The OPRAA Cohort

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Standardised Assessment of older population in THE acute hospital setting: OPRAA

Older Persons Routine Acute Assessment

Based on the principle of Comprehensive Geriatric Assessment (CGA)

Development of OPRAA

650 bed district general hospital with unselected medical intake (serving diverse population of 370,000)

Autumn 2008-Cognitive impairment audit: basic cognitive assessment not routinely undertaken in emergency admissions

Early 2009-Funding from Scottish Government Joint Improvement Team for development of assessment tool, employment and training of nurse specialists and pilot testing in medical admission unit.

Spring 2009- Multidisciplinary development of OPRAA tool

NHS eHealth engagement with development of electronic clinical page for OPRAA

Aug 2009- Start of pilot

OPRAA Tool

CGA Domain	Method Used to assess in OPRAA
Physical Health	Routine clerking
Functional Ability	Katz ADL scale Collateral history for decline Falls history
Cognitive and Mental Health (COGNITIVE SPECTRUM DISORDERS)	**Dementia History** **AMT cognitive score** **CAM screen for delirium** **Expert clinical impression**
Socio-environmental	Semi-structured interview

Development of OPRAA continued…

2011-OPRAA adopted into routine clinical practice.

2013 NHS R&D bursary – transfer of electronic clinical record OPRAA dataset to Health Informatics Centre (Farr Institute, University of Dundee). (SOP's approved by NHS Tayside ethics review board)

Caldicott Guardian approval based on researcher access only to anonymised data held in a secure safe haven that does not permit data export

Routine Implementation of OPRAA

2011onwards

majority emergency admission 65 years and over have OPRAA.

No OPRAA

- predicted length of stay < 24hrs
- poor prognosis
- acute illness requiring critical care

Data linkage

OPRAA dataset linked to:

Scottish Morbidity Records 01 (SMR01) dataset (acute hospital admissions = HES in England),

General Register Office (GRO) for Scotland mortality data

Community Health Index (CHI) dataset

patient-level community dispensed prescribing dataset held by HIC.

Descriptive analysis

Data set used for analysis:-

All medical emergency admissions aged 65 years and over

Jan 2012- June 2013 (18 months)

Incident cohort defined as all emergency admissions without prior admission in preceding 6 months.

Descriptive analysis- Definitions of cognitive disorders

Unspecified Cognitive impairment - abbreviated mental test (AMT) (Hodkinson 1972) score of 7 or less

Full syndromic delirium - Confusion Assessment Method score positive (CAM+) (Inouye 1990)

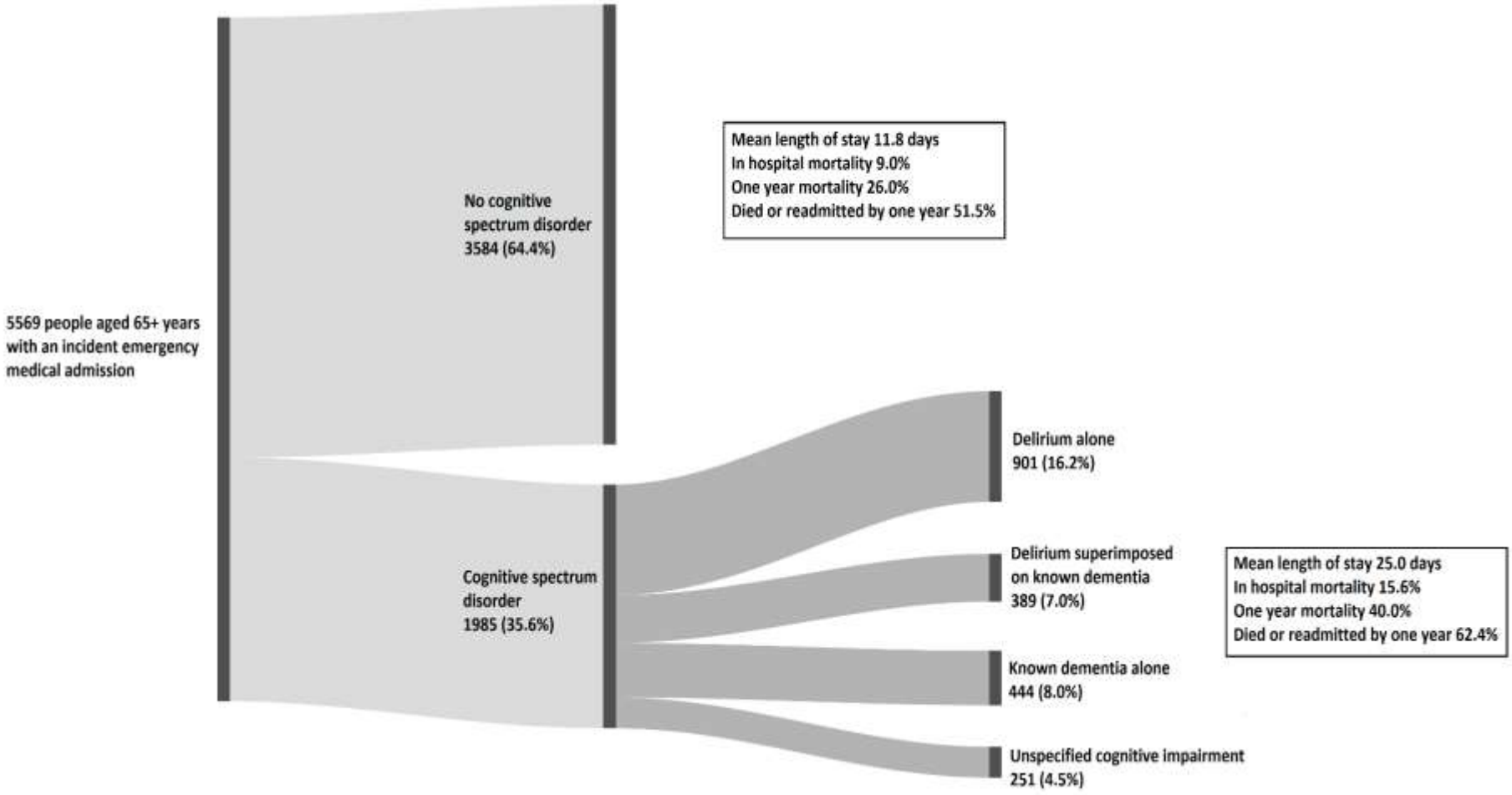
Clinical assessment suggestive of delirium - specialist nurse assessment following full OPRAA and discussion with informant

Any delirium - CAM+ve or clinical assessment suggestive of delirium

Dementia- patient/informant report of pre-admission diagnosis,pre-admission diagnosis recorded or receipt of any licenced drug for the treatment of dementia in the community (cholinesterase inhibitors or memantine included in chapter 4.11 of the British National Formulary)

OPRAA Population	All admissions – received an OPRAA assessment N=10014 (79.0% of all admissions)	All admissions – did not receive an OPRAA assessment N=2659 (21.0% of all admissions)
Age (mean [95%CI])	79.3 (79.2-79.5)	77.0 (77.6-77.3)
Admitted from care home	8.0 (7.5-8.5)	5.8 (5.0-6.8)
Length of stay (mean days [95%CI])	16.8 (16.2-17.4)	7.4 (6.5-8.3)
0-2 days	31.4 (30.5-32.3)	66.6 (64.8-68.4)
3-5 days	16.5 (15.8-17.2)	10.7 (9.6-11.9)
6-9 days	15.0 (14.3-15.7)	6.8 (5.9-7.8)
10+ days	37.1 (36.2-38.1)	16.0 (14.7-17.4)
Cognitive spectrum disorder	38.5 (37.5-39.4)	Not assessed
Any known dementia	17.3 (16.6-18.1)	
Known dementia alone (no delirium)	9.4 (8.8-10.0)	
Delirium superimposed on known dementia*	7.9 (7.4-8.5)	
Any delirium	24.6 (23.8-25.5)	
Full syndrome delirium(CAM+)	7.6 (7.1-8.2)	
Clinical history suggestive of delirium only	17.0 (16.2-17.7)	
Delirium alone (no dementia)	16.7 (16.0-17.4)	
Unspecified cognitive impairment#	4.5 (4.1-4.9)	

Prevalence and outcomes (incident cohort)



Discussion:

Cognitive spectrum disorder is common in older inpatients

Associated with considerably worse outcomes with little variation between different types of CSD.

Why and how to prevent need further research.

Ongoing use of OPRAA cohort in research projects to better understand the older population admitted to hospital.

Collaborators

Funders

- Scottish Government Joint Improvement Team
- NHS Fife R&D

NHS Fife

- Vera Cvoro
- Multi-disciplinary clinicians in geriatric medicine and liaison mental health team
- eHealth
- R+D
- Senior management team

University of Stirling

- Alison Bowes
- Alasdair Rutherford

University of Dundee

- Simona Hapga
- Nicosha De Souza
- Peter Donnan
- Bruce Guthrie
- Health Informatics Centre Dundee

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