

From Old Age to Space Age Networks

Rupert McShane

Consultant in Old Age Psychiatry
Honorary Senior Clinical Lecturer



Networks

DeNDRoN: Dementia & Neurodegenerative Diseases
Recruitment

Oxford Academic Health Science Network
Innovation
Reducing unwarranted variation

NIHR 'portfolio' : new recruits with dementia 2013-14 to date

Study	ID	Number
Brain donation	BDR	50/87 ^{tv} /638 ^{cum}
Vision assessment	PROVIDE	50/106 ^{tv} /165 ^{cum}
Exercise in dementia - RCT	DAPA	52/90 ^{tv}
Stem cells	STEMBANCC	27
Assistive Technology – Qualitative	AKTIVE	2
Assistive Technology – RCT	ATILLA	14
Functional MRI - diagnostic		112
Training in person centred care – care home RCT	WHELD	324
Commercial, multicentre, drug RCT	SERVIER	9
Commercial, multicentre, drug RCT	MERCK EPOCH	5
Commercial, multicentre, drug RCT	TAU Rx	0
OXON + BUCKS TOTAL: 656		OXON TOTAL (est): 460

tv: TV total cum: cumulative total all years

Other major clinical research

- Oxford Vascular Cognitive Impairment Cohort
 - 2000 patient subset of OXVASC
 - Incidence & risk factors following stroke / vascular
- Parkinson's UK Discovery
- Healthy elderly
 - 800 civil servants followed for >25y
 - Cognitive reserve, structure & connections
 - Exercise and cognitive stimulation
 - Effect in healthy ageing

Performance against PM 10% target

- % diagnosed in Oxon
 - $460/2,500 = 18.4\%$
- % Expected prevalence in Oxon
 - $460/7,757 = 5.9\%$



‘Join Dementia Research’

- New national IT system in development
- Who is active on our ‘Research Interested Lists’?
 - Oxon, Dementia: 363
 - Oxon, Dementia, in current study: 87

Original Investigation

Effect of Vitamin E and Memantine on Functional Decline in Alzheimer Disease The TEAM-AD VA Cooperative Randomized Trial

Maurice W. Dysken, MD; Mary Sano, PhD; Sanjay Asthana, MD; Julia E. Vertrees, PharmD, BCPP; Muralidhar Pallaki, MD; Maria Llorente, MD; Susan Love, MA; Gerard D. Schellenberg, PhD; J. Riley McCarten, MD; Julie Malphurs, PhD; Susana Prieto, MD; Peijun Chen, MD, MPH, PhD; David J. Loreck, MD; George Trapp, MD, JD; Rajbir S. Bakshi, MD; Jacobo E. Mintzer, MD; Judith L. Heidebrink, MD; Ana Vidal-Cardona, MD; Lillian M. Arroyo, MD; Angel R. Cruz, MD; Sally Zachariah, MD; Neil W. Kowall, MD; Mohit P. Chopra, MD; Suzanne Craft, PhD; Stephen Thielke, MD; Carolyn L. Turvey, PhD; Catherine Woodman, MD; Kimberly A. Monnell, MD; Kimberly Gordon, MSN, RN, FNP-BC; Julie Tomaska, PhD; Yoav Segal, MD, PhD; Peter N. Peduzzi, PhD; Peter D. Guarino, MPH, PhD

JAMA. 2014;311(1):33-44. doi:10.1001/jama.2013.282834

- No industry involvement

- Veterans with possible or probable AD
- mild to moderate severity
 - MMSE 12-26 inclusive
- Currently taking a ChEI eg Donepezil

Design

- Factorial ~N=150 in each arm
 - Vitamin E 1000iu bd
 - Memantine 10mg bd
 - Memantine 10mg bd + Vitamin E 1000iu bd
 - Placebo
- Vitamin E: DL-alpha-tocopherol acetate
'synthetic
- Follow up 2.3 years

- Average age ~78y
- Mean MMSE 21
- 30% start within 12 weeks of starting ChEI
- Follow up 2.3 years

Outcomes

- Primary: Alzheimer's Disease Cooperative Study-ADL
- Secondary
 - MMSE
 - ADASCog
 - Neuropsychiatry Inventory (Freq x Sev)
 - Caregiver Activity Survey
 - Time spent assisting in 6 ADL domains
 - Dependence Scale
 - 6 levels of functional dependence

Main result

- Compared with placebo
 - 3.15 ADCS points less decline on Vitamin E
 - 1.98 on memantine
 - 1.76 on both
- Delays progression by
 - 19% per year
- Comparable to ChEI eg Donepezil / Aricept
- Reduced caregiver time by 2 hours per day

A previous Vitamin E study

- Vit E (1,000iu bd) vs Selegiline (10mg od) vs both vs placebo
- 2 years
- N=341, (~85 in each group)
- Mean MMSE = 13
- Mean age = 73y
- Primary outcome: time to any of
 - Death
 - Institutionalisation
 - Loss of 2 of eating, grooming, toilet
 - Severe dementia

Sano et al, 1997, NEngJMed 336:1216-22

Vitamin E – useful evidence?

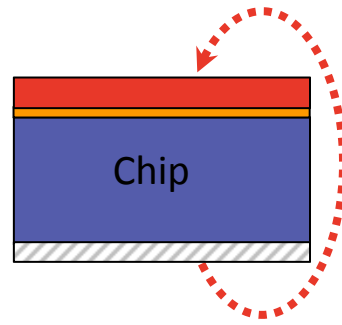
Outcome	Placebo	Vit E
Unadjusted 'survival' (days)*	526	597
Adjusted 'survival' (days)*	440	670
Loss of ADL (%)	31	22
Severe dementia (%)	51	48
Institutionalisation (%)	39	26
Death (%)	12	12

* To composite endpoint

Of course I've taken my pills, darling

Cuprous Chloride $\sim 10 \mu\text{m}$

Magnesium $\sim 10 \mu\text{m}$



xxxxxxxxxxxxxxx.html?app=xxxxxxxxxxxxxxx

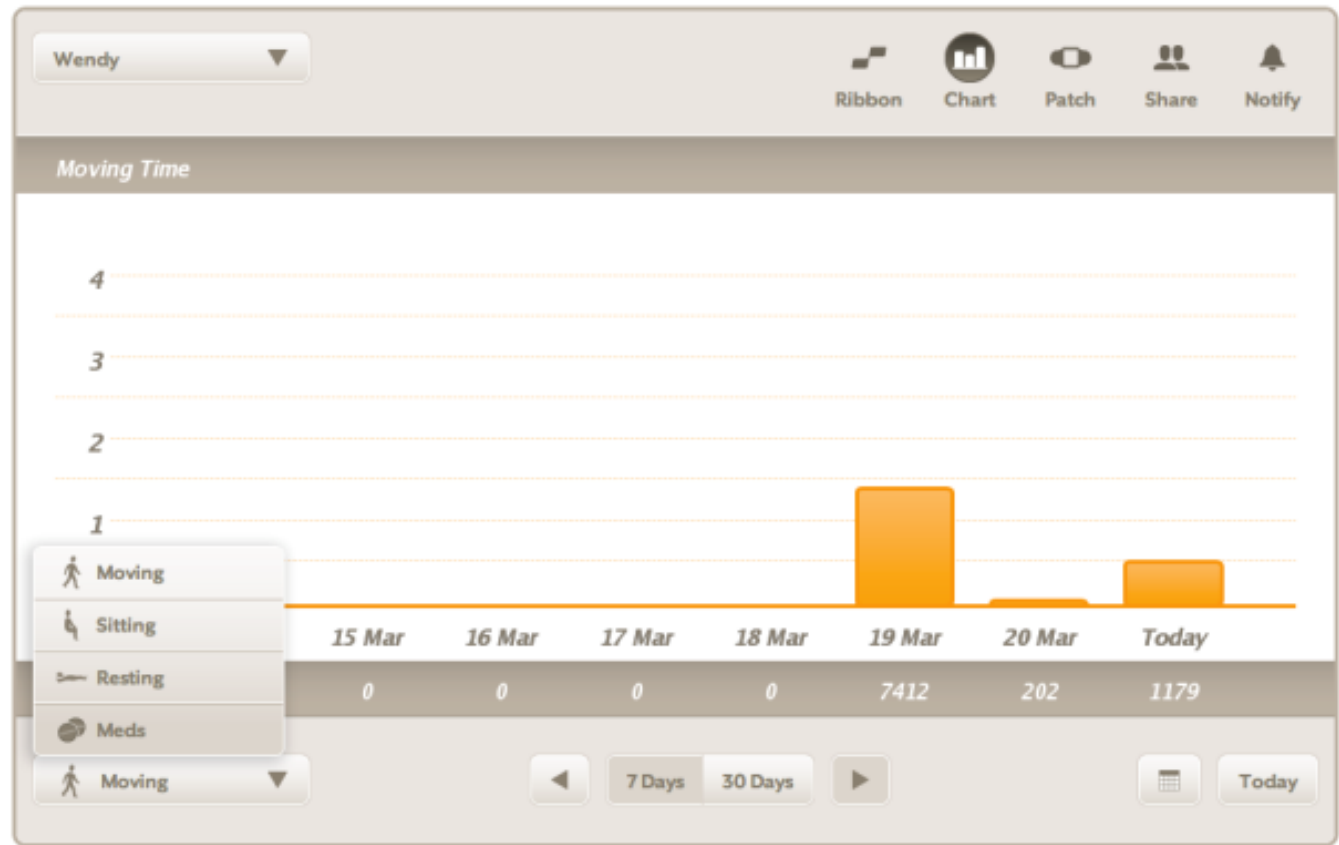
your password?

helius



Powered by you
proteus
DIGITAL HEALTH

helius



Powered by you
proteus
DIGITAL HEALTH





password

helius


Wendy ▾

-  Ribbon
-  Chart
-  Patch
-  Share
-  Notify

Meds Taken

dose 1	8:00a							
dose 2								
dose 3								
dose 4								

15 Mar 16 Mar 17 Mar 18 Mar 19 Mar 20 Mar Today

 Meds ▾

◀ 7 Days 30 Days ▶

 Today

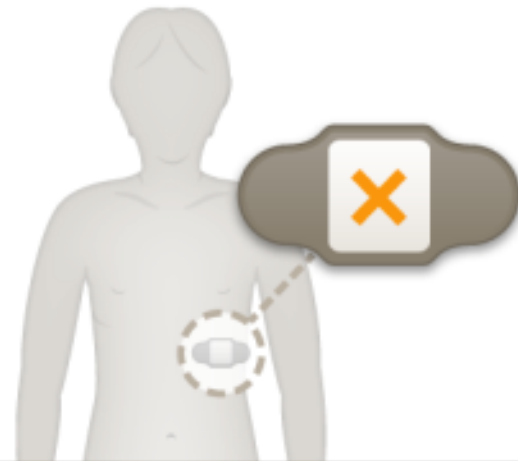
Powered by you
proteus
DIGITAL HEALTH



Wendy

- Ribbon
- Chart
- Patch
- Share
- Notify

Patch Status



Wendy's Patch needs to be replaced.

Patch worn for 11 days.



Circle of Care
If only I'd known THAT

The online version of your personal child health record

Join the eRedbook trial!

If you are interested in participating in the trial and/or being kept up to date with the latest eRedbook developments, please let us know via our 'Contact' form.

BAby [Switch child](#) ▼

NHS No. None entered



Age: 13 days

Gender: Unknown

Born: 05/03/2014

[Calendar](#)

Most Recent Weight: None entered

Photos of BAby

[Summary & Appointments](#)

[Screening & Routine Reviews](#)

[Immunisations](#)

[Notes](#)

[Growth Charts & Firsts](#)

Contacts

Use this space to save important clinical contacts.

You have not yet added any contacts. [Add contacts](#)

< PAST TODAY FUTURE >



Add to health record



Add growth measurements



Add appointment

Next Appointment

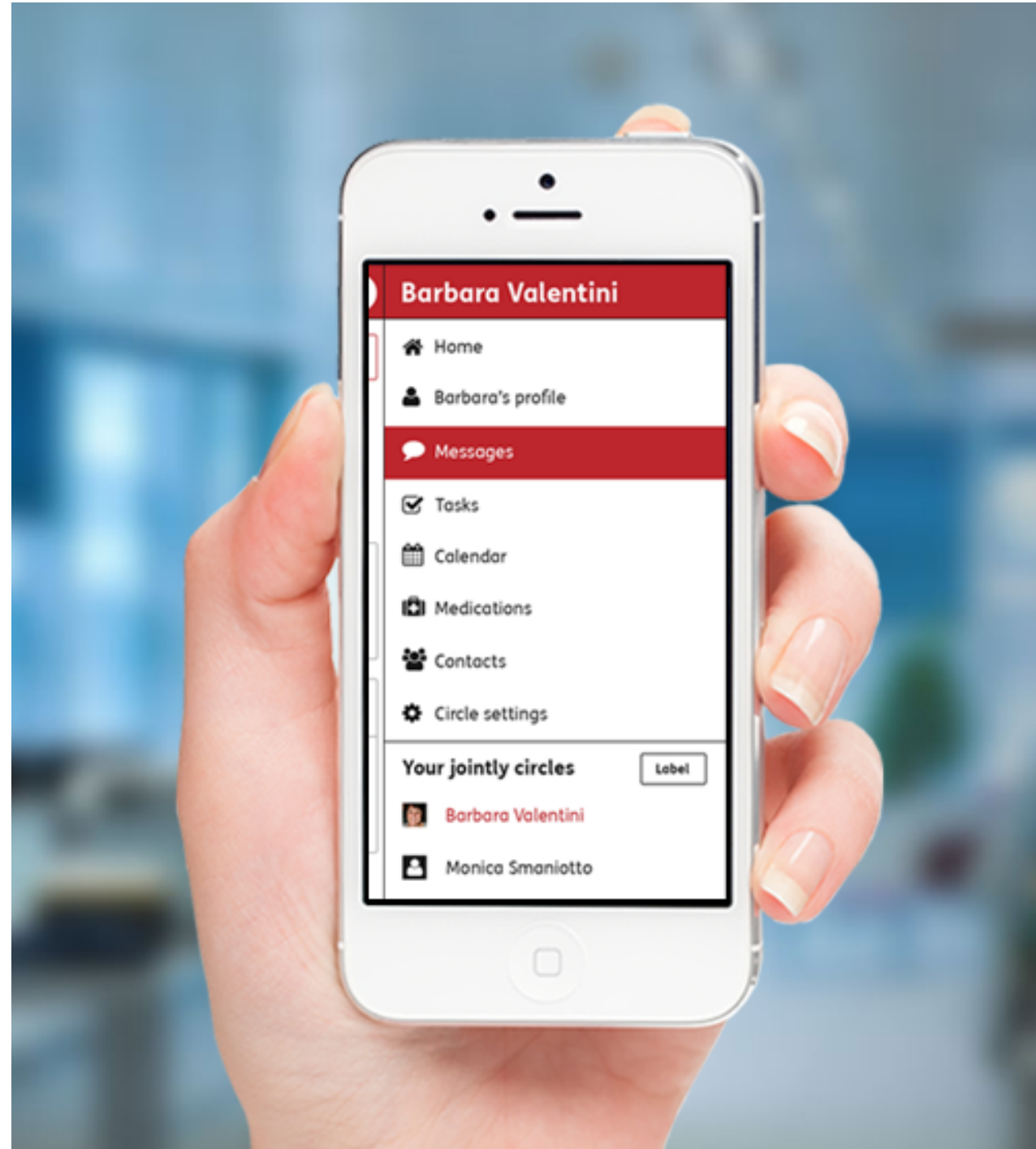
There are no appointments scheduled in your eRedbook.

















Questions

[Add question](#)

You can keep track of any questions you may have here as a reminder for your next appointment with a health professional.

'Jointly'
Carers UK
Circle of care



Joan Smith		Joan Smith
<p>Invite people to this circle</p> <p>See who is in this circle</p> <p>Michelle Townsend </p> <p>Rupert McShane (you)</p> <hr/> <p>Pending invitations</p> <p>No pending invitations in this circle.</p> <hr/> <p>Recent circle activity</p> <ul style="list-style-type: none"> You commented Beware parking is an absolute nightmare. Come earlier. Might be worth... You created Memory clinic for Thursday, 13th of March You created Donepezil Michelle joined this circle You joined this circle You created this circle		<p>Home</p> <p> Joan's profile</p> <p> Messages</p> <p> Tasks</p> <p> Calendar</p> <p> Medications</p> <p> Contacts</p> <p> Circle settings</p> <hr/> <p>Your Jointly circles</p> <ul style="list-style-type: none"> Joan Smith Senior McShane <p>+ Create a new circle</p> <hr/> <p>About you Rupert McShane</p>

THANK YOU