Assisted Living Innovation Platform (ALIP)

The Technology Strategy Board's Assisted Living Innovation Platform (ALIP), is responding to the exciting and unprecedented phenomenon of population ageing. By 2021 half of the UK's adult population will be over 50 years and by 2025 almost 1.5 million people will be living with a disability. The aims of ALIP are to foster technological, business and social innovation, ensuring people continue to live independent lives the way they choose in the future. ALIP is about making the future brighter for people in later life and for the wealth creation capability of the UK.

The dallas programme (delivering assisted living lifestyles at scale) is thinking beyond traditional health and social care to consider how new ideas and technology can be used to improve the way people live. By summer 2015, dallas aims to impact the lives of 169,000 people across the UK, benefiting from new and innovative products, systems and services redesign to transform their choices as they age.

Here, we would like to provide more detail about their programmes.



The Year Zero project will design, develop and deploy a range of digital services and applications which will allow users to take control of their own health information and through the use of these services take a more active role in the self management of their health and wellbeing.

As these services are based on *Personal Health Records* (PHRs), users will be able to choose who to share this data with, from health or social care providers in the statutory sector to carers, third sector agencies or their friends and family.

These PHR based services are distinct from current moves to providing access to Medical Records held by the NHS in that they are entirely under the user's control. Year Zero in that sense is citizen rather than provider focused. In addition, Year Zero believes that an added advantage of creating digital healthcare services centred on the user is that a whole series of the interoperability issues that have proven insoluble as regards providers can be removed if the citizen is put at the centre, allowing the redesign of services around them rather than configuring the user in terms of the services that are provided. Year Zero intends to demonstrate the benefits of PHR's across all age ranges. Our core products are:

- The eRedbook a digital service emulating the current paper based Personal Child Health Record issued at the birth of every child, held by parents and unique in that the data is not owned by the Department of Health but by the citizen.
- A Personal Care Plan an online, secure, shareable care plan created and owned by the citizen which can be shared with providers but also with carers, family, friends and other agencies to record, organise and coordinate care as well as become the basis for citizen recorded health information.
- Good Neighbours a secure social networking application that allows the creation of a circle of support and the sharing and allocation of tasks and diaries within the circle.

Home 🖪 Health Record	Healthy Child Programme Growth an	d Development Guildance <u>Contacta</u>
Mark Johnson	< RECENT TODAY	UPCOMING >
Age: 20 months Born: 16/05/2011	Add to Mark's eRedbook	
Calendar 🗄	Add to health record Add growth measurement	eta Add appointment
Growth Charts		
Height Weight Head Circum		
78cm 11kg 45cm 16/16/2012 16/06/2012 16/05/2012	Next appointment	
Immunisations Health Notes and Questions Developmental Firsts Appointments Health Reviews	Health check for trip abroad Variation Health check for trip abroad Variation Variation Variation Variation Variation Variation Variation Variation Variation	
Contacts	Questions	Add question
Family doctor		
Dr. John Lewis 07700 900000 Health visitors	Developed a rash	
Me, Sam Magual 07700 900099	16 November 2012 Added by sarah johnson Mark has developed a small rash on his arm	
	fever *	
	06 November 2012 Added by sarah johnson Marks got fever	

		eRedbo	eok e <sup>n</sup>				
		health record		Your are signed in as Helen Smith			1010
editific and and the second seco	fi Home 🔳 Health Record		Healthy child programme C	Switch child record ¥ Sign out Drowth & development Contacts	Caluy •	- 8 + x b + y	p ope = Safety = Tools = 📦
Ale a     Ale a <td< td=""><td>Age: 1y Smbs Barn: 15 / 2 / 11 Calendar (*) Growth charts Biggint Weight Band 85 cm 11.8 kg 48 cm Immunisations</td><td>C RECEVE   Add to Alfle's redbook   Add to Alfle's redbook   Made be readed   Add to Alfle's redbook   Add to Alfle's redbook</td><td>TODAY</td><td>UPCOUNDS &gt;</td><td>Annual Annual Annua</td><td></td><td></td></td<>	Age: 1y Smbs Barn: 15 / 2 / 11 Calendar (*) Growth charts Biggint Weight Band 85 cm 11.8 kg 48 cm Immunisations	C RECEVE   Add to Alfle's redbook   Add to Alfle's redbook   Made be readed   Add to Alfle's redbook   Add to Alfle's redbook	TODAY	UPCOUNDS >	Annual Annua		
Ŭ	Health Checks Dury	My personal child health record	225			Beened J Postechel Mode Off	4 <b>6</b> • <b>4,200</b> • •

Each of these products will be rolled out through our NHS partners (Liverpool NHS Community Health Trust, Moray Health & Social Care Partnership/NHS Grampian, South Warwickshire NHS Foundation Trust and Rotherham NHS Foundation Trust) and developed in an iterative fashion using co-design principles and working toward connecting to statutory systems and services. In addition we are working to offer these services direct to consumers in a free and sustainable fashion with brand and media partners. The project will also be integrating and developing digital applications to support behaviour change in connection to specific health and wellbeing needs.

At present a parental version of the eRedbook <u>http://www.eredbook.org.uk/</u> is being deployed across our NHS partners to be followed in the summer by a version that can be used by health professionals. Our personal care planning app is in the advanced stages of development and has just completed a series of workshops with staff and clinicians from across all of our partners. A prototype will be rolled out to partners in the spring.



Living it Up (LiU), the Scottish element of the UK-wide dallas programme is funded by a consortium led by the Technology Strategy Board, the Scottish Government, Highlands and Islands Enterprise and Scottish Enterprise in partnership with other key stakeholders. NHS 24 has been appointed by the Scottish Government to provide overall leadership, coordination, programme management and financial governance for the project.

LiU has entered its first recruitment phase of an initial 1500 people by Spring 2013. It is initially aimed at the over 50s but will also be of benefit to people living with long term conditions, care givers and those who just want to keep happy, healthy and safe. The programme aims to reach a community of 55,000 in Scotland by 2015 and to deliver economic benefit to Scotland through innovation.

The 3 year project will deliver innovative and integrated health, care and wellness services, information and products via familiar technology enabling them to care for themselves and others. These technologies will include TV, mobile phones, games consoles, computers and tablets

Each of the five LiU Project Areas – Lothian, Forth Valley, Highland/Argyll & Bute, Moray and the Western Isles – are running a series of community engagement and recruitment events throughout February and March as part of this process.

These events are an extension of previous community engagement activities, designed to actively engage the local communities to better understand their needs and how they would like to participate in the developing project.

The initial community engagement events, 'Hidden Talents', took place in Spring 2012 and reached approximately 250 people. At these 'pop up' events, in diverse locations such as shopping centres

and hospital foyers, the community engagement team asked participants to reveal their 'hidden talents' and how they could share their skills with others. Finally participants were asked: "What, if anything, would make life better for them?"

The second wave of community engagement pop-up events, 'A little birdie told us', took place Summer/Autumn 2012 and asked around 500 participants to reveal the 'assets' in their communities and identified the services, support and people valued most locally. In addition 50 in depth interviews and focus groups with NHS staff and unpaid carers were conducted.





The key themes were then developed into service ideas through co-design workshops attended by members of the community, service providers, technology experts and innovators (illustrated in the above photos).

This process resulted in a set of service principles to guide LiU; brand and identity guidelines; and informed development of the key LiU services - Hidden Talents, Market Place, My Care and Keeping Connected through video conference.

LiU has now entered phase 2 (Jan – Dec 2013), which is focussed on developing working LiU service prototypes in partnership with the local communities. Community engagement work has been further refined to take into consideration the aims of this phase, and is developing new tools to assist in co-design, co-production and recruitment. Members of the 5 LiU communities will be

encouraged to sign up on the Living it Up community engagement website as 'test users' during this phase, and will be invited to share their ideas, try the prototypes and feedback their views. <a href="http://livingitup.org.uk/">http://livingitup.org.uk/</a>



Like many other parts of the UK, Liverpool has a number of well-being challenges. Health & care interventions are as good if not better than other areas in the UK and we have moved forward at an equal pace to other areas in relation to the deployment of technology to the well-being challenges. Liverpool's *dallas* community, Mi<sup>[1]</sup> the consumer brand for the FeelGood Factory, has approached the challenge of achieving transformation within health and social care not from a technological perspective but from a people perspective.

Our starting point has not been "the technology doesn't exist or work" – we believe it does but rather that:

- people do not have the information or confidence to use the technology and as a result retain traditional views of what to expect when they become vulnerable (a care home/home care/day centre) or ill (hospital/doctor). This insight is taken from Whole System Demonstrator.
- "practitioners" don't fully understand the technology and/or fear it takes away employment opportunities and/or power (and therefore don't maximise its potential)

Mi partners believe that individual demand for good health and consumer demand for technology to support well-being will drive the transformation of health and care (and remove any organisational or cultural inhibitors). So although Mi Liverpool is working across a spectrum of need we believe that real change will only occur at scale if we change the mindset of those people not in receipt of care and health services i.e. when they are fit, healthy, and able and in control.

Liverpool is asset rich and Mi is committed to taking an approach which builds upon those assets to achieve its aims. We are engaging with communities and individuals through the things they need and like to do, their lifestyles. To get Mi messages out to people at scale, we are working for instance, with Liverpool and Everton Football Clubs, National Museums Liverpool, Merseytravel and local retailers to piggy back upon their current successful engagement of 1,000s of local people.

<sup>&</sup>lt;sup>[1]</sup> Liverpool NHS, social housing provider, Riverside, Liverpool based charity, PSS, Hft, a national charity supporting people with learning disabilities, and technology partners Philips, Tunstall and Informatics Merseyside.



To engage with those people that are harder to reach, generally people who are less economically active, we are building upon existing volunteer assets to develop an army of Mi Champions able to:

- raise the profile of community activity, resources and assets
- encourage people to get involved to build local assets and resilience
- provide information, advice and signposting about things that are happening in the City



Mi Champion activity is community driven and covers a range of areas e.g. education, learning, employment and training, housing and health. Our messages about well-being, life planning and technology will be taken out to the community by Mi Champions.



The dallas Interoperability Conference in Leeds in November 2012 tackled some priority issues for ifocus and for dallas as a whole. Delegates with a wide range of expertise, across the health and wellbeing sector in the UK, gathered for a day to consider some key topics of interoperability in the emerging Assisted Living domain, including NHS, third sector and industrial partners.

i-focus <a href="http://ifocus-dallas.com/pub/">http://ifocus-dallas.com/pub/</a> has prioritised four areas of importance:

- Consumers' Own Devices and the Medical Devices Directive
- Personal Health records and statutory Information Systems
- Identity and Consent
- Delivery of Services to Multiple platforms

# **Consumers' Own Devices**

To achieve Scale (the 'S' in dallas), Communities are expecting to be able to leverage the low cost and ease of use of mass-market products. David McGirr of the Year Zero project said: "Consumers' Own Devices are key because it's about health and well-being being part of your everyday life. It's not about being 'tech-savvy'; it's about how people use communication and digital technology in their lives". One of the perceived barriers to the use of "low-cost" or consumer-grade devices is that the Medical Devices Directive may restrict freedom to deploy. i-focus will be looking at this together with MHRA in some detail in the next quarter, and will publish their findings.

## **Personal Health Records**

All the dallas projects are considering the use of Personal Health Records in some form, and there is perceived to be real value in making their data available to the statutory sector (and vice versa), so that people can be encouraged to take more responsibility for their own wellbeing. Understanding the human factors is essential before deploying technology in this area. Neil Tierney said: "so much of dallas is about trying to open up health records, we have to make absolutely sure that's what people want".

## **Information Governance**

With regard to the sharing of information between systems, interoperability can be hampered by non-technical issues: "almost everything else is a technical issue. Information governance can knock dallas off the rails: all you need are enough jobs-worths to say that the walls between health care and social care can't be breached," adds Andrew Michaelson. This affects dallas firstly in the area of PHRs, where some of the i-focus scenarios involve moving personal health data between privately-held records and GP systems, for example.

## **Identity and Consent**

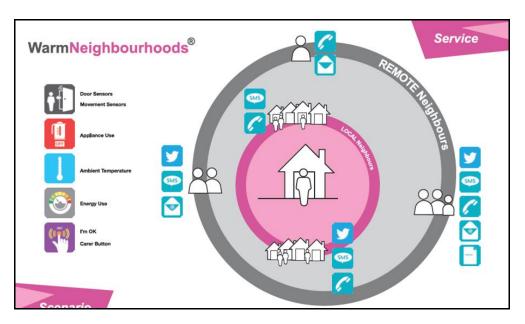
When online services begin to emerge across the sector, people will begin to need to access systems deployed by a range of service organisations. The last thing they want is a vast array of diverse login methods with multiple passwords. Yet reliably identifying people is key to gaining confidence, and knowing for certain that only authorised people have access to data is crucial. This area looks at the deployment of new developments in federated identity schemes such as those being promoted by the Cabinet Office.

### **Multiplatform Service Delivery**

As dallas is about scale, it must be possible to deliver services to devices that consumers already have available to them, or are prepared to purchase for themselves. Just as one consumer may be happy to use tablets and PCs, another may only be comfortable using their TV or a more traditional mobile phone. It must be possible to deliver services across this wide range of platforms, and this presents development challenges and architectural choices both in the organisation of the server-side or cloud-based services and also for the user-interface experience.

## Warm Neighbourhoods® pilot proving popular!

The Warm Neighbourhoods<sup>®</sup> pilot service 'AroundMe' running over this winter is proving very popular. 'Around Me' service is a simple proposition combining ambient temperature, electrical usage, and activity monitoring sensors in the home to provide reassurance messages to an elderly or vulnerable end customer, and their informal care network.



The pilot commenced in December 2012 with 12 end customers and their 'neighbourhood' of friends and family informal carers. The Health Design & Technology Institute (HDTI) at Coventry University has held mid-point interviews with the pilot participants and feedback has been very positive:



"I find it brilliant! It sends a positive message that I'm up and about, it also sends a message if I'm not, which is nice to know that he (responder) is keeping an eye on me"

"It's comforting to know that somebody's watching over me."

"You do feel that there's just a little assistance available or around the corner and that the family do know you're alright."

"You just get used to the [sensors] being where it is and you don't notice it. I mean nobody said at my party, "What's this?" that's the main thing!"

"It is just something that's there and we carry on as normal."

# Evaluating dallas – Benefits to the Individual, the System and UK Economy

In parallel with the work being undertaken by the communities, Databuild and the University of Glasgow have been conducting research to establish a baseline prior to considering the impact that the dallas programme has made to individuals, carers, systems and the wider economy in 2015.

Databuild are in the process of finalising a pioneering report which describes the current market for products, services and systems to support independent living. The report draws together existing evidence with findings from interviews with dallas community members, leading market experts and representatives from the wider industry, describing the current state of the independent living sector and barriers to growth, and summarising the data available to inform an estimate of the market size in 2011/12. The baseline estimates presented in the report will be reviewed and refined as the project progresses and will provide a basis for examining the economic impact of dallas activity in 2015 and beyond.

The University of Glasgow has developed a novel and pragmatic overarching evaluation framework which aims to provide methods and tools for evaluating both evidence based impact and outcomes relating to health, wellbeing and lifestyle and also implementation processes such as how technologies and services are co-designed and developed and ultimately integrated into peoples' daily lives and working practices.

Contributed by Alison Mlot, dallas Programme Manager and the dallas communities <u>https://connect.innovateuk.org/web/dallas</u> Twitter @AlisonMlot

www.alip-healthktn.org

Technology Strategy Board Driving Innovation