

Liverpool's Joint Strategic Needs Assessment

Care Homes Health Needs Assessment

March 2018



Connect



Be Active



Take Notice



Keep Learning



Give

READER INFORMATION	
Title	Care Homes Health and Care Needs Assessment
Team	Public Health
Author(s)	Philip McHale
Contributor(s)	Sophie Kelly, Adam McCamley, Rachel Bowman-Sayle, Paul Madden, Jeanette Smart, Angela Strange, Rachael Gosling, Fiona Ogden-Forde, Sarah Thwaites, Andrew Durkin, Jo McCullagh, Richard Jones
Reviewer(s)	Paula Parvulescu
Circulated to	Adults' Social Care Senior Management Team
Version	1.4
Status	Final
Date of release	
Review date	
Description	This document aims to provide an overview of issues relating to Care Homes in Liverpool. As part of the Joint Strategic Needs Assessment (JSNA), it's purpose is to provide an evidence base to support policy makers and commissioners within the City Council, and local NHS. Whilst the document is primarily aimed at policy makers and commissioners, it is also available to members of the public and other organisations.
Related Documents	Liverpool's Joint Strategic Needs Assessment – Statement of Need www.liverpool.gov.uk/jsna
Contact details	p.mchale@liverpool.gov.uk

Contents

Foreword.....	6
Summary of Key Findings and Recommendations	7
1.1. Care Home Markets and Future Need	7
1.2. Health.....	7
1.3. Quality.....	8
1.4. Limitations.....	9
1. Introduction	10
1.1. Background	10
1.2. Aims & Objectives	11
2. Method	12
2.1. Literature Review	12
2.2. Epidemiology.....	12
2.3. Stakeholder Analysis	12
2.4. Provider Survey	13
2.5. Resident Views	13
3. Literature Review and Policy Analysis.....	14
3.1. Literature Review	14
3.1.1. Care Home Market.....	14
3.1.2. Nutrition.....	15
3.1.3. Medicines Management	15
3.1.4. Healthcare.....	17
3.1.5. End-of-life Care	19
3.1.6. Falls	20
3.1.7. Dementia.....	20
3.1.8. Mental Wellbeing.....	21
3.1.9. Oral Health	21
3.1.10. Infection Control	22
3.1.11. Safeguarding	23
3.1.12. Quality.....	23
3.2. Policy Analysis	24
3.3. Local Actions and Interventions.....	27
3.3.1. Future Need, Market Shaping and Sustainability	28
3.3.2. Nutrition.....	28
3.3.3. Medicines Management	28
3.3.4. Healthcare.....	28
3.3.5. Infection Control	29
3.3.6. Physical Activity.....	29
3.3.7. Safeguarding	29
3.3.8. Quality.....	30

4.	Epidemiology.....	31
4.1.	Population Profile	31
4.1.1.	Age Profile and Projections.....	31
4.1.2.	Deprivation.....	32
4.1.3.	Ethnicity	33
4.2.	Care Home Markets and Future Need	33
4.2.1.	Projected Care Home Need and quality	37
4.2.2.	Cost of Care Home placements.....	41
4.3.	Care Home Residents Demographic Profile.....	42
4.3.1.	Care Home Deaths	44
4.4.	Medicines Management	46
4.5.	Healthcare.....	47
4.5.1.	Hospital admissions	47
4.5.2.	Care Home Improvement Interventions.....	48
4.5.3.	Transfer of Care.....	49
4.6.	Infection Control	50
4.7.	Safeguarding	51
5.	Insights	52
5.1.	Care Home Markets and Future Need	52
5.2.	Nutrition.....	52
5.3.	Medicines Management	52
5.4.	Healthcare.....	52
5.4.1.	Transfer of Care.....	53
5.5.	Oral Health	53
5.6.	Infection Prevention and Control	54
5.7.	Safeguarding	54
5.8.	Quality.....	54
5.8.1.	NICE Guidance.....	54
5.8.2.	Health and Wellbeing Promotion	54
5.8.3.	Cross-Organisational Working	55
5.8.4.	Training	55
5.8.5.	Leadership.....	56
5.8.6.	Staffing	56
5.8.7.	Provider Forum	56
5.8.8.	Estates.....	56
6.	Provider Survey	58
7.	Resident Views.....	59
7.1.	Quantitative data	59
7.2.	Qualitative data.....	59
8.	Discussion.....	61
8.1.	Care Home Markets and Future Need	61
8.2.	Health.....	62

8.2.1.	Acute care use.....	62
8.2.2.	End of Life	63
8.2.3.	Medicines Management	63
8.2.4.	Oral Health	64
8.2.5.	Health and Wellbeing Promotion	64
8.3.	Quality.....	64
8.3.1.	Leadership and Staffing.....	65
8.3.2.	Training	65
8.3.3.	Practice.....	65
8.3.4.	Safeguarding	65
8.4.	Limitations.....	66
8.4.1.	Epidemiology.....	66
8.4.2.	Provider Survey	66
8.4.3.	Resident views	66
9.	Recommendations	67
9.1.	Care Home Markets and Future Need	67
9.2.	Health.....	67
9.3.	Quality.....	68
9.4.	Limitations.....	69
10.	References	70
11.	Appendix A – Stakeholder list	76
12.	Appendix B – Topic Guide	78
13.	Appendix C – Provider Survey	79

Foreword

Year on year, the population of elderly and vulnerable adults needing care grows, and the needs of this population become more complex. A key part of meeting this need lies with care homes. Currently, the estimated need for care home places will become larger than what is available within the next decade. Staff and leadership at Liverpool City Council are aware of this, and that is why we work tirelessly to have a strategy to best manage this. The 'Care Home Improvement Strategy – The Art of Outstanding' is a jointly agreed strategic approach across the health and social care sector, co-produced across Liverpool City Council, Liverpool CCG and the local care home sector.

A core focus for this strategy is to support people in Liverpool to remain in their own homes for as long as possible; however, this is only half of the strategy. We recognise that entry into a care home is sometimes the best, safest option for people in our community, and that the increasingly complex needs of our population requires an innovative approach to care homes, moving away from the traditional, rigid model of service design. We are, therefore, striving to ensure that homes in the area are equipped to best meet the holistic needs of care home residents, including health, wellbeing and social needs, while also ensuring that providers have the flexibility to best meet the needs of our community.

This needs assessment has helped identify and reiterate what is important for care homes. By accessing a wide range of data sources and stakeholders, this work has incorporated views from across the sector, residents and care home providers. It has identified that important needs include the pathways into a care home, transfer of care to health care, staff training and leadership, and processes for safeguarding.

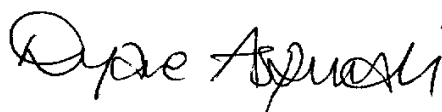
We at Liverpool City Council, in collaboration with partners in the NHS and voluntary sector, are committed to ensuring quality and appropriate care for our population, and we are currently supporting the implementation of interventions to help drive this quality. This includes additional training for staff and managers, novel approaches to healthcare (both in assessment and transfer), and the opening of three new flexible dementia hubs as well relocating a refurbished Venmore reablement hub, with a focus on different models of care. These interventions will allow the wider care home sector to be adaptable in meeting individual needs, either through providing short term reablement and respite services, or long term residential and nursing services. Agreements with the sector will ensure this flexibility exists. We believe this innovative approach will be a key driver of quality, and allow the care home sector the adaptability it will need to meet the changing demands it will face.

Sandra Davies



Director of Public Health

Dyane Aspinall



Interim Director of Adult Social Care

Summary of Key Findings and Recommendations

The recommendations below have been developed based on the range of issues that have been identified through this HNA report from the analysis of local and national intelligence and stakeholder views.

The recommendations have been split, according to the design of the report.

1.1. Care Home Markets and Future Need

- 1. Build on the strategic approach to support people to stay in their homes for as long as possible, thus ensuring entrance to care homes occurs later in life – LCC, Liverpool CCG and care homes** – This approach requires a focus on prevention, self-care and healthy ageing; improved transfer of care from hospital; investment in new flexible care facilities to respond to meet short term respite and reablement needs to maintain people at home and provide modern, accessible environments to provide high quality permanent nursing/dementia placements to compensate for the current/anticipated under-supply.
- 2. Ensure respite care is appropriately available – LCC** – Respite care has been shown to be beneficial to carers, and is used in Liverpool, particularly for carers of individuals over 65. It is important to ensure and maintain availability. It is recommended that a respite review to determine levels of need/demand and supply to be carried out.
- 3. Implement clear pathways to prevent inappropriate transfers from hospital into care homes – LCC, Liverpool CCG and acute care providers** – This approach must be made with health partners as the findings suggest there are problems with the pathways from hospital into care homes.
- 4. Provide detailed requirements regarding placement types to enable the provider market to prepare for the expected demographic change and resulting needs in the care home population– LCC, Liverpool CCG, Care Homes** – The increasing age of the Liverpool population will increase pressure on the care home market, however the potential increasing ethnic diversity of future care home populations may lead to demand for different, more culturally appropriate, services. The projected shortfall in beds is particularly relevant and new facilities will be required, particularly for nursing dementia care.

1.2. Health

- 5. Falls prevention should be central to attempts to improve quality in, and preventing admissions to hospital from, care homes – care homes, primary and community care providers** – Falls are a significant and substantial cause of hospital admission from care homes. Prevention approaches should follow NICE guidance.
- 6. Trials to improve transfer of care, such as the ‘red bag scheme’ and nurse exchange schemes should continue to be supported, with strong involvement of all partners – care homes, LCC, Liverpool CCG and acute care providers** – A well planned approach and

comprehensive evaluation of the interventions is needed to understand the impact, particularly in different care settings.

- 7. Explore opportunities to link care homes with a specific GP practice** – *Liverpool CCG* – As is described in the framework for enhanced health in care homes, from NHS England, with each care home having a named practice providing care and services to all residents.
- 8. Flu Vaccination rates in staff should be improved** – *care homes, primary care providers and community services*– Approaches should include education, workplace drop-ins and free provision of vaccines. Funding this year is welcomed and attempts to continue this should be made.
- 9. Use and coverage of Advanced Care Plans should be maximised** – *Liverpool CCG, care homes and primary care providers* – This will fall mostly on primary care, but care home staff should be trained to recognise when an ACP is required, and refer as appropriate.
- 10. Interventions that are being trialled to reduce secondary care use should be comprehensively evaluated and results should be used to inform future plans**– *Liverpool CCG, primary care providers, acute care providers, care homes* – This includes telemedicine and the enhanced GP service. Widespread implementation of interventions should be strongly supported if successful.
- 11. All homes should give residents the opportunity to safely self-administer medication where appropriate and safe** – *care homes. Use and prescribing of sedative medications (such as anti-psychotics or benzodiazepines) should be monitored* – *Liverpool CCG* – This is particularly relevant to residents with challenging behaviour, secondary to dementia.
- 12. All residents should be supported in daily maintenance of oral health** – *care homes* – This should be included in care plans when new residents are admitted to homes.
- 13. Clear care pathways for primary dental care are needed** – *NHS England, care homes* – Mobile residents should be supported to attend dental practices, rather than use domiciliary services.

1.3. Quality

- 14. A full range of activities should be available to all care homes residents**– *care homes* – Time for activities should be protected, and range of activities should be varied and appealing to residents (including assuring these are appropriate for people with dementia) in order to improve general wellbeing. The role of an Activities Coordinators could be considered in the future.
- 15. Attendance at the care providers' forum should be advertised and encouraged, with a strong focus on sharing best practice** – *LCC, care homes* – The report identified that attendance and representation for larger providers particularly requires improvement.

- 16. Interventions for training staff and managers require comprehensive evaluation – LCC < Liverpool CCG and community services** – This includes the two day training course for care home staff (provided by Edge Hill and LCH/MerseyCare) and leadership training for managers.
- 17. Improve ICT infrastructure – LCC, care homes, Liverpool CCG** – Innovative approaches to using technology should be encouraged, particularly digitisation of record keeping and data linkage.
- 18. Encourage the use of, and support the implementation of electronic care plans – care homes, LCC, Liverpool CCG** – This has begun to be explored by LCC, and needs to be followed.
- 19. Dementia training for staff involving psychosocial approaches to behaviour is required – care homes** – The data suggest that dementia need is increasing and psychosocial approaches to managing dementia residents is supported by stakeholders.
- 20. All stakeholders involved in safeguarding should have clear roles and responsibilities – LCC**
- 21. Outcomes of safeguarding interventions should be feedback to reporters when appropriate – LCC**
- 22. Relatives and residents should feel confident and able to feedback safeguarding and quality concerns confidentially – LCC, Healthwatch, Care Homes**

1.4. Limitations

- 23. Clear, up-to-date, comprehensive data on care home beds are needed – LCC, Liverpool CCG** – This is particularly important for CCG/CSU. Initial analysis shows a need for additional beds, particularly nursing beds. However, more in depth predictive modelling should be carried out as part of the refreshed market Position Statement to fully describe the care mix required in the short, medium and long term, allowing for changes in population and increasing levels of need, adjusted for successes generated via increased prevention and healthy ageing.
- 24. Find new ways to collect specific data on care home residents' use of secondary care – Liverpool CCG, acute care providers** – A direct measure would provide increased information, while data sharing, and alignment, between organisations would increase accuracy.
- 25. Work is needed with residents and relatives to better understand their views – LCC, Liverpool CCG, care homes, Healthwatch** – This should particularly focus on what they feel would improve quality.

1. Introduction

1.1. Background

Care homes provide support for individuals who, to varying degrees, have difficulty taking care of themselves. This could either be due to health needs or social needs; commonly this is for older people but also includes others, such as people with a learning disability or certain Long Term Conditions (LTC). There are broadly two types of care home; residential and nursing. Residential homes are generally for people with lesser degrees of need and maintain some independence, whereas nursing homes provide 24 hour nursing care.¹ There are, however, a number of subgroups of homes which provide specialised care for specific populations (dementia, reablement, mental health). The demographic change of an ageing population has increased the population which care homes serve, the increasing prevalence of LTCs has led to more complex requirements for residents, and reduction of hospital beds and length of stay has resulted in increased pressure on care homes.² Currently across England, one in seven adults who are 85 or older live permanently in a care home.³ Additionally, the majority of care home residents are over 85, and there are large increases predicted of the prevalence of dementia and LTCs.² By 2022 the total national expenditure on health and social care for older people in England is estimated to be £12.7 billion, based on the 2010 figure of £9.3 billion. This figure is likely to be higher given the expected rise in older adults with severe disabilities or chronic conditions.⁴

NICE released recommendations for older people with social care needs and multiple long-term conditions.⁵ The recommendations include:

- Refer individuals to the Local Authority for a needs assessment;
- Refer individuals to geriatrician or old age psychiatrist for specialist assessment;
- Discuss the role and benefits of telecare;
- Have a single care coordinator, with the resident involved in the decision making process;
- Medicines should form part of the care plan;
- Service specifications and contracts are used to maximise quality by stressing need for collaborative working and direction to services;
- Self-management is supported;
- Encourage social interaction through good environment design and facilitate communication through technology use;
- Residents should have control over their own environment, such as heating;
- Nutrition and hydration requirements are planned;
- Link to local organisations that can provide support; and,
- Provide information about tariffs and entitlements.

1.2. Aims & Objectives

This report forms part of the Joint Strategic Needs Assessment for Liverpool City Council (LCC), and provides an in-depth review of care homes in the city. The purpose is to give all those with an interest in improving quality in care homes a holistic view of the health and care needs of the population. In particular the document sets out to:

- Provide an overview of the national and local policy context in relation to care homes
- Provide an overview of the literature in relation to care homes
- Provide an overview of needs in the city of the care home population
- Provide an overview of the views of service providers and wider stakeholders on the key pressures, gaps and weaknesses within the current system in relation to care homes
- Provide an analysis of the current available information on the views of care home residents in the city
- Provide a review of provider views, collected via a survey

2. Method

A steering group was formed to direct the Health Needs Assessment. The steering group was integral to the overall design of the project, with five strands to the work agreed.

2.1. Literature Review

A comprehensive literature review was performed to describe the recent evidence base for care homes. The literature search used the medical database Scopus, and used the search terms:

("care homes" OR "residential home") AND needs AND health AND ("older people" OR elderly)

The results were limited to the past 10 years, and 621 papers were identified. From this, titles were reviewed and relevant papers were selected based on how relevant the titles and abstracts were. Further papers were identified by review of reference lists of two UK health needs assessments for care homes,^{6,7} conducted in England in 2014, and of selected papers. Relevant NICE guidance was also included, while relevant grey literature was identified using tailored searches of specific organisations (e.g. Public Health England (PHE)) and advice from relevant stakeholders.

The policy analysis identified relevant policies via internet search engines, reference lists of papers and reports, and advice from relevant stakeholders. The steering group assessed included literature and policy, and advised on completeness.

2.2. Epidemiology

The epidemiology section included data from different sources. Table 1 shows what data were included and where it came from. The Secondary Usage Data provided by Liverpool CCG did not have information on place of residence, was based on age (over 65) and postcode (shared with a registered care home), and thus was a proxy for care home residents.

Team	Data Included
LCC Public Health	Demographics of Liverpool Population Projections Care Home Deaths
LCC Adult Social Care	Care Home Population Demographics Care Home quality Safeguarding Costing
Liverpool CCG	Secondary Usage Statistics
LCH Medicines Management	Audit Data
LCH Community Infection Prevention and Control	Audit Data

Table 1: Data used in project, and who provided it. CCG- Clinical Commissioning Group; LCC- Liverpool City Council; LCH- Liverpool Community Health

2.3. Stakeholder Analysis

Interviews were conducted between July 2017 and October 2017. With support from the steering group, relevant stakeholders were identified. Of these, 32 stakeholders were interviewed across 28

interviews, covering health, social care and third-sector organisations. Appendix A includes a full list of stakeholders who were interviewed. Attempts were made to contact stakeholders twice via email. If this was unsuccessful, steering group members would attempt to make further contact. Interviewees identified further individuals to be contacted. Overall, 83% of identified stakeholders were interviewed.

The topic guide was created using themes from the literature review and in conjunction with the steering group. The topic guide can be found in Appendix B. Interviews were conducted using a semi-structured approach, and all were conducted by the lead author. Interviews were recorded and notes made from recordings. The findings were analysed using a framework approach.

2.4. Provider Survey

The provider survey was designed by the lead author, with support and advice from the steering group. The initial idea of the survey was influenced by a care home needs assessment done by Wandsworth Borough Council.⁶ Using their survey as a blueprint, further changes were made based on findings from the literature review. The survey was then analysed by the steering group and modified based on their advice. The survey can be seen in Appendix C.

The survey was piloted prior to its use. Working with staff from LCC Adult Social Care team we identified four providers to pilot the survey with. All four returned the survey and no changes were made. The survey was then sent to all care homes in Liverpool for the manager to fill out with an accompanying email explaining the work and the four-week deadline. A reminder email was sent one week before the deadline.

2.5. Resident Views

An important aspect of the needs assessment was to gather the views on care homes residents. As the service users will be directly affected by changes to, and quality of, care homes, the steering group felt it was important to give a voice to residents. Unfortunately, due to time and resource constraints, it was not possible to do direct work with residents. Therefore, the project used secondary data sources to fulfil this requirement.

This section used data from the 2017/18 Survey of Adult Social Care Services for LCC. Participants in the survey were people who received an adult social care service within the previous 12 months. For the qualitative data about resident views, we used data from interviews conducted by Healthwatch from 2016 and 2017. The interviews and comments were from residents, relatives and staff, and covered Nursing homes, Residential homes and Reablement sites. The sites served both under and over 65s, and those with physical disabilities, mental health conditions, sensory impairments and dementia.

3. Literature Review and Policy Analysis

This section will focus on three aspects: the international evidence base concerning care homes; national policy that dictates what care homes do; and, local practice. The international evidence is important to ensuring actions taken locally are evidence based, and a number of interventions discussed in the literature review have similar local implementations.

3.1. Literature Review

There are a number of broad issues that exist in care home, and although there is overlap for some of these, there are also distinct separations. The areas of interest are:

- Care Home Market
- Nutrition
- Medicines Management
- Healthcare
- End-of-life care
- Falls
- Dementia
- Mental wellbeing
- Oral health
- Infection control
- Safeguarding
- Quality

3.1.1. Care Home Market

Commissioning and contracts are seen as levers to drive improvement through better recruitment and retention policies, and training provision. Local authorities were given commissioning responsibility in 1989 but there was a push to develop independent providers. Now, commissioning is increasingly a joint venture between health and social care. Specialist training as a contractual requirement is associated with a lower turnover; training for care of people with dementia is associated in better continuity of care through retaining of staff.⁸ Work from the British Geriatrics Society highlight the importance of specialist commissioning for older people, with benefits for residents, the local NHS and care home market sustainability. They advocate that services should be resident centred, proactive, accessible, strongly integrated between health and social care (particularly for geriatricians), and recognise the needs which are non-standard (such as out-of-hours care).⁹

There is evidence that high stress among informal caregivers is associated with moving into long-term care. Respite care was shown as one of the factors which was associated with reduced

caregiver stress.¹⁰ Notably, a number of systematic reviews found mixed evidence that respite care was associated with delay of entry into long term-care.^{11,12} However, ensuring availability of respite care is advocated by the Alzheimer's Society, given its importance for carer wellbeing.¹³

3.1.2. Nutrition

Malnourishment is a major problem among older people; evidence from Scotland shows six out of ten older people in hospital are malnourished.¹⁴ NICE have released guidance and quality statements around nutrition in older people.^{15,16} The guidance recommends staff are trained about nutritional needs, support options that are available, and when and where to seek support if required. The guidance also recommends that all residents are screened for malnutrition on admission to the care home or when there is a clinical concern. The quality statements cover:

- The use of a validated tool used to screen for malnutrition;
- Ensuring a care plan is in place to meet nutritional needs of malnourished residents;
- Screening results and goals are documented, and these results are communicated between settings (such as when transfer to a different care provider occurs) and to residents;
- Self-managing residents are trained in monitoring their nutritional needs and input; and,
- Nutritional support has planned reviews which cover goals, benefits, indications and route of support.

Additional to the NICE guidance, a systematic review of oral nutritional supplements showed that they were cost effective, resulting in a significant reduction in hospital admissions. Other positive clinical outcomes included improved quality of life, reduced falls and reduced infections. It should be noted however, that these findings were mostly from community settings and the evidence was not as clear for care homes.¹⁷

In 2009, the Care Commission for Scotland produced an evaluation of a programme aimed at improving nutrition for older people in care homes. The programme was one of nutrition champions, identified, trained and responsible for nutrition in care homes. Champions went on 3-day training course, followed by a modular training course, and then implemented change in the workplace. The programme was assessed by participants positively, with value attributed to the training and support, however there was a high dropout of staff rate for the programme.¹⁴ The evaluation did not report on the change in nutritional outcomes for residents.

3.1.3. Medicines Management

Major issues around medicine management for care home residents include polypharmacy (this is very common and its appropriateness is questionable), inappropriate prescribing (particularly psychotropic drugs to sedate residents with challenging behaviour, or under-prescription of drugs for common morbidities), adverse events (residents are particularly vulnerable to this because of change to pharmacodynamics and pharmacokinetics related to age, medication errors, and polypharmacy) and compliance.¹⁸ Adverse events are particularly important when considering the potential prevalence of kidney dysfunction among care home residents; over 80% of the sampled

care home population in a 2007 study had chronic kidney disease, with high levels of unidentified disease.¹⁹

Staff issues around medicines management, include time constraints, administration difficulties and interruptions to medicines related activities. Importantly, staff qualifications were not consistently important for medicines management. Transferring a resident from one care facility to another, such as admission to hospital, was identified as a key time. Effective and high quality transfer is crucial to good medicines management, particularly for reducing adverse events.¹⁸

Care home residents are at particularly high risk of medication errors, partly because a substantial proportion of residents have reduced capacity, thus they cannot self-administer medications or detect errors in what they are receiving. A 2009 study of care homes in different areas in the UK found that over two thirds of care home residents had received a medication error, with an average of almost two errors per resident. The risk of harm from these errors was generally low. Reasons for errors associated with staff included a lack of access to information, being overworked, lack of training, documentation inaccuracies and systemic issues.²⁰ Record of administration and errors regarding medicines was good, but some issues were highlighted around getting medications 'on time' and being aware of national policy.²¹

A study comparing older people in the community to care home residents found that care home residents were significantly more likely to receive benzodiazepines, loop diuretics, anti-histamines or anti-psychotics. Other medications such as antibiotics, anti-depressants and laxatives were all more likely to be prescribed, but medication for cardiovascular disease was less likely to be prescribed to care home residents.²² The concerns around treatment of LTCs is further compounded when considering a US study of care home residents which showed adherence to optimal hypertension treatment was low.²³ Another comparison study found that quality of care around medicines was found to be inadequate with lower rates of common illness prescribing, lower rates of monitoring (for example blood pressure) and higher rates of harmful prescribing (neuroleptics and laxatives) in the nursing home compared with the community.²⁴

Antipsychotics are used to treat symptoms of dementia but their use is associated with increased morbidity and mortality. A systematic review found that interventions such as education and medication reviews resulted in a fall in inappropriate prescription rates, but there was a lack of long term evidence.²⁵

NICE released guidelines to optimize medicines management in care homes.²⁶ These guidelines are aimed to aid the safe and effective use of medication in care homes. The recommendations include:

- Record keeping;
- Identification of problems;
- Information sharing;
- Safeguarding;
- Ordering, administration and disposal of medications;
- Medication review;

- Supporting self-administration where appropriate;
- Covert administration;
- Training;
- Non-prescription administration of over the counter and herbal medicines; and,
- Supporting informed decision making.

It is important to recognize that culture influences prescribing practices, and residents, and relatives, should be at the centre of any decision making.²⁷ Evidence suggests that care home residents are at increased risk of adverse drug reactions and hospital admissions, as a result of inappropriate prescribing. Interventions to reduce this are more effective when a multi-disciplinary approach involving community geriatricians is taken, combining medicine review with comprehensive geriatric assessment.²⁸

The Department of Health released guidance on the administration of medicines in care homes.²⁹ These include:

- Care assistants can administer medicines, but require adequate training;
- Care homes should have policies and procedures regarding medicines management which comply with current legislation and guidance;
- Training should cover supply, storage, disposal, administration, record keeping and quality assurance;
- There should be specific error/incident reporting process;
- Investigate and report incidents to regulators if required; and,
- Residents should be assumed to have capacity to take their own medications, and have a right to do so, but capacity should be regularly assessed.

3.1.4. Healthcare

Issues surrounding the relationship between healthcare services and care homes, and meeting the health needs of residents, are considerable, and the literature around this topic is substantial. Healthcare for care homes has previously been from primary care responsive to specific needs, however care home residents have variable access to the NHS, which has led to inappropriate hospital admissions, unmet need, a lack of dignity in treatment and poor access to specialist care. There are high rates of admissions of older residents from care homes into hospital, and these patients have a high mortality rate, especially in the first 24 hours. These admissions were commonly blamed on a lack of advance care plans, poor communication, and lack of access to GPs, palliative care and specialist nurses.³⁰ The Royal College of Physicians, Royal College of Nursing and British Geriatrics Society released guidelines on clinical practice in 2000 around review of individuals prior to care home admission. By 2009 there was a majority of GPs who did pre-admission assessment, but there was low involvement in ongoing care or integration.³¹

A 2009 cohort study of 11 UK care homes found that multiple morbidity was common, three quarters of residents had some degree of cognitive impairment, two thirds displayed behavioural symptoms and almost a third were malnourished. Contact with NHS services averaged once a month, while those that used secondary care did so intensively (high number of admission days).³² An observational study found care home residents provide a substantial burden for emergency departments, with almost half arriving outside normal working hours. There was a high admission rate for these attenders, and trauma was the commonest reason for attendance.³³

A report for the Care Quality Commission (CQC) explored healthcare in care homes.²¹ It found that:

- The majority of care homes had a consent policy but this was variable;
- Staff received training about confidentiality, but some residents raised concerns about information sharing;
- Person-focussed care planning was not always evidenced, and views of carers and relatives was not regularly accounted for;
- Not all homes had a Do Not Attempt Resuscitation policy;
- Self-administration of medicines was not routinely offered; and,
- Over a third of residents did not feel they had options for continence care

It has been identified that lack of awareness to spot early signs and symptoms of conditions that could be managed in the care home was a major cause of unscheduled attendance and admission at healthcare. Importantly, residential care homes do not need to employ registered nurses, and there is an increasing reliance on care home staff, who are inadequately prepared or supervised. The study identifies that education for all staff is beneficial, and it should be made mandatory to improve attendance. Training should include falls, tissue viability, continence promotion, LTC, dementia, nutrition and hydration, and end-of-life care.³⁴ Other barriers to high quality care include disjointed working, low priority to urinary incontinence, dementia, co-morbidity, nutrition and safeguarding.¹

In keeping with the evidence around medicines, a retrospective study found quality of chronic disease care was significantly lower for care home residents, particularly cardiovascular disease prescribing and diabetic monitoring. Exception reporting was higher among care home residents, which might compromise their care.³⁵ A qualitative study identified some of the barriers to quality healthcare in care homes; time constraints, lack of training and confusion over responsibilities are key barriers to integrated working. Added to these issues, there was limited organisational structures in place to be really effective and care homes are not in Quality Outcomes Framework.³⁶

A further interview study highlighted three areas as important to improving healthcare for care home residents: shared learning and continuity between the NHS and care homes; age-appropriate services provided by the NHS; and, governance approaches to raising minimum standards (through contracts and finances).³⁷ A 2011 systematic review of studies evaluating integrated working found there was some limited evidence of positive outcomes in quantitative studies, although qualitative results did suggest there was improvement in resident quality of life. Initiatives to improve integration need to incorporate patient, organisational and strategic level approaches. It should be

noted that the limited and narrow outcomes examined lead to questions about the applicability of results.³⁸

An evaluation of a specialist in-reach team of nurses and physiotherapists, found that over a period of two years, the team received over 700 referrals, and was estimated to prevent nearly 200 admissions, and support 20 early discharges. This was determined to likely be cost-effective.³⁹ A small interview study in London explored the effect of a local enhanced GP service. The service was seen as increasing service efficiency, reducing admissions and was popular with residents. Close and positive working relationships were important to the effectiveness of the service.⁴⁰ Similarly, evidence from Northern Ireland examining the effectiveness of pharmacist led outreach clinics for nursing home residents showed a reduction in hospital admissions, more appropriate prescribing and that the intervention was cost-effective.⁴¹

3.1.5. End-of-life Care

End-of-life care is an important issue for care homes; almost all of their residents are permanent, and a drive to reduce numbers of people who die in hospital means a significant number of residents will die in the care home. There is, however, variable quality of end-of-life care in care homes. Issues raised included variable support and reluctance to prescribe from primary care, a lack of support from other agencies (including community nursing, specialist teams and secondary care) and out of hours services, costs and training. The relationships with primary care and other professionals was identified as important to improving the quality of this care.⁴²

Advanced care planning is an important part of the Gold Standards Framework in Care Homes to improve quality of end-of-life care. A small qualitative study highlighted that understanding of advanced care planning was variable, and that although residents were open to it, this was influenced by the way it was introduced. Training and staff skills for end-of-life care are vital to ensure quality.⁴³ It is important to be aware that end-of-life care can have particular consequences for care home staff due to relationships formed (residents and relatives). Emotional support and training would be beneficial.⁴⁴

NICE have created guidelines for end-of-life care.⁴⁵ These are:

- Identify people approaching end-of-life, and offer information and effectively communicate options;
- Comprehensive assessment of needs;
- Holistic approach to their needs, including physical and psychological, emotional and social, and spiritual;
- Support families of residents;
- Coordinate care between appropriate specialist services;
- Ensure that urgent care is readily available, and that specialist palliative care considered;
- Bereavement support services are signposted to appropriate individuals;
- Training is available for staff to make them competent in caring for and supporting people nearing end of life; and,

- The multi-disciplinary team is sufficiently large and skilled to provide end-of-life care.

3.1.6. Falls

Falls are a major problem for care homes, with high prevalence of falls in older people, and risk of harm increased, therefore preventing falls should be an aim for care homes. Risk factors for falls include a previous history of falls, sensory impairment, polypharmacy, alcohol, clothing or environmental hazards, co morbidity, and cognitive issues. NICE have released quality statements for care homes regarding falls.⁴⁶ These include:

- Routine assessment of residents identified as at risk of fall;
- Multifactorial risk assessment to help identify specific risks and implement tailored, individual multifactorial interventions;
- Check for injury prior to moving a resident with a fall;
- Safe manual handling procedures in place for injured fallers; and,
- Referral of residents for strength and balance training.

A 2015 Cochrane review analysed the effectiveness of specific interventions for falls in older people resident in care facilities or hospitals.⁴⁷ They found that exercise interventions were ineffective at reducing prevalence or risk of falls overall, although there was some suggestion that exercise reduced risk in intermediate level residents but increased risk in those with high level needs. Vitamin D supplements reduced rate but not risk of falls, and there was inconclusive evidence for multifactorial interventions.

NHS Scotland produced a good practice resource for preventing falls in care homes. They identified six key areas of improvement: recognition of falls as a problem; strong leadership; wider support from the health and social care system; resources to plan, test and implement improvements; having a dedicated improvement team; and, clarity around roles and responsibilities. Recommendations included: doing a self-assessment and identify key improvement areas for the organisation; pre-admission falls assessment and multifactorial risks screen for new residents; have a falls care plan; and, encourage exercise and ensure appropriate equipment is available.⁴⁸

3.1.7. Dementia

A survey of people with dementia, family members and care home staff found that a majority of care home residents have dementia, with low expectations of a good quality of life for people with dementia going into a care home. Over a quarter of family members of care home residents thought resident quality of life was poor. There were positive views on the quality of care, but concerns about future investment were raised, while difficulties in accessing information prior to entry were described. Although respondents described a good relationship between care homes and healthcare staff, there was less positive feedback regarding relationships with volunteers and opportunities to be involved in activities.⁴⁹ Individuals with dementia who display behavioural problems should receive a psychosocial intervention as first line treatment.⁵⁰

NICE have released guidance on quality of care for people with dementia.⁵¹ Their recommendations include:

- Residents with concerns about dementia should have access to appropriate support and diagnostic services;
- Residents with dementia are given choice and control over care, and are involved in the review of plans;
- Residents with dementia are enabled to participate in leisure activities of their choice;
- Residents with dementia are enabled to maintain and develop relationships;
- Residents with dementia are enabled to access services to support physical and mental wellbeing;
- Residents with dementia are able to participate in service design, delivery and evaluation;
- Residents with dementia have access to independent advocacy; and,
- Residents with dementia are supported and encouraged to be involved with, and contribute to, their community.

3.1.8. Mental Wellbeing

Mental illness is more common among care home residents than people in the community, suggesting it is important to encourage mental wellbeing in care homes.⁵² NICE have released two pieces of work on mental wellbeing. The first is a set of quality statements,⁵³ including:

- Residents should have the opportunity for participation in meaningful activity that promotes health and wellbeing;
- Enablement of development and maintenance of personal identity;
- Recognition of mental illness, sensory impairment and physical problems; and,
- Access to healthcare services as required

The second is a set of recommendations,⁵⁴ including:

- Occupational therapists regularly conduct individual or group sessions to increase knowledge and awareness, and maximise independence;
- Physiotherapist to support safe, regular physical activity;
- Offer and promote participation in local walking schemes; and,
- Suitable training for staff.

3.1.9. Oral Health

Oral health is a particularly important aspect of care for residents. Poor oral health is associated with a number of negative health outcomes,^{55–57} while there is evidence that residents in care homes, particularly those of older age, are at increased risk of poor oral health.⁵⁸ A 2012 report for the British Dental Association found that there were significant levels of unmet dental need for

residents, however this opinion was not shared by care home staff. The report recommends that there are clear, formal contractual arrangements to provide dental care and assessment.⁵⁹ A 2012/13 PHE survey of oral health for care home residents found that there was particular concern around access to standard and emergency dental care, while not all staff received oral health training.⁶⁰ NICE have released a set of quality statements regarding oral health in care homes.⁶¹ These are:

- Mouth care needs should be assessed on admission;
- Mouth care needs should be recorded in the personal care plan; and,
- Residents are supported in daily mouth care maintenance.

A recent systematic review found there was a lack of evidence for strategies to support care home staff in providing better oral health care.⁶²

3.1.10. Infection Control

Infection prevention and control is an important aspect of quality in care homes. Residents in care homes are particularly vulnerable to infectious disease, and healthcare associated infections,⁶³ and the underlying health of this population make them susceptible to death and disability from this. It is therefore vital that homes have robust infection control policies. These should include control procedures, such as hand hygiene, personal protective equipment, safe handling of sharps, environmental cleaning, reporting mechanisms during an outbreak, and managing sick individuals (isolation, barrier nursing).⁶⁴

Environmental cleaning has been highlighted as particularly important. Residents share communal areas and equipment, increasing susceptibility. It has been suggested that responsibility for the environment is on staff.⁶⁵ Importantly, it is argued that environmental cleanliness is important beyond infection control, but also for quality regarding the 'homeliness' of the environment.⁶⁶

Infectious disease outbreaks are particularly important for care homes. The size of the care home, hygiene and infection control standards all have an inverse correlation with attack rates of infectious disease. Meanwhile, delaying contact with the local health protection agency worsens the outbreak.⁶⁷

Evidence from norovirus outbreaks suggests that cross-transfer between healthcare settings is a prevalent mechanism of spread, and this is potentially due to inadequate application of infection control measures.⁶⁸ Respiratory outbreaks, especially flu, are particularly challenging for care homes.⁶⁹ These cause admissions to hospital and early involvement of public health is important to preventing spread.⁷⁰

Regarding flu, vaccination of all healthcare and care home staff is recommended. This is because workers are vulnerable to contracting flu and spreading it to residents, so vaccination prevents staff absences and spread, while contributing to herd immunity in the home. Evidence from Nottinghamshire suggests flu vaccination uptake across care home staff is low. Education, workplace drop-ins and free provision of vaccines may improve uptake.⁷¹

3.1.11. Safeguarding

A systematic review examining abuse in the elderly population found a highly variable rate of abuse in the population, with low reporting rates. Dependant adults reported psychological abuse at a rate of one in four, while neglect was reported at a rate of one in five.⁷² This statistic highlights the importance of having robust safeguarding practices, however this is only a part of the issue. Safeguarding also covers other issues that have potential to harm residents. It is particularly important to recognise that cognitive impairments and frailty make residents particularly vulnerable. Additionally, a high proportion of care home services are provided by independent providers. A proportion of the care home population do not receive correct treatment, leading to a poor quality of life, and concerns have been raised over abusive behaviour. Specialist multi-disciplinary teams (MDT) are important for raising standards, and improvements in staff communication, awareness of safeguarding and opportunities to discuss and raise concerns are useful.⁷³

3.1.12. Quality

International evidence on improving quality has lacked consensus but there is agreement that leadership and organizational culture are important, particularly when implementing change.² Inspections are important to ensure resident wellbeing and compliance to standards. They were particularly useful for providing feedback, and support and guidance to care homes.⁷⁴ Of particular concern to residents was autonomy and relationship forming. Important factors were: to accept their living situation with a positive attitude; forming connections with other residents, a reciprocal relationship with staff, and changing to familial relationships; environment (homely, individual space with bathroom, and activities all supported quality of life); caring which is timely, not rushed, competent, and from staff that are known, trusted and understanding.⁷⁵

An analysis by the CQC found that training for staff in working with dementia was common, but training for working with residents who had a stroke was less common. Training around medicines management was most attended for staff, whereas continence care was not well attended. Importantly, high confidence in meeting health needs of residents was only seen in three quarters of staff.²¹ Another CQC report found a number of issues were important to improving quality of care homes.⁷⁶ These include:

- Promote a culture of care through understanding of preferences and needs of residents, providers to ensure staff are respectful, see residents as individual and support independent living, and encourage social interaction between staff and residents;
- The right systems involve identifying and discussing needs (care, preferences and nutrition), good record keeping of care decisions and preferences, identify and respond to risk of malnutrition, use a formal nutrition tool, clear pathway to raise concerns for residents, and staff resources are flexible and reactive to resident needs;
- Maximise privacy and dignity by acting appropriately, using correct equipment (screens), and respect preferences and choice;
- Ensure staff adequately trained (particularly dementia), and understand relevant safeguards and acts; and,
- Ensure resident's right to choose is respected.

Since 2008, there has been a drive to ensure care is person-centred, and this is a regulated activity assessed by the CQC.⁷⁷ There are a number of factors associated with person-centred care,⁷⁸ including:

- Leadership to develop a culture of personalisation, ensuring staff invest in this approach;
- Define quality based on what the resident views it as;
- Involve relatives in the care;
- Work with local partners to improve local services;
- Make the care home part of the local community; and,
- Make the care home environment as 'homely' as possible.

Staff are key to quality of care; however, recruitment and retention is a concern. Continuity of care, particularly with staff is the key aspect of quality.

3.2. Policy Analysis

There are three main Acts in UK legislation very important to care homes; the Care Standards Act of 2000, the Health and Social Care Act of 2008 and the Care Act 2014. The Care Standards Act defined a care home as somewhere which provides accommodation with nursing or personal care for someone who is ill, disabled/infirm, has a mental illness, or is dependent on alcohol or drugs, but is not a hospital, independent clinic or children's home. It also put responsibility on managers to ensure that nursing is of an appropriate quality.⁷⁹

The Health and Social Care Act 2008 established the regulatory and enforcement powers of the CQC, also in relation to care homes.⁸⁰ The CQC was created to provide the registration for, and inspection of, providers of health and social care services, including care homes.

The Care Act changed eligibility criteria for funding support from local authorities. Eligibility is as follows:

"The Act says clearly that a person will be entitled to have their needs met when:

- *the adult has 'eligible' needs*
- *the adult is 'ordinarily resident' in the local area (which means their established home is there)*
- *any of 5 situations apply to them*

These are the 5 situations:

- *the type of care and support they need is provided free of charge*
- *the person cannot afford to pay the full cost of their care and support*
- *the person asks the local authority to meet their needs*
- *the person does not have mental capacity, and has no one else to arrange care for them*

- *when the cap on care costs comes into force, their total care and support costs have exceeded the cap”*

From 2020, individual contributions will be capped and means-tested financial support will be extended, and the CQC have been given market oversight powers to inspect finances of hard-to-replace providers.⁸¹

As part of the Care Standards Act, the Department of Health also released a set of minimum standards for care homes.⁸² These were:

- Residents should be involved in their choice of home:
 - o Information should be made available to help individuals make an informed decision;
 - o Contracts should to explain the terms of residence;
 - o Service users should have a needs assessment prior to entry into the home;
 - o Homes should demonstrate the capacity to meet needs;
 - o Prospective users are able to undertake trial visits;
 - o Intermediate care residents are adequately supported to regain independence and return home.
- Interactions between residents and staff maintain dignity at all times and are respectful.
- Quality of end-of-life care is integral, and can have a profound effect on the community. Providers should have clear policies and procedures about this care, and foster an atmosphere of openness so staff and residents can discuss death. Quality of care should extend to family and friends of residents.
- The service user should have a plan to meet their care needs.
- Access to health services is ensured, while residents feel supported in making decisions about health.
- There are clear policies regarding medication administration, while service users with capacity have control over their own medication.
- Daily living and activities:
 - o Residents are offered flexible and variable activities to suit differing needs (social, religious and interests);
 - o Residents are able to maintain contact with people outside the care home;
 - o Personal autonomy and choice is maximized through support; and
 - o Diet is varied, balanced, appealing and nutritious
- Complaints from users or relatives are listened to and acted upon.
- Legal rights of residents are protected.

- Users are safeguarded against all forms of abuse: physical, mental, emotional, sexual or neglect.
- Environment:
 - Meets the aims of the service- it is safe, accessible, well-maintained;
 - Both indoor and outdoor areas are available;
 - There are adequate toilets and washing facilities;
 - Specialist equipment to support independence is available after assessment by qualified professional (Occupational Therapist) including grab rails, hoists, wheelchairs, communications aids;
 - Users have own room of minimum size, furnished with own possessions if possible;
 - The temperature and lighting is adequate; and,
 - The care home is clean.
- Staff:
 - All staff are competent and trained;
 - There is a minimum proportion of qualified staff (NVQ level 2);
 - There is appropriate supervision of staff; and,
 - Managers have required qualifications (NVQ Level 4) with sufficient experience.
- User's financial interests are safeguarded

NHS England are currently exploring a model of care for enhanced health in care homes. There are six vanguards across the UK to improve quality of life, healthcare and planning for care home residents. This is part of the enhanced health in care homes model which involves close working between care home providers, the NHS, the voluntary sector, local authorities, and carers and families. The model provides a selection of evidence based interventions, and collaborative work between partners helps the vanguards implement the changes. This model exists in the wider context of barriers which are limiting quality of care, such as:

- Care: overly medical focus, variable access to services, insufficient care planning and poor continuity of care.
- Financial: lack of systemic incentivisation of preventative care, distressed market, challenges of increasing costs, recruitment and retention, and contractual mechanisms to provide preventative care
- Organisational: inter-organisational barriers, lack of accountability, and variation in policy and systems (such as IT).

The overall aims are to ensure healthcare access, optimize the working environment, maximise resident independence, and coordinate commissioning and services. The principles are for the model to be person-centred, focus on co-production from the different organizational partners involved in care homes, be quality driven, and strong leadership.³ The approach to ensure healthcare access

includes enhanced primary care support, such as a link between a care home and a specific GP practice.

Provided by Health Education England, the care certificate is a set of standards for health and social care staff to meet in regular work, to ensure they meet a minimum requirement for care work.⁸³ A free online resource, there are 15 standards in the Care Certificate:

1. Understand your role
2. Your personal development
3. Duty of care
4. Equality and diversity
5. Work in a person centred way
6. Communication
7. Privacy and dignity
8. Fluids and nutrition
9. Awareness of mental health, dementia and learning disability
10. Safeguarding adults
11. Safeguarding children
12. Basic life support
13. Health and safety
14. Handling information
15. Infection prevention and control

3.3. Local Actions and Interventions

There are many approaches to improving care home quality in Liverpool. This includes the care home improvement plan for 2017-2022, which has four broad priorities:

- Quality of care and enhanced health care
- Workforce Development
- Digital
- Market Shaping & Sustainability

This strategic approach to improving care homes involves multiple partners, including Liverpool CCG, LCC, Liverpool Community Health (LCH), CQC and primary care providers among others. The approach was initially called the Liverpool Care Homes Improvement Programme (LCHIP). Additionally, there are multiple other interventions which are currently being implemented. This section will describe these interventions.

3.3.1. Future Need, Market Shaping and Sustainability

The requirement for the care home market to meet current and projected need, particularly for nursing care and dementia, has been identified. There is a plan to allow the population to remain in their own homes for longer, through improved domiciliary care. Of concern are the pathways which lead individuals from hospital into care homes, and a review of these are needed.

LCC is investing around £25M to meet the rising demand for quality residential and nursing care placements for people with dementia and older people with nursing needs as well as providing reablement and quality respite facilities for carers in the City. The services will be run by Shaw Healthcare, a national employee owned, not for profit provider. There is also the provision of intermediate care hubs in the area, which aim to facilitate reablement care.

3.3.2. Nutrition

The major change in nutritional interventions in Liverpool will focus on the prescribing of Sip Feeds (such as Ensure) to care home residents. Sip feeds were seen to be overused in residents not eating well, due to ease of their use above homemade thickening, such as milkshakes. Local data suggest these are prescribed inappropriately to residents, at significant financial cost, and there is a plan to review the appropriateness of prescribing with a view to stopping unnecessary sip feeds, in early 2018.

3.3.3. Medicines Management

The current local work on medicines management is covered in the enhanced healthcare model (below). A notable difference between the literature and the local picture is for the prevalence of Chronic Kidney Disease. For the over 65 population in Liverpool, prevalence is at 25%, much lower than the 80% stated in the literature, although this is for the general population, not just care home residents. Previous work has been undertaken to determine, and reduce, the prevalence of antipsychotic prescribing with a large-scale audit undertaken in 2010/11, however data on current trends are unavailable.

3.3.4. Healthcare

Interventions around healthcare for care homes in Liverpool broadly focus on the proof of concept model of enhanced care. Enhanced health care involves ensuring access to consistent primary care services including: medicines reviews; hydration and nutrition support; and out of hours/emergency support. Additionally, there will be a MDT approach for those residents with the most complex needs, and alignment with rehabilitation and reablement services. There will be a specific focus on end-of-life care and dementia. The MDT comprises of an enhanced GP, community matron, pharmacist and care home staff, with Consultant Geriatricians or Psycho-geriatrician support as needed.

The enhanced GP model, initiated as part of the LCHIP covering one neighbourhood in the city, is a proof-of-concept involving fortnightly, GP led MDT ward rounds in each of the 9 care homes in the neighbourhood, with the aim to identify upstream initiatives and needs, thus preventing use of secondary care. There are also approaches to improve digital healthcare (computerised medicines

management, telemedicine). The telemedicine system, commissioned by Liverpool CCG from NHS Airedale and currently on a phased rollout to homes, allows staff to contact a call centre for medical advice, hopefully preventing conveyances.⁸⁴

Two schemes are underway to reduce the issues with transfer of care from the care home to acute care. The first is the plan to exchange staff between the frailty unit and homes, to improve understanding of the requirements for different teams and what information is important. The second is similar to a scheme led by NHS England's vanguards, called the red bag scheme. This will create a standardised set of notes that will follow a resident to improve the transfer of information.

3.3.5. Infection Control

Flu vaccinations for care home staff was funded in 2017, and delivered by the GP Federation.

3.3.6. Physical Activity

Merseyside Sport Partnership (MSP) currently offers two schemes for care home residents:

- Active Care Homes – a team of volunteers visit care homes on a weekly basis to deliver adapted sport and physical activity sessions to residents, including table tennis, boccia (bowls), golf, cycling and walking.
- Oomph – MSP are working with social enterprise Oomph to roll out their license package to local care homes and community venues, providing older adults with a range of suitable exercise classes to increase their physical and social mobility. As part of the license, care homes can have their staff trained up as qualified exercise instructors, providing a range of chair based classes and adapted sports sessions (e.g. volleyball, boccia, orienteering and weightlifting) to their residents.

3.3.7. Safeguarding

Careline, a 24 hour contact line run by LCC, is the key referral contact for safeguarding concerns about care homes in Liverpool. A number of other organisations also have safeguarding roles. Liverpool CCG have a safeguarding service which co-ordinates the response to concerns about CCG funded residents, ensuring they are appropriately managed and referred to relevant services. The LCH safeguarding team has the key role of supporting LCC careline enquiries, particularly from a clinical perspective, and also follows up outcomes of such enquiries, and supports the strategic approach to safeguarding in care homes by providing knowledge on the key themes and the locality. Midlands & Lancashire Commissioning Support Unit commission Continuing Health Care and Funded Nursing Care care packages on behalf of the CCG. They have a general duty to ensure safeguarding concerns for individuals on these packages are followed up. A Quality and Performance Specialist Nurse attends the Quality Assurance group, which deals with safeguarding and quality concerns, and has a role in safeguarding strategy, and performs quality compliance visits to homes.

3.3.8. Quality

Improving quality of care is focussed on raising standards in poorly performing homes, standardising approaches to care planning and documentation, using intelligence to improve prevention and early response to quality and safety concerns, and embed dignity and person-centred approaches to care.

Another area important to quality is workforce development, split into two areas:

- Training and Development
 - Leadership and Management
 - Nursing and clinical skills
 - Care workers development
- Recruitment and retention
 - Apprenticeships: develop a two year apprenticeship scheme, incorporating work experience in health and social care sectors
 - Workplace culture and image of sector promote working in the sector, and highlight and publicise good practice
 - Health and social care pathway – work with health partners to create a career path across the whole sector

Two main training opportunities are being provided for by LCC in partnership with the CCG and LCH. The first is a course aimed at covering a number of topics for staff, including nutrition and oral health. The second is a leadership course for managers. It should be noted that training is not the responsibility of LCC, and these offers are extra. Finally, there is a will focus on improving ICT infrastructure for care homes, including a provider portal and linked data.

4. Epidemiology

4.1. Population Profile

4.1.1. Age Profile and Projections

Figure 1 shows the age profile of the Liverpool population. Compared to England, Liverpool's population is younger, with a lower proportion over the age of 65. There are approximately 39,000 females over 65, compared with approximately 32,000 males.

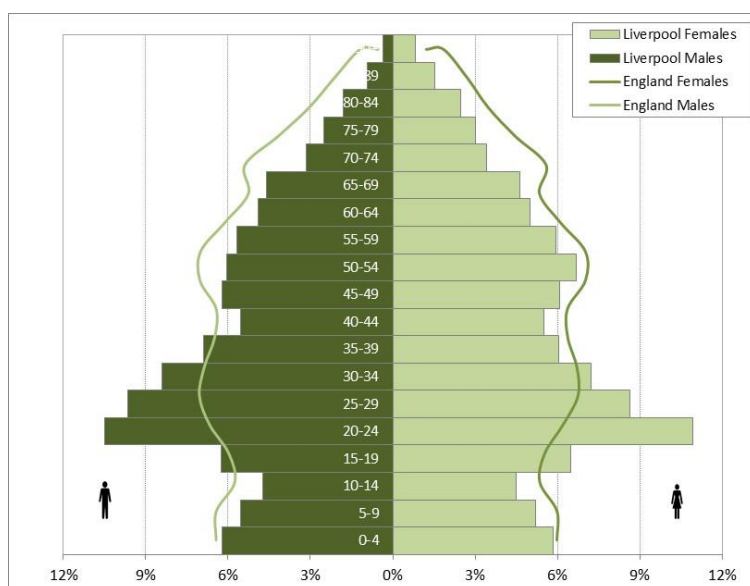


Figure 1: Liverpool Population Profile 2016. Source: Office for National Statistics, 2016 Mid-Year Estimates

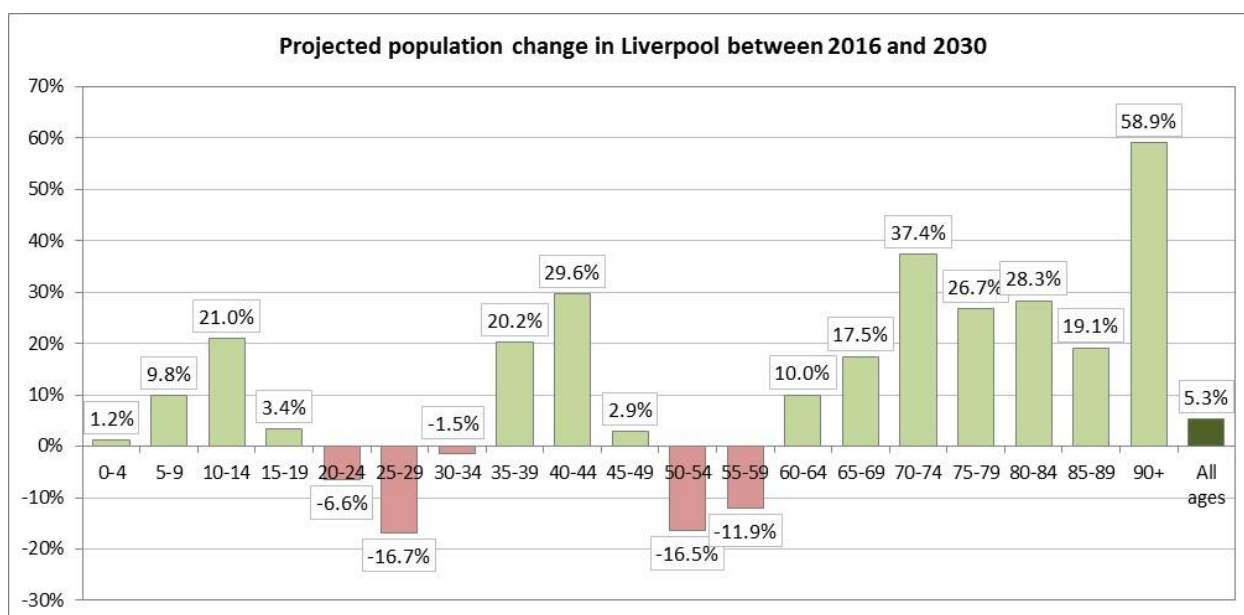


Figure 2: Estimated change in Liverpool resident population, 2016-30. Source: Office for National Statistics, 2014 based sub-national population projections

Latest population estimates from the Office for National Statistics show there are currently around 484,600 people living in Liverpool, representing a 9.7% increase in the population since 2001. Population projections suggest the increase in the number of residents in Liverpool will continue in the medium term, with the number of local residents increasing by a further 25,500 by 2030, to over 510,000 people. Figure 2 shows how the population is projected to change by age band over the next 14 years. The largest population increase is predicted in people aged 65 and over (27.1%). This will mean an increase in health problems that affect older people like dementia and injuries due to falls.

4.1.2. Deprivation

The English Indices of Deprivation 2015 (IMD 2015) combine a range of economic, social and housing indicators to provide the most up-to-date and comprehensive picture of deprivation in England. They provide a measure of relative deprivation, i.e. they measure the position of areas against each other.

Table 2 below shows the ranking for each Local Authority in the Liverpool City Region for each of the seven domains, in addition to the two sub-domains on income. Results show that Liverpool remains one of the most deprived local authorities in the country, and the City Region is ranked as the most deprived Local Enterprise Partnership areas in England.

Domain	Liverpool	Haltoun	Knowsley	Sefton	St Helens	Wirral	Liverpool City Region
Overall IMD	7	36	5	102	52	106	1
Income	9	51	5	74	50	78	2
Employment	10	28	1	40	18	42	1
Health and Disability	4	17	3	37	13	32	1
Education, Skills and Training	46	83	7	172	127	191	7
Barriers to Housing and Services	291	220	260	323	286	319	38
Crime	46	61	96	154	111	178	7
Living Environment	23	136	106	111	128	115	7
Income Deprivation Affecting Children	14	47	19	115	59	98	2
Income Deprivation Affecting Older People	10	62	8	82	80	100	2

Table 2: Local Authority Rank of Ranks. Source Indices of Deprivation 2015 Note: Local Authority ranks: 1 = most deprived, 326 = least deprived, Local Enterprise Partnership ranks: 1 = most deprived, 39 = least deprived

Almost 45% of the Liverpool population live within communities ranked within the 10% most deprived in England. This compares to less than a third for the Liverpool City Region as a whole. At the other end of the deprivation spectrum, less than 1% of local residents live in communities ranked as the least deprived in England. The severity and extent of deprivation in the city has significant implications for the health and wellbeing of local people, and is strongly associated with poor health outcomes from childhood through to old age. Levels of deprivation within Liverpool are particularly high in the north of the city, where virtually all of the neighbourhoods are ranked in the most deprived one or ten percent nationally.

4.1.3. Ethnicity

Table 3 shows the current ethnic make-up of Liverpool by age group. The proportion of BAME ethnicities in the over 65 population is less than 4%, with larger proportions as age group decrease, particularly for the mixed ethnicity population.

	All Ages	0 to 15 years	16 to 39 years	40 to 64 years	65+
White: Proportion	89%	84%	85%	93%	96%
Mixed/ multiple ethnic group: proportion	2.5%	4.7%	2.8%	1.8%	0.8%
Asian/ Asian British: Proportion	4.2%	4.4%	6.3%	2.5%	1.4%
Black/African/ Caribbean/ Black British: Proportion	2.6%	4.3%	3.2%	1.7%	1%
Other ethnic groups: Proportion	1.8%	2.9%	2.6%	0.8%	0.4%

Table 3: Ethnicity breakdown of Liverpool population, by age group, 2011. Source: Census, 2011

4.2. Care Home Markets and Future Need

Care home beds are commissioned by either LCC or Liverpool CCG (with support from the Commissioning Support Unit (CSU)), with the remaining being privately commissioned, or commissioned by other local authorities. There are several types of care home based care commissioned by LCC – permanent nursing; permanent residential; spot purchased reablement and respite/other short-term placements. To date, there are currently 97 care homes in the Liverpool area, ranging from homes with less than 10 beds, to homes with 150 or more beds. This accounts for 3,848 beds, of which 1,914 are commissioned by the local authority. Figure 3 shows the split of commissioned beds, by type of beds. Almost a quarter are nursing beds, almost a third are for Elderly Mentally Infirm (EMI), and 39% are residential (the highest proportion). When reviewing EMI beds specifically, almost three quarters are residential (Figure 4). Data for Continuing Healthcare commissioned beds was requested from the CSU for Liverpool CCG, however it was unavailable for time of publication.

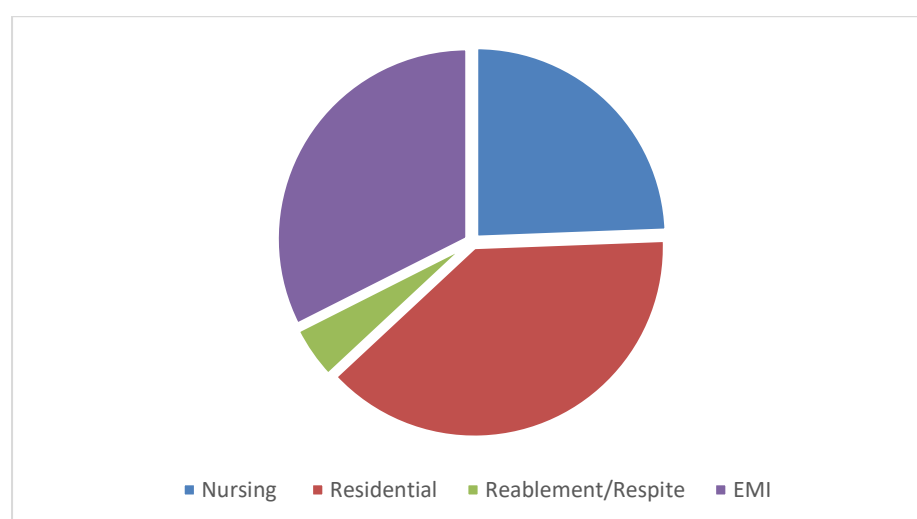


Figure 3: Proportion of LCC commissioned beds by type. Source: LCC Adult Social Care

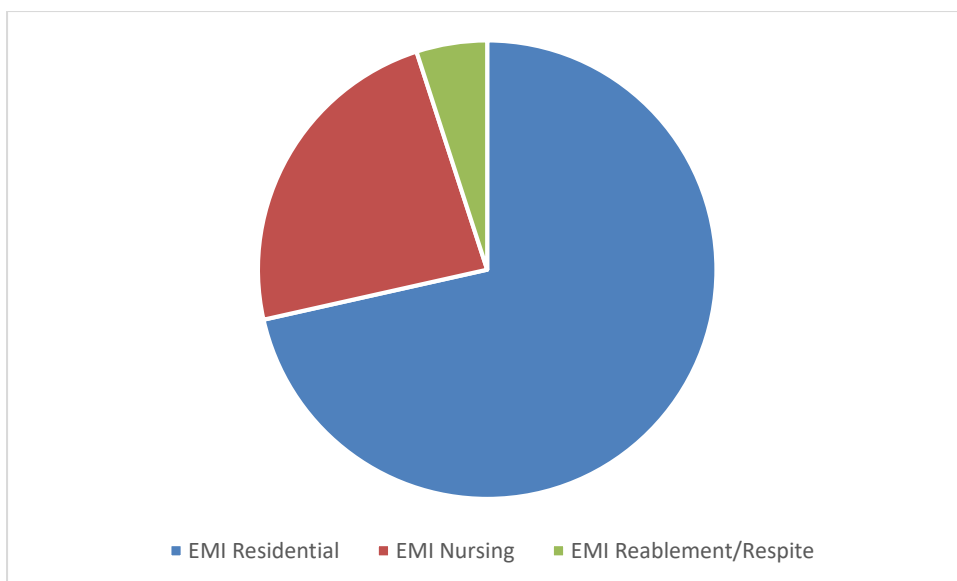


Figure 4: Proportion of LCC commissioned EMI beds by type. Source: LCC Adult Social Care

Table 4 shows the breakdown of homes by service type. A large majority are for older people, and almost half provide services for dementia. The CQC have assessed 89 of these homes, with 53 being rated as good or outstanding, and 36 rated as requiring improvement or poor. However, half the care home beds in the city are in homes rated as inadequate or requiring improvement.

Service Type		Number of Homes
Age Group	Children 0-18 years	3
	Younger Adults	28
	Older People	71
Health Need	Physical Disability	32
	Sensory Impairment	14
	Dementia	46
	Learning disabilities or autistic spectrum disorder	25
	Mental Health	31

Table 4: Number of homes by service type. Numbers do not add up to 97 because some homes offer more than one service. Source: LCC Adult Social Care

The 12 months leading up to June 2017 saw 7 care homes close, accounting for a 4.5% reduction (270) in the number of beds in the care home market for Liverpool. All of these homes were rated as inadequate or requiring improvement prior to closure, and these homes mostly provided nursing care.

Figure 5 shows the numbers of respite placements by month, between November 2014 and October 2017. Over 65 placements have consistently been higher than 18 to 64 placements, with an average of almost 60 over 65 placements per month, and 20 days for people aged 18 to 64. Figure 6 shows the average length of stay in respite care, with over 65 placements lasting substantially longer.

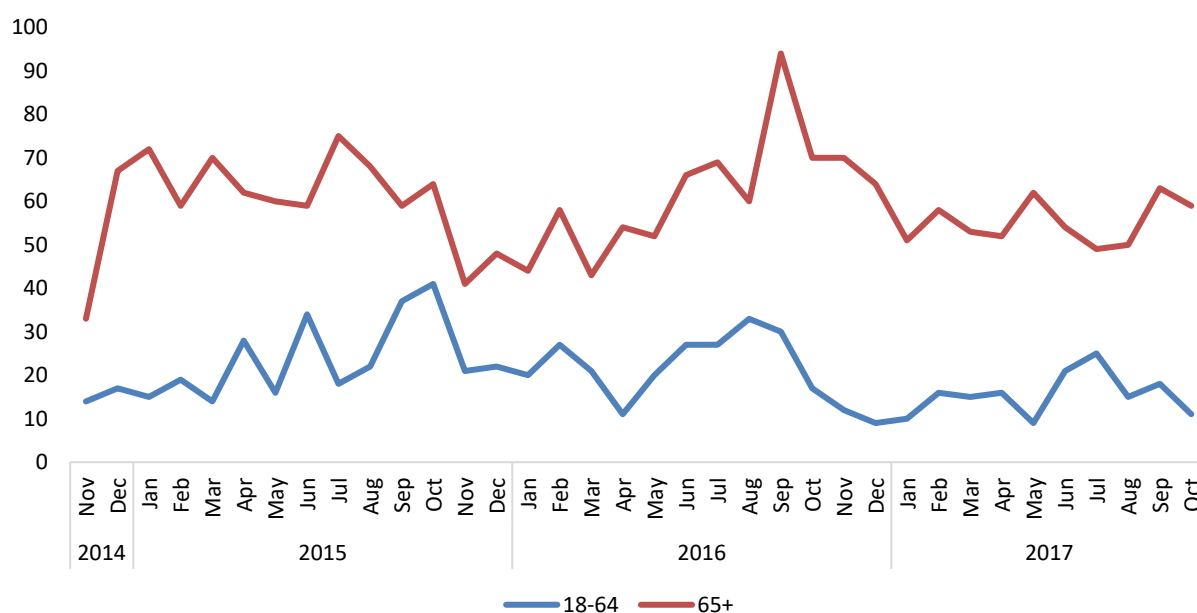


Figure 5: LCC Commissioned Short Term and Respite Placements (Nov 14 to Oct 17). Source: LCC Adult Social Care

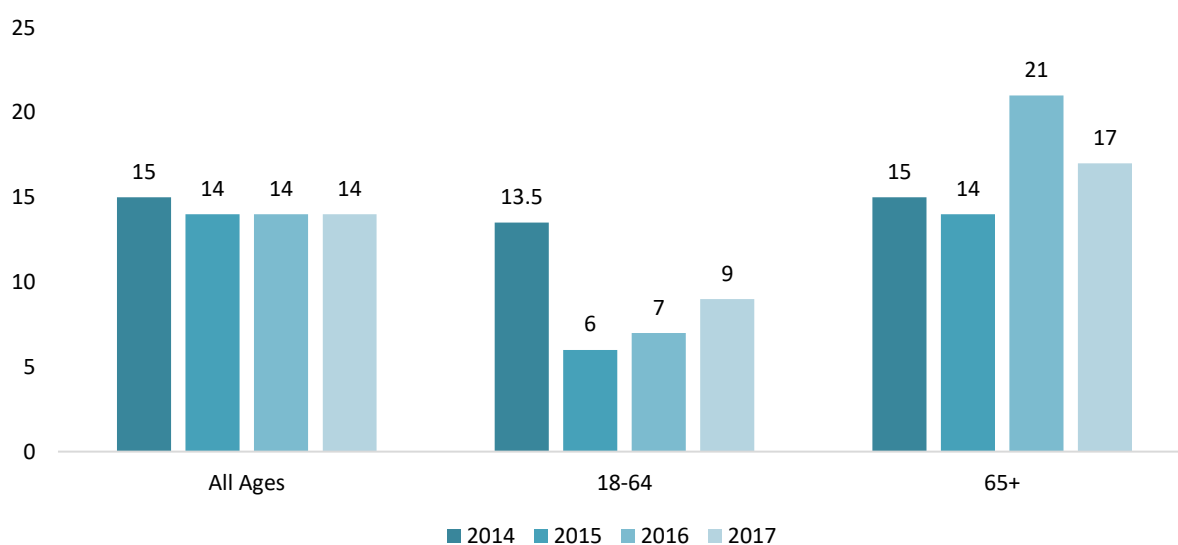
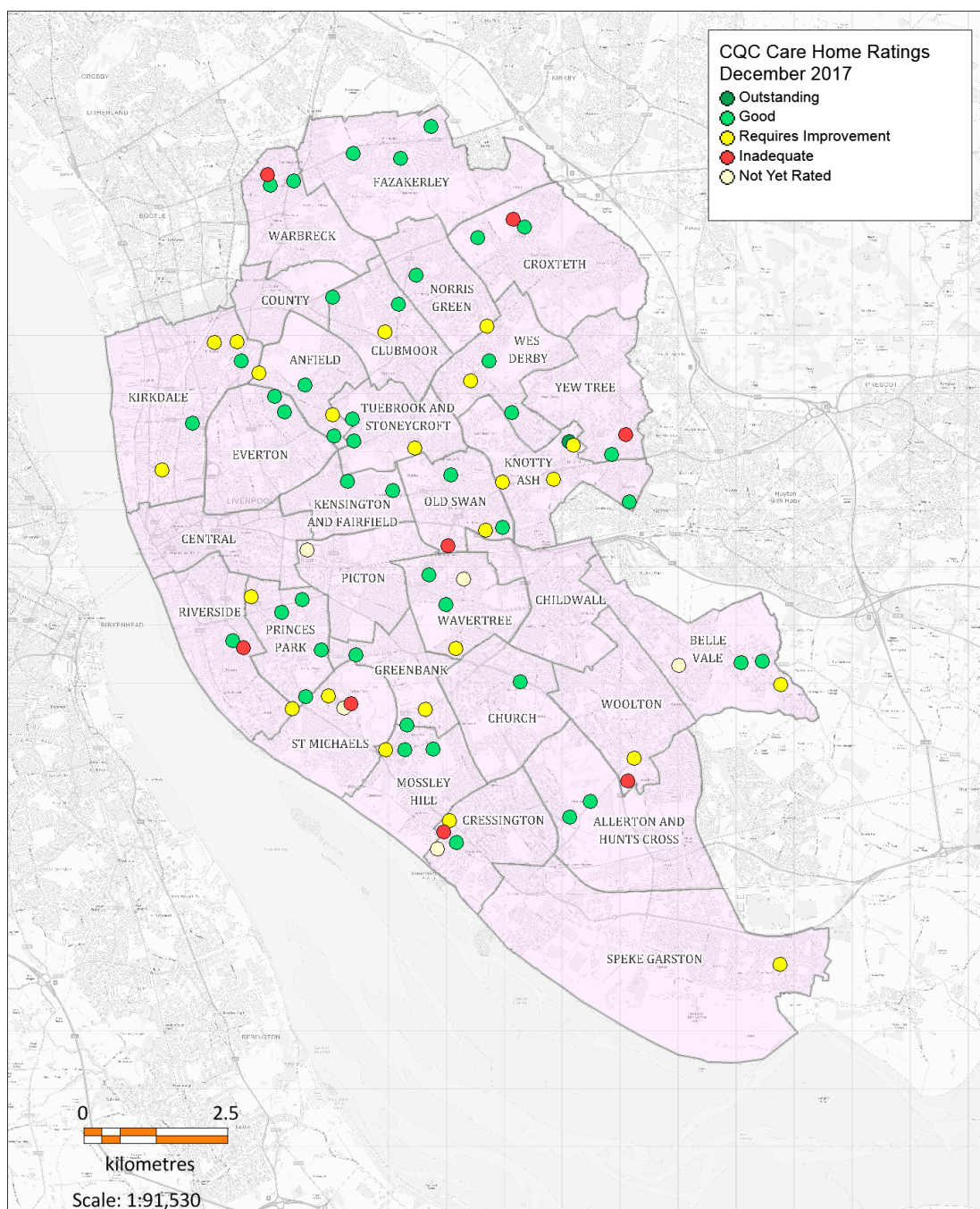


Figure 6: Median Length of Stay per Respite Placement, per Age Group (Nov 14 to Oct 17). Source: LCC Adult Social Care

Using data from the Personal Social Services Survey of Adult Carers in England, 2016-17, almost a third of carers had taken advantage of services that provide respite for less than 24 hour, while 16% had used respite for more than 24 hours.

Below is a map of care homes in Liverpool and their CQC rating, as of December 2017.



**Adult Services & Health
Governance & Intelligence**

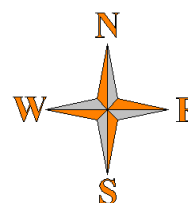
© Crown Copyright and
Database rights 2014,
Ordnance Survey 100018351

Care Quality Commission Care Home Ratings

January 2018

Map showing the CQC registered care homes for Liverpool as at 1st December 2017. Each location is coded by the latest published data regarding the overall quality score awarded at the most recent CQC inspection.

Liverpool geography is based on ward boundaries.



4.2.1. Projected Care Home Need and quality

Figure 7 shows the long term trend in Older Persons Nursing Home beds in the city since April 2012. The first five bars (blue) show how many beds there were at the beginning of each year between 2012/13 and 2016/17, and the orange bars show a more frequent quarterly breakdown since July 2016.

The overall trend was the Nursing Home beds were rising in the city between 2012/13 and 2016/17, but have since began to fall more recently, from a peak in July 2017/18. Q4 2017/18 and Q1 2018/19 both have 2,136 Nursing Home beds for Older People, this is the lowest number in the city since April 2012/13.

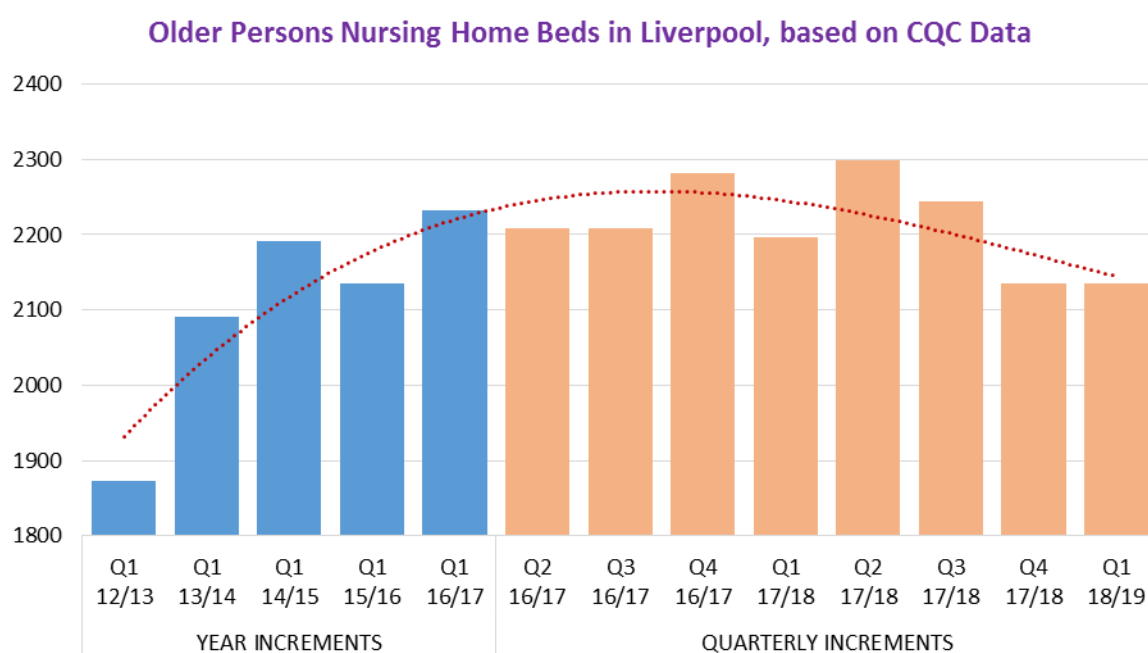


Figure 7: Trend in Older Persons Nursing Home beds in the city since April 2012. Source: LCC Adult Social Care

Figure 8 shows the comparison between the potential number of beds needed and the available number of care home beds in Liverpool, over time. The population projections data from ONS predict an ageing population in Liverpool: between 2016/17 and 2023/24, the 65+ population in Liverpool is expected to rise by approximately 9,000 individuals. It should be noted that Liverpool has a uniquely young population, compared to national and regional averages. It is estimated there will be year-on-year growth of the 65 and above age group, which by 2037 will be almost 50% more than the current number. Importantly, there is a faster increase in life expectancy among service users than the average increases. The red line shows that between April 2016 and April 2018 our 65+ population has increased by 2.7% when during the same period the green line shows that our Nursing Home beds has reduced by 4.7%. Assuming the figures remain stable, this means that the number of people requiring care home placement will exceed the number of available care home beds by around 2020/21.

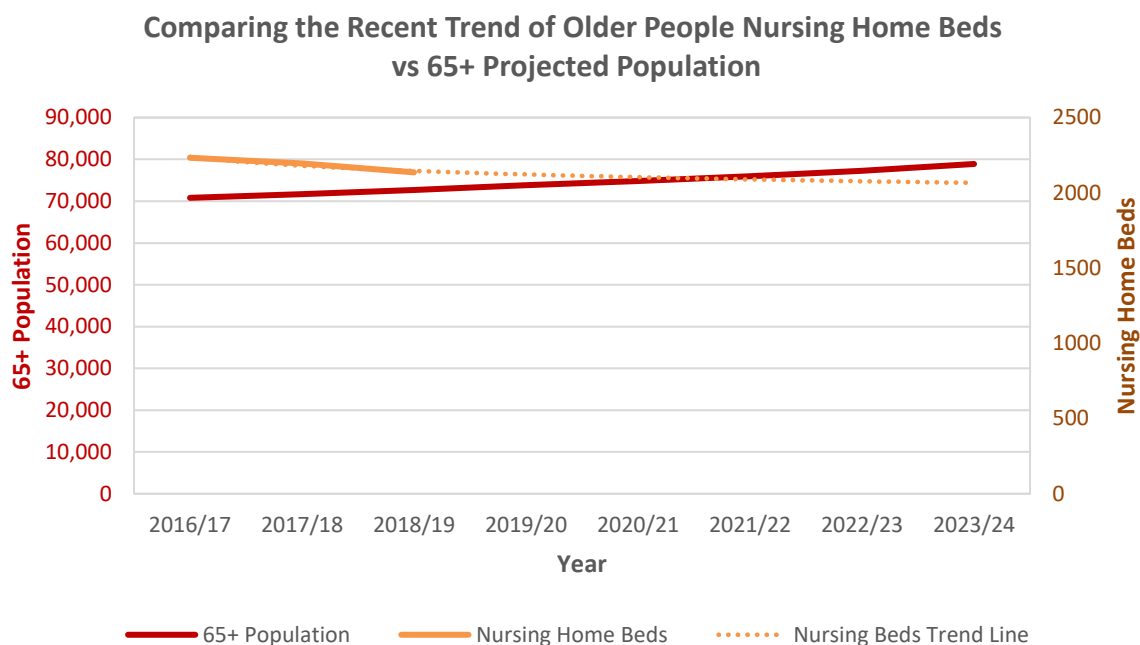


Figure 8: Projected impact of the ageing population on the care home market. Source: LCC Adult Social Care

Figure 9 is based on 4.5% of the city's 65+ population requiring Residential or Nursing Care. Assuming the 4.5% figure remains stable, this means that the number of people requiring care home placement will exceed the number of available care home beds by the early 2020s. Since 2004, fewer people overall have been entering residential and nursing care through Local Authority funding. However, this is expected to begin increasing again due to increased dementia placements and an ageing population. The trends show large increases in residential EMI requirement offsets the reduction in nursing requirement, while residential requirement will begin to increase again by the end of this decade.

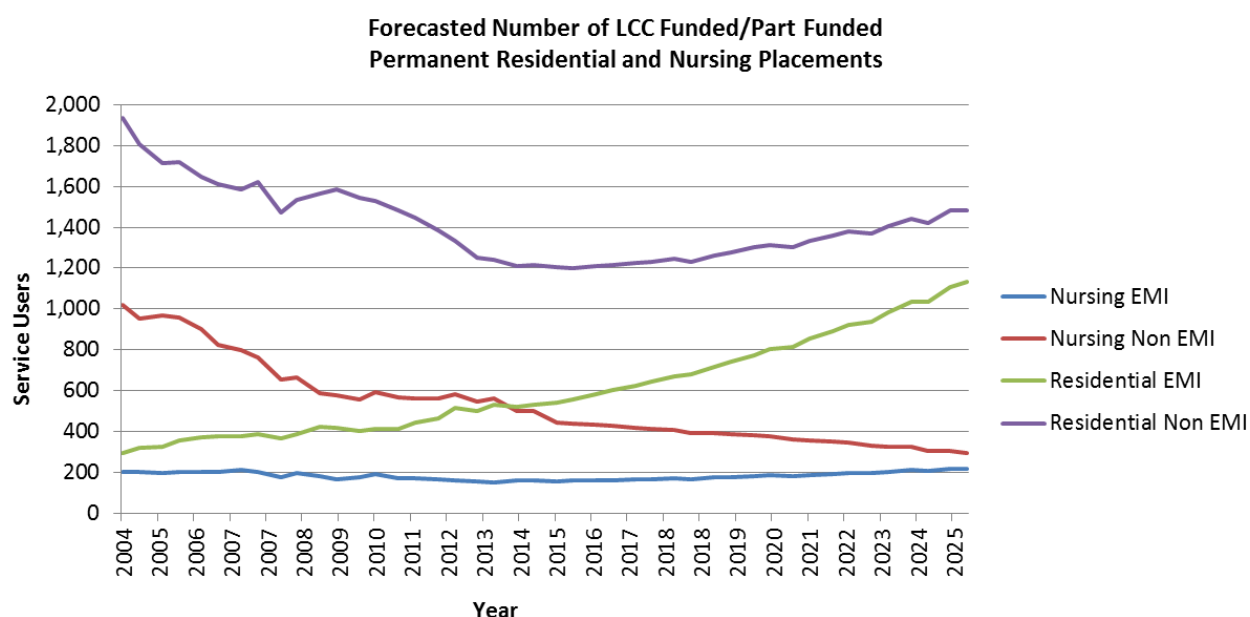


Figure 9: Forecast number of care home placements. Source: LCC Adult Social Care

Comparing Older Persons Residential and Nursing Care Quality in Liverpool Over Time

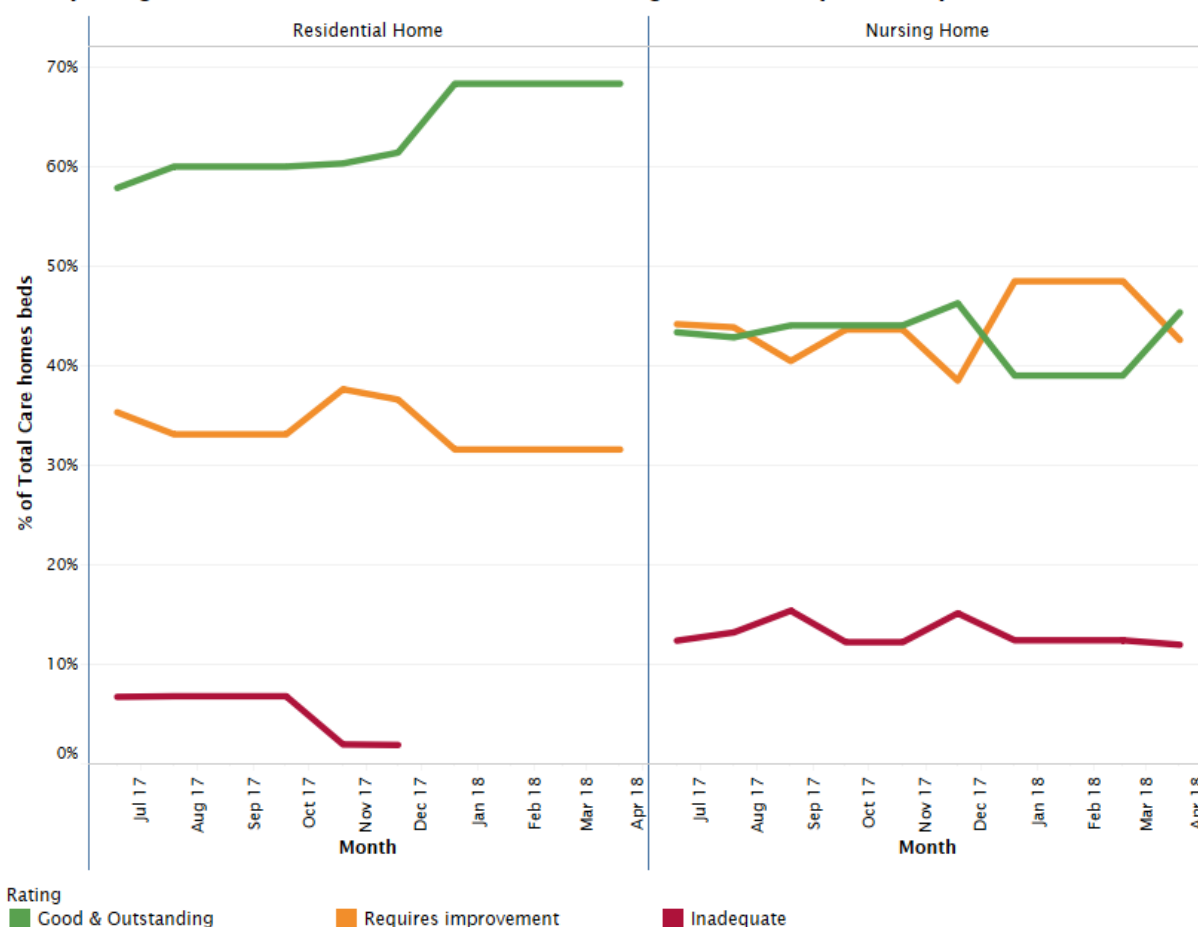


Figure 10: Changes in quality of Liverpool's Residential Homes and Nursing Homes for Older People over the last 10 months. Source LCC Adult Social Care

Figure 10 shows that Nursing Care quality appears to be much more of an issue in Liverpool than Residential Care. For all months since July, Liverpool's 'Good' and 'Outstanding' Residential Homes have far outweighed the 'Requires Improvement' and 'Inadequate', whereas for Nursing Care there have been consistently more 'Requires Improvement' and 'Inadequate'. When focusing specifically on the 'Inadequate' beds, since December there haven't been any in our Residential Homes, but these have typically made up between 12% and 15% of our Nursing Home beds.

Figure 11 shows that Liverpool's Nursing Line (solid blue) is significantly below the National Average (dashed blue), but our Residential quality (solid orange) is only marginally lower than the National Average (dashed orange). Nursing Care quality appears to have been an issue in the Liverpool City Region for some time as five of the six Local Authorities have been noticeably lower than the National Average.

% of Care Home Beds Rated 'Good' or 'Outstanding' in LCR

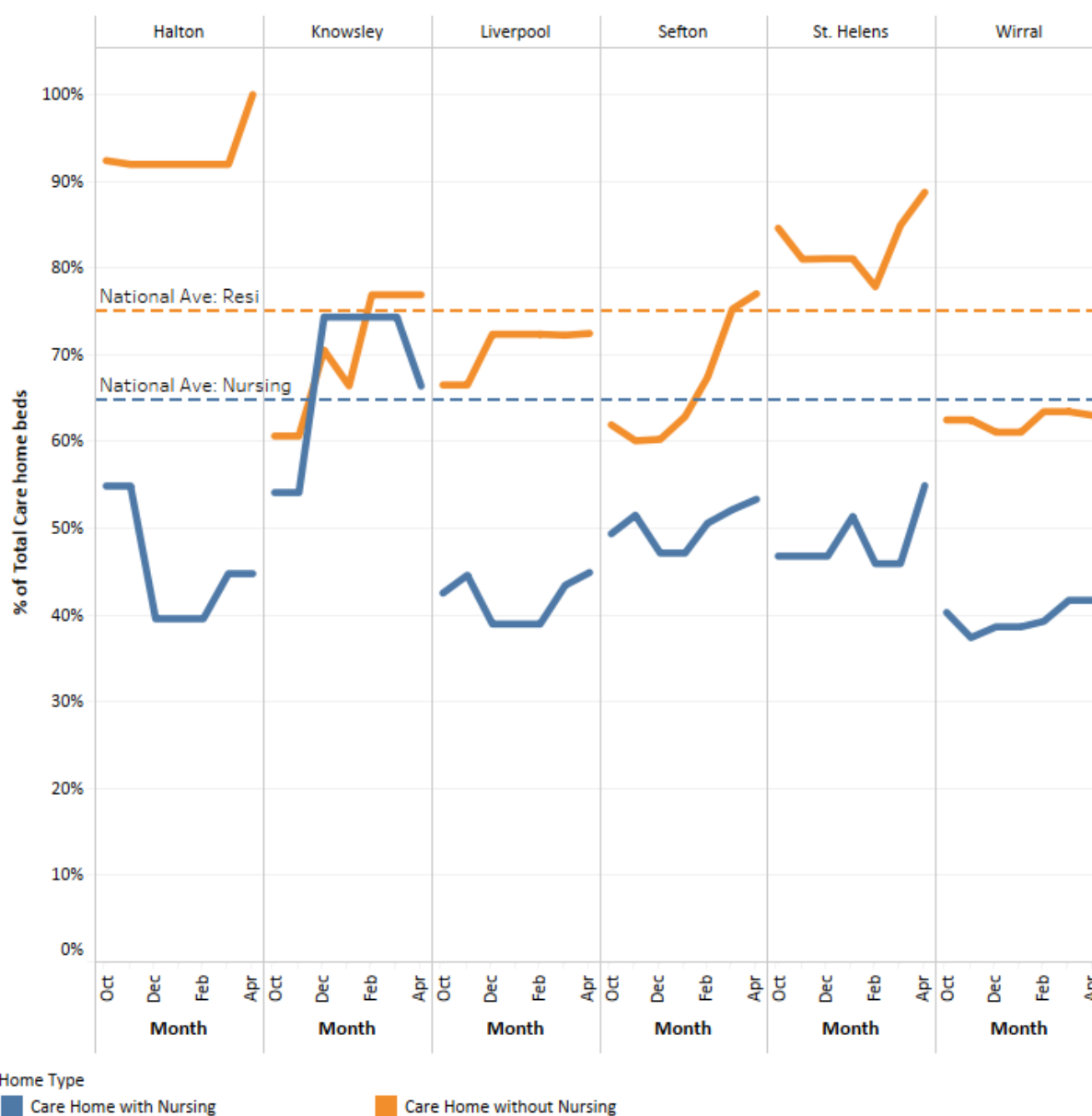


Figure 11: Benchmark of Liverpool's CQC quality data for beds rated as 'good' or 'outstanding' with the other five Liverpool City Region Local Authorities and the National Average.

4.2.2. Cost of Care Home placements

Table 5 shows the proposed rate for the four main types of care home placement for 17/18. The increase in rates for nursing placements was almost three times higher than the increases for other placement types.

	16/17 rates	16/17 Expenditure	16/17 Income	17/18 proposed rates	% increase
Residential - Older People	£394.33	£13,317,966	-£5,428,863	£407.16	3.3%
Residential – Dementia	£487.23	£13,889,591	-£4,909,986	£503.94	3.4%
Nursing - Older People	£564.10	£7,958,323	-£2,238,294	£600.21	9.1%
Nursing - Dementia	£646.24	£5,516,028	-£1,251,196	£661.78	3.4%
		£40,681,908	-£13,828,339		

Table 5: proposed rates for care home residents in 17/18. Source: LCC Adult Social Care

As of 2015/16, Liverpool spent almost two thirds of its funding for 65+ long term care on resident and nursing care, with the total cost of residential care being almost twice as much as nursing. The overall year on year spending for local authorities is decreasing, however the percentage change seen in Liverpool was less than half the reduction seen in England. The spend per head of over 65 population is higher in Liverpool than England or the North West, however the unit cost is substantially lower than both.

Overall, 8.4% of residents are in care homes under a section 117 of the Mental Health Act. Generally concerning residents with dementia, funding for a section 117 is entirely provided by the local authority or CCG.

4.3. Care Home Residents Demographic Profile

Figure 12 shows the demographic breakdown of residents in care homes. It shows that a high proportion of residents are older females. Females aged 85-94 comprise the largest proportion and the proportion of over 95s is much higher for females than males. The proportion of residents aged 75-84 is almost identical for males and females, while younger males consist of a much higher proportion than females. Over 60% of care home placements are for females.

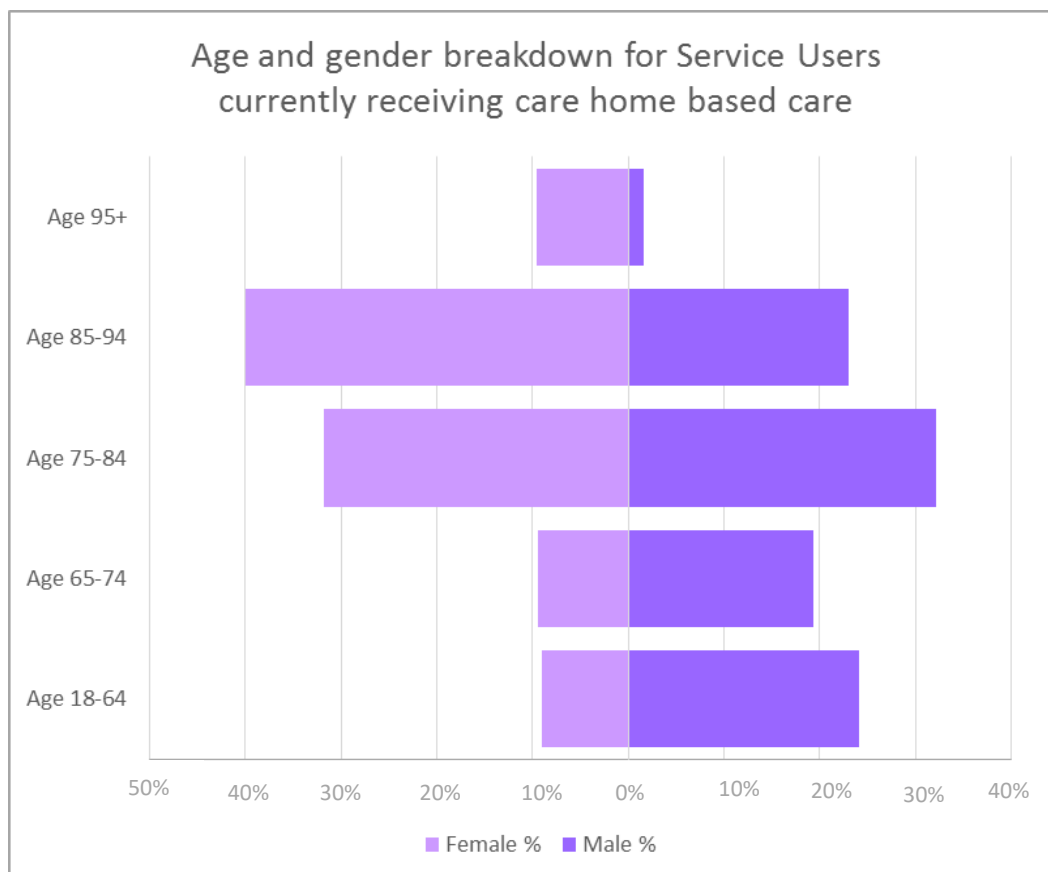


Figure 12: Demographics of care home residents, April 2017. Source: LCC Adult Social Care

Figure 13 shows the recent trends in commissioned care home resident numbers across Liverpool between October 2014 and May 2017. Permanent placements fell between November 14 and February 16, but increased since then.

Dementia prevalence is estimated to increase by 57% between 2016 and 2040 in England and Wales,⁸⁵ which will result in increasing demand on the Care Home market. There have been small, but steady, rises in Residential EMI placements, with a continued small reduction in Non-EMI Nursing. Table 6 shows the number of dementia residents with a LCC commissioned care package. Dementia residents make up nearly 60% of all residential and nursing for people aged 65 and older

**NUMBER OF INDIVIDUALS IN A PERMANENT RESIDENTIAL OR NURSING LCC
COMMISSIONED PLACEMENT (OCTOBER 14 - MAY 2017) INCLUDES HIGH/MED
SPEC. RES/NURSING**

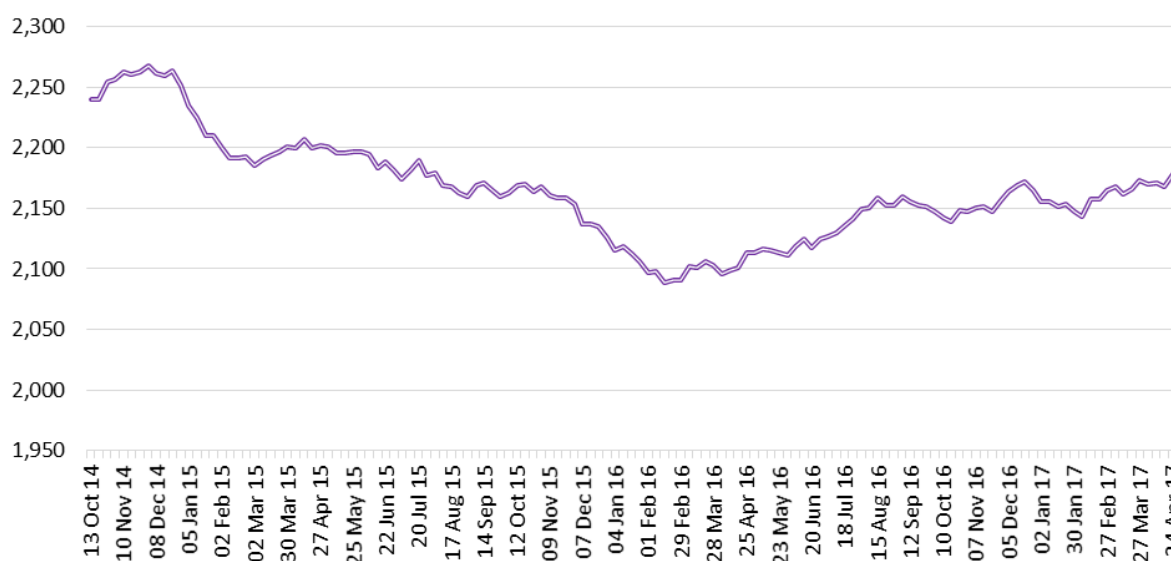


Figure 13: Individuals with a permanent commissioned care home placement, Oct 2014 to May 2017.
Source: LCC Adult Social Care

Package Type	18-64	% of All 18-64 Service Users	65+	% of All 65+ Service Users
Day Centres	39	7.1%	128	45.9%
Direct Payments	28	3.6%	151	37.2%
Extra Care	4	16.7%	52	33.1%
Home Care/REACT/Home First	28	7.5%	613	28.1%
Residential/Nursing	54	14.8%	1,260	58.2%
Supported Living	73	4.7%	46	16.0%
Grand Total	174	5.8%	2,079	40.7%

Table 6: Dementia residents with a Current Commissioned LCC Care Package. Source: LCC Adult Social Care

Figure 14 shows the average length of stay for residents based on the age they enter the care home and the type of care home they are placed in. It shows results for mean, median and upper quartile values for length of stay. The results show that there is a clear link between the age of entry and length of stay; older entrants have shorter length of stay in care homes due to increased stay in their own homes. Also, residential placements have the longest length of stay, and Residential EMI tended to have the shortest length of stay.

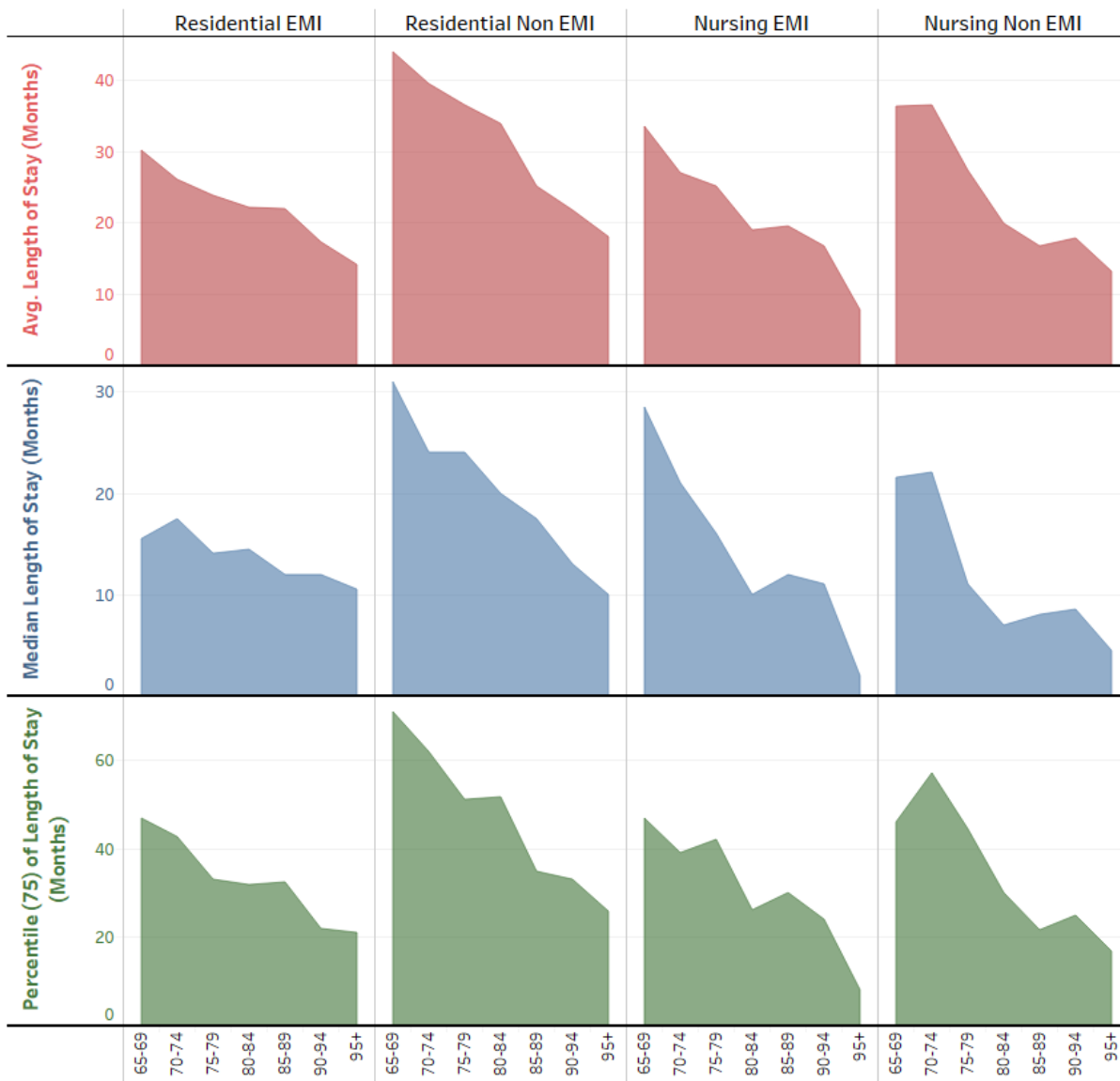


Figure 14: Length of stay by age of entry and placement type. Data were not available for under 65s.
Source: LCC Adult Social Care

4.3.1. Care Home Deaths

Table 7 shows trends in the number and percentage of deaths occurring in care homes in Liverpool between 2004 and 2015 reported as a proportion of the total number of registered deaths. In 2015 deaths in care homes accounted for 17.2% of all registered deaths (762 deaths) in the city, significantly below the national average of 22.6%, and the North West average of 21%. Although the proportion of deaths among care home residents has increased in the time period, the size of the increase in Liverpool has also been lower than both England and the North West.

Table 8 shows that on average one in every three care home residents will die in hospital. The proportion of care home residents who die in a hospital or hospice is significantly below that of the Liverpool population in general (32.4% compared to 57.9% in 2016), however, there is a general upward trend for proportion of deaths in hospital.

Persons	Liverpool		North West	England	Gap with England
	Deaths	%	%	%	
2004	619	12.8	15.6	16.5	-22.1%
2005	616	13.3	15.0	16.1	-17.5%
2006	558	12.2	15.1	16.2	-24.8%
2007	498	11.0	15.3	17.0	-35.2%
2008	532	11.7	15.5	17.4	-33.2%
2009	491	11.5	15.7	17.5	-34.4%
2010	611	13.8	16.7	18.5	-25.2%
2011	599	14.2	18.0	19.5	-27.0%
2012	615	14.5	19.3	21.1	-31.2%
2013	638	14.5	20.0	21.6	-32.8%
2014	686	16.4	20.2	21.7	-24.2%
2015	762	17.2	21.0	22.6	-24.1%
Relative change (%) (2004-2015)	23.1%	33.9%	35.0%	37.4%	

Table 7: Annual trends in Care Home Deaths (%). Source: Public Health England, End of Life Health Profiles

Year	Usual place of residence		Hospital (including hospice)		Other places		Total Deaths
	Number	Percent	Number	Percent	Number	Percent	
2012	433	65.8%	200	30.4%	25	3.8%	658
2013	443	63.1%	231	32.9%	28	4.0%	702
2014	468	69.0%	185	27.3%	25	3.7%	678
2015	522	69.2%	212	28.1%	20	2.7%	754
2016	433	63.4%	221	32.4%	29	4.2%	683
2012-16 (5 year pooled)	4,249	62.0%	2377	34.7%	229	3.3%	6,855

Table 8: Annual trends in Care Home Deaths by Place of Death (%). Source: Primary Care Mortality Database, Open Exeter

Table 9 shows how the cause of death differs for care home resident by place of death. There was a significantly higher proportion of deaths at home for causes including mental and behavioural disorders, cancers, circulatory and the nervous system. A significantly lower proportion died at home for infectious disease, external cause, digestive disease and skin disease. Organic, including symptomatic, mental disorders were the leading cause of death both in and out of hospital. The other leading causes of death in hospital were cerebrovascular disease and chronic lower respiratory disease, while for out of hospital it was general symptoms and signs, and cancer.

Underlying Cause of Death	Deaths at home/ other places		Deaths in hospital/ hospice		Total Deaths
	Number	% of total	Number	% of total	
V Mental and behavioural disorders	790	22.7	192	5.5	982
IX Diseases of the circulatory system	368	10.6	246	7.1	614
X Diseases of the respiratory system	237	6.8	232	6.7	469
II Neoplasms	285	8.2	70	2.0	355
VI Diseases of the nervous system	287	8.3	58	1.7	345
XVIII Symptoms, signs, not elsewhere classified	324	9.3	14	0.4	338
XI Diseases of the digestive system	17	0.5	73	2.1	90
XIV Diseases of the genitourinary system	38	1.1	40	1.2	78
IV Endocrine, nutritional and metabolic diseases	43	1.2	21	0.6	64
XX External causes of morbidity and mortality	13	0.4	48	1.4	61
I Certain infectious and parasitic diseases	<5		27	0.8	29
XIII Diseases of the musculoskeletal system and connective tissue	13	0.4	11	0.3	24
XII Diseases of the skin and subcutaneous tissue	<5		11	0.3	11
Other causes	9	0.3	6	0.2	15
Grand Total	2,426	69.8	1,049	30.2	3,475

*Table 9: Causes of death among Care Home Residents by Disease Chapter and Place of Death.
Source: Open Exeter 2012-16 (5 Year Pooled)*

4.4. Medicines Management

Data from the LCH Medicines management team, for the period covering March to September 2017, show the impact of the medicines management strand of the enhanced care in care homes proof of concept, and the wider work plan. Twenty audits of homes were completed, which audited MAR charts, storage of medicines and controlled drugs, and included all nine in the enhanced care model. Nine were referred for safeguarding concerns. There were 233 resident reviews performed by the care homes team, 155 as part of the enhanced model, with an estimated saving of £60,484. Table 10 shows the interventions implemented, with the majority being stopping medication or identifying

Intervention	Number of interventions
Stopped Medication	428
Monitoring Identified	410
Administration Error identified	97
Commenced medication	114
Decreased Dose	93
Quantity Reduced	72
Alternative prescribed safety guidance	60
Overdue Review (effectiveness, dose, S/E, still indicated)	83
Alternative prescribed cost effective	30
Increased Dose	51
Incorrect Therapeutic Dose	16
No Longer Indicated	20
Other	3
Total interventions	1477

Table 10: Medicines management interventions by type, March to Sep 2017. Source: Medicine Management team, LCH

4.5. Healthcare

4.5.1. Hospital admissions

Table 11 show the number of hospital admissions from care homes for 16/17. There were 2,371 admissions, with over 15% being due to falls. Table 12 shows that there were 3,538 attendances to the accident and emergency department (AED) over the same time period, with over a third of these attendances occurring out of hours. Figure 15 show the trends in admissions and attendances over four years. AED attendances increased annually, with an increase of over 1,000 between 13/14 and 16/17. Hospital admissions meanwhile, increased for the first three years, but actually decreased slightly in 16/17.

Falls	392
ACS	223
Pressure Sores (Any Diagnosis)	170
Malnutrition (Any Diagnosis)	3
Dehydration (Any Diagnosis)	189
Total admissions for any diagnosis	2371

Table 11: Hospital admissions by diagnosis type for 16/17. Source: Liverpool CCG

In-Hours	2,303
Out of Hours	1,235
Total	3,538

Table 12: AED attendances by timing, for 16/17. Source: Liverpool CCG

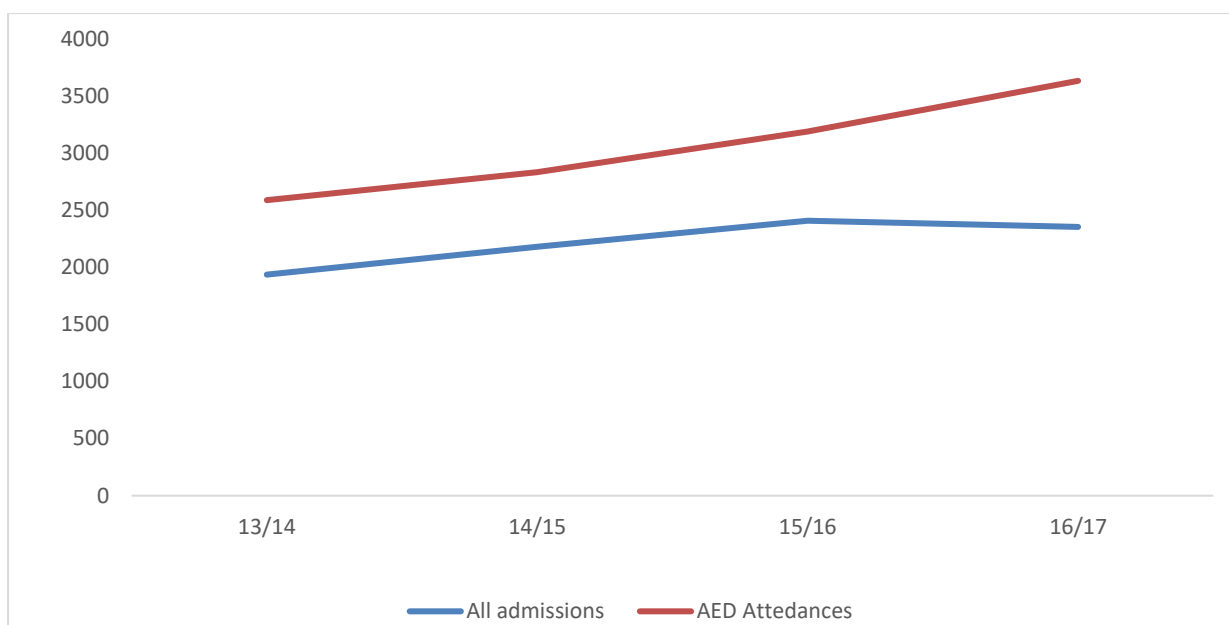


Figure 15: time trends in hospital admissions and AED attendances, between 13/14 and 16/17.
Source: Liverpool CCG

Table 13 shows hospital admission indicators for Liverpool compared with the North West average, for the over 65 population. Liverpool is performing worse across the indicators and is noticeably high for the rate of Non Elective Bed Days and is highest in LCR for this. Liverpool is also the highest in the Liverpool City Region for the percentage of patients discharged straight to Residential Care at 3.2%.

Local Authority	Liverpool	North West	Is Liverpool Outperforming the North West?
Rate of Non Elective Admissions (65+)	322	249	No
Rate of Non Elective Bed Days (65+)	2,941	2,209	No
Non Elective Re-admissions within 30 Days (65+)	18.9%	18.0%	No
Non Elective Re-admissions within 60 Days (65+)	29.7%	28.1%	No

Table 13: Benchmarking of hospital admission data for the over 65 population, comparing Liverpool to the North West, for Q3 16/17. Rates are per 1,000 of population. Source: ADASS AQuA

4.5.2. Care Home Improvement Interventions

This section will focus on care home improvement intervention: telemedicine and the enhanced GP proof-of-concept model in the West Derby ward. Figure 16 shows the number of calls to the telemedicine service between April 2017 and August 2017. The results show a clear increase in usage of the system as time has progressed. As of June 2017, 62% of old age care homes had telemedicine installed, and as of January 2018, all older people's homes have telemedicine installed. The evaluation of the enhanced GP model is available from January 2018.



Figure 16: Number of calls to telemedicine, April 2017 to August 2017. Source: Liverpool CCG

4.5.3. Transfer of Care

LCC received eight complaints from members of the public in the last six months, regarding transfer of care. These complaints concerned quality of care, and lack of information regarding financial contributions.

4.6. Infection Control

The infection control team audited 91 homes last year, of which 87 were rated as green on a RAG rating, the other four were rated as amber. One home had initially been rated as red, but with support had become green. There was 367 care home staff trained in 2016/17. Figure 17 shows the proportion of homes compliant by specific criterion. Although no homes are failing overall, the following issues are highlighted:

- Communal areas – findings included, tears to chairs, worn carpeted areas and ripped wall paper, due to these examples, the cleanliness in these areas is generally poor.
- Clean/dirty utility – findings included inappropriate storage of equipment and lack of hand washing facilities
- Decontamination – findings included poorly laundered hoists, slings and poor systems in place for general decontamination of equipment.

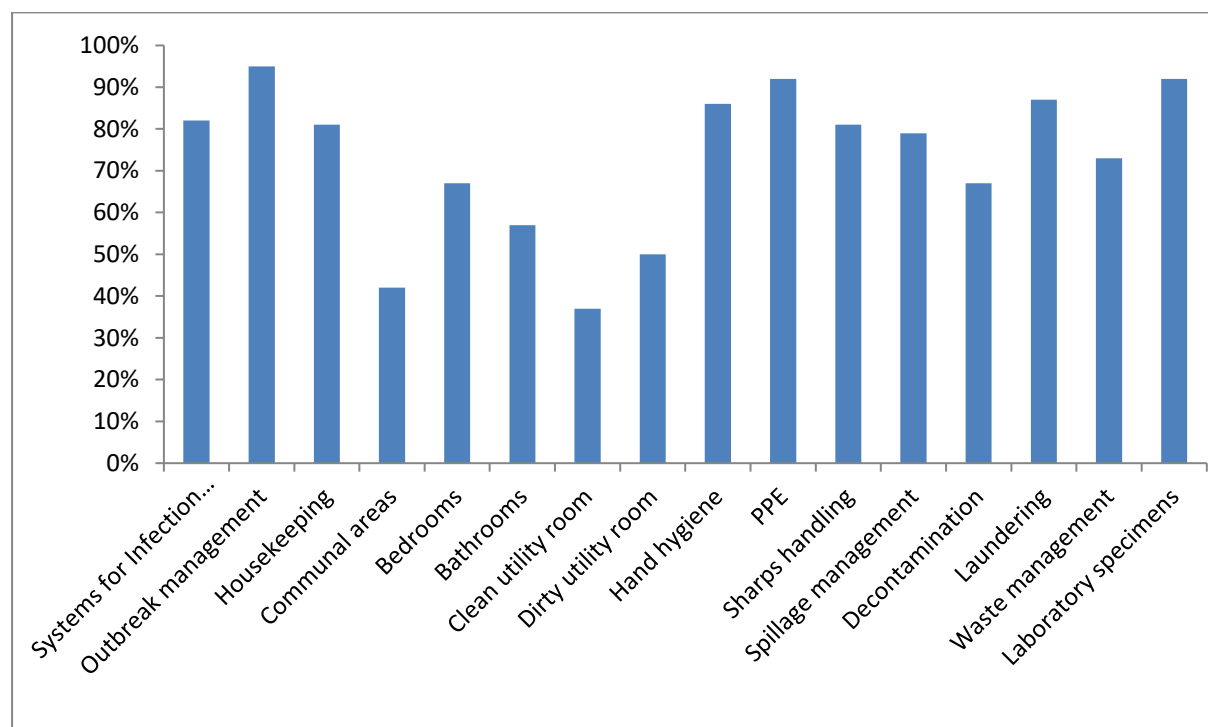


Figure 17: Proportion of care homes fully compliant by criteria for 16/17. Source: LCH Infection Prevention and Control team

Additionally, there were five influenza outbreaks in Liverpool in 2016/17. This highlights the importance of ensuring comprehensive flu vaccination for both staff and residents.

4.7. Safeguarding

Table 14 shows the number of safeguarding referrals received from care homes by allegation type. There were 1,217 referrals for safeguarding between September 2016 and September 2017. Over half of these were due to alleged neglect or acts of omission, while 20 percent was due to physical allegations.

Data from a similar period (although covering 13 more referrals) were available for outcomes of investigations and referrals. A quarter of referrals were unsubstantiated, while almost a third were substantiated; 14% were partially substantiated, while 17% were inconclusive. Concerning outcomes from referrals, almost a third had no risk identified, half had risks reduced while 14% had risk removed. Only 6% of referrals had the risk remaining at the end of the process.

Neglect and Acts of Omission	747
Physical	251
Financial and Material	85
Emotional/Psychological	45
Sexual	39
Organisational	43
Discriminatory	7
Grand Total	1217

Table 14: Number of safeguarding referrals by allegation type for 12 month until September 2017.

Source: LCC Adult Social Care

5. Insights

5.1. Care Home Markets and Future Need

It was identified by a number of stakeholders that the future market shaping approach to care homes will have to focus on the increased need and reduced availability of care home beds. The approach will aim to maintain people in their own homes for as long as possible. A particular issue raised was that the high levels of deprivation in the city meant there were limitations on potential for out-of-pocket payments as a source of funding.

Concerns were raised by one stakeholder that there was a need to engage in better respite provision, as this was important to maintaining people in their homes. It was discussed that booking mechanisms needed to be improved, around both planned and unplanned care. It was also noted by a stakeholder that the Intermediate Care Hubs were working well, making an invaluable contribution, and that feedback is positive. They are well staffed with low turnover rates which makes it easier to maintain training levels and provide quality and consistency

5.2. Nutrition

Nutrition for care home residents was mentioned by multiple stakeholders. Concerns were raised over the nutritional quality of food provided, the role that practical barriers play in preventing eating, and how the social aspect of eating was not encouraged. Plans to stop Sip Feeds were seen as a broadly positive move, but there was the feeling that increased consultation of specialist workforces could be explored in the future to maximise the effectiveness of interventions.

5.3. Medicines Management

This has long been a concern in care homes, and the appropriate use of medicines was a topic in many interviews, with training and audit discussed as part of the care home improvement strategy. Some stakeholders mentioned that there is variability in the quality of medicines management across care homes, and one stakeholder specifically discussed variable joint working between providers and community pharmacy leading to inappropriate use and waste of medicines. Another issue discussed was the use of anti-psychotics and sedatives for people with dementia, and one stakeholder felt that plans to reduce this prescribing would only work if staff can deal with challenging behaviour. The current practice around prescribing antipsychotics and sedation is uncertain, with some stakeholders mentioning the requirement for psychiatry input, however the specific practice was unclear.

5.4. Healthcare

Reducing secondary care usage is a major aim for organisations involved in care homes, and many of the interventions discussed work towards this goal. Much of the discussions about primary care related to the LCHIP – particularly telemedicine and the enhanced GP service. The two interventions have not been formally evaluated yet, but early feedback has been positive. A number of stakeholders confirmed that the interventions would undergo formal evaluation at the end of the process. The telemedicine intervention was highlighted as allowing community matrons to do more

preventative work with residents, as some of the reactive work has been diverted. The community matrons across the city were identified as not having a standardised way of working, and that communication between telemedicine, and acute services, with matrons could be improved. A number of stakeholders felt there could be more input from Allied Health Professionals on these interventions, particularly telemedicine.

Another discussion point was that of primary care provision for care homes; residents are covered by various GPs, which leads to confusion for care home staff, and logistical difficulties for visiting GPs. One approach that has been successful in other areas, and has been explored by NHS England Vanguard scheme, is to have a single practice cover all residents in a home. However, one stakeholder argued that this would potentially be difficult to implement in Liverpool.

The other important part of primary care was the use of Advanced Care Plans (ACPs). These should be used for patients nearing end of life, and aim to reduce inappropriate admissions to hospital, although their coverage was variable. The approach for these is not standardised, and better understanding of their appropriate use, and how they relate with capacity was discussed. The number of care home residents who die in hospital is increasing, and a potential reason for this is care home staff perceptions on where residents should die. Appropriate use of ACPs should clarify this. When discussing ACPs, a number of stakeholders felt that any approach to care planning should have the resident's wishes as central.

5.4.1. Transfer of Care

Concerns were raised by a number of stakeholders about transfer of care between care homes and acute care. There was a feeling that there was a lack of information following residents which lowered the quality of care. This lack of information existed in both directions, with healthcare uninformed about reasons for attendance, and staff in homes unprepared for, or uninformed of, new care requirements. A particular issue highlighted was regarding the use of A&E and the difficulty to safely discharge back to the care home out of hours. The pressure on beds in hospital can lead to residents being discharged to homes that are not well matched to their needs. Newly discharged residents are particularly vulnerable and would benefit from review on discharge by community or primary care, although this does not always happen. Another issue that was raised was the immediate discharge from hospital to care homes, with concerns raised by stakeholders that individuals who could potentially go home were ending up in care homes long term, either through incorrect discharge or through insufficient use of reablement services, and it was felt that work to improve this should link with work to improve remaining at home.

5.5. Oral Health

Of the stakeholders that discussed oral health, two key areas were consistently raised. First, concerns were raised over the availability of primary dental care, and the inappropriate use of specialist dental service. Specialist dentistry was increasingly seen as the provider of care to residents, particularly around domiciliary visits, however this is not the function of such a service. Concerns were raised that access to primary dental care was poor, particularly around preventive measures, and it was stated that the majority of care should be provided by General Dental Practice. There was confusion around how to access dental care, and the region lacked an effective model to

manage this. The second issue was about daily mouth care for residents, with concerns prevalent that these needs were not met, residents preferences for their maintenance of oral health was not being considered, and that oral health was a low priority for homes.

5.6. Infection Prevention and Control

Stakeholders described levels of infection control in care homes as good, with the only issue being that of the estates and buildings. Two particular areas were highlighted as important: flu vaccinations for staff, and timely cascading of seasonal information about infectious diseases. One stakeholder felt that a contractual obligation to meet guidelines for infection prevention and control would improve this.

5.7. Safeguarding

All organisations had processes for reporting safeguarding concerns, however variability in these mechanisms leads to variability in reporting. These processes generally involved contacting careline, but some organisations had their own safeguarding teams. Careline had their own mechanism for triaging referrals. Some issues were raised about the process. Multiple stakeholders discussed feeling that those who act as reporters did not receive feedback on the results of investigations, particularly reporters from health organisations. Additionally, one stakeholder felt that the reporting process to careline could be difficult and time-consuming.

The process also involved the Quality Assurance Group at LCC. This group was regularly attended by the appropriate teams, such as LCC, the CCG, and the community provider, however, there were issues around the understanding providers had about what the group is and what it does. Some stakeholder felt that better definitions of the roles each organisation has in safeguarding is needed. There were particular suggestions from one stakeholder that the role of health organisations in decision making could be strengthened, while another felt there was scope for improved joint working between organisations. The understanding of providers around what constitutes a safeguarding issue needs strengthening, particularly around falls. Plans to improve social worker support for care homes should make safeguarding more proactive.

5.8. Quality

5.8.1. NICE Guidance

The use of NICE guidance was mentioned by a number of the stakeholders. Of particular interest were the potential barriers to its implementation, such as awareness or ability to use the guidance. Mechanisms to enforce the guidance were also queried, however the NICE guidance now form part of the care homes contract. Importantly, there are staff available from NICE who may be able to provide advice to care home providers regarding this.

5.8.2. Health and Wellbeing Promotion

This section included a holistic approach, looking at physical and mental health but also social impacts. There was discussion around difficulties in signposting residents to appropriate services for their needs, with staff knowledge of referral pathways vital to ensuring quality and gaps in this

leading to variability in quality. There were concerns that population approaches to promotion were not being used, particularly for oral health, and it was important to ensure relevant information was cascaded to homes, such as screening or infection prevention.

Lack of opportunities for physical activity and appropriate activities were of particular concern, as was activities to promote independence. These issues commonly came about because of lack of staff time; statutory requirements took precedence so prevention suffered, especially social stimulation and maintaining social relationships. Additionally, the health professionals that go into care homes were not commissioned to do promotion beyond the individual level. Finally, issues surrounding the care home environment were raised; it was identified as important to make it 'homely'. It was noted that the mix of residents, and their associated needs and limitations, mean that there is a need for personalisation of activities.

5.8.3. Cross-Organisational Working

Stakeholders consistently reiterated the importance of good partnership working and removal of barriers between organisations. Discussions highlighted how silo-working and limits to joint working can hamper the effectiveness and growth of roles, create duplication of work and lead to confusion for care home providers. Also, the input of providers is vital. Fortunately, the feedback was almost exclusively positive for cross-organisational working in Liverpool, particularly between large organisations, such as the CCG, the council and the community provider. This working included different levels, including strategic approaches. There were a small number of issues raised though:

- The channels of communication to social workers could be strengthened, particularly for health;
- The relationship between health and providers could be stronger;
- Good joint working is often reliant on individuals in post, and thus when new staff come in the working can suffer in the short term;
- Confusion can exist over responsibilities due to the large number of organisations involved, particularly for care home providers;
- There is a lack of formal routes for communication in some circumstances; and,
- Relationships with care home providers can be variable.

5.8.4. Training

This was one of the most common topics of discussion. Training was repeatedly highlighted as vital to quality, with the acknowledgement that untrained staff are unsafe. There was a general feeling that although training was available, issues around attendance (especially by appropriate staff), availability (for staff needing funding and time from the provider) and rapid turnover of staff, made this difficult. A number of different approaches to training were discussed, such as lecture based, visits to each care home, a single 'champion' or e learning. All approaches however faced their own issues. Visits were problematic due to cost and poor attendance; 'champions' had issues due to staff turnover; and e learning could only be used for certain topics and relied on access to IT.

The common gaps that were mentioned were nutrition, dementia and oral health. For dementia, it was particularly around challenging behaviour and approaches to managing this. Additionally, concerns were raised that the most appropriate experts were not involved in training. The care homes teams at LCC and Liverpool CCG highlighted training as an important issue, and have set up a two-day training course which will cover numerous areas discussed. The react to red training for pressure ulcers was evaluated as effective.

5.8.5. Leadership

Improving leadership was identified by multiple stakeholders as vital to improving quality. There were suggestions that there was not enough high quality managers in the area, and good managers were likely to be used to troubleshoot problems in failing homes, constantly moving locations. When they moved, good work was sometimes undone. There is a lack of governance and oversight from providers above the registered managers, leading to a lack of support, particularly for new managers. In response to this, there is a leadership training course being offered, while there was a feeling that sharing of experience between managers should be facilitated. One stakeholder argued that a recognition was needed that the skills involved in being a good clinician are not the same as those to be a good manager.

5.8.6. Staffing

Adequate levels of staff is an indicator for the CQC, while homes are legally required to have enough staff to evacuate residents in case of emergency. However, a common theme from stakeholders was that homes have problems recruiting staff (particularly registered nurses) and retaining staff. One stakeholder argued that the problems recruiting nursing staff have led to a reduction in number of nursing beds available, while numerous stakeholders felt continuity of care is a problem due to high use of agency staff and turnover. Concerns were raised about support for new staff and their knowledge of the system. Many stakeholders discussed potential opportunities to improve this, including better communication in the home, better staff understanding of roles, increased valuation of care qualifications and development opportunities, and using volunteers where appropriate. Additionally, two other issues raised by a small number of stakeholders were the low levels of influenza vaccinations among staff, and support for staff wellbeing.

5.8.7. Provider Forum

The provider forum has been running across the city for a number of years. The stakeholder feedback on this was positive. One stakeholder discussed how, initially, the forum had limited attendance, but as word of mouth spread about usefulness the attendance has improved. Ran monthly, each forum is also attend by representatives from the CCG and CQC, and stakeholders felt it provided good opportunity for sharing best practice and troubleshooting. One stakeholder felt it particularly provided good support to smaller providers who may lack the governance and wider support of big providers, however the bigger providers in the city had less engagement.

5.8.8. Estates

Two stakeholders raised the issue of estates and the environment. Infection prevention and control highlighted that this was usually good, but homes that were not purpose-built had issues with the

environment that could not be fixed. Fire safety raised similar concerns, however they highlighted that these issues could be mediated against. Fire safety also mentioned how environmental prevention was not always good, such as holding open fire doors or limited alarm systems. One stakeholder raised the issue of difficulties in getting appropriate supportive equipment for residents.

6. Provider Survey

The provider survey (Appendix C) was sent to all care homes in Liverpool. Nineteen responses were received, 12 from older age care home, and over 75% of respondent homes were privately managed, with the rest charity managed. Numbers of beds ranged from 3 to 180, with the majority providing residential only care (three provided nursing and three provided nursing EMI). Twelve homes were rated as good or outstanding, seven as requiring improvement or inadequate, and one was awaiting CQC assessment. Only four homes used zero-hours contracts, while one used agency staff.

All responding homes provided staff training on dementia, while almost all provided training on medicines management and nutrition. Falls prevention, oral health and tissue viability were less well trained (not provided at 3, 5 and 6 homes respectively). Notably, over half of respondent homes did not provide end of life care training. There was variability in proportion of staff who had a Care Certificate qualification and six respondent homes had no plans for all staff to get the certificate. Of the 15 homes that provided information on staff flu vaccination the average staff vaccination rate was 50%. For recruiting staff, nine homes stated no problems, while the most prevalent issue was recruiting nursing staff. All homes with nursing bed reported difficulties hiring nursing staff. Only two homes reported replacing staff regularly.

All homes reported positive nutritional outcomes (information about diet for residents, choice and opportunity to consume five fruit and vegetable portions per day). Five homes did not provide stop smoking advice, while six did not offer service support to quit. Seven homes did not offer information to residents on safe alcohol guidelines. Six had identified problem drinkers and all six offered support. Alcohol was most commonly bought by relatives or residents, but it was sometimes bought by care home staff for residents. All respondents provided residents with opportunities to do physical activity, but two could not offer it outdoors. Three homes did not have an activities coordinator. Of the 16 homes that did hire an activities coordinator, three required their coordinator to be involved in care work. Social activity outdoors was available for residents at all homes, while 16 homes offered opportunities for residents to participate in nationally validated screening programmes.

Eleven homes had no private relationship with a GP to provide primary care and all residents kept their own GP, while eight provided a mixed provision (residents's own GP and home contracted GP). Sixteen homes reported always being able to access a GP during working hours. On average, 82% of residents had a medication review in the previous 12 months, while 31% had an advanced care plan. All homes reported risk assessing residents on admission. Less than 75% of homes reported having access to occupational therapy, community geriatrician or community matron. Three homes did not allow residents to self-administer medicines, and six did not allow over the counter 'homely' remedies. Of those that did allow remedies, one home did not record this along with other medicines.

7. Resident Views

7.1. Quantitative data

In 2017/18, LCC invited people who received an adult social care service within the previous 12 months to participate in the Survey of Adult Social Care Services. The response rate was 13% (201 responses); of these 42 were from service users in a residential or nursing home setting (20%). Of the respondents, 55% were female and 75% of the cohort self-identified as White British.

Fewer than 20% of respondents were able to independently move indoors, get out of bed, get dressed, use the toilet or wash self. Almost half of the residential and nursing service users reported that they were in “moderate pain or discomfort”, and 41% suffered from anxiety or depression. Social and physical isolation was high among residents, with 29% reporting not leaving their accommodation.

The survey also asked questions to derive a baseline for quality of service and impact of services on daily life. Overall, residential and nursing service users perceived that the use of services improved their quality of life, but potentially at the cost of their independence; 15% felt that they had “no control over their daily life”. Forty percent of respondent were “extremely or very satisfied” with their services, and 13% rate their quality of life as “Couldn’t be better” or “Very Good”. This was attributed to use of services by over half. Almost a third of respondents felt their treatment by the service made them feel better, while almost half said services made them feel safe. Almost a quarter were satisfied with services, while half felt services improved their quality of life and over half felt they increased feeling of control.

7.2. Qualitative data

The feedback was generally very positive about staff and how they treated residents, while the feedback about nutrition was generally mixed, with one respondent complaining about lack of choice in particular. The cleanliness of the environment was a common theme; residents who mentioned this perceived the environment as clean. There was also mixed feedback about activities, with some respondents positive about the options, while others were clearly not interested in the options and did not get involved. Opportunities to go out seemed to be broadly limited to activities with relatives.

“I’ve been here 5 years, I love it, I like the carers and if you have any complaints you know who to go to. The food is good sometimes, but sometimes not, but I can ask a carer to change it.”

“With regard to my ticking average on meals, we all have different likes and dislikes in our food’s, e.g. I like currys and spicy meals, a great deal of elderly residents don’t - so be it.”

“I have lived here for 3 years. It is sound. I would rather have people around me than go into my own place and be alone. I watch TV and I go out every day to buy my own paper so that I don’t have to wait to read the shared newspapers. We have sing-songs, we go out together now and then.”

There was a feeling that pressures on the system led to mistakes which impacted on quality, such as the transfer of notes when being discharged from hospital, while one respondent mentioned that there was a wait for their transfer. Although some felt that their independence had been improved, one respondent mentioned that an episode of waiting for staff had adversely impacted on their dignity.

"I'm waiting for a care package, I need some help to get up and get dressed."

"My daughter has raised concerns as sometimes I get left on the toilet - I like a bit of dignity."

The feedback for intermediate care hubs is very positive from users.

"I've never had any complaints regarding his care or wellbeing. He has always been treated with the uppermost respect and dignity. I am always informed of any health issues or decisions regarding my Dad. [Staff] and every one of his staff are so approachable, nothing is too much trouble to them. They are an amazing team and I couldn't wish for better"

"They are lovely here. Very good."

"I've never been here before but I'm very impressed. The staff are excellent and the rooms are comfortable with lots of different things going on. It's not like a hospital, it's a rehabilitation centre"

8. Discussion

The findings from this work have raised a number of issues. Caution must be taken when interpreting the findings, particularly from the provider survey and the quantitative analysis of resident views, because there was only a limited response rate for both. The key findings are grouped and discussed here.

8.1. Care Home Markets and Future Need

The data on the current population in Liverpool show higher levels of deprivation than either England or the North West, while the projections for the future population estimate that the population will both get older and increase. Importantly, increasing life expectancy across the UK is not associated with equivalent increases in healthy life expectancy,⁸⁶ meaning that people are living for longer in poor health. Additionally, the higher levels of deprivation will be associated with more ill health, which will occur earlier in life, and there will be a reduced ability for individuals to self-fund their care. This will create increased pressure on the care home market, increasing the demand for care home places, while the level of care required is predicted to increase, and the ability to manage this demand is smaller. The data suggest age of entry into care homes will be unchanged, but the age of exit will increase (due to increasing life expectancy), and thus time spent in the care home is increasing. These data have been used to estimate that by 2022, the demand for care home beds in Liverpool will outstrip supply. This is supported by the evidence that pressure on LA commissioned beds is increasing, while the big driver for increasing demand is residential EMI care. Data on ethnicity show that ethnic diversity is higher in younger populations than the current over 65 population, which suggests that the diversity of the care home population will increase in the future.

This is an issue of pressing urgency, and there are two approaches to managing it. The first would be to reduce demand; data show that the age an individual enters a care home is strongly linked with length of stay. Therefore, a potential approach would be to delay entry into the home; an approach which is already being considered by the improvement strategy. The key to this is maintaining people in their own home for as long as possible.

A critical aspect of this is recognition that ageing per se is not the driver of care home use, but rather the disease and disability burden associated with ageing, and thus delay or prevention of such burdens is integral.⁸⁷

The drastic loss of ability most older people experience is not an inevitable part of aging. Ageing by itself is a normal biological process which reduces ability and resilience. Ageing starts in the late thirties but for many people the decline in fitness starts in the early twenties when they move into a 'dangerous' occupation that involves sitting and a sedentary lifestyle.

A person's need for care and support arises when someone is no longer able to manage vital activities of daily living— such as washing, dressing, feeding themselves and keeping safe. A key point is being able to get to the toilet in time (assuming no underlying medical cause). People in their 70s with below average ability (measured as 'chair rise time' score) need improve this by 25%, to the speed of those in their 60s – to experience a reversal of a decade of decline.⁸⁶

At any age and for any health problems exercise provides '*The Miracle Cure*'. The current prevailing attitude that exercise is for young people and older people are allowed to be idle needs to be

challenged. It is possible to combat the effects of ageing by increasing activity - physical, mental and social. As the decrease in the dementia prevalence shows, healthy ageing (and consequently less need for social care) is possible by increasing activity, stopping smoking, good nutrition and using alcohol sparingly.⁸⁷

Social care is preventable because the risk of disease, disability, dementia and frailty can be reduced.⁸⁸ National and local organisations must act to encourage opportunities for people to be active, building this into built environments, transport and work places.

Another approach would be to increase the supply of care home beds. Approaches have already started to attempt this, especially for nursing beds with a large increase in the funding supplement. It is especially important to prevent further closures in the care home market by working closely with providers.

Approaches to delay the entry into care homes focus on improving domiciliary care so individuals can stay at home, and improving respite care availability. Although this has been discussed, concerns were raised about the discharge of individuals straight into care homes, and the data suggest this is higher in Liverpool than the North West on average. This suggests a planned approach to review discharge pathways is indicated. Regarding respite care, the data suggest there may be a small increase in length of stay for older individuals. Importantly, the evidence base does not comprehensively show that respite care delays entry into long term care, however it does seem to be beneficial to carers.

8.2. Health

8.2.1. Acute care use

The data show that there are increasing pressures on A&E from care home residents, while there has also been increased hospital admissions, but this may have plateaued based on the last years data. This finding is in keeping with evidence from the literature.³³ It is notable that a failure to spot early symptoms and signs has been blamed for high usage,³⁴ while this will be part of the training in the local improvement strategy.

Importantly, Liverpool performs worse than the North West average when it comes to acute care use by the over 65 population. The biggest cause of admission to hospital is due to falls which is potentially due to inadequate falls prevention. However, there was a feeling from stakeholders that staff response to all falls was problematic and led to increased pressures. Causes of falls are multifaceted, and incorporate issues such as medicines and the environment. While some reviews found inconclusive evidence on falls prevention in the past, more recently NHS Scotland have produced recommendations for improving falls prevention.^{47,48}

The improvement programme identified issues around reducing acute care pressures from care homes and implemented two interventions; telemedicine and the enhanced GP service. Both approaches have received positive initial feedback, but full evaluations have not yet been done. Survey responses suggest access to certain specialists could be improved, such as community geriatrician, community matron and occupational therapist, all of whom could have a role to play in preventing acute care use. An approach that has been explored elsewhere is the use of a specialist in-reach team of Allied Health Professionals.³⁹ Other approaches involving wider specialists beyond

GPs has been shown to be effective.⁴¹ Access to primary care services is thought to be a major part of secondary care use by care home residents.³¹ Stakeholder interviews highlighted a number of barriers for primary care in care homes, such as confusion for staff and time constraints, which are supported by the evidence.³⁶ Notably, a number of stakeholders discussed the possibility of linking a care home to a specific GP practice, an approach which is being explored by the NHS England enhanced health in care homes framework.³

The use of acute care is also impacted negatively by issues around transfer of care. Communication between acute care and care homes was identified as an issue, and this is particularly seen during transfers. Evidence suggests that the transfer of care increases the risk of adverse medication events.¹⁸ Two approaches are to be trialled to improve this; a scheme to standardise information that follows a resident (similar to NHS England's red bag scheme), and a trial to exchange nursing staff between care homes and the local frailty unit to improve understanding. The evidence base supports the move toward more integrated working.^{37,38} Transfer of care has also been indicated in outbreaks of infectious disease, such as norovirus.⁶⁸

Flu outbreaks create a pressure on health care,⁷⁰ and the data on last year show this is an issue for homes in Liverpool. Vaccinations of staff are seen as an important preventative measure, however results suggest this is variable, as the evidence also suggests. Approaches to improve uptake should be explored.⁷¹

8.2.2. End of Life

Another area of interest is end-of-life care, with this area being core for improving quality. One in three care home residents who die in Liverpool do so in hospital. This is costly and potentially inappropriate. This may highlight there is a lack of training in end-of-life care and that work needs to be done to manage expectations around where it is appropriate to manage end-of-life. Staff perception is particularly important given that care homes are likely to become the most common place to die.⁸⁸ Training for staff has been identified as important, especially for emotional support,^{43,44} while the relationship between care home staff and primary care is directly correlated with quality of end-of-life care.⁴²

A particular area which should reduce the effect of this problem is Advanced Care Planning. The evidence base advocates the use of such an approach, and there is an attempt to increase the coverage of these, however the provider survey suggests the coverage is less than a third of residents. Training in this for staff is vital to improving quality,⁴³ while NICE guidelines advise that any assessment of needs should be comprehensive and holistic.⁴⁵

8.2.3. Medicines Management

This is a well described issue for care homes, and it is an area of concern for Liverpool. The area of medicines and prescribing takes a central role in the care home improvement plan, and care home residents are particularly vulnerable due to the increased levels of poly-pharmacy and reduced capacity in the population.^{18,20} Any approaches to reducing inappropriate prescribing need to ensure that potential negative consequences to plans are considered and mediated, and appropriate specialist and staff are included in the decision. Notably, it is strongly thought that prescribing of antipsychotics or sedatives to manage behaviour in care homes was not a problem in Liverpool.

However, data on this was unavailable, and there was a lack of clarity regarding the previous interventions that had been implemented.

It is seen as best practice, but not every home affords residents the opportunity to self-administer medicines. Additionally, the survey suggested that homes have policies for good medicines management, however audit data from LCH shows over half were referred for concerns. The evidence base suggest staff problems exist around time constraints and training.¹⁸

8.2.4. Oral Health

Oral health was highlighted as having too low a priority for care homes. Care home residents are vulnerable to poor oral health,⁵⁸ while it is strongly linked with physical health.^{55–57} Stakeholders reiterated issues that were seen in the evidence base; daily maintenance of oral health is key and there should be a thorough assessment of needs. Additionally, there were clear concerns that access to primary dental services for care home residents was insufficient. These services are commissioned by NHS England at a population level, and issues around access fit with findings from PHE.⁶⁰ Concerns around the ability of residents to attend general dental practice exist, with practical issues around transfers noted, although this was seen as best practice. The British Dental Association have recommended that oral health is part of the commissioning contract,⁵⁹ while NICE recommend oral health is assessed on admission and for part of the care plan.⁶¹

8.2.5. Health and Wellbeing Promotion

Three areas were particularly important to health and wellbeing. The opportunity to socialise out of the home was highlighted by stakeholders as important, however almost a third of residents did not leave the home, and the qualitative feedback from residents suggested this was reliant on going out with relatives. Having an activities coordinator is important to quality, and the survey responses suggest the majority of homes offer this, however feedback from stakeholders and residents question how appropriate or appealing activities available are. Finally, independence is key for residents, however 15% of residents felt they had no control. NICE recommends that residents have the opportunity to participate in meaningful activity, supported physical activity, and development and maintenance of personal identity.^{53,54}

Nutrition was a particularly important area of promotion. Concerns were raised that nutritional needs were not met and that nutritional supplements were used inappropriately. NICE recommends that nutritional needs are assessed and training is provided for staff.¹⁶ Interestingly, a systematic review found nutritional supplements were cost effective although this was for older individuals in the community.¹⁷

8.3. Quality

Although almost 60% of care homes were rated as good or outstanding by the CQC, a disproportionately high number of beds are in homes rated as inadequate or requiring improvement (49%). Given this, improving quality is vital.

8.3.1. Leadership and Staffing

The evidence base shows that good leadership is a key tenet of improving quality in care homes.¹ There were concerns that good managers were transferred to failing homes to troubleshoot, and the home they came from suffers. This speaks to two issues; there is a shortage of highly skilled managers in the area, and there is a lack of support for managers from the providers. LCC have organised a leadership training course to help improve this.

Another important area is of staffing. Concerns were raised that the difficulties in recruiting and retaining staff were negatively implementing on continuity of care, as was the use of agency staff. Continuity is important to resident perceptions of their care.⁷⁵ It should be noted that residents were broadly positive about staff, while survey responses suggested the only problem in recruitment was of nursing staff, and retention was not a problem. There was a feeling that staff in care homes were undervalued and required career progression opportunities.

8.3.2. Training

It is unclear from this work what the best approach to training is, as all approaches were limited by different factors. Based on the survey, training for many areas was available, however there are concerns over how well attended these sessions are, and whether appropriate staff attend. Training was less readily available for oral health and tissue viability. There is a training course being run over two days which will cover many areas superficially, however it is vital to ensure that the most appropriate professionals are involved in the sessions. All providers stated that training was provided for dementia, however concerns were raised by stakeholders that this may not cover the most important areas of dementia care, for example managing challenging behaviour. Considering the increased demand for EMI care, ensuring high quality care for people with dementia is important. The CQC have found similar findings for training, and recommend training, particularly for dementia.^{21,76} The importance of psychosocial interventions for dementia was stated,⁵⁰ especially training for staff.

8.3.3. Practice

The provider forum has been increasingly well attended by both professionals and providers over time, and it offers an excellent opportunity to share best practice. There were concerns however, that some providers did not engage. Additionally, the implementation of NICE guidance was seen as an important part to improving quality of practice, however this was felt to be inconsistent. Communication between organisations and teams was seen to be generally good, but there was a lack of formal communication channels, and communications with providers were not uniformly good.

8.3.4. Safeguarding

Three key issues with safeguarding were clear from this work. First, the variability in reporting processes between organisations led to variable reporting quality. Secondly, reporters felt they could be given better feedback on investigation outcomes. Finally, there were issues around provider understanding and expectations of the Quality Assurance Group.

8.4. Limitations

A number of limitations should be noted when considering this work.

8.4.1. Epidemiology

The major limitation of the epidemiology section are the data regarding care home beds. There were data available from LCC, however the fluctuating nature meant these data were quickly and regularly out of date. Data on CCG/CSU commissioned beds were not available, as these were not block commissioned. Another limitation concerned resident status and hospital use. Data that confirmed status as a care home resident were not available, so a proxy measure had to be used. The proxy was individuals over the age of 65, whose usual place of residence coincided with a known care home. Two issues are present: not all individuals included will be a care home resident (over 65s who share a postcode with a care home but do not reside there); and, not all care home residents will be included (those under the age of 65). This second issue is particularly important given the substantial under 65 population of care home residents, and the number of care homes which specialise in younger individuals.

Another limitation is that only available data were used. For example, the length of stay data would be useful if extended below the age of 65, however these data were not available. Finally, the data would only provide a snapshot of the situation when the data were collected, and the situation in care homes can change rapidly.

8.4.2. Provider Survey

The information from the survey is limited by the response rate. The response rate was below 25%, therefore caution must be taken when interpreting results.

8.4.3. Resident views

The use of secondary data may limit the potential for this section. The results from the survey are also limited by the low response rate, while the qualitative data were not collected specifically for this project. Both data sources are at risk of selection bias as the participants were not randomly selected.

9. Recommendations

The recommendations have been split, according to the design of the report.

9.1. Care Home Markets and Future Need

- 1. Build on the strategic approach to support people to stay in their homes for as long as possible, thus ensuring entrance to care homes occurs later in life – LCC, Liverpool CCG and care homes** – This approach requires a focus on prevention, self-care and healthy ageing; improved transfer of care from hospital; investment in new flexible care facilities to respond to meet short term respite and reablement needs to maintain people at home and provide modern, accessible environments to provide high quality permanent nursing/dementia placements to compensate for the current/anticipated under-supply.
- 2. Ensure respite care is appropriately available – LCC** – Respite care has been shown to be beneficial to carers, and is used in Liverpool, particularly for carers of individuals over 65. It is important to ensure and maintain availability. It is recommended that a respite review to determine levels of need/demand and supply to be carried out.
- 3. Implement clear pathways to prevent inappropriate transfers from hospital into care homes – LCC, Liverpool CCG and acute care providers** – This approach must be made with health partners as the findings suggest there are problems with the pathways from hospital into care homes.
- 4. Provide detailed requirements regarding placement types to enable the provider market to prepare for the expected demographic change and resulting needs in the care home population– LCC, Liverpool CCG, Care Homes** – The increasing age of the Liverpool population will increase pressure on the care home market, however the potential increasing ethnic diversity of future care home populations may lead to demand for different, more culturally appropriate, services. The projected shortfall in beds is particularly relevant and new facilities will be required, particularly for nursing dementia care.

9.2. Health

- 5. Falls prevention should be central to attempts to improve quality and preventing admissions to hospital from care homes – care homes, primary and community care providers** – Falls are a significant and substantial cause of hospital admission from care homes. Prevention approaches should follow NICE guidance.
- 6. Trials to improve transfer of care, such as the ‘red bag scheme’ and nurse exchange schemes should continue to be supported, with strong involvement of all partners – care homes, LCC, Liverpool CCG and acute care providers** – A well planned approach and comprehensive evaluation of the interventions is needed to understand the impact, particularly in different care settings.

7. **Explore opportunities to link care homes with a specific GP practice** – *Liverpool CCG* – As is described in the framework for enhanced health in care homes, from NHS England, with each care home having a named practice providing care and services to all residents.
8. **Flu Vaccination rates in staff should be improved** – *care homes, primary care providers and community services*– Approaches should include education, workplace drop-ins and free provision of vaccines. Funding this year is welcomed and attempts to continue this should be made.
9. **Use and coverage of Advanced Care Plans should be maximised** – *Liverpool CCG, care homes and primary care providers* – This will fall mostly on primary care, but care home staff should be trained to recognise when an ACP is required, and refer as appropriate.
10. **Interventions that are being trialled to reduce secondary care use should be comprehensively evaluated and results should be used to inform future plans**– *Liverpool CCG, primary care providers, acute care providers, care homes* – This includes telemedicine and the enhanced GP service. Widespread implementation of interventions should be strongly supported if successful.
11. **All homes should give residents the opportunity to safely self-administer medication where appropriate and safe** – *care homes*. **Use and prescribing of sedative medications (such as anti-psychotics or benzodiazepines) should be monitored** – *Liverpool CCG* – This is particularly relevant to residents with challenging behaviour, secondary to dementia.
12. **All residents should be supported in daily maintenance of oral health** – *care homes* – This should be included in care plans when new residents are admitted to homes.
13. **Clear care pathways for primary dental care are needed** – *NHS England, care homes* – Mobile residents should be supported to attend dental practices, rather than use domiciliary services.

9.3. Quality

14. **A full range of activities should be available to all care homes residents**– *care homes* – Time for activities should be protected, and range of activities should be varied and appealing to residents (including assuring these are appropriate for people with dementia) in order to improve general wellbeing. The role of an Activities Coordinators could be considered in the future.
15. **Attendance at the care providers' forum should be advertised and encouraged, with a strong focus on sharing best practice** – *LCC, care homes* – The report identified that attendance and representation for larger providers particularly requires improvement.
16. **Interventions for training staff and managers require comprehensive evaluation** – *LCC< Liverpool CCG and community services* – This includes the two day training course for care home staff (provided by Edge Hill and LCH/Merseycare) and leadership training for managers.

- 17. Improve ICT infrastructure** – *LCC, care homes, Liverpool CCG* – Innovative approaches to using technology should be encouraged, particularly digitisation of record keeping and data linkage.
- 18. Encourage the use of, and support the implementation of electronic care plans** – *care homes, LCC, Liverpool CCG* – This has begun to be explored by LCC, and needs to be followed.
- 19. Dementia training for staff involving psychosocial approaches to behaviour is required** – *care homes* – The data suggest that dementia need is increasing and psychosocial approaches to managing dementia residents is supported by stakeholders.
- 20. All stakeholders involved in safeguarding should have clear roles and responsibilities** – *LCC*
- 21. Outcomes of safeguarding interventions should be feedback to reporters when appropriate** – *LCC*
- 22. Relatives and residents should feel confident and able to feedback safeguarding and quality concerns confidentially** – *LCC, Healthwatch, Care Homes*

9.4. Limitations

- 23. Clear, up-to-date, comprehensive data on care home beds are needed** – *LCC, Liverpool CCG*
– This is particularly important for CCG/CSU. Initial analysis shows a need for additional beds, particularly nursing beds. However, more in depth predictive modelling should be carried out as part of the refreshed market Position Statement to fully describe the care mix required in the short, medium and long term, allowing for changes in population and increasing levels of need, adjusted for successes generated via increased prevention and healthy ageing.
- 24. Find new ways to collect specific data on care home residents' use of secondary care** – *Liverpool CCG, acute care providers* – A direct measure would provide increased information, while data sharing, and alignment, between organisations would increase accuracy.
- 25. Work is needed with residents and relatives to better understand their views** – *LCC, Liverpool CCG, care homes, Healthwatch* – This should particularly focus on what they feel would improve quality.

10. References

- 1 Chillala J, Sinclair A. Quality of Medical Care in British Care Homes. *J Am Med Dir Assoc* 2009; **10**: 223–5.
- 2 Szczepura A. Residential and nursing homes: how can they meet the challenge of an aging population? *Aging Health* 2011; **7**: 877–87.
- 3 NHS England. The framework for enhanced health in care homes. London: NHS England, 2016.
- 4 Wittenberg R, Hu B, Comas-Herrera A, Fernandez J-L. Care for older people: projected expenditure to 2022 on social care and continuing health care for England's older population. London: Nuffield Trust, 2012 <https://www.nuffieldtrust.org.uk/research/care-for-older-people-projected-expenditure-to-2022-on-social-care-and-continuing-health-care-for-england-s-older-population> (accessed Oct 20, 2017).
- 5 NICE. Older people with social care needs and multiple long-term conditions. 2015. <https://www.nice.org.uk/guidance/ng22/chapter/Recommendations> (accessed Oct 20, 2017).
- 6 Greenwood C, Cranston A, Garrib A. Care Home Needs Assessment in Wandsworth. Wandsworth: Wandsworth Borough Council, 2014.
- 7 Public Health Devon. Care Home Residents in Devon, Plymouth and Torbay - A Health Needs Assessment. Devon: Devon City Council, 2014.
- 8 Chester H, Hughes J, Challis D. Commissioning social care for older people: influencing the quality of direct care. *Ageing Soc* 2014; **34**: 930–50.
- 9 British Geriatrics Society. Effective healthcare for older people living in care homes. London: British Geriatrics Society, 2016.
- 10 Spillman B. Why do elders receiving informal home care transition to long stay nursing home residency? USA: US Department of Health and Human Services, 2014.
- 11 Mason A, Weatherly H, Spilsbury K, *et al*. The Effectiveness and Cost-Effectiveness of Respite for Caregivers of Frail Older People. *J Am Geriatr Soc* 2007; **55**: 290–9.
- 12 Vandepitte S, Van Den Noortgate N, Putman K, Verhaeghe S, Verdonck C, Annemans L. Effectiveness of respite care in supporting informal caregivers of persons with dementia: a systematic review. *Int J Geriatr Psychiatry* 2016; **31**: 1277–88.
- 13 Walsh J. Carer support. Alzheimers Soc. https://www.alzheimers.org.uk/info/20091/what_we_think/86/carers_support (accessed Dec 8, 2017).
- 14 Care Commission. Promoting nutrition in care homes for older people. Scotland: Scottish Government, 2009.
- 15 NICE. Nutrition support for adults: oral nutrition support, enteral tube feeding and parenteral nutrition. 2006. <https://www.nice.org.uk/guidance/cg32> (accessed Oct 20, 2017).

- 16 NICE. Nutrition support in adults. 2012. <https://www.nice.org.uk/guidance/qs24> (accessed Oct 20, 2017).
- 17 Elia M, Normand C, Laviano A, Norman K. A systematic review of the cost and cost effectiveness of using standard oral nutritional supplements in community and care home settings. *Clin Nutr* 2016; **35**: 125–37.
- 18 Parsons C, Lapane K, Kerse N, Hughes C. Prescribing for older people in nursing homes: a review of the key issues. *Int J Older People Nurs* 2011; **6**: 45–54.
- 19 Carter JL, O’Riordan SE, Eaglestone GL, Delaney MP, Lamb EJ. Chronic kidney disease prevalence in a UK residential care home population. *Nephrol Dial Transplant* 2008; **23**: 1257–64.
- 20 Barber ND, Alldred DP, Raynor DK, *et al*. Care homes’ use of medicines study: prevalence, causes and potential harm of medication errors in care homes for older people. *Qual Saf Health Care* 2009; **18**: 341.
- 21 Care Quality Commission. Healthcare in care homes. London: CQC, 2012.
- 22 Shah SM, Carey IM, Harris T, DeWilde S, Cook DG. Quality of prescribing in care homes and the community in England and Wales. *Br J Gen Pract* 2012; **62**: e329–36.
- 23 Drawz PE, Bocirnea C, Greer KB, Kim J, Rader F, Murray P. Hypertension Guideline Adherence Among Nursing Home Patients. *J Gen Intern Med* 2009; **24**: 499–503.
- 24 Fahey T, Montgomery AA, Barnes J, Protheroe J. Quality of care for elderly residents in nursing homes and elderly people living at home: controlled observational study. *BMJ* 2003; **326**: 580.
- 25 Thompson Coon J, Abbott R, Rogers M, *et al*. Interventions to Reduce Inappropriate Prescribing of Antipsychotic Medications in People With Dementia Resident in Care Homes: A Systematic Review. *J Am Med Dir Assoc* 2014; **15**: 706–18.
- 26 NICE. Managing medicines in care homes. 2014. <https://www.nice.org.uk/guidance/sc1> (accessed Oct 20, 2017).
- 27 Hughes C, Lapane K, Kerse N. Prescribing for older people in nursing homes: challenges for the future. *Int J Older People Nurs* 2011; **6**: 63–70.
- 28 Burns E, McQuillan N. Prescribing in care homes: the role of the geriatrician. *Ther Adv Chronic Dis* 2011; **2**: 353–8.
- 29 Department of Health. Administration of medicines in care homes (with nursing) for older people by care assistants. Leeds: Department of Health, University of Leeds, 2016.
- 30 Ong ACL, Sabanathan K, Potter JF, Myint PK. High mortality of older patients admitted to hospital from care homes and insight into potential interventions to reduce hospital admissions from care homes: The Norfolk experience. *Arch Gerontol Geriatr* 2011; **53**: 316–9.
- 31 Steves CJ, Schiff R, Martin FC. Geriatricians and care homes: perspectives from geriatric medicine departments and primary care trusts. *Clin Med* 2009; **9**: 528–33.
- 32 Gordon AL, Franklin M, Bradshaw L, Logan P, Elliott R, Gladman JRF. Health status of UK care home residents: a cohort study. *Age Ageing* 2014; **43**: 97–103.

- 33 Mitchell JS, Young I. Utilization of a UK emergency department by care home residents: a retrospective observational study. *Eur J Emerg Med* 2010; **17**. http://journals.lww.com/euro-emergencymed/Fulltext/2010/12000/Utilization_of_a_UK_emergency_department_by_care.4.aspx.
- 34 Means T. Improving quality of care and reducing unnecessary hospital admissions: a literature review. *Br J Community Nurs* 2016; **21**: 284–91.
- 35 Shah SM, Carey IM, Harris T, DeWilde S, Cook DG. Quality of chronic disease care for older people in care homes and the community in a primary care pay for performance system: retrospective study. *BMJ* 2011; **342**. DOI:10.1136/bmj.d912.
- 36 Robbins I, Gordon A, Dyas J, Logan P, Gladman J. Explaining the barriers to and tensions in delivering effective healthcare in UK care homes: a qualitative study. *BMJ Open* 2013; **3**. DOI:10.1136/bmjopen-2013-003178.
- 37 Goodman C, Davies SL, Gordon AL, *et al*. Relationships, Expertise, Incentives, and Governance: Supporting Care Home Residents' Access to Health Care. An Interview Study From England. *J Am Med Dir Assoc* 2015; **16**: 427–32.
- 38 Davies SL, Goodman C, Bunn F, *et al*. A systematic review of integrated working between care homes and health care services. *BMC Health Serv Res* 2011; **11**: 320.
- 39 Szczepura A, Nelson S, Wild D. In-reach specialist nursing teams for residential care homes: uptake of services, impact on care provision and cost-effectiveness. *BMC Health Serv Res* 2008; **8**: 269.
- 40 Daniel Briggs, Les Bright. Reducing hospital admissions from care homes: considering the role of a local enhanced service from GPs. *Work Older People* 2011; **15**: 4–12.
- 41 McKee H, Miller E, Cuthbertson J, Scullin C, Scott M. Nursing Home Outreach Clinics show an improvement in patient safety and reduction in hospital admissions in residents with chronic conditions. *Eur J Person Centred Healthc* 2016; **4**: 650–5.
- 42 Seymour JE, Kumar A, Froggatt K. Do nursing homes for older people have the support they need to provide end-of-life care? A mixed methods enquiry in England. *Palliat Med* 2011; **25**: 125–38.
- 43 Stone L, Kinley J, Hockley J. Advance care planning in care homes: the experience of staff, residents, and family members. *Int J Palliat Nurs* 2013; **19**: 550–7.
- 44 Vandrevale T, Samsi K, Rose C, Adenrele C, Barnes C, Manthorpe J. Perceived needs for support among care home staff providing end of life care for people with dementia: a qualitative study. *Int J Geriatr Psychiatry* 2017; **32**: 155–63.
- 45 NICE. End of life care for adults. 2011. <https://www.nice.org.uk/guidance/qs13> (accessed Oct 20, 2017).
- 46 NICE. Falls in older people. 2015. <https://www.nice.org.uk/guidance/qs86> (accessed Oct 20, 2017).
- 47 Cameron ID, Gillespie LD, Robertson MC, *et al*. Interventions for preventing falls in older people in care facilities and hospitals. *Cochrane Database Syst Rev* 2012. DOI:10.1002/14651858.CD005465.pub3.

- 48 Care Inspectorate. Managing Falls and Fractures in Care Homes for Older People – good practice resource. Scotland: NHS Scotland, 2016.
- 49 Quince C. Low expectations: Attitudes on choice, care and community for people with dementia in care homes. London: Alzheimer's Society, 2013.
- 50 Jackman L, Beatty A. Using the Newcastle Model to understand people whose behaviour challenges in dementia care. *Nurs Older People* 2015; **27**: 32–9.
- 51 NICE. Dementia: independence and wellbeing. 2013. <https://www.nice.org.uk/guidance/qs30/chapter/Development-sources> (accessed Oct 20, 2017).
- 52 Shah SM, Carey IM, Harris T, *et al.* Identifying the clinical characteristics of older people living in care homes using a novel approach in a primary care database. *Age Ageing* 2010; **39**: 617–23.
- 53 NICE. Mental wellbeing of older people in care homes. 2013. <https://www.nice.org.uk/guidance/qs50> (accessed Oct 20, 2017).
- 54 NICE. Mental wellbeing in over 65s: occupational therapy and physical activity interventions. 2008. <https://www.nice.org.uk/guidance/ph16/chapter/1-Recommendations> (accessed Oct 20, 2017).
- 55 D'Aiuto F, Gable D, Syed Z, *et al.* Evidence summary: The relationship between oral diseases and diabetes. *Br Dent J* 2017; **222**: 944–8.
- 56 Dietrich T, Webb I, Stenhouse L, *et al.* Evidence summary: the relationship between oral and cardiovascular disease. *Br Dent J* 2017; **222**: 381–5.
- 57 Manger D, Walshaw M, Fitzgerald R, *et al.* Evidence summary: the relationship between oral health and pulmonary disease. *Br Dent J* 2017; **222**: 527–33.
- 58 Karki AJ, Monaghan N, Morgan M. Oral health status of older people living in care homes in Wales. *Br Dent J* 2015; **219**: 331–4.
- 59 British Dental Association. Dentistry in care homes research – UK. London: British Dental Association, 2012.
- 60 Public Health England. Dental public health intelligence programme: North West oral health survey of services for dependant older people, 2012 to 2013. London: PHE, 2014.
- 61 NICE. Oral health for adults in care homes. 2016. <https://www.nice.org.uk/guidance/ng48> (accessed Oct 20, 2017).
- 62 Hoben M, Clarke A, Huynh KT, *et al.* Barriers and facilitators in providing oral care to nursing home residents, from the perspective of care aides: A systematic review and meta-analysis. *Int J Nurs Stud*; **73**: 34–51.
- 63 Winfield J, Wiley C. Tackling infection in care homes. *Nurs Times* 2012; **108**: 16–8.
- 64 Department of Health, Health Protection Agency. Prevention and control of infection in care homes – an information resource. London: Department of Health, 2013.

- 65 Cousins G. Role of environmental cleanliness and decontamination in care homes. *Nurs Stand R Coll Nurs G B* 1987 2016; **30**: 39–43.
- 66 Müller B, Armstrong P, Lowndes R. Cleaning and Caring: Contributions in Long-term Residential Care. *Ageing Int* 2017; published online May 20. DOI:10.1007/s12126-017-9290-x.
- 67 Vivancos R, Trainor E, Oyinloye A, Keenan A. Factors affecting prevention and control of viral gastroenteritis outbreaks in care homes. *J Hosp Infect* 2012; **82**: 129–32.
- 68 Curran ET, Wilson J, Haig CE, McCowan C, Leanord A, Loveday H. The Where is Norovirus Control Lost (WINCL) Study: an enhanced surveillance project to identify norovirus index cases in care settings in the UK and Ireland. *J Infect Prev* 2016; **17**: 8–14.
- 69 Paranthaman K, Turley A, Sedgwick JEC. Influenza outbreaks in care homes: what can we do better? *J Hosp Infect* 2016; **94**: 155–6.
- 70 Millership S, Cummins A. Oseltamivir in influenza outbreaks in care homes: challenges and benefits of use in the real world. *J Hosp Infect* 2015; **90**: 299–303.
- 71 Shroufi A, Copping J, Musonda P, *et al.* Influenza vaccine uptake among staff in care homes in Nottinghamshire: A random cluster sample survey. *Public Health* 2009; **123**: 645–9.
- 72 Cooper C, Selwood A, Livingston G. The prevalence of elder abuse and neglect: a systematic review. *Age Ageing* 2008; **37**: 151–60.
- 73 Lawrence V, Banerjee S. Improving care in care homes: A qualitative evaluation of the Croydon care home support team. *Aging Ment Health* 2010; **14**: 416–24.
- 74 Furness S. A Hindrance or a Help? The Contribution of Inspection to the Quality of Care in Homes for Older People. *Br J Soc Work* 2009; **39**: 488–505.
- 75 Bradshaw SA, Playford ED, Riazi A. Living well in care homes: a systematic review of qualitative studies. *Age Ageing* 2012; **41**: 429–40.
- 76 Care Quality Commission. Time to listen in Care Homes. London: CQC, 2012.
- 77 Care Quality Commission. Regulation 9: Person-centred care. 2017. <http://www.cqc.org.uk/guidance-providers/regulations-enforcement/regulation-9-person-centred-care> (accessed Oct 20, 2017).
- 78 Social Care Institute for Excellence. Introduction to person-centred care for older people in care homes. 2017. <https://www.scie.org.uk/person-centred-care/older-people-care-homes/introduction> (accessed Oct 20, 2017).
- 79 UK Parliament. Care Standards Act of 2000. 2000.
- 80 UK Parliament. Health and Social Care Act 2008. 2008.
- 81 UK Parliament. Care Act 2014. 2014.
- 82 Department of Health. Care Homes for Older People: National Minimum Standards and the Care Homes Regulations. London: Department of Health, 2001.

- 83 Health Education England. The Care Certificate. Health Educ. Engl. 2015; published online Nov 16. <https://www.hee.nhs.uk/our-work/developing-our-workforce/talent-care-widening-participation/care-certificate> (accessed Oct 20, 2017).
- 84 Airedale NHS Foundation Trust. Telemedicine | Airedale NHS Foundation Trust. <http://www.airedale-trust.nhs.uk/services/telemedicine/> (accessed Oct 26, 2017).
- 85 Ahmadi-Abhari S, Guzman-Castillo M, Bandosz P, *et al.* Temporal trend in dementia incidence since 2002 and projections for prevalence in England and Wales to 2040: modelling study. *BMJ* 2017; **358**. DOI:10.1136/bmj.j2856.
- 86 McNally S, Nunan D, Dixon A, Maruthappu M, Butler K, Gray M. Focus on physical activity can help avoid unnecessary social care. *BMJ* 2017; **359**. DOI:10.1136/bmj.j4609.
- 87 Matthews FE, Stephan BCM, Robinson L, *et al.* A two decade dementia incidence comparison from the Cognitive Function and Ageing Studies I and II. *Nat Commun* 2016; **7**: 11398.
- 88 NICE. Dementia, disability and frailty in later life – mid-life approaches to delay or prevent onset. 2015. <https://www.nice.org.uk/guidance/ng16> (accessed May 29, 2018).

11. Appendix A – Stakeholder list

1. Yvonne Marsden – LCH Community Matron
2. Tracey Carver – LCH Community Matron
3. Lesley Gough – PHE Dental Consultant
4. Annie Coppel – NICE
5. Ian Maxwell – Merseyside Fire and Rescue Service Protection team
6. Liz Puzzar and Gill Usher – Dental health promotion LCH
7. Elaine Middleton – Age Concern
8. Christine Griffith Evans – NHS England Deputy Director of Nursing
9. Jennie Williams – Liverpool CCG
10. Kerry Harvey – Liverpool CCG
11. Michelle Barry – LCC Adult Social Care
12. Natalie Markham – LCC Adult Social Care
13. Andrew Durkin – LCC Adult Social Care
14. Fiona Ogden-Forde – Liverpool CCG
15. Gavin Williams – LCH Community Infection Prevention and Control
16. Rita Huyton – PHE Health Protection
17. Margaret Alderman and John Moane- LCH Community PT/ falls
18. Sue Wright – LCH Advanced Nurse Practitioner Skin team
19. Alistair Docherty – LCH Community Dental Service
20. Helen Casstles – LCC Public Health
21. Phil Bartley and Catherine Challinor – CQC
22. Carmel Hale – Designated Nurse Safeguarding Adults
23. Keeley Stasik – NHS Midlands and Lancashire Commissioning Support Unit
24. Laura Yallop and Sarah Thwaites – Healthwatch Liverpool
25. Jill Pendleton – Merseycare
26. Amanda James – LCH Out of Hospital Service

27. Sophie Weston – LCH Dietician

28. Jan Makin – LCC Community Manager, North Locality

12. Appendix B – Topic Guide

- Please describe your job, and its relationship with care homes.
- What actions is your organisation currently involved in to improve care home quality?
 - Please discuss what areas you feel are important to improving care.
 - What work do you do with other teams to improve service quality?
 - Please describe interventions to improve care. Do you think these are effective?
- What role do you, or your colleagues have in promoting health and wellbeing?
 - Describe specific interventions you are involved in.
 - Are there any areas you feel promotion for care home residents is either good or poor?
- Please describe the safeguarding processes in care homes and your involvement in them.
- Do you think there are areas of unmet need? What are they?
- Please highlight the keys areas to improve quality in care homes

13. Appendix C – Provider Survey

Dear Care Home manager,

Please find attached a survey aimed at care home managers. As you are hopefully aware, the Adult Social Care and Public Health teams in Liverpool City Council are working with other partners across the city to undertake a comprehensive piece of work to assess the current situation for care homes in Liverpool, particularly identifying the needs which can be met to improve quality. A major part of this work is to get the view from you regarding the current level of care in care homes. As the providers, you offer a unique perspective on care homes that will be invaluable to analysis. This survey offers you the chance to influence our work and help guide what we plan for the future for care homes in Liverpool. Please answer questions honestly and be aware that all survey responses are anonymous and confidential, your responses **cannot** be traced back to your place of work. We appreciate your help with this work. Please complete and return the survey by Friday 1st September.

Many thanks

Liverpool City Council Adult Social Care and Public Health

The first section of the survey is about details of the care home

1. What type of residents do you serve in your care home?

Old age residents (including dementia) ☐

Other (please describe): _____

2. Which of the following applies to your care home:

Privately managed ☐

Charity managed ☐

Local authority managed ☐

Other please state _____

3. Number of beds:

Residential: _____

Residential E.M.I _____

Nursing: _____

Nursing E.M.I _____

If flexible category please state: _____

4. What is the home's current CQC rating?

Outstanding ☐

Good ☐

Requires Improvement ☐

Inadequate ☐

Not Rated ☐

This section of the survey refers to your staff.

1. What type/how many staff do you employ?

Nurse	_____	Caretaker	_____
Care Assistant	_____	Administration	_____
Cooks	_____	Activity Co-ordinator	_____
Cleaner	_____	Other:	_____

2. How many of your staff are employed on full-time, part-time or on zero-hours contracts?

Full time	_____	Zero-hours	_____
Part time	_____	Agency	_____

3. Do your care staff receive training in the following areas:

- a. Dementia ☐
- b. Tissue viability ☐
- c. Falls prevention ☐
- d. Nutrition ☐
- e. Medicines management ☐
- f. End of life care (Gold Standards Framework) ☐
- g. Oral care ☐
- h. Other (please specify) _____

4. What percentage of care workers have a Care certificate?

Are there plans for all staff to complete a Care certificate?

Yes ☐ No ☐

5. How many staff, as a percentage, had a flu vaccine last year?

How do you record of this?

6. Do you have issues around recruitment, particularly specific staff? (tick all that apply)

Yes, it is difficult to recruit all staff ☐

Yes, it is difficult to recruit nursing staff ☐

Yes, it is difficult to recruit care assistants ☐

Yes, it is difficult to recruit management staff ☐

No, we have no difficulty in recruiting ☐

7. Do you have regular turnover of staff?

Yes, we are replacing staff regularly ☐

No, we have no problems retaining staff ☐

8. What is your percentage turnover rate?

9. Is the care home manager registered with the CQC?

Yes ☐

No ☐

This section refers to how health, and healthy living, is promoted for residents.

1. Nutrition

- a. Are residents provided with information about a healthy, nutritious diet?

Yes ☐ No ☐

- b. Are residents given the choice to what food they eat at every meal?

Yes ☐ No ☐

- c. Are residents encouraged and able to consume 5 portions of fruit and vegetables per day?

Yes ☐ No ☐

- d. Are any staff trained in nutrition?

Yes ☐ No ☐

- e. How do you record hydration needs?

2. Smoking

- a. Are residents provided with information about stop smoking?

Yes ☐ No ☐

- b. Approximately how many residents smoke? _____

- c. Are residents given stop smoking service support to help quit?

Yes ☐ No ☐

- d. Do injuries ever occur due to smoking, such as falls? If so how often?

Yes, monthly ☐

Yes, more than twice a year ☐

Yes, once a year or less ☐

No ☐

Don't know

- e. Does the home have an up-to-date smokefree policy?

Yes ☐ No ☐

3. Alcohol

- a. Are residents provided with information about guidelines around alcohol and safe drinking?

Yes ☐ No ☐

- b. Approximately how many residents drink?

Daily _____

2-3 times per week _____

Weekly _____

Rarely _____

Never _____

c. Who buys the alcohol?

d. Where is the alcohol stored?

e. Are any residents identified as problem drinkers?

Yes ☐ No ☐

f. Is support available for residents with problem drinking?

Yes ☐ No ☐

g. Do injuries ever occur due to alcohol? If so how often?

Yes, monthly ☐

Yes, more than twice a year ☐

Yes, once a year or less ☐

No ☐

Don't know ☐

h. Does the home have an up-to-date alcohol policy?

Yes ☐ No ☐

4. Physical activity

a. Are residents provided with opportunities to engage in physical activity?

Yes ☐ No ☐

b. Are residents given opportunity to do 30 minute of moderate physical activity, five times a week, if appropriate?

Yes ☐ No ☐

c. Are residents given opportunity to do physical activity outdoors?

Yes ☐ No ☐

5. Activities

a. Do you have an activities coordinator?

Yes ☐ No ☐

b. If so for how many hours per week are they contracted?

c. Are they ever involved in care work during these hours?

Yes ☐ No ☐

6. Social contact

- a. Are there areas and times for residents to socialise with each other?

Yes ☐ No ☐

- b. Are residents given the opportunity to spend time outside the care home environment?

Yes ☐ No ☐

If yes, please provide examples:

7. Do residents regularly take part in relevant health screening programmes?

Yes ☐ No ☐ Don't Know ☐

This section of the survey refers to health services.

1. Does the home have a primary care provider who is contracted to provide services for residents or are residents seen by their personal GP?

The home has a contracted GP ☐

Residents retain their personal GP ☐

Mixed provision of both dedicated and individual G.P ☐

Don't know ☐

2. What percentage of residents were reviewed last year by a medical practitioner?

3. What percentage of residents advance care plans, or equivalent?

4. How easy is it to get an urgent review from a GP?

It is always possible any time ☐

It is always possible during working hours ☐

It is sometimes possible ☐

Mostly it is not possible ☐

5. What percentage of residents had an annual medication review last year?

Who did these?

Pharmacist ☐

GP ☐

Practice Nurse ☐

Other (please describe): _____

6. On admission to the home, are all residents assessed for risks and current needs?

Yes ☐ No ☐

7. Are there clear protocols for staff to follow if a resident experiences specific issues?

Yes ☐ No ☐

Please describes what protocols (for example falls, confusion etc.)

8. Which of these community services do you have access to?

- a. Pharmacist ☐
- b. Physiotherapist ☐
- c. Occupational therapist ☐
- d. District Nurse ☐
- e. Fall prevention service ☐
- f. Tissue viability nurse ☐
- g. Dental health ☐
- h. Community Geriatrician ☐
- i. Social Work ☐
- j. Podiatry ☐
- k. Speech and language ☐
- l. Community matron ☐

9. Are palliative care, or end of life care support available as required?

Yes ☐ No ☐

This final section of the survey refers to medicines, and how they are managed in the care home.

1. Does the home have a self-administration policy to allow those residents who are able to administer their own medicines?
Yes ☐ No ☐
2. Are residents assessed on admission to establish if they are able to manage their own medication or identify what support is needed?
Yes ☐ No ☐
3. Have staff who administer medicines received training and been assessed as being competent by the care home to administer medicines?
Yes ☐ No ☐
4. What grade of staff administers medicines?

5. Does the care home complete their own internal medicine management audit?
Yes ☐ No ☐
6. Is there a written procedure/process for staff to follow for reconciling residents medicines (accurate listing of all medicines) when they are either newly admitted into the home or being discharged from hospital back to the home?
Yes ☐ No ☐
7. Is there a written procedure/process for staff to follow for the ordering and receipt of medicines?
Yes ☐ No ☐
8. Are all medicines stored safely and securely (ie locked cupboards, trollies medicine room) and with only authorised care home staff having access?
Yes ☐ No ☐

9. Are Homely remedies, such as those from a chemist or local shop, available to residents?

Yes ☐ No ☐

10. Are the use of such remedies recorded along with other medicines?

Yes ☐ No ☐

11. Do you have a policy regarding administration, recoding and storage of remedies?

Yes ☐ No ☐