

# NHS surplus land for supported housing: why now and what are the possible cost savings?

A Smith Institute research paper





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## Foreword

Paul Hackett, Director of the Smith Institute

This research paper forms part of an ongoing programme of work examining the relationship between housing and health. The programme aims to explore how good housing and housing related services for older people and vulnerable adults can help prevent illness and promote independent, healthy living; how new partnership working can improve a neighbourhood's capacity to care and help de-medicalise services; and how housing associations can help deliver better services and long-term cost savings for healthcare providers.

This paper looks specifically at how using surplus NHS land to build supported housing can help meet demand and reduce the costs of care. It makes the case for thinking differently about cost savings in the NHS, notably in regard to alternative provision of supported housing through innovative partnerships between housing associations and NHS trusts. In particular, the paper aims to quantify possible future savings that can be made based on existing land disposal programmes. The evidence suggests that even by disposing of small parcels of surplus land significant savings can be realised over the long-term.

The Smith Institute would like to thank One Housing Group for supporting this research project and Peter Molyneux (Common Cause Consulting), Patrick Vernon (National Housing Federation) and Emma Stanton (Beacon Health) for their comments. I would also like to thank Paul Hunter (Head of Research at the Smith Institute) for researching and writing the paper.



# Executive summary

## Executive summary

The headline analysis in this paper suggests that using NHS land for supported housing offers better value for money than selling it for private development. This approach can not only save money whilst providing a better service, but also deliver public assets that strengthen balance sheets rather reducing them. This paper seeks to evaluate the levels of possible savings. The main findings are based on surplus NHS land being sold at present values alongside potential demand for supported housing:

- The NHS could make indicative savings of around £6 billion (over a 25 year period) by using surplus land for supported housing.
- Using NHS land for supported housing offers significant scope for reducing delayed discharges which costs the NHS around £200 million per year.
- The scenarios show that the NHS could save around £75,000 per year per unit if, for example, a mental health patient was transferred to supported housing rather than staying in an acute ward. £50,000 per year could be saved if an older person was transferred from an acute ward to a supported home.
- Unlike other early intervention programmes using surplus land offers the opportunity to meet upfront capital costs of building supported homes. Factoring in build costs over 25 years £1.6 million could be saved on a supported housing unit for those with mental health problems, and £1 million for older people.
- On current land values (ignoring inflation) over a 25 year period this would provide an annualised return on investment of 7% for mental health supported housing and 5% for older people. Given that the calculations ignore inflation these yields are arguably higher than just selling the land and investing elsewhere.
- As many as 2,267 homes could be built for supported housing using the surplus land currently being sold by NHS trusts.
- Based on the current levels of land being sold and with 367 supported homes being built each year for 15 years (with the first 1,000 for those with mental illnesses) the NHS could save as much as £5.9 billion over a 25 year period.



- Whilst more detailed work needs to be undertaken, the headline analysis suggests a higher rate of return (over the longer term) than might be expected from investing in other asset classes. The NHS trust could also retain the land.



# Introduction

## Introduction

The NHS is said to be facing a ticking time bomb. The additional pressures that an ageing population implies coupled with health spending set not to rise above inflation means the health service is under increasing pressure to deliver more for less.

The so-called 'Nicholson challenge' sets out the task at hand with around £20 billion of savings targeted by 2015 and further savings likely to be needed into the next decade. Arguably the additional pressures are in part due to a lack of integrated care, with too many older people (and those with mental and physical health illnesses) being treated in expensive acute wards when other (less expensive) provision could be provided.

One possible way to reduce such costs is to provide supported housing. Numerous studies and schemes have shown the potential to make significant savings. Collaboration between housing providers and NHS trusts could help deliver supported housing. Such models of supported housing have been proven to reduce admissions, delayed discharges and out of area treatments.<sup>1</sup> The idea is simple: that a housing association or other provider delivers on-site support supplemented by clinical support from the NHS trust. This means patients are not released too early and are therefore less likely to suffer a further health issue and be readmitted.

Such innovative housing schemes would of course require new specialist housing and land to build them on. Rolling surplus public land into innovative deals with suitable housing providers (like housing associations) could enable the homes to be built. By offering surplus land the NHS would be in effect making an investment as significant year-on-year savings could be realised. Moreover, as the report demonstrates, the levels of savings would likely be larger than selling the land and investing in stocks or shares.

This paper looks at the growing cost pressures on the NHS and analyses the potential savings of freeing up surplus land for supported housing. In effect it sets out the potential business case for supported housing based on current surplus NHS land, providing a headline analysis.

Realising such cost savings is far from straightforward and begs the question - who would financially benefit (i.e. the Treasury or individual NHS trusts)? The report acknowledges

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<sup>1</sup> See for example Department of Health *No health without mental health: A cross-Government mental health outcomes strategy for people of all ages Supporting document - The economic case for improving efficiency and quality in mental health*; Frontier Economics, *Financial benefits of investment in specialist housing for vulnerable and older people - A report for the Homes and Communities Agency* (2010)

these issues, but focuses on identifying the potential savings and possible benefits to NHS trusts and the public.



## Section 1

# The productivity challenge

## The productivity challenge

This paper looks at the case for social landlords and the NHS working together to provide new homes for supported care. This builds on the work of others, such as the National Housing Federation,<sup>2</sup> in exploring how NHS land can be used to reduce pressures on NHS services.

The challenge in adult health and social care is stark. More than a million more people, for example, are projected to have dementia by 2021 and 1.7 million by 2050.<sup>3</sup> At the same time we face a worsening housing shortage, including a serious lack of supported housing for older people as well as for those suffering from mental health problems and with learning disabilities.

### The current care crisis

Adult social care is said to be in a constant state of crisis. The issue of funding care has yet to be fully resolved. Whilst there has been some clarity around the social care 'cap' and the introduction of universal deferred payment schemes, councils are still predicting an imminent funding crisis. More pertinent to this paper, there are significant costs to the NHS with the failure to integrate health and social care resulting in unnecessary admissions and delayed discharges. The King's Fund, for example, has shown that integrating primary and social care reduces admissions and calls for new approaches.<sup>4</sup>

The UK also has relatively fewer discharges per inhabitants by international comparisons. This may be due to a range of factors, including day treatment and treatment in the community.

However, it also reflects people staying in hospital for unnecessarily long periods. In 2012/13 there were 1,383,537 delayed days in England.<sup>5</sup> A fair proportion of these delays are due to in-patients waiting for suitable accommodation and housing related support. This in turn adds extra costs onto the healthcare bill.

It was estimated in 2012 that delayed discharges cost the NHS around £550,000 per day (approximately £200 million per year).<sup>6</sup> This relates to those who are already in

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2 National Housing Federation *Creative use of NHS estate* (2014)

3 [http://www.alzheimers.org.uk/site/scripts/documents\\_info.php?documentID=412](http://www.alzheimers.org.uk/site/scripts/documents_info.php?documentID=412)

4 Purdy S *Avoiding hospital admissions: What does the research evidence say?* (King's Fund, 2010)

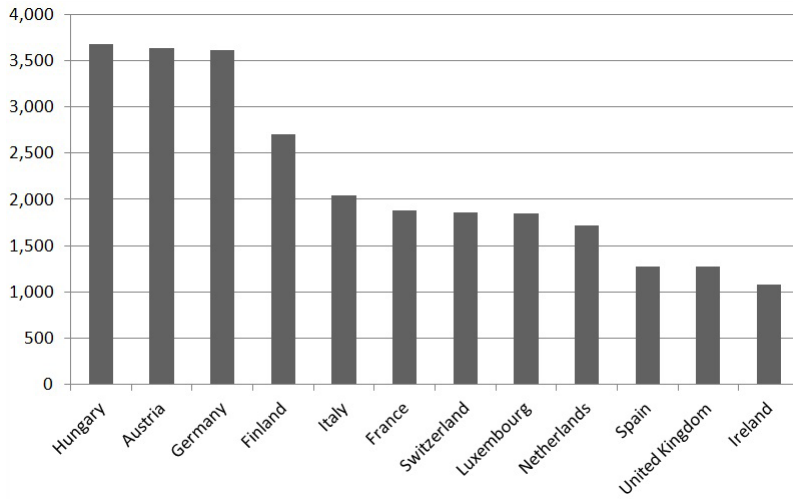
5 NHS England *Delayed Transfers of Care Statistics for England 2012/13 Annual Report*

6 NHS Confederation *Briefing* September 2012 Issue 248

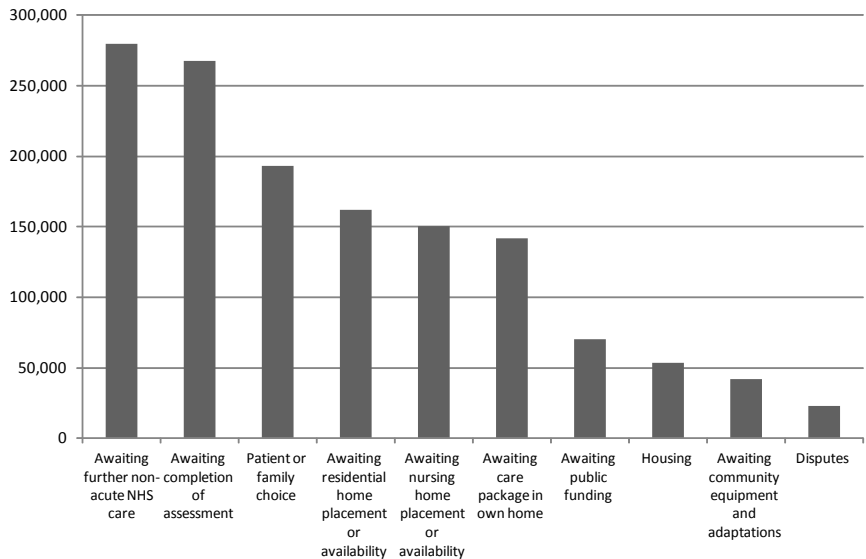


## Discharges from hospitals, 2011

Per 100,000 inhabitants



## Number of delayed days by reasons, 2012/13



Source: NHS England, *Delayed Transfers of Care Statistics for England 2012/13 Annual Report*

hospital rather than initial admissions. The Nuffield Trust has estimated that there has been a 50% rise in potentially avoidable admissions over a twelve year period. Three of the five conditions that make up over half the avoidable admissions were those which disproportionately affect older people. Such admissions already form a major proportion of NHS urgent care costs, estimated at £1.4 billion per year. With the trend upwards the cost to the NHS is forecasted to rise further. As the Trust's report highlights:

*Although some ACS<sup>7</sup> conditions have shown a fall, there have been increases in other ACS conditions that are a cause for concern: in particular, pneumonia and urinary tract infection (UTI). Often, these are associated with frail older people. The increases are caused most likely by a combination of changes in the way that people respond to health crises, coupled with changes in access to wider alternative care services.<sup>8</sup>*

### **Shifting demographics**

Demographic changes within our population suggest that these pressures are only likely to get worse. The UK population is estimated to grow by 4.3 million people over the next 10 years to 68 million by 2022. Over the next 25 years it is expected to reach 73 million, an increase of 9.6 million. Much of this growth is being driven by people living longer. Over the next 25 years the number of those of pensionable age is due to rise by 31% and those aged 85 and over are expected to rise by over 150% by 2037.<sup>9</sup>

Demography alone is not projected to increase demand on services. As people live longer, the cost to the NHS is still likely to be felt at the end of people's lives, thus the cost is largely delayed rather than increasing exponentially. However, this is still contested with others arguing that postponing the period of death from chronic degenerative diseases results in additional costs such as extended treatment periods for underlying health issues. The cost of advances in medicine and treatment are often cited as bigger drivers. Nevertheless, most experts do project an increase in spending due to an ageing society.<sup>10</sup> Even if demographics are not the biggest driver of cost increases, the rising price of medicine amongst other things is likely to place more pressure on other services.

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7 Avoidable admissions refer to ambulatory care sensitive illnesses which good quality preventative and primary care should prevent admission to hospital.

8 Blunt, I *Focus on preventable admissions: Trends in emergency admissions for ambulatory care sensitive conditions, 2001 to 2013* (Nuffield Trust, 2013)

9 ONS, *An Executive Summary, 2012-based NPP Reference Volume* (2014)

10 For example In 2008, a report by the King's Fund forecast the cost of dementia rising from around £15 billion a year to £35 billion by 2026 as the number of people with dementia rises from 580,000 to 940,000. McCrone, P et al, *Paying the price: The cost of mental health care in England to 2026* (King's Fund, 2008)

## Support for those with different needs

The cost of care to the NHS is obviously not just confined to older people or indeed just to those with dementia. The NHS also has to carry the cost of avoidable admissions and delayed discharges from those with mental health problems, and learning and physical disabilities.

Depression, for example, places significant costs on the NHS. The total cost of depression to services was around £1.7 billion in 2007, and is set to rise to £3 billion by 2026.<sup>11</sup> This however ignores the bigger cost to society through lost employment, which costs around £7.5 billion per year and is due to rise to £12.2 billion by 2026.<sup>12</sup> Meanwhile the cost of learning difficulties to secondary care was around £2.7 billion per year.<sup>13</sup>

There is already evidence of savings across public services from investing in support services. An assessment of the DCLG's Supporting People programme, which provided strategically planned housing related services, showed that public service savings were possible amongst those suffering from mental health illnesses, not least from the reduced costs of acute care and homelessness. The same study also showed that the programme made net savings across the public sector amongst those with learning disabilities, including from reduced general admissions into hospital.<sup>14</sup>

## Health spending

Whilst health spending has not increased and is said to have been largely protected from the government's austerity programme, in historical terms the NHS is facing unprecedented budget constraints. To meet demands on services within the current health spending envelope significant efficiencies need to be realised. The IFS has shown that even if health spending keeps pace with inflation, real age-adjusted health spending per person will be 9% lower in 2018/19 than 2010/11.<sup>15</sup>

Health spending since the 1950s has increased by around 4% per annum. With the NHS budget set to rise only with inflation, considerable savings will need to be made – around £20 billion by 2014/15 or 4% year-on-year productivity gains.<sup>16</sup>

Making such savings will be difficult. NHS trusts have increasingly struggled to meet

<sup>11</sup> Ibid

<sup>12</sup> Ibid

<sup>13</sup> Department of Health *Annual Report and Accounts 2011/12* (The Stationery Office, 2012)

<sup>14</sup> Ashton, T *Research into the financial benefits of the Supporting People programme* (Department for Communities and Local Government, 2009)

<sup>15</sup> Crawford, R et al "Public finances: risks on tax, bigger risks on spending?" *IFS Green Budget 2014* (IFS, 2014)

<sup>16</sup> Roberts, A et al *A decade of austerity* (Nuffield Trust, 2012)

demand under the current funding settlement. Almost a third of NHS trusts were forecasting that they will have overspent during the last financial year.<sup>17</sup> Moreover, for the OBR's forecasts on spending for the period from 2015/16 to 2021/2 to hold true a further 2% a year productivity gains in the NHS will need to be found. However productivity gains have to date been relatively small, averaging only around 0.4% per year from 1995 to 2010.<sup>18</sup>

These pressures are in part due to demographics and are set to continue beyond current spending plans. For example, the OBR has stated that:

*Population ageing will put upward pressure on public spending. Our central projection shows spending other than on debt interest falling from 36.7 per cent of GDP at the end of our medium-term forecast in 2017-18 to 36.1 per cent of GDP in 2020-21 as the output gap closes. It then rises to 40.6 per cent of GDP by 2062-63 as demographic trends lift spending on health, pensions and long-term care, an increase of 4.0 per cent of GDP or £61 billion in today's terms from the end of our medium-term forecast.*

In particular:

*Health spending rises from 7.0 per cent of GDP in 2017-18 to 8.8 per cent of GDP in 2062-63, rising smoothly as the population ages. This is a slightly smaller rise than we projected last year, in part due to the additional overall spending cuts the Government has pencilled in for 2017-18 (which are included in our medium-term forecast) and in part due to the above-trend GDP growth we assume as the output gap closes after 2017-18;<sup>19</sup>*

Meeting this challenge will eventually mean reconfiguration of services, greater deficits or poorer quality of care. Even if some of these pressures were to be reduced due to a return to sustained growth and a willingness to pay more, there will still be a push to make productivity gains. At present the Quality, Innovation, Productivity and Prevention (QIPP) initiative sets out how the NHS hopes to meet the Nicholson challenge:

*QIPP – Quality, Innovation, Productivity and Prevention – is a large scale transformational programme for the NHS, involving all NHS staff, clinicians, patients and the voluntary sector. It will improve the quality of care the NHS delivers while*

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17 Jeffreys, B "More NHS trusts sliding into the red" *BBC News* 31 January 2014

18 ONS *Public Service Productivity Estimates: Healthcare, 2010* (2012)

19 OBR *Fiscal sustainability report* (2013)

*making up to £20 billion of efficiency savings by 2014-15, which will be reinvested in frontline care.*<sup>20</sup>

If delivered well, integration of health and social care could play an important role in delivering QIPP.<sup>21</sup> Indeed, one of the main examples given by the Department of Health is reducing expensive admissions by treating people closer to home. One such option would be to look at how housing can play a role in integration. Providing a greater supply of supported housing could reduce the need and cost of expensive acute hospital provision.

### **The lack of supported housing**

Housing could and should play an important role in reducing the cost of primary and secondary care. One of the ten objectives of the 2009 Department of Health's National Dementia Strategy, for example, was to call for greater housing support and housing-related services. This would be delivered through:

- *Monitoring the development of models of housing, including extra care housing, to meet the needs of people with dementia and their carers.*
- *Staff working within housing and housing-related services to develop skills needed to provide the best quality care and support for people with dementia in the roles and settings where they work.*
- *A watching brief over the emerging evidence base on assistive technology and telecare to support the needs of people with dementia and their carers to enable implementation once effectiveness is proven.*<sup>22</sup>

More recently, in *Integrated Care and Support: Our Shared Commitment*, NHS England and other health bodies stated:

*We know that well designed housing is a key factor in facilitating timely discharge from hospital and avoiding admissions to hospital or a residential home in the first place and maintaining independence.*<sup>23</sup>

A Department of Health document on the economic case for improving efficiency and quality of mental health services found that:

<sup>20</sup> <http://webarchive.nationalarchives.gov.uk/20130107105354/http://dh.gov.uk/health/category/policy-areas/nhs/quality/qipp/>

<sup>21</sup> Goodwin et al, *A report to the Department of Health and NHS Future Forum* (2012)

<sup>22</sup> Department of Health, *Living well with dementia: A National Dementia Strategy* (2009)

<sup>23</sup> *Integrated Care and Support: Our Shared Commitment* (2013)

*The Department of Health's Care Services Efficiency Delivery Unit undertook a series of audits of housing-based support service in mental health, which suggest that housing-based support services for people with mental health problems could deliver cost savings to health and social care of £10,000 – £20,000 per year per client. One audit estimated that supported housing for men with enduring mental illness could save £11,000 – £20,000 each year per client. Another audit showed that supported housing for women with multiple, complex needs including mental health problems could save local authorities and the NHS £12,000 each year per client.*<sup>24</sup>

International comparisons show that the UK has relatively low levels of supported housing. Although there are difficulties in comparisons, as many as 25% of Danes over 65 receive home care. In the UK by contrast the figure is just 6%.<sup>25</sup>

Specialist housing has suffered from a range of supply-side constraints, including specific land needs (for example they need to be close to shops and services).<sup>26</sup> As a result the UK has failed to provide as much housing for older people (or others with specific mental or physical needs) as many other OECD countries. Indeed, it is estimated that the build rate for supported and extra care housing will need to increase fourfold to match future demand.<sup>27</sup>

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24 Department of Health *No health without mental health: A cross-Government mental health outcomes strategy for people of all ages* Supporting document – *The economic case for improving efficiency and quality in mental health*

25 Knap, M et al *Dementia: international comparisons* (PPSRU, LSE and Institute of Psychiatry, Kings College, 2007)

26 Ball, M *Housing markets and independence in old age: expanding the opportunities* (Henley Business School, 2011)

27 Ibid

## Section 2

# Surplus NHS land for supported housing

## Surplus NHS land for supported housing

At present the NHS is under pressure to dispose of surplus land for housing. The aim is to build much needed homes, help stimulate the economy and provide extra funds for the NHS. The under-secretary of state for health, Dan Poulter MP, has argued that:

*Income generated from the sale of surplus land will be used by the NHS to deliver new and improved hospitals as well as refurbishment and improvement of existing facilities. Much of the surplus estate will be suitable for redevelopment into housing, including that for affordable housing for local people. This is seen very much as a 'win-win' opportunity for the NHS and the public.<sup>28</sup>*

Whilst sale of surplus land does offer the NHS funding for refurbishment of existing facilities, it is a one-off benefit. Once the land is sold the NHS would not see any future gains apart from possible benefits this funding could offer by improving facilities. If it is simply used to meet shortfalls in revenue then the gains would be a one-off cash injection.

However, by using the land to deliver supported care it could be used to deliver year-on-year savings. These savings could be released to fund other services. Moreover, housing for older people may garner the support of local communities and would allow for greater independent living. This would enable trusts to deliver the services and facilities which local residents need. It would also create a public asset that actually strengthens the balance sheet rather than reduce it.<sup>29</sup> For example, NHS trusts could seek to invest land in joint ventures which deliver a developer's return whilst also improving their service.<sup>30</sup> Such a model has the potential to deliver on the Department of Health's plans for efficiencies through quality, innovation, productivity and prevention:

- *Quality*: offering greater independence for those needing supported care by providing non-institutional forms of provision whilst offering telecare, floating care and telehealth.
- *Innovation*: using surplus land to deliver savings. Designing homes for healthy living by reducing falls, affordably heated and lifetime homes standards.

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28 Poulter, D "Accelerating the release of public sector land Funding support for NHS trusts" 21st March 2013 [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/154553/DCL\\_Accelerating\\_the\\_release\\_of\\_public\\_sector\\_land\\_funding\\_support\\_for\\_NHS\\_trusts\\_V2.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/154553/DCL_Accelerating_the_release_of_public_sector_land_funding_support_for_NHS_trusts_V2.pdf)

29 Beirne K and Molyneux P *Making creative use of the NHS estate* (One Housing Group, 2012)

30 National Housing Federation *Briefing: Creative use of NHS estate* (2014)



- *Productivity*: significantly reducing the cost of care and reducing delayed discharges.
- *Prevention*: reducing further need for acute care if discharged too early back to their home where there is no support or adaptations.

Building supported housing could also be provided at no additional cost to the Treasury. In most cases early intervention type programmes usually require considerable levels of upfront government expenditure and savings are recouped over the longer term. At a time of fiscal austerity and commitments to reducing the government's debt such programmes are therefore often deemed unaffordable in the short-term even if proven to be cost-effective over a longer period. However, the capital cost of building supported housing can often be met by cross-subsidising profits from private sales on a development.

Housing associations which deliver supported housing can not only build the private and supported housing but also provide the care and support. This in theory should make the process of releasing land for such purposes easier. Moreover, as social enterprises, surpluses made on such programmes are reinvested in the projects rather than in dividends to shareholders.

### **Possible future savings**

Given the pressures on the NHS and the urgent need for specialist housing, what are the possible future savings that could be delivered by using surplus NHS land for supported housing? By freeing up NHS land what is the scope for cashable savings? And what rate of return could be realised? The following analysis offers a high-level snapshot of what could be realisable. Calculations are based on a set of assumptions, outlined below.

### **Methodology**

The calculations are based on a set of simplifying assumptions, including:

- The availability of land is based on the NHS trust submissions on land that could be, or is being, used for housing. This does not cover all land owned by NHS trusts, some of which is in places with little or no infrastructure and very difficult for workers and relatives to get to. It also ignores land held by NHS Property Services, which looks after around 12% of all NHS land.
- The development size would be between 12-20 units of accommodation.

- The potential cost savings are based on figures from One Housing Group's experience of providing supported housing for those suffering mental health illnesses and from PSSRU studies of unit costs of health and social care. Savings change depending on the level and type of care being provided, for example:
  - o *Mental health*: The cost per bed day for specialist in-patient average £321.<sup>31</sup> One Housing Group can provide a supported housing bed at £92 per day.<sup>32</sup> Patients would still require NHS services which are calculated at £13 per day<sup>33</sup> making the total cost per day £105. Thus there would be a saving of £217 per day.
  - o *Older people*: The cost per bed day for an older person is £225 per day.<sup>34</sup> PSSRU estimate the cost of a housing association providing very sheltered accommodation at £81 per day.<sup>35</sup> The cost savings would therefore be around £144 per day.
- The cost savings assume that one bed provided in supported housing would result in one fewer bed provided by the NHS trust.
- Savings from reduced readmissions are not taken into account. This may be more than the cost savings from providing a different form of care, and thus calculations are likely to underestimate the true potential for savings.
- Each unit of accommodation would be occupied for 95% of the time.
- So as not to inflate the demand for such housing, demand is pegged against in-bed population. The potential market is 25% of the in-bed market although a more modest figure of 5% is used.
- The potential savings are offset by the upfront capital investment in building homes. It is assumed that the NHS trust would in effect subsidise £280,000 per unit in land and build costs (see below).

### **Net savings per unit: cashable savings and land and build costs**

Using the underlying assumptions we can calculate the potential headline savings per

31 Curtis, L *Unit costs of health and social care 2011* (PSSRU, 2011)

32 Based on experience at Tile House

33 PSSRU, *Unit Costs of Health and Social Care 2010* (2010)

34 The average cost of an acute ward is £225 and nursing-led inpatient unit has been estimated at £240 per - PSSRU, *Unit Costs of Health and Social Care 2010* (2010)

35 Ibid

unit. Each year providing one supported housing unit for those with a mental health illness could save the NHS approximately £75,245 per year (at 95% occupancy). Over the lifetime of a unit (25 years) the savings would be around £1.9 million. For older people the savings would be slightly more modest at £49,932 per year or £1.2 million over 25 years.

However, supported homes need to be built. These savings therefore have to be offset against the cost of building the homes and the value of the land. Under the assumed model above homes would be built on NHS land but also paid for through cross subsidy. In each development additional homes would be built for private sale. For the model to stack up supported housing has to provide a return in excess of that initial investment and more than the return a trust could realise by selling the land to a developer and investing that cash in other (potentially cost saving) services.

### *Land values*

The latest figures show that the value of land with planning permission was £2.3m per hectare and peaked at around £4 million per hectare in January 2008. There are of course wide regional variations, with London's land valued at £6.5 million in 2010 and £10.5 million at its peak.<sup>36</sup> However, taking the English average and assuming that it has returned to the previous levels nationally<sup>37</sup> and assuming density of 50 units per hectare would mean the land cost for one unit would be £80,000. Taking the average, the NHS would be subsidising each supported housing unit by £80,000 per unit, plus the land price for homes being developed for private sale to meet the build costs.

### *Build costs*

It is assumed that the build cost of each unit of supported housing would be £200,000<sup>38</sup> (specialist housing tends to be significantly more expensive to build than general needs housing). The NHS trust would therefore need to be subsidising each unit by £200,000. Assuming that the trust could realise £80,000 per unit through land sales this would equate to building 2.5 units for private sale to pay for building one unit. In addition the land value for the supported home would need to be included. As such, for each unit the NHS trust would be in effect subsidising upfront unit cost of £280,000. Moreover, the size of the development would need to be 2.5 times the number of supported homes. Therefore the site would need to be a minimum of 30 units in order to fund the development of 12 supported homes through cross subsidy. This is an average and

36 VAO "Residential Building Land Figures: Value of land for residential development as of 1 January 2010" (2010)

37 This is made on the assumption that average house prices across England and Wales have almost returned to the previous peak levels (ignoring inflation).

38 Based on figures from One Housing Group

would of course vary by location with high-value areas requiring fewer homes per site for cross-subsidy of the build costs.

#### *Net rate of return per unit*

Subtracting the initial subsidy from the cost savings over a 25 year period shows net savings of £1.6 million per unit for supported housing for mental health patients. For older people the net savings would be around £1 million per unit.

However, the money could have been invested either in an asset or cost saving service. The above analysis for supported housing for those with mental health illnesses suggests that the annualised return on investment would need to be around 7%. For older people the savings would be closer to 5%. This also assumes that the initial investment is treated as a gift (the trust could remain the leaseholder and thus still hold onto an asset but this is not looked at in this report). Moreover, both are in excess of the implied 4% year-on-year productivity gains within the Nicholson challenge. It is also worth noting that both these figures discount the impact of inflation.

#### **Potential savings for a NHS trust**

Using these assumptions, we can estimate possible savings a NHS trust could make on one site over a 25 year period. If one site was used to build 20 supported housing units for mental health patients it could make £1.5 million savings per year. Over a 25 year period the savings minus the initial investment would be £32 million (see below).

#### **Potential overall savings: existing surplus land disposal**

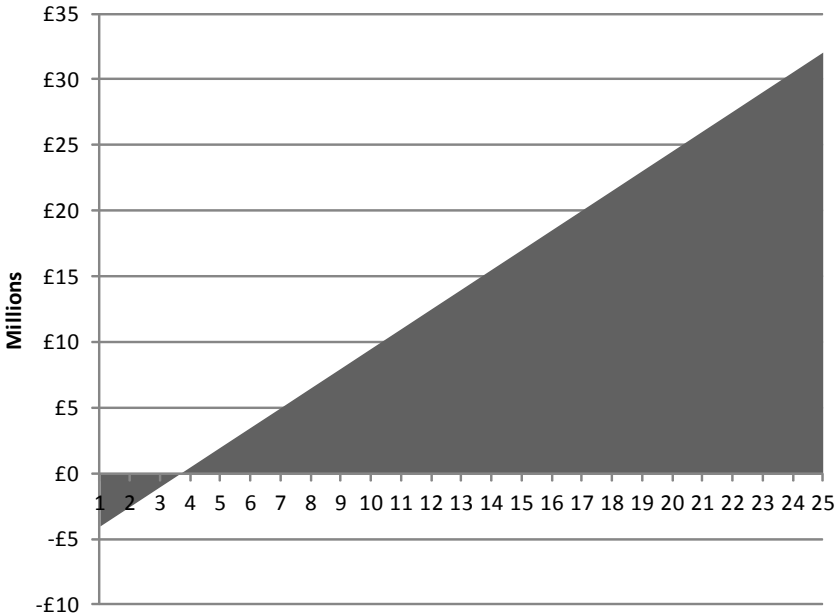
Whilst there are apparent and considerable savings, what is the scope for extending the supply of supported housing using surplus NHS land?

Submissions by NHS trusts show the estimated number of units that could be built on surplus land that is planned to be or is in the process of being sold. The 2013 submissions show there are an estimated 14,794 units that may be built.

Not all these homes would deliver supported housing, given that large numbers are concentrated in some areas and therefore the demand would not be there to warrant building them. When stripping these out, as well as those where only a small number of units could be built (i.e. only looking at developments of between 12-20), 2,267 homes could be built.

If these (supported) homes were for those with mental health problems, the savings each day could be just over £470,000 (at 95% occupancy). Over a year that would

### Potential savings for one scheme



equate to £170 million. And over a 25 year period (less the initial subsidy/investment) that would be equivalent to £3.6 billion. For supported housing for older people the savings per day would be £250,000 per day and over a year it would be £92 million. Over a 25 year period, less the initial subsidy, savings would be £2.2 billion.

This may be overly optimistic. The numbers of homes per site vary, ranging from a handful to up to 1,500 units. To meet the demands of cross-subsidising the initial building of homes (see net savings section) for every supported home built 2.5 for private sale would need to be delivered (up to a maximum of 20). Some sites would no longer be viable (having space for fewer than 12 units) and for others the numbers of supported housing units would be reduced, but still above the 12 houses per site threshold.

If this is factored in then 1,833 supported houses could be built. The savings to the NHS for supported housing for those with mental health problems would be £2.9 billion over 25 years and £1.7 billion over 25 years for supported housing for older people.

This is what could be built under the current disposal plans. Whilst a lot of surplus land has been sold a considerable amount remains. The following section looks at what would happen if current surplus land disposal was extrapolated over a 15 year period.

### **Scope for using future surplus land**

There is potentially more surplus land that could be used for supported housing in the future. The NHS estate has fallen from 8,600 hectares in 1999/2000 to 7,461 hectares in 2009/10. The plans for disposal of surplus NHS land as part of the government's 'Accelerating the release of public sector land for development' initiative indicates that for the period up to 2015 an additional 740 hectares will be sold. Whilst there may be diminishing returns, it appears likely that further sites will become available in the future.

The latest returns show that NHS trusts hold around 6,700 hectares of land. The total occupied floor space is around 2,600 hectares so there is land for further disposals. Not all of this land of course will be suitable for supported housing projects.

The following scenario looks at what might be possible if current land disposal was carried forward over a fifteen year period with gains calculated over a 25 year horizon.

### **Savings on current trends**

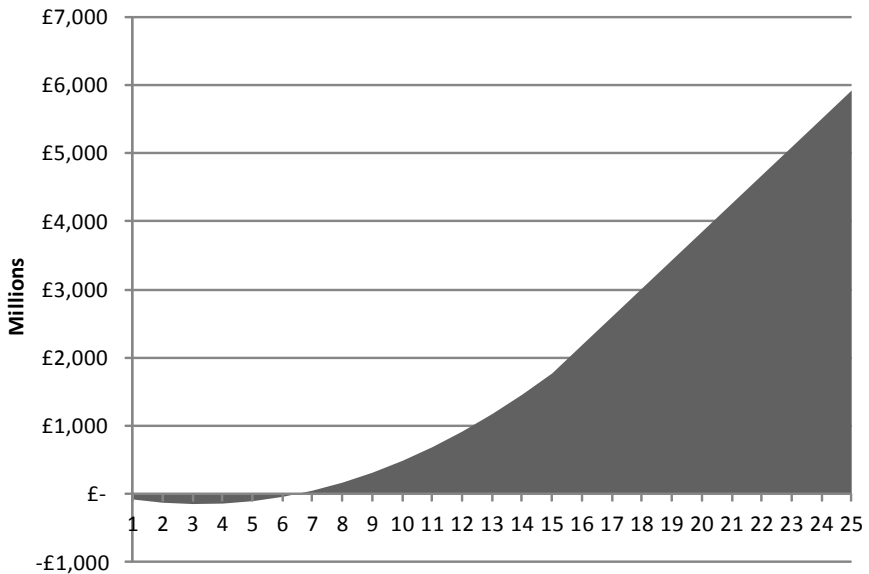
Using the current disposal rates outlined above and projecting forward for 15 years, we can estimate the total savings that might be realised. This assumes a build rate of around 367 units each year (a fifth of the 1,833 outlined above which covers a five year period – the land available may be higher as more surplus land is released at the end of the period this more conservative and current assessment is used). At a disposal rate of 740 hectares of land per year, that would still leave NHS trusts with 4,480 hectares of land – above the current footprint of used land of 2,600 hectares. Whilst there might be diminishing surplus land supply, building this level of supported housing would require the use of only around 275 hectares of land (at 50 units per hectare). This land itself might not be best seen as disposal but adding to health services (especially if was part of a lease deal). Whilst surplus land might not be disposed of at the same rate, NHS land designated for supported housing could be brought forward given the added value.

This scenario would therefore see 5,500 units being built, which represents around 5% of the in-bed population and 28% of mental health in-patients. To calculate the potential savings we assume that 1,000 of the 5,500 units would be used for those

with mental health problems (5% of the in-patient population) and the remaining 4,500 would be for older people.

Assuming that homes were built over a 15 year period, with those for mental health patients front loaded to maximise savings, the NHS could save £414 million per year. Factoring in build and land costs allows for total savings over a 25 year period of £5.9 billion (see below).

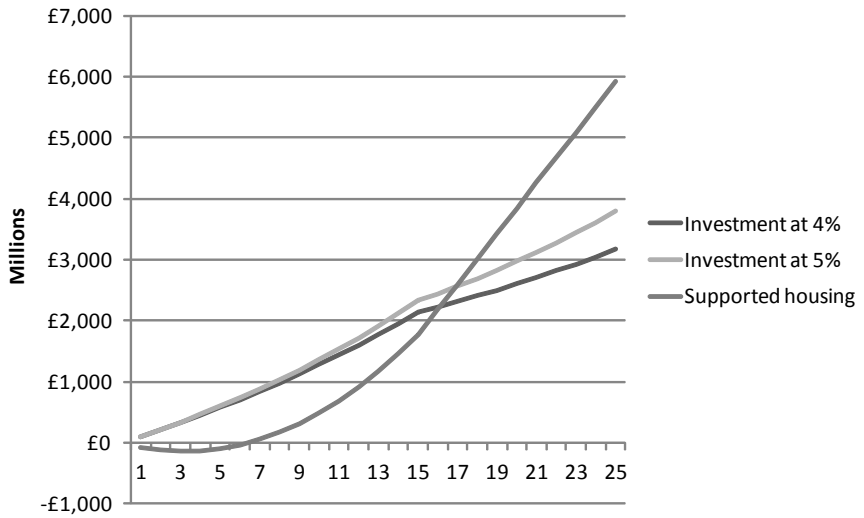
### Cumulative savings per year over 25 year period (£millions)



### Comparative rates of return

NHS trusts could of course dispose of land at the same rate and invest in other assets. Comparing land disposal for supported housing with land disposal which is invested elsewhere with annual yields of 4 or 5% (all figures again ignore inflation), supported housing appears still to offer a better return whilst arguably also delivering better services for patients. The graph below shows after around 16 years that even if the land is gifted the savings still outweigh the value of the asset if it appreciates at 4% or 5% per year (i.e. 6% or 7% yield including inflation at 2%). What is also apparent is that the longer supported housing functions for, the greater the savings will be compared with other investments.

Comparison of savings from supported housing versus land assets invested at 4 or 5%





# Conclusion

## Conclusion

The NHS is facing significant challenges. An ageing society is set to put additional pressures on services, including specialist housing. Budgets are also likely to be restricted over the short- to medium-term as a result of fiscal constraint. Regardless of whether more money does become available the NHS will be seeking to deliver greater efficiency savings.

As this paper has highlighted, the NHS could make significant savings by tying up housing and health. Supported housing, for example, has the potential to offer better services with greater independence for those requiring support, is cost-effective as it offers lower levels of support than acute care and reduces avoidable admissions. These outcomes could be delivered by using surplus NHS land. Rather than selling land off for general needs housing, supported housing could benefit the NHS year in, year out. The paper demonstrates the potential rates of return over time which are in excess of those implied within the Nicholson challenge and more than might be achieved if land was sold and invested in other assets.

The paper provides a headline analysis. It is based on a set of assumptions which could change. More sophisticated models would need to be employed to understand the potential savings in each area to take into account (future) demand and land values. However, the scenario indicates the type of savings that could be possible.

The scenario assumptions are based on the NHS reducing in-patient provision. As the recent history of NHS reforms has shown, such a move may face strong resistance from the public. Using surplus land in this way would also arguably need to be in the interests of individual NHS trusts rather than the NHS as a whole. If trusts did not see any of the benefits of the savings then why would they seek to dispose of their surplus land for supported housing rather than to maximise their income?

However, as this paper shows, the indicative and comparative cost savings are significant. In addition, using surplus NHS land for supported housing could offer an alternative route to better healthcare.

## **The Smith Institute**

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