

**1<sup>st</sup> November 2011**

**ASSISTIVE TECHNOLOGY – ASSISTING  
INDEPENDENCE**

# **Helping People Manage Medication**

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# Worcestershire - Early Days

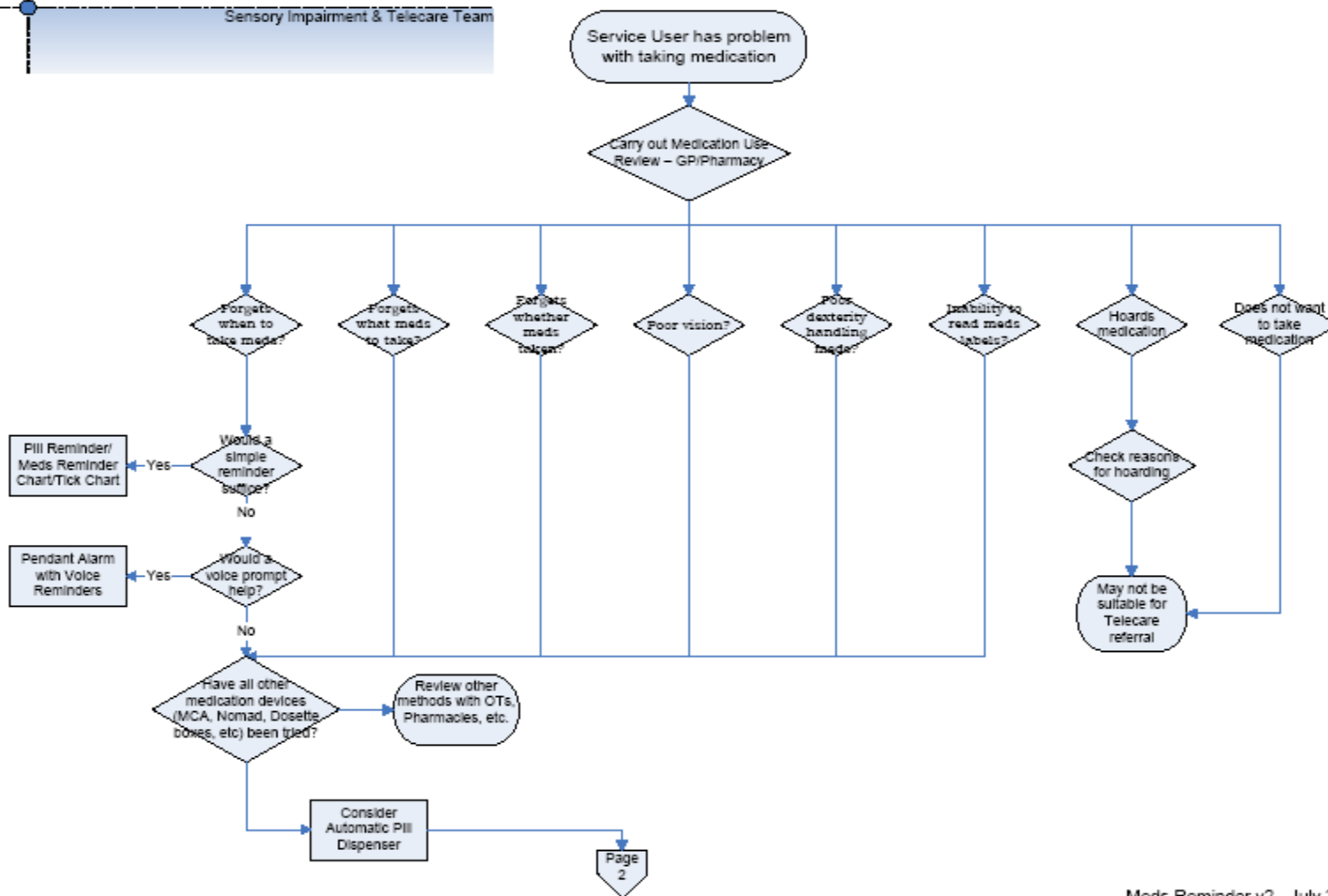
- Needs identified for equipment to support service users who could not manage medication
- Risk of high numbers of care calls
- Risk of entry to long term residential care due to medication mismanagement
- Risk of hospital admission due to accidental under- or over-dosing
- Other reasons for non-compliance
- Lack of identification of non-compliance

# Worcestershire - Early Days

- Pharmacy engagement
- Risk management – pharmacy
- Risk management – service user/patient
- Ad hoc agreements
- Independent pharmacies or individual pharmacists in pharmacy chains
- High risk to patient in not taking medication
- Identification of best solution from only two manufacturers – Addoz v Pivotell
- Decision process – medication compliance aids

# Medication Reminders

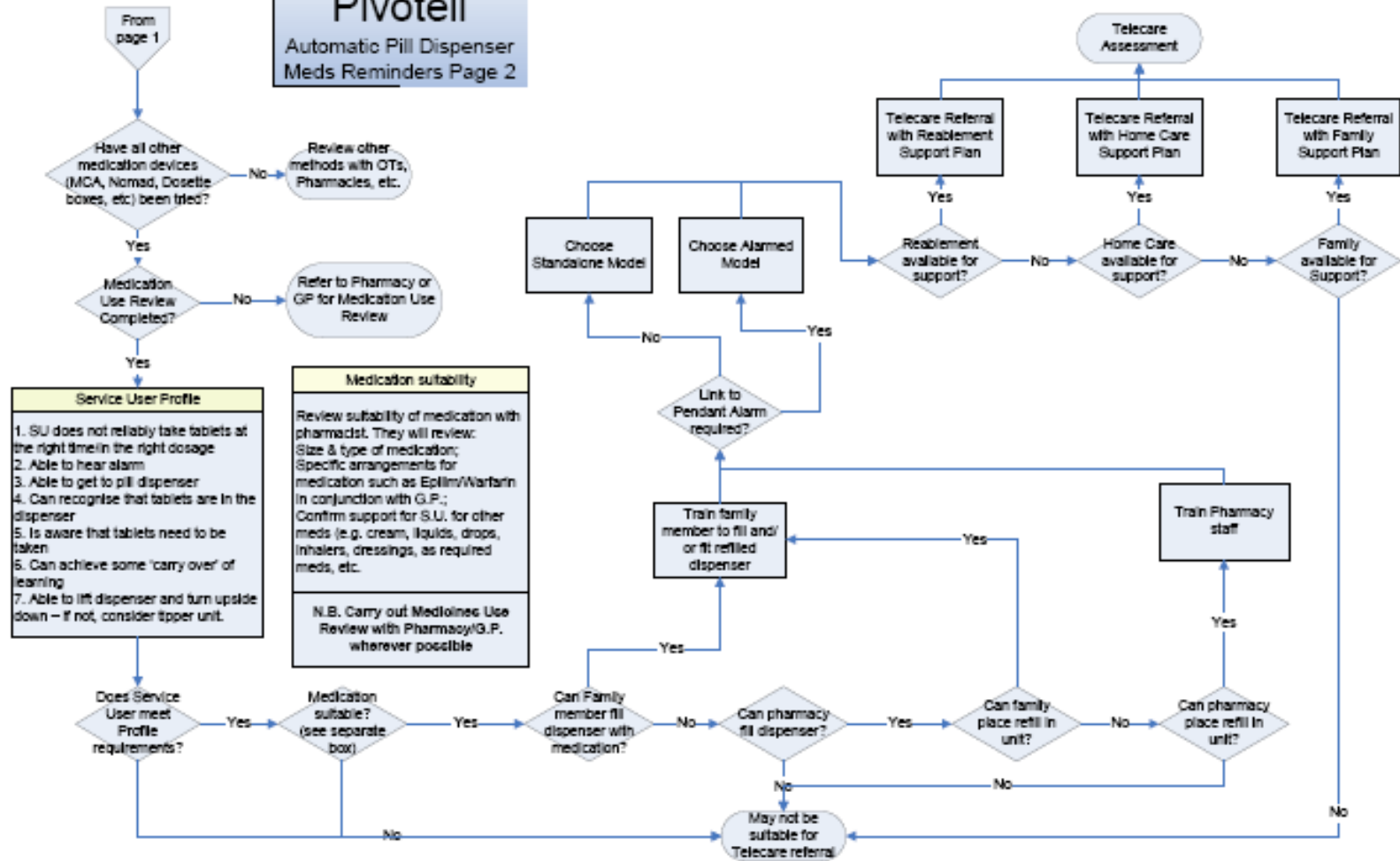
Sensory Impairment & Telecare Team



Meds Reminder v2 - July 2009

# Pivotell

Automatic Pill Dispenser  
Meds Reminders Page 2



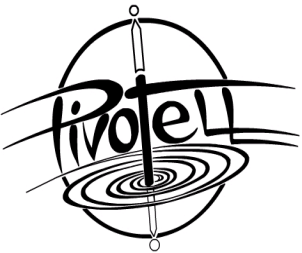
Medis Reminder v2 - July 2009



# Early Days – pre Pilot

- Excellent support via individual pharmacists and small independent pharmacy chains
- Build on experience gained
- Anecdotal success stories
- No structured evidence
- Regional interest in our success story

# The Big Idea





# Set Up

- Pill dispenser in use around the country but limited use in West Midlands
- Anecdotal evidence only existed
- University of Birmingham research completed September 2008
- Obvious benefits to service users but needed to be targeted
- Jointly funded by NHS West Midlands Innovation Fund and Improvement and Efficiency West Midlands

# Set Up

- Pilot commenced July 2009 in 6 pilot sites
- Pilot set up to test the device as an aid for users who have difficulty in remembering to take their medication, improving their quality of life and allowing them to remain living independently at home
- Database devised to capture health and social care interventions, 6 months pre-pilot and 6 months during pilot
- Over 200 pharmacies trained to confirm suitability of medication, fill and programme the devices and arrange changeover, delivery

# Target Group

- Users who have problems with taking medication
  - forgetful
  - confused
  - over or under dose
  - poor vision
  - dexterity issues
- Typical conditions
  - dementia
  - mental health problems
  - Epilepsy
  - Parkinson's
  - stroke

# Funding

- Technology (c. £80 per device) funded by Improvement and Efficiency West Midlands
- Prescription costs funded by NHS West Midlands (£20 per month per device) and allocated to PCTs



# Current Status

- Seven pilot sites live serving 235 people (as at 13<sup>th</sup> October)
- Continuing to recruit more users on to the pilot via Social Care Teams
- Now working with some GP surgeries in Staffordshire
- Pilot sites currently in discussions to secure post-pilot funding

# Outcomes - User Profile

- Age and Gender:

Age	Women	Men	Total
18-64	20	26	46
65-74	19	25	44
75-84	73	41	114
85+	64	36	100
<b>Totals</b>	<b>176</b>	<b>128</b>	<b>304</b>

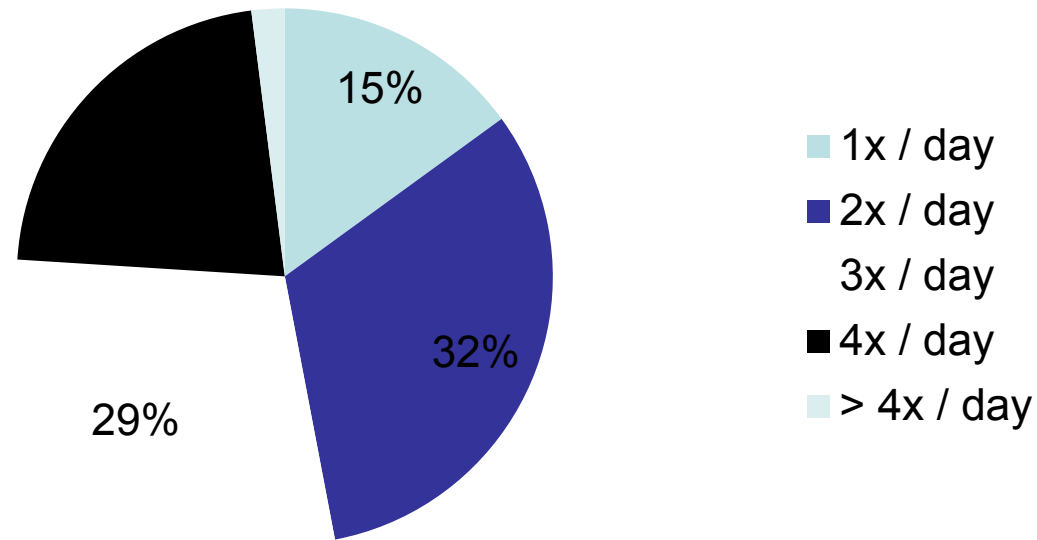
# Outcomes - Medical Conditions

- Medical Conditions:

Condition	Women	Men	Total
Dementia	65	28	93
Old age	41	23	64
Visual impairment	20	19	39
Physical disability	17	18	35
Mental health	15	18	33
Parkinson's	10	7	17
Learning difficulties	4	9	13
Other	61	36	97
<b>Totals</b>	<b>233</b>	<b>158</b>	<b>391</b>

# Outcomes - Pharmacy Stats

## Daily Dosages Frequencies



Note: Untaken medication as % of total doses 2.9%



# Outcomes - Financial

- Current savings show an average saving of £1,800 per user over 6 months
- 52%/48% spilt between social and health
- Savings:
  - Social care - reduced medication prompting visits (£108k)
  - Health - fewer hospital admissions (£185k)
  - Both the above account for 69% of total savings
- Ongoing ROI of £9 per £1 spent

# Outcomes - Qualitative

Typical words to describe how the user/carer feel:

- Before the pill dispenser:  
“anxious”, “frustrated”, “stressed”
- With the pill dispenser:  
“relieved”, “calmer”, “happy”  
“It’s the best thing on the market and you are not having it back!” Mrs. J, Dudley resident  
“It’s the greatest thing since sliced bread.” – Mr C, Worcestershire resident  
“It’s a godsend” – Mrs K, Worcestershire family carer

# The Future

- Final evaluation due March 2012
- Aim is to mainstream the device to make it business as usual for Local Authorities and within the health service
- Funding discussions for post-pilot are happening at the moment
- More pharmacies will need to be trained
- Will be asking users and carers about the dispenser and the difference it has made to their lives

# Benefits

## To Service users

- Cost
- Independence
- Carers
- Health and wellbeing
- Choice and Control

# Benefits cont.

## Health and Social Care Services

- Cost savings
  - Care Calls
    - Worcestershire figures
  - Medication compliance
    - Reduced wastage
- Time savings

# Referral Pathway

- Social work teams
- Mental Health teams
- Promoting independence or Intermediate care teams
- GP's/ Surgeries
- Pharmacies
- Family members

# Worcestershire Case Study

- Mr X
  - Dual sensory impaired
  - Several health conditions
  - Referred to the Telecare team for assistance with medication management.
    - Forgetful
    - Sight loss and loss of feeling in his hands
    - Assists his son/main carer
  - He used a dosette box which his son set up for him once a week

# Worcestershire Case Study - contd.

- Assessment carried out
- Service User keen to try the Pivotell and tipper.
- Pharmacy agreed to support with the filling and delivery
  
- After the 6 month pilot period a review took place with his son:



# Worcestershire Case Study - contd.

- *It is brilliant, superb, really really good...*
- *It has been excellent and life changing...*
- *...made things easier for my father and also for myself...*
- *...no longer have to worry about filling the dosette box or about whether my dad has taken the tablets or not.*
- *...fathers health, kidney functions and water levels, are much more stable now he is taking the correct medication at the correct time.*
- *I'd like to say how good the pharmacy have been...*
- *It is an excellent piece of equipment for anyone, with or without a sensory impairment who may struggle with their tablets.*

# Worcestershire – Now & The Future

- Many reviews showing similar reaction as Case Study
- In excess of 200 units deployed
- Funding stream for 3 years – until March 2013
- Referrals now coming in from GPs, Dispensaries, Pharmacies, OTs, Social Workers, Families and Service Users themselves
- New developments with Pivotell – Delay program, Pager for Hard of Hearing/Deaf

# Questions?