Does a novel specialist ward for older medical patients with delirium improve outcomes or experience? - a randomised controlled trial

This presentation presents independent research commissioned by the National Institute of Health Research (NIHR) under it's Programme Grants for Applied Research funding scheme (Grant Reference Number RP-PG-0407-10147) and under it's Research for Patient Benefit (RfPB) programme (Grant Reference Number PB-PG-0110-21229). The views expressed in this presentation are those of the author and not necessarily those of the NHS, the NIHR or the Department of Health

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Bad press

NHS failing in basic care of some elderly patients, warns watchdog

Care Quality Commission says some NHS trusts do not provide dignity and nutrition for some senior citizen patients

Denis Campbell, health correspondent
The Guardian, Thursday 26 May 2011
Article history

The Royal Free Hampstead NHS trust is failing to meet basic standards, accord to the Care Quality Commission. Photograph: Bruno Vincent/Getty Images

The NHS regulator today criticises the service for failing some elderly patients by giving them what the health secretary, Andrew Lansley, called "appalling levels of care" in hospital.

theguardian

News | Sport | Comment | Culture | Business | Money | Life & style

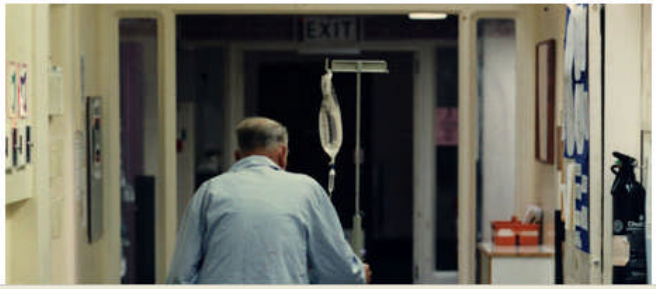
News › Society › NHS

Half of NHS hospitals failing to care for elderly

Care Quality Commission finds 'truly appalling and shocking' levels of dignity and provision of nutrition during spot visits

Reality check: why are some hospitals failing older people?

Denis Campbell and James Meikle
guardian.co.uk, Thursday 13 October 2011 11.39 BST
Article history



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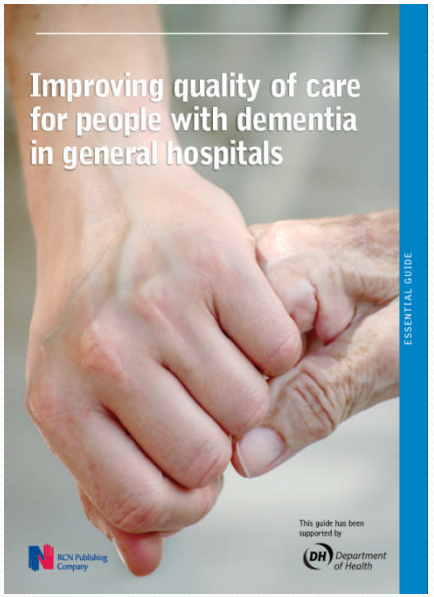
Problems for people with dementia



- noisy busy environments
- fast pace of work
- intensive questioning
- multiple new faces
- moving through different departments and wards
- inability to express wishes
- taking account of other patients' needs

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Medical and Mental Health Unit

- Nottingham University Hospital
- Funded by PCT – £280k per year/ 3 years.
- Developed over 18 months – under leadership Rowan Harwood
  - Literature review
  - Expert Opinion
  - Cohort Study
- Evaluated by a NIHR programme grant and NIHR RfPB

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Enhanced Staffing

- 3 Mental Health Nurses
- 3 Activity co-ordinators
- 1 Mental Health Occupational Therapist
- 0.5 Physiotherapist
- 0.2 Speech and Language Therapist
- 0.1 Consultant Psychiatrist

Person-centred care

- Value people with dementia and protect their rights
- Recognise and respect what makes each person unique
- Understand the perspective of the person with dementia
- Use relationships to reduce distress and enhance well-being

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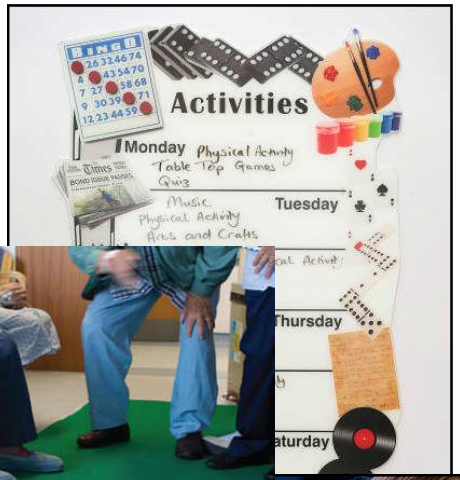
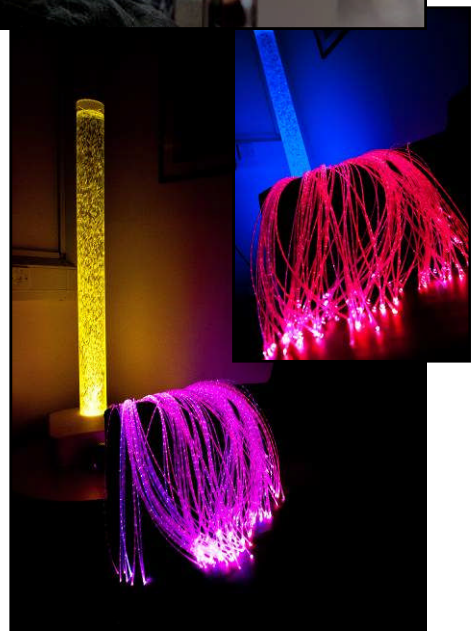
Activities


Activities
Monday
Physical Activity
Table Top Games
Quiz
Tuesday
Music
Physical Activity
Arts and Crafts
Thursday



Clothes

As our patients recover, it helps if they get up and dressed.

Please ensure that your relative has something to wear, preferably labelled.

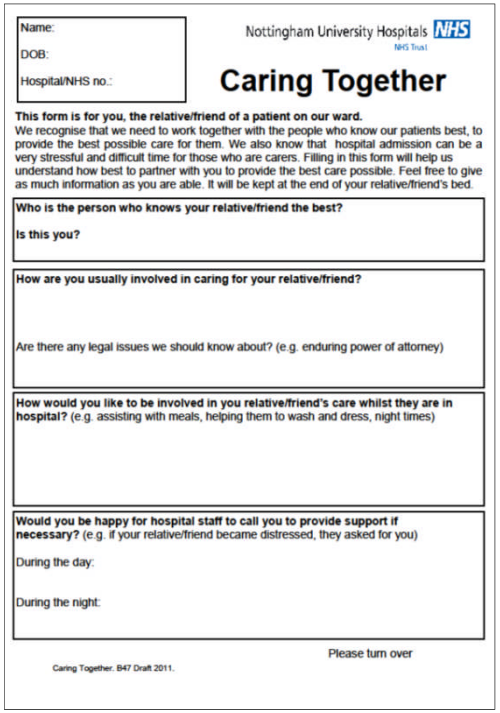
Ask the nurse about arrangements for returning clothes for washing.

Thanks, B47

Environment

Family Carers

- Recognising family carer needs
- Gaining and giving information
- Decision making
- Liberal visiting times



Name:
DOB:
Hospital/NHS no.:

Nottingham University Hospitals NHS
NHS Trust

Caring Together

This form is for you, the relative/friend of a patient on our ward.
We recognise that we need to work together with the people who know our patients best, to provide the best possible care for them. We also know that hospital admission can be a very stressful and difficult time for those who are carers. Filling in this form will help us understand how best to partner with you to provide the best care possible. Feel free to give as much information as you are able. It will be kept at the end of your relative/friend's bed.

Who is the person who knows your relative/friend the best?

Is this you?

How are you usually involved in caring for your relative/friend?

Are there any legal issues we should know about? (e.g. enduring power of attorney)

How would you like to be involved in you relative/friend's care whilst they are in hospital? (e.g. assisting with meals, helping them to wash and dress, night times)

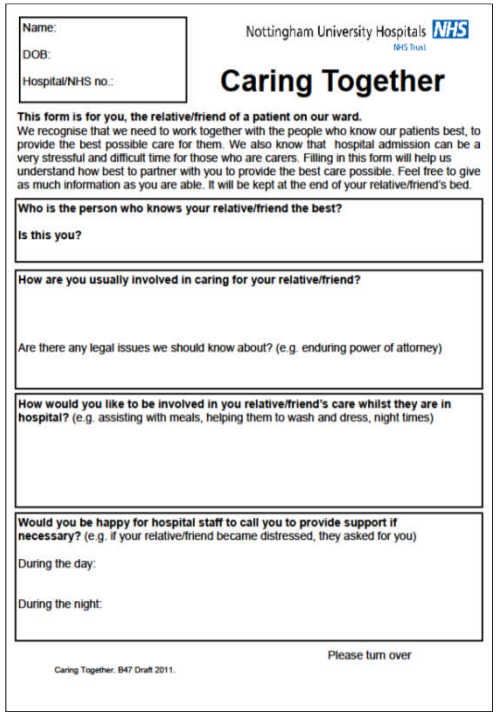
Would you be happy for hospital staff to call you to provide support if necessary? (e.g. if your relative/friend became distressed, they asked for you)

During the day:

During the night:

Please turn over

Caring Together. B47 Draft 2011.



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Caring Together. B47 Draft 2011.

Evaluation

- Randomised controlled trial – 90 day outcomes
  - Days at home
  - Range of health status measures
  - Carer strain
  - Carer satisfaction with care
- Observations of care – Dementia Care Mapping
- Patient, staff and carer interviews
- Process of care – case note review

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Randomisation *by clinical service*

- ‘Confused, over 65’
- Transferred to MMHU or standard ward
- Patient and carer recruited to follow up study
- Baseline data
- Outcomes at 90 days

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Consultant on call 24/7

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Baseline

	MMHU (n=310)	Standard Care (n=290)
Median age	84y	84y
Care home resident	28%	21%
Median MMSE	14/30	13/30
Delirium*	53%	62%
Median Barthel ADL	9/20	8/20
Presented with fall	42%	44%
Any hallucinations	37%	40%
Any agitation	69%	64%
Poor sleep	50%	57%
Problems eating	57%	54%

***p<0.05**

Case Study - Ivan

- 91 year old
- Widowed
- Lives Alone
- Hearing impairment
- Voice dysphonic – hoarse voice
- ‘difficult to communicate with’
- Prior to current illness
  - Independent eating
  - Occasional incontinence
  - Independent walking
  - Needs help washing and dressing.

Ivan Reason for Admission

Confusion on a background of dementia. No obvious cause.

Prior to admission Ivan had been getting more confused over a few days. On the Friday before he was admitted, a community nurse found him on the floor. Ivan said he had 'slid' onto the floor. It was not known how long he was on the floor for. He was seen later that day very confused. At 9pm the community nurse called the family as he could not be roused.

Medical Information

- Medication prior to admissions – metformin
- Diagnoses of dementia and delirium
- Eyesight problems
- Presented with
  - Reduce mobility
  - Deteriorating cognitive skills
- Delirium Rating Scale 33/46 – delirium
- No admissions in the previous year

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At Admission

Functional Problems

- Dependent on staff for personal care
- Doubly incontinent
- Walking with supervision +1
- Needed assistance with eating

Behavioural and Psychiatric Problems (NPI)

- Mild: irritability, motor behaviour problems
- Moderate: delusions, agitation, apathy, difficulty sleeping
- Marked: appetite problems

Carer

- Daughter-in-law
- Retired
- Caring for children
- 51 hours a week of care
  - 7 hours physical care (washing, dressing, feeding)
  - 25 hours domestic care (cleaning, laundry, shopping)
  - 16 hours company
  - 2 hours dealing with finance
  - 1 hour household maintenance

Carer Strain Index

- Sleep Disturbance
- It is inconvenient
- It is a physical strain
- It is confining
- There have been family adjustments
- There have been changes in personal plans
- There have been other demands on time
- There have been emotional adjustments
- Some behaviour is upsetting
- It is upsetting to find the person cared for has changed from former self
- Feeling completely overwhelmed.

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NIHR TEAM Trial: outcomes at 90 days

	MMHU (n=309)	Standard care (N=290)	P (adjusted)
Median days at home	51d	45d	0.3
Not returned home	26%	30%	0.5
Died	22%	25%	0.9
Median initial LOS	11d	11d	0.2
Readmission	32%	35%	0.8
Total LOS in 90d	16d	16d	0.8
Move to care home	20%	28%	0.3

NIHR TEAM Trial: health status at 90d

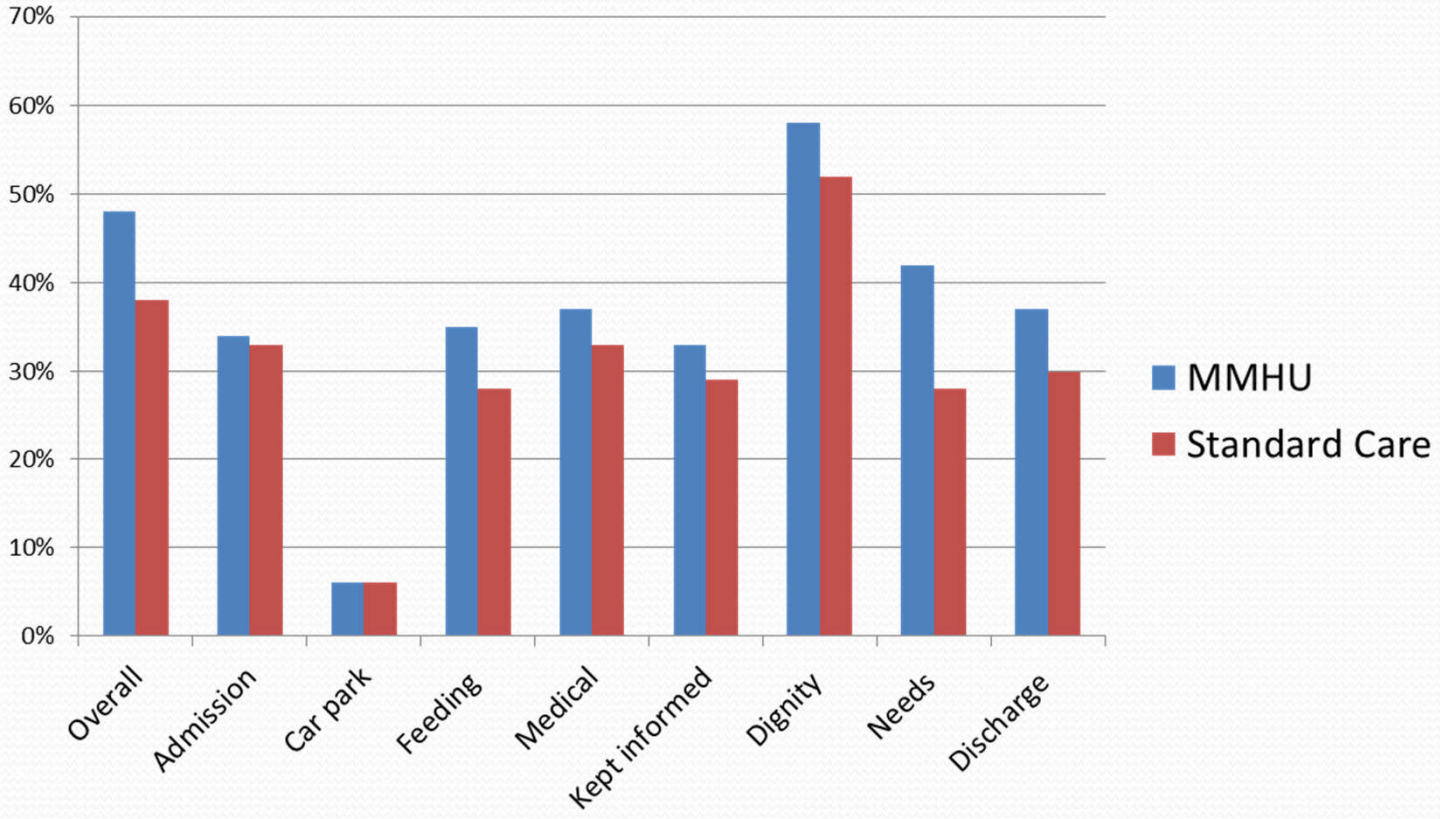
	MMHU (n=241)	Standard care (N=219)	P (adjusted)
Median MMSE/30	16	16	0.6
Median total NPI/44	19	17	0.5
Median Barthel/20	12	13	0.8
Median London Handicap/100	33	42	0.9
Median DEMQOL	84	84	0.7
Median proxy DEMQOL	93	93	0.8

NPI: Neuropsychiatric Inventory, behavioural and psychological symptoms

MMSE: mini-mental state examination

DEMQOL: Dementia Quality of Life scale

Carers Very Satisfied with Care



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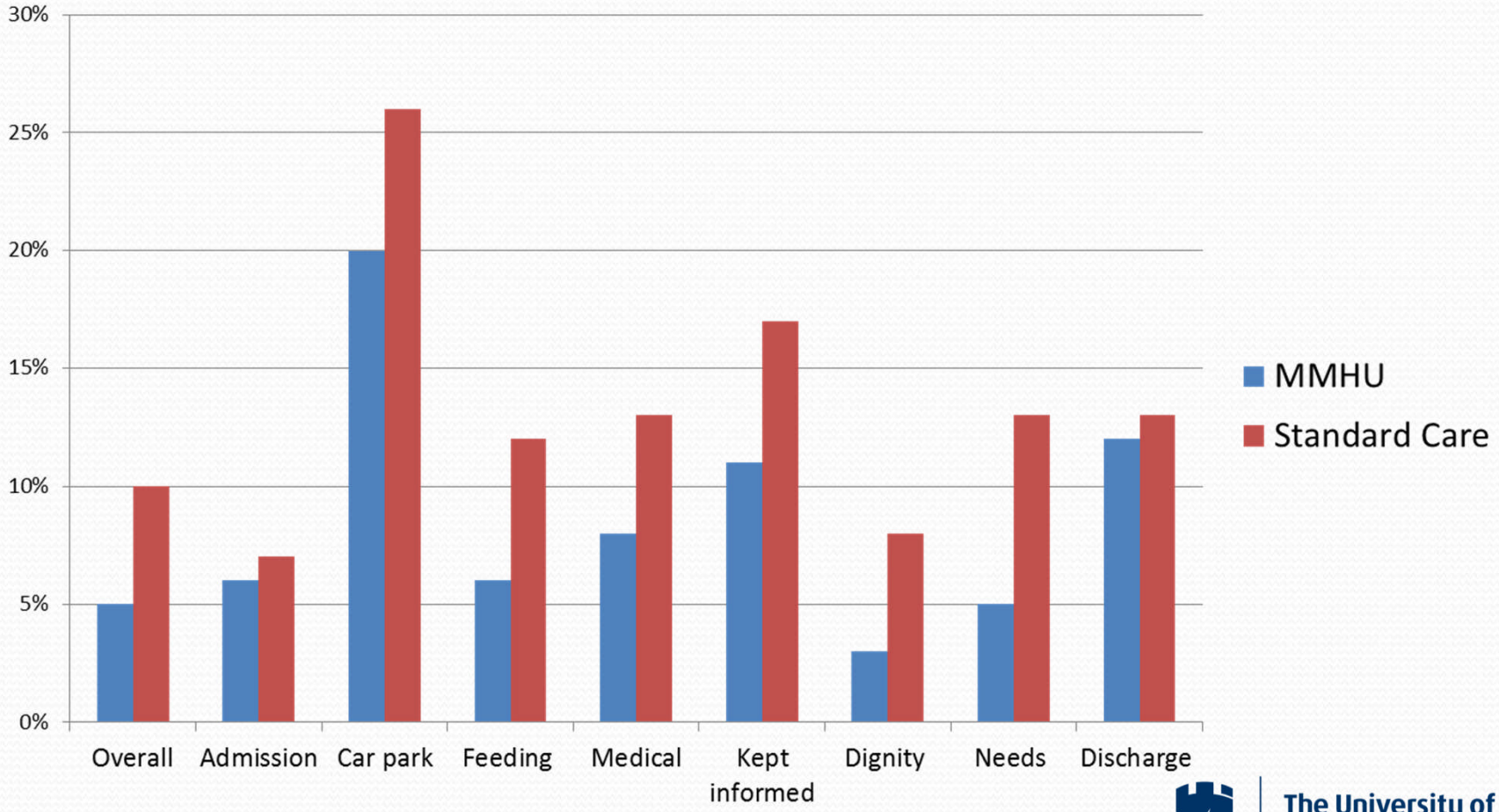
Carers Very Dissatisfied with Care



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Ivan's Carer's Satisfaction with Care

- **Mostly satisfied**: overall care, admission, extent the ward met the special needs of the patient, discharge arrangements.
- **Mostly unsatisfied**: help given with feeding, management of medical issues, patient being treated with dignity.
- **Very unsatisfied:** how well kept informed, car parking
- Adequately prepared for discharge, discharge about right

Ivan's Outcomes

- 30 days at home in 90 days
- Alive at 90 days
- Two hospital admissions
- Index admission 51 days discharged home
- Readmitted one week later for 9 days discharged home.
- No care home admissions

- Ivan would not engage for MMSE or DEMQol

Ivan's Carer at 90 days

- Reduced hours of caring from 51 to 20 hours per week
- Still under high levels of strain – no change on carer strain index
- Improvements in psychosocial health GHQ12 25/36 at admission, now 14/36.

Ivan's Quality of Life at 90 days

- Carer DEMQOL - QoL poor
- London Handicap Scale
  - Can afford what he needs.
  - Can be left alone safely
  - Doesn't find it difficult to get on with close family, but doesn't meet new people
  - Doesn't get out of the house
  - Would like to be more occupied
  - Problems with hearing, speaking, seeing or memory make life difficult.

Ivan's functional and BPSD at 90 days

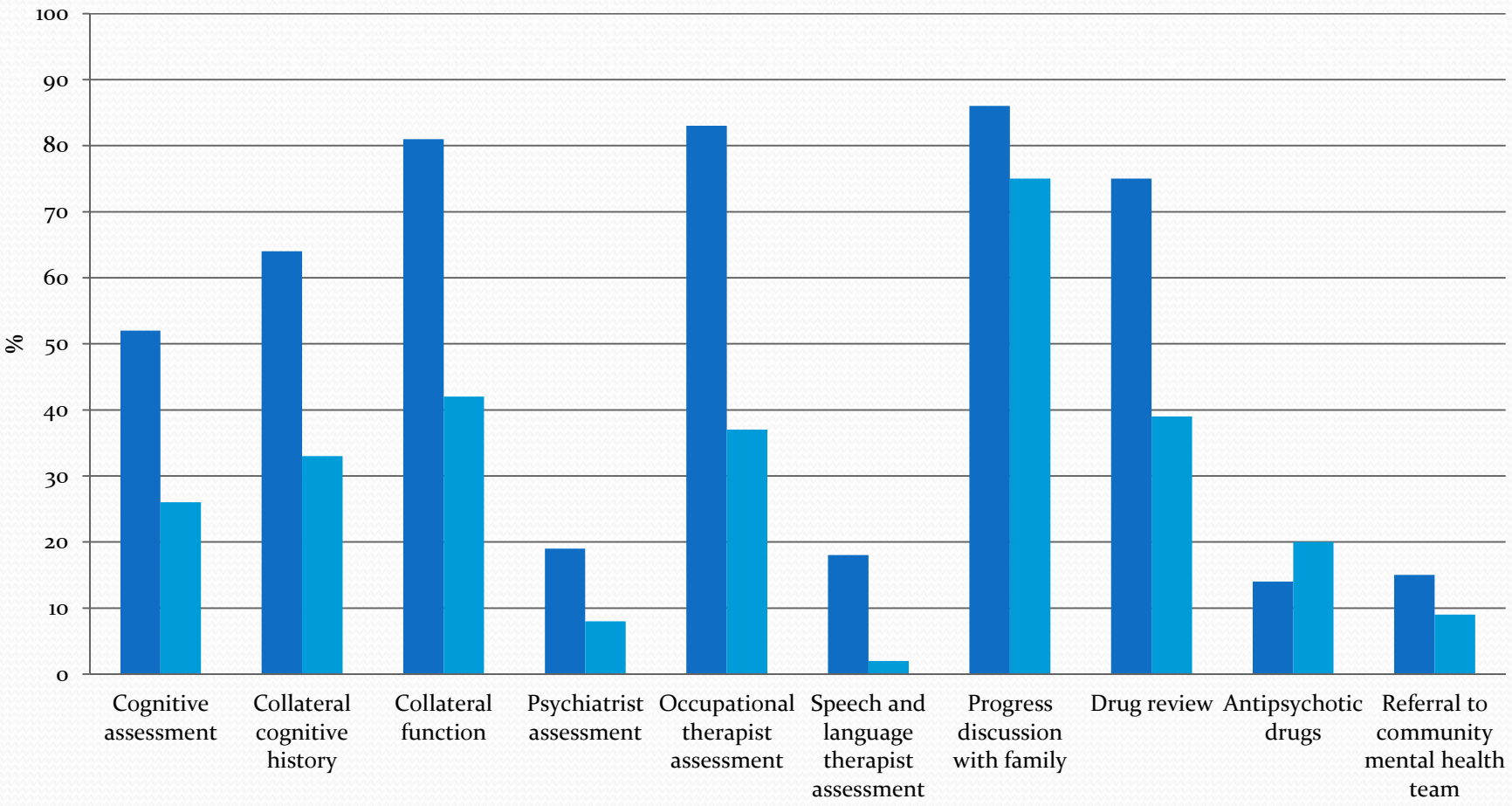
Functional problems

- Continent of bowels and bladder
- Independent on transfer
- Walks with help of one person
- Needs help with eating.

Behavioural and psychiatric problems

- Mild: agitation, anxiety, apathy, motor behaviour
- Moderate: sleep disturbance
- Marked: appetite problems.

Process of care



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Non-participant observation study
90 observations 6 hours each
540 hours

	MMHU Median (IQR)	Standard Care Median (IQR)
Positive Mood/Engagement*	79%	68%
Active State	82%	74%
Number Enhancers**	4 (1-8)	1 (0-3)
Number Detractors	4 (2-7)	5.5 (3-10.5)

***p<0.05, **p<0.001**

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Ivan's Dementia Care Mapping

- 80% positive mood and engagement
  - 17% happy or highly engaged
  - 62% neutral mood, intermittent engagement
  - 2% disengaged
  - 19% asleep
  - 6% talking
- Three enhancers
- Four detractors

- 79% time in active state
  - 26% Eating and drinking
  - 11% personal care
  - 16% vocational (moving items around)
  - 14% doing for self (scratching head etc)

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Breakfast - Detractor

The auxiliary 1 says to Ivan “do you want me to help you”. She takes the bowl off Ivan and starts to feed him” standing up.

She abandons feeding. 15 minutes later a nurse gets Ivan some fresh porridge and assists him.

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Breakfast - Enhancer

‘The nurse brings Ivan a bowl of porridge. She says to Ivan “here you go Ivan, porridge – alright? I’m just going to sit with you because we’re a bit worried about your swallowing – is that alright – I’ll try not to stare at you too much”. Ivan takes the bowl in his hand and starts to eat porridge.’

The nurse continues to support Ivan’s independent eating…

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Qualitative Analysis of Observations

MMHU Improvements in Care Quality:

- Organised activity
- Social eating/supporting patients to eat
- Understanding of patient mental health needs
- Freedom of movement
- Seeing patient as a person
- Integration of student nurses into team.

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Qualitative Analysis of Observations

No difference between MMHU and standard care wards:

- Routine washing and dressing
- Medicine administration
- Toileting.

More problems on MMHU:

- Falls
- Disruptive or repetitive vocalisation.

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What did Ivan think of his care?

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- Thumbs Up
  - Staff on the ward, grooming, bath and shower, toilet, general health, singing and listening to music.

- Not sure
  - Sleep, safety, comfort, food and drink, listening to radio, playing games, watching TV, looking at photos,, noise

- Thumbs Down
  - Other patients, not having things to do, mood

NIHR TEAM Trial: summary

- Care was different on MMHU
- Patient experience better (mood, activity, staff interactions)
- Carer satisfaction better
- Health status unchanged
- Length of stay, readmissions, care home placement unchanged

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Thank you

Sarah.goldberg@nottingham.ac.uk

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