

Remodelling Sheltered Housing for Extra Care

Professor Julienne Hanson
University College London

Presentation to a CARDI / SPARC Workshop

Recent Developments in Housing, Health and Technology for
Older People: Policy and Practice

Grosvenor House Conference and Training Centre, Belfast

10th June 2008

What this talk will cover

- In the next twenty minutes I shall:
 - Briefly recall the origins of sheltered and extra care housing.
 - Introduce our research project, which set out to evaluate the results of remodelling sheltered housing and care homes to extra care housing.
 - Present what we found out in respect of:
 - Architecture;
 - Construction process;
 - Assistive technology;
 - Support and care services;
 - Capital costs of remodelling.
 - Draw some conclusions about what worked well and not so well in respect of remodelling from sheltered housing to extra care.
 - Because my background is in architecture, I will provide more detail about the building and its AT than about service delivery.

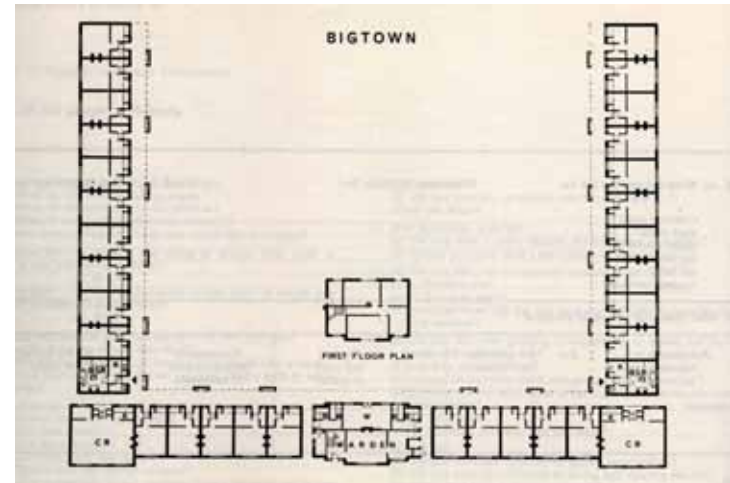
Sheltered housing

- Grouped, purpose-built flats or bungalows mainly for older people, though some providers also use this term to refer to housing for people with learning disabilities.
- Post-WWII concept, associated with the welfare state. Most sheltered housing was originally built for rent by the Local Authorities in the 1960s and 1970s, and also by Housing Associations in the 1980s and 1990s.
- Usually small schemes of between 12-48 dwellings. Offered tenants a self-contained home with its own front door, weather-protected access to shared facilities such as a residents' lounge, laundry or guest room, a scheme manager who may or may not live on-site and a community alarm to summon help in an emergency.
- Low space standards - 35 sq.m. on average for our sample. Mainly bed-sitting rooms, with some one bed accommodation. Often sited in 'out of the way' locations. Soon became synonymous with 'difficult to let'.
- As originally conceived, sheltered housing was designed for relatively fit and active older people. It pre-dated modern assumptions about accessibility and social inclusion. As the age and frailty of new tenants has risen in recent years, most is deemed no longer 'fit for purpose'.

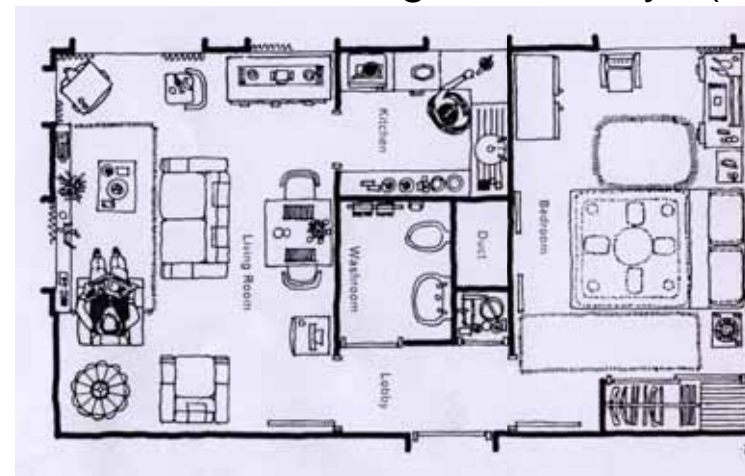
Sheltered housing



The front cover of 'Housing the Elderly', MTP Construction, 1974.



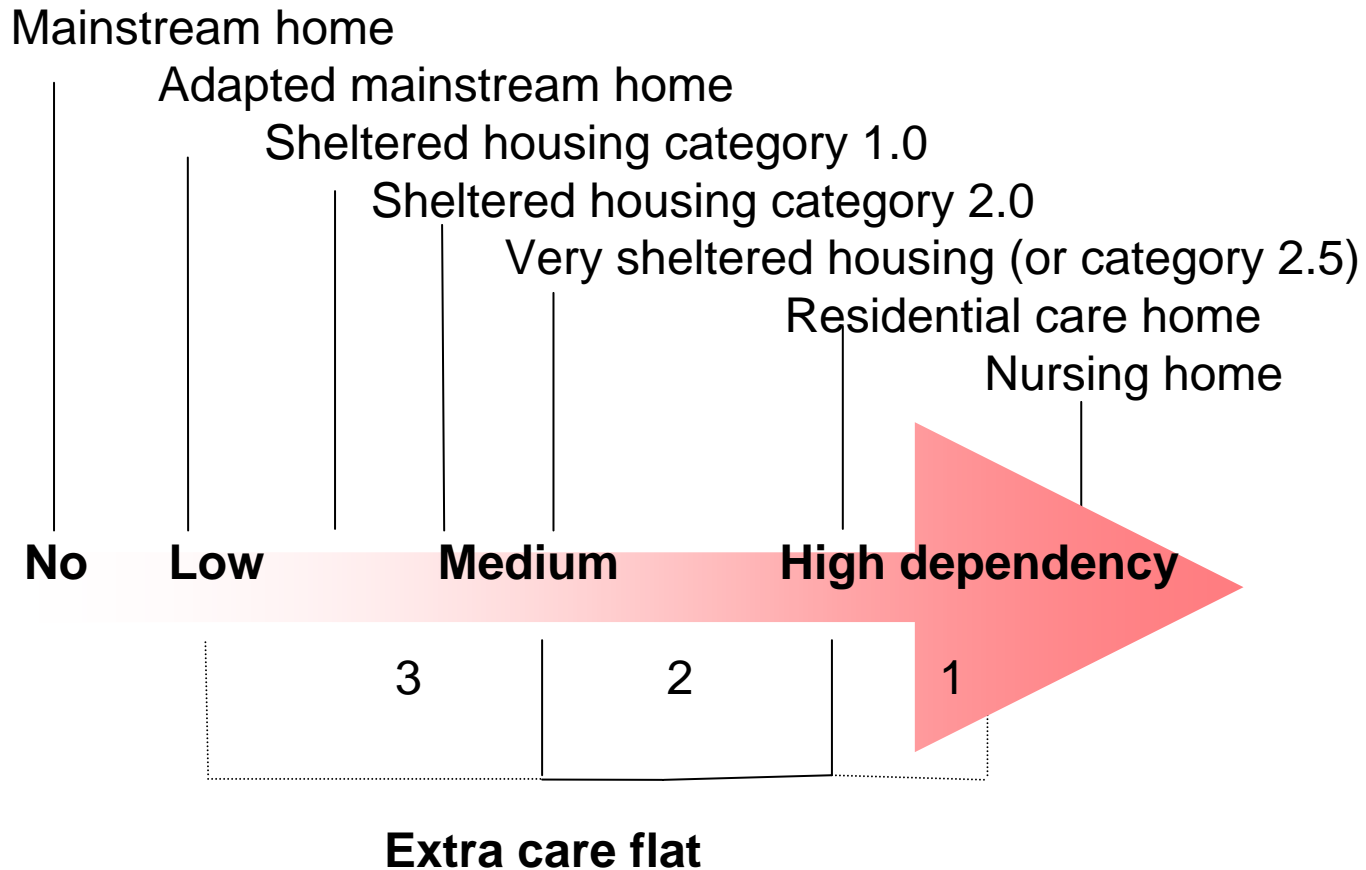
Idealised scheme layout and typical flatlet from 'Housing the Elderly', (1974).



Extra care housing (ECH)

- ECH developed out of sheltered / very sheltered housing during the 1990s and is probably the most popular form of older people's housing today.
- As before, the term is usually but not invariably used in the context of older people's housing. A key difference from sheltered housing is that it is deemed suitable for frail as well as fit older people. Three models for ECH in general use, that cover the entire care spectrum.
- Advocated as an approach - a concept - rather than a specification or checklist of what should be provided by way of facilities and services.
- In this respect, the DoH Housing LIN's (2006) Extra Care Housing Toolkit identifies three overarching concepts: to promote independence, to be empowering and to be accessible.
- A type of housing that is above all someone's home. Independent housing with features that help the occupants to 'age in place', care for themselves and live as independently as possible, as well as facilitating the delivery of support and care, ideally available 24/7.
- A key government policy objective, and to that end it has been given a substantial funding boost in recent years. £227m (£80m for 2008-2010) in housing grants and related revenue programmes.

Extra care housing (ECH)



1. "An alternative to care homes"
2. "Ageing in place"
3. "A home for life"

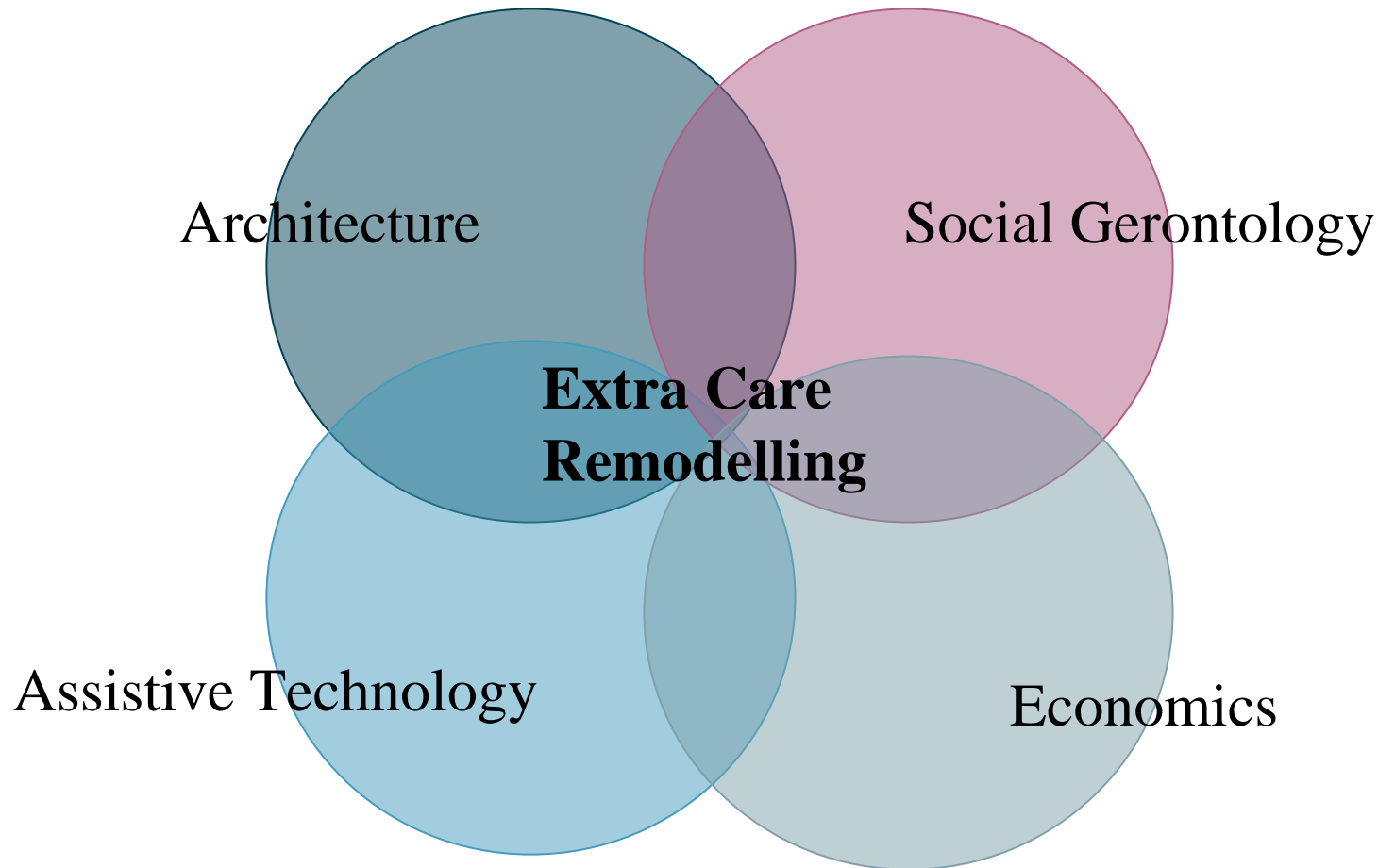
Remodelling v. new build / refurbishment

- Whichever model is adopted, the objective of ECH is to bridge the gap between living in a mainstream home with little or no support, and living in a care home with little or no independence.
- To that end, many housing providers are remodelling their outmoded sheltered housing and care homes to ECH, in the hope of realising the EC 'concept' of combining flexible care with independent living, whilst at the same time giving the building (and its tenants and caregivers) a new lease of life.
- We defined a **remodelled** project as one that involved structural or constructional alterations, by demolishing and rebuilding elements of the existing building or by extending the existing building. Planning permission / building regulations approval required. **Refurbishment** simply involves stripping out and replacing the building's superficial fixtures and fittings and redecorating it.
- Remodelling in this way begs a number of important questions:
 - Does remodelling present challenges over and above those relating to new build schemes?
 - Does it provide as good a solution as a purpose built ECH scheme?
 - Is it a sustainable and cost-effective strategy in the long term?

Interdisciplinary research

- Engineering and Physical Sciences Research Council (EPSRC) funded project, May 2005 to July 2007.
- Interdisciplinary project involving architects, rehabilitation engineers, social gerontologists and an economist.
- Remodelled into ECH from either sheltered housing or residential care.
- Only social housing. The most numerous building type with the most pressing problems. Schemes that had been converted to ECH since 2000 and that had been reoccupied by the time we were able to visit.
- We examined what the building, AT and care delivery changes there had been, and considered what was likely to be needed in the future.
- Conducted interviews with 31 design professionals involved in the construction process, to find out what the problems were on site.
- Obtained the views of 96 older tenants and 56 support staff about the building and care services, post-occupancy of the remodelled building, to look at the advantages and disadvantages of a remodelled scheme.
- Costed the changes to the schemes, and compared these with the costs of 4 recent new-build schemes, 2 private and 2 social.
- Provided good practice guidelines, based on the findings.

Interdisciplinary research



Overview of the ten case studies

- Ten case studies drawn from all over England, but with a concentration in the south-east.
- Five were provided by housing associations, 2 by local authorities and 3 changed tenure through stock transfer at the time that the buildings were remodelled, to secure the funding to facilitate the remodelling.
- Eight out of the 10 were formerly sheltered housing. Residential care schemes are more difficult to remodel due to their small rooms.
- All the original buildings bar 1 were post war, the exception being a 1830s Grade 2 listed building that posed special challenges; 2 were built in the 1960s and 5 were built during the 1970s. Most schemes had therefore attained a thirty-year design life prior to remodelling. However, the most recent was built in 1991, and was only 11 years old when it was remodelled.
- The average number of units before remodelling was 44. The largest was a sheltered scheme with 124 units; the smallest a care home with 18 bedrooms. Five had a resident warden's flat prior to remodelling.
- Seven out of the 10 had a significant number of bedsits in the original accommodation.

Overview of the case studies



Architecture

- The architectural variety within our 10 schemes was immense. No two schemes were the same in how they had remodelled. Two schemes had not actually been remodelled, but refurbished.
- No scheme had increased the amount of accommodation provided. All the schemes either kept the same number of units as before or reduced the number of dwellings and therefore the number of residents. Important to note this in respect of income generation for the remodelled scheme.
- The largest scheme with 124 units refurbished just 16 flats dotted about the building, to upgrade them to extra care. The smallest two examples had 18 and 21 units that were each reduced to 16, at or below the threshold of financial viability. The rest were of the order of 30-50 units, and were sufficiently large to justify the range and level of services that are normally provided in an extra care setting.
- Eight schemes had increased the area of the building devoted to dwellings, 8 increased the area of the communal facilities, and 5 increased the area allocated to staff.
- Most schemes therefore needed to extend the building beyond the original envelope to accommodate the newly-established extra care community. All the schemes with bedsits extended the building as part of the remodelling process.

Overview of communal facilities

- Extra care is associated with enhanced facilities and amenities for tenants and, although there is no generally agreed definition of what a tenant in such a scheme might expect by way of communal facilities, the consensus is that it should be more than the communal lounge that was provided in sheltered housing schemes.
- If we look at the range and diversity of the communal facilities in the remodelled buildings, the sample as a whole had quite a wide range of facilities between them, but not every scheme could offer their tenants all of these.
- In descending order, all 10 case studies had at least one communal WC in the public parts of the building, a laundry for residents' use and a residents' lounge. Fewer than half the schemes provided an IT area, treatment room or shop. Only 2 had Internet dial up facility.
- Eight had a dining area, but in practice only 5 schemes routinely provided a regular optional communal lunch. Yet 8 had a hairdresser's room. The list reveals some perhaps unexpected priorities when space is at a premium, as it invariably is when an existing building is remodelled to take on a new, more complex function.
- All cases fulfilled the minimum requirement for accessible circulation, but the majority fell short of the recommended 1500mm width for corridors.

Overview of communal facilities

	Communal Facilities	Total
1	Communal WC	10
2	Laundry room	10
3	Main lounge	10
4	Assisted bathroom	9
5	Storage areas	9
6	Buggy store	8
7	Dining area	8
8	Hairdresser's	8
9	Tea kitchen	8
10	Guestroom	7
11	Smaller lounge(s)	6
12	Multipurpose area	5
13	IT area	4
14	Treatment room	4
15	Residents' shop	2

Overview of staff accommodation

- A similar picture emerged from the overview of staff facilities provided in the 10 schemes.
- They all had a manager's office and a carers' office, but one had no space for staff to sleep over at night, two had no staff room and three did not even provide a separate staff toilet.
- At the bottom of the rank we can see that perhaps necessary functions in a setting where many tenants will be quite old and frail - like a sluice room or staff laundry - were seldom provided.
- Seven schemes had a commercial-size, fully equipped, kitchen but in 3 of them the housing provider concerned was unwilling to employ a cook so the kitchen was unused or used as a storage area.
- The presence of a resident manager on site, once a hallmark of much sheltered housing, is becoming much rarer, and our sample also reflects this as only 2 had retained a scheme manager's flat.

Overview of staff accommodation

	Staff Facilities	Total
1	Carers' office	10
2	Manager's office	10
3	Sleep-over area	9
4	Staff room	8
5	Commercial kitchen	7
6	Staff WC	7
7	Sluice room	3
8	Laundry room	3
9	Manager's flat	2

Overview of the individual flats

- 89% of the remodelled flats had just the one bedroom, 6% were 2 bedroom flats, none had 3 and one scheme retained 20 bed sits out of 50 units.
- Although flat sizes were usually increased by remodelling - the average flat size rose from 35 sq.m. to 44 sq.m. - the majority of the accommodation still fell well short of the current space standards for new build extra care schemes.
- Thus, while the majority of tenants' flats were bigger and better than before, the individual flats were not as inclusive and accessible as they should be and no kitchens had been designed to wheelchair standards.
- Three possibilities for remodelling the flats had been adopted:
 - Remodelling within the existing envelope, usually by decreasing storage space;
 - Enlarging the existing building envelope by extending outwards from each flat;
 - The most generous solution was to knock two flats into one, but this was not found very often, and those schemes that did had put together a just a few units of accommodation to give one or two very generous flats, whilst the rest of the units had been remodelled within the existing envelope.
- Neighbours living in the same type of accommodation within the same scheme often experienced widely differing space standards.
- Seven out of 10 schemes displayed a large disparity (more than 10 m²) between the sizes of their one and two bedroom flats.
- The range of flat plans increased dramatically. Far less standardisation and many more unique flats. Perhaps a good thing for tenants in that they had more choice, but less so for 'best value' in the construction and maintenance of the building.

Remodelling within the same building envelope.

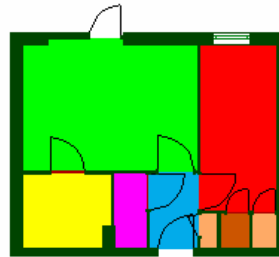


Existing Area = 48.6 m²

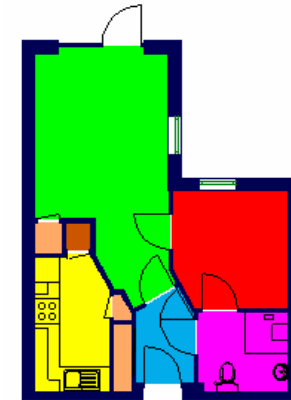


Remodelled Area = 48.6 m²

Extending the building envelope.



Existing Area = 29.3 m²

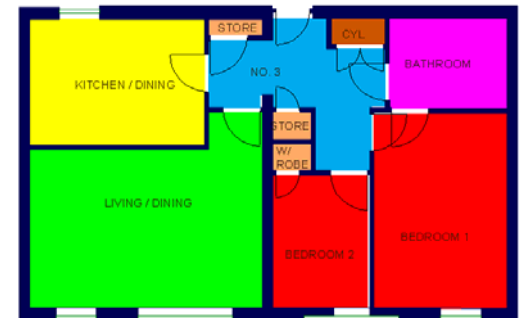


Remodelled Area = 39.2 m²

Knocking two adjacent flats into one, a process that entailed an almost complete stripping out of the original interiors.



Existing Area = 33.0 m²



Remodelled Area = 66.7 m²

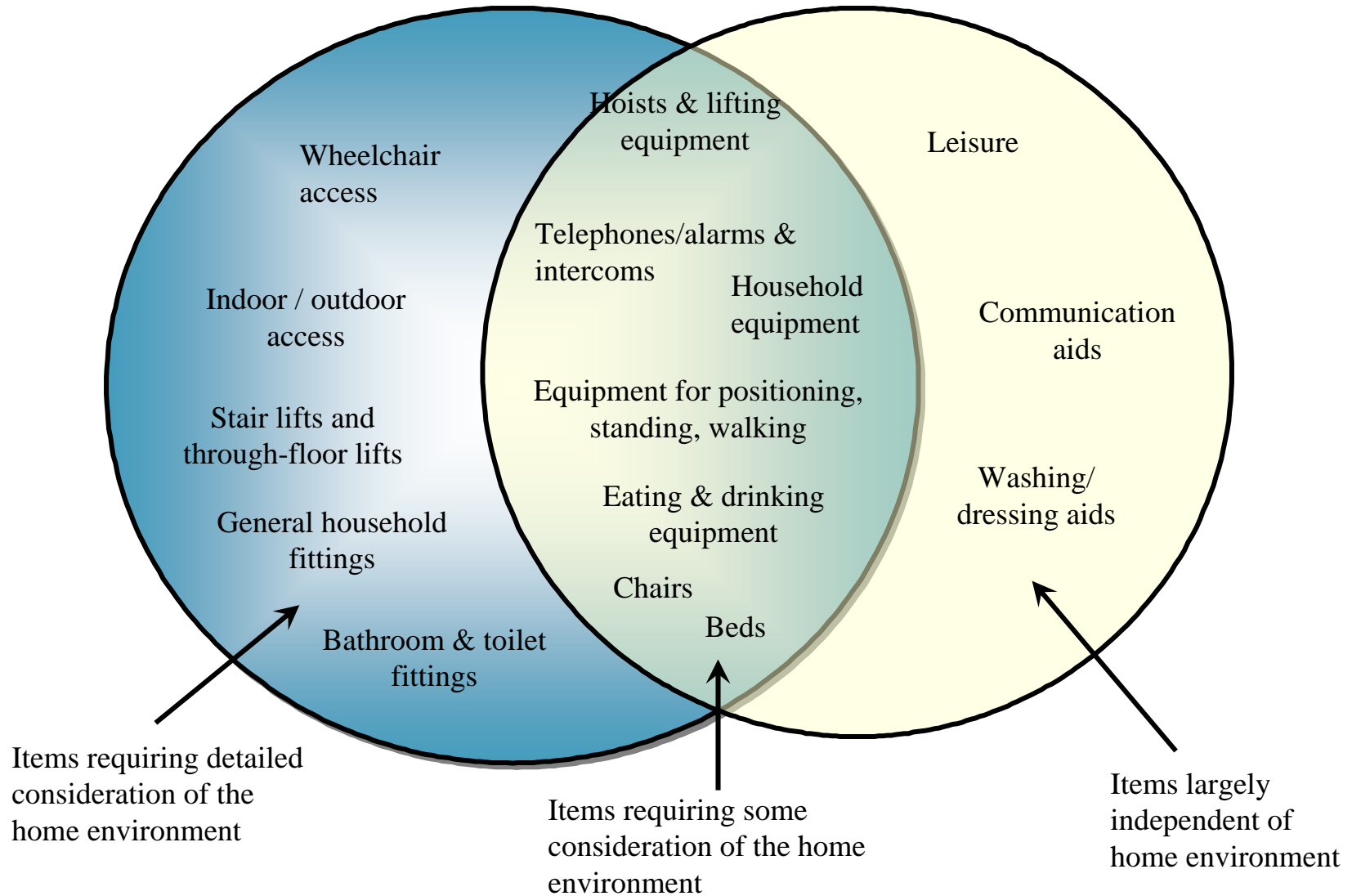
Lessons about the process of remodelling

- Remodelling does not necessarily save time. The average project length was 56 months, of which 36 was spent planning and 20 on site. Put another way, it can take nearly twice as long to set up a remodelling project up as it does to build it. The shortest time to bring a project to the site was 16 months and the longest was 6 years.
 - Long lead times due to finance, permissions.
- Delays also bedevilled the work on site:
 - Dealing with the unknown, discovering unforeseen problems once the building was ‘opened up’;
 - Asbestos (8/10), structure (7/10), replastering (7/10), cables/pipes (7/10), roof (5/10) M+E (4/10);
 - In six cases, phasing of the work was necessary, due to residents’ remaining *in situ* during the build.
- The shortest time on site was 9 months, only two took less than a year and the longest, where major structural problems were identified when the build was already underway, took nearly 3 years on site.

Assistive Technology (AT)

- 44 representative flats, of which 40 were occupied, were audited by a team comprising an OT, architect and rehab engineer, and assessed for different types of AT.
- 37 tenants were in extra care housing, 3 were still living in sheltered housing in a mixed scheme where some flats had been upgraded to extra care. 4 tenants had partners, the rest were living alone.
- In total, 356 examples and 53 different types of AT were noted. On average, a tenant had 8 AT devices. Most were personal, portable AT (the most numerous was a crutch or walking stick, 35/44) not building-related, fixed AT (of which the most numerous was a toilet frame with a raised seat 16/44).
- Apart from this, we found little fixed AT in the flats visited: shower chair (8), bed grab bar (7), raised toilet seat (4), ceiling hoist (3), transfer pole (2), bath lift (1).

Fixed and portable AT



Key findings on fixed AT

- All the schemes had a door release control on the main entrance, but none had this on the individual flats. None had an intercom for the individual flats, nor an amplified or visual door bell. All schemes had heavy internal fire doors. This limited tenants' control over both the main entrance and their own front door.
- 6 had a lift prior to remodelling, usually small. Those 4 that did not, provided one after remodelling, but often it had to be 'squeezed in' at a less than optimum location. Tenants living in the new extensions were often a long way from the lift / shared facilities and amenities. Many tenants reported difficulties in reaching and using the lift. Only two lifts could fit a stretcher, but these could not accommodate an accompanying person. Most could not accommodate a wheelchair plus caregiver, or a scooter. Poor lift location / design reduced tenants' independence and opportunities for social interaction. Some tenants would only use the lift if accompanied by a caregiver.
- The 'devil was in the detail'. Few remodelled flats adhered to the detailed recommendations in respect of Part M of the Building Regulations, let alone Lifetime Homes, especially in respect of WC pan and basin heights, accessible switches, sockets, controls, door /window handles etc.
- After remodelling, conventional step-in baths were usually replaced by level-floor showers, though in one scheme baths were left on the first floor 'to give tenants choice'. Baths left in this scheme reduced independence and resulted in additional care. Remodelled bathrooms were usually still unsuitable for wheelchair users. Walk-in baths installed in one scheme were found to be impractical and unpopular and had to be removed at considerable extra expense.
- All the flats had social alarms, but most had retained pull cords and these were often not reachable from the floor. Social alarms were often used for internal conversations, thus reducing caregivers' ability to distinguish between routine calls and real emergencies.
- Only one scheme had installed the infrastructure to provide enhanced monitoring like telcare services in future. Little incorporation of AT especially with regard to increased frailty / future generations.
- AT cannot bridge the accessibility gaps that result from remodelling, resulting in care-negative long term impacts (more work for care staff) as well as less independence for tenants.

Support and care services

- Interviews were held with:
 - 96 residents
 - 23 senior housing and care managers
 - 9 extra care housing managers
 - 10 extra care managers
 - 14 care assistants
- Who is extra care for?
- What should extra care provide?
- How did housing and care providers support the existing community in those schemes where tenants remained on the site during the build, and was it worthwhile?

Who is extra care for?

- All the schemes assessed new entrants on the basis of how many paid care hours per week were needed when at home.
- Two distinct ‘extra care models’ were in evidence; one, followed by 4 schemes aimed at achieving a dependency **spectrum** while the other 6 schemes had set a minimum dependency **threshold**. However this threshold varied:
 - 4 hours personal care at home (2 schemes);
 - 7 hours personal care at home (1 scheme);
 - 10.5 hours personal care at home (3 schemes).
- Care needs often dropped after admission.
- Housing status could affect admission:
 - 6 schemes admitted homeowners (who would then self fund), 1 never accepted homeowners, 1 never accepted homeowners whose property had sold for more than £150K, 1 accepted homeowners considered too old and frail to cope with house move and 1 assessed both renters and owners but if their care needs were equal gave the renter the vacancy.
- Type of dependency often affected admission:
 - Dementia sufferers or wheelchair users may be refused, as may people needing attention at night.

What should be provided?

- What kind of care?
 - All claimed to offer flexible care
 - 4 schemes had a HA care provider, 6 schemes had care from a private agency. More concerns were expressed when care was provided by a private agency.
 - All schemes had a problem with temporary staff
 - Bullying by some carers; bullying by some residents
 - Problems around cleaning
- Communal meals?
 - 5 schemes provided an optional communal cooked lunch, but 5 schemes did not. Not always cooked on site, but brought in or reheated.
- Activities?
 - 9 schemes organised communal activities, but 1 did not provide any
- Night cover?
 - 3 schemes had two waking night staff
 - 6 schemes had only one sleep-in carer on duty
 - 1 scheme had no member of staff on duty in the building at night
- Home for Life?
 - Tenants often believed that they could remain in a scheme; managers believed that there was a conditional tenancy
 - Most of the schemes had a few people moving onto care homes

Tenants' experiences of remodelling

- Reasons for remodelling with the tenants in situ:
 - Keeping the community together;
 - There may be nowhere else for the HA to decant them to (the Benidorm solution);
 - Familiarity with home and neighbourhood.
- Pre-remodelling, most existing tenants were hostile. Lack of consultation about the change to extra care in some cases. When to tell the tenants that the building is to be remodelled? “*Its never the right time!*”
- Involving tenants in choosing the fixtures and fittings for their flats worked well in 5/6 cases, as did gaining the confidence of relatives.
- The optimum situation (2 cases) was to build a new extension, move all the remaining tenants into that, and then work on the existing building. If this was not feasible, phasing the build worked better than a rolling programme.
- In all 6 schemes the choice of a sympathetic site manager was essential to the smooth running of the build.
- In 5/6 having tenants on site led to significant delay and additional expense. Interviewees on 3 schemes said they would not do it again.
- Tenants admitted to an extra care scheme since remodelling were generally enthusiastic about what a scheme offered but tenants remaining *in situ* during the remodelling process were generally angry that their home had become ECH.

Financial appraisal

- Information about the cost of the schemes was extremely diverse, which made cost comparisons difficult.
- 9 out of 10 projects overspent the original budget.
- VAT emerged as a factor that could add substantially to the costs of remodelling.
- The average cost of per standard flat in schemes for which financial information was available was £69,500. Four had a range of between £53,000 - £56,000 per flat. The lowest cost / flat was £20,000 per unit (a refurbishment); the highest was £95,000 per unit (the heritage building).
- Average cost per 'standard flat' for new build was £68,000, including the two private enterprise flats. The two RSL new build schemes' cost per standard flat was £87,000.
- These figures need to take account of the average size of the flats, at which point the picture becomes much more complex.
- Comparing like for like, it cannot be assumed that remodelling will be cheaper than new build.
- Need to do a cost benefit analysis at an early stage, transparency and sound accountancy.

Conclusions

- Remodelling as an option needs to be a careful choice when other alternatives including rebuilding have been considered.
- General satisfaction among tenants (especially new tenants) with the design of their flats (especially compared with residential care), with the structure and appearance of the buildings and often the grounds/gardens were better than before. Staff were also generally positive about the benefits of remodelling.
- Successful remodelling to ECH needs:
 - Architects and builders to be specialists;
 - User-centred approach when planning/building;
 - Taking the long-term view;
 - Involving tenants from the start.
- We identified a number of examples of good practice that were found in the case studies. This was very encouraging.
- These, together with the lessons learned from when things did not go so well, can lead the way for future remodelling projects to be more successful, providing appropriate and high quality spaces that foster the well-being of both tenants and staff.

Acknowledgements

- The research team:
 - The architects - Professor Julienne Hanson, Hedieh Wojgani & Flora Margeti, Faculty of the Built Environment, University College London,
 - The social gerontologists - Professor Anthea Tinker and Dr Fay Wright, Institute of Gerontology, King's College London,
 - The rehabilitation engineer and the OT - Dr Ruth Mayagoitia-Hill and Els van Boxstael, Centre of Rehabilitation Engineering, King's College London.
 - The economist - Dr Alan Holmans, University of Cambridge
- The sponsor:
 - Funded by the Engineering and Physical Sciences Research Council (EPSRC – EP/C5329451) EPSRC
- Website details for recommendations and advice:
 - www.kcl.ac.uk/content/1/c6/02/96/45/remodellingadviceversion151007.pdf