

The Sandwell Telecare Project



The Use Of Electronic Assistive Technology For Independent Living

Barry Downs

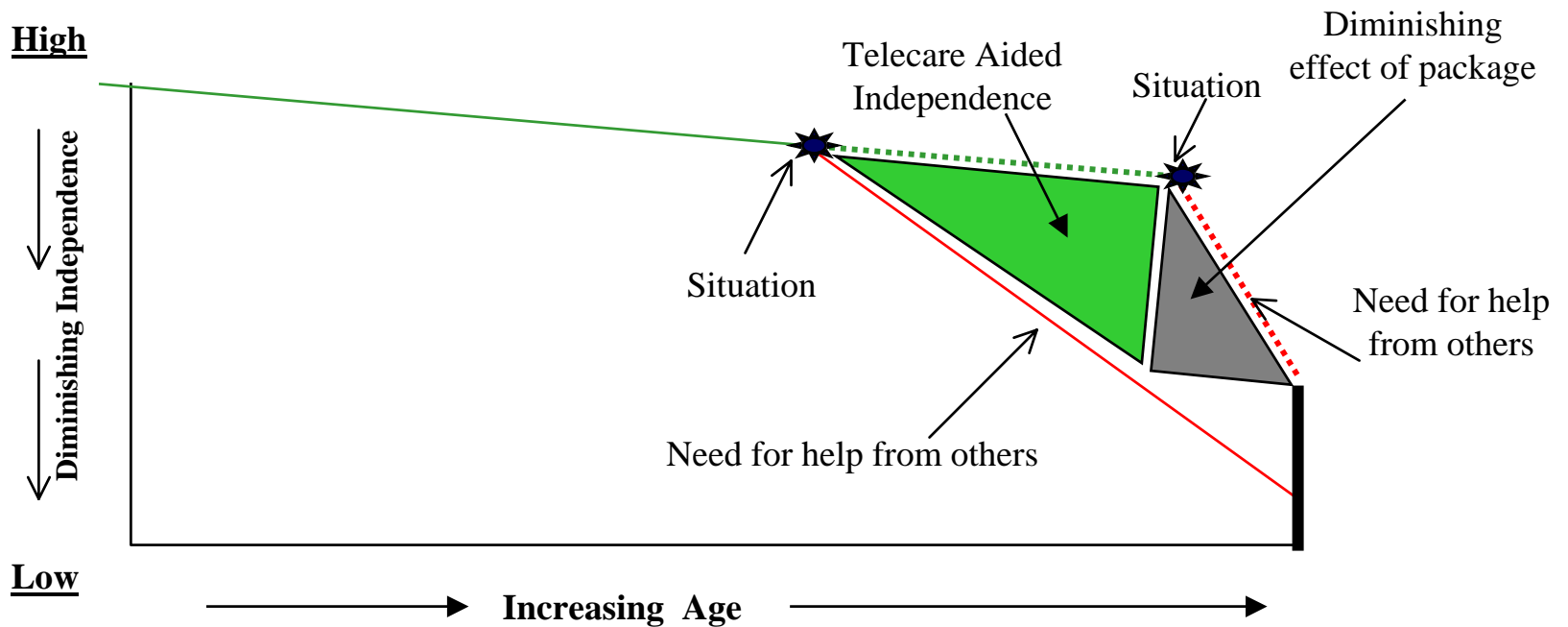
Sandwell MBC

Paul Waddington

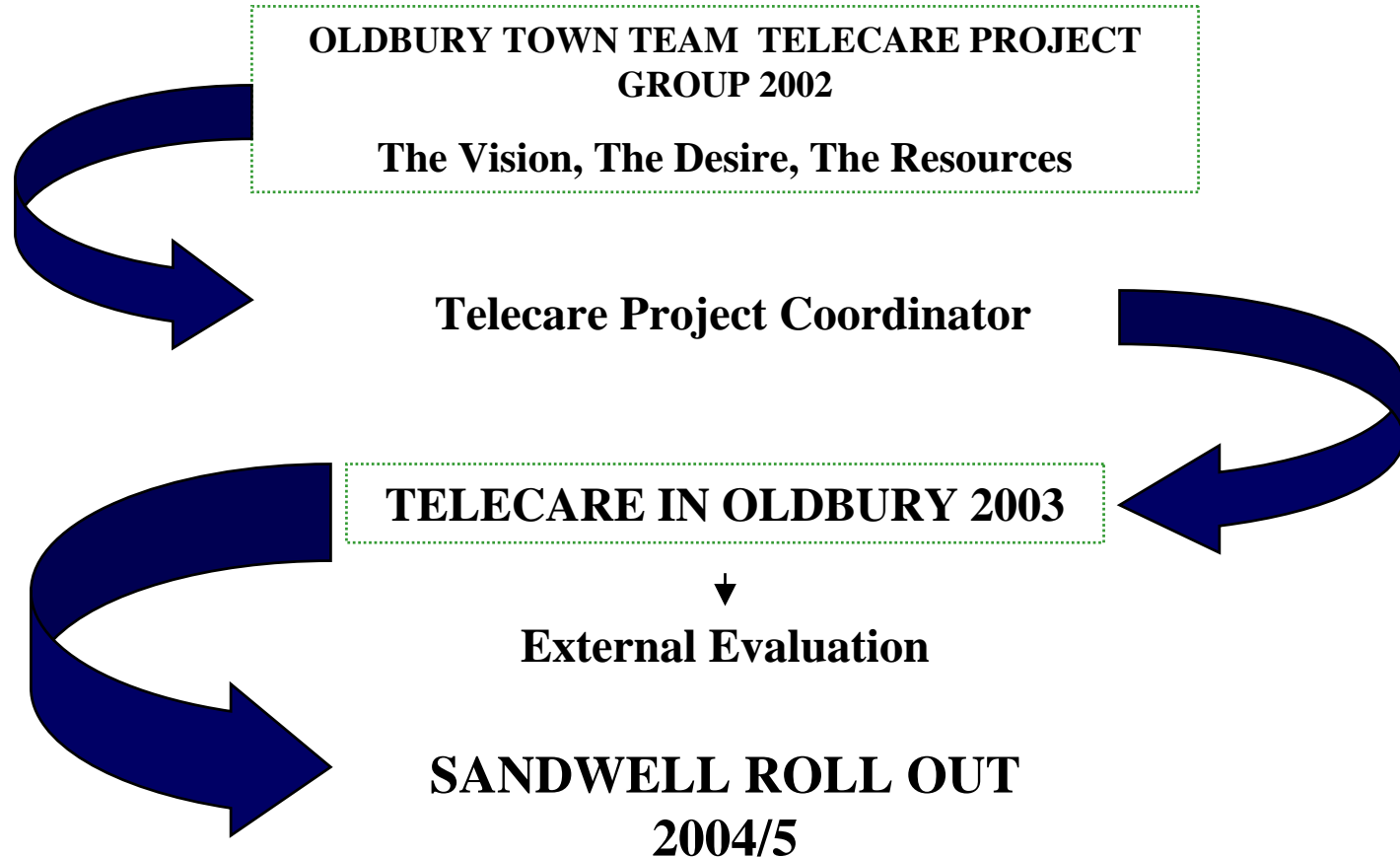
University of Central England

The Aim of Telecare

To Support Independence & Quality of Life



Background



First Observations

The Service

No standard definition

Technology driven

Commercially directed

The Models

Single user group focus

Defined habitation areas

Assessment free provision

What Should Telecare Be?

- Automated, situation sensitive, risk management
- An appropriately monitored service for effectiveness
- Meeting assessed needs via evolving technologies
- Capable of maximum effect with minimal user input
- Useable in any type of domestic environment
- 'Wireless', for ease of installation & low disruption

Telecare Objectives

- Enable people to live more safely at home
- Assist in the process of hospital discharge
- Support fall & accident prevention strategies
- Provide focused support for Carers

What Should TeleCare First Comprise?

✓ 'Smart' Community Alarm Service ✓

- ✓ Smoke detector
- ✓ PIR detector
- ✓ Auto. pill dispenser
- ✓ Magnetic contacts
- ✓ High temp. Detector



- ✓ Gas / CO Detector
- ✓ 'Smart' Pendants
- ✓ Fall detector
- ✓ Flood detector
- ✓ Low temp. detector

✓ Carer Monitored Radio Devices ✓

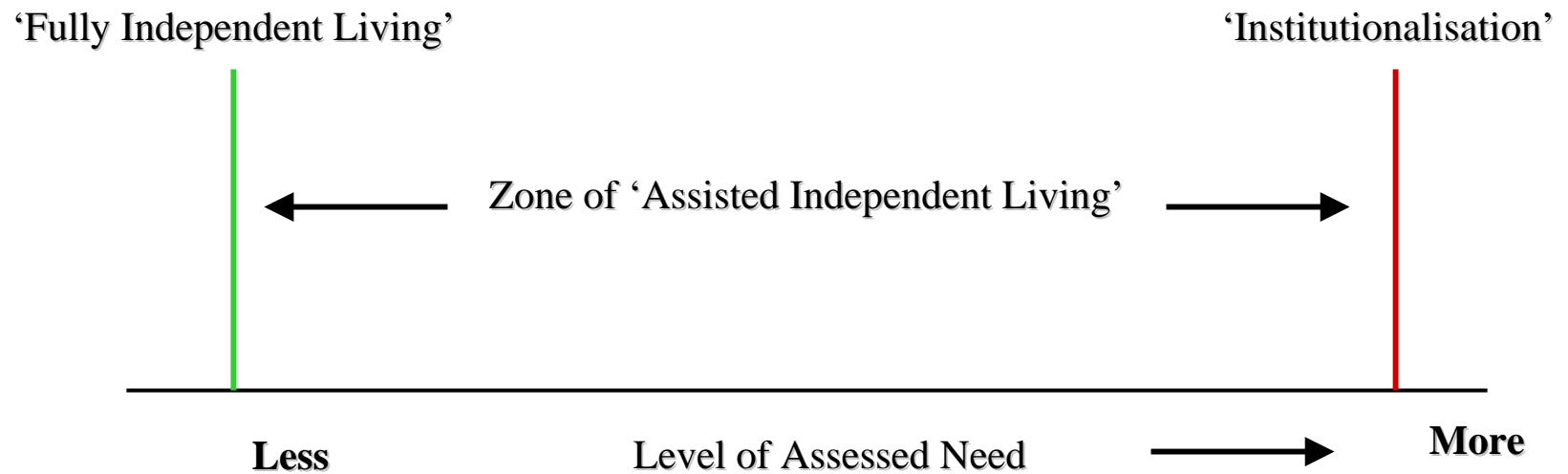
Telecare Values

- Appropriateness - *to the prevailing situation*
- Acceptability - *to users, carers & workers*
- Effectiveness - *does what it says on the tin*
- Efficiency - *best use of finite resources*
- Sustainability - *not a short term 'quick fix'*
- Accountability - *to users & commissioners*
- Flexibility - *not a permanent installation*

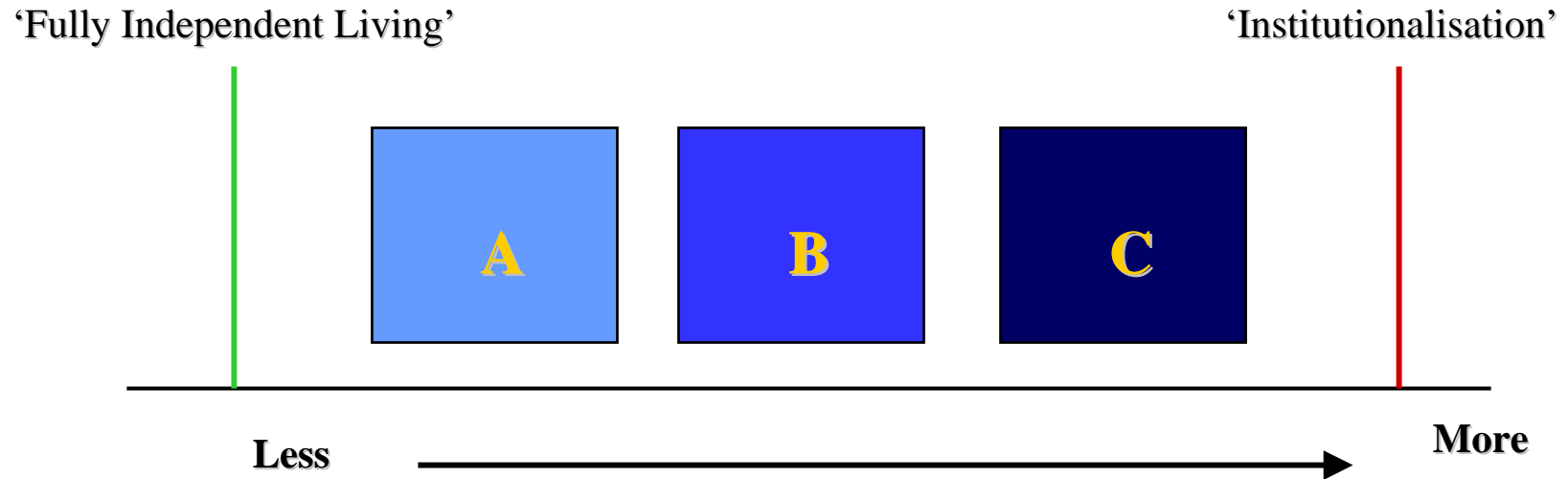
Telecare Characteristics

- Not appropriate for every person or situation
- Not a 'one size fits all' service
- Is the service outcome of a user centred assessment
- Is available to a range of assessors
- Should be targeted at identified need
- Must be supported by a sound responder network
- Does slot into existing practices, procedures & services

The Assessment Process



Categories of Need

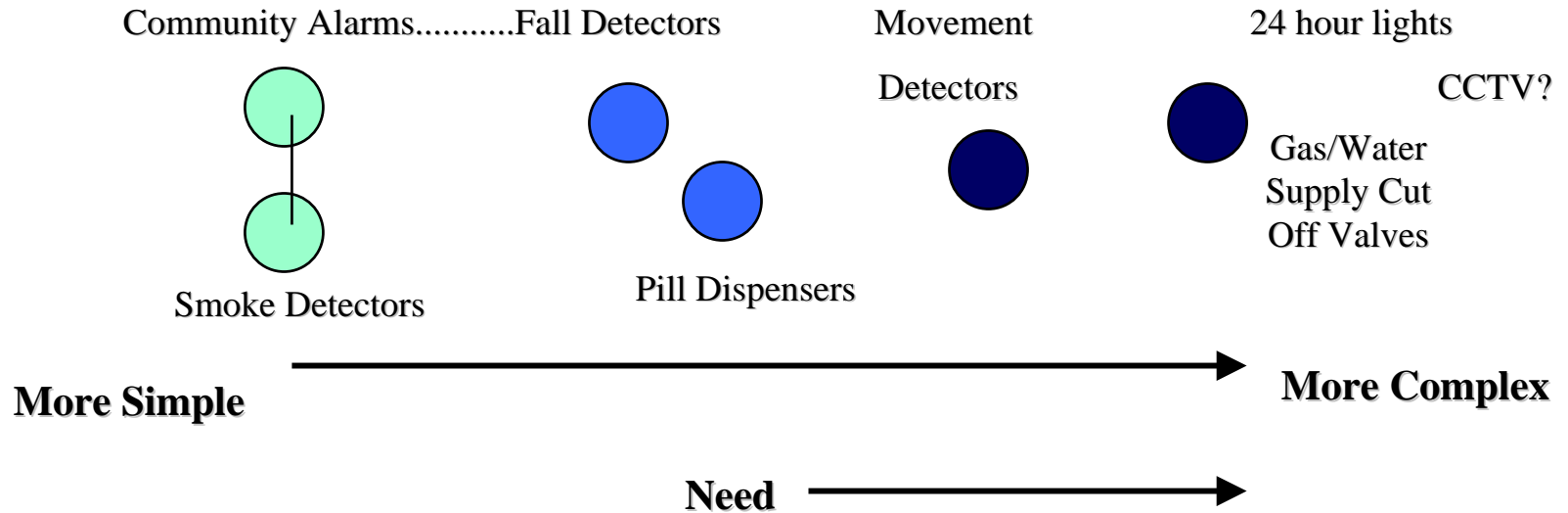


A = Needs requiring a relatively ‘low’ level of support

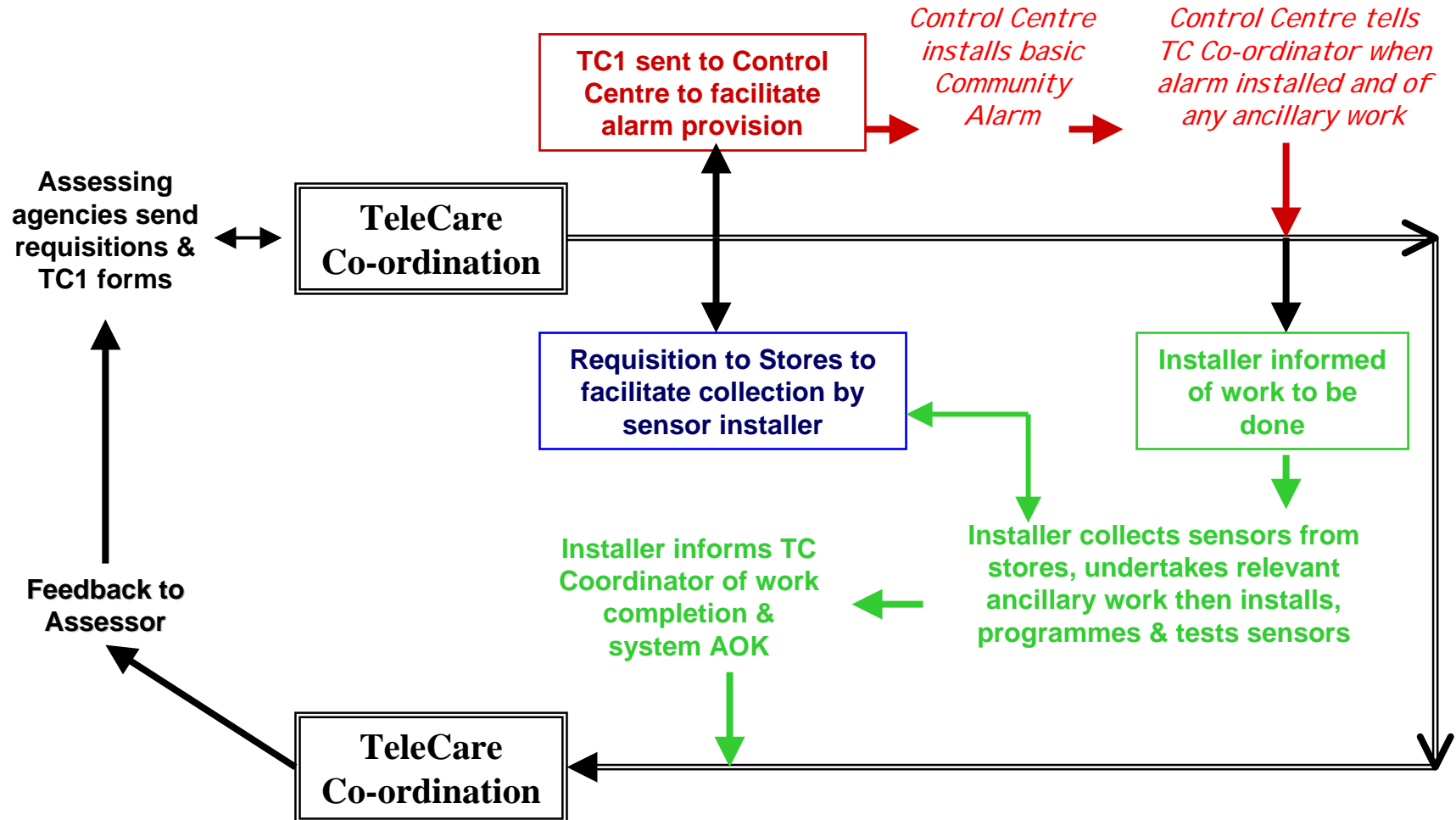
B = Needs requiring a relatively ‘higher’ level of support

C = Cases at or near the threshold of unavoidable ‘institutionalisation’

'The Sensor Continuum'



Accessing Telecare



Initial Statistical Data – 100 installations

<u>Project Objectives</u>	%
Enable people to stay at home	48
Falls/accident prevention strategy	22
Hospital discharge	1
Carer Support	3
Unspecified	26

<u>Probable Alternative Services</u>	%
Residential care home	23
Increased care package	11
Health funded service	16
Other	50

<u>Assessors Involved</u>	%
OT/Nurse - Health	53
OT – Social Inclusion	2
Social Worker	27
Other inc no information	18

<u>Equipment Installed</u>	
<u>Item</u>	<u>No.</u>
Horizon 2	85
Additional Pendants	6
Pendant Adapter	5
Smoke Detectors	13
Movement Detectors	2
Pill Dispensers	23
Extreme Temp Detectors	18 (L) 3 (H)
Fall Detectors	41 (+ 26 belts)
Gas/CO Detectors	18 (inc. 5 auto off)
Signal Transmitters	32
Door Contacts	19

TOTAL COST	£25,157
Average Equipment Cost	£250
Care, administration, installation, maintenance & monitoring costs must be added	

Service Information

6.

BRIEF DESCRIPTION OF NEED	
APPROPRIATE TELECARE SENSOR	
LOCATION OF SENSOR IN PROPERTY	
INITIAL RESPONSE TO ALARM	RESPONDER NAME & CONTACT DETAILS
FOLLOW UP ACTION (IF ANY REQUIRED)	

Basic Information

	DATE		
1.	CLIENT NAME		DoB
	ADDRESS		
	TOWN	POSTCODE	
	TEL:	MOBILE:	
	ACCESS CONTACT DETAILS		
2.	Requesting Team		Assessor
	Contact Address & Tel.		
	G.P.	Practice	PCT
	Is A Community Alarm Installed? Y / N	Is It Part Of A Sheltered Dwelling System? Y / N	
	Is It An SMBC Community Alarm? Y / N	If 'N' Who Monitors It?	
	Is The Property Council Owned? Y / N	Housing Association? Y / N	Private? Y/N
	Will Alarm Aid Hosp. Discharge? Y / N	Is A Private Telephone Line Installed? Y / N	

Monitoring Information

3.

PRINCIPAL ORIGIN OF NEEDS

Mobility & Function Physical Wellbeing Criminal Experiences Informal Support
 Living Environment Mental Wellbeing Memory & Orientation Vision & Hearing

4.

PRIMARY TELECARE OBJECTIVE

PROBABLE 'NO TELECARE' CONSEQUENCE

Falls – Accident Prevention	<input type="checkbox"/>	Residential Care	<input type="checkbox"/>
Timely Hospital Discharge	<input type="checkbox"/>	Intensive Home Care	<input type="checkbox"/>
Enabling Staying At Home	<input type="checkbox"/>	Hospital Trust Funded Services	<input type="checkbox"/>
Supporting Carers Needs	<input type="checkbox"/>	Community Trust Funded Services	<input type="checkbox"/>
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>

5.

TeleCare Equipment

<input type="checkbox"/>	Additional Pendant	<input type="checkbox"/>	Pendant Adapter	<input type="checkbox"/>
Smoke Detector <input type="checkbox"/>	Movement Detector <input type="checkbox"/>	Door Contacts <input type="checkbox"/>	Pill Dispenser <input type="checkbox"/>	
Gas/CO Detector <input type="checkbox"/>	Low Temp Detector <input type="checkbox"/>	Fall Detector <input type="checkbox"/>	Water Detector <input type="checkbox"/>	
Auto Off Gas/CO. <input type="checkbox"/>	High Temp Detector <input type="checkbox"/>	Fall Detector Belt <input type="checkbox"/>	Pressure Pad <input type="checkbox"/>	

Business Case 2. Care Package Enhancement

Alternative to an additional four hours home care weekly

- TeleCare package cost = £700
- Community Alarm 'home care' unit
- Additional pendant alarm + holder
- Radio door contact sensor
- Radio smoke detector
- Radio fall detector
- Radio PIR movement detector
- Radio extreme temperature detector
- Pill alarm & dispenser (*not alarm centre linked*)

*Given reusability and a guaranteed life of two years then the weekly depreciation roughly equates to 1% of capital cost = approx. £7.00pw
An estimated £6.00 pw should cover initial installation and routine maintenance.*

7 Hours per Week Home Care	£4,300.00	pa
Alarm Centre Service Charge	£ 180.00	pa
Equipment Depreciation/Maintenance	£ 680.00	pa
Admin, warehousing etc	£ 440.00	pa
TOTAL ANNUAL 'MIXED PACKAGE' COST	£5,600.00	pa
MIN. COST FOR 11 HOURS pw. HOME CARE	£6,800.00	pa

POTENTIAL COST BENEFIT OVER INCREASED HOURS = £1,200.00 pa

Business Case 1. Care home Alternative

Assumes a net cost of £200 weekly

- **TeleCare package cost = £700**

- Community Alarm 'home care' unit
- Additional pendant alarm + holder
- Radio door contact sensor
- Radio smoke detector
- Radio fall detector
- Radio PIR movement detector
- Radio extreme temperature detector
- Pill Alarm & Dispenser *(not alarm centre linked)*

Given reusability and a guaranteed life of two years then the weekly depreciation roughly equates to 1% of capital cost - approx. £7.00pw. An estimated £6.00pw. should cover initial installation and routine maintenance.

5 hrs. home care support weekly @ £12.00ph	£60.00	pw
Alarm Centre Service Charge	£ 3.50	pw
Equipment depreciation	£ 7.00	pw
Installation & maintenance, new batteries etc	£ 6.00	pw
Admin & other costs inc. warehousing etc.	£ 8.50	pw
TOTAL COST OF TELECARE	£85.00	pw

POTENTIAL COST BENEFIT OVER CARE HOME = £115.00 PER WEEK