



THE ROYAL BOROUGH OF
KENSINGTON
AND CHELSEA

Review of Assistive Technology in Kensington and Chelsea

July 2012

Chairman's Foreword

I really welcome this report and its twenty recommendations.

Assistive Technology will make an extraordinary difference to the lives of our most vulnerable and needy residents.

Take the hypothetical case of Frances, a 50 year-old woman living by herself with Chronic Obstructive Pulmonary Disease (described in Appendix 2).

Frances is constantly short of breath and fears going out by herself – even to the shops – in case she has a flare up. At home, she becomes anxious about not being able to get help in time.

These fears make Frances' breathing problem worse, and she avoids exercise and other activities in case they exacerbate it. When she thinks her symptoms are worsening, she rings the emergency services and, more often than not, ends up in hospital.

But imagine if Frances could have her symptoms monitored remotely? Every morning, she could check the severity of her symptoms and find out the likelihood of a flare up.

Remote monitoring would anticipate Frances' bad days, enabling her doctors to prescribe the necessary treatment in time and saving her another hospital visit. On good days, she would no longer have to stay at home, anxiously awaiting a nurse's visit to get the all clear.

For Frances, remote monitoring would mean dignity, convenience and independence. Her quality of life would be transformed.

For the health system, her remote monitoring would mean early, preventative intervention and fewer hospital visits: a better outcome at a lower cost.

But Frances is just one example of telehealth at work (the kind of Assistive Technology described in 3.42-3.62). When cases like hers are multiplied to



*Councillor Mosley-
Chairman of the Working
Party on Assistive Technology*

encompass the huge range of technologies available and the even greater number of health conditions, they yield truly remarkable benefits.

A 45% reduction in mortality; a 21% reduction in emergency admissions; a 24% reduction in elective admissions; a 15% reduction in A&E visits; a 14% reduction in bed days; and an 8% reduction in tariff costs, according to the Government's four-year-long trial of Assistive Technology (2.7-2.11).

It bears repeating that these benefits are nothing short of astonishing.

And the good news is that Kensington and Chelsea is supremely well-placed to take advantage of them. Inner West London is already home to the most technology-savvy population in the UK: more of our residents are connected to the Internet and use devices such as smartphones and tablets than anywhere else (4.2). And tri-borough gives us greatly increased purchasing power (3.39).

But that said, it would be wrong to oversell Assistive Technology. It is not a panacea and its rollout presents significant challenges, which this report has not been too shy to describe (3.52-3.60).

Established practices will have to change; staff will need to re-train; managers will have to ensure that more use of technology does not mean less human contact; and many Assistive Technologies will require much greater integration between social care and the NHS (3.49-3.51).

But, these challenges notwithstanding, there is much that we can do now.

We can begin to put an end to the strange state of affairs where an encounter with health services in this country can feel –in technological terms – like going back in time.

Above all, we can begin to give our most vulnerable and needy residents the dignity and independence they desperately need, while at the same time improving the quality and the cutting the cost of our care.

I would like to give my thanks to my fellow members of the "Review of Assistive Technology in Kensington and Chelsea" Working Party, the officers who have supported us with such enthusiasm, and to the many people who generously gave up their time to give us evidence (listed in Appendix 1).

Councillor Louis Mosley
Chairman, Working Party on Assistive Technology
July 2012

ASSISTIVE TECHNOLOGY - AN IMPORTANT TOOL FOR PROMOTING INDEPENDENT LIVING

A REVIEW OF ASSISTIVE TECHNOLOGY IN KENSINGTON AND CHELSEA

Recommendations

i: The provision of aids and preventative technology should be a priority to meet care needs and reduce the overall need for some individuals to move into extra care schemes.

ii: All plans to facilitate new developments of accommodation for older people should consider the inclusion of installation of assistive technology, in response to individually assessed need. Where major refurbishment of existing specialist accommodation is envisaged then arrangements for providing assistive technology should be included.

iii: We support the voluntary sector in its efforts to promote digital inclusion, particularly in the up-take of appropriate assistive technology.

iv: Adult and community learning can help in the work to equip residents with the skills to use assistive technology. The Adult and Family Learning Team should explore if programmes, such as their Moodle programme¹, could be adapted for this purpose.

v: High quality information and timely advice must be provided for families, carers and service users, to enable them to understand their assistive technology options to assist them to make informed choices to address their needs.

vi: The inner north west London local authorities (Westminster, Kensington & Chelsea and Hammersmith & Fulham) should make the most of their increased purchasing power gained by tri-borough working in buying of assistive technology.

vii: To ensure the inner north west London local authorities have the right provision of assistive technology in the longer term, we recommends:

(a) Tri-borough Adult Social Care undertakes research to establish future assistive technology needs.

¹ Moodle.org: open-source community-based tools for learning
<http://moodle.org/>

(b) Tri-borough Adult Social Care compares and contrasts the current position of assistive technology within the three boroughs.

(c) The three boroughs and NHS agree a common vision for the future assistive technology services. This could include:

A common vision for assistive technology services

Aims:

- To help more people live at home for longer, safely and with security by promoting the use of assistive technology in Westminster, Kensington & Chelsea and Hammersmith & Fulham, thus making the best use of limited resources to support their safety and wellbeing
- To should support the delivery of efficient and effective services through an integrated approach within wider care and support models for people with community care needs living in the community.

Objectives:

- Increasing choice and independence for service users
- Contributing to a range of preventative measures
- Supporting hospital discharge and intermediate care services
- Supporting self care
- Supporting the management of long term conditions at home
- Increased use within mainstream services. Local care agencies need to think about what technology patients need first. Then think about what they need to deliver in a coordinated fashion.
- Support effective procurement to ensure that assistive technology services grow as quickly as possible.

Outcomes:

- Increase the availability, year on year, of assistive technology packages for frail and vulnerable people
- Reduce the number of avoidable emergency admissions and readmissions to hospital
- Increase the speed of discharge from hospital once clinical need is met;
- Reduce the use of care homes
- Improve the quality of life of users of assistive technology services
- Reduce the pressure on (informal) carers
- Extend the range of people assisted by assistive technology services
- Better coordinate the different agencies delivering assistive technology.
- Better integration of data between health and social care. This ranges from sharing data between organisations, the JSNA to single assessment.
- To achieve efficiencies (cash releasing or time releasing) from the investment in assistive technology.

When developed, the vision should be shared with the local Health and Wellbeing Boards. The Health and Well-Being Strategy(s) of the three local Health and Well-Being Boards' should include the development of assistive technologies as a way to promote independence and good health.

(d) We believe the vision should be the basis for investment decisions to be made to expand assistive technology services in the knowledge it will bring a better service. An action plan should be developed to set out the work to be carried out to deliver a co-ordinated assistive technology service across the three boroughs.

viii: Tri-borough adult social care should carry out further work looking at the charging for telecare to ensure there are no perverse incentives restricting up-take.

ix: The provision of an assistive technology service for people who do not meet the eligibility criteria that are willing to pay should be further explored. Assistive technology equipment and support should be offered to all residents enabling them to live safely and independently in their own home. A tri-borough charging policy could be considered to allow people to join the service when not eligible for it.

x: We support local initiatives by our clinical commissioning Groups (CCGs) and Central London Community Healthcare NHS Trust (CLCH) to increase the uptake of telehealth in the NHS in line with the government's "Three Million campaign". Assistive technology solutions need to be coordinated with Tri-borough adult social care and Tri-borough children's services.

xi: Local CCG Out Of Hospital Strategies will need to set out the ways that assistive technology can be used to address needs.

xii: As a way to promote integration we recommend that a pilot "assistive technology improvements project" is set up between the NHS and social care, focused on a specific problem of vulnerable older people and employing the deployment of vital signs monitoring.

xiii: There needs to be a coordinated effort locally for a joint approach between health, social care and housing in assisted technology to ensure the best use is made of the technology at a time of reduced resources. The three local Councils, NWL PCTs, CLCH and local CCGs are asked to co-ordinate telecare with telehealth to ensure compatibility and reduce duplication.

xiv: The use of technology should not lead to a service of impersonal care. There should be a detailed staff training programmes in assistive technology to ensure they understand the benefits and that it is not a substitute for other types of support.

xv: Assistive technology user's needs should be reviewed on an annual basis at a minimum.

xvi: The Tri-borough Adult Social Care service should communicate clearly how people might find telecare services through the most appropriate media. Telecare information for the public should be co-ordinated so there is a tri-borough approach.

xvii: The Councils should promote the evidence-based low-cost technological resources that help people remain healthy or more independent in their homes.

xviii: Local agencies must work to keep up with advances in assistive technologies. The adoption of assisted technologies should be done with reference to any NICE guidelines/technological appraisals.

xix: We support any drive to efficiently technologically-enable local government and co-ordinate the use of technology in the centre of London. We recommend that the three local Councils develop a holistic digital strategy for inner north west London.

xx: We request that the Tri-borough Adult Social Care provide a bi-annual report - in one, three and five years - to enable the Committee to monitor standards and improvements in telecare services.

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1. BACKGROUND

Introduction

- 1.1 At the Health, Environmental Health and Adult Social Care (HEHASC) Scrutiny Committee meeting on 16 November 2011 it was agreed to carry out an in-depth scrutiny review of Assistive Technology in Kensington and Chelsea during 2011/12. The terms of reference (agreed by the HEHASC Scrutiny Committee on 25 January 2012) and membership of the Working Party are set out in Appendix 1.

History of remote care

- 1.2 There was nothing new about remote care. That the telephone might be of use to doctors to ease their practice was first suggested in the Lancet on 29 November 1879 by an anonymous writer.

The Yankees are rapidly finding out the benefits of the telephone. A newly made grandmamma, we are told, was recently awakened by the bell at midnight, and told by her inexperienced daughter, "Baby has the croup. What shall I do with it?" Grandmamma replied she would call the family doctor, and would be there in a minute. Grandmamma woke the doctor, and told him the terrible news. He in turn asked to be put in telephonic communication with the anxious mamma. "Lift the child to the telephone, and let me hear it cough," he commands. The child is lifted, and it coughs. "That's not the croup," he declares, and declines to leave his house on such small matters. He advises grandmamma also to stay in bed: and, all anxiety quieted, the trio settle down happy for the night.²

Assistive Technology

- 1.3 The term "assistive technology" can be defined as "any device or system that allows an individual to perform a task that they would otherwise be unable to do, or increases the ease and safety with which the task can be performed."³
- 1.4 Telecare and telehealth enable social and health care services to be provided remotely to people in their own homes. They are both types of assistive technology which involves electronic sensors that monitor people's health in their own homes and transmit findings to health or social care professionals. Telecare and telehealth are both types of assistive technology that enable health and social care services to be provided remotely to people in their own home;

² The Lancet Nov. 29, 1879. Page 819

³ Royal Commission on Long Term Care 1999.

however, they are quite distinct in their definitions and uses. Telecare is characterised by continuous, automatic and remote monitoring to manage the risks associated with independent living. Examples include sensors that can detect movement, falls, and bed occupancy. Telehealth is the remote exchange of data between an individual and a health care professional, and aims to assist in the diagnosis and management of health care conditions. Examples include monitoring blood pressure and blood glucose levels for clinical review by a health professional using phone lines or wireless technology. About 1.7 million people benefit from telecare services in the UK, but telehealth services have only around 5,000 users.⁴

1.5 However, assistive technology refers to a wider range of equipment than just telecare or telehealth. There is an increasing range of products and services, designed to appeal to private purchasers and those with low level needs – remote controlled curtains and lighting, kitchen gadgets and the “smart homes” concept that can link a range of leisure and assistive technology with energy saving devices and enhanced home security – often seen as a lifestyle choice for people with significant financial resources.

1.6 Assistive technology services can:

- Increase choice and independence for service users
- Reduce the burden on carers and provide them with more personal freedom;
- Reduce the need for residential and nursing care;
- Unlock resources and redirect them elsewhere in the system;
- Reduce acute hospital admissions;
- Reduce accidents and falls in the home;
- Support hospital discharge;
- Contribute to the development of a range of preventative services
- Contributing to care and support for people with long term health conditions
- Monitor changes to the clinical condition of patients with CHD, respiratory problems etc

1.7 The technology driving these developments has improved vastly with the introduction of broadband and secure web-based services for exchanging data between patients and clinicians.

1.8 Section 3 of this report will go into more detail on:

⁴ Kings Fund: Telehealth and telecare - Key points and background
http://www.kingsfund.org.uk/topics/technology_and_telecare/technology_and.html

- 3.1 Telecare - General
- 3.2 Telecare - Kensington and Chelsea
- 3.3 Telehealth - NHS
- 3.4 The promotion of telecare and telehealth for all

2. NATIONAL POLICY CONTEXT AND EVIDENCE BASE

Professor James Barlow, Imperial College Business School

- 2.1 At the meeting on 5 March, Professor James Barlow spoke about the amount of work being undertaken into the deployment of new technologies. In the last 20 years much effort had gone into four particular areas:
- (i) Telecare - to manage the risk in the home (e.g. social alarms). About 1.5 million people nationally have this. There is an established network of some 300 call centres across the country.
 - (ii) Monitoring individuals - this can be sub-divided into two categories: (a) Those whose vital signs (blood pressure, blood sugar, respiration etc) are monitored remotely. Technology here is settling down. (b) Life-style monitoring (e.g. movement in the home, whether the fridge had been opened etc).
 - (iii) Using the mainstream technologies such as mobile phones and apps (e.g. [e.g. individuals receiving appointment or medication reminders or lifestyle messages (e.g. diet, exercise etc)], Internet networks (e.g. virtual networks of those suffering from a particular disease) and TV.
 - (iv) Electronic assistive technologies to enable people to live in their homes, such as devices to open doors or windows, stair-lifts etc. These are usually standalone devices.
- 2.2 Professor Barlow added that while there were some 10-12,000 publications around the subject, much of the research was unreliable.

Operating Framework for the NHS in England 2012-13 (November 11)

- 2.3 "The Operating Framework for the NHS in England 2012-13"⁵ says "PCT clusters will need to work together with local authorities to agree jointly on priorities, plans and outcomes for investment of the monies allocated for reablement in 2012/13. This could include:

⁵ The Operating Framework for the NHS in England 2012-13 (November 11): http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_131360

current services such as telecare." (Paragraph 4.36) and "PCT clusters working with local authorities and the emerging CCGs should spread the benefits of innovations such as telehealth and telecare as part of their ongoing transformation of NHS services. They should also take full consideration of the use of telehealth and telecare as part of any local reconfiguration plans." (Paragraph 2.22)

Developing a national strategy for integrated care (January 2012)

- 2.4 The second key recommendations from the Kings Fund report "Developing a national strategy for integrated care"⁶ is that "setting an ambitious goal to improve patient experience should be reinforced by guarantees to patients with complex needs. These guarantees would include an entitlement to ... access to telehealth and telecare ... where appropriate."

The "Three Million Lives" Campaign (December 11)

- 2.5 The government on 5th December 2011 announced plans to ensure three million people with long-term conditions and/or social care needs could benefit from telehealth or telecare, but stressed it was not a national target. Instead, the Department of Health would lead a "Three Million Lives" campaign - to improve the lives of 3 million people over the next 5 years with the introduction of telehealth and telecare technologies. This campaign will not actually provide the systems but will give "national leadership, strategic direction, and advice to NHS and social care organisations; with support from industry who would be responsible for creating the market and working with local organisations to deliver the change." The details of the campaign are still being worked out. The government's announcement came on the back of the initial findings from the Whole-System Demonstrator (WSD) Programme.

The Concordat between the Department and the telehealth and telecare industry⁷

- 2.6 Paul Burstow the Minister for Care Services launched a Concordat between the Department of Health (DH) and the telehealth and telecare industry on 19 January 2011. The Concordat is to demonstrate the commitment from both sides to work together to accelerate the take up of telecare and telehealth.

⁶ The King's Fund: Integrated care for patients and populations - Improving outcomes by working together ((January 2012):

http://www.kingsfund.org.uk/publications/future_forum_report.html

⁷ The Concordat between the Department and the telehealth and telecare industry
<http://www.dh.gov.uk/health/files/2012/01/Concordat-3-million-lives.pdf>

Making an evidence-base - Whole-System Demonstrator Programme^{8 9}

- 2.7 In July 2008, the Whole System Demonstrator (WSD) Programme was launched. The WSD programme, funded by the Department of Health and led by The King's Fund, has developed an evidence database on the impact of telehealth and telecare in the management of people with long-term conditions. In addition, it has worked with 12 member sites to examine the progress and challenges of telecare and telehealth adoption.
- 2.8 The WSD Programme is the world's largest randomised control trial of telehealth and telecare. It involves 6191 patients, 238 GP practices across three sites, Newham, Kent and Cornwall. WSD was set up to look at cost effectiveness, clinical effectiveness, organisational issues, effect on carers and workforce issues. It focused on three conditions, diabetes, COPD and coronary heart disease. The programme will provide a clear evidence base to support important investment decisions and show how technology support people to live independently, take control and be responsible for their own health and care. The large-scale evaluation found the use of telehealth and telecare could significantly cut death rates and costs for the NHS. Early findings indicate that telehealth can lead to:
- 45% reduction in mortality;
 - 21% reduction in emergency admissions;
 - 24% reduction in elective admissions;
 - 15% reduction in A&E visits;
 - 14% reduction in bed days; and
 - 8% reduction in tariff costs.
- 2.9 We are now waiting for the detailed papers which will help us best understand which groups of people will benefit most from this type of service and how the best outcomes can be achieved in terms of improved quality of life, reduced unnecessary hospital admissions and a range of other important indicators.
- 2.10 The government believe at least three million people with long term conditions¹⁰ could benefit from using telehealth and telecare over the next five years.

⁸ DH: Whole system demonstrator programme - Headline findings (December 11) <http://www.dh.gov.uk/health/2011/12/wsd-headline-findings/>

⁹ DH: Three million lives will be improved through hi tech health project (January 2012) <http://nds.coi.gov.uk/Content/detail.aspx?NewsAreaId=2&ReleaseID=422699&SubjectId=2>

- 2.11 At the international congress for telehealth and telecare on 7 March 2012, Paul Burstow said: "The widespread adoption of telehealth and telecare as part of an integrated care plan will mean better quality of care and greater independence for people with long-term conditions ... Delivered from the front line it could save the NHS up to £1.2 billion over five years."¹¹

Targeted Support and Telecare in Staffed Housing for People with Intellectual Disabilities: Impact on Staffing Levels and Objective Lifestyle Indicators (January 2012)¹²

- 2.12 This study set out to look at the quality of life consequences of living with less intensive staff support in a variety of settings as a result of the provision of more targeted staff allocation along with telecare. It included 91 people living in 33 settings. 63 of the participants in 25 of the settings received the support/telecare intervention at staggered intervals. The authors conclude that the combination of targeted support and telecare in the settings involved did not have any adverse short-term affect on the quality of life of the participants, but it did reduce staff input. They suggest therefore that telecare interventions may have a role to play in managing future community based support environments for people with learning disabilities. They point out however that this was a small study and that further research would be needed to more fully explore how such efficiencies may be achieved in practice.

Making an evidence-base - Delivering Assisted Living Lifestyles at Scale¹³

- 2.13 In 2011, the DALLAS project (Delivering Assisted Living Lifestyles at Scale) was launched with a £23m budget, DALLAS seeks to establish up to 5 communities across the UK to show how assisted living technologies and services can be used to promote well-being and provide top quality health and care, enabling people to live independently. It seeks to do so 'at scale' with more than 10,000 people to be provided with support in each community. The Telecare

¹⁰ This is from the 15.4 million people living in England with at least one long term conditions (defined as one that cannot be cured but can be managed). The expectation is that this figure will increase to around 18 million over the next 20 years with the main increase being those with multiple long term conditions.

¹¹ Department of Health: Telehealth and telecare could save NHS £1.2 billion

<http://www.info4local.gov.uk/filter/?item=2101617>

¹² Targeted Support and Telecare in Staffed Housing for People with Intellectual Disabilities: Impact on Staffing Levels and Objective Lifestyle Indicators, Perry, J. et al., in Journal of Applied Research in Intellectual Disabilities, 25: 60–70. January 2012.

<http://onlinelibrary.wiley.com/doi/10.1111/j.1468-3148.2011.00647.x/abstract>

¹³ Kings Fund: Telehealth and telecare - Key points and background http://www.kingsfund.org.uk/topics/technology_and_telecare/technology_and.html

Learning and Improvement Network (LIN) supports this work by providing a national network to aid the application of telecare and telehealth to aid the delivery of housing, health, social care, and support services for older and vulnerable people.

3. TELECARE AND TELEHEALTH

TELECARE - GENERAL

- 3.1 Telecare is a catch all term for a range of assistive technologies that involve the use of electronics, telecommunications and information systems related to continuous, automatic and remote monitoring to manage the risks associated with independent living.
- 3.2 Telecare includes simple devices such as self activated pendant alarms.
- 3.3 A range of devices can be added to an alarm to provide alerts that help manage risk and support the delivery of care. The devices broadly fall into two categories: those that have to do with managing risk in the home environment to support older and disabled people to continue living safely in their own home and provide service users with enhanced information, and those that address risks arising from the health or mobility issues that an individual may be experiencing.
- 3.4 In the first category would be included devices that: Detect flooding (arising from taps being left on, for example); Extreme heat detectors; Gas and smoke detectors; and, Devices that detect movement when people enter or leave a room or a building. All these can be added by way of an "overlay" to a standard alarm.
- 3.5 The second category of devices include: Activity monitors that, for example, will detect if someone leave their bed in the night and does not return within a pre-determined time (i.e. Bed occupancy sensors), detect when people have had a fall, and more specialised equipment that will detect when people are experiencing an epileptic fit (i.e. Epilepsy sensor mats).
- 3.6 In all cases the device will raise an alert with a central monitoring station and the staff there can contact the individual. If there is no response, or if it becomes evident that there is a problem that the individual cannot resolve for themselves then the staff will contact an appropriate individual or agency to respond: whether a carer, doctor or the emergency services.
- 3.7 Early applications of telecare tended to focus on those at greatest risk, for example people living alone with dementia, but now

applications have become much more diverse. The installation of devices in the first category: those that protect against risk in the home environmental are now recognised as part of standard equipment for the homes of people who may be vulnerable.

- 3.8 Devices that support the management of risk in relation to specific health and mobility issues are increasingly recognised as part of the array of responses that a modern Community Equipment Service can offer to those who need support.

The people who use Telecare

- 3.9 The main people using these services are older adults and carers. There are also people with physical disabilities, learning disabilities and mental health needs. Appendix 2 summarises the main points of five telecare case studies. The names used are not the real names of service users.

- 3.10 Older people can remain living in their own home reduced risk of entering residential care when they and family know that assistance can be provided with the press of a button, managing risk such as leaking gas cooker on, wondering at night, falling. In 2004, the Audit Commission report "Older people - Implementing telecare"¹⁴ said that telecare could support independent living for older people by:

- Reducing hospital stays by supporting earlier discharge
- Virtual visiting – for example, by monitoring the safety of older people with dementia who live alone
- The use of reminder systems – for example, reminding older people to take their medication
- The use of home security and social alarm systems – for example, smoke and heat detectors, alarm systems and crime surveillance, as well as monitors that pick up any unexpected changes to an older person's routine.

- 3.11 These technologies can help older and vulnerable people to live independently for longer in their homes and reduce the need to move into supported housing of any kind or care homes. They can increase quality of life immediately, reduce the number of falls and accidents leading to hospital admissions and enable greater independence of older and disabled people without them moving home.

¹⁴ Audit Commission: Older people - Implementing telecare (September 04) http://www.audit-commission.gov.uk/localgov/nationalstudies/Pages/olderpeople-implementingtelecare_copy.aspx

- 3.12 People with significant levels of disability and increased their independence because they are able to summon assistance as required rather than having staff remaining with them e.g. overnight.
- 3.13 Telecare can reduce stress experienced by carers. Monitoring technology can give them a reassurance that the person cared for is OK (e.g. persons with dementia living at home). It can also allow them to carry out daily activities in the knowledge that if the cared for person requires their support they will be alerted immediately.
- 3.14 People suffer from mental ill-health, mental ill-health can be a co-morbidity for people with a chronic physical illness and it can also affects carers. Depression and anxiety are likely to have been a factor in all of the hypothetical case studies. Augmented services - Cognitive Behavioural Therapy on the computer, on-line self-help groups, helplines (text and phone), and reputable on-line information resources - all have a role to play in managing these conditions.

Recommendation i:

The provision of aids and preventative technology should be a priority to meet care needs and reduce the overall need for some individuals to move into extra care schemes.

Recommendation ii:

All plans to facilitate new developments of accommodation for older people should consider the inclusion of installation of assistive technology, in response to individually assessed need. Where major refurbishment of existing specialist accommodation is envisaged then arrangements for providing assistive technology should be included.

Confidence using new technology

- 3.15 At the Working Party's meeting on 16 January 2012, Ms Shah and Ms Dize responded there was a need for user confidence and for support to be available if required. Ms Dize and Mr Cabello added that volunteers (such as those of Age Concern) could play a useful role in helping other persons to be more confident in their use of new technology.

Recommendation iii:

We support the voluntary sector in its efforts to promote digital inclusion, particularly in the up-take of appropriate assistive technology.

Recommendation iv:

Adult and community learning can help in the work to equip residents with the skills to use assistive technology. The Adult and Family Learning Team should explore if programmes, such as their Moodle programme¹⁵, could be adapted for this purpose.

Recommendation v:

High quality information and timely advice must be provided for families, carers and service users, to enable them to understand their assistive technology options to assist them to make informed choices to address their needs.

Smart Homes

3.16 A smart home can:

- Provide an environment that is constantly monitored to ensure the householder is safe (activity monitoring)
- Automate specific tasks that a householder is unable to perform (turning lights on or off)
- Provide a safe and secure environment (alerting the householder of potentially dangerous activities)
- Alert helpers or carers should the householder be in difficulties (through linking to a local community alarm scheme)
- Enable and empower the user
- Facilitate in the rehabilitation of householders (by giving prompts that be auditory and/or visual).

3.17 The Working Party decided on 16 January 2012 that it no longer wished to visit the Smart Home at Newham instead it tasked officers to carry out an online search of 'virtual' smart homes.

TELECARE - KENSINGTON AND CHELSEA

3.18 The Adult Social Care context for telecare is set out in the next three sections: Our Goal: Delivering 'better for less'; Making best use of technology; and, Budget changes 2011-2012.

¹⁵ Moodle.org: open-source community-based tools for learning
<http://moodle.org/>

Our Goal: Delivering 'better for less' ¹⁶

3.19 Better for less is the term we have chosen to encapsulate our end goal. Implicit in this concept are the following core outcomes:

- More people will stay healthy and independent for longer, able to live life as they choose, to achieve their personal ambitions and to play an active part in their local community.
- People who use our services will be supported in a way which maximises self-reliance, choice and opportunity, whilst also ensuring adequate protection.
- People will have a positive experience of the support they receive.
- Public money will be used to support the delivery of the above outcomes in the most cost effective and efficient way possible, so helping to manage the impact of continuing budget reductions.

Making best use of technology

3.20 We will expand the use of technology, both to assist staff in carrying out their work more efficiently and to benefit service users and the wider public. This will include:

- The use of assistive technology such as telecare, which is now our first offer to anyone approaching us for support.
- Further development of our People First website, to widen the content and include interactive functions.
- Promoting internet use amongst our target audience by ensuring that wherever feasible, the services we fund provide computer access, training and support as an integral part of their offer.
- Exploring the use of technology to enable people to submit feedback about the support they receive.

3.21 The Councils websites are discussed in paragraphs 3.65 – 3.65. Other available and low-cost resources are listed in paragraphs 3.66-3.69.

Budget Changes Summary 2011-2012

3.22 These goals are expressed in monetary terms in the Adult Social Care Budget Changes Summary¹⁷, which includes:

¹⁶ Appendix 1: Royal Borough of Kensington and Chelsea "Mandate for Adult Social Care and Integration with Health"

<http://www.rbkc.gov.uk/committees/Document.ashx?czJKcaeAi5tUFL1DTL2UE4zNRBcoShqo=qvECjWs7M4phZkLqzTc5%2bPd68K2UCJBHTCaBRTjuGycsqKTjGvxBVw%3d%3d&mCTIbCubSFFXsDGW9IXnlg%3d%3d=hFflUdN3100%3d&kCx1AnS9%2fpWZQ40DXFvdEw%3d%3d=hFflUdN3100%3d&uJovDxwdjMPoYv%2bAJvYtyA%3d%3d=ctNJff55vVA%3d&FgPIIEJYlotS%2bYGoBi5olA%3d%3d=NhdURQburHA%3d&d9Qij0ag1Pd993jsyOJqFvmyB7X0CQK=ctNJff55vVA%3d&WGewmoAfeNR9xqBux0r1Q8Za60lavYmz=ctNJff55vVA%3d&WGewmoAfeNQ16B2MHuCPMRKZMwaG1PaO=ctNJff55vVA%3d>

¹⁷ Appendix 2: Adult Social Care - Revenue Budget 2012-13

<http://www.rbkc.gov.uk/committees/Document.ashx?czJKcaeAi5tUFL1DTL2UE4zNRBcoShqo=Rq1JijJZrqrW5TLh2k%2bIJNYNyn5737z3xY3%2fHL4aF7tQObOR4F7KA%3d%3d&mCTIbCubSFFXsDGW9IXnlg%3d%3d=hFflUdN3100%3d&kCx1AnS9%2fpWZQ40DXFvdEw%3d%3d=hFflUdN3100%3d&uJovDxwdjMPoYv%2bAJvYtyA%3d%3d=ctNJff55vVA%3d&FgPIIEJYlotS%2bYGoBi5olA%3d%3d=NhdURQburHA%3d&d9Qij0ag1Pd993jsyOJqFvmyB7X0>

- £150,000 reduction in the home care budget through use of reablement and telecare
- £230,000 reduction in placements budgets through use of reablement and telecare services together with effective purchasing of essential placements to ensure value for money.

The service in Kensington and Chelsea

- 3.23 The telecare used in Kensington and Chelsea helps people manage their lives and stay safe and independent their own homes as long as possible. People can remain living as independently as possible because the telecare provides a way to summon assistance during an emergency - 24 hours a day, 365 days a year. This can allow them to manage a level of risk as they go about their daily lives.
- 3.24 The self activated pendant alarms are provided free of charge to all residents in Kensington and Chelsea's sheltered housing schemes. These alarms are offered as part of the standard specification and all residents must opt in. Housing pay the support charge for residents on housing benefit and all other sheltered housing residents must pay the charge themselves.
- 3.25 The more sophisticated telecare services are currently provided to people who have had a Community Care Assessment and who have been assessed as eligible for Adult Social Care funded services.
- 3.26 All Council provided telecare devices, including the pendant alarms, are connected to the Community Alarm Service (CAS) monitoring centre. The CAS is operated by the Kensington and Chelsea Tenant Management Organisation (TMO). Through the night the telephone response service is provided by a call centre service run by Tunstall. The Community Alarm Service has locally based staff available to respond 24 hours per day, seven days per week.
- 3.27 When a telecare alarm or sensor is activated a CAS officer will attempt to make contact using the electronic intercom service that is installed as part of any telecare package. The CAS officer will check with the person to see if they require assistance, and whether they would like medical support. The CAS officer will then either:
- a) Alert the persons' emergency contact, if they have subscribed to the 'monitoring' service
 - b) Attend the persons' house themselves, if they have subscribed to the 'visiting' service. In the case of the visiting service, CAS

guarantees that they will attend within thirty minutes of the alarm being raised.

Numbers and spend

- 3.28 In Kensington and Chelsea there are approximately 1,600 people supported by the Community Alarm Service. At any one time there would be about a further 675 people who are using telecare products funded by Adult Social Care.
- 3.29 Once all the Housing funded community alarm contracts are combined, the total contract with the TMO will be £287k per year. Of this ASC contribute £160,000. This funds the provision and maintenance of the equipment provided, the costs of the telephone handling and response service and a management fee.
- 3.30 People who receive telecare equipment and support are currently charged a monitoring fee of £13 per month or a monitoring and response fee of £35 per month. People who have been discharged from hospital and are being supported by the reablement team are able to use the service at no cost for up to six weeks.

Assistive Technology/Telecare Fast Track Programme

- 3.31 Kensington and Chelsea, Westminster and Hammersmith and Fulham are now members of a Department of Health funded programme, managed by the Joint Investment Partnership, called the Assistive Technology/Telecare Fast Track programme.
- 3.32 Signatures of support were obtained from the Directors of Adult Social Care from each borough as well as the Chief Executive of Inner North West London PCTs (INWL). These were requested to express a commitment to participation in the programme and to developing a local vision for further development of telecare services. So far we have not agreed a tri-borough approach but the Project Leads from each borough are in contact. There are different service arrangements in each borough but the main issues are the same.
- 3.33 Membership requires the Council to:
- Attend monthly workshops and contribute to a community of practice
 - Review current telecare arrangements
 - Assess local need and develop a vision for telecare
 - Evaluate cases to establish the current costs and outcomes.
 - Set and monitor targets.

- 3.34 There will be ongoing support from the Programme Manager, in the form of sharing of best practice and there may be access to someone who has completed a number of evaluations across the country.
- 3.35 Subsequent to this, there was an approach by the London Ambulance Service who want to work with the three boroughs, INWL and CLCH to improve arrangements for people who have fallen at home. A separate project brief is being developed across the three boroughs with the NHS partners and work is underway to identify the resources needed to project manage this work.

Future work

- 3.36 Through the mandates for Adult Social Care, each of the three boroughs has made a commitment to support the development of telecare and assistive technology to help people retain their independence and continue living in their own homes. There is now an opportunity to build on this support and to develop a more coordinated approach across the three boroughs.
- 3.37 The current contract arrangements with the TMO for the Community Alarm System have been reviewed and work is underway to bring a number of separate agreements between housing providers and the TMO under one contract between the Council and TMO.
- 3.38 Adult Social Care is involved in work with the telecare leads in the other boroughs to look at options for a tri-borough service. Although the issues are the same in each borough, the arrangement of services is different and this needs a thorough review. In the meantime there have been local negotiations with the TMO to ensure that the current arrangement is delivering the best outcomes and value for money.
- 3.39 The Working Party at its 14 November 2011 meeting recognised the unique opportunity offered by Tri-borough and the increased purchasing power provided.

Recommendation vi:

The inner north west London local authorities (Westminster, Kensington & Chelsea and Hammersmith & Fulham) should make the most of their increased purchasing power gained by tri-borough working in buying of assistive technology.

Recommendation vii:

To ensure the inner north west London local authorities have the right provision of assistive technology in the longer term, we recommends:

(a) Tri-borough Adult Social Care undertakes research to establish future assistive technology needs.

(b) Tri-borough Adult Social Care compares and contrasts the current position of assistive technology within the three boroughs.

(c) The three boroughs and NHS agree a common vision for the future assistive technology services. This could include:

A common vision for assistive technology services

Aims:

- To help more people live at home for longer, safely and with security by promoting the use of assistive technology in Westminster, Kensington & Chelsea and Hammersmith & Fulham, thus making the best use of limited resources to support their safety and wellbeing
- To should support the delivery of efficient and effective services through an integrated approach within wider care and support models for people with community care needs living in the community.

Objectives:

- Increasing choice and independence for service users
- Contributing to a range of preventative measures
- Supporting hospital discharge and intermediate care services
- Supporting self care
- Supporting the management of long term conditions at home
- Increased use within mainstream services. Local care agencies need to think about what technology patients need first. Then think about what they need to deliver in a coordinated fashion.
- Support effective procurement to ensure that assistive technology services grow as quickly as possible.

Outcomes:

- Increase the availability, year on year, of assistive technology packages for frail and vulnerable people
- Reduce the number of avoidable emergency admissions and readmissions to hospital
- Increase the speed of discharge from hospital once clinical need is met;
- Reduce the use of care homes
- Improve the quality of life of users of assistive technology services
- Reduce the pressure on (informal) carers
- Extend the range of people assisted by assistive technology services

- Better coordinate the different agencies delivering assistive technology.
- Better integration of data between health and social care. This ranges from sharing data between organisations, the JSNA to single assessment.
- To achieve efficiencies (cash releasing or time releasing) from the investment in assistive technology.

When developed, the vision should be shared with the local Health and Wellbeing Boards. The Health and Well-Being Strategy(s) of the three local Health and Well-Being Boards' should include the development of assistive technologies as a way to promote independence and good health.

(d) We believe the vision should be the basis for investment decisions to be made to expand assistive technology services in the knowledge it will bring a better service. An action plan should be developed to set out the work to be carried out to deliver a co-ordinated assistive technology service across the three boroughs.

3.40 Currently, telecare is charged for in a different way to other social care services whilst this is happening it can be more difficult to include it in the delivery of services. There is the potential for perverse incentives because:

- People who get home care for free can find they need to pay when it comes to telecare.
- In some cases when people are paying for telecare this can be considered disability related expenditure when they are being assessed for their financial contribution for their social care costs.

Recommendation viii:

Tri-borough adult social care should carry out further work looking at the charging for telecare to ensure there are no perverse incentives restricting up-take.

3.41 Councils are taking a variety of approaches to the funding and charging of telecare. In some places it is provided as a free service for a year.

Recommendation ix:

The provision of an assistive technology service for people who do not meet the eligibility criteria that are willing to pay should be

further explored. Assistive technology equipment and support should be offered to all residents enabling them to live safely and independently in their own home. A tri-borough charging policy could be considered to allow people to join the service when not eligible for it.

TELEHEALTH - NHS

- 3.42 Telehealth solutions and assistive technology specifically designed to meet health needs are developing rapidly and there have been several pilots across the country. As the number of people living with long-term conditions rises, NHS commissioners and providers are seeking more effective and efficient models of care to support patients to manage their own conditions successfully.
- 3.43 The report "Accelerating Innovation - The Power of the Crowd"¹⁸ was published by management consultants KPMG and the Manchester Business School on 27 March 2012. It said, "The case for eHealth has never been more compelling yet its performance has never been more mixed". However, Government-led schemes were being scaled back due to "significant challenges" ... "While some projects have ultimately been successful, more often they have lost momentum after the pilot phase, collapsed under their own complexity, or become irredeemable thanks to spiralling implementation costs." ... "The UK has scaled back their eHealth initiatives, reflecting the significant challenges faced by some of the larger, government-led programmes."
- 3.44 On 12 December 2012, the Working Party noted the report of the Whole System Demonstrator sites and the considerable financial savings and quality improvements made through the use of telehealth.
- 3.45 The Working Party also noted the Prime Minister David Cameron in a speech at the FT Global Pharmaceutical and Biotechnology Conference on 6th December 2011, commenting on the initiatives to support life sciences and medicine, said,
- "Just look at our approach to telehealth – telemedicine – getting new technology into patients' homes so they can be monitored remotely. We've done a trial, it's been a huge success and now we're on a drive to roll this out nationwide with an aim to improve three million lives over the next five years with this technology ..."*

¹⁸ KPMG: Accelerating Innovation - The Power of the Crowd
<http://www.kpmg.com/global/en/issuesandinsights/articlespublications/accelerating-innovation/pages/default.aspx>

*Now this will make an extraordinary difference to people. Diabetics will be taking their blood sugar levels at home and having them checked remotely by a nurse; heart disease patients will have their blood pressure and pulse rates checked without leaving their home at all. This is dignity and convenience and independence for millions of people. And it's not just a good healthcare story; it's going to put us miles ahead of other countries commercially too as part of our plan to make our NHS a driver of innovation in UK life sciences."*¹⁹

Recommendation x:

We support local initiatives by our CCGs and CLCH to increase the uptake of telehealth in the NHS in line with the government's "Three Million campaign". Assistive technology solutions need to be coordinated with Tri-borough adult social care and Tri-borough children's services.

Recommendation xi:

Local CCG Out Of Hospital Strategies will need to set out the ways that assistive technology can be used to address needs.

- 3.46 The Working Party's attention was brought to the National Institute for Health and Clinical Excellence (NICE) studies on Guided Self Help. For example, the recommendation of use of computerised cognitive behavioural therapy²⁰ as a low-intensity psychosocial intervention.

Telehealth in Kensington and Chelsea

- 3.47 NHS North West London has said "there is significant scope for both avoiding admissions and for shifting care for patients who do require admission out of hospital sooner through early facilitated discharge. These opportunities will be realised most effectively when they are enabled by effective triage systems (e.g. NHS 111) and supported by technologies that increase the productivity of services (e.g. Telehealth/virtual wards.)"²¹
- 3.48 NHS Kensington and Chelsea said in its vision for long term conditions that "an increased emphasis on self management and use

¹⁹ British Journal of Healthcare Computing: Government says it's time to roll out telecare <http://www.bj-hc.co.uk/bjhc-news/news-detail.html?news=1982&lang=en&feed=111>

²⁰ NICE Guidance: The treatment and management of depression <http://www.nice.org.uk/nicemedia/pdf/CG90NICEguideline.pdf>

²¹ NHS North West London Commissioning Strategy 2012 Plan Part B. Page 63. http://www.northwestlondon.nhs.uk/publications/2012_Commissioning_Plans

of telemedicine will be a priority of the long term conditions work programme."²² NHS Kensington and Chelsea plan to "introduce more telemedicine to support self management and patient participation in their care."²³

- In COPD, by 2015 NHS Kensington and Chelsea expect patients in a community based respiratory service to "be participating in self management through the introduction of telemedicine."²⁴
- In cardiology a practice based commissioning project will be delivered in the following five different pathways (Chest pain, Hypertension, Heart failure, Arrhythmia and Chronic Heart Failure). "Where possible, telemedicine will be used in each of these pathways."

An integrated response of telecare and telehealth

3.49 Paul Burstow, Minister of State for Care Services, said, "We need local providers and local commissioners to look at the needs of their communities and make decisions based on the clinical and social needs of their patients. If technology can help, then we need to remove all barriers to it playing its part."²⁵

3.50 Telehealth and telecare could be combined to provide a common platform to integrate care for people requiring both health and social care support, but relatively few people are judged suitable for joint care. This is related both to the nature of the technology and the profile of those people who can use it, and to the different ways in which health and social care systems assess who is most 'at risk', which makes it difficult to assess which individuals might best benefit from an integrated response to their care needs. More understanding of their benefits of care integration in the home environment is required to convince commissioners and providers of its potential. Another potential barrier to taking an integrated approach between telecare and telehealth is that often there has been an interoperability of the technology between service sectors.

Recommendation xii:

²² NHS Kensington and Chelsea Commissioning Strategy 2010-15, Paragraph 4.7, Page 44. <http://82.110.121.126/media/12767/commissioningstrategy2010-2015.pdf>

²³ NHS Kensington and Chelsea Commissioning Strategy 2010-15, Page 45. <http://82.110.121.126/media/12767/commissioningstrategy2010-2015.pdf>

²⁴ NHS Kensington and Chelsea Commissioning Strategy 2010-15, Page 47. <http://82.110.121.126/media/12767/commissioningstrategy2010-2015.pdf>

²⁵ Speech: Wednesday 7 March 2012, Paul Burstow, 2ND International Congress on Telehealth and Telecare <http://mediacentre.dh.gov.uk/2012/03/07/speech-wednesday-7-march-paul-burstow-2nd-international-congress-on-telehealth-and-telecare/>

As a way to promote integration we recommend that a pilot “assistive technology improvements project” is set up between the NHS and social care, focused on a specific problem of vulnerable older people and employing the deployment of vital signs monitoring.

- 3.51 In terms of a vision, Professor Barlow also said at the 5 March 2012 meeting that technology could lead to a more holistic delivery of care. It could support more self-care, decentralise hospital services by moving them out into the community and take some of the demands out of the system.

Recommendation xiii:

There needs to be a coordinated effort locally for a joint approach between health, social care and housing in assisted technology to ensure the best use is made of the technology at a time of reduced resources. The three local Councils, NWL PCTs, CLCH and local CCGs are asked to co-ordinate telecare with telehealth to ensure compatibility and reduce duplication.

Potential barriers and pitfalls to avoid

- 3.52 At the Working Party’s meeting on 5 March 2012, a number of the barriers to adopting assistive technology were discussed.
- 3.53 A potential pitfall from using assistive technologies is from the implications for professionals and organisations of changing their established methods of practice. There will be a need to train staff in different ways of interacting with patients/clients.
- 3.54 At the Working Party’s meeting on 16 January 2012, the Chairman raised the issue of human contact. Mr Cabello said that for housebound persons even a 10 minute face to face is important. Ms Mustapha added that with face to face contact 'the smell test' is important in checking a person's wellbeing.
- 3.55 Assistive technology may be incorrectly perceived as a substitute for other types of support. This may place a person greater risk (e.g. reducing support from home care inappropriately). Assistive technology cannot replace traditional social worker care (such as systems of assessment etc) but could enhance it and allow resources to be focused on those in greatest need. It is important to many service users to maintaining human contact and avoid isolation.

- 3.56 There was a need to get the balance right between technology and human contact; technology should not remove human contact. The package for each service user must relate to that person and not to the technology.
- 3.57 The Chairman thought that the balance right between technology and human contact needed to be assessed on a case by case basis; the technological mix dependent on each individual.
- 3.58 Human nature is a major factor that can inhibit the adoption of new technology – people don't like change. The reality is, when presented with an alternative way of doing something, we tend to overvalue the way we already do it while undervaluing the new option. The benefits from new technologies will need to be clearly communicated with staff.
- 3.59 There are ethical issues to consider around the use of closer monitoring (for example, how to explain the technology and get consent from someone with dementia). Privacy, security and data sharing issues all need to be carefully managed. There are protocols that need to be carried out.

Recommendation xiv:

The use of technology should not lead to a service of impersonal care. There should be a detailed staff training programmes in assistive technology to ensure they understand the benefits and that it is not a substitute for other types of support.

Recommendation xv:

Assistive technology user's needs should be reviewed on an annual basis at a minimum.

- 3.60 At the Working Party's meeting on 16 January 2012, Ms Leech and Ms Shah stated that SKYPE can be used to reduce isolation.

The challenge for commissioners and providers

- 3.61 The need to decide who should pay for what can create an organisational barrier.
- 3.62 Commissioners and service providers across health and social care will need to plan carefully for their scaled programmes. Many commentators have cautioned about the importance of ensuring that

services are reconfigured and where possible integrated prior to developing a scaled service. The 'Three Million Lives' initiative envisages that public and third sector organisations will need to work in partnership with industry and service providers to develop scalable models. The detailed reports from the WSD Programme will help us better understand the potential beneficiaries of technology-supported services allowing better planning and use of resources.

THE PROMOTION OF ASSISTIVE TECHNOLOGY FOR ALL

3.63 The council also provides a service for people who fall outside the eligibility criteria. The self activated pendant alarms are also available for private purchase to all residents of Kensington and Chelsea and a number of older people chose to do this, purchasing the equipment and paying the monthly monitoring and response charge.

3.64 Kensington and Chelsea has developed a "People First" website.

People First website

In Kensington and Chelsea there is also the People First website. There is going to be an improved offer of information and advice to the whole community to make it easier for any local resident to find out about their support options, so enabling many people to make their own arrangements, without recourse to public services.

- Through the People First website, we will provide comprehensive information on staying independent and related sources of support. The initial aim is to establish the site as a key resource for front-line staff in all sectors, supporting the delivery of clear, consistent information to the public in a cost efficient way.
- Bearing in mind that regular internet use is still quite limited amongst people in need of adult social care, the website will be backed up by a Council-run phone-line for information and advice. To broaden our offer further, we will continue to commission a range of information and advice services in the voluntary sector. These will have a particularly important role for groups who are less likely to access Council services, including members of BME communities and self-funders.
- Recognising the vital role of informal carers and the challenges they may face, we will continue to provide information, advice and support specifically geared to their needs, through the Carers Kensington & Chelsea service.
- In partnership with service providers, we will pilot new ways of improving access to information and advice, while also easing pressure on frontline services - an example being the social care 'navigator' role currently being tested in two local GP practices.

People First <http://www.rbkc.gov.uk/healthandsocialcare/peoplefirst.aspx>

3.65 The three councils provide specific web-based information on telecare options. For example:

Kensington & Chelsea	Westminster	Hammersmith & Fulham
<p>The Council's website and the People First website both direct users to the webpage "Alarms and Telecare in Kensington and Chelsea"</p> <p>http://www.rbkc.gov.uk/healthandsocialcare/peoplefirst/livingathome/living safelyathome/alarmsandtelecare.aspx</p>	<p>The Council's website has the webpage "Westminster City Council – Telecare"</p> <p>http://www.westminster.gov.uk/services/healthandsocialcare/adultservices/disabilities/telecare/</p>	<p>The Council's website has the webpage: "Careline and telecare - Hammersmith & Fulham"</p> <p>http://www.lbhf.gov.uk/Directory/Health and Social Care/Assistance at home/Care and scan and community alarm services/40213 Careline and telecare.asp</p>
<p>"Help when you need it most - Using telecare to promote independence and reduce risks in the home" leaflet:</p> <p>http://www.rbkc.gov.uk/pdf/Telecare%20leaflet%20Jan%202010%20low%20res.pdf</p>	<p>"How the Westminster Community Alarm Service and Telecare can help you" leaflet:</p> <p>http://transact.westminster.gov.uk/docstores/publications_store/Telecare%20booklet%20March%2007.pdf</p>	<p>"Careline leaflet"</p> <p>http://www.lbhf.gov.uk/Images/Careline%20March%202010_tcm21-128770.pdf and</p> <p>"Telecare leaflet"</p> <p>http://www.lbhf.gov.uk/Images/Assistive%20technology%20leaflet%20Aug%2009_tcm21-128832.pdf</p>

Recommendation xvi:

The Tri-borough Adult Social Care service should communicate clearly how people might find telecare services through the most appropriate media. Telecare information for the public should be co-ordinated so there is a tri-borough approach.

Available resources

- 3.66 There are resources available such as "Get Connected"²⁶ a support programme to enable providers of care for adults in England to access information and communication technology more effectively.
- 3.67 People are using of technology for "self-tracking"²⁷ to measure everyday activities and improve quality of life.

²⁶ SCIE: Get Connected
http://www.scie.org.uk/workforce/getconnected/index.asp?dm_i=405,PLRA,Y19G2,22B7F,1

²⁷ The Economist: Counting every moment
<http://www.economist.com/node/21548493>

3.68 Others are using numerical tools for more self knowledge such as Qualified Self²⁸

3.69 There are now many available apps that could be better promoted such as:

- apps²⁹ prescribed by GPs.
- Mental health apps³⁰.
- vital signs camera app³¹ to measures your heart rate and breathing rate.
- a smartphone app³² to help people identify and resolve any safety issues in their home, from the Electrical fire safety council.
- an iphone app³³ to help people provide life-saving assistance to victims of Sudden Cardiac Arrest.

Recommendation xvii:

The Councils should promote the evidence-based low-cost technological resources that help people remain healthy or more independent in their homes.

4. CONCLUSION

General

4.1 Through the process of taking evidence the Working Party heard about many technological advances. For example: Last year, Westminster Council and the Royal Borough of Kensington and Chelsea announced a deal with O2 to provide free WiFi in parts of the boroughs in time for the Olympics.

Recommendation xviii:

Local agencies must work to keep up with advances in

²⁸ Quantified Self: <http://quantifiedself.com/>

²⁹ Department of Health: GPs to 'prescribe' apps for patients
<http://www.info4local.gov.uk/filter/?item=2093330>

³⁰ More detail is available in the NPU article - Mental Health Apps: Like A 'Therapist In Your Pocket' by Michelle Trudeau

<http://www.npr.org/templates/story/story.php?storyId=127081326>

³¹ Philips Vital Signs Camera app <http://itunes.apple.com/us/app/vital-signs-camera-philips/id474433446?mt=8>

³² Download the Electrical fire safety council's smartphone app, to help people identify and resolve any safety issues in their home, from: <http://www.esc.org.uk/public/news-and-campaigns/press-releases/news/article/millions-in-uk-risking-lives-with-basic-electrical-blunders/>

³³ More information is available at: <http://mapsandapps.dh.gov.uk/2012/02/07/heroic-app-story/>

assistive technologies. The adoption of assisted technologies should be done with reference to any NICE guidelines/technological appraisals.

- 4.2 Inner west London is a most technologically enabled area. More residents here are connected to the internet and use gadgets such as smartphones and tablet devices than anywhere else in the Country.³⁴ The three local authorities can further harness this by expanding the online options for contacting the Councils, improving their websites, and stepping up the use of digital publications to save money for the taxpayer.
- 4.3 It is critically important to recognize pitfalls and take steps to make sure the right technology solution gets implemented. A digital strategy could encompass – and draw the links between – fixed and mobile broadband infrastructure, Public Sector Networks, assistive technology, education needs, smart meters etc. Institutional barriers, reflected by incompatible technological systems, should be planned against so there is a better ability to share information across the public sector, where appropriate.

Recommendation xix:

We support any drive to efficiently technologically-enable local government and co-ordinate the use of technology in the centre of London. We recommend that the three local Councils develop a holistic digital strategy for inner north west London.

Assistive technology

- 4.4 The potential of telecare systems to support the independence and well-being of older, vulnerable or disabled people has been clearly demonstrated in a number of studies. The basic technology is robust. The challenge for telecare services is now to move it into the mainstream service, in order to support the independence and well-being of an increasingly large number of potential users.
- 4.5 For telecare to become mainstream, commissioners need robust evidence on its cost-effectiveness, as well as shared learning on targeting relevant populations and service design.

³⁴ WCC press release (14 March 2012): Westminster Council revealed data on residents' technological habits
<http://www.westminster.gov.uk/press-releases/2012-03/digital-revolution-paves-the-way-for-big-savings-a/>

- 4.6 As the current population gets older, people are likely to be more familiar with IT equipment such as mobile phones and computers. With these technologies service users could to greater extent manage their own health and the earlier they could be introduced to technological assistance the better. The closer that technological aids could be made to consumer technology the better.
- 4.7 In order to reap the full benefits the deployment of this technology it will be necessary to further integrate care systems.
- 4.8 Telecare is only one element of a much broader agenda to increase the use, and usefulness of technology in social care, in support of our wider policy objectives. There may be need of a Council-wide approach that encompasses consideration of the technology, capital investment, housing, health and social care policy, and the workforce issues that underpin all these areas.

Recommendation xx:

We request that the Tri-borough Adult Social Care provide a bi-annual report - in one, three and five years - to enable the Committee to monitor standards and improvements in telecare services.

The future

- 4.9 Rip Empson wrote, "Technology is in the process of bringing change to every piece of the health industry - wellness, fitness, healthcare, medicine - you name it. And as it always seems with introduction of new technologies, it's awe-inspiring how quickly they can transform entire industries yet, at the same time, make us realise just how far we have to go (or how far behind we really are)."³⁵

³⁵ FT: Connecting Patients and Doctors for Better Care
<http://www.ft.com/cms/s/0/f207a234-6a19-11e1-a26e-00144feabdc0.html>

APPENDIX 1: TERMS OF REFERENCE, SUB-GROUP MEMBERSHIP AND MEETINGS

TERMS OF REFERENCE

This review is intended:

- To consider evidence on the range and quality of assistive technology services in the tri-borough area. This will include:
 - Character examples of how people in some need of support (e.g. persons suffering from dementia, obsessive-compulsive personality disorder, diabetes, falls etc) could be assisted by technology;
 - talk to providers, possibly through a presentation or a visit;
 - visit the Smart Home at Newham; and
 - liaise with outside groups such as Age Concern Kensington & Chelsea (incorporating Sixty Plus), Open Age, and SMART.
- To consider an ideal vision (5-10 years from now) of how technology could be used to enhance person's independence and quality of life; and the implications for future proposals;
The vision would cover:-
 - Communication with persons supported;
 - Communication between the staff members of various agencies (joined up thinking was necessary);
 - What technology there was available to help persons supported.
- To suggest ways in which the Councils and their partners can improve the assistive technology support available to health/social care users and residents in the tri-borough area; and
- To make recommendations to the Cabinet Members and NHS bodies as appropriate.

ASSISTIVE TECHNOLOGY WORKING PARTY MEMBERSHIP

Members:

Councillor Louis Mosley (Chairman)
Councillor Terence Buxton
Councillor Bridget Hoier

Governance support:

Gareth Ebenezer, Governance Administrator

Tri-borough Adult Social Care officer support:

Henry Bewley, Senior Policy Officer
Sophie Jameson, Programme Assistant - People First

Paul Rackham, Head of Community Commissioning.
Martin Waddington, Director of Contracts, Business Intelligence and Workforce
Rachel Wigley, Director of Finance

People Who Gave Evidence

From NHS organisations:

Hakan Akozek, Chief Information Officer, Central London Community Healthcare

Dr Charles Bruce, North West London CLAHRC (Collaboration for Leadership in Applied Health Research and Care)

Stephen Tucker, Assistant Director - Borough Commissioning, Inner North West London PCTs

From the voluntary sector:

Cynthia Dize, Chief Officer of Age Concern Kensington & Chelsea

Tasio Cabello, Volunteer Services Manager, Age Concern Kensington & Chelsea

Helen Leech, Director, Open Age

Swati Shah, Head of Community Learning, Open Age

Amelia Mustapha, Director of SMART

Other experts:

Professor James Barlow, Imperial College Business School

Mike Kiely, Technical and Industry Lead for Broadband Delivery UK (part of DCMS).

SUB-GROUP MEETINGS HAVE BEEN HELD ON:

14 November 2011: A background paper was presented and an exploratory discussion took place.

12 December 2011: Officers presented a number of case studies (See Appendix 2).

16 January 2012: Meeting with the voluntary sector.

5 March 2012: Meeting with health professionals.

23 May 2012: To consider the final report.

APPENDIX 2: SUPPORTING PEOPLE USING ASSISTED TECHNOLOGY

CASE STUDIES

The benefits to local residents taking part in the scheme have been varied, as packages are specifically tailored to individuals' needs. Therefore these benefits can best be described using case studies, six of which are outlined below:

	Details of Case (anonymous - names have been changed)	How technology can help?
1.	Ben is a 56 year old man living in South Kensington who has uncontrolled epilepsy. He normally has two or three tonic-clonic epileptic seizures a week. He doesn't have any outward symptoms that alert him to the fact that he is about to have a seizure. When he has an attack he loses consciousness, has convulsions and is incontinent. As he has no warning he can sometimes fall awkwardly in the process. One of the main side effects of his epilepsy is therefore injury from falling. He lives in a 3 bedroom flat and has 2 live in carers who are with him should he have a seizure and need medical attention. He is therefore not very independent as he feels unsafe going anywhere by himself.	Falls alarm in the house could alert someone to go and check on him if suitable person could be found or alternatively alert telecare carers to visit and check he is ok. Epilepsy monitor in bed can alert to convulsions if he has a seizure when in bed. There are epilepsy monitoring bracelets being developed which measure changes in heart rate and warn someone they are going to have a seizure.
2.	Francis is a 50 year old woman living by herself. She has Chronic Obstructive Pulmonary Disease (COPD). This means she is constantly short of breath. Francis' husband died a few years ago and she also suffers from mild depression. Her daughters visit regularly but she still spends a lot of time alone in the house. She does not like going out by herself because she is afraid of having a flare up (where the symptoms suddenly worsen). She is very anxious about having a flare up when she is alone in case she can't get help and she can't breathe. She is prone to infections which make her symptoms worse if not treated early. When she gets anxious about her condition, she sometimes gets panicky, and this can exacerbate her breathing problems. Normally if her symptoms worsen and	<u>Telehealth monitoring.</u> Regular monitoring of vital signs as well as a symptom questionnaire which is submitted to triage manager, means that medical staff can be alerted if an infection or exacerbation is developing and take preventative steps such as steroid or antibiotic treatment. This reduces hospital admissions. Patients also learn to recognise symptoms/changes that indicate an infection or exacerbation so there are fewer 'false alarms' and reduced anxiety. Doctor via SKYPE? For someone who needs frequent appointments and struggles to get the doctors surgery this could be a solution for checkups - vital stats could be provided via telehealth equipment. Prescription sent straight to pharmacists.

	<p>she is struggling to breath she will ring her daughter or call emergency services (which sometimes results in a hospital admission). She feels like a burden on her daughter and so she tries to avoid doing anything that will cause shortness of breath (such as exercise or activity).</p>	
3.	<p>Max is a 24 year old man with learning disabilities. He moved out of his parent's home when he was 20 and has since been living in supported accommodation with 24 hour staff support. During his time in the supported accommodation, the staff have worked with Max to develop his independent living skills. He has learned to cook meals for himself and he has a regular routine for getting washed and dressed in the morning. Max still needs help with managing finances and correspondence but his support workers feel that he doesn't need 24 hour support and he is keen to have a place of his own. His family are worried because Max is very easily distracted and he has been known to leave the shower running or the oven on. Max is a very sociable and trusting person and likes to talk to people. His family are worried about bogus callers targeting him.</p>	<p>Bogus caller alarm that allows telecare centre to listen in to conversation and respond if necessary. Also a panic button to get someone sent out if necessary.</p> <p>Flood monitors, gas monitors, appliance monitors all inked to a monitoring centre which can call Max if an alarm is triggered. They can remind him to turn off the appliance or escalate if there is an emergency.</p>
4.	<p>Jennifer has quite advanced dementia. There have been two occasions recently when she has wandered from her house in the night. Her family really don't want her to move into residential care and she gets very upset whenever this is discussed. They would like her to stay in her house for as long as possible. They pay for her to have carers in the morning and evening but are increasingly feeling like she needs someone there all the time but are worried about the costs and the loss of independence for Jennifer. Although she is lucid most of the time she does get confused at times and when this happens she tends to forget what she is doing or where she is going. There have been occasions recently when she has left the taps running or left the fridge door open.</p>	<p>Individual sensors could be put in to monitor if Jennifer gets out of bed in the night and doesn't return, or opens the door at night. This could be supplemented with flood alarms, temperature alarms, gas sensors, appliance alarms.</p> <p>Could also link up all these alarms to monitor activity so that family has an impression of what Jennifer is doing during the day and night e.g.</p> <p>ADLife: System for using existing telecare sensors to provide combined ADL (Activities of daily living) and telecare functions. ADLife can be used to monitor ADLs such as how often a user visits the kitchen, bathroom or whether they have got up in the morning. ADLife web based information may assist care professionals to tailored care packages specifically to users' individual needs.</p>

		<p>Available for use in individual homes (Lifeline Connect+) and grouped housing systems (Communicall Connect). Possible connections include: movement detectors (PIRs); Electrical Usage Sensor; Door Usage sensor; Bed Occupancy Sensor; Chair Occupancy Sensor; Bed/Chair Occupancy Control Unit.</p> <p>GPS linked 'buddy' systems where authorised carers or professionals can locate Jennifer at any time as she wears a sensor. They can be set to alert if Jennifer goes a certain distance from home, if she gets in a vehicle or if she falls. They can also be set to monitor only at certain times of day (e.g. at night).</p>
5.	<p>Alfred has early stages of dementia and is taking anti-dementia medication. He also has a number of other chronic conditions which means he takes around 13 different tablets at 3 different times every day. The district nurse found recently that he was taking double doses of some medication by accident and sometimes forgetting to take his medication altogether. He now has a carer sent in for 3 x15 minute visits everyday to make sure he takes his medication. He has a niece who calls him every day and is available on her mobile in any emergencies.</p>	<p>Dossette boxes that can be loaded by the pharmacist and has timed alarm reminders to take pills.</p> <p>Alternatively pill dispensers that can be programmed to release a set of pills several times a day and also have an alarm to remind the patient to take them. These can also be programmed to ring through to a monitoring centre if the patient does not respond by taking the pills out of the box. The monitoring centre can then phone or visit the person to check on them.</p>

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1. Telecare Learning and Improvement Network

The Telecare LIN is the national network supporting local service redesign through the application of telecare and telehealth to aid the delivery of housing, health, social care and support services for older and vulnerable people.

<http://www.telecarelin.org.uk>

2. King's Fund - telecare and telehealth

To access information and resources on telecare and telehealth from the Kings Fund knowledge database.

http://www.kingsfund.org.uk/topics/technology_and_telecare/index.html

3. Telecare Aware

A "one-stop" for telecare and telehealth news updates.

<http://www.telecareaware.com>

4. Hft Virtual Smart House

This link is an online smart home demonstration aimed at the learning disability client group, but it is equally applicable to other service users. It is very useful for exploring the different types of technology currently available.

<http://www.hftsmarthouse.org.uk/>

5. Possum - independence

This webpage gives an interview with someone who uses smart technology in their home.

<http://www.possum.co.uk/eat/independence>

6. Open Hub Smart Homes

Open Hub are a digital design consultancy working on a project to look at technology for the community and for older people, amongst other things.

<http://www.openhub.co.uk/projects.htm>

7. Tomorrow Together

Tomorrow Together is a campaign about the future needs of older adults and why we need innovation to help people live independently in later life.

<https://tomorrowtogether.innovateuk.org/>

GLOSSARY

A&E	Accident and Emergency (Casualty).
Acute Services/Care	Medical and surgical care provided mainly in hospitals.
Adult Social Care	Provide a range of care and protection services for adults.
Assistive technology	Any device or system that allows an individual to perform a task that they would otherwise be unable to do, or increases the ease and safety with which the task can be performed.
Central London Community Healthcare (CLCH)	Provider of community services to Kensington and Chelsea, Westminster and Hammersmith and Fulham PCTs.
Commissioning	The process of deciding what local people need from the NHS and buying those services with public money from the most appropriate providers.
Clinical Commissioning Group (CCG)	These are the entities which will take on responsibility for commissioning many NHS funded services under the Health and Social Care reforms.
Department of Health (DH)	Central government planning agency for health and social care.
INWL	Inner North West London.
Primary Care Trust (PCT)	This is a statutory body responsible for commissioning health care for local people and reducing health inequalities.
Provider services	Organisation that provides services.
HEHASC Scrutiny Committee	This is a Council body that has a statutory obligation to scrutinise adult social services and local health services.
Telecare	Telecare is electronic equipment used in a person's home to support independent living. Good examples of this are personal pendant alarms worn around the neck, bed sensors to detect unexpected movements, flood alerts and door alarms. All of these can be used to support people with a range of long term conditions (e.g. dementia) so that they can avoid unplanned admissions to hospital or care homes.
Telehealth	Telehealth is using electronic equipment to read vital health signs such as pulse, weight, respiration and blood oxygen levels and then sending those readings remotely to a health professional. The equipment can be installed in the patient's home and the readings monitored by health professionals in a different location.