MANCHESTER 1824
The University of Manchester

Mild Cognitive Impairment and Dementia in the Prison Population of England and Wales: Identifying Individual Need and Developing a Skilled, Multi-Agency Workforce to Deliver Targeted and Responsive Services

Katrina Forsyth, Baber Malik, Leanne Heathcote & Jenny Shaw

July 2018

MANCHESTER 1824
The University of Manchester

Background

- Dementia is an NHS priority
- Number in the community is increasing
- Nearly triple the number of older prisoners than 14 years ago
- Significant issue for prisons

MANCHESTER 1824
The University of Manchester

Background

- Previous studies (1-7%)
  - general mental health
  - no national samples
  - excluded women
- No specialist services
- Slower responses; difficulties following rules; and victimisation

Objectives

In England and Wales:

1) Estimate prevalence of dementia and MCI;

2) Validate the Six Item Cognitive Impairment Test (6CIT);

3) Identify service needs and appropriate care pathways throughout custody and on release;

4) Generate estimated costs of delivering the care pathways locally and nationally using prevalence data;

5) Establish prison and healthcare training needs;

6) Develop an appropriate training support pack.

MANCHESTER 1824
The University of Manchester

Design

Part One	•Prevalence study and validation of the 6CIT as a screening tool
Part Two	•Survey of current service provision
Part Three	•Focused Ethnography and semi-structured interviews
Part Four	•Care pathway and training package design and costing.

MANCHESTER 1824
The University of Manchester

Part 1: Method

- All female sites invited to participate.

- Proportionate number of male prisons according to overall number by prison type.

Part 1

Phase 1

860 male (591) and female (269) prisoner screened using:

- Six-item Cognitive Impairment Test (6CIT) and
- Montreal Cognitive Assessment (MoCA).

- One-day census and random sample generated at each site (repeated until target reached).

Part 1

Phase 2

Participants testing positive on the **MoCA** complete a demographics questionnaire and a range of standardised assessments to establish:

- degree and type of cognitive impairment; (ACE-III)

MANCHESTER 1824
The University of Manchester

Alternative explanations for apparent cognitive impairment

- Limited education/Learning disability
- Hearing/visual impairment
- history and symptoms of brain injury (Rivermead PCSQ)
- Serious mental illness (GDS/Prisonquest)

MANCHESTER 1824
The University of Manchester

Characteristics of ACE +VE individuals

- activities of daily living needs (BADL);
- social networks (Lubben Scale)
- OaSys risk (high, medium, low)/offending history
- mental health needs (GDS/PrisnQuest);
- Physical health problems

MANCHESTER 1824
The University of Manchester

Part 1: Recruitment

	Total 50+	Total Approached	Target	Total Recruited
Male	2028	916	591	601
Female	500	500	269	275
Total	2528	1416	860	876

MANCHESTER 1824
The University of Manchester

Anticipated vs actual

	DNA (%)	Refused (%)	Screen in MoCA (%) ≤ 22
Anticipated	14	20	7
Actual	12	12	11

MANCHESTER 1824
The University of Manchester

6CIT validation

- 495 completed 6CIT and MoCA
- Kappa = 0.40

24 screened in on 6CIT & MoCA

18 screen in on 6CIT & not MoCA

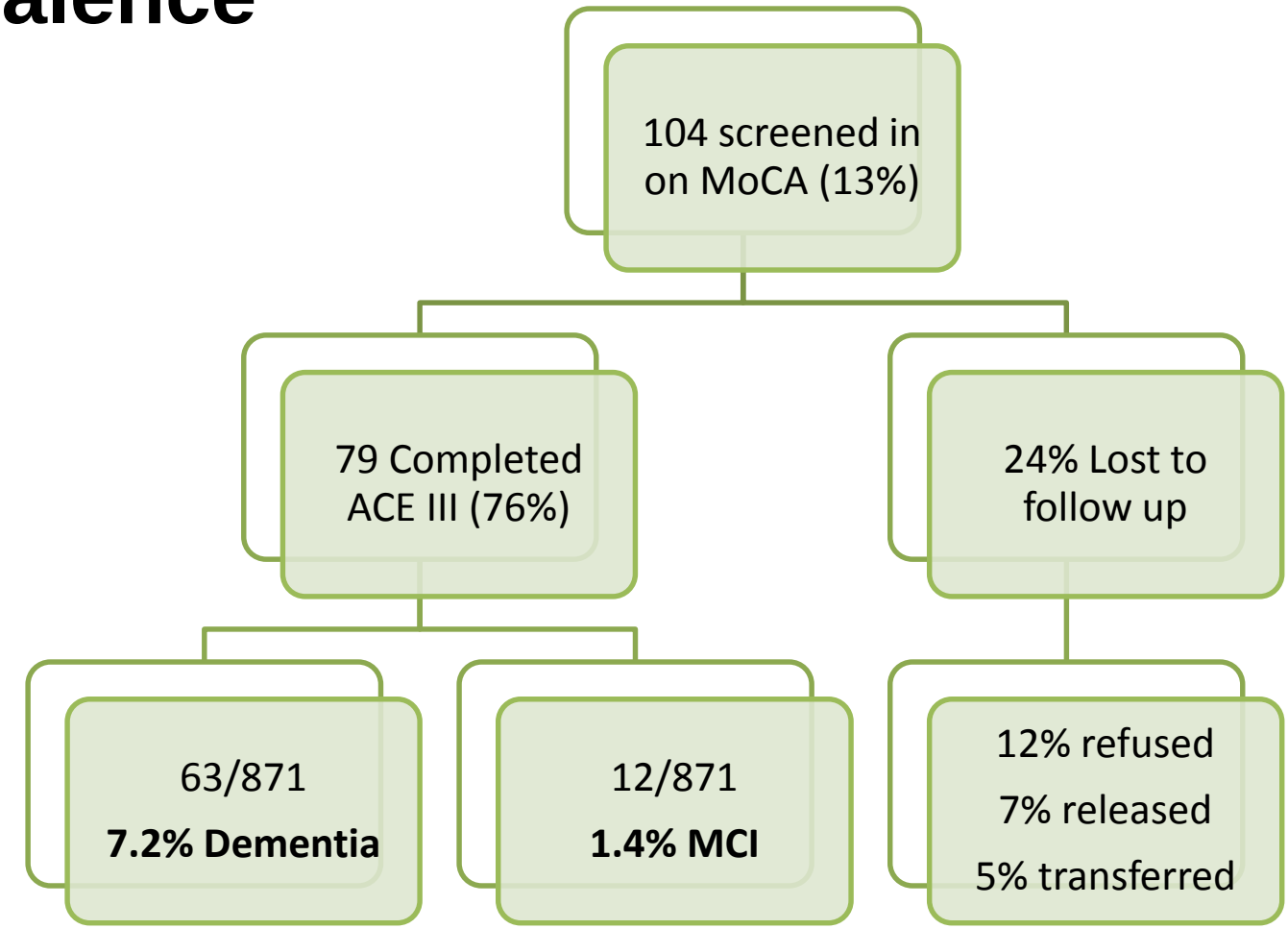
42 Screened in on **MoCA** and not 6CIT

MANCHESTER 1824
The University of Manchester

- MoCA good sensitivity and specificity (community)
- Poor agreement on Kappa
- The 6CIT failed to identify 41 cases who screened in on the MoCA
- Therefore 6CITnot useful as a screen

MANCHESTER 1824
The University of Manchester

Prevalence



MANCHESTER 1824
The University of Manchester

Prevalence of Dementia

Estimate	Prevalence (%)	95% CI
Crude	7.2	5.6 to 9.2
Weighted	6.8	5.2 to 8.7

This table shows the weighted estimates based on the current prison population.

Roughly 2000 people in England and Wales prisons scoring within the cut of for suggested dementia

Alternative explanations for apparent cognitive impairment

75 participants had suggested MCI/dementia

Mean number of years in education lower in this group compared with the rest of the sample

	Learning Disability	Head injury	Stroke	Depression	Eyesight problems	Hearing impairment
Total Number	3	19	3	13	43	20

Needs further exploration.

People may have dementia and these conditions.

MANCHESTER 1824
The University of Manchester

Preliminary findings of characteristics of ACE +VE

Characteristic variables	Total number (N= 79)
Previously charged	32
IEP Warnings	15
Convicted status	76
Medium/high risk	32
Physical health problems	55
Activities of Daily Living needs	16

MANCHESTER 1824
The University of Manchester

Part 2:Method

- Questionnaire distributed to HCMs and Governors in all prisons in England and Wales holding adult men and women (n = 107).
  - Ascertain current service provision for prisoners with cognitive impairment; and
  - Identify unmet training needs.

Part 2: Preliminary findings

- 55% healthcare staff & 40% of governors were aware of dementia or MCI cases

Part 2: support available

Modification/support	Yes (%)
Provision of prisoner carer service	60
Provision for incontinence material	70
Handrails	50
Bigger accessible prison cells	30

MANCHESTER 1824
The University of Manchester

Training provisions

	Training provided	
	Yes (%)	No (%)
Healthcare (N=20)	20	80
Governor (N=19)	35	65

Part 3.1 Ethnography

- Approx. 10 (part1&2)
  - Males/females
  - Range of severity/prison types
- Focussed
- Time limited activities:
  - Off-wing activities;
  - Social activities on the wing;
  - Use of time in cell ?????

Part 3: Case studies

No.		age	Prison type	location	diagnosis	Issues
1	HH	60	Specialist older	OP wing	Stroke	Sleeping Meds confusion Poor MD working
2	J H	70	Specialist older	OP wing	Dementia LD	Fit to plea? Violence & distraction 4.5y over tariff
3	TC	72	Local/care pathway	HC	Dementia Parkinsons	Dropping food Low staffing Frightened
4	MK	65	Sex offender	Normal	Dementia Parkinsons Diabetes	Noisy environment Hallucinations Referred but no service

MANCHESTER 1824
The University of Manchester

Part 3.2: Interviews

- Aprox 5 per individual case study (n=50 approx.)
  - Staff members
  - other prisoners
  - friends/family members
  - carers
  - the individual (where possible and appropriate)
  - Healthcare manager & Governor – managerial perspective

MANCHESTER 1824
The University of Manchester

Key themes

- Vulnerability of prisoners
- Lack of identified specialist services
- Lack of coordination
- Beginning to consider dementia
- Beginning to commission services
- Need for awareness raising & training

Part 4.1 : Balance of Care Approach

The University of Manchester

User Profiling

- Descriptive analysis - part 1 data
- Subgroups – 'case types'
- Vignettes formulated to represent case types (anonymised)

Service Identification

- Care planning workshops (3 workshops, 36 -48 approx.)
- Activity 1 = Explore services required if in community
- Activity 2 = How services should be adapted for prisons

Service Validation

- Further workshops held – Managers (approx. 36)
- Validity, and potential impact & implications
- Whole group discussion

MANCHESTER 1824
The University of Manchester

Key points for care pathways

- Raising awareness
- Assessment and diagnosis
- Environmental adaptation
- Service provision
- Buddy schemes
- True equivalence to community

MANCHESTER 1824
The University of Manchester

So what?

- Our study tells us:
  - Prevalence
  - What services do we need
- How drastic shall we go?

MANCHESTER 1824
The University of Manchester

Next steps

- Development & validation of care pathways
- Development of training package
- Costing care pathways

- Future project – implementation & evaluation

MANCHESTER 1824
The University of Manchester

Thank you

Jennifer.Shaw@manchester.ac.uk

Katrina.Forsyth@manchester.ac.uk