Knowledge Services
Scotland's public health information service

Evidence Summary

Mental health diagnosis of people aged 65 and over.

Author	Grant Donaghy Knowledge Services NHS Health Scotland
Enquirer	Claire Stevens Chief Executive Voluntary Health Scotland
Date of Search	July 2019
Search Type	Evidence summary
Disclaimer	This evidence summary contains a selection of material gathered from a search of the evidence base. It is not intended to be comprehensive and has not been critically appraised. Written by a qualified information professional, the content is based upon informed prioritisation of the search results based upon the criteria supplied by the requestor. The summary is not a substitute for clinical or professional judgement and the information contained within does not supersede national and local NHS policies and protocols.

0141 414 2762
nhs.healthscotland-knowledge@nhs.net

NHS Health Scotland

Table of contents

---

1. Introduction

This report describes the evidence search request, provides a brief thematic analysis of the findings and details the included references. The question asked was:

What happens to the mental health diagnosis of a person once they reach the age of 65?

2. Search Overview

The searches for this evidence summary were conducted during July 2019. The search strategy is included in Appendix 4. The results were then de-duplicated and screened using date/title/abstract.

The following criteria were applied:

- Limits applied to search:
  - Language: [English]
  - Period: [2014-2019]
  - Geography: [UK, EU, USA, AUS]
  - Population: [65+]
- Inclusion criteria:
  - [Psychosis]
- Exclusion criteria:
  - [Dementia]

3. Key Messages

● Depression in older people is under-diagnosed and under-treated [1, 2, 6]

● There are several diagnostic assessment tools available for use with elderly patients [2]

● Evidence shows that older people are less likely to be referred to specialist services compared with younger people [1, 3]

● Patients aged 60 and over are identified as being less likely to seek medical help for their mental health as well as being less likely to receive adequate treatment if they do, in comparison to younger adults [3]

● There is limited evidence on the treatment of older people's mental health beyond dementia and depression suggesting that further research in this area is required [5]

4. Findings

Brief literature review

Allen et al [1] in their article on the under-diagnosis of depression in older people state that even though depression is more common in old age than dementia it remains both under-diagnosed and under-treated [1, 2, 6]. They suggest the reasons for this may be due to the over-lapping of presenting symptoms or to a lack of recognition of the impact of depression by clinicians, patients and their families. For this reason it is suggested that consideration of depressive illness as a differential diagnosis is required. Morichi et al [2] note that, from a clinical perspective, depression in older people is associated with:

- Functional decline
- Greater morbidity
- Increased risk of hospital admission
- Institutionalisation
- Increased mortality (due to risk of suicide as well as other causes)
- Higher healthcare costs

In diagnosing depression, Allen et all [1] note that organic disorders such as anaemia, B12 and folate deficiency and hypothyroidism should first be excluded before considering cognitive assessment. They reiterate that in an elderly patient with

depression, cognitive assessment scores are likely to have significant overlap in scores with mild cognitive impairment and even dementia.

For this reason screening tools should be used to identify key symptoms and to evaluate their severity [1]. Morichi et al [2] list the following diagnostic assessment tools for use with elderly patients:

- The Geriatric Depression Scale (GDS)
- The Patient Health Questionnaire (PHQ)
- The Cornell Scale for Depression in Dementia (CSDD)
- The Beck Depression Inventory Scale
- The Older American Resources and Services (OARS) Depression Scale
- The Hamilton Rating Scale for Depression
- The Geriatric Mental State

Yet it is noted that some of the assessment scales have varying success with the oldest old due to comorbidities and the effects of old age, e.g. frailty.

Valkanova et al [6] note that depression and dementia are common in older people and frequently happen together. However, they highlight that depression can be an independent risk factor, a prodromal symptom or a consequence of dementia. For this reason disentangling the temporal relationship between the two can be challenging. Depression can be seen as a psychological response to receiving a diagnosis of dementia. They reiterate that studies have found high rates of anxiety and depression, particularly early in the course of dementia.

Allen et al [1] state that many older people resist the use of antidepressants for the treatment of depression and express a preference for a psychological treatment. Despite this, the evidence shows that older people are less likely to be referred to specialist services compared with younger people [1, 3]. However, Morici et al [2] acknowledge that clinical presentation of late-life depression is usually different from that in younger people. Additionally to this, patients aged 60 and over are identified as being less likely to seek medical help for their mental health as well as being less likely to receive adequate treatment if they do, in comparison to younger adults [3]. Referral to specialist mental health services is recommended [1, 2] where:

- There is diagnostic difficulty
- There is poor response to treatment
- There are psychotic symptoms
- There is significant psychiatric comorbidity
- There is a risk of self-neglect or suicide

The evidence shows that antidepressants are effective in older people and that the principles of prescribing are the same as those for younger people [1]. NICE guidelines [CG90] make recommendations and state that the choice of antidepressant should be guided by comorbidities, which are more common in the elderly.

Scogin and Presnell [4] in their analysis of geriatric depression acknowledge that barriers for the elderly to seek mental health therapy can include:

- Stigmatisation of mental health treatment
- Believing depression is part of old age
- Culturally specific shame
- Lack of acculturation

They suggest some therapeutic techniques for application with the elderly:

- Behaviour therapy techniques including Cognitive Behaviour therapy (CBT)
- Cognitive bibliotherapy
- Problem-solving therapy (PST)
- Brief psychodynamic psychotherapy
- Reminiscence therapy

Searby et al [5] in their review of dual diagnosis in older adults state the dedicated studies concerning older mental health populations are scarce and as such further research in this area is required. They speculate that mental health services providing hospital and community care to older adults are likely to experience increased demand as a result of ageing generations with greater comorbid mental health disorders.

Scottish statistics (based on available data)

Figures show that that whilst there has only been a slight increase in the prescribing of anti-psychotic medication to those over 65 across all health boards in Scotland since 2010, the prescribing of dementia related medicines in the same period has more than doubled [Appendix 2].

Figures also show that there has been a slight decrease in discharges from psychiatric hospitals for those aged 65 plus across all Scottish health boards since 2015. The number of patients aged 65 plus discharged from a psychiatric hospital where their diagnosis was psychosis has also decreased slightly since 2015 [Appendix 3].

5. References

[1] Allan, Charlotte E.; Valkanova, Vyara; Ebmeier, Klaus P.
Depression in older people is underdiagnosed. Practitioner 2014;258(1771):19-22 2014

[2] Morichi V.; Dell'Aquila G.; Trotta F.; Belluigi A.; Lattanzio F.; Cherubini, A.
Diagnosing and treating depression in older and oldest old. Current pharmaceutical design 2015;21(13):1690-1698

[3] Sanglier .; Saragoussi D.; Milea D.; Tournier, M.
Depressed older adults may be less cared for than depressed younger ones. Psychiatry research 2015;229(3):905-912

[4] Scogin, Forrest; Presnell, Andrew; Floyd, Mark R.
Chapter: Geriatric depression. Translating psychological research into practice 2014; 193-199

[5] Searby, Adam; Maude, Phil; McGrath, Ian
Dual diagnosis in older adults: a review. Issues in Mental Health Nursing 2015;36(2):104-111

[6] Valkanova V.; Ebmeier K.P.; Allan, C. L.
Depression is linked to dementia in older adults. The Practitioner 2017;261(1800):11-15

Appendix 1: Evidence matrix of identified publications with priority listing

Table 1: Publications (Listed Alphabetically by author)

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
1	Allan, Charlotte E.; Valkanova, Vyara; Ebmeier, Klaus P. Depression in older people is underdiagnosed	Practitioner 2014;258(1771):19-22 2014	Depression is more common in old age than dementia yet is underdiagnosed and undertreated. It is important to recognise that patients may not always present in a typical way, features that may indicate depression include anxiety, a preoccupation with somatic symptoms, and a change in function.	• Focus on eliciting current features of depression, which have been present for at least two weeks, and are associated with a significant change in function.	Article
2	Bendixen A.B.; Engedal, K. Anxiety among older psychiatric patients: a hidden comorbidity?	Aging & mental health 2016;20(11):1131-1138 2016	The aims were to explore prevalence of anxiety among patients admitted to departments of geriatric psychiatry for treatment of various diagnoses and to examine how often anxiety was registered as a previous or ongoing diagnosis.	• Anxiety is common in geriatric psychiatric patients, regardless of the primary diagnosis. The findings suggest that anxiety is often a hidden comorbidity in various psychiatric disorders.	Article
3	Bennett, Courtney Identifying delirium in older adults with pre-existing mental illness.	Nurse Practitioner 2017;42(6):39-44 06 16 201	The ability to distinguish key signs and symptoms of delirium in the presence of multiple medical comorbidities and mental illness allows the practitioner to intervene appropriately and improve care outcomes. It is critical that NPs promptly recognize, diagnose, and correct modifiable causes of delirium in	• Early recognition and diagnosis of delirium, in lieu of medical comorbidities and pre-existing mental illness, are crucial to improve care outcome and quality of life in older adults. In the case study, upon recognizing the symptoms of delirium, appropriate treatment was	Case Study

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
			older adults. Timely and appropriate intervention reduces the risk of death and life-threatening medical conditions.	implemented and the prognosis improved for the patient. Delirium should be considered in all cases of sudden changes in cognitive status, especially in older adults.	
1	Chew-Graham, Carolyn A. Chapter: Anxiety and depression in older people: Diagnostic challenges.	Mental health and older people: A guide for primary care practitioners 2016; 45-55	This chapter considers the presentation of anxiety and depression in older people and explores the challenges clinicians face in making a diagnosis in the face of multiple health problems. Depression is a major global public health threat, and by 2030, depressive disorders are predicted to be the second leading cause of disease burden and disability worldwide.	• Reducing the burden of depressive disorders is recognised as a major public health priority. Anxiety and depression commonly overlap or coexist.	Book chapter
2	Colligan, Erin M.; Cross-Barnet, Caitlin; Lloyd, Jennifer T.; McNeely, Jessica Barriers and facilitators to depression screening in older adults: a qualitative study.	Aging & Mental Health 2018;1-8(Journal Article): 2018	The objective of this qualitative study was to better understand facilitators and barriers to depression screening for older adults.	• Findings indicate that using person-centered approaches to build positive communication and trust between beneficiaries and providers could be an effective strategy for improving depression screening. Better screening can lead to higher rates of diagnosis and treatment of depression that could enhance quality of life for older adults.	Qualitative study
2	Dols, Annemiek; Chen, Peijun; Jurdi, Rayan K. Al; Sajatovic, Martha	Bipolar disorder in older age patients	This chapter on clinical assessment of older adults with bipolar disorder will discuss the differential diagnosis of	•	Book chapter

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
	Chapter: Clinical assessment of older adults with bipolar disorder.	2017;(Journal Article):21-41 Cham, Switzerland 2017	manic presentation in older individuals as well as the elements of a clinical evaluation appropriate for the older adult who may have bipolar disorder. This includes the psychiatric clinical interview, history-taking, risk assessment, application of standardized techniques in the assessment of mood symptoms, and that of cognition as well as the assessment of medical and psychiatric comorbidities.		
3	Harrawood A.M.; Perkins A.J.; Fowler N.R.; Boustani, M. A. Mental health outcomes for a large cohort of older primary care patients who were screened for dementia	Alzheimer's and Dementia 2017;13(7):P875 Alzheimer's and Dementia. Conference Alzheimer's Association International Conference, AAIC 2017. United Kingdom. 13 (7) (pp P875); Elsevier Inc. 2017	Dementia frequently coexists with negative psychosocial symptoms such as depressive symptoms and anxiety. Strong social support has been associated with better mental health outcomes for older adults. We examined the relationship between performance on cognitive screening, social support, depression and anxiety in a large cohort of primary care patients age 65 and older.	• There was no difference in rates of depression or anxiety between the group that screened positive for dementia compared to those who screened negative for dementia. Higher social support was positively associated with less depression and anxiety for both groups, regardless of whether they screened positive or negative for dementia.	Conference abstract
2	John A.; Patel U.; Rusted J.; Richards M.; Gaysina, D. Affective problems and decline in cognitive state in older adults: a systematic review and meta-analysis.	Psychological medicine 2019;49(3):353-365	Evidence suggests that affective problems, such as depression and anxiety, increase risk for late-life dementia. However, the extent to which affective problems influence cognitive	• Results of the present study improve current understanding of the temporal nature of the association between affective problems and decline in cognitive state. They also suggest that	Systematic review

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
			decline, even many years prior to clinical diagnosis of dementia, is not clear. The present study systematically reviews and synthesises the evidence for the association between affective problems and decline in cognitive state (i.e., decline in non-specific cognitive function) in older adults.	cognitive function may need to be monitored closely in individuals with affective disorders, as these individuals may be at particular risk of greater cognitive decline.	
3	Kennedy G.J.; Ceide, M. E. Screening Older Adults for Mental Disorders.	Clinics in geriatric medicine 2018;34(1):69-79	Avoidable disability associated with depression, anxiety, and impaired cognition among older adults is pervasive. Incentives for detection of mental disorders in late life include increased reimbursement, reduced cost, and less burden for patients and families. However, screening not aligned with diagnosis, intervention, and outcome assessment has questionable utility. The link between screening, treatment, and outcomes is well established for depression, less so for anxiety and impaired cognition.	• This article details the use of common instruments to screen and assess depression, anxiety, and cognitive impairment.	Article
1	KujawskaDanecka H.; NowickaSauer K.; Hajduk A.; Wierzba K.; Krzeminski W.; Zdrojewski, Z. The prevalence of depression symptoms and other mental	Family Medicine and Primary Care Review 2016;18(3):274-277	Mental disorders, especially depression, are common problems among the elderly. This article determines the prevalence of symptoms of mental disorders, with emphasis on symptoms	• 1. In the studied group symptoms of sleep disorders and depressive disorders were the most frequent problems.	Case study

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
	disorders among patients aged 65 years and older - screening in the rural community.		of depressive disorders, in patients aged 65 years and older. Material and methods. The study involved 93 patients (59 women, 34 men, median age 70).	• 2. The severity of symptoms of depressive disorders correlated positively with the number and severity of somatic complaints. • 3. Only 1/3 of the patients presenting symptoms of mental disorders were treated with pharmacotherapy. • 4. Depression screening should be carried out among the elderly who report somatic problems and sleep disorders.	
1	Morichi V.; Dell'Aquila G.; Trotta F.; Belluigi A.; Lattanzio F.; Cherubini, A. Diagnosing and treating depression in older and oldest old.	Current pharmaceutical design 2015;21(13):1690-1698	Depression is very common in older people and it is associated with negative consequences such as functional decline, increased morbidity and mortality and higher healthcare costs. Despite this, it is still under diagnosed and undertreated and the issue is particularly relevant for people older than 80 years. The main reasons for under-diagnosis are: atypical presentation, concomitant cognitive decline, inadequate diagnostic tools, and prejudice that depression is a normal part of ageing.	• In light of the heterogeneity of people aged 80 years and over, with multiple and different medical, functional, socioeconomic problems, a multidimensional approach is probably the most suitable both for diagnosis and treatment, in order to develop an individualized care plan.	Article
2	Pocklington C.; Gilbody S.; Manea L.; McMillan, D.	International journal of geriatric psychiatry 2016;31(8):837-857	Depression in older adults is often under recognised despite it being the most	• Results suggest the possibility of selective reporting of cut-off scores,	Systematic review

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
	The diagnostic accuracy of brief versions of the Geriatric Depression Scale: a systematic review and meta-analysis.		common mental health illness in this age group. An increasing older adult population highlights the need for improved diagnostic rates.	and therefore, findings should be approached cautiously	
2	Rhee T.G.; Capistrant B.D.; Schommer J.C.; Hadsall R.S.; Uden, D. L. Effects of the 2009 USPSTF depression screening recommendation on diagnosing and treating mental health conditions in older adults: A difference-in-differences analysis.	Journal of Managed Care and Specialty Pharmacy 2018;24(8):769-776	To examine the effects of the 2009 USPSTF depression screening recommendation on the 3 following outcomes: diagnoses of mental health conditions, antidepressant prescriptions (overall and potentially inappropriate), and provision of nonpharmacological psychiatric services in office based outpatient primary care visits made by adults aged 65 or older.	• While there are mixed findings about efficacy and effectiveness of depression screening in the existing literature, more population-based observational research is needed to strengthen and support current USPSTF depression screening recommendation statements in the United States.	Difference-in-differences analysis
1	Sanglier .; Saragoussi D.; Milea D.; Tournier, M. Depressed older adults may be less cared for than depressed younger ones.	Psychiatry research 2015;229(3):905-912	The aim of the study was to investigate depression treatment use, either psychotherapy (PT) or antidepressant drugs (ADT) in the older and younger depressed population.	• Elderly persons were less often treated than the younger adults either by ADT (25.6% vs. 33.8%) or by PT (13.0% vs. 34.4%). ADT dispensing occurred later in the elderly group (51 vs. 14 days). ADT was associated with comorbid chronic conditions or polypharmacy in the elderly and younger adults. Although depressed elderly commonly presented with comorbidity, this age group was at higher risk of untreated illness or later treatment.	Article

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
2	Schluter P.J.; Lacey C.; Porter R.J.; Jamieson, H. A. An epidemiological profile of bipolar disorder among older adults with complex needs: A national cross-sectional study.	Bipolar disorders 2017;19(5):375-385	Research on bipolar disorder (BD) among community-living older adults is scant and often suffers from important methodological limitations. Using a national database, this study presents an epidemiological profile of BD in older community residents within New Zealand.	• BD among older adults is not uncommon, and numbers will increase as populations age. Increasingly, health services are moving to home-based integrated models of care. Clinicians and decision-makers need to be aware in their planning and service delivery that significant deficits in environment quality and exposure to stressful living circumstances remain for older adults with BD.	Article
1	Scogin, Forrest; Presnell, Andrew; Floyd, Mark R. Chapter: Geriatric depression.	Translating psychological research into practice 2014;(Journal Article):193-199	Depression in late life is one of the most common psychological disorders faced by older adults. Many controlled investigations have examined the treatment of the disorder, providing for a rich foundation for determining the best course of treatment. Central to the issues of treatment is the diagnosis of the disorder in this population.	• Older adults are more likely to focus complaints on somatic concerns, such as sleep problems or loss of appetite, fatigue, and cognitive concerns, than to present affective complaints. Older adults may also have a variety of medical issues that complicate treatment. These special issues make the treatment of depression in late life nuanced and therefore require techniques specifically studied within the population for best practices to be established.	Book chapter
1	Searby, Adam; Maude, Phil; McGrath, Ian Dual diagnosis in older adults: a review	Issues in Mental Health Nursing 2015;36(2):104-111	A comprehensive review of the contemporary literature examining this issue was conducted, finding a paucity	• Several recurring themes emerge from the literature, including the notion of a statistically small population that, in	Article

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
			of literature concerning dual diagnosis in older adults.	absolute terms, represents a sizeable number of individuals coming to the attention of aged mental health services in the future. Additionally, the potential for under-diagnosis in this cohort is highlighted, potentially creating a hidden population of older adults with dual diagnosis.	
3	Sohn N.; Cummings C.; Kreider, T. R. A Case of Very-Late-Onset Schizophrenia-Like Psychosis, an Under-Recognized and Distinct Syndrome	American Journal of Geriatric Psychiatry 2019;27(3 Supplement):S118-S119	Schizophrenia is classically viewed as a neurodevelopmental disorder that manifests at an early age. However, geriatric presentations of schizophrenia-like illness have been described, suggesting a distinct syndrome and warranting a diagnosis of very-late-onset schizophrenia-like psychosis (VLOSLP).	• The case of Ms. L illustrates a rare presentation of first episode of psychosis at advanced age with relative sparing of cognitive and functional status. This syndrome has been called very-late-onset schizophrenia-like psychosis.	Case report / Conference abstract
1	Valkanova V.; Ebmeier K.P.; Allan, C. L. Depression is linked to dementia in older adults.	The Practitioner 2017;261(1800):11-15	Depression and dementia are both common conditions in older people, and they frequently occur together. Late life depression affects about 3.0-4.5% of adults aged 65 and older. Depression occurs in up to 20% of patients with Alzheimer's disease and up to 45% of patients with vascular dementia. Rather than a risk factor, depression with onset in later life is more likely to be either prodromal to dementia or a condition	• Older people with depression are at raised risk of dementia and this risk is increased if they have had symptoms for a long time, if their symptoms are severe, where there are multiple (vascular) comorbidities, and where there are structural brain changes including hippocampal atrophy and white matter abnormalities.	Article

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
			that unmasks pre-existing cognitive impairment by compromising cognitive reserve.		
1	Weisenbach, Sara; Carns, Danielle Chapter: Cognitive impairment and older age bipolar disorder.	Bipolar disorder in older age patients 2017;(Journal Article):107-126	Many older adult patients seen in psychiatric settings exhibit a clinical presentation that involves mixed affective and cognitive disturbances. These disruptions typically take one of two forms: either a primary mood disturbance with secondary cognitive impairment, or a primary neurodegenerative illness with secondary mood disorder, such as depression. The former pattern, also known as cognitive impairment with depression, involves cognitive impairment that may improve with adequate treatment of depression, while the latter does not.	• This differentiation highlights the importance of accurate and quick diagnosis, which is a process that begins with being able to effectively screen for impairments and knowing when to refer for neuropsychological evaluation.	Book chapter

Appendix 2: Scottish psychiatric prescribing for 65 and over figures

ISD Reference Number: IR2018-01802

Description: The number of paid items for Dementia and Antipsychotics for patients aged 65+, 2010/11 - 2017/18, by Health Board

Data source: Prescribing Information System, ISD Scotland (extracted 26/11/2018)

Please note that previous releases of this report have used existing BNF section classifications for reporting of drugs used in mental health. Since the report of October 2017 the structure of BNF medicines classification has changed and the section descriptions used are no longer applicable to the new structure. In order to maintain consistency and comparability with previous years this report uses the "legacy BNF" structure, consistent with what has been used in previous years for data for 2017/18. The "legacy BNF" is not publically available to view online, however the medicines attributed to the relevant BNF sections (BNF 4.2.1, and 4.11) are available in the "Legacy BNF" tab of this workbook. Up to date information on the availability and therapeutic uses of medicines can be found on the British National Formulary website: www.bnf.nice.org.uk

Notes

1. Includes items prescribed and dispensed in Scotland
2. Excludes items prescribed or dispensed in England
3. Split by NHS Board of prescribing
4. Excludes private prescriptions (other than control drugs), hospital and direct supply of medicines to patients; i.e. excludes prescriptions supplied though clinics
5. Includes all prescriber types
6. Includes all dispenser types
7. Data shown is for that dispensed within the community only
8. Data captured from paid items
9. Paid items are based on items which have been prescribed, dispensed and subsequently submitted for payment by a dispensing contractor
10. The paid date is the date the contractor was paid for dispensing the drugs, this is always defaulted to the end of the month
11. The frequency of items by patient is based on a count of the number of paid items for each valid CHI number.
12. Includes only items where a valid CHI has been captured. The CHI capture rates are:

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Dementia	*87.33%*	*86.95%*	*88.27%*	*92.17%*	*93.58%*	*94.71%*	*95.37%*	*96.14%*
Antipsychotics	*93.52%*	*93.98%*	*94.77%*	*96.18%*	*96.79%*	*96.99%*	*97.18%*	*97.41%*

13. Age band is based on the patient's age as at 30th September for the financial year in question, for example the age band for financial year 2011/12 is based on 30th September 2011.

NHS National Services Scotland

The number of paid items for Dementia (4.11) and Antipsychotics (4.2.1) for patients aged 65+, 2010/11 - 2017/18 [1, 2]

ISD SCOTLAND

Prescribing NHS Board	Dementia (4.11)								Antipsychotics (4.2.1)							
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
NHS SCOTLAND	**112,918**	**128,857**	**154,644**	**192,321**	**216,180**	**229,563**	**243,859**	**250,438**	**184,770**	**186,645**	**189,502**	**197,228**	**205,181**	**210,886**	**219,215**	**228,280**
NHS AYRSHIRE & ARRAN	906	825	665	2,689	5,727	7,931	9,542	9,614	11,921	12,171	12,226	12,686	12,894	13,157	13,601	13,685
NHS BORDERS	2,975	3,557	4,196	5,707	7,136	8,160	8,886	9,027	3,739	3,840	3,820	3,909	3,788	3,906	4,094	4,301
NHS DUMFRIES & GALLOWAY	4,742	5,201	5,913	6,656	7,524	8,537	9,346	9,587	7,052	6,626	6,147	6,232	6,374	6,627	7,166	7,404
NHS FIFE	12,073	14,628	18,304	22,214	25,649	27,837	29,413	29,549	11,529	11,071	10,809	10,375	10,989	11,880	12,758	13,096
NHS FORTH VALLEY	2,018	1,626	2,924	9,846	11,566	11,715	11,982	13,320	8,606	9,249	9,601	10,301	10,551	11,419	12,253	13,832
NHS GRAMPIAN	15,493	17,365	19,680	22,235	23,286	22,856	23,264	23,377	20,366	20,891	21,159	22,267	23,465	24,285	25,129	25,335
NHS GREATER GLASGOW & CLYDE	24,825	28,077	34,160	40,238	41,460	43,875	45,148	43,496	46,072	46,437	46,773	48,177	48,260	49,259	49,776	51,042
NHS HIGHLAND	8,531	9,884	10,964	12,634	13,910	14,751	15,384	16,084	14,866	14,726	14,735	15,507	16,311	16,790	16,968	17,535
NHS LANARKSHIRE	19,286	22,590	27,135	31,092	35,121	35,358	36,473	35,892	20,739	20,603	21,320	22,497	26,348	27,013	27,955	29,389
NHS LOTHIAN	16,409	19,389	22,219	27,255	31,579	33,426	35,902	38,773	20,190	20,770	22,039	23,288	24,288	24,584	26,568	27,836
NHS ORKNEY	591	626	674	690	642	540	530	461	656	638	585	629	657	661	728	751
NHS SHETLAND	171	335	639	967	1,042	991	1,022	1,088	471	472	550	671	763	776	831	964
NHS TAYSIDE	4,077	3,875	5,970	8,947	10,243	12,277	15,787	19,078	17,251	17,739	18,059	18,806	18,635	18,758	19,596	21,187
NHS WESTERN ISLES	821	879	1,201	1,151	1,295	1,309	1,180	1,092	1,312	1,412	1,679	1,883	1,858	1,771	1,792	1,923

Notes:

1. Age is based on the patient's age as at 30th September for the financial year in question. For example 2010/11 data the age is based on 30th September 2010.
2. The number of items paid is where there is valid CHI only.

NHS National Services Scotland

ISD SCOTLAND

"Legacy" BNF classification - approved drug names allocated to BNF sections 4.2.1 and 4.11

Section BNF	Sub-Section BNF	Approved Name
0402 - DRUGS USED IN PSYCHOSES & RELATED DISORDERS	040201 - ANTIPSYCHOTIC DRUGS	AMISULPRIDE
		ARIPIPRAZOLE
		BENPERIDOL
		CHLORPROMAZINE HYDROCHLORIDE
		CLOZAPINE
		FLUPENTIXOL
		FLUPENTIXOL DECANOATE
		FLUPHENAZINE HYDROCHLORIDE
		HALOPERIDOL
		LEVOMEPROMAZINE
		LURASIDONE HYDROCHLORIDE
		OLANZAPINE
		PALIPERIDONE
		PERICYAZINE
		PERPHENAZINE
		PIMOZIDE
		PROMAZINE HYDROCHLORIDE
		QUETIAPINE
		RISPERIDONE
		SULPIRIDE
		THIORIDAZINE
		TRIFLUOPERAZINE
		ZOTEPINE
		ZUCLOPENTHIXOL
0411 - DEMENTIA	041100 - DEMENTIA	DONEPEZIL HYDROCHLORIDE
		GALANTAMINE
		MEMANTINE
		RIVASTIGMINE

Appendix 3: Scottish pychiatric discharges for 65 and over figures

This table shows all discharges from psychiatric hospitals for those aged 65 plus by diagnosis grouping and also by health board.

For the financial years ending 31 March 2015/16 - 2017/18
By health board of residence

	Financial Year		
Health Board of Residence	2015/16	2016/17	2017/18
NHS Ayrshire & Arran	173	218	205
NHS Borders	109	76	84
NHS Dumfries & Galloway	141	172	161
NHS Fife	322	232	247
NHS Forth Valley	264	277	294
NHS Grampian	368	340	364
NHS Greater Glasgow & Clyde	732	731	784
NHS Highland	233	197	197
NHS Lanarkshire	395	374	379
NHS Lothian	581	555	609
NHS Tayside	549	551	428
Island Boards	19	23	31
Total	**3,886**	**3,746**	**3,783**

Notes:
Source: ISD SMR04 August 2019
No diagnosis codes have been excluded from this analysis.
Each spell of treatment is counted i.e. individual patients with more than one spell of treatment would be counted for each spell of treatment within the time frame.
Due to small numbers, the island boards NHS Orkney, NHS Shetland and NHS Western Isles have been combined.

This table shows the number of patients discharged from a psychiatric hospital where their diagnosis was psychosis broken down by health board of residence.

Number of patients discharged from a psychiatric hospital with a psychosis diagnosis for those aged 65 and over
For the financial years ending 31 March 2015/16 - 2017/18
By health board of residence

	Financial Year of Discharge		
Health Board of Residence	2015/16	2016/17	2017/18
NHS Ayrshire & Arran	48	46	58
NHS Borders	*	17	17
NHS Dumfries & Galloway	29	33	32
NHS Fife	68	52	43
NHS Forth Valley	58	52	54
NHS Grampian	75	97	82
NHS Greater Glasgow & Clyde	203	177	186
NHS Highland	50	43	42
NHS Lanarkshire	87	101	99
NHS Lothian	156	151	155
NHS Tayside	96	107	85
Island Boards	*	10	13
Total	**897**	**886**	**866**

Notes:
Source: ISD SMR04 August 2019
Psychosis has been defined as schizophrenia, bipolar disorder and/or severe depression.
ICD10 codes F105, F106, F107, F20-F29, F30, F31, F322, F323, F332, F333, F39X and F431 have been used to select psychosis patients.
It should be noted that learning disability and personality disorder codes have not been used to select psychosis patients.
All six discharge diagnosis positions have been used to identify patients with a psychosis diagnosis.
Each patient is counted only once in each financial year however, if they are discharged in more than one financial year then they will be shown for each financial year.
* denotes values which have been suppressed to protect patient confidentiality.

Appendix 4: Search Strategy

Bibliographic Databases	**Search strategy** (inc. limits and filters)
Ovide Medline, Embase & Psycinfo	***1. "mental disorder*".ti.*** ***2. *Psychotic Disorders/*** ***3. *Schizophrenia/*** ***4. schizophren*.ti.*** ***5. *Bipolar Disorder/*** ***6. "bipolar disorder".ti.*** ***7. *Depression/*** ***8. depress*.ti.*** ***9. *Anxiety/*** ***10. anxiety.ti.*** ***11. *Cognition Disorders/*** ***12. "subjective cognitive impairment".ti,ab.*** ***13. *Mental Health/*** ***14. *Mental Disorders/*** ***15. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14*** ***16. older.ti.*** ***17. elder.ti.*** ***18. "senior citizen*".ti.*** ***19. pension*.ti.*** ***20. geriatric*.ti.*** ***21. gerontol*.ti.*** ***22. 16 or 17 or 18 or 19 or 20 or 21*** ***23. 15 and 22*** ***24. *Diagnosis/*** ***25. diagnosis.ti,ab.*** ***26. 24 or 25*** ***27. 23 and 26*** ***28. limit 27 to (english language and yr="2014 -Current")***