



Toynbee Hall

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Consumer research with ‘older old’ consumers and those living with cognitive, physical and sensory disabilities

Final report



FOREWORD

This research was commissioned to help us understand the challenges and obstacles that older people and people with sensory, physical or cognitive impairments can experience when using payment services and acquiring cash. Our close working relationship with major consumer and disability organisations had told us that barriers exist; but we wanted to learn first-hand from consumers themselves.

Over the last six months we have worked closely with Policis and Toynbee Hall to conduct this important piece of research. In addition, we set up a special advisory group of consumer and disability organisations to discuss the research and offer advice on the research focus, approach and design, as well as the analysis of findings and policy implications.

Reading the report of the findings, it is clear that this gives us invaluable insight into the experiences and concerns of a wide range of individuals. I am most grateful to those who voluntarily gave their time and energy to take part. It is striking that, despite some clear common themes across the experiences of both the older old and those living with disability, the impact of conditions and impairments associated with very old age and particular types of disability vary widely among those who experience them.

This is an independent report of the research findings, written by Policis and Toynbee Hall. I would like to thank the advisory group for their input and time, which shaped our approach to this research; and the dedication of Policis and Toynbee Hall to deliver a comprehensive and illuminating piece of research. It makes for challenging but enlightening reading and it will inform much of our future work in this area. At the Payments Council we are committed to using this research to enhance payment services. The challenge is now firmly on us to identify what those changes need to be and to make that happen, in ways that are practical and genuinely useful to the consumers concerned.

A handwritten signature in black ink, appearing to read 'A. Kamellard', written over a horizontal line.

Adrian Kamellard

Chief Executive of the Payments Council

September 2012

Executive summary

Research aim

The research aimed to help the Payments Council understand the needs and experience of using payments systems among people over eighty and those living with cognitive, physical or sensory impairment.

Key findings

There is considerable diversity in use of payments services among the very old and those living with disability. Within both groups there is a full spectrum of use ranging from narrow and traditional to use of a wide spectrum of technology-facilitated banking and payment channels.

Technology-facilitated payment and banking channels can empower, going some way to overcoming the constraints of very old age or disability.

There are a series of barriers faced by those with physical, sensory or cognitive impairment in accessing and using payment services.

The impact of these barriers varies with the contextual circumstances of the individual but they can limit access to essential goods and services.

Those living alone, the poor and digitally excluded can face insuperable barriers to payment inclusion or access to cash. Lack of technology confidence and know-how compounds the barriers.

Workarounds and coping strategies appear widespread. For example:

- sharing cards, card details and PIN numbers to allow others to access cash or facilitate shopping in retail outlets and over the Internet;
- sharing passwords and access details to facilitate partners, family members and friends acting as the account holder in management of finances.

In adopting these strategies, consumer protection for card and account holders is compromised and individuals are exposed to the potential for abuse.

Key payment service gaps

There are a number of barriers to accessing cash for those with physical, sensory or cognitive impairments, which hinge on:

- physical inaccessibility of ATMs, bank branches and payment terminals;
- text layout, screen colours and back-lighting for ATMs;
- lack of standardisation between ATMs;
- small and fiddly buttons on payment terminals and ATMs, which can be hard to see or manipulate;
- data entry processes and verification hurdles, which can be difficult or impossible to negotiate;
- requirement to remember PINs and passwords.

There is a critical unmet need for limited and safe delegation of payment services:

- a payment delegation facility that is limited and does not compromise account holders' financial privacy;
- a means of enabling limited and flexible sharing of access and control with trusted parties that stops short of a total ceding of responsibility.

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Context and background

In October 2011 the Payments Council launched an update to their National Payments Plan, which aims 'to ensure that the UK's citizens, businesses and other organisations have access to a broad range of modern and efficient payment methods that meet their needs.' This study was initiated to inform the Payments Council's work in identifying potential actions to enhance access to and use of payment services for the older old and those living with disabilities.

About this study

The study was undertaken by Policis and Toynbee Hall, with the support of an advisory group of sector experts on financial inclusion and representatives of consumer groups working with older people and those living with disability. The study aimed to understand the experience and needs of the older old and those living with disability, to identify the specific barriers faced in use of payment services, the impact of these barriers and the workaround choices and coping strategies employed by the target groups in coping with the constraints and barriers they faced.

Use of payment systems

There is significant diversity within both the older old and those living with disability in their use of payment services. Within both groups there is a full spectrum of use of payment services ranging from a narrow and traditional focus on payment by cash and cheque, with cash obtained exclusively at bank branch counters, to the use of a wide spectrum of technology-facilitate banking and payment channels.

Barriers to use of payment services

Barriers to use of payment services hinge on design issues around:

Access

- Particularly for those with mobility issues, and with difficulty standing or queuing and in wheelchairs.

Usability

- For those with dexterity issues unable to manipulate buttons or terminals.
- For those with cognitive issue who find PINs difficult to memorise.
- For those with dexterity, fatigue, concentration, memory or visual issues for whom data entry requirements can cause Internet forms to fail.

Visual presentation

- Some screens and ATM are difficult or impossible to read for those with visual impairments, while others are straightforward.

Lack of standardisation

- Lack of standardisation of ATMs, which can result in random outcomes for users who may select unwanted services or too much or too little cash.

Security fears

- Especially for vulnerable and elderly users at external ATMs.

Delegation

- The inability to delegate payment services in a limited manner, safely or with privacy is a critical service failing, particularly for those living alone or reliant on carers.

The impact of barriers on use of payment services

How far individuals are constrained by their physical, sensory or cognitive impairment and how far they face barriers to use of payment services is determined by:

- their socio-economic status;
- the degree to which they engage with and use technology;
- the extent of family support.

Affluence can mitigate many of the difficulties of living with disability and in using payments services, in that the better off can afford more care and support, private transport to and from ATMs and bank branches and are better placed to take advantage of Internet shopping and banking.

The poor can face significant, even insuperable, barriers to accessing cash and using payment services if they are housebound or have mobility difficulties, and are more likely to be digitally excluded. They frequently cannot afford the delivery charges, transport or support that mitigate difficulties for the more affluent.

Ultimately, however, it is the human factor and whether individuals have a partner or supportive family that determines the impact of barriers to payment services. Those living alone or with no family living nearby to ask for help or delegate payment services to appear most likely to struggle with access and to suffer practical difficulties as a result.

Technology is both a key enabler for those able to make effective use of it and a barrier for those who are not technologically engaged. Among both the older old and those living with disabilities, there is a spectrum that operates from having little or no engagement with technology to enthusiastic embrace of technology as empowering and the means to overcome some aspects of the constraints of living with old age or disability.

Lack of confidence and know-how is a significant barrier for some of those who might otherwise benefit from technology-facilitated services. For some of the younger users who were living with disability, progressive deterioration in their condition was compromising their access to the digital world, leading them to use simpler phone-based channels that offer human support. Different dynamics operate for the older old and those living with disability.

Some aspects of new mobile payment and banking channels have the potential to exclude the very old, who have largely not engaged with the mobile revolution.

Research method

The project rested on a qualitative methodology with a mix of seven focus groups and 48 depth interviews, with a pilot phase to refine approach and content.

The sample was structured to cover a wide range of circumstances and potential needs and constraints:

- a mix of ages: older old (80–85/85–90, 90+); younger users (under/over 40);
- across socio-economic spectrum;
- married/cohabiting and living alone;
- with/without family support;
- physical, sensory, cognitive impairment: more or less serious conditions; requiring greater or lesser degrees of care and support; from birth/late onset; specific constraints (housebound, wheelchair users); temporary/permanent conditions.

Case study

Harvey and his wife, in their late eighties and early nineties, have a close family living locally. As they see it, they have reached a stage in life where they prefer to rely on family for shopping and for day-to-day management of their accounts.

Their daughters have their card details and organise both their weekly shop and special purchases, mainly over the Internet, also bringing them cash, withdrawn from the ATM using Harvey's card.

Neither Harvey nor his wife have any interest in acquiring a computer or technology skills, far less getting personally involved in Internet banking. One of their sons organises their finances and bill payments using their account, via Internet banking.

"It works for us. And we don't have to worry about it all any more. We're very lucky to have good family."

Case study

Jean, in her early eighties, has had a bad fall and broken her hip and is not able to walk more than a few steps. For some months she has been dependent on a series of carers from a local agency who pop in to help her with personal care, cooking and shopping.

Her only son lives and works abroad and is only able to visit once a month. He stockpiles cash for her on these occasions, using her cash card and letters of authority to the bank. She needs therefore to keep relatively large sums of cash in the house, to give to her carers for shopping.

She would not consider giving her carers her card to obtain cash because she fears fraud and is concerned about the potential for her carers to discover how much money she has in her account. Towards the end of the month or if her son has to delay his visits, she can come close to running out of cash and has to cut back on some essentials.

"I wouldn't let her use my card. Then you are a bit stuck. You have to do without unless you have the cash to give them."

Reimbursement

The reimbursement chain could be inconvenient, time-consuming and disruptive to finances for carers as well as family members.

For their part, carers could feel exposed to the risk of being accused of exploitation or abuse. Carers also sometimes had to use their own cash for shopping and wait to get reimbursed until adult children could bring cash or transfer funds via the Internet. Given that carers were often on close to the minimum wage, this could make their own budgeting difficult, not least by injecting unwanted volatility into their own finances.

Alternatively, carers might have to go to the bank to deposit cheques given to them by their client to cover the cost of shopping, which was not always convenient. It could also be time-consuming and had the additional disadvantage that cheques would take time to clear, so that there could be some considerable lag between carers' expenditure and their receiving reimbursement.

"I wasn't going to let her [woman caring for] go without obviously, but sometimes it was difficult if [her son] was busy or away, you know, I might not buy something one week which she liked. I might think we could do without that 'til after [her son] has been. I might put something in and it might be a little while before I got that money back, you know."

Coping strategies and workarounds

Technology-based workarounds such as voice-activated software and zoom facilities enable individuals to use payment services and Internet shopping and banking, which would otherwise prove to difficult to use.

Others responded to difficulties in remembering PINs and passwords by simplifying payment options, reducing the number of cards they used or by deploying a variety of unsafe strategies to enable them to recall PINs and passwords, such as keeping PINs with cards or using a single PIN or password for all applications.

The most common strategy was simply to share PINs and passwords with partners or family members or to hand over cards or card details, with family members then acting as the account-holder or card-holder in accessing cash, undertaking shopping or using bank accounts to manage funds.

For those without trusted family members nearby, options could be very limited, with people sometimes facing a choice between sharing details with people they were uncomfortable with having access to personal financial, or doing without cash or essentials.

Case study

Formerly a singer travelling the world, Louisa is confined to a wheelchair. She is highly dependent on a paid-for carer for personal care. A highly sociable person, she has embraced technology and social networking to keep up with a large circle of friends and family.

The height and location of ATMs and payment terminals mean she can rarely withdraw cash or pay for items herself in retail outlets, so her carer obtains cash and uses her card to pay for goods when they are out shopping. When he goes on holiday, she must either stockpile cash or wait for a family member to visit as she does not trust temporary carers in the same way.

Using voice-activated software Louisa manages her financial affairs via Internet banking, a source of considerable satisfaction and one of the few areas of privacy and control in her life. She indulges her passion for fashion and buys gifts for family and friends by shopping extensively on the Internet.

Conclusions and implications

The most significant gaps in meeting payment services needs arise in:

- access to cash;
- delegating payments.

The key issues in enhancing access and addressing barriers to use of payments services are:

- physical barriers to use of ATMs and bank branches;
- how the visual presentation of ATMs might be enhanced and greater standardisation in layout achieved;
- ways around the challenges faced by those with dexterity and memory or focus issues in negotiating payment terminals and Internet shopping and banking.

Important unmet needs in the delegation of payment and banking services are:

- limited delegation of powers to access cash and undertake shopping on behalf of others;
- a means of ensuring privacy and the security of personal information while delegating payment services;
- a way to share access to banking to enable family members to provide support without account holders ceding control;
- the flexibility to specify the scope and limit delegation so that individuals are able to tailor delegation to their needs and circumstances.

There appears to be a need for a user-friendly pathway into use of technology-based payment services for those who lack the confidence or skills to start or extend their use of technology facilitated channels.

The full report can be found on the Payments Council website: www.paymentscouncil.org.uk.

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1.0 BACKGROUND, PROJECT AIMS AND METHODS

1.1 Background

In October 2011 the Payments Council launched an update to their National Payments Plan.¹ This Plan is a portfolio of different Payments Council activities and projects that aim “to ensure that the UK’s citizens, businesses and other organisations have access to a broad range of modern and efficient payment methods that meet their needs”.

In the Plan, the Payments Council notes that although they have robust quantitative and qualitative market research on payment needs in a broad sense, there are a number of groups less well represented in their existing research, including people aged 80 and over and disabled people. Aware that older consumers and those with sensory, physical or cognitive impairment can experience barriers and obstacles to using payment services and acquiring cash, the Payments Council was thus rightly concerned that these consumers may be experiencing additional, unknown difficulties that could otherwise be addressed. As a result, a piece of work was initiated to conduct research with these groups and to use the research to identify potential actions to enhance payment services.

Report outline

This report is divided into five sections: this first section provides background and context to the research and the methodological approach adopted. Section 2 looks at the impact of age and disability on lifestyle, focusing on the importance of personal relationships and support, socio-economic factors, and attitudes to and use of technology. Section 3 covers the way that money is managed and the way that payment services are used, including some of the barriers to use. Section 4 describes the coping strategies and workarounds employed in relation to payments services and the constraints of disability or age-related impairment. Finally, Section 5 presents the main conclusions around the barriers and obstacles to using payment services identified by the research.

1.2 Context

The ability to access and use a range of payment methods effectively to manage household income and contract services is a fundamental aspect of well-being. Financial exclusion has been defined as “the inability, difficulty or reluctance of particular groups to access mainstream financial services” (McKillop and Wilson, 2007). The general characteristics that make individuals vulnerable to financial exclusion are: living on a low income; receipt of state benefits; living in socially rented accommodation; and living in single-headed households, for instance, single people or lone parents (Kempson and Whyley, 1999; Mitton 2008). Additional risk factors for financial exclusion include unemployment, disability and low educational attainment (Devlin, 2009). Certain minority ethnic groups are also particularly affected (Kempson *et al.*, 2000; Khan, 2008).

Crucially, financial exclusion presents as a state, not a trait; if financial inclusion is seen as a continuum from total exclusion to total inclusion, an individual might move along the line in either direction as life circumstances change or skills and/or

¹ http://www.paymentscouncil.org.uk/files/payments_council/pc_npp_report_2011_final-pdf.pdf

capabilities increase or decrease. Similarly, an individual might be excluded in a narrow sense, where a specific financial service product or payment mechanism excludes individuals with particular characteristics. For example, a payments mechanism such as Chip and PIN, which relies on accurate long-term recall of a four-digit number and the ability to enter it into a small keypad, is likely to exclude those with age-related memory loss and declining dexterity or vision (Age UK, 2011), as well as disabled people of all ages. Thus age-related and disability-related impairments of memory, dexterity, sight, hearing, speech, understanding and mobility can all lead to exclusion from using individual or a range of financial services, and new exclusion can occur as people age or as disabilities worsen.

Financial exclusion is associated with increased financial hardship, over-indebtedness and social exclusion, both directly through the effect of the “poverty premium” (Save the Children, 2007, 2010), and indirectly through reduced choice, social participation and confidence (Mitton, 2008). Where an individual is unable to use the most appropriate payment method due to physical or other disability barriers or insufficient financial capability, the price of goods and services can be unnecessarily inflated or individuals may be excluded entirely from making the transaction. For the most vulnerable in our society – including the “older old” and disabled people – who are already at risk of general exclusion and reduced economic and social opportunities, inappropriate or inaccessible payment methods can act as a further barrier (Help the Aged, 2006; Kempson et al, 2007), thus reinforcing the negative impact of age or disability and exacerbating deprivation and social exclusion. Given the current economic context in which real incomes for many are falling and welfare provision is being increasingly devolved to the individual through the twin instruments of Universal Credit and the personalisation agenda, this research with older old consumers and disabled people is particularly important in that it seeks to understand a significant cause of financial, emotional and physical disadvantage and to inform efforts to tackle it.

There is considerable overlap of needs and barriers across the two consumer groups targeted in the research. People aged 80 and above are vulnerable to a range of age-related disabilities, such as visual or hearing impairment, mental or physical frailty and/or loss of mobility or memory. Likewise, as welfare reform transfers the commissioning and management of welfare services to the beneficiary, those with disabilities and those who require age-related care will be increasingly required to manage larger sums of money and to make regular payments in the context of purchasing care services. As a result, this research needed to consider both the specific challenges of how a particular form of disability or perception might act as a barrier to using a particular payment option, and how those challenges might change for individuals over time. For example, an individual might at one point in their life be comfortable using a Chip and PIN card, but as their memory, physical dexterity or eyesight declines, they may resort to writing down the PIN number or ask someone else to enter it, both of which “workaround” solutions undermine the safety protection the PIN number is intended to supply (Age UK, 2011). For such a user, a chip and signature card may be more effective; however, users of the chip and signature option frequently find that they are given misleading information about when and where it can be used, and that those taking the payment are ill-informed about the validity of the chip and signature option.

1.3 Project aims

This study sits within a wider body of research being undertaken by the Payments Council and other organisations to understand better the needs of vulnerable and excluded groups in accessing and using payment systems.²

The principal aim of this research was to help the Payments Council better understand the use and experience of payment services amongst people aged 80 and over, and people with a cognitive, physical or sensory impairment.

As an exploratory piece of research, it focused on perceptions and attitudes to payment services and requirements from payment services to meet needs. The Payments Council was clear that it wanted to be able to use the findings to identify policy implications for the industry and ways to enhance payment services and minimise any exclusion faced by the older old or those living with disability. The intention was to use the research to inform thinking on potential developments that would be practical and genuinely useful to the individuals concerned.

1.3.1 Detailed research objectives

Given the two specific target groups, the research objectives sought to determine:

- the specific barriers the target groups experience in using the full range of available payment methods;
- the ways in which the target groups seek to overcome those barriers;
- the perspectives held by the two target groups where they influence whether and how they choose to use or not use different payment methods;
- the impact on the target groups of experiencing difficulties when making payments;
- the “workaround” choices users make;
- the role of informal and formal support intermediaries when making payments.

The research examined these issues from the perspective of the totality of users’ lives, recognising that users may need different payment methods for different purposes and that a truly effective set of payment methods will allow the user to make appropriate choices based on their own circumstances.

1.4 Role and remit of advisory group

To support their work, the Payments Council established an advisory group with sector experts on financial inclusion and representatives of consumer groups working with older people and those living with disability. The group was asked to consider, discuss and offer advice to the Payments Council on the research focus and approach, and is now involved in helping the Payments Council consider the potential actions from the research. The advisory group is chaired by Stephen Locke, a Payments Council Independent Director.

² Other related work includes the Payments Council’s research into consumer needs around accessing cash and delegating payments, and their campaign to raise awareness of chip and signature cards.

1.5 Research methods

Given the exploratory nature of this research, the advisory group took the view that a wholly qualitative methodology was appropriate to define the issues from the perspectives of the older old and those living with disability and to elicit the colour and depth of insight to bring their experience and needs alive. The method developed by the research team was then considered by the advisory group and tested in a pilot phase, consisting of two focus groups and eight depth interviews, with both the research instruments and sample specifications further refined in light of the experience of the pilot. The main body of fieldwork consisting of eight focus groups and 48 depth interviews was undertaken in June and early July 2012. Details of the sample can be found in Appendix A.

Focus groups enabled the research team to understand the range of issues facing respondents and to explore these in the context of the creative, interactive dynamic engendered by the group setting. Depth interviews enabled the study to capture the needs of some of the hardest to reach and allowed the detailed exploration of experience and challenges faced, including issues about which individuals were sensitive, or which were inappropriate to discuss in a group context.

Older old consumers were recruited, to take in both those aged between 80 and 85 and older respondents over 85, those living with moderate age-related impairments and those living with a range of more serious physical, sensory or cognitive impairments.

Respondents with disabilities were selected to represent the full range of physical, sensory and cognitive impairments that individuals might experience, ranging from more or less serious conditions, including those that require greater or lesser degrees of care and support. The sample included those who were disabled from birth, as well as those for whom disability was later-onset. It also included those with specific constraints, such as being housebound or using a wheelchair, and people with both temporary and permanent conditions.

Respondents were recruited from across the socio-economic spectrum to ensure that the research identified the needs of all income groups. Sampling was also structured to ensure that the sample comprised a mix of:

respondents who were married or cohabiting and those who lived alone;

people with or without family support available locally;

people living independently and with carer support;

individuals who were more or less familiar and comfortable with technology such as the Internet and mobile phones;

respondents from urban and rural settings.

Informal and formal carers were also included in the sample.

A more detailed description of the project methods, including the detailed sample structure, recruitment to the research and conduct of the analysis is contained in Appendix A.

Throughout the report we have used case studies for selected individuals to bring the experience and needs of the older old and those living with disability alive. Different aspects of experience for these selected individuals are presented within each chapter to illustrate how individual issues play out in various contexts.

2.0 THE IMPACT OF AGE AND DISABILITY ON LIFESTYLES

Perhaps the most striking finding of this research is that, despite some clear common themes within the experiences of both the older old and those living with disability, these groups are otherwise characterised by a significant degree of diversity. The impact of conditions and impairments associated with very old age and particular types of disability vary widely among those who experience them. The key determinants of the needs and experiences of the older old and people living with disabilities are: the availability of family support; socio-economic background; and attitudes towards technology. These factors interact with the particular constraints of the age and/or disability experienced by an individual to shape their quality of life and lifestyle.

2.1 Nature of disability or impairment and lifestyle

The sample was designed to include people living with a wide range of cognitive, sensory and physical impairments, associated with old age or disability, as well as people aged over 80 who were living with the normal range of conditions and impairments associated with being very elderly. As a result, the research covered people living with more and less serious impairments; those who were able to manage independently and people requiring a high degree of support; and those who had developed life-limiting conditions later in life as well as those who have had them since birth.

Visual difficulties impact widely on reading, writing, form-filling, using technology and travel

Some people in the research were experiencing a range of difficulties associated with sight problems, including cataracts and glaucoma, as well as congenital sight defects. This group experienced, to a greater or lesser degree, difficulties with reading handwritten and some printed material, filling in forms and dealing with paperwork, using machinery and technology, reading maps, following road signs and using public transport.

Sam is in his mid-twenties and is registered blind as a result of a serious sight impairment that he has had since he was very young. Although he has very little sight he works full time as a laboratory technician, shares a flat with some friends and manages to live a very “normal” life. Having lived with his sight impairment since childhood, he has found ways to manage his condition so that it impacts as little as possible on his lifestyle and he manages with a small amount of largely informal support.

“Personally, no, I don’t have any support at the moment. I used to have a small amount when I was, you know, quite young, when I first was diagnosed with my eye condition, so for that but not since...not in quite a while.”

People with mobility problems faced a range of constraints with standing, sitting, housework and carrying, as well as with walking

Other people were restricted by mobility problems, caused by a range of factors including damaged limbs and on-going back problems, and more severe conditions including hemiplegia, arthritis, multiple sclerosis and osteoporosis. This group were, to

at least some extent, limited in their ability to stand, sit or walk for any length of time and some were unable to walk without crutches, walking frames or wheelchairs.

“I wake up some days and I don't know what's going to hurt, and whatever is hurting it's how do I manage it to get on with what I'm going to do for the day.”

In addition, carrying shopping and doing heavier household tasks like changing beds, hoovering and taking out rubbish could also present problems.

“Shopping. I have one hand and if I go shopping, I could buy a little bit at a time. I couldn't carry too much in one hand. Because the thing is, this one hand is always taken up by the walking stick as well. So, then I have no hands.”

Using public transport could present difficulties for people with mobility problems. Some were able to drive, which helped them to manage these limitations to some degree. People with mobility problems might also encounter problems with manual dexterity and some also spoke of being “clumsy” and of difficulties with balance. Most required help with particular tasks or, if help was unavailable, had had to cease particular activities that were no longer manageable.

Some people were able to do very little independently, due to severe and/or progressive conditions that could make getting out of bed difficult

A few people in the research were suffering from quite severe conditions, including serious lung disease, rheumatoid arthritis and diabetes, which, for some, impacted very heavily on their lifestyle and independence. Most, for example, experienced on-going tiredness and loss of strength and energy. One or two had very little capacity to manage without help and one often struggled to get out of bed and get dressed without help. Some of this group were managing on-going progressive conditions with a clear trajectory. Those experiencing intermittent symptoms found that the impact on their lifestyle and their support needs varied accordingly.

A number of people suffered with cognitive impairments, either from birth or developing later in life, making it difficult to manage a range of situations

A number of people in the sample experienced limitations resulting from cognitive conditions such as dementia, the after-effects of stroke or learning disabilities. The impact of these conditions varied widely, depending on individual circumstances, but often included memory loss; difficulties with speech, literacy or numeracy; problems with social interaction or dealing with unfamiliar situations. People with cognitive impairments required varying degrees of informal and formal support, and some were unable to go out alone or manage their affairs independently.

Tom is 75 and has been suffering from the effects of vascular dementia for the last three years. Although otherwise in good physical health, he experiences a range of cognitive limitations as a result of his condition, finding himself with severe short-term memory problems, difficulties with counting and understanding money and a loss of manual dexterity. As well as having to make major adjustments to his lifestyle to cope with the sudden onset of his condition, Tom also has to constantly adapt to the new challenges posed by the progressive nature of this form of dementia.

“Yes, it is. Essentially, I was, when in local government my budget was £4.5 million, and now I can't even count up properly. That is probably the worst.”

Tom does not need any personal care but his wife and a few close friends provide a relatively high level of on-going support to enable him to live as independently as possible, including going out on his own, buying things he wants and maintaining his hobbies.

Predictably, a high degree of overlap between these groups was very apparent, with people tending to fall into more than one of them at any one time.

2.2 Personal relationships and support

The availability of help and support is the most significant determinant of quality of life and day-to-day constraints that people face

The extent to which people need – and can rely on – help and support is, predictably, a key determinant of their quality of life and the constraints that they face. Participants in this study varied both in their need for support and its availability. While almost everyone needed help of some kind, many were able to live largely independently, including living alone, with only occasional help from other people.

“I mean, generally day-to-day I find, you know, I’m reasonably sort of able to sort of deal with whatever life kind of throws along but, I mean, there are certainly bits and pieces...So, from time to time, you know, I might ask one of my flatmates, if they’re around.”

Others were able to manage their everyday lives with a fair degree of independence but, nevertheless, required fairly frequent, on-going support from friends or family members, albeit at a relatively low level. Those who were married tended to rely on their spouse, ranging from limited support with specific tasks to heavy reliance on a partner for most things.

“No, I’m fortunate because I’ve got a husband at home. So, I don’t need a great deal of help.”

A small number of people relied on professional carers to help them and this group tended to need quite a lot of support with a number of daily tasks and activities.

“If I didn’t have a carer or support, oh God I would be very suicidal because I’m not used to being closed in, you know, staying indoors all the time. I try...even though I’m in the wheelchair and I can’t do other things for myself, but I do like to stay as active as I can.”

Easy, reliable access to support without feeling a burden means that couples tended to fare better than those living alone

The most important factor in how well people were able to cope was having access to easily available support without feeling like they were being a burden to other people. In this respect, married or cohabiting couples tended to fare better than those who live alone, especially among the older old but also among younger people living with disabilities that affected their mobility. The level of support provided by spouses seemed to flex relatively seamlessly as needs changed, so that the question of care being provided in any other way simply did not arise. As a result, while some people relied on their spouse for help with particular tasks, such as heavy housework or

shopping, others had found themselves in a situation where their spouse took care of them as well as taking responsibility for most day-to-day tasks and housework.

“You know, lifting heavier objects, like when I need my mattress flipped and I do need that flicked because my body doesn’t feel right on one side after a while, taking out the bins, things like that, but I just let my son and my partner do that.”

“My husband has taken over a lot of the work. He works extremely long hours, and he does...a lot of the cleaning and so on. But he likes shopping, thank goodness...I used to go shopping but the shopping falls down to him, now. And he cooks...On a bad day he dresses me, you know.”

Adult children and grandchildren living close by provided wide-ranging support for the older old

For the older old, especially those living alone, having adult children or grandchildren living nearby was by far the most important factor in coping with day-to-day challenges. Support from local family members made a huge difference to the limitations they faced and, critically, the degree to which they worried about their ability to manage. Many of the older people in this study had daily contact with adult children and frequent contact with grandchildren.

“No, my daughters are both very good and they’re a good help, you know, anything I wanted they would get for me.”

“Well, I just think my daughter or my son would sort me out, I don’t even think about that to tell you the truth...I know my children would do things for me, so I don’t have any worries whatsoever. No, there’re both nearby.”

Not only did this relieve them of the effort required to tackle the tasks they found difficult, in many cases it also significantly enhanced quality of life by enabling them to continue activities that they would be unable to manage without help.

“But I’m not driving any more...I miss it so much so, you know...it’s very restricted at the moment. So I’ve got very good family, you see. They take us out, they take us shopping, they take us to the seaside so I can’t grumble.”

“My grandchildren. They take us out, they help us. You know, they, if we want anything doing, taking away, they come down and do it for us. They’re very, a very close family and we’ve been good to them so, you know, it’s payback time.”

Proactive family support could be triggered by the death of one parent or an accident or illness that required particular support. Often, however, regular family visits that had always occurred simply became more focused on providing assistance.

People living alone without family nearby were forced to rely on occasional support, largely from friends, which could be patchy and less comfortable

People who lived alone had far less day-to-day support and were forced to rely on more occasional support from distant family, in the case of the older old, and, for younger people with disabilities, on friends. As a result, the provision of support was often a lot more patchy for this group, requiring them to ask for help proactively, when they really needed it, which some of them found uncomfortable. It could also result in people feeling uncomfortable about their reliance on other people.

“So I’ve got a friend who does the shopping and cooks for me. She’s my workmate, my friend. She knows me very well and she shouldn’t be doing all that for me. But she knows how I am. But it’s like I have no choice. I just have to take any help that I can possibly get until I feel better.”

“When we went to the hospital they arranged for someone to come in three times a day to, sort of, help me...I didn’t like it, to be honest, because I had to let someone shower me. Well, I never in a million years thought I’d be able to do that, but I didn’t have a choice really, so I got on with it. But as soon as I felt able I stopped them coming, you know, so that was very good.”

In these circumstances, obtaining necessary support required a high degree of planning and flexibility

Obtaining the support they needed also required quite a high degree of planning, in some cases, to ensure they were able to cover all their needs and meet the day-to-day challenges they faced.

“My legs, yes, my legs prompted me to explore the options because sometimes I’m unable to walk completely and leave the house. I can’t depend on other people to drop what they’re doing for me to live my life.”

“Sometimes I will tell my friends to come and get me or pick this up when they’re coming or can you pay this, can you pay that. I do that quite a bit with them and then just transfer the money. And yes, if I need a little £5 or £10 I’ll tell them bring that as well and I just transfer. Sometimes I’m immobile, if I want to vary the food that I’m eating and I can’t cook, I might have a Chinese. And with Chinese you have to spend a minimum of £10 so I have to rack it up to £10 and just have leftovers for a couple of days, so I ask them to bring me the money.”

Coping alone could also be more expensive and added considerably to the financial burdens people faced

People who lived alone – especially those without family living nearby to help them – also encountered additional expense in getting their needs met, including having to pay people to help with household jobs like cleaning and gardening; taxis fares; parking charges; and charges associated with having goods delivered. Some of them faced quite significant gaps in the support they needed to manage their day-to-day life.

“Because I’m below a particular age, 60, I’m finding it very difficult to actually find...anybody willing to give me support. There seems to be a gap...if you’re under 55 but over 40, this seems to be a grey area where you do not fit in to anybody. And I came out of hospital three weeks ago and...I spoke to my hospital about speaking to a social worker and, no, that was impossible because the hospital doesn’t have social workers anymore. And my local Social Services are basically not interested, they have so many cases. But I’m too young for Age Concern.”

“Yes. It’s very expensive to have mobility problems because, you know, where in the past I would walk somewhere, I would now have to get the bus or I’d have to get a lot of taxis.”

“Just lots of little things, they add up and it does make life very expensive and particularly... Yes, just because when you can’t really do anything...And I have to have a cleaner, for example, because I can’t do it myself. So, yes, it all mounts up, these little things, and money is a big issue, a big factor.”

Some of those living alone faced an extreme degree of social isolation

A few of those who lived alone experienced a high degree of social isolation.

“I’m basically on my own, seven days a week. I haven’t got money to really go out and entertain, so I’m mostly at home.”

“Most people are not at all really wanting to be with me no more. I’m not working. I’m hard work. I never have money. You know. They’re not interested basically. Don’t want to know. I spend 98% of my time by myself...if anything goes wrong I’m on my own.”

“If it wasn’t for my [paid for professional] carer I would be suicidal for sure...I would never go out and I would live on the computer.”

2.3 Socio-economic factors

Socio-economic status impacts on the experience of old age and disability, and significantly influences ability to manage challenges and limitations

Those who had sufficient income were able to moderate the constraints they faced to the extent that they were able to get most, if not all, of their needs met. Those with more constrained economic circumstances encountered far greater difficulties in managing day-to-day needs.

Having the resources to pay additional charges for goods and services could make life considerably easier and less restricted

Being able to pay any additional charges associated with having goods delivered enabled people who found it difficult to visit shops or carry shopping to buy what they need online or by telephone. Although people recognised that these delivery charges increased the cost of the goods they were buying, they felt that this was an essential service that they simply could not manage without. For those who could afford it, the benefits far outweighed the associated costs.

“When I broke my ankle, that’s when I first really looked into the whole Tesco’s shopping online thing and it’s just great...I had a plate in there and I was off for four months with my leg up, so I needed something because everyone else in my house was going to work and was active and whenever I asked them to do something it seemed like it was a problem. So my only option really was to find technology and pay the delivery charge for them to do that.”

“Yes, because also as well as not being able to carry stuff because of my back and lift things upstairs, it’s so useful they literally knock on your door and they’ll put it in the fridge for you.”

Key to this, of course, is, on the one hand, being able to afford the technology required to shop remotely and, on the other, having the skills and confidence to do so.

Access to private transport afforded a higher degree of independence, as well as variation and pleasure

People who could afford to own and run a car, and pay any associated parking costs, were also far less limited in their day-to-day lives and were able to enjoy a greater degree of independence. Some had been able to purchase specially adapted vehicles that enabled them to drive themselves. Others relied on a partner to drive them around in the family car. One respondent had a longstanding professional carer who was insured to drive her car.

“So I can’t really tell you on the public transport side because I don’t use public transport at all because I’ve got my own vehicle, which my carer knows how to

drive. I don't drive but I've got my own vehicle, my Motability. It's got up to two nominated drivers."

Having access to private transport enabled people to undertake their daily activities with more ease and convenience, relieving them of the difficulties associated with walking to and from public transport points; getting on and off public transport; and having to carry things they needed or had bought. In addition, it gave them the independence to do things without relying on other people and allowed them to get out of the house, visit friends and relatives and enjoy other social and leisure activities.

Those without private transport need to find sufficient funds for public transport and taxis

Those without access to their own car were in a far better position if they had sufficient funds to pay for taxis or public transport to get them around.

"Well, we do get on a bus and we go to, ride out and have a meal, you know, of lunchtimes and we come back. It breaks the day up, you see. Staying in the house all day, you get fed up, you know, so we get on a bus."

Respondents with conditions that prevented them from driving or using public transport had to factor the cost of taxis into their budget.

"I get a taxi sometimes if public transport's not going to be sort of possible in terms of being really fatigued."

Buying in help with household tasks and gardening also took the pressure off some people, enabling them to focus on their health and things they enjoy

A number of people were also able to buy in extra help with household tasks such as cleaning and gardening that they were unable to manage themselves. This relieved pressure on the respondent to try to undertake these tasks, and also meant that they did not have to rely on a partner or family member to do all the household chores, freeing up more quality time for them to enjoy. The importance of affluence in determining quality of life in this context is illustrated most clearly by Louisa.

In her early fifties, Louisa has been using a wheelchair for twelve years. She has a number of muscular-skeletal problems following a serious car accident and also suffers severely from rheumatoid arthritis, which affects all of her joints. Louisa is entitled to some statutory help to pay for carers and supplements this with her own funds, in order to buy in all the care and support she needs to maximise her quality of life.

"I've got a personal assistant who's like a carer. I pay him extra...the Government helps me towards paying him and I pay him extra to get extra hours because I still like to do lots of socialising and things like that"

"My personal assistant, they come in the morning and they help me get washed and dressed and, you know, make sure I have something to eat. Then they usually go away and only in the afternoon now they'll come back and we'll have lunch and then if I've got things to do, we'll set out and do what I need to do. And in the evening around eight o'clock, they make sure I have something to eat and, you know, tuck me in for the night. He helps me with, you know, laundry, washing, going to hospital appointments plus other

appointments away from medical as well, because I pay for the extra hours. Once a week I pay extra to go to cinema once a week because I do enjoy the cinema. So once a week I do go to the cinema and if there's the odd little functions going on with family and friends, I try to go here and there. Oh yes, he gets all my personal food, etc."

People who are unable to pay for support face extremely limited and difficult circumstances and a lower quality of life

Louisa's experience of living with her condition presents a very stark contrast to those who are not able to pay for the additional support they need. A number of respondents identified specific care needs that they wished they were able to get help with, but were unable to do so due to the cost involved. In these circumstances they were left with no choice but to continue to undertake tasks that caused them pain or otherwise exacerbated their condition, or to go without things they needed. As a consequence, their quality of life was markedly different and their daily lives characterised by a much greater degree of effort and struggle.

"Shopping. I was told by the...I've had nine operations since February and I was told by the surgeons I mustn't lift up anything more than two pound in weight. So, that meant...And I live on the first floor and have 14 steps to my front door and then my flat's all on one level. The thing is my walking frame is more than two pound, my shopping bags empty are more than two pound."

"So, I have to get a bag which goes across but then there's only so much you can put in there, you know, and then it'll topple down. Already my bag is big, so, you know..."

In these circumstances, people were acutely aware that cost was a major obstacle in making their lives safer and more comfortable.

"When I came out of hospital I did try and sort out somebody to go shopping for me and it was...or shopping with me and they suggested that I should do all my shopping on the Internet...because I'm on benefits, I have to watch my money very, very carefully, I've found that although I'd love to shop on the net and get it delivered at home, there's a minimum of £50/£60 and now they charge £5 for delivery. So..."

"If you're willing to pay the money, then it's all there for you but if you can't afford it, then...And if not in work, like myself, I'm out of work, then it's difficult..."

Perhaps the most extreme example of the extent to which poverty compounds the constraints imposed by serious health problems is Eric.

Aged in his mid-forties, Eric suffered two major heart attacks followed by a stroke that has affected his mobility, vision and some of his cognitive functions. Following his health problems, he lost his job and was unable to keep up with the mortgage on the family home or his other commitments. His marriage subsequently broke down and, while he was in hospital, he was declared bankrupt. He now lives on a very low income. At the time of the interview he had recently moved into an unfurnished housing association flat. He hasn't been able to furnish his property, buy carpets or a stove.

"Yes, there's no carpet...and you have to get a stove...You get an empty

house, with no floor.”

This had affected his relationship with his children as well as his ability to socialise with his friends. Living on so little money also makes it impossible for him to eat healthily, let alone buy in the extra care that would make his life more manageable.

“Or like bread, a loaf of bread lasts me for at least two weeks. It goes stale, I will put it in the frying pot, I kind of heat it, fry it, like, because it's stale, isn't it? Yes. And milk. I'll buy just a smallest carton I can. And, you know, work with that. It's not easy, but I have to work with what is there, because at the end of the day, nobody's interested, you know.”

Since his heart attack Eric is unable to walk very far and was given a mobility scooter to help him get around, but cannot afford to fill it with petrol.

“Today I have 27 pence in my name. My mobility car outside is empty. Diesel, it uses diesel, but it's very expensive, diesel. So that's parked.”

2.4 Attitudes to and use of technology

There were significant differences in attitudes to and use of technology between the older old and the younger people living with disability, arising from generational factors rather than disability as the older old group included both those living with significant disability and those with milder or very little in the way of physical, sensory or cognitive impairment. We therefore discuss the two groups separately.

2.4.1 The older old

The older old vary hugely in their attitudes to and experience of technology

Among the older old, a broad spectrum of attitudes to technology was apparent. This ranged from those with a total disinterest in or rejection of it, to those who were highly techno-literate and made daily use of a range of different types of technology.

Those who had not been exposed to computers during their working lives were far less comfortable with technology

Older people who had spent their working lives in more manual occupations, and those who had retired before computers reached their workplace, had been much less exposed to most forms of technology and so had not built up any familiarity with it or developed the skills they would need to use it.

“I had retired before computers came along and now it's too late – we're too old to start learning something new now. We're happy with what we know. Leave it to the grandchildren.”

Lack of direct exposure to technology meant that some of the older old perceived few, if any, benefits to using it

In many cases, they had also developed misconceptions about the risks involved in using it and displayed quite exaggerated security fears.

"I think for all the computer...All the...All the good that computers do it's got a bad, evil side to it as well...I think there's a lot of theft that goes on online, which, there's a lot about it in the news now. Pornography. And...bad things on it. I think it's got more bad things than good things. So that's why I keep away from it, I've got no...I think basically that it would have been a better thing if it had never been invented."

"I think all this techno has...this technology and everything has made the world a far, far more dangerous place...because you think of what all this technology has done to the banking, and how everything's gone wrong with the banking, and how people rob millions and billions. I'm not talking about individuals, I'm talking about how millions and billions of pounds get lost in the banking system, through computers. Now, if you went back 50 years ago, you had Mr Smith sitting at a desk with a pencil and paper, and a ledger, and you never had any of this."

Comfort with the status quo and the lack of a perceived need to change are key to resistance to technology

Key driving factors behind a rejection of or resistance to technology were comfort with the status quo and a lack of perceived need to change.

"I've never had a computer in my life. You get to a certain age and you think to yourself, I've lived all my life doing everything with pen and paper, and my husband is exactly the same."

"When I was housebound my granddaughter set me up for shopping at Tesco, which I was assured would be absolutely easy. I have no desire to use it so it sits there and I never do anything with it."

"When computers came in, I showed absolutely no interest...If somebody gave me one, and said, and this is how you use it, I'd say, 'Oh, yes, okay, fine', and it'd go in the drawer, and that'd be it. Because it's just something that has never ever interested me."

Some of the older old see themselves as simply being too old to learn new skills or adopt different practices

Several of the older old expressed the view that they were too old to learn new skills, despite having friends and relatives of a similar age who were using technology quite extensively.

"I'm too old. I know a lot of people older than me, they think, oh, I'll have a go at this, yes, this is brilliant, but when I hear people saying about online banking, and Google, and I bought this off of eBay, and you think, I couldn't be bothered to do all that."

"I think, to be frank, my wife and I, we are getting to the stage in life where we are happy with the way we've always done things and we don't see any need to change, maybe we're just too old to learn. But, I'm happy to leave all that to the children. We've earned the right not to be too bothered."

Some older people were incorporating technology into some aspects of their lives, albeit in a fairly limited and selective way

This tended to have been facilitated by adult children or grandchildren who were keen to include their parents/grandparents in the digital world.

"I've now discovered the Internet, which is amazing...So it makes my life a bit easier. Well that's great, really, but you don't really want to do that all the time,

because it means you leave the chance of going out and meeting people, and that's what you need."

"I think it's wonderful, I'm amazed at what my children can do on their iPads and things, but I don't need to do Twitter and Facebook, you know, you don't as you get older, it's the last thing you want to be bothered with, and the telephone and the computer is really as much as I need."

A key trigger here was identifying clear uses and needs for technology that cannot be met any other way

In this context, older people engaged with some aspects of technology because it had a clear use and met important needs that could not be met in any other way.

"Computers and me are not terribly friendly. I have a computer, I do my minutes on it for meetings and I can do letters. I'd love to get on the Internet but I think it would be a waste of time and so far I haven't managed it...I'm hooked up to Skype, yet I don't use it very often. Sometimes I do to speak to the little ones. But that's about as far as my technology goes."

"Yes, I send emails and I have bought something on the Internet. But I'm not very adventurous, I must admit, but I wouldn't like to be without it because I go on it every day for a little while because I just think that helps keep my brain ticking over."

Some of the older old had embraced technological developments with enthusiasm and integrated them widely into their lives

Some of the older old – including some people in their 90s – had embraced technological developments much more fully, finding them exciting and enabling, as well as very convenient. They used the Internet extensively for banking, shopping, communication and research, as well as for playing games and keeping records.

Stephen is 83 and lives with his wife, with children and grandchildren close by. Stephen and his wife make extensive use of computers and the Internet, finding that their engagement with it has built up over time, as they've found more and more uses for it. Their computer skills are largely self-taught, with Stephen's wife first buying a computer for their home when she started using one at work.

"So we then found ourselves with a computer as a result of that. And once having a computer, we then started to use it. So I didn't use it that much to start with, but she would always do all our correspondence on the computer. And so then we went from there."

Stephen and his wife then found themselves making increasing use of computer technology in their daily lives, as they discovered more and more uses for it. In particular, they have been very drawn to the speed and convenience it brings and the wide range of activities that it supports.

"I like technology. I've worked with my hands all my life. I would say I'm more technological than artistic...Email, we use email a lot. We get emails and we send emails. I'm okay on emailing...I get [photographic] prints done via email, so I use the computer for that."

"And I use Internet Explorer a lot, Google...I mean, we had, just the other day...what was it? Oh, yes, we went to see a play by Joe Orton. I've heard of

him and remember him, but I'd forgotten the history. So I just went to the computer, put in Joe Orton, and there was the whole story. So I think it's wonderful."

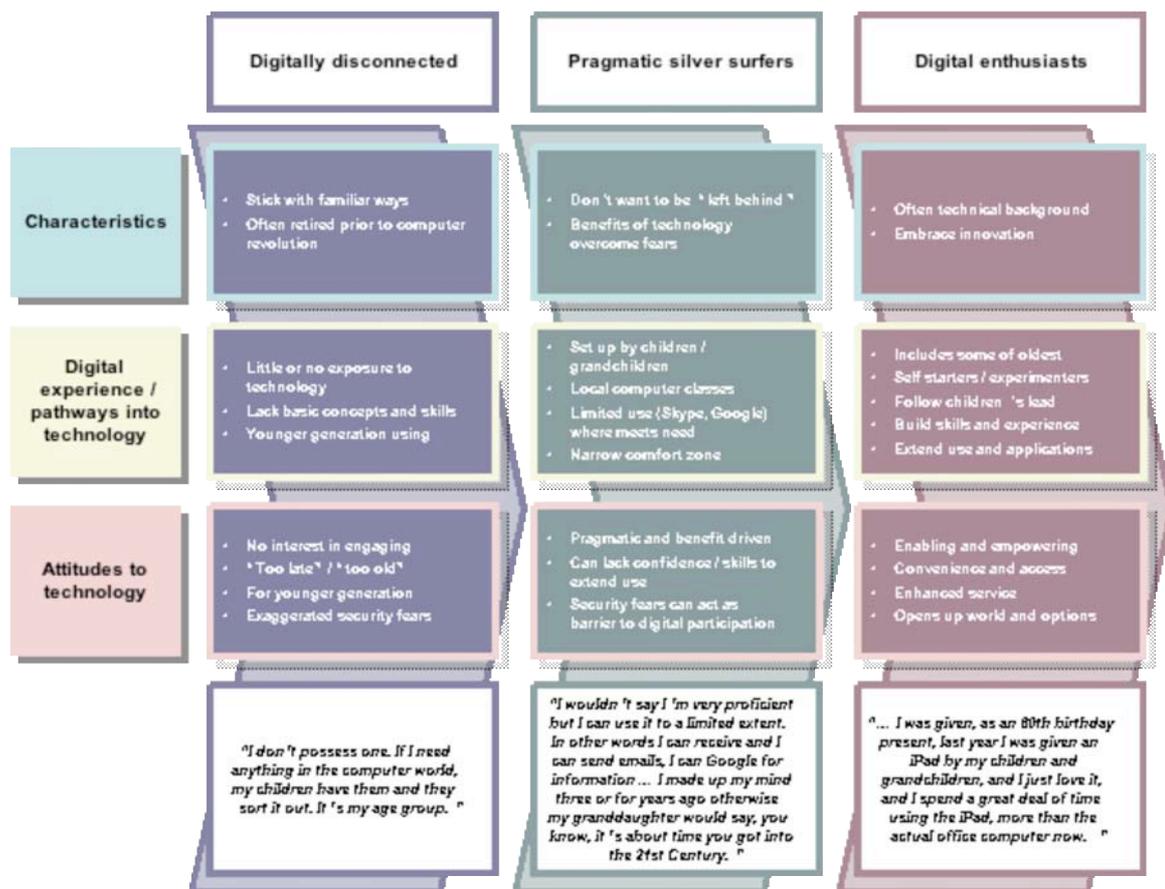
"We book holidays. We research holidays. If somebody suggests a hotel to us, rightly or wrongly I always look it up on TripAdvisor...and then we'll book it on the Internet, definitely."

"Shopping, eBay...I sell things, odds and ends on eBay. And again, because of the photography, I buy bits and pieces on eBay. I can get the stuff so much cheaper."

"Yes, Amazon. We do Amazon quite a lot. We bought some stuff recently on Amazon. And the bowl...I bowl and I wanted a new pair of shoes. I looked it up on Amazon and got a good price. Amazon is very cheap of course. So that's another thing, Amazon, eBay. Yes."

These various dimensions of attitudes to and experience of technology are captured in the technology segmentation of the older old described diagrammatically in Figure 1. It illustrates three broad segments: "the digitally disconnected"; "the pragmatic silver surfers"; and "the digital enthusiasts".

Figure 1. Technology segmentation – the older old



It was striking that across the technology spectrum there was little experience of mobile technology, which was seen purely in terms of little-used phones

One aspect of the attitudes to technology among the older old is particularly important to understand in the context of the evolution of payment services. Among the older old, very few had smart phones and, while many had a mobile telephone, few used it for anything other than making important calls while away from home.

“I have a mobile phone and...after about three years I thought, ‘Oh I’ll get it out of the box.’ And I’ve just learned how to text. Oh, aren’t I wonderful? And that’s it. That’s as much as I can do.”

“I have a very simple mobile phone. I’m not into this high tech sort of, Blueberry, sort of thing. It’s just I use a mobile. Actually, I use a mobile phone very rarely but, you know, I do have one purely for making telephone calls and receiving calls. But, you know, nothing else.”

“I have a mobile phone. I don’t use it very much, I leave it switched off, but I use it really for essentials.”

“Because we’re too old to understand what they’re going on about half the time. Technology as it is, let’s face it, five years ago if my daughter had given me a mobile phone, if that [landline] phone hadn’t been on the table in the corner I’d have been completely lost. Even now I’m loath to use it [mobile phone].”

Very little understanding of the range of applications available

In general, there was little appreciation of the advantages of mobile phone-based technology or of the range of possibilities and applications that mobile technology could deliver.

Many have virtually no experience of mobile applications, and many were not comfortable even with texting.

“I don’t understand apps and things like this on phones. I’m afraid I think the more technology they introduce the more complicated it becomes, rather than easier. Again, you know, using these apps as an example, I mean they’re beyond me.”

“I think I’m too old to start learning new things at this stage. I’m happy with the little and it is little technical knowledge that I have and, as I say, I can manage to use a mobile phone for making calls and I can even text now which is brilliant, isn’t it, but apart from that, you know, that’s it.”

Practical difficulties in using mobile phones can create further barriers

In addition to attitudinal barriers, many of the older old found it difficult to read text on mobile phone screens and some also struggled with navigating around them due to limited manual dexterity.

“Okay, my eyesight is poor so the letters appear very small on the mobile phone. So I prefer not to use that [mobile phone] unless I have to”

2.4.2 Those living with disabilities

Among those living with disability there was also a spectrum of engagement with technology

The dynamic was rather different among younger people living with disability. Here a more extreme spectrum operated. At one end, individuals were not so much disinterested as effectively excluded from the digital world, a source of some anxiety. At the other, highly skilled “power users” saw technology as a powerful enabler and a means of overcoming the constraints they faced in their lives. Those in between were not necessarily any less cognisant of the potential power of technology but were, rather, losing access to it due to the constraints of their condition.

Socio-economic factors are an important determinant of opportunities to become familiar with technology

People on lower incomes who are not working or have very limited work opportunities find that the constraints related to their disability restricts their exposure to technology and can both create and entrench digital exclusion due to unfamiliarity and a deep-seated lack of confidence. This was most common with people who have experienced a lifelong disability.

“I think in my particular life personally...I’ve always been...things that I’ve been afraid of that might – might – need two hands, you know I’ve...maybe out of nervousness I’ve tried to avoid and find a way round, or because I think...I know I may need to ask for help, and to avoid asking for help I see if there’s a way round.”

“Because I’ve avoided it for so long, because, the thing is, I’m also quite worried and the reason I’m out of it is I’m unsure of how to use it. Also if there’s a breakdown you’re quite dependent.”

Some of those living alone were reluctant to substitute remote technology-based interactions for personal contact and support

In addition, people who were living alone often welcomed the contact that they had with people during the course of making the transactions associated with daily life and were reluctant to replace it with remote methods.

“I’m a little old fashioned at the same time, because I like going in and interacting with people, because sometimes with a disability...it’s very isolating. So, I will find an excuse to go and talk to someone. It’s not necessary, but it works.”

Linked to this was the fact that people who felt quite isolated by their disability also welcomed the availability of people to help them and did not want to lose this opportunity of feeling supported.

“If I’m paying something into the, one of the machines in the bank, I just think why am I struggling? These people are in here, happy to help me. So I’m like, oh, I need to pay this cheque in, find they’ll do it for me. So I’m quite happy to take advantage of that.”

It is also the case, however, that some very techno-literate people find themselves increasingly excluded from technology

Other people living with disability who have previously been very digitally literate and confident find technology becoming increasingly inaccessible due to difficulties in

using it. This can relate to loss of dexterity and difficulties holding, lifting or manipulating equipment, loss of ability to concentrate, fatigue, short-term memory problems and visual constraints.

"I used to be very into all that – computers and phones and gadgets. But now it's getting difficult, and I'm getting slower. And it can be really hard. And I think sometimes now it's easier just to pick the phone up and talk to people rather than to struggle. Then you've done it and you feel you've had that bit of contact."

Equally, however, digital exclusion can be created by financial constraints, which prevent people from buying or using technology in their daily lives.

Those who are unable or unwilling to use technology can find themselves feeling very excluded and out-of-step with the rest of the world

In these circumstances, people often see themselves as being materially disadvantaged by their lack of engagement.

"The way round that I've found is normally a backward method, a method that's not used anymore. It's not modern...these days it's a world of technical times or technological world...It's very difficult. I don't like it, but that's the way it is. It's a fact, like it or not."

"I feel shut out, to be honest."

Again, however, at the other end of the spectrum, technology is embraced as a powerful lifeline and enabler

At the other end of the spectrum, technology is a lifeline and fundamental enabler, affording a degree of control, empowerment, convenience and independence that would otherwise be unattainable.

"Because I'm housebound...it's a form of escapism almost...because I can do something that, you know, that doesn't require me breathing really."

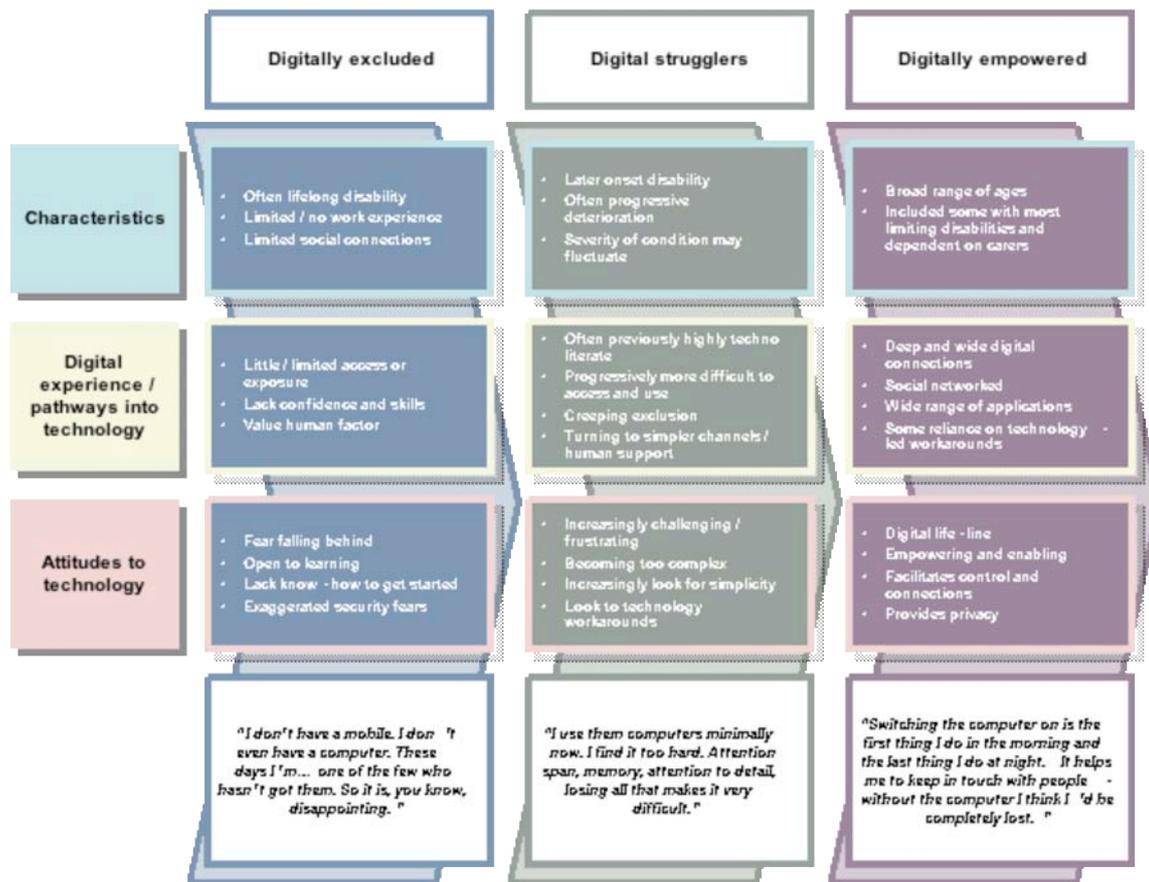
"I'm on the computer daily. I'm on Facebook...Well, my daughter's in Australia, my best...old best friend from school, she's in America – we play Scrabble online. I use Skype, as I say, to talk to the grandchildren. I check my emails. I do my banking online. I shop online sometimes...We had a mini-break recently and I researched that online to find the hotel we were going to stay at...I love it, yes."

"To be honest, thank God for technology because if it wasn't for technology I wouldn't be able to get a lot of things done, like for instance I shop online, I do my shopping online sometimes. So when it's really severe, when it first happened as we'll when I broke my ankle, that's when I first really looked into the whole Tesco's shopping online thing and it's just great."

"It made me feel independent, to be honest, because I was still being able to live. I wasn't wasting away and I was able to have the things I wanted and just that technology helped me to understand that there are ways that you can live without having to leave the house if you're in pain."

These various dimensions of attitudes to and experience of technology are captured in the technology segmentation of those living with disabilities described diagrammatically in Figure 2. It illustrates three broad segments: "the digitally excluded"; "the digital strugglers"; and "the digitally empowered".

Figure 2. Technology segmentation – those living with disabilities



Use of technology can, however, increase social isolation for people who find it difficult to leave the house or interact with other people

It is worth bearing in mind that some of those who had adapted to technology expressly as a result of their disability, while recognising its benefits, also regretted the associated lack of personal contact that has resulted and have found their reliance on technology quite isolating.

"What I actually find with the computer technology is that I can become quite isolated from the world. I have problems getting out anyway, physically, but with having access to the Internet, I don't have to go to WH Smith's anymore because it's quicker for me to click through. I can buy my goods before I've put my coat on to go out, and because I'm having difficulty with transport and everything, I'm actually finding that my world is getting smaller and smaller."

3.0 MANAGING MONEY AND USING PAYMENT SERVICES

This chapter covers the way that both the older old and those living with disability manage their money and use payment services on a day-to-day basis, their approach to banking and service channels, the management of income and household expenses, and their use of payment methods and channels. It discusses the reasons for patterns of use of payment services, including any barriers to access and use that arise. The chapter also explores the issues and barriers around access to cash.

3.1 Approaches to banking and banking channels

In this section we discuss separately the dynamics shaping attitudes to and use of different banking channels by the older old, and by younger people living with disability, because there are significant differences between the two groups.

3.1.1 The older old

Approaches to banking among the older old reflect both generational effects and the changing nature of banking relationships

For many of the older respondents who had grown up in the era of the “old-fashioned bank manager” and who may have maintained their account at the same bank for decades, the mental model for banking was still very much one of relationship banking. There was frequently a strong association in people’s minds between their account and a specific bank branch. Despite the recent damage to the image of banks, they associated their own branch with trust, personal service and personal relationships. Recognition by branch staff at the counter was, for these individuals, a key component of the banking experience, and was much valued.

“I’ve been going to that bank for fifty years. And I know the staff and they know me. And every week on a Friday I get what I need from the counter. And that’s the way I’ve always done it and that’s what I like.”

Awareness and understanding of new banking channels could be very low – leading to exaggerated security fears

For such individuals, awareness and understanding of new banking channels and how they operate could be very low. This lack of understanding of the infrastructure of new channels then meant that perceptions of both phone and Internet banking were associated with exaggerated security concerns, reflecting more widely drawn fears around computers, the Internet and technology.

“I wouldn’t touch it [Internet banking] with a barge pole. Because I like to be in control and not have somebody else be in control...I just don’t trust it. I’d much rather not do it. I’d much rather phone and talk to somebody and send my son in to the bank.”

“Just the thought of somebody accessing my account [via the Internet] I just don’t like the idea...I guess they can access it anyway if they are clever enough.”

“Because I don’t like the idea of having to go through the Internet [to look at her account]. It would be far quicker but then it would be quicker for a lot more people to have my money and I have the rudest objection to that.”

"I do not want to put information on the computer that someone else cleverer than I could get hold of, and therefore I do not use it for purchasing."

Perceptions of telephone banking are heavily shaped by negative experiences of offshore call centres that can be difficult for the hard of hearing to use

There may be little real appreciation of how the modern banking customer communications infrastructure works. Individuals are commonly frustrated, for example, that they cannot readily ring their local branch directly. Understanding of telephone banking is often particularly incomplete in that telephone banking was not necessarily understood as a fully realised channel-focused banking service.

"You can't ring the bank in Didsbury any more. You get put through to God knows where and it's no good asking to speak to your local bank because they won't put you through. I want to speak to someone who knows me and my account."

"The risk of giving details over the phone, I wouldn't be very happy about doing that."

Indeed perceptions of telephone banking are heavily influenced by negative service experiences with offshore call centres. Calling offshore call centres frequently presented very real communication difficulties for the elderly, particularly those who were hard of hearing, who can find it very difficult to understand the accents of those they speak to.

"I'm fed up of that voice in India because I can't understand a word. And I say to her, I'm not being rude, but can you...? She goes...I'm saying to her please will you slow down and speak more clearly. I don't want to be rude, but I know what you mean, the voice from India. With my hearing aid it's hard, you know."

"And you ring up and, as you just said, you can't hear a word they're saying. I've tried it once or twice, but enough. I'm going down to the bank and speak to someone who knows me and speaks English."

There is some use of phone-based savings accounts where the usability downside is tolerated as a trade-off against higher rates

Some of the elderly with substantial savings are prepared to engage with phone-based savings accounts, often prompted by media articles or their [adult] children's recommendations on "best buy" rates. The decision is rates-driven, however – a particularly important consideration in the current rate environment for those living on savings and fixed income. The service and usability downside – difficulties in hearing and/or memorising passwords – are simply tolerated in the interests of better rates, and accepted because the need for communication and access is limited and occasional in this case. In several cases, phone-based savings accounts were in fact managed by adult children on their behalf (see discussion on delegation in Section 4).

"At least with the telephone you do have to go through the rigmarole of what they want to know...and it's not as if you are doing it every day...the interest rates are better than my bank is offering."

Internet banking is seen by some as only suitable for another generation and as requiring competencies that they do not have

Internet banking for this type of customer is something of an alien concept, seen as only suitable for another generation and requiring skills and a familiarity with technology that many do not have. Some have a little – often hazy – understanding of

how Internet banking works through exposure via their children, but are resistant to becoming engaged with it on a personal level, not least because many see Internet channels as inherently unsafe. Essentially, however, Internet banking is simply too far from the familiar comfort zone and values of relationship and branch banking.

“Internet banking, what’s that?”

“My son is always saying he will set me up with Internet banking and how I would love it. But I’m not interested. I’ve been with my bank a long time.”

Some had moved into Internet banking at the instigation of family members while others had done so independently

In line with the broad spectrum of attitudes to technology and the more or less technology-oriented segments described in Section 2, however, a significant sub-set of the older old respondents had engaged or experimented with Internet banking. Trialling or getting into Internet banking was usually triggered by a suggestion from a family member, though in some cases it was prompted by communications from the bank. Others had made the transition to Internet banking independently as part of a wider effort to learn about and get into the world of computing. Individuals reported learning about the benefits of Internet banking and how to use it at “silver surfer” clubs and the “U3A” (University of the Third Age) computer courses, and at sessions held by libraries and local authorities. For these individuals, the effort to get to grips with computing which in turn led into Internet banking was part of an effort to keep their brains active, keep up with the modern world and try to ensure that they did not get “left behind” by technology.

“No. I’ve wanted one [computer] for ages. I keep thinking I ought to get one and get one, and then I did. And I practised on it and...with a little help from sons I managed to, you know, just about use it...my son set me up with Skype and Internet banking and I email my daughter.”

The move into Internet banking was made very much in the same spirit that they made use of computers in other ways, using Skype to chat to children or grandchildren overseas or using the Internet look up the weather, for example. As with other computer-based applications, the benefits of Internet banking were seen as worth overcoming the initial difficulties in getting started and acquiring skills, even where they were not fundamentally confident with technology.

In other cases, Internet banking had been set up for parents by adult children as part of a delegation or account-sharing strategy (see the discussion in Section 4 on coping strategies and work-arounds). In the latter case, the degree of engagement varied, with in some cases individuals rarely or never using their Internet banking account independently, while in other cases it was used regularly.

The transition to Internet banking can require a degree of support if elderly people and the excluded are to use it independently and with confidence

It was evident that, for the elderly who do not have an existing bedrock of computer skills, successful transition to Internet banking usually requires a fair amount of support and confidence-building in the early stages. Where individuals had made the transition successfully, they had usually had the assistance of a family member to set up their account and to show them how to use it, typically requiring the demonstration to be repeated on several occasions in the early stages.

Inconsistent support or a lack of reinforcement could leave elderly people disempowered or overly reliant on family members

Generally, individuals wanted to be independent and to be able to use technology and Internet banking themselves, without having to rely on family members. Where support had been inconsistent or superficial – or, as in some cases, given largely remotely by phone, it could be difficult for individuals to become familiar with how to use Internet banking, or indeed other aspects of using computers, particularly where use was occasional. Alternatively, younger family members could become irritated by the repetition involved in showing elderly relatives aspects of computer use that they themselves took entirely for granted. This could in turn make individuals reluctant to ask for help when they needed it. As a result, some elderly people struggled with Internet banking, particularly at the beginning. This could be disempowering and frustrating, in that individuals wanting to use Internet banking were left more reliant on relatives than they would like. In a couple of cases, this had caused people to revert to more familiar channels. However, most of those who had made the transition reported that children were supportive and encouraging and that they made the transition fairly easily.

“If you don’t remember the next time you have to do something on the computer and they’ve gone out and left you doing it...when they come back in again and you’re still wanting to do that...‘But we’ve already shown you.’ ‘I know, but show me again.’ And they can get a bit ratty, you know. It’s off-putting.”

For the techno-enthusiasts already using computers regularly in their daily lives, Internet banking was a natural extension of the way they used technology

Other older people, including some of the very old, were, as described in Section 2, naturally techno-curious and comfortable with computers and the Internet more generally, so that the move into Internet banking was a natural extension of the way that they used technology in their lives more widely.

“Yes, Internet banking, I check it every day. I’m perfectly happy with that, you know. If anybody’s worried about it, don’t be [aside to other members of the focus group]. It’s so easy, but if you haven’t tried it, you’re going to be suspicious. I can understand what you’re saying, but I’ve been doing it for some years now and believe me, it’s so simple.”

The convenience and functionality of Internet banking was seen as superior to branch banking while also overcoming some of the constraints of old age

Whatever their route to it, however, for those who had mastered Internet banking, the convenience and control conferred was greatly liked, particularly the facility to monitor transactions and check on balances in near-real time. Most who had made the switch saw Internet banking as much more convenient than branch banking and greatly liked the associated functionality. There were real practical advantages also – for those with mobility issues or who were reliant on family members for transport, Internet banking was much more accessible.

“My grandson set it up. Yes, I mean you can do it 24 hours a day. You’ve got an up-to-date balance whenever you need it. The transactions show up almost immediately. Yes, I find it’s much better.”

“Well, I mean the high-street bank is probably not as accessible as it used to be. I find it [Internet banking] a lot easier now than going down to the bank and in fact I very rarely do. It’s far more convenient to do it from home.”

Although his wife still prefers relationship banking, Stephen, 83, has started using Internet banking.

“Yes. I do all my banking on the Internet...Because I’m lazy. It saves me having to walk to the bank. And it’s convenient. I find that I go into the banking and I see instantly how much money is in there or not in there; so whether I can pay bills or whether I can’t pay bills.”

Like many other people, especially among the older old, Stephen does have concerns about security and the risk of fraud associated with banking and making financial transactions on the Internet.

“Well, the disadvantages, the possible disadvantage is security; big, big, big disadvantage. We worry about security.”

Nevertheless, when asked about the extent to which this constrained his use of technology, Stephen was unequivocal:

“It doesn’t really. Rightly or wrongly, it doesn’t.”

Little or no interest among the elderly in mobile banking services

Even among the group who had moved into Internet banking, given the pattern of very limited use of mobile phones described in Section 2 there was no appetite among the elderly for mobile banking services. Fundamentally, elderly people had no affinity with or experience of mobile technology. They also found mobile phones difficult to see, with some having difficulty also understanding the functionality or manipulating keys. Beyond this, since most had plenty of time, they could not see any advantage to banking on the move, when they would be more comfortable accessing Internet banking at home.

“No, I can’t see myself doing that. I’d need to put my glasses on just to see it and then it’s not always that easy to see and I’d be worried I’d get it wrong and who else can be getting at my money.”

“Two things are very important. Anything that I can read easily and see better. That’s one thing...I love technology. It’s only like, I have limits regarding my reading...I can’t see the letter...[that’s why] I prefer using the Internet than the mobile, for that reason.”

“I’m not short of time and nothing is that pressing. I’m always going to be able to do it better at home on the Internet...what’s wrong with using my card?”

3.1.2 Those living with disability

The dynamic for the use of banking channels for those living with disability was very different to that of the older old, and, again, reflects the broad spectrum of attitudes to technology and the technology segmentation described in Section 2.

At one end of the spectrum the deeply digitally excluded see their options as very narrowly focused on branch banking or the Post Office

The exception was the deeply digitally excluded group who share many of the attitudes and fears of the older people who were resistant to technology. The deeply digitally excluded group among those living with disability tended to define the range of available banking options very narrowly. They thought in terms of bricks and mortar

– branch banking and the Post Office – and had little real understanding of other channel options. As with digitally disconnected older services users, phone banking was not necessarily fully understood as a stand-alone banking channel. Equally, even leaving aside the practical barriers to accessing Internet banking for those without computers or computer skills, there was a fear of Internet banking and Internet-based transactions as unsafe, again reflecting a lack of understanding of how these channels and payment systems operate.

“To avoid all that fear, wariness, I find the best method...I mean this is old-fashioned, people say – I would go into the bank, write out the cheque, and get the money, so at least now I know exactly what I’m doing. They can see me, the money I’ve got in my hand. I feel completely safe.”

Digitally excluded disabled individuals were not so much resistant to new channels, as lacking the knowledge, confidence or means to access them

Unlike some of the digitally excluded older people, however, these fears and concerns did not necessarily mean that they had a lack of appetite for technology or an unwillingness to change the way that they operated. While they felt comfortable and safe with branch-based channels and using the bank counter, people explained that they rather lacked the confidence and knowledge to make use of other options and technology they did not understand or were not familiar with. Indeed, individuals could be very conscious that they were being left behind or potentially opting out of a world that was increasingly dependent on technology and connected through it.

“I need to know how it works. Like I said for a very long time I’ve been out of the system. You know, I’ve been stuck in the house. You know, so I don’t stick with the old system, because all I know is to use cash to make the payments, I need to know how you have to use the Internet to make a payment. Also with the computer, you have to know about it. Look at me, I have left it so long I can’t do it but I know it will help me along...they have to make people like me aware...I am sure if they do that people will be happy to use [Internet banking and shopping].”

“It’s a lack of confidence, isn’t it; looks like. Maybe I could do it with practice. But it’s a fear for me that in case things go wrong, I’ve got no one for help.”

Rita, in her forties, was born hemiplegic and has always lived at home. She lives with her elderly father, who is now almost blind. She does not work currently but has had some work experience and gained some basic digital skills. She appears to have few opportunities for social interaction. Neither her father nor she have any formal support but help each other in a variety of ways.

In many ways her attitudes to and experience of technology are those of an older generation. She is, however, very conscious that the world is increasingly technology oriented and that her digital exclusion is not only potentially making her life more difficult than it might be but also cutting her off from opportunity and narrowing her options and social possibilities. She would like to change this but lacks both confidence and the funds to alter her situation.

She feels conspicuously vulnerable in a wide range of situations and has few people she could ask for help. In all contexts she seeks the lowest risk solution. For this reason, she has never used a cash machine, and obtains cash using her chequebook at the counter, as the “safest” way.

“To be honest it’s just because I’m scared and I just don’t practise, and so if I get stuck, who would I ask? My father’s never used one [ATM]. You can’t ask anyone on the street.”

She pays for shopping in cash, which she must undertake daily because she cannot carry very much, having only one functioning hand. Bills are paid by cheque, which she struggles to write and tear off, but manages with the help of her father.

She can access the Internet at her local library, which she uses for job applications, so far unsuccessfully. She would not consider phone or Internet shopping or banking, partly because of exaggerated security fears but more fundamentally because she lacks the knowledge and confidence to do so.

“I’ve never done it, so I’m guessing. I probably just need to give my card number. So why do I avoid it?...I’m wary of who can have access to my bank...I seem to fear it, because, you know...I’m vulnerable already.”

She would love some support to learn how to use the various banking and payment services that she now avoids and to help her to overcome her fears but does not know where to start in gaining new skills or acquiring new knowledge.

“I think the main problem is lack of confidence and fear, to be honest...What would be really helpful, I’m thinking, for example, if there was a law saying today you have to use cards and cash machines...if the bank offered services...if they, disabled people, need help using our services, please book an appointment...and the person will show you how to use the machine with your disability.”

The majority of younger people living with disability saw remote banking and Internet-based services as empowering and enabling

Outside this digitally excluded group, and especially among the younger disabled people, digital and remote banking channels were seen as a natural extension of the role of technology in their wider lifestyle. Beyond this, however, Internet banking and Internet-based payment services represented a means of empowerment and of managing or overcoming the constraints of their disability. Internet banking – and to a much lesser extent potentially mobile banking also – were seen as enabling individuals to realise independent control over their affairs and finances and thus independence more widely. This was particularly helpful for those who were housebound and who relied on others to help with many other practical and physical tasks that they were unable to manage themselves. Several of those who were married or cohabiting and who lived with considerable physical and mobility constraints relied on their partner to undertake many day-to-day tasks but were able to make a contribution to the running of the household by managing the household finances over the Internet. This was a very considerable source of satisfaction, going some way to rebalancing their independence and enabling them to take an active role in the partnership.

“He [husband] does all the shopping and the housework, you know, he does a lot for me. And I look after the finances and the banking and paying the bills and our savings and the credit cards and everything. And I can do that from bed if necessary. So, you know, I’m doing something useful. I’m contributing to the family.”

Internet banking conferred control and enabled working around constraints of disability – for some with carers this was one of very few areas of real privacy

For those who were housebound or who had “bad days” when they were able to do very little, Internet banking and Internet shopping, more generally, enabled individuals to overcome many of the day-to-day difficulties of managing household finances or getting shopping.

For those dependent on a carer for many activities, Internet banking and shopping represented not only independence and control but, equally significant, one of the few areas of their life in which they were able to maintain personal privacy.

“Why I love Internet banking is because immediately I can check at any time of the day or night...I like to be a little bit in control. I like to go on when the bills are due, send them through as and when I can. So that’s what I find really easy with that. Yes, without Internet banking, I don’t think I’d be able to cope. I do most of my transaction online.”

“And yes, he [carer] knows everything. There’s nothing really I’m able to keep from him because it’s everything I need him to help me with. So, yes, that’s the thing...we would like to have privacy, but we’re just not in that position I’m afraid...I do transactions myself online, so I pay lots of my bills. To be honest, a great percentage of my bills are paid online. The only thing my carer would usually do is, as I said, pay for something if we’re in a shop or if, like, I need money paid into my account to cover something, he will go literally and do that. Other than that, all my bills, most of them are paid online, not just direct debit. I actually pay what’s owing and send the payment through.”

Louisa has advanced rheumatoid arthritis and is confined to a wheelchair. She is heavily dependent on her longstanding carer for personal care.

As Louisa’s physical capabilities have deteriorated and her world has shrunk, she has turned to technology to keep her connected to those she might not otherwise often see and to keep up with family and friends and the developments in the world more widely.

She loves technology and is sufficiently well off to ensure she has high spec equipment and all the available technological workarounds. She has some dexterity issues in her hands, though on good days she can manage some applications, albeit with pain, but relies also on voice-activated type. She is heavily into mobile technology and uses a wide range of largely social and messaging apps on the go.

She manages her finances closely using Internet banking, a key source of satisfaction and control, and one of the few areas of privacy in her life.

“Well, to be quite honest, because of the position I am in, you know, you can’t hide anything really from him [carer]. And yes, he knows everything. There’s nothing really I’m able to keep from him...I love Internet banking... I like to be a little bit in control. I like to go on when the bills are due, send them through as and when I can. I do transactions myself online, so I pay lots of my own bills.”

Technology-based solutions have enabled people to use Internet banking and shopping channels by using specialist adaptive software and other aids

Technology-based solutions have clearly played an inclusive role in enabling those living with disability to use Internet banking and shopping, which might otherwise have been difficult, with both Internet banking and Internet shopping themselves playing a role in mitigating some of the difficulties arising from living with disability.

In some cases, Internet banking was used in combination with specialist software, such as voice-activated commands for those with dexterity issues or who for other reasons were not able to type. In other cases, use was made of a series of workarounds, such as zooming out text or use of spoken codes, for the visually impaired, to make applications such as Internet banking more accessible and to increase their usability.

As those with progressive impairment found their access to technology increasingly constrained, use of Internet banking was becoming more difficult

There was, however, a group who were finding that Internet banking was becoming more difficult to use, reflecting the growing difficulty they were having in using technology more widely. These were people with progressive impairment, visual, cognitive or physical, or those who had periods where their disability was more or less troubling. As their condition deteriorated, or at times when their condition was particularly acute, they could find themselves unable to use Internet banking effectively, in much the same way as they were finding other applications difficult. This was for a number of reasons. Pain, fatigue or cognitive impairment could make it difficult to concentrate or focus for any length of time, which could preclude using computers for a long period or to complete lengthy processes. For those using smart phones, these difficulties could be more extreme because screens and keys were smaller.

“On bad days, you know it is just too much effort to focus and my hands have, like, this glove effect and it’s just too difficult. It’s easier to pick up the phone to the bank.”

“I don’t even text some days, don’t even answer the phone. Sometimes I just can’t face it and, you know, sometimes the computer I don’t go on it for weeks...it’s just easier to pick up the phone and speak to someone.”

Difficulties in concentrating or fatigue, dexterity or visual constraints could make Internet banking and Internet services problematic to access and use

These difficulties could occur in isolation from or in combination with difficulties with dexterity or visual impairments, which tended to manifest in frequent typing errors. This could be a source of huge frustration in that it resulted in Internet-based forms failing or timing out, with the need to start again compounding existing fatigue or dexterity difficulties. On bad days or in particularly trying situations, faced with repeated failures, individuals reported giving up and aborting transactions in despair. Alternatively, serial failure could result in the system shutting them out. Similar difficulties arose with passwords and PIN-based keys, which could be difficult to remember, see or enter. The same difficulties also arose with use of mobile services on smart phones.

“There are some [apps on phones] that I wouldn’t use now because they’re too difficult. Just because they’re too complex!”

“I have tried sometimes to do something simple, pay someone new, you know, and by the time you have got it wrong three times and you are just so tired you just give up in frustration...It used to be fine.”

For some, as Internet banking had become more difficult to use, they had turned instead to phone-based banking as simpler and more accessible

For those encountering difficulty with the Internet, telephone-based channels could be seen as easier and more accessible, albeit in some cases also as a “step back”. In some instances, individuals facing constraints in their use of the Internet and Internet banking and payment channels had simply moved away from the Internet to rely more heavily on the telephone. Others switched between channels on good and bad days, as their condition and the associated constraints varied over time.

“The login procedure, in, I feel that’s quite windy, long winded, you know, there’s several things you have to remember to enter, which is very difficult, and in all honesty, as of late, I have actually been ringing the bank instead.”

Telephone-based channels had a number of advantages for those with a range of constraints

One of the key attractions of telephone banking was simplicity and accessibility – without the usability hurdles associated with the Internet, in that the requirement for data entry was minimised. For those with visual impairment, however, some of the security questions could be difficult to answer – account numbers or sort codes on cards were very difficult to read, for example. Similarly, for those with difficulties with memory, resulting from physical or cognitive impairment, identification queries which rested on knowing recent transactions or details of regular account activity could present significant barriers due to difficulties related to recall. Where users were presented with a series of time-consuming menu options, this could also be a challenge for some.

“I have found it difficult for telephone banking, as an example, [they ask] ‘Have you got any direct debits on your account?’ I wouldn’t be able to remember. I used to be able to do that no trouble.”

Telephone banking also opened up the possibility of human interaction and support

Most importantly, however, the telephone offers the possibility of human interaction, which allows individuals to explain what they want and to ask for help, and in some cases even to explain that they have a disability and needed extra support. Others, especially those who had little human contact due to their relative isolation, such as the housebound, also simply valued the opportunity for human interaction.

3.2 Managing payments

3.2.1 Receipt of incomes and management of household outgoings

The overwhelming majority of income, primarily pensions and disability benefits, was paid direct into bank accounts

The overwhelming majority of the older old and people living with disability who were interviewed received their income directly into a bank account. Quite a few people living with disabilities who were working were freelance, self-employed and often occasional or part-time contractors, typically configuring work around those times when they were well enough to work or not undergoing treatment. In these cases some income could be received by cheque, but this was relatively rare.

There were thus differences between those in work, and the retired and those living on disability benefits, which influenced the way they managed their money. For those living primarily on pensions or disability benefits, income was predictable in terms of both value and timing, as was also the case for the employed among those living with disability. For those dependent on freelance work, income was much more volatile, meaning that management of budgets and outgoings had to be more flexible.

The affluent had the most direct debits while those on modest incomes limited numbers of direct debits to maximise flexibility in the timing of payments

Use of direct debits reflected patterns of wider use within the population, with the more affluent tending to be most comfortable with direct debits, to have more direct debits set up and to use direct debits for a wider range of commitments and bills. Many of both the old and those living with disability were, however, living on tight fixed incomes and needed therefore to be careful about their money management and budgeting. For the most part, payment of outgoings was timed to coincide with receipt of income. The majority had their key household outgoings and bills covered by direct debits from their accounts with, as in the wider population, the more affluent having a wider range of direct debits than the less well off. As in the wider population, some of those on more moderate incomes – and those whose income fluctuated with freelance contracts – were more likely to pay their major regular bills by direct debit while choosing to make some payments personally via the phone, in a branch or by cheque. This was primarily to maximise the flexibility within their budgets by varying the timing of payments to suit cash flow.

“It [direct debit] pays itself and they tell me whether I’ve underpaid or overpaid and I know exactly where the money’s going. And when my bank statement comes in I’ve just got to check it down and I know that all the entries on direct debit are there.”

“I’d rather have a regular amount going out each month so I know exactly what I’ve got in the bank. I don’t get a surprise every three months, because, you know, the high use of gas or something for the heating.”

Those on the lowest incomes often managed entirely in cash to maximise spending discipline and control and avoid the risk of straying into overdraft

Again, as with the wider population, there was a sub-set of those on the lowest incomes with a distinctive approach to money management and bill payment, focused on cash-based management of budgets. In these cases, although funds may have

been received electronically via a bank account or POCA, they were usually withdrawn soon after receipt. Bills might then be paid in cash via Paypoint or at the Post Office. Alternatively, fuel keys would be charged with cash, payment stamps (for TV licence or Christmas club or similar) bought with cash or gas or electricity meters fed with cash. In the latter case, people often put more cash into meters than necessary in the summer in order to “save up” for the winter. Where major purchases had been made from catalogues and were being repaid over time, agents collecting payments were often paid in cash, as, in some cases, were agents collecting on door-step loans. People were aware that these payment methods could be more expensive than direct debits but were making an active choice of these channels as better suited to their need for flexibility in the management of their budgets.

“Because I know where my cash is...if I squirrel a bit away, I know where it is. And I know what I’ve got, and what I haven’t got, and when it’s gone, I know it’s gone.”

“You’re not getting any nasty surprises with cash and you don’t get so much temptation either.”

“You know where you are. With a debit card it might not come out of your account for a couple of days then if you’re on a tight budget, you can then sometimes slip up. So that is the reason I’ve preferred cash, then I know exactly where I am.”

“Paypoint. You know, you can do it when you want. You know where you are.”

Eric, formerly a trading standards officer and community police officer, has both mobility and cognitive problems as a result of a heart attack and a series of strokes in his mid-forties.

He is a discharged bankrupt, arising from financial difficulties that occurred during the time he was in hospital, in part because his cognitive impairments mean he cannot understand and deal with correspondence.

“If I’m looking at an A4 paper, basically I see half of it, and when I’m reach halfway down that paper, I can’t remember what I read in the first half. It’s the stroke that did that.”

He now has monthly support from a community organisation that has set up arrangements for paying his bills and prioritising his outgoings, and which deals with his correspondence. He has no other formal support.

Eric is computer literate and owns a computer and smart phone, both legacies of his previous life, but struggles to afford Internet access or credit on his phone.

Prior to the onset of his disability Eric had a mortgage, savings and range of payment and credit facilities. His access to banking now rests on a basic bank account and a cash card only, because of his bankruptcy.

“No, is a basic cash account. Because I went bankrupt, with my situation I was only allowed a cash card and that’s it. I can’t get no credit now, nothing like that.”

He lives in extreme poverty and manages entirely in cash, which he takes out of his account all at once to minimise the costs and difficulties of getting to a cash machine.

3.2.2 Attitudes to and use of payment service products and channels

3.2.2.1 Payment cards

Use of debit cards was widespread and played a key role in minimising the use of cash, which could be problematic to obtain

Outside the cash-focused group just discussed, debit cards were widely used as the principal and most preferred payment mechanism, liked for their convenience and flexibility, and also because they provided a record of transactions and reduced the need to carry cash, which, for some of both the older old and those living with a disability, could be difficult to acquire (see Section 3.3). Debit cards were also widely used for shopping remotely over the Internet and phone, albeit that some people experienced a series of difficulties in using cards (see Section 3.2.3) The low-income cash-managers were much less likely to have or to use a debit card.

“Now, if I go out on one of my rare excursions, I don’t always have cash on me. Now, I feel like the queen sometimes, you know...I’ve got no cash on me. I pay for everything with my debit card, which is very useful for me, because I don’t have to worry about whether I’ve got cash or not...which, for me, takes a lot of organising to get.”

“I’ve got no cash on me. I pay for everything with my debit card, which is very useful for me, because I don’t have to worry about whether I’ve got cash or not, you know. It’s very rare, nowadays, you don’t find somewhere that’ll take a debit card, you know. So it does give me that freedom, not having to wait, do I have to go to the bank first?”

Even among the older people, payments that might once have been made by cheque were increasingly being made by card over the phone or Internet

Among the older old, one-off purchases and some bill payments that individuals might once have paid by cheque were often made over the phone by debit card as an active preference, with this seen as being easier, more convenient and less time-consuming. For these people, cheques tended only to be used where the recipient did not have the facility to take a card-based payment, so typically for donations to charities, payment to tradesmen doing larger jobs in the home, subscriptions to clubs and so on.

“I don’t know. Well, I mean the high-street bank is probably not as accessible as it used to be. I find it [Internet banking] a lot easier now than going down to the bank and in fact I very rarely do. If I get the occasional cheque, which is not very often these days, I have to pay that in, but apart from that it’s far more convenient to do it from home.”

Credit cards were used primarily to spread the cost of larger purchases but also to gain consumer protection benefits or rewards

In this sample of elderly consumers and those living with a disability, largely living on fixed – and often fairly tight – incomes, budgets tended to be carefully managed and purchases considered. The same appeared to be true of use of credit cards, which were used primarily to spread the cost of purchases or inject some flexibility into budgets, with most either paying off cards at the end of each month or paying down larger purchases over the course of a few months. Some of both the elderly and those living with disability were savvy and fairly strategic card users, however, using credit

cards on large purchases or holidays to benefit from consumer protection benefits, to maximise interest free periods, or using both credit and store cards to gain rewards and other benefits.

Internet and phone-based payment services mitigated many of the key constraints facing the elderly and those living with disability

For those who are comfortable online or paying remotely by phone, card-based payment services and Internet and phone shopping played a role in mitigating the constraints of both old age and disability, allowing people who might otherwise find it difficult to get to the shops or to carry shopping to take advantage of home delivery and avoid asking others for help.

For those who had mobility problems or who were in wheelchairs, the Internet and phone-based payment services had advantages beyond convenience and independence. They also allowed for greater flexibility in examining goods than could be achieved in a bricks-and-mortar environment when burdened with sticks or crutches or unable to reach goods from a wheelchair.

For some of the elderly and the digitally excluded the prospect of Internet shopping left them feeling profoundly uncomfortable

Even among some of the elderly who were happy with using computers in other contexts, Internet shopping was seen as high risk. The digitally excluded among the younger people living with disability also had strong fears around security and an exaggerated sense of security risk, with little awareness of the protections available.

“I might have a look but I don’t ever buy. I’ve never bought anything off the Internet...I’ve never felt very happy using my card, so I’m a bit old-fashioned...you can have your card cloned...I’m quite happy doing the things I’ve always done. I don’t really like anything new.”

“Most people do lots of things over the Internet. I still...I do think that maybe you can read information over the Internet or things I need to know, or want to know. I don’t use it for major things like buying things. I’m wary of that. I’m always...because that would involve getting very involved. You know, putting in numbers, your very personal details. How safe that is, I don’t know, you see.”

Phone-based shopping channels and payment services could be more accessible than the Internet for those with dexterity, visual or memory issues

As with phone-based banking, for those with progressively deteriorating or intermittent conditions, or with visual or dexterity problems, phone-based payment channels could sometimes be preferred to Internet channels because they posed fewer access and usability barriers. They were also seen as simpler and offered human contact.

“It is easier for me to just pay with my card and have what I need delivered, that I could not carry anyway. And you don’t have to ask anyone to get it for you so you are more independent in that sense.”

Increasing dependence on remote payment and Internet services was, however, working to increase social isolation for some

For some, however, increasing dependence on remote shopping could increase their sense of isolation, in that they had fewer opportunities for interaction with others. For

this reason, some of those who were very comfortable online chose nonetheless to go and shop face-to-face where they could or when they were feeling well simply because they felt that it was good for them to get outside or to have an opportunity for human contact.

In these cases, heavy or mundane items might be purchased over the Internet while other purchases might be made in person. Some elderly people who did not shop remotely, and who otherwise had a degree of techno-literacy, gave their desire to keep active and meet people as a key reason for not using remote purchase channels.

“What I actually find with the computer technology is that I can become quite isolated from the world. I have problems getting out anyway, physically, but with having access to the Internet.”

“One granddaughter set me up for shopping at Tesco which I was assured would be absolutely easy. I have no desire to use it so it sits there and I never do anything with it...I like shopping. It’s the biggest time waster I know...have a little chat to people, you know. Have a lovely coffee”.

3.2.2.2 Cheques

There is a diminishing use of cheques even among the very elderly, as preference switches to easier methods of payment such as cards

Almost all of the respondents reported that they used fewer cheques than they had historically, primarily because it was easier to use debit cards (either face-to-face or remotely), but in part because the number of outlets where cheques are accepted is diminishing. Where cheques were used, with the exception of the sub-set of largely older respondents with a strong preference for cheques as a payment mechanism (see following paragraphs), this was primarily because the payment recipient did not have the means to accept payments other than by cheque, typically donations to charities, subscriptions to clubs and tradesmen doing jobs around the home. In some cases cheques were used to pay service providers where bills were larger or providers paid monthly, with care agencies typically also being paid by cheque.

“I’ve got a record. I know in theory it can be traced, but, having done that on one or two occasions I know that there’s a lot of reasons why you can’t trace it. Probably, I’m not so keen on cheques now if they’ve got to go by mail because I’ve found Royal Mail unreliable.”

“I used to write a cheque and post the cheque but you don’t know whether the other person got the cheque and you have to go to the post so [I write cheques] rarely nowadays.”

“I only did one this week and that’s the first time I’ve written a cheque for years and that was purely because I hadn’t been well and my daughter paid the rent. I just gave her a cheque and she went and did it for me.”

“Well, I just feel more in control because you’re the one that’s writing it and you know how much you’re putting down. All these modern things, I’m not used to dealing with, when you’ve got loads of cards and stuff like that. It’s not a good idea for me.”

“Well, it’s easier by debit card but as I say the various organisation things and charities which are having a problem with it, the cheque is the only way and also the cheque is more final. I’m not very happy giving information about my cards over to third parties, just one of those things.”

Cheques are valued by an important sub-set of the older old but also by those for whom there are practical barriers or security fears associated with card use

There was, however, a sub-set almost exclusively of the older old, who were wedded to their cheque-book as a method of payment, for a number of reasons, albeit that some also made use of card payments in parallel. Some of this stemmed from familiarity and comfort with a long-established and trusted method of payment. Equally, many relied on cheque stubs to act as a record of transactions that could be referred to easily or checked against their bank statement.

“I suppose I’m just used to cheques and I don’t see the need to change. I mean, it’s worked for all these years, it’s working for me still. I don’t need anything to be done in a mad rush anymore so it doesn’t have to be instantaneous.”

“When it’s new and it comes in, I’m not really geared up for that. I’m quite happy to live in my little cocoon, so to speak, doing the things I’ve always done, doing it the way I’ve always done it. When they said they were going to stop cheques that was a nightmare.”

“I avoid all types of banking except cheques. Once a week I go to church. That’s it basically. Sometimes if I feel OK I go shopping. And then I write a cheque in the shop. That’s it.”

“For me, [using cheques is] a safety thing. I’m always conscious of that.”

Cheques are seen as more secure and were the only option for some who faced access or usability issues with card payments

For others, the security fears around giving out card details over remote channels were such that the cheque was thought to be more secure. Alternatively, for those who struggle to read card details on plastic cards or who struggled to remember passwords or PINs on remote accounts, payment by cheque could seem simpler or more accessible. For those who found card payment services too difficult to use (see Section 3.3 on barriers to use), cheques could be the only option for some payments.

“Because then I’ve got an immediate record of what, I look at my paying-in stub and I know what I’ve paid out and what I normally have, is I have a running balance.”

“I pay by cheque, yes. They keep on telling me to go direct debit, but I can look back, you know, I can see when I’ve paid and how much I’ve paid last time, whereas...to have to start going through the whole of my things from the bank, you know, the bank accounts, is a nuisance, where I can just get my chequebook out and flip through it and see what I’ve paid, so I prefer cheques.”

With the exception of the digitally excluded, few of the younger people living with disabilities used cheques regularly, unless they were unable to use card payment services. In the latter case, this could cause considerable inconvenience and pose its own challenges in that cheques were slower to process and often needed to be posted, which itself was not always easy. Some cheque users with dexterity issues also struggled with aspects of cheques, having difficulty tearing them out of cheque-books, for example.

“I find them difficult, tearing the cheque out of the book, and plenty of times I’ve actually torn part of the cheque in taking it out.”

3.2.2.3 Cash

Cash was typically used for low-value purchases with many minimising their use of cash as a conscious payment strategy in the face of access difficulties

Except for those on very low incomes, where people were able to use card payments services readily cash was used primarily for low-value and incidental purchases, or for gifts and treats for children and grandchildren.

Indeed many had adopted a strategy of minimising their use of cash. This was partly because debit and credit cards were seen as more convenient and having a range of other advantages, but also because physically accessing cash could itself pose a series of challenges (see Section 3.4).

Some people who had trouble with accessing or using card payment services could, however, of necessity be more reliant on cash because they could not readily use card-based payment mechanisms. Examples might include those with dexterity or cognitive problems who can find it difficult to enter or remember PINs, or wheelchair users, who are often unable to reach ATMs or payment terminals.

“It’s not easy to go to a cash machine, number one...Someone could be noting down your PIN number. That fear is always there. And to go to the counter, I can’t stand in a queue...so rarely, I rarely take out cash. I use my card for most things”,

People frequently need to maintain a store of cash to pay small service providers visiting their home, or to reimburse third parties for shopping

Larger sums of cash were generally needed, however, for paying visiting service providers, such as cleaners, chiropodists, gardeners, etc. This was primarily because these small service providers preferred this medium. In some cases, also, where third parties regularly went shopping on their behalf, it was necessary to keep a fairly regular supply of cash in the house so that individuals could reimburse neighbours or carers, formal or informal, for the cost of shopping and similar. This could sometimes take considerable planning in that individuals might be unwell or recovering from treatment for extended periods.

“I’ve got a metal safe at home so if I am having treatment and know I’m not going to be very well, I might get quite a bit out and then I know I’ve got it at home.”

For those on the lowest incomes, cash was their primary payment medium

People on the lowest incomes preferred the discipline and control conferred by cash. The primary driver for dealing in cash was to avoid temptation and prevent over-spending or inadvertently straying into overdraft and incurring charges as a result. Those on very low incomes also often shopped in cash-only outlets such as street markets. Budgets tended to be very tight and very carefully managed.

3.2.3 The new payment technologies

The research team explored spontaneous awareness of new payment methods and then prompted for awareness of contactless payment cards, the potential for payments to be made or funds managed or transferred using mobile phones and also for the use of PayPal as an alternative to card-based payments.

There was relatively little awareness of contactless technology and some reluctance to use it until more widely established

There was some awareness of contactless payment technology and also of mobile payment services, mostly derived from television advertising rather than from experience or observation of others. There was, however, widespread reluctance to use these services, at least until they are more widely established. This was most marked among the older old and the digitally excluded, with the primary deterrent being fears around security.

Despite security fears, some could see the potential of contactless technology for overcoming some constraints faced by disabled people in using payment cards

Some of those living with disability and the older old saw fairly quickly, however, that contactless technology had the potential to address a series of difficulties that arise in accessing cash and using conventional Chip and PIN services (see Sections 3.3 and 3.4). It was seen as having the potential to overcome difficulties in remembering and inputting PIN numbers and reading instructions on terminals, while also overcoming some practical issues around access to terminals for those in wheelchairs. For those who were encountering difficulties manipulating or distinguishing between coins or understanding their relative value, as was the case with some of those with a learning disability or cognitive impairment, contactless technology also offered the potential to bypass both practical difficulties and social embarrassment, a factor of considerable importance for those who found handling coins and cash a real challenge.

“But that [contactless card] would be quite helpful for times when, you know, I can’t reach the thing [terminal]; and also if I had a carer with me that I wasn’t used to that would be great. But I haven’t even heard about that one; that’s amazing.”

“Well, on bad days to put in my PIN number could be a pain sometimes. Right now, because of the way my hands are with the arthritis I can hardly enter numbers at the moment, which isn’t very helpful for me; that [contactless] would be so helpful.”

“That [contactless payment card] would be ideal, wouldn’t it? That would be ideal. So they could not take your card and just spend it willy-nilly.”

“Nobody’s watching you...if you touch it, or go up to the terminal or what have you, nobody’s watching you. It’s not as if you’ve got to punch in numbers and somebody’s looking over your shoulder. Much safer way of doing it, I think, if you’re using a card like that.”

For the overwhelming majority of the older old the prospect of mobile payment services was profoundly uncomfortable

The overwhelming majority of the older old were highly resistant to the concept of mobile payment services, reflecting wider attitudes to mobile services and mobile banking. This was partly because of exaggerated security fears but also for practical reasons such as dexterity difficulties, visual issues and lack of skills. Fundamentally, however, the world of mobile payment services and of mobile technology and apps more widely was simply too far outside their comfort zone.

“Something else to worry about. I don’t know, I’m not saying that’s not a good idea and young people probably think it’s wonderful. But the more things you’ve got flying through the airwaves, the more things you’ve got to remember to do. It was easy before. You didn’t have to worry. You had a bank. You had a cheque book. If

you were lucky you had a credit card. And now there's all these other things people have to use."

Significant concerns about the security of mobile payments were, however, a barrier for both older people and those living with disability

Most important, however, were significant security concerns among both disabled people and the older old, which currently are a significant barrier to making use of mobile payments.

"I've not used those. I'm always a little bit wary. I don't know, like, you know when you read in newspapers and things and sort of, I've seen sort of things about people's personal information being hacked into through their mobile phone. So I've, yes, I've not gone down that route of using my mobile phone for anything."

"I've seen all of that but I haven't really ventured into it yet because I'm not sure how secure it is. I know that I have 100% trust in Internet banking because I've been doing it for a while, but I'm not too sure about that yet because I need to know that the apps are actually genuine, because there are a lot of apps and it's like it's a real app or whether it's an app that's just trying to capture your Visa."

Previous bad experiences of mobile payments were a significant obstacle for a few who had encountered them

Some had encountered mobile phone-based payment services in the context of car parking, an experience which they had found difficult to understand, set up and negotiate and deeply frustrating to use. In several cases, the result had been that parking spaces with mobile phone payment facilities had subsequently been avoided, at no little inconvenience.

"I've had bad experiences of trying to use parking by phone. I mean, it's a complete nightmare as far as I'm concerned...It was so simple just to put a couple of coins in a meter but now, no, the meters won't accept coins; you have to phone up. Very, you know, often you can't hear what they're saying at the other end, you have to hold the phone with one hand, punch in various numbers, your PIN number and your registration number...there are plenty of people without phones, you know? I think the whole thing is completely wrong."

"The worst thing I can tell you is the new parking payment system. You have to give all those details... just for £2 or £4. It's the nastiest thing ever implemented by the council...key in the number and then...if you get it wrong they can fine you £20 or £30 for no reason. It's vey, very frustrating...I had to get the train and I could not leave my car without payment and go, you know, so I missed the train."

It may be very difficult for many to make the transition to mobile payments, with some likely to opt out

It would appear therefore that for many of the older old, mobile services lie, as yet, too far outside their comfort zone and the familiar. Any shift to mobile banking and payment services may be very difficult for many, with some likely to opt out, becoming effectively excluded.

Others rather took the view that they would need to adapt to change in the same way they had learned to live with other changes over a long lifetime

It should be emphasised, however, that, much as the idea of mobile phone-based payment services was uncomfortable, resistance was not universal. Many took the view that if phone-based payments were to become widely used, they would ultimately need to adapt to them, in much the same way the older generation has adapted to many other changes in their lifetime. Nonetheless, it is clear that for some it will be a step too far.

“Until I’m actually shoved into the corner and I’ve got to do something about it I don’t really want to know...but I expect I’ll cope.”

“We’ve had to change with the times. It was new money at one time. Now that was a shock to the system. If that is the way things are going to go, I guess we’ll have to get on with it or lump it.”

Those already struggling with using mobile phone use feared that visual and dexterity issues would make mobile payment services difficult to use

The attitudes of the younger people living with disability were more mixed, again reflecting the spectrum of attitudes to and use of mobile technology, including the extent to which mobile phones were already throwing up challenges and barriers to use for some of those losing dexterity or vision. Power mobile technology users and those generally most proficient with mobile phones were the most enthusiastic and likely early adopters while others were simply cautious about using services seen as not fully tried and tested. The attitudes of the digitally excluded younger people living with a disability mirrored those of the older old.

There was relatively little awareness of PayPal, but it was seen as overcoming some barriers arising in using other payment card services

With the exception of those using eBay to buy or sell goods and some of those receiving payments for freelance work via PayPal, there was low awareness of PayPal as an online payment method. For those that did have a PayPal account, and who had struggled with other payment systems, however, PayPal bypassed a number of the difficulties, particularly those associated with extended data entry.

“I’m quite blessed because a lot of the sites I love to use, they all use PayPal and I’ve got a PayPal account, so I don’t have to type in any of my card details...I’d have to sit there and type in all the letters. Whereas [unclear]. PayPal is definitely, even on a bad day, PayPal is the best way to pay my bills.”

“I love PayPal. It’s secure and you only have to go through that pain once entering all your details.”

“The next time I ordered something it took me directly to PayPal when I wanted to make a payment and that was relatively easy because everything was sort of already there really.”

3.3 Barriers to use of card payments

There are barriers to the full and effective use of cards both for elderly people and for those with a range of physical, sensory or cognitive impairments

There are barriers to the effective use of card payments for those with various kinds of physical, sensory or cognitive impairment, whether arising from old age or disability, which are more or less serious and which are more or less accessible to workarounds. In some cases, barriers can be effectively insuperable.

PINs and passwords pose challenges for those with impaired memory, cognitive and learning difficulties

There is a series of issues that arise around memorising PINs and passwords, which are common among the elderly and arise through the normal course of ageing but most acute among those suffering some cognitive impairment. Those with a range of disabilities, including MS sufferers, for example, can also suffer some cognitive impairment while those who are simply permanently fatigued or in pain can find it difficult to remember both PINs and passwords. Those with learning disability commonly struggled with even simple memorable passwords. There was very low awareness of chip and signature as an alternative to PIN numbers.

“Silly things like, what do they call it now, I’m trying to think what they call it. PIN numbers, all that kind of stuff. I think what on Earth, I mean, I think the world is governed by PIN. Oh God, every time you do something it’s all PIN numbers or whatever. I can’t remember them, that’s the main thing.”

“Well, yes, I mean you’ve got to know the PIN, haven’t you, and I mean I’ve written it sometimes on pieces of paper and then I lose them.”

“I would say specifically on bad days it’s a lot worse to actually try and remember things, to try and remember, as an example, card details. But certainly before I got the condition, I was able to remember a lot of these things but now I cannot.”

Chip and signature does not necessarily solve problems however for those who have dexterity issues, as pens can be as difficult to manipulate as entry pads.

“I have to say using the Chip and PIN devices is a bit easier than having to sign, because it often depends on the pen that someone gives you. If they give you a really skinny pen to hold on to I actually find it really difficult.”

“Oh, no, for me, I mean, sign...using...writing is just as difficult as pushing buttons when my hands are like this. So, no, that wouldn’t be of any advantage and it’s a lot less secure, I think.”

PIN entry can be problematic and terminals difficult or impossible to reach

For those with dexterity problems PIN entry can be problematic, while for people in wheelchairs or using crutches payment terminals can be difficult or impossible to reach.

“I can’t press hard enough and you don’t get the star, and I’m always frightened I’ve forgotten the number and if you get it wrong three times they swallow the card. I’ve had that happen a few times.”

“What makes it impossible is because a lot of the time it’s the position that I might be in, in the queue, well, in the aisle. Because it’s very narrow sometimes. Sometimes you cannot pick it up and stretch it all the way out. So if I can’t stretch it all the way out, I can’t make a payment. And obviously there’s no way I’m going to let the actual person that works at the store tap in my PIN.”

For those trying to use Internet-based payment services there can be a series of difficulties with both access and usability

Access codes that require the user to supply individual letters from a password rather than the full, potentially more memorable, whole password can be very difficult for some.

Completing credit or debit card details in payment forms can also be problematic if typing errors cause the form to fail or if typing is so slow that forms time-out. Small errors in typing can frequently require that the whole form is re-entered. In such cases individuals who tend to be getting more tired and frustrated with each failure then go slower and make more errors with each iteration.

“My finger just starts to go into spasms and it just really hurts, you know. And then I’ll stop and I’ll change the hand, the same thing. I’ll use the other hand again, it will start back again, you know... and then it times out and I am sometimes so tired and frustrated I could weep, you know.”

“It’s just difficult holding that card, looking at those numbers, putting them in, checking them, sometimes you’ve got a whole form of stuff to fill in, and then once you press send, you forgot to do this, or you didn’t enter the correct information there, so it didn’t send it, and you’ve got to, you know, it alerts you, and you put that in and then sometimes it just, it, you know, you’ve got to, sometimes the screen’s blank again, you’ve got to start again, you know. By then you are exhausted.”

“I’d put in the details, card details, and I’ve done that five times and then I have given up. I ended up basically having to ring the company and do it, and do it via the company. It was a lot easier and quicker.”

Final security hurdles on “captcha” or verification procedures can cause purchases to fail, sometimes after significant effort has been expended

Even where forms are successfully completed, there may be final hurdles that people simply cannot negotiate. Some of the visually impaired may not be able to read the “captcha” codes, for example, while others may not be able to negotiate additional security measures such as “Verified by Visa” because they are unable to remember the selected letters requested within the whole password. In some cases these difficulties are sufficient to cause even the most determined individuals to abandon transactions, while for others the barriers are so high that they are effectively insuperable.

“You get all the way to the end and then you can’t read the wavy letters – it’s impossible, and you fail at the final hurdle. Or they do Verify by Visa and I can’t remember the letters.”

“I’ve tried to buy something and found it difficult to reach the end where it would say your basket is full and carry on and finish. I just couldn’t get to the end of whatever the technical procedure is to acquire whatever it is you wish to buy. I have on one or two occasions found it so difficult to follow through that I aborted and didn’t buy it.”

3.4 Access to cash and the barriers to obtaining cash

Access to cash is one of the key payment service difficulties faced by both elderly people and those living with a disability

Access to cash was one of the most important but also the most challenging payment services issue faced by both the older old and those living with a range of impairments, with difficulties arising for a variety of reasons. In many ways it encapsulates the range of problems faced by those with impairments in using a range of payment services. For the more affluent and those with partners or support there were generally workarounds in place (see Section 4). For those on their own or without support, for those more reliant on cash because they were less able to use cards, and for those on very low incomes, obtaining cash could make life and managing finances much more difficult.

3.4.1 Obtaining cash

A significant sub-set of the elderly and those living with disability used the branch counter to obtain cash as both the most accessible and secure method

The channels used for cash withdrawal and the approaches taken to obtaining cash varied considerably. A significant sub-set of the older people, particularly those with a local branch relationship, always went to their local bank branch and obtained cash at the counter, either using a payment card or by cashing a cheque. The habit of a lifetime and the personal recognition associated with these visits were important parts of their motivation for obtaining cash in this way but so also was a sense that this was the safest and most secure approach.

“Using machines don’t interest me very much. I prefer to go into the bank...I’ve been with the bank for so many years and they know me and I know them and I go in and it’s...you know, it’s more personal and I prefer that.”

“I find that going into the bank, hello, how are you, how’s the holidays, and everyone has a chat and everything. It’s just that bit of friendliness.”

A significant minority of those with disabilities also chose to obtain their cash this way, and for much the same reasons, in that among both the elderly and those living with disability many felt conspicuously vulnerable, and felt safer obtaining cash inside the branch. Others were simply reluctant to hold others up, feeling either self-conscious or under pressure if using an ATM with others present.

“No, I don’t like cash machines. I don’t like anything where I lose contact with my card. I go into the building society and I then give them my building society book and say ‘I want £300’, or whatever. And she pays me cash and puts it in an envelope and it goes in my handbag and I then go home and take it and put it in the safe.”

“I think it, I don’t really like going to the cash point; there tends to be like a queue of people behind you and I always feel like I’m being a pain in terms of it’s taking me a bit longer to get my money out. I feel like I’ve, I need to rush because people are in a rush, but if I’m finding it difficult to use the cash point you just feel like everyone’s kind of annoyed that you’re taking longer than everybody else.”

Among the elderly who preferred to get their cash at the counter, more than a few had never used a cash machine in their lives while others were prepared to use a cash machine either occasionally to avoid queues in the bank or in the event that the bank

was not open. In these cases the strong preference was for using cash machines within the bank, with some unwilling to use external cash machines at all.

“No, I never, never use the...never since the day I got it [card], I never use the hole in the wall. I always try...I go into the bank.”

“I won’t use a hole in the wall unless I am absolutely desperate. I’ve done it a couple of times. But I’m in no hurry to repeat it.”

“Can’t say I’ve ever used one, so I can’t tell you.”

Some among both elderly people and those living with disability were happy to use ATMs, but often only within a branch because they felt less exposed doing so

Some among both elderly people and those living with disability were comfortable using ATMs, both inside the branch and externally, and encountered no problems in doing so.

Others would only use ATMs within the branch, and so were restricted to opening hours, while yet others reported that they used external ATMs but nonetheless felt vulnerable and uncomfortable as they did so.

“They just stand and watch. I mean, I cover up my number but, you know, somebody can just snatch my bag, I can’t really fight them back at 82.”

“And I feel very vulnerable there, because you know, you’re on a crutch, and, you know, people just, I’m assuming they automatically see you as vulnerable, you know, and you’re put at a higher risk doing that.”

“Most of the time they are more helpful than the machine outside. I have problems with the machine outside nowadays while the reason you can see inside is because there is no sunlight so you can see the screen properly.”

Some people used “cashback” as their primary means of withdrawing cash, albeit that they are not able to access larger sums in this way

Some among both elderly people and those with disabilities relied primarily on “cashback” while shopping. This did not allow for obtaining more than small amounts of cash, however, suitable for making small payments and purchases but not sufficient for paying cleaners, gardeners or other service providers.

Many of those on low income obtained their cash at the Post Office when they cashed their benefits, others withdrew small sums via ATMs over the week

Many of those on low incomes received their benefits via the Post Office and collected them from the counter. They obtained cash from the Post Office counter, immediately diverting the various cash sums needed to cover essential outgoings by charging fuel keys, and purchasing TV licence stamps and so on, then using the balance remaining as their cash budget to spend for the week. Others with a bank account and cash card used ATMs to obtain cash. Some withdrew their entire weekly or fortnightly income all in one go directly after benefits had been received, in order to ensure that all essential bills and shopping could be covered at the outset of their budgeting period, thus minimising the potential to run out of food or fuel. Others, where access to an ATM was not problematic and did not incur costs, withdrew small sums of cash throughout the week to minimise the temptation to spend.

"Well my money goes into the Post Office and to be honest I tend to draw all or if not the majority of it out in the next few days. Then I don't need to go back."

3.4.2 Difficulties arising in accessing cash

Difficulties in getting to a branch, parking and opening hours were significant barriers for those with limited mobility or who could not travel without help

There could be considerable practical barriers to using the branch to obtain cash, even where it was close by and relatively conveniently sited, which was not always the case. For those with mobility problems and the housebound, simply getting to the branch could be a major problem and a significant expense.

"You see, you have to make a special journey and it's always difficult. Now before when I could drive and was like a free bird but now everything is a problem, but how else can you get your own money?"

Where individuals relied on partners or family members, who were often working, to take them to the nearest branch, opening hours could be limiting. Parking was also often a problem with few disabled spaces available near branches. Some people found Post Offices more accessible for this reason. For some people with severe mobility problems the only way to get to a branch was by taxi, a considerable expense, particularly if the taxi had to wait as a result of queues. Others could only get to the bank with the active assistance of a carer.

"You can't park near the bank. The Post Office has disabled parking so I just go there."

"Online I can do that. I manage all my things online myself. If I would have to actually physically go to a bank machine or to actually, over the counter, then yes, I would need the help of my assistant."

"I'm using the money [mobility allowance] to pay for the minicab to take the children to school...and if I go to the bank I have to take a taxi and make it wait and I can't stand and I can't afford it."

For those with problems standing for any length of time queues could be very difficult or even impossible to negotiate

Where queues arose, this could be very uncomfortable and tiring for those who had difficulty in standing for any length of time. People who struggled with queues also reported that it could be problematic to save a place in the queue if they needed to sit down and take a break from standing. In some cases these barriers were so inhibiting as to make bank branches all but inaccessible for those with the most severe problems around standing and mobility.

"The bank isn't particularly accessible for me. Yes, they have level access to walk through the front door but the queuing system isn't accessible to me, really. And, like having to stand for that period of time, by the time I get to the counter quite often, sort of barely able to stand, which is quite difficult."

"If I can get away without going to the bank I try to just because...there always seems to be queues and...I'm not able to stand for long periods of time, so trying to save your place in the queue and getting a seat is actually quite difficult and quite often you have to stand."

"If I go into the bank, yes, if I go into the branch and am confronted by a long queue, I really can't manage that, you know...so even if I can get to the branch I can't."

Those who did not use ATMs were often unable to memorise their PIN or feared fraud or mugging, but some simply lacked the knowledge and confidence

Most of the non-ATM users were too afraid of forgetting their PIN number, someone seeing their PIN number or being mugged at the ATM to even consider using one.

However, there were some amongst both the elderly and younger digitally excluded disabled people who would have quite liked to be able to use an ATM but lacked the confidence and knowledge to do so. They either did not have anyone they could trust to ask for help or felt uncomfortable or foolish doing so. In these cases, people were also worried that they would hold up the queue or lose access to their card or cash if they made a mistake and that the very act of fumbling with the machine would attract unwelcome attention and make them appear vulnerable.

"I think it, I don't really like going to the cash point; there tends to be like a queue of people behind you and I always feel like I'm being a pain in terms of it's taking me a bit longer to get my money out. I feel like I've, I need to rush, because people are in a rush, but if I'm finding it difficult to use the cash point you just feel like everyone's kind of annoyed that you're taking longer than everybody else."

Those with learning disabilities could find the need to remember their PIN number a barrier to independent use of their card or the ATM

Some of those with learning disabilities reported that having their carer or parent enter or help them to enter their PIN number was their usual way of using their card, either needing help to remember or to enter their PIN number. Independent attempts to use the card could result in embarrassment and frustration if they were unsuccessful, and the card being swallowed by the machine if too many incorrect attempts were made.

"I was upset, you know, the hole in the wall took my card because I did the number wrong. It was really embarrassing and I had to go home without getting it [shopping] and I couldn't get my lunch neither and I was hungry."

"My carer does the card when we go shopping. I might get it wrong. She has it in her purse and I say what I want and she does the card."

Those with standing difficulties or using walking aids and those with dexterity issues could find ATMs very difficult to use

There were a series of important practical barriers to using ATMs. Remembering PIN numbers posed a real difficulty for many of the elderly and for younger people with impaired memory, particularly where they were nervous and stressed, as many were when withdrawing cash. Those with mobility problems or difficulty standing often found it very difficult to stand up and hold on to their crutches or sticks while also needing a hand to manipulate PIN entry and make a choice of services. Those with dexterity issues could find it difficult to manipulate buttons. Alternatively they could lack the strength to depress buttons sufficiently to register.

"I suppose I find it difficult as well when it's a cash point on the street and it's practically on the pavement, because I'm trying to sort of put my crutches up against the cash point, sort of, and lean against, I suppose I kind of lean against the cash point sort of Perspex, I suppose, and put my number in. But if people are

walking quite close by it's kind of I'm worrying about my crutches falling over and people bumping me, that sort of thing."

"The buttons [entering PINs] are close together or maybe if I was having a particularly bad day where my hands weren't very good...I wouldn't be able to just like, I wouldn't be able to feel my way round."

"It's my eyesight. On my computer I can increase the size of the font and I can readily see. When I go the ATM machine, I can't see sometimes, if there is poor sunlight."

"I have to ask if I keyed wrong or I have to ask what do I need to key in because I can't read it on the screen. It's so bad sometimes. Most of the machines they're design for like a normal person which is not good for me and it just becomes a hassle."

Bill is in his early forties and has a degenerative condition that affects his ankles, feet and hands. This results in both mobility and dexterity problems. He has had extensive treatment and a series of operations over the years.

He operates cash machines by using his elbows on days when his hands are bad, choosing times when others are not around, sometimes more successfully than others. The same method cannot be adapted to smaller payment terminals when purchasing goods.

"I have been known to use my elbows which I've been doing at the moment. I also do that to cross the road and various things. To withdraw cash, that's essential...I'll do it with people not about...but now that a lot of them have the little plastic covers over the top, you can't really do that."

Chip and signature is of no help as he cannot easily grasp a pen. As a result he shops primarily in cash. Contactless payment technology is a boon but is limited to low value purchases.

"At the moment my feet are okay but it's my hands that are a problem, so I'm using cash at the moment because that's easier than, you know, than typing in my PIN number."

Text layout, screen colours, backlighting and sun could make some ATMs near impossible to use for the visually impaired

For those with visual impairment, backlighting or text layout could make it very difficult to read some ATMs, with some screen colours or combination of text colour and background making it all but impossible. Sharp definition, clear differentiation and high contrast between colours are required for easier visibility.

"Well, the NatWest cash point is a particular one, but there are a few cash points that are sort of fairly similar. They have extremely small writing, it's kind of generally a sort of lightish bluey colour on a white background, and the fact that there's a white background tends to mean that it's got quite a lot of glare. Obviously if you happen to have a sunny day as well, that's completely and utterly out of the question. There's just no way of using it."

"No, it's not that easy because there's a lot of, the sunlight and that, you know, the light shines in so you can't really see the display, it's very hard to see the display and I never, well, yes, sometimes, when I'm taking the card out, I find it hard to

grab it, and I'm worried that the machine's going to take it back, you know, because I find it hard just to grab the card."

"So, I mean a lot of cash points, I know from experience, I will generally target HSBC, they have cash points which are really clear. The text is nice and clear, it's a nice, decent size, so I can always read those. The ones at Tesco's are the same basic setup, they've got nice big text. But some of the Nationwide cash points are like the bane of my life."

Lack of standardisation makes it difficult to apply rules from one machine to another – often resulting in random selection of services or cash amounts

For those not able to read ATM text readily, the lack of standardisation between machines and banks can be a major problem, with people unable to use different machines in a consistent way, with the result that the choice of services requested or the amount of cash obtained could be somewhat random. For those whose budgets were very tightly balanced this could be a serious issue in that withdrawing too much cash could have consequences for the viability of direct debits.

"You know, just get a little snapshot and go okay, withdrawal is there. Sometimes as well you end up like having a guess at which button, because the order that they put the cash in on the side of the screen, so sometimes when I can't read it that way I'll take a guess and you end up taking out £200 rather than £30 because you've gone for the one that's in... So I've had that on a few occasions as well, which is a bit of a pain in the neck."

"A unified style of cash point, so that, you know, there, you press a certain position every time to get cash or balance or whatever, you, they're all, all of the amounts are in, you know, the same order, so it goes down this side and down this side or across like this, rather than it being sort of one or the other. It means that you can effectively learn where you need to press, and it would make life so much easier."

For those in wheelchairs ATMs could be entirely inaccessible

Some of the biggest problems were faced by wheelchair users who reported that wheelchair-friendly ATMs were relatively rare, while normal height machines were inaccessible.

"I can't stand up. So that is another problem when the carer will have to step in and do it for me."

Louisa has advanced rheumatoid arthritis and is confined to a wheelchair. She is heavily dependent on her longstanding carer, whom she trusts implicitly.

A highly sociable person, Louisa is able to pay her carer to support her in socialising regularly with friends and family. Wherever possible, on these occasions Louisa will seek to enter her card details and pay for meals, goods or access cash herself.

However, more often than not, payment terminals and ATMs are not wheelchair accessible.

"And then sometimes...I've gone to a few places where they've got, they sometimes have higher ones [ATMs] and then they've got lower ones for disabled. Sometimes you go out and the lower ones might be out of money,

not working and it's only the taller ones that are available, which I cannot reach. I'm in the wheelchair."

Her carer usually has to enter her PIN to enable her to make purchases and obtain cash. She is not, however, comfortable with doing the same on those occasions when she has a temporary carer. At these times she turns to a family member to obtain cash and limits shopping activity to essentials that can be paid for in cash.

How far the barriers to access to cash impacted on individuals' financial well-being was depended to a large extent on whether they had formal or informal support

Against this background of more or less insuperable barriers to accessing cash, people had to deploy a series of coping strategies, while minimising their use of cash and relying on cards in as many contexts as possible. Where cash was needed, one common approach was to withdraw large amounts at infrequent intervals and keep relatively large sums in the house. This strategy was not, of course, available to those living on very tight budgets and with little or nothing in the way of savings. By far the most common strategy, however, was to rely on others to withdraw cash for them. Thus the degree of difficulty arising and the impact of the various barriers to accessing cash depended to a large extent on whether people had ready access to support and whether they trusted and were comfortable with the individuals on whom they had to rely. The various coping strategies and workarounds are described in detail in Section 4.

Difficulties in accessing cash have the greatest impact on those with the most severe conditions, those on low incomes and those living without support

It was clear that difficulties in accessing cash and the consequences of lack of easy access varied between different groups, for all of the reasons described in this section. It was clear, however, that issues around access to cash were most acute for the following groups:

- those facing greatest constraints, especially constraints on mobility (house-bound, survivors of strokes, wheelchair users, seriously ill);
- those on very low incomes with the greatest need for cash and least access to bank branches/ATMs, least access to support and most reliant on public transport;
- those without families/partners or other formal/informal support;
- at times when conditions were acute/on "bad days"/during periods of treatment when they were least able to go out and most likely to need cash to pay others for services/shopping;
- outside centres of population or in areas where ATM or branch coverage is patchy.

4.0 COPING STRATEGIES AND WORKAROUNDS

This section describes a variety of coping strategies and workarounds used to overcome challenges in using payment services, in a range of contexts by different groups, and the issues that arise in the process.

Coping strategies rest on behavioural adaptations and technology for some, but primarily on the human factor, and hinge on personal relationships and trust

Some coping strategies are primarily behavioural while others rest on technologically driven adaptations. Relative affluence also has a role to play, in that coping strategies available to the more affluent, such as taking taxis to a bank branch or paying carers to undertake shopping, are often out of reach for those with limited resources.

Ultimately, however, workarounds and coping strategies rested primarily on human factors and depend largely on reliance on family or carer support and thus hinged on personal connection and trust. For those without supportive relationships the options can be very limited.

4.1 Technological workarounds

We turn first to some of the technology-based workarounds. For some people living with disability, technology-supported workarounds enabled them to use computers, which would otherwise have been difficult. In some cases, this enabled individuals to continue working as well as enjoying the benefits of technology.

Some participants reported using voice activated software, for example, to get round dexterity problems and fatigue while those with visual impairments were able to use zoom and image capture to easily increase magnification to facilitate reading text that might otherwise be impossible to process.

“I’ve got a package on there called Dragon and when I go through the bad times with the arthritis in my hands, I can just talk into it because it’s got voice recognition and it will type my emails, letters...you know, so I find that tool really, really handy.”

“Yes, it’s definitely going in the right direction because everything they’re doing is more and more geared to help people like myself, you know. Like my mobile phone has got an app that can make things much bigger so when I’m looking at it, you know, I can make things bigger. Even though the dexterity, gain, is not brilliant but on a good day, on a reasonable day it’s fine.”

“My eyes get tired very, very quickly, so there’s wonderful technology where you highlight what you want to read, and it speaks it to you. It’s not very good, but you get the gist of what he’s talking about. So, as my eyes start to close, I’m still getting what’s going on.”

“Well, I mean, usually what I do...if I want to read a letter, actually, these days the wonders of smartphone technology, if I want to read a letter I’ll just take a photograph of it and then I’ll just enlarge the picture as large as I need it to go and I can just read the...read whatever it is off the phone. Back in the day I used to use a magnifying glass but this is kind of...like a slightly sort of...slightly easier way around doing it.”

Bill is in his early forties and has a degenerative condition that affects his ankles, feet and hands. This results in both mobility and dexterity problems. He has had extensive treatment and a series of operations over the years.

He works from home as a freelance translator, fitting engagements around periods in hospital or when he is undergoing treatment, which results in him being temporarily housebound or, as he gets better, able to go only short distances from his home.

He tries very hard to work around the limitations of his condition, dislikes being dependent and avoids drawing attention to his disability. His professional life and earnings are primarily facilitated by voice-activated software and various other technological workarounds.

“I work from home. I have chronic pain from RSI in my hands, arms and shoulders and neck, so I dictate all my work...I have got voice-activated software to dictate when I type...I’ve got a PC with various types of software, translation memory software, voice software.”

Bill is active in managing his money, savings and investments. He also uses technology in managing banking and finances, using voice activated software with his Internet banking and savings accounts so that he does not need to type. He can receive but has difficulty sending text messages and relies heavily on text banking.

“With First Direct I was an early adopter of that [Internet banking and then text banking]...And it’s fantastic...So, that means I never go overdrawn and everything else I manage online. Yes, I tend to manage everything online. I’m always, yes, moving money from one place to another.”

4.2 Adaptations to behaviour in use of payment mechanisms

One approach to the issues posed by difficulties in remembering PINs and passwords was to attempt to simplify and reduce payment options

For many of those living with memory problems or dexterity, mobility, visual or cognitive impairment, some of the most important and widely used coping mechanisms are around PIN numbers. People took a variety of approaches to this. One was to simplify their portfolio of payment options, reducing the numbers of cards they used or relying on a single card, with one number, which was easier to remember.

Others took the route of using the same PIN for multiple cards, often taking the same approach to passwords also, and using the same password for multiple applications and sites. There was not necessarily any real effort to discriminate in this case between critical applications and those that were less important or raised fewer security issues.

“My basic PIN number is burnt into my brain. But the other PIN numbers I have no hope of remembering...so I don’t use them [cards].”

“Yes, I do the daft thing and I have one which serves me for everything.”

“Except I enter my garage on a touch pad and that is the same as my PIN so...And that one, of course, my neighbours all know because that’s how they get in. You see, if I had to remember a different one for every one I don’t think I’d be able to.”

“I’ve got them all with the same number. It’s the start of my RAF number.”

Some of the younger people had switched from online to phone-based channels as both less taxing and providing ready access to personal support

Some of the younger people living with disability who have begun to struggle with online channels, either because of memory or dexterity issues, reported turning to phone-based channels because they could more easily gain access to personal support and were able ask others for help.

John is in his late thirties and has multiple sclerosis and diabetes.

He was formerly very capable technologically, something of a self-confessed “gadget freak” and highly tech-connected, seriously into social networking and a heavy user of a range of apps. He has found it increasingly difficult to manage texting or to use apps on his phone, struggles to use the computer for more than short periods and has difficulties focusing and concentrating and in memorising PINs and passwords. His condition fluctuates and on bad days he will not even attempt to answer his mobile phone or to send texts.

“I just don’t send text messages on my phone any more, and try not to type generally, just because it’s too difficult.”

His primary coping strategy is to be open about his limitations and rely on others and the human factor for help. He has moved from active use of technology to greater reliance on the phone for day-to-day service interactions, such as shopping, customer service and banking, where he would previously have gone online. He reasons that this is simpler and by explaining his condition and asking for help, he usually obtains superior service.

“With the phone you’re talking to a person, and what I do is start the conversation off by, excuse me, I’m sorry to ask this but I’ve got MS and I’ve got diabetes, explaining about the condition. And generally, nine times out of ten, people will help you because you’re a one-off.”

Beyond this he has focused on simplifying his life, reducing the role that technology plays within it and editing down the range of applications and options he has to manage. He now has one account, uses one debit and one credit card, and uses the same PIN and password for all applications. He avoids situations where he is required to recall or enter data.

“I just try and keep things as simple as possible. So the simpler they are, the easier they are for me...As an example, one of my friends set up my email accounts originally, so as an example, my passwords for all of my [bank, saving, Internet shopping] accounts is ‘xxxx’, just to make it easier for me to use that particular password for everything.”

Many of the coping strategies commonly employed compromise advised best practice and run counter to security requirements

Others wrote down their passwords, sometimes in disguise and sometimes not, and carried them with their cards, again sometimes in a way that could be identified as a PIN number and sometimes not. The same approach was used with passwords, which were written down and kept with computers, again sometimes disguised and in other cases not.

"Well I do, I must admit I do, I have written them down in a place which I hope is not too accessible. But, yes, I have a list of passwords that I use."

"I have mine written down with the card. It's one of those things they tell you not to do isn't it?"

"On the telephone banking, they ask for a password and I've got that taped on the computer."

"I have a list of all my passwords in a little notebook in the drawer with the computer."

Another common strategy was to share a PIN or password with a partner, relative or carer, so that they could prompt them as needed. This was a very common strategy among the respondents with learning disability.

"I keep forgetting it, but she [wife] reminds me."

"My foster mother, she knows [PIN] so I don't have to."

"My dad has to help me with it, like, I can remember the numbers just not always in the right order so he comes with me and tells me which one to do next."

4.3 Informal delegation

Workarounds can be essential for some who find difficulties insuperable but are often used because they are simply easier than struggling to overcome barriers

The most important coping mechanism is delegation, where another person is asked to perform the payment or task on their behalf. Some form of delegation was a very commonly used strategy to get round access or usability difficulties.

For some people, coping strategies and workarounds could be the only way to use some payment services or to access cash. For many, however, delegation to others was simply easier than struggling to overcome barriers to independent use of payment services.

"One of my credit cards, you know, he [husband] would use that a lot to do bits...Gosh, I would say maybe once or twice a week he uses [her cash card], possibly even more, just because of, you know, the inconvenience of me actually going out, you know, or using it actually in the store."

"It's easier actually. Just the line of least resistance. Let them get it for you, why not? It's so much easier and they want to help. Why give yourself the grief, you know?"

"I cannot do it. I feel so much pain. Walking on my leg is not good. I send my friend to do the walking and the shopping for me."

Delegation can simply take the form of asking other people to shop or get cash using their own account and then repaying what they have spent on your behalf

Some people relied on others to go shopping for them or to pay bills for them and subsequently paid them back. In some cases adult children, partners, family members or friends withdrew cash from their own account and were then paid back in turn. This was most commonly by cheque in the case of elderly relatives paying back family members, with electronic transfer more common for some of the younger people with disabilities. Paid-for carers or neighbours were frequently reimbursed for shopping with cash provided by other family members, with the same applying also to cash paid to cleaners or other service providers (see the following section for more detail on paid for carer relationships).

“At one time my son just took my cheques and then gave me the money. Another one of my next-door neighbours who was, still is, absolutely brilliant...like me he keeps some money in the house so I just simply gave him my cheque and he gave me the cash. So that tided me over for the time that I wanted it.”

Delegation by means of sharing PIN numbers and other access details with trusted third parties appears very common

By far the most important solution to access or usability issues on payment services is to delegate use of cards and other payment and money management mechanisms to others by sharing access or account details. Sharing PIN numbers with family members, partners, adult children or friends appeared to be widespread among both the elderly people and those living with disability we spoke to as part of this research.

John, who has multiple sclerosis, lives alone but is engaged to his girlfriend who is currently living and studying in a town some hundreds of miles away. Formerly a solicitor, he no longer works.

He depends heavily on his best friend, who lives around the corner and does much of his shopping and helps him in a variety of other ways also, including using his card to obtain cash. His friend tends to pop in most days on the way to and from work.

“That’s him [friend at door] just now. That’s a prime example of him helping me. He’s got a meeting to go to, so he’s happy to go to the supermarket for me to get something for me to eat tonight. He’ll bring it [supper and his card] back later.”

On those weekends when his girlfriend visits, he relies instead on her to take his card and obtain cash and shopping. He anticipates that when they are married she will be responsible for managing their finances, shopping and accessing cash, etc.

“I give my card details to my girlfriend and she does a lot of it for me because I trust her implicitly...we’re about to get, we’re going to get married, so I am more than happy. So I’m very lucky to have somebody that you can trust with things like that.”

Some give out cards and PINs when they require cash while in other cases cards are retained on a permanent basis by third parties

In some cases cards and PINs are handed to the family member on occasions when individuals want cash. In others, the family member or friend retains the card full time and delivers cash regularly to the card-holder as required.

“But now that my friend is helping me, she’s got my card, so she’s the one who takes the money for me to make any payment or if I need some money.”

“My daughters do all that for me, yes. Nowadays, this last...I mean, let’s face it, when you get to be over 90, you don’t do holes in the wall. Even with my glasses on. But you’ve got to have somebody you can trust.”

Sarah, in her early thirties, is a nurse, but is now unable to work, having previously both studied and worked long hours. She is a single mother of two small children, the youngest of whom is rising three.

Damaged ligaments in her legs have left her in constant pain and unable to walk more than a few feet or to stand for more than a few minutes. Constant pain and fatigue make it very difficult for her to concentrate for any length of time and she now rarely uses her computer. She struggles to make ends meet and has amassed considerable debt, including rent arrears, which is a source of constant anxiety.

She is effectively housebound. Her only means of getting around is by taxi, with a large part of her budget used to take her children to school by taxi.

“A taxi has to come and take myself and the children to the school. So unless I really, really need to go outside, I don’t go. Because I cannot stand and I am depending on taxis to go for my appointments, you know, everywhere.”

She depends heavily on an ex-workmate, who provides informal carer support. Her friend performs a range of childcare and household tasks, including cooking and housework and any lifting and carrying.

Her friend has her bank cards and PINs and shops for her in retail outlets and over the Internet using her card. Her friend also brings her cash for her taxi fares, which she gets from a local ATM using the cash card.

“She [friend] comes here about three, four times a week, so whenever she’s coming to me, it’s not every day, but she takes some money for me [friend has her card and PIN] and then when I need it I tell her that the money has finished.”

Delegation can be extensive – with those providing support using physical cards to shop either in retail outlets or card details to shop remotely

One of the most striking findings of the research was the extent to which delegation extended beyond access to cash to take in a much wider range of workarounds and support practice based on informal sharing of access and security details.

In some cases, cards are retained permanently and used routinely to undertake shopping for parents, relatives or friends who have mobility difficulties, are housebound, having prolonged treatment or simply having a “bad day”.

Family members and friends take cards and the associated PINs when they go shopping for the card holder and use the card as if they were the card holder, entering the PIN number at the till or self-service checkout.

This practice also extended to use of the Internet and remote phone-based payment services. In this case, for example, adult children supporting elderly parents would typically keep a record of debit or credit card details and shop online or by phone on behalf of their parents, effectively impersonating the cardholder. A common example given was ordering a weekly shop online for a parent that lives many miles away. This also appears to happen with younger people who are housebound, in arrangements made with family members or friends.

“Yes, my children often do it for me. Because they've shown me how to do it and I never know. I never can remember. So I often grab one of them and say can you just come order my shopping.”

“My daughter usually orders things for me. I show her in the catalogue and then she orders it for me on the Internet.”

“My son organises all that. It just gets delivered to the door and it saves him driving round and having to take me out with my shopping.”

Harvey and his wife are in their late eighties and early nineties. They have a large and close family, most of whom live locally. As they see it, they have now reached the stage in life where they prefer to rely on the family to organise shopping and services, for day-to-day management of their accounts and for acquiring cash.

“We’ve been good to them all, you know...now it’s payback time...We’re a very, very close family.”

Their daughters have their card details and tend to organise both their weekly shop and special purchases, mainly over the Internet. Harvey liquidated his investments a decade or so ago and now relies on cash savings and his pension income so that there is nothing complex in the way of financial affairs for the family to manage. One of their sons organises their finances and bill payments through Internet banking.

“My son does all that [Internet banking]. He’s a computer expert. And I’m happy to leave him to get on with it.”

Neither Harvey nor his wife have any interest in acquiring a computer or technology skills, far less getting personally involved in Internet banking. Both have mobile phones, which their children have insisted on in case of emergency, but neither would consider using a phone as a payment mechanism.

Harvey and his wife both use cash as their primary spending mechanism but occasionally use their cheque-books where they need to, to pay for subscriptions to societies or charity donations. They very rarely use debit cards themselves, usually relying on their children to prompt them with, or enter, the PIN number.

Their children or grandchildren bring them cash from the ATM alongside other small items such as prescription medicines, either bringing cash and shopping to the house or obtaining these things when taking their parents/grandparents out to the shops or on other trips.

“It works for us. And we don’t have to worry about it all any more. We’re very lucky to have good family.”

Delegation can also extend to formal or informal bank account management and to other aspects of financial management

This approach is also taken further, to bank account management in which adult children have access details for, typically, Internet-based bank accounts as part of a support arrangement. They are then able to pay bills, transfer funds in and out, and set up standing orders on behalf of their parents, or alternatively to repay themselves for expenditure made on behalf of a parent or to transfer funds anticipating such expenditure.

This can be set up as a formal arrangement, such as with a shared account with adult children, or where adult children are formal signatories on the account. Alternatively, the arrangement can be informal in the sense that an Internet account is set up in the name of the parent and the adult child has access via the security codes and account details. In some cases, the parent rarely or never accesses the account themselves. In others they do so regularly. The degree to which adult children actively use the account on behalf of their parent, or partner use the account on behalf of a spouse, also varies. In some cases use can be very active and continuous, in others restricted to the occasional intervention – perhaps on a “bad day” or where parents are unwell or undergoing treatment.

“My son does my Internet banking and my daughter does all my shopping on the Internet. They have all our details and I trust them implicitly.”

“My kids were brilliant when my husband died. They just took over and that was it. They did everything from, you know, just saying, sign here...they did all the accounts, that sort of thing. So probably I haven’t got a clear view of things.”

“I’ve got a problem with money, so we’ve had to get, or my son, because I’ve got one son, he and my wife look after my money, you know, because I’ve got pensions and things like that, and I can’t really count up really.”

Jean, a widow in her late eighties, has recently suffered a fall and broken hip, which left her unable to walk or do a great deal for herself for a few weeks after her return from hospital. Her children both live abroad and her grandchildren are all at university, none of them local to her.

During the period she was at home and recuperating she had a series of visiting carers who undertook various personal care tasks, cooking and food shopping. Her son made monthly visits from France for a weekend each time. On each visit he stockpiled cash from the ATM, obtained using her card and PIN, also using a letter of authorisation from Jean to the bank on one occasion when taking out a larger amount.

He also tried to stock up on non-perishable food and groceries. In between visits, Jean paid the carer to go shopping using the cash brought by her son. Alternatively, she asked one of her longstanding neighbours to get cash for her and repaid the neighbour by cheque, again using the cash to pay the carer. There were, however, a couple of occasions when she had run uncomfortably

short of cash and when her neighbour had not been available. She relied on her carers to post letters and thus pay bills by cheque.

"I coped. It wasn't for long. But it did make me think, you know, you become aware that actually if anything did happen, you could be in a bit of a pickle when you don't have family nearby."

Following this experience, she and her son have set up a joint account to which he has remote access, to enable him to help his mother, and together they have set up direct debits for bill payment. They have not, however, found a workaround for the cash problem. Her neighbour is shortly to move closer to his own children.

"Well, my dear neighbour will not be here to help me out any more. So that is a bit of a worry. But there's no point worrying, is there, if there is nothing you can do about it. We'll just have to cross that bridge when we come to it. Maybe one of my daughters could come and stay for a little while. But, you know, they've got their own lives. It's difficult."

People appear to be unworried by sharing PINs with trusted third parties, but some are concerned about legality and consumer protection implications

Where the family member is trusted this does not appear to be any great source of concern. Some, however, appreciate that sharing PIN numbers in this way compromises consumer protection and security while others are either unaware or unconcerned. None however have raised this issue with the bank or had mentioned to their bank that they were using their cards in this way.

"She's like my sister, my everything. I trust her so much. I know she won't do anything to me. So I trust her so much, that's the reason why for me to leave my card with her. She does my shopping with that, anything I need."

"I give my card details to my girlfriend and she does a lot of it for me because I trust her implicitly."

"They say you mustn't share your PIN number or if anything goes wrong, they won't back you up, you know, but what else can you do?"

"I do worry about it a little bit. What would happen if someone said, you know, you're not Mrs [name] but then she has got the same name as me so it would probably be okay."

Impairment of cognitive faculties can pose a series of challenges requiring multiple workarounds in the use of payment services

Loss of cognitive abilities, particularly dementia, poses a series of issues around delegation. The case of Tom encapsulates both some of the issues that can be faced by people and their families in this situation and the pragmatic nature of the solutions that families have developed to "workaround" the difficulties.

Tom, an economics graduate and former senior civil servant and magistrate, was diagnosed with vascular dementia three years ago, and has gradually lost cognitive capacity over the intervening period.

Although still fairly active and independent, he has lost the ability to handle and count money and distinguish between denominations of notes and coins. He is still able to use a card with a simple memorable PIN but frequently mislays his card and has a tendency to lose or leave behind cash. His ability to write has deteriorated to the point where it is no longer viable to write out even a short sentence or two without significant support and his signature is no longer recognisable or consistent, so that cheques are no longer possible for him.

The family have developed a number of coping strategies. Tom is no longer in a position to handle finances though he retains some understanding of and interest in his investments and stocks and shares. Having previously managed the household finances, his wife has now taken over day-to-day management of their bank accounts, bill payments and cash management. In this she is assisted by their son, who has a City background, and who uses Internet banking to manage their accounts and day-to-day financial affairs. He also runs their investment portfolio, which he does remotely.

“Once I was told that I’d got dementia they said, you know, Dad...for 50 years you’ve looked after us, we’ll look after you for 50 years, now shut up...I’m sorry to make it laughable but that’s the way I can deal with it...You know, I mean my son Michael, that’s [finance] his job, and he looks after the money. The others do it [support him] in other ways.”

A separate bank account has been set up in Tom’s name into which a small amount of money is paid on a regular basis in order to enable him to use an associated debit card for shopping, while limiting the potential downside of his having and losing a card to the joint main bank account.

Generally, if with his wife, Tom simply relies on her to pay for everything and to obtain cash. Tom’s wife also gives him coins and small denomination notes as “petty cash” in a purse he carries with him to cover day-to-day needs. If he is on his own he then hands notes or coins to shop assistants and waits for change or a request for further funds but is unable to tell whether the note he offers is appropriate or if his change is correct. If he is with friends, he asks them to use the cash in his purse and pay for goods and services on his behalf. Both approaches are a source of some embarrassment and frustration.

“It’s embarrassing because I mean I did it last Saturday, we went into a café with about seven other people, and the woman then said, you know, what do you want Tom, give me your purse, and then, you know, I tell her what I want, she does all the money for me.”

Neither Tom nor his wife had heard of contactless technology but felt that this was potentially a way round some aspects of the problems that he faces in handling cash.

Informal delegation outside the context of a relationship with a partner appears less extensive among younger people living with disability

Such extensive on-going informal delegation arrangements only appeared to arise with younger people living with disability in the case of sharing with partners or

spouses. Delegation outside this context tended to be much more limited – confined to getting shopping in or procuring cash – and was more likely also to be a one-off, where individuals required help in an emergency and might ask a family member or friend for help.

Those with a learning disability clearly depended heavily on informal support from parents and carers, who could exert a high degree of control over finances

The exception to this pattern was for those with learning disability, where paid-for carers and family members often provided a high degree of support but also exerted a high degree of control over the finances of the individual concerned. In a family setting, this appeared to be primarily an informal arrangement, with parents and carers frequently looking after cards in case they got lost and writing out cheques for signature. They also facilitated access to and use of bank accounts and helped with payments using Internet shopping sites or phone-based shopping channels – in the same way that they also supported those with learning disability to open and use Facebook or eBay accounts.

“We do it together with my dad. I tell him which one I want and he does the numbers and the clicking.”

“My foster mother keeps that for me because I lose it and she does that [using his card and PIN] when I go out shopping.”

“We’re going on holiday, me and my carer and her friend, and we’re going to go together so we’re saving up so she looks after my card and then she will do it for me when we go on holiday.”

“Well, I sign my cheques up in the book and me Mam keeps it and she sends it off when we want something.”

For some of those delegating to trusted third parties relief and gratitude could be mixed also with a degree of regret at loss of independence

Few of those who had made such arrangements with close family members had any real qualms about doing so, with most indeed being profoundly grateful for the support offered. Others had ceded access a little reluctantly or in the spirit of succumbing to the inevitable, not so much because they did not trust their adult children but because they felt they were giving up a little of their independence. For some it was clearly a relief, however, not to have to concern themselves about bills, shopping, etc. and to be able to leave it to their children to manage their money.

4.4 Those without support

For those without family support options could be very limited, with individuals conscious that they could be open to abuse

For those who do not have family or close friends to help them and to support workarounds, the options can be both limited and sub-optimal. They may also expose individuals to considerable expense and can be open to abuse.

Those living with disability and not married or cohabiting were the most likely to have uneven or inconsistent support or to have no support at all

It appears that, although some elderly people could be very isolated, they were more likely to have support in the form of children, whether living nearby or some distance away. It was the younger people with disabilities living alone that were most likely to find themselves with patchy or very little support, unless their condition was so severe as to necessitate the support of a carer. Those who were married or cohabiting were clearly much better placed than those who were living alone.

For younger people living with disability, contemporaries and siblings were frequently at work and often had young families to look after, as indeed did many of those living with disability themselves. Children could themselves be a source of extensive help, but if very young could add considerably to the challenges, stresses and fatigue associated with living with disability, particularly in the case of single parents, often living on very low incomes. In some cases parents were able to offer support and took a proactive role in informal care. In others, parents themselves were elderly, and in need of support themselves.

Some people did not have regular support but were able to rely on occasional help from friends and relatives should they need it. They tended, however, to be fairly careful in making such requests, only making them if they could not find any other way around a situation, primarily in the interests of independence but also in order not to use up goodwill.

For both the elderly and those living with disability, it was those on the lowest incomes who, particularly if they did not have a partner, were most likely to find themselves with very limited options on workarounds.

“If she [friend] is not here, if she goes on holiday, I have to wait until she comes back. She gets it [cash] before she goes because she knows I cannot go [to the bank] on my own.”

Coping strategies often rested on planning in advance or stockpiling goods

For those living alone, coping strategies often rested on careful planning in advance. Goods were frequently ordered remotely for delivery to avoid lifting or having to go to the shops, with phone channels being more accessible than the Internet for some. However, where access and usability barriers for remote payment services were insuperable, individuals found themselves essentially reliant on cash.

Where people had mobility issues or knew that they were going to be ill or recovering from treatment or operations, non-perishable foods could be stockpiled beforehand to enable them to manage through an extended period of being unable to go out or unable to cook. This might mean, however, that some things had to be done without, including, frequently, fresh food. People in this position often had to shop in the nearest stores, if they were able to do so, which could be more expensive and offer a limited selection.

“I will...I’ll make sure that I have several hundred pounds in cash on me so that, yes, I can pay people back for all the things I need and...Because I can’t really...you know, I can’t get out and buy things myself. So, that’s the only thing I do...I just wait until somebody can come by.”

Bill has dexterity and mobility issues arising from problems with both his hands and feet. His sister has a similar condition and they try and help each other. He has frequently been in hospital for a series of operations.

When he is unable to get cash himself he gives his bank cards to his sister, with whom he has a reciprocal arrangement. They both also get cash and shopping for their grandmother using her card and PIN.

His primary coping strategy is to plan carefully and stockpile food, other necessities and cash, which needs to be undertaken over a relatively long period as he is limited to what he can carry on his back. Internet shopping is of limited usefulness as when recovering from treatment or when his condition is acute he is unable to come downstairs to answer the door or to carry goods up stairs.

“When I know that I’m going to have an operation, I will stock up with cash, which is... This is one of the preparations that I’ll make before I have surgeries.”

When his close friends visit he often asks them to bring him fresh food and usually transfers funds direct to their accounts to pay for this shopping, using voice activated typing to do so.

“When I’m trapped at home after surgery everything will be done by bank transfer... You know, I’ll ask people to bring things and then they don’t want to be paid for them and it’s... I want to make sure that, you know, I’m not taking advantage of people.”

The system works reasonably well when he knows in advance he will be going into hospital or recovering from surgery. But unexpected or acute periods of difficulty can be problematic to manage.

The biggest challenge was access to cash, with some individuals able to do so only by giving PINs to those that they did not fully trust

The biggest issue was typically access to cash, for all of the reasons described in Section 3. For this reason individuals tended to stockpile cash also, to minimise the number of times they needed to go to the bank or ATM. Journeys to the bank frequently involved having to pay for taxis and to negotiate queues, which could be an expensive, daunting and exhausting option.

Where this option was not available, either because of financial or health constraints, some individuals reported sharing their card and PIN with third parties, such as neighbours, visiting carers or friends and relatives that they did not really know or trust well enough to do so, in order to get access to cash. This could be a source of considerable anxiety and concern, not only because of the security considerations but also because providing access to their bank account in this way compromised their privacy. More commonly, people simply did without things they needed or wanted because they did not want to share PINs, both for security and privacy reasons.

“I have to let my friend get the money [using her cash card and PIN] and then I give it to the person [carer] to do the shopping.”

“You get scared. Once someone knows how much you have in your account, even though you tell them to go and spend about £20 or something, when they go they

will check your statement straightaway. Once they know you have a lot of money in your account, then they will start to find ways and means of stealing that money.”

“I’ve worked with people who have been in my situation. I have worked with old people and people who are not able to go out like myself right now. You always have to rely on people, and if you don’t get the right person you always lose money”.

“When I was in hospital I gave my help my PIN to get money out. It wasn’t that I thought she’d rob me. I just didn’t like the thought that she could be knowing what I’ve got.”

4.5 Coping strategies and paid-for care

The paid-for carers who visited or lived-in at people’s homes reported varying approaches to acquiring shopping, making payments and accessing cash for their clients. These in part reflected whether they were serving multiple clients or were dedicated carers for single clients, whether they were employed directly by those they were caring for, or by an agency, and how longstanding the relationship was.

4.5.1 Visiting and part-time carers

Carers reported that care agencies took a range of approaches to client monies, with some having formal protocols and others not

Carers, particularly those caring for people with moderate or occasional needs or for those on low incomes, appeared most frequently to be “pop in” carers, offering part-time support for washing, dressing, personal care, preparing meals, shopping, housework, getting up and going to bed, and other tasks that were difficult or impossible for them to accomplish unaided.

Carers themselves reported a range of approaches employed by different agencies in managing clients’ payments and cash. Some agencies offered some training and/or formal protocols around handling clients’ cash. Others simply relied on ad hoc arrangements negotiated between the carer and the client.

The most common approach reported was for family members to provide cash for shopping within a more or less structured arrangement

Most commonly, carers were given cash for shopping by other family members, and kept receipts and a record of purchases. This could be within an informal system agreed with the individual for whom they were caring or their family members or in line with a record-keeping system operated more formally by the agency for which they worked.

Others spent their own money and were reimbursed either in cash or by cheque by the individual concerned. In the case of cash this could be supplied by family members, or alternatively carers could take individuals down to the bank to draw cash to fund ongoing shopping and so on as part of their caring responsibilities.

“Well, it’s just what you write in the books. You’ve got to put it in a book because anything like, say someone, Mrs Smith, £50 taken out the house and I could say, look I’ve made a record of this, such a date, she gave me £50, she signed it. So really it, kind of, covers me then they know I’m not stealing from this poor little woman. It’s best to keep records of everything.”

"I just take her to the bank in her wheelchair. I write the cheque for her for cash and she signs it and then we go and do the shopping together and then she gives me cash to get things during the week."

"I think they would like a lot more control over themselves [those she cares for], but they're unable to sort of like, go and get the money themselves. They're unable to go shopping anyway, so they need the carer to go and do it for them, or usually the family sorts it out. It varies. Sometimes I use my own money and she gives it me back when her daughter comes."

People typically lacked the trust to share a card and PIN number with visiting carers and were concerned also about privacy

In this situation individuals usually lacked the trust to hand over a card and their PIN as they might with family members or friends. Alternatively, they were reluctant to do so for privacy reasons.

"I don't know the person. And to actually give them financial details of mine to get them to get money for me, I just don't feel comfortable. Somebody knowing everything about your finances, incomes and goings on from the very off, without even...I need time to get to know people. I'm very funny with strangers because of my disability."

"So I don't want anybody to misuse my account because, as I said, I've worked with people who needed help, so I know the situation I'm in. I know how it is, that people can make easy money from your account. I wouldn't like that to happen to me."

"I'd feel very nervous and, you know, if it came to the crunch and I really had to do it, you know, and my husband wasn't here and I really did have no means of getting, you know, getting out myself to get it, I would have no choice, but I'd be so, I'd be so worried, you know, and even when they come back with what I've asked for, I'd still be worried, because I don't know, my card was out of my possession, so I don't know what else has happened with it. I'd be extremely worried."

The patchy and ad hoc nature of arrangements for shopping and accessing cash could be awkward, inconvenient and difficult for all parties involved

This largely informal and somewhat patchy system could be effective in meeting needs but equally could be awkward and inconvenient for all parties involved. A trusted agent, usually a family member, was needed to obtain and deliver the cash to reimburse carers – not always easy unless family was very local. Alternatively, those being cared for had to be well enough to get to the bank with the support of the carer, which wasn't always the case. Either approach was essentially a workaround in the sense that those being cared for had no other effective means of delegating the ability to pay for goods and services or access cash on their behalf without compromising security or privacy. Where cash was not readily available, for whatever reason, people could simply have to do without things they needed.

"I wouldn't let the carer do shopping for me. If I don't have the cash with me, I wouldn't let her use my card. That's another thing I would be thinking about...and then you are a bit stuck. You have to do without unless you have the cash to give them."

The reimbursement chain could be inconvenient, time consuming and disruptive to finances for family members as well as carers

For their part, carers said they could feel exposed to the risk of being accused of exploitation or abuse. Alternatively they might have to wait to get reimbursed for shopping until adult children delivered cash. Given that carers were often on close to the minimum wage, this could make their own budgeting difficult, not least by injecting unwanted volatility into their own finances. Alternatively carers would have to go to the bank to deposit cheques, which was not always convenient. It could also be time-consuming and had the additional disadvantage that cheques would take time to clear, so that there could be some considerable lag between expenditure and payment. Some carers who were in touch with family members were able to ask family members, usually adult children of elderly parents, to transfer funds electronically to the carer's account, which bypassed these problems. In this case, adult children, in order to be reimbursed themselves, would then either need to obtain a cheque to cover their outgoings from their parent or be in a position to organise electronic transfer of funds from their parents' account to their own.

"I mean, one gentleman I was looking after, I didn't get any cash from the family. I had to sort of get the groceries myself, and then they would reimburse me later on, only because no one ever came over. No one ever came over and visited their father."

"There's never any cash there to buy any food with...I always had a few bob in my bank, so I could get the groceries and just charge it, and the money was always paid into your account."

"I wasn't going to let her [woman caring for] go without obviously, but sometimes it was difficult if [son] was busy or away, you know, I might not buy something one week which she liked, I might think we could do without that 'til after he [son] has been. I might put something in and it might be a little while before I got that money back, you know."

Formal delegation of authority to voluntary organisations or other supporters could leave individuals feeling disempowered

There were also some cases where people, particularly those experiencing cognitive impairment, following a stroke or the onset of dementia, or in the case of some of those with learning disability, had made formal authority arrangement in which a nominated individual or a voluntary organisation had been given authority to act on behalf of the individual concerned in managing their financial affairs. In this case help might be given with day-to-day management of finances, organising the payment of bills as well as ordering essential shopping and so on.

"I just know [the community organisation] will do the paperwork for me, with accounts, bank's application for the new address, they'll inform the present organisation that looks around me, with new address. Things like that."

In these cases, individuals who still had an interest in their affairs while not necessarily having full capacity to deal with them could find themselves somewhat disempowered and uninvolved in decisions that impacted their financial well-being, even where they appreciated and relied on the support involved.

"Well, they probably come once a month. If I've any papers to do, I think, yes...I don't fill in anything. They just say, sign here, sign there."

4.5.2 Those highly dependent on carers

Some people lived with a condition that meant they were highly dependent on support and had dedicated personal carers. Examples might include those living with a terminal illness, long-term serious mobility problems or partial paralysis that left individuals confined to a wheelchair, or people with dementia. Carers could be both live-in and live-out. Relationships could be longstanding or, alternatively, carers could change every few weeks. There were also periods when a permanent carer took holidays and extended breaks.

In cases where individuals were highly dependent on permanent carers, allowing the carer to enter PINs in shops and at ATMs could be routine

Where individuals are highly dependent on carers or where they face practical barriers to entering PIN numbers themselves – because they cannot reach payment terminals or cash machines because they are in a wheelchair, for example – the only way around the problem can be for the carer to enter the PIN number.

“No, he will enter it for me. Lots of the time. Some places we go to, you know, they’ve got that long wire so it can come straight to me. But a lot of the times things are not always geared for the disabled. So a lot of the times he would have to do that for me.”

“Well, definitely, if I want cash out of a machine, obviously my assistant has to help me because, number one, sometimes, as I said, it depends how I’m feeling regards my hands. Because of punching in the keys”.

“Because of the position I am in, you know, you can’t hide anything really from him [carer], because, like with, even banking, you go to a teller machine and you would...I’m there, but he’ll do it for me. So if we’re in a shopping mall or anywhere buying things, he’s the one that will tap in my PIN number for me.”

“As soon as I’m going shopping and we’re in a shop, I normally just hand over my card to my carer. That’s how it’s become. So, yes, it just cuts out the mucking about.”

Even where relationships with carers were long term and trusting, individuals could resent the lack of privacy as well as the loss of independence

Where relationships with carers are longstanding and there is a high degree of trust, the arrangement is seen as sub-optimal but a pragmatic adaptation to circumstances borne out of necessity. Privacy and independence seemed to be the key concern rather than trust in these cases.

“There are a lot of times when I think, yes, I’d like that part of my life [financial affairs] to be private, not to have to share it with anybody. And if it’s not my carer, then it would be a family member.”

“We would like to have privacy, but we’re just not in that position I’m afraid. You have to have let them [carers] because we can’t do it ourselves.”

4.5.3 Nursing and care homes

The research team did not speak directly to any individuals living in nursing homes. Paid carers working in nursing homes reported that some individuals still had full control over their financial affairs and took pride and pleasure in being able to manage independently, running their affairs from the home.

“He’s 100 years old but he can still decide on his own; he’s still doing the cheques, signing the cheques and paying for the chiropodist or the services that are for him.”

“Yes we’ve got one who is still, you know, playing what they call the money market, he’s still playing money market and doing placement, some sort of, that, and he said, he talked to me and then he said this money is in Switzerland, all his money. He still can decide on his own...he does it by telephone.”

Carers working in nursing homes also described how those living in nursing homes who had lost capacity to manage their affairs or where day-to-day control had largely been ceded to children, either on a formal or informal basis, could have relatively few opportunities to exercise independence and control or use payment systems and access cash directly.

“Like, you know, if they know what they’re doing most of the clients handle their own money, but if a client has got dementia or Alzheimer’s normally the family will look after their money interest or, in some cases, not where I work, social services hold the money for them and they allocate so much money, like, for shopping; we don’t deal with bills, we just do the shopping side of it. They [social services] deal with most of their finances or the family.”

Carers reported a cashless system for acquiring small personal items such as toiletries “ordered” through a weekly system operated by the nursing home, with payment managed through the resident’s account with the nursing home. Other items or small sums of cash were provided by adult children who brought them to the home and paid for them themselves.

“In the home the family takes care of everything, or if they don’t have any family the social workers do everything, the financial, in regards to financial matters. If the residents need some toiletries or whatever they just leave the money in the office and then the office will buy it for them, not the carers, it will be the office”.

“The carer is responsible, to know what the resident needs or what they are lacking in their toiletries and the activity chairperson there, he has something like a trolley with stuff on it and then they go around to fill in their needs, you know, toiletry stuff.”

This loss of independence and worries about how their finances were being managed were reported as a source of anxiety for some residents.

“Because this one particular resident was always telling us that before she got there she got control over her money and now it’s all finances, now it’s all with the daughter so every single little thing that she needs she has to ask the daughter.”

“They’re worried about what will happen to their money...It’s like taking away your independence, isn’t it?”

“Some of them worry. It affects their lives.”

4.6 Full delegation of the management of financial affairs – Powers of Attorney and informal arrangements

There was a spectrum, with a greater or less degree of delegation of management of financial affairs, on both a formal and informal basis

There was clearly something of a spectrum in operation in terms of delegation of the management of affairs, a large part of which appears to be entirely informal and dependent on trust. The spectrum extends from “back-up” arrangements and occasional intervention when the occasion calls for it or, in the event of illness, right up

to total take over and responsibility for all aspects of financial affairs, some of which is supported by legal authority and formal powers of delegation and some of which is clearly not.

At the “light touch” end of the spectrum, occasional support for intervention and help with financial management might take the form of advice and/or monitoring financial affairs or bank accounts and the kind of shared or informal delegation of management of Internet banking or other accounts described in Section 4.2. At the other end of the spectrum, individuals would have little or no engagement in the management of their financial affairs, which was managed entirely by their family members. This might be because they no longer had the interest or desire to do so, possibly in the wake of serious illness or, in some cases, because they simply wished to be relieved of the burden of responsibility. Alternatively they might have lost the capacity to manage their affairs effectively. This may have been a gradual process or one that occurred suddenly (as in the event of a stroke for example) and may or may not have been planned for. In between these two extremes there was a range of subtle gradations and more or less conscious ceding of control and authority.

There are fewer workarounds among older couples because finances in any case are often managed through joint accounts and holdings

For the informal carers looking after elderly spouses, the way financial arrangements and payments services were managed reflected both the capacity of the individual being cared for and the history of financial management between the couple. However financial arrangements had been managed prior to the deterioration of capacity, most elderly couples had had joint accounts, even where they also kept separate accounts. For this reason the transition to one partner managing the financial affairs of the other could be relatively seamless and require little in the way of workarounds, in terms of payment services implications at least. It was very often the case that for this generation, however, the male partner had been in charge of finances. Where women had to take over financial management in the event of their spouse’s ill health this could be a considerable challenge, with many having little or no previous experience of payments services, including paying bills, setting up direct debits and standing orders, and even, in some cases, of writing cheques or using payment cards.

Workarounds, formal or otherwise, were more likely to be needed for younger couples or where accounts had not been joint, and for those looking after parents or other elderly relatives.

In some cases Lasting Power of Attorney arrangements had been set up as a precautionary measure or on diagnosis of terminal or degenerative conditions

There were a number of cases where formal delegation via Lasting Power of Attorney had been put in place. In some cases this had been undertaken long before there was any need for it on a “just in case” basis. This had usually been in conjunction with setting up a will and a general attempt to set affairs in order. Others had set up Power of Attorney on diagnosis of a terminal illness or conditions that would imply progressive incapacity, such as cancer or dementia. In other cases, elderly individuals had just reached the stage where they preferred their children to manage their affairs. Most of these situations were in the context of considerable trust and close family relationships.

“I have planned. I’ve already nominated my daughter. I have made a will and instructions to do this, that and the other...I’ve watched too many people in my situation that have just left it, you know.”

The delegation of management of financial affairs could be entirely informal and in many cases rested on pragmatic responses to an evolving situation

Delegation arrangements and workarounds could also be entirely informal and operated with a greater or lesser degree of active consent from the individual concerned. It is important to emphasise that informal carers were often working very hard to support those they cared for, often contributing very significant time and effort for little or no reward, and at no little sacrifice to themselves. Some carers were clearly operating under very considerable pressure and living with a very difficult situation and trying to do their best to manage the finances of those they were caring for in that context. Against that background, informal carers for the most part simply took a highly practical attitude to the need for workarounds as a pragmatic solution to a pressing need to keep the finances going, pay for goods and services and obtain the cash required to meet the needs of the individual they cared for.

There was also something of a spectrum of more or less meaningful consent to such informal arrangements and practice

Many carers were uncomfortably aware that they were operating in a grey area and possibly in an illegal manner. Some were aware also that their actions probably compromised the consumer protection rights attached to payments services for those that they cared for. Others simply felt uncomfortable about invading the personal privacy or compromising the independence of those they cared for.

There were some examples, however, where it appeared that Power of Attorney had been put in place in situations where the individual ceding authority was not fully engaged in or cognisant of the process. Alternatively, carers facing a situation where the person they were caring for was losing capacity could be struggling to balance a desire to legitimise and/or expand their informal delegation and workarounds while caught in the “Catch 22” by which revealing the degree of deterioration in capacity would preclude the person giving consent to Power of Attorney in any case.

“I’d never tell him how much the Power of Attorney cost me, £800 – I don’t tell him things that he doesn’t need to know.”

“I manage all his finances, everything, yes...No, there’s no system. I didn’t get Power of Attorney. I did go into it but then he said he didn’t want me to have power, he didn’t want to spend the few hundred pounds that it was to pay for it. But I do it all – everything.”

Some evidence of inappropriate behaviour and a lack of clear demarcation lines, authority or consent to act

That said, it was clear that carers could be operating without clear demarcation lines between their money and that of those that they were caring for and without legal power or consent, effectively acting as if they did have formal Power of Attorney. There was, indeed, some evidence of inappropriate, even fraudulent, behaviour, albeit not necessarily driven by anything other than a desire to make things work, rather than any kind of desire for personal gain.

“So there are ways I’m developing of making him feel like he’s still in control, but he’s not, if you know what I mean. So he’ll write me the cheque but I’ve noticed his signature’s getting worse and worse and he forgets he’s done it. I’m just hoping that he’ll continue to be able to sign his name, which I’ve noticed is getting worse, his signature’s getting worse.”

“Personally I just don’t like doing things online, I like to ring up and deal with them. So that’s, I think it’s getting more difficult and with the banks and everything going to cards, so you have to go online for that [i.e. managing person’s money].”

This situation clearly has potential for significant abuse, albeit that there is no suggestion that any of those who took part in the research were exploiting those in their care.

Tina is in her late sixties and is caring full time for her second husband, an ex-policeman, now in his mid-seventies. Her husband began to drink heavily in retirement, resulting in serious liver disease, a series of small strokes and other physical and mental health problems, including a downward spiral into deep depression. He goes nowhere other than to the local pub for two pints at lunchtime, and speaks to nobody. He stays up most nights and sleeps during much of the day. He refuses, however, to see a doctor. Although physically able to do so, he no longer shaves, washes, dresses himself or undertakes any personal care.

“He used to bathe every morning and shave and be absolutely immaculate but he won’t do anything now. He doesn’t bathe, he doesn’t shave. I have to shave him. I have to cut his hair. I have to goad him to get washed.”

Having previously run all of the household finances, he now takes no part in and has no interest in managing them. Their major source of income, his pension, is paid into his account. Her husband is not willing to go to the bank or to sign the papers to open a joint account or to discuss the situation. Her husband used to be a stickler for accounting, balancing the books to the penny, but now he no longer opens or has any interest in his bank statements. She provides him with cash to pay for his pub visits and he uses no other money or payment mechanism.

“Before, he used to look after all the finances but now he doesn’t and I have to look after them all. He used to be so pedantic about it.”

She has consulted a lawyer about seeking Power of Attorney but in the meantime has employed a series of coping mechanism, which she sees as the only way to manage the situation. She writes out cheques made out to herself and places them in front of her husband, which, on continued prompting, he signs without looking at. He appears to have little or no recall of having done so. His signature is deteriorating, however, and she worries that it will soon not be accepted.

When her husband ran the finances he was a strictly cash and cheque man who distrusted new channels and payment mechanisms and never used either debit cards or ATMs. She, however, has retained his replacement debit card sent to their home and uses it to get cash and shopping, but is painfully aware that she does so essentially without either his knowledge or meaningful permission. This is a source of constant anxiety to her and she increasingly shops remotely as a result.

“The last one [debit card] when it came, renewed, I thought I’d better keep this one, and his PIN number. So he doesn’t know, actually, I’ve got it because he’s sort of never used it, is totally against it. So it will just mean probably – well, doing the illegal, me going – because he won’t go, you know, going to the cash machine, getting money out with his card.”

5.0 CONCLUSIONS

There are clearly barriers to the use of payments services, with the impact of these barriers varying according to the contextual circumstances of individuals

There are clearly a series of barriers and difficulties faced by both the older old and those living with disability in using payment services. The qualitative evidence from this research shows that the issues and barriers surrounding payment methods for the older old and those living with disability are highly complex. Individuals clearly experience different barriers to a varying level of degree of difficulty depending on the interplay between their physical and cognitive state and key external factors. For these two consumer groups the three key external factors that appear to have the most impact on their experience are:

- their socio-economic status;
- their attitude towards and ability to use technology;
- whether they have supportive family and friends nearby.

There is considerable diversity in the experience of payment services among both the older old and those living with disability

The study clearly demonstrates the importance of the “human factor” in whether and to what extent individuals experience difficulty when making payments, how they approach these difficulties, and how successful they are in overcoming them. There is a wide range of individual experience within both consumer groups (the “older old” and “people living with disability”), as already stated, usually as a result of the interplay between the individual’s physical and cognitive state and their relative affluence, engagement with technology and family support. For the majority, workarounds and coping strategies depend largely on reliance on family or carer support and thus hinge on personal connection and trust. For those without supportive relationships the options can be very limited.

Those with supportive local families, the more affluent and those with access to technology have greater resilience to difficulties with payment services

Where these three factors are optimised, consumers appear to have an increased sense of possibility when using payment methods and a greater range of workaround choices when experiencing a barrier of some kind. Specifically, this wider range of options for overcoming the barrier invariably include using technology, drawing on support from others, or drawing on previous experience of a wider range of economic activity, or utilising the presence of a larger financial buffer when experiencing difficulty. Individuals who are IT literate, who have a supportive family member or carer, or who have a higher income level consistently demonstrate higher levels of resilience and ability to overcome barriers when using payment methods, including adapting to new ones, through adopting a range of workarounds.

Payment services have often been made to work in this context by the use of workarounds, which potentially expose individuals to risk

Where any or some of these factors are sub-optimal within a person’s life framework, they appear to struggle more to overcome existing barriers or to adapt to newer payment methods, primarily because their available options for workarounds are more

limited. These three factors, then, can be seen as a “workaround toolkit”, and when any pieces of this toolkit are missing people have fewer options and thus experience higher levels of difficulty and exclusion.

The poor, those without supportive families and the digitally excluded may face absolute barriers to effective use of payment services

For both the older old and those living with disability, whether these factors are present, in what combination and to what extent, varies considerably between individuals and rests to a large extent on contextual circumstances. Different individuals will find themselves resorting to different workarounds and will have to do so to a varying degree – while yet others find themselves in situations which they cannot workaround. In the first instance access to safe and effective payment services is compromised while for the latter exclusion from use of payment services can be absolute. It is the poor, those without supportive families and the digitally excluded who are most likely to face absolute exclusion. The more affluent, the digitally connected and those with local supportive families are most likely to have developed workarounds, albeit that these have weaknesses and compromise the consumer protection and security in their use of payment services that others take for granted. Given the diversity of impacts and the spectrum of greater or lesser exclusion being experienced by both the older old and those living with disability, this both throws up challenges for inclusive service design and emphasises its importance in ensuring that modern payment services are accessible to all who need to use them.

Needs in relation to payment services and barriers to access to payment services clearly fluctuate with the severity of their condition, for many people

For many, the physical or cognitive condition that leads to difficulty making payments fluctuates, depending on the individual’s level of well-being on any given day. In periods where a disability or age-related impairment is in temporary remission, users are more able to access and use a wider range of payment methods with confidence and success. However, when symptoms are worsening, individuals report significant challenges using their regular payment methods. This pattern of fluctuating access itself would seem to imply a need for flexibility within payment services solutions and how they fit together, rather than a dedicated alternative solution.

Confidence is a key factor in effective use of payment services

A key finding is that the issue of confidence is central both to how people experience payment methods and how they overcome barriers. Where people’s confidence is low, for example in using new methods or technologies (where “new” is new to the user, rather than new to the market), individuals can remain excluded despite having a latent ability to adapt. This is likely to be an issue for mobile payment services for many of both the older old and the deeply digitally excluded. Again, it is clear that the human factor plays an important role here; where new users are allowed to get used to a system gradually with patient, repeated support and demonstration, they are more likely to adopt the new system successfully. Thus where individuals lack this level of personal support in the form of a family member or carer, they are less likely to adopt new technologies. Consistently people describe having patient and repeated demonstration and time to get comfortable with a new system as key to overcoming the “confidence gap” in using it on a regular basis. The issue of confidence is thus key when considering how most effectively to develop payment services for best fit with the needs of both the older old and those living with disability.

The nature of coping strategies and workarounds most clearly demonstrates the gaps in the payments services systems

We conclude that it is the workarounds that individuals adopt which most clearly demonstrate the gaps in the payments systems. Consumers can be unaware that they are in fact using a workaround rather than using the payment method as its design intended, and thus are often also unaware of the barrier or risk the payment method failure is creating. Others are uncomfortably conscious that they are operating in a grey area and are aware that workaround solutions may compromise protections. Some even fear that their workarounds may be illegal. For all of these reasons consumers themselves are unlikely to identify and articulate a barrier or difficulty but will rather move to adopt a workaround as the only pragmatic solution to their difficulty. Workarounds simultaneously solve the immediate problem but also place both the card-holder and the support provider at risk, while also compromising security, independence and privacy. While workarounds mainly take place within the context of a relationship of trust, which is in large part why few express concern, there is significant risk if the chosen workaround involves trust that may be abused.

The data shows that there are significant gaps in two key service areas

- Accessing cash.
- Delegating payments.

These two service areas present multiple barriers, with services as currently configured representing a poor fit with needs, for both the older old and for individuals living with disabilities. Together they encapsulate the range of barriers experienced across all payment methods. In each case, individuals are forced to find workarounds that, whilst often effective, deviate from the intended usage of the payment method and expose both the primary user and their carers to unacceptable risk, ranging from physical security risks when withdrawing cash from street-based ATMs to the risk of theft, or false accusation of theft, when users hand over their debit card and PIN number to carers to access cash or make payments on their behalf.

People with disabilities and the elderly can experience a range of difficulties when accessing cash

These difficulties arise from a combination of physical location, use of technology, visual or audio systems, and the amount of data required to be memorised, which all combine to create unique challenges. Using an ATM machine to withdraw cash presents considerable obstacles, including:

- the lack of uniformity in ATM screens and poorly designed screens, both of which cause difficulties for those with visual impairments;
- physical location and height of ATMs creating practical barriers for wheelchair users;
- ATMs not always near disabled parking facilities;
- small, fiddly buttons, which present challenges for users with dexterity impairments;
- the need to remember PIN numbers, which causes difficulty for users with permanent or temporary cognitive impairment;
- a fear of technology amongst digitally excluded consumers;

- a fear for physical security when ATMs are located on a street, or when regular withdrawals need to be made, for example from a pension account.

Withdrawing cash at a branch counter also presents specific challenges:

- a lack of disabled parking nearby;
- the need to wait by standing in a queue, which is difficult or even impossible for users with limited mobility or who experience significant discomfort when standing;
- the need to remember security details at the counter, which presents difficulties for those with cognitive impairments;
- the need to speak through a counter security grille, which can be difficult for those with hearing impairments;
- the need to use a keypad when using a debit card to withdraw cash, which can be difficult for those with dexterity impairments.

Payment cards (debit, credit and pre-paid) also present difficulties for users with age-related or long-term visual impairments, as the text was often not clearly legible.

The second key gap in payment mechanisms is the need for a means to delegate payments that does not concede control

In many cases where users experience physical or cognitive difficulties in accessing and using payment systems, either on a permanent or temporary basis, family members and carers step in to provide essential support. However, the current framework only legitimately allows complete control through Power of Attorney. For many users, this all-or-nothing approach is inappropriate, and thus users adopt individual workarounds, such as giving out their PIN number or Internet banking passwords in order to be able to access cash and make payments through a third party, usually a family member or, less frequently, a carer. This clearly creates unnecessary risk, both for the user and those providing support and/or care.

Unmet needs around delegation appear to arise on three levels

Limited payment delegation that does not compromise users' privacy

Where people are losing cognitive or physical abilities and need support in accessing cash and making payments, the evidence suggests that they currently have no means of allowing limited and private delegation, with appropriate legal protections. There is a clear need for people in this position:

- to be able to delegate limited use of personal payment services, particularly for accessing cash and undertaking shopping;
- to be able to delegate limited use of payment services in a way that does not compromise privacy or security, for example by ensuring that those using delegated services on their behalf cannot access personal financial information;
- to have a degree of flexibility around the delegation of payments services:
 - to enable those delegating to specify different levels of access to information or to limit delegated powers to certain types of activity, such as making payments in shops, paying bills or accessing cash;

- to enable those delegating to place limits around the value of cash that can be accessed via ATMs, the value of purchases that can be made or time periods over which delegation is authorised.

A means of enabling limited and flexible sharing of access and control that stops short of a total ceding of responsibility

Additionally, in cases where the primary user needs or wants someone to act on their behalf when managing their finances but is not yet at the point where he/she wishes or needs to relinquish full control, there is a need for people to be able to delegate their authority in a controlled and bespoke way, with appropriate protections against abuse. Primary users need the facility:

- to give designated individuals access to their account(s) to facilitate support by family members;
- to specify and limit the nature of activities that can be undertaken;
- where desired, to limit the value of transactions that can be undertaken by a designated delegatee.

The current processes around Lasting Power of Attorney do not appear to be working well for either individuals or their family and carers

Finally, whilst it is outside the scope of the payments industry itself, the research also shows that there is an urgent need to make the system for acquiring Power of Attorney work more effectively, ensuring that in cases where individuals unexpectedly lose cognitive independence or where they have failed to plan ahead, carers and family members are able to gain Power of Attorney quickly and legitimately in order to protect and manage the individual's financial security. The risk is that otherwise, as the evidence in this study indicates, carers may feel that they have little option but to adopt pragmatic workarounds, which can both compromise financial security and protection and are also open to abuse.

Those who lack the confidence to start or extend their use of technology have an unmet need for a user-friendly pathway into technology-based services

The research has revealed a number of barriers to use of payment services and significant unmet needs in two areas. The research reveals, however, one other significant issue around the accessibility and usability of newer technology-supported channels and services. There appear to be many people among the older old and those living with disability who are open to greater use of technology but lack the confidence or knowledge to start using technology-facilitated channels. Alternatively, if they are already using technology-based channels in a limited way, they lack the confidence and/or skills to expand their use of these channels and thus to enjoy the full range of potential benefits. This is in part manifested in the exaggerated fears around the security of technology-based channels. A further key gap in the delivery of payments services lies therefore in user-friendly pathways into the use of technology-based channels, which work also to provide reassurance and promote trust in technology.

The design of solutions and recommendations for ways forward can now be grounded in the needs of the older old and those living with disability

Clearly it is for the Payments Council, their members and the advisory group to consider solutions and to articulate what inclusive service design will look like in the context of the older old and those living with disability. It is clear that needs are complex and diverse, that there are some significant barriers to effective use of payments services and that the resulting difficulties are very real. It is also clear that the reality is that workarounds are widespread and that these compromise security and consumer protection, and leave some of the most vulnerable open to abuse.

In some cases, where barriers or difficulties in using payments services arise, it may be that solutions will require a modification to existing operating practice or systems. It may be, for example, that the difficulties visually impaired people face in using ATMs or the difficulty represented by queues in branches for those with problems standing for any lengths of time will fall within this category. In other cases, there may already be an acceptable solution to barriers but people are simply not aware of them. A striking example is the alternative option to Chip and PIN of chip and signature – the low level of awareness amongst users who struggle to remember PIN numbers and use keypads demonstrates that further education is required.³ In other cases, users sometimes just need to be shown how to use existing services, and in such a way that they have the confidence to use the method or solution. Addressing other aspects of the barriers or addressing unmet needs may, however, require some more fundamental re-design or the introduction of new products or services. The research team hopes that the picture of the experience and needs of older customers and those living with disability revealed in this research will provide the Payments Council with the understanding necessary to arrive at recommendations for tackling barriers and meeting needs, to underpin inclusive design of products and services and to achieve the meaningful payment inclusion of these two important and potentially vulnerable consumer groups.

³We note that at the time of writing, the Payments Council had recently launched a major communication campaign focused on increasing awareness of chip and signature cards.

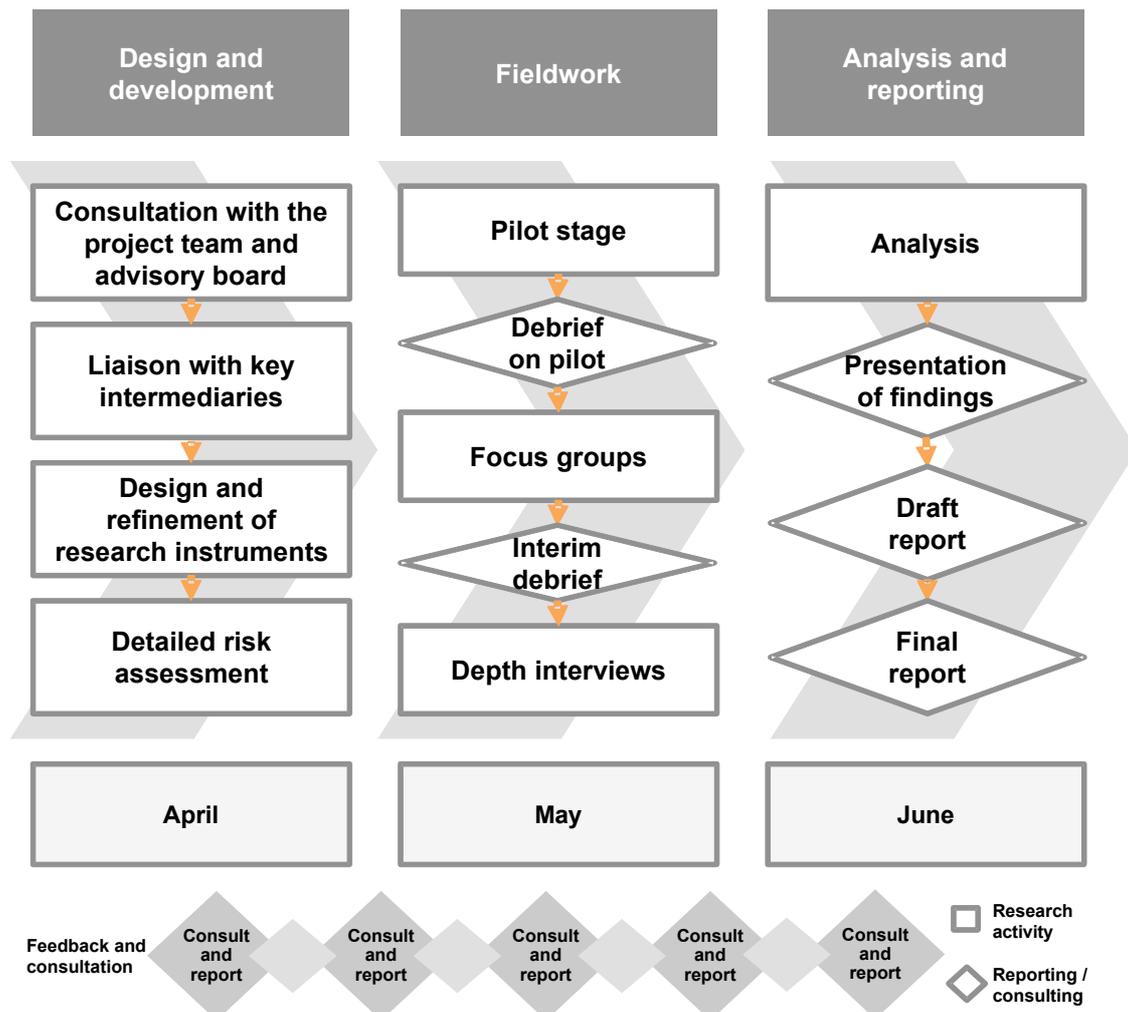
APPENDIX

Detailed study methodology

This study was fundamentally exploratory in nature. A key part of the challenge facing the Payments Council and the research team was that so little was known about the experience of the payments system or the payment needs of either the “older old” or those with cognitive, physical or sensory impairments. In such a context it was important not only that all of the key research questions were covered during the course of the research but, equally, that the research structure was sufficiently flexible, responsive and wide-angle to enable the capture of unanticipated issues so that definition of the issues could truly be user driven.

Given the exploratory nature of this research, the advisory group took the view that a wholly qualitative methodology was appropriate to define the issues from the perspectives of the older old and those living with disability and to elicit the colour and depth of insight to bring their experience and needs alive. The method developed by the research team was then considered by the advisory group and tested in a pilot phase with both the research instruments and sample specifications further refined in light of the experience of the pilot.

Figure 1. Project structure



Research vehicle

A series of seven focus groups and four mini groups (including two with carers) and 48 depth interviews were held with both subject groups (over 80 with and without disabilities, and under 80 with disabilities), to explore a wide range of circumstances, potential needs and constraints. The pilot phase consisted of two focus groups and eight depth interviews.

Learning from the pilot

A key learning from the pilot was the distinction between those who had family nearby (and where family are trusted and willing to provide support) and those who did not. It became clear that it was crucial to understand the differences between those who are more or less dependent on care and support, and to include within this some who are housebound. Likewise, the situation of those who need temporary support or care, which can be a quite frequent occurrence for the older old following falls or operations such as hip replacement, etc., emerged as significant. Linked to this, the pilot showed it was necessary to consider the position of the old who are seriously ill rather than facing age-related impairment, and who are often recipients of extended care, which may go on for many months or even years.

During the pilot it proved very difficult to recruit over 85s who did not have some degree of functional impairment, which indicated that the original distinction between those with and without functional impairments was artificial. The study was amended to include more or less serious constraints or conditions, accepting that many older people live with a moderate degree of impairment.

The pilot also demonstrated the need to understand better the differences in the challenges faced by those who have been born with a condition and those who have to cope with disability or functional impairment as a result of illness or accident.

The original distinctions between urban/rural/suburban contexts seemed overemphasised relative to other issues of importance, so the sample was amended to ensure it included some rural interviewees without this being a major focus.

Finally, the pilot indicated that it was better to explore the issues around a lack of technical confidence via depth interviews as this was more difficult to unpick in a group situation.

The sample

Respondents with disabilities were selected to represent the full range of physical, sensory, and cognitive impairments that individuals might experience, ranging from more serious to less serious conditions, including those who require greater or lesser degrees of care and support. The sample included those who were disabled from birth, as well as those for whom disability was of later onset. It also included those with specific constraints, such as being housebound or using a wheelchair, and people with both temporary and permanent conditions.

Respondents were recruited from across the socio-economic spectrum to ensure that the research identified the needs of all income groups. Sampling was also structured to ensure that the sample comprised a mix of:

- respondents who were married or cohabiting and those who lived alone;
- people with or without family support locally;

- individuals who were more or less familiar and comfortable with technology such as the Internet and mobile phones;
- respondents from urban and rural settings;
- Informal and formal carers.

Focus groups

The seven focus groups and two mini groups were structured as follows:

- two focus groups with the “older old”, experiencing the normal range of issues that accompany old age, but without additional physical, sensory or cognitive impairments (one group with ABC1s and one group with C2DEs);
- two focus groups with the “older old” living with a range of more serious physical, cognitive and sensory impairments (one group with ABC1s and one group with C2DEs);
- three focus groups with younger people living with a range of physical, sensory and cognitive impairments (one group each with ABC1s and C2DEs with physical or sensory impairments, and one group with learning disabilities).
- Two mini groups with carers (one group with paid carers and one group with unpaid carers supporting relatives, in each case working with/supporting those with a spread of physical, sensory and cognitive impairments).

Depth interviews

Depth interviews enabled the study to capture the needs of some of the hardest to reach and allowed a detailed exploration of experiences and of challenges faced, including issues about which individuals were sensitive, or which were inappropriate to discuss in a group context.

In total, 48 depth interviews were conducted with end users, specified to cover the full spectrum of potential needs, barriers and challenges among both the “older old” and younger users living with a range of disabilities.

Thirty-two depth interviews were held with the older old, of which :

- 16 were held with those with only the degree of moderate physical or sensory impairment that might normally be associated with old age;
- 16 were held with those with more serious physical, cognitive or sensory impairments.

Sixteen depth interviews were held with younger people living with disability and with a range of physical, sensory or cognitive conditions. For both sets of the 16 depth interviews with those with physical, sensory or cognitive impairment, held with the older old and the younger people living with disability:

- 4 had very significant impairment;
- 2 were wheelchair bound;
- 2 were housebound;
- 2 had serious illnesses;
- 4 had either temporary (in the case of the older old) or fluctuating conditions (in the case of the younger people living with disability).

The older old sample was structured to achieve a mix of sexes, albeit with a bias towards women, and a mix of ages, with individuals in their early eighties, mid and late eighties and into their nineties. The sample of younger people living with disability was split equally between those under and over forty. The interviews were recorded and fully transcribed, with the resulting qualitative material analysed to a structured thematic grid, designed to support balanced and systematic analysis.

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