<u>Trends in referrals to liaison psychiatry teams from UK emergency departments for patients over 65</u>

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Conflicts of interest:

Nil

Acknowledgements:

Data collection for this study was assisted by representatives from each site as well as the authors. We would like to thank all those involved for the effort and dedication shown, including; Jennifer Ness, Lida Panagiotopolou, Ulker Ali, Isobel Lack, Laura Edwards-Suarez, Sarah Wilson, Rowena Carter, Yvonne Ha, Rebecca Landey and Rebecca Marshall.

Data availability statement:

The data that support the findings of this study are available from the corresponding author upon reasonable request.

<u>Abstract</u>

Introduction

The number of people over the age of 65 attending Emergency Departments (ED) in the United Kingdom (UK) is increasing. Those who attend with a mental health related problem may be referred to liaison psychiatry for assessment. Improving responsiveness and integration of liaison psychiatry in general hospital settings is a national priority. To do this psychiatry teams must be adequately resourced and organised. However, it is unknown how trends in the number and type referrals of older people to liaison psychiatry teams by EDs are changing, making this difficult.

Methods

We performed a national multi-centre retrospective service evaluation, analysing existing psychiatry referral data from EDs of people over 65. We described trends in the number, rate, age, mental health presentation, and time taken to assessment over a 7 year period.

Results

Referral data from 28 EDs across England and Scotland were analysed (n=18828 referrals). There was a general trend towards increasing numbers of people referred to liaison psychiatry year on year. Variability in referral numbers between different departments, ranged from 0.1 - 24.3 per 1000 ED attendances. The most common reasons for referral were mood disorders, self-harm and suicidal ideas. The majority of referrals were assessed within 60 minutes, however there is variability between departments, some recording waits over 11 hours.

Discussion

The data suggests great inter-departmental variability in referral numbers. Is not possible to establish the cause of variability. However, the data highlights the importance of asking further questions about why the differences exist, and the impact that has on patient care.

Introduction:

In the United Kingdom (UK) life expectancy has increased over the last 30 years. The number of older people in the population has risen [1], and this has led to a greater proportional increase in the 'older old'; those aged 80 and over [2]. This has significant health resource implications as advancing age is associated with increased physical and psychiatric morbidity [3]. In 2018/19 43% (8.9 million) of people admitted to hospital were aged over 65 years old. In the same year 4.7 million over 65s attended English Emergency Departments (ED), a 65% rise in attendances compared to 10 years earlier [3].

Dementia, depression and anxiety disorders are common in older people [4]. Around 1.3% of those aged between 65 and 69 will have dementia, this number rises to almost 20% in those over 80 [5]. Moderate to severe depression occurs in 3-4% of the older adult population [6], with the highest prevalence found in those over 75 [7]. These conditions may require urgent attention, and although community psychiatric support should be available, many patients attend hospital EDs either in crisis, or following a significant event precipitated by mental illness. Where there are concerns, for example self-harm, suicidal ideation, severe and distressing symptoms in dementia, acute symptoms of a mental illness such as schizophrenia, or depression the person may be referred from the ED to the liaison psychiatry team.

Many, but not all, liaison psychiatry teams in the UK specifically assess and treat older people. Traditionally in UK psychiatry 65 years is used as an age cut-off to determine when a person is 'older', however some services are delivered by patient need, for example frailty. The perceived advantage of mental health services for older people are that they have specialist experience in meeting care needs in a population who often have complex communication, social, medical and mental health problems.

There is wide variation in the degree of provision of liaison psychiatry services across the UK [8]. In a recent national survey of EDs 52% (n=174) reported that their service had better liaison psychiatry provision than the previous year, 15% reported that their service was less well resourced, and some services lacked the staff to cope with the overwhelming number of referrals, leading to patients reportedly being turned away [9] [10].

NHS planning guidance has included improved provision of liaison psychiatry services for the past three years, this has been set out among the nine 'must dos' for the NHS in the two year planning guidance, and is the cornerstone of the National Confidential Enquiry into Patient Outcome and Death's 'Treat as One' report [11],[12]. There is limited evidence from a single hospital of a trend for increasing numbers of referrals [13], however, the number or type of referrals from UK EDs to older peoples' mental health liaison services has never been examined. Nor do we understand whether the number of people accessing services is changing in line with demographics, or the impact this may have on future services. Having an awareness of these trends could help design these services and plan for future changes in need.

To achieve this we designed a study to with the primary objective of describing trends in the number and rate of older people referred to liaison psychiatry from EDs per year over time. Further objectives were to:

1) describe age characteristics and common reasons for referral

- 2) better understand the challenges of assessing patients in a timely by describing the time taken from referral by ED to assessment by liaison psychiatry services
- 3) Examine how time from referral to assessment has varied over time and between hospital sites.

Methods:

Overview:

We performed a national multi-centre retrospective service evaluation, analysing existing referral data for people over 65 years old to psychiatry from the UK EDs.

Participating sites:

UK hospitals with an established liaison psychiatry department that accept referrals of over 65 year olds from a type 1 EDs and their associated observation wards / clinical decision units (CDU) were invited to participate (n=189). Sites were invited to participate through two routes.

- 1) All members of the Royal College of Psychiatrists (RCPsych) Faculty for liaison psychiatry and old age psychiatry were sent an email explaining the study and inviting participation (n=4984 individuals).
- 2) Snowball sampling was used and recipients of the invitation were asked to pass this on to colleagues in other liaison psychiatry departments [14].

Inclusion criteria were that the department had an established psychiatry liaison service, running for longer than 5 years that accepts referrals of over 65 year olds, and an existing anonymised data set on referrals for at least 2 years.

Exclusion criteria were any recent large restructuring of local ED services during the data collection period (for instance other local hospital closures impacting ED attendances), and major departmental restructuring or the establishment of new psychiatry services for assessing over 65 year olds in the ED during the data collection period.

Data collection:

Participating departments provided pre-existing, routinely collected, anonymised referral data between the calendar years of 2011-2018 inclusive. Where departments did not have data dating as far back as 2011 a minimum of 2 years was required (2017-2018). As it was predicted that different departments would keep different amounts and types of data, information required was prioritised into essential and preferable. Data requested is set out as below with essential data marked with an asterisk.

Service specifications of liaison team:

- Team structure; Number of staff.*
- Working hours/days of the team.*
- Whether the team has dedicated expertise in older adults.*

Routinely kept retrospective referral data:

- The number of referrals from ED/CDU to liaison psychiatry per calendar year*.
- The number of ED attendances over 65 per calendar year.
- The number of referrals from ED/CDU per calendar year by age category.
- The number of referrals per year by reason for referral.
- The average time taken between referral and assessment by psychiatry services by year.

All data was collected on a predesigned and peer reviewed data collection tool. Data collection tools were completed by the individual trusts or health board and returned to the project team where they were collated and analysed.

Data analysis:

Descriptive statistics were used to display the number of participating teams and their service specifications.

As hospital EDs vary in size depending on the size of the population they serve, referral numbers are (where possible) displayed as the number of referrals from the ED department to liaison psychiatry per 1000 attenders over the age of 65. For each data category (as described above) the referral rate median, interquartile range and 95% confidence interval are described. Medians have been selected over mean to minimise skewing of results due to the large variability between sites.

Ethics and information governance considerations:

As this this is a national service evaluation, Health Research Authority or ethics approval were not required. All data requested was fully anonymised. Permission to share data with the data collection team (GC, SB, MC) was at the discretion of the participating departments and their affiliated trusts' or health board clinical governance departments.

Results:

Contributing departments:

Of the 189 type 1 EDs in the UK 42 expressed an interest in participation, after reviewing the protocol and exclusion criteria 33 committed to return data. 30 returned data sets and a further 2 were excluded as the data provided did not meet minimum data set requirements. 27 were from England and 1 from Scotland. Sites in England included rural and urban areas in the North and South of the country including London. No valid data sets from Wales or Northern Ireland were available.

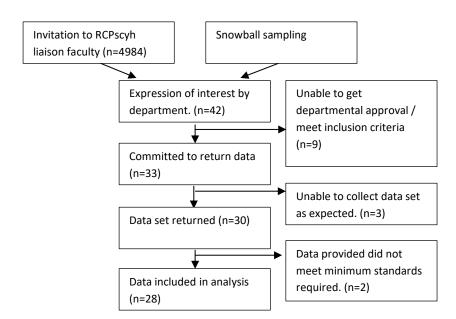


Figure 1: Flow chart to describe study site recruitment numbers.

Every site returned information about team structure and size. Every site included returned the minimum data set; 2 years worth of referral numbers from ED to liaison psychiatry. Data returned for other categories was variable and this can be observed in the presented results below.

Of the 28 returning sites 9 exclusively took referrals for people over the age of 65, the remaining 19 operated a service catering for all people over the age of 18, or in one case 16. Every site accepted referrals from both ED and all other wards or departments of the general hospital they serve, though data provided was only for those referrals over 65 years old referred from ED or its associated clinical areas. Across the sites each team had an average of 13.8 whole time equivalent staff members (typical 40 hour working week) made up of 1.6 consultant psychiatrists (63 hours per week (PW)), 1.7 non consultant grade doctors (66 hours PW), 9.8 mental health trained nurses (394 hours PW), 0.3 psychologists (12 hours PW), 0.1 Occupational Therapists (3 hours PW), and 0.4 Healthcare Support Workers (15 hours PW).

Referral numbers to liaison psychiatry:

Referral numbers data were submitted for the calendar years 2011 to 2018 inclusive. All sites submitted 2017 and 2018 data (minimum data set). Data submitted for the preceding years (2011, 2012, 2013, 2014, 2015 and 2016) were less complete and the number of returning sites was 6, 7, 8, 12, 22 and 27 respectively. Over the whole date range 18828 referrals were analysed. The number of referrals to liaison psychiatry per department per year ranged from 4 to 500 per year (table 1).

Table 1: Total referral numbers, referral rates to liaison psychiatry of people over 65 from ED per year.

	Number of retu	Number of returning sites, Median, InterQuartile Range, (95% Confidence Interval)					
Year	Referrals to liaison psychiatry	Attendances to ED in those >65 years	Referral rate / 1000 ED attenders >65				
2018	28, 138 , <i>101</i> , (94-166)	20, 28463 , <i>14805</i> , (1876-30403)	20, 5.3 , <i>4.5</i> , (3.1-7)				
2017	28, 124, <i>84</i> , (102-152)	20, 26047 , <i>13988</i> , (18788-28589)	20, 4.3 , <i>4.3</i> , (2.5-6.7)				
2016	27, 123 , <i>114</i> , (94-194)	19, 25655 , <i>15511</i> , (16188-30337)	19, 4.6 , <i>4.5</i> , (2.2-6.9)				
2015	22, 84 , <i>139</i> , (45-184)	17, 23249, <i>14738</i> , (15754-32302)	17, 2.3 , <i>3.1</i> , (1.9-5.0)				
2014	12, 71 , <i>106</i> , (10-130	13, 26078, <i>14236</i> , (19537-40265)	9, 2.0 , <i>0.8</i> , (1.4-4.5)				
2013	8, 81 , <i>68</i> , (7-280	10, 2792 , <i>14847</i> , (15426-41736)	7, 2.2 , <i>2.0</i> , (1.3-12)				
2012	7, 66, <i>48,</i> (6-195)	8, 24079 , <i>10380</i> , (9034-32100)	5, 2.1 , 1.7, (NA)				
2011	6, 58 , (4-153)	8, 19316 , <i>9962</i> , (8797-29760)	4, 1.9 , 1.4, (NA)				

From 2017-2018 referral numbers per 1000 ED attendances showed a large degree of variability between departments; 0.1 to 15.5 (Table 1). Over the entire data set this variability is even greater ranging from 0.1 - 24.3 referrals per 1000 ED attenders (Figure 2).

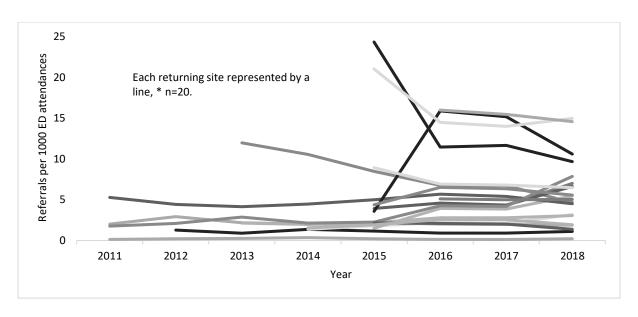


Figure 2: Referral numbers to liaison psychiatry services per 1000 ED attendances in people over 65 years old displayed by returning hospital site*.

Year on year, there has been a general trend towards increasing referral numbers (Figure 3), although rates of referral between 2016 - 2018 inclusive have been relatively stable and the number of returning sites for these three years is far greater than the proceeding five years.

Trends in referral rates by age range are stable year on year (Figure 3). Consistently those aged 65-69 are the most frequently referred. The number of referrals diminish with increasing age (figure 3).

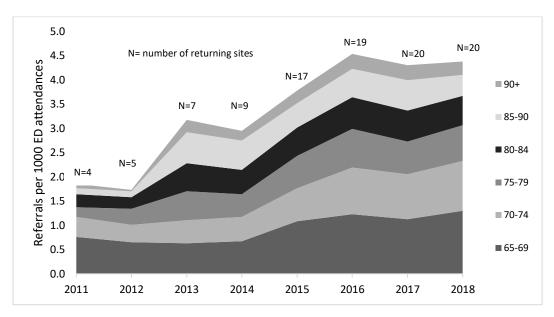


Figure 3: Combined referral numbers to liaison psychiatry per 1000 ED attendances over 65 years old, displayed by age category.

Time to referral:

The average proportion of patients seen by the liaison psychiatry with in 60 minutes of the referral being made was relatively stable over the 5 years of aggregated site data, ranging from 57% in 2014 to 64% in 2013. There was however large variability between sites; ranging from <10% to >90% of

people being seeing in under 60 minutes. Similarly, while in general people waiting over 11 hours to be seen was low (mean 2-10%) in some sites the percentage of people waiting over 11 hours for assessment was as high as 46% (Table 2).

Table 2: Time from referral by ED to assessment by psychiatry liaison team per year.

	Per cent % of referrals seen within time range								
	Returning	S							
	sites	sites Mean, Standard deviation, range (min-max)							
	n	<60 mins	60 – 359 mins	360 – 659 min	>660 min	Left Department			
2018	23	62, 23 (11-94)	23, 18, (16-67)	6 <i>, 16,</i> (0-69)	5 <i>, 9,</i> (1-63)	3, 7, (1-19)			
2017	24	61, 28, (9-100)	21, 19, (0-70)	6, 18, (0-16)	9, 18, (0-19)	3, <i>6</i> , (0-35)			
2016	20	63 <i>,26,</i> (4-94)	20, 15, (0=50)	28, <i>20</i> , (0-88)	6, <i>10</i> , (0-35)	2, <i>3</i> (0-13)			
2015	16	54 <i>, 25,</i> (9-89)	26, <i>16</i> , (0-55)	9, 21, (0-87)	10, 12, (0-46)	2, 3, (0-10)			
2014	9	57 <i>, 24,</i> (3-24)	24, 15, (6-49)	12, <i>26</i> , (0-81)	5, <i>5</i> , (0-15)	3, 4, (0-12)			
2013	7	64 <i>, 20,</i> (38-95)	29 <i>, 17,</i> (3-54)	2, <i>2</i> , (0-7)	2, 3, (0-7)	2, 4, (0-11)			

Reasons for referral:

From the 17 sites who returned referral reason data; the most common reason for referral was 'other' where either the referral was not coded in a format that could be captured in the data collection tool or a reason not stated (Figure 4). The second most common reason for referral was 'mood or anxiety without self-harm', 'self-harm' or 'suicidal ideation'. These three categories accounted for one third of all referrals to liaison psychiatry. Problems with cognition; dementia and confusion were the fourth most common reason, followed by psychosis, substance mis-use and 'in crisis'. Referral rates, by reason for referral across the sites for 2016, 2017 and 2018 were consistent (Figure 4).

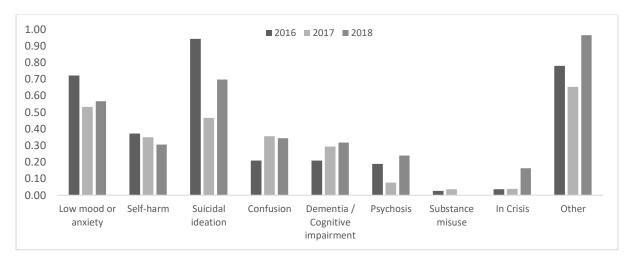


Figure 4: Referral rate to liaison psychiatry services per 1000 ED attendances over 65 years old by reasons for referral as stated by the referrer. Number of returning sites =17.

Discussion:

Principal findings

Referral data from up to 28 EDs across England and Scotland over a 7 year period were analysed (n=18828 referrals). There is a general trend towards increasing numbers of older people referred to liaison psychiatry year on year. There is variability in referral numbers per 1000 ED attendances between different departments, ranging from 0.1 - 24.3. The most common clinical reasons recorded for referral were mood disorders, self-harm and suicidal ideas, followed by dementia, psychosis and substance misuse. The majority of referrals were assessed within 60 minutes, however there is variability between departments with some regularly recording waits over 11 hours.

Strengths and weaknesses:

There are no previously published single or multi-centre studies describing the number of older people referred to liaison psychiatry services from EDs. Although the number of EDs included is relatively small; 28 from the 189 type 1 ED's in the UK, the total sample size (number of referrals reviewed) is large n=18828. The sample included both small and large EDs (table 1), serving a diverse population. It was hoped to have wider geographical spread in the UK, unfortunately no departments from Northern Ireland responded and Welsh data was not compatible with the data set. This limits the generalisability of the results. However, this data is not routinely collected by the NHS or individual liaison services and so this paper begins to fill this gap.

The study used retrospective, but contemporaneously collected data, that relied on different liaison psychiatry departments keeping similar data types (number of referrals, reason for referral, etc.) before data were collated and combined. Not all departments kept the same types of data or stored it in the same format. To overcome this the authors classified data as essential or non-essential. This created a greater wealth of data overall, but meant that some sites had missing data points. Scrutiny of data collection at each site was not possible, however where anomalies in the data were detected they were checked with the department.

The variability of the quantity of data available from site to site impaired the ability to draw reliable statistical inference without excluding a large number sites; those who were unable to provide more complete data sets. This would have significantly reduced the power and relevance of the study. To fully overcome this limitation and produce a 'clean and complete' data set would require a coordinated prospective cohort study. This would have severely limited the number of years of data available and was beyond the scope of this study.

The majority of departments did not keep routine referral data beyond three years. As such there were fewer contributing departments before 2015. This makes the data prior to 2015 less reliable.

In order to maximise the number of participating sites we used a convenience sample; departments were invited to participate, and those that did so self-selected. This introduces a selection bias, potentially confounding the results and limiting generalisability. For example, departments that are performing well or are very busy, may choose to participate to validate this perception. Additionally, better performing or bigger departments are potentially more likely to keep referral data records. Were the study to be repeated these limitations could be reduced by selecting a purposive sample

method, with sites selected to fulfil a sampling frame of variables including urbanicity, the size of the population the ED serves and staffing resources available to the liaison psychiatry department.

The data described, while perhaps crude gives an overview of referral trends. It does not attempt to establish the reason for them, nor can it. However, this overview can help us better understand the national picture and more reliably ask the relevant questions about why these trends are observed, leading on to future work that might improve service provision.

Meaning of the study:

The number of people young and old attending ED is rising. ED attendance data are widely publicised and oft lamented due to the demands placed on the hospitals and the economy [3]. Many psychiatric presentations are also becoming increasingly prevalent, for example self-harm and dementia [5,15]. With these trends one might expect to see comparable rises in older people attending ED with mental health related problems. Indeed, an overall rise in referral rate is shown over the 7 years from 1.9 to 5.3 referrals per 1000 ED attenders over 65. However, over the most recent 3 years (2016-2018) the rates are more stable, (4.6-5.3). It is perhaps significant that during this period there are more returning sites included in the data (n=19,20,20), and with this the potential for improved reliability. There may also be contextual issues in the way hospitals are organised to explain this. For example improved community management of frailty, a greater number of older people being admitted to medical wards on frailty pathways, or hospitals becoming more adept at managing dementia and depression[16]·[4]. The general trend towards increased referral numbers is important none the less, it indicates the potential for increasing strain on an already stretched mental health service.

Perhaps more important than the overall trend in referral rates is the intra and inter departmental data variability (figure 2). Individual departmental referral rates demonstrates some areas with rapidly reducing referral numbers year on year while others are rising. A large variation in referral rates between departments is also observed (range 0.1-24.3 patients per 1000 referrals over 65). When extrapolated into actual referral numbers per year for an average size ED department in our sample (n=31000 attenders over 65), this variation would equate to a range of between 3 and 744 patients referred per year.

While the prevalence of mental health conditions does vary from one geographical region to another, this inter-departmental variation is unlikely to be explained by this alone. One might hypothesise, that the observed differences are due to how local psychiatry and ED services are organised. For example, if an area has a well-resourced community mental health team with crisis services for managing mental health emergencies in the community, this might lead to fewer ED referrals. Local policy and thresholds for referral to mental health liaison teams may also be a factor, some departments dealing with more clinical scenarios 'in house' or having access to third sector organisations.

The number of 'older old' (>80) in the community is smaller than those age 65-79 [1]. It is perhaps unsurprising therefore that there are consistently fewer people presenting with mental health crises over the age of 80 than their younger counterparts (figure 3). Increasing age is often associated with increasing comorbidity and social dependence however; two strong predictors of mental ill health [17]. Within the data set it is not possible to tell how many referrals in the same year relate to the

same person presenting multiple times. It is also of note that people with multiple physical morbidities and co-existing mental illness may be admitted from ED to hospital wards for a medical assessment prior to a referral to liaison psychiatry. These referrals would not show in ED data. If this study is repeated a greater focus on repeated attendance by the same individuals, may be helpful to identify at risk groups where community care is consistently failing to meet needs. Also reviewing all hospital referrals to liaison psychiatry would help us better understand how age effects patients' typical hospital journeys.

The majority of liaison psychiatry teams aim to have face to face contact with patients referred to them with in 1 hour. This target has been in place since 2019 (immediately following data collection period) [18]. While the majority of patients in the cohort were seen in this time frame, large interdepartmental variation was observed, ranging from 9%-100% in 2017 and 11%-94% in 2018. Perhaps more important are those with very long waits (>11 hours) or that left the department before they could get help (table 2). Although overall numbers in this category were low, some departments demonstrated consistently longer waits and non-attenders than others. Long waits may not necessarily imply that patients are left in distress or untreated, referrals are often triaged depending on urgency, risk and distress. However, it does perhaps represent a fragile referral system whereby available staff cannot meet referral rate demand easily.

The most common mental health disorders in older people in the community are dementia (variable rate, increasingly common with age) and depression (3-4%) [4,5]. Self-harm in older people is relatively rare, but those that do self-harm go onto complete suicide with a much higher frequency than their younger counterparts [19]. Delirium is common in hospital but less so in the community [20]. When considering the most common reasons for referral to liaison psychiatry by ED they differ from expected community prevalence. Depression being the most common followed by self-harm and suicidal ideation, dementia and psychotic illness. Delirium was very infrequently referred, this would be expected as it is primarily a medical condition. This would suggest that these presentations are the ones that are viewed with the most urgency by patients and ED referrers.

Clinical implications:

To plan an effective healthcare system we need to understand the population it serves, and have appropriate structures and processes within it [21]. The data displayed in this study clearly describes the common mental health problems that people present to EDs with and the times of life that they are most likely to present. This could allow our mental health services the opportunity to better prepare to meet this demand. While fallibilities in the data exist, the overarching message is clear; mental health emergencies presenting in ED are common and appear to be increasingly so. To meet this demand in a timely fashion is important, but many departments struggle. Without appropriate investment either in EDs or community mental health services, this is unlikely to improve.

As well as learning from the overall referral trends, lessons can be learnt from one another. Collaboration and information sharing between liaison departments exists[10], but is too rare, the fact this evaluation is the first of its kind is perhaps testament to that. The data suggests very variable inter-departmental referral rates and assessment times. It is not possible to establish why rates from one department to another are so different, or whether outcomes for the population they serve are better or worse. The data does however, highlight the importance of asking further

questions about why the departments are different, and what impact that has on the patients they serve. We aim to use this data as the staging point to establish this, further contributing to the emergency mental health care provision for older people.

References:

- 1. Office for National Statistics. National life tables, UK. 2018.
- 2. Office for National Statistics. National population projections: 2018-based. *Population Proj.* 2019.
- 3. NHS Digital. Hospital Admitted Patient Care Activity, 2018-19., 2019.
- 4. Anderson D, Baldwin B, Barker A, Forsyth D, Guthrie E, Holmes J, Ratcliffe J RA. *Who Cares Wins, Improving the Outcome for Older People Admitted to the General Hospital.*, 2005.
- 5. M. Knapp MG, M. McCrone, P. Prina, M. Comas-Herrera, A. Wittenberg R, Adelaja, B. Hu, B. King, D. Rehill DS. *Dementia UK: Update.*, 2014.
- 6. Beekman ATF, Copeland JRM, Prince MJ. Review of community prevalence of depression in later life. *Br J Psychiatry* 1999.
- 7. McCrone P, Dhanasiri S, Patel A *et al.* Paying the price: the cost of mental health care in England to 2026. *Br J Psychiatry* 2008.
- 8. Joint commissioning Panel for Mental Health. *Guidance for Commissioners of Liaison Mental Health Services to Acute Hospitals.*, 2012.
- 9. J Barrett, Aitken P LW. Report of the 3rd Annual Survey of Liaison Psychiatry in England., 2016.
- 10. L Palmer, Hodge S, Ryley A, Bolton J WC. *Psychiatric Liaison Accreditation Network (PLAN) National Report 2012-2015.*, 2016.
- 11. NHS England and NHS Improvement. *NHS Operational Planning and Contracting Guidance 2017 2019.*, 2016.
- 12. The National Confidential Enquiry into Patient Outcome and Death. Treat as One., 2017.
- 13. Anderson D, Nortcliffe M, Dechenne S *et al.* The rising demand for consultation-liaison psychiatry for older people: Comparisons within Liverpool and the literature across time. *Int J Geriatr Psychiatry* 2011;**26**:1231–5.
- 14. Patton MQ. Qualitative research and evaluation methods. Thousand Oaks. Cal Sage Publ 2002.
- 15. Morgan C, Webb RT, Carr MJ *et al.* Self-harm in a primary care cohort of older people: incidence, clinical management, and risk of suicide and other causes of death. *The Lancet Psychiatry* 2018;**5**:905–12.
- 16. Dent E, Martin FC, Bergman H et al. Management of frailty: opportunities, challenges, and future directions. Lancet 2019; **19:** 31785-4.
- 17. Cole MG, Dendukuri N. Risk factors for depression among elderly community subjects: A systematic review and meta-analysis. *Am J Psychiatry* 2003;**160**:1147–56.
- 18. National Institute for Health and Care Excellence (NICE). Achieving Better Access to 24/7 Urgent

and Emergency Mental Health Care., 2016.

- 19. Conwell Y. Suicide in Later Life: A Review and Recommendations for Prevention. *Suicide Life-Threatening Behav* 2001;**31**:32–47.
- 20. Fick DM, Agostini J V., Inouye SK. Delirium superimposed on dementia: A systematic review. *J Am Geriatr Soc* 2002;**50**:1723–32.
- 21. Donabedian A. *Explorations in Quality Assessment and Monitoring Vol. 1. The Definition of Quality and Approaches to Its Assessment.* first. MI: Health Administration Press., 1980.