MATCH Colloquium 26ᵗʰ June 2012 Glasgow

The Whole System Demonstrator Trial:

delivery, initial results and plans for the future

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(nb thanks to Dept of Health & Philips for some of slides used)

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Some Definitions

Technology and home care
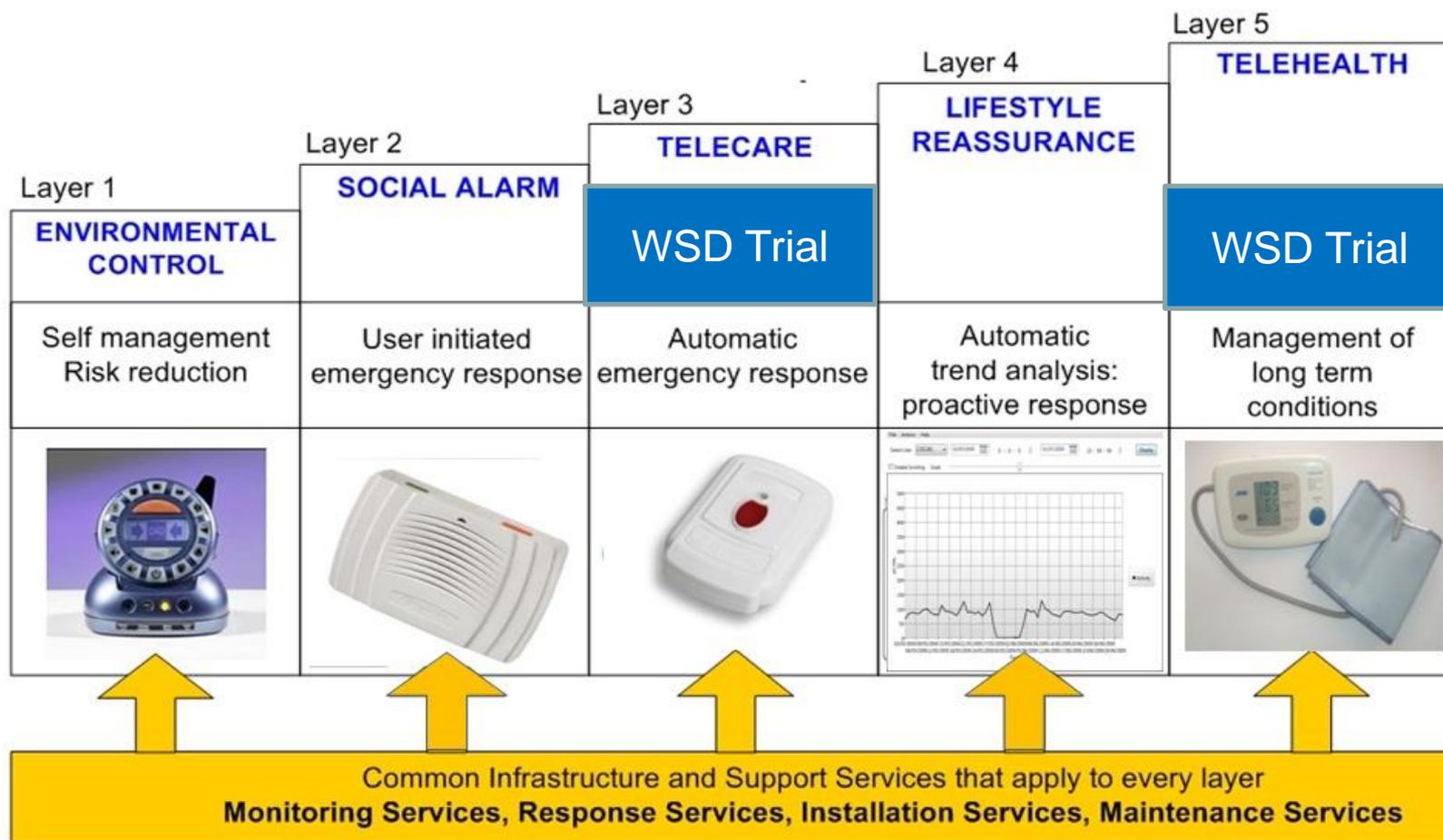
What is telecare

Telecare (personal, environmental, security)

Electronic sensors and aids that make the home environment safer so that people can live at home, independently, for longer. The sensors automatically raises the alarm by contacting, via a call centre, a family member, friend, neighbour or warden (in sheltered housing). Examples include pendant/community alarms worn around the neck, bed sensors to check that someone has got back to bed after going to the toilet at night and door sensors to alert if an outside door has been left open unintentionally.
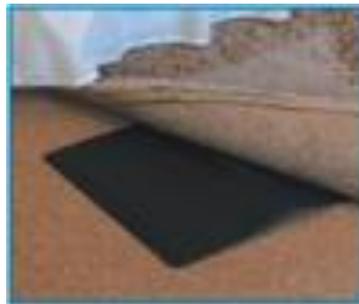
What is home telehealth?

Telehealth (remote care)

Electronic sensors or equipment that monitor people's health in their own home. So for example equipment to monitor vital signs such as blood pressure, blood oxygen levels or weight. These measures are then automatically transmitted to a clinician who can observe health status without the patient leaving home. The clinician monitors daily readings to look for trends that could indicate a deterioration in condition.

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Telehealth & Telecare

Telehealth

- Non emergency service
- Used daily
- Behaviour change

Telecare

- Emergency service
- Preferably not used!
- Supports usual behaviour

Delivery and Evaluation of the Whole System Demonstrator Trial

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WSD History

- 2006/07 – WSD defined, funding agreed and competition opened by Department of Health
- 2007 – Sites & evaluators selected, build teams, agree scope, plan & build services, procure technology
- 2008 – Recruitment begins & data gathering starts
- Sept 2009 – Recruitment ends
- Sept 2010 – Trial period ends - data gathered
- 2011 – Evaluators do initial analysis
- Dec 2011
- April/May 2012 - initial results published

DH Rationale for WSD

We want to know to what extent the WSD model of care:

- promotes individuals long term well-being and independence

- improves individuals and their carer's quality of life

- improves the working lives of staff

- is more cost effective

- is more clinically effective

- provides an evidence base for future care and technology models.

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Evaluation Themes

THEME	Question	NO. PARTICIPANTS REQUIRED
1 Nuffield	*Does the introduction of telehealth or telecare result in reduction in service utilisation and costs of care?*	5721 participants Combined Model
2 UCL	*What is the effect on carer burden, self-care behaviours and quality of life? What predicts whether people will use the service as planned? What is the clinical impact?*	3445 participants 470 informal carers
3 LSE	*What is the cost−effectiveness of the introduction of telecare & telehealth?*	3445 participants 470 informal carers Professional interviews
4 Man'r Oxford	*What are the service users, informal carers and health and social care professionals' experiences of telehealth and telecare?*	234 interviews. Participants & informal carers. Health & social care professionals.
5 Imperial College	*What organisational factors facilitate or impede the sustainable adoption and integration of telehealth/telecare?*	45 key WSD managers and commissioners in health & social services. Staff from 3 WSDAN sites and 3 non WSD related sites

RCT design

General Practices are the basis of the cluster randomisation.
Practices balanced by size, disease prevalence, population age profile, deprivation etc.

Group 1	Group 2
Social Care needs receive usual care **(TC Control Group)**	Social Care needs receive telecare **(TC Intervention Group)**
LTCs receive telehealth **(TH Intervention Group)**	LTCs receive usual care **(TH Control Group)**
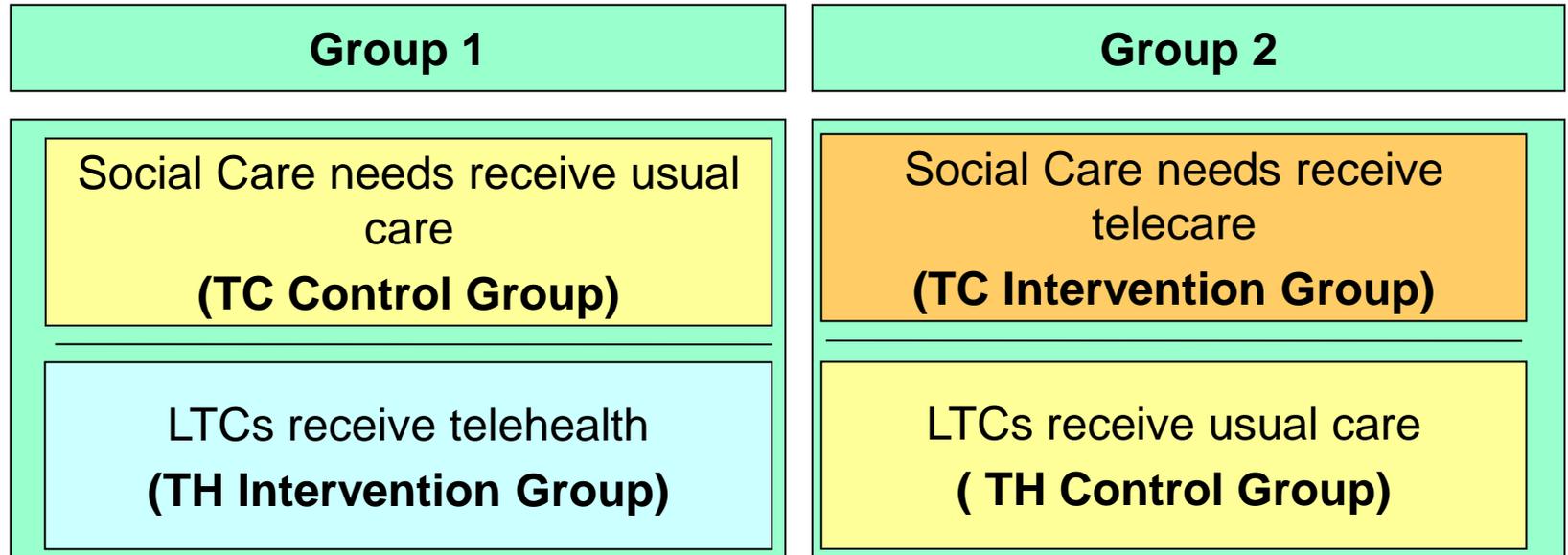
119 Practices   119 Practices

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Delivering the WSD Trial

- Recruit programme team
- Agree data sharing arrangments governing trial
- Establish & agree new care pathways
- Agree contractual arrangements with TC/TH suppliers
- Install, test and integrate systems
- Train health and social care professionals as needed to provide care supported by technology
- Recruit GP practices
- Identify potential participants through patient (GP) & social care records and recruit them
- Deliver telecare and telehealth services
- Collect data.

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Process

Practice Consent	Randomisation	Data Search	Practice Letters & Follow Up	Consent Gained Eligibility Confirmed	Light Touch Visit	Baseline Interview

80 Days

Assess if necessary

Interview at 12 months	Ongoing data collection	Interview at 3 months	Patient goes live on trial	Early Monitoring & Calibration	Training	Install

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National WSD Trial numbers
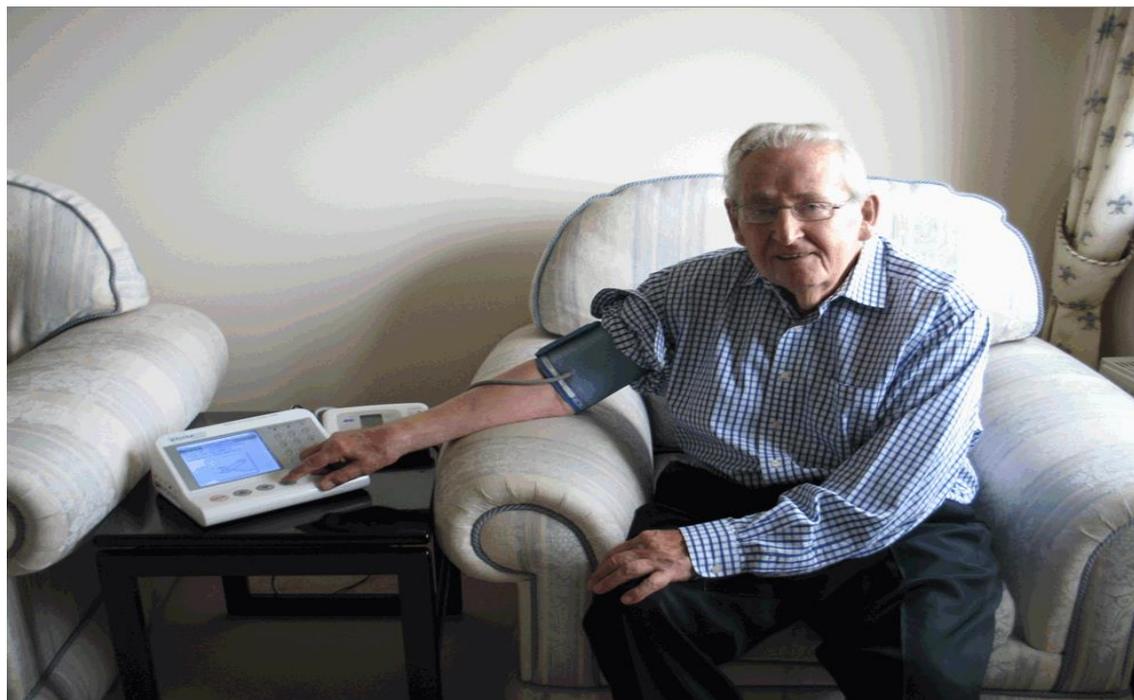
A total of 6191 People Recruited to the Trial in Cornwall, Kent and Newham
(5721 service users plus 470 carers, 238 GP practices,
27K letters, 9K home visits)

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The headline results

"The early indications show that if used correctly telehealth can deliver a 15% reduction in A&E visits, a 20% reduction in emergency admissions, a 14% reduction in elective admissions, a 14% reduction in bed days and an 8% reduction in tariff costs. More strikingly they also demonstrate a 45% reduction in mortality rates."

(Department of Health – Dec '11)

Evaluation – some lessons

- Whole System change OR an RCT
- Evaluation needs project management
- Beware of assumptions
- Listen to your rats!
- Awareness of scale
- Evaluating an evaluation or evaluating a service?

People who know it works!

Patient Champions

- "TeleHealth is my best friend."
- "TeleHealth is part of my life style."
- "Like a doctor in the house."

Service Providers

- "Makes me more effective."
- "Encourages self care "
- "Helps people stay out of hospital."

What happened next – at UK level

The DALLAS Programme

- Delivering Assisted Living Lifestyles At Scale
- £23 million programme by Technology Strategy Board
- Aim: Implementation of <u>innovative services</u> at scale in the UK by building the supply chain
- Service and technology for integrated health and social care
- Economies of scale - Cost target to drive future deployment
- Embedded & integrated with societal/lifestyle needs
- Regional footprint connected UK-wide (3-5 UK sites)
- User-centric to size of 10k+ users, lasting up to 36 months (ie up to 50,000) people
- Next stage evidence for benefits of Assisted Living

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DALLAS site scope

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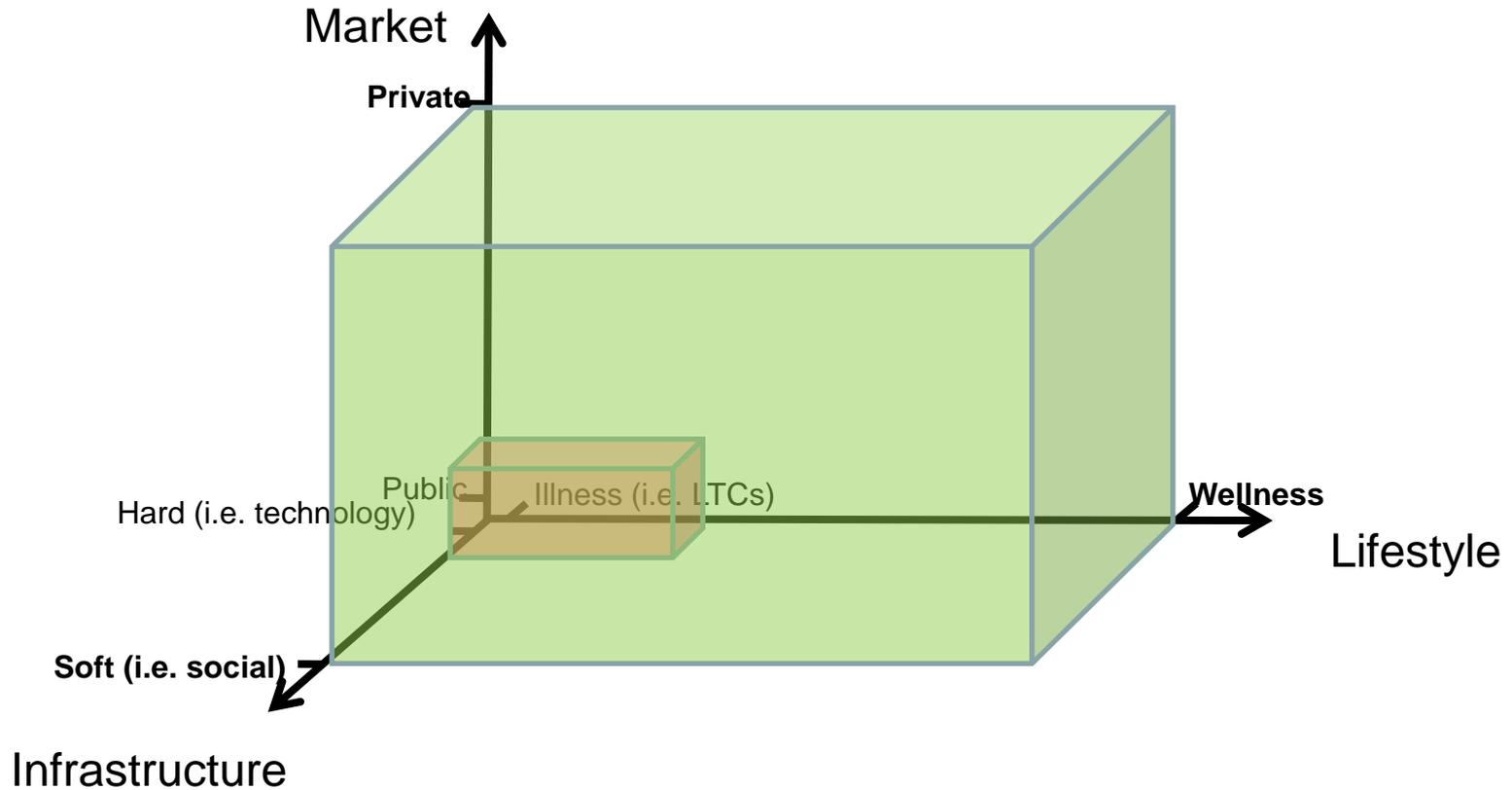
"The matron picked up a deterioration in my condition immediately and I was rushed to hospital for life saving surgery."

Benefits of Telecare and Telehealth

Why has 3millionlives been developed?

Get Involved

3millionlives Latest News

DH - 3 Million Lives Campaign

- The DH believes that at least three million people with long term conditions and/or social care needs could benefit from the use of telehealth and telecare services.

- Concordat with industry to work together to achieve target in 5 years.

- An **enabling framework** by Govt. supported by industry. **No extra money**

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What happened next – Newham

Drivers for change

- Better outcomes for more patients
- Cost reduction without service reduction
- More effective use of clinical resources
- Very positive WSD results for telehealth
- Government & DH policy
- Capitalises on existing experience and Newham flagship role

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New telehealth technologies
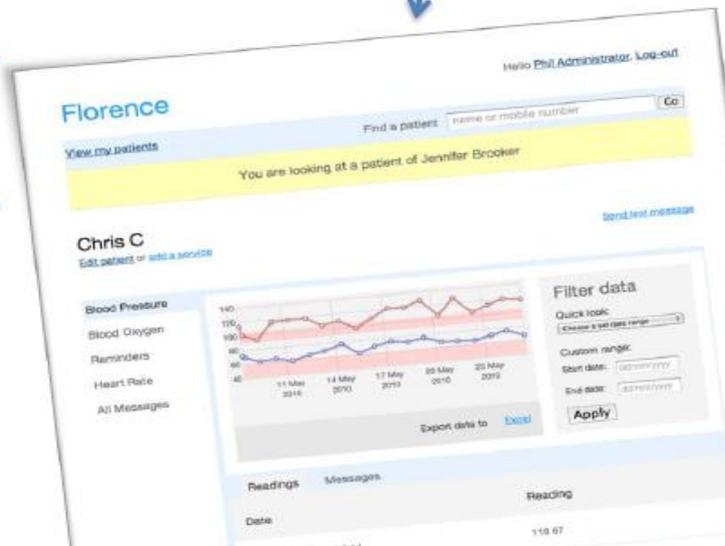
Steps to a mainstream service

- Staff consultation & re-organisation

- Process development

- Implement new telehealth techologies

- Implement risk stratification

- System integration

- Staff & Patient Training programme

- Communication strategy & delivery

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http://www.newhamwsdtrial.org/