INAD-2

Report of the Second

Irish National Audit of Dementia Care

in Acute Hospitals

National Dementia Office Leadership, Integration and Innovation

HSE Seirbhís Sláinte Níos Fearr á Forbairt | Building a Better Health Service

Report of the Second Irish National Audit of Dementia Care in Acute Hospitals (INAD-2)

REPORT AUTHORSHIP AND GOVERNANCE

This report was prepared by Dr Mairéad Bracken-Scally, Dr Emma O'Shea and Dr Suzanne Timmons.

The Second Irish National Audit of Dementia care in acute hospitals (INAD-2) was a partnership between the National Dementia Office and Healthcare Audit, Quality Assurance and Verification; both within the Health Service Executive (HSE). Funding for this audit was provided by the HSE Acute Operations. The INAD-2 Steering Committee was co-chaired by representatives from National Clinical Advisory Group Lead (NCAGL). For full details of the Steering Committee members and the Project Team, please see Appendix A.

Ms Anne Keane and Ms Anne McDermott, HSE Healthcare Audit, Quality Assurance and Verification, performed data collection for the case note audit and the quality assurance of same.

Content was advised and approved by all members of the INAD-2 Steering Committee.

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FOREWORD

People living with dementia are admitted to acute hospitals for the same reasons as other people, but for the person living with dementia, admission to the hospital can present a greater challenge. Along with the distress caused by being unwell, the stress of facing changes in their daily life and routine can have an impact and contribute to poorer outcomes. In hospital, there are fixed wake/meal/sleep routines, and complex interactions with several staff members, who can ask multiple questions and give large amounts of new information. Added to this, there can be extensive tests, in different parts of the hospital, periods of fasting, high noise levels, and sometimes, sleep deprivation.

A person living with dementia may struggle to adapt to this environment, particularly when unwell. They may find it frightening. The person living with dementia may become anxious, more confused, and less able to be independent in activities of daily living.

Investing in staff training, resources and good environmental design can improve the experience for the person living with dementia and their family, and is likely to result in a speedier and more effective transition from the community to hospital and back again.

The Department of Health published the National Dementia Strategy in 2014. This included specific actions in relation to acute hospitals, including the development and implementation of dementia and delirium care pathways, including for the ED/AMAU, with a senior clinician within each hospital assigned responsibility for this. The development of dementia friendly design guidelines, covering aspects such as safe walking spaces and orientation cues was recommended, as was the development at national level of guidance material on psychotropic medications for people living with dementia. Hospitals were also to take measures to encourage better coding of dementia in hospital records.

These actions were informed by the first Irish National Audit of Dementia care in Ireland's acute hospitals (INAD, performed in 2013), jointly funded by Atlantic Philanthropies and the Meath Foundation. This audit found many areas where changes could improve the quality of dementia care, similar to the first round of a similar audit in England and Wales in 2010 (noting that they are now preparing for round 5 of the audit).

Although we did not expect significant changes by 2019, the National Dementia Office, in partnership with HSE Acute Operations, agreed to repeat the INAD audit to generate up to date data for individual hospitals and hospital groups to inform national and local plans to implement the strategy actions.

The necessary national dementia and delirium pathways (including for ED/AMAUs), delirium algorithms, and guidelines on environmental design and psychotropic medications are all now available. These need to be implemented locally as part of a Hospital Dementia Care Pathway. Recent COVID-19 experiences heighten the need for this implementation, along with staff training in dementia and delirium care.

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LIST OF ABBREVIATIONS

4AT	Rapid assessment test for delirium
ACE	Assessment of Comprehension and Expression
AMAU	Acute Medical Assessment Unit
AMTS	Abbreviated Mental Test Score
ASAU	Acute Surgical Assessment Unit
BPSD	Behavioural and Psychological Symptoms of Dementia
CAM	Confusion Assessment Method
cANP	Candidate Advanced Nurse Practitioner
CEO	Chief Executive Officer
CGA	Comprehensive Geriatric Assessment
CNM	Clinical Nurse Manager
CNS	Clinical Nurse Specialist
DON	Director of Nursing
ED	Emergency Department
GP	General Practitioner
HCP	Healthcare Professional
HIPE	Hospital In-Patient Enquiry
HSE	Health Service Executive
ICD-10	International Classification of Disease - 10th revision
ICPOP	Integrated Care Programme for Older People
INAD	Irish National Audit of Dementia
INAD-2	Second Irish National Audit of Dementia
LOS	Length of Stay
MMSE	Mini Mental State Examination
MNA	Mini Nutritional Assessment
MOCA	Montreal Cognitive Assessment
MST	Malnutrition Screening Tool
MUST	Malnutrition Universal Screening Tool
NCAGL	National Clinical Advisor and Group Lead
NCG	National Clinical Guideline
NCSD	Non-Cognitive Symptoms of Dementia
NDO	National Dementia Office
OT	Occupational Therapy/Therapist
PAINAD	Pain Assessment in Advanced Dementia Scale
PHN	Public Health Nurse
POA	Psychiatry of Old Age
PUTZ	Pressure Ulcers to Zero
RANP	Registered Advanced Nurse Practitioner
RUDAS	Rowland Universal Dementia Assessment Scale
SLT	Speech and Language Therapy/ Therapist
SMMSE	Standardised Mini Mental State Examination
SQiD	Single Question in Delirium
TIA	Transient Ischaemic Attack

EXECUTIVE SUMMARY

Background

National and international research confirms that an admission to an acute hospital can be distressing and disorientating for a person living with dementia, and is often associated with a decline in their cognitive ability and levels of functioning. A recent systematic review of more than 100 papers concluded that people living with dementia were at higher risk from death in hospital, nursing home admission, increased lengths of stay, as well as delirium, falls, dehydration, reduced nutritional status, physical and cognitive function, and new infections when in hospital. Patient and carer experiences of hospital admission were also poor (Fogg et al., 2018). In response to the need for more Irish data on dementia care in acute hospitals, the first Irish National Audit of Dementia Care in Acute Hospitals (INAD) was undertaken in 2013 to measure criteria relating to care delivery known to impact on people living with dementia admitted to hospital. The report of the first INAD was published in January 2014. The audit, co-funded by Atlantic Philanthropies and the Meath Foundation, was carried out in all 35 acute public hospitals that admit adults with known/suspected dementia. Relevant parameters included policies and governance within the hospital that recognise and support the needs of people living with dementia, elements of comprehensive assessment, involvement of carers, discharge planning, and identified changes to support needs during admission. INAD was based on the UK National Audit of Dementia (2011) in acute hospitals, which had found many deficits in practice. The aim was to, with permission, replicate the UK audit, using minor modifications for the Irish setting.

A second audit (INAD-2) was conducted in 2019 in acute and orthopaedic hospitals in the Republic of Ireland, to provide an overview of the current situation with regard to the care of people living with dementia during hospital admission. Findings are compared with the findings of INAD from 2013. The results will inform future local and national education provision, and plans for staffing and resource allocation within hospitals.

INAD-2 was a partnership between the HSE National Dementia Office (NDO) and HealthCare Audit, Quality Assurance and Verification. The audit was funded by HSE Acute Operations and overseen by a multidisciplinary Steering Committee which was co-chaired by the National Clinical Advisor and Group Lead (NCAGL) Acute Operations and the Clinical Lead for the NDO (Appendix A).

Methodology

As there were no specific standards in place in Ireland for dementia care in acute hospitals when the first INAD was conducted, the audit measured practice against international best practice guidelines. The audit tool was adapted from the National Audit of Dementia Care in general hospitals in the UK, with the kind permission of the Healthcare Quality Improvement Partnership (Royal College of Psychiatrists, 2011). For INAD-2, many audit items from INAD were retained, for comparison purposes. Additional items were based on findings of the National Patient Experience Survey 2018, an in-preparation national clinical guideline on psychotropic medication, and key issues identified by an expert stakeholder group. All audit items in INAD-2 are mapped to existing standards/guidelines (https://dementiapathways.ie/care-pathways/acute-hospital-care/acute-hospital-audit).

All acute public hospitals that admit adults with known or suspected dementia which participated in the first INAD were invited to participate in the audit. Three large orthopaedic hospitals were also invited, recognising the overlap between hip fracture and dementia (Appendix B). A total of 33 hospitals were audited. In order to capture a comprehensive picture of dementia care policies and practices, three audit modules were conducted in each hospital.

1. The Organisational Audit collected data on dementia-related policies, protocols, structures, processes and key staff that impact on service delivery for people living with dementia. Data was collected through interviews with Hospital Managers/Chief Executive Officers, Directors of Nursing and/or Geriatricians and any other relevant staff.
2. The Case Note Audit examined 30 healthcare records per hospital. The audit collected data on assessments carried out on or during admission, discharge planning and coordination, and referral to specialist services. The majority of hospitals (87.5%, 28/32) self-audited (though all of these had 20% of healthcare records re-audited by a HSE Healthcare auditor for quality assurance), while 12.5% were audited entirely by HSE Healthcare Auditors.
3. The Environmental Audit collected information on aspects of the wards' physical environment which can impact on people living with dementia. These audits were carried out by the INAD-2 Audit Coordinator and an auditor from TrinityHaus, Trinity College Dublin.

All data was collected between June and November 2019. Data from all three audits were combined and are reported under 10 headings below; Governance and Dementia Specific Roles, Availability of Services, Physical Ward Environment, Case Note Audit- Details of Sample (presented for context for following sections), Physical Assessment, Mental Assessment, Staff Training, Discharge Planning and Discharge, Palliative Care, and Psychotropic Prescribing. In all cases valid percentages are presented, i.e. missing data is excluded from the calculation. Unless otherwise specified, all variation in denominator values is due to missing data.

SUMMARY OF KEY AUDIT COMPONENTS

The following figure illustrates the key themes and components of the audit, as they relate to the point of admission, admission period, and peri-discharge period.

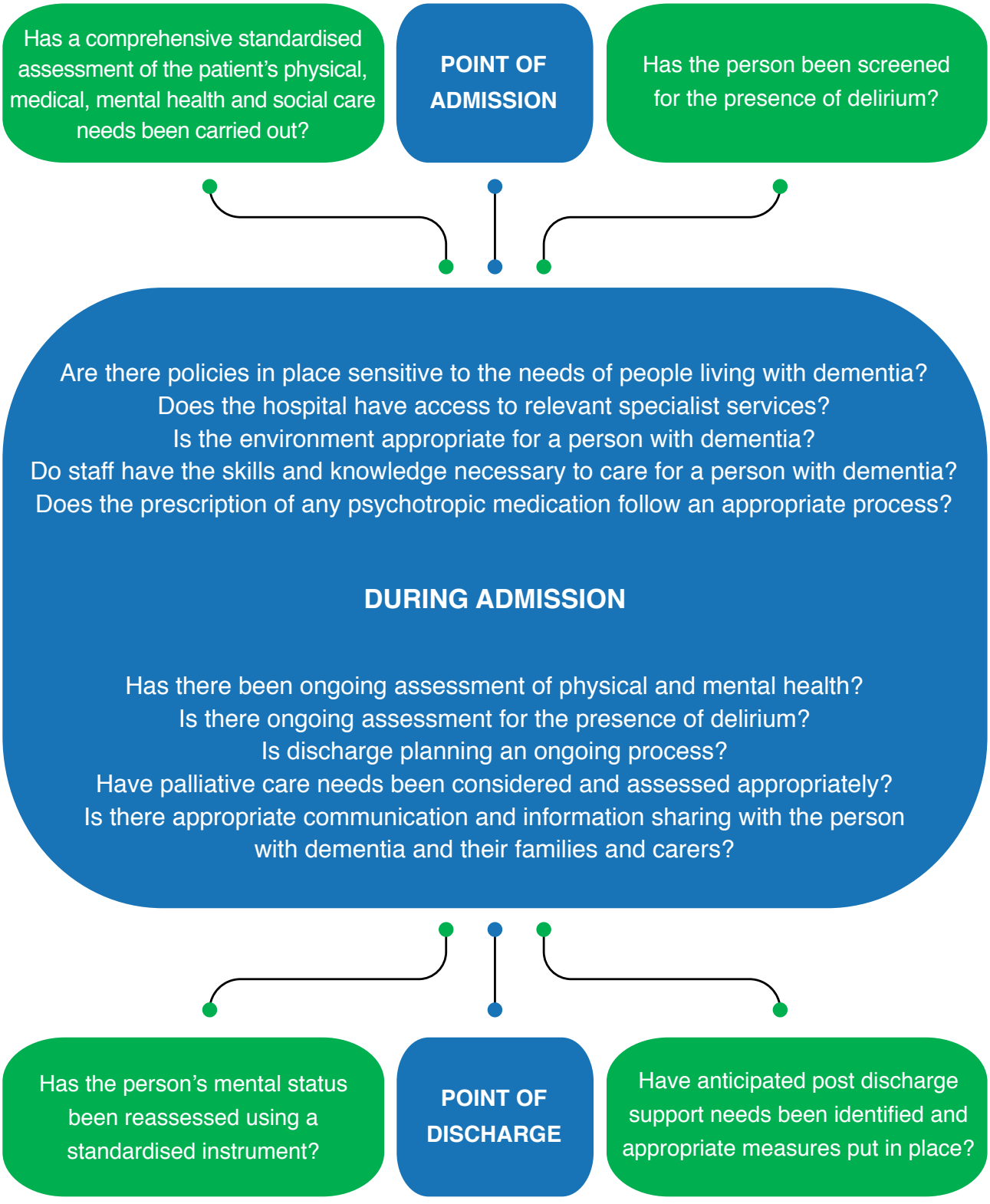


Figure 1. Summary of Key Audit Components

KEY FINDINGS

Overall, many results show improvement from those reported in the first INAD. Others identify where ongoing improvements and further change is required. Figure 2 provides an overview of key findings.

There are increased numbers of **dementia quality improvement teams, dementia champions** and **dementia specific staff** in place when compared to 2013, but more are needed. As of 2019, just **6% of hospitals have a dementia in-patient care pathway** in place.

Only 22% of hospitals have a **dementia recognition system** in place across some or all areas of the hospital, to ensure that all staff are aware of the person's dementia and how it affects them.

There was **some improvement in way finding and orientation aids.** For example, **76%** of wards now have **signage on** some or all **toilet doors, with signs** on some or all **bathroom doors** in **63%** of wards.

There was an **increase** in the already high levels of performance and recording of numerous **physical assessments** such as functioning, mobility, pressure sore risk, and nutrition.

In contrast, only **40%** of patients with dementia had any **cognitive testing** performed during admission; recording of **collateral history around dementia status** and **personal preferences** was very poor.

Although more than half of hospitals with an ED/AMAU stated that they screen some or all patients for delirium, only **19% of patients with dementia had any delirium screening** performed during the admission.

Encouragingly, 85% of hospitals stated they provide **dementia awareness training,** and 70% had provided this in the previous 12 months.

Overall, **38%** of people living with dementia were **receiving antipsychotic medication on admission**; a **new or increased dose of antipsychotic** medication was prescribed to **25%** of patients during admission.

Figure 2. Summary of Key Audit Findings

KEY RECOMMENDATIONS

The findings from the audit resulted in a significant number of detailed recommendations to ensure policies and practices in the acute care setting are appropriate for the care of a person living with dementia. These recommendations are listed by theme on pages 26-35 of the Executive Summary. Below are nine key recommendations for national and local management teams, as well as local dementia quality improvement teams and other relevant groups:

- A multidisciplinary **dementia quality improvement team**, closely linked to senior hospital management, is required within each hospital to map out the changes required to improve the provision of dementia care, based on hospital-level INAD-2 data, and to implement other national guidelines/guidance relating to acute hospital dementia care.
- There should be suitably qualified and **trained staff** available within the hospital to support and advise on optimum dementia care within the hospital; this includes a wider team of dementia champions, and one or more dementia specific roles. These latter roles should not be limited to nursing posts only.
- The **physical environment** of the hospital should be a key consideration for hospital management. The design guideline on "Dementia friendly hospitals from a universal design approach" (Grey et al., 2018) should be incorporated as standard by hospital management into all future refurbishments and new builds, while cost-neutral or low-cost solutions should be implemented as a priority.
- There should be improved **recognition** and communication of dementia, including, but not limited to: at the point of entry to the hospital (dementia diagnosis and type of dementia recorded in admission note); implementing a system to communicate dementia diagnosis to staff within the care area and between care areas; improved communication and use of relevant information such as a patient passport document and National Transfer Document; and inclusion of all relevant information (dementia progression, delirium, cognitive function, persistent non-cognitive symptoms, and mobility and continence needs) on the discharge summary.
- All hospitals should implement the nationally agreed acute hospital **delirium algorithms** for the Emergency Department (ED)/Acute Medical Assessment Unit (AMAU) and general medical and surgical wards[1], and adapt and implement the national templates for **dementia pathways** within the hospital.
- Each acute hospital has responsibility for developing a **training and knowledge strategy** to ensure that all staff are provided with basic training in dementia awareness and that the required proportions of staff receive more in-depth dementia training (as outlined on pp. 35-36).
- Hospital management and staff should ensure that the HSE Code of Practice for Integrated Discharge Planning is followed. This includes, where appropriate, **discharge planning** meetings involving the person living with dementia and/or their carer/family at least 48 hours prior to planned discharge; clear information about follow-up and support after discharge; and the treating team assessing whether there is an indication for follow-up with local dementia services, and arranging this where required.

- The recommendations from the NCG21 (Appropriate prescribing of **psychotropic medication** for non-cognitive symptoms in people with dementia), should be implemented in each hospital to ensure appropriate prescribing and use of psychotropic medications for non-cognitive symptoms of dementia.
- The recommendations from this audit should be collated as a set of **standards** for the provision of dementia care in acute hospitals, to guide future audit. There should be a national level re-audit of all hospitals in 2022; in addition, senior management should arrange local self-audit and evaluation in the interim.

1. “Early identification and initial management of delirium in the Emergency Department/Acute Medical Assessment Unit” (2015; revised 2020) and “Delirium on hospital wards: Identifying patients as risk, delirium screening and next steps” (2017; revised 2020)

SUMMARY OF RESULTS BY THEME

Governance and Dementia Specific Roles

The theme of governance and dementia specific roles relates to whether the policies, procedures, guidelines, systems and staffing in place in a hospital take into account and are sensitive to the needs of people living with dementia. The hospital organisational audit collected data on hospital pathways, policies, guidelines and resources available to support high quality person centred dementia care.

- Currently, just two hospitals (6%) have a dementia care pathway in place which encompasses in-patient care, unchanged from 2013.
- In contrast to 2013, a dementia quality improvement team or working group is now in place in 36% of hospitals (12/33) and is in development in one other.
- The majority of hospitals (27/33) now have one or more champions for dementia, though still just 30% of hospitals (10/33) have a champion for dementia on all wards.
- In contrast to 2013, there is now some availability of dementia specific roles within hospitals; nine hospitals have a dementia specific nurse specialist or dementia specific Advanced Nurse Practitioner (RANP)/ candidate Advanced Nurse Practitioner (cANP), and four hospitals have a dementia specific occupational therapist.
- Almost a quarter of hospitals now have a system in place across some or all areas of the hospital to ensure that all staff are aware of the person's dementia or condition and how it affects them.

These findings show that while, as yet, a very small number of hospitals have a dementia care pathway in place, there are definite indications there is a greater focus on dementia care in acute hospitals. This includes a number of improvements since 2013. However, further development is needed in many hospitals and more staff resources are required, including champions for dementia and dementia specific roles.

Availability of Services

Given the complexity of the management of dementia care, a multidisciplinary approach is required, and during an acute admission people living with dementia may require access to a number of specialist services.

- Currently, 88% of hospitals (29/33) provide regular access to a geriatric medicine service.
- Overall, 91% of hospitals (30/33) have regular access to liaison psychiatric services and 85% of hospitals (28/33) have regular access to liaison psychiatry of old age services.
- Most hospitals reported access to neurology (21/33) and occupational therapy (29/33), with psychology services available in less than one third of hospitals (10/33). Pharmacy is available in all but one hospital.
- Just 58% of hospitals (19/33) have access to a social worker and 76% of hospitals (25/33) have a discharge coordinator in place.

- In contrast to 2013, the majority of hospitals (91%, 30/33) now provide advocacy services with experience and training in working with people living with dementia.
- There is relatively poor access to social and therapeutic activities for people living with dementia; 42% of hospitals (14/33) have access to such activities.

The availability of services improved in almost all disciplines from 2013 to 2019, though in many hospitals there is poor availability of neurologists, social workers and discharge coordinators; less than a third of hospitals have access to a psychologist. These gaps should be addressed in order to provide optimum dementia care to people living with dementia during an acute hospital admission.

Physical Ward Environment

It is well established that admission to acute hospital can be distressing and disorientating for a person living with dementia. Research has shown however that agitation and distress for the person living with dementia can be reduced, and staff morale can be increased, through comparatively simple, cost-effective changes to the care environment (Waller & Masterson, 2015). The ward environmental audit examined aspects of the physical ward environment known to impact on people living with dementia.

- While there is some improvement from the first INAD, only a small proportion of wards have adequate environmental cues to aid orientation for people living with dementia.
- Almost one quarter of wards (18/72) have some colour schemes in use, although no hospital has a comprehensive colour scheme to help people living with dementia find their way around. This is compounded by few wards having sufficient and/or appropriate signage in place.
- There are deficits in toilet and bathroom signage in a number of hospitals; there is signage on some or all toilet doors in 76% of wards audited (55/72) and signage on some or all bathroom doors in 63% of wards (45/72).
- Just 17% of wards (12/72) have space outside of a standard ward corridor for active people living with dementia to walk in; less than half of wards (31/72) provide handrails along the corridors. It was noted that handrails were often obstructed by equipment and trollies.
- Among the wards audited, 53% (38/72) have a room/area available for patients to use as a break from the ward environment.
- The flooring in the majority of wards is appropriate for a person living with dementia; all floors are plain/subtly patterned in 79% of wards (57/72) and all floors are subtly polished in 71% of wards (51/72).

The majority of hospitals reported that they have implemented some dementia friendly environmental changes, and this was reflected in the audit findings, with improved use of clocks, calendars, signage, and use of colour to aid orientation. There remain substantial gaps in the acute care ward environment in the provision of a dementia friendly environment in relation to aiding orientation and way finding, promoting independence, and facilitating assisted care.

Case Note Audit - Details of Sample

This section provides relevant contextual and background details, including demographics and length of stay, of the sample of healthcare records audited as part of the case note audit. The findings here provide useful demographic and contextual information to enhance the understanding of the findings which follow in subsequent chapters.

- The sample was 56% women with a median age of 84 years. Only half of healthcare records (51%) specified the type of dementia, even though this information could have an influence on several aspects of care. Where dementia diagnosis was recorded, the most common diagnosis was Alzheimer's disease (44%), followed by vascular dementia (30%).
- The most common primary cause of admission was respiratory infection (27%), followed by fall or fracture (17%) and urinary tract infection (12%). Dementia was the primary cause of admission in 9% of cases.
- Ethnicity was documented in less than half of healthcare records audited (52%, 484/930) and there was also a documentation gap in recording the first language of the person, with this information present in less than three quarters (74%, 682/925) of healthcare records.
- The mean length of stay (LOS) for people admitted from and discharged to their own home was 13.6 days, compared to 38.8 days for people admitted from home and discharged to residential care.
- There was a substantial decrease in LOS for people living with dementia from the first INAD in 2013, particularly in those admitted from and discharged to residential care.
- Length of stay was highest for those admitted with dementia as primary cause of admission (M=38 days) in comparison to all other causes of admission.

There were weaknesses in the recording of key variables identified (e.g. dementia type, ethnicity) and this may call into question the level of recording and/or accurate filing of other relevant information and assessments in the healthcare records, i.e. whether other key information is noted by staff but not subsequently recorded in the healthcare records.

Physical Assessment

Findings from the hospital organisational and case note audits are combined to present a picture of physical assessment in acute hospital for people living with dementia.

- Case note audit findings demonstrated that there was an increase in the performance and recording of assessment of functioning, assessment of mobility, formal pressure sore risk assessment and assessment of nutritional status.
- Findings highlighted that in a substantial proportion of patients living with dementia there is no record of being asked about pain or assessed for pain.
- The majority of hospitals have protected mealtimes in place and have access to speech and language therapy and dietetics.

- Patients living with dementia can have a complete meal option that can be eaten without cutlery in just 55% of hospitals (18/33).
- In the majority of hospitals (26/33), only simple food supplies or snacks are available 24 hours a day.
- While screening question(s) relating to bladder and bowel problems are part of the comprehensive assessment of the person living with dementia in all hospitals, just three hospitals have a lead for continence care and services in the hospital. There is no structured programme of staff training on promoting continence in any of the 33 hospitals audited.

The audit findings demonstrated that there were improvements in a number of areas since 2013 though further improvement is imperative. The findings here highlight a number of areas where improvements are required in relation to standardised assessment, e.g. assessment of pain.

Mental Assessment

Findings from the hospital organisational and case note audits are combined to present a picture of mental assessment in acute hospital for people living with dementia.

- A standardised test of cognition was evident in just 40% of healthcare records (340/851) and this had reduced from 43% of healthcare records in 2013, in spite of 85% of hospitals (28/33) reporting that the comprehensive assessment includes a standardised test of mental health status.
- There was a substantial increase in the number of hospitals which have a system in place to ensure that a suspected dementia triggers a referral for assessment and differential diagnosis (23% in 2013 versus 82% in 2019), though this was generally not specified in hospital policy.
- Collateral history was generally poorly recorded in the healthcare records; just 6% of healthcare records (56/875) had a comprehensive collateral history encompassing all core components recorded.
- While there was some progression since 2013 in the awareness and reported use of patient passports or other documents which collect information pertinent to caring for the person living with dementia, including likes, preferences and routines, evidence of these being used to inform care was present in just 2% of healthcare records (17/934).
- There were a number of developments in relation to delirium management and care since 2013 including, for example, a substantial number of hospitals which report that they screen older people for cognitive impairment in the Emergency Department (ED)/Acute Medical Assessment Unit (AMAU)/Acute Surgical Assessment Unit (ASAU)/Acute floor. However further developments are required in this area as evidenced by the case note audit findings that just 19% of patients (181/932) had delirium screening conducted at any time during their admission.
- Almost one quarter of healthcare records (23%, 216/934) demonstrated suspected or confirmed delirium.

- Just 11% of patients (98/926) had been assessed for recent changes in mood.
- More than one third of hospitals (12/33) have a protocol governing the use of interventions for patients displaying responsive behaviours, aggression and agitation, with this in development in a further 21% of hospitals (7/33).
- 70% of hospitals (23/33) have a written policy for the use of one-to-one observation.
- There was an increase in the communication of cognitive status at discharge since the first audit in 2013, e.g. 69% of discharge letters (91/132) included delirium where relevant, compared to just 24% in 2013.

In summary, there were a number of weaknesses in mental assessment identified through the audit, for example, a decrease in levels of cognitive testing since 2013 and a relatively poor level of delirium screening and assessment.

Staff Training

Dementia specific education and training is vital to ensure that hospital staff have the skills, knowledge and awareness to respond appropriately to, and care holistically for, people living with dementia. The hospital organisational audit looked at the provision of dementia training within the hospital.

- None of the hospitals audited have a knowledge and training framework for dementia.
- Dementia awareness training is mandatory for all staff who provide direct patient care in just one hospital, and for some staff categories in another four (15% overall). The majority of hospitals do provide dementia awareness training (85%, 28/33), and 70% had provided dementia awareness training to staff in the previous 12 months, comparable to 71% of hospitals who had provided this in the previous 12 months in 2013.
- One third of hospitals (11/33) now include dementia awareness training in staff induction programmes, compared to just 6% in 2013; this applies to all staff categories in just five hospitals.
- The National Dementia 4-hour dementia acute care programme “Enhancing & Enabling Care of the Person with Dementia in the Acute Hospital Setting” is provided to some staff in 61% of hospitals (20/33) and similarly, the 2-day programme “Enhancing & Enabling Wellbeing for the Person with Dementia” is provided to some staff in 64% of hospitals (21/33).

Overall, there has been an improvement in staff training for dementia since 2013, with increased provision within hospitals of dementia awareness training, and increased uptake of the National Dementia 4-hour and 2-day dementia training programmes. Staff awareness and training in dementia is a critical part of the foundation, together with adequate and effective resources, for the provision of optimum dementia care, and so should be addressed as a matter of priority in hospitals where this is lacking.

Discharge Planning and Discharge

Adequate and appropriate discharge planning is vital, as inadequate discharge practices are linked to adverse outcomes and an increased risk of readmission. The hospital organisational audit collected information on discharge policies and systems within the hospital while the case note audit examined the recording of discharge practices.

- A discharge summary was available in 90% of healthcare records (664/739), compared to just 39% of healthcare records in 2013.
- In less than one fifth of healthcare records (18%, 118/645), the discharge letter included details of cognitive status, mobility needs and continence needs at the time of discharge.
- There was evidence of a discharge planning meeting which included the person living with dementia and/or their carer/relative in 59% of healthcare records (400/684), a reduction since 2013.
- Where a discharge plan/summary was available, this was addressed to the GP/primary care team/nursing home, as appropriate in 96% of cases (609/638) and a nursing specific discharge letter was similarly available addressed to the PHN (or the PHN was copied on the discharge plan/summary), where relevant, in 64% of cases (169/266).
- Just 37% of carers/families (179/479) received at least 48 hours' notice of discharge.
- An assessment of carers' needs, where relevant, took place in 61% of cases (193/319).
- In less than one third of healthcare records (30%), there was documentation that information about support after discharge was provided to the patient and/or carer.
- Where relevant (i.e. discharged to the community and not receiving end of life care), follow-up with dementia services was arranged in only 20% of cases (147/733). The audit did not determine whether there were indicators for such a referral, but the 20% follow-up rate seems lower than would be expected.
- In 27% of cases (200/734), a follow-up appointment was made with the team caring for the person in the hospital.

There was an improvement in the presence of a discharge summary in the healthcare records. However, this very often did not contain detailed information about key dementia-related parameters. There appears to be a need for increased consultation with the person living with dementia and/or their carer/family in relation to discharge planning. The case note audit also demonstrated a low level of follow-up arranged with dementia services or with the team caring for the person in the hospital.

Palliative Care

The case note audit looked at referral to palliative care services and whether the person was cared for according to an end of life care pathway.

- In total, 9% of patients (88/934) died whilst in hospital, 88% of whom (76/86) were receiving end of life care, or on an end of life care pathway.
- Overall, 14% of patients (130/918) were receiving end of life care or on an end of life care pathway, compared to just 6% of patients in 2013.
- Within the audit sample, 15% of patients (142/928) were referred to specialist palliative care services, 43% of whom (61/142) died whilst in hospital.
- A decision on resuscitation orders was recorded in 43% of healthcare records (404/932), demonstrating an increase from 33% in 2013.
- There was a recorded referral for bereavement support in 2% of healthcare records (19/909); and in 13% of cases where the patient died during the admission.
- Less than one third of patients (291/909) had advance care planning recorded in their healthcare records.

The case note audit demonstrated that approximately 1 in 11 patients living with dementia admitted to an acute hospital die during the admission, emphasising the need for a coordinated palliative care approach. Considerable gaps in a palliative care approach were highlighted. Further research may be needed to explore the reasons behind this poor provision of advance care planning in the acute hospital setting.

Psychotropic Prescribing for a Person with Non-cognitive Symptoms

This spotlight psychotropic audit was primarily designed to provide baseline data on psychotropic prescribing in dementia care in hospitals prior to the implementation of the NCG. Thus, the audit preceded the launch of the guideline, which needs to be kept in mind in reflecting on the results.

- In total, 83% of patients (771/931) were receiving psychotropic medication on admission to the hospital. This proportion was highest in those admitted from residential care (90%) and lowest in people admitted from home (79%).
- During the hospitalisation, 41% of patients (384/933) were prescribed a new psychotropic medication and/or an increased dose of an existing psychotropic medication.
- In cases where all new or increased prescriptions were for non-cognitive symptoms of dementia, a comprehensive assessment was documented for only 53% of patients (39/73) and non-pharmacological interventions were documented to be trialled prior to prescription in just 15% of cases.

- Excluding prescriptions for end of life care (n=23) and for seizures (n=2), Intramuscular or intravenous psychotropic medication was prescribed to 7% of the entire patient sample (67/934), representing almost one fifth (17%, 67/384) of all patients prescribed a new and/or increased dose psychotropic medication during the admission.

There is a need for education for all medical, nursing and pharmacy staff to increase awareness and understanding of the appropriate prescribing and use of psychotropic medication in the management of cognitive and non-cognitive symptoms of dementia. The recent NCG must be rolled out nationally, as per the detailed implementation plan within the guideline.

Psychotropic Prescribing: Focus on Antipsychotic, Benzodiazepine and Z-Type Medication

This audit gives particularly useful insight into the widespread use of antipsychotic, benzodiazepine and z-type medication (in the community and during the hospitalisation).

- Overall, 38% of all patients (353/926) were receiving antipsychotic medication on admission; the proportion was much higher in those admitted from residential care (55%) than in those admitted from home (30%).
- A new or increased dose antipsychotic medication was prescribed to 25% of patients (233/934), though at least 31% of these prescriptions (73/233) were for medical indications. Almost half (48%, 110/230) of those prescribed a new or increased dose antipsychotic were already receiving antipsychotic medication on admission.
- Thus, more than half of patients (51%) were prescribed antipsychotic medication at some point during the admission, though this decreases to 46% when new or increased dose prescriptions for medical indications are removed. Although this is an apparent increase from 2013 when 41% of patients were administered antipsychotic medication at some point during the admission (noting that the proportion prescribed antipsychotic medication may be higher than those administered it), the proportion of prescriptions of antipsychotics for delirium or end of life care were much higher in 2019, with an actual decrease in prescriptions for non-cognitive symptoms.
- There was an explicit, appropriate indication documented for the requirement for antipsychotic medication in 81% of cases (182/225); most commonly this was agitation and/or aggression, end of life care or delirium. In total, 109/182 (60%) of these indications were for non-cognitive symptoms, indicating that somewhere between 11.2% and 16.8% of the total cohort received a new or increased dose antipsychotic medication for non-cognitive symptoms.
- Excluding cases where the medication was commenced for end of life care, there was documentation that the risks and benefits of the antipsychotic medication were discussed with the person living with dementia and/or their family (or a decision supporter) in only 4% of cases (7/182). There was a documented review of effectiveness and side effects during the admission in just 3% of cases (5/186).

- In total, 12% of patients (112/926) were receiving benzodiazepine medication on admission (21% of those admitted from residential care (56/262) compared to 8% of those admitted from home (43/571)).
- Although 16% of patients (150/934) were prescribed a new or increased dose benzodiazepine medication during the admission (with most (82%; 121/148) not previously prescribed a benzodiazepine), many of these prescriptions were for a medical indication. Thus, 45/121 prescriptions with a documented indication were for severe anxiety or non-cognitive symptoms, indicating that somewhere between 4.8% and 7.9% of the total cohort received a new or increased dose benzodiazepine medication for severe anxiety or non-cognitive symptoms.
- Similar to benzodiazepine medication, approximately one in six patients (16%, 146/926) were receiving z-type medication or a benzodiazepine at night on admission (23% of those admitted from residential care (60/262) compared to 13% of those admitted from home (72/571)).
- In total, 5% of all patients (49/934) were prescribed a new or increased dose of z-type medication (or a benzodiazepine at night); most of these were a prescription to a person not previously taking these medications (86%; 42/49). A sleep regimen/care plan was documented to have been trialled prior to the trial of a z-type medication (or benzodiazepine at night) in just 7% of cases (3/43).
- Just 1% of patients (10/926) were receiving Melatonin on admission and less than 1% of all patients (3/934) were newly prescribed Melatonin during their admission, while one other person was prescribed an increased dose.

Although NCG 21 was not available at the time of this audit, the HSE-developed "Guidance on appropriate prescribing of benzodiazepines and z-drugs (BZRA) in the treatment of anxiety and insomnia" has been available since 2018. Despite this, there was insufficient evidence of discussion with the person and their family (or decision supporter) about the risk/benefit of benzodiazepines and Z-type medications, and little evidence of a planned further review to assess benefit and plan the discontinuation of these medications.

Psychotropic Prescribing: Focus on Acetylcholinesterase inhibitors, Memantine, Antidepressants, and Anticonvulsants

This audit gives useful insight into the use of acetylcholinesterase (AChE) inhibitors, Memantine, antidepressants and anticonvulsants.

- Just over one quarter of all patients with dementia (27%, 253/926) were receiving an AChE inhibitor (cognitive enhancer) on admission to hospital. Another 3% of all patients (27/934) had a new prescription during the admission, with these prescriptions primarily for cognitive dysfunction.
- More than one third of all patients (35%, 323/926) were receiving Memantine on admission (41% of those admitted from residential care (106/262) compared to 32% of those admitted from home (183/571)). Another 3% of patients (28/934) were newly prescribed Memantine during the admission.

- There was poor practice evident in relation to documentation of discussing the risks and benefits of Memantine with the person living with dementia and/or their family/decision supporter, and in conducting or planning for a review of the medication when this was prescribed for non-cognitive symptoms.
- Overall, 38% of patients (351/926) were receiving antidepressant medication on admission to hospital (42% of those admitted from residential care (111/262); 34% of those admitted from home (196/571)).
- A new or increased antidepressant medication was prescribed to 4% of all patients during admission (40/934), with 28/40 of these a new prescription to a person not already receiving an antidepressant. Where documented, the most common reason for prescription was severe non-cognitive symptoms, depression (unspecified severity), and agitation.
- There was poor practice evident in relation to documenting the discussion of the risks and benefits of the antidepressant medication with the person living with dementia and/or their family/decision supporter, and in documentation around conducting or planning for a review of the medication.
- In total, 9% of all patients (84/926) were receiving anticonvulsant medication on admission (14% of those admitted from residential care (37/262) compared to 7% of those admitted from home (38/571)). A small proportion of all patients (3%, 30/934) were prescribed a new or increased dose anticonvulsant during the admission, with the majority prescribed for seizures or pain, rather than for mood disorders or non-cognitive symptoms of dementia.

It appears that AChE inhibitors may be underused in Ireland for cognitive symptoms, and this should be explored further in non-hospitalised cohorts. The proposed national dementia registry will be particularly helpful in this regard, and it is important that funding is provided for implementation of this registry following the conclusion of the pilot stage in 2020. In the audit cohort, Memantine prescription was not supported by adequate documentation of the type and severity of the dementia (or evidence of intolerance of AChE inhibitors). Generally, there was insufficient evidence of discussion with the person and their family (or decision supporter) about the risk/benefit of AChE inhibitors and Memantine. There was also little evidence of a planned further review with a view to assessing benefit or discontinuing these medications.

RECOMMENDATIONS BY THEME

Governance and Dementia Specific Roles

- As per the National Dementia Strategy, a dementia care pathway should be implemented within each hospital, to include any period in the ED/AMAU. There should be a senior clinician who leads the work of the hospital on this. This pathway also needs to include local pathways to avoid unnecessary hospital attendance or admission.
- This pathway similarly needs to include the hospital wards and particularly transitions to/from wards, including to/from home or residential care, with a focus on care planning and information transfer.
- Any pathway for dementia has to incorporate delirium screening, prevention and treatment as an integral part, given the close and bi-directional relationship between dementia and delirium.
- People living with dementia should not be moved within or between wards unless the move is necessary for their own care.
- A dementia quality improvement team or similar working group should exist in every hospital, with a clear governance structure and communication path to senior hospital management. This group can be a sub-group of an overall hospital quality improvement group or similar group, but it does require a direct focus on the needs of people living with dementia.
    - This group should be chaired by a senior member of staff and should be multidisciplinary, ideally encompassing executive management, healthcare professionals, bed management/ patient flow, nursing management, organisations which support people living with dementia, carer/service user representation, and practice development coordinator(s).
    - This group should be responsible for the planning and implementation of key activities and projects to improve dementia care within the hospital, including, but not limited to: the implementation of dementia care pathways; planning and implementing dementia friendly environmental changes; and increasing the provision and uptake of dementia education within the hospital.
- There should be suitably qualified and trained staff available within the hospital to support and advise on optimum dementia care within the hospital; this includes a wider team of dementia champions and one or more dementia specific roles. These latter roles should not be limited to nurse posts only.
- Hospital management, through the dementia quality improvement team, in each hospital should implement systems (e.g. the Butterfly Scheme) to ensure that people with known or suspected dementia can be identified by staff on the ward, and also staff from outside the ward when accessing other treatment areas.
- There should be a national level re-audit of all hospitals in 2022 (to be presented in 2023) and in addition, senior hospital management should arrange self-audit in the interim through the dementia quality improvement team.

Availability of Services

- There should be access to gerontological services (such as a consultant, specialist registrar or RANP) seven days per week for the assessment and support of people living with dementia.
- Liaison psychiatry, and particularly liaison Psychiatry of Old Age services, should be accessible seven days per week.
- A neurology opinion should be available seven days per week, if required, for all patients with: dementia or suspected dementia under the age of 65; where dementia accompanies or presents with a movement disorder; where the dementia is accompanied by seizures; or is rapidly progressive in course.
- There should be seven-day availability of other key services such as psychology, social work and discharge coordinators, and timely access to other relevant health and social care professionals as indicated by the person's needs.
- Hospitals should be able to provide social and therapeutic activities for people living with dementia within the hospital. All front-line hospital staff should receive education in person-centred dementia care.

Physical Ward Environment

- The design guideline on "Dementia friendly hospitals from a universal design approach" (Grey et al., 2018) should be incorporated as standard by hospital management into all future refurbishments and new builds as follows:
- Cost-neutral or low-cost solutions should be implemented as a priority, as set out in the design guideline (Grey et al., 2018), for example, de-cluttering of ward areas to reduce excessive sensory stimulation.
- The use of social spaces, colour and other design features should be considered to assist orientation and make memorable places.
- There should be a focus on the provision of clocks and calendars, labelling of key accommodation, dementia friendly internal signage, introduction of an orientation aid (e.g. a large clock with day and date, or a digital screen with day, date, time of day etc) in patient rooms, and identification of toilet and bathroom facilities, as these will assist orientation and provide prompts.
- There should be implementation of colour contrasting fittings including soap dispensers, bins and hand dryers, and a contrast between toilet paper/paper towel dispensers and the colour of the paper.
- Colour contrast handrails should be provided on all corridors of all hospital wards.

- In corridors and other areas where independence is being promoted, a management system is required to ensure that equipment and trollies do not restrict use or obstruct access to handrails and that the environment remains clutter-free.
- Ward environments should be re-audited in 2022 as part of a national level audit of hospitals, and hospital management should ensure that ward environments are self-audited in the interim.

Case Note Audit - Details of Sample

- Dementia type (e.g. Alzheimer's disease, Lewy body dementia) needs to be recorded in the healthcare records by the admitting team for all people living with dementia admitted to hospital.
- Ethnicity and primary language should be recorded in the healthcare records by the admitting team for all people living with dementia admitted to the hospital.

Physical Assessment

- Unless the assessor is confident that the patient could state that they have pain/no pain and their body language and behaviour is consistent with this, a standardised assessment of pain, suitable for use in people living with dementia (such as the Abbey Pain Scale or PAINAD), should be conducted.
- An assessment to determine any assistance required with eating/drinking should be conducted on admission; any identified assistance required should be recorded in the care/management plan.
- The catering department of hospitals that admit patients living with dementia should be able to provide a full finger food menu, and also meals outside of usual meal times.
- A dementia specific Speech and Language Therapist should be available at hospital group level to assess and support people living with dementia during their admission.
- Given the significance of continence promotion for older people, including people with dementia, each hospital needs access to a continence advisor, who is trained in the needs of people living with dementia, and each hospital needs to train a cohort of staff in this area.
- A national policy on promotion of continence and the management of incontinence should be developed. This policy should be implemented in all acute hospitals in Ireland.

Mental Assessment

- Hospital management should ensure that the admission assessment of people living with dementia includes a standardised assessment of mental health status and recording of collateral history.
- Nursing management should ensure that a patient passport, or similar document, which collects information pertinent to caring for the person living with dementia (e.g. preferences, routines, likes and dislikes) is routinely used to improve the provision of person-centred care.
    - Hospital staff need to read these documents and incorporate them into the care plan of the person living with dementia. Such documentation should be included as part of any future electronic healthcare record.
- Hospital management need to ensure that formal systems are in place in the hospital to ensure that suspected dementia triggers a referral for assessment and differential diagnosis.
- Hospital management should ensure that there is cognitive screening in the ED for all patients aged 65 and older, preferably using the 4AT, to screen for delirium and identify potential cases of undiagnosed dementia.
- All staff caring for people living with dementia should consider depression and anxiety as a potential source of distress in the person living with dementia. Hospitals should have access to staff with the competence to assess a person living with dementia for depression and anxiety.
- A protocol governing the use of interventions for patients displaying responsive behaviours, suitable for use in people living with dementia, should be in place across all hospitals, with ongoing promotion and education to support same by hospital management.
- The recent model of enhanced care teams (Department of Health, 2019b), where one-to-one observation is provided by a dedicated team of support staff who have undergone specific dementia training, should be implemented in all hospitals by hospital and nursing management.
- There should be improved communication of diagnoses and the outcomes of assessments by all relevant hospital staff during admission, and particularly at the time of discharge. This information needs to be communicated to the community.

Staff Training

- Hospital management (through the dementia quality improvement team) should develop a knowledge and training framework or strategy that identifies staff types who require dementia awareness training, and staff types/numbers who require minor level education (e.g. the 4-hour programme), moderate (e.g. the 2-day programme) and major level (university modules or definitive postgraduate education programmes). Each hospital's education framework or strategy should have an action plan which includes clear indicators of how the workforce has the right knowledge and skills to meet the needs of people living with dementia. Hospital management, working through the dementia quality improvement team (or similar working group) should have

responsibility for action plans/timelines for roll out of education initiatives. The action plan needs to outline each of the following core components and how these can be achieved.

- Ensure that dementia education/skill development is available for all staff, both clinical and non-clinical, working in the acute environment. This should include opportunities for both formal (structured education sessions) and informal education (point of care/whiteboard sessions).
- Ensure that all staff, including non-clinical staff, have completed at least one hour of dementia awareness training. Ideally, this training should be included in all staff induction programmes.
- Ensure that in the hospital, there is a cohort of highly trained staff who have undergone post-graduate (NFQ level 8 or 9) education in dementia. These staff will provide a valuable resource as champions for dementia in driving a person centred dementia care culture.
- At least 5% of hospital staff should have undergone post-graduate education in dementia. Given the prevalence of dementia, it is recommended that all RANPs in Older Persons have undergone at least a 10-credit module (at NFQ level 8 or 9) in dementia care.
- In keeping with the nationally agreed job description, all dementia nurse specialists need to have a minimum of a Postgraduate Diploma in dementia care on appointment, or undertaken within the first year of taking up post. It is recommended that a similar requirement applies for any other dementia specific medical, nursing (e.g. RANP), or health and social care professional posts.
- Ensure that all staff providing direct patient care on Care of the Older Person wards have undergone training to the level of the 4-hour dementia programme (or equivalent) and the 2-day programme.
- Ensure that on each ward in the hospital that provides care for people living with dementia (including ED/AMAU), all nurse managers (including clinical placement coordinators/nurse practice and quality development) have completed the 2-day programme. In addition, all front-line staff should have completed the 4-hour programme and at least 30% should have completed the 2-day programme.
- Ensure that within each department in the hospital (e.g. out-patients, therapy departments, theatre recovery), at least one staff member has completed the 2-day programme.
- Ensure that staff in hospitals are facilitated to attend available dementia education programmes (including online education, as appropriate), with programmes provided regularly, and staff cover provided. Achievable timelines should be set out and reviewed regularly, with prioritisation of key staff (Care of the Older Person wards, champions for dementia).

- Performance indicators for dementia specific education should recognise the need for ongoing targeted education for all staff (clinical and non-clinical), with a particular emphasis on person centred dementia care. Innovative solutions such as brief handover education sessions, whiteboard sessions, point of care education (through dementia nurse specialist/champions) and online forums/education should be considered. This education should be tailored to the specific needs/concerns of staff working in different care departments (e.g. out-patient department, surgical, medical). Additionally, it can be tailored to specific topics (e.g. delirium, non-cognitive symptoms, person centred care).

Discharge Planning and Discharge

- In keeping with the HSE Code of Practice for Integrated Discharge Planning, ED/AMAU/ward staff should begin discharge planning within 48 hours of admission and should include an assessment of the patient's expected needs in relation to safe discharge home.
    - Where possible on admission, the person living with dementia and/or their carer/family should be given an estimate of time to discharge.
    - An assessment of the carer's needs should also be conducted, where the person living with dementia is being discharged to their own home.
- Wherever possible, the treating team should ensure that a formal or informal discharge planning meeting involving the person living with dementia and/or their carer/family has occurred at least 48 hours prior to planned discharge, anticipating that most people living with dementia may require support from their carer/family in the transition out of hospital.
- Prior to discharge home, the treating team should ensure that the person living with dementia and/or their carer/family are provided with information about follow-up and support after discharge (ideally in a written, easy to understand format), in relation to the presenting complaint, dementia, and where relevant, delirium.
    - At a minimum, the person living with dementia and/or their carer/family should be given the phone number of the local dementia advisor and/or dementia coordinator if available, with their available hours. Where relevant, the local dementia advisor/coordinator should be notified of the planned discharge of the person living with dementia.
    - Other relevant supports which may be required include referral to an Occupational Therapist or other relevant health and social care professional for assessment and input, and engagement with PHN.
- The treating team should assess whether there is an indication for follow-up with local dementia services (including but not limited to: worsening dementia, distressing non-cognitive symptoms of dementia or responsive behaviours, carer stress or burnout, need for future care planning, unmet dementia symptoms).
- Where there is an indicator of a need for follow-up, the treating team should arrange a follow-up appointment with local dementia services (where applicable, with the service that last saw the person to ensure continuity of care).

- The treating team should ensure that the discharge letter includes all necessary details of the person living with dementia relevant to their future care, including any worsening of dementia status, delirium diagnosis, non-cognitive symptoms of dementia or responsive behaviours, changes in mobility, continence needs, or other function. This discharge letter should be sent to the GP, and the primary care team/nursing home/PHN/dementia advisor/dementia coordinator, as relevant.

Palliative Care

- As per the HSE National Consent Policy, a decision for resuscitation should be made by the treating team for all patients living with dementia during hospital admission (wherever possible with the person living with dementia themselves, and if not possible, in consultation with the person's carer/family) and documented appropriately.
- It is crucial that advance care planning happens while the person living with dementia can still take part in (supported) decision making. The treating team should consider the opportunity for advance care planning during hospital admission, unless already in place prior to admission, noting that a hospital admission may not always be the most appropriate environment or time to include the person living with dementia in this discussion (e.g. delirium). In this case, advance care planning can be deferred to appropriate community follow-up (but this must be arranged by the treating team).
    - All discussions and decisions around advance care planning should be clearly documented and recorded by the treating team, ideally on a prescribed form.
    - A new transfer to residential care, a decline in dementia status or function, or markers of limited life expectancy, all indicate a need for advance care planning, either in hospital or as a priority after discharge.

Psychotropic Prescribing for a Person with Non-cognitive Symptoms

- There should be, at a minimum, a comprehensive medication review for all patients aged 65 and older admitted to hospital (to include psychotropic medications) at the point of admission and at the point of discharge, and ideally also during the admission as medications or clinical conditions change.
- Acute hospitals should focus efforts to ensure appropriate prescribing of psychotropic medications for non-cognitive symptoms of dementia, using staff education, self-audit, dementia champions and suitable quality improvement techniques.
- Acute hospitals should have mechanisms in place to identify the prescribing of psychotropic medication in all patients, and particularly those with a diagnosis of dementia.
- An audit of psychotropic prescribing in people living with dementia in the acute hospital should be repeated in 1-2 years to establish change after the implementation of NCG 21.

- Acute hospitals should support staff to follow NCG 21 “Appropriate prescribing of psychotropic medication for non-cognitive symptoms in people with dementia” (Department of Health, 2019a); in particular, the following recommendations of the NCG are important:

  - Prior to considering any psychotropic medication in a person with dementia, a comprehensive assessment should be performed, by an appropriately trained healthcare professional.
  - Non-pharmacological interventions should be used initially to treat non-cognitive symptoms in a person with dementia, unless there is severe distress, or an identifiable risk of harm to the person and/or others.

Psychotropic Prescribing: Focus on Antipsychotic, Benzodiazepine and Z-Type Medication

- Acute hospitals should implement the following recommendations of the National Clinical Guideline “Appropriate prescribing of psychotropic medication for non-cognitive symptoms in people with dementia” (Department of Health, 2019a):

  - Antipsychotic medication should be used with caution and only in cases where there is aggression, agitation or psychosis that either causes an identifiable risk of harm to the person with dementia and/or others or causes severe distress to the person.
  - People with Alzheimer’s disease, vascular dementia or mixed dementias with mild-to-moderate non-cognitive symptoms should NOT be prescribed antipsychotic medication due to the increased risk of cerebrovascular adverse events and death.
  - People with dementia with Lewy bodies and Parkinson’s disease dementia with mild to moderate non-cognitive symptoms should NOT be prescribed antipsychotic medication due to the increased risk of severe adverse reactions.
  - People with Alzheimer’s disease, vascular dementia, mixed dementias, dementia with Lewy bodies, or Parkinson’s disease dementia, with severe non-cognitive symptoms, causing severe distress, or an identifiable risk of harm to the person and/or others, may be offered antipsychotic medication, where appropriate.
  - A full discussion with the person and/or their relevant Decision Supporter about the benefits and risks, including the increased risk of stroke, transient ischemic attack and mortality, should occur before antipsychotic medication is commenced.
  - Atypical (second generation) antipsychotic medications are associated with fewer extrapyramidal effects and risks than typical (first generation) antipsychotics, and therefore second generation medication should be used if antipsychotic therapy is necessary for the management of non-cognitive symptoms.

- If a risk and benefit assessment favours the use of antipsychotic medication, treatment should be initiated at the lowest possible dose and titrated slowly, as tolerated, to the minimum effective dose.
- If there is a positive response to treatment with antipsychotic medication, decision making about possible tapering of the medication should occur within 3 months, accompanied by a discussion with the person with dementia and/or their relevant Decision Supporter.
- If a person with dementia is taking an adequate therapeutic dose of antipsychotic medication without clear clinical benefit, the medication should be tapered and stopped; where possible after discussion with the person and/or their relevant Decision Supporter.
- If antipsychotic treatment is being tapered, assessment of symptoms for re-emergence should occur regularly during tapering, and for a period after discontinuation of antipsychotic medication.
- Due to the very limited evidence to support the use of benzodiazepines in the management of non-cognitive symptoms in a person with dementia, and their significant adverse effects, they should be avoided for the treatment of non-cognitive symptoms, and usage strictly limited to the management of short-term severe anxiety episodes.
- A personalised sleep management regimen may be considered for sleep disorders in a person with dementia.
- Melatonin should NOT be used for sleep disorders in people with dementia.

Psychotropic Prescribing: Focus on Acetylcholinesterase inhibitors, Memantine, Antidepressants, and Anticonvulsants

- Acute hospitals should support staff to follow NCG 21 “Appropriate prescribing of psychotropic medication for non-cognitive symptoms in people with dementia” (Department of Health, 2019a) and in particular the following recommendations of the NCG:
    - Acetylcholinesterase inhibitors are indicated for cognitive enhancement in people with mild to moderate Alzheimer’s disease but are NOT recommended solely for the treatment of non-cognitive symptoms in a person with Alzheimer’s disease.
    - Due to the particular risks with antipsychotics in people with Parkinson’s disease dementia and dementia with Lewy bodies, rivastigmine or donepezil may be considered for non-cognitive symptoms causing severe distress when non-pharmacological interventions have proved ineffective.
    - People with vascular dementia or frontotemporal dementia who develop non-cognitive symptoms should NOT be prescribed acetylcholinesterase inhibitors.

- Memantine is indicated as a cognitive enhancer in people with moderate to severe Alzheimer's disease, Parkinson's disease dementia, and dementia with Lewy bodies, but it is NOT recommended to be prescribed solely for the treatment of non-cognitive symptoms in a person with dementia.
- In people with mild to moderate dementia, and mild to moderate depression and/or anxiety, psychological treatments should be considered. Antidepressants may be considered to treat severe comorbid depressive episodes in people with dementia, or moderate depressive episodes that have not responded to psychological treatment.
- Anticonvulsant medication is indicated for the treatment of seizures, bipolar disorder, or as an adjunctive therapy for pain, but is NOT recommended as a treatment for non-cognitive symptoms in a person with dementia.

INTRODUCTION

Dementia is a term which describes a range of conditions which cause damage to brain cells, affecting memory, thinking, language, perception, mood and personality. This umbrella term includes Alzheimer's disease, vascular dementia, dementia related to Parkinson's disease, and many others. In Ireland it has been estimated that there are between 39,272 and 55,266 people living with dementia (Pierse et al., 2019) and these numbers are projected to rise to approximately 151,157 by 2046 (Pierce et al., 2014).

Dementia is linked with increased utilisation of medical services. It is challenging to estimate the number of people living with dementia in acute hospitals in Ireland at any given point in time due to the poor recording, recognition and diagnosis of this condition. A large, comprehensive prospective cohort study in Cork hospitals in 2013 found that 29% of people aged over 70 admitted to five acute public hospitals had dementia, rising to more than half of admissions to Geriatric Medicine services (Timmons et al., 2015). Interestingly only 36% of patients were recorded as having dementia or cognitive impairment at the time of admission, some of whom had moderate-severe cognitive deficits (Timmons et al., 2015). Similarly, in a recent study in an acute hospital in Ireland, more than one third of patients aged 70 years and over had dementia, with again only 36% of these having a previously documented diagnosis (Briggs et al., 2017). In a UK study, Sampson et al. (2009) reported that 42% of patients aged over 70 with an unplanned medical admission had dementia. It is currently estimated that 40% of those aged over 75 admitted to Scottish hospitals have dementia (Crowther et al., 2017).

National and international research confirms that an admission to an acute hospital can be distressing and disorientating for a person living with dementia, and is often associated with a decline in their cognitive ability and levels of functioning, as well as quality of life (Moyle et al., 2010). A recent systematic review of 104 papers concluded that during hospital admission, people living with dementia were at higher risk for death in hospital, nursing home admission, increased lengths of stay, as well as delirium, falls, dehydration, reduced nutritional status, physical and cognitive function, and new infections in hospital. Patient and carer experiences of hospital admission were also poor (Fogg et al., 2018). In-patients with a recorded diagnosis of dementia have a significantly greater length of stay than in-patients without a recorded diagnosis of dementia, with the excess length of stay costing over €199 million per annum in Ireland (Connolly & O'Shea, 2015).

Delirium is an acute confusion due to illness, typically with reduced ability to focus and sustain attention, and altered alertness (e.g. drowsiness or hyper-vigilance). Many people with delirium develop psychosis (e.g. distressing hallucinations). During an episode of delirium, a person is prone to falls, dehydration, aspiration, iatrogenic events, and death. Delirium is an independent risk factor for mortality in hospital, and in the subsequent years (Dani et al., 2018; Hapca et al., 2018). The biggest predisposing factor for developing delirium is a baseline cognitive impairment/dementia. Other risk factors include neurological illness (e.g. stroke, Parkinson's disease), vision and hearing impairment, and advancing age and frailty.

Delirium is associated with a five-fold risk of death, and twice the rate of admission to residential care. Delirium can also precipitate or accelerate dementia. Indeed, delirium is one of few currently

preventable causes of dementia. Delirium is highly distressing to experience, both during it, and afterwards, with some patients developing a post-traumatic stress disorder-like syndrome, such was the horrific experience of the delirium (e.g. Fuller, 2016; Meilak et al., 2020). Thus, in considering the care of a person with known or suspected dementia in an acute hospital, we must have a particular focus on delirium prevention, detection and reduction.

IRISH NATIONAL AUDIT OF DEMENTIA (INAD) CARE IN ACUTE HOSPITALS 2013

In response to the need for more Irish data on dementia care in acute hospitals, the first **Irish National Audit of Dementia Care in Acute Hospitals (INAD)** was undertaken in 2013 to measure criteria relating to care delivery known to impact on people living with dementia admitted to hospital, with the report published in January 2014. The audit, jointly funded by Atlantic Philanthropies and a peer reviewed grant from the Meath Foundation, was led by University College Cork and Trinity College Dublin, in partnership with the HSE Quality and Patient Safety Directorate. It was carried out in all 35 acute public hospitals that admit adults with known/suspected dementia. Relevant parameters included policies and governance within the hospital that recognise and support the needs of people living with dementia, elements of comprehensive assessment, involvement of carers, discharge planning, and identified changes to support needs during admission. INAD was based on the National Audit of Dementia in acute hospitals in England and Wales (2011), which had found many deficits in practice. The findings and recommendations from the INAD audit informed the **Irish National Dementia Strategy**, published in December 2014 (Department of Health, 2014). The strategy specifically stated that:

1. The Health Service Executive will develop and implement **a dementia and delirium care pathway**, which could be fitted to existing acute, rehabilitative, care of older people, stroke, mental health, palliative care and end of life care pathways, **to be developed and implemented on a local level in each acute hospital**.
2. The Health Service Executive will assign responsibility in its own facilities, and elsewhere will encourage the assignment of responsibility to, **a senior clinician within each hospital to lead** the development, implementation and monitoring of the pathway.
3. Hospitals will be required to ensure that people living with dementia have **a specific pathway through Emergency Departments and Acute Medical Units** that is appropriate to their particular sensory and psychosocial needs.
4. The Health Service Executive will develop guidelines on dementia friendly ward specification to be taken into account at the design stage of all **refurbishments and new builds**. Elements to be considered should include safe walking spaces and the use of colour, lighting, signage, orientation cues and space used to promote social interaction.
5. Hospitals will prioritise the **assessment of social and environmental supports** to meet the needs of people living with dementia and their carers, including appropriate access to social work support.

Subsequent to this, the HSE and Genio (an Atlantic Philanthropy-funded non-governmental organisation) held a national competition for acute hospitals to develop such integrated care pathways for people living with dementia. Three hospitals, Mercy University Hospital in Cork, and St James's Hospital and Connolly Hospital Blanchardstown in Dublin were funded, and developed these pathways over the period 2014-2018. These quality improvement projects were independently evaluated by researchers in Trinity College Dublin, with separate reports developed across 2018-2019 (Brady et al., 2018a; Brady et al., 2018b; Brady et al., 2018c). In early 2018, the National Dementia Office developed an overall project plan to disseminate the key learning from these reports once finalised, and to support acute hospitals to form dementia quality improvement plans specific to their own contexts. From consultations with senior staff in acute hospitals and within the HSE Acute Operations, it was obvious that up-to-date audit data was required to inform local and national change planning. Thus, in parallel with the roll out of a series of learning and networking events for acute hospital staff across Ireland, the revision of existing acute hospital delirium algorithms, the development of a guidance document and suite of resources for acute hospital dementia care, and the planning of a national acute hospital dementia quality improvement competition for late 2019, the National Dementia Office looked to repeat the INAD audit to provide current data.

SECOND IRISH NATIONAL AUDIT OF DEMENTIA CARE IN ACUTE HOSPITALS (INAD-2)

INAD-2 was conducted in 2019 as a partnership between the HSE National Dementia Office and HealthCare Audit, Quality Assurance and Verification, and was funded by HSE Acute Operations. INAD-2 was overseen by a multidisciplinary Steering Committee which was co-chaired by the NCAGL Acute Operations and the Clinical Lead of the National Dementia Office. This audit aimed to provide an overview of current dementia care in acute hospitals, and to compare findings with those of INAD from 2013, to establish progress over a 6-year period, without any formal national programme being implemented/resourced. Of note, the chart audit date period preceded the national learning and networking events and the quality improvement project competition, so that no hospital was advantaged or disadvantaged by the timing of the audit. The aims of INAD-2 were to:

- Establish a current picture of dementia care within acute and orthopaedic hospitals in the Republic of Ireland
- Enable comparisons with findings of the first INAD audit
- Inform future local and national education plans, environmental re-design, and staffing and resource allocation.

METHODOLOGY

There were four components of the first INAD, with each audit tool adapted with permission from those used in the first round of the national audit of dementia in the UK: a hospital organisational audit, ward organisational audit, ward environmental audit and case note audit. The ward organisational audit was found to be somewhat duplicative of the hospital organisational audit tool and highlighted primarily staffing issues (not specific to dementia care) and so it was not included in INAD-2.

The hospital organisational and case note audit tools were updated through consultation with the INAD-2 Steering Committee to incorporate changes made to these tools in subsequent rounds of the UK audit. Questions which were felt not to have provided valuable data in the first INAD were also removed. Additional relevant questions for the Irish context were added, particularly relating to:

- Delirium screening and formal assessment, given the presence of nationally agreed acute hospital delirium algorithms for the Emergency Department (ED)/Acute Medical Assessment Unit (AMAU) ("Early identification and initial management of delirium in the Emergency Department/ Acute Medical Assessment Unit" (2015)) and general medical and surgical wards ("Delirium on hospital wards: Identifying patients as risk, delirium screening and next steps" (2017)) and a focus on delirium in the Nursing and Midwifery Quality Care-Metrics for Acute Care Services.
- Continence and toileting, from issues raised about the availability of assistance with toileting when required in the National Patient Experience Survey (HSE, 2018a). This was specifically requested by the HSE Quality Assurance and Verification Healthcare Audit team.
- Prescribing of psychotropic medications, given the in-progress National Clinical Guideline (NCG) "Appropriate prescribing of psychotropic medication for non-cognitive symptoms in people with dementia" (Department of Health, 2019a) (NCG 21). INAD-2 gave an opportunity to perform a baseline audit of current practice, prior to the launch and implementation of the guideline, to support the implementation of this guideline in 2020-2022.

Of note, the psychotropic audit tool was developed by the guideline development group for the NCG (a multidisciplinary team of 27 experts and service user representatives), directly based on the proposed guideline content. This audit tool was accepted by the INAD-2 Steering Committee without alteration.

The INAD environmental audit tool underwent only minor amendments for INAD-2, as it was used alongside a recently developed more in-depth environmental audit tool based on the "Dementia friendly hospitals from a universal design approach: Design guidelines 2018" by TrinityHaus, Trinity College Dublin. It is planned that the more in-depth environmental audit tool will be used for future audits, having been benchmarked to the INAD-2 ward environmental audit tool on this occasion in 15 hospitals.

All 35 hospitals who participated in the first INAD were invited and strongly encouraged to participate in INAD-2. In addition, the main orthopaedic hospitals (Cappagh National Orthopaedic Hospital, Kilcreene Orthopaedic Hospital and Croom Hospital Limerick) were invited to participate in INAD-2, given the overlap between hip fracture and dementia (Smith et al., 2020), and the high occurrence of delirium post hip fracture (Mosk et al., 2017; O'Regan et al., 2013).

A total of 33 hospitals participated in the INAD-2 (Appendix B). The four acute hospitals in the RCSI hospital group (Beaumont Hospital, Connolly Hospital Blanchardstown, Cavan & Monaghan Hospital, and Our Lady of Lourdes Hospital, Drogheda) did not participate at the instruction of the CEO of the hospital group. Kilcreene Orthopaedic Hospital also declined to participate.

The following three audit components were conducted in each hospital[2]:

1. The Hospital Organisational Audit collected data in each hospital on the governance and delivery of: dementia care; continence promotion; dementia, delirium and mental health assessment; transfer of vulnerable patients; formal information collection systems pertinent to the person living with dementia; formal systems and procedures for the recognition of dementia in the hospital; dementia specific training, learning and development; specific resources supporting people living with dementia; services for people living with dementia; physical environment; and one-to-one observation in the hospital (Appendix C).
2. The Case Note Audit examined 30 healthcare records from each hospital to gather information on practice in relation to: assessments (multidisciplinary assessments, cognitive and mental state assessments, collateral information about the person living with dementia); discharge processes (assessment before discharge, discharge coordination and multidisciplinary input, discharge planning, and support for carers and family around discharge); palliative care approach (decision for resuscitation, referral for palliative care and bereavement support, and advance care planning); one-to-one observation service; and the prescribing of psychotropic medication (Appendix D).
3. The Ward Environmental Audit examined 2-3 wards per hospital, where the auditors looked at aspects of the physical environment including: ward size and layout; signage; the floors, bed and rest areas; accessibility of toilet and bathing facilities; and whether the environment promoted independence for the person living with dementia (Appendix E). In addition, a smaller number of hospitals (n=15) had a more detailed audit of the structural environment completed by auditors from Trinity Haus, Trinity College Dublin.

Initial notification of the audit was sent out by members of the audit team from the HSE Healthcare Audit, Quality Assurance and Verification to the National Director of Acute Hospitals, the National Director of HSE Quality Assurance and Verification and hospital group Chief Executive Officers (CEOs). Hospital CEOs/Hospital Managers were then notified individually by the INAD-2 Audit Coordinator, who requested the nomination of an INAD-2 site liaison for the hospital. The INAD-2 Audit Coordinator worked with the site liaison to arrange the site visit and collection of audit data.

Data for the organisational audit was collected by interviewing one or more of the following: the Hospital Manager/CEO, the Director of Nursing (DON), a geriatrician and any other relevant staff nominated by the hospital. The majority of hospitals (73%, 24/33) had 2-4 hospital representatives present for this interview (3 hospitals had only one representative present and the remaining 6 hospitals had more than four representatives present). The hospital organisational audit tool, along

2. All three audit components were conducted in each of the 33 hospitals, except Croom Orthopaedic Hospital Limerick where there was an insufficient number of case notes with a recorded diagnosis of dementia to be able to perform the case note audit.

with a checklist of documentation to be prepared for the interview (Appendix F), was sent to the site liaison in advance of this meeting for distribution to key stakeholders.

Data collection for the case note audit was carried out between June and November 2019. The number of healthcare records audited per site for INAD-2 was increased from 20 in the first INAD, to 30 in INAD-2, as the denominator had been small for some audit items (e.g. being treated on an end of life care pathway) when only 20 healthcare records were included. A total of 934 healthcare records were audited from 32 hospitals[3], which is an average of 29 healthcare records per hospital (30 healthcare records audited in each hospital apart from Cappagh National Orthopaedic Hospital (N=27), Cork University Hospital (N=23) and South Infirmary Victoria University Hospital (N=14)).

The majority of hospitals (87.5%, 28/32) self-audited their healthcare records, with 20% of these healthcare records re-audited by a HSE Healthcare auditor for quality assurance (see below), while 12% of hospitals were audited entirely by two HSE Healthcare auditors (who performed a similar quality assurance exercise for each other). Where hospitals self-audited the healthcare records, the audit was conducted by a combination of staff: doctors (52.6%, 428/814), nursing staff (primarily candidate ANPs; 43.1%, 351/814), other relevant staff (e.g. risk manager, clinical audit manager; 2.7%, 22/814), and Allied Health Professionals (1.6%, 13/814).

All staff involved in the case note audit data collection completed audit training with the Audit Coordinator prior to commencing the audit and a guidance document was prepared for their use (Appendix G), as well as a detailed user manual for completion of the psychotropic audit (Appendix H).

Eligible healthcare records were identified through the Hospital Inpatient Enquiry (HIPE) system using the following criteria:

1. A diagnosis of dementia of any type
2. Minimum length of stay of 72 hours[4]
3. Dates of discharge (or death) between 1st January and 30th April 2019[5].

A total of 40 healthcare records were requested from each hospital to allow for a small number of healthcare records to be later removed for re-admissions, out-patient appointments etc., leaving at least 30 records available for auditing. While some hospitals (n=8) retrieved the required number of healthcare records at random from the eligible pool, as per the audit guidelines, many hospitals retrieved a full sample of less than 40 healthcare records, as their HIPE records indicated that there were not 40 people with dementia admitted during the time period. In these instances, the eligible audit period was extended retrogradely until the required number was reached. In a small number of cases (n=4), the eligible audit period was extended up to one year. However, even with this extended

3. Case note data was not available for Croom Orthopaedic Hospital Limerick due to insufficient numbers

4.For the first INAD, the criterion for minimum length of stay was 5 days. The INAD-2 Steering Committee amended this to 72 hours for INAD-2 given the overall reduction in length of stay in hospitals, and to mirror the change in this criterion in later UK NAD rounds.

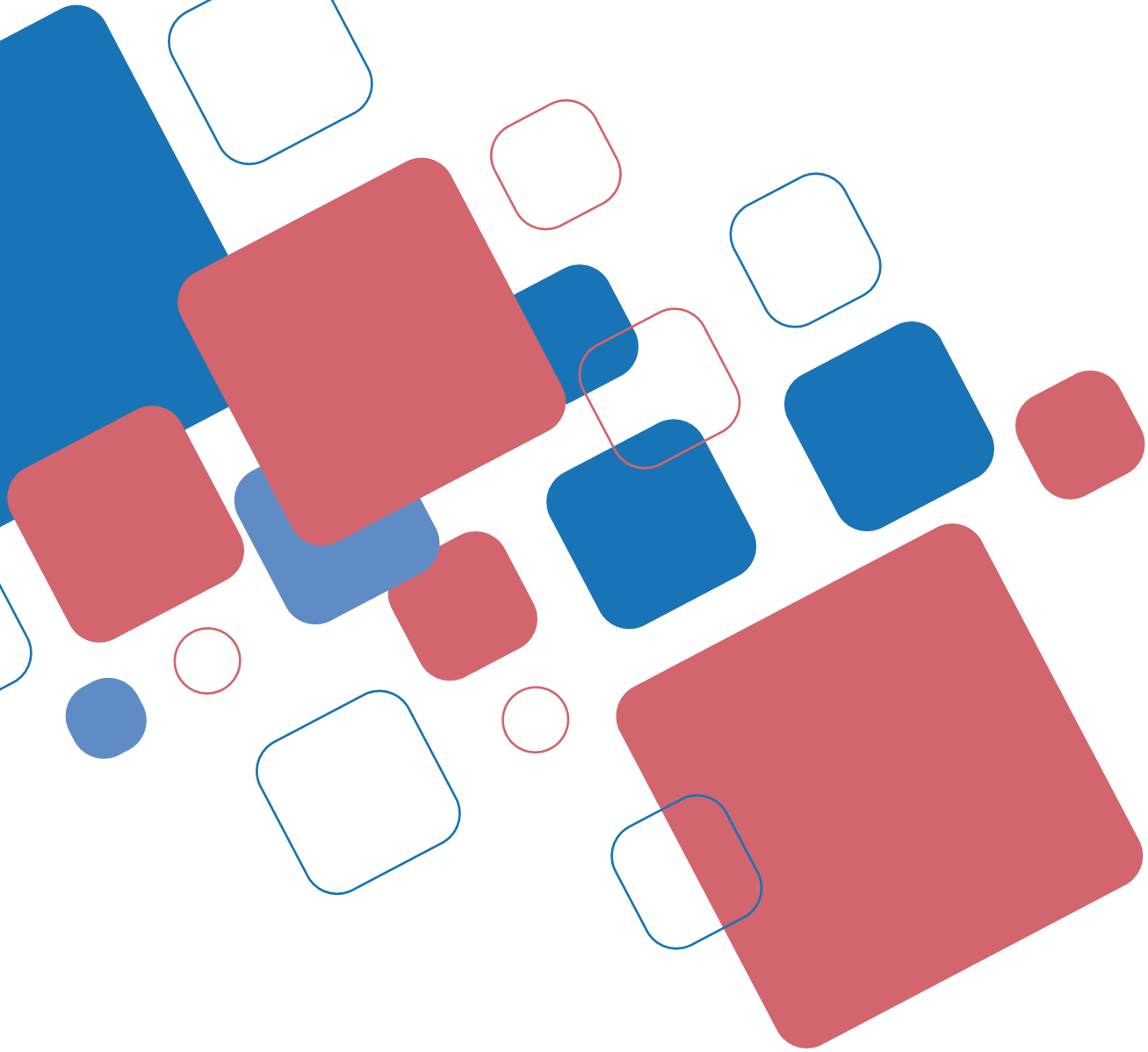
5. For the first four hospitals in which the case note audit was conducted, the dates of discharge (or death) were between 1st November 2018 and 28th February 2019.

period, three hospitals were unable to identify the required number of healthcare records; in two hospitals it was agreed to proceed with a smaller number of healthcare records and in one hospital (Croom Orthopaedic Hospital) the case note audit was not ultimately performed as only five eligible healthcare records were identified. While it is possible that some hospitals did not have 40 patients living with dementia admitted (with a length of stay of 72 hours or more) in one year, it is more likely that this reflects under recording of dementia in healthcare records, and hence falsely low HIPE coding, as has been previously documented in Irish hospitals (Brady et al., 2016).

In all hospitals, a quality assurance process was implemented whereby six healthcare records from each self-auditing hospital were re-audited by a HSE Healthcare auditor (or by a second HSE Healthcare auditor where the hospital was entirely audited by HSE Healthcare auditors). Inter-rater reliability was assessed using Cohen's Kappa coefficient in conjunction with percentage agreement for each item on the audit tool. This data is not presented where the inter-rater reliability and/or percentage agreement was high. Of note, where the audit item denominator is small, and/or the majority of answers to an item falls into one of two or three categories, the Kappa value can be low even if there was very good percentage agreement. While percentage agreement does not take into account the role of chance, it can be a more accurate representation of reliability between raters in some instances. Thus, both measures are presented where this issue arises.

Ward environmental audits were carried out in 2-3 medical, surgical or orthopaedic wards in the 33 participating hospitals. In total, data were collected from 72 wards. The environmental audit was conducted through direct observation, with a small amount of input from the ward nurse manager. These audits were conducted by the INAD-2 Audit Coordinator and/or an auditor from TrinityHaus.

The results from the three audits have been combined and are reported under the following headings below; Governance and Dementia Specific Roles, Availability of Services, Physical Ward Environment, Case Note Audit- Details of Sample (presented here for context for the sections that follow), Physical Assessment, Mental Assessment, Staff Training, Discharge Planning and Discharge, Palliative Care and Psychotropic Prescribing. In all cases valid percentages are presented, i.e. missing data is excluded from the calculation. Unless otherwise specified, all variations in denominator values are due to missing data.



Results Chapter 1

Governance and Dementia Specific Roles

SUMMARY OF FINDINGS

- Currently, just two hospitals (6%) have a dementia care pathway in place which encompasses in-patient care, unchanged from 2013.
- In contrast to 2013, a dementia quality improvement team or working group is now in place in 36% of hospitals (12/33) and is in development in one other.
- The majority of hospitals (27/33) now have one or more champions for dementia, though still just 30% of hospitals (10/33) have a champion for dementia on all wards.
- In contrast to 2013, there is now some availability of dementia specific roles within hospitals; nine hospitals have a dementia specific nurse specialist or dementia specific RANP/cANP(s), and four hospitals have a dementia specific occupational therapist.
- Almost a quarter of hospitals now have a system in place across some or all areas of the hospital to ensure that all staff are aware of the person's dementia or condition and how it affects them.

A CARE PATHWAY FOR DEMENTIA WITHIN THE HOSPITAL

In recent years there has been an increasing focus on the development of integrated care pathways and care bundles for dementia to improve care in acute care settings. A review published in 2017 found insufficient evidence to judge the effectiveness of integrated care pathways for dementia care in acute settings, and also limited evidence about care bundles for dementia in this setting (O'Sullivan et al., 2017). While the evidence base does not yet exist, intuitively care pathways seem a good idea and have widespread support. The HSE and Genio[6] provided funding to three hospitals within Ireland to develop integrated care pathways for dementia, over approximately three years per site. Two of the sites also employed new dementia specific staff. An independent evaluation of these projects demonstrated a positive impact on service provision, e.g. accelerated identification and assessment of patients living with dementia, and also reduced length of hospital stay (Brady et al., 2018a; Brady et al., 2018b; Brady et al., 2018c). A template for an integrated care pathway for dementia care in acute hospitals, suitable for local adaptation, was developed by a working group led by the National Dementia Office in 2019. This is being disseminated nationally in 2020.

Four hospitals (12% compared to 6% in 2013) reported having a dementia care pathway in place[7], though two of these were ambulatory care pathways only, rather than also covering in-patient care. Promisingly, a further seven hospitals (21%, compared to 6% in 2013) are in the process of developing a dementia care pathway and/or care bundle. Of these eleven hospitals with a dementia care pathway and/or bundle in place or in development, the responsibility for implementation/review of the pathway lies with a senior clinician. In five cases, this is a consultant geriatrician, in four hospitals this is a team of staff (three of which included one or more consultant geriatricians), while

6. Genio is a European organisation based in Ireland specialising in social service transformation and working with philanthropy and government at national and EU levels.

7. One hospital has an integrated care pathway for cognitive impairment in place which was accepted as a care pathway for dementia for the purposes of the audit.

in the remaining two hospitals this was an old age psychiatrist (n=1), and a rANP/CNSp (n=1).

Of the eleven care pathways and/or bundles that are in place or are currently being developed, eight of these are currently, or will be, integrated with a care pathway/bundle for delirium, two will be integrated with a care pathway/bundle for stroke, two will be integrated with a care pathway/bundle for fractured neck of femur, and four will be integrated with a care pathway/bundle for falls. There was a lack of clarity in some hospitals about what exactly the integration of two or more care pathways would entail.

None of the hospitals audited have a policy on internal transfers for recording and reporting instances of night time bed moves (i.e. between 8pm and 8am) at hospital level, though many hospital representatives mentioned that no patient, and in particular those with dementia, would be moved during the night, except due to a medical emergency.

DEMENTIA QUALITY IMPROVEMENT TEAMS AND WORKING GROUPS

A dementia quality improvement team, working group or consortium can play an important part in achieving significant and lasting changes to existing services as well as developing and implementing new initiatives (Keogh et al., 2016). Twelve of the hospitals audited (36.4%, 12/33) have a dementia quality improvement team, working group or similar group in place (e.g. Dementia Working Group, Dementia and Delirium Steering Group). One other hospital has a group set up, but this had not met at the time of the audit. A further hospital has a dementia group in place on one ward, not hospital wide. Nine hospitals had another group in place which encompasses dementia (e.g. Integrated Care Programme for Older People (ICPOP) group), and one other hospital was in the process of developing such a group. Thus, more than one quarter of hospitals audited (9/33, 27.3%) do not have and are not in the process of developing a dementia quality improvement team/working group or a wider group which encompasses dementia.

Regular meetings and continuous communication are a critical enabler of the success of a dementia quality improvement team or consortium (Keogh et al., 2016). Where a dementia quality improvement team/working group is in place, the group meets monthly (25.0%, 3/12), 6-weekly (8.3%, 1/12), bi-monthly (33.3%, 4/12), quarterly (25.0%, 3/12) or bi-annually (8.3%, 1/12). All of these groups include nursing management and healthcare professionals and the majority include multidisciplinary representation (91.7%, 11/12) and a representative of the executive management team (75.0%, 9/12). A substantial amount of these groups (58.3%, 7/12) include a practice development coordinator. Less than half (41.7%, 5/12) include bed management/patient flow representative(s) and carer/service user representation. One of these groups includes organisations which support people living with dementia, e.g. the Alzheimer Society. A clear governance and reporting structure to senior hospital management is in place for 75% of these groups (9/12). The provision by the National Dementia Office of acute hospital quality improvement grants in 2020 (through an open competition) is likely to advance the development of dementia quality improvement teams and other quality improvement projects within acute hospitals.

CHAMPIONS FOR DEMENTIA

Dementia champions, who have received effective preparation and ongoing support, are important in ensuring the voices of the person living with dementia, their family and supporters are heard. They can influence and improve the acute care experience for people living with dementia, in what is a complex health and social care arena (Brown et al., 2018). For the purposes of this audit, champions for dementia were defined as those with a demonstrated passion for supporting and encouraging those around them to provide optimum dementia care, even if they have not necessarily completed formal Dementia Champion training. A substantial number of hospitals, in comparison to 2013, have champions for dementia in place; 81.8% of hospitals (27/33) have one or more champions for dementia at hospital level. More than half of hospitals (53.3%, 16/30) have one or more champions for dementia in the ED/AMAU/Acute Surgical Assessment Unit (ASAU)/Acute floor[8]. While just 23% of hospitals (8/34) had one or more champions for dementia in place at medical directorate level in 2013, this has now increased to 51.6% of hospitals (16/31). In addition, almost a third of hospitals audited (31.3%, 10/32) have one or more champions for dementia in place at surgical/peri-operative/trauma level. However, 32% of hospitals (11/34) stated they had one or more dementia champions in place at ward level in the hospital in 2013, and this has not improved in 2019, with 30% of hospitals (30.3%, 10/33) currently having champions for dementia on all wards (excluding maternity and paediatrics).

DEMENTIA SPECIFIC ROLES

Dementia specific roles have the potential to counteract the pressure on resources and the conflict between managing the acute medical symptoms and the cognitive and non-cognitive symptoms of the person living with dementia. For the purposes of the audit, 'dementia specific' was defined as a staff member having protected time to perform a dementia specific role rather than having received dementia training or education. For example, a dementia nurse specialist role could provide substantial input in the acute hospital in order to improve the hospital experience for older adults and their families and provide timely assistance and support for service users as well as service providers (Duane et al., 2015; Elliot & Adams, 2011; Griffiths et al., 2015).

Eight of the hospitals audited have dementia specific Advanced Nurse Practitioners (either registered or still a candidate); four of these have one position in the hospital and four others have two. One hospital has a dementia specific ANP in-reaching from the community, and another outlined that there is a dementia specific ANP for the hospital group with group remit but no defined role in the hospital. One hospital has a dementia specific nurse specialist in place (one whole time equivalent; WTE) and one other outlined that funding for a CNS in delirium and dementia is in progress. One hospital has a CNM2 for dementia and another has a CNS for dementia in the community. In addition, CNS(s) in frailty and Care of the Older Person and ANP/candidate ANP(s) in frailty and Care of the Older Person are in place in some hospitals, with potential to support people with dementia in the hospital.

8. Three hospitals had no ED/AMAU/ASAU/Acute floor

In addition, four hospitals reported that they have a dementia specific OT; one of these is 0.8 WTE, two others are 1 WTE. One hospital has 2 WTE posts, however one is based in the day hospital and the other in out-patients. One other hospital stated that a dementia specific OT post (1 WTE) has been approved and is due to commence in the coming months.

RECOGNITION OF DEMENTIA

In order to provide optimum dementia care, and ensure continuity of care throughout the in-patient stay for the person living with dementia, it is important that staff are made aware of the person's dementia diagnosis. Systems in place within hospitals to ensure that staff are aware of the person's dementia and associated needs are becomingly increasingly common and typically consist of a visual identifier (e.g. a butterfly, flower or other symbol) placed at the bedside or on semi-public patient boards (Northcott et al., 2019). Hospitals were asked whether they had a system in place across the hospital to ensure that all staff are aware of the person's dementia or related condition and how it affects them. There was positive development in this area since the first INAD, with 24% of hospitals having a system in place across some or all of the hospital (communication had been through verbal handover only in 2013). Five hospitals audited (15%) indicated that a system is in place across all areas and wards of the hospitals and all of these also had a system in place to ensure that staff from other areas are aware of the person's dementia or related condition when the person leaves their designated care area. A further two (6%) indicated there is a system in place at ward level only and one other has a system in place in some hospital wards. In all cases, a visual indicator, symbol or marker was used (e.g. butterfly symbol or flower magnet on the patient board at the nurses' station) except for one hospital, where the system in place for when the person leaves their designated care area, was a transfer form which includes dementia as an item. An additional two hospitals indicated that implementation of a system is planned.

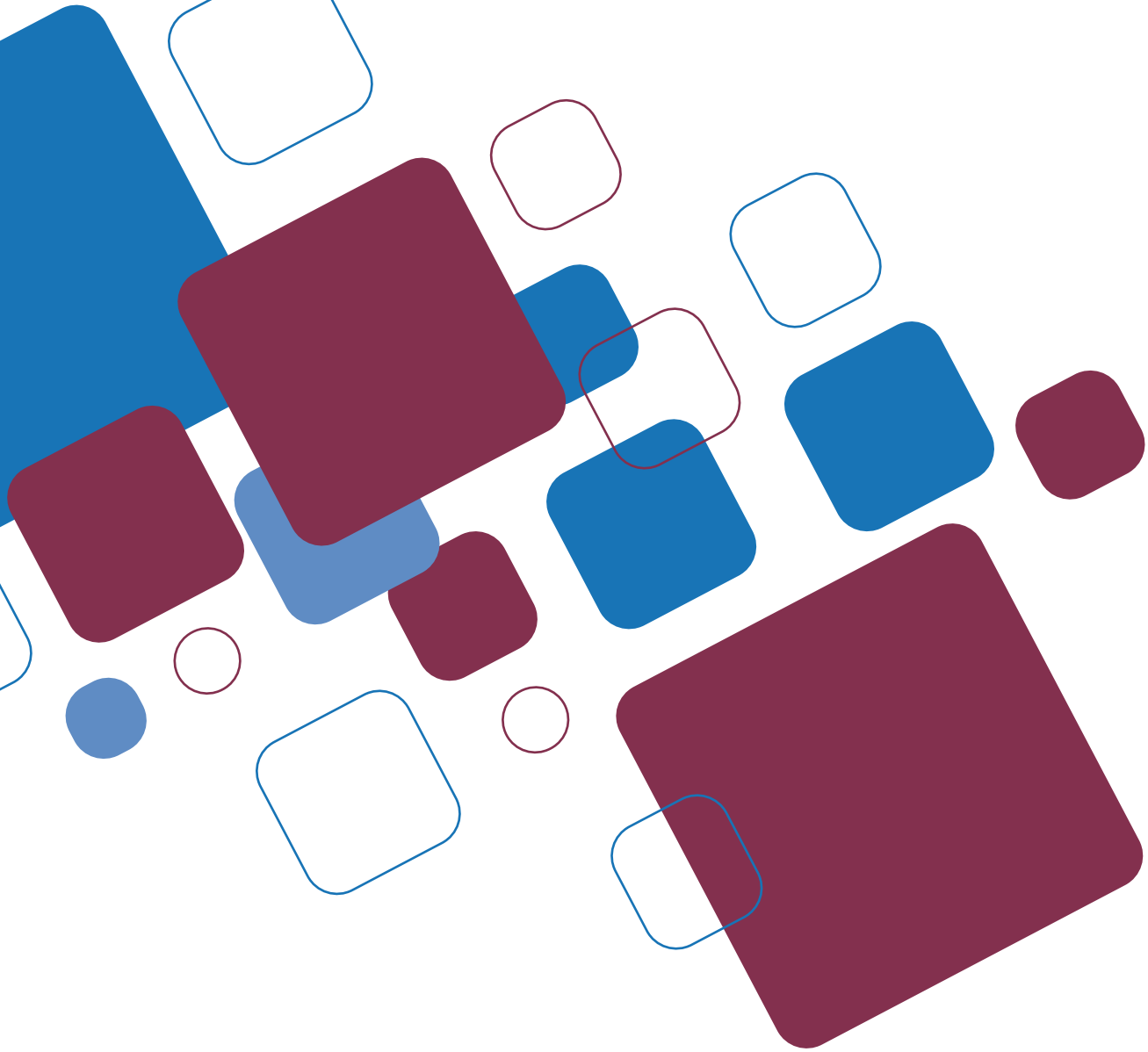
CONCLUSION

These findings show that while, as yet, a very small number of hospitals have a dementia care pathway in place, there are definite indications of there being more focus on dementia care in acute hospitals. This includes improvements since 2013 in the presence within hospitals of a dementia quality improvement team or another group which encompasses dementia quality improvement; more dementia specific roles (predominantly nursing), dementia champions and advocacy services; and more use of visual identifiers to ensure all staff know the person has dementia.

However, further development is needed in many hospitals to implement systems to support optimum dementia care, such as a recognition system. More staff resources are required, including champions for dementia and dementia specific roles, given their pivotal position in driving the enhancement of dementia care. The development by the National Dementia Office of a suite of resources to facilitate hospitals to implement integrated dementia/delirium care pathways, which will be nationally disseminated in 2020, will support hospital groups and individual hospitals to develop locally-attuned integrated care pathways.

RECOMMENDATIONS

- As per the National Dementia Strategy, a dementia care pathway should be implemented within each hospital, to include any period in the ED/AMAU. There should be a senior clinician who leads the work of the hospital on this. This pathway also needs to include local pathways to avoid unnecessary hospital attendance or admission.
- This pathway similarly needs to include the hospital wards and particularly transitions to/from wards, including to/from home or residential care, with a focus on care planning and information transfer.
- Any pathway for dementia has to incorporate delirium screening, prevention and treatment as an integral part, given the close and bi-directional relationship between dementia and delirium.
- People living with dementia should not be moved within or between wards unless the move is necessary for their own care.
- A dementia quality improvement team or similar working group should exist in every hospital, with a clear governance structure and communication path to senior hospital management. This group can be a sub-group of an overall hospital quality improvement group or similar group, but it does require a direct focus on the needs of people living with dementia.
    - This group should be chaired by a senior member of staff and should be multidisciplinary, ideally encompassing executive management, healthcare professionals, bed management/ patient flow, nursing management, organisations which support people living with dementia, carer/service user representation, and practice development coordinator(s).
    - This group should be responsible for the planning and implementation of key activities and projects to improve dementia care within the hospital, including, but not limited to: the implementation of dementia care pathways; planning and implementing dementia friendly environmental changes; and increasing the provision and uptake of dementia education within the hospital.
- There should be suitably qualified and trained staff available within the hospital to support and advise on optimum dementia care within the hospital; this includes a wider team of dementia champions and one or more dementia specific roles. These latter roles should not be limited to nurse posts only.
- Hospital management, through the dementia quality improvement team, in each hospital should implement systems (e.g. the Butterfly Scheme) to ensure that people with known or suspected dementia can be identified by staff on the ward, and also staff from outside the ward when accessing other treatment areas.
- There should be a national level re-audit of all hospitals in 2022 (to be presented in 2023) and in addition, senior hospital management should arrange self-audit in the interim through the dementia quality improvement team.



Results Chapter 2

Availability of Services

SUMMARY OF FINDINGS

- Currently, 88% of hospitals (29/33) provide regular access to a geriatric medicine service.
- Overall, 91% of hospitals (30/33) have regular access to liaison psychiatric services and 85% of hospitals (28/33) have regular access to liaison psychiatry of old age services.
- Most hospitals reported access to neurology (21/33) and occupational therapy (29/33), with psychology services available in less than one third of hospitals (10/33). Pharmacy is available in all but one hospital.
- Just 58% of hospitals (19/33) have access to a social worker and 76% of hospitals (25/33) have a discharge coordinator in place.
- In contrast to 2013, the majority of hospitals (91%, 30/33) now provide advocacy services with experience and training in working with people living with dementia.
- There is relatively poor access to social and therapeutic activities for people living with dementia; 42% of hospitals (14/33) have access to such activities.

GERIATRIC MEDICINE

The National Clinical Programme for Older People recommends that all older adults identified as being frail or at risk of frailty should have a timely comprehensive geriatric assessment (CGA) performed and documented in their permanent health record (HSE, 2012). According to a frailty screening tool that is commonly used in Irish hospitals (the Clinical Frailty Scale), all older people with dementia are classified as frail (Rockwood et al., 2005). The multidisciplinary team performing this CGA should include experienced individuals drawn from medical, nursing and health and social care professions and may often include a geriatrician or geriatric medicine team (National Clinical Programme for Older People, 2016).

- 88% of hospitals audited (29/33) provide access to a geriatric medicine service which can assess and/or support patients living with dementia (two of these are only available half time or less) while two other hospitals indicated that this service is accessed through the community or through another hospital within the hospital group, and two others indicated they have no access to geriatric medicine. This indicates little change since 2013 when 89% of hospitals (31/35) provided access to a geriatric medicine service, with 68% of these based on-site.

The times that services were available varied. Where geriatricians were on call out of hours on a general medical call rota with other general consultant physicians, this was not considered to be an out of hour's dedicated geriatric medicine service.

- 39% (13/33) of hospitals stated they have access to geriatric medicine in the evenings (compared to 23% of hospitals (8/35) in 2013).
- 33% (11/33) of hospitals stated that they have access to geriatric medicine at weekends (compared to 23% of hospitals (8/35) in 2013).

LIAISON PSYCHIATRY

Liaison psychiatry deals with the interface between physical and psychological health by providing psychiatric treatment to patients attending the hospital as either an in-patient or out-patient (Mental Health Commission, 2010). Access to liaison psychiatry services has apparently reduced somewhat in comparison to 2013.

- 91% of hospitals audited (30/33) reported that liaison psychiatry services are available during the day, though one of these was only available two days per week and another was available through another hospital within the hospital group. Two other hospitals reported that this service is accessed through the community or on referral. In 2013, 100% of hospitals (34/34) reported that liaison psychiatric services were available during the day.
- 39% of hospitals (13/33) reported that liaison psychiatric services are available in the evening, compared to 56% of hospitals (19/34) in 2013.
- 39% of hospitals (13/33) reported that liaison psychiatric services are available at weekends, compared to 56% of hospitals (19/34) in 2013.

These differences may reflect a reduced availability, or a more stringent interpretation of "availability".

PSYCHIATRY OF OLD AGE

"A Vision for Change", a report on mental health policy outlines that "anybody aged 65 years or over with primary mental health disorders, or with secondary behavioural and affective problems arising from dementia, should be cared for by a mental health services for older people team" (Expert Group on Mental Health Policy, 2006, p. 114). A new model of care for specialist mental health services for older people was launched in 2019 (National Clinical Programme for Older People, 2019) which outlines how specialist mental health services for those aged 65 and over should be developed appropriately to focus on the diagnosis and treatment of mental disorders in this age group. In contrast to liaison psychiatric services, access to liaison psychiatry of old age (POA) has improved since 2013, although there is still slightly less availability of Liaison POA services compared to general liaison psychiatry.

- The majority of hospitals (85%, 28/33) reported that liaison POA services are available during the day (compared to 71% of hospitals (25/35) in 2013). In five cases, this was provided from another hospital or the community, with no on-site service.
- A minority of hospitals (18%, 6/33) reported that liaison POA services are available in the evening, compared to 11% of hospitals (4/35) in 2013.
- A similar small increase was noted for availability of liaison POA services at weekends; 15% of hospitals (5/33) compared to 2% of hospitals (2/35) in 2013.

NEUROLOGY

A neurology service is valuable in providing assessment for people living with dementia, particularly those with more complex neurological symptoms of dementia. Neurology is available to assess and/or support patients living with dementia in just under two thirds of hospitals audited (63.6%, 21/33). Where available, this is a limited service in a number of cases; in two hospitals the service is available for one or two days per week and in four hospitals the service is available by a consultation service from another hospital. The times that services were available in the evenings and at weekends varied; seven hospitals reported neurology is available in the evening and eight hospitals reported neurology is available at weekends.

MULTIDISCIPLINARY TEAM

A multidisciplinary approach to dementia assessment, support and management is extremely effective. The majority of hospitals (87.9%, 29/33) have an occupational therapy service available to assess and/or support patients living with dementia, similar to 2013 when 89% of wards audited had access. In one hospital where the service is available, it is on a half time basis (i.e. 2.5 days per week), and in another, the service is available from another hospital in the hospital group only. Only two hospitals reported that occupational therapy is available in the evening time (one of these is an "on call" service) and only one hospital reported that occupational therapy is "on call" at the weekend.

Overall, almost one third of hospitals audited (30%, 10/33) reported that a psychologist was available to assess and support patients living with dementia (though in one case this was provided from another hospital in the hospital group). This is an increase from just 9% of hospitals in 2013. Two hospitals reported that psychology is available in the evenings (6.1%), while just one hospital reported that psychology services are available at weekends (3.0%).

The availability of speech and language therapy and dietetics is outlined as part of the physical assessment chapter in the section relating to specialist input under nutrition.

PHARMACY

All but one hospital audited (97.0%, 32/33) have access to a pharmacy service to assess and/or support patients living with dementia, though in one of these hospitals the service is provided from another hospital in the hospital group. Four hospitals reported that pharmacy services are available in the evening time and six hospitals reported that pharmacy services are available at the weekend, although this is a limited service ("on call" only, or restricted times).

SOCIAL WORK, ADVOCACY AND DISCHARGE COORDINATION

More than half of hospitals audited (57.6%, 19/33) reported that they have access to a social worker, somewhat better than in 2013, when 40% of hospitals audited (14/35) reported having access to a social worker. In hospitals where access to a social worker is available for patients living with dementia, in one hospital this is only one day per week. A social worker is available in the evening in only two hospitals, and at weekends in only one hospital. The majority of social workers (17/19) working with people living with dementia and their carers have had education in the ongoing needs of people living with dementia.

The audit explored whether hospitals had access to patient advocacy services. Advocacy services can be HSE-delivered or independent, and provide support to a person living with dementia and their family. Compared to just 20% of hospitals (7/35) in 2013, in the current audit 91% of hospitals audited (30/33) reported having access to advocacy services with experience and training in working with people living with dementia. An additional hospital reported having this available through the hospital group, but not directly available on-site.

There is a discharge coordinator in 76% of hospitals audited (25/33). The discharge coordinator is available in the evening time in five hospitals and available (limited hours) at the weekend in three hospitals. The majority of discharge coordinators (20/25) have had education in the ongoing needs of people living with dementia, including six who have completed the National Dementia 4-hour dementia acute care programme, and one who has completed the 2-day “Enhancing and enabling wellbeing for the person with dementia” programme.

SOCIAL AND THERAPEUTIC ACTIVITIES

The National Institute for Health and Care Excellence recommends that psychosocial and environmental interventions are offered as part of initial management of non-cognitive symptoms in people living with dementia (NICE, 2018). This has since been further delineated for Ireland with the launch, in December 2019, of the NCG on “Appropriate prescribing of psychotropic medication for non-cognitive symptoms in people with dementia” (NCG21) and the sister document “Non-Cognitive Symptoms of Dementia (NCSD): Guidance on Non-pharmacological Interventions for Healthcare and Social Care Practitioners”. Thus, it is important that wherever possible, there is access to non-pharmacological interventions for non-cognitive symptoms for people living with dementia, during an acute hospital admission. Furthermore, research has demonstrated that while in hospital, people living with dementia have a desire to do familiar things that they enjoy and consider purposeful in order to keep both their body and brain active and consequently improve health and wellbeing (Hung et al., 2017). Thus, ideally there would be access to social and therapeutic activities in the hospital for people living with dementia.

However, there is relatively poor access to these in many hospitals audited; less than half (42.4%, 14/33) reported that they have one or more social or therapeutic activities available. Approximately one fifth of hospitals have either art therapy (18.2%, 6/33) and/or music therapy (21.2%, 7/33); four of these hospitals have access to both. Other physical activities (e.g. reflexology, massage) were much less common, with these in place in only one hospital, and on a "needs basis" only. Less than half of hospitals (42.4%, 14/33) reported that they have "other" activities available. Some of the activities reported by the hospital representative to the audit coordinator as examples reflect a poor understanding of meaningful therapeutic activities, e.g. used in isolation, "twiddle" mitts or blankets and "regularly turning on music for patients" would not be considered social and therapeutic activities, and reflect an attitude to people living with dementia as passive recipients of an activity rather than exerting choice in their occupation.

CONCLUSION

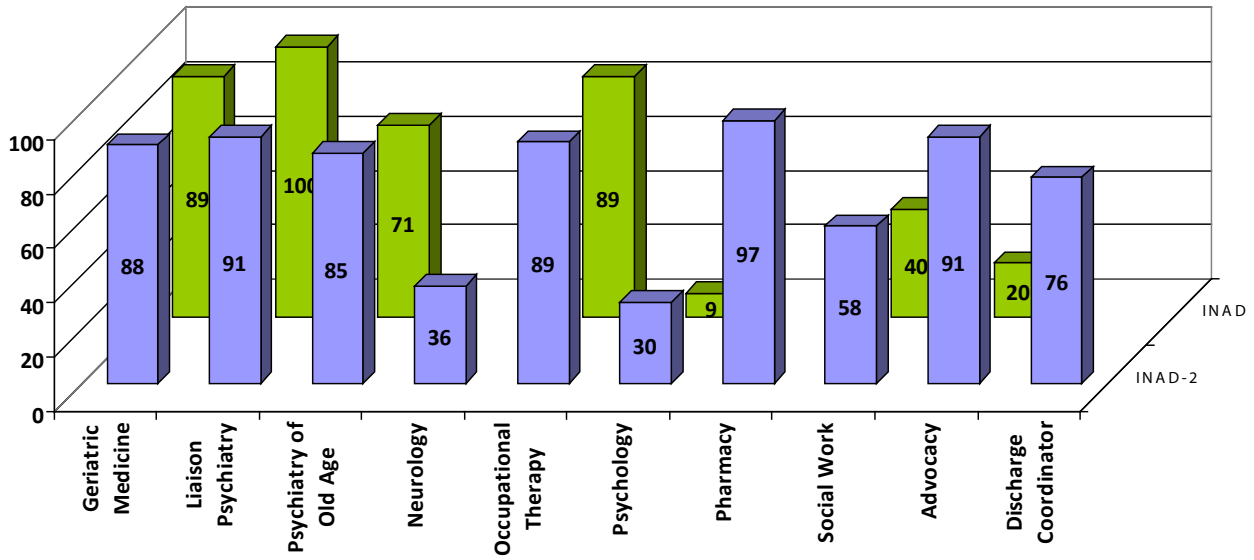


Figure 3. Comparison of Availability of Services[9] (%)

Figure 3 provides a comparative overview of the availability of services in 2013 and 2019. Given the complexity of the management of dementia care, a multidisciplinary approach is required. The availability of services improved in almost all disciplines from 2013 to 2019. Geriatric medicine, Psychiatry of Old Age, liaison psychiatry, occupational therapy, pharmacy and advocacy services are available in most hospitals, but less so neurologists, social workers and discharge coordinators, while less than a third of hospitals have access to a psychologist. These gaps should be addressed in order to provide optimum dementia care to people living with dementia during an acute hospital admission. On a positive note, almost all social workers, advocates and discharge coordinators have undergone dementia training.

9. No comparable data for 2013 for neurology, pharmacy and discharge coordinator. Data for availability of occupational therapy in 2013 is based on ward organisational audit data.

RECOMMENDATIONS

- There should be access to gerontological services (such as a consultant, specialist registrar or RANP) seven days per week for the assessment and support of people living with dementia.
- Liaison psychiatry, and particularly liaison Psychiatry of Old Age services, should be accessible seven days per week.
- A neurology opinion should be available seven days per week, if required, for all patients with: dementia or suspected dementia under the age of 65; where dementia accompanies or presents with a movement disorder; where the dementia is accompanied by seizures; or is rapidly progressive in course.
- There should be seven-day availability of other key services such as psychology, social work and discharge coordinators, and timely access to other relevant health and social care professionals as indicated by the person's needs.
- Hospitals should be able to provide social and therapeutic activities for people living with dementia within the hospital. All front-line hospital staff should receive education in person-centred dementia care.

Results Chapter 3

Physical Ward Environment

SUMMARY OF FINDINGS

- While there is some improvement from the first INAD, only a small proportion of wards have adequate environmental cues to aid orientation for people living with dementia.
- Almost one quarter of wards (18/72) have some colour schemes in use, although no hospital has a comprehensive colour scheme to help people living with dementia find their way around. This is compounded by few wards having sufficient and/or appropriate signage in place.
- There are deficits in toilet and bathroom signage in a number of hospitals; there is signage on some or all toilet doors in 76% of wards audited (55/72) and signage on some or all bathroom doors in 63% of wards (45/72).
- Just 17% of wards (12/72) have space outside of a standard ward corridor for active people living with dementia to walk in; less than half of wards (31/72) provide handrails along the corridors. It was noted that handrails were often obstructed by equipment and trollies.
- Among the wards audited, 56% (40/72) have a room/area available for patients to use as a break from the ward environment.
- The flooring in the majority of wards is appropriate for a person living with dementia; all floors are plain/subtly patterned in 79% of wards (57/72) and all floors are subtly polished in 71% of wards (51/72).

Image comparison of an uncluttered and cluttered ward corridor

It is well established that admission to acute hospital can be distressing and disorientating for a person living with dementia. Research has shown however that agitation and distress for the person living with dementia can be reduced, and staff morale can be increased, through comparatively simple, cost-effective changes to the care environment (Waller & Masterson, 2015). Design guidelines for dementia friendly hospitals were published in Ireland in 2018 (Grey et al., 2018). These guidelines outline key design recommendations, such as:

1. Provide space and supports so that accompanying persons can remain with the person with dementia, where possible, throughout their time in the hospital
2. Soften the institutional environment: more human-scale[10], less clinical or austere in appearance
3. Familiar design: recognisable design that is easily understood and intuitive to use
4. Facilitate personalisation: provide opportunities to add personal belongings such as photos to reinforce identity and help with orientation
5. Optimise positive sensory stimulation while minimising negative stimulation as part of a calming and therapeutic approach
6. Provide indoor and outdoor contact with nature, and access to outdoor space to support active and passive therapeutic activities
7. Support orientation to date, time, location, and improve spatial cognition
8. Provide good way-finding that supports navigation
9. Provide good visibility and visual access: optimise lighting conditions and make important features, spaces and people clearly visible
10. Space for retreat in multi-bed wards, and communal areas in single-bed wards to allow social interaction

More than half of hospitals audited (57.6%, 19/33) had reviewed at least some areas within the hospital using an appropriate tool to establish whether they are dementia inclusive/dementia friendly. The majority of hospitals (87.8%, 29/33) have environmental changes planned/ongoing.

10. Designed for the needs of the users of the environment rather than designed for monumental or aesthetic effect.

ORIENTATION

The audit tool looked at the immediate surroundings of the person living with dementia when in hospital. In many cases, there were objects visible from the patient's bed that would help them to orientate themselves, as illustrated in Figure 4, with some improvement since the first INAD.

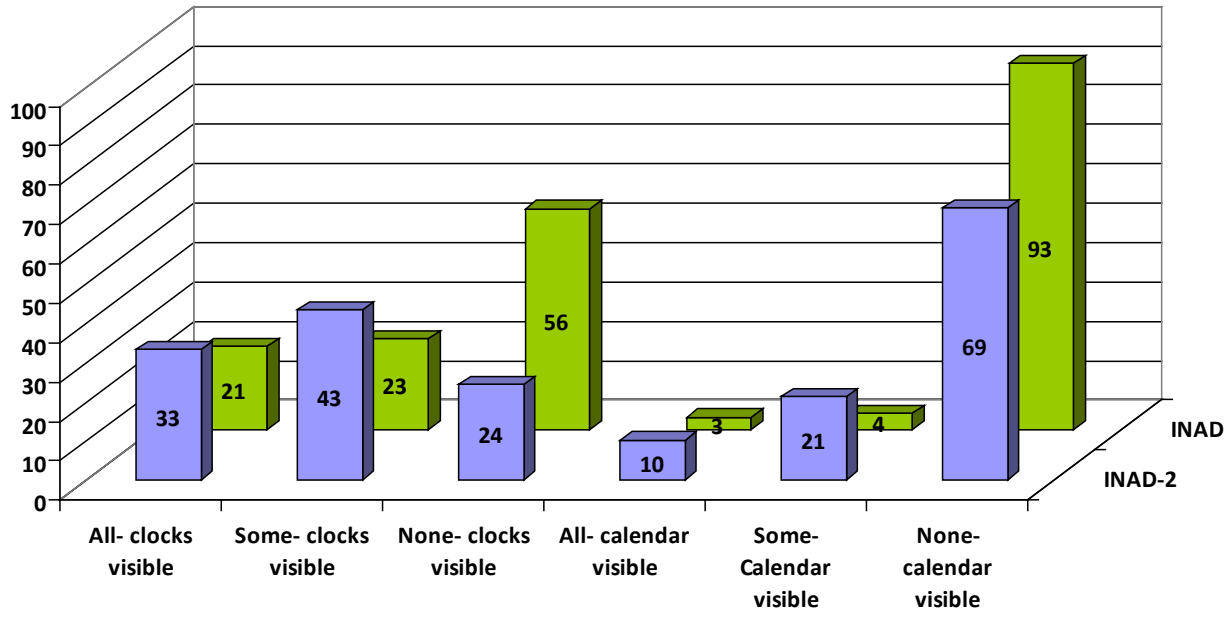


Figure 4. Environmental Cues for Orientation (%)

In all hospitals audited, the bed area within the ward was provided with a locker for patients to place personal belongings, though arguably this does not provide adequate space for the storage of personal objects including messages from families/friends and self-care items. In one ward audited, there is a lot of additional space and storage provided for personal objects and in another, each patient room had a separate large table affixed to the wall to place personal items. Some wards with a large amount of single rooms provided extra surfaces, such as window sills, for the storage and display of personal items. The storage and display of personal objects was often viewed by staff as a low priority in an acute care setting. There were call/alarm buttons visible and within reach for most patients in all wards (visible and within reach for most patients in 72/72 wards).

Recent research has demonstrated that hospital environments which are difficult to navigate and/or comprehend can have a negative impact on people living with dementia and their independent functions (Hung et al., 2017). At the time of the first INAD, no wards audited had used colour schemes to help people living with dementia find their way around the ward. There had been some improvement in this regard with 25% of wards (18/72) having some colour schemes in use, though this did not cover all ward areas or components, e.g. some wards painted all toilet doors a distinctive colour such as red or blue to enable patients to easily identify toilets. Just two thirds of wards (66.7%, 48/72) have some (36/72) or all (12/72) key areas (e.g. nurses' station) clearly marked (albeit higher than the 42% of wards in 2013).

The majority of wards audited (81.9%, 59/72) had signs to help direct and orientate patients (increased from 65% of wards in 2013), though importantly in many cases, it was noted that signage was minimal within the ward. In half of wards with signage (50.8%, 30/59), signs/maps were large, bold and distinctive, and in a further 20.3% (12/59) of wards with signage, some of the signs/maps were large, bold and distinctive. In comparison, in 2013, only 12% of signs/maps within wards audited were large, bold and distinctive. The information on the majority of these signs (74.6%, 44/59) was in clear contrast to the background, demonstrating a small improvement from 71% in 2013.

IDENTIFIABLE AND ACCESSIBLE TOILET AND BATHING FACILITIES

The presence of environmental cues and signage for the toilet are important aspects in maintaining continence for people living with dementia in the acute care environment. The audit examined the presence of environmental cues for toileting and personal care. The findings are illustrated in Figure 5.

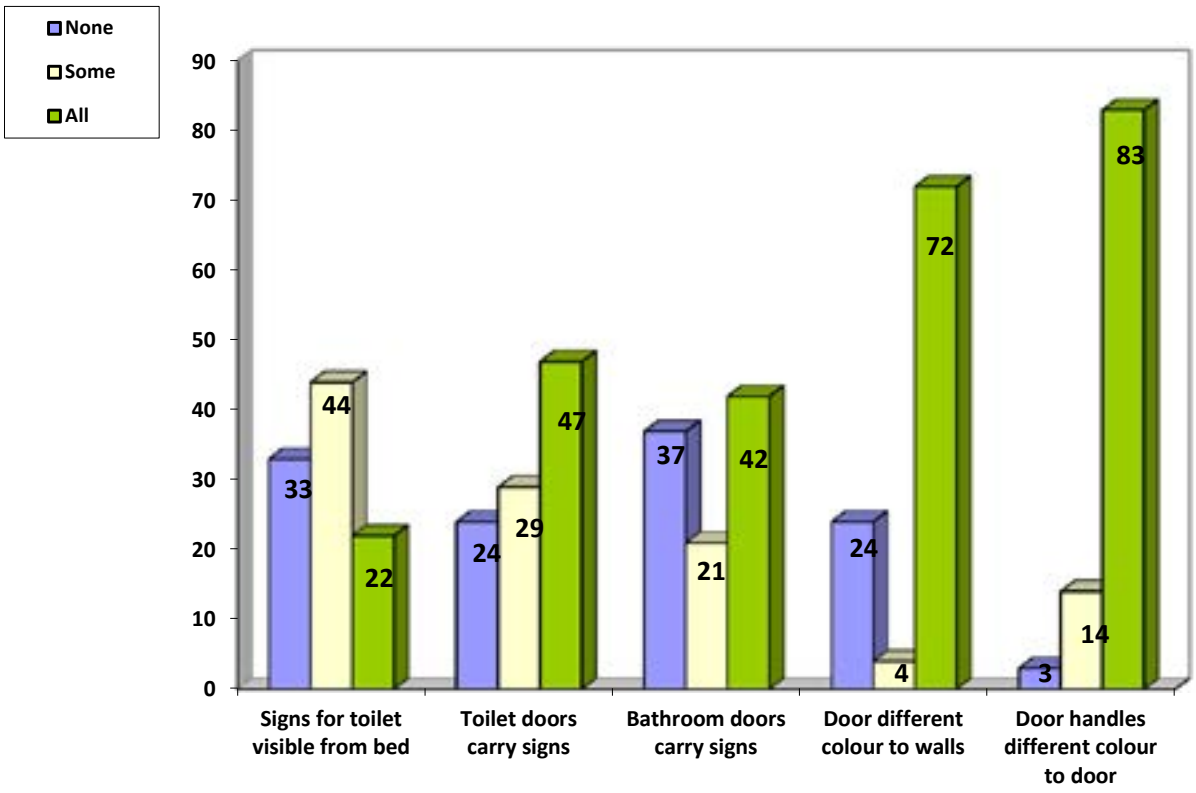


Figure 5. Environmental Cues for Locating Toilets and Bathrooms (%)

There were improvements in all of these areas since the first INAD, e.g. at the time of the first INAD all door handles were a different colour to the door in 26% of wards compared to 83% of wards in INAD-2, and all toilet doors carried signs in 35% of wards in the first INAD compared to 47% of wards in INAD-2. Significant gaps still exist in some hospitals. For example, there is no signage on toilet doors in almost a quarter of wards audited and no signage on bathroom doors in more than one third of wards audited. Some signage for toilets and bathrooms was noted as being particularly good, i.e. good colour contrast, use of picture and word, large text size, etc.

No wards had items such as the soap dispenser, bin or hand dryer clearly labelled with pictures as well as words, though in a small number of wards, some items had been labelled with words. Of note, it is important that labels and images should be carefully used to avoid information overload or visual clutter, which may be confusing and, while the use and combination of different modes (text, pictorial) for the presentation of information is beneficial for many people, it is important that any pictures are relevant, necessary and that they correctly fill possible information gaps. For instance, a picture of a standard hand dryer on a standard hand dryer is probably pointless, but a picture of a standard hand dryer used on a new or unfamiliar type of hand dryer may help a person identify what it is, and hopefully how to use it.

Two thirds of wards audited (66.7%, 48/72) had a toilet paper holder that was a different colour to the wall to help it to stand out, and a further 10% of wards (9.7%, 7/72) had at least some contrasting colour toilet paper holders. It was noted that in many cases, there was a very small amount of toilet paper projecting from the toilet paper holder, making it difficult to identify the toilet paper. Appliances/devices that promote independence (e.g. hand rails, large handles and a raised toilet seat) were present in the majority of wards audited (93.1%, 67/72), though notably, in some cases not all devices were present in all toilets and bathrooms.

While in 59.7% of wards (43/72) all toilets were big enough for assisted toileting, this was the case in only some toilets in the remaining 40.3% (29/72) of wards. Facilities for assisted bathing were somewhat better, with bathrooms big enough for assisted bathing in all bathrooms on 76.4% (55/72) of wards and in some bathrooms in the remainder. Less than two thirds of wards audited (63.9%, 46/72) provide single sex toilet/washing facilities. In wards where these are provided, in 23.9% of cases (11/46), these are provided to only some patients within the ward, i.e. not all toilet/washing facilities within the ward are for single sex use.

The majority of wards (90.3%, 65/72) provide facilities so that patients have a choice about bathing or assisted bathing in all bathrooms (i.e. sink, handheld shower and overhead shower all available). In the remaining wards, the full range of choices were only available in some bathrooms (8.3%, 6/72), or bathing choices were limited to sink or overhead shower only (1.4%, 1/72). A full bath was available in 13.9% (10/72) of wards audited.

Call/alarm bells were visible and in reach in all toilets/bathrooms in more than three quarters of wards (77.8%, 56/72); in the remainder these were either visible and not in reach (11/72), or were not visible or missing from one or more toilets/bathrooms (5/72).

PROMOTING INDEPENDENCE

In assessing whether the ward environment promoted independence, the audit looked at whether there was a space for active people living with dementia to walk about where they were visible to staff and staff were visible to them. Less than one fifth of wards (16.7%, 12/72) had space for active patients living with dementia to walk, apart from a standard ward corridor; seven wards had an additional outdoor garden or area for patients to walk around, while seven wards used an oval/circular configuration enabling patients to walk around continuously without coming to an obstructing wall or door (two of these wards also had access to outdoor gardens). In five wards, corridors were deemed unsuitable for patients to walk in as they were narrow and cluttered with equipment and/or trollies.

Less than half of wards (43.1%, 31/72) were adapted to assist people with limited mobility by providing hand rails along the corridors. Moreover, it was noted that equipment was often placed against the walls, obstructing the handrails and creating safety issues for people with mobility difficulties and in some hospitals, rails were used to hang patient charts. Few wards (15.3%, 11/72) could provide hearing aids such as amplifiers, communicators, hearing loops, batteries for personal aids or other assistive devices, though almost the same amount (13.9%, 10/72) indicated that these could be provided when needed through a referral to OT/SLT/audiology.

All wards (72/72) reported that they can readily provide equipment to assist people with mobility difficulties, similar to 2013 (99% of wards).

OTHER WARD FEATURES

Recent research has demonstrated the importance of social space for people living with dementia within the hospital (e.g. Hung et al., 2017). While people living with dementia recognise that the care received is of more importance than the physical environment of the hospital, they value homeliness, privacy, a shared space with a television, a connection to the outside, and space and amenities for carers (Digby & Bloomer, 2014). More than half of hospital wards (55.6%, 40/72) had a room/area available for patients to use for a break from the ward environment. Table 1 provides a breakdown of these rooms/areas available. Two wards reported having an end of life care room but this was not routinely used by patients.

Table 1. Rooms/areas Available as Break from Ward Environment (N=40)11

ROOM/AREA[12]	N
Family room/visitors room	11[13]
Day room/sitting room	12[14]
Outdoor garden(s)	7
Quiet room	4
Seating area in corridor	3
Conservatory area	1
Three large family/social areas	1
Visitors' waiting room[15]	1
Relatives' room	1
Dining room	1
Kitchen area	1

When asked whether patients living with dementia were situated on the ward where they were visible to staff and staff were visible to them, the most common response (87.5%, 63/72) was 'some patients'. Anecdotally, ward staff reported that they endeavoured to situate patients who were agitated, or who might walk about, where they were visible to staff (e.g. opposite the nurses' station); though it was highlighted that the demand on beds affected where patients living with dementia were situated.

11. Seven wards with more than one area/room available (n=2 day room, seating area in corridor; n=2 day room, outdoor garden; n=1 visitors room, outdoor gardens; n=1 day room, quiet room; and n=1 rooftop garden, sitting room, dining room, kitchen area).

12. While many of these rooms had a similar purpose, they are referred to by the title given to the room by the individual hospital.

13. Family room (n=11) and visitors room (n=3).

14. Day room (n=12) and sitting room (n=2).

15. Although named a visitors' waiting room, staff indicated that this is used by patients.

FLOORING

The floor surface of the ward environment is an important consideration, not just for patients living with dementia, but for all patients and for hospital staff in order to reduce the risk of slips, trips and falls and to improve orientation and way finding. Overly polished or shiny floors can create an illusion of water, while complex or abstract patterns or textures can cause confusion and overwhelm users (Hobson, 2019). Furthermore, it is not recommended to have flooring with different textures, e.g. wooden flooring in one section followed by tiling, as this can create the illusion of a step and lead to falls (Hobson, 2019). The flooring in the majority of hospitals was appropriate for a person living with dementia, with 79.2% of wards (57/72) with all floors plain/subtly patterned, and 70.8% (51/72) of wards with all floors subtly polished. It was noted that due to wear and tear, the flooring in many ward corridors had reduced in non-slip functionality. In six wards audited, there was a level change (slope), and this was not clearly marked in five cases. In the remaining case, there was a wall sign for the level change but no floor markings to indicate the change.

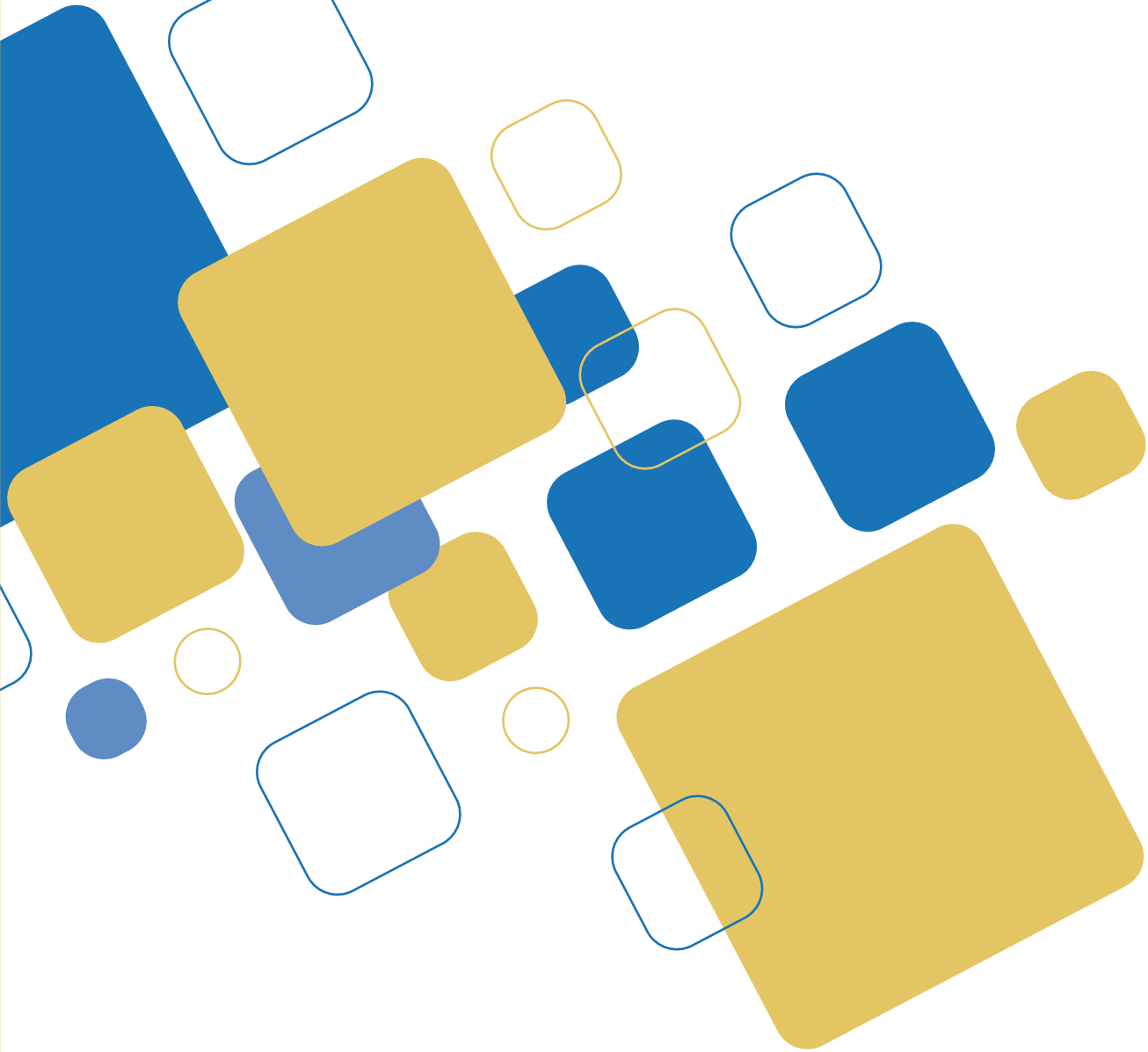
CONCLUSION

The majority of hospitals (29/33) reported that they have implemented some dementia friendly environmental changes, and this was reflected in the audit findings, with improved use of clocks, calendars, signage, and use of colour to aid orientation. There remain substantial gaps in the acute care ward environment in the provision of a dementia friendly environment in relation to aiding orientation and way finding, promoting independence, and facilitating assisted care (e.g. having bathrooms big enough for assisted bathing). It is important to note that where it is outlined that the specific design feature (e.g. signage) was present in 'some' cases, in actuality the design feature may have been present in a very small number of cases e.g. 'some' signage may convey that only two key areas had signage. Universal design, which is dementia inclusive, can contribute positively to the experience of all hospital users, including people living with dementia and their families (Bracken-Scally et al., 2019). The recommendations in the recently published design guideline for "Dementia friendly hospitals from a universal design approach" (Grey et al., 2018) should be considered when planning and implementing acute hospital new builds, refurbishments or retrofits. The audit tool to accompany this guideline will be finalised and disseminated to all hospitals in 2020. It is anticipated that this audit tool will supersede the INAD environmental tool for future local and national use.

RECOMMENDATIONS

- The design guideline on "Dementia friendly hospitals from a universal design approach" (Grey et al., 2018) should be incorporated as standard by hospital management into all future refurbishments and new builds as follows:
- Cost-neutral or low-cost solutions should be implemented as a priority, as set out in the design guideline (Grey et al., 2018), for example, de-cluttering of ward areas to reduce excessive sensory stimulation.
- The use of social spaces, colour and other design features should be considered to assist orientation and make memorable places.
- There should be a focus on the provision of clocks and calendars, labelling of key accommodation, dementia friendly internal signage, introduction of an orientation aid (e.g. a large clock with day and date, or a digital screen with day, date, time of day etc) in patient rooms, and identification of toilet and bathroom facilities, as these will assist orientation and provide prompts.
- There should be implementation of colour contrasting fittings including soap dispensers, bins and hand dryers, and a contrast between toilet paper/paper towel dispensers and the colour of the paper.
- Colour contrast handrails should be provided on all corridors of all hospital wards.
- In corridors and other areas where independence is being promoted, a management system is required to ensure that equipment and trollies do not restrict use or obstruct access to handrails and that the environment remains clutter-free.
- Ward environments should be re-audited in 2022 as part of a national level audit of hospitals, and hospital management should ensure that ward environments are self-audited in the interim.

THE USE OF **SOCIAL SPACES, COLOUR AND OTHER DESIGN FEATURES** SHOULD BE CONSIDERED TO ASSIST ORIENTATION AND MAKE MEMORABLE PLACES.



Results Chapter 4

Case Note Audit - Details of Sample

SUMMARY OF FINDINGS

- The sample was 56% women with a median age of 84 years. Only half of healthcare records (51%) specified the type of dementia, even though this information could have an influence on several aspects of care. Where dementia diagnosis was recorded, the most common diagnosis was Alzheimer's disease (44%), followed by vascular dementia (30%).
- The most common primary cause of admission was respiratory infection (27%), followed by fall or fracture (17%) and urinary tract infection (12%). Dementia was the primary cause of admission in 9% of cases.
- Ethnicity was documented in less than half of healthcare records audited (52%, 484/930) and there was also a documentation gap in recording the first language of the person, with this information present in less than three quarters (24%, 682/925) of healthcare records.
- The mean length of stay (LOS) for people admitted from and discharged to their own home was 13.6 days, compared to 38.8 days for people admitted from home and discharged to residential care.
- There was a substantial decrease in LOS for people living with dementia from the first INAD in 2013, particularly in those admitted from and discharged to residential care.
- Length of stay was highest for those admitted with dementia as primary cause of admission (M=38 days) in comparison to all other causes of admission.

DEMOGRAPHIC INFORMATION

The sample (which was random) included more women (56.0%, 520/928) than men (44.0%, 408/928), reflecting expected proportions. The median age of patients[16] was 84.0 years (N=928, range=60, IQR=9). The majority of patients (89.7%, 832/928) were aged over 75 years. Looking at age in more detail, 1.6% (15/928) were aged under 65 years, 8.7% (81/928) were aged 65-74 years, 43.9% (407/928) were aged 75-84 years, 41.5% (385/928) were aged 85-94 years, and 4.3% (40/928) were aged 95 years and over. The majority of patients (62.1%, 576/927) were admitted from home[17], while the remainder were admitted from residential care[18] (28.6%, 265/927) or another service[19] (9.3%, 86/927).

By definition, all healthcare records had a diagnosis of dementia recorded (to be eligible for the audit). However, just half of the healthcare records (50.7%, 462/911) specified the type of dementia (e.g. Alzheimer's dementia or vascular dementia). It is important to know what type of dementia a person has - for example, there are particular contraindications to the use of antipsychotic medication for a person with Lewy body dementia, and specific therapeutic medications for Alzheimer's disease.

16. This variable was not normally distributed [D(928)= .975, p<.0001] so median rather than mean is reported.
17. Home includes own home, carer's home and respite care
18. Residential care includes residential care/nursing home and community hospital
19. Another service includes transitional care, rehabilitation, psychiatric care, convalescence, and transfer from another hospital

Thus, it is critical that the specific type of dementia is recorded in the chart. Where dementia diagnosis was recorded, the most common diagnosis was Alzheimer's disease (43.9%, 203/462), followed by vascular dementia (30.3%, 140/462), mixed dementia (10.8%, 50/462), Lewy body dementia (7.1%, 33/462), Parkinson's disease dementia (6.5%, 30/462), and fronto-temporal dementia (1.3%, 6/462), reflecting expected proportions. The case note audit demonstrated that dementia or suspected dementia was recorded in the admission note (including post-take ward round record) in 91.5% of healthcare records (843/921).

Ethnicity was documented in less than half of healthcare records audited (48.8%, 454/930). Where ethnicity was documented, white Irish ethnicity was recorded in the vast majority (98.0%, 445/454) with the remainder being any other white background (1.8%, 8/454) and other ethnic group (0.2%, 1/454). There was also a documentation gap in recording the first language of the person, with this recorded in less than three quarters of healthcare records (73.7%, 682/925). English was the most commonly documented first language (98.6%, 673/682) followed by other European language (0.7%, 5/682), other (0.4%, 3/682) and Irish (0.1%, 1/682).

CAUSE OF ADMISSION AND SPECIALITY OF CARE

The majority of cases audited (90.1%, 838/930) were emergency rather than elective (9.9%, 92/930) admissions. For each case, the primary diagnosis/cause of admission was recorded (see Table 2). There was often more than one primary issue indicated and in such cases, the more serious issue was coded. The most common primary diagnosis was a respiratory infection (27.3%, 254/931). One fifth of patients (20.4%, 190/931) presented with a fall or fracture, and this was the primary cause of admission in 17.2% of all cases. A proportion of patients (5.2%, 48/931) were admitted with delirium symptoms, where a delirium diagnosis was recorded (n=13) or where delirium symptoms (e.g. confusion) were recorded (n=35), and this was the primary cause of admission in 3.4% (n=32) of all cases. A small proportion of patients (0.8%, 7/932) self-discharged from hospital, noting the minimum stay of 3 days to be eligible for the audit.

Table 2. Primary Diagnosis/Cause of Admission (N=931)

PRIMARY DIAGNOSIS/CAUSE OF ADMISSION	N (%)
Respiratory infection	254 (27.3%)
Fall or fracture	160 (17.2%)
Urinary tract infection	115 (12.4%)
Other medical issue	91 (9.8%)
Dementia was the primary issue	81 (8.7%)
Stroke/TIA (including intracranial bleed)	37 (4.0%)
Seizure/syncope	37 (4.0%)
Surgical issue	36 (3.9%)
Gastrointestinal issue	36 (3.9%)
Delirium (explicitly referred to, or symptoms of delirium)	32 (3.4%)
Cardiac (including pulmonary embolism)	30 (3.2%)
Infection - other	22 (2.4%)

The majority of patients (66.7%, 617/925) spent the longest period during their admission on a general medical ward, while the remainder spent the longest period on a geriatric medicine ward (15.4%, 142/925), a surgical ward (8.0%, 74/925), an orthopaedic ward (3.6%, 33/925), a stroke ward (0.8%, 7/925), critical care ward/intensive care unit (0.6%, 6/925), or another unspecified ward (5.0%, 46/925). Similarly, the majority of patients (61.7%, 571/925) spent the longest period of their admission under a general medicine physician, while the remainder spent the longest period under either a geriatrician (27.6%, 255/925), surgeon (8.3%, 77/925), orthopaedics (1.7%, 16/925), neurologist (0.2%, 2/925), other unspecified (0.2%, 2/925), palliative care (0.1%, 1/925) or infectious disease (0.1%, 1/925). Of note, in cases where patients were mainly under the care of a geriatrician, almost half (46.9%, 119/254) spent the longest period of their care on a general medicine ward rather than a geriatric ward.

DISCHARGE DESTINATION

The research evidence continues to demonstrate that the likelihood of being discharged to residential care after an in-patient admission is significantly higher for patients living with dementia than those without dementia (e.g. Bu & Rutherford, 2019; Alzheimer Scotland, 2009). The results here demonstrated that almost one third of patients admitted from home were discharged to a residential care setting.

- 57.3% of people (296/517) admitted from home[20] were discharged home (improved on the 2013 rate of 45%, 164/363).
- 29.4% of people (152/517) admitted from home were discharged to residential care[21] (compared to 35% (128/363) discharged to nursing home in 2013).
- 13.3% of people (69/517) admitted from home were discharged to another service[22] (compared to 20%, 70/363 in 2013).

This is in line with research from a systematic review and meta-analysis which reported that the need for long term care on discharge from hospital is independently associated with the in-patient having a diagnosis of dementia, as well as age, female sex and functional dependency (Harrison et al., 2017). The decrease in the proportion of patients admitted from home and discharged to residential care between 2013 and 2019 is welcome, although this audit can't identify the causes of this change (i.e. better direct access to residential care from the community, better care processes in hospitals and/or community supports post-discharge, secular improvements in overall functional status, or a change in the sample characteristics).

Recent research has demonstrated that poorer cognition and the presence of non-cognitive symptoms of dementia were consistently associated with an increased risk of nursing home admission in people living with dementia (Toot et al., 2017). The case note audit demonstrated that non-cognitive symptoms of dementia (responsive behaviours) were more often documented in those admitted from home and discharged to residential care (61.2% (93/152)) compared to patients admitted from, and discharged to, home (29.2%, 85/291).

20. Home includes own home, carer's home and respite care.
21. Residential care includes residential care/nursing home and community hospital.
22. Another service includes transitional care, rehabilitation, psychiatric care, palliative convalescence, and transfer to another hospital.

LENGTH OF STAY

The overall median length of stay[23] (LOS) (including those who died in hospital) was 10.0 days (n=934, range=356, IQR=16); mean LOS was 20.3 days. In comparison, based on an analysis of HIPE data, the mean length of stay in 2018 for in-patients aged 75 years and over discharged from all acute hospitals nationally with a length of stay of 3 days or more is 14.4 days (N=87,112). When the length of stay in the current audit was adjusted to calculate overall mean LOS for only those with a minimum LOS of 5 days, in order to more accurately compare to data from 2013[24], the mean LOS was 23.1 days (n=801, Min=5, Max=359, SD=31.04). This demonstrates a reduction from the mean LOS of 24.9 days (n=650, Min=5, Max=375, SD=35.77) in 2013. An overview of the mean LOS based on admission source and discharge destination is provided in Table 3. There was an overall decrease in LOS since 2013 across all categories.

Table 3. Mean Length of Stay Based on Admission and Discharge Destination

Admitted from	Discharged to	Mean LOS in INAD (2013)	Mean LOS in INAD-2	Adjusted[25] Mean LOS in INAD-2
Own home [26]	Own home	22 days	*13.6 days (n=296, Min=3, Max=104, SD=14.7)*	16.0 days (n=239, Min=5, Max=104, SD=15.45)
Own home	Residential care	59 days	*38.8 days (n=152, Min=3, Max=189, SD=32.8)*	39.3 days (n=150, Min=5, Max=189, SD=32.74)
Residential care	Residential care	17 days	*8.5 days (n=228, Min=3, Max=36, SD=5.9)*	10.05 days (n=174, Min=5, Max=36, SD=6.02)

Length of stay was highest for those admitted with dementia as primary cause of admission (M=38, SD=48.15) in comparison to all other causes of admission (see Table 4), with fall/fracture also associated with a relatively longer length of stay.

23. This variable was not normally distributed [D(934)=.28, p<.0001] so median rather than mean is reported.

24. In the first INAD, the length of stay criterion for inclusion in the case note audit was a minimum length of stay of 5 days; in INAD-2, this was reduced to 3 days.

25. Calculations based on cases with a minimum LOS of 5 days only

26. Own home includes own home, carer's home and respite care

Table 4. Length of Stay by Primary Diagnosis (N=931)

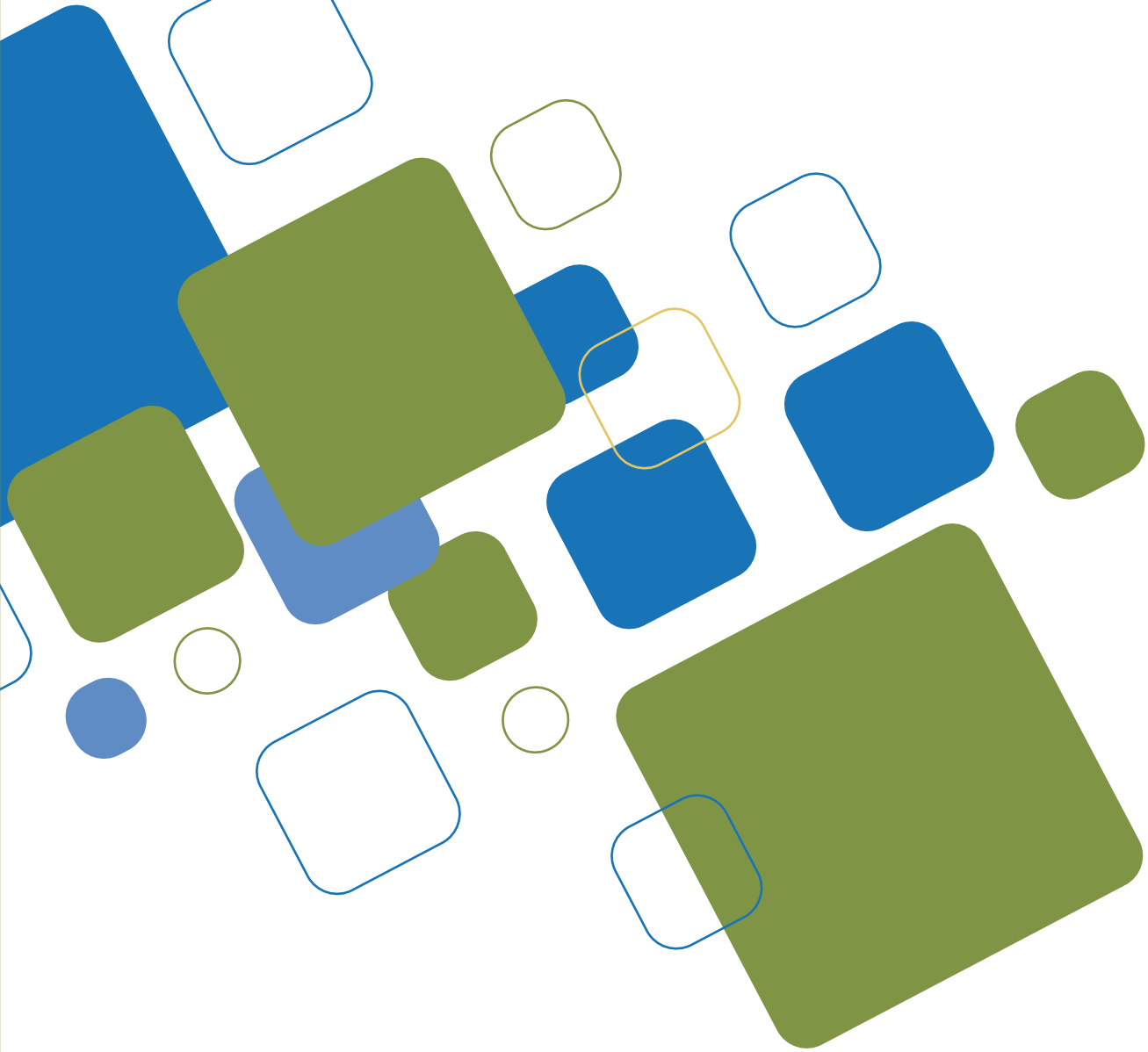
Primary Diagnosis/Cause of Admission	N	Mean LOS (Standard Deviation)
Dementia was primary issue	81	37.7 (48.2)
Fall or fracture	160	29.9 (40.2)
Delirium symptoms	32	22.2 (23.1)
Infection- other	22	22.0 (30.8)
Stroke/TIA (including intracranial bleed)	37	20.8 (21.7)
Urinary Tract Infection	115	19.9 (35.9)
Seizure/syncope	37	17.2 (21.0)
Other medical causes	91	16.5 (18.2)
Surgical	36	15.4 (18.5)
Cardiac (including Pulmonary Embolism)	30	13.0 (15.6)
Gastrointestinal	36	13.1 (12.7)
Respiratory infection	254	12.8 (12.7)

CONCLUSION

The findings here provide useful demographic and contextual information to enhance the understanding of the findings which follow in subsequent chapters. There were weaknesses in recording of key variables identified (e.g. dementia type, ethnicity) and this may call into question the level of recording and accurate filing of other relevant information and assessments in the healthcare records, i.e. whether other key information is noted by staff but not subsequently recorded in the healthcare records.

RECOMMENDATIONS

- Dementia type (e.g. Alzheimer's disease, Lewy body dementia) needs to be recorded in the healthcare records by the admitting team for all people living with dementia admitted to hospital.
- Ethnicity and primary language should be recorded in the healthcare records by the admitting team for all people living with dementia admitted to the hospital.



Results Chapter 5

Physical Assessment

SUMMARY OF FINDINGS

- Case note audit findings demonstrated that there was an increase in the performance and recording of assessment of functioning, assessment of mobility, formal pressure sore risk assessment and assessment of nutritional status.
- Findings highlighted that in a substantial proportion of patients living with dementia there is no record of being asked about pain or assessed for pain.
- The majority of hospitals have protected mealtimes in place and have access to speech and language therapy and dietetics.
- Patients living with dementia can have a complete meal option that can be eaten without cutlery in just 55% of hospitals (18/33).
- In the majority of hospitals (26/33), only simple food supplies or snacks are available 24 hours a day.
- While screening question(s) relating to bladder and bowel problems are part of the comprehensive assessment of the person living with dementia in all hospitals, just three hospitals have a lead for continence care and services in the hospital. There is no structured programme of staff training on promoting continence in any of the 33 hospitals audited.

FUNCTION AND MOBILITY ASSESSMENTS

There are numerous standards and guidelines relating to the recording and sharing of relevant patient information, such as assessment. For example, the HIQA National Standards for Safer Better Healthcare (2012, p. 44 and p. 50) state that there should be "assessment of the service user's individual healthcare needs by the healthcare professional or team with the necessary competencies and information to plan for and deliver healthcare to the service user" and "ready availability of accurate, up-to-date and easily retrievable high quality information, including information from the service user, to healthcare providers involved in each individual's care."

Furthermore, the National Clinical Programme for Older People recommends that all older adults identified as being frail or at risk of frailty should have a timely CGA performed and documented in their permanent health record (HSE, 2012). Despite this, and similar to the first INAD, there was a lot of variation in the performance and documentation of assessments.

- More than three quarter of hospitals audited (76%, 25/33, compared to 62% of hospitals, 21/34 in 2013) reported that an assessment of functioning using a standardised instrument is routinely carried out. An additional three hospitals indicated that a standardised assessment of functioning is used, but not routinely, and a further five hospitals reported that an assessment of functioning is routinely conducted but not using a standardised tool.
- In 27 healthcare records, an assessment of functioning could not be assessed for recorded reasons. In the remainder, 83.7% of patients (751/897) had a standardised assessment of functioning recorded. This is a large increase from 2013 when only 36% of patients (236/653) had this assessment conducted.

Almost half of these assessments (49.4%, 371/751) were conducted by a nurse, more than a quarter (25.7%, 193/751) were conducted by two or more staff using a team approach (e.g. nurse, physiotherapist & occupational therapist), while the remainder were conducted by an occupational therapist (17.8%, 134/751), physiotherapist (4.5%, 34/751), a doctor (2.0%, 15/751), a discharge coordinator/planner (0.3%, 2/751), a medical social worker (0.1%, 1/751), or not specified (0.1%, 1/751).

Loss of mobility is common in people with advanced dementia and is associated with negative outcomes, such as increased fall risk, loss of independence, reduced participation in meaningful activities (Van Ooteghem et al., 2019), and increased mortality (Mahmoudi et al., 2017).

The HSE's campaign to "end PJ paralysis" by getting patients up, dressed and moving, highlights the importance of physical activity for all patients, and particularly older patients, within the hospital environment. Physical activity during hospitalisation shortens the length of stay in hospital and can improve function and mobility in older adults (Oestergaard et al., 2018).

- In 42 healthcare records, an assessment of mobility could not be conducted for recorded reasons. In the remainder, 94.3% of patients (836/887) had an assessment of mobility carried out (compared to 89% of patients (585/657) in 2013).

Notably, these assessments were not standardised, and while some assessments of mobility were carried out by a physiotherapist, others were carried out by the nurse during the admission process. The need for a multidimensional, dementia-specific approach to mobility assessment has been highlighted by research (Van Ooteghem et al., 2019) and the audit findings here suggest a need for a more standardised approach to assessment.

PRESSURE SORE RISK ASSESSMENT

Hospitalisation significantly increases the risk of weight loss, incontinence and pressure sores in older people (Fitzpatrick, 2019). The HSE's Pressure Ulcers to Zero (PUTZ) initiative aims to reduce the number of avoidable pressure sores by 50%. As part of this initiative, all hospital in-patients should have a pressure sore risk assessment. The HSE National Wound Management Guidelines (2018b) also specify that a structured risk assessment should be conducted to identify patients at risk of developing pressure ulcers. This is of particular importance for people living with dementia.

- The majority of patients (97%, 904/931) had a formal pressure sore risk assessment conducted; an increase from 2013 when 87% of patients (575/660) had this completed.

PAIN ASSESSMENT

Pain is generally under-detected and under-treated in people living with dementia, owing at least in part, to the reduced ability to self-report pain. This points to an increased need for regular assessment for potential pain (Malara et al., 2016). All of the hospitals audited reported that an assessment of pain is part of the comprehensive assessment of a person living with dementia.

In 35 cases, the patient could not be asked about the presence of pain for recorded reasons. In the remainder, almost four fifths of healthcare records (79.1%, 700/885) indicated that the patient had been asked about the presence of pain; similar to the 77% frequency in 2013. In almost one quarter of healthcare records (23.7% 219/924), a standardised assessment of pain was not needed as the patient self-reported the presence or absence of pain and in an additional 4.5% (42/924), this could not be used for recorded reasons. In the remainder of cases, who were eligible for having a standardised assessment of pain using a tool suitable for a patient living with dementia (e.g. PAINAD, Abbey Pain Scale), just 12.2% of patients (81/663) had this conducted at any time during their admission, indicating that 88% of this group may have had undetected pain. However, the audit question relating to standardised assessment of pain had a low Kappa value (0.254, $p<.001$) with just 57.4% percentage agreement (reflecting auditor differences in what constituted a formal pain assessment) indicating that this particular finding should be interpreted with caution.

NUTRITION

Nutritional Assessments

There is an increased risk of malnutrition and dehydration in older people, and an even higher risk in older people living with dementia (Bunn et al., 2016; O'Shea et al., 2017). Malnutrition is associated with a number of negative outcomes, for example, an increased risk of pressure ulcers (Litchford et al., 2014), increased length of stay and mortality (Badosa et al., 2017) and increased risk of falls (Trevisan et al., 2019). An assessment of nutrition and hydration is recommended for all patients admitted to acute hospital. For example, the HSE Food, Nutrition and Hydration Policy for Adult Patients in Acute Hospitals (2018c, p. 10) states that "on admission to hospital a food, nutrition and hydration needs assessment should be undertaken to identify and to document the individual patient requirements by nursing or appropriately trained healthcare staff." The organisational audit found that the hospitals are aware of the importance of recording nutritional status for people living with dementia.

- All hospitals (33/33) reported that standardised assessment of nutritional status is routinely carried out on people living with dementia (though one hospital reported this is only within some areas of the hospital). A similar proportion reported that assessment of nutritional status was routinely carried out on people living with dementia in 2013 (97% of hospitals, 33/34), though it was not specified in the question that this was a standardised assessment.

Findings from the case note audit indicated a high level of assessment of nutritional status.

- In 19 cases, nutritional status could not be assessed for recorded reasons. In the remaining 913 cases, 82.1% of patients (750/913) had an assessment of nutritional status performed by a healthcare professional. This is an improvement from 2013 when 76% of patients (496/651) had a nutritional assessment recorded, but there is room for further improvement.

The most commonly used tool to assess nutritional status was the Malnutrition Universal Screening Tool (MUST) (81.6%, 609/746), in keeping with the HSE policy, followed by the Malnutrition Screening Tool (4.4%, 33/746) and the Mini Nutritional Assessment (0.3%, 2/746). A formal assessment tool was not used in 13.7% (102/746) of assessments.

Mealtimes on Wards

In order to mitigate against malnutrition in patients, mealtimes should allow enough time for people to eat and be offered encouragement to eat, where required (Roberts et al., 2019). The use of protected mealtimes is one way in which hospitals can endeavour to provide uninterrupted and assisted mealtimes to patients living with dementia to ensure adequate nutrition and hydration. Research has shown that the use of protected mealtimes is associated with reduced interruptions and positive changes to the patients' mealtime experiences and patient care (Chan & Carpenter, 2015). More than three quarters of hospitals audited (81.8%, 27/33[27]) have protected mealtimes established in all wards that admit adults with known or suspected dementia (compared to 50% in 2013), and this was in development in three other hospitals[28]. In hospitals where protected mealtimes are established, 81.5% of hospitals (22/27) have a process to review and monitor the wards adherence to protected mealtimes, compared to 27% of hospitals in 2013.

Additional information on mealtimes was collected at ward level through the ward environmental audit tool.

- A majority of wards (83.3%, 60/72[29], compared to 75% in 2013) can provide adapted utensils to facilitate patients eating independently.

Many wards actively encourage families and carers to visit and assist at mealtimes in order to overcome potential difficulties in resources at mealtimes in providing assistance to all patients who require it. While none of the hospitals audited have a policy/procedure/guideline which promotes and allows identified carers of people living with dementia to visit at any time, including at mealtimes, almost all of the hospitals (94%, 31/33) outlined that this is promoted informally and/or that the hospital's mealtime or visitor policy promotes/allows identified carers (not specific to dementia) to visit at mealtimes.

27. Includes n=1 "Mealtimes Matter"

28. Includes n=2 "Mealtimes Matter".

29. Includes n=14 not on the ward but can be obtained.

"Finger foods"—foods that can be readily eaten without cutlery—can increase the enjoyment of eating, enhance food consumption and increase autonomy in older people living with frailty and dementia (Roberts et al., 2019). In more than half of hospitals audited (55%, 18/33), patients can choose a complete meal option (incorporating special dietary requirements) that can be eaten without cutlery (finger food) every day, while in a further 6% of hospitals (2/33), this is available only some days, and in the remaining 13 hospitals (39%), finger food consists of sandwiches/wraps only. In the majority of hospitals (79%, 26/33) only simple food supplies (n=25; for example, bread, cereal, yoghurt) or snacks (n=1; for example, biscuits and cake) are available 24 hours a day, while 21% of hospitals audited (7/33) reported that a full menu including hot meals and other food, for example, toast, sandwiches, soup and lighter hot dishes, is available 24 hours a day. This is similar to the first INAD where 92% of wards (71/77) were able to provide food to patients between mealtimes, and this was primarily snacks and simple food supplies.

More than one third of hospitals audited (36%, 12/33) have opportunities for social interaction for patients living with dementia, though this was only in place on all wards in two of these hospitals. In comparison, only 20% of wards (15/77) in the first INAD had opportunities for patients to socially interact at mealtimes.

Identified assistance with eating/drinking was recorded in just 59.8% of healthcare records (555/928), though this finding should be interpreted with caution as the Kappa value was 0.3, p<.001, with a moderate percentage agreement (65.4%). Where the need for assistance was identified, this was also recorded in the care/management plan in 81.1% of healthcare records (434/535).

Specialist Input

Swallowing difficulties are often present in people living with dementia and increase the risk of choking, dehydration, malnutrition, weight loss, pneumonia and death (Flynn et al., 2018). Recent research has demonstrated that use of comprehensive geriatric assessment with multidisciplinary interventions could enhance the functional status of eating and enable older patients with severe eating problems and dementia to survive independently without the need for artificial hydration and/or nutrition (Arahata et al., 2017). An assessment of swallow function is part of the routine comprehensive assessment for people living with dementia within the majority of hospitals audited (84.8%, 28/33). In the remaining five hospitals, this is conducted either on referral to Speech and Language Therapy only (6.1%, 2/33), or only in some patient cohorts/areas of the hospital (e.g. within the stroke unit).

A referral to specialist services, such as speech and language therapy or dietetics, is sometimes necessary to support adequate nutritional intake. The majority of hospitals (91%, 30/33) reported that there is access to speech and language therapy (though in one of these this is available only 2.5 days per week). In the remaining three hospitals, limited access is available (available on referral 4 hours per week; through another hospital in the hospital group; and very limited access through a private service). Similarly, in 2013, 94% of hospitals (33/35) reported that specialist assessment and advice could be obtained from Speech and Language Therapists. Access to speech and language therapy is available on call in the evening in three hospitals and on call at the weekend in two hospitals.

Almost all hospitals audited (32/33) have access to a dietetics service to assess and/or support patients living with dementia (available through another hospital in the hospital group in the remaining hospital), though this is available only 2.5 days per week in one hospital. This is an improvement from 2013 when 83% (29/35) of hospitals reported that specialist assessment and advice could be obtained from a Dietician. This service is available on call in the evening in two hospitals and on call at the weekend in one hospital.

An assessment of communication was part of the comprehensive assessment of the person living with dementia in all but one hospital audited, though two hospitals indicated that this assessment is conducted by Speech and Language Therapists only.

CONTINENCE

The risk of developing incontinence during a hospital admission increases for those aged over 65. For example, Furlanetto and Emond (2016), in a study of people living with dementia or cognitive impairment aged over 65 who were continent pre-admission, found that there was a significant relationship between admission and the development of incontinence. At discharge, 36% suffered urinary incontinence, and a further 21% experienced an episode of urinary incontinence during their admission but were continent at discharge.

The hospital organisational audit demonstrated weaknesses in the area of continence governance and policy within hospitals. Just one hospital audited has a written policy for the management of continence, with this policy in development in five other hospitals. Only three hospitals have a lead for continence care and services in the hospital (one of whom has education in the ongoing needs of people living with dementia), though one hospital outlined that an individual has been newly appointed for this role and was scheduled to commence shortly after the audit. A small number of hospitals (9.1%, 3/33) have a staff member who is "informally" considered the lead for continence care within the hospital.

On a positive note, all hospitals have screening question(s) relating to bladder and bowel problems as part of the comprehensive assessment of a person living with dementia.

- In 28 cases, continence needs could not be assessed for recorded reasons. In the remaining cases, 87.5% of patients (787/899) had been asked about continence needs as part of the multidisciplinary assessment (compared to 84% (557/659) in 2013).
- Approximately two thirds of patients or their carers/family members (67.7%, 621/917) were asked about any requirement for assistance with toileting (though this finding should be interpreted with caution as the Kappa value was 0.2, $p<0.002$, valid percentage agreement= 58.7%).

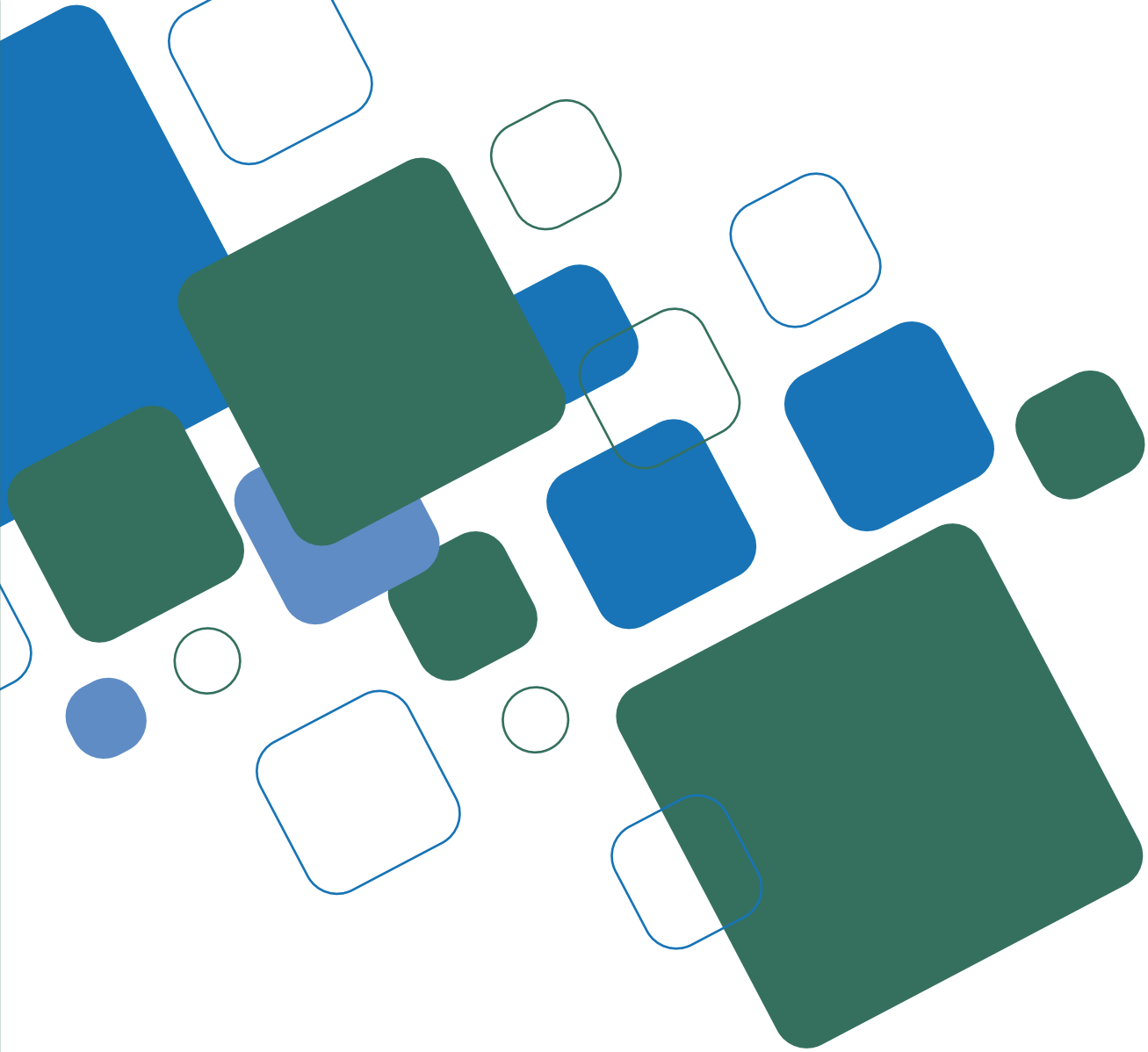
While there is not a structured programme of staff training on promoting continence in any of the hospitals audited, this is in development in three hospitals, and there is some training and education in continence provided within most hospitals, through either the Frailty Education programme or the hospital group.

CONCLUSION

The audit findings demonstrated that there were improvements in a number of areas since 2013, e.g. increased performance of relevant assessments such as assessment of functioning and assessment of mobility, though further improvement is imperative. The findings here highlight a number of areas where improvements are required, e.g. in relation to assessment of pain and recording of the requirement for assistance with toileting. Governance in continence care is an area where further resources are required, as well as the provision of a structured programme of staff training on promoting continence.

RECOMMENDATIONS

- Unless the assessor is confident that the patient could state that they have pain/no pain and their body language and behaviour is consistent with this, a standardised assessment of pain, suitable for use in people living with dementia (such as the Abbey Pain Scale or PAINAD), should be conducted.
- An assessment to determine any assistance required with eating/drinking should be conducted on admission; any identified assistance required should be recorded in the care/management plan.
- The catering department of hospitals that admit patients living with dementia should be able to provide a full finger food menu, and also meals outside of usual meal times.
- A dementia specific Speech and Language Therapist should be available at hospital group level to assess and support people living with dementia during their admission.
- Given the significance of continence promotion for older people, including people with dementia, each hospital needs access to a continence advisor, who is trained in the needs of people living with dementia, and each hospital needs to train a cohort of staff in this area.
- A national policy on promotion of continence and the management of incontinence should be developed. This policy should be implemented in all acute hospitals in Ireland.



Results Chapter 6

Mental Assessment

SUMMARY OF FINDINGS

- A standardised test of cognition was evident in just 40% of healthcare records (340/851) and this had reduced from 43% of healthcare records in 2013, in spite of 85% of hospitals (28/33) reporting that the comprehensive assessment includes a standardised test of mental health status.
- There was a substantial increase in the number of hospitals which have a system in place to ensure that a suspected dementia triggers a referral for assessment and differential diagnosis (23% in 2013 versus 82% in 2019), though this was generally not specified in hospital policy.
- Collateral history was generally poorly recorded in the healthcare records; just 6% of healthcare records (56/875) had a comprehensive collateral history encompassing all core components recorded.
- While there was some progression since 2013 in the awareness and reported use of patient passports or other documents which collect information pertinent to caring for the person living with dementia, including likes, preferences and routines, evidence of these being used to inform care was present in just 2% of healthcare records (17/934).
- There were a number of developments in relation to delirium management and care since 2013 including, for example, a substantial number of hospitals which report that they screen older people for cognitive impairment in the Emergency Department (ED)/Acute Medical Assessment Unit (AMAU)/Acute Surgical Assessment Unit (ASAU)/Acute floor. However further developments are required in this area as evidenced by the case note audit findings that just 19% of patients (181/932) had delirium screening conducted at any time during their admission.
- Almost one quarter of healthcare records (23%, 216/934) demonstrated suspected or confirmed delirium.
- Just 11% of patients (98/926) had been assessed for recent changes in mood.
- More than one third of hospitals (12/33) have a protocol governing the use of interventions for patients displaying responsive behaviours, aggression and agitation, with this in development in a further 21% of hospitals (7/33).
- 70% of hospitals (23/33) have a written policy for the use of one-to-one observation.
- There was an increase in the communication of cognitive status at discharge since the first audit in 2013, e.g. 69% of discharge letters (91/132) included delirium where relevant, compared to just 24% in 2013.

COGNITIVE TESTING

The comprehensive assessment of older people in the acute hospital should include a sufficiently thorough assessment of mental state to detect depression, delirium and dementia (Royal College of Psychiatrists (UK), 2011). The organisational audit demonstrated some improvements at an organisational level since 2013 to ensure appropriate assessments of mental health status are carried out in acute hospitals:

- An increased number of hospitals (84.8%, 28/33 compared to 63%, 22/35 in 2013) reported that the comprehensive assessment includes a standardised assessment of mental health status; the remaining hospitals reported that this is not conducted on all patients living with dementia (n=4) or that it can be done if needed (n=1).

There was a relatively low level of cognitive testing recorded in the case note audit:

- In 71 cases, mental health status could not be assessed for recorded reasons. In the remainder, 40% of patients (340/851) had cognitive testing using a validated structured instrument (including the 4AT) carried out during the admission. This is a reduction from 43% of patients (283/658) in 2013.

However, it is not always be appropriate to perform routine cognitive testing when a person living with dementia is admitted to hospital, such as when the person is extremely unwell, or receiving end of life care, or has current or resolving delirium, or has a very recent cognitive test result available. Equally, a period of hospitalisation in the absence of these constraints is often a good opportunity to record the decline in cognition since last tested, particularly when the person hasn't had cognitive testing for several years, where the cognitive test result combined with collateral history can indicate the degree of dementia progression and perhaps a need for altered therapy or goals of care. Thus, the low rate of cognitive testing may not be inappropriate, but the absence of even the briefest cognitive screening using the 4AT to detect delirium (see later) is more so.

The usual residence and discharge destination for the person living with dementia appeared to impact on the cognitive assessments carried out during admission. Similar to findings from the case note audit in 2013, the case note audit here found that people who were admitted from a residential care setting were less likely to have a standardised mental health status test than people who were admitted from home (see Table 5). This very low rate of performing even brief cognitive testing (after excluding un-testable people) in people living with dementia admitted from residential care is potentially concerning, particularly in relation to delirium detection and prognostication.

Table 5. Patients who had Cognitive Testing

Admitted from	Discharged to	2013 - of patients who had cognitive testing	INAD-2 - patients who had cognitive testing[30]
Own home	Own home	52% (85/164)	41.5% (118/284)
Own home	Residential care	71% (89/126)	57.6% (80/139)
Residential care	Residential care	20% (39/190)	18.4% (38/207)

In addition, despite the need for a recent cognitive test result as part of an application for state funding for residential care, it was not possible to find a result in the healthcare records, in 36% of people discharged de novo to residential care. This may reflect patients having such funding already in place, or that pre-admission cognitive scores are being used, which may be appropriate if the test result is recent and an in-hospital test was at risk of being falsely low.

Among those assessed, 20/340 (5.9%) had more than one structured instrument used; most commonly the (standardised) Mini-Mental State Examination (MMSE) and another tool. The instruments most commonly used for cognitive testing were the (standardised) MMSE alone (40.6%, 138/340, plus 18 additional cases where a second tool was also used), followed by the 4AT alone (25.9%, 88/340), the Montreal Cognitive Assessment (MOCA) alone (17.4%, 59/340 plus 14 others where a second tool was also used), Abbreviated Mental Test Score (AMTS) alone (5.6%, 19/340, plus one other where a second tool was also used), Addenbrooke's Cognitive Examination (ACE) alone (2.4%, 8/340, plus 5 others where a second tool was also used), 6 item screener (1.2%, 4/340), and others (2.6%, 9/340, either alone, or with a second tool (n=6)).

In 2013, only 23% of hospitals had a system in place to ensure that where dementia was suspected but not yet diagnosed, this triggered a referral for assessment and differential diagnosis, either in the hospital or in the community. The current audit demonstrated that 82% of hospitals audited (27/33) reported that they have such systems in place, though the majority of these (74%, 20/27) indicated that while routinely done, it is not specified in policy. In addition, five other hospitals indicated that this is only done in some cases, based on clinical judgement.

30. Excluding those who could not be assessed for recorded reasons, and including those who were assessed using the very brief cognitive assessment, 4AT.

COLLATERAL HISTORY AND INFORMATION ABOUT THE PERSON LIVING WITH DEMENTIA

Collateral history from the carer or family of a person living with dementia is important in developing an overall picture of the person living with dementia's cognitive functioning, non-cognitive symptoms, and rate of progression and dementia stage (the latter two are crucial for care planning and prognostication).

- Just over half (51.4%, 476/926) had a collateral history taken with confirmation of cognitive decline (increased from 44%, 287/658 in 2013).
- One in five (20.8%, 192/922) had a collateral history taken which noted time since onset of memory problems (reduced from 25%, 166/658 in 2013).
- Almost one in three (30.5%, 277/909) had a collateral history taken which noted the nature of progression of the condition (increased from 27%, 176/658 in 2013).
- Almost half (48.9%, 445/910) had a collateral history taken which noted evidence of loss of physical function (increased from 35%, 233/658 in 2013).
- Just over one third (37.8%, 347/919) had a collateral history taken which noted recent deterioration in cognitive function (e.g. memory or language).
- One in five (22.8%, 208/914) had a collateral history taken which noted recent deterioration in non-cognitive function (e.g. hallucinations, delusions, responsive behaviour, BPSD).
- All of the above six components of collateral history were recorded in only 6.4% of healthcare records (56/875).

The use of a personal passport or other document which collects information pertinent to caring for the person living with dementia, including routines, preferences, likes and dislikes, enhances the provision of quality person-centred dementia care (O'Reilly, 2016). However, the use of a patient passport in acute care can be challenging given the prioritisation of medical needs and the lack of awareness and education (O'Reilly, 2016). In more than a quarter of hospitals audited (27%, 9/33[31]) a formal system was in place for gathering information pertinent to caring for a person living with dementia, and in eleven others, a system was in use but only in some wards/areas of the hospital. One other hospital outlined that the implementation of such a system was in progress. This is improved from the first INAD when only one hospital in Ireland had a form dedicated to collecting information about the person living with dementia from a carer, family or relative.

The following systems were in use: This is me (n=6; including two hospitals which also use other patient passport documents[32]), What matters to me (n=5; including one hospital which also uses "More about me"), Getting to know me (n=3), patient passport (n=2), Reach out to me (n=2), Key to me (n=1), Personal life history (n=1). A recently launched national transfer document for use when

31. Some of these were only recently implemented and may not therefore be reflected in case note audit data.
32. One hospital also uses a "What matters to me" whiteboard and "My way my day" with catering services, and another also uses communication-focused patient passports developed by the speech and language therapy department

any older person is being transferred from residential to acute settings (Coffey et al., 2019) includes a "Health Profile" section which collects information that is very pertinent to caring for person living with dementia. Where this Health Profile is available, hospital staff would not need to request completion of another patient passport type document.

The first INAD highlighted some difficulty in identifying a formal system for collating information about the person living with dementia necessary to their care within the healthcare records, indicating a need for further information, skills and resources in this area. The case note audit here demonstrated that evidence of a formal system or patient passport document was present in only 1.8% (17/934) of healthcare records. The following section/documents were identified in these cases: This is me (n=3), Getting to know me (n=3), Nursing home passport (n=3), What matters to me (n=2), Reach out to me (n=2), and "other" patient/personal passport (unspecified; n=4). In an additional few cases (0.9%, 8/934), this document/section was referenced in the healthcare record, but was not available for audit. In two cases (0.2%), there was a documented reason why it was impossible to collect this data. Of the remaining healthcare records, in 91.1% of cases (907/934), there was no document/section dedicated to collecting information about the person living with dementia. However, in 1.7% of these cases (15/907) all of the relevant information was collected informally in the healthcare records, but not together within a formal document/section. In a further 2.3% of these (21/907), either four or five of the six specified information types had been collected[33].

DELIRIUM

It is estimated that 20% of all adults in hospital at any time have delirium (Ryan et al., 2013). There is a much higher risk of delirium in people living with dementia, with estimates that up to 60% of older frail older hospitalised patients have delirium on admission or subsequently (Malik et al., 2016). The first INAD highlighted that hospitals were not giving due consideration to the issue of delirium. INAD-2 noted a number of developments in this regard. Seven hospitals (21%) had a care pathway/bundle for delirium in place at the time of the audit, while twelve other hospitals (36%) had a care pathway/bundle in development.

- Seven hospitals indicated that the hospital had no ED/AMAU, leaving 27 eligible hospitals for this audit item. Within these, three hospitals reported that their hospital has a policy that all older people are screened for cognitive impairment/delirium in the ED/AMAU/ASAU/Acute floor (supported by policy), while a further 12 hospitals indicated that procedures are in place to screen some older people (e.g. over 75s only). One further hospital indicated that while there is no policy in this regard, this is part of nursing assessment in the ED and AMAU, and five other hospitals indicated that this is in progress/development. The remaining four indicated that this is not in place. This compares to only one hospital in 2013 which had a policy that a screening assessment of mental state is carried out on all patients over the age of 65 admitted to the hospital.

33. Six questions clarified what information was collected by the section/document dedicated to collecting information about the person with dementia, specifically information about: personal details, preferences and routines; food and drink preferences; reminders or support with personal care; recurring factors that may cause or exacerbate distress; support or actions that can calm the person if they are agitated; and life details which aid communication.

- Two hospitals (6%) have a policy or guideline in place to ensure that patients living with dementia or cognitive impairment are assessed for the presence of delirium at presentation, three hospitals (9%) indicated that this is done but without an accompanying policy, and twelve others (36%) indicated that this is in development. In comparison, no hospitals in 2013 had such policies or guidelines in place, though 12% of hospitals (4/34) reported that they were developing such a policy.
- Within hospitals with an ED/AMAU, three hospitals have formally implemented the ED/AMAU delirium algorithm, and three others had modified this algorithm or developed their own delirium algorithm which was subsequently implemented. One hospital had partially implemented it (n=7), while five others indicated that implementation was in progress (total 12, 45%). The remaining 15 hospitals indicated that this algorithm had not been implemented.
- Just one hospital indicated that the hospital formally screens people at risk for delirium on wards on a daily basis and consistent with this, only 2.0% of patients (19/928) had daily delirium screening recorded in their healthcare records (for at least one week of their admission).
- While two hospitals (6%) had a local ward delirium management algorithm in place, three others (9%) were in the process of formally implementing the national “Delirium on general hospitals wards: identifying patients at risk, delirium screening and next steps” algorithm.

Figure 6 provides an overview of the proportion of patients screened and assessed for delirium during their admission.

- Only 19.4% of patients (181/932) had any delirium screening conducted during their admission (reduced from 29.7% of patients (196/659) in 2013).
- Where delirium screening occurred, this was most commonly within 24 hours of admission (78.5%, 142/181), and a further 5.5% (10/181) at 25-48 hours.
- The most commonly used tool to screen for delirium was the 4AT (77.1%, 138/179) followed by the Single Question in Delirium (SQiD) (18.4%, 33/179), months of the year backwards (3.9%, 7/179) and the Confusion Assessment Method (CAM) (0.6%, 1/179).
- In total, 15.9% of patients (147/927) were formally assessed for delirium (compared to 17% of patients (113/660) in 2013).

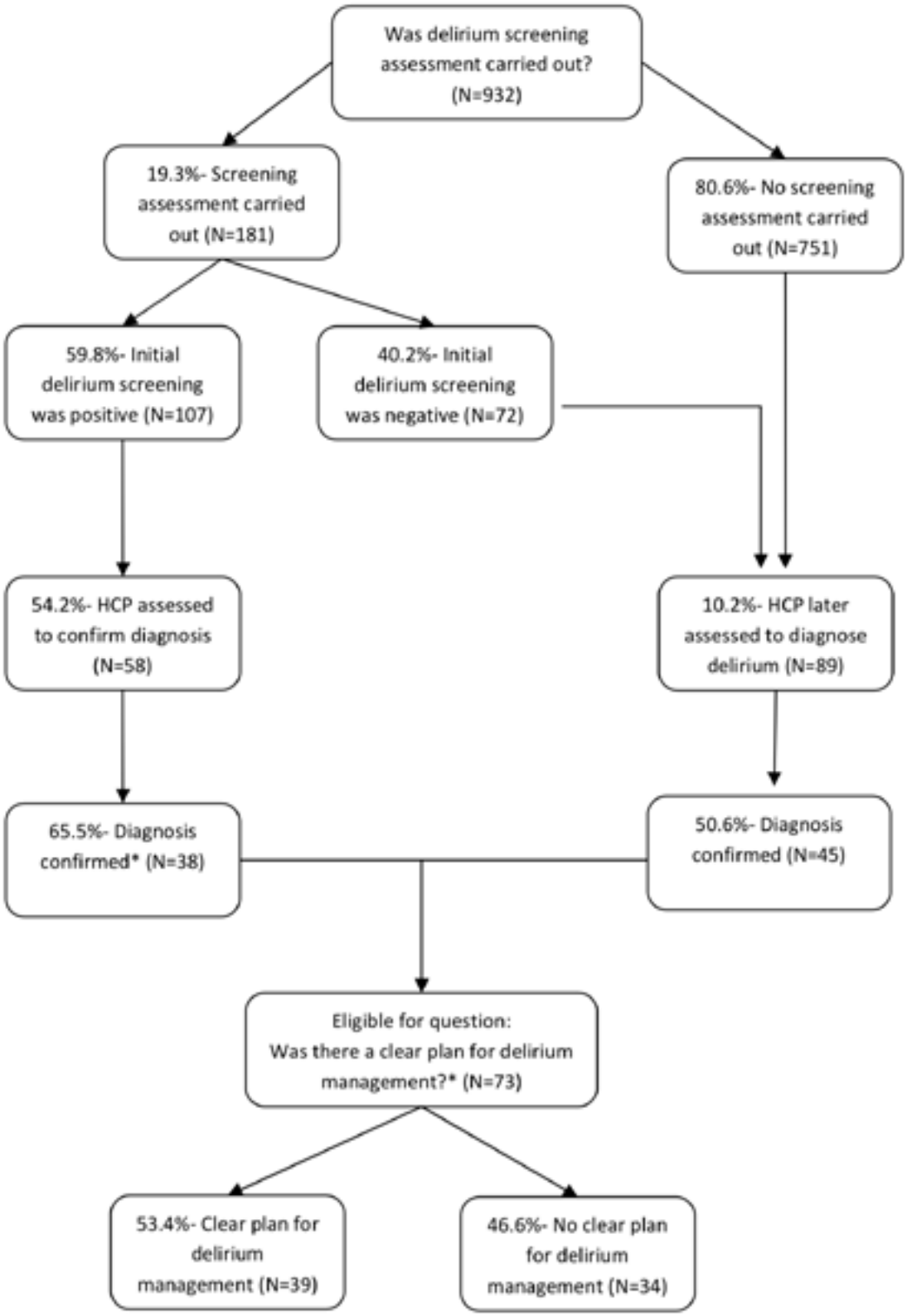


Figure 6. Delirium Screening, Assessment and Management [34]

34. Items with an * are those which had poor inter-rater reliability

Of note, the audit question relating to whether, following positive screening, a diagnosis of delirium was confirmed (based on assessment by a healthcare professional) should be interpreted with particular caution (Kappa= -0.037, p=.901, 50% percentage agreement). This poor agreement based on chart documentation of an important diagnosis is potentially concerning, with the caveat that the poor agreement may also have simply related to the wording of the question. The audit question relating to whether there was a clear plan for delirium management demonstrated moderate agreement between auditors (Kappa= 0.400, p=0.386, 66.7% percentage agreement). Table 6 provides an overview of the number and breakdown of suspected and confirmed delirium cases identified in the case note audit.

Table 6. Cases of Suspected and Confirmed Delirium

Source of delirium/suspected delirium	N (% of total sample of 934)
Probable delirium based on screening, but no assessment to confirm	46[35] (4.9)[36]
Admitted with delirium type symptoms, but no screening or assessment recorded	20 (2.1)
Delirium recorded as primary/co-primary cause(s) of admission, but no screening or assessment recorded	4 (0.4)
Delirium based on clinical assessment	83[37](8.9)
Delirium recorded in notes, but no screening or assessment recorded	18 (1.9)
Delirium recorded in discharge letter and/or psychotropic prescribed for delirium, but no screening or assessment recorded	32[38] (3.4)
Other evidence of possible delirium[39]	8 (0.9)
Total	216 (23.1)
Total using delirium screening correction factor[40]	202 (21.6)

35. One of these had delirium as the primary/co-primary cause of admission, another was admitted with delirium type symptoms; a third had psychotropic prescribed for delirium, but no documented assessment.

36. {Corrected data: 32 (3.4)}. Corrected based on O'Sullivan et al. (2018), where 70% of 400 older people in ED in one Irish hospital with positive delirium screen results (4AT) had delirium on formal testing.

37. Seven of these were admitted with delirium type symptoms; eight were admitted with explicitly recorded delirium.

38. Three of these were admitted with delirium type symptoms.

39. Delirium recorded in discharge letter but assessment for delirium was recorded as negative (n=1); screened positive, then assessed as negative, but psychotropic prescribed for delirium (n=1); psychotropic prescribed 'for delirium' but no screening or assessment recorded (n=6).

40. Corrected based on O'Sullivan et al. (2018), where 70% of 400 older people in ED in one Irish hospital with positive delirium screen results (4AT) had delirium on formal testing.

MOOD

Depression and dementia often occur together, and it is estimated that depression occurs in 20% of people with Alzheimer's disease and 45% of people with vascular dementia (Valkanova, 2017). The symptoms of depression and cognitive impairment can be inter-linked and overlapping and thus depression and dementia in older people have a complex relationship whereby cognitive changes are common within depression and mood symptoms often occur in the context of cognitive disorders (Steffens, 2017). It is therefore important that all staff caring for people living with dementia should consider depression and anxiety as a potential source of distress in the person living with dementia. Hospitals should have access to staff with the competence to assess a person living with dementia for depression and anxiety.

- One tenth of patients (10.6%, 98/926) received an assessment for recent changes in mood (reduced from 14%, 94/658 in 2013).

RESPONSIVE BEHAVIOURS AND ONE-TO-ONE OBSERVATION

Almost all people living with dementia experience some non-cognitive symptoms of dementia at some stage (McGowan et al., 2019). Non-cognitive symptoms of dementia are one of the most difficult aspects of the dementia journey for people living with dementia as well as their family carers and formal care services (McGowan et al., 2019). Hospital admission, combined with unfamiliar surroundings and memory problems, can be frightening and disorientating for those with dementia and can lead to worsening of non-cognitive symptoms, often manifested as responsive behaviours. A recent study in the UK found that three quarters of people living with dementia experienced at least one "Behavioural and Psychological Symptom of Dementia" during a hospital stay (White et al., 2017).

More than one third of hospitals (36%, 12/33) have a protocol governing the use of interventions for patients displaying responsive behaviour, aggression and agitation, which they report is suitable for use in people living with dementia who have responsive behaviours, compared to 32% of hospitals (11/34) in 2013. A further 21% of hospitals (7/33) are currently developing a protocol (18%, 6/34 in 2013). One other hospital highlighted that the appendix of the hospital's one-to-one observation policy provides guidance on the use of interventions for responsive behaviour. Three other hospitals referred to the HSE Prevention and Management of Violence and Aggression protocol, however this protocol does not refer to dementia or responsive behaviours.

- Where a protocol was in place or in development[41], 69% of these (11/16) include/will include a section on the appropriate use of restraints, while 56% of these (9/16) include/will include specific instruction on the risks of antipsychotics and benzodiazepines.

Given that there was documentation of "responsive behaviours" (e.g. walking about, calling out, pacing, aggression, hitting etc) in 37.5% of healthcare records (347/926), it is important that all

41. Data unavailable for three hospitals where protocol was in early stages of development.

hospitals implement the recent NCG 21 (Department of Health, 2019a) and the sister document "Non-Cognitive Symptoms of Dementia (NCSD): Guidance on Non-pharmacological Interventions for Healthcare and Social Care Practitioners" (McGowan et al., 2019).

In a comprehensive literature review of dementia care, Cahill et al. (2012) outline that patients living with dementia who display responsive behaviours need time to be listened to and be better understood, and that one-to-one observation (formerly known as "specialling") of these patients should be a last resort when all other available psychosocial interventions have been trialled. The more recent model of enhanced care teams (Department of Health, 2019b) has replaced observation with therapeutic activities, support, companionship, etc, provided by a dedicated team of support staff who have undergone dementia training.

A majority of hospitals audited (69.7%, 23/33) have a written policy for the use of one-to-one observation (or similar terms), with five others reporting that they are working on this, or a policy is in development. Where a policy is in place, just three of these (13.0%, 3/23) include specific information on the use of one-to-one observation for people living with dementia, though even this information is minimal. One other hospital reported that this policy is currently undergoing revision and will include this information once revised. One further hospital outlined that specific information on the use of one-to-one observation for people living with dementia is contained within another hospital policy.

In only one hospital, all staff who provide one-to-one observation services received education in the ongoing needs of people living with dementia. In hospitals where all staff providing this service do not have this education, the nurse manager requesting the service specifically requests someone with this education in only two hospitals. It was highlighted that in many cases, due to the low level of staff with this education, it would prove fruitless to make this request. One-to-one observation services are provided solely by internal staff in just one hospital audited. This is provided mainly by internal staff with agency staff occasionally used in more than a third of hospitals (39.4%, 13/33). In three hospitals (9.1%, 3/33) there is an approximate 50/50 split between internal and agency staff providing this service, while mainly agency staff are used in fifteen hospitals (45.5%, 15/33). This service is provided solely by agency staff in one hospital (3.0%, 1/33).

In the case note audit, a one-to-one observation service was allocated to 15.2% of patients (141/926) during their admission. Auditors highlighted difficulties in determining the number of days for which the service was allocated, and accordingly, there was poor inter-rater reliability for this question (Kappa= .354, p<.001, 41.7% percentage agreement). Bearing this caveat in mind, the median number of days for this service was allocated[42] was 5.5 (N=108, range=87.9, IQR=6.0). It was also difficult to determine whether this service was allocated on a one-to-one or cohort basis, primarily due to poor or inconsistent recording of same in the healthcare records; this was reflected in moderate percentage agreement for this question (Kappa= .473, p=.019, 66.7% percentage agreement). Where recorded, the service was mainly provided on a one-to-one basis (73.7%, 87/118), and less frequently on a cohort basis (23.7%, 28/118). In occasional cases (2.5%, 3/118), this service was provided by both means to the one patient (i.e. one-to-one at certain times, and as part of a cohort at others).

42. This variable was not normally distributed [D(108)=.30, p<.0001] so median rather than mean is reported.

COMMUNICATION OF COGNITIVE STATUS AT DISCHARGE

The HSE Code of Practice for Integrated Discharge Planning (2014) recommends that discharge information should include a description of unresolved ongoing problems listed in the hospital care plan. This would include relevant cognitive and mental health assessments, and any non-cognitive symptoms or responsive behaviours noted during the admission, as this information is particularly relevant to ensure community services and families/carers can access appropriate treatment and supports after discharge. It is also important that any episode of delirium is communicated, as it identifies the person as being at greater risk for future delirium, in the community or in hospital. In addition, delirium can worsen the trajectory of dementia progression.

In total, 189 healthcare records were not eligible for the review of discharge letters as the patient (a) died in hospital, (b) was receiving end of life care, or (c) was transferred to another hospital, a psychiatric ward, or a palliative care or rehabilitation unit.

- Thirteen healthcare records had no discharge letter available (online or in paper format).
- Of the available discharge letters, 81.2% (590/727) had dementia listed at the point of discharge.
- Where delirium was diagnosed by a healthcare professional during the admission, this was included in the discharge letter in 64.6% of healthcare records (42/65[43]). This is a substantial increase from 2013 when 24% of healthcare records (47/194) had "the symptoms of delirium, where present" summarised for discharge.
- One third of discharge letters (34.4%, 87/253) had persistent non-cognitive symptoms or responsive behaviours (where present[44]) noted. This is an increase from 27% (37/139) in 2013.

The Discharge Planning and Discharge results chapter details the communication of other information at the time of discharge.

CONCLUSION

There was a decrease in levels of cognitive testing since 2013, although this may not necessarily be inappropriate. However, only a small proportion of healthcare records had key components of collateral history recorded, e.g. only one in five had a collateral history taken which noted the duration since onset of memory problems. While hospitals reported improved recognition of the value of, and use of, patient passport documents, this was not yet reflected in the case note audit. The case note audit demonstrated a poor level of delirium screening and assessment, despite the recognition of dementia as the major risk factor for delirium, and the existence of an ED delirium algorithm since 2015 and a ward delirium algorithm since 2017. The communication of any episode of delirium at

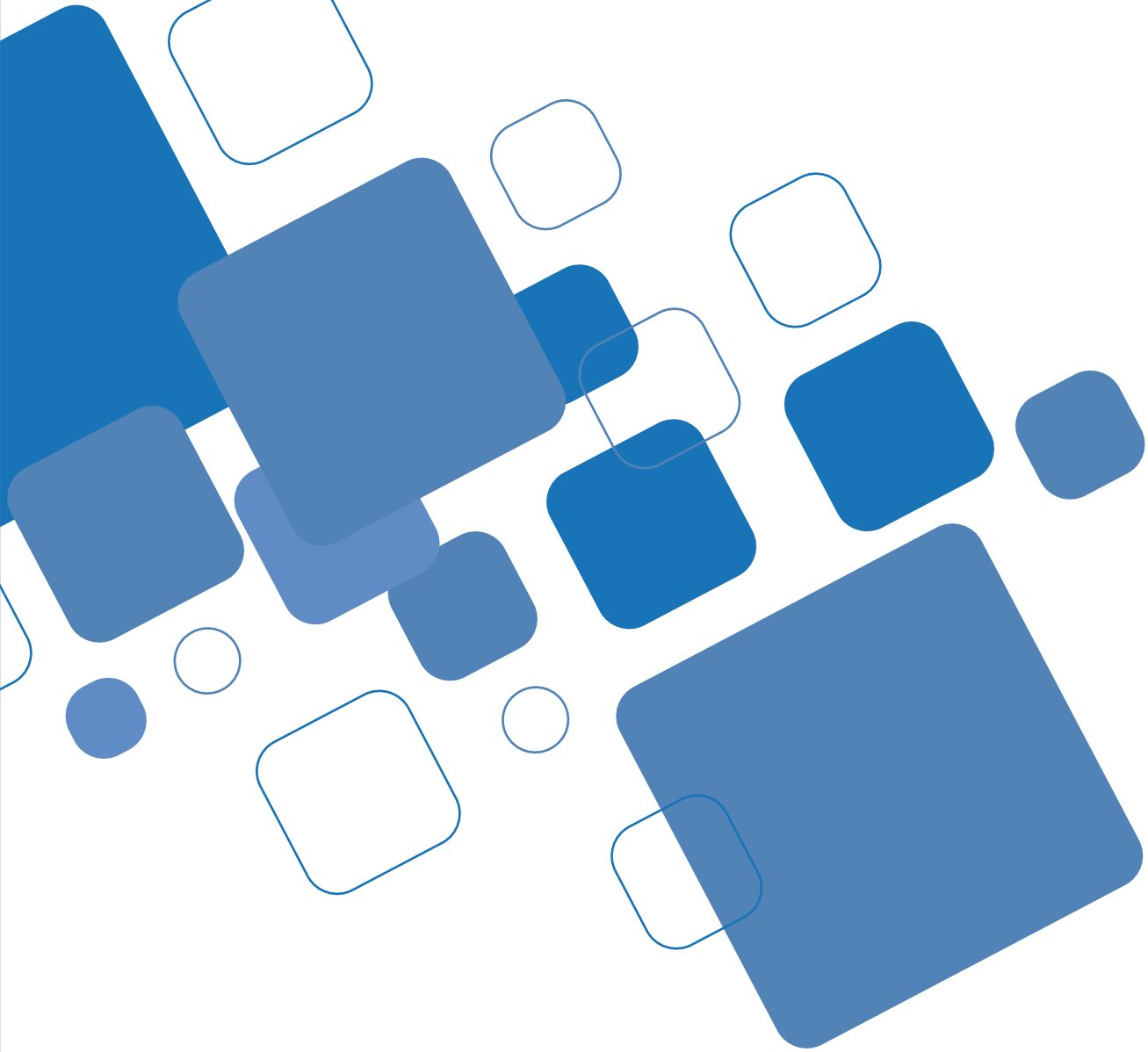
43. This excludes one additional case where this was marked as N/A by the auditor (reason unknown)

44. An additional 32 cases where this question was marked N/A, presumably because even though there was documentation of "responsive behaviours" in the cases notes, these were not deemed persistent and therefore would not be applicable to include in the discharge letter.

discharge was also sub-optimal, given the importance of this information. A minority of hospitals have a protocol governing the use of interventions for patients displaying responsive behaviour. Most hospitals have a written policy for the use of one-to-one observation, but not all staff providing this have received training in dementia care.

RECOMMENDATIONS

- Hospital management should ensure that the admission assessment of people living with dementia includes a standardised assessment of mental health status and recording of collateral history.
- Nursing management should ensure that a patient passport, or similar document, which collects information pertinent to caring for the person living with dementia (e.g. preferences, routines, likes and dislikes), is routinely used to improve the provision of person-centred care.
- Hospital staff need to read these documents and incorporate them into the care plan of the person living with dementia. Such documentation should be included as part of any future electronic healthcare record.
- Hospital management need to ensure that formal systems are in place in the hospital to ensure that suspected dementia triggers a referral for assessment and differential diagnosis.
- Hospital management should ensure that there is cognitive screening in the ED for all patients aged 65 and older, preferably using the 4AT, to screen for delirium and identify potential cases of undiagnosed dementia.
- All staff caring for people living with dementia should consider depression and anxiety as a potential source of distress in the person living with dementia. Hospitals should have access to staff with the competence to assess a person living with dementia for depression and anxiety.
- A protocol governing the use of interventions for patients displaying responsive behaviours, suitable for use in people living with dementia, should be in place across all hospitals, with ongoing promotion and education to support same by hospital management.
- The recent model of enhanced care teams (Department of Health, 2019b), where one-to-one observation is provided by a dedicated team of support staff who have undergone specific dementia training, should be implemented in all hospitals by hospital and nursing management.
- There should be improved communication of diagnoses and the outcomes of assessments by all relevant hospital staff during admission, and particularly at the time of discharge. This information needs to be communicated to the community.



Results Chapter 7

Staff Training

SUMMARY OF FINDINGS

- None of the hospitals audited have a knowledge and training framework for dementia.
- Dementia awareness training is mandatory for all staff who provide direct patient care in just one hospital, and for some staff categories in another four (15% overall). The majority of hospitals do provide dementia awareness training (85%, 28/33), and 70% had provided dementia awareness training to staff in the previous 12 months, comparable to 71% of hospitals who had provided this in the previous 12 months in 2013.
- One third of hospitals (11/33) now include dementia awareness training in staff induction programmes, compared to just 6% in 2013; this applies to all staff categories in just five hospitals.
- The National Dementia 4-hour dementia acute care programme "Enhancing & Enabling Care of the Person with Dementia in the Acute Hospital Setting" is provided to some staff in 61% of hospitals (20/33) and similarly, the 2-day programme "Enhancing & Enabling Wellbeing for the Person with Dementia" is provided to some staff in 64% of hospitals (21/33).

DEMENTIA AWARENESS

It is suggested that some of the negative effects on dementia from acute hospitalisation are related to the tension between prioritisation of acute care for the primary medical condition and the provision of person-centred dementia care. This is further complicated by poor understanding of person-centred dementia care and the required knowledge and skills to provide this among healthcare professionals (Dewing & Dijk, 2016). The first INAD data suggested that dementia education and training wasn't a priority in many Irish hospitals, despite the high prevalence of people with dementia in this setting. INAD-2 demonstrates improvements in this regard.

None of the hospitals audited have a knowledge and training framework or strategy that identifies necessary skill development in working with, and caring for, people living with dementia. Currently, one third of hospitals audited (33%, 11/33) include dementia awareness on their staff induction programme, though this applies to all staff in only five of these. This demonstrates a promising increase from 2013 when only 6% of hospitals (2/33) included dementia awareness on their staff induction programmes. While no hospitals had mandatory dementia awareness education/training in 2013, this is now in place for all staff with patient contact in one hospital audited, while a further four have mandatory dementia awareness education/training for some staff categories (see Table 7). Overall, 85% of hospitals (28/33) now have some dementia awareness training.

Table 7. Provision of Dementia Awareness Training

Staff Category	N=33 hospitals in INAD-2			2013 results
	Mandatory	Provided: On induction	Provided: In previous year	Provided: In previous year
	Number of hospitals	Number of hospitals	Number of hospitals (%)	Number of hospitals[45] (%)
Doctors	1	4	10 (30%)	18/33 (54%)
Nurses	5	10	22 (67%)	16/31 (52%)
Health Care Assistants	4	5	20 (61%)	9/31 (30%)
Other HSCPs, e.g. pharmacists physiotherapists, OTs	2	3	15 (76%)	5/31 (16%)
Support staff, e.g. porters, catering, security	2	3	13 (40%)	3/31 (10%)

The median number of staff in each hospital provided with dementia awareness training in 2018 was 33[46] (N=31, range=407, IQR=80). Ten hospitals audited had not provided any dementia awareness education to staff in 2018, comparable to the results in 2013 (10 hospitals also, out of 35).

OTHER DEMENTIA EDUCATION

The National Dementia 4-hour dementia acute care programme "Enhancing & Enabling Care of the Person with Dementia in the Acute Hospital Setting" is provided in 60.6% (20/33) of hospitals audited; in 12 of these it is provided to all relevant staff and in the remaining 8 it is provided to some of the relevant staff categories only (e.g. provided to nursing staff only). In hospitals where this programme is provided, it is mandatory for some staff in two (e.g. where provided as part of nursing induction), and for all staff in one. The median number of staff in each hospital[47] who had been provided with this education to date was 30 (N=29 hospitals) with much variability between hospitals (range=726, IQR=152). Eight hospitals reported that no staff had received this education.

Similarly, the "Enhancing & Enabling Wellbeing for the Person with Dementia" (2-day programme; National Dementia Education Awareness Programme) is provided in 63.6% (21/33) of hospitals audited; in 8 it is provided to all relevant staff, and in the remaining 13, it is provided to some staff only (e.g. provided through the hospital group for staff who request it). This education was not mandatory in any of the hospitals. The median number of staff in each hospital[48] who had been provided with this education to date was 2 (N=30 hospitals), with much variability between hospitals (range=144, IQR=5). More than one third (36.4%, 12/33) reported that no staff had received this education.

45. Missing data for dementia awareness training for doctors (n=2) and other staff groups (n=4).
46. This was not normally distributed [D(31)=.24, p<.0001] so median rather than mean is reported.
47. This was not normally distributed [D(29)=.269, p<.0001] so median rather than mean is reported.
48. This was not normally distributed [D(30)=.369, p<.0001] so median rather than mean is reported.

CONCLUSION

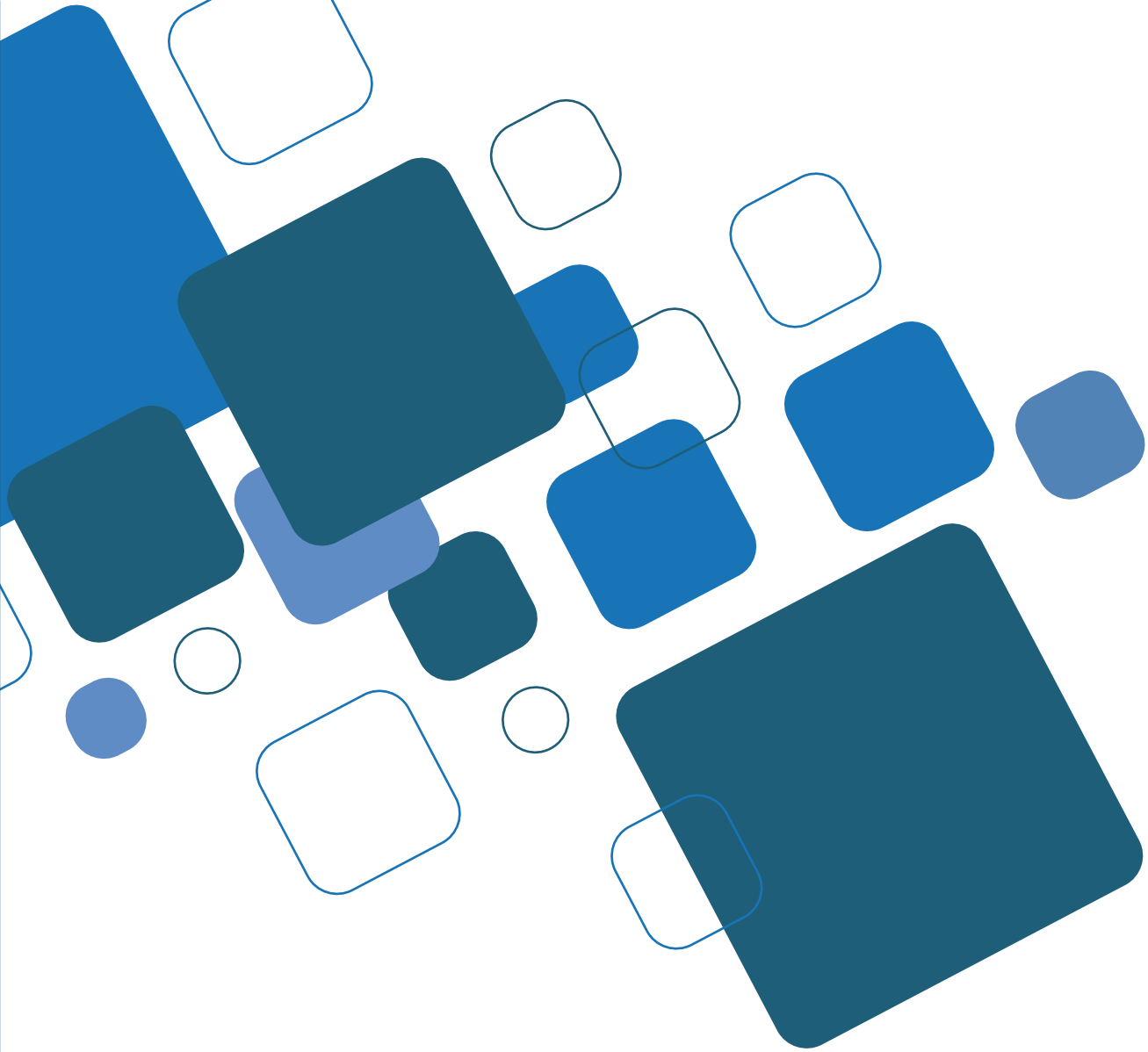
Overall, there has been an improvement in staff training for dementia since 2013, with increased provision within hospitals of dementia awareness training, and increased uptake of the 4-hour and 2-day dementia training programmes. Although it is promising to see five hospitals with mandatory dementia awareness training for some staff, from zero in 2013, this needs to be universal in hospitals for staff who have direct contact with patients with dementia. Staff awareness and training in dementia is a critical part of the foundation, together with adequate and effective resources, for the provision of optimum dementia care, and so should be addressed as a matter of priority in hospitals where this is lacking. The Dementia Pathways website (https://dementiapathways.ie/education-and-training-2) contains details of dementia education available nationally, including dementia awareness training, the 4-hour and 2-day programmes, and also postgraduate education available through higher education institutions.

RECOMMENDATIONS

- Hospital management (through the dementia quality improvement team) should develop a knowledge and training framework or strategy that identifies staff types who require dementia awareness training, and staff types/numbers who require minor level education (e.g. the 4-hour programme), moderate (e.g. the 2-day programme) and major level (university modules or definitive postgraduate education programmes). Each hospital's education framework or strategy should have an action plan which includes clear indicators of how the workforce has the right knowledge and skills to meet the needs of people living with dementia. Hospital management, working through the dementia quality improvement team (or similar working group) should have responsibility for action plans/timelines for roll out of education initiatives. The action plan needs to outline each of the following core components and how these can be achieved.
    - Ensure that dementia education/skill development is available for all staff, both clinical and non-clinical, working in the acute environment. This should include opportunities for both formal (structured education sessions) and informal education (point of care/whiteboard sessions).
    - Ensure that all staff, including non-clinical staff, have completed at least one hour of dementia awareness training. Ideally, this training should be included in all staff induction programmes.
    - Ensure that in the hospital, there is a cohort of highly trained staff who have undergone post-graduate (NFQ level 8 or 9) education in dementia. These staff will provide a valuable resource as champions for dementia in driving a person centred dementia care culture.
    - At least 5% of hospital staff should have undergone post-graduate education in dementia. Given the prevalence of dementia, it is recommended that all RANPs in Older Persons have undergone at least a 10-credit module (at NFQ level 8 or 9) in dementia care.

- In keeping with the nationally agreed job description, all dementia nurse specialists need to have a minimum of a Postgraduate Diploma in dementia care on appointment, or undertaken within the first year of taking up post. It is recommended that a similar requirement applies for any other dementia specific medical, nursing (e.g. RANP), or health and social care professional posts.
- Ensure that all staff providing direct patient care on Care of the Older Person wards have undergone training to the level of the 4-hour dementia programme (or equivalent) and the 2-day programme.
- Ensure that on each ward in the hospital that provides care for people living with dementia (including ED/AMAU), all nurse managers (including clinical placement coordinators/nurse practice and quality development) have completed the 2-day programme. In addition, all front-line staff should have completed the 4-hour programme and at least 30% should have completed the 2-day programme.
- Ensure that within each department in the hospital (e.g. out-patients, therapy departments, theatre recovery), at least one staff member has completed the 2-day programme.
- Ensure that staff in hospitals are facilitated to attend available dementia education programmes (including online education, as appropriate), with programmes provided regularly, and staff cover provided. Achievable timelines should be set out and reviewed regularly, with prioritisation of key staff (Care of the Older Person wards, champions for dementia).

- Performance indicators for dementia specific education should recognise the need for ongoing targeted education for all staff (clinical and non-clinical), with a particular emphasis on person centred dementia care. Innovative solutions such as brief handover education sessions, whiteboard sessions, point of care education (through dementia nurse specialist/champions) and online forums/education should be considered. This education should be tailored to the specific needs/concerns of staff working in different care departments (e.g. out-patient department, surgical, medical). Additionally, it can be tailored to specific topics (e.g. delirium, non-cognitive symptoms, person centred care).



Results Chapter 8

Discharge Planning and Discharge

SUMMARY OF FINDINGS

- A discharge summary was available in 90% of healthcare records (664/739), compared to just 39% of healthcare records in 2013.
- In less than one fifth of healthcare records (18%, 118/645), the discharge letter included details of cognitive status, mobility needs and continence needs at the time of discharge.
- There was evidence of a discharge planning meeting which included the person living with dementia and/or their carer/relative in 59% of healthcare records (400/684), a reduction since 2013.
- Where a discharge plan/summary was available, this was addressed to the GP/primary care team/nursing home, as appropriate, in 96% of cases (609/638) and a nursing specific discharge letter was similarly available addressed to the PHN (or the PHN was copied on the discharge plan/summary), where relevant, in 64% of cases (169/266).
- Just 37% of carers/families (179/479) received at least 48 hours' notice of discharge.
- An assessment of carers' needs, where relevant, took place in 61% of cases (193/319).
- In less than one third of healthcare records (30%), there was documentation that information about support after discharge was provided to the patient and/or carer.
- Where relevant (i.e. discharged to the community and not receiving end of life care), follow-up with dementia services was arranged in only 20% of cases (147/733). The audit did not determine whether there were indicators for such a referral, but the 20% follow-up rate seems lower than would be expected.
- In 27% of cases (200/734), a follow-up appointment was made with the team caring for the person in the hospital.

THE DISCHARGE PROCESS

The recording of cognitive status and/or any episode of delirium in the discharge documentation was presented in the Mental Assessment chapter.

Best practice recommends that prior to discharge, specific relevant information should be incorporated into a single, up-to-date, discharge plan. The HSE "Integrated care guidance: A practical guide to discharge and transfer from hospital" document outlines all the information which should be included in the discharge plan and states that "a copy of the transfer/discharge communication which is completed before discharge is sent to the service user, the service user's GP, PHN and other healthcare providers (e.g. nursing home) and a further copy is retained in the healthcare record" (HSE, 2014, p. 35).

In total, 189 healthcare records were not eligible for the discharge section of the case note audit as the patient (a) died in hospital, (b) was receiving end of life care, or (c) was transferred to another hospital, a psychiatric ward, or a palliative care or rehabilitation unit.

- The majority of healthcare records (89.9%, 664/739) had a discharge summary available, though it was noted that in some cases, this was not put together as a single plan and was instead divided between multiple documents, e.g. nursing transfer letter and medical discharge letter. This is an increase from 39% of healthcare records (209/535) in 2013.

This increase is likely linked to the HSE Code of Practice for Integrated Discharge Planning (2014) and may also in part reflect greater use of electronic discharge summaries, versus paper summaries which may not be filed, or correctly filed, in healthcare records.

The audit also looked at documentation in the discharge plan or summary. It found that:

- Where support needs were identified during the admission, these were included in the discharge plan or summary in almost half of healthcare records (46.8%, 267/571; increased from 32%, 174/535 in 2013).
- In less than one fifth of healthcare records (18%, 118/645), the discharge letter included details of cognitive status, mobility needs and continence needs. Looking at each of these individually:
    - Less than half of discharge summaries (47.4%, 306/645) included details of cognitive function.
    - Just over one third of discharge summaries (38.1%, 246/645) included details of mobility needs.
    - Just over one fifth of discharge summaries (22.3%, 144/645) included details of continence needs.

It may not be relevant to include all of this information within the discharge summary in all cases, for example, if no continence issues have been flagged during the admission then it would not be necessary to include details of continence needs. This audit captured data on assessing cognition, mobility and continence but not the results of these, or whether there was a change from baseline function. Of note, the questions relating to the inclusion of information on mobility needs (Kappa= .40, p<.001) had only moderate percentage agreement (70%). The question relating to continence needs had good percentage agreement (Kappa= .374, p<.001, 75.6% percentage agreement).

The results from the first INAD indicated that only 21% of healthcare records had evidence that place of discharge was discussed with the person living with dementia, while the person's carer/relatives were included in the discussion in 50% of cases. For INAD-2, there was evidence in the notes that a discharge planning meeting involving the person living with dementia and/or their carer/relative took place, where needed, in 58.5% of cases (400/684).

Where a discharge plan/summary was available, this was addressed to the GP/primary care team/ nursing home, as appropriate, in 95.5% (609/638[49]) of cases, and a nursing-specific discharge letter addressed to the PHN was present (or the PHN was copied on the discharge plan/summary), where relevant (i.e. where the person was discharged home), in 63.5% (169/266) of cases.

49. Missing data for n=26.

SUPPORT FOR CARERS AND FAMILIES ON DISCHARGE

Patients in hospital may receive conflicting information about expected discharge from different clinicians, and some receive little notice of discharge (Doos et al., 2015). Adequate notice of discharge allows for better planning by families (McDermott & Venditti, 2015) and facilitates the organisation and provision of relevant services (Gonçalves-Bradley et al., 2016). In recognition of this, the HSE integrated care guidance for discharge states that "the carers/family, primary care team/GP, PHN and other primary and community service providers are contacted at least 48 hours before discharge to confirm that the service user is being discharged and to ensure that services are activated or re-activated" (HSE, 2014, p. 34).

- More than a quarter of healthcare records (27.9%, 185/664) had no documentation to indicate families/carers had received notice of discharge (reduced from 45%, 238/535 in 2013).

Where notice of discharge was documented, just 37.3% of cases (179/479) were compliant with the guidance that carers/families should receive at least 48 hours' notice of discharge (noting that more cases are included in INAD-2 with either 3 or 4 days total length of stay in hospital, which may make giving 48 hours' notice of discharge more challenging). As in the first INAD, the moderate levels of agreement between auditors for this question (Kappa value of 0.49; 61.4% agreement) may indicate a lack of standardised recording of communication with families/carers in healthcare records. Therefore, caution is needed in interpreting this result.

- 60.5% of healthcare records (193/319) had documentation to show that an assessment of the carer's current needs had taken place in advance of discharge (where relevant); this was an increase from 55% in 2013.

Where a patient is discharged back to their own home or to their carer's home, it is important that they are provided with information about support on discharge/transition. However, there was documentation of information about support having been provided in less than one third of healthcare records (30.1%, 87/289). Where this was given, the information most commonly recorded was on the presenting complaint and follow-up of same (77.0%, 67/87). In total, 23.0% (20/87) were given information on the patient's dementia/delirium and follow-up of this.

ARRANGEMENT OF FOLLOW-UP

Excluding cases where the patient died, was receiving end of life care etc., there was follow-up with dementia services arranged in only one fifth of cases (20.1%, 147/733). Follow-up with dementia services was more common where delirium symptomatology was the primary diagnosis/cause of admission, (44.8%, 13/29 had follow-up arranged), and for cases with seizure/syncope (36.4%, 12/33) or stroke/TIA (including intracranial bleed) (29.2%, 7/24). In general, where follow-up with dementia-related services was arranged, this was with geriatric medicine (59.9%, 88/147), psychiatry of old age (21.1%, 31/147), palliative care (6.8%, 10/147), neurology (6.1%, 9/147), an Alzheimer Society of Ireland service (4.8%, 7/147), a nurse or healthcare professional-led dementia clinic/ service (3.4%, 5/147), or another dementia support service, e.g. Memory Technology Resource Room, dementia-specific day service (2.7%, 4/147).

In patients where there was documentation of "responsive behaviours" in the healthcare records, less than one fifth (19.5%, 57/293) had follow-up with dementia services arranged; where present, this was most commonly with geriatric medicine (49.1%, 28/57) and/or psychiatry of old age (42.1%, 24/57).

A follow-up appointment was made with the team caring for the person in the hospital in approximately one quarter of cases (27.2%, 200/734; n=91 general medicine, n=59 geriatrician, n=34 surgeon, n=14 orthopaedics, n=1 neurologist). Most commonly, the indication given for this appointment was to follow up on the presenting complaint (71.6%, 141/197). Another 10% of follow-up appointments (9.6%, 19/197) were for a repeat chest x-ray or blood test.

In the cohort of patients where delirium was suspected or confirmed during the admission (and where the discharge letter was reviewed), one quarter (25.0%, 44/176) had follow-up arranged with dementia services (most commonly with geriatric medicine; 50%, 22/44) and almost the same proportion (24.9%, 44/177[50]) had a follow-up appointment made with the team caring for the person in the hospital (9.1%, 4/44 of these appointments specifically for follow-up of delirium). The remainder of patients with suspected or confirmed delirium (61.4%, 108/176) had no follow-up plans documented. Almost two thirds of these (60.2%, 65/108)were discharged to residential care, where follow-up may have been felt to be most appropriate within the residential care facility, and some may have had recurrent previous delirium episodes, or indeed a full return to their normal cognitive status during the admission. Further research would be required to tease apart whether follow-up might have led to an altered care plan.

50. In 20 cases, the person had both follow-up with dementia services and follow-up with the team caring for the person in hospital arranged.

CONCLUSION

There was a notable improvement in the presence of a discharge summary in the healthcare records. However, this very often did not contain detailed information about key dementia-related parameters such as cognitive decline and mobility, which may simply be because these were unchanged, or it may be that they were not considered important. There appears to be a need for increased consultation with the person living with dementia and/or their carer/family in relation to discharge planning. This includes providing adequate notice of discharge and providing information about support on discharge. It should be noted that practice may be better than is presented here, given the poor levels of auditor agreement around the timing of the notice given to families in relation to discharge.

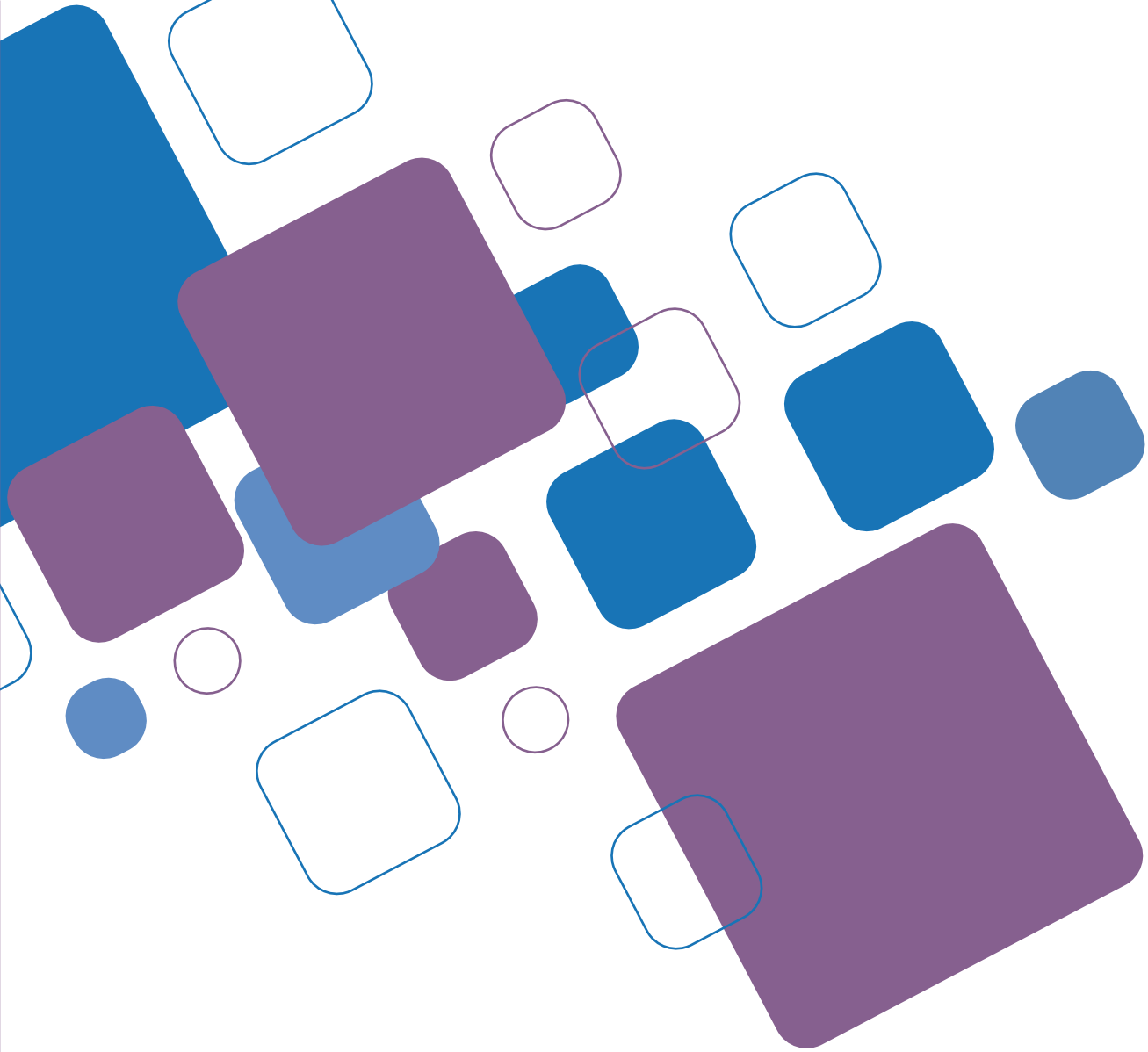
The case note audit also demonstrated a low level of follow-up arranged with dementia services or with the team caring for the person in the hospital. This may be appropriate or not, as the audit wasn't designed to determine whether there was a need for follow-up, and it can't be known whether there was a prior appointment with dementia services known to the treating team, but not documented. Similarly, the apparent lack of follow-up for 61% of patients with an episode of delirium is superficially concerning, but may not always be inappropriate for that person's individual case.

RECOMMENDATIONS

- In keeping with the HSE Code of Practice for Integrated Discharge Planning, ED/AMAU/ward staff should begin discharge planning within 48 hours of admission and should include an assessment of the patient's expected needs in relation to safe discharge home.
    - Where possible on admission, the person living with dementia and/or their carer/family should be given an estimate of time to discharge.
    - An assessment of the carer's needs should also be conducted, where the person living with dementia is being discharged to their own home.
- Wherever possible, the treating team should ensure that a formal or informal discharge planning meeting involving the person living with dementia and/or their carer/family has occurred at least 48 hours prior to planned discharge, anticipating that most people living with dementia may require support from their carer/family in the transition out of hospital.
- Prior to discharge home, the treating team should ensure that the person living with dementia and/or their carer/family are provided with information about follow-up and support after discharge (ideally in a written, easy to understand format), in relation to the presenting complaint, dementia, and where relevant, delirium.
    - At a minimum, the person living with dementia and/or their carer/family should be given the phone number of the local dementia advisor and/or dementia coordinator if available, with their available hours. Where relevant, the local dementia advisor/coordinator should be notified of the planned discharge of the person living with dementia.

- Other relevant supports which may be required include referral to an Occupational Therapist or other relevant health and social care professional for assessment and input, and engagement with PHN.

- The treating team should assess whether there is an indication for follow-up with local dementia services (including but not limited to: worsening dementia, distressing non-cognitive symptoms of dementia or responsive behaviours, carer stress or burnout, need for future care planning, unmet dementia symptoms).
- Where there is an indicator of a need for follow-up, the treating team should arrange a follow-up appointment with local dementia services (where applicable, with the service that last saw the person to ensure continuity of care).
- The treating team should ensure that the discharge letter includes all necessary details of the person living with dementia relevant to their future care, including any worsening of dementia status, delirium diagnosis, non-cognitive symptoms of dementia or responsive behaviours, changes in mobility, continence needs, or other function. This discharge letter should be sent to the GP, and the primary care team/nursing home/PHN/dementia advisor/dementia coordinator, as relevant.



Results Chapter 9

Palliative Care

SUMMARY OF FINDINGS

- In total, 9% of patients (88/934) died whilst in hospital, 88% of whom (76/86) were receiving end of life care, or on an end of life care pathway.
- Overall, 14% of patients (130/918) were receiving end of life care or on an end of life care pathway, compared to just 6% of patients in 2013.
- Within the audit sample, 15% of patients (142/928) were referred to specialist palliative care services, 43% of whom (61/142) died whilst in hospital.
- A decision on resuscitation orders was recorded in 43% of healthcare records (404/932), demonstrating an increase from 33% in 2013.
- There was a recorded referral for bereavement support in 2% of healthcare records (19/909); and in 13% of cases where the patient died during the admission.
- Less than one third of patients (291/909) had advance care planning recorded in their healthcare records.

PALLIATIVE CARE AND END OF LIFE CARE

The median estimated survival time from onset of dementia is 4.1 years for men and 4.6 years for women (Dempsey et al., 2015) and a growing number of people are dying from dementia annually (Nakanishi et al., 2015). Currently, dementia is reported to be the second leading cause of death in Australia overall and the leading cause of death among Australian females (Austrian Bureau of Statistics, 2018). Similarly, dementia was the leading cause of death in England and Wales in 2018, accounting for 12.8% of all deaths registered (Office for National Statistics, 2019). Consequently, palliative and end of life care, as well as advance care planning, are of tremendous importance for people living with dementia, and preparation for the last phase of life should be included in national dementia strategies (Nakanishi et al., 2015). Importantly, palliative care for people living with dementia is included in the Irish National Dementia Strategy (Department of Health, 2014).

While it is widely acknowledged that palliative care is of benefit to people living with dementia, there is reportedly some controversy in relation to its early introduction (van der Steen et al., 2016). However, it is argued that this is when palliative care principles are most valuable, as the person can still make decisions about their future care (Volicer & Simard, 2016).

The case note audit found that 88 patients (9.4%) died while in hospital (compared to 8%, n=51 in 2013), 76 of whom (88.4%, 76/86[51]) were receiving end of life care or on an end of life care pathway, which is increased from the 45% (23/51) of people who had received end of life care prior to death in 2013. In total, 130 patients (14.2%, 130/918) were receiving end of life care or were treated using an end of life care pathway (increased from 6%, n=37 in 2013). The increase in these percentages

51. Data missing for two cases

since the first INAD may reflect a more general trend of in-patients being older, frailer and sicker, or it may reflect changes in the care of a person living with dementia, with better identification of the end of life phase. Of note, an analysis of HIPE data from 2018 demonstrates that 5.5% of in-patients aged 75 years and older in all acute hospitals nationally died during the admission (6,888/125,685).

Often, there is an under-usage of palliative care services in people living with dementia. This can be for a number of reasons including the consideration of palliative care as not meaningful, insufficient time to initiate palliative care, and existing care sufficiently addressing palliative and supportive needs (Beernaert et al., 2015). In this audit, 15.3% of patients (142/928) were referred to specialist palliative care services (increased from 9%, 44/466 in 2013), 43% of whom (43.0%, 61/142) died whilst in hospital (compared to 59%, 26/44 in 2013).

Provision of bereavement support is a critical element of palliative care service delivery (Hudson et al., 2018). In some cases (n=22), there was documentation that the family/carer didn't need this, or refused it, or that the patient had no family/carer. In the remainder, 19 patients had a recorded referral made for bereavement support, a welcome increase from the one solitary recorded referral for family/carer bereavement support in 2013. However, a referral for bereavement support was still only made in 12.6% of cases (11/87) where the patient died during the admission (and where there was no documentation that family/carer didn't need this, or refused it, or that the patient had no family/carer[52]). Similarly, a referral was made in only 9.4% of cases (12/127) where the patient was receiving end of life care/on an end of life care pathway.

ADVANCE CARE PLANNING

Advance care planning, a targeted intervention to promote autonomy for end of life decisions, is particularly important in dementia where the illness, over time, impairs individuals' decision-making abilities (Jethwa & Onalaja, 2015). The audit therefore explored whether advance care planning was completed during the hospitalisation with the patient and/or their family, as hospitalisation can provide a trigger for such planning (i.e. an acute or serious illness requiring decision-making about future care) and also an opportunity to identify where someone has markers of limited life expectancy, such as weight loss, severe dependency, swallowing impairment, etc.

In 1.8% of cases (17/926), it was not applicable to complete advance care planning as this was already in place on admission. In the remainder, advance care planning was completed during the admission in just under one third of patients (32.0%, 291/909). This audit couldn't determine whether this was an appropriate level overall, as this would depend on dementia stage and life expectancy and patient and family distress/stress at the time, such that it may be better to defer this discussion to follow-up with local dementia services. However, within the cohort who were discharged to residential care (de novo or returning) as being people living with dementia with a high need for advance care planning, and unlikely to be attending community follow-up, 2.6% (11/416) had such planning already in place. Of the remainder, approximately one third (34.1%, 138/405) had one or more elements of advance care planning completed during the admission.

52. Documented as not needed in two cases.

In general, where advance care planning was conducted, the most common form was discussion of ceilings of care (70.8%, 206/291), followed by prognosis (67.0%, 195/291), appropriateness of re-admission (15.8%, 46/291) and an Advance Healthcare Directive (12.7%, 37/291).

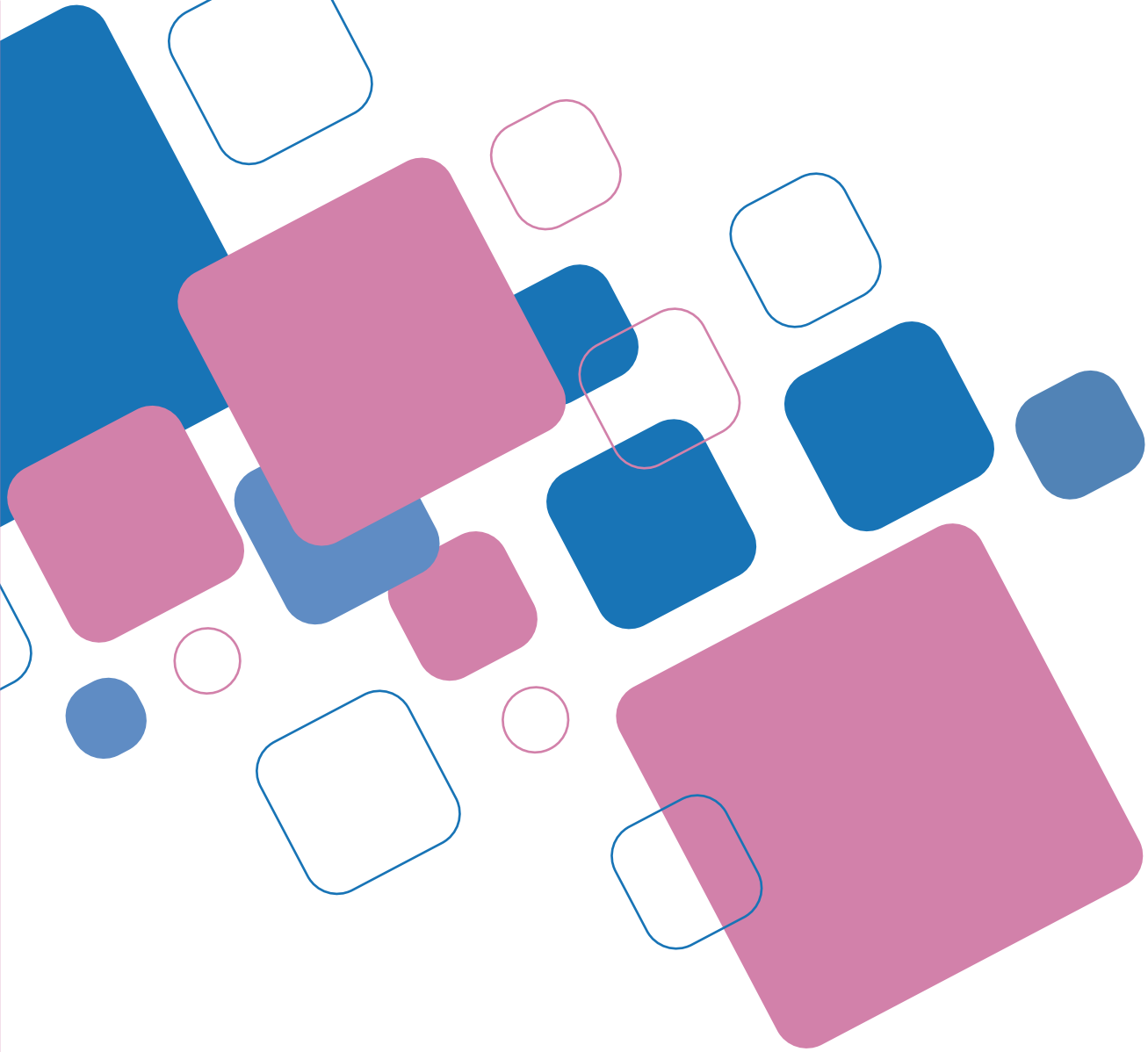
Apart from future care planning, the HSE National Consent Policy (2019, p. 112) states that "a decision whether or not to attempt CPR [cardiopulmonary resuscitation] should be clearly and accurately documented in the individual's healthcare record, along with how the decision was made, the date of the decision, the rationale for it, and who was involved in discussing the decision". Despite the fact that most people living with dementia die of acute illness, and a significant proportion die in acute hospitals, limitations of care orders such as "Do Not Attempt Resuscitation" are under-used in this population (Ibrahaim et al., 2016). The case note audit found that a decision about resuscitation was documented in only 43.3% of healthcare records (404/932); demonstrating an increase from 32.5% in 2013. It was noted that this was still lower than expected (given the caveat that dementia stage was not known in this audit). Again, taking the cohort who were discharged to residential care (de novo or returning) as being people living with dementia with a high need for a resuscitation order, only half of this cohort (50.4%, 211/419) had this recorded. In addition, not all of those on an end of life care pathway (94.6%, 122/129) had a decision about resuscitation documented, whereas this should be always recorded. A decision about resuscitation was more commonly recorded for patients whose primary diagnosis/cause of admission was: cardiac (60.0%, 18/30), respiratory infection (59.8%, 152/254) and infection-other (59.1%, 13/22).

CONCLUSION

The case note audit demonstrates that approximately 1 in 11 patients living with dementia admitted to an acute hospital die during the admission, emphasising the need for a coordinated palliative care approach. Considerable gaps in a palliative care approach were highlighted. This was particularly in relation to conducting advance care planning with the person living with dementia and their carer/family (as evidenced in those residing in or being transferred de novo to residential care where only 34% without prior advance care planning had it performed in hospital). Recording of a decision for resuscitation orders was also poor in this cohort (50%). Further research may be needed to explore the reasons behind this poor performance of advance care planning in the acute hospital setting.

RECOMMENDATIONS

- As per the HSE National Consent Policy, a decision for resuscitation should be made by the treating team for all patients living with dementia during hospital admission (wherever possible with the person living with dementia themselves, and if not possible, in consultation with the person's carer/family) and documented appropriately.
- It is crucial that advance care planning happens while the person living with dementia can still take part in (supported) decision making. The treating team should consider the opportunity for advance care planning during hospital admission, unless already in place prior to admission, noting that a hospital admission may not always be the most appropriate environment or time to include the person living with dementia in this discussion (e.g. delirium). In this case, advance care planning can be deferred to appropriate community follow-up (but this must be arranged by the treating team).
    - All discussions and decisions around advance care planning should be clearly documented and recorded by the treating team, ideally on a prescribed form.
    - A new transfer to residential care, a decline in dementia status or function, or markers of limited life expectancy, all indicate a need for advance care planning, either in hospital or as a priority after discharge.



Results Chapter 10

Psychotropic Prescribing for a Person with Non-cognitive Symptoms

SUMMARY OF FINDINGS

- In total, 83% of patients (771/931) were receiving psychotropic medication on admission to the hospital. This proportion was highest in those admitted from residential care (90%) and lowest in people admitted from home (79%).
- During the hospitalisation, 41% of patients (384/933) were prescribed a new psychotropic medication and/or an increased dose of an existing psychotropic medication.
- In cases where all new or increased prescriptions were for non-cognitive symptoms of dementia, a comprehensive assessment was documented for only 53% of patients (39/73) and non-pharmacological interventions were documented to be trialled prior to prescription in just 15% of cases.
- Excluding prescriptions for end of life care (n=23) and for seizures (n=2), Intramuscular (IM) or intravenous (IV) psychotropic medication was prescribed to 7% of the entire patient sample (67/934), representing almost one fifth (17%, 67/384) of all patients prescribed a new and/or increased dose psychotropic medication during the admission.

PRESCRIPTION OF PSYCHOTROPIC MEDICATION

In December 2019, a National Clinical Guideline (NCG) "Appropriate prescribing of psychotropic medication for non-cognitive symptoms in people with dementia" (NCG 21; Department of Health, 2019a) was launched to fulfil priority action point 2.3 of the National Dementia Strategy Implementation plan. This action point had stated: "The HSE will develop guidance material on the appropriate management of medication for people with dementia, and in particular on psychotropic medication management, and make arrangements for this material to be made available in all relevant settings, including nursing homes".

An audit tool was developed by the guideline development group to support guideline implementation, and INAD-2 was used as an opportunity to collect baseline data. Thus, this current audit of the use of psychotropic medications reflects practice in a time period prior to the launch or implementation of this guideline. Results are presented to inform the future implementation of the guideline, but practice and documentation should not be judged as if the guideline were available at the time.

This audit examined the use of psychotropic medications overall, both existing prescriptions at the time of admission, and in-hospital prescriptions. The following medications were included in the audit (the Anatomical Therapeutic Chemical (ATC) classification code is shown in brackets):

- Antipsychotic medications (NO5A, excluding N05AN01 Lithium)
- Benzodiazepines (NO5BA)
- Hypnotics and sedatives including Z-drugs (NO5CF), benzodiazepine-derivatives (N05CD) and melatonin (N05CH01)
- Acetylcholinesterase inhibitors (N06DA) and memantine (N06DX)
- Antidepressant medications (NO6A)
- Anticonvulsant medications (NO3A)

Of note, it was not possible to calculate inter-rater reliability for some of the questions on individual medications in the psychotropic audit due to the small sample size receiving the medication.

The majority of patients (82.8%, 771/931[53]) were receiving psychotropic medication on admission to the hospital. This was highest in people admitted from residential care[54] (89.8%; 238/265) or admitted from another service[55] (88.4%; 76/86), and lower in people admitted from home[56](78.5%; 450/573)[57]. Of these, more than one third (35.2%, 270/767[58]) were receiving one class of psychotropic medication, or two classes (33.5%, 257/767), while one fifth (19.9%, 153/767) were receiving three classes, approximately one tenth (9.3%, 71/767) were receiving four classes, 1.6% (12/767) were receiving five classes, and four patients were receiving six classes of psychotropic medication. When AChE inhibitors and Memantine are excluded from this analysis (as they may have been prescribed for cognitive rather than non-cognitive symptoms), more than half (53.2%, 333/626) were receiving one class of psychotropic medication on admission, almost one third (31.5%, 197/626) were receiving two classes, 12.6% (79/626) were receiving three classes, 2.2% (14/626) were receiving four classes, and three (0.5%) were receiving five classes of psychotropic medications.

Overall, 41.2% of patients (384/933[59]) were prescribed either a new psychotropic medication (31.7%, 296/933), or an increased dose of an existing psychotropic medication (5.1%, 48/933) or both (4.3%, 40/933). Figure 7 provides additional information in this regard.

53. Three audit forms had missing data.

54. Residential care also includes community hospital.

55. Other service includes transitional care, rehabilitation, psychiatric ward, convalescence, and transfer from another hospital.

56. Home encompasses own home, carer's home and respite care.

57. Data missing on source of admission in seven cases.

58. Data missing in four cases.

59. Data missing on whether psychotropic medication was prescribed during the admission in one case.

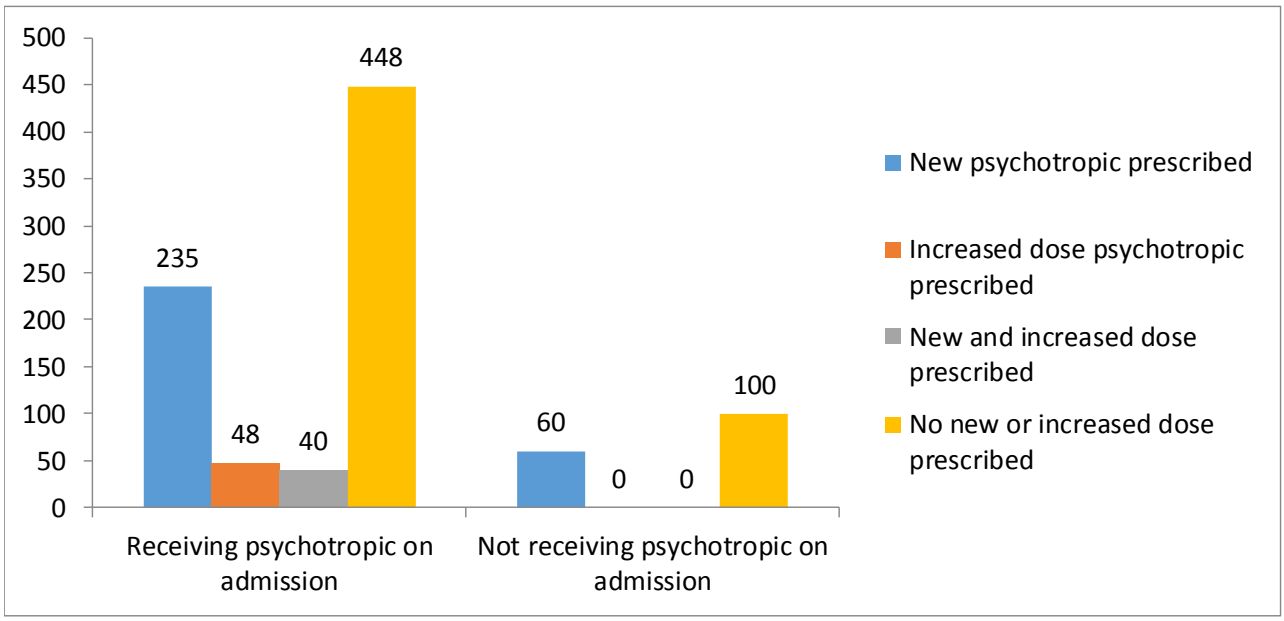


Figure 7. Number of Patients Receiving Psychotropic Medication on Admission and Those Prescribed New or Increased Dose (N=931)

NCG 21 (Department of Health, 2019a, p. 36) recommends that "Prior to considering any psychotropic medication in a person with dementia, a comprehensive assessment should be performed, by an appropriately trained healthcare professional". In cases where all new or increased prescriptions were for non-cognitive symptoms of dementia (n=74) (i.e. excluding any medical indications), a comprehensive assessment was documented in only 53.4% of patients (39/73[60]). NCG 21 (Department of Health, 2019a, p. 38) also recommends that "non-pharmacological interventions should be used initially to treat non-cognitive symptoms in a person with dementia, unless there is severe distress, or an identifiable risk of harm to the person and/or others". Non-pharmacological interventions were tried before medication was commenced/increased in just 14.9% of cases (11/74). Where non-pharmacological interventions were not tried first (n=63), and where a reason was documented, 63.6% (14/22[61]) of healthcare records had a valid indication for not trialling non-pharmacological interventions initially (see Table 8)[62]. The most common non-pharmacological intervention was use of one-to-one supervision/enhanced care (n=6). Re-orientation and reassurance were also recorded in a small number of case notes.

60. Missing data for one case

61. Missing data for n=35

62. Invalid indications recorded (non-cognitive symptoms/BPSD) in two cases

Table 8. Indications for Not Trialling Non-pharmacological Interventions (N=14)

Indication(s)	N (% of valid indications)
Severe distress to the person living with dementia	8 (57.1)
Severe distress to the person living with dementia and risk of harm to the person living with dementia and/or others	4 (28.6)
Risk of harm to the person living with dementia and others (e.g. combative and aggressive behaviour)	1 (7.1)
Risk of harm to others	1 (7.1)

INTRAMUSCULAR AND INTRAVENOUS PSYCHOTROPIC MEDICATION

NCG 21 (Department of Health, 2019a, p. 40) has a good practice point that "if psychotropic medication is necessary for the management of non-cognitive symptoms, oral medication should be used initially. In the exceptional case where parenteral treatment is necessary, the intramuscular (IM) route is preferred to intravenous (IV) administration, and single agents are preferred to combination therapy". The evidence base to support this is low, but the guideline development group agreed with an existing international guideline (NHMRC, 2016) that this was the preferred pattern of prescribing. It must be noted that there may have been other factors that influenced the choice of administration that were not documented, or that were not identified by the auditors. Also, there was evidence of co-prescribing of both oral and IM medications, allowing IM administration if oral medication was not possible. Thus, the following data is presented for general information to guide decisions on the future inclusion of route of administration in psychotropic prescribing audits, but firm conclusions or action points are not appropriate.

Excluding prescriptions for end of life care (n=23) and for seizures (n=2), IM or IV psychotropic medication was prescribed to almost 7.2% of the entire patient sample (67/934), and to almost one fifth (17.4%, 67/384) of all patients prescribed a new and/or increased dose psychotropic medication during the admission. Of note, this number did not include any patient administered a usual depot injection as per schedule.

These cases were examined in further detail:

- Oral medication was prescribed before parenteral medication in only 52.4% of cases (33/63[63]).
- Where combination IM agents were administered (n=50), single IM agents had been tried first in 76.0% of cases (38/50).
- Where IV medications were prescribed (n=18), IM agents were prescribed first in almost one third of cases (29.4%, 5/17[64]).
- Where IV psychotropic medication was prescribed, the indication for requiring IV treatment was documented in 44.4% of cases (8/18) though this audit item had only moderate agreement between auditors (Kappa= .429, p=.172, 66.7% percentage agreement).

CONCLUSION

This spotlight psychotropic audit was primarily designed to provide baseline data on psychotropic prescribing in dementia care in hospitals prior to the implementation of the NCG. There were not specific Irish recommendations on the prescribing of many of these medications at the time of the audit, which needs to be remembered when considering the findings. A comprehensive assessment was documented in only 53% of cases where psychotropic medication was prescribed for non-cognitive symptoms. The decision making process around either trialling non-pharmacological interventions first or proceeding to medications first was poorly documented, so that non-pharmacological interventions may indeed have been tried, or there may have been a valid reason for proceeding directly with medications, but this was not evident in the healthcare record.

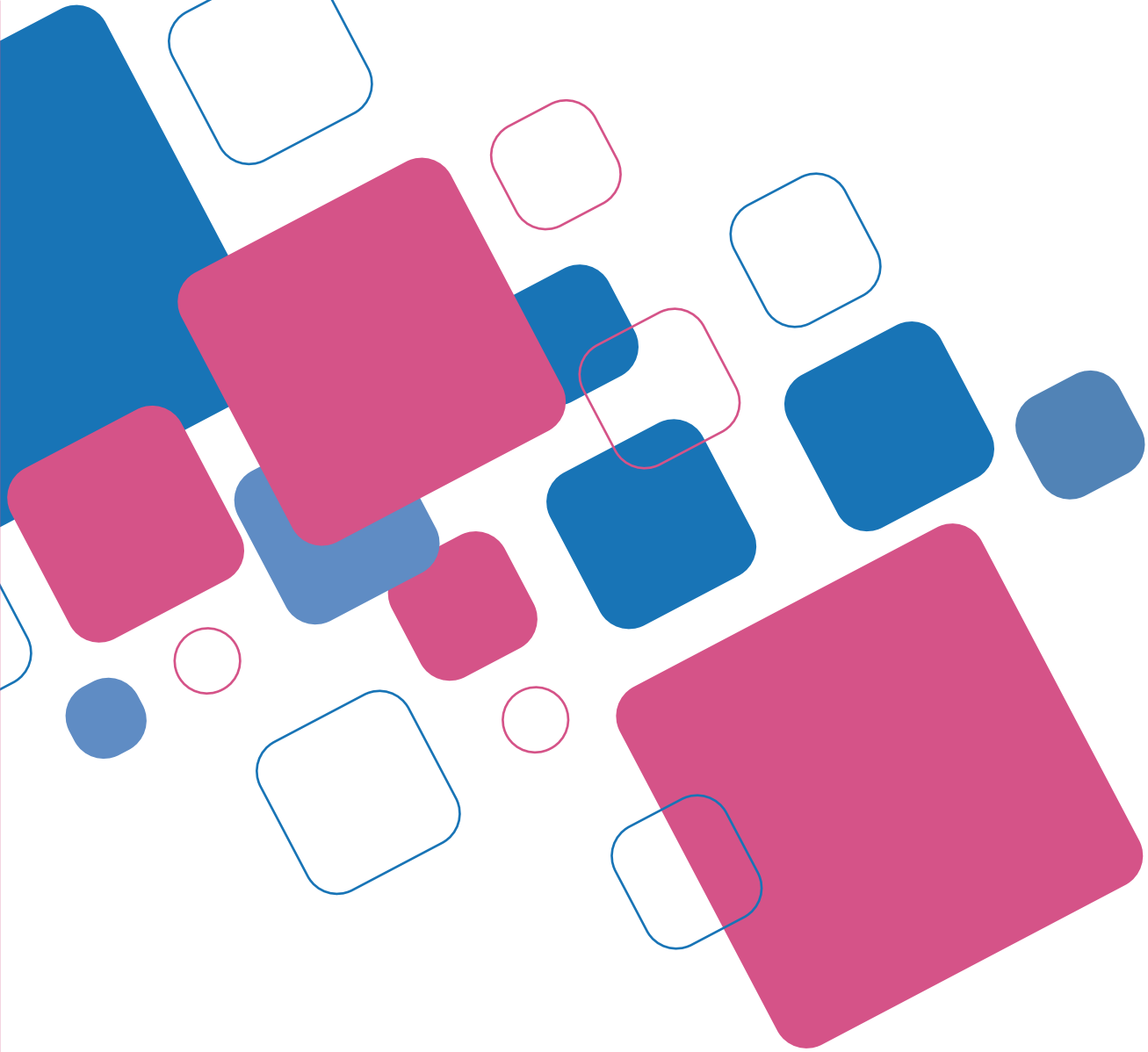
There is a need for education for all medical, nursing and pharmacy staff to increase awareness and understanding of the appropriate prescribing and use of psychotropic medication in the management of cognitive and non-cognitive symptoms of dementia. The recent NCG must be rolled out nationally, as per the detailed implementation plan within the guideline.

63. Missing data in four cases.

64. Auditor indicated that this was not applicable in one case.

RECOMMENDATIONS

- There should be, at a minimum, a comprehensive medication review for all patients aged 65 and older admitted to hospital (to include psychotropic medications) at the point of admission and at the point of discharge, and ideally also during the admission as medications or clinical conditions change.
- Acute hospitals should focus efforts to ensure appropriate prescribing of psychotropic medications for non-cognitive symptoms of dementia, using staff education, self-audit, dementia champions and suitable quality improvement techniques.
- Acute hospitals should have mechanisms in place to identify the prescribing of psychotropic medication in all patients, and particularly those with a diagnosis of dementia.
- An audit of psychotropic prescribing in people living with dementia in the acute hospital should be repeated in 1-2 years to establish change after the implementation of NCG 21.
- Acute hospitals should support staff to follow NCG 21 “Appropriate prescribing of psychotropic medication for non-cognitive symptoms in people with dementia” (Department of Health, 2019a); in particular, the following recommendations of the NCG:
    - Prior to considering any psychotropic medication in a person with dementia, a comprehensive assessment should be performed, by an appropriately trained healthcare professional.
    - Non-pharmacological interventions should be used initially to treat non-cognitive symptoms in a person with dementia, unless there is severe distress, or an identifiable risk of harm to the person and/or others.



Results Chapter 11

Psychotropic Prescribing: Focus on Antipsychotic, Benzodiazepine and Z-Type Medication

SUMMARY OF FINDINGS

- Overall, 38% of all patients (353/926) were receiving antipsychotic medication on admission; the proportion was much higher in those admitted from residential care (55%) than in those admitted from home (30%).
- A new or increased dose antipsychotic medication was prescribed to 25% of patients (233/934), though at least 31% of these prescriptions (73/233) were for medical indications. Almost half (48%, 110/230) of those prescribed a new or increased dose antipsychotic were already receiving antipsychotic medication on admission.
- Thus, more than half of patients (51%) were prescribed antipsychotic medication at some point during the admission, though this decreases to 46% when new or increased dose prescriptions for medical indications are removed. Although this is an apparent increase from 2013 when 41% of patients were administered antipsychotic medication at some point during the admission (noting that the proportion prescribed antipsychotic medication may be higher than those administered it), the proportion of prescriptions of antipsychotics for delirium or end of life care were much higher in 2019, with an actual decrease in prescriptions for non-cognitive symptoms.
- There was an explicit, appropriate indication documented for the requirement for antipsychotic medication in 81% of cases (182/225); most commonly this was agitation and/or aggression, end of life care or delirium. In total, 109/182 (60%) of these indications were for non-cognitive symptoms, indicating that somewhere between 11.2% and 16.8% of the total cohort received a new or increased dose antipsychotic medication for non-cognitive symptoms.
- Excluding cases where the medication was commenced for end of life care, there was documentation that the risks and benefits of the antipsychotic medication were discussed with the person living with dementia and/or their family (or a decision supporter) in only 4% of cases (7/182). There was a documented review of effectiveness and side effects during the admission in just 3% of cases (5/186).
- In total, 12% of patients (112/926) were receiving benzodiazepine medication on admission (21% of those admitted from residential care (56/262) compared to 8% of those admitted from home (43/571)).
- Although 16% of patients (150/934) were prescribed a new or increased dose benzodiazepine medication during the admission (with most (82%; 121/148) not previously prescribed a benzodiazepine), many of these prescriptions were for a medical indication. Thus, 45/121 prescriptions with a documented indication were for severe anxiety or non-cognitive symptoms, indicating that somewhere between 4.8% and 7.9% of the total cohort received a new or increased dose benzodiazepine medication for severe anxiety or non-cognitive symptoms.
- Similar to benzodiazepine medication, approximately one in six patients (16%, 146/926) were receiving z-type medication or a benzodiazepine at night on admission (23% of those admitted from residential care (60/262) compared to 13% of those admitted from home (72/571)).

- In total, 5% of all patients (49/934) were prescribed a new or increased dose of z-type medication (or a benzodiazepine at night); most of these were a prescription to a person not previously taking these medications (86%; 42/49). A sleep regimen/care plan was documented to have been trialled prior to the trial of a z-type medication (or benzodiazepine at night) in just 7% of cases (3/43).
- Just 1% of patients (10/926) were receiving Melatonin on admission and less than 1% of all patients (3/934) were newly prescribed Melatonin during their admission, while one other person was prescribed an increased dose.

ANTIPSYCHOTIC MEDICATION

Extensive research has evidenced the risks and limited benefit of antipsychotic medication for non-cognitive symptoms of dementia, as summarised by Foley et al. (2019). For example, antipsychotic medication is associated with a threefold increase in the risk of stroke and a 1.7 times risk of all-cause mortality compared with placebo (Schneider et al., 2005). Potentially 80% of people with non-cognitive symptoms who receive antipsychotics do not receive any symptom benefit, despite being exposed to a 1:100 risk of death (Department of Health, 2019a).

It must be highlighted that this current audit of the use of psychotropic medications reflects practice in a time period prior to the launch or implementation of this guideline. This audit data has been collected and results are presented to inform the implementation plan for the guideline, but practice should not be judged as if the guideline were available at the time. Notwithstanding this, there has been extensive evidence on the risks of antipsychotic medication for many years, with clear recommendations on their use within the 2018 NICE guideline on dementia (National Institute for Health and Care Excellence, 2018).

In total, 38.1% of patients (353/926[65]) were receiving antipsychotic medication on admission. This proportion was highest in people admitted from residential care (55.0%; 144/262), which may reflect more complex non-cognitive symptoms in people with dementia residing in long-term care. Of note, this proportion was increased since 2013 (46%, 100/216 in 2013), and was also high in people admitted from another service (43.0%; 37/86). The prevalence was lowest in those admitted from home (29.8%; 170/571), even though this also had increased since 2013 (19%; 68/362). In total, 12.2% of people receiving antipsychotic medication on admission (43/353) were receiving more than one antipsychotic medication.

A new or increased dose antipsychotic was prescribed to almost one quarter of all patients (24.9%, 233/934) during their admission. Almost half (47.8%, 110/230[66]) of these were receiving antipsychotic medication on admission, while 52.2% received a new prescription (120/230). Thus, in total, more than half of patients (51.1%, 473/926[67]) were prescribed antipsychotic medication at some point during the admission. This is an apparent increase from 2013 when 41% of patients were

65. The sample size is 926 as n=8 missing data on psychotropic medication on admission.
66. Missing data on prescription of psychotropic medications on admission in three cases.
67. The sample size is 926 as n=8 missing data on psychotropic medication on admission.

administered antipsychotic medication at some point during the admission (though the proportion of patients prescribed but not administered antipsychotic medication may have been higher). However, when prescriptions for medical indications are removed[68], this reduces to 46.3% of patients (429/926) prescribed antipsychotic medication during the admission, as illustrated in Figure 8.

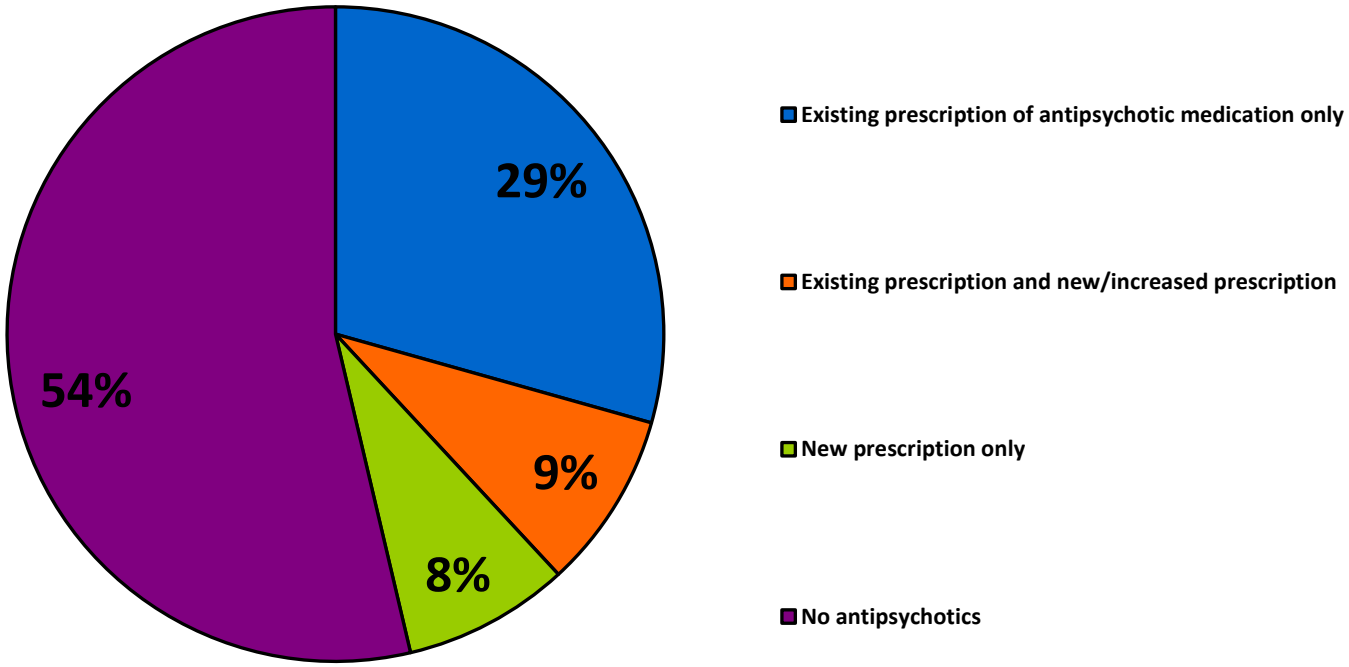


Figure 8. Antipsychotic Prescribing Data (N=926)[69]

In 37 cases, patients were also prescribed a new or increased dose of a second antipsychotic. In six cases, the patient was also prescribed a third new or increased dose antipsychotic medication during the admission.

The NCG 21 (Department of Health, 2019a, p. 42) recommends that "antipsychotic medication should be used with caution and only in cases where there is aggression, agitation or psychosis that either causes an identifiable risk of harm to the person with dementia and/or others or causes severe distress to the person". In the 233 people prescribed a new or increased dose antipsychotic during their admission (N=233), there was an explicit, appropriate indication documented for the requirement of the antipsychotic medication in 80.4% of cases (181/225[70]), which is increased from 50% in 2013. Further details of the documented indications are provided in the Table 9. As in the first INAD, the most common reasons recorded were agitation- and/or aggression-related. In total, between 11.2% and 16.8%[71] of the total cohort received a new or increased dose antipsychotic medication for non-cognitive symptoms. This is reduced from 2013, where at least 20.7% (136/656) of the cohort received a new or increased dose antipsychotic medication for non-cognitive symptoms (different methodology prevents an accurate upper range from 2013).

68. Cases removed where prescriptions were for end of life care, stat doses for medical procedures, delirium and discomfort.
69. Excluding prescriptions for end of life care and stat doses for medical procedures.
70. Missing data in eight cases
71. Assumption 1: all undocumented indications were also for NCS, so in total 109 + 52 received for NCS (161/934 = 17.2%). Assumption 2: all undocumented indications were not for NCS, so in total 109 received for NCS (109/934 = 11.7%). So the true figure lies somewhere between 11.7% and 17.2%.

Table 9. Documented Indication for Prescription of Antipsychotic Medication (N=182)

Indication	N (%)
Agitation alone or with other symptoms	62 (34.1)
Aggression and agitation[72]	35 (19.2)
Aggression alone	1 (0.5)
Psychotic features[73]	5 (2.7)
"Deterioration of dementia/cognition"	2 (1.1)
"Other" non-cognitive symptom[74]	4 (2.2)
Total "non-cognitive symptom" prescription	*109 (59.9%)*
Delirium	**33 (18.1)**
End of life care	**35 (19.2)**
Stat dose for medical procedure	**4 (2.2)**
Discomfort	**1 (0.5)**

The cases prescribed an antipsychotic for end of life care (n=34) or a 'stat' dose for a medical procedure (n=4) are not included in any further analysis below, as the risk, benefit and context for these scenarios is very different to prescribing for non-cognitive symptoms of dementia.

Within the 109 cases[75] where the antipsychotic was prescribed for non-cognitive symptoms of dementia (i.e. also excluding those patients with delirium where this is not applicable), there was documented severe distress, or an identifiable risk of harm to the person living with dementia and/or others in almost three quarters of cases (71.6%, 78/109). Within these[76], this documented indication was severe distress in 71.1% (54/76), risk of harm to the person living with dementia in almost half (46.1%, 35/76), and risk of harm to others in almost one third of cases (31.6%, 24/76).

The NCG 21 (Department of Health, 2019a, p. 47) recommends that "a full discussion with the person and/or their relevant Decision Supporter about the benefits and risks, including the increased risk of stroke, transient ischemic attack and mortality, should occur before antipsychotic medication is commenced". Here a Decision Supporter refers to a Decision-Making Assistant, Co-Decision-Maker, Decision-Making Representative, Attorney or Designated Healthcare Representative, if any of these are in place for a person, and have a role in relation to health-related decisions. (In practice, this person may often be a family member of the person with dementia, but not always). Excluding a further one case marked "not applicable" by the auditor, the risks and benefits of the antipsychotic

72. Includes aggression, agitation and wandering in one case

73. Includes aggression, agitation and psychosis (n=3), agitation and hallucinations (n=1) and 'increased BPSD' and hallucinations (n=1)

74. Includes emotional lability (n=1), 'wandering' (n=1), depression (n=1), and 'high risk of confusion at night' (n=1)

75. Includes agitation alone or with other symptoms (n=62), aggression and agitation (n=35), aggression alone (n=1), psychotic features (n=5), deterioration of dementia/cognition (n=2), emotional lability (n=1), 'wandering' (n=1), depression (n=1), and 'high risk of confusion at night' (n=1)

76. Missing data on whether specifically distress or risk of harm was the indication in two cases.

77. The sample here includes antipsychotic prescription for all indications (except end of life care or a 'stat' dose for a medical procedure), as well as cases where the indication was missing or unspecified.

medication were documented in the notes in less than 10% of cases (9.8%, 18/184[77]). Excluding three cases marked "not applicable" by the auditor, there was documentation that the risks and benefits were discussed with the person living with dementia and/or their family/relevant decision maker in less than 4% of cases (3.8%, 7/182).

With regards to the choice of antipsychotic, if indicated, the NCG 21 (Department of Health, 2019a, p. 49) recommends that "atypical (second generation) antipsychotic medications are associated with fewer extrapyramidal effects and risks than typical (first generation) antipsychotics, and therefore second generation medication should be used if antipsychotic therapy is necessary for the management of non-cognitive symptoms". A second generation antipsychotic was chosen in 72% of cases (139/193[78]). Where a first generation drug was prescribed (n=54), there was no documented reason for choosing first generation[79].

In addition, the NCG 21 (Department of Health, 2019a, p. 49) recommends that "if a risk and benefit assessment favours the use of antipsychotic medication, treatment should be initiated at the lowest possible dose and titrated slowly, as tolerated, to the minimum effective dose". The initial antipsychotic dose was at, or close to, the lowest available dose in 89.9% of cases (170/189[80]). The audit also attempted to determine the appropriateness of subsequent increases in dosage, but this audit item had a Kappa value of 0.082, p=0.504, with only 41.9% percentage agreement, so results are not presented.

Where a new or increased antipsychotic medication was prescribed, there was a documented review for effectiveness and side effects during the admission in just 2.7% of cases (5/186); there was a documented review for effectiveness only in a further 34.4% (64/186) and a review for side effects only in a further 1.6% (3/186). In two cases, there was documentation that a review was planned post-discharge. Of note, the findings in relation to whether a review for effectiveness and side effects was conducted or planned should be interpreted with some caution as this audit item had only moderate agreement between auditors (Kappa= .311, p=.023, 67.7% percentage agreement).

As per NCG 21 (Department of Health, 2019a, p. 52), "if there is a positive response to treatment with antipsychotic medication, decision making about possible tapering of the medication should occur within 3 months, accompanied by a discussion with the person with dementia and/or their relevant Decision Supporter". Excluding 18 cases where the auditor marked the question as N/A, there was documentation that the antipsychotic was effective in one third of cases (33.3%, 56/168). There was evidence of a planned review date within 3 months of the first prescription in approximately

78. The denominator is higher here than, for example, in the question about whether there was a discussion of risks and benefits, as in a number of cases the auditor had incorrectly entered information (e.g. entered an antipsychotic in benzodiazepine section, or had provided the name of the antipsychotic without any further detail documented).

79. In two cases, it was indicated that patient was already receiving Quetiapine, but this is not a valid reason for choosing a first generation drug.

80. The denominator is higher here than, for example, in the question about whether there was a discussion of risks and benefits, as in a number of cases the auditor had incorrectly entered information (e.g. entered an antipsychotic in benzodiazepine section, or had provided the name and dose of the antipsychotic without any further detail documented).

one tenth of cases (10.3%, 19/184). Where present, this plan explicitly stated the physician/service responsible for the review in the majority of cases (73.7%, 14/19).

Excluding 19 cases where the auditor marked this question as N/A, there was documentation that the antipsychotic was ineffective in a small proportion of cases (8.4%, 14/167). Where it was ineffective, it was tapered down in two cases and stopped in three (i.e. nine cases appeared to have continued with the medication). However, this audit item had only moderate agreement between auditors, so results should be interpreted with caution (Kappa= .400, p=.386, 66.7% percentage agreement).

BENZODIAZEPINE MEDICATION

As per the recent NCG 21 (Department of Health, 2019a, p. 72), "due to the very limited evidence to support the use of benzodiazepines in the management of non-cognitive symptoms in a person with dementia, and their significant adverse effects, they should be avoided for the treatment of non-cognitive symptoms, and usage strictly limited to the management of short-term severe anxiety episodes." Furthermore, given the high risk of dependency associated with these medications, the pre-existing "Guidance on appropriate prescribing of benzodiazepines and z-drugs (BZRA) in the treatment of anxiety and insomnia" (Medicines Management Programme, 2018) recommended that prescribers inform patients of the risk of dependency with long term use of benzodiazepines and that this medication is not prescribed for longer than four weeks. Of note, this HSE guidance was available prior to the chart audit period.

Approximately one in eight patients (12.1%, 112/926[81]) were receiving benzodiazepine medication[82] on admission. More than one fifth of those admitted from residential care (21.4%, 56/262), compared to 15.1% of those admitted from another service (13/86), and just 7.5% of those admitted from home (43/571) were receiving benzodiazepine medication on admission. In total, 14.3% of patients receiving benzodiazepine medication on admission (19/112) were receiving more than one benzodiazepine.

Approximately one sixth of patients (16.1%, 150/934) were prescribed a new or increased dose benzodiazepine during the admission, with the majority (81.8%; 121/148[83]) of these being patients not previously prescribed a benzodiazepine. Eight patients were prescribed more than one new and/or increased dose benzodiazepine during the admission (7 prescribed two and 1 prescribed three). However, more than half of the documented indications for prescribing benzodiazepines were for medical indication (see below). Thus, Figure 9 provides an overview of the prescribing of benzodiazepine medication before and during the admission, for "non-medical indications" only.

81. The sample size is 926 as n=8 missing data on psychotropic medication on admission.

82. Those receiving benzodiazepines at night as hypnotics are included within the z-type medication section which follows.

83. Missing data in two cases.

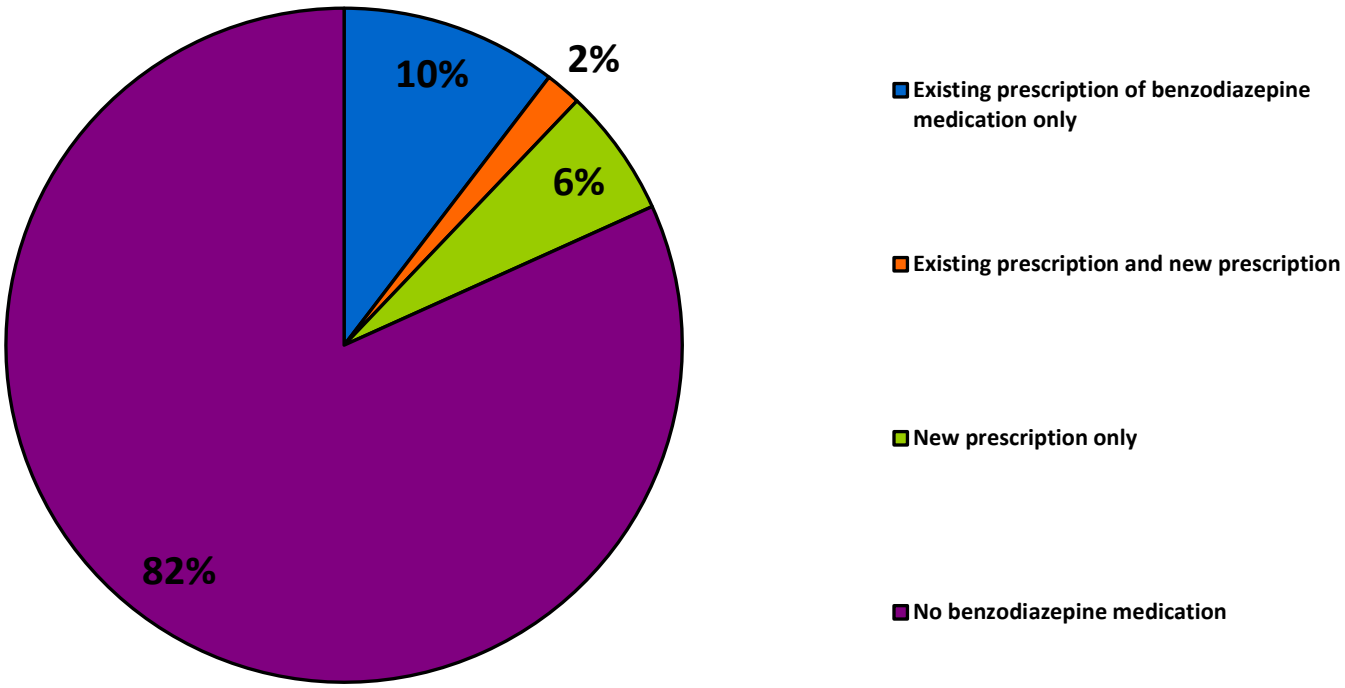


Figure 9. Prescribing of Benzodiazepine Medication for Non-Medical Indications (N=926)

There was an indication for the prescription of a benzodiazepine given in 82.3% of cases (121/147[84], as per Table 10. Of note, many of the prescriptions were for a medical indication, and only 45/121 indications were for anxiety or a non-cognitive symptom, with between 4.8% and 7.9% of people living with dementia receiving a prescription in hospital for a benzodiazepine for severe anxiety or other non-cognitive symptoms[85].

Table 10. Indication for Prescription of Benzodiazepines During the Day (N=121)

Indication	N (%)
Severe anxiety	22 (18.2)
Other non-cognitive symptoms[86]	21 (17.4)
Sleep aid	2 (1.7)
Total anxiety/non-cognitive symptom indications	45 (37.2%)
Seizures	8 (6.6)
End of life care	45 (37.2)
Alcohol withdrawal	6 (5.0)
Prior to medical treatment or surgery	6 (5.0)
Respiratory distress	4 (3.3)
Other[87]	7 (5.8)

84. Missing data in three cases.

85. Assumption 1: all undocumented indications were also for NCS or anxiety, so in total 45 + 29 received for this indication (74/934 = 7.9%). Assumption 2: all undocumented indications were not for NCS or anxiety, so in total 45/934 = 4.8%. So the true figure for the prescribing of benzodiazepines for NCS or anxiety lies between 4.8% and 7.9%

86. This includes non-cognitive symptoms (n=9), as well as agitation and aggression (n=6), restlessness (n=2), anxious and agitated (n=1), severe agitation (n=1), 'trying to get out of trolley with no clothes' (n=1), visual hallucinations, agitation, disoriented (n=1), 'if agitated' (n=1).

87. This includes four cases with other 'documented indications' but not specified, and two medically indicated prescriptions (as needed in event of catastrophic upper GI bleed; and for discomfort).

Where the benzodiazepine was prescribed for severe anxiety (n=22), excluding patients who only received a single dose (n=2) or where it was discontinued before discharge (n=1), there was a documented maximum duration of treatment in 72.2% of cases (13/18[88]).

Where the benzodiazepine was prescribed for non-cognitive symptoms (n=21), there was a justification of why a benzodiazepine was chosen over other medication in one quarter of cases (25.0%, 3/12[89]) and there was documentation that the risks and benefits of the benzodiazepine were discussed with the person living with dementia and/or their family/decision supporter in only one case.

Z-TYPE MEDICATION AND MELATONIN

The "Guidance on appropriate prescribing of benzodiazepines and z-drugs (BZRA) in the treatment of anxiety and insomnia" (Medicines Management Programme, 2018) recommends that benzodiazepine and z-type medications should only be prescribed for a period of a few days to two weeks for insomnia. The NCG 21 (Department of Health, 2019a, pp. 73-74) recommends that "Melatonin should not be used for sleep disorders in people living with dementia", and "a personalised sleep management regimen may be considered for sleep disorders in a person with dementia". In addition, the NCG 21 (Department of Health, 2019a, p. 74) includes the following good practice point: "There are no studies of z-drugs for sleep disorders in people with dementia. Due to their significant side effects, if z-drugs are considered, it should be for the shortest period possible".

In total, approximately one in six patients (15.8%, 146/926) were receiving a z-type medication or a benzodiazepine at night on admission. More than one fifth of those admitted from residential care (22.9%, 60/262), compared to 16.3% of those admitted from another service (14/86) and 12.6% of those admitted from home (72/571), were receiving z-type medication or a benzodiazepine at night on admission.

Approximately one in twenty patients (5.2%, 49/934) were prescribed a new or increased dose z-type medication or a benzodiazepine at night during the admission. Most of these were a prescription to a person not previously taking these medications (85.7%; 42/49). The new or increased medication was most commonly z-type medication (73.5%; 36/49) rather than a night-time benzodiazepine (24.5%; 12/49). One patient was prescribed both. Excluding cases where the auditor felt this was not applicable (end of life care; n=3), a sleep regimen/care plan had been documented as trialled prior to trial of the medication in just 7.0% of cases (3/43[90]).

In addition, 1.1% of patients (10/926) were receiving melatonin on admission, with these patients admitted from residential care (n=6), or home (n=4). Only three patients were newly prescribed Melatonin during their admission, while one other was prescribed an increased dose of Melatonin.

88. Missing data in one case.
89. Missing data in nine cases.
90. Missing data in four cases.

CONCLUSION

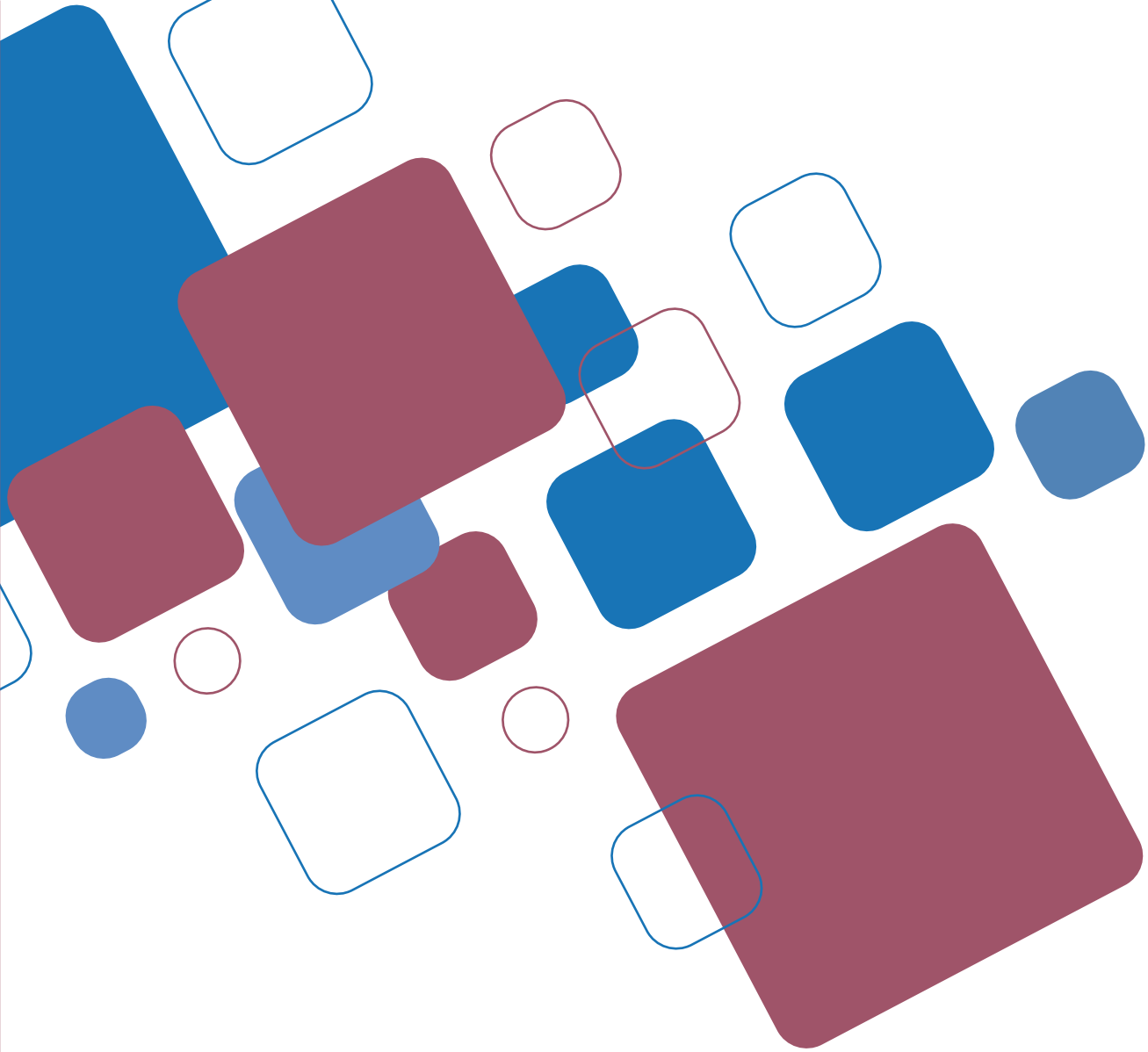
This audit gives particularly useful insight into the widespread use of antipsychotic medication (in the community and during the hospitalisation). There is better documentation of the indications for the prescription of antipsychotic medications since 2013, and although there is an increase in the use of these medications during hospitalisation since 2013, this appears to be mainly due to an increased use for end of life care and delirium (or at least better documentation of these indications). The prescription for non-cognitive symptoms seems to have actually decreased since 2013, with the caveat that this may reflect better documentation of other indications. However, the use of these medications for non-cognitive symptoms, in between 11.7% and 17.2% of all patients with dementia, does raise a concern that some of these prescriptions may have been inappropriate, and that their use could have been avoided by other non-pharmacological measures, supported by dementia-trained hospital staff. Of note, only 71.6% of prescriptions for non-cognitive symptoms were for severe distress or evidence of risk of harm, and only 10% had a risk-benefit decision documented in the healthcare record. There is also insufficient evidence of discussion with the person and their family (or decision supporter) or of planning further review of the person with a view to discontinuing these medications.

Although NCG 21 was not available at the time of this audit, the HSE-developed "Guidance on appropriate prescribing of benzodiazepines and z-drugs (BZRA) in the treatment of anxiety and insomnia" has been available since 2018. Despite this, there was insufficient evidence of discussion with the person and their family (or decision supporter) about the risk/benefit of benzodiazepines and Z-type medications, and little evidence of a planned further review to assess benefit and plan the discontinuation of these medications.

RECOMMENDATIONS

- Acute hospitals should implement the following recommendations of the National Clinical Guideline "Appropriate prescribing of psychotropic medication for non-cognitive symptoms in people with dementia" (Department of Health, 2019a):
    - Antipsychotic medication should be used with caution and only in cases where there is aggression, agitation or psychosis that either causes an identifiable risk of harm to the person with dementia and/or others or causes severe distress to the person.
    - People with Alzheimer's disease, vascular dementia or mixed dementias with mild-to-moderate non-cognitive symptoms should NOT be prescribed antipsychotic medication due to the increased risk of cerebrovascular adverse events and death.
    - People with dementia with Lewy bodies and Parkinson's disease dementia with mild to moderate non-cognitive symptoms should NOT be prescribed antipsychotic medication due to the increased risk of severe adverse reactions.

- People with Alzheimer's disease, vascular dementia, mixed dementias, dementia with Lewy bodies, or Parkinson's disease dementia, with severe non-cognitive symptoms, causing severe distress, or an identifiable risk of harm to the person and/or others, may be offered antipsychotic medication, where appropriate.
- A full discussion with the person and/or their relevant Decision Supporter about the benefits and risks, including the increased risk of stroke, transient ischemic attack and mortality, should occur before antipsychotic medication is commenced.
- Atypical (second generation) antipsychotic medications are associated with fewer extrapyramidal effects and risks than typical (first generation) antipsychotics, and therefore second generation medication should be used if antipsychotic therapy is necessary for the management of non-cognitive symptoms.
- If a risk and benefit assessment favours the use of antipsychotic medication, treatment should be initiated at the lowest possible dose and titrated slowly, as tolerated, to the minimum effective dose.
- If there is a positive response to treatment with antipsychotic medication, decision making about possible tapering of the medication should occur within 3 months, accompanied by a discussion with the person with dementia and/or their relevant Decision Supporter.
- If a person with dementia is taking an adequate therapeutic dose of antipsychotic medication without clear clinical benefit, the medication should be tapered and stopped; where possible after discussion with the person and/or their relevant Decision Supporter.
- If antipsychotic treatment is being tapered, assessment of symptoms for re-emergence should occur regularly during tapering, and for a period after discontinuation of antipsychotic medication.
- Due to the very limited evidence to support the use of benzodiazepines in the management of non-cognitive symptoms in a person with dementia, and their significant adverse effects, they should be avoided for the treatment of non-cognitive symptoms, and usage strictly limited to the management of short-term severe anxiety episodes.
- A personalised sleep management regimen may be considered for sleep disorders in a person with dementia.
- Melatonin should NOT be used for sleep disorders in people with dementia.



Results Chapter 12

Psychotropic Prescribing: Focus on Acetylcholinesterase inhibitors, Memantine, Antidepressants and Anticonvulsants

SUMMARY OF FINDINGS

- Just over one quarter of all patients with dementia (27%, 253/926) were receiving an acetylcholinesterase inhibitor (cognitive enhancer) on admission to hospital. Another 3% of all patients (27/934) had a new prescription during the admission, with these prescriptions primarily for cognitive dysfunction.
- More than one third of all patients (35%, 323/926) were receiving Memantine on admission (41% of those admitted from residential care (106/262) compared to 32% of those admitted from home (183/571)). Another 3% of patients (28/934) were newly prescribed Memantine during the admission.
- There was poor practice evident in relation to documentation of discussing the risks and benefits of Memantine with the person living with dementia and/or their family/decision supporter, and in conducting or planning for a review of the medication when this was prescribed for non-cognitive symptoms.
- Overall, 38% of patients (351/926) were receiving antidepressant medication on admission to hospital (42% of those admitted from residential care (111/262); 34% of those admitted from home (196/571)).
- A new or increased antidepressant medication was prescribed to 4% of all patients during admission (40/934), with 28/40 of these a new prescription to a person not already receiving an antidepressant. Where documented, the most common reason for prescription was severe non-cognitive symptoms, depression (unspecified severity), and agitation.
- There was poor practice evident in relation to documenting the discussion of the risks and benefits of the antidepressant medication with the person living with dementia and/or their family/decision supporter, and in documentation around conducting or planning for a review of the medication.
- In total, 9% of all patients (84/926) were receiving anticonvulsant medication on admission (14% of those admitted from residential care (37/262) compared to 7% of those admitted from home (38/571)). A small proportion of all patients (3%, 30/934) were prescribed a new or increased dose anticonvulsant during the admission, with the majority prescribed for seizures or pain, rather than for mood disorders or non-cognitive symptoms of dementia.

ACETYLCHOLINESTERASE INHIBITORS

Just over one quarter of patients (27.3%, 253/926) were receiving an AChE inhibitor on admission, with little differences across settings prior to admission. It is surprising that more people were not receiving this treatment, as it is indicated for cognitive impairment in Alzheimer's disease and dementia with Lewy bodies of any severity (which together accounted for 51% of the cases in this audit where the type was documented). As per the NICE guideline "Dementia: Assessment, management and support for people living with dementia and their carers (NG97)" (2018), it should not necessarily be discontinued as the dementia progresses, if still tolerated, and thus most patients with these two diagnoses should be receiving it (unless side effects, or life expectancy was limited), whereas only 34.1% (79/232[91]) were receiving it. Paradoxically, one person was receiving two AChE inhibitors on admission (0.4%, 1/253), which has no rationale unless they were transitioning from one to another at the time. An additional 27 patients had an AChE inhibitor newly prescribed during the admission. Where an AChE inhibitor was newly prescribed during the admission, this was primarily prescribed for cognitive dysfunction (96.3%, 26/27).

MEMANTINE

As per the NICE guideline "Dementia: Assessment, management and support for people living with dementia and their carers (NG97)" (2018) and the more recent NCG 21 (Department of Health, 2019a), Memantine monotherapy is recommended as an option for managing severe Alzheimer's disease, and in moderate Alzheimer's disease only when AChE inhibitors are not tolerated or contraindicated. For people with Alzheimer's disease who are already taking an AChE inhibitor, the recommendation is to consider Memantine in addition to an AChE inhibitor in moderate disease and offer Memantine in severe disease. The NICE guideline also recommends that clinicians consider memantine for people with dementia with Lewy bodies if AChE inhibitors are not tolerated or are contraindicated. As per NCG 21, Memantine is NOT recommended to be prescribed solely for the treatment of non-cognitive symptoms in a person living with dementia. At this current time, Memantine only has a licence for use in Ireland in moderate and severe Alzheimer's disease. Thus, the type and severity of dementia should be known (and hence recorded) to make a decision to commence this medication.

In total, 34.9% of patients (323/926) were receiving Memantine on admission. This was most common in people admitted from residential care (40.5%; 106/262), or admitted from another service (33.7%; 29/86), while 32.0% of those admitted from home (183/571) were receiving Memantine on admission[92].

91. Missing data on psychotropic medication on admission in four cases.

92. Missing data on source of admission in five cases.

An additional 28 patients were newly prescribed Memantine during the admission. In these patients, the type of dementia was recorded in only 39.3% of patient case notes (11/28). The severity of the dementia was not documented in more than half of cases where Memantine was newly prescribed during the admission (60.9%, 14/23[93]). In the remaining 9 patients, one had documented mild dementia, for which Memantine should not be used. In the majority of cases where Memantine was newly prescribed (85.2%, 23/27[94]), the indication was documented. Within these (n=23), it was more commonly for cognitive symptoms (n=19) than for non-cognitive symptoms (n=4). In cases where the Memantine was newly prescribed for non-cognitive symptoms or where the indication was not documented (n=8[95]), there was no documentation of that the risks and benefits of commencing Memantine were discussed with the person living with dementia and/or their family/decision supporter in any cases. There was documentation of either a review or a plan for review of the Memantine in just one case.

ANTIDEPRESSANT MEDICATION

NCG 21 "Appropriate prescribing of psychotropic medication for non-cognitive symptoms in people with dementia" (Department of Health, 2019a, p. 68) recommends that "Antidepressants may be considered to treat severe comorbid depressive episodes in people with dementia, or moderate depressive episodes that have not responded to psychological treatment". A further good practice point states that "Antidepressants may have a role in the treatment of other severe non-cognitive symptoms in a person with dementia (such as agitation), where pharmacological treatment has been deemed necessary. If trialled for other non-cognitive symptoms, antidepressants should be used with caution, with close monitoring for side effects".

In total, 37.9% of patients (351/926) were receiving antidepressant medication on admission, and 17.1% of these (60/351) were receiving more than one antidepressant. Almost half (48.8%, 42/86) of those admitted from another service were receiving antidepressant medication on admission compared to 42.4% (111/262) of those admitted from residential care and 34.3% (196/571) of those admitted from home[96].

A new or increased dose antidepressant medication was prescribed to 4.3% of all patients (40/934), with 28/40 of these a new prescription to a person not already receiving an antidepressant. Within these, two patients were prescribed two new and/or increased dose antidepressants.

The prescription was not documented to be for pain in any of the cases. The reason for prescription of the antidepressant was specified in almost three quarters of cases (72.5%, 29/40). The documented reasons for prescription of antidepressants are listed in Table 11.

93. Missing data in five cases.

94. Missing data in one case.

95. Missing data in one case.

96. Missing data on source of admission in two cases.

Table 11. Documentation of Reason for Prescribing Antidepressant (N=29)

Reason	N (%)
Depression- severity not specified	5 (17.2)
Moderate depression	4 (13.8)
Mild depression	1 (3.5)
Low mood (with or without panic attacks)	2 (6.9)
Severe non-cognitive symptoms	6 (20.7)
Agitation	5 (17.2)
Poor sleeping pattern/insomnia	2 (6.9)
Other[97]	4 (13.8)

Apart from one case where the auditor marked this not applicable, there was documentation that the risks and benefits of the antidepressant had been discussed with the person living with dementia and/or their family/decision supporter in only 15.4% of cases (6/39). This question had poor inter-rater reliability due to small numbers, but good percentage agreement between auditors (Kappa= .357, P=.284, 77.8% percentage agreement). There was documentation of either a review or a plan for review of the antidepressant in just one fifth of cases (20.0%, 8/40).

ANTICONVULSANT MEDICATION

As per the recent NCG 21 (Department of Health, 2019a, p. 70) "anticonvulsant medication is indicated for the treatment of seizures, bipolar disorder, or as an adjunctive therapy for pain, but is NOT recommended as a treatment for non-cognitive symptoms in a person with dementia."

In total, 9.1% of patients (84/926) were receiving anticonvulsant medication on admission. This was most common in people admitted from residential care (14.1%, 37/262), or admitted from another service (10.5%, 9/86), while just 6.7% of those admitted from home (38/571) were receiving anticonvulsant medication on admission. Within the cohort receiving anticonvulsant medication on admission, 13.1% (11/84) were receiving more than one anticonvulsant.

In total, 3.2% of patients (30/934) were prescribed a new or increased dose anticonvulsant during the admission, with 23 of these being a new prescription in a patient not previously prescribed an anticonvulsant. The majority of prescriptions[98] for new/increased doses of anticonvulsants during the admission were for seizures (71.4%, 20/28) or pain (14.3%, 4/28), and further analysis was not conducted on these cases. Another specified indication was "agitation/distress if refractory" (n=1). The indication for the new or increased anticonvulsant medication was not specified in a further three cases.

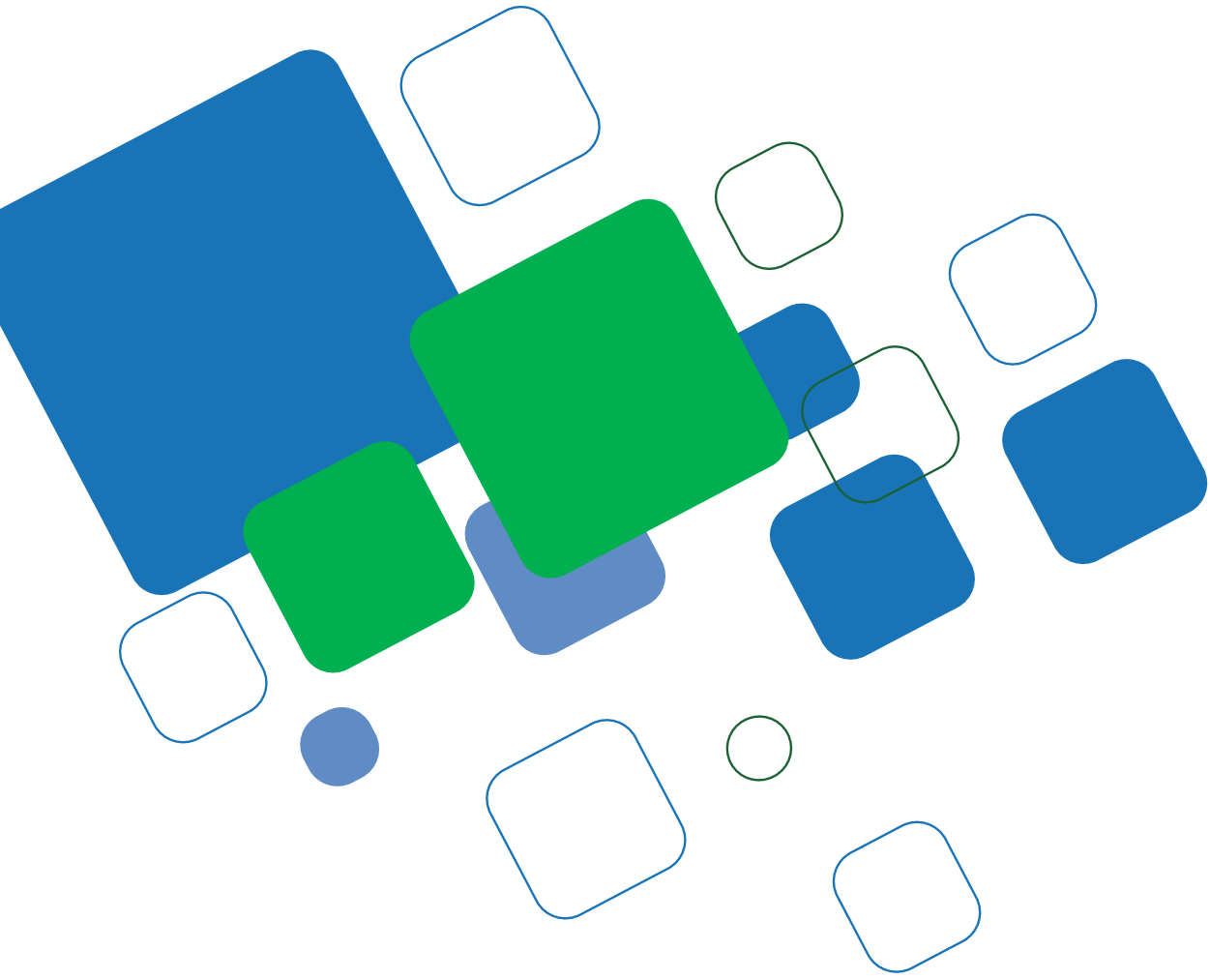
97. Includes emotional lability (n=1), delirium (n=1), anxiety (n=1) and acute confusion (n=1).

98. Missing data in two cases.

CONCLUSION

Although NCG 21 was not available at the time of this audit, there were existing recommendations from the NICE guideline (2018) on the use of AChE inhibitors and Memantine for cognitive symptoms. It appears that AChE inhibitors may be underused in Ireland for cognitive symptoms, and this should be explored further in non-hospitalised cohorts, as people admitted to hospital may not be typical of the overall population. The proposed national dementia registry will be particularly helpful in this regard, and it is important that funding is provided for implementation of this registry following the conclusion of the pilot stage in 2020. In the audit cohort, Memantine prescription was not supported by adequate documentation of the type and severity of the dementia (or evidence of intolerance of AChE inhibitors).

Generally, there was insufficient evidence of discussion with the person and their family (or decision supporter) about the risk/benefit of AChE inhibitors and Memantine. There was also little evidence of a planned further review with a view to assessing benefit or to discontinuing these medications.



RECOMMENDATIONS

- Acute hospitals should support staff to follow NCG 21 "Appropriate prescribing of psychotropic medication for non-cognitive symptoms in people with dementia" (Department of Health, 2019a) and in particular the following recommendations of the NCG:
    - Acetylcholinesterase inhibitors are indicated for cognitive enhancement in people with mild to moderate Alzheimer's disease but are NOT recommended solely for the treatment of non-cognitive symptoms in a person with Alzheimer's disease.
    - Due to the particular risks with antipsychotics in people with Parkinson's disease dementia and dementia with Lewy bodies, rivastigmine or donepezil may be considered for non-cognitive symptoms causing severe distress when non-pharmacological interventions have proved ineffective.
    - People with vascular dementia or frontotemporal dementia who develop non-cognitive symptoms should NOT be prescribed acetylcholinesterase inhibitors.
    - Memantine is indicated as a cognitive enhancer in people with moderate to severe Alzheimer's disease, Parkinson's disease dementia, and dementia with Lewy bodies, but it is NOT recommended to be prescribed solely for the treatment of non-cognitive symptoms in a person with dementia.
    - In people with mild to moderate dementia, and mild to moderate depression and/or anxiety, psychological treatments should be considered. Antidepressants may be considered to treat severe comorbid depressive episodes in people with dementia, or moderate depressive episodes that have not responded to psychological treatment.
    - Anticonvulsant medication is indicated for the treatment of seizures, bipolar disorder, or as an adjunctive therapy for pain, but is NOT recommended as a treatment for non-cognitive symptoms in a person with dementia.

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APPENDIX A

INAD-2 Partners, Audit Team and Steering Committee

INAD-2 Partners

The Second Irish National Audit of Dementia care in acute hospitals (INAD-2) is a partnership between the National Dementia Office and HealthCare Audit, Quality Assurance and Verification; both within the Health Service Executive (HSE). Funding for this audit is generously provided by the HSE Acute Operations. The INAD-2 Steering Committee is co-chaired by representatives from NCAGL Acute Operations and the National Dementia Office.

INAD-2 Audit Team

INAD-2 National Audit Coordinator

Dr Mairéad Bracken-Scally

HSE Healthcare Audit, Quality Assurance and Verification

Ms Anne Keane

Ms Anne McDermott

INAD-2 Steering Committee

The INAD-2 Steering Committee provides governance, guidance and direction in order to attain the objectives of the project. The Steering Committee is Co-Chaired by Dr Suzanne Timmons, National Dementia Office, and Dr Vida Hamilton, HSE Acute Operations

National Dementia Office: Dr Suzanne Timmons, co-chair of Steering Committee and Clinical Lead of National Dementia Office*

HSE Acute Operations: Dr Vida Hamilton, co-chair of Steering Committee and NCAGL, Acute Operations

Healthcare Audit - Quality Assurance and Verification: Ms Anne Keane/Ms Anne McDermott, Auditors, Healthcare Audit, Quality Assurance and Verification and Ms Cora McCaughan, Assistant National Director, Healthcare Audit, Quality Assurance and Verification*

INAD-2 Audit Team: Dr Mairéad Bracken-Scally, National Audit Coordinator for INAD-2*

Dementia Environment Project, TrinityHaus: Prof Desmond O'Neill, Professor in Medical Gerontology, Trinity College Dublin*

Irish Society of Physicians in Geriatric Medicine: Dr Paul Gallagher, Consultant Geriatrician and Senior Lecturer, University College Cork*

National Clinical Care Programme for Older People: Dr Sean Kennelly, Co-Investigator, Dementia

Inclusive Hospital Design Audit Tool and Consultant Geriatrician*

Dr Emma O'Shea: Former Project Manager of Northern Ireland Audit of Dementia*

Nursing and Midwifery Directorate: Ms Leonie Finnegan/Ms Michelle Quinn, NMPDU Quality Care Metrics Project Officers

Office Nursing Midwifery Services Director: Ms Deirdre Lang, Director of Nursing/National Lead Older Persons Services, Clinical and Integrated Programmes

Faculty of Old Age, College of Psychiatry of Ireland: Dr Sabina Fahy, Consultant Old Age Psychiatrist

Alzheimer Society of Ireland: Ms Catherine O'Keeffe, QPSD Manager

Health Information and Quality Authority: Ms Geraldine Ryan, Regional Manager

Dementia Services Information and Development Centre: Mr Matthew Gibb, Director, DSIDC

Dublin City University: Prof Kate Irving, Professor of Clinical Nursing

School of Epidemiology and Public Health, UCC: Prof John Browne, Director of the National Health Services Research Institute in Ireland

National Clinical Programme Neurology: Dr Siobhán Hutchinson, Consultant Neurologist, St James's Hospital

HSE Quality Improvement Team: Ms Nicola O'Grady, HSE Quality Improvement Team

HSE Health and Social Care Professionals Office: Ms Joan Elliott, OT Manager, Naas General Hospital

Emergency Medicine Programme: Dr Rosa McNamara, Emergency Medicine Consultant

HBS Estates, HSE: Mr Derek Dockrell, Architectural Advisor

National Clinical Programme Neurology: Dr Seán O'Dowd/Mr Emmett Kelly, Consultant Neurologist/CNM Neurology, Tallaght University Hospital

**Also a member of the INAD-2 Management Committee. The management committee, comprising a small number of members of the Steering Committee, was responsible for initial preparation of the draft INAD-2 tools for review by the Steering Committee, and had oversight of week-to-week operational issues of the audit that did not require full Steering Committee consideration.*

APPENDIX B

Participating Hospitals

Bantry General Hospital

Cappagh National Orthopaedic Hospital

Cork University Hospital

Croom (Orthopaedic) Hospital Limerick

Ennis Hospital

Letterkenny University Hospital

Mallow General Hospital

Mater Miserciordiae University Hospital

Mayo General Hospital

Mercy University Hospital, Cork

Midland Regional Hospital Portlaoise

Midland Regional Hospital Tullamore

Naas General Hospital

Nenagh Hospital

Our Lady's Hospital Navan

Portiuncula Hospital Ballinasloe

Regional Hospital Mullingar

Roscommon County Hospital

Sligo University Hospital

South Infirmary Victoria University Hospital, Cork

South Tipperary General Hospital

St Columcille's Hospital, Loughlinstown

St James's Hospital, Dublin

St John's Hospital Limerick

St Luke's General Hospital, Kilkenny

St Michael's Hospital, Dun Laoghaire

St Vincent's University Hospital

Tallaght University Hospital

University Hospital Galway

University Hospital Kerry

University Hospital Limerick

University Hospital Waterford

Wexford General Hospital

Other hospitals invited but hospital group/hospital declined to participate

Beaumont Hospital

Cavan & Monaghan Hospital

Connolly Hospital Blanchardstown

Kilcreene Orthopaedic Hospital, Kilkenny

Our Lady's Hospital Drogheda

APPENDIX C

Second Irish National Audit of Dementia Care in Acute Hospitals (INAD-2)

ORGANISATIONAL CHECKLIST

This audit tool looks at structures, resources, areas of identified good practice and monitoring that the hospital has put in place to improve the care, treatment and support of people with dementia. Standards have been developed based on the UK National Audit of Dementia Care, adapted for the Irish health services. A full bibliography for the standards in this audit can be found at www.nationalauditofdementia.org.uk

The checklist should be completed with input from the CEO (or equivalent managerial level), Director of Nursing, nominated site liaison, and nominated consultant physician or psychiatrist.

At the end of the questionnaire you will find a comment box. Use this to make any further comments on your answers to the questions.

Adapted from the first INAD tool, which was in turn adapted from the UK National Audit of Dementia, with permission.

Enter your hospital code:

This is the code allocated by the project team and is held by the audit lead contact. It will consist of 2 letters and 2 numbers, e.g. 11XY. If you do not know the hospital code, please get in touch with the audit lead from your hospital or contact the INAD audit Coordinator on 057 9318477

SECTION 1: GOVERNANCE AND DELIVERY OF CARE

1. A care pathway or bundle for patients with dementia is in place[1]:

- ☐ **A care pathway is in place** ⇒ **Go to 1b**
- ☐ **A care bundle is in place** ⇒ **Go to 1b**
- ☐ **Both a care pathway and a care bundle are in place** ⇒ **Go to 1b**
- ☐ **Neither a care pathway nor a care bundle are in place** ⇒ **Go to 1a**

1a. If a care pathway or bundle is not in place, are either of these in development

- ☐ **A care pathway is in development**
- ☐ **A care bundle is in development**
- ☐ **Both a care pathways and bundle are in development**
- ☐ **Neither are in development**

1b. A senior clinician is responsible for implementation and/or review of the care pathway or bundle:
N.B. They may also have responsibility for other areas.

- ☐ **Yes** ⇒ **Go to 1c**
- ☐ **No** ⇒ **Go to 2**

1c. Please identify the senior clinician who leads the work of the hospital on this

- ☐ **Clinical/Medical Director**
- ☐ **Director of Nursing**
- ☐ **Consultant Geriatrician/Specialist Physician in Care of the Older Person**
- ☐ **Consultant Psychiatrist**
- ☐ **Old Age Psychiatrist**
- ☐ **Consultant Physician**
- ☐ **Neurologist**
- ☐ **Consultant Nurse**
- ☐ **Registered Advanced Nurse Practitioner (RANP)/Clinical Nurse Specialist (CNSp)**
- ☐ **Health and Social Care Professional**
- ☐ **Other, please specify:**

2a. There is a care pathway/bundle for:

	Yes->Go to 2b	In development-> Go to 2b	No->Go to 3
Delirium[2]	☐	☐	☐
Stroke	☐	☐	☐
Fractured neck of femur	☐	☐	☐
Falls	☐	☐	☐

2b. It is/will be integrated with the dementia pathway:

	Yes	No
Delirium	☐	☐
Stroke	☐	☐
Fractured neck of femur	☐	☐
Falls	☐	☐

[1] Please provide evidence of any care pathway or bundle which is in place
[2] Please provide evidence of any care pathway or bundle which is in place

Comments on 2

3. There are champions for dementia:
Those with a passion for supporting and encouraging those around them to provide optimum dementia care. Have not necessarily completed Dementia Champion training

a) At hospital level

☐ **Yes** ☐ **No**

b) In the Emergency Department/AMAU/ASAU/Acute floor

☐ **Yes** ☐ **No**

c) At Medical Directorate Level

☐ **Yes** ☐ **No**

d) At surgical/peri-operative/trauma level

☐ **Yes** ☐ **No**

e) On all wards (excluding maternity and paediatrics)

☐ **Yes** ☐ **No**

4. Does the hospital have dementia specific:
N.B. This is related to protected time for a dementia specific role rather than staff who have received dementia training or education

a)Nurse Specialists ☐ **Yes** ☐ **No**

If yes, how many WTE: Whole Time Equivalent:

b) Advanced Nurse Practitioners/ candidate RANPs ☐ **Yes** ☐ **No**

If yes, how many WTE: Whole Time Equivalent:

c) Occupational Therapists ☐ **Yes** ☐ **No**

If yes, how many WTE: Whole Time Equivalent:

4a. Comments on 4

5. A Dementia Quality Improvement Team or Working Group or similar[3] is in place and reviews the quality of services provided in the hospital:

☐ **Yes** ⇒ **Go to 5a**
☐ **No** ⇒ **Go to Comment box at end of section**

[3] Please provide evidence for this e.g. Terms of Reference, list of membership

5a. The group meets:

- ☐ Quarterly
- ☐ Bi-monthly
- ☐ Monthly
- ☐ Other, please specify:

5b. The group includes:

- ☐ A representative of the executive management team
- ☐ Healthcare professionals
- ☐ Multidisciplinary representation
- ☐ Bed management/patient flow representative(s)
- ☐ Nursing management
- ☐ Organisations which support people with dementia e.g. Alzheimer's Society
- ☐ Carer/service user representation
- ☐ Practice development coordinator e.g. education and training representative

5c. Does this group have a clear governance and reporting structure to senior hospital management in place?

- ☐ Yes
- ☐ No

Do you have any comments to make on Section 1: Governance and delivery of care?

SECTION 2: CONTINENCE

6. Does your hospital have a written policy for the management of continence?[4]

- ☐ Yes
- ☐ No
- ☐ In development

7. Is there a lead for continence care or services in your hospital?

- ☐ Yes ⇒ Go to 7a
- ☐ No ⇒ Go to 8

7a. Does this person have education in the ongoing needs of people with dementia?

- ☐ Yes
- ☐ No

[4] Please provide documentation

8. Is there a structured programme of staff training on promoting continence?[5]

☐ **Yes** ⇒ **Go to 8a**
☐ **No** ⇒ **Go to comment box at end of section**

8a. Staff training on promoting continence:
Tick all that apply for each of the staff groups

	Mandatory	Provided on Induction	Provided in the last 12 months *(either in-house or externally)*	Not provided in last 12 months
Doctors	☐	☐	☐	☐
Nurses	☐	☐	☐	☐
HCAs	☐	☐	☐	☐
Other health and social care professionals, e.g. physiotherapists, dieticians	☐	☐	☐	☐

Do you have any comments to make on Section 2: Continence?

SECTION 3: DELIVERY OF CARE

This section asks whether there are systems in place to ensure that people with dementia receive a comprehensive assessment with the following components:
This can be contained within systems/policies for assessment of older people, ***including*** people with dementia. It need not be a separate system, process or policy unless people with dementia are excluded from such documents.

9a. Assessment of functioning using a standardised instrument- i.e. basic activities of daily living, instrumental activities of daily living, mobility
Answer "Yes" if functioning is assessed using a standardised instrument, e.g. Barthel or other instrument.

☐ **Yes** ☐ **No**

9b. Assessment of mental state using a standardised instrument – i.e. mental status (cognitive) testing
Answer "Yes" if cognitive assessments use standardised instruments, e.g. AMT, MMSE, MOCA.

☐ **Yes** ☐ **No**

[5] Please provide documentation

9c. Standardised assessment of nutritional status (e.g. MUST)

☐ **Yes** ☐ **No**

9d. Assessment of communication

☐ **Yes** ☐ **No**

9e. Assessment of pain

☐ **Yes** ☐ **No**

9f. Assessment of swallow function

☐ **Yes** ☐ **No**

9g. Screening question(s) relating to bladder and bowel problems

☐ **Yes** ☐ **No**

Do you have any comments to make on Section 3: Delivery of Care?

SECTION 4: DEMENTIA ASSESSMENT / MENTAL HEALTH NEEDS

10. Does your hospital screen <u>all</u> older people for cognitive impairment/delirium in the ED/AMAU/ASAU/Acute floor e.g. using the 4AT (supported by policy)?

☐ **Yes** ☐ **No**

11. Has your hospital formally implemented the "Early Identification and Initial Management of Delirium in the ED/AMAU" algorithm?

☐ **Yes** ☐ **No**

12. There are policies or guidelines in place to ensure that patients with dementia or cognitive impairment in high risk areas (the ED/AMAU/ASAU/Acute floor, theatre and wards caring for people with dementia) are assessed for the presence of delirium at presentation:[6]
This relates to national/international guidelines such as UK NICE delirium guideline CG103 which specifies that people at risk of developing delirium should be assessed for recent fluctuations in behaviour.
See http://www.nice.org.uk/cg103

☐ **Yes**
☐ **No**
☐ **In development**

[6] Please providence documentation

13. Does your hospital formally screen people at risk for delirium on wards on a daily basis?

☐ Yes ☐ No

If yes, what screening tool is used?

14. Has your hospital formally implemented the "Acute Ward Delirium Screening Algorithm"?

☐ Yes ☐ No

15. There are systems in place to ensure that where dementia is suspected but not yet diagnosed, this triggers a referral for assessment and differential diagnosis either in the hospital or in the community (memory services, geriatric medicine, old age psychiatry or neurology):
Answer "Yes" if either referral for assessment as an in-patient or referral for assessment as an out-patient is triggered by suspected dementia and this is specified in local policy or protocol.

☐ Yes ☐ No

16. There is a protocol in place governing the use of interventions for patients displaying violent or responsive behaviour, aggression and extreme agitation (also known as BPSD), which is suitable for use in patients who present responsive behaviours[7]
Answer "Yes" if there is a local protocol which includes a section for people with dementia.

☐ Yes ⇒ Go to 16a
☐ No ⇒ Go to Comment box at end of section
☐ In development ⇒ Go to 16a

16a. Within this protocol, there is a section on the appropriate use of restraints:

☐ Yes ☐ No

16b. Within this protocol, there is specific instruction on the risks of antipsychotics and benzodiazepines:

☐ Yes ☐ No

Do you have any comments to make on Section 4: Dementia Assessment/Mental Health Needs?

[7] Please provide documentation

SECTION 5: TRANSFER MONITORING

17. Is there a policy on internal transfers for recording and reporting instances of night time bed moves (i.e. between 8pm and 8am) at senior management level:[8]

☐ **Yes** ⇒ **Go to 17a**
☐ **No** ⇒ **Go to Comment box at end of section**

17a. Does this policy capture/allow identification of patients with dementia?

☐ **Yes** ☐ **No**

Do you have any comments to make on Section 5: Transfer monitoring?

SECTION 6: INFORMATION EXCHANGE

18. There is a formal system (pro-forma or template) in place for gathering information pertinent to caring for a person with dementia: [9]
Answer "Yes" if there is a dedicated or a generally used system, which is also used with people with dementia. This can be a form, template or checklist. It should prompt the collection of information and ensure it is consistently presented. Examples include Patient Passports, "This is Me" booklet. This system should capture significantly more information than activities of daily living and should include, for example, the patient's likes and dislikes

☐ **Yes** ⇒ **Go to 18a**
☐ **No** ⇒ **Go to Comment box at end of Section**

18a Please specify the name of the system used:

Do you have any comments to make on Section 6: Information?

[8] Please provide documentation
[9] Please provide documentation

SECTION 7: RECOGNITION OF DEMENTIA

19. There is a system in place across the hospital that ensures that all staff in the ward or care area are aware of the person's dementia or condition and how it affects them: [10]
Answer "Yes" if there is a visual identifier, e.g. in case notes, for dementia, or other flagging system that ensures dementia is quickly identified.

- ☐ **Yes, across all areas and wards of the hospital** ⇒ **Go to 19a**
- ☐ **In the ED/AMAU/ASAU/Acute floor only** ⇒ **Go to 19a**
- ☐ **At ward level only** ⇒ **Go to 19a**
- ☐ **No** ⇒ **Go to 20**

19a. Please say what this is:

- ☐ **A visual indicator, symbol or marker**
- ☐ **Alert sheet**
- ☐ **A box to highlight or alert dementia condition in the notes or care plan**
- ☐ **Other, please specify:**

20. There is a system in place across the hospital that ensures that staff from other areas are aware of the person's dementia or condition whenever the person leaves their designated care area: *E.g. for assessment.*
Answer "Yes" if there is a visual identifier, e.g. in case notes for dementia, or other flagging system that ensures dementia is quickly identified.

- ☐ **Yes** ⇒ **Go to 20a**
- ☐ **No** ⇒ **Go to comment box at end of section**

20a. Please say what this is:

- ☐ **A visual indicator, symbol or marker**
- ☐ **Alert sheet**
- ☐ **A box to highlight or alert dementia condition in the notes or care plan**
- ☐ **Other, please specify:**

Do you have any comments to make on Section 7: Recognition of Dementia?

[10] Please provide documentation

SECTION 8: TRAINING, LEARNING AND DEVELOPMENT

21. There is a training and knowledge framework or strategy that identifies necessary skill development in working with and caring for people with dementia:[11]

☐ **Yes** ☐ **No**

22. Staff induction programmes include dementia awareness:

☐ **Yes** ☐ **No**

The following questions are about training that is provided to acute healthcare staff who are involved in the care of people with dementia (or suspected dementia):
Training provision can refer to in-house training, knowledge sharing sessions, induction, online training, or other scheduled learning event including ward based training provided by a specialist practitioner e.g. dementia champion, liaison nurse

23. Dementia awareness training:
Tick all that apply for each of the staff groups

	Mandatory	**Provided on Induction**	**Provided in the last 12 months** *(either in-house or externally)*	**Not provided in last 12 months**
Doctors	☐	☐	☐	☐
Nurses	☐	☐	☐	☐
HCAs	☐	☐	☐	☐
Other health and social care professionals, e.g. physiotherapists, dieticians, pharmacists	☐	☐	☐	☐
Support staff in the hospital, e.g. housekeepers, porters, receptionists, catering	☐	☐	☐	☐

23a. How many staff in the hospital were provided with dementia awareness education between 1 January 2018 – 31 December 2018[12]

24. The National Dementia Office 4 hour dementia acute care programme is provided to staff in your hospital?

☐ **Provided to all relevant staff** ⇒ **Go to 24a**
☐ **Provided to some staff only. Please provide details:** ⇒ **Go to 24a**

☐ **Not provided** ⇒ **Go to 25**

24a. If provided, this education is mandatory:

☐ **Yes** ☐ **No**

[11] Please provide documentation
[12] Please provide evidence, where possible

24b. How many staff in the hospital were provided with this education to date?

25. "Enhancing & Enabling Wellbeing for the Person with Dementia" (2 day programme) is provided to staff in your hospital:

- ☐ **Provided to all relevant staff** ⇒ **Go to 25a**
- ☐ **Provided to some staff only. Please provide details:** ⇒ **Go to 25a**
- ☐ **Not provided** ⇒ **Go to Comment box at end of section**

25a. If provided, this education is mandatory:

☐ **Yes** ☐ **No**

25b. How many staff in the hospital were provided with this education to date?

Do you have any comments to make on Section 8: Training, learning and development?

SECTION 9: SPECIFIC RESOURCES SUPPORTING PEOPLE WITH DEMENTIA

26. The discharge coordinator has education in the ongoing needs of people with dementia:

- ☐ **Completed 4 hour dementia acute care programme**
- ☐ **Completed 2 day dementia programme**
- ☐ **Completed other relevant education, please specify:**
- ☐ **Discharge coordinator does not have education in the ongoing needs of people with dementia**

27. Does your hospital have a social worker(s)?

- ☐ **Yes** ⇒ **Go to 27a**
- ☐ **No** ⇒ **Go to 28**

27a. Do any of the social workers working with people with dementia and their carers have education in the ongoing needs of people with dementia?

- ☐ **Yes**
- ☐ **No**

28. Protected mealtimes are established in <u>all</u> wards that admit adults with known or suspected dementia:[13]
i.e. no ward rounds or routine patient reviews conducted during patient mealtimes. Answer "Yes" if this applies to all wards admitting adults with known or suspected dementia.

☐ **Yes** ⇒ **Go to 28a**
☐ **No** ⇒ **Go to 29**

28a. Wards' adherence to protected mealtimes is reviewed and monitored:
E.g. there is a local system for reporting and monitoring this.

☐ **Yes** ☐ **No**

29. The hospital has in place a policy/procedure/guideline which promotes and allows identified carers of people with dementia to visit at any time, including at mealtimes (e.g. Carer's passport):[14]

☐ **Yes**
☐ **No**

29a. If yes, please provide the name of this scheme/programme:

30. The hospital can provide finger foods for people with dementia (please select one option only:

☐ **Patients can choose a complete meal option (incorporating special dietary requirements) that can be eaten without cutlery (finger food) <u>every day</u>**

☐ **Patients can choose a complete meal option (incorporating special dietary requirements) that can be eaten without cutlery <u>only some days</u>**

☐ **Finger food consists of sandwiches/wraps only**

31. The hospital can provide 24 hour food services for people with dementia (please select one option only):
Where the organisation's 24-hour food services cannot meet the needs of all patients, including those with specific dietary requirements (such as vegetarians, those requiring puréed or gluten-free foods), the fifth option (i.e. Food is not available 24 hours a day) must be selected.

☐ **In addition to the main meals, other food, for example toast, sandwiches, cereals, soup, and lighter hot dish(es), is available 24 hours a day**

☐ **In addition to the main meals, other food, for example toast, sandwiches, cereals, soup, and lighter hot dish(es), are available, but less than 24 hours a day**

☐ **Simple food supplies, for example bread, cereal, yoghurt and biscuits, are available 24 hours a day**

☐ **Only snacks (biscuits, cake) are available 24 hours a day**

☐ **Food is not available 24 hours a day**

[13] Please provide documentation
[14] Please provide documentation

32. Opportunities for social interaction for patients with dementia are available. e.g. to eat/socialise away from their bed area with other patients:

☐ **Yes, on all adult wards**
☐ **Yes, on care of the older person wards**
☐ **Yes, other – please specify:**
☐ **No**

33. There is access to speech and language therapy and dietetics for patients with dementia:

☐ **Access to both speech and language therapy and dietetics**
☐ **Access to speech and language therapy only**
☐ **Access to dietetics only**
☐ **No access to either of these services**

34. There is access to advocacy services with experience and training in working with people with dementia:
Answer "Yes" if advocates (e.g. hospital social worker, Sage advocate, chaplain, patient advocate) have experience in working with people with dementia and have training in involvement of users and carers

☐ **Yes** ☐ **No**

35. There are other social and therapeutic activities and non-pharmacological interventions available for people with dementia in the hospital (please tick all those that are available):

☐ **Art therapy**
☐ **Music therapy**
☐ **Other physical activities (e.g. reflexology, massage)**
☐ **Other, please specify:**
☐ **No social or therapeutic activities available**

Do you have any comments to make on Section 9: Resources supporting people with dementia?

SECTION 10: AVAILABILITY OF SERVICES

36. Please indicate when the following hospital services are available to assess and/or support patients with dementia:

	Day	Evening	Weekend	Never
Liaison Psychiatry	☐	☐	☐	☐
Liaison Psychiatry of Old Age	☐	☐	☐	☐
Geriatric Medicine	☐	☐	☐	☐
Neurology	☐	☐	☐	☐
Occupational Therapy	☐	☐	☐	☐
Psychology	☐	☐	☐	☐
Social Work	☐	☐	☐	☐
Speech and Language Therapy	☐	☐	☐	☐
Dietetics	☐	☐	☐	☐
Pharmacy	☐	☐	☐	☐
Discharge Coordinator	☐	☐	☐	☐

Do you have any comments to make on these services?

SECTION 11: ENVIRONMENT

37. The physical environment within the hospital has been reviewed using an appropriate tool (e.g. the Dementia Friendly Hospital Guidelines from a Universal Design Approach) to establish whether it is "dementia inclusive/dementia friendly":

☐ **Yes**
☐ **No**

37a. Environmental changes based on these principles are:

☐ **Completed**
☐ **Underway**
Planned but not yet underway
☐ **Planned but funding has not been identified**
☐ **Plans are not in place**

Do you have any comments to make on Section 11: Environment?

SECTION 12: ONE-TO-ONE SUPERVISION

This relates to provision of one-to-one observation (i.e. specials or enhanced care) by a Health Care Assistant, porter or similar

38. Does your hospital have a written policy for the use of one-to-one supervision (specials)?[15]

☐ **Yes** ⇒ **Go to 38a**
☐ **No** ⇒ **Go to 39**

38a. Does this policy have specific information on the use of one-to-one supervision for people with dementia?

☐ **Yes**
☐ **No**

39. Have all staff who provide one-to-one observation services received education in the ongoing needs of people with dementia?

☐ **Yes** ⇒ **Go to 40**
☐ **No** ⇒ **Go to 39a**

39a.If no, does the manager requesting the service specifically request an individual who has received this education?

☐ **Yes**
☐ **No**

40. Which staff groups provide one-to-one observation services?

☐ **Internal staff only**
☐ **Mainly internal staff with agency staff occasionally used**
☐ **Mainly agency staff used**
☐ **Other, please specify:**

Do you have any comments to make on Section 12: Use of Specials?

If you have any queries, please contact:

Dr Mairéad Bracken-Scally,
INAD-2 National Audit Coordinator
057-9318477
mbrackenscally@muh.ie

[15] Please provide documentation

APPENDIX D

Second Irish National Audit of Dementia Care in Acute Hospitals (INAD-2)

AUDIT OF CASE NOTES

Background

This audit tool asks about assessments, discharge planning and aspects of care received by people with dementia during their stay in hospital. Standards have been drawn from national and professional guidance. Before completing this tool, please read the guidance document and have your hospital code to hand.

Patient Sample

The patient sample is drawn from a long list of eligible patients already identified using ICD10 coding discharged during the period 1st January to 30th April 2019. The sample is 40 charts, drawn at random, from the eligible cases within that period. Please see guidance about what to do when a casenote is not eligible. If you have fewer than 40 charts within that time frame, please continue to identify casenotes from 1st November 2018 to 30th April 2019.

Entering the data

Data from each set of eligible casenotes should be recorded individually, after the sample has been selected and numbered according to date order of discharge. **NB** Once you have identified your sample correctly, it does not matter in which order the data are recorded. Please follow the instructions in the guidance document carefully.

At the end of each section you will find a comment box. Use this to make any further comments on your answers to the questions.

Adapted from the first INAD tool, which was in turn adapted from the UK National Audit of Dementia, with permission.

Enter your hospital code:

This is the code allocated by the project team and is held by the audit lead contact. It will consist of 2 letters and 2 numbers, e.g. XY11. If you do not know the hospital code, please get in touch with the audit lead from your hospital or contact the audit co-ordinator on 057-9318477

Enter number for this patient:

This is the number allocated for audit eg 01, 02, 03 etc. Please refer to the guidance document on how to select case notes for audit. If case note is a data reliability check please add 'Rel' at the end of the number. For example, if you are re-auditing case note number 5, please enter 5rel.

Has the patient been in hospital for 72 hours or longer?
This includes the date of admission. If the patient has NOT been in hospital for 72 hours or longer, they are not eligible for audit.

☐ **Yes**
☐ **No** ⇒ **This case note is not eligible and you cannot continue**

What is the patient's dementia diagnosis? (See guidance document)

☐ **Alzheimer's Disease**
☐ **Parkinson's dementia**
☐ **Fronto-temporal dementia**
☐ **Other (please specify):**
☐ **Vascular dementia**
☐ **Lewy body dementia**
☐ **Mixed dementia**
☐ **Not specified**

In case we need to contact you regarding this entry, please provide us with your contact details:

Name, Job title:

Email address

SECTION 1: INFORMATION ABOUT THE PATIENT

1. Enter the month and year in which the patient was born:

Year of birth:

Month of birth: **January-June** **July-December**

2. Select the gender of the patient:

☐ **Male**
☐ **Female**

3. Select the ethnicity of the patient:

☐ **White Irish**
☐ **Black**
☐ **Mixed Race**
☐ **Not documented**
☐ **Any Other White Background**
☐ **Asian**
☐ **Other Ethnic Group**

4. Select the first language of the patient:

☐ **English**
☐ **Other European Language**
☐ **Not Documented**
☐ **Irish**
☐ **Asian Language**
☐ **Other**

5. Please identify the speciality of the ward that this patient spent the longest period on during this admission: (See guidance document)

- ☐ **Geriatric Medicine**
- ☐ **Surgical**
- ☐ **Orthopaedics**
- ☐ **Stroke**
- ☐ **General Medical**
- ☐ **Critical Care**
- ☐ **Intensive Care Unit**
- ☐ **Other**

5a. Please identify the speciality of care/consultant that this patient spent the longest period under during this admission:

- ☐ **Geriatrician**
- ☐ **Psychiatrist**
- ☐ **Other (please specify):**
- ☐ **Neurologist**
- ☐ **Surgeon**

6. What is the primary diagnosis /cause of admission?

- ☐ **Dementia was primary issue**
- ☐ **Stroke**
- ☐ **Respiratory infection**
- ☐ **Other, please specify**
- ☐ **Fall or fracture**
- ☐ **Urinary Tract Infection**
- ☐ **Other medical- not dementia related**

7. Please say whether this is an emergency or elective admission:

- ☐ **Emergency**
- ☐ **Elective**

8. Did the patient die whilst in hospital?

- ☐ **Yes**
- ☐ **No**

9. Did the patient self-discharge from hospital?

- ☐ **Yes**
- ☐ **No**

10. Was the patient receiving end of life care/on an end of life care pathway? (see guidance document)

- ☐ **Yes**
- ☐ **No**

11. What was the date of admission and the date of discharge?
Please enter in DD/MM/YYYY format. The discharge date should fall between 01/01/2019 and 30/04/2019.
If the patient died whilst in hospital, please enter the date of death in the discharge box.

Admission date: _____ /_____ /_____

Discharge date: _____ /_____ /_____
(or date of death if the patient died whilst in hospital)

12. Please indicate the place in which the person was living or receiving care before admission:
"Own home" can include sheltered or warden controlled accommodation. "Transfer from *another hospital" means any hospital other than the one for which you are submitting this case note.*

- ☐ **Own home**
- ☐ **Respite care**
- ☐ **Rehabilitation Unit**
- ☐ **Residential Care/Nursing home**
- ☐ **Palliative care**
- ☐ **Transfer from another hospital**
- ☐ **Carer's home**
- ☐ **Transitional care**
- ☐ **Psychiatric ward**
- ☐ **Community Hospital**
- ☐ **Convalescent Care**

Q13 is not applicable if Q8 = "Yes" (the patient died)

13. Please indicate the place in which the person was living or receiving care after discharge:
Own home can include sheltered or warden controlled accommodation. "Transfer to another hospital" means any hospital other than the one for which you are submitting this case note.

- ☐ **Own home**
- ☐ **Respite care**
- ☐ **Rehabilitation Unit**
- ☐ **Residential Care/Nursing home**
- ☐ **Palliative care**
- ☐ **Transfer from another hospital**
- ☐ **Carer's home**
- ☐ **Transitional care**
- ☐ **Psychiatric ward**
- ☐ **Community Hospital**
- ☐ **Convalescent Care**

Do you have any comments to make on Section 1: Information about the patient?

SECTION 2: ASSESSMENT

This section asks about the assessments carried out during the admission episode (or pre-admission evaluation), or during the patient's stay.

14. In the admission note (including post-take ward round record), is dementia or suspected dementia recorded?

- ☐ **Yes**
- ☐ **No**

ASSESSMENT OF PERSONAL ACTIVITIES OF DAILY LIVING

An assessment of personal activities of daily living can be carried out on or after admission, i.e. once the patient becomes well enough. Elements of assessment may also have been carried out immediately prior to admission, in A&E.
***NB** elements of assessment may be found in places such as nursing notes and OT assessments, as well as in medical notes.*

15. An assessment of mobility was performed by a healthcare professional:
This refers to an assessment of gait, balance, mobility carried out by a doctor, nurse or other health and social care professional, e.g. physiotherapist, occupational therapist.This does not have to use a formal tool.

☐ **Yes**
☐ **No**
☐ **Could not be assessed for recorded reasons**

16. An assessment of nutritional status was performed by a healthcare professional:
Assessment carried out by a doctor, nurse or other health and social care professional, e.g. dietician.

☐ **Yes** ⇒ **Go to Q16a**
☐ **No** ⇒ **Go to Q17**
☐ **Could not be assessed for recorded reasons** ⇒ **Go to Q17**

16a. Which tool was used for assessment of nutritional status:

☐ **The Malnutrition Universal Screening Tool (MUST)**
☐ **The Mini Nutritional Assessment (MNA)**
☐ **Other, please specify:**
☐ **Formal assessment tool not used**

17. Has identified assistance required with eating/drinking been recorded.

☐ **Yes** ⇒ **Go to Q17a**
☐ **No** ⇒ **Go to Q18**

17a. If assistance required with eating/drinking is identified, is this recorded in the care/management plan?

☐ **Yes**
☐ **No**

18. Has a formal pressure sore risk assessment been carried out and score recorded?
This should be assessment using a standardised instrument such as Waterlow.

☐ **Yes**
☐ **No**

19. As part of the multidisciplinary assessment has the patient been asked about any continence needs?

This can be the initial nursing assessment (a trigger question which prompts full bowel and Bladder assessment where necessary and the patient's understanding / acceptance of the question is assessed). Answer "Yes" if family member, GP etc has been asked on behalf of the patient.

- ☐ **Yes**
- ☐ **No**
- ☐ **Could not be assessed for recorded reasons**

20. Has the patient or their carer/family member been asked about any requirement for assistance with toileting?

- ☐ **Yes**
- ☐ **No**

21. As part of the multidisciplinary assessment has the patient been asked about the presence of any pain?

Answer "Yes" where the notes show that there has been an enquiry about any pain and response recorded.

- ☐ **Yes**
- ☐ **No**
- ☐ **Could not be assessed for recorded reasons**

22. Has a standardised assessment of pain suitable for a patient with dementia been carried out (e.g. PAINAD, Abbey Pain Scale)

- ☐ **Yes**
- ☐ **No**
- ☐ **Could not be assessed for recorded reasons**
- ☐ **Not needed- patient self-reported presence or absence of pain**

23. Has an assessment of functioning (ability to perform activities of daily living) been carried out?

- ☐ **Yes, a standardised assessment has taken place** ⇒ **Go to Q23a**
- ☐ **No** ⇒ **Go to comment box**
- ☐ **Could not be assessed for recorded reasons** ⇒ **Go to comment box**

23a. Who performed this assessment?

- ☐ **Nurse**
- ☐ **Physiotherapist**
- ☐ **Occupational Therapist**
- ☐ **Other, please specify:**
- ☐ **Not specified**

Do you have any comments to make on multidisciplinary assessment?

24. Has cognitive testing, using a validated structured instrument, been carried out at any time during this admission?

- ☐ **4AT only**
- ☐ **MOCA**
- ☐ **ACE**
- ☐ **RUDAS**
- ☐ **Not assessed**
- ☐ **Could not be assessed for recorded reasons**
- ☐ **MMSE/sMMSE**
- ☐ **AMTS**
- ☐ **Assessment of Motor & Process Skills**
- ☐ **Other, please specify**

25. Has a collateral/witness history been recorded indicating:

a) Confirmation of long standing cognitive decline	☐ **Yes**	☐ **No**
b) Time since onset of memory problems	☐ **Yes**	☐ **No**
c) Nature of progression	☐ **Yes**	☐ **No**
d) Evidence of loss of physical function	☐ **Yes**	☐ **No**
e) Recent deterioration in cognitive function (e.g. memory or language)	☐ **Yes**	☐ **No**
f) Recent deterioration in non-cognitive function (e.g. hallucinations, delusions responsive behaviour, BPSD: Behavioural and Psychological Symptoms of Dementia)	☐ **Yes**	☐ **No**

26. Was a delirium screening assessment carried out (using a validated tool) during this admission? (*see guidance document for Q26-27)

This refers to the assessment at presentation set out in NICE CG103 Delirium Guideline which specifies that people at risk should be assessed for indications of delirium.This includes people with dementia/cognitive impairment. See http://www.nice.org.uk/cg103

- ☐ **Within 24 hours of admission ⇒ Go to 26a**
- ☐ **Within 25-48 hours of admission ⇒ Go to 26a**
- ☐ **After this time ⇒ Go to 26a**
- ☐ **Not carried out at any time ⇒ Go to 27**

26a. Which screening assessment was used?

- ☐ **Single Question in Delirium (SQiD) ⇒ Go to 26b**
- ☐ **4AT ⇒ Go to 26b**
- ☐ **Confusion Assessment Method (CAM) ⇒ Go to 26b**
- ☐ **Other, please specify: ⇒ Go to 26b**

26b. If a screening assessment was carried out:

- ☐ **Initial delirium screening was positive ⇒ Go to 26c**
- ☐ **Initial screening was negative ⇒ Go to 27**

26c. If delirium screening was positive, did a healthcare professional who is trained and competent in the diagnosis of delirium (i.e. a doctor, ANP, dementia nurse specialist or specialist nurse in care of older persons) do an assessment to confirm the diagnosis of delirium?

☐ **Yes** ⇒ **Go to 26d**
☐ **No** ⇒ **Go to 27**

26d. From this assessment(s), was a diagnosis of delirium confirmed?

☐ **Yes** ⇒ **Go to 27b**
☐ **No** ⇒ **Go to 28**

27. Apart from as a result of screening, did a healthcare professional who is trained and competent in the diagnosis of delirium (i.e a doctor, ANP, dementia nurse specialist or specialist nurse in care of older persons) complete a formal assessment to diagnose delirium?

☐ **Yes**
☐ **No assessment for delirium was carried out by a healthcare professional** ⇒ **Go to 28**

27a. From this assessment, was a diagnosis of delirium confirmed?

☐ **Yes** ⇒ **Go to 27b**
☐ **No** ⇒ **Go to 28**

27b. If a diagnosis was confirmed, was there a clear plan for delirium management?

This may be recorded in the nursing care plan

☐ **Yes** ☐ **No**

28. Did the patient have daily delirium screening (e.g. using the 4AT or SQiD) for at least one week of admission?

☐ **Yes**
☐ **No, but done for at least 3 days**
☐ **Other formal tool used (e.g. CAM)**
☐ **No**

29. Has screening or assessment been carried out for recent changes in mood?

Answer yes if the patient and/or their family been asked directly about recent changes in mood or if the patient has been assessed for depression (e.g. using the Geriatric Depression Scale or Cornell Scale for Depression in Dementia)

☐ **Yes** ☐ **No**

Do you have any comments to make on cognitive and psychological assessment? (optional)

INFORMATION ABOUT THE PERSON WITH DEMENTIA

This sub section looks at whether there is a formal system in place for collating information about the person with dementia necessary to their care which supports the delivery of person-centred care. **NB** this system need not be in use only for patients with dementia.

This could be an assessment proforma, or prompted list of questions for a meeting with the carer or next of kin, producing information for the care plan. It could also be a personal information document (e.g. "This is Me", patient passport).

30. Does the care assessment contain a section dedicated to collecting information from the carer, family member or a person who knows the patient well?

- ☐ **Yes** ⇒ **Go to 31**
- ☐ **No** ⇒ **Go to 33**
- ☐ **Referenced in notes but not available** ⇒ **Go to 33**
- ☐ **Documented reason why impossible to collect this data** ⇒ **Go to 33**

31. Please specify the name of this section/document:

- ☐ **What matters to me**
- ☐ **This is me**
- ☐ **Other patient/personal passport**
- ☐ **List of questions**
- ☐ **Other, please specify:**

32a. Has information been collected about the patient regarding personal details, preferences and routines?
This could include details of preferred name, need to walk around at certain times of day, time of rising/retiring, likes/dislikes regarding food etc.
Answer "No" if sections of the form are left blank/there is no way of identifying whether information has been requested.
Answer "N/A" if there is no carer/relative/friend and information is not available and recorded as such.

☐ **Yes** ☐ **No** ☐ **N/A**

32b. Has information been collected about the patient's food and drink preferences?
Answer "No" if sections of the form are left blank/there is no way of identifying whether information has been requested.
Answer "N/A" if there is no carer/relative/friend and information is not available and recorded as such.

☐ **Yes** ☐ **No** ☐ **N/A**

32c. Has information been collected about the patient regarding reminders or support with personal care?
This could include washing, dressing, toileting, hygiene, eating, drinking, and taking medication.
Answer "No" if sections of the form are left blank/there is no way of identifying whether information has been requested.
Answer "N/A" if there is no carer/relative/friend and information is not available and recorded as such.

☐ **Yes** ☐ **No** ☐ **N/A**

32d. Has information been collected about the patient regarding recurring factors that may cause or exacerbate distress?
This could include physical factors such as illness or pain, and/or environmental factors such as noise, darkness.
Answer "No" if sections of the form are left blank/there is no way of identifying whether information has been requested.
Answer "N/A" if there is no carer/relative/friend and information is not available and recorded as such.

☐ **Yes** ☐ **No** ☐ **N/A**

32e. Has information been collected about the patient regarding support or actions that can calm the person if they are agitated?
This could include information about indicators especially non-verbal, of distress or pain; any techniques that could help with distress e.g. reminders of where they are, conversation to distract, or a favourite picture or object.
Answer "No" if sections of the form are left blank/there is no way of identifying whether information has been requested.
Answer "N/A" if there is no carer/relative/friend and information is not available and recorded as such.

☐ **Yes** ☐ **No** ☐ **N/A**

32f. Has information been collected about the patient regarding life details which aid communication?
This could include family situation (whether living with other family members, spouse living, pets etc), interests and past or current occupation.
Answer "No" if sections of the form are left blank/there is no way of identifying whether information has been requested.
Answer "N/A" if there is no carer/relative/friend and information is not available and recorded as such.

☐ **Yes** ☐ **No** ☐ **N/A**

Do you have any comments to make on information about the person with dementia? (optional)

RESPONSIVE BEHAVIOURS

33. Was there documentation of "responsive behaviours" (e.g. wandering, calling out, pacing, aggression, hitting etc) in the case notes?

☐ **Yes**
☐ **No**

SECTION 3: DISCHARGE

This section does not apply to all patients, please read carefully the information below before continuing.

If any of the responses below apply, you will not be asked any questions in the Discharge Section and can move onto Section 4:
Q8 = "Yes" (patient died in hospital)
Q9 = "Yes" (patient self-discharged from hospital)
Q10 ="Yes" (patient was receiving end of life/on end of life care pathway)
Q13 = "Transferred to another hospital" OR "Psychiatric ward" OR "Palliative Care" OR "Intermediate care" OR "Rehabilitation"

ASSESSMENT BEFORE DISCHARGE

This section asks about appropriate discharge planning and procedures including support and information for patients and carers.

34. At the point of discharge dementia was listed on the discharge letter:

☐ **Yes** ☐ **No**

35. If delirium was diagnosed during this admission, this was included in the discharge letter:

☐ **Yes** ☐ **No** ☐ **N/A**

36. If there were persistent non-cognitive symptoms (e.g. anxiety, apathy) or responsive behaviours (e.g. walking about, aggression, shouting), during this admission, this was noted in the discharge letter:

☐ **Yes** ☐ **No** ☐ **N/A**

Do you have any comments to make on assessment before discharge? (optional)

DISCHARGE COORDINATION AND MDT INPUT

37. Is there evidence in the notes that a discharge planning meeting involving the person with dementia and/or their carer/relative took place?
Answer "N/A" if the person with dementia and/or their carer/relative has refused discussion and this is recorded OR this is not relevant OR it has not been possible to carry this out for another documented reason.

☐ **Yes** ☐ **No** ☐ **N/A**

38. Is a discharge summary available?
This refers to the discharge plan with summarised information for the use of the patient, carer, GP and community based services. The question asks whether nursing and medical/surgical information has been put together as a single plan and mental health information is included.

☐ **Yes⇒** **Go to 38a**
☐ **No⇒** **Go to 39**
☐ **N/A⇒** **Go to comment box**

38a. Does the discharge summary include details of: *(tick all that apply)*

☐ **Cognitive function**
☐ **Mobility needs**
☐ **Continence needs**
☐ **None of the above**

38b. Are any support needs that have been identified documented in the discharge plan or summary?
This asks about whether the referrals and recommendations about future care, treatment and support are contained in the discharge plan or summary, e.g. help needed with Activities of Daily Living, referral to Occupational Therapy.

☐ **Yes** ☐ **No** ☐ **N/A**

38c. Was a copy of the discharge plan/summary sent to the GP/primary care team/nursing home?
Answer yes if GP/primary care team/nursing home were CC'ed on discharge letter

☐ **Yes** ☐ **No** ☐ **N/A**

38d. Was a nursing-specific discharge letter sent to the Public Health Nurse (PHN)?

☐ **Yes**
☐ **No, but PHN was CC'ed on the discharge plan/summary**
☐ **No letter sent**
☐ **N/A as discharged to a nursing home**
☐ **N/A as no support needs relevant to the PHN documented**

39. Was there a follow-up arranged with any of the following dementia services: *Please tick all that apply*

☐ **Psychiatry of Old Age**
☐ **Geriatrician/Geriatric Medicine**
☐ **Nurse led dementia clinic/service**
☐ **Neurology**
☐ **Other, please specify:**
☐ **None of the above**

40. Was a follow-up appointment made with the team caring for the person in the hospital:

☐ **Yes** ⇒ **Go to 40a**
☐ **No** ⇒ **Go to Comment box at end of section**

40a. What indication was given for this follow-up appointment

- ☐ **Follow up on presenting complaint**
- ☐ **Repeat chest x-ray or blood test**
- ☐ **Follow up of delirium (needs to be specified)**
- ☐ **Other, please specify:**

Do you have any comments to make on discharge coordination and MDT input?

SUPPORT FOR CARERS AND FAMILY

Q41 is only applicable if Q13 = Own home OR carer's home

41. Has information about support on discharge/transition been given to the patient and/or the carer? *(tick all that apply)*
This needs to be explicitly documented rather than implied

- ☐ **Documentation of information given on presenting complaint and follow up**
- ☐ **Documentation of information given on dementia/delirium and follow up**
- ☐ **Neither of the above**

42. Carers or family have received notice of discharge and this is documented:
Carers or family here refers to relative, friend or next of kin named as main contact or involved in caring for the patient. It does not refer to the patient's case worker from social services or residential care. Answer, indicating notice period, regardless of the destination of the patient on discharge.

- ☐ **Less than or equal to 24 hours**
- ☐ **25-48 hours**
- ☐ **More than 48 hours**
- ☐ **No notice at all**
- ☐ **No carer, family, friend**
- ☐ **Not documented**
- ☐ **Patient specified that discharge information be withheld**

43. An assessment of the carer's current needs has taken place in advance of discharge:
Answer "N/A" if the carer did not want, or did not need to meet about this (e.g. has had a recent assessment, all support services already in place, or the person they care for is moving to another place of care) OR there is no carer.

- ☐ **Yes**
- ☐ **No**
- ☐ **N/A- Carer offered but declined**
- ☐ **N/A- No carer**
- ☐ **N/A- Other reason, please specify:**

Do you have any comments to make on discharge planning?

SECTION 4: PALLIATIVE CARE NEEDS

44. Was a decision for resuscitation (either for resuscitation or not for resuscitation) documented in the medical notes <u>this admission</u>?

☐ **Yes** ☐ **No**

45. Was a referral made to Palliative Care?

☐ **Yes** ☐ **No**

46. Was a referral made for the family/ carer for bereavement support?
This may include referral to a social worker, or to a specific bereavement support group.

☐ **Yes**
☐ **No**
☐ **No with documentation that family/carer didn't need this, or refused it, or patient had no family/ carer**

47. Was there any advanced care planning completed with the patient and/or their family? (see guidance document)

☐ **Prognosis discussed**
☐ **Appropriateness of re-admission discussed**
☐ **Ceilings of care discussed** (e.g. "For non-invasive ventilation but not to be intubated")
☐ **Advanced Healthcare Directive discussed**
☐ **None of the above completed**
☐ **Other, please specify:**
☐ **N/A as advanced care planning already in place on admission**

Do you have any comments to make on palliative care needs?

SECTION 5: USE OF ONE-TO-ONE OBSERVATION SERVICE

This relates to provision of one-to-one observation (i.e. specials or enhanced care) by a Health Care Assistant, porter or similar

48. Was a "one-to-one" observation service allocated to the patient at any point during their admission?

☐ **Yes** ⇒ **Go to 48a**
☐ **No** ⇒ **Go to Comment box at end of section**

48a. How many days was this service allocated to the patient?

48b. Was this service allocated on a one-to-one or cohort basis?

☐ **One-to-one**
☐ **Cohort**
☐ **Not recorded**

Do you have any comments to make on the use of one-to-one observation service?

SECTION 6: PRESCRIBING OF PSYCHOTROPIC MEDICATIONS

49. Was this person receiving psychotropic medication on admission to hospital?

☐ **Yes** ⇒ **Go to 49a**
☐ **No** ⇒ **Go to 50**

49a.If yes, please list name and dose:

50. Was any new psychotropic medication prescribed during the admission or was an increased dose of an existing psychotropic prescribed?

☐ **A new psychotropic medication was prescribed** ⇒ **Psychotropic audit tool must be completed**
☐ **Increased dose of existing psychotropic prescribed** ⇒ **Psychotropic audit tool must be completed**
☐ **Neither of the above** ⇒ **Not necessary to complete psychotropic audit tool**

If you have any queries, please contact:
Dr Mairéad Bracken-Scally,
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Second Irish National Audit of Dementia Care in Acute Hospitals (INAD-2)

PSYCHOTROPIC MEDICATIONS

Background
The following sections are only to be performed where the person with dementia received a new prescription for, or an increased dose of a psychotropic medication during their stay in hospital. The items are linked to the forthcoming national clinical guideline on appropriate psychotropic medication prescribing for non-cognitive symptoms in people with dementia. This baseline audit will help to inform the implementation of training and education to support healthcare professionals around the guideline. Before completing this tool, please read the user manual and have your hospital code to hand.

Patient Sample
The patient sample is drawn from the 30 charts included in INAD-2. Where the person was prescribed a **new** or **increased dose** of a psychotropic medication (audit item 50), you need to also complete this section for each and any new/increased dose psychotropic medication.

Entering the data
Data from each set of eligible casenotes should be recorded individually on this separate chart review document, using the **patient code from the audit tool for this patient.**

Enter your hospital code: ☐

Enter the chart code: ☐

At the end of each section you will find a comment box. Use this to make any further comments or clarifications on your answers to the questions.

If a person was prescribed more than one new antipsychotic (section C) more than one new antidepressant, benzodiazepine, etc (section D), during their admission please use duplicate sheets for this section, and securely attach to the main chart review document. NB please enter the hospital and chart code on these additional sections, where indicated on the sheet.

SECTION A: PRESCRIBING OF ANY NEW PSYCHOTROPIC MEDICATION

Prior to the prescribing of <u>ANY</u> new or increased dose psychotropic medication is there evidence that: *(if more than one, please answer for the <u>first</u> one)*

1. A comprehensive assessment of the person with dementia has been performed by a suitably trained healthcare professional

☐ **Yes**
☐ **No**
☐ **N/A**

2. Non-pharmacological interventions have been tried initially

Mark N/A if there is <u>documented</u> evidence of severe distress and/or an identifiable risk of harm to the person with dementia and/or others.

☐ **Yes** ⇒ **Please list all non-pharmacological interventions used in comment box and then go to 3**
☐ **No** ⇒ **Go to 3**
☐ **N/A** ⇒ **Go to 2a**

2a. Please tick which indication for not trialling non-pharmacological interventions initially applied:

☐ **Severe distress to the person with dementia**
☐ **Risk of harm to the person with dementia** ⇒ **Please specify type of harm**
☐ **Risk of harm to others** ⇒ **Please specify type of harm**

Do you have any comments to make on Section A?

SECTION B: PARENTERAL ADMINISTRATION OF PSYCHOTROPIC MEDICATION

3. Was any intramuscular or intravenous psychotropic medication prescribed during the admission?

☐ **No** ⇒ **Go to Section C**
☐ **Yes** ⇒ **Go to 3a**

3a. If yes, was this prescribed only for:

☐ **Seizures** ⇒ **Go to Section C**
☐ **End of life care** ⇒ **Go to Section C**
☐ **Usual depo injection given as per schedule** ⇒ **Go to Section C**
☐ **None of the above** ⇒ **Continue with Section B**

In prescribing parenteral psychotropic medication, is there evidence that:

4. Oral medication has been prescribed before parenteral medication (refer to person with dementia's drug kardex)

☐ **Yes**
☐ **No**
☐ **N/A**

5. Single intramuscular (IM) psychotropic agents have been administered prior to combination IM agents being administered

☐ **Yes**
☐ **No**
☐ **N/A**

6. Intramuscular agents (IM) have been prescribed prior to intravenous (IV) agents

☐ **Yes**
☐ **No**
☐ **N/A**

7. Where intravenous psychotropic medication has been prescribed, the indication for requiring IV treatment is documented

☐ **Yes**
☐ **No**
☐ **N/A**

Do you have any comments or clarifications to make on Section B?

SECTION C: PRESCRIPTION OF ANTIPSYCHOTIC MEDICATION

Was any new or increased dose antipsychotic medication prescribed during the admission?

☐ **Yes** ⇒ **Continue with Section C**
☐ **No** ⇒ **Go to Section D**

***If a person has been prescribed two or more antipsychotics during the admission, please complete "section C duplicate" for the second or subsequent antipsychotic. ***

If yes, is there evidence that:

8. There was an explicit, appropriate indication documented for the requirement of the antipsychotic medication?

☐ **No**
☐ **Yes** ***If yes, tick <u>all</u> indications that apply:***
- ☐ **Aggression**
- ☐ **Agitation**
- ☐ **Psychosis**
- ☐ **End of Life Care** ⇒ **Go to comment box and then Section D**
- ☐ **Delirium diagnosed by senior nurse or doctor** ⇒ **Go to Q 9**
- ☐ **Other indication(s), please specify:**

8a. There was documented severe distress, or an identifiable risk of harm to the person with dementia and/or others?

☐ **No**
☐ **Yes** ***If yes, tick <u>all</u> indications that apply:***
- ☐ **Severe distress to the person with dementia**
- ☐ **Risk of harm to the person with dementia**
- ☐ **Risk of harm to others**

9. The risks and benefits of the medication have been documented in the notes?

☐ **Yes**
☐ **No**
☐ **N/A**

9a. There is documentation that the risks and benefits of the medication have been discussed with the person with dementia and/or their family/relevant decision maker?

☐ **Yes**
☐ **No**
☐ **N/A** ⇒ **Please indicate reason why not applicable below.**

10. A second generation antipsychotic was prescribed?
Please refer to list of first and second generation antipsychotics in the user manual for chart review of appropriate prescribing of psychotropic medications

☐ **Yes**
☐ **No** ***If no, is there a documented reason for choosing a first generation drug?***

Please provide details:

11. The initial antipsychotic dose was at or close to the lowest available dose? *Please refer to list of common agents and doses*

☐ **Yes**
☐ **No**
☐ **N/A**

11a. There were no large increases in dose from one dose to the next?

☐ **Yes**
☐ **No**
☐ **N/A**

If necessary, explain here reason for judging to be non-compliant here

12. There was a review for effectiveness <u>and</u> side effects during the admission?

☐ **No review recorded ⇒ Go to 13**
☐ **Review for effectiveness recorded ⇒ Go to 13**
☐ **Review for side effects recorded ⇒ Go to 13**
☐ **Discharged within 48 hours of commencement <u>and</u> documented planned review post discharge ⇒ Go to 12a**

12a. When was this review planned for?

☐ ***Review planned for within 2 weeks of discharge***
☐ ***Review planned 2-4 weeks post discharge***
☐ ***Review planned 1-3 months post discharge***
☐ ***Review planned 3-6 months post discharge***
☐ ***Review planned for more than 6 months post discharge***

13. There was documentation that the antipsychotic was <u>effective</u>?

☐ **Yes**
☐ **No**
☐ **N/A**

14. There is evidence of a planned review date within 3 months of the first prescription?

☐ **No ⇒ Go to 15**
☐ **Yes** ***If yes, does this plan explicitly state the physician/service who is responsible for this review?***

☐ **Yes**
☐ **No**
☐ **N/A** *Mark N/A if an exception existed; record exception here:*

15. There is documentation that the antipsychotic was <u>ineffective?</u>

☐ **Yes** ⇒ **Go to 16**
☐ **No** ⇒ **Go to 17**
☐ **N/A** ⇒ **Please indicate reason why not applicable below, then go to 17**

If necessary, explain here reason for judging to be non-compliant or n/a

16. Is there evidence that:

☐ **The antipsychotic was stopped**
☐ **The antipsychotic was tapered down** *(i.e. dose reduced)*
☐ **No evidence of either of the above**

17. Was an <u>existing</u> antipsychotic tapered/withdrawn during the admission?

☐ **No** ⇒ **Go to comment box and then Section D**

☐ **Yes** ***If yes, was the usual dose (or close to usual dose) resumed during the admission?***

☐ **Yes** ⇒ **Go to comment box and then Section D**
☐ **No** ⇒ **Go to 17b.**

17b. Was there a review for possible symptom re-emergence prior to discharge?

☐ **Yes**
☐ **No**
☐ **N/A as person was discharged within 48 hours of dose reduction**
☐ **N/A as person within 48 hours of dose reduction**

17c. Was there a clear plan for review, within 4 weeks of discharge, for possible symptom re-emergence post discharge?

☐ **Yes**
☐ **No**
☐ **N/A as person with dementia died in hospital**

Do you have any comments or clarifications to make on Section C?

SECTION D: ADMINISTRATION OF OTHER PSYCHOTROPIC MEDICATION

If NO Acetylcholinesterase Inhibitor medication OR Memantine prescribed, proceed to item 26.

If a person has been prescribed two or more other psychotropic medications during the admission, please complete "section D duplicate" for the second medication.

18. Was an Acetylcholinesterase Inhibitor (galantamine, rivastigamine or donepezil) newly prescribed during the admission?

☐ **No ⇒ Go to 22**

☐ **Yes** ***If yes, is there evidence that this was for cognitive dysfunction?***

- ☐ **Yes ⇒ Go to 22**
- ☐ **No ⇒ Go to 19**

19. Is the person documented to have Parkinsons Disease Dementia (PDD) or Dementia with Lewy Bodies (DwLB) or Lewy Body Dementia (LBD)?

☐ **No ⇒ Go to 20**

☐ **Yes** ***If yes, is it documented that the person with dementia has:***

- ☐ **Severe distress**
- ☐ **Non-pharmacological interventions have been ineffective**
- ☐ **Neither of the above**

20. The risks and benefits of the medication have been discussed with the person with dementia and/or their family/decision supporter?

☐ **Yes**
☐ **No**
☐ **N/A ⇒ Please indicate reason why not applicable below.**

21. There is documentation of either a review during the admission or a plan for review?

☐ **Yes**
☐ **No**
☐ **N/A ⇒ Please indicate reason why not applicable below.**

22. Was memantine <u>newly</u> prescribed during this admission?

☐ **No** ⇒ **Go to 26**

☐ **Yes** ***If yes, is there evidence that:***

- ☐ **The person has documented moderate to severe dementia**
- ☐ **The person has mild dementia**
- ☐ **Severity of dementia not documented**

23. It is documented that the memantine was commenced for cognitive dysfunction, not for non-cognitive symptoms:

☐ **Memantine was prescribed for cognitive symptoms** ⇒ **Go to 26**
☐ **Memantine was prescribed for non-cognitive symptoms**
☐ **Indication was not documented**

24. The risks and benefits of the medication have been discussed with the person with dementia and/or their family/decision supporter

☐ **Yes**
☐ **No**
☐ **N/A** ⇒ **Please indicate reason why not applicable below.**

25. There is documentation of either a review or a plan for review of the memantine?

☐ **Yes**
☐ **No**
☐ **N/A** ⇒ **Please indicate reason why not applicable below.**

Do you have any comments or clarifications on acetylcholinesterase inhibitors or memantine?

26. Was a new or increased dose antidepressant medication prescribed during this admission?

☐ **No ⇒ Go to 29**

☐ **Yes** ***If yes, is there evidence that it was prescribed for pain:***

- ☐ **Yes ⇒ Go to 27**
- ☐ **No ⇒ Go to 26b**

26b. If not prescribed for pain, has the person: *tick all that apply*

☐ **Severe depression**

☐ **Moderate depression**
☐ **AND the depression has not responded to psychological treatment**

☐ **Severe non-cognitive symptoms**

☐ **Other, please specify:**

27. The risks and benefits of the antidepressant have been discussed with the person with dementia and/or their family/decision supporter?

☐ **Yes**
☐ **No**
☐ **N/A ⇒ Please indicate reason why not applicable below.**

28. There is documentation of either a review or a plan for review of the antidepressant?

☐ **Yes**
☐ **No**
☐ **N/A ⇒ Please indicate reason why not applicable below.**

Do you have any additional comments or clarifications on antidepressants?

29. Has a new or increased dose anticonvulsant been prescribed during this admission?

☐ **No** ⇒ **Go to 32**

☐ **Yes** ***If yes, is there evidence that the anticonvulsant has been prescribed for the treatment of:***

- ☐ **Seizures** ⇒ **Go to 32**
- ☐ **Pain** ⇒ **Go to 32**
- ☐ **Bipolar disorder** ⇒ **Go to 32**
- ☐ **Non-cognitive symptoms**
- ☐ **No indication given**
- ☐ **Other documented indication**

Please specify:

30. The risks and benefits of the medication have been discussed with the person with dementia and/or their family/decision supporter

☐ **Yes**
☐ **No**
☐ **N/A** ⇒ **Please indicate reason why not applicable below.**

31. There is documentation of either a review or a plan for review of the anticonvulsant:

☐ **Yes**
☐ **No**
☐ **N/A** ⇒ **Please indicate reason why not applicable below.**

Do you have any additional comments or clarifications on anticonvulsants?

32. Was a new or increased dose benzodiazepine prescribed during this admission?

☐ **No** ⇒ **Go to 35**
☐ **Yes** ***If yes, is there evidence that it was prescribed for the treatment of:***

- ☐ **Seizures** ⇒ **Go to 35**
- ☐ **Severe anxiety** ⇒ **Go to 33**
- ☐ **Non-cognitive symptoms** ⇒ **Go to 33a**
- ☐ **No indication given** ⇒ **Go to 34**
- ☐ **Other documented indication** ⇒ **Go to 34**

Please specify indication:

33. If prescribed for severe anxiety, is there a documented maximum duration of treatment?

☐ **Yes**
☐ **No**
☐ **N/A** ⇒ **Please indicate reason why not applicable below.**

33a. If prescribed for non-cognitive symptoms, is there a justification of why a benzodiazepine was chosen?

☐ **Yes**
☐ **No**
☐ **N/A** ⇒ **Please indicate reason why not applicable below.**

34. The risks and benefits of the benzodiazepine have been discussed with the person with dementia and/or their family/decision supporter

☐ **Yes**
☐ **No**
☐ **N/A** ⇒ **Please indicate reason why not applicable below.**

35. Was a new or increased dose Z type medication (or a benzodiazepine at night) prescribed during this admission?

☐ **No ⇒ Go to 36**

☐ **Z type medication prescribed ⇒ Go to 35a**

☐ **Benzodiazepine at night prescribed ⇒ Go to 35a**

35a. If a Z type medication (or a benzodiazepine at night) is prescribed is there evidence that a sleep regimen/care plan has been put in place <u>prior</u> to trial of the medication?

☐ **Yes, but medication was commenced later that night**

☐ **Yes, and medication commenced on next night or subsequently**

☐ **No**

☐ **N/A ⇒ Please indicate reason why not applicable below.**

36. Was melatonin newly prescribed during this admission?

☐ **No**

☐ **Yes** ***If yes, is there a note to justify this use?***

☐ **Yes**

☐ **No**

Do you have any additional comments or clarifications on benzodiazepines OR Z type medications OR melatonin?

End of audit

If you have any queries, please contact:
Dr Mairéad Bracken-Scally,
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057-9318477
mbrackenscally@muh.ie

APPENDIX E

Second Irish National Audit of Dementia Care in Acute Hospitals (INAD-2)

ENVIRONMENTAL CHECKLIST

Hospital code

Ward code

Ward Size and Layout

Number of beds

Number of single sex bays

Number of mixed bays

Number of single rooms

Section 1: The Ward/Signage

Signs should display information in a consistent and simple way. They should be positioned on the ward so they can be easily seen by patients and designed so they are readable and easy to understand - clearly contrasted, placed at a suitable height on the wall etc.

1 **Colour schemes are used to help patients with dementia to find their way around the ward** *(e.g. different bays are painted in different colours to aid recognition)*

❒ **Yes** ❒ **No**

2 **Key areas are clearly marked** *(e.g. the nursing station, the bathroom, any side rooms or waiting areas)*

❒ **Yes** ❒ **No**

3 **Signs/maps are large, bold and distinctive**

❒ **Yes** ❒ **No** ❒ **N/A (no signs/maps)**

4 **Information (words and pictures) on signs is in clear contrast to the background**

❒ **Yes** ❒ **No**

Section 2: Floors

5 **Level changes and contrasts (gentle slopes and steps) are clearly marked**

❒ **Yes** ❒ **No** ❒ **N/A**

6 **Floors are plain or subtly patterned, not 'busy'** (*e.g. without bold or high contrast design or pattern which could affect orientation)*

❒ **Yes** ❒ **No**

7 **Floor surfaces are subtly polished rather than high gloss**

❒ **Yes** ❒ **No**

8 **Floor surfaces are non slip**

❒ **Yes** ❒ **No**

Section 3: Bed/Rest Area

9 **Patients with dementia are situated on the ward where they are visible to staff and staff are visible to them**

❒ **All patients** ❒ **Some patients** ❒ **No patients**

10 **Patients with dementia are able to see a clock from their bed area**
❒ **All patients** ❒ **Some patients** ❒ **No patients**

11 **Patients with dementia are able to see a calendar from their bed area** *(this can be an orientation board)*
❒ **All patients** ❒ **Some patients** ❒ **No patients**

12 **For patients with dementia, messages from relatives and personal objects, including self care items, are situated where the patient can see them at all times**
❒ **All patients** ❒ **Some patients** ❒ **No patients**

13 **A room/area is available for patients to use for a break from the ward environment** (*e.g. a 'quiet room', patient's lounge or seating area)*
❒ **Yes** ❒ **No**

Any Comments on Bed/Rest Area (e.g. clocks/calendars on right time/date)

Section 4: Accessible Toilet and Bathing Facilities

14 **Signs to locate the toilet are visible from the patient's bed area/door of room**
❒ **All** ❒ **Some** ❒ **None**

15a. **Toilet doors carry signs**
❒ **All** ❒ **Some** ❒ **None**

15b. **Bathroom doors carry signs**
❒ **All** ❒ **Some** ❒ **None**

16 **Toilet and bathroom doors are a different colour to the walls**
❒ **All** ❒ **Some** ❒ **None**

17 **Items such as the soap dispenser, the bin, the hand dryer, are clearly labelled with pictures as well as words so that the patient can identify them**
❒ **All** ❒ **Some** ❒ **None**

18 **There are hand rails, large handles and a raised toilet seat to support patients**
❒ **Yes** ❒ **No**

19 **Door handles are a different colour to the wall so that they stand out**
☐ **All** ☐ **Some** ☐ **None**

20 **Toilet paper is a different colour to the wall so that it stands out**
☐ **All** ☐ **Some** ☐ **None**

21 **The toilets are big enough for assisted toileting**
☐ **All** ☐ **Some** ☐ **None**

22 **The bathroom is big enough for assisted bathing**
☐ **Yes** ☐ **No**

23 **Single sex toilet/washing facilities are provided for patient use**
☐ **Yes** ☐ **No**

24 **Facilities are available so that patients have choices about bathing or assisted bathing** *(e.g. at the sink, overhead showering, hand held shower head, full bath)*
☐ **Yes** ☐ **No**

25 **There are call/alarm buttons visible in the toilet/bathroom**
☐ **Visible and in reach**
☐ **Visible and not in reach**
☐ **Not visible**

25a. **Call/alarm buttons visible and within reach at the bedside**
☐ **Visible and in reach**
☐ **Visible and not in reach**
☐ **Not visible**

Section 5: Promoting Independence

26 **There is space for active patients with dementia to walk up and down where they are visible to staff and staff are visible to them**
☐ **Yes** ☐ **No**

27 **The ward is adapted to assist people with mobility difficulties** (*e.g. large handles, hand rails)*
☐ **Yes** ☐ **No**

28 **The ward can readily provide equipment to assist mobility** (*e.g. walking frames, wheelchairs)*
☐ **Yes** ☐ **No**

29 **The ward can provide hearing aids such as amplifiers/communicators/hearing loops/batteries for personal aids or other assistive devices**
☐ **Yes** ☐ **No**

30 **The ward can provide adapted utensils (cutlery) to encourage patients to assist themselves with their meal and eat independently**
☐ **Yes** ☐ **No**

Any comments on the environmental checklist:

If you have any queries, please contact:

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057-9318477
mbrackenscally@muh.ie

APPENDIX F

Checklist of documents to have prepared for INAD-2 Hospital Organisational Audit

1. Dementia pathway documentation and/or dementia bundle documentation
   Please provide documentation for pathway and/or bundle suitable for use in the ED/AMAU/ASAU/Acute floor and documentation for pathway and/or bundle suitable for use in other wards and hospital areas
2. Delirium care pathway/bundle documentation
   Please provide documentation for pathway and/or bundle suitable for use in the ED/AMAU/ASAU/Acute floor and documentation for pathway and/or bundle suitable for use in other wards and hospital areas
3. Evidence for the dementia quality improvement team/working group or similar
   This includes, for example, Terms of Reference for the team/group or a list of membership
4. Policy for the management of continence
5. Structured programme of staff training on promoting continence
6. Policies or guidelines to ensure patients with dementia or cognitive impairment in high risk areas (the ED/AMAU/ASAU/Acute floor, theatre and wards caring for people with dementia) are assessed for the presence of delirium at presentation
7. Protocol/policy governing the use of interventions for patients displaying violent or challenging behaviour, aggression and extreme agitation (also known as BPSD), which is suitable for use in patients who present with responsive behaviours
8. Policy on internal transfers for recording and reporting instances of night time bed moves (i.e. between 8pm and 8am) at senior management level
9. Formal system for gathering patient information (e.g. Patient passport, “This is Me”)
10. System (e.g. visual identifier) to ensure that all staff are aware of the person’s dementia or condition and how it affects them
11. Training and knowledge framework or strategy that identifies necessary skill development in working with and caring for people with dementia.
    Please highlight or clearly display, for easy viewing, where this framework or strategy refers to skill development in working and caring for people with dementia
12. Evidence, where possible, of the number of staff in the hospital provided with dementia awareness education between 1 January 2018 and 31 December 2018
13. Protected mealtimes policy
14. Policy/procedure/guideline which promotes and allows identified carers of people with dementia to visit at any time, including at mealtimes (e.g. Carer’s passport)
15. Policy for the use of one-to-one supervision (i.e. specials or enhanced care)
    Please highlight or clearly display, for easy viewing, where this policy provides specific information on the use of one-to-one supervision for people with dementia

APPENDIX G

Second Irish National Audit of Dementia care in acute hospitals (INAD-2)

Case Note Audit Guidance Document

July 2019

Introduction

Thank you for taking part in the Second Irish National Audit of Dementia care in acute hospitals (INAD-2).

All acute and orthopaedic hospitals in the Republic of Ireland are participating (N=38). The audit consists of three components;

- Chart Audit
- Organisational Audit
- Environmental Audit

This document has been prepared as a guide for people carrying out the chart audit, which will audit the records of 30 patients with a diagnosis or current history of dementia against a checklist of standards which have been drawn from national and international best practice.

Please see separate guidance document for the additional sections for psychotropic medications. These sections only need to be completed if the person received any new or increased dose of psychotropic medications during the admission.

INAD-2 Audit Team
INAD-2 National Audit Coordinator

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Completing the Case Note Audit

Each hospital is expected to submit an audit of 30 sets of case notes of patients discharged with a known diagnosis or current history of dementia, identified through HIPE coding. One case note audit form is to be filled in per set of notes audited. Where relevant, a psychotropic audit form should also be filled in (please see separate user manual).

Estimated time to complete:

This is a complex data set. Feedback suggests that the first set of case notes audited will take an hour or more. For subsequent sets the majority took less than one hour.

Inter rater reliability check:

As part of the reporting process for this audit, the audit team we will be collecting inter rater data. This will involve re-audit by a HSE Quality Assurance and Verification auditor of six case note records. This will help to establish the reliability of data returned. Input from the original auditors will not be required in this process.

To facilitate this process is it essential that the MRN is clearly recorded on the Case Note Coding Sheet and the patient code is recorded on the data collection form. This is an important part of the audit.

NB. Reliability (agreement between auditors) is not the same as validity (accuracy of measure). However establishing good agreement between auditors is an important part of the process of validation as valid data by definition will have to be reliable.

How to select your sample:

This is a retrospective audit of the records of patients with a diagnosis of dementia, and admitted for 3 days or longer, discharged from your hospital (or died during admission) between 1st January and 30th April 2019.

40 charts will be pulled for audit by medical records, selected at random from all cases in the HIPE list for that period, and 30 of these will need to be audited using the case note audit tool.

Please only review the documentation for one admission. If a person has more than one admission during the audit period, the evidence is based on the most recent admission within the audit time period.

Exclusion:

- Length of stay: please exclude patients whose admission was less than 3 days. Use the date of admission and date of discharge to do this (including both dates in the total length of stay). (Please note that there may be a second, valid length admission within the audit period – so please do look for other admissions with the audit period before discounting the notes)
- No diagnosis of dementia: please exclude patients whose notes have been incorrectly HIPE coded.

Choosing your sample

1. Ensure that all charts selected meet the inclusion criteria (diagnosis of dementia, minimum length of stay of 72 hours, discharged within specified time period)
2. Allocate each set of case notes a patient code number from the Case Note Coding List. This is the number you will use when entering “number for patient” in the data collection form. A copy of the Case Note Coding List for your hospital is available from the INAD-2 coordinator.
3. NB. Whenever a set of notes identified is found to be ineligible for this audit, e.g. length of stay less than 72 hours or wrongly coded, go on to the next set in the sequence, but do not reallocate the number. Replace excluded records with the next consecutively discharged patients in the total series, until there is a total return of 30 e.g. if number 2 is ineligible, go on to number 3, and make up the sample with number 31 on your list, and so on.

Guidance to questions

Guidance to individual questions is included in the tool. Further guidance to a number of specific questions is given in the table which follows. If you need any further guidance before answering a question please contact the INAD-2 Coordinator on 057-9318477.

Section	Question Number	Guidance
Introduction	Not numbered- dementia diagnosis	This may be listed in a clinic letter at the front of the chart, in the medical or nursing notes, or in a discharge letter from this or a previous admission- it doesn't have to be listed on admission note to be a valid diagnosis, once it appears somewhere in the chart.
Section 1	5, 5a	In cases where the speciality of the ward or consultant is not known, please enter the name of the ward or consultant and an INAD-2 auditor will select the speciality and remove the ward/consultant name when the data is returned.
Section 1	10	Being at end of life needs to be explicitly documented using terms such as "not for any active treatment", "for palliative care measures only", "treat as per end of life protocol", "dying", "actively dying", "moribund", or similar terms. Being referred to Specialist Palliative Care does not necessarily mean that the person was at end of life.
Section 2	26, 26a, 26b, 26c, 26d, 27, 27a, 27b	There are two important things which the audit aims to examine here: 1. Whether delirium screening was conducted within 24-48 hours of admission and, if positive, led to an assessment by a healthcare professional who can diagnose delirium (i.e. a doctor; or specialist dementia/delirium or Older Persons nurse- CNS or ANP) and 2. If delirium was diagnosed under any circumstances (i.e. following screening or not), was there a plan of action or follow-up. It is important to pay particular attention to the question routing for these questions so that all relevant information is recorded.
Section 4	47	'Ceiling of care' includes for example directions such as: • For non-invasive ventilation but not to be intubated • Fluids and IV antibiotics on ward but not for inotropes • Full treatment on ward but in event of deterioration, not to be transferred to ICU

At the end of each section you will find a comment box. Use this to make any further comments on your answers to the questions, particularly if you were unsure of how to answer a particular question. These comment boxes can also be used to record relevant anecdotal information relating to the persons dementia and care seen in the notes but not captured with the tool.

Question routing

Some questions on the case note form are routed, depending on previous answers. E.g. if you answer “No” to question 16, An assessment of nutritional status was performed by a healthcare professional, you will not be asked question 16a, which asks for further information about the nutritional assessment.

Data return

Completed audit forms and the Case Note Coding List should be returned to the Site Liaison for your hospital. If you are unsure of the name and contact details of the site liaison, please contact the audit coordinator Mairéad Bracken-Scally, on 057-9318477 or mbrackenscally@muh.ie

Timeline for data collection

All data should be collected and returned within 2 weeks of audit training.

Reporting

Local Reports: Local data will be made available to individual hospitals. Hospital group reports will be prepared and provided to the Hospital Group CEOs.

National Report: Key findings from collated anonymised data from the audit and recommendations will be presented in an overall report in Spring 2020.

List of Abbreviations

4AT:	Rapid assessment test for delirium
ACE:	Assessment of Comprehension and Expression
AMTS:	Abbreviated Mental Test Score
BPSD:	Behavioural and Psychological Symptoms of Dementia
CAM:	Confusion Assessment Method
GP:	General Practitioner
ICD-10:	International Classification of Disease- 10th revision
MMSE/sMMSE:	Mini Mental State Examination/Standardised Mini Mental State Examination
MOCA:	Montreal Cognitive Assessment
N/A:	Not Applicable
PAINAD:	Pain Assessment in Advanced Dementia Scale
RUDAS:	Rowland Universal Dementia Assessment Scale

Management of the Audit

This audit is a joint initiative between the National Dementia Office and the HSE Quality Assurance and Verification. A number of professional bodies are collaborating on the project through membership on the INAD-2 Steering Committee.

APPENDIX H

User manual for Psychotropic Medication section

Selection of healthcare records for inclusion
For any of the 30 charts in INAD-2, where a person received any new or increased dose of psychotropic medication (question 50), you will complete additional items on these medications in the relevant section(s), Sections A-D. If a person has more than one admission during the audit period, the evidence is taken from the same episode as the main audit data (i.e the most recent admission episode within the audit period).

How to complete these sections:
The following are instructions on how to complete the psychotropic medication sections including definitions and terminology used throughout.
Instructions: Please read the manual prior to completing these sections. It may also be helpful to have a copy of the manual at hand when reviewing the chart to ensure relevant terms are understood.
Complete all sections in ink, in legible writing.

- Indicate Yes if the item has been found in the person with dementia (PwD's) notes.
- Indicate No if the item is absent or not found in PwD's notes.
- Indicate N/A in cases where the specific item is not relevant. In all cases where N/A is indicated, please provide the rationale for this decision. Please refer to listed exceptions for each question to indicate where N/A should be selected.

Please note that at end of life, rapid relief of symptoms often takes precedence over non-pharmacological interventions, and antipsychotic, anticonvulsant or benzodiazepine medication may be prescribed for specific end-of-life symptoms apart from non-cognitive symptoms. Thus, being documented as being at end-of-life at the time of prescription is an exception to many of the items in these sections. Being at end of life needs to be explicitly documented using terms such as "not for any active treatment", "for palliative care measures only", "treat as per end of life protocol", "dying", "actively dying", "moribund", or similar terms. Please mark "N/A" and document the end of life state in the comments box and the end of the relevant section.
NB It can't be assumed that a person who died during an admission was at end of life for the duration of their admission, especially for a long admission- often a person is stable, but then deteriorates a few days before death. Thus, earlier prescriptions, before the end of life period was documented, can be included, even if the person later received the same medication during the end of life phase.

Chart code refers to the specific number assigned to the chart (eg 01, 02 etc)
Hospital code is the code for your hospital (eg AB)

Section A

1. A comprehensive assessment of the PwD has been performed by a suitably qualified healthcare professional.
Based on Rec 1. **Options:** Yes or No or N/A
Exceptions: Emergency circumstances (see section B)
A comprehensive assessment is defined as: review of medical history and mental health history (including depression) and medication history; physical examination, including consideration of possible delirium, or undetected pain or discomfort (with an appropriate assessment of same); assessment of the severity, type, frequency, pattern, and timing of symptoms, and other potentially contributory or comorbid factors. This assessment should be performed in an appropriate environment that optimises the person's comfort and ability and includes any support that the person may require. The assessment needs to be performed by a nurse or doctor who is competent in assessing a person with dementia who may be distressed.
Instructions: To select "yes", there must be a documented comprehensive assessment in the patient's notes AND it must be done by a suitable person. This does not need to include every point below, but needs to demonstrate coverage of most of the following points:

1. medical, medication, and mental health history is summarised or referenced;
2. a physical examination is recorded
3. pain is assessed
4. the severity, type, frequency, pattern, and timing of symptoms is recorded or referenced
5. other potentially contributory or comorbid factors are considered

Other satisfactory evidence is use of a formal tool, for example “PINCH-ME”
The assessment should have been performed by a registered doctor or nurse (of any grade), but not a student unless the assessment is co-signed. If a comprehensive assessment was performed, but by another discipline, please make a note in the comment section at the end of the page.

2. Non-pharmacological interventions have been tried initially.
Based on Rec 2. **Options:** Yes or No or N/A
Exceptions: Severe distress; an identifiable risk of harm to the person and/or others; at end of life
Non-pharmacological interventions refer to interventions that do not involve medications. Non pharmacological interventions will often be documented in the nursing care plan. The type of non-pharmacological intervention documented should be detailed in the space provided.

Types of non-pharmacological interventions include:
Please note this list is not exhaustive
In cases where severe distress in the person, or an identifiable risk of harm to the person and/or others, has been documented, please indicate N/A and tick which exception applied in question 2a. (Please specify the risk harm that was documented)
(In the recommendation, identifiable risk refers to the presence of real, evident or substantial risk to the person and/or others).
Severe distress will often be documented using this exact term. Other acceptable proxy terms are “very upset”, “inconsolable”, “very distressed” etc.

Section B

(note - all these items are based on GPP (Good Practice Point) only)

3. Was any intramuscular or intravenous psychotropic medication prescribed during the admission?
This will usually be “no” and you can move to section C. If “yes”, proceed through the questions in this section.

4. Oral psychotropic medication has been prescribed before parenteral medication
Based on GPP 4. **Options:** Yes or No or N/A
Exceptions: Emergency situations; End of Life
Emergency situations pose an immediate risk to the health, life, or condition of a person. In these cases, due to the potential for harm, it may not be feasible and safe to delay the administration of IM or IV psychotropic medication when considering the best interest of the person with dementia. In this case, once the risk has been reduced or alleviated, appropriate review and evaluation of the person and care should occur to reduce further emergency intervention.
Instructions: Chart reviewers should review PwD’s drug kardex/medication record, seeking evidence in the PwD’s drug kardex that oral medication has been prescribed and administered before parenteral medication has been prescribed.
Note: It may have been impossible to administer the medication orally- please refer to the kardex code and document the reason why oral not possible (eg fasting, vomiting etc) in the comments box at end of page.
NB Refusal of oral medications is not a valid indication to give parenteral medications, unless there is additional documentation of an emergency situation that necessitated the medication being given parenterally.

5. Single intramuscular (IM) psychotropic agents have been prescribed prior to combination IM agents

Using a quiet area	Reminiscence Therapy	Art Therapy	Multisensory Stimulation
1:1 care with activity *(not just supervision)*	Validation Therapy	Music Therapy	Snoezelen Rooms
Reference to patient passport	Reality Orientation	Aromatherapy	Distraction
Physical Exercise			

Based on GPP 4. **Options** Yes or No or N/A
Exceptions: End of Life

Single agents means the prescription of one psychotropic medication at a time. Combination refers to the prescription of two or more psychotropic medications at any one time. This can be the use of two or more from of the same class e.g. two different antipsychotics; or two or more from different classes e.g. antidepressants and antipsychotics
Instructions: There is documented evidence in the PwD's drug kardex that a single IM psychotropic medication has been prescribed and administered before a combination has been prescribed. If selecting "N/A", please justify in the comments box (e.g. no IM agents given) at end of page.

6. Intramuscular agents (IM) have been prescribed prior to intravenous (IV) agents
Based on GPP 4. **Options** Yes or no or N/A
Exceptions: Emergency situations; End of Life

Instructions: There is documented evidence in the drug kardex that IM medication has been prescribed and administered before IV medication has been prescribed. If selecting "N/A", please justify in the comments box (e.g. no IV agents prescribed) at end of page.

7. Where IV psychotropic medication has been prescribed, the indication for requiring IV treatment is documented
Based on GPP 4.. **Options** Yes or No or N/A
Exceptions: End of Life

Instructions: There should be documentation of why the prescriber believed emergency IV medication was required. If selecting "N/A", please justify in the comments box (e.g. no IV agents prescribed) at end of page.

Section C:
Skip this section if no **new** antipsychotic medication **or increased dose** was prescribed during the admission.
8. There was an explicit, appropriate indication for the requirement of the antipsychotic medication.
8a. There was severe distress, or an identifiable risk of harm to the PwD and/or others.
Based on Rec 3 and 6. **Options:** No; or Yes with options
No exceptions

There should be documented evidence within the PwD's notes of indicator symptoms, and either severe distress to the person or risk of harm to the person or others

Instructions: Chart reviewers should tick all indications that apply.
Aggression ☐ Agitation ☐ Psychosis ☐ End of Life Care ☐ Delirium ☐

Delirium is defined as a disturbance in attention and awareness, typically developing over hours to days, often fluctuating in severity within a day, and representing a change from usual status. Delirium is caused by a variety of insults, typically acute infection, metabolic derangement, medication side effect, or acute brain injury.
Currently, delirium is a valid indication for antipsychotic medication (without needing to be severely distressed or posing a risk of harm) so if this box is ticked, the item is deemed to have been met. However, to be fully valid, the diagnosis of delirium needs to be documented by either a senior nurse (ward manager or older persons/dementia/delirium nurse specialist), or a physician above the grade of an intern. **If made by another grade/discipline, please note this in the comments box, and proceed to question 9.**
Where the indication was aggression, agitation or psychosis, there also needs to be documentation of:
Severe distress to the PwD or Risk of harm to the PwD or Risk of harm to others. Chart reviewers should tick all indications that apply.

9. The risks and benefits of the medication have been documented in the notes
Based on Rec 9.
Options: Yes or No or N/A
Exceptions: End of Life
Instructions: Seek documentation in the person's notes outlining the risks associated with the medications including cardiovascular risks, risk of stroke, death, drowsiness, falls, pneumonia, etc and the potential benefits of using psychotropic medications. Documented statements such as "despite the risks, an antipsychotic is required because….", or other mention of "risk" without actually naming the risk, is also acceptable.
9a. There is documentation that the risks and benefits of the medication have been discussed with the PwD and/or their family/relevant decision maker
Based on Rec 7.
Options: Yes or No or N/A
Exceptions: End of Life; Emergency situations – see section B.
Instructions: Seek evidence in notes that a discussion took place with the PwD regarding the risks and benefits, or evidence in notes that a similar discussion took place with the family of the PwD or a Decision supporter. This documentation does not need to list the risks discussed, just that there was a discussion of risk-benefit (or "the need for the medication" or a similar term).
A 'Decision Supporter' refers to a Decision-Making Assistant, Co-Decision-Maker, Decision-Making Representative, Attorney or Designated Healthcare Representative, if any of these are in place for a person, and have a role in relation to health-related decisions [i.e. an attorney may or may not]. In practice, this person may often be a family member of the person with dementia, but not always. **For this item, you can assume that the family is the decision maker unless it is documented to the contrary.**

10. A second generation antipsychotic was prescribed
Based on Rec 8.
Options: Yes or No
Exceptions: Contra-indication to second generation antipsychotics; End of Life

Typical (first generation) antipsychotics were first developed in the 1950s. Atypical (second generation) antipsychotics have less effects on the motor system (e.g. tremor, shuffling gait).
Instructions: Sometimes a decision is made to use a first generation medication – for example haloperidol when someone has severe respiratory disease as this may cause less respiratory depression. A reason needs to be documented for the decision to use a first generation drug- the chart reviewer needs to record the reason given.

11. The initial antipsychotic dose is at or close to the lowest available dose for that medication
11a. There were no large increases in doses from one dose to the next
Based on Rec 9.
Options: Yes or No or N/A for both.
Exceptions: End of Life; Emergency situations – see section B.

Instructions: Check drug kardex to see if the initial antipsychotic dose prescribed is at or close to the lowest available dose for that medication; and that there are no large increases in dose from one prescribed dose to the next (see list of commonly prescribed antipsychotics and their starting/ titration doses). If the medication is not listed here, record the drug name and the doses prescribed (dose and frequency- e.g. 100mg twice a day).
It may be valid to use a larger dose in an emergency situation (or at end of life). This needs to be documented (if so, mark N/A and give details). Also, mark N/a for 11a. if only one dose was prescribed.

12. There was a review for effectiveness AND side effects during the admission
Based on Rec 10 and 11. **Options:** detailed
Exceptions: None
Instructions: The documentation of effectiveness and side effects should be recorded within the notes. This documentation can be performed by a healthcare professional who is monitoring the PwD (nurse, doctor, psychologist, OT). The chart reviewer is asked to tick options for both parts of the initial statement (review for effectiveness recorded, and review for side effects recorded) so that it can be seen which review is more commonly omitted.
However, in acute hospitals, the person may be discharged rapidly, so compliance with this item can also be via evidence of a clear plan for this review post discharge, (for example back at a hospital clinic, or a specialist service, or within the residential care unit). Please use the options in Q12a to indicate when this review was planned for.

13. Is there documentation that the antipsychotic was effective?
Based on Rec 10. **Options:** Yes or No or N/A
Exceptions: An antipsychotic was being re-commenced following an unsuccessful trial of discontinuation*; Person is documented to have a short life expectancy (less than three months); End of life care
*If an antipsychotic was discontinued and the person then had a relapse of symptoms and the antipsychotic was re-commenced, it is not necessary to document it was effective on recommencing it.
Instructions: Seek documentation of symptoms being reassessed and words such as “agitation improved”, “psychosis settling” etc.

14. Is there evidence of a planned review date within 3 months of the first prescription?
Based on Rec 10. **Options:** No; or yes with options
Exceptions: An antipsychotic was being re-commenced following an unsuccessful trial of discontinuation*; Person is documented to have a short life expectancy (less than three months); End of life care
In cases where the medication has been documented as being effective, a clear plan of future review should be evident in the PwD’s notes.
Instructions: If there is no review planned within 3 months, then move on to the next question.
If “yes”, then you are asked to answer another question. i.e. does this plan explicitly state the physician/service who is responsible for this review?
Mark n/a if an exception existed, and record which exception it was.
(Even where there is no documentation of effectiveness, the notes still need to meet the separate criterion of a planned review)

15. Is there documentation that the antipsychotic was ineffective?
Based on Rec. 11. **Options:** Yes or No or N/A
Exceptions: End of Life
Instructions: There should be documentation of ineffectiveness in the notes- such as “no change in aggression”, or “symptoms unimproved” etc.

16. Is there evidence that the antipsychotic was stopped or tapered?
Based on Rec. 11.
Options: The antipsychotic was stopped or the antipsychotic was tapered down or no evidence of either of the above
Exceptions: End of Life

Tapering is where the medication is gradually lessened over a period of time, rather than stopped outright.
Instructions: If medication was tapered or stopped, it can be assumed that there was a review of some sorts, even if it was not documented (but don't change your answer for question 15 as that question is about documentation).
(There should also be a discussion with the person and/or their family as part of the decision making, with evidence of this discussion documented in the notes, but the key action is the taper/stopping).
Please note that there is no fixed time point for this action to have occurred as it will depend on response and side effects.

17. Was an existing antipsychotic tapered/withdrawn during the admission?*
Based on text around Rec. 12. **Options:** No; Yes with further options
Exceptions: End of Life
*The recommendation specifically relates to a newly commenced antipsychotic, but it is not rare for a medical team to reduce or stop a long-standing antipsychotic in hospital (e.g. for low sodium, low blood pressure), and it is important that there is sufficient review for later re-emergence of the indicator mental health symptom.
Re-emergence refers to where symptoms come into effect or become evident once more. Primary prescriber is the person who initiated the medication. Specialist services refers to person or persons who have significant experience in managing dementia and symptoms associated with it. It is usually a psychiatry of old age or geriatrician or dementia nurse specialist/ANP led service.
Instructions: If there was no tapering or withdrawal of an existing antipsychotic, then proceed to the comment box and then on to the next section.
If there was a withdrawal (stopping or holding a medication), or dose reduction, there should be evidence in the person's notes that a plan of care for the duration of the tapering or discontinuation has been developed. This is not necessary if the usual dose (or close to it- eg 75% or more of the usual dose) was recommenced during the admission (no matter when it happened), in which case you mark "yes" for this question and proceed to the comment box and then on to the next section.
Mark N/A if person died or was discharged within 48 hours of the dose reduction, as the review couldn't have occurred in this case, and proceed to question 17c.
For post discharge review, it needs to be documented that the PwD was discharged with a plan for review, within 4 weeks of discharge, of their status post tapering/withdrawal. (This can be with the primary prescriber or an appropriate specialist service). If there was a planned review but after 4 weeks, mark "no" but add a comment in the box.
NB A planned review for another indication is not sufficient for this item (eg follow up of CXR or abnormal blood result)- the notes must explicitly state a plan for review of non-cognitive or mental health symptoms or a similar term. If the review is for something else, mark "no" and add a comment.

Section D

Acetylcholinesterase inhibitors and memantine

18. If prescribed, the Acetylcholinesterase inhibitor was commenced for cognitive dysfunction.
Based on Rec. 13. **Options:** Not prescribed; or Yes and options **Exceptions:** None
Cognitive dysfunction is a noticeable decline in cognitive abilities, including memory, thinking and language skills.
Non-cognitive symptoms include psychosis, agitation or restlessness, aggression, apathy, anxiety and depression (also referred to as neuropsychiatric symptoms). In some instances, people with non-cognitive symptoms of dementia may exhibit behaviours such as: walking about; pacing; hoarding; repetitive vocalizations (calling out); inappropriate sexual behaviour; etc. These are often termed 'responsive behaviours'. Together, non-cognitive symptoms and responsive behaviours are often termed Behavioural and Psychological Symptoms of Dementia (BPSD).
Instructions: There should be documented evidence in notes that the medication was commenced for the management of cognitive symptoms (may be documented as cognitive

dysfunction, cognitive impairment, memory impairment, language difficulty, etc), and not for non-cognitive symptoms or BPSD.
If so, notes are excluded from the remainder of this item à proceed to question 22 (on memantine)
If not prescribed for cognitive dysfunction, proceed to the next question (19).

19. Has the person documented PDD or DwLB (also called LBD):
Based on Rec. 14. **Options:** No; or Yes with options **Exceptions:** None
Parkinson's Disease Dementia (PDD) is relatively common, where a person with Parkinson's Disease for many years develops dementia as their disease progresses. Dementia with Lewy Bodies (DwLB) is a closely related condition with very early dementia relative to Parkinsonian features, and prominent visual hallucinations (due to the culprit protein accumulating particularly in the cerebral cortex, unlike Parkinson's Disease where the protein accumulates in the brainstem). Extreme caution is required in prescribing antipsychotics to a person with dementia with Lewy Bodies, as they can have life-threatening adverse reactions to antipsychotic medications.
People with Parkinsons Disease Dementia and Dementia with Lewy Bodies (sometimes also called Lewy Body Dementia (LBD) in clinical notes) may validly be prescribed ACHEIs for BPSD.
Instructions: First answer if the person has PDD or DwLB or LBD- if not, they should not have been prescribed the medication. If they have PDD or DwLB or LBD, it is valid to prescribe an Acetylcholinesterase inhibitor if the person has severe distress AND non-pharmacological interventions have been tried first (refer to list in section A) and haven't worked.
Severe distress will often be documented using this exact term. Other acceptable proxy terms are "very upset", "inconsolable", "very distressed" etc.

20. The risks and benefits of the ACHEI have been discussed with the PwD and/or their family/relevant decision maker
Based on GPP2. **Options:** Yes or No or N/A **Exceptions:** None
Instructions: Please see question 9A for details around discussions. For Acetylcholinesterase inhibitors, relevant risks to be documented include cardiovascular risk (blackout, syncope, heart rhythm disturbance); anorexia, nausea, "GI upset" etc). However, it is also sufficient to document more generally that risks were discussed, without the details of the risk.

21. There is documentation of either a review or a plan for review of the Acetylcholinesterase inhibitor
Based on GPP3. **Options:** Yes or No or N/A
Exceptions: None
Instructions: There should be documentation of a review of effectiveness and side effects within the notes. This documentation can be performed by a healthcare professional who is monitoring the PwD (nurse, doctor, psychologist, OT)
In acute hospitals, the person may be discharged rapidly, so compliance with this item can also be via evidence of a clear plan for this review post discharge, (for example back at a hospital clinic, or a specialist service, or within the residential care unit).
As this is based on a GPP, not a recommendation, there is not the same detailed answering required that there was for this item for antipsychotics- so any plan for review at any time during or post admission is sufficient. If the person died, or there is another valid reason why the review was not applicable, mark "N/A".

22/23. If memantine was prescribed, has the person documented moderate to severe dementia, and it is documented that the memantine was commenced for cognitive impairment or for non-cognitive symptoms.
Based on Rec 16. **Exceptions:** None
Instructions: To be fully compliant, firstly, it needs to be documented that the person has moderate or severe dementia- memantine should not be prescribed in mild dementia. The severity may not documented, in which case select that option.
Secondly it needs to be documented that the memantine was commenced for cognitive dysfunction, and not for non-cognitive symptoms. Sometimes, it will not be clear why the memantine was prescribed- in this case select "indication was not documented".

24. The risks and benefits of the medication have been discussed with the PwD and/or their family/relevant decision maker

Based on GPP2.

Options: Yes or No or N/A

Exceptions: None

Instructions: Please see question 9A for details around discussions. For memantine, relevant risks to be documented include drowsiness, dizziness, headache, hypertension, etc. However, it is also sufficient to document more generally that risks were discussed, without the details of the risk.

25. There is documentation of either a review a plan for review of the memantine

Based on GPP3.

Options: Yes or No or N/A

Exceptions: None

Instructions: There should be documentation of a review of effectiveness and side effects within the notes. This documentation can be performed by a healthcare professional who is monitoring the PwD (nurse, doctor, psychologist, OT).

In acute hospitals, the person may be discharged rapidly, so compliance with this item can also be via evidence of a clear plan for this review post discharge, (for example back at a hospital clinic, or a specialist service, or within the residential care unit)

As this is based on a GPP, not a recommendation, there is not the same detailed answering required that there was for this item for antipsychotics- so any plan for review at any time during or post admission is sufficient. If the person died, or there is another valid reason why the review was not applicable, mark “N/A”.

Antidepressants

26. Indication for the antidepressant.

Based on Rec 17 and GPP 10.

Options: See details.

Exceptions: None.

Comorbid depression is the presence of depression in association with another health condition. In this case depression occurs along with the dementia, not just due to the dementia. It can also be pre-morbid, i.e. pre-dating the dementia onset.

Defining the ‘degree’ or ‘severity’ of depression i.e. if it is mild, moderate or severe, requires an extensive medical judgement that involves the number, type, and severity of the symptoms present.

Instructions: If no antidepressant was prescribed, proceed to item 29 (anticonvulsants). If prescribed, the antidepressant may have been prescribed for pain, which is not within the scope of the guideline, so proceed to item 29. As pain is very common, it must be explicit that the antidepressant was prescribed for pain in order to be sure that pain was the indication.

Otherwise (26b), there should be documented evidence within the notes either that the depression was severe (e.g. “major depression”, “depression with somatic features”, “severe depressive symptoms”, “suicidal ideation”, “nihilism)

OR that it was moderate AND hadn’t responded to psychological treatment. Both of these need to be documented to be compliant. If it is documented that the depression is mild, then the prescribing of an antidepressant doesn’t comply with the guideline.

OR that the PwD had severe non-cognitive symptoms (e.g. agitation, calling out, walking about). The word “severe” or a similar term needs to be documented.

27. The risks and benefits of the antidepressant have been discussed with the PwD and/or their family/carer.

Based on GPP2.

Options: Yes or No or N/A

Exceptions: None

Instructions: Please see question 9A for details around discussions. For antidepressants, relevant risks to be documented include dizziness, insomnia, headache, hyponatremia (low sodium), psychosis, “serotonin syndrome”, etc. However, it is also sufficient to document more generally that risks were discussed, without the details of the risk.

28. There is documentation of either a review a plan for review of the antidepressant

Based on GPP3.

Options: Yes or No or N/A

Exceptions: None

Instructions: There should be documentation of a review of effectiveness and side effects within the notes. This documentation can be performed by a healthcare professional who is monitoring the PwD (nurse, doctor, psychologist, OT).
In acute hospitals, the person may be discharged rapidly, so compliance with this item can also be via evidence of a clear plan for this review post discharge, (for example back at a hospital clinic, or a specialist service, or within the residential care unit)
As this is based on a GPP, not a recommendation, there is not the same detailed answering required that there was for this item for antipsychotics- so any plan for review at any time during or post admission is sufficient. If the person died, or there is another valid reason why the review was not applicable, mark "N/A".

Anticonvulsants

29. If an anticonvulsant has been prescribed, a valid indication is for the treatment of seizures, pain or Bipolar Disorder.

Based on Rec 18.

Options: Not prescribed; Yes with options
Exceptions: End of Life

Seizures refers to activity in the brain that result in convulsions in which a person's body shakes rapidly and uncontrollably. Bipolar Disorder, formerly called manic depression, is a mental health condition that causes extreme mood swings that include emotional highs (mania or hypomania) and lows (depression).
Instructions: Within the person's notes there should be clear explicit documentation that the anticonvulsant is used to treat a specific disease and not for the management of non-cognitive symptoms.
There should be documented evidence of:
Seizures or epilepsy (prior to, during the admission or in the past)- including "non-convulsive seizures" or "status epilepticus". It does not have to specifically state that the anticonvulsant is to treat seizures- this can be implied if seizures or epilepsy are recorded.
A diagnosis of Bipolar Disorder (may be written also as 'manic depression' or 'cyclothymic disorder'). It does not have to specifically state that the anticonvulsant is to treat this - this can be implied if the diagnosis is recorded.
The antidepressant being prescribed for pain. As pain is very common, it must be explicit that the antidepressant was prescribed for pain in order to be considered a valid indication.
If there is another indication recorded, or if the person is at end of life, enter the details in the box provided.

30. The risks and benefits of the anticonvulsant medication have been discussed with the PwD and/or their family/carer.

Based on GPP2.

Options: Yes or No or N/A
Exceptions: End of life.

Instructions: Please see question 9A for details around discussions. For anticonvulsants, relevant risks to be documented include sedation, dizziness, confusion, etc. However, it is also sufficient to document more generally that risks were discussed, without the details of the risk. If there is a valid reason why the discussion was not applicable (such as end of life care), mark "N/A".

31. There is documentation of either a review or a plan for review of the anticonvulsant.

Based on GPP3.

Options: Yes or No or N/A
Exceptions: End of life.

Instructions: There should be documentation of a review of effectiveness and side effects within the notes. This documentation can be performed by a healthcare professional who is monitoring the PwD (nurse, doctor, psychologist, OT).
In acute hospitals, the person may be discharged rapidly, so compliance with this item can also be via evidence of a clear plan for this review post discharge, (for example back at a hospital clinic, or a specialist service, or within the residential care unit)
As this is based on a GPP, not a recommendation, there is not the same detailed answering required that there was for this item for antipsychotics- so any plan for review at any time during or post admission is sufficient. If the person died, or there is another valid reason why the review was not applicable, mark "N/A".

Benzodiazepines/Z type hypnotics/ melatonin

32. If a benzodiazepine was prescribed, a valid indication is for the treatment of seizures or severe anxiety. Based on Rec 19. **Options:** No or Yes with options
Exceptions: End of Life

Instructions: Within the PwD's notes there should be clear explicit documentation that the PwD has severe anxiety. Anxiety is a feeling of unease, worry or fear, that can be mild, moderate or severe.
A valid exception is that the PwD has seizures. There should be documented evidence of: Seizures or epilepsy (prior to, during the admission or in the past)- including "non-convulsive seizures" or "status epilepticus". It does not have to specifically state that the anticonvulsant is to treat seizures- this can be implied if seizures or epilepsy are recorded.

33. If prescribed for severe anxiety, is there a documented maximum duration of treatment?
Based on Rec 19. **Options:** Yes or No or N/A
Exceptions: End of Life

Instructions: The duration of treatment (in total or before review) should be clearly evident in the drug kardex. The maximum duration of usage is dependent on the medication used- it is only important that there is a duration recorded, not the actual value. If the person is at end of life, enter the details in the box provided.

33a. If prescribed for non-cognitive symptoms, is there a justification of why a benzodiazepine was chosen?
Based on Rec 19. **Options:** Yes or No or N/A
Exceptions: End of Life

Instructions: Please record any justification given (eg previously responded well to benzodiazepine (or 'anxiolytic'); severe distress and intolerant of other medications, etc.). If the person is at end of life, enter the details in the box provided.

34. The risks and benefits of the medication have been discussed with the PwD and/or their family/decision supporter.
Based on GPP2. **Options:** Yes or No or N/A
Exceptions: End of life; seizures.

Instructions: Please see question 9A for details around discussions. For benzodiazepines, relevant risks to be documented include sedation, falls, drowsiness, increased agitation, cognitive deterioration, etc. However, it is also sufficient to document more generally that risks were discussed, without the details of the risk. If there is a valid reason why the discussion was not applicable (such as end of life care), mark "N/A".

35/35a. If a Z type medication (or a benzodiazepine at night) is prescribed, is there evidence that a sleep regimen/care plan has been put in place prior to trial of the medication?
Based on Rec. 20. **Exceptions:** End of life; Specific sleep disorders*; Nocturnal seizures

A sleep regimen is a specific routine that is followed to promote good sleep (e.g. avoiding caffeine before bedtime, having a quiet, comfortable temperature bedroom, avoiding evening naps etc.), exposure to daylight, exercise and personalised activities.
Instructions: There should be a documented sleep management regimen in the notes outlining the time the person goes to sleep, daytime naps, if stimulants are to be avoided/used, fluid restrictions, etc. Please use the response options to indicate if this preceded the prescription by 0 or more nights. Options: Yes with options, or No or N/A
*Exceptions include documented specific sleep disorders where a benzodiazepine is indicated- eg REM (or Rapid Eye Movement) sleep disorder (also called RBD, or REM behavioural disorder) or night terrors.

36. Has melatonin been prescribed? If yes, is there a note to justify this use?
Based on Rec. 21 **Options:** Yes or No **No exceptions.**
Instructions: Please tick "yes" if there is a written justification and briefly record what was written

Psychotropic medications licensed in Ireland:

Generic name (example of Brand(s) name®) -classification *

Typical (first generation) antipsychotics are in italics

A

- Agomelatine (Valdoxan®) - antidepressant
- Alprazolam (e.g Gerax®, Xanax®) – benzodiazepine
- Amisulpiride (e.g. Solian®) – atypical antipsychotic
- Amitriptyline - antidepressant
- Aripiprazole (e.g. Abilify®)- atypical antipsychotic
- Asenapine (Sycrest®)- atypical antipsychotic

B

- Brivaracetam (Briviact®) - anticonvulsant
- Bromazepam (Lexotan®)- benzodiazepine

C

- Carbamazepine (Tegretol®)†- anticonvulsant
- Citalopram (e.g. Cipramil®, Citrol®, Ciprager®) - antidepressant
- Clobazam (Frisium®) - benzodiazepine
- Chlordiazepoxide (Librium®)- benzodiazepine
- Chlorpromazine (Clonactil®) – typical antipsychotic
- Clomipramine (Anafranil®) – antidepressant
- Clonazepam (Rivotril®) – benzodiazepine
- Clozapine (e.g. Clozaril®) - atypical antipsychotic

D

- Diazepam (Anxicalm®) - benzodiazepine
- Donepezil (e.g. Aricept®, Donecept®, Donesyn®)- acetyl cholinesterase inhibitor
- Dosulepin (Prothiaden®) - antidepressant
- Duloxetine (e.g. Cymbalta®) – antidepressant

E

- Escitalopram (e.g. Lexapro®) – antidepressant
- Eslicarbazepine (Zebinix®) – anticonvulsant
- Ethosuximide (Zarontin®) - anticonvulsant

F

- Fluoxetine (e.g. Fluzac®, Gerozac®, Prozac®)- antidepressant
- Flupentixol (Depixol®) – typical antipsychotic
- Flurazepam (Dalmane®) - benzodiazepine
- Fluvoxamine (Faverin®) - antidepressant
- Fluphenazine (Modecate®) – typical antipsychotics

G

- Gabapentin (e.g. Neurontin®) - anticonvulsant
- Galantamine (Reminyl®) – acetyl cholinesterase inhibitor

H

- Haloperidol (Haldol®) – typical antipsychotic

I, J, K

L

- Lacosamide (Vimpat®) - anticonvulsant
- Lamotrigine (e.g. Lamictal®)† – anticonvulsant
- Levomepromazine (Nozinan®) – typical antipsychotic
- Levetiracetam (e.g. Keppra®) – anticonvulsant
- Lofepramine (Gamanil®) - antidepressant
- Lorazepam (Ativan®) – benzodiazepine
- Lormetazepam (Noctamid®) - benzodiazepine

- Loxapine (Adasuve®) –atypical antipsychotic
- Lurasidone (Latuda®) –typical antipsychotic

M

- Melatonin (Circadin®)1 –other hypnotic
- Memantine (e.g. Ebixa®)
- Mirtazapine (e.g. Mirap®, Zispin®) – antidepressant
- Moclobemide (Manerix®) - antidepressant

N

- Nitrazepam (Mogadon®) - benzodiazepine

O

- Olanzapine (e.g. Zyprexa®) –atypical antipsychotic
- Oxcarbazepine (Trileptal®) -anticonvulsant

P

- Paliperidone (e.g. Invega®) – atypical antipsychotic
- Paroxetine (e.g. Parox®, Seroxat) – antidepressant
- Perampanel (Fycompa®) - anticonvulant
- Phenobarbital – anticonvulsant
- Phenytoin (Epanutin®) - anticonvulsant
- Prazepam (Centrax®)- benzodiazepine
- Pregabalin (e.g. Lyrica®)† - anticonvulsant
- Primidone (Mysoline®) - anticonvulsant

Q

- Quetiapine (e.g. Seroquel®)-atypical antipsychotic

R

- Reboxetine (Edronax®) – antidepressant
- Retigabine (Trobalt®) - anticonvulsant
- Risperidone (e.g. Rispeva®, Risperdal®) – atypical antipsychotic
- Rivastigmine (e.g. Exelon®)- acetyl cholinesterase inhibitor
- Rufinamide (Inovelon®) - anticonvulsant

S

- Sertraline (e.g. Lustral®, Serlan ®)- antidepressant
- Sodium Valproate (Epilim®)† – anticonvulsant
- Sulpiride (Dolmatil®) – atypical antipsychotic

T

- Temazepam (Nortem®) -benzodiazepine
- Tiagabine (Gabitril®) - anticonvulsant
- Topiramate (Topamax®) -anticonvulsant
- Tranylcypramine (Parnate®)- antidepressant
- Trazodone (Molipaxin®) – antidepressant
- Triazolam (Halcion®) – benzodiazepine
- Trifluoperazine (Stelazine®) – typical antipsychotic
- Trimipramine (Surmontil®) - antidepressant

U, V

- Venlafaxine (e.g. Efexor®, Ireven®, Venex®) –antidepressant
- Vigabatrin (Sabril®) - anticonvulsant
- Vortioxetine (Brintellix®) -antidepressant

W, Z

- Ziprasidone (Geodon®) – atypical antipsychotic
- Zolpidem (e.g. Stilnoct®, Zoldem®, Zolnod®) – Z type medication
- Zonisamide (Zonegran®) - anticonvulsant
- Zopiclone (e.g. Zileze®, Zopitan®, Zimovane®)- Z type medication
- Zuclopentixol (Clopixol®) – typical antipsychotic

**This list is correct as of October 2018. It is not an exhaustive list. Further details of medicines licensed in Ireland are available on www.hpra.ie.*

† These anticonvulsants are also licensed for mood stabilisation- see individual SmPC for further information.

1As of October 2018, Circadin® 2mg Prolonged Release Tablet is the only melatonin medicine licensed in Ireland

Common antipsychotics and their typical starting/escalation doses in older people

Drug (common trade name)	Usual starting dose	Usual dose increase
Aripiprazole (e.g. Abilify®)	5mg OD	5mg per dose
Clozapine (e.g. Clozaril®)	12.5mg OD	12.5-25mg per dose
*Haloperidol (Haldol®)	0.5-1mg BD/TDS or prn	0.5-1mg per dose
Olanzapine (e.g. Zyprexa®)	2.5-5mg OD	2.5-5mg per dose
Paliperidone (e.g. Invega®)	3mg OD	3mg per dose
Quetiapine (e.g. Seroquel®)	12.5-25mg BD	12.5-25mg per dose
Risperidone (e.g. Rispeva®, Risperdal®)	0.5mg BD	0.5mg per dose

*Haloperidol is the only 'typical' (first generation) antipsychotic in this list

Glossary of Terms for Psychotropic Medications

Term	Definition
Psychotropic Medication	A medication capable of affecting the mind, emotions, and behaviour through an effect on the chemical makeup of the brain and nervous system.
Antipsychotics	A group of drugs that are used to treat serious mental health conditions such as psychosis and/or delusions as well as other emotional and mental health conditions.
Antidepressants	A drug used for the treatment of major depressive disorders and conditions, including dysthymia, social anxiety disorder, obsessive–compulsive disorder, chronic pain, agitation, generalized anxiety disorder, bipolar disorder, childhood enuresis (bedwetting), migraine and sleep disorders.
Antiepileptic/Anticonvulsant drugs	A diverse group of pharmacological agents used in the treatment of epileptic seizures.
Acetylcholinesterase Inhibitors (AChEI's)	An acetylcholinesterase inhibitor (often abbreviated to AChEI) or anti-cholinesterase is a drug that inhibits the acetylcholinesterase enzyme from breaking down acetylcholine, thereby increasing both the level and duration of action of the neurotransmitter acetylcholine. These are sometimes referred to as cognitive enhancing drugs. These can be termed cognitive enhancers also.
Memantine	A drug used to treat moderate to severe Alzheimer's disease through its act on the glutamatergic system by blocking NMDA receptors.
Benzodiazepines	A group of drugs sometimes referred to as minor tranquillisers, that can aid with anxiety or sleep problems (sometimes called benzos).
Z type drugs / hypnotics	A non-benzodiazepine drug with effects similar to benzodiazepines, used in the treatment of sleeping problems often termed hypnotics.

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