



# Engaging with technology to increase effectiveness and efficiency of care using Telehealth/Telemedicine

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## CCG Overview: What you already know...

Airedale, Wharfedale and Craven CCG is predominantly a rural area, with only one major acute provider located within the CCG boundary



### Airedale, Wharfedale and Craven CCG

- 17 member practices
- 156,000 patients
- 23% of population aged 65+
- 30% of population forecast to be 65+ by 2021 (3% CAGR in absolute population)
- 1% annual growth in total population
- £186m budget<sup>1</sup>
- £1,200 average cost per patient
- 78.3 / 82.3 year life expectancy for males / females

#### Key:

- GP Surgery
- Acute Provider
- Mental Health Care / Community Care Provider
- Community Hospital (delivers services provided by multiple NHS Trusts)
- Private Hospital (delivers some services provided by NHS Trusts)

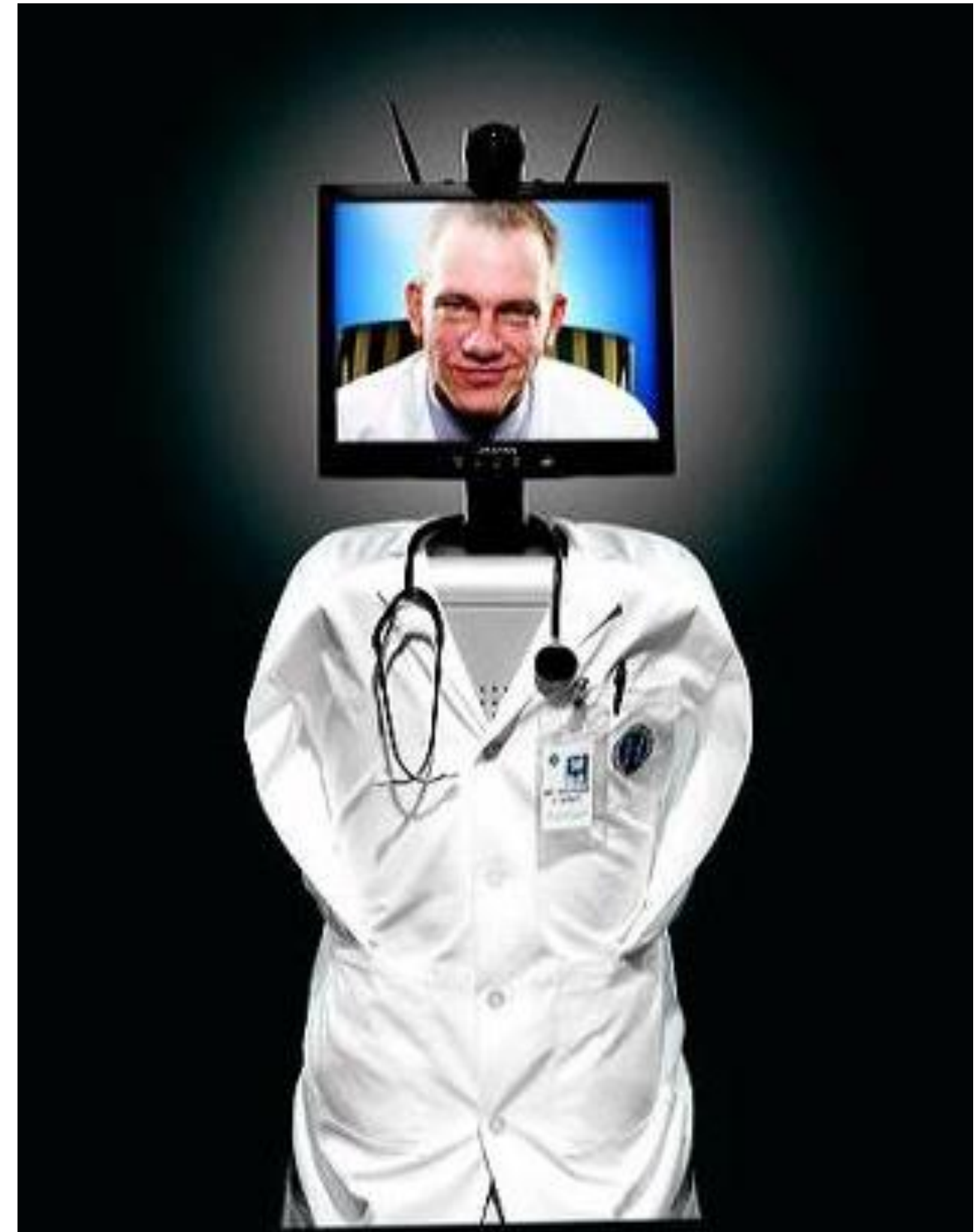
Source: Airedale, Wharfedale and Craven CCG website, NHS England 2013/14 CCG Budget Allocations, Airedale, Wharfedale and Craven CCG Prospectus, ONS Sub regional – population estimates and projections, 2001 to 2021 (as per March 2013)

Note: 1. Budget for 2013/14, Budget for 2014/15 will be £188m



# Telehealth, e health, digital health.....

Telecare  
Telemonitoring  
Teleconsultation



# Tele care





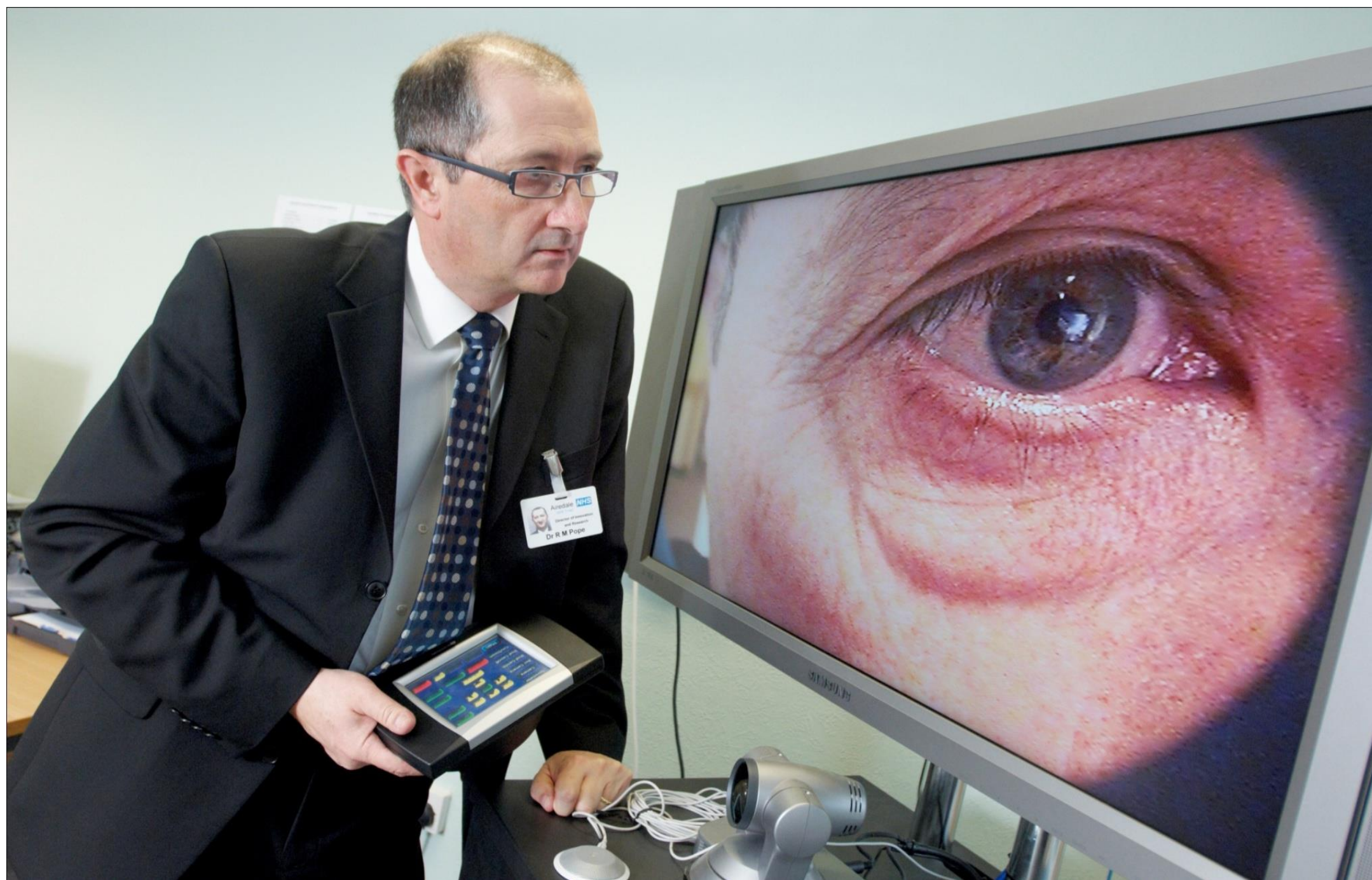
# Tele monitoring



YOUR HOSPITAL *Here to care*



# Tele Consultation/Medicine



YOUR HOSPITAL *Here to care*



# a system designed by default



some people seem to do  
**quite** well without  
waiting for healthcare  
support.....





## History

Since 2005 – video consultation in prison healthcare



Used for: Out Patient and ED referrals



Since 2011-Patient consultation in own home /Nursing & Residential Care Homes





## Current approach – telehealth hub

- Bespoke centre (small)
- Operational 24/7
- Staffing:
  - Experienced nurses
  - Medical support
  - Administration
  - Technology support
  - Training





## The Aim of the Service

- Provide, safe, effective high standards of care
- To support residents to stay at home
- Support residents/nurses/carers in the planning, and delivery of care
- Escalate to community teams out of hours





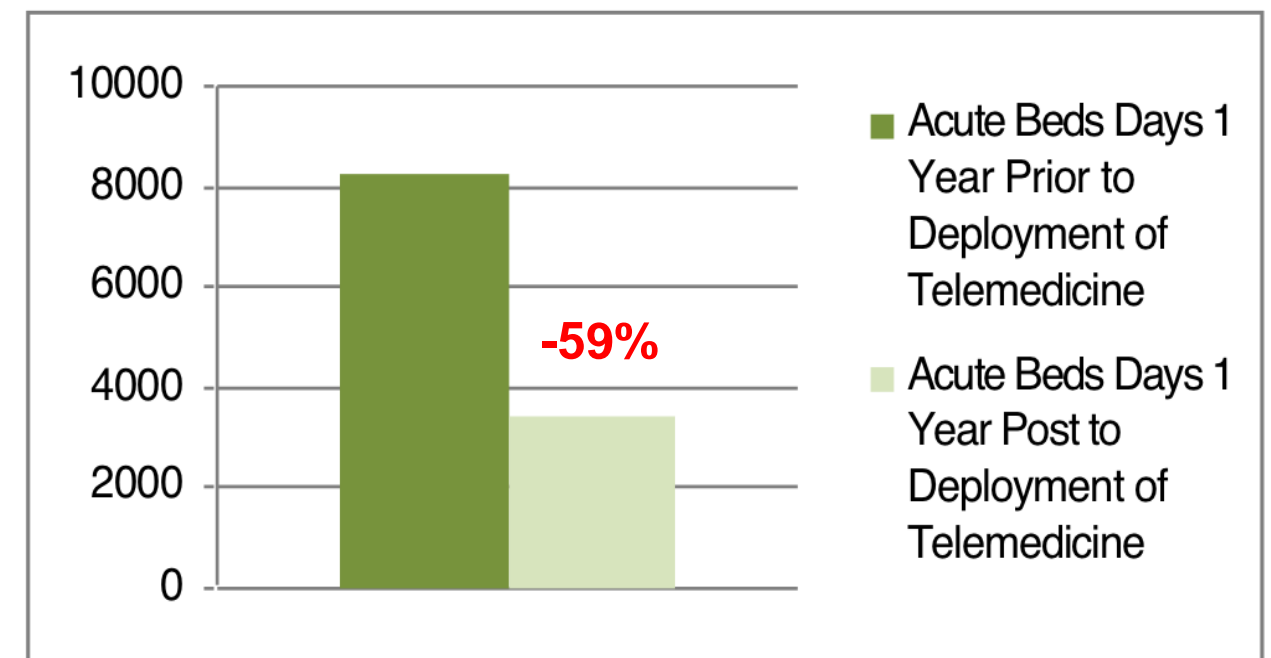
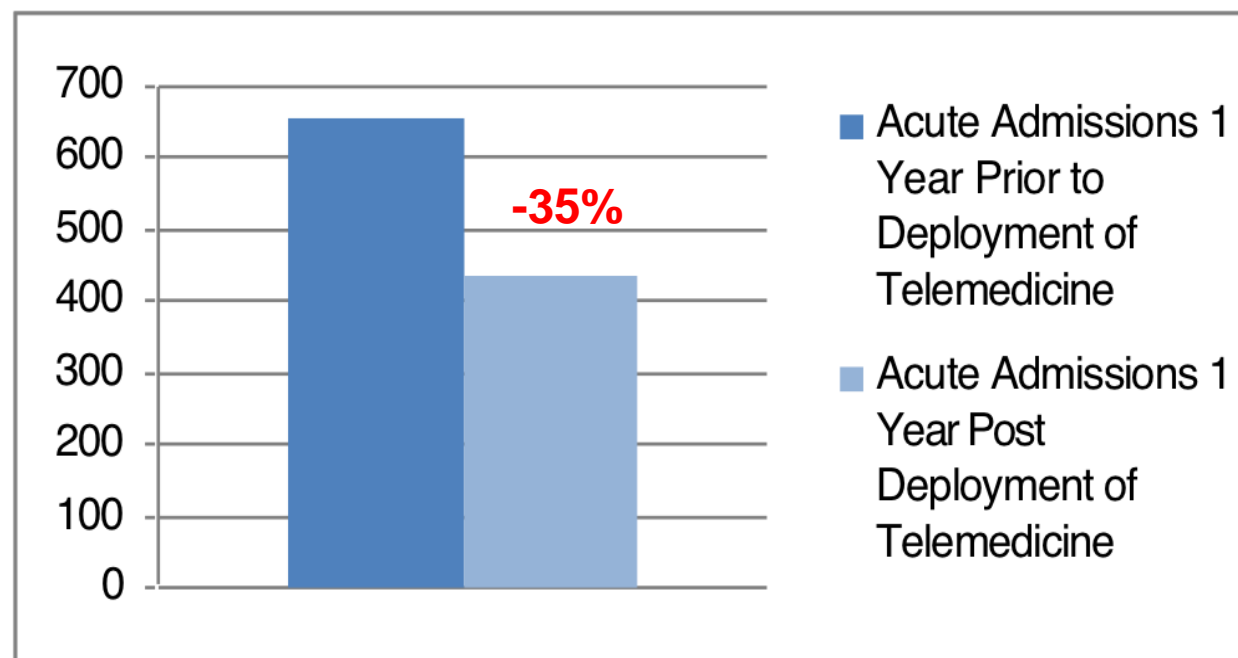
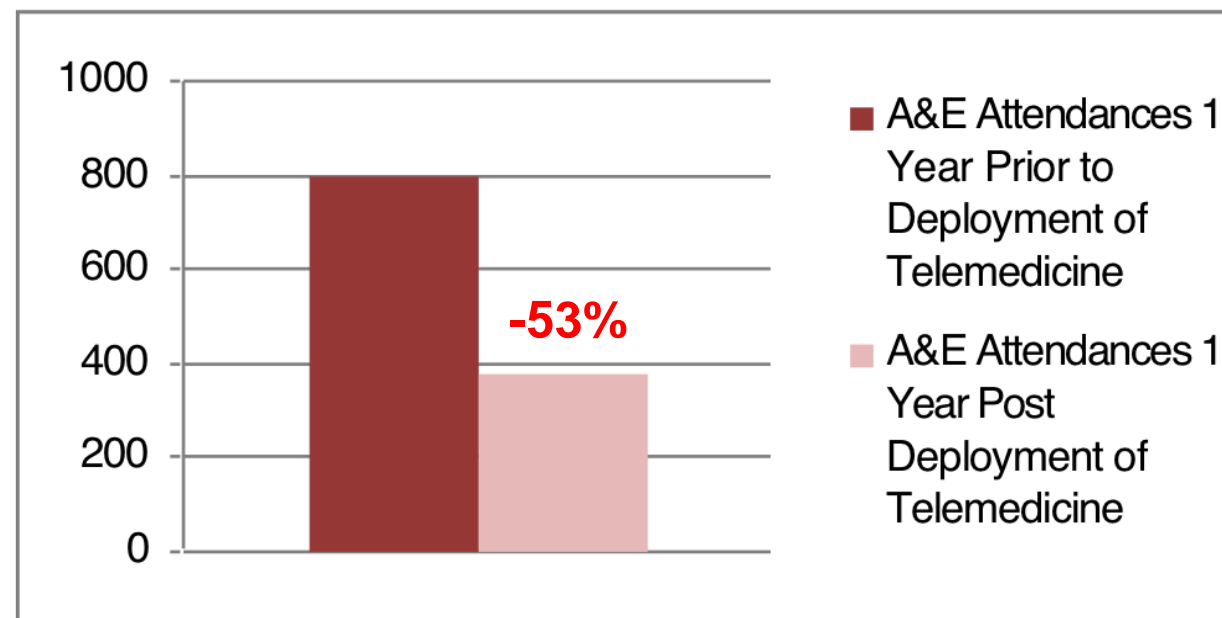
# When Admission to Hospital is Required

- Streamlined process
- Avoiding A&E where ever possible
- Supporting the resident, and their carer until the ambulance arrives, via the video link





# Care Homes





## Current position

- 13 Prisons (4 in implementation)
- 183 Care Homes (113 in implementation)
- 100 Patient own homes (83 in implementation)
- Cumbria to Kent
- >6000 Residents



## Case studies

- Falls
- Laceration
- Painful shoulder
- “Chest Pain”
- Evolving stroke
- Drowsy / “off legs”
- Medication error with symptoms

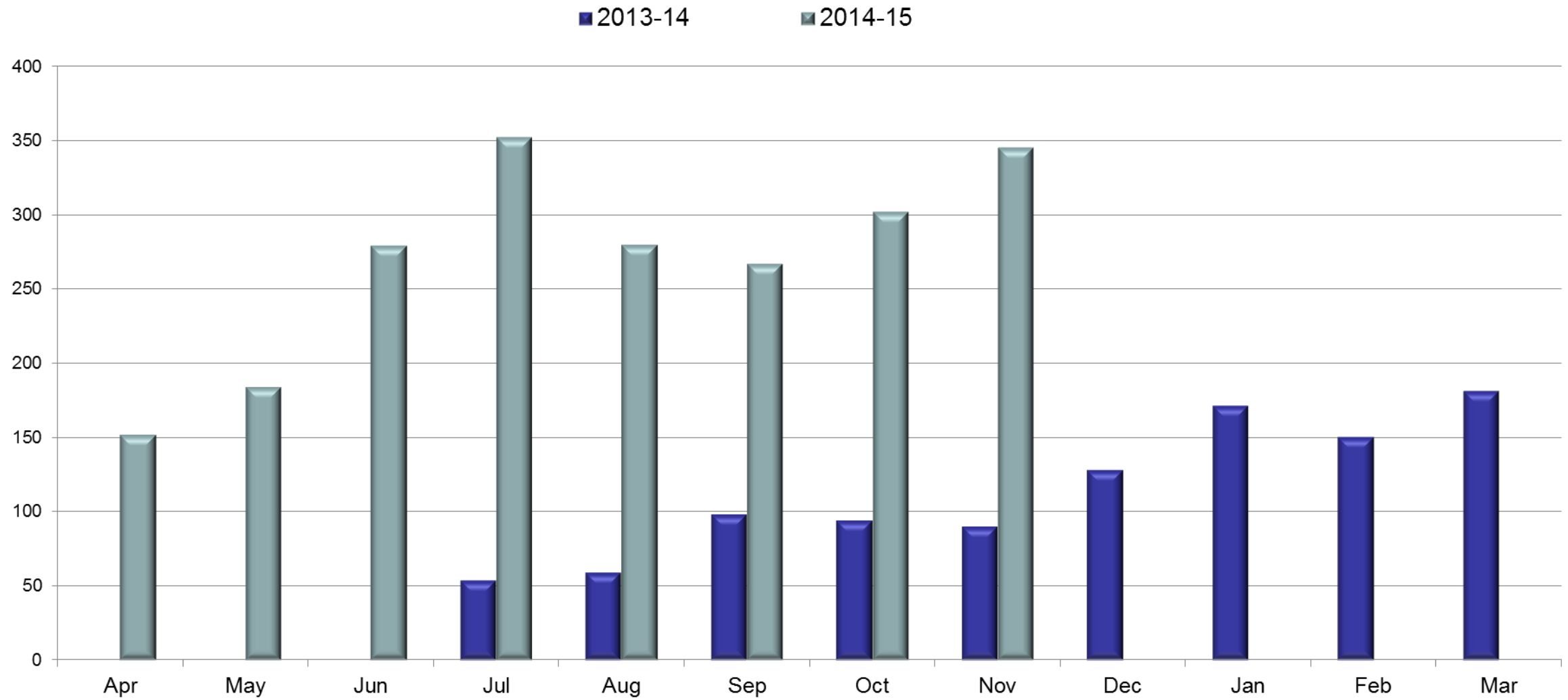


.....positive feedback from users, relatives and staff



# Care Homes – activity

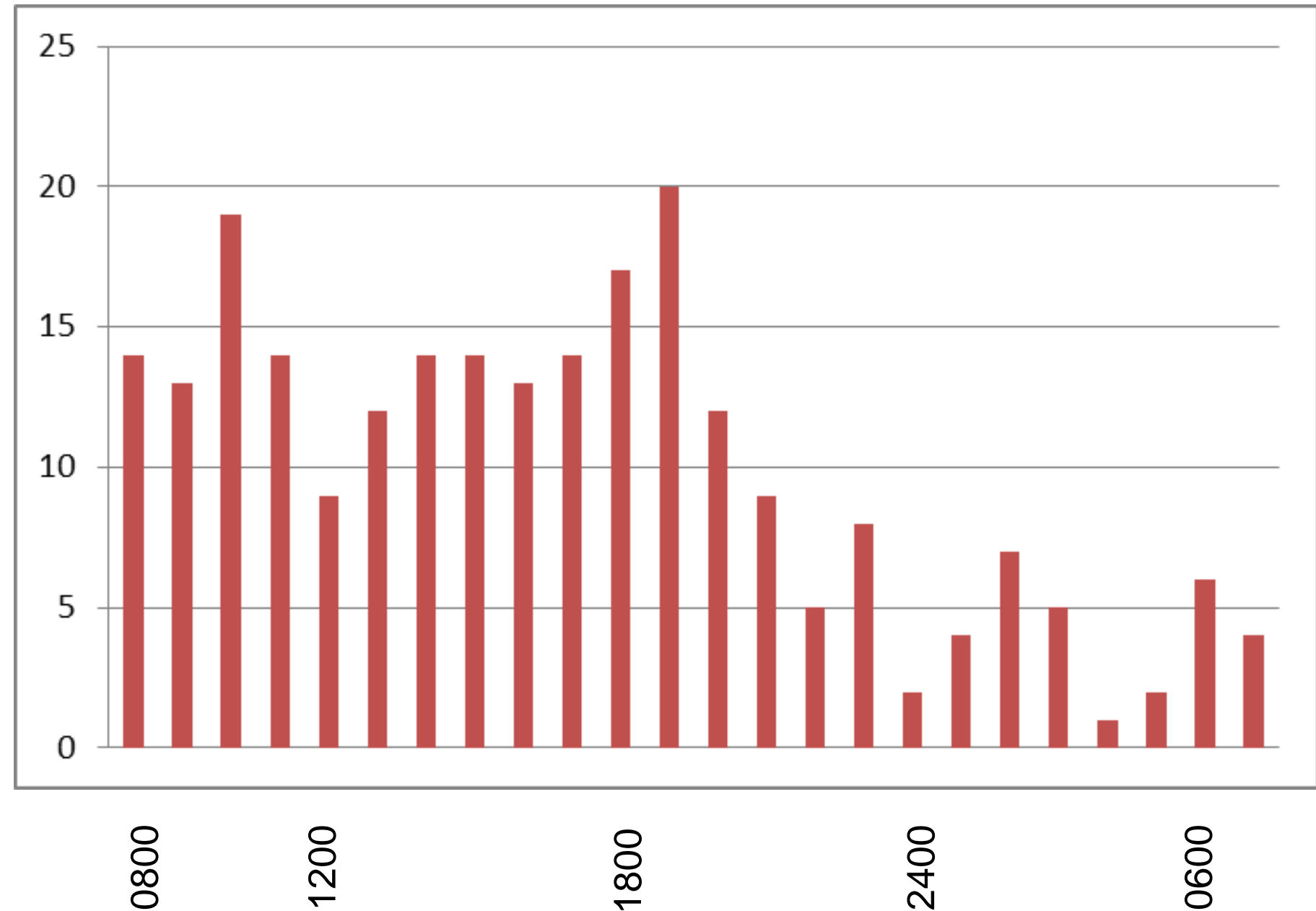
## NUMBER OF CALLS



# Care Homes – call activity

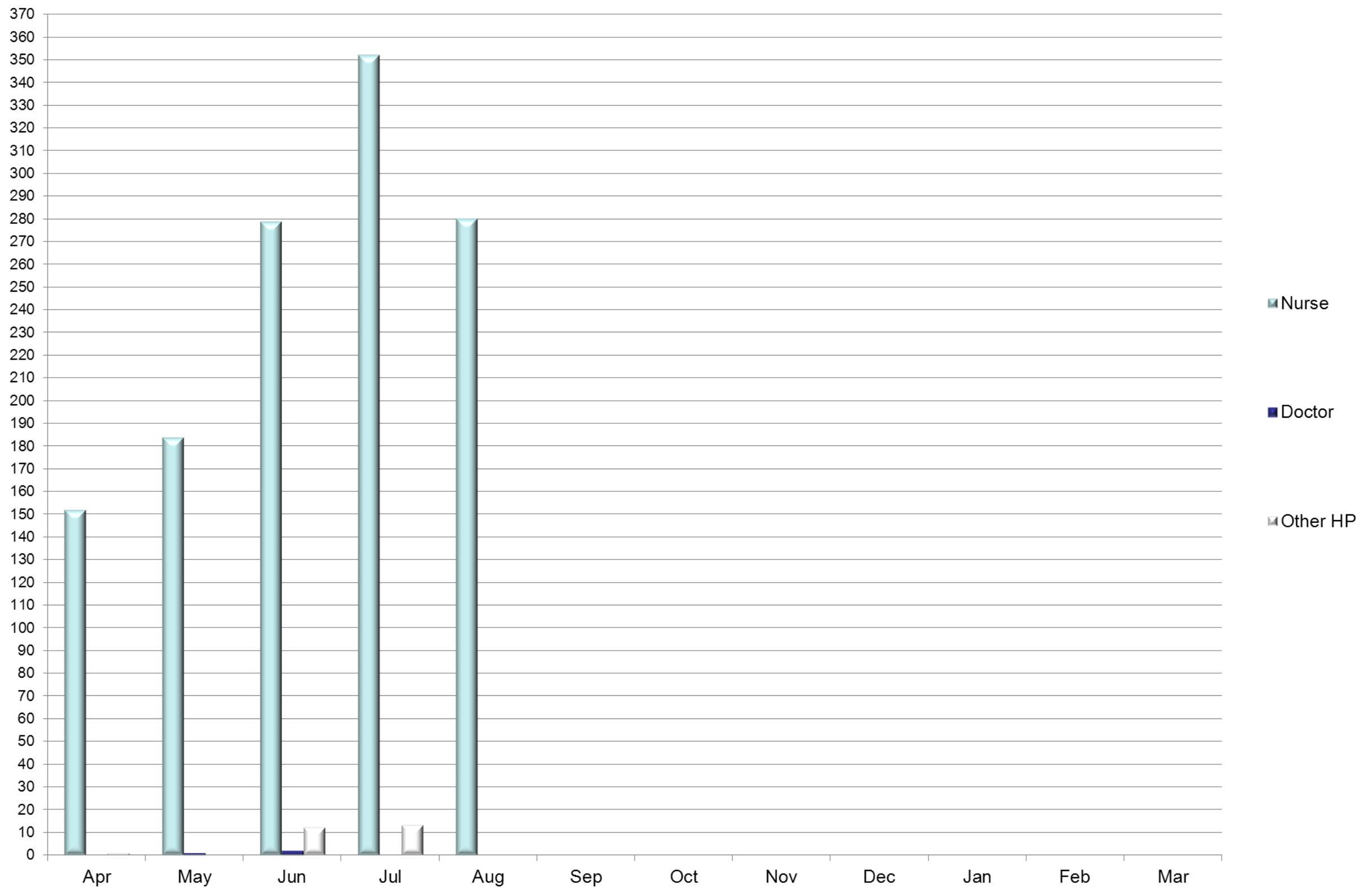
Calls by time of day  
(1 month's data)

Allow 30 min to:  
complete call action  
document

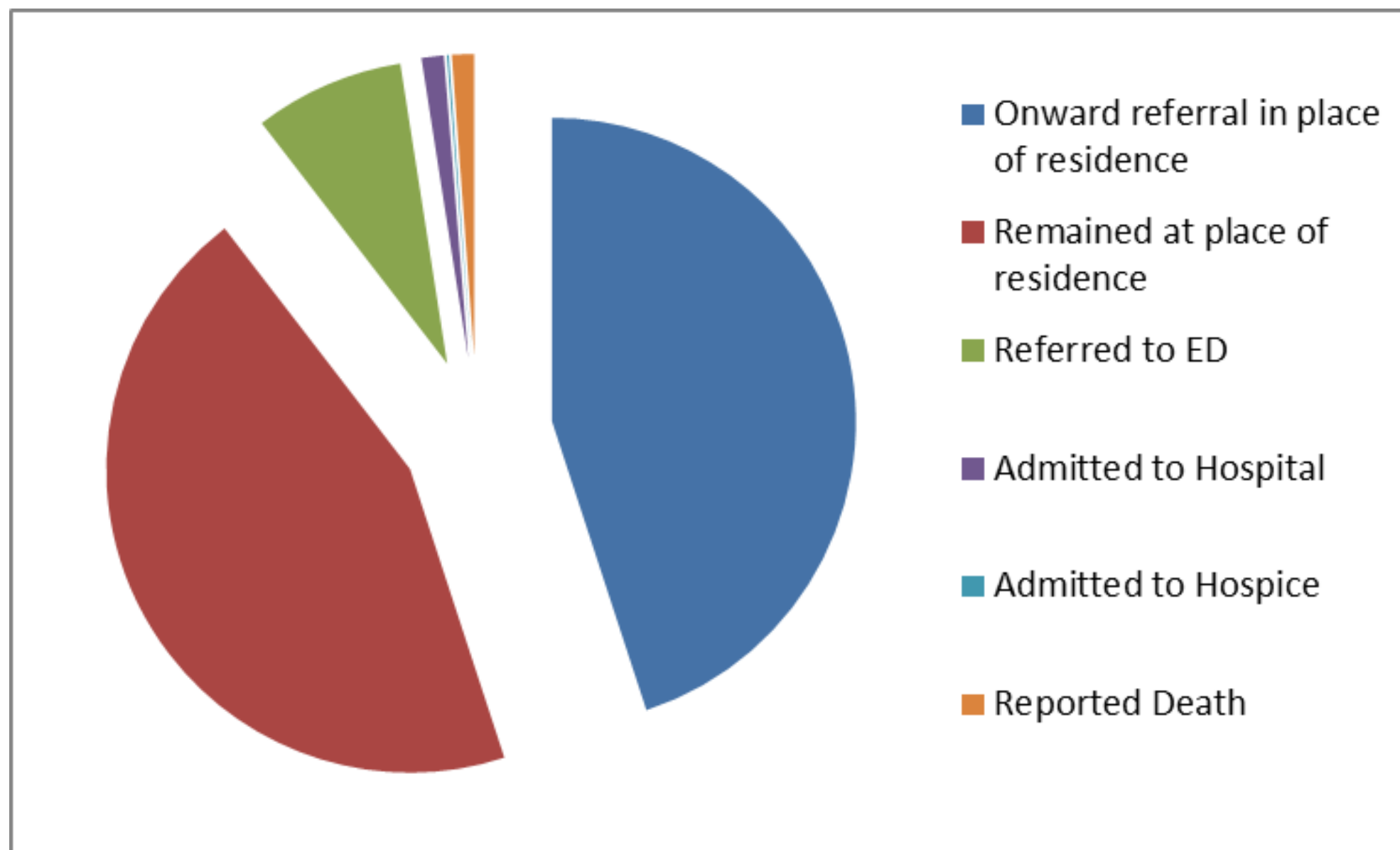




# Health Professional Type



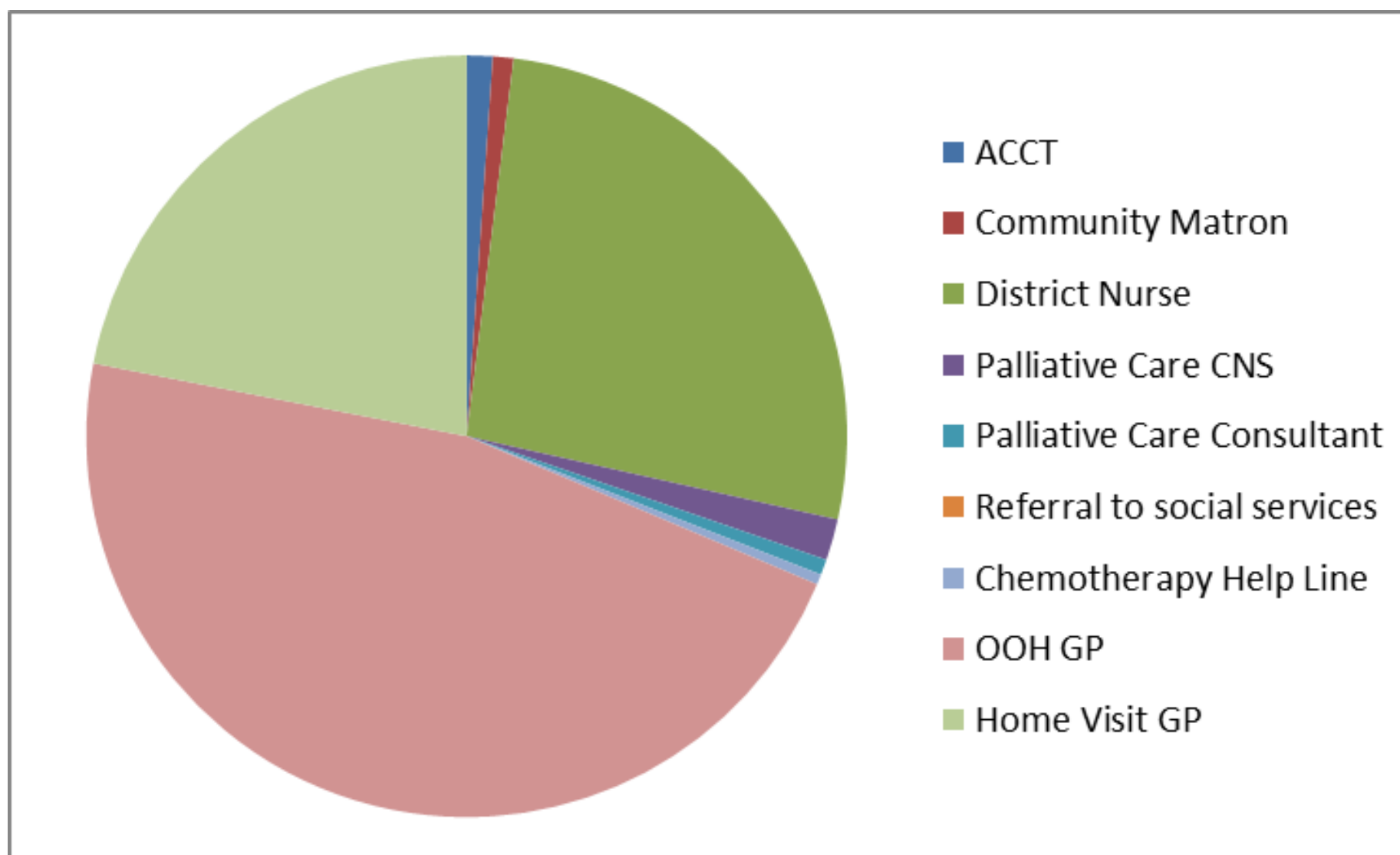
## Care Homes – call outcomes



April-July 2014

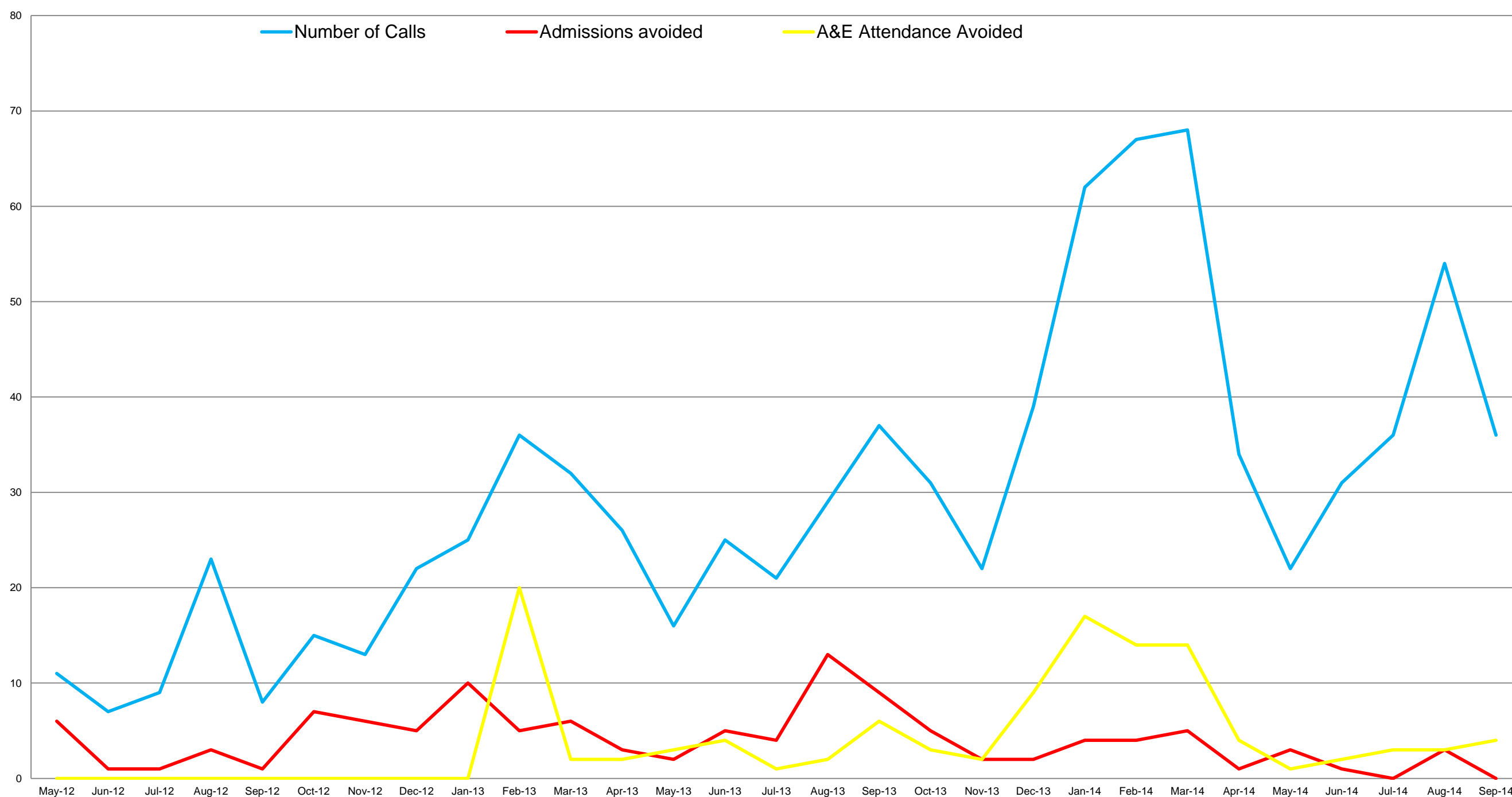


# Care Homes – onward referrals



(at place of residence)  
April-July 2014

# No of calls and avoided A&E admissions and A&E visits





# SCENARIO FOR A FRAIL ELDERLY PATIENT TODAY



EDNA IS 79 YEARS OLD, HAS CHRONIC CHEST DISEASE AND LIVES ALONE AT HOME

FOLLOWING HER DISCHARGE EDNA IS CONFUSED ABOUT HER MEDICATION AND HER FOLLOW UP CARE PLAN

## ANNUAL PATIENT JOURNEY COST: £40,500

EDNA IS ALONE AND DOES NOT KNOW WHO TO CONTACT, SHE CALLS 111

AN AMBULANCE IS DESPATCHED AND TAKES EDNA TO THE EMERGENCY DEPARTMENT

THE EMERGENCY DEPARTMENT DOES NOT HAVE ACCESS TO EDNA'S PRIMARY CARE RECORD. EDNA IS STABILISED AND TRANSFERRED FOR INPATIENT CARE

DURING EDNA'S INPATIENT STAY HER SOCIAL CARE PACKAGE IS PLACED ON HOLD. THIS SUBSEQUENTLY RESULTS IN HER DELAYED DISCHARGE

EDNA'S CONDITION DETERIORATES

# SCENARIO FOR A FRAIL ELDERLY PATIENT TOMORROW



EDNA IS 79 YEARS OLD, HAS  
CHRONIC CHEST DISEASE AND  
LIVES ALONE AT HOME

ANNUAL PATIENT JOURNEY COST: £26,100

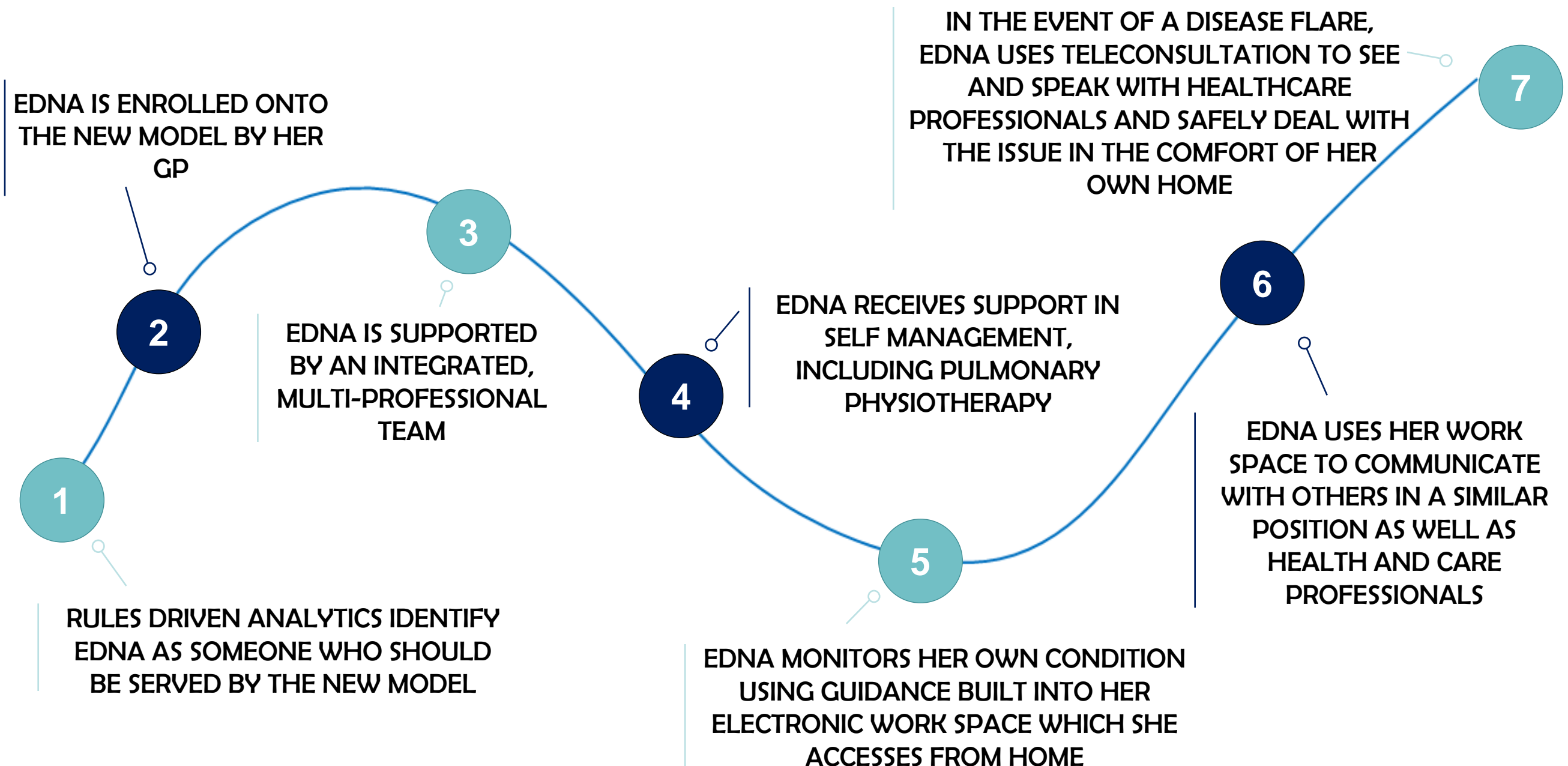
SUPPORTED SELF CARE ✓

PATIENTS IN CONTROL ✓

REDUCTION IN UNPLANNED HOSPITAL ADMISSIONS ✓

PRIMARY CARE CONTACTS MINIMISED ✓

BETTER RESOURCE UTILISATION & VALUE FOR MONEY ✓





# HEE Strategic Framework 15 (2014)

- > DEMOGRAPHICS
- > TECHNOLOGY & INNOVATION
- > SOCIAL, POLITICAL, ECONOMIC & ENVIRONMENTAL
- > SERVICE MODELS
- > EXPECTATIONS



GLOBAL DRIVERS OF CHANGE > TECHNOLOGY AND INNOVATION >

## People will pull the system

Historically, most attention has been focussed on exciting new breakthroughs in our ability to diagnose and treat disease, but in the future the potential for radical innovation lies in re-engineering how ill health is managed, that is, the respective roles and responsibilities of both staff and 'patients' and how they use technology to support them during and in between interactions with 'professionals'. What will Jamie expect at home, at work, as a patient? And what will be the role of technology in these aspects of his life?

Jamie, 2017, at home..



Has all his music, films, TV, photos, connected and filed digitally.

Can access information 24/7 and connect with friends and family from around the world instantly.

Self-monitors all his vital signs, calorie/alcohol intake and sleep patterns, with warnings flagged to his e-health account.

When he goes to work as a physiotherapist will he accept...



Paper-based records for his patients.

Access to senior advice only face-to-face and if 'on call' and not 'out-of-hours' at weekends.

That he, as the trained physiotherapist is responsible for the care of the patient, and that the patient has no responsibilities.

[Find out more about Jamie by clicking here](#)

When he is a patient will he accept...



Having to repeat his story every time he meets a different health or social care professional.

Sub-optimal care dependent on physical presence, when his iPad instantly shows him the international standard he should expect for his treatment.

Only seeing a health professional when something goes wrong, with little opportunity for virtual conversations about prevention and rehabilitation.



GLOBAL DRIVERS OF CHANGE >

## Current and future service models

There is also a greater emphasis on more care being provided in the community and closer to home, although how much of this is 'professional push' as oppose to 'patient pull' is not clear.

### PAST AND PRESENT



With a total yearly investment of more than £11 billion, community services make up approximately 10% of the NHS budget. Care closer to home can be effective: the Department of Health's Whole System Demonstrator study reported a 24% fall in elective admissions, a 14% reduction in bed days, a 21% drop in emergency admissions, a 45% reduction in mortality and a fall of 15% in A&E visits as a result of delivering care at or closer to home.

### PAST AND PRESENT



Since 2008, the proportion of people dying at home or in care homes (as opposed to hospital) has increased, from 38% to 44%.

### FUTURE TRENDS



Close collaboration between commissioners and providers is needed to facilitate the necessary shift in the balance of care to local settings, improve care coordination and make better use of limited resources. Significant investment is needed in innovation to deliver more care in people's homes, such as telehealth, mobile diagnostics and mobile care records.

### FUTURE TRENDS



Surveys show that over two-thirds of people in Britain would prefer to die at home.

### ISSUES



Previous attempts to radically change the nature and location of service delivery have not succeeded on a large scale. What if these new models of care also do not materialise?

### ISSUES



We need to ensure that people are increasingly able to die in the surroundings that they choose, and that we have staff with the right skills in the right place to support this.



## SystmOne – Shared Record

- Shared record between the hub, and other services involved in the residents care
- Consent obtained from resident/best interest decision form
- Consultation flagged to GP, and other services



## GP Triage Calls

- Clinical assessment by Hub nurse
- Onward refer if required to HCP for home visit
- Request prescription
- GP surgery informed by NHS secure mail



## End of Life – early outcomes

*internal analysis – data for all deaths of people who died in 2013/14 who were registered with an AWC GP (gathered from district wide System1)*

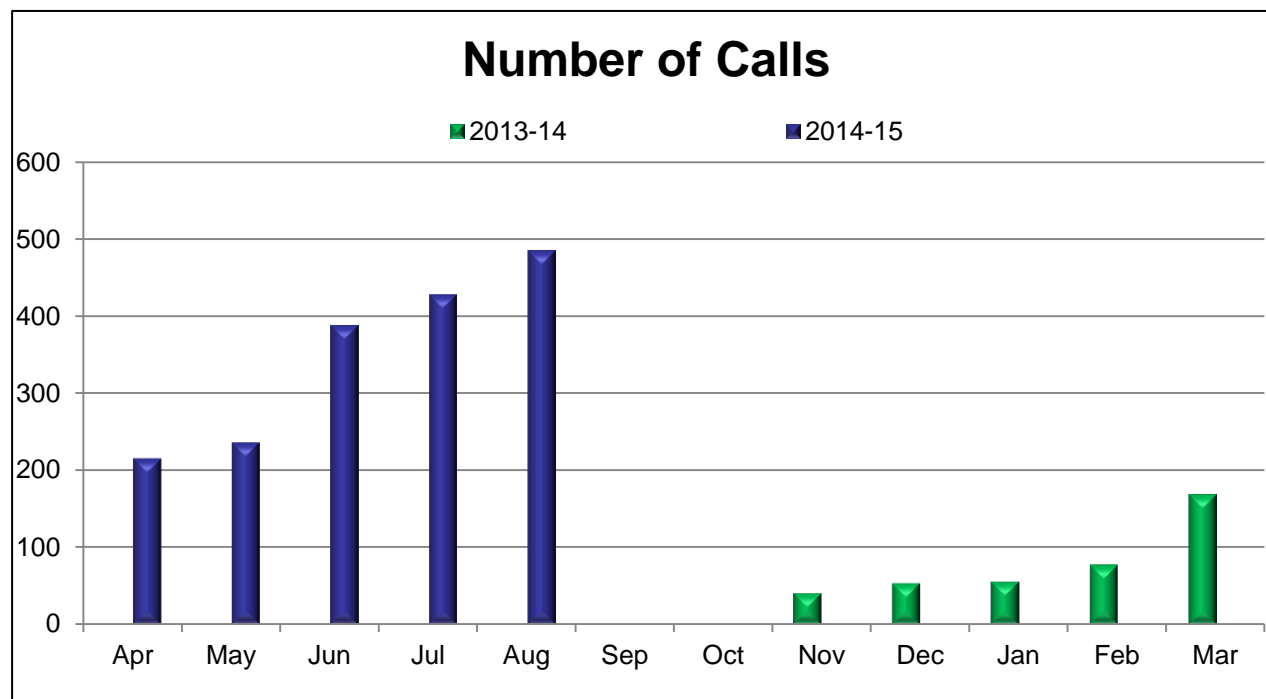
*Approximately 160,000 people are registered with a GP in AWC*

Total deaths	1244	
Expected deaths	933	75% of all deaths
GSF code recorded	458	
Known PPOD	367	A further 80 offered and deemed not appropriate to discuss, and 1 declined discussion
Achieved PPOD	212	58%



# Gold Line – early outcomes

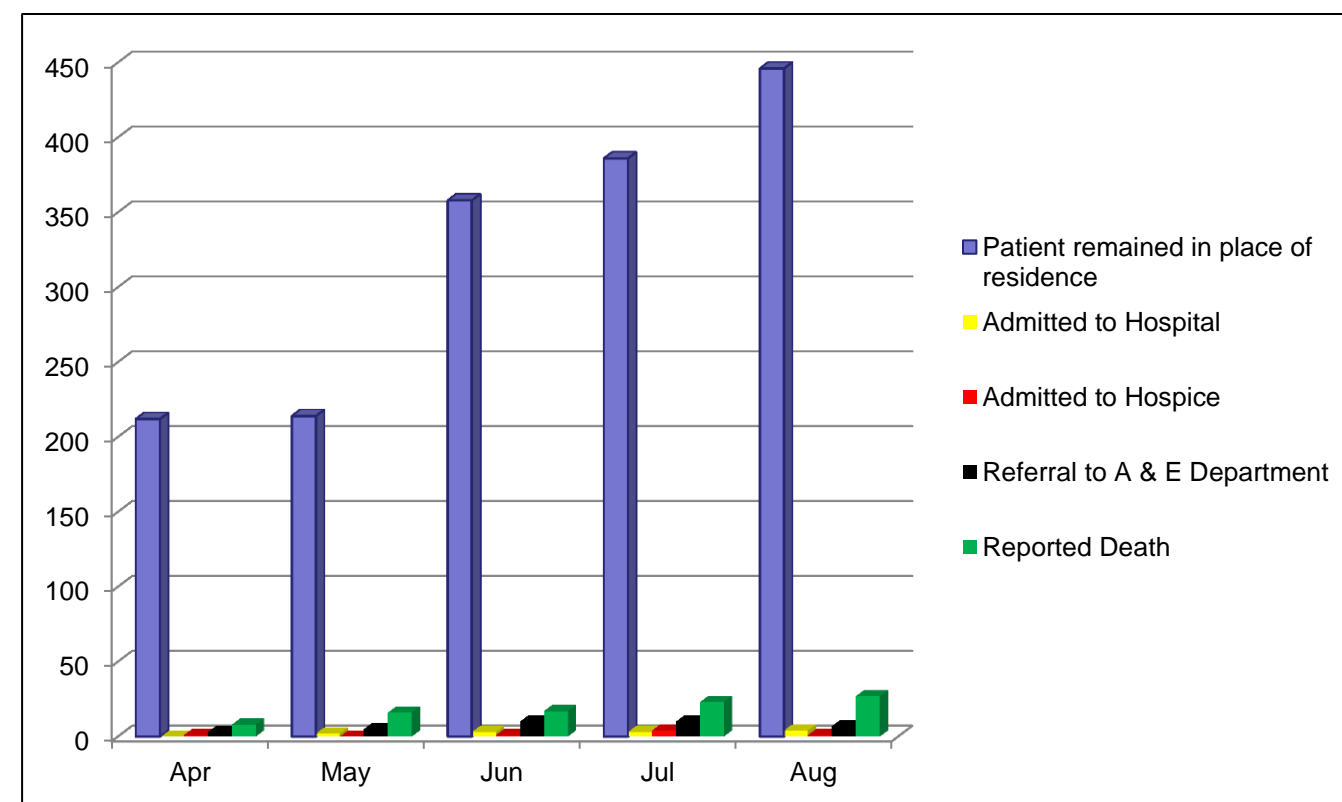
*internal analysis – AWC and Bradford CCGs*



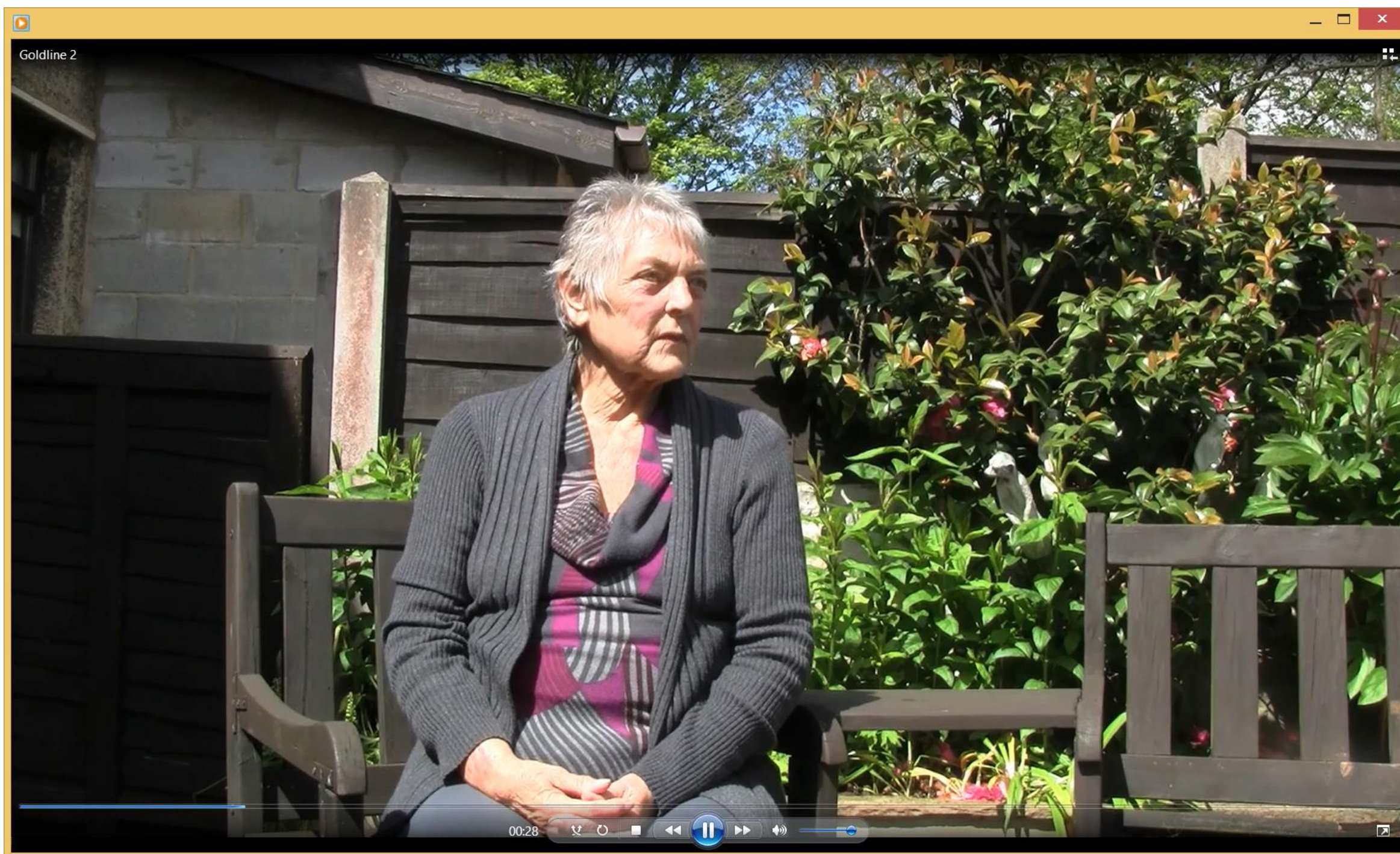
## Caseload

- AWC CCG 398
- Bradford CCGs 412
- iPad 20-30

## Post Call Outcome



# Case study - Mrs Jovanic





# Questions?