicine have meant that people live for longer. Longer life expectancy is clearly a benefit to society, but as people live longer they also tend to require more care and assistance.
- 4.11 In their report, *The NHS belongs to the people: A call to action*²⁸, NHS England identified the following evidence that growth in the elderly population will result in a significantly greater need for health care:
- Nearly two-thirds of people admitted to hospital are over 65 years old.
 - Hospital treatment for over 75s has increased by 65 per cent over the past decade (2002 to 2012) and someone over 85 is now 25 times more likely to spend a day in hospital than those under 65
 - The number of older people with a care need is predicted to rise by over 61% by 2030.
- 4.12 Figure 5 shows the OBR's forecast²⁹ for spending per head on healthcare in 2019/20 by age. This shows that the cost of care increases rapidly after 65.

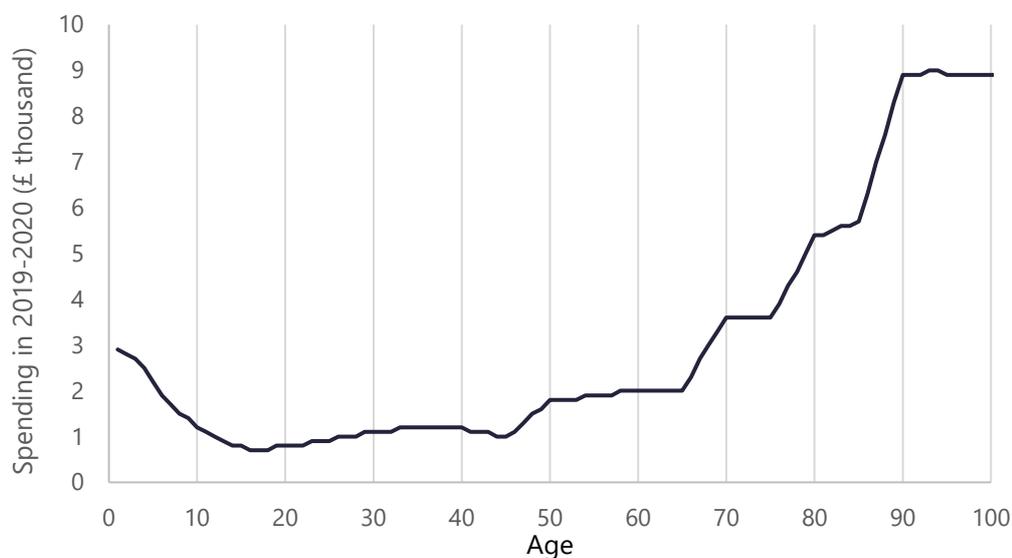
²⁶ House of Commons, Briefing Paper, NHS Key Statistics: England, 2018

²⁷ A&E Attendances & Emergency Admission monthly statistics, NHS and independent sector organisations in England, February to April 2018

²⁸ NHS England (2013), *The NHS belongs to the people: A call to Action – The Technical Annex*

²⁹ OBR (June 2015), *Fiscal sustainability report: Charts & Tables*

Figure 5: Health care spending (forecast for 2019/20)



Source: OBR

- 4.13 Based on this, it is possible to estimate the cost of healthcare per head. The cost of an over 65 is £4,580 per year which is 2.4 times the average cost for all age groups (£1,950) and 3.3 times the cost per head of the working age population (£1,370). The cost of a person aged over 85 is even higher at £8,310; this is 4.3 times the average cost of all age groups (£1,950) and 6.0 times the cost per head of the working age population (£1,370).

Table 5: Annual cost per head of healthcare

Age group	Health cost per head per year	Cost relative to average	Cost relative to working age
Average - all	£1,950	1.0	1.4
0 to 17	£1,560	0.8	1.1
18 to 65	£1,370	0.7	1.0
65+	£4,580	2.4	3.3
85+	£8,310	4.3	6.0

Source: OBR, Volterra Calculations 2016

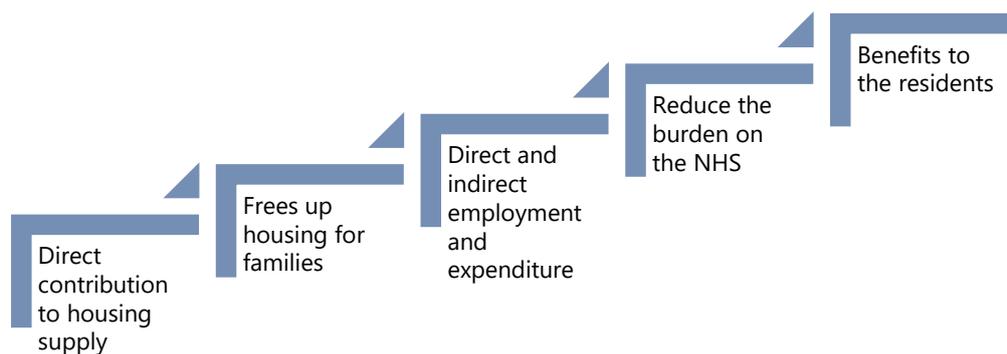
- 4.14 The demand from the elderly population is putting an increasing burden on the NHS at a time when the healthcare budget is declining. More than 40% of the NHS budget³⁰ is currently spent on the over-65s (more than £40bn); based on population growth forecasts it is estimated that this would increase by over 50% by 2036 (to more than £60bn). This forecast is conservative since it assumes that the cost per over 65 will stay constant over this time period whereas in reality, it is likely that advances in medicine means that people live for longer and therefore cost more.

³⁰ Nuffield Trust estimates

5 The benefits of the Proposed Development

- 5.1 The Proposed Development would result in a number of socio-economic benefits including: contribution to the housing supply both directly through the provision of 89 elderly units and indirectly as larger family houses are freed up; improved quality of life for residents; reduced burden on the NHS and additional employment supported by the Proposed Development.

Figure 6: Benefits of Elysian



Contribute to housing supply in Epping Forest

- 5.2 The Proposed Development would contribute to the housing supply in Epping Forest directly through the provision of elderly housing units, and indirectly through freeing up family houses.
- 5.3 The Epping Forest Draft Local Plan acknowledges the importance of this: ‘ensuring that new housing is accessible and adaptable may help to encourage some older people to ‘down-size’ into more manageable accommodation and enable them to remain at home for as long as possible. Enabling older people to down-size could also free up some larger-sized housing for younger families’.

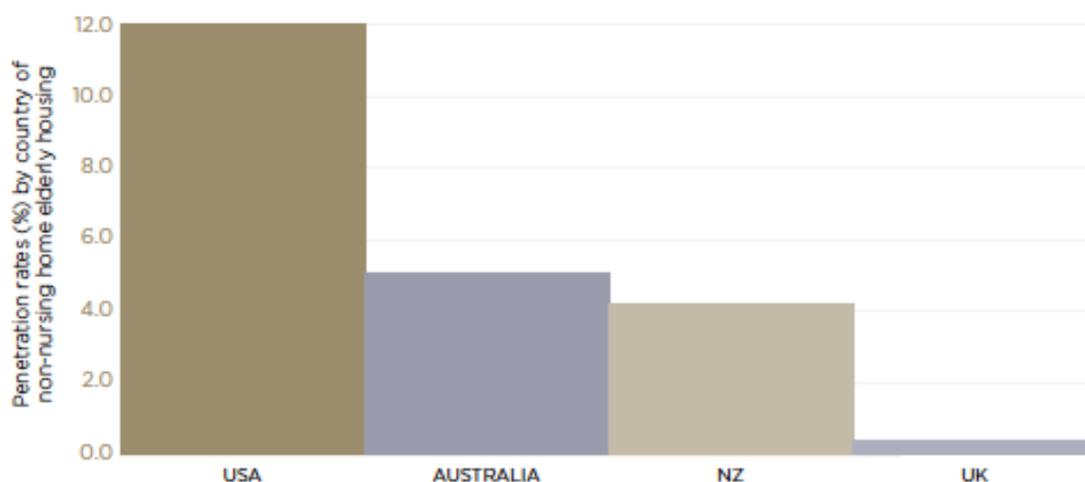
Direct contribution to housing supply

- 5.4 The provision of 89 purpose built units would be expected to accommodate c. 120³¹ residents and specifically cater for the needs of the elderly population. This would be a significant contribution to elderly housing, and indeed housing in general. As set out previously, the SHMA forecasts an increase of 535 elderly people (70+) living in communal establishments and therefore the proposed scheme delivers 22% of this need.
- 5.5 In reality, demand may well be higher than this since it is likely that there is some pent-up demand from people who may choose to live in accommodation such as the proposed scheme if it existed, but have continued to live at home. Figure 7 shows that New Zealand, Australia and The USA have between 4% and 12% of their elderly population living in some kind of elderly housing. It is likely demand in the UK is at a similar level but there is not adequate provision to fulfil that demand. If demand to

³¹ Based on evidence of previous Elysian schemes, it is expected the average occupancy per unit will be 1.4.

live in elderly housing in the UK was equal to that of just New Zealand (c. 4%) it would mean the demand for assisted living in Epping Forest within the existing over 65s would be c. 1,000. Factoring in the district's additional demand for 535 places would give rise to a total demand of over 1,500.

Figure 7: Penetration rates for assisted living/retirement villages



Source: AARP, *Assisted Living in Residential Care in the States in 2010*, JLL, *Senior Living: Can Australia Learn from the USA?* JLL *New Zealand Retirement Village Database*

- 5.6 It is acknowledged that the Proposed Development would result in the direct loss of three family units onsite, albeit two which are in disrepair.

Indirect contribution to supply by freeing up family housing

- 5.7 Since 82% of elderly people in Epping Forest are living in under-occupied housing, and 53% have two or more spare rooms, it is expected that the Proposed Development would release c. 70 family houses (assuming that units with one or more spare rooms are family houses). This is equivalent to c. 210 rooms of family housing, of which over 57% (120 rooms) will be rooms that are not currently used (refer to Table 6).

Table 6: Spare rooms released

	%	Units	Spare rooms released		Total rooms released	
Assumed to have no spare rooms	18%	16	0		17	
Assumed to have one spare room	29%	26	26	120	52	193
Assumed to have two spare rooms	53%	47	94		141	
Total	100%	89	120		210	

Source: Volterra Calculations 2018

- 5.8 Evidence from other schemes operated by Elysian suggests that at least 90% of the units will be taken by elderly people downsizing from family housing – this suggests that at least 80 units would be released for family housing - this is broadly consistent with the results presented in Table 6.

- 5.9 Based on both these statistics, it is estimated that c. 75 family houses would be released by people downsizing to the Proposed Development. As above, it is acknowledged that this is in the context of the loss of three family units onsite.
- 5.10 Based on UK, US and Australian residency statistics, it is estimated that residents at Elysian tend to move into Elysian accommodation eight years earlier than they would have otherwise downsized; this means that family housing is freed up earlier than it otherwise may have been, while residents also benefit from the facilities and support available at the Elysian accommodation. Building smaller units that encourage elderly people to downsize, thereby freeing up family houses, is a more efficient use of resources than directly providing the equivalent number of family houses. Smaller units tend to be more efficient to build, to service with utilities and require less energy to heat.

Employment and expenditure

Construction employment

- 5.11 The construction of the Proposed Development would result in economic activity in terms of employment and spending in the local area.
- 5.12 The standard method for estimating the number of construction jobs that would be created is to divide the total construction cost by the Gross Value Added (GVA) per construction worker. The total construction cost of the Proposed Development is estimated to be approximately £44.3m. The average GVA per construction worker in London and the East is £91,100³². Therefore, it is estimated that there would be c. 485 person years' worth of construction jobs created over the course of the construction period.
- 5.13 The construction period is anticipated to last c. 26 months, and so it is expected that there will be an average of 225 people onsite during the construction period. The construction advisor has advised that peak onsite construction workforce is likely to be c. 250 people, which is in line with the estimates set out above.
- 5.14 The construction workforce would support economic activity in the local area through spending money on food and drinks before, during and after work. It is estimated that the construction workforce would support at least £575k of spending in the local area over the course of the construction phase³³, equivalent to c. £265k per annum.

Operational employment

- 5.15 Based on Elysian experience of operating these sorts of facilities elsewhere and given the proposed number of residential units, it is expected that the scheme would support c.18 FTE jobs directly onsite once operational. Since there is not any employment currently supported on site, these 18 FTE jobs are all additional.
- 5.16 Taking into account the displacement (jobs that would have otherwise been supported elsewhere) and the multiplier impact (indirect and induced jobs supported

³² GDP per head of construction industry in London and the East (Regional GVA, ONS 2016; BRES 2016); given the location of the site close to the border of London the GVA per head of the combined regions is deemed an appropriate geographical area to use

³³ Assuming 60% of workers spend £9 a day for 220 days a year

by the supply chain and worker expenditure) it is estimated that the total net additional impact of the Proposed Development would be c. 25 FTE jobs³⁴.

Resident expenditure

- 5.17 The Elysian model has been developed to give residents the freedom to live an active lifestyle in purpose-built homes. Whilst the properties offer a variety of onsite services and activities, such as fitness classes, an onsite restaurant, guest speakers, and arts and crafts, as well as 24-hour medical provision, the 120 residents would also be expected to spend money outside of the Proposed Development, generating additional economic activity.
- 5.18 ONS provide statistics on household expenditure by age of the household reference person (HRP).³⁵ Households with an HRP aged 65 to 74 spend an average of £267 per person per week, rising to £364 for the richest 20%.³⁶ The survey breaks this down by commodity or service. Removing the categories which will be provided for within the Proposed Development (food and non-alcoholic drinks, housing, fuel and power, household goods and services, health, and communication), it is estimated that residents will spend an estimated £98 per person per week outside of the Proposed Development. This expenditure, which will be largely within the local area, will be on the remaining categories, including clothing and footwear, transport, recreation and culture, restaurants and hotels, alcoholic drinks and tobacco, and miscellaneous goods and services.
- 5.19 The following table shows that based on this estimate of weekly expenditure, the 120 residents would be expected to spend £610k outside of the Proposed Development each year. The estimate is based on the average household so may underestimate resident spend here.³⁷

Table 7: Resident expenditure

	Value
Residents	120
Average spend	£267
Spend outside of development	£98
<i>% of total</i>	<i>37%</i>
Annual gross spend	£610,000

Source: ONS; Volterra calculations

Healthcare provision and reducing the burden on the NHS

- 5.20 Integrated health models, such as Elysian, significantly reduce the burden on the NHS. The service and facilities provided are designed to improve the physical and mental health of the residents and so reduce their need for care. The onsite medical provision

³⁴ This is based on a displacement rate of 25% and a multiplier of 1.7

³⁵ Household reference person is an individual person within a household to act as a reference point for producing further derived statistics and for characterising a whole household according to characteristics of the chosen reference person. For a person living alone, it follows that this person is the HRP.

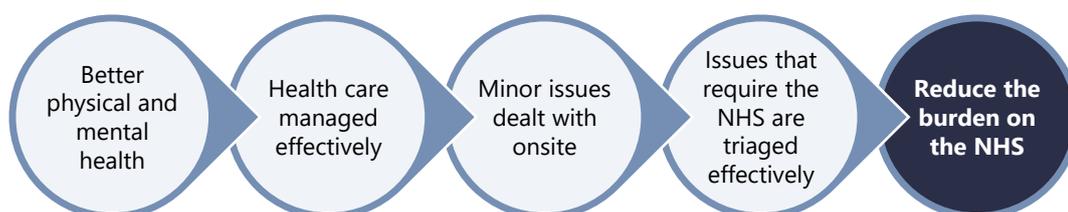
³⁶ Office for National Statistics (2017), Household expenditure by gross income quintile group where the household reference person is aged 65 to 74. UK, financial year ending 2015 to financial year ending 2017

³⁷ This estimate is collaborated by a GLA Study (2015) (more residents, more jobs) which finds that for every 100 new residents in outer London, 17 new jobs are supported. That implies that the 120 residents would support c. 20 jobs. The spending figures are broadly aligned with this – ie £610k of spending could support c. 20 local, service jobs.

ensures that minor issues can be dealt with onsite and that the health of residents is carefully managed – this means ensuring that residents take medicine at the right time, exercise as appropriate and see medical personnel when appropriate. The medical treatment room also allows patients to see a GP or specialist onsite where appropriate, which is likely to be more efficient than multiple home visits if patients were living in independent accommodation.

- 5.21 The model also ensures that residents that do need to use the NHS, use the appropriate service and therefore reduce the burden on the NHS and particularly A&E.

Figure 8: Reduce the burden on the NHS



- 5.22 It is expected that living in one of the units at the Proposed Development would reduce the likelihood of hospital admission. This is based on other examples of integrated care facilities:

- In Australia, integrated care with a care facilitator who directs patients to the required health care services led to 21% less A&E visits and 28% less hospital admissions³⁸.
- In the UK, the Department for Health found that integrated preventative services delivered a 47% reduction in overnight stays³⁹.

- 5.23 The ExtraCare study⁴⁰ also shows that similar schemes to the Proposed Development have significant impacts on the reliance of elderly people on the NHS. This analysis compared changes in care needs and care costs of ExtraCare residents to a control group over a three-year period, finding that ExtraCare’s integrated housing resulted in:

- A 46% reduction in routine GP appointments in year one;
- A 38% reduction in total NHS costs (GP visits, practice and district nurse visits and hospital appointments and admissions);
- A 51.5% reduction in total NHS costs for ‘frail’ residents;
- Unplanned hospital stays fell from an average of 8-14 days to 1-2 days.

- 5.24 As set out in Chapter 4, the average cost to the NHS of someone over 65 is £4,580 per year. Based on the 38% reduction in NHS costs, it is expected that the total saving of the Proposed Development to the NHS would be c. £210k per year.

³⁸ Canadian Institute for Health Information, (2011) *Healthcare in Canada*

³⁹ POPP (2009) *The National Evaluation of Partnerships for Older People*

⁴⁰ Aston University (2015), *Collaborative Research between Aston Research Centre for Healthy Ageing (ARCHA) and the ExtraCare Charitable Trust*

Table 8: Saving to the NHS

	Cost saving of Proposed Development
Number of units	89
Average occupancy	1.4
Number of residents	c. 120
Average cost of care per over 65	£4,580
Cost saving per person	38%
Cost saving per person	£1,740
Total cost saving to NHS	£210k

Source: Volterra Calculations 2017, Note figures are rounded to the nearest 10; NB this assumes occupancy of 1.4 per unit

- 5.25 The onsite medical care will also result in elderly residents making fewer trips to their GP as some issues can be sorted onsite. A study for the NHS Information Centre and DHSC⁴¹ found that the average patient had 5.5 consultations each year in 2008 but that rate varied markedly by age and sex, with the highest rate in the elderly – for example over 13 consultations each year for people aged 85 to 89. Applying these assumptions⁴² and the estimated 46% reduction in routine GP appointments, we estimate that the scheme could result in c. 5 fewer GP appointments per resident per year, equivalent to a total of c. 620 fewer GP appointments by residents of the scheme each year.
- 5.26 This represents the reduction of the burden to the NHS at a national level – the higher the level of provision and quality of integrated health facilities, the lower the residents burden will be on the NHS. It is however acknowledged that if the Proposed Development results in additional elderly population in the local area, there will be an increase in demand for GPs (and therefore burden on the local NHS), albeit smaller than if the same elderly people were living in independent accommodation.

Benefits to the residents

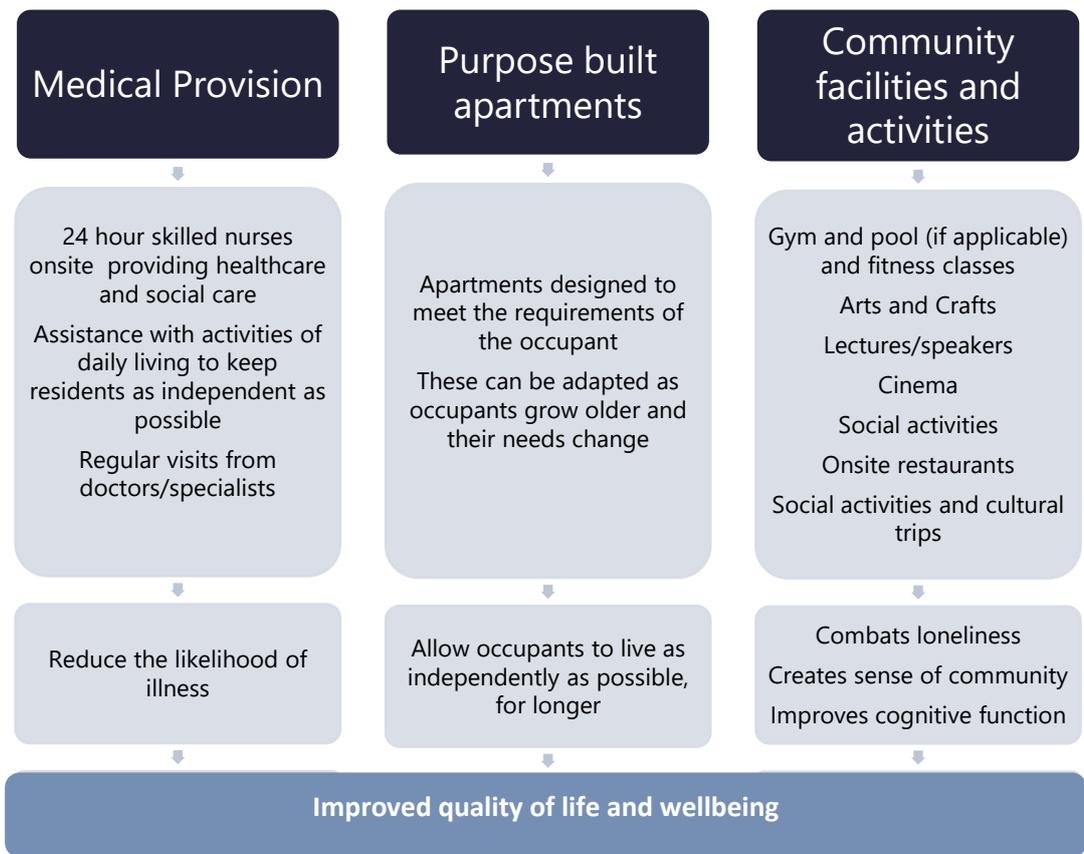
- 5.27 The Elysian model is to provide high quality, purpose built residential units for elderly people looking to live in a supportive environment. The quality of the facilities, services and care encourage people to downsize earlier than they may have otherwise done – Based on residency statistics in the UK, US and Australia, it is estimated that this can be up to eight years earlier in Elysian residences.
- 5.28 The aim is to allow residents to live as independently as possible for as long as possible, reducing the likelihood of them being admitted to hospital and/or requiring unplanned medical care. The units are designed so that they are flexible to the needs of the occupant, and can be adapted as the residents grow older and their needs change. The Development would also include a guest unit onsite which would allow residents' families to visit.

⁴¹ Final Report to the NHS Information Centre and Department for Health: Trends in Consultation Rates in General Practice 1995 to 2008: Analysis of the QResearch® database.

⁴² A further study "Clinical workload in UK primary care: a retrospective analysis of 100 million consultations in England, 2007–14 by F D R Hobbs, C Bankhead, T Mukhtar, S Stevens, R Perera-Salazar, T Holt and C Salisbury in The Lancet" found that consultation rates had risen by c. 13.5% between 2007 and 2014, however it found lower average consultation rates (4.9 in 2007 and 5.6 in 2014) so we have not applied this increase in order to remain conservative.

5.29 The aim is to improve the quality of life of residents, both through quality of care – there is a nurse onsite 24 hours a day and regular visits from doctors/specialists – but also through a communal atmosphere. A major issue amongst elderly people is loneliness: 17% of older people have less than weekly contact with family, friends and neighbours⁴³; the social activities (exercise classes, cultural trips, cinema etc.) and facilities provided in an Elysian development ensure that there is a strong sense of community. A study looking at the impact of ExtraCare’s integrated housing⁴⁴, health and social care found that there was a general reduction in depression in residents after 18 months.

Figure 9: The Elysian model – benefits to residents



⁴³ Age UK (2014), *Evidence Review: Loneliness in later life*

⁴⁴ Aston University (2015), *Collaborative Research between Aston Research Centre for Healthy Ageing (ARCHA) and the ExtraCare Charitable Trust*

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