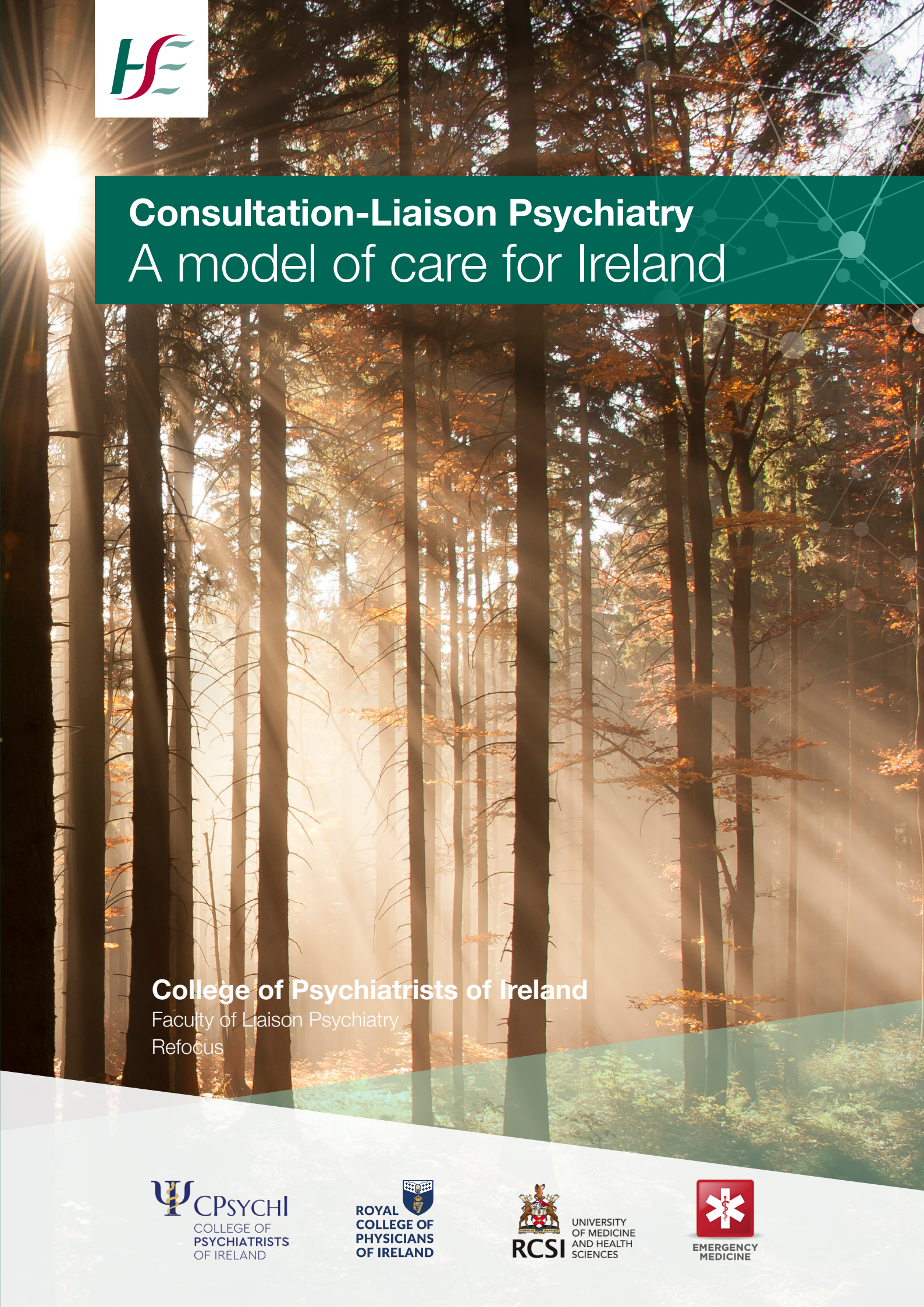

Consultation-Liaison Psychiatry
A model of care for Ireland

College of Psychiatrists of Ireland
Faculty of Liaison Psychiatry
Refocus

CPSYCHI COLLEGE OF PSYCHIATRISTS OF IRELAND

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EMERGENCY MEDICINE

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CONTENTS

GLOSSARY OF KEY TERMS

AMAU = acute medical assessment unit

ANP = advanced nurse practitioner – a specialist nurse practitioner who has undergone training and supervision in advanced levels of assessment and clinical decision-making skills

CAMHS = Child and Adolescent Mental Health Services

CAP = Child and adolescent psychiatry

CBT = Cognitive behavioural therapy

CLP = consultation liaison psychiatry – specialist services which provide integrated mind and body care for patients with mental and physical health problems, usually in the general hospital setting, including the Emergency Department.

CNS = clinical nurse specialist – a specialist nurse providing clinical care to patients or clients and their families, with a clinical focus (direct care and indirect care).

CORE staffing = staffing for consultation liaison psychiatry services based on National Health Service (NHS) benchmarked standards for different levels of service provision

CNRT = Community Neuro-Rehabilitation Team

CSCST = Certificate of Successful Completion of Specialist Training - this is awarded at the end of higher specialist training and indicated that the doctor is competent to be appointed as a consultant

DBT = Dialectic behavioural therapy

ED = Emergency Department

HIPE = Hospital In-Patient Enquiry – a dataset collecting demographic, clinical and administrative data on discharges from, and deaths in, acute public hospitals nationally.

MEED = Medical Emergencies in Eating Disorders

Model 3 Hospital = a hospital providing general medical and surgical services, unscheduled care through acute medical assessment units (AMAU), emergency departments (ED), and intensive care units (category 1 or 2) and may cater for some specialist services such as obstetrics, gynaecology or paediatrics.

Model 4 Hospital = in addition to the services provided at a Model 3 Hospital, a Model 4 Hospital has a category 3 or 3S intensive care unit (ICU) and accepts tertiary patient referrals. Model 4 Hospitals are larger in terms of bed numbers and provide a wider range of subspecialties.

MTC = Major Trauma Centre

NCPED = National Clinical Programme for Eating Disorders

NCP–SSI = National Clinical Programme for Self-harm and Suicide-Related Ideation

NMBI = Nursing and Midwifery Board of Ireland

POA = psychiatry of old age

PTSD = Post Traumatic Stress Disorder

RAID = rapid assessment and interface discharge service. A UK model of CLP in Birmingham was pivotal in drawing the attention of funders of healthcare services to the potential of CLP services to effect cost savings. This study reported that every one pound invested in CLP services resulted in a saving of four pounds for that hospital

SFBT = Solution-Focussed Brief Therapy

SPMHS = Specialist Perinatal Mental Health Service

SSRI = Selective serotonin reuptake inhibitor – a medication licenced for the treatment of a range of conditions, including depression and anxiety

Foreword

This model of care is for people and their families in Ireland who are living with mental and physical health comorbidities, along with all those who attend our general hospitals (including emergency departments) with a mental health problem alongside their physical health needs. This document sets out how their care should be organised and resourced, and it is a life-span document.

Consultation Liaison Psychiatry (CLP) is a key speciality of psychiatry and provides an essential service to a cohort of people who have complex and often emergency care needs. Consultation Liaison Psychiatry services work without waiting lists and without barriers to serve the patients who need them. In the year of the initial baseline study which is reported in Appendix 1, we see that CLP services see over 50,000 patients per annum, often in crisis and emergency settings, and it is likely that demand has risen in the aftermath of the COVID-19 pandemic.

The model was written by the working group under the Faculty of Liaison Psychiatry in response to recommendation 60 of Sharing the Vision. The working group, established in 2020, is multidisciplinary, including nominees from different groups involved in the care of people with mental and physical health comorbidities. It includes individuals from specialist treatment centres for adults, children and older people, along with nominees from the relevant professional bodies and representatives from the patient group of the College of Psychiatrists of Ireland, known as Refocus. The priority of the working group was to outline the current level of service provision, benchmark against international norms, and develop a model of care to outline national services for integrated mental and physical healthcare across the lifespan. A model of care writing group reviewed national and international data and evidence relating to these services, and conducted scoping work of existing Irish services. Strong consideration was given to the placement of this model with the many other models with which it intersects, and its potential role in the planned health and social care service reform under Sláintecare, with its priority to develop integrated care: the right care, in the right place, at the right time.

This final document has been approved by members of the College of Psychiatrists of Ireland's Liaison Faculty and other faculties of the college, and was approved by the Forum of the HSE. We are proud to have been in a position to advocate for our patients in leading this work and in defining the gold standard of mental healthcare that people with mental illness should receive in acute hospitals.

Dr Lorcan Martin
President
College of Psychiatrists of Ireland

Foreword

The Model of Care for Consultation Liaison Psychiatry (CLP) was identified as a key priority in Sharing the Vision, the 2020 national mental health policy. We are pleased to see this model finalised as a framework to guide the future development and standardisation of CLP services across the country.

Over the past decade, the development of CLP services has been uneven, as it developed organically within many areas. This has resulted in variable remits and staffing levels around the country. While significant progress has been made through national clinical programmes such as the Self-Harm and Suicide-Related Ideation Programme, the Perinatal Mental Health Model of Care, and the Psycho-Oncology Model of Care, these programmes address only a small portion of the comprehensive workload of CLP services. A standardised approach to service delivery across the full spectrum of CLP is now needed.

CLP embodies the principles of integrated care and Sláintecare by bridging mental health and medical care. It delivers holistic, person-centred care that integrates mental and physical health, while promoting equitable access across the lifespan. This model aligns with international standards and is benchmarked against best practices and recommendations from comparable jurisdictions.

Ireland has the opportunity to lead in this area, building on its strengths in the management of self-harm, psycho-oncology, and the emerging field of trauma psychiatry within major trauma centres.

This model of care emphasises the importance of service-based research to build the evidence base for CLP and to drive the evolution of collaborative, proactive service delivery. CLP is integral to ensuring the safe and effective care of individuals presenting to emergency departments with complex mental health needs and co-morbidities. However, it is only one element of a broader, system-wide approach to emergency and crisis mental healthcare.

Delivering twenty-first-century healthcare requires a seamless integration of hospital-based and community services. CLP services must be embedded within a broader system that includes crisis resolution teams, day hospitals and community mental health teams, as envisioned in Sharing the Vision. With appropriate resourcing, CLP can ensure that individuals requiring emergency or inpatient medical care receive the specialised mental health support they need, furthering the goal of equitable and integrated care for all.

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Executive Summary

Executive Summary

Consultation-liaison psychiatry (CLP) services are delivered in general or acute hospital settings, providing specialist medical expertise for conditions occurring at the intersection of mental and physical healthcare. Internationally, this speciality is known as liaison psychiatry, psychological medicine, or general hospital psychiatry. Although a critical component of the work of CLP teams is based in emergency departments (EDs), appropriately resourced CLP services work with patients throughout the acute hospital setting, including inpatients and outpatients. Where a hospital has supra-regional or national programmes, dedicated funding streams are key to ensuring that additional CLP resources are made available to support the associated complex specialist mental health needs, of which the psycho-oncology development within the National Cancer Care Programme is a good example.

Although the understandable focus of mental health services traditionally has been on patients with mental health needs in the community, large numbers of patients are also being assessed and managed by psychiatrists in acute hospitals in Ireland. A recent study estimated that over 50,000 patients have a first contact liaison psychiatric assessment across adult and paediatric acute hospitals annually in Ireland (Doherty et al., 2021). Over 12,000 patients present to Irish emergency departments with self-harm each year (NSRF 2020), therefore integrated physical and mental healthcare is an important aspect of ensuring parity of esteem for people with mental health conditions (RCN 2019; RCPsych 2013).

Sharing the Vision, a Mental Health Policy for Everyone, recommendation number 60 states:

> *'Continued expansion of liaison mental health services for all age groups should take place in the context of an integrated Liaison Mental Health Model of Care.' (DoH, 2020). This is the model.*

Writing Group Membership

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1. Recommendations

Service and staffing

1. Patients in general hospital settings with co-morbid mental and physical comorbidities need specialised consultation liaison psychiatry (CLP) services that can meet their needs and integrate their care in a meaningful way.
2. CLP services should work seamlessly with other services in the hospital, and for continuity of care with mental health services in the community, with primary care and other relevant agencies.
3. Services should be multidisciplinary, including staff with medical, nursing, psychology, social work, occupational therapy (OT) and administrative expertise.
4. Services should be staffed at the minimum staffing recommended by A Vision for Change, with higher staffing required for extended hours services and for specialist tertiary services, such as neuropsychiatry, transplant psychiatry and psycho-oncology. Larger hospitals should have a proportional increase in staffing, based on clinical need and complexity.
5. Services should serve the needs of patients of the hospital, rather than geographical catchment areas. Best practice is a single point of access in each acute hospital for patients of all ages, with age-appropriate clinicians providing care.
6. Comprehensive mental health services should be provided out of hours outside of the ED setting in all geographical areas. For example, CLP provided ED-based services should not be the only source of emergency mental healthcare.

Facilities

7. CLP services should be based in the acute hospital setting, in space provided by the acute hospital.
8. Adequate IT services and infrastructure are required to allow communication with other relevant professionals involved in patient care. IT solutions, including electronic patient records, optimise the availability of data on service activity and needs and reduce the time spent by clinical staff away from patient care.
9. A minimum dataset for services nationally to correct and report data in a timely manner needs to be supported by infrastructure and administrative staffing (not clinical staff).
10. There is an urgent need for the development of regional bed manager posts embedded within mental health services to identify beds for the psychiatric admission of patients for whom this is indicated and to support overall bed management in the region.

Training

11. The training of staff to provide these specialist services is essential, and adequate training posts across the disciplines involved in the provision of CLP is required. All staff need to have core professional training. Consultants in adult liaison psychiatry must have completed higher specialist training in psychiatry, with certified specialist training in liaison psychiatry from their higher specialist training (or equivalent evidence of competency).
12. Training and education of acute hospital staff in the mental health of their patients is a key component of the work of CLP services, and needs protected time to develop and deliver appropriate training.

Governance

13. The governance of CLP services should sit primarily in the acute hospital in which the service is based, with certain elements via the (Executive) Clinical Director of the local mental health service. The CLP consultant should have a direct clinical reporting line in the hospital to ensure integration of the working of the CLP service within the hospital directorates, and to the (Executive) Clinical Director of the mental health services (MHS) to facilitate their on-call duties, patient flow and the safe provision of the Mental Health Act (MHA). This is to support the integration of care between the acute hospital setting and the MHS. Where there are existing successful governance arrangements, this model will not seek to implement change.
14. Each team should have an identified clinical lead who is an appropriately trained CLP consultant psychiatrist for the purposes of accountability, leadership and service development.

2. Introduction – What is Consultation-Liaison Psychiatry?

2.1 Consultation-Liaison Psychiatry Defined

Consultation liaison psychiatry (CLP) or consultation-liaison mental health services provide specialist psychiatric expertise within the general hospital, delivering mental healthcare in the acute medical setting. This includes patients presenting for assessment to the emergency department, as well as psychiatric emergencies among inpatients (for example, steroid-induced psychosis or acute suicidality). Liaison psychiatry services also provide assessment and treatment of mental health difficulties which arise in the acute hospital inpatient and outpatient settings. These range from eating disorders and functional conditions to depressive disorders and adjustment disorders comorbid with other health conditions, psychiatric disorder in the context of brain disorders such as acquired brain injury, delirium and encephalitis, along with a range of mental disorder conditions which can impact on an individual's ability to manage their physical illness (Figure 1).

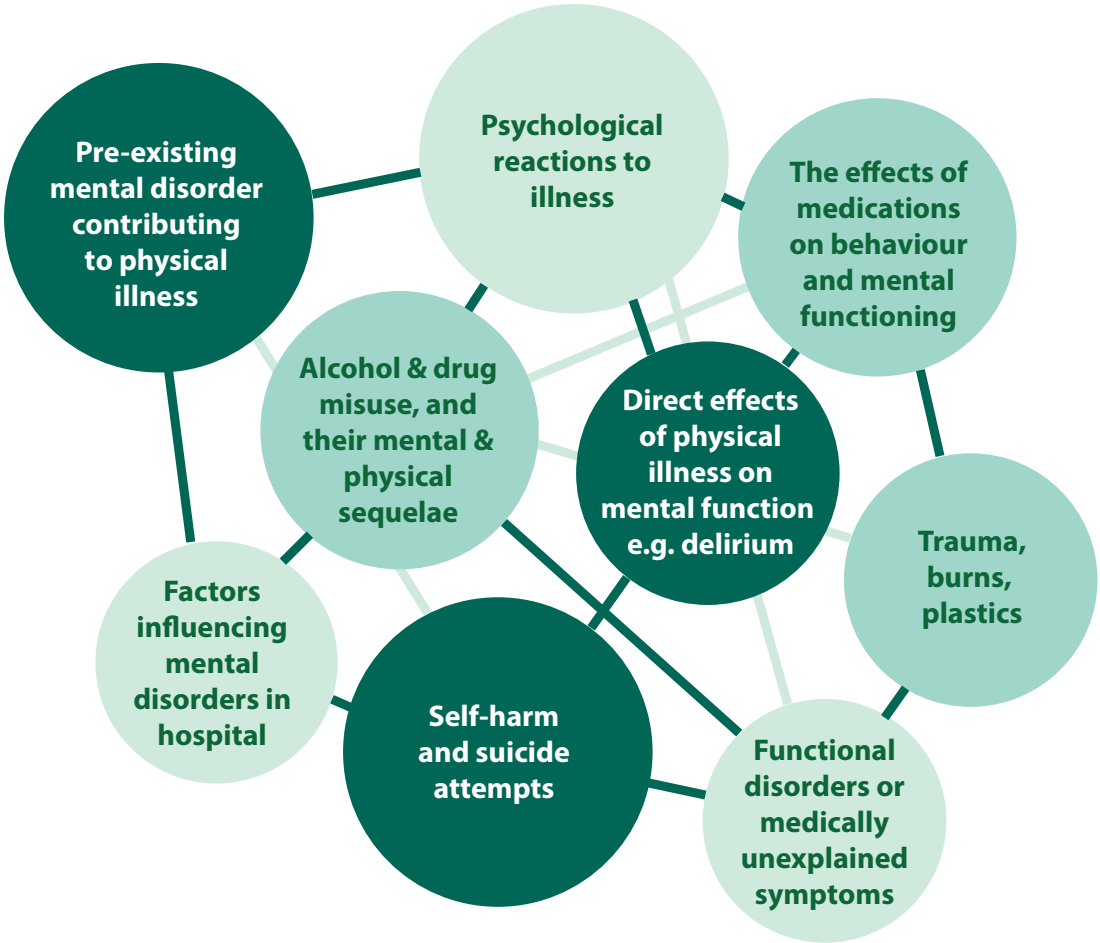


Figure 1: Main areas of effectiveness of CLP services.

A well-resourced and well-integrated CLP service will meet the mental health needs of its specific hospital population across the life cycle. The needs of each hospital population is different, depending on the type of hospital (Model 3 or Model 4), the local populations, and on the specialties represented within the hospital, especially where this includes tertiary and national specialist services (for example, regional trauma, cancer, neurology or transplant centres).

Liaison psychiatrists have specialist training in the management of the conditions which occur at the interface of medicine and psychiatry. This includes the provision of a timely, comprehensive bio-psycho-social assessment and management plan for patients presenting with psychological and mental health difficulties in the general hospital setting, as well as providing expert opinion to colleagues across the acute hospital and to other relevant services, via consultation, supervision, education, training and research.

Consultation regarding the care and management of inpatients may include a range of inputs, from advice about medication, behavioural management, substance and/or alcohol related issues, eating disorders, delirium and dementia, capacity issues, child-protection and safeguarding issues, understanding of mental health legislation and services and frequent attenders to conservative or palliative care.

2.2 The need for CLP services

Mental health problems are common in the population, often associated with a deleterious effect on the well-being, social and occupational functioning of the individual (WHO, 2004, Patel et al., 2018). Many mental illnesses are associated with a higher burden of physical illnesses or health problems (Moussavi et al., 2007), and patients with severe mental disorder have a reduced lifespan by an average of 10–20 years (Chang et al., 2011, Tiihonen et al., 2009, Momen et al., 2022). Equally, patients in acute hospitals are known to have markedly elevated rates of mental disorder (Hansen et al., 2001).

Where mental disorders are co-morbid with physical health problems, outcomes are worse for the patient, with increased mortality and morbidity and reductions in overall quality of life. One example of this relationship is in diabetes, where depression is associated with poorer glycaemic control and an increased rate of complications and premature mortality rate (Ismail et al., 2007). When mental healthcare is integrated with diabetes care these measures improve, along with improvements in mental health and in quality of life (Katon et al., 2010). Similar improvements are reported in other chronic healthcare conditions where an integrated approach is taken towards mind-body care (Camacho et al., 2018).

Young people with pre-existing mental health disorders and medical illness are especially vulnerable. Mental health difficulties in children and adolescents are highly prevalent, with accepted worldwide rates of 10–20 per cent, and are associated with significant developmental, educational and social difficulties. Mental disorders contribute substantively to the burden of disability among youth, with depressive disorders now ranked as the third most common cause of years lost to disability among children and adolescents (Kieling et al., 2011), and escalating presentations with self-harm and disordered eating in this population.

Psychiatric co-morbidity in older adult general hospital inpatients is very common (three to four times more common in the acute hospital setting compared with the community), with rates of up to 60% reported (RCPsych, 2005). The ageing population, and an associated increased need for health and care services, has been identified as a national strategic risk; the population aged 65 years and above is predicted to double by 2051 (CSO, 2017, Oireachtas, 2017, DoH, 2019).

There is good evidence that medical and psychiatric comorbidities can be treated in an integrated way, and this is associated with better outcomes across the lifespan (Polonsky and Henry, Bennett et al., 2015, Naylor et al., 2016, Naylor et al., 2012). It is also associated with efficiencies and cost-savings.

Based on a background of increasing rates of mental health problems in the population, both among adults and children (Collishaw et al., 2004, Anderson et al., 2022), we also need to consider the additional impact of Covid-19. Since the pandemic there has been an escalation in the number of people seeking treatment for mental disorders internationally, especially in emergency departments and among children (Werling et al., 2022, Anderson et al., 2022). Irish mental health services have described increased demand for services (Kelleher et al., 2021). Data from the National Clinical Programme for Self-harm and Suicide-related Ideation report indicates increased numbers of people presenting for assessment with suicidal ideation since the beginning of the pandemic, with alcohol misuse being associated with a greater proportion of presentations than pre-pandemic (Maguire et al, 2022).

Mental illness, psychological disorders and distress are common in the general hospital setting. Up to 5 per cent of people who attend EDs present with a primary mental health problem, and over 30 per cent will have a co-morbid mental disorder in addition to their primary (non-psychiatric) presenting complaint (Kabashi et al., 2021, Hartnett et al., 2022). Delirium is a common condition among the critically ill and older people and frequently these categories will present with mental or behavioural disturbance. This is the population where the greatest economic impact of a CLP service may be seen in terms of reducing length of stay and the complications associated with under-recognised delirium (Parsonage & Fossey, 2011). A large proportion of people admitted to acute hospitals have drug and alcohol-related problems (NHS London 2020)(O'Farrell et al., 2004, O'Farrell et al., 2007, McKenny et al., 2010). It is estimated that between 24 per cent and 58 per cent of adult patients with chronic disease have co-existing psychological disorders (WHO, 2010). For example; prevalence rates of depression and anxiety are estimated to be 28 per cent in oncology patients (Boyes et. al, 2013), and two to three times higher than population levels in people with coronary heart disease (Carney & Freedland, 2008; Leung et al, 2012; Whooley et al 2008) and diabetes (Lloyd et Al 2010). Chronic pain is estimated to be prevalent in 35 per cent of Irish adults and increasingly it is recognised as causing significant distress for children and adults (Fayaz et al 2016).

Where co-morbid mental illnesses are untreated they can have a profound impact on patient outcome costs, as well as on morbidity and mortality. Where there is a functional component to the person's presentation, they are unlikely to make progress without the assessment and treatment of any existing mental health difficulties. Patients do best, and healthcare costs are lower, where their mental and physical healthcare are delivered side-by-side, or better still as integrated components of one healthcare team (King's Fund, 2016).

Mental health difficulties in children and adolescents are prevalent (10–20 per cent) and contribute substantively to the burden of disability among youth. Increasingly physicians, including paediatricians, are aware that people with existing medical conditions are also at increased risk of mental health disorders, and that with psychological medicine services in place, much can be done about this.

2.3 Benefits of a CLP service

CLP services bridge the gap between traditional mental and physical health services. When appropriately resourced they are flexible and responsive services designed to assist medical/surgical colleagues in meeting the mental health needs of the patients under their care. There are no prescriptive criteria, beyond that all patients presenting following self-harm or with suicidal ideation require assessment. Cascading biopsychosocial skills to acute hospital staff in the management of their patients means that not every distressed patient, or those with a history of mental illness, needs to be referred to the CLP service, but CLP services should be responsive to concerns from general medical and surgical colleagues. Rather than considering a request as an inappropriate referral, this could most usefully be an opportunity for helpful education of the referrer.

In addition to the obvious benefits for patients in having mental and physical care delivered together, there is a significant body of evidence demonstrating that a robust and adequately resourced service which can respond quickly to complex needs may provide significant financial saving to the hospital. The publication in 2011 of the economic evaluation of the liaison psychiatry service (Rapid Assessment and Interface Discharge (RAID) service) in Birmingham was pivotal in drawing the attention of funders of healthcare services to the potential of CLP services to effect cost savings. This study reported that every one pound invested in the CLP services resulted in a saving of four pounds for that hospital (Tadros et al., 2013, Parsonage and Fossey, 2011). Since this initial publication there have been further publications replicating RAID in examining the impact of CLP on the economics of the hospitals in which they are based (Tadros et al., 2013, Parsonage and Fossey, 2011, Crowther et al., 2021). The effectiveness of CLP services has been supported by a systematic review (Wood and Wand, 2014), and a narrative review conducted by the Netherlands Psychiatric Association as part of the development of their guidelines (Leentjens et al., 2009).

This has been replicated by other studies of integrated mental and physical healthcare as provided by liaison psychiatry services (Tadros et al 2011; Centre for Mental Health 2012).

- Expert review and treatment of complex disorders affecting physical and mental health.
- Symptom resolution or relief.
- Reduction of patient distress.
- Increased patient satisfaction.
- Health maintenance and treatment adherence.
- Improved psycho-social functioning.
- Improved quality of life.
- Reduced length of stay.
- Reduced rates of admission and re-admission.
- Reduced ED attendances.
- Patients can experience a more holistic approach to their care.
- Carers can experience enhanced support.
- Staff can have improved supervision and support.
- Avoidance of inappropriate or unnecessary medical investigations and treatments.
- Reduced stigma associated with mental disorder.
- Addressing identified safeguarding issues.
- Facilitates timely connection with community mental health services.

Table 1. Examples of benefits of CLP

2.4 Key clinical areas

A CLP service provides care to patients across the following areas of an acute hospital:

- The emergency department (ED)
- Acute medical/surgical wards
- Outpatient departments

These areas have differing levels and types of mental health need, and certain tertiary services may have additional requirements, such as psycho-oncology, neuropsychiatry and screening assessments for solid organ transplantation.

A significant number of patients seen by the CLP service in the acute hospital will be current or past attenders of their Community Mental Health Team. The CLP service will work effectively with the community services to ensure seamless care to patients moving from CLP to other mental health services. The CLP service does not have a role on an acute psychiatric unit.

Further detail is provided in Section 4.

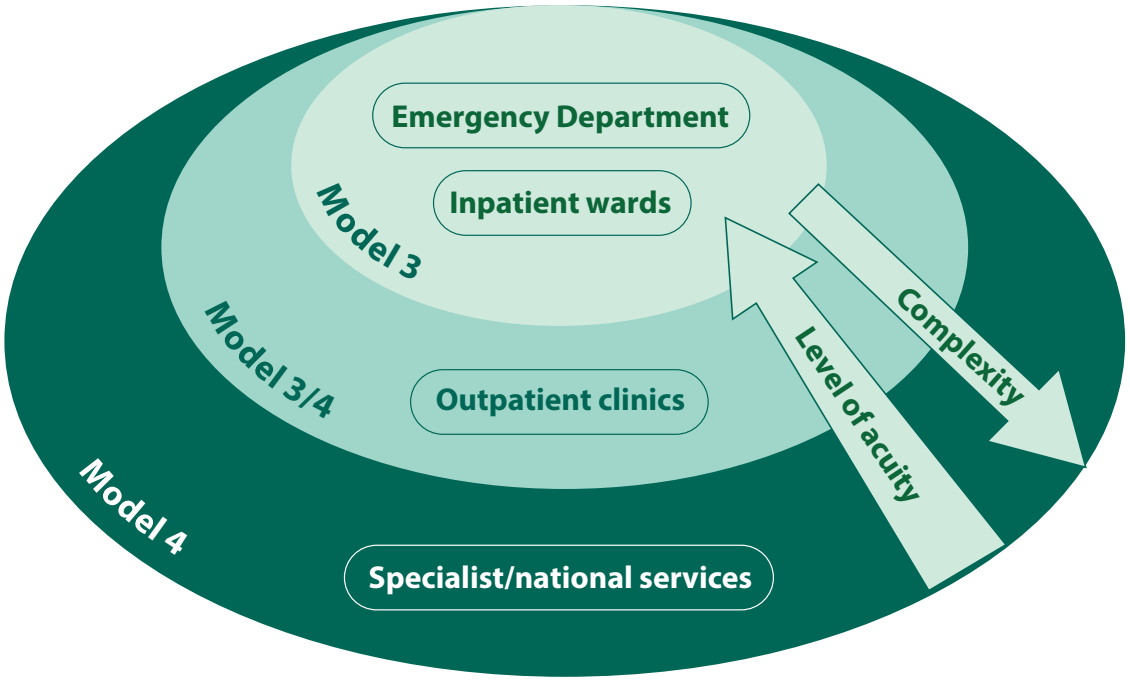


Figure 2: The complexity-acuity balance in CLP services.

3. A Vision for Change

Sharing the Vision and Consultation-Liaison Psychiatry

A VISION FOR CHANGE – SHARING THE VISION AND CONSULTATION-LIAISON PSYCHIATRY

The 2005 document A Vision for Change, provided a clear outline of the staffing requirement of a liaison psychiatry service, similar to NHS standards for a 'CORE' team (DoH, 2006, NHS England and Excellence, 2016). It recommended a team for each regional hospital, and in addition, two teams nationally for neuropsychiatry, and a national neuropsychiatry unit. It was written over nineteen years ago, long before many of the current national clinical programmes and models of care were developed in mental health and acute medicine settings, and at a time when there were much higher numbers of acute mental health beds.

Sláintecare has set out the importance of the need for the patient being central to service configuration and of integrating care around the person in order to make the services and care required available at the right place for the patient (Oireachtas, 2017). Integration of mental and physical healthcare is an essential underpinning principle of liaison psychiatry, and existing models of service provision exemplify this to varying degrees (Parsonage et al., 2012).

The 2020 document Sharing the Vision has clearly set out the need for services to be patient-centred and accessible, to incorporate early intervention principles, to ensure appropriate access to care with equity of access and social inclusion principles as a foundation (DoH, 2020). Well-resourced CLP services provide these as part of the provision of care integrated with the physical healthcare the person is receiving in the general hospital setting. Specifically Recommendation 60 of Sharing the Vision states:

> *' Continued expansion of Liaison Mental Health Services for all age groups should take place in the context of an integrated Liaison Mental Health Model of Care.'*

Recommendation 53 of Sharing the Vision makes recommendations which impact on CLP services in the implementation of the Programmes for Eating Disorders and Perinatal Mental Health:

> *'The National Mental Health Clinical Programmes for Eating Disorders, Adults with ADHD and the Model of Care for Specialist Perinatal Mental Health Services should continue to have phased implementation and evaluation.'*

According to A Vision for Change, a team for a hospital with 500 beds should have the following staff: One consultant psychiatrist, one non-consultant hospital doctor, five clinical nurse specialists (two with psychotherapy expertise), two psychologists, two administrators, one substance misuse counsellor, one mental health social worker, one occupational therapist, one family therapist and one clinical neuropsychologist (at sites with neurology/neurosurgery).

In addition, the National Clinical Programme for Self-Harm (2015, updated 2021), recommends one clinical nurse specialist per 200 presentations with self-harm to the emergency department per annum, to provide expert integrated care to patients presenting with self-harm under the clinical governance of a consultant psychiatrist. (NCP-SSI–HSE, 2022).

In the UK, CORE staffing is the minimum staff required to run a 9–5 emergency service in an acute hospital. Where extended hours are staffed, the requirements are set out as CORE-24, rapid response 24-hour cover is Enhanced-24, and where there are outpatient or specialist services this is described as Comprehensive (tertiary services). In Ireland few services are currently resourced to CORE (minimum) level (see Appendix 1: Scoping). No CLP services are available outside working hours and the community psychiatry services provide the out-of-hour cover to the acute hospital service on an on-call emergency basis.

3.1 Staffing in general hospitals

In addition to the basic staffing levels detailed above, staffing should be scaled up where there is a greater number of inpatient beds, or where there is a particularly busy emergency department (based on activity levels). Where the bed numbers do not suggest that a full consultant is required, for example in some of the Model 3 hospitals, it may be possible to build a case for a full-time post based on other aligned needs, such as the provision of perinatal mental health services as a 'spoke' site under the Perinatal Model of Care.

Given that the needs of each individual service are different, we are recommending the following staffing for different hospital types (Table 2):

Table 2 Recommended staffing levels in Model 3 and model 4 Hospitals

Model 3 Hospital with 500 beds or 300,000 population	Model 4 Hospital with 500 beds or 300,000 population*
1x consultant psychiatrist 2x NCHD 5x clinical nurse specialists 2x psychologists 1x administrator 1x substance misuse counsellor 2x other clinical MDT members, according to need of hospital population 1x data manager (may be shared with other sites in a hospital group)	2x consultant psychiatrist 4x NCHD 5x clinical nurse specialist (2 with psychotherapy expertise) 4x clinical/counselling psychologist 2x administrator 1x substance misuse counsellor 4x other clinical MDT members, according to need 1x data manager
*The higher staffing requirements of a Model 4 Hospital relate to the greater complexity of the tertiary and national services which these hospitals provide, and the greater mental health needs associated with this complexity. **Additional requirements are needed for specialist services with high demand, such as transplantation programmes (HSE 2023), or any other identified areas of need, in adult and paediatric centres. Additional staff will likewise be required to provide an extended hours service.**	
Additional requirements for neuropsychiatry centres as per A Vision for Change (2006), National Strategy and Policy for the Provision of Neuro-rehabilitation Service in Ireland (2019–2021) (DoH 2020). 2x consultant psychiatrist 2x NCHD 2x clinical nurse specialist 2x psychologist 1x administrator	
Additional requirements for major trauma centre 1x consultant psychiatrist 2x NCHD 2x clinical nurse specialist 2x psychologist	

Where there are tertiary and national services to be provided, such as neuropsychiatry services, transplantation services, and in the cancer centres – to name just a few – these services will need bespoke staffing to provide services to an internationally accepted level. These needs will vary with the tertiary or national services provided by the hospital and the requirements of the patients attending the service. Likewise designated centres for the treatment of cystic fibrosis require dedicated staff (0.6WTE psychologist and 0.2 WTE consultant psychiatrist per 50pt) (HSE 2019a; HSE 2023).

If a hospital has less than 500 beds, where it is felt that the complexity of the workload does not warrant one whole-time equivalent (WTE) consultant psychiatrist in CLP, a decision may be made to provide pro-rata consultant staffing (e.g. 0.6 WTE for a 300-bed hospital). If in such cases, the remainder of a full-time post is made up with other complementary duties, such as perhaps in the perinatal spoke role or in delivering a specialist clinic in an adjacent CLP service. If part of the role includes non-CLP activities (such as community psychiatry, crisis teams, ECT, inpatient psychiatry in an approved centre), it is important that this is not represented as one WTE CLP consultant, but rather as a split post – 0.6 CLP/0.4 general adult psychiatry.

3.2 Paediatric services

Child and Adolescent Mental Health Services (CAMHS) around Ireland are variable in their staffing and resourcing, their ability to respond to emergencies and their overall integration into the working of the acute hospital. CAMHS services and services for young people with an intellectual disability around Ireland are likewise variable in their staffing, with around 50 per cent of posts anticipated in A Vision for Change currently staffed. Thus their ability to respond to emergencies and develop alternative pathways is limited.

Mental health service utilisation reportedly is increasing at a greater rate in the acute care sector, at least in Canada and in the UK, where emergency department self-harm presentations have increased by over 60 per cent, prompting the development of innovative service models (Ougrin et al., 2022, McDonnell et al., 2022). In general, these models offer intensification of support to young people outside of the hospital setting, or while in the emergency department, utilising innovative and young person-centred approaches to adolescent crisis needs.

There has been a 526 per cent increase in the number of mental health presentations in Temple Street Hospital ED over a ten-year period – from 69 in 2006 to a peak of 432 in 2016, (see Appendix 2), despite a minimal 7 per cent increase in overall presentations to the emergency department over that time period. This figure has increased further through the Covid-19 pandemic (Fitzgerald et al., 2020, McDonnell et al., 2022, McNicholas et al., 2021). Although there are dedicated child and adolescent psychiatry (CAP) services to the three Dublin paediatric units, their needs are expected to change in the years ahead with the move to the National Children's Hospital. Appendix 2 outlines in detail the services required.

Many Model 3 and 4 hospitals around the country have paediatric units without any dedicated child and adolescent liaison psychiatry services. Most have inreach from the community-based CAMHS services, with little standardisation of the service provided.

In Dublin, the three paediatric units admit children up to their 16th birthday. After that date, if they require a medical assessment or admission they receive this at an adult hospital. None of the Dublin based 'adult' hospitals have any child and adolescent psychiatry input, either inreach or as a dedicated liaison psychiatry service. There is an urgent need for age-appropriate CLP services at these sites, where some of the adolescents with the most complex co-morbidities attend for care, as well as for community-based access to CAP assessment for differentiated emergencies. It is crucial that child and adolescent liaison psychiatry services form part of an integrated pathway for children, along with community-based child and adolescent mental health services (CAMHS) and inpatient child and adolescent psychiatry units.

Where children attend national services for physical healthcare, or indeed spend long periods of time as inpatients, but also require intense community supports when at home, there is an important role for the use of shared care protocols. A child's need for a national specialist service should be complemented by equity of access to their local CAMHS service.

For paediatric services, a team per 300,000 head of population is recommended. Of the fifteen paediatric liaison psychiatry teams nationally recommended in A Vision for Change, only three under-developed and under-resourced services are currently in place in Dublin (soon to be combined in the new Children's Hospital) and one in Cork. Service development to support specialist tertiary care and extended working hours is required.

For child and adolescent liaison psychiatry, the multi-disciplinary team should involve psychiatry, nursing, psychology, occupational therapy, social work and other team members, depending on the clinical setting and type of work undertaken. Resourcing and standardisation of emergency psychiatry and on-call provision to children aged under 16 years, along with the development of services for those aged 16–17 years, requires urgent attention.

There are nineteen paediatric emergency departments at present. While in an ideal world every child presenting for emergency care would have equity of access to expert mental healthcare, it may not be feasible to have full liaison psychiatry teams at each site, and so the following is recommended:

All Model 3 and 4 hospitals where children attend (including Dublin hospitals from age 16–18) should have access to a consultant-led paediatric liaison psychiatry team as outlined in A Vision for Change, with an on-site clinical nurse specialist or advanced nurse practitioner.

3.3 Consultation-Liaison Psychiatry for older people (65+)

The ageing population, and an associated increased requirement for health and care services, has been identified as a national strategic risk; the population aged 65 years and above is predicted to double by 2051 (CSO, 2017, Oireachtas, 2017, DoH, 2019). Psychiatric co-morbidity in older adult general hospital inpatients is very common (three to four times more common in the acute hospital setting compared with the community), with rates of up to 60 per cent reported (RCPsych, 2005). Frailty and cognitive impairment significantly increase the risk of mental disorders in this age group, but additional factors – such as pain, psychological distress and disability – can also contribute to an increased risk.

While the entire spectrum of mental disorders that afflict the general adult population can occur in older adult inpatients, the most common (80 per cent) reasons for referral for psychiatric review in this group are dementia, delirium and depression (Anderson and Holmes, 2005). The number of patients affected by these conditions is considerable: depression can affect up to 29 per cent of older inpatients, rates of delirium of up to 60 per cent have been reported in this patient group and rates of dementia are estimated to be 31 per cent.

At any point in time, a 500-bed hospital will be occupied by 300 older people, 220 of whom experience a mental disorder: 100 each with dementia or depression and 66 with delirium (Age, 2016). During hospitalisation, patients themselves value coordination of care, access to and continuity of care through transitions and mental health support (Barry and Edgman-Levitan, 2012).

Some hospitals have mental health services for older people run on a CLP model and provide a service to all patients aged 65 and over, regardless of address or previous service attendance. These are examples of good practice, and they operate in a similar way to RAID teams in the NHS (Tadros et al 2011). The Specialist Mental Health Services for Older People, National Clinical Programme for Older People Part 2 (hereafter NCP-OP) includes the need for mental health consultation liaison

services for older people in hospital (HSE, 2018). It is important that especially in Model 4 Hospitals (and the larger Model 3 Hospitals where people are admitted from beyond the local catchment area) that an age-appropriate service is offered to all of those aged over 65 years (with the provision of adequate resourcing as outlined in Table 3), as the nature of a tertiary hospital will require the admission of patients from far beyond the geographical confines of the local Psychiatry of Old Age service. It is important that these most complex patients receive age-appropriate care.

Irish policy documents including Sláintecare (2017), National Clinical Programme for Older People (2012), Integrated Care Programme for Older People (2013), and a quality review by the Inspector of Mental Health Services (Finnerty 2020), all inform and support the principles of Liaison Psychiatry for Older People. Sharing the Vision (2019) recommends ' Investment in the expansion of Liaison Mental Health Services is needed to address emerging liaison demands'. The 'National Clinical Programme for Older People, Model of Care for Specialist Geriatric Service Part 2, Mental Health Services Provision' (2019) (aka 'Mental Health Services for Older People MHSOP Model of Care') notes: a multidisciplinary approach is best suited to optimal patient care, that 'every MHSOP should have a designated Consultant Psychiatrist for Consultation-Liaison', and that 'core team members should include psychiatrists, mental health nurses, occupational therapists, social workers and clinical psychologists'.

Therefore, Model 4 CLP services need specialist Psychiatry of Old Age staff as part of the overall service, and this need for comprehensive inpatient care is supported by the RAID study in the UK which found that the cost savings were significant in the older patient group (Tadros et al., 2013, Parsonage and Fossey, 2011). They may have a role in supporting subspecialist services providing all-age care (such as psycho-oncology). Ideally, people attending the ED who are aged over 65 would also receive age-appropriate specialist care, but this Model is recommending the staffing for non-ED work in the first instance. POA ED cover could be considered with additional resourcing.

Table 3: Recommended staffing levels in Model 3 and Model 4 Hospitals for people aged over 65 years

Model 3 Hospital less than 500	Model 4 Hospital over 500 beds & 'graduates' seen**
0.5 Consultant psychiatrist	1 Consultant psychiatrist
1 NCHD	1 NCHD
3x clinical nurse specialist (1 psychotherapy experience)*	4x clinical nurse specialist (2 psychotherapy experience)*
1x psychologist with Psychiatry of Old Age expertise	1x psychologist with Psychiatry of Old Age expertise
1x other MDT, depending on need of hospital population	1x other MDT, depending on need of hospital population
1x administrator	1x administrator

Resources may need to be revised locally in light of service demands. Where there are difficulties in recruiting in a particular discipline, there should be flexibility in recruiting another MDT member in lieu

* clinical nurse specialist or advanced nurse practitioners

** to include affiliated off-site medicine for older people beds for rehabilitation and step-down care

4. The Emergency Department

THE EMERGENCY DEPARTMENT

The National Emergency Medicine Programme 2012 states:

> *'Emergency departments provide 24/7 access for undifferentiated emergency and urgent presentations across the entire spectrum of medical, surgical, trauma and behavioural conditions ... essential healthcare for people who may have difficulty accessing other services. It is crucial for the effectiveness of emergency care systems that appropriate alternatives ... are available and attractive to patients who would be better served by those services.'*

Hence patients attending the emergency department who require psychiatric assessment should have dual or undifferentiated mental and physical emergency needs: patients with differentiated mental health needs alone should be seen outside the ED setting, as per national recommendations and patient and carer- expressed preferences. The provision of urgent access to CMHTs, crisis teams, home treatment teams and therapeutic day hospital services is uneven across the country and EDs are not infrequently used to fill the gaps caused by a dearth of appropriate community mental health services. These challenges have been exacerbated by the restrictions necessitated by Covid-19, which has resulted in some primary and secondary community care services being restricted or becoming unavailable.

Despite the recommendations in a Vision for Change for 24-hour CMHTs, the absence of adequate crisis mental healthcare in the community results in patients (across all age groups) with acute mental health needs presenting or being directed to the emergency department. As a consequence, the limited liaison psychiatry resources are focused on emergency and crisis care (as high as 70 per cent in the paediatric setting) of patients whose needs are better met in rapidly responsive community settings, rather than on the integration of mental and physical healthcare in people with co-morbid mental and physical conditions and functional disorders.

Internationally, there is evidence of an increasing rate of emergency presentation at paediatric emergency departments. Suicide is the second most common cause of death in young people, and self-harm is one of the strongest predictors of suicide. Recommendation 35 of Sharing the Vision states:

> *'a comprehensive mental health out of hours response should be provided for children and adolescents in all geographical areas. This should be developed in addition to current ED services'.*

This will ensure the availability of community assessment for young people in a crisis which does not occasion a visit to the emergency department – often an unsuitable environment due to the high risk of sensory overload.

People who present to the ED for assessment with undifferentiated presentations or with self-injury requiring medical attention should be seen as soon as practicable by the psychiatry service. Best practice is for parallel assessment where the physical and mental health assessments occur contemporaneously and without need for physical healthcare interventions to be complete before a mental health assessment commences (Figure 3). The National Clinical Programme for Self-Harm and Suicide-related Ideation promotes this approach in assessing patients who present following self-harm, and the Side by Side document of the RCPsych promotes this as the gold standard (HSE, 2022). The Side by Side document emphasises the finding of the UK National Confidential Enquiry into Patient Outcome and Death (NCEPOD) that harm and poor practice were associated with delays in psychiatric assistance and made a recommendation that:

> *All healthcare professionals must work together to eradicate terms such as 'medically fit' or 'medical clearance'. The terms 'fit for assessment', 'fit for review' or 'fit for discharge' should be used instead to ensure parallel working. The phrase 'medically cleared' is not meaningful and has no role in the assessment or management of patients in this context (RCPsych, 2020).*

There are exceptions to this: it is not possible to complete a valid diagnostic assessment of someone who is intoxicated for example. In this situation the CLP clinician might need to provide interim safety advice, perhaps obtain collateral histories and return later to conduct a thorough assessment when the person is fit for a more complete assessment. Likewise, where there is a question of a psychological cause of physical symptoms which is still being investigated, it is important not to pre-empt the findings of these investigations.

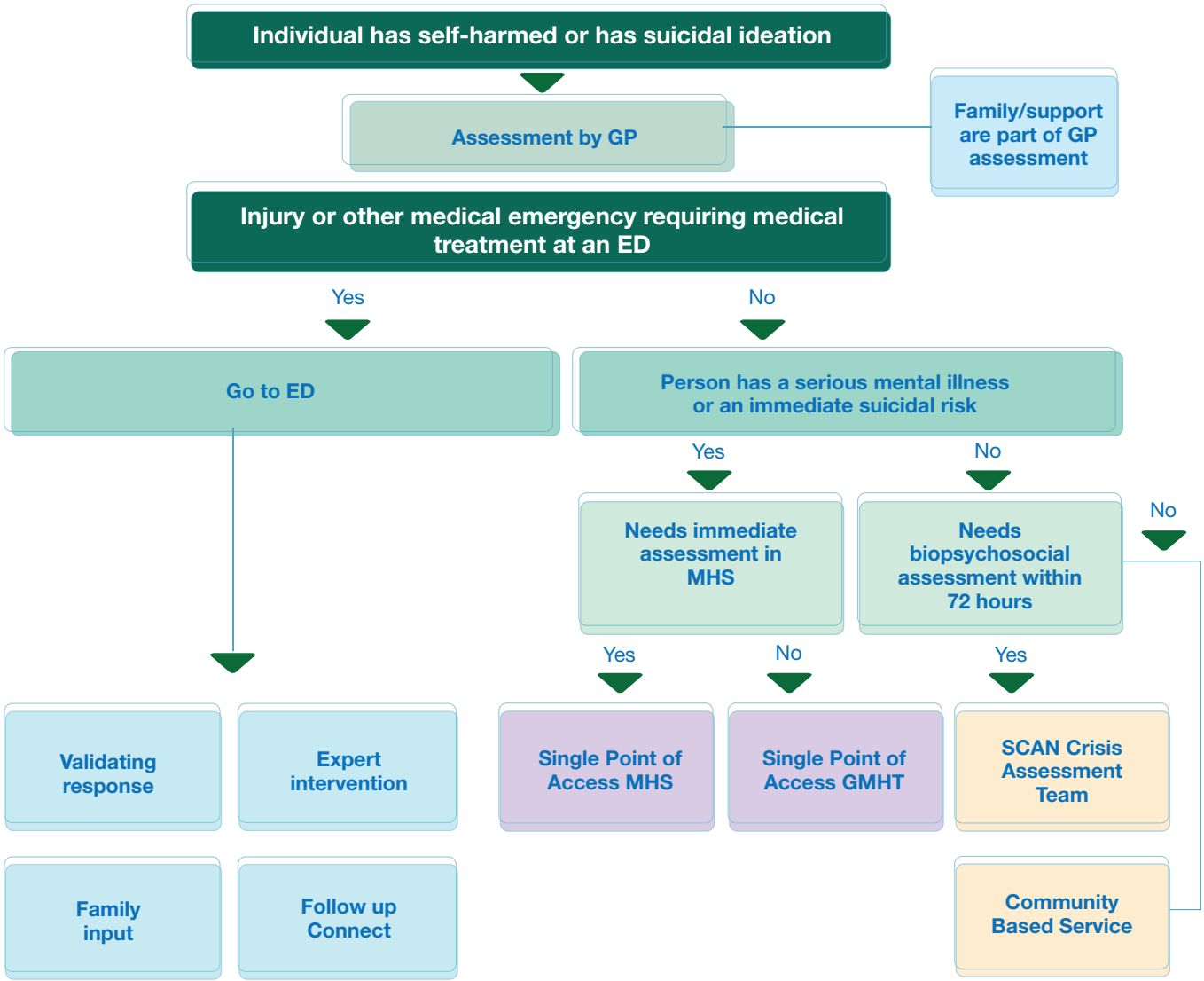


Figure 3: Pathway for people who have self-harmed or are suicidal (taken from the NCP-SSI).

Principles of assessment

- All patients presenting with self-harm or suicidal ideation should be offered a robust mental health biopsychosocial assessment wherever they are seen, as outlined in detail in the National Clinical Programme for Self-Harm and Suicide-related Ideation (HSE, 2022).
- Best practice is for parallel assessment of mental health needs alongside physical investigation and treatment, with interim management plans agreed until the assessment can be completed. This requires adequate staffing, and a culture of responsiveness and proactivity.

- Emergency medicine as a specialty is expert in the management of undifferentiated need, and increasingly the focus is on ensuring early specialist care where this is indicated. The emergency department is therefore the appropriate setting for the management of undifferentiated presentations, but should not be the default or only avenue to seek emergency care where the patient has a clearly differentiated primary mental health problem.
- Where a patient requires an admission under another specialty (for example under medicine for the treatment of a paracetamol overdose) the principles of parallel assessment should apply and policies should be in place to ensure patients are referred promptly.
- A shared governance model is best practice in the ED, as outlined in the National Emergency Medicine Programme (HSE 2012). Psychiatry services provide consultations to patients in the ED, but the patients cannot be considered as admitted under the care of psychiatry until a decision to admit has been made. Once that decision has been made, patients may be considered to be under the joint care of emergency medicine and psychiatry while they remain in the ED.
- Local and regional bed management policies should be developed, with allocated staff, to ensure that patients of all ages have prompt access to psychiatric admission when required.

All hospitals with an ED should have a CLP team to provide expert mental health assessments and management plans. This has been set out as a basic requirement in the NHS in both the Five Year Forward View for Mental Health and the NHS Long Term Plan of 2019 (NHS, 2016, NHS, 2019). In Ireland the HSE National Clinical Programme for Self-harm and Suicide-related Ideation has set the standard of mental health trained clinical nurse specialists in self-harm in every ED to provide the pillars of the programme (HSE, 2022).

The service provided to people who present to the acute hospital following self-harm in Ireland is guided by the National Guidelines of the National Clinical Programme for Self-harm and Suicide-related Ideation (NCP-SSI, 2022). The introduction of this National Clinical Programme (NCP) in 2014 included the resourcing of mental health nursing staffing for EDs, along with evidence-based guidelines requiring full biopsychosocial assessment for all people who present with self-harm or suicidal ideation. It also included the coproduction of an emergency care plan, involvement of carers, and communication with and bridging to next care. The 2022 updated version of the Model of Care for National Clinical Programme for Self-harm and Suicide-related Ideation (NCP-SSI) requires that there should be an alternative site for the assessment of people who only require mental health assessment, and that these patients should have access to community-based assessment and treatment (HSE 2022).

There is a need for clear pathways for GPs and other referrers to access urgent care without unnecessary barriers. As outlined in the NCP-SSI, patients with acute severe mental health need should be able to access treatment via community health services (funded by the community healthcare organisations) unless there is a physical health reason to attend the ED. All patients attending a CMHT should have an identified keyworker and crisis care plan in the event of an acute deterioration in their mental health. CMHTs should be able to meet the emergency needs of their patients – whether this is an emergency appointment with a member of the team, or in a crisis service or day hospital which is part of the community mental health services. The same would apply where there are clear links and responsibility with the CMHT and the admitting acute inpatient mental health unit, without a requirement to attend the ED to access admission.

Community mental health services should only send a patient to the ED where there is a concern that the patient needs treatment for the sequelae of self-harm, or for the investigation and/or treatments of other physical health emergencies (like an undifferentiated presentation). It should never replace timely community-based care, or the established pathways for voluntary and involuntary admission from the community.

There is a clear need for regional bed managers to identify beds for the psychiatric admission of patients for whom this is indicated, in order to free up clinicians to see patients in a timely manner. This was a recommendation of the National Emergency Medicine Programme twelve years ago (p.189, HSE 2012).

Strategic drivers

The key policy drivers include:

National:

1. HSE, ICGP, CPsychI. Model of Care for the National Clinical Programme for Self-Harm and Suicide-related Ideation (HSE, 2022).
2. The National Emergency Medicine Programme (HSE 2012).
3. A Vision for Change
4. Sharing the Vision
5. The SláinteCare Report outlines that healthcare provision must shift from the current hospital-centric system to an integrated system led by community and primary care (Oireachtas, 2017).

International:

1. Royal College of Emergency Medicine. Mental Health in Emergency Departments A Toolkit for Improving Care, Royal College of Emergency Medicine (RCEM, 2019).
2. Side by Side: A UK-wide consensus statement on working together to help patients with mental health needs in acute hospitals 2020 (Royal College of Psychiatry, Royal College of Nursing, Royal College of Emergency Medicine, Royal College of Physicians).

5. General Hospital Wards

GENERAL HOSPITAL WARDS

In liaison psychiatry, referrals are received from consultant-led teams within the acute hospital setting. The majority of referrals in most hospitals, and especially of presentations to the ED are aged 16–65. Some hospitals will have only working age teams, while others will have variable input from CAMHS, psychiatry of later life and perinatal teams. For referrals, the gold-standard is the single point of contact pathway for referrers, although some hospitals may have different pathways for different age groups or patient groups (Figure 4).

The referral can be assigned to the most appropriate clinician within the team – depending on the needs as identified at referral, and according to age-appropriate expertise and specialties.

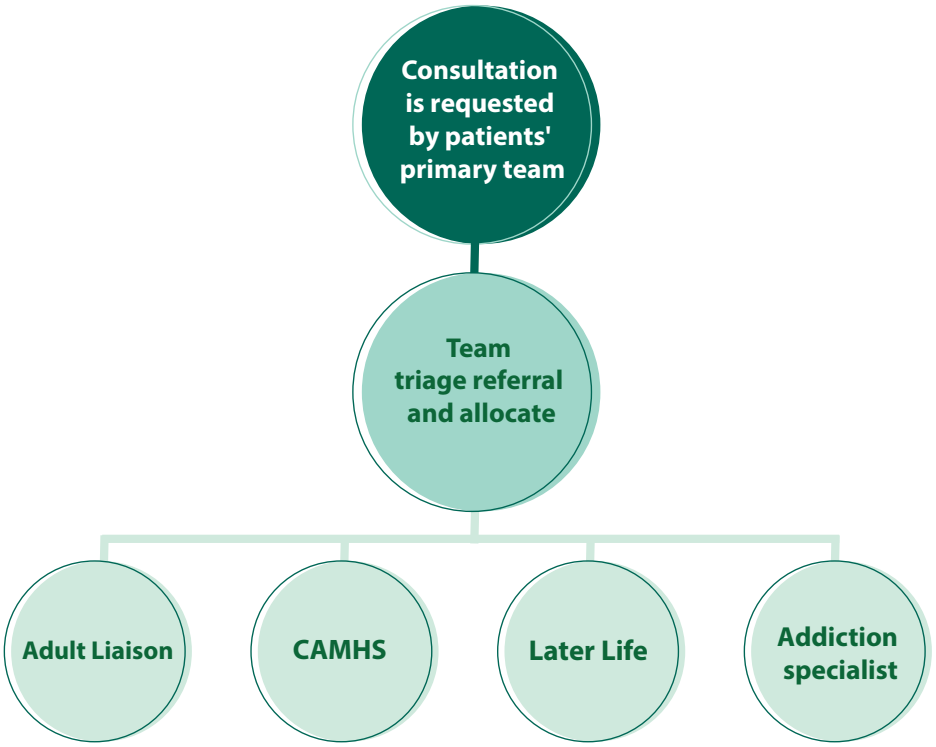


Figure 4: Single point of contact for referrers within the acute hospital.

CLP services work at the interface between physical health and mental health in the acute general hospital setting. Physical and mental health is inextricably intertwined. Many long-term conditions such as Parkinson's disease, diabetes mellitus and epilepsy are associated with high rates of mental illness. Psychological distress is often expressed as physical symptoms which may contribute to presentations of somatic or functional disorders. The mental health needs of a patient in physical care settings often go undiagnosed and therefore untreated. To optimise the physical healthcare of patients in an acute general hospital in-patient setting, it is essential that their mental health and well-being are addressed jointly, and this is best achieved with well-integrated CLP services.

The CLP service is designed to meet the needs of the following medical inpatients:

- Patients who are admitted for medical or surgical treatment of severe self-harm or suicide attempts, up to and including ICU settings.
- Patients treated in acute settings with co-morbid physical disorders such as a long-term physical health condition and a mental disorder such as bipolar disorder and end stage renal failure, requiring dialysis.
- Patients requiring the acute management of the physical sequelae or for refeeding in severe eating disorders such as anorexia nervosa.
- Patients being treated in acute hospital settings for physical disorders caused by alcohol and substance use like delirium tremens, bacterial endocarditis in patients who inject opiates requiring prolonged inpatient treatment and Wernicke-Korsakoff syndrome.
- Patients whose physical care is causing mental health problems like steroid induced psychosis in oncology patients or prolonged social isolation in stem-cell transplant patients.
- Patients in acute general hospital settings with undifferentiated presentation like acute agitation which may be due to encephalitis or psychosis and those with functional disorders who may present with chronic pain or paralysis.
- Patients in medical and surgical settings who have significant adjustment difficulties to illness or injury, and/or post-traumatic stress, such as patients with traumatic amputation or severe burn injuries who experience severe acute emotional distress or go on to develop Post Traumatic Stress Disorder (PTSD).

In terms of their role in an in-patient setting, liaison psychiatry services aim to increase the detection, recognition and early treatment of impaired mental wellbeing and mental disorder to:

- Reduce excess morbidity and mortality associated with co-morbid mental and physical disorder.
- Reduce excess lengths of stay in acute settings associated with co-morbid mental and physical disorder.
- Reduce the risk of harm to the individual and others in the acute hospital by adequate risk management and assessment.
- Reduce overall costs of care by reducing time spent in general hospital beds and minimising unnecessary or duplicate medical investigations and use of medical and surgical outpatient facilities.
- Ensure that appropriate care is delivered in the least restrictive and disruptive manner possible.

Common reasons for CLP referral of medical and surgical in-patient settings

- Patients medically/surgically admitted following serious episodes of self-harm.
- Adjustment reactions/disorders to serious medical comorbidity such as cancer.
- Patients with a pre-existing diagnosis of a major mental illness who require adjustment of their psychotropic medication.
- Advice around psychotropic medications, which may need to be changed due to new physical health considerations.
- Concerns about patients' emotional states.
- Concerns about causes of patients' symptoms if no organic cause is found.
- Patients' reactions to diagnoses and treatment – improving understanding and engagement with treatment protocol.
- Enhance formulation of patients presenting with chronic functional symptoms or bodily distress symptoms to rationalise investigations which may not be indicated.
- Identification and treatment of anxiety, depression, psychosis and delirium in the hospital setting, drug and alcohol problems with medical comorbidity.
- Advice on capacity, mental health legislation and common law, and the appropriate use of same.
- Treatment of behavioural and psychological symptoms of delirium, dementia, and other cognitive disorders.
- Treatment of functional or somatic syndromes such as chronic fatigue syndrome, irritable bowel syndrome, fibromyalgia, non-cardiac chest pain and chronic pain disorders.
- Treatment of complicated alcohol, opiate and other substance misuse disorders in an in-patient setting.
- Treatment of PTSD related to traumatic injury or life-threatening illness.

In Ireland the development of orthogeriatric services in acute hospitals to provide expert medical geriatric care for older people admitted for orthopaedic indications has been an example of integrated care that prioritises patient well-being and creates efficiencies and cost-savings for the wider system (Shanahan et al., 2016, Murphy et al., 2019). Further formal integrated care is foreseen as Comprehensive Geriatric Assessment for older adults – now adopted as policy – necessitates the identification of psychological and mental health needs of older adults as part of each assessment and will require the availability of specialised staff trained in Psychiatry of Old Age to provide their assessments and input where indicated (HSE, RCPI 2012). Another specific need for integrated healthcare is in the area of management of dementia, regardless of the age of the patient where Power of Attorney (POA) expertise is particularly required.

Paediatric liaison psychiatry teams on general paediatric wards work in the context of both acute and chronic illness, as with adult patients. Diagnosis and management of medical illness will impact on parental and child stress and anxiety, and caregiver burden increases with concurrent medical and psychiatric morbidity. Psychiatric and medical co-morbidity have a profound influence on children from a developmental perspective and a significant impact on rates and duration of hospitalisation, as well as school attendance. Treatment itself may cause psychiatric morbidity and children and adolescents with these complex needs may present management challenges in paediatric settings. These services also play a key role in the assessment and management of children and young people presenting following self-harm – escalating (Griffin et al., 2018, Fitzgerald et al., 2020).

The role of the CLP team includes obtaining collateral information from and referring onwards to community mental health services. Where a patient is well known to another service, it is helpful to involve this service in more complex decision-making, especially where they will be involved in the ongoing treatment (such as in the case of making adjustments to psychotropic medications like the initiation of clozapine or recommending psychological therapies).

6. Outpatient CLP Services

OUTPATIENT CLP SERVICES

In order to offer patients the full range of specialist care that a CLP service can provide, outpatient CLP services should be adequately resourced to allow for outpatient services. However, if services do not have the recommended staffing levels, services must prioritise more urgent services to inpatients and those attending the ED ahead of setting up outpatient clinics. Outpatient CLP services accept referrals from other hospital specialists who are concerned about the mental health of their patients. The indications, including those conditions listed under inpatient, and a properly resourced service will provide outpatient care specifically to patients with functional disorders and significant co-morbidities in long-term conditions (above, Section 5). There is also a role where there may be a question around the mental health consequences of treatment (such as with the use of Roaccutane for acne). Patients may be referred when requesting or requiring a surgical procedure in the context of possible distorted body image (such as requesting interventions from plastic surgery), or patients with psychological issues requesting or requiring surgical intervention that might best have a psychological treatment as first line (like sympathectomy for blushing). There is a role for CLP services (psychiatry and psychology) in ensuring that non-surgical treatment options have been explored and exhausted prior to surgical intervention.

6.1 Integrated care

Psychiatric and psychological co-morbidities like depression are common in patients with chronic physical disorders, representing over 25 per cent of medical inpatients. These co-morbidities are associated with poorer outcomes, including higher mortality rates (Moussavi et al., 2007, Ismail et al., 2007), and unscheduled service use (Stein et al., 2006, Unützer et al., 2009). There is strong evidence that integrating mental and physical healthcare leads to better outcomes for patients (Katon et al., 2010, Ismail et al., 2010), but the complexities of real patients and the segregation of mental and physical health services create difficulties in translating gold-standard research into real-life services (Ismail et al., 2019).

Psychiatric conditions presenting as medical symptoms (and where both co-exist) can require significant resources to manage in medical services, both inpatient and outpatient, resulting in increased waiting lists and patient dissatisfaction. Functional disorders or medically unexplained symptoms account for up to 30 per cent of medical out patient referrals (Stone et al., 2009). A well-resourced consultation-liaison psychiatry service integrates the psychiatric, psychological and social aspects of care with the physical care received in an acute hospital setting. As an integrated model, CLP involves two separate services working together. As the same CLP service works across multiple acute hospital services, it is a cost-effective way of ensuring every hospital service receives a level of integrated care. This level is ideal for acute and emergency mental healthcare needs. For the most complex non-acute mental healthcare need, a more integrated model is required (RCPsych 2019).

Internationally, liaison psychiatry services have developed out of a need to integrate mental and physical healthcare and have created a body of evidence in terms of both service development and the underlying research. Few studies have been conducted in the Irish context to give a clearer picture. In Ireland, the provision of integrated mental and physical healthcare is variable, with gaps in service for all age groups. There are disparities in the care offered across different hospitals where services have not been developed to standards outlined in A Vision for Change.

Only a number of the Model-4 adult hospitals in Dublin and Cork have well-established liaison psychiatry teams which can deliver care as part of a more integrated model. There is little access to integrated mind-body care outside of these areas (Doherty et al., 2021). There are similar gaps in the provision of specialist liaison psychiatry services for children. Under-recognition or lack of treatment of mental health problems and illness, including self-harm and death by suicide, in paediatric admissions can lead to prolonged and more expensive hospital care, with overall poorer outcomes for those children (Ougrin et al., 2018). Older adults comprise a large and growing portion of the population of medical inpatients. Similar gaps exist in the provision of specialist care for this cohort in acute hospitals. A liaison psychiatrist and adequate liaison psychiatric services can add real value to these areas (Fossey and Godier-McBard, 2020).

In order for SláinteCare's plans to integrate and personalise care to succeed, the inclusion of essential integration of mental and physical healthcare needs to be incorporated into the scope for the implementation of SláinteCare. True parity of esteem of mental and physical healthcare with improved and greater outcomes and reduced costs of hospital care is not possible without a well-resourced and properly functioning CLP service.

An innovative example of integrated working is in the Beaumont Hospital National Renal Transplant service. This service involves renal physicians, transplant surgeons, with liaison psychiatry support working together to optimise outcomes for transplant patients.

The governance of the psychiatric care in an integrated-liaison psychiatry (ILP) service lies with the consultant psychiatrist, reporting on professional and line management to a head of service, either within an acute hospital or mental health service (see Section 16). The clinical governance of the service and overall accountability lies with the clinical lead of the service, an acute hospital physician or surgeon. The consultant in an ILP role should be fully integrated into the hospital CLP service. To optimise integration, all ILP whole time equivalent (WTE) should be paired with CLP WTE – for example one post could be made up of 0.5 ILP and 0.5 CLP.

The staffing required for an integrated-liaison psychiatry service will be dependent on specific service and activity. The greater the staffing resource the lower the threshold for direct care within the service. The minimum staffing to provide a service is 0.2 WTE consultant psychiatrist and 1.0 WTE senior clinical psychologist. The development and funding of new integrated-liaison psychiatry models needs to come from the acute hospital service's strategic development; CLP services are integral in informing such service developments through defined clinical governance systems (see Section 16).

7. Neuropsychiatry Services

NEUROPSYCHIATRY SERVICES

There is a long-acknowledged unmet need for neuropsychiatry services in Ireland. The neuropsychiatric sequelae in traumatic brain injury is estimated to be approximately 120 cases per 100,000 head of population (HSE 2009). Unexplained neurological symptoms (or functional neurological disorder) are the most common presentation to neurology services following headache and are commonly psychiatric in origin and include psychiatric diagnoses such as dissociative disorders/non-epileptic seizures/conversion disorders and somatoform disorders (300 cases per 100,000 population) (Stone, et al 2010). Therefore it is reasonable to expect 45–50 new referrals to specialist neuropsychiatry services per 100,000 population per year where needs cannot be met by local mental health services (HSE 2009).

In A Vision for Change (2006), staffing levels for two neuropsychiatry teams, led by consultant neuropsychiatrists, to serve national neuroscience centres in Dublin and Cork were set out (See Box 1). The College of Psychiatrists of Ireland Workforce Planning Report 2013–2023 proposes seven full-time Neuropsychiatry posts in Ireland by 2020 or one per 350,000 (CPsychI 2013). Neuropsychiatry forms 'an essential part of an effective neuro-rehabilitation service' of the 2019 National Strategy and Policy for the Provision of Neuro-rehabilitation Service in Ireland (2019–2021) (DoH 2006, DoH 2020). In Sharing the Vision neuropsychiatry as a specialty is removed and, under a new neuro-rehabilitation section, it is recommended that 'mental health supports could be provided as part of the development of liaison mental health services and in the context of the proposed integrated Liaison Mental Health Model of Care' (DoH 2020). It also stipulates that the implementation of the National Strategy and Policy for the Provision of Neuro-rehabilitation Service in Ireland should remain a priority and should include the essential mental health support components of this service development, in the context of the proposed liaison mental health model of care.

It is important to highlight that consultant neuropsychiatry staffing as set out in A Vision for Change and the college workforce planning document has never been achieved and neuropsychiatry remains underdeveloped as a specialty in Ireland (DoH 2006, CPsychI 2013).

As a minimum, it is essential that neuroscience centres are staffed appropriately to meet the complex needs of this patient population (see Table 4) and that each community neuro-rehabilitation team (CNRT) should have access to neuropsychiatry if required (HSE 2019b). The College of Psychiatrists workforce planning document for the development of neuropsychiatry services in Ireland has recommended, based on international standards for neuropsychiatry service provision, a hub and spoke model which can support the development of CNRTs (CPsychI 2016).

Neuropsychiatry SERVICE	CONSULTANT POSTS	LOCATION	INPATIENT BEDS
Dublin Adult Neuropsychiatry Service	4 CONSULTANT NEUROPSYCHIATRISTS to include clinical leads in: a. Brain Injury (BH-NRH Axis) b. In-patient NP c. Epilepsy (Surgery programme/ NEAD)	Beaumont Hospital and National Rehabilitation Hospital	20 Neuropsychiatry beds providing for national and regional requirement
Cork Adult Neuropsychiatry Service	2 CONSULTANT NEUROPSYCHIATRISTS	Cork University Hospital	Defined access to 5 inpatient beds at national inpatient unit
Galway Adult Neuropsychiatry Service	2 CONSULTANT NEUROPSYCHIATRISTS	Galway University Hospital	Defined access to inpatient beds at national inpatient unit
Model 4 Hospitals*	1 consultant neuropsychiatrist or liaison psychiatrist with a special interest in neuropsychiatry to work across outpatient and inpatient care	Other Model 4 Hospitals where there are Neurology services (St Vincent's, St James's, Mater, Tallaght, UHL etc)	Access to referral to inpatient beds at the inpatient unit
Dublin and Cork Paediatric Neuropsychiatry Service	4 CONSULTANT NEUROPSYCHIATRISTS to include clinical leads in: a. Epilepsy psychiatry b. Brain injury c. Movement disorders/ Functional disorder d. National outreach/second opinion service: CAMHS/ID/ Psychopharmacology	National Children's Hospital, including Ambulatory and Urgent Care Centres, Cork University Hospital	Shared beds at NCH / CUH with neurology/ liaison services link with National Rehabilitation Hospital

***This is an addition to the 2016 CPsychI document to ensure parity of access to neuropsychiatry centres at all tertiary centres.**

Table 4: Outline of the neuropsychiatry need across Ireland from the College of Psychiatrists workforce planning document (2016)

8. Policies and Procedures

POLICIES AND PROCEDURES

Each service should have appropriate local policies for the governance of the team, and should work to develop policies across the acute hospital to work towards better patient-centred integrated care, including areas such as the management of acute behavioural disturbance and the management of alcohol withdrawal.

9. Care Pathways and Interfaces with Other Services

CARE PATHWAYS AND INTERFACES WITH OTHER SERVICES

There are areas of overlap with various other models of care as CLP services interface with most health services to a greater or lesser extent, both mental and physical.

NATIONAL CLINICAL PROGRAMME FOR SELF-HARM AND SUICIDE-RELATED IDEATION (HSE, 2022)

See sections 4.1.1 and 5.2.2 above (HSE, 2022)

EATING DISORDER SERVICES: HSE MODEL OF CARE FOR IRELAND (HSE, 2018)

Section 9.5.1 of Eating Disorder Model of Care refers to the medical admission of people with eating disorder. Medical admission is required when patients are identified as being at risk of physical harm and/or death due to the physical sequelae of starvation and when urgent refeeding under medical observation is required. This applies to some people with severe anorexia nervosa of very low weight or severe dietary restriction and high risk of refeeding syndrome, medically unstable bulimia nervosa, or a comorbid physical disorder such as diabetes.
This model of care refers to the need for 'virtual MARSIPAN' – now Medical Emergencies in Eating Disorders (MEED) teams to support the care of these patients requiring the following staffing: consultant physician/paediatrician, consultant (liaison) psychiatrist and senior dietitian, in addition to a medical nursing team (RCPsych, 2022).

The instances of patients requiring medical admission for eating disorders has risen since the beginning of the Covid-19 pandemic.

Integrated care is a key recommendation of the HSE Model of Care for Eating Disorder services in Ireland. Eating disorders have the highest mortality and morbidity risk of all mental health disorders. Much of the 10 per cent mortality rate is caused by the physical consequences of starvation. Hospital admissions for eating disorders have been rising, particularly for the under 18 years group over the past decade. There was a further significant increase for patients with eating disorders requiring medical admissions in 2020 and 2021, as indicated in the Hospital In-patient Enquiry (HIPE) data) due to the stark rise in eating disorder presentations during the Covid pandemic (Figure 5). Despite a fall in rates in 2022, referral rates for eating disorders to community eating disorder teams in Ireland remains over twice the rate pre-pandemic (National Clinical Programme for Eating Disorders (NCPED) 2022 data).

	2006	2015	2018	2019	2020	2021	2022
Total No			459	429	542	833	
AGE							
< 18 years	**46**	**95**	**171**	**168**	**290**	**547**	**Likely ⇩**
18+			288	261	252	286	
DIAGNOSIS							
Anorexia Nervosa			321	269	338	535	
Other Dx/unspec			85	101	149	238	

Figure 5: HIPE data on admissions with eating disorders

The National Clinical Programme for Eating Disorders endorses the Medical Emergencies in Eating Disorders: Guidance on Recognition and Management (RCPsych, 2022), which replaces the MARSIPAN guidance. The emphasis of this guidance is on medical management, meaning both physical and psychiatric care. Patients who require admission to medical or paediatric wards should be treated by a team with experience of treating eating disorders and involving their carers, using protocols developed in collaboration with eating disorder specialists and having staff trained to implement them. The inpatient team on the medical/paediatric ward should include a lead physician/paediatrician, a dietitian with specialist knowledge of eating disorders and a lead nurse. An eating disorders or liaison psychiatry service should provide sufficient support and training to medical/paediatric wards to allow them to manage eating disorder patients. The HSE Model of Care for Eating Disorders makes recommendations for inpatient medical admissions of children, adolescents and adults with eating disorders in relation to admissions, treatment and discharge. These recommendations include on admission a same day consultation with a Medical Emergencies in Eating Disorders (MEED) team, including an adult/paediatric liaison consultant. A minimum weekly MEED team meeting to update risk and collaborative care plan is recommended, along with regular psychiatric reviews during the treatment phase.

Community Eating Disorder Teams will support collaborative care pathways between community and acute medical settings for people with eating disorders. The HSE model of care for eating disorders recommends that community eating disorder staffing include sessions from paediatricians/physicians and hospital dietitians. These team members will facilitate safe collaborative pathways and handovers as patient's transition between care settings.

Inpatient psychiatric care through the provision of specialist eating disorder beds will be required for a small number of cases. Eating disorder beds for adults are recommended to be co-located within acute hospitals and a national eight-bed eating disorder unit will be located in the new children's hospital. Integrated pathways between community eating disorder services, liaison psychiatry and inpatient teams will be required.

MODEL OF CARE FOR SPECIALIST GERIATRIC SERVICES, PART 2: MENTAL HEALTH SERVICE PROVISION (HSE, 2018)

The inpatient care pathways for older people in the acute hospital with mental health needs are outlined in the document Specialist Mental Health Services for Older People (HSE, 2017a). This document leaves a gap in the management of older adults in tertiary hospitals who may be far from their community. There is a need for age-appropriate services to provide specialist care. This already happens in some Dublin hospitals, but there is a need for enhanced resourcing, given the demographic projections in the years ahead.

SPECIALIST PERINATAL MENTAL HEALTH SERVICES: MODEL OF CARE FOR IRELAND (HSE, 2017B)

Specialist Perinatal Mental Health Services (SPMHS) and their care pathways are described in the perinatal model of care, and function via a hub-and-spoke model (HSE 2017). The SPMHS is based in the 'hub' and provides support to the 'spokes', where mental health midwives are based, with liaison psychiatry providing psychiatric input as required.

Second opinions to spoke hospitals:

Referrals to the hub SPMHS can be made by the liaison psychiatrist for women that have been assessed and require a second opinion or further advice about medication management.

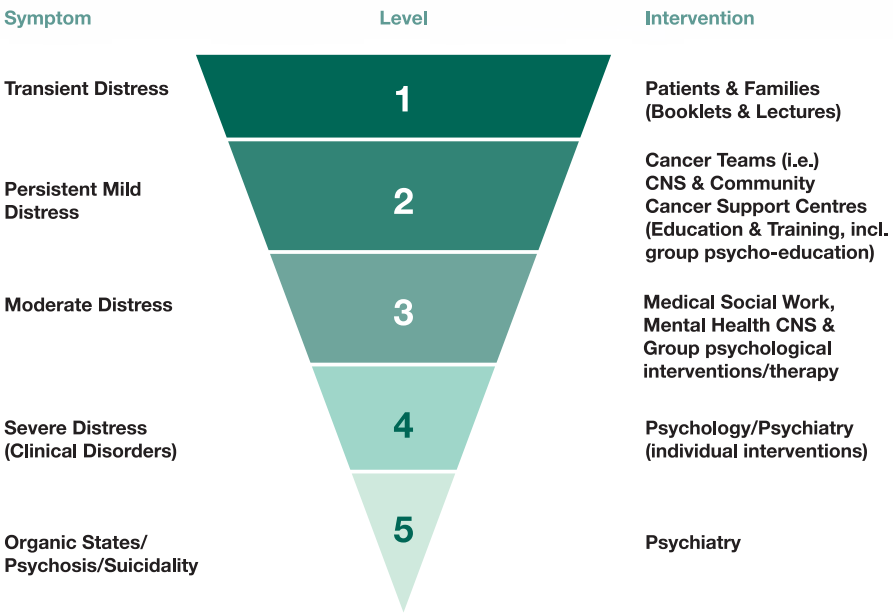
For example, the hub team will:

1. Provide clinical advice to the liaison psychiatrist based in the spokes.
2. Offer second opinions if clinically indicated.
3. Organise monthly network meetings.
4. Organise relevant education for staff in the hub and spoke teams and staff across the maternity directorate.

Unfortunately, in many spokes there is no liaison psychiatrist, and where they do exist, it is often a very basic team with limited administrative support and frequently without outpatient clinics. In these settings, funding should be provided for a liaison psychiatry team to cover both liaison psychiatry duties in the emergency department and on the medical wards, in addition to serving the needs of the perinatal 'spokes'.

A MODEL OF CARE FOR PSYCHO-ONCOLOGY (HSE, 2020)

This model of care outlines the psychological needs and services to meet the needs of people with cancer diagnoses who experience mental illness or 'distress'. It provides a stratified model of care provision, with the psycho-oncology service providing care to those with more severe problems, a model that is appropriate for application to other areas of illness (Figure 6). This is a truly integrated model, where the mental health staff are fully integrated with the haematology and oncology services. The staffing includes consultants in liaison psychiatry, psychology, clinical nurse specialists and social workers. The best utilisation of these resources should allow for cross cover with other members of the CLP service to ensure service provision continues through episodes of staff leave. Governance should be provided as usual through the consultant.



(modified from O'Dwyer & Collier, St. James's Hospital, 2003)

Figure 6: The psycho-oncology model of care

A TRAUMA SYSTEM FOR IRELAND (HSE, 2018)

This model of care outlines the two trauma networks for all of Ireland, comprising two Major Trauma Centres (MTCs) and other trauma units. The MTCs are based at the Mater Hospital Dublin, and at University Hospital Cork, and modelling has predicted an increase in volume of complex patients at both sites. Many of these will have mental health comorbidities – either because the injury is related to a pre-existing problem (such as self-harm/ suicide attempts or substance misuse problems), because the person has a pre-existing mental illness unrelated to their injury which will impact on their progress through the pathway (for example, severe mental illness or personality disorder), or because they have developed a secondary problem like PTSD, acquired brain injury, delirium or other organic mental illness. Both acute and subacute or rehabilitation pathways will require expert integrated mental healthcare in order to optimise outcomes.

Twelve months following traumatic injury, 31 per cent of patients report a psychiatric disorder (Bryant 2010). Most commonly, these disorders include depression, severe anxiety, post-traumatic stress disorder (PTSD), panic and agoraphobia. As many as 68 per cent of inpatient survivors of traumatic injury fulfil criteria for one or more psychiatric diagnoses (Gluyas 2011; Findlay 2003). Highly complex trauma patients, such as are seen in a tertiary trauma centre, have an especially high prevalence of psychiatric comorbidities (Luthi, 2011). Natural PTSD remission rates are only 44 per cent after forty months (Morina 2014). Less than half of those identified as having PTSD receive treatment (ONS 2014). Psychiatric comorbidity is associated with greater length of stay and inpatient costs among the orthopaedic trauma inpatient population. It is also independently associated with a lower rate of discharge to the patient's own home (Menendez 2013) and medium and long-term disability and further increasing costs (Holbrook 1999; Ponsford 2008). It is notable that early and persisting psychiatric symptoms are a better predictor of overall disability than either pain severity or injury severity (O'Donnell 2013; Zatzick 2002; Zatzick 2008).

- There are other models of care covering complex physical illnesses, including diabetes, Huntington's disease and stroke, where there is a clear need for the integration of CLP services at various points along the diagnostic trajectory.
    - In diabetes, there should be dedicated CLP resourcing to provide integrated care to this population group who have worse outcomes associated with unmet mental health need (see 'Integrated Care', Section 5.5 below).
    - In stroke care there are specific mental health needs at two points of the patient's journey. Following presentation with an acute brain injury there can be delirium, new onset chronic cognitive difficulties and adjustment difficulties. In addition, over 30 per cent of people who experience stroke will develop a post-stroke depression, which is very responsive to treatment with selective serotonin reuptake inhibitors (SSRIs) (Hackett and Pickles, 2014, Mortensen and Andersen, 2021). Prompt treatment can have a significant impact on the patient's quality of life and recovery journey. Furthermore there may be a need for psychological intervention in the rehabilitation stage (Sarkar et al., 2021).

10. Legal Considerations

LEGAL CONSIDERATIONS

Given the work of the CLP service with people who may have diminished or fluctuating capacity, if may be appropriate in some situations to seek a second opinion from the CLP team for complex cases.

10.1 Mental Health Act, 2001 (MHA, 2001)

If an inpatient in the general hospital setting requires a psychiatry admission, it is the role of CLP services to arrange this in collaboration with the receiving psychiatry team, and to determine if the patient meets the criteria for admission under the MHA 2001. The specialist opinion of the CLP team should be seen as the final opinion in this matter in the acute hospital setting.

In the event of the patient requiring admission under the MHA 2001 to an approved centre (i.e. acute inpatient psychiatry unit), following the receipt of an application (completed by a family member, authorised officer, member of an Garda Síochána, or a concerned member of the public) a recommendation will need to be completed by a registered medical practitioner. If the doctors on the CLP team are on the call roster of the receiving approved centre, they will need to request the involvement of a member of the treating medical or surgical team to complete the recommendation under their guidance.

10.2 Mental Capacity

The Assisted Decision-Making (Capacity) Act, 2015 has taken effect since April 2023, and any additional guidance around this may be sought from the Decision Support Service, especially in relation to Advance Care Directives.

If a medical or surgical team are concerned about the capacity of a patient to decline or consent to a particular procedure or treatment, they may seek a second opinion from the CLP, having first documented their own opinion (by a senior member of the team) regarding the person's mental capacity. Guidance and advice in this may be provided by the CLP team. The Medical Practitioner's Act provides for the emergency treatment of life-threatening conditions which may be treated under the Doctrine of Medical Necessity, but more elective treatments or procedures may require a legal opinion or even a court order. This may affect some acute hospital in patients with neurocognitive disorders, dementias, acquired brain injuries or learning disabilities, in addition to critically ill patients with severe eating disorders.

11. Roles of Multidisciplinary Team Members

ROLES OF MULTIDISCIPLINARY TEAM MEMBERS

Healthy well-integrated liaison psychiatry teams are non-hierarchical, communicate well and have a high level of respect and appreciation for the specific and overlapping skills of each team member.

11.1 Psychiatrists

Psychiatrists are medical doctors who receive postgraduate training in psychiatry, and at consultant level are on the Specialist Register of the Irish Medical Council. Doctors at consultant level and in training posts have key roles in the CLP service. Consultant psychiatrists who work on adult CLP services should have received one year of accredited training in CLP, and hold an endorsement (or equivalent evidence of competence) in liaison psychiatry on their Certificate of Completed Specialist Training (CSCST). This endorsement does not apply in child and adolescent or old age psychiatry where the criterion is a CSCST in Child and Adolescent Psychiatry or Psychiatry of Old Age respectively, and appropriate experience and expertise, perhaps via a 'special interest' in higher training. Their skills range over the following domains:

- Clinical: As clinical experts, liaison psychiatrists provide specialist psychiatric assessment based on history and clinical examination, together with all other relevant information to ensure early detection of mental illness, using different models such as biological, psychological, sociological, developmental, behavioural and systemic. In so doing, they provide a diagnostic assessment, including risk assessment to best guide effective evidence-based treatment planning, in collaboration with the multidisciplinary team.
- Leadership: As team leads, consultants have a responsibility to provide leadership in their clinical setting. Their medical training maximises communication in the acute hospital setting and helps to bridge the biopsychosocial translation. Efficient resource management requires an understanding of the organisational features of national, regional and local mental healthcare structure. Where resource constraints are impacting on the quality of care to patients, the liaison psychiatrist will act in the best interests of their patients to assertively communicate their concerns with management and seek an effective resolution. By so doing they will satisfy their ethical obligations to act as an advocate for patients and staff. Concerning multi-disciplinary working, the liaison psychiatrist will be aware of the limitations of his or her professional skills and acknowledge the separate but complementary skills of other professional members of the multi-disciplinary team.
- Education: CLP psychiatrists have a key responsibility to provide education on mental illness in the acute hospital setting, both formally and informally and to advocate for the care of patients referred to CLP services. CLP psychiatrist have a key role in the training of basic and higher specialist trainees in liaison psychiatry and of trainees in general practice where applicable.

11.2 Specialist Nurses

CLP teams in Ireland are usually staffed by senior nurses at clinical nurse specialist (CNS) and adult nurse practitioner (ANP) levels, who typically have a wide breadth of clinical and management experience in nursing. Nurses are entitled to register with the Nursing and Midwifery Board of Ireland (NMBI) on the register of clinical nurse specialists or advanced nurse practitioners, once they have achieved the respective levels of academic and clinical competency, in conjunction with a higher educational institution (HEI) and a clinical supervisor (typically a consultant liaison psychiatrist). CLP nurses have specialised training in roles in aforementioned areas in general hospitals psychiatry, such as perinatal, psycho-oncology and self-harm.
Liaison psychiatry CNS core responsibilities include biopsychosocial assessments of patients' needs, gathering history and collateral, assessment of risk, coproducing emergency care plans in ED, effective collaboration and education with families, clear documentation of interventions, effective communication with primary care and CMHTs, and evaluation and audit of nursing care. CNS have a pivotal implementation role in the national clinical programmes for Self-harm and Suicide-related Ideation (NCP-SSI) and associated data collection to ensure adherence to established quality metrics and KPIs. CNS also have a significant role in undergraduate mental health nursing preceptorship and education of allied health professionals and families. Liaison CNS/ANPs have pursued further training and accreditation in psychotherapies or utilise the likes of cognitive behavioural therapy (CBT), dialectical behaviour therapy (DBT), motivational interviewing (MI), or solution-focussed brief therapy (SFBT) informed interventions with their caseload work. There is increasing recognition for specialist CNSs in addiction or alcohol nurses in CLP.

Advanced nurse practitioners (ANPs) in CLP typically undergo training and supervision in advanced levels of assessment and clinical decision-making skills, in conjunction with agreed frameworks and referral pathways within the CLP team and hospital governance. ANPs may see patients from admission to discharge entirely autonomously, or with some supervision from his or her consultant. ANPs accept accountability for decision-making at an advanced practice level. Mandatorily ANPs in CLP must be registered prescribers of medicinal products, and must be registered in the NMBI register of nurse prescribers. ANPs additionally have roles in service development, clinical supervision of staff, and affiliation with a HEI for research and teaching purposes and the provision of clinical teaching to both the ED and wider hospital.

All liaison nurses are committed to delivering a quality focused, recovery-orientated model of care, which is patient-centred, responsive, and evidence-based.

11.3 Psychologists

Psychologists across both paediatric and acute hospital liaison teams aim to reduce psychological distress and enhance psychological wellbeing of patients by the systematic application of knowledge derived from psychological theory and research (British Psychological Society, 2010). Acute hospital psychologists aim to achieve this by facilitating both adjustment and adaptation to the challenges of illness and/or treatment regime, as well as focussing on the prevention and treatment of more significant psychological issues. The overall aim is to have a positive impact on the health outcomes of patients and their families.

- The role involves four key pillars – clinical, consultation, education and research.
- Psychological interventions include treatment of clinical depression and anxiety disorders, functional disorders and medically unexplained symptoms, PTSD, recurrent pain, health anxiety, adjustment to acute, chronic and life threatening illness, post-stroke or cardiac event depression, eating disorders and disordered eating patterns in patients with diabetes, moderate to severe distress in psycho-oncology patients and post-transplant patients, grief and loss, challenging behaviour and addiction issues. Psychologists also assess and manage the risk of intentional self-harm and suicide.

- Neuropsychological and cognitive assessment, formulation, interventions and rehabilitation for traumatic and acquired brain injury patients or CLP patients with additional cognitive or memory challenges requiring neuro-rehabilitation. Interventions for patients at neuropsychiatry clinic such as therapy for functional disorders, including functional or dissociative seizures. The psychological impact of an intensive care admission may be severe and the psychologist may contribute to ICU patients' needs to promote adherence to the multi-disciplinary team treatment plan and enhance cognitive rehabilitation and reduce the incidence of post-traumatic stress disorder.
- Psychologists working in liaison psychiatry services can promote staff support and education, for example through facilitating staff reflective practice groups such as a Balint group or Schwartz rounds. They can provide reflective supervision for staff, offering lower level intensity therapy, as well as delivering education on psychologically-informed care to staff.
- The psychologist also offers training placements to psychologists in clinical or counselling psychology training on the doctorate university programmes over six to nine months. Trainees carry out a supervised caseload within the CLP model and attend team meetings.
- Research, audit, strategy and service development are a core part of the role.
- Liaison with MDT and other services to ensure the provision of an integrated service and using psychological expertise to contribute to the planning and policy development of those services.

11.4 Social workers

Social workers have a key role to play in the provision of mental health services to patients and should be involved in assessment, care planning and therapeutic service provision. A key element of meeting the identified needs of patients is multi-disciplinary and multiagency co-operation and communication throughout the time of social work involvement in the case. The social work assessment is revised in accordance with new information that emerges, keeping the person at the centre of practice at all times. The social worker must develop close working relationships with outside agencies to effectively advocate for resources to be provided in the interests of clients, including state agencies such as housing authorities, voluntary agencies like homeless organisations and private agencies like nursing homes). Many social workers have a background in psychotherapies such as cognitive behaviour therapy. It is important that the liaison team social worker is not seen as a replacement for the medical/surgical team social worker.

11.5 Occupational Therapists (OTs)

Occupational therapists (OTs) work closely with the person recovering from a mental illness and provide specialised assessment, planning and treatment interventions to assist and optimise his or her functional independence and wellbeing. In general, the goal of OT treatment is to achieve an optimal interaction between the person, his or her occupations or purposeful activities, and the environment, to enable the client to live a meaningful life within their community. This can be achieved through various areas including:

- The identification and therapeutic use of occupations or activities within a meaningful routine that promotes positive mental health.
- Provision of a structured assessment in conjunction with the person to review their level of function and cognitive performance both within the hospital and community setting, as required, to identify their strengths and goals.
- Community re-integration programmes, such as facilitating the person in engaging with graded goals in relation to shopping, social clubs or public transport.
- Group facilitation, including recovery-focussed groups and therapeutic groups around long-term conditions.

11.6 Pharmacists

The role of the specialist CLP pharmacist does not exist in Ireland but in the services where they work (for example, in the UK) they perform a valuable role in the healthcare care of older people across all settings: community, hospital, mental health services and all forms of residential care. Major mental illness often requires psychotropic medication as a preliminary management to stabilise the person sufficiently to facilitate the other essential MDT interventions required to support recovery. The pharmacy is of particular importance to people who attend CLP services because they:

- Are commonly on several medications for physical illnesses which may cause compliance issues and increased potential for interactions.
- May have difficulties relating to a particular mode of administration (such as a patient who may be unable to take oral medications for a number of reasons, or in certain intestinal conditions may have altered absorption).
- May have altered pharmacodynamics, increasing the risk of side effects.
- Integrated pharmacy may be a solution: for example in Beaumont Hospital where the specialist mental health pharmacist works across Beaumont Hospital and the affiliated approved centre with a specific role around Clozapine policy, education etc.

11.7 Administrators

Effective administration is essential to the running of an effective CLP service. The role may include:

- Being a consistent point of contact for the team at all times.
- Triaging of phone calls from patients and their families to ensure that their needs are met in a timely fashion.
- Receiving phone calls from hospital doctors and again triaging them to ensure a timely response.
- Alerting the relevant member of the multi-disciplinary team in response to clinical situations.
- Office management.
- Typing of clinical reports to be sent to referring doctors to ensure timely communication of patient needs and assessments.
- Liaising with and ensuring that appropriate documentation is sent to the appropriate community team.

In recent years various national clinical programmes have allocated staff to hospitals to be part of consultation-liaison mental health teams (listed in Section 5.4 above). It is essential that where a CLP team will have governance for the working of this programme that the clinical lead is actively involved in the working of the programme at the site and in the recruitment of staff who will form part of the team, and that integrated team working is seen as central to good patient care. It is also essential that appropriate accommodation and resources are made available for new team members, and that the acute hospital management team is centrally involved in this provision.

12. Facilities

FACILITIES

12.1 Referral

Within the hospital there should be a single point of contact for referrals to the CLP service, whether this is by an electronic system, or verbal (telephone/bleep).

There should be a senior decision-maker available to advise on emergency or complex cases in a timely manner, at a minimum before a patient is discharged.

12.2 Team base

CLP services should be based in the acute hospital setting, with space provided by the acute hospital, to reflect the focus of the service. This space should include office space, and clinical space for the assessment and review of outpatients. The majority of the work of a CLP service will occur in the acute hospital itself – in the emergency department and on the medical, surgical and critical care wards, and proximity will help with speed and efficiency of response.

For outpatients, it is essential that the patients are seen in the acute hospital outpatient department and not in a community-based mental health department. This is to ensure that the CLP service team have access to the same clinical notes and information that the referring physician or surgeon has, and allows joint clinics with the referrer where indicated. It is as important from the perspective of improving access to care: patients who may be reluctant to attend a psychiatric clinic may be happier to attend the CLP clinic, with is co-located with their neurology team for example, and this is especially important in the management of people with functional disorders.

12.3 Information systems and Data

There should be adequate information technology services and infrastructure to allow easy communication with other relevant professionals involved in the patient's care. This is outlined in Recommendation 86 of Sharing the Vision:
'A National Mental Health Information System should be implemented within three years to report on the performance of health and social care services in line with this policy' (DoH, 2020).

National level data on service activity is not available: to date there has been no centralised system for collecting this data. Local data collection varies greatly, and depends on either appropriate information technology systems being made available to capture this, or on individual clinicians (often consultants or clinical nurse specialists) collecting this in their spare time. This is not a sustainable model of data collection.

Information technology solutions that optimise the availability of data on service activity need to be prioritised, and to minimise the burden on clinical staff spending time in clerical tasks. Even in the UK, where data collections systems are better established, there is a dearth of useful information regarding the activities and outcomes of CLP services (Fossey and Parsonage, 2012).

Members of the liaison psychiatry team should enter notes in the same records as the treating or referring medical or surgical team to ensure that all professionals involved in the patient's care have access to clinically relevant information.

A basic minimum dataset to inform services needs to be agreed, and relevant administrative and data management support needs to be implemented to ensure that this data is collected and reported quarterly. This in turn can inform service need and is in line with Recommendation 77 of Sharing the Vision:

> *'A standardised set of performance indicators (PIs) directly aligned with the desired outcomes in Sharing the Vision and agreed standards of care and quality frameworks should be developed by the Department of Health and the National Implementation Monitoring Committee accounting for quantitative and qualitative delivery of intended outcomes.' (DoH, 2020)*

This is in line with the outcome-based approach of international best practice such as the Outcome Books of the Cleveland Clinic in the United States (Cleveland, 2021). In the UK an outcome set has been developed to measure outcomes specific to CLP. The Framework for Routine Outcome Measurement in Liaison Psychiatry (FROM-LP) is a set of measures designed to provide an overview of outcomes – with separate measures for single contact interventions (such as in the ED) and a series of contact interventions (many inpatient referrals and outpatient care), covering the following domains: process, clinician-rated outcomes, patient-rated outcomes, patient satisfaction and referred satisfaction (Trigwell and Kustow, 2016, Fossey and Parsonage, 2012, RCPsych, 2015). The need to collect this data should drive the provision of adequate administrative and information systems supports.

13. Current Activity and Gaps in Service Provision

CURRENT ACTIVITY AND GAPS IN SERVICE PROVISION

In preparing this document the Liaison Psychiatry Faculty of the College of Psychiatry of Ireland undertook a scoping exercise of current service provision, which has been published in an international peer reviewed journal. This highlights the significant level of mental healthcare needs and services being provided in acute hospital settings in Ireland.

Most services are very active, with a high volume of both emergency and extremely complex referrals, and have inadequate administrative support to keep a comprehensive dataset of their activity. Most services have some way of capturing their data, albeit rudimentary, but no two services do this in the same way, and in many cases it relies on clinicians doing this collection in their own time. There is a national database from the National Clinical Programme for Self-harm and Suicide-related Ideation, based on the input of data by the Clinical Nurse Specialists (1 nurse per 200 cases per annum).

Current estimates of activity are as many as 50,000 first contacts per annum (across twenty-nine clinical sites) from our scoping exercise and may be read in Appendix 1 (Doherty et al., 2021).

14. Education and Training

EDUCATION AND TRAINING

14.1 the team

Staff members working in CLP services need to have the appropriate training to carry out their clinical duties. The training of staff to provide these specialist services is essential, and there needs to be adequate training posts across the disciplines. All staff need to have core professional training for registration in the different disciplines.

Consultants in liaison psychiatry must complete full higher specialist training in psychiatry, with an endorsement in liaison psychiatry from their higher specialist training, and they should be listed on the Specialist Register of the Irish Medical Council. Only such consultants are equipped to train doctors in liaison psychiatry.

In Ireland there are no higher education courses to equip mental health nurses or social workers for the role of working on a CLP team. Especially in nursing, this is a major gap in the education and training currently available, although training sessions are available as part of some of the National Clinical Programmes (such as the National Clinical Programme for Self-harm and Suicide-related Ideation (NCP-SSI).

14.2 The education role of the team in the wider hospital

A key role of CLP services is to provide training and education to acute hospital staff in the mental health of their patients and is an important component of the work of a CLP service. This requires protected time to develop and deliver appropriate training.
14.3 Supporting the wider hospital

Where services are sufficiently resourced, the CLP service can play an important role in the support of other staff members, especially in the provision of impactful interventions, such as reflective practice groups.

15. Research

RESEARCH

Clinical research forms the basis of evidence-based healthcare delivery, and is essential in driving forward developments in services delivery.

There are a number of key areas, as follows, within research into liaison psychiatry:

- The neurobiological and psychosocial underpinnings of mental illness
- The characteristics of and treatments for people who present for treatment following self-harm
- Epidemiology of comorbidity between mental and physical health
- Functional disorders, and their management
- Treatments for specific disorders within the hospital setting
- Service developments in liaison psychiatry

16. Governance and Funding

16. GOVERNANCE AND FUNDING

Liaison psychiatry services, in general, fall into three models of governance:

- General hospital
- Mental health services
- Joint – where the service falls under the governance of both or where different members of the MDT fall under different governance systems.

Given that CLP services are designed to meet the needs of the acute or general hospital and that the savings that a well-resourced CLP service will affect will be savings for the acute hospital rather than for community-based mental health service funding and governance (which should be aligned) will be via the acute hospital structures.

In the main, CLP services do not have admitted inpatients under their care: they provide a service to inpatients admitted to medical or surgical beds. Better-resourced services might have a model of joint care, but overall, there is variation between the degree of consultation, liaison, or integration of care provided.

On our scoping review, of the nine Model 4 Hospitals, six (67 per cent) CLP services are funded principally by the acute hospital, with the exception of the CNSs from the NCP-SSI, which are funded through the mental health budget. Of the four non-Dublin-based Model 4 Hospitals, three have CLP services funded via mental health services, with a hybrid model in one. The CLP services in Model 3 Hospitals are funded by the mental health services, except for two hospitals with a hybrid model in place. Two of the three existing liaison psychiatry teams in Dublin paediatric hospitals fund their CLP services, with the other being funded through mental health services (Doherty et al., 2021).

As with all other services, governance is through the consultant and the directorate structure. Each team should have an identified clinical lead, who is an appropriately trained CL consultant psychiatrist for the purposes of accountability, leadership and service development.

CURRENT RESOURCING AND ACTIVITY OF LIAISON PSYCHIATRY TEAMS IN IRELAND

https://www.frontiersin.org/articles/10.3389/fpsyt.2021.748224/

frontiers in Psychiatry

ORIGINAL RESEARCH
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Consultation-Liaison Psychiatry Services in Ireland: A National Cross-Sectional Study

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Objective: This study aimed to describe the provision of consultation-liaison psychiatry (CLP, also known as liaison psychiatry) services in acute hospitals in Ireland, and to measure it against recommended resourcing levels.

Methods: This is a survey of all acute hospitals in Ireland with Emergency Departments, via an electronic survey sent by email and followed up by telephone calls for missing data. Data were collected on service configuration, activity, and resourcing. Data were collected from CLP or proxy services at all acute hospitals with an Emergency Department in Ireland (n = 29). This study measured staffing and activity levels where available.

Results: None of the services met the minimum criteria set out by either national or international guidance per 500 bed general hospital.

Conclusions: CLP is a relatively new specialty in Ireland, but there are clear international guidelines about the staffing levels required to run these services safely and effectively. In Ireland, despite clear national guidance on staffing levels, no services are staffed to the levels suggested as the minimum. It is likely that patients in Ireland's acute hospitals have worse outcomes, and hospitals have unnecessary costs, due to this lack. This is the first study of CLP provision in Ireland and demonstrates the resource constraints under which most services work and the heterogeneity of services nationally.

Keywords: consultation-liaison (C-L) psychiatry, health services research [MeSH], hospital psychiatry, liaison psychiatry, mental health, Ireland

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INTRODUCTION

Consultation-Liaison Psychiatry (CLP), also known as liaison psychiatry is a subspecialty of adult psychiatry and refers to clinical services which deliver care at the intersection of mental and physical health care. CLP provides specialist medical expertise of the management of conditions which occur in areas overlapping mental and physical healthcare. Internationally, this specialty is known variously as liaison psychiatry, psychological medicine, and general hospital psychiatry, (1).

It is delivered in general or acute hospital settings. A key component of the work of CLP teams is to the Emergency Departments (ED) of their hospitals. The service provided to people who present following self-harm in Ireland is guided by the National Guidelines of the National Clinical Programme for people presenting to EDs following self-harm (NCP-SH), which in addition to providing mental health nursing staffing for EDs, also has guidelines on evidence-based practise such as full biopsychosocial assessments for all people who present, the co-production of an emergency care plan and communication with and bridging to next care (2). Some services provide outpatient services, which accept referrals from medical and surgical clinics in secondary care. Where a hospital has supra-regional or national programmes which require dedicated psychiatry resources for optimal patient care, such as organ transplantation programmes, neurological services or haematology-oncology hubs, there are often additional CLP resources to support the associated additional complex specialist mental health need associated with these.

Although CLP is a relatively new specialty, there has been much development in the past decade of service-based research which has aimed to quantify the activity and best practise of CLP services and to define needs and future development. The seminal publication in 2011 of the economic evaluation of the Rapid Assessment and Interface Discharge (RAID) service in Birmingham was pivotal in drawing the attention of funders of healthcare services in the UK to the potential of CLP services to effect cost savings. This study reported that every £1 invested in CLP services would effect a saving of £4 for that hospital (3, 4). Since this initial publication there have been further publications replicating RAID in examining the impact of CLP on the economics of the hospitals in which they are based (5–7). The effectiveness of CLP services has been supported by a systematic review conducted by Wood et al. and a narrative review conducted by the Netherlands Psychiatric Association conducted as part of the development of their guidelines (8, 9).

In England, near-annual surveys have examined the CLP services provided at all acute hospitals with EDs (10). These are in the context of commissioning guides which examined the key factors which influence the success of CLP services, set standards for good services, and described and named differing levels of service provision (11). There are also specific government targets for growth in the specialty in England [5 year forward View in Mental Health].

In Ireland, the document a vision for change provided clear guidance on staffing levels for all mental health services (12). Although this document was published 15 years ago and refreshed in 2020, there has not been any assessment of the degree to which CLP services are resourced to the minimum levels of this standard.

In this study we aimed to examine the nature of CLP services in Ireland and to define the key components of the psychiatry service provision at acute hospitals in Ireland to inform future work.

METHODS

Setting and Sample

The sample consisted of all acute hospitals in Ireland with an ED (Model 4 and Model 3 hospitals—see below) in 2020, and were identified from the Health Service Executive website (https://www.hse.ie/eng/services/list/3/acutehospitals/hospitalgroups.html) and the National Clinical Programme for Self Harm. A Model 4 hospital provides 24/7 ED, acute surgery, acute medicine, critical care, tertiary care and, in many instances, supra-regional care. A Model 3 hospital has a 24/7 ED and provides acute medical and surgical care, and is equivalent to a district general hospital.

At each hospital site, we identified which components of CLP services were available typically defined by the part of the hospital covered by that component—for example: ED, ward referrals, links to specialist services, outpatient clinics.

We aimed to identify the keys component of the service and associated characteristics such as staff mix, working hours, patient groups seen.

Design

This was a cross-sectional electronic survey disseminated by email and text messaging with follow up telephone interviews where required. All hospitals in Ireland with an Emergency Department (ED) were included. As there is a small body of consultants in CLP in Ireland, this was disseminated by email and text message.

In hospitals where there was no consultant the research team made contact with the CLP or proxy service by telephoning the hospital and seeking a clinician in the service. The survey was conducted via the online survey, or by telephone.

Measures

The survey ran from October to November 2020 for Model 4 hospitals, and from March to April 2021 for Model 3 hospitals. The survey was brief and allowed flexible (free text) responses. Response was by email or telephone. Non-responding hospital sites were followed up by email and telephone.

The primary outcome measure was the level of service provision as set out in A Vision for Change, and each service was benchmarked against this standard.

This paper also compared services against international benchmarking, mainly the English publications in this area. Consistent with the work of the LP-MAESTRO study of Walker et al. we used the same variables derived from the UK based gold-standard RAID services. "Original RAID" (variable 1) is based on the description provided in Tadros et al. of the original RAID service evaluated at Birmingham City Hospital (4); "modified RAID" (variable 2), is based on the profile of current services in Birmingham still known as RAID. Each service was characterised by whether or not the met the criteria for the two RAID variables. In addition, responses on staffing level and scope of work were used to categorised each service

TABLE 1 | Comparison of different models of Consultation Liaison Psychiatry provision—NHS-NICE, RAID & RANZCP CLP Model for Victoria, Australia.

	NHS-NICE				RAID		RANZCP CLP Model for Victoria, Australia ("Baseline" service for admitted patients only–not ED)
	Core	**Core 24**	**Enhanced**	**Comprehensive**	**Original**	**Modified**	
Hours of service	Working hours	24/7	24/7	24/7	24/7	24/7	24/7
Age groups	Over 16	Separate older adult team	Separate older adult team	Separate older adult team	All age team	All age team	All ages
Response targets—ED	n/a	n/a	n/a	n/a	1 h	1 h	n/a
Response targets—wards	n/a	n/a	n/a	n/a	24 h	24 h	80% in 24 h
Including self-harm	Yes	Yes	Yes	Yes	Yes	Some	Yes
Out-patients	No	No	Yes	Yes	Yes	Some	No
Staffing							
Psychiatrists							
Consultant	2	2	2	5			2
Non-consultant hospital doctors (including trainees)	2	2	4	2			3.5
Nursing	8	13	10	29			2.5
Psychology/other therapists	0	4	2	16			1
Manager	1.2	1.2	1.2	4			1
Administrator (incl. business support)	2.6	3	3	13			1

RAID and RANZCP CLP Model for Victoria, Australia.

according to recent guidance from NHS England that was created to help commissioners in planning service delivery: Comprehensive (full liaison provision), Enhanced 24 (staffed according to the original RAID model), Core 24 (provides acute provision for a hospital with an ED, but no outpatient work) and Core (intended for less busy hospitals); and services not meeting Core criteria were classified as subCore (see **Table 1**) (11, 13).

Patient and Participant Involvement

Further work will focus on patient experience and incorporate the patient voice into future developments. This study was however a more basic picture of resourcing, services provided and activity.

Statistics

Data were entered into SPSS for statistical analysis. Given the heterogeneity of the services examined and the lack of hypothesis, descriptive statistics were generated, but there was no role for more complex statistical analysis.

RESULTS

Data were collected from 100% ($n = 29$) of clinical sites where there is an emergency department: nine Model 4 hospitals, 18 Model 3 hospitals and 2 tertiary paediatric hospitals. Each service was benchmarked against the levels of service provision as set out in A Vision for Change. Of the 9 Model 4 hospitals, 5 (56%) are located in Dublin along with both paediatric hospitals. The remaining Model 4 hospitals are based in the other urban centres (Cork, Limerick, Galway and Waterford). Of the 18 Model 3 hospitals, 17 (94%) are located outside the capital, Dublin.

Staffing

Benchmarking Against Minimum Standards, and Classification

No services met the minimum level of staffing as per A Vision for Change, either the original or modified RAID services or any of the levels of the NHS England/ NICE recommendations—all were "sub core" as per the NHS/NICE standards (**Table 2**) (13). Model 4 hospitals had double the number of beds of Model 3 hospitals with significantly higher activity in the ED setting, but more significantly in terms of patients seen, both as inpatients and outpatients.

No service met the staffing requirements set out in Australia for Victoria by the Royal Australian & New Zealand College of Psychiatrists (14). No services operated 24/7: the majority of sites out of hours just an on-call junior doctor on site who can call an off-site consultant for advice.

TABLE 2 | Characteristics of Model 3, Model 4, & Paediatric hospitals in Ireland, activity, and models of working.

	Model 4 ($n = 9$) Mean (SD)	Model 3 ($n = 18$) Mean (SD)	Paediatric ($n = 2$) Mean (SD)
Beds per hospital, mean (SD)	688.3 (199.1)	271.2 (105.1)	215 (190.9)
ED activity, mean (SD)[a]	1675 (282.4)	737 (324.1)	725 (388.9)
Ward activity, mean (SD)[a]	983.3 (223.6)	319 (258.1)	120 (42.4)
Self-harm referrals, mean (SD)[b]	874.8 (223.6)	375.4 (182.6)	90 (84.8)
Out-patient new activity, mean (SD)[c]	311.5 (398.8)	5.2 (14.8)	172.5 (201.5)
Out-patient return activity, mean (SD)[c]	478 (674.8)	8.9 (36.9)	1750 (2474.9)
	***n* (%)**	***n* (%)**	***n* (%)**
Extended working hours, *n* (%) 8–8	2 (22.2)	3 (16.7)	0 (0)
>18 h/day but <24 h	1 (11)	0 (0)	0 (0)
24/7	0 (0)	0 (0)	0 (0)
Funding source, *n* (%) acute hospital only	2 (22.2)	0 (0)	1 (50)
Acute hospital with NCP-SH	4 (44.5)	0 (0)	1 (50)
Mental health service with NCP-SH	3 (33.3)	16 (88.9)	0 (0)
Hybrid	2 (22.2)	2 (11.1)	0 (0)
Assessment in ED, *n* (%) In parallel with emergency medicine	7 (77.8)	15 (83.3)	1 (50)
Directly from triage in general	3 (33.3)	9 (50)	0 (0)
Directly from triage on occasion	2 (22.2)	1 (5.6)	0 (0)
Adequate office space, *n* (%)	2 (22.2)	14 (77.8)	2 (100)
Office in acute hospital, *n* (%)	8 (88.9)	10 (55.6)	2 (100)

[a]*For Model 3, n = 12; Model 4, n = 5.*
[b]*For Model 3, n = 11; Model 4, n = 5.*
[c]*For Model 3 n = 2 (the remainder do not have OPD), for Model 4, n = 5 (no OPD n = 2, data unavailable n = 2).*
NCP-SH, Funding from the National Clinical Programme for people presenting to the ED following Self-Harm.

Model 4 Hospitals

The staffing levels of Model 4 hospitals are outlined in **Table 3**. The mean number of consultants is 1.6 WTE (SD 0.7) and of registrars or junior doctors is 3 WTE (SD 1.9). Seven of the 9 hospitals (78%) had at least 1 WTE consultant /500 beds, and seven had at least 1 registrar or junior doctor per 500 beds.

There was a mean of 3.8 WTE (SD 1.3) clinical nurse specialists (CNS) across the hospitals or 2.9 WTE (SD 0.8) nurses/500 beds (including the CNS in self-harm posts from the National Clinical Programme for Self-Harm: NCP: SH), with no hospital reaching the minimum of 5 nursing posts per 500 beds.

There was a mean 0.8 WTE (SD 1.1) psychologist integrated to the liaison psychiatry teams, and 1.6 WTE (SD 1.3) psychology elsewhere in the hospitals. Four hospitals have no psychology available across the hospital as part of the liaison psychiatry service, although there is discrete psychology provision for certain clinical areas.

Four of the Dublin-based Model 4 hospitals have national services such as transplant programmes, oncology programmes and neurosurgery centres which had contributed to resourcing for the transplant psychiatry, neuropsychiatry and psycho-oncology services at these sites. These services are included in the totals, and given the additional needs of these services, create a picture of greater overall resource allocation the is available for the general work of the CLP services.

Across the nine service the mean administration provision was 1.4 WTE (SD 1.1), with only 2 (22%) services meeting the Vision for Change minimum of 2 administrative posts/500 beds.

Of the remaining posts (social work, substance misuse counsellor, occupational therapist, and family therapist) there was a mean 0.1 WTE across the 9 sites with no hospital having the 4 recommended staff members.

Six hospitals (67%) have access to group therapies for at least certain patient groups.

Model 3 Hospitals

In Model 3 hospitals mean number of consultants is 0.4 WTE (SD 0.4) and of registrars or junior doctors is 0.7 WTE (SD 0.7). Five of the 18 hospitals (28%) had at least 1 consultant/500 beds, and nine (50%) had at least 1 registrar or junior doctor per 500 beds.

There was a mean of 2.5 WTE (SD 1.2) clinical nurse specialists (CNS) across the hospitals or 4.4 WTE (SD 1.8) nurses/500 beds (including the CNS in self-harm posts from the NCP-SH, with 7 hospitals (38.9%) reaching the minimum of 5 WTE nursing posts per 500 beds.

There was a mean 0.1 WTE (SD 0.2) psychologist part of the liaison psychiatry teams, and 0.1 WTE (SD 0.5) psychology elsewhere in the hospitals. Seventeen (94.4%) Model 3 hospitals have no psychology available in the hospital.

TABLE 3 | Staffing at Model 3, Model 4 & Paediatric hospitals in Ireland in absolute numbers and per 500 beds.

	WTE /hospital Median (range)	WTE/hospital Mean (SD)	WTE/500 beds Mean (SD)	Number meeting minimum standard (WTE required for compliance with AVFC/500 beds)
Model 4 hospitals (*n* = 9)				
Clinical nurse specialist (total)	4 (3–6)	3.8 (1.3)	2.9 (0.9)	0 (5)
Clinical nurse specialist (National clinical programme, self-harm)	2 (0–3)	1.3 (1.3)	0.9 (1.0)	1/200 self-harm presentation/year
Consultant 4 have <1 cons/500 beds	1.5 (1–3)	1.6 (0.7)	1.2 (0.3)	7 (1)
Psychology with CLP team	0.6 (0–3)	0.8 (1.1)	0.6 (0.7)	0 (3)
Other psychology	1.8 (0–3)	1.6(1.3)	1.3 (1.0)	4 have no CLP psychology
NCHD	3.0 (1–7)	3.0 (1.9)	2.3 (1.6)	5 have HSTs
HST	1 (0–2)	0.6 (0.7)	0.5 (0.5)	7 had <1/500
BST/SHO/Registrar	1 (0–6)	2.3 (1.6)	1.8 (1.3)	
Other clinical team members	0 (0–1)	0.1 (0.3)	0.1 (0.2)	0 (4)
Administration	1.2 (1–2)	1.4 (0.5)	1.1 (0.4)	2 (2)
Model 3 hospitals (*n* = 18)				
Clinical nurse specialist	2.9 (0–5)	2.5 (1.2)	4.4 (1.8)	5 (7)
Clinical nurse specialist (National clinical programme, self-harm)	1.0 (0–3)	1.1 (0.8)	2.1 (1.5)	1/200 self-harm presentation/year
Consultant	0 (0–1)	0.4 (0.4)	0.6 (0.8)	5
Psychology with CLP team	0 (0–1)	(0.2)	0.1 (0.3)	0 (1 hospital had 2 psychologists; all others 0)
Other psychology	0 (0–2)	0.1 (0.5)	0.3 (1.3)	
NCHD (total)*	0.7 (0–2)	0.7 (0.7)	1.4 (1.7)	3 have HSTs
HST	0 (0–1)	(0.3)	0.2 (0.4)	10 have ≥1 per 500
BST/SHO/Registrar	0.4 (0–2)	0.6 (0.7)	1.3 (1.7)	
Other clinical team members	0 (0)	0 (0)	0 (0)	0 (4)
Administration	0 (0–1)	0.2 (0.3)	0.3 (0.6)	1 (2)
Paediatric hospitals (*n* = 2)				
Clinical nurse specialist	2.5 (2–3)	2.5 (0.7)	7 (3.9)	1 (5) 9.7/500 beds and 4.3/500 beds
Clinical nurse specialist (National clinical programme, self-harm)	1.0 (0–2)	1.0 (1.4)	3.2 (4.6)	1/200 self-harm presentation/year
Consultant	2.2 (2.1–2.2)	2.2 (0.1)	5.8 (1.5)	2 (1)
Psychology with CLP team	1.6 (0–3.2)	1.6 (2.3)	5.2 (7.3)	1 (3) One site has 3 psychologists on CL team, other hospital has 10 non-aligned psychologists
Other psychology	5.5 (1–10)	5.5 (6.4)	12.4 (12.9)	
NCHD (total)*	2.3 (2–2.5)	2.3 (0.4)	5.9 (0.8)	2 (1)
HST	(0–0.5)	0.3 (0.4)	0.5 (0.8)	1 service has 0.5 HST
BST/SHO/Registrar	2 (2–2)	2 (0)	5.4 (1.6)	
Other clinical team members	0.5 (0–1)	0.5 (0.7)	1.6 (2.3)	0 (4)

**NCHD= Non Consultant Hospital Doctor all doctors who are not consultants, including BSTs (Basic Specialist Trainees), HSTs (Higher Specialist Trainees) and SHOs (senior house officers) or registrars (the latter 2 categories may not be in approved training posts).*

Across the eighteen services, the mean administration provision was 0.1 WTE (SD 0.2), with only 4 (22.2%) services meeting the Vision for Change minimum of 2 administrative posts/500 beds. Of the remaining 4 posts across other disciplines recommended by A Vision for Change, there were no posts at any site.

Paediatric Hospitals

In the two paediatric hospitals, the mean number of consultants is 2.2 WTE (SD 0.1) and of registrars or junior doctors is 2.3 WTE (SD 0.4). Both hospitals had at least 1 consultant/500 beds, and both had at least 1 registrar or junior doctor per 500 beds.

There was a mean of 2.5 (SD 0.7) WTE clinical nurse specialists (CNS) across the hospitals or 2.9 (SD 0.8) nurses/500 beds, with one hospital reaching the minimum of 5 nursing posts per 500 beds.

There was a mean 1.6 WTE (SD 2.3) psychologists as part of the liaison psychiatry teams, and 5.5 WTE (SD 6.4) psychology elsewhere in the hospitals. Both services met the Vision for Change minimum of 2 administrative posts/500 beds. At time of this survey the remainder of the hospitals nationally where children present have no paediatric liaison psychiatry services, with a minority having inreach from local community CAP services.

Activity

Not all hospitals were in a position to supply exact activity data, and most provided an approximation. Given that few services have a robust electronic health system, data are mostly collected

manually. The data on self-harm was present in the main as the data is central to the operation of the NCP-SH. The data are detailed in **Table 2**. Based on the mean figures at each hospital type, which are estimates and not complete, we can extrapolate an approximate total of (15,075 Model 4 + 13,266 Model 3 + 1,450 Paediatric) 29,791 ED attendances (8,850 Model 4 + 5,742 Model 3 +240 Paediatric) 14,832 ward based consults, and (2,804 Model 4 + 162 Model 3 + 3,500 Paediatric) 6,466 new clinic appointments. This is an approximate total of 51,089 first contacts in this attendance per annum across the 29 teams. Data on repeat reviews were not available, despite the most complex patients being usually reviewed multiple times on even short admissions (e.g., people with serious self-injury requiring care in critical care, people with complex neuropsychiatric conditions, or with serious sequelae of treatment, such as steroid-induced psychosis).

Care Delivery

All Model 4 hospitals provide a services to the ED and to the medical and surgical wards. Eight (89%) Model 4 hospital CLP services have outpatient clinics too, as do both paediatric CLP services. Only two (11%) of Model 3 hospitals have outpatient CLP clinics. A majority of services provide assessment in the ED in parallel with medical treatments where indicated, which is consistent with best practise (15).

None of the Dublin based hospitals have co-located maternity services—in the capital these are located at 3 standalone maternity hospitals. All other Model 4 hospitals ($n = 4$) have obstetric services on site, three are designated "hubs" for perinatal mental health care (have a perinatal mental health team on site), and one is a "spoke" as designated by the Perinatal Model of Care (16). Twelve of the Model 3 hospitals are designated "spokes" and have mental health midwives who can escalate mental health need to the consultant liaison psychiatrist.

Specialist Services for Different Age Groups

In Dublin, there are 2 paediatric hospitals which see all patients under 16 years of age. In Dublin, those aged 16 and over who require acute medical care are seen in the EDs of adult hospitals. There is no expertise in Child and Adolescent Psychiatry (CAP) at any of the Dublin EDs, and care is provided by the adult services both within and outside working hours.

In other parts of the country, the ED caters for all age groups. Outside of Dublin there is one paediatric liaison psychiatry service in Cork, which provides a service to a Model 4 and a Model 3 hospital. There is variable provision of CAP expertise in the remaining Model 3 and Model 4 hospitals.

Three of the Dublin hospitals have bespoke Psychiatry of Old Age (POA) staffing. In one hospital this is closely integrated with the working age service and together provides a single point of access. The other two have different referral pathways. In the remaining hospitals there is a varying degree of "inreach" provided by the POA teams in the local area, and in the main they only provide a service to patients who meet the criteria for their community service—thus tertiary or out of area patients have mental health care provided by the non-specialist working-age service. This practise is supported by the Model of Care for Older People (17).

Funding and Governance

Of the 9 Model 4 Hospitals, 6 (67%) CLP services are funded principally by the acute hospital, with the exception of the CNSs from the NCP-SH, which are funded through the mental health budget. Of the four non-Dublin based Model 4 hospitals, three have CLP services funded via the mental health services, with a hybrid model in one. The CLP services in Model 3 hospitals are funded by the mental health services with the exception of two hospitals where there is a hybrid model in place. The two paediatric hospitals fund their CLP services.

DISCUSSION

This study found that Irish CLP services are not resourced to the level recommended by the 2006 policy document A Vision for Change. When a benchmarking exercise was used to compare staffing levels per 500 beds with the standard, no services were adequately resourced.

The Model 4 or tertiary hospitals were significantly bigger and busier than the Model 3 hospitals, and their work is more of the complex mix of CLP rather than the predominance of emergency psychiatry at the smaller sites. All services are severely under-resourced by any defined standards. Model 4 hospitals had levels of medical and psychological provision which were on the surface at the levels set out by A Vision for Change. More specialised services require higher levels of medical input due to the level of complexity of the patient group. They do not have the levels of nursing staff required to safely provide 9–5 level staffing, much less any extended hours offering. Notwithstanding these deficits, 33% of services provided some form of extended hours services, although none provided a 24 h service.

When benchmarked against the international standards of the NHS England-NICE standards in England and Wales, no adult services meet the level of resourcing for CORE services, much less CORE-24, as no services ran 24/7 (13). Like in Norway, the availability of CLP services outside of working hours is severely limited in this study (18). However, consistent with many services in England, several Model 4 hospitals had elements of Comprehensive services (i.e., highly specialised input for discrete clinical areas, e.g., neuropsychiatry, psycho-oncology, transplant psychiatry), combined with "sub-Core" provision across the service more generally. Existing services have developed organically at certain major national centres by individual funding by these tertiary/national services at these hospitals. These were similar to "Cluster 3" services identified in the UK by Walker et al. (10). Unlike services in hospitals on continental Europe there is little history of psychosomatic medicine services. Compared with a European survey of CLP services published 20 years ago, the Irish Model 4 hospitals are equivalent to Cluster II and III and the Model 3 to Cluster I, and found a mix of traditional medical model and multidisciplinary services (19). This study, however was an opt-in model and likely

included those services who were most interested in research and service development. A more recent Italian study of 5 hospitals of various sizes concluded that the better resources and more active a hospital service, the more likely patients were to be referred, and that the existence of strong services overcame systemic barriers to patients receiving needed mental health care, consistent with finding of Chen et al. from an Australian study (20, 21). Lobo et al. in a survey of Spanish CLP services reported higher proportions of services with psychology provision and less specialist nursing provision. Neither this Spanish study, nor a similar Norwegian described the degree of ED input (18, 22).

The existing levels of nursing resourcing owe much to the NCP-SH which has set the standard for the staffing of mental health services at EDs at 1 CNS/200 presentations per annum, and without which the mean CNS staffing levels would certainly be much lower especially in the Model 3 hospitals (2, 23). This, along with the effective delivery of the Perinatal Model of Care, emphasise the importance of funding accompanying staffing requirements to ensure services are adequately resourced (16).

Among Model 3 hospitals, there were higher staffing levels for nursing staff compared with Model 4 hospitals (39% meeting the standard of 5 CNS/500 beds, compared with none in the Model 4 hospitals), but this is counterbalanced by the lack of medical staff. The five hospitals with consultant staffing (any WTE) met the minimum standard of A Vision for Change. While it may be difficult to justify a fulltime CLP consultant for a hospital with 200 beds, this indicates a need for some degree of on-site medical leadership and there may be potential to combine a 0.5 WTE CLP consultant role with other roles in psychiatry or to provide part-time working options.

For the paediatric hospitals, there were no staffing levels specified in A Vision for Change and UK-based documents did not specify what resourcing of paediatric hospitals should be. However, as the assessment and treatment of children and adolescents is arguably a lengthier process in the main, there is an argument for higher levels of staffing per presentation in these settings (24).

Resourcing levels in Ireland compare poorly to English levels of staffing and service delivery. With all services being sub-core, the resources are not in place to provide high quality 24/7 care. In the UK, 21% met at least Core standards, and 10.1% were at least Core24 (10). Activity levels are higher than those reported by services in UK and Australia although the levels of resourcing are poor (25, 26). There is an identified need to ensure services are resourced to the minimum levels established by national and international standards.

Data and information systems are a significant barrier to the development of services. The provision of these is idiosyncratic and there is no national standard. Where hospitals have data and information systems in place it allows for a more granular examination of the work of the CLP service (27, 28). Universal information systems would allow comparisons to be made to similar work conducted internationally, and to establish whether the work of Irish CLP differs from other countries, and where it needs to be improved (25, 29, 30). The data available suggests very high levels of clinical activity, compared to other areas of mental health services.

LIMITATIONS

The most significant limitation was the absence of any systematic consistent activity data across the sites, as a result this study was dependent on self-report data, rather than independent observation. However, this is not dissimilar from other published work in the area of CLP service-based research (10). At the smaller sites where self-harm data represents a significant proportion of the workload, this is captured by the NCP-SH data. It is difficult for clinical teams with little administrative support, often struggling to meet the clinical demands for their services, to prioritise data collection ahead of delivering clinical care.

The full (100%) response rate gives a clear view of the national provision of services, similar to the work of Walker et al. in the UK (10). It is a very strong response compared with the 62% response rate in the Spanish study and the 41% response rate in a similar Norwegian study (18, 22).

The findings of this study will be used as a basis of a Model of Care for Irish CLP services, a model that will be developed in keeping with the recommendations of the 2020 policy document Sharing the Vision (31). It is expected that this will result in the implementation of minimum safe resourcing levels and allocation of information systems and administration to facilitate future development of Irish CLP services.

Further work will incorporate the patient voice into both the design as well as capturing the qualitative experience of patients who come into clinical contact with liaison psychiatry services. There is a clear need for robust data to be routinely collected in order to identify the areas where there is greatest need as well as simply quantifying activity. This is a challenge internationally (32). Such data would allow for the activity-based commissioning of services and would lead the way toward ensuring that services are adequately resourced for the needs of their patients. Once there is data available it will be possible to establish outcome measurements such as the FROM-LP and to use this to enhance the quality of services delivered (33).

CONCLUSIONS

This study found that despite the strong and evolving data on the economic benefits of a well-functioning CLP service the development of CLP services in Ireland is lagging behind the development of policy. Despite this, services provide high volume of care, and a high proportion are adhering to best practise guidelines such as regarding parallel assessment. In Ireland, CLP services are grossly under-resourced, and report high levels of clinical activity. There is an urgent need for robust data collection and for investment to bring these services to a sustainable level of resourcing for the activity undertaken. This paper has demonstrated the need for a systematic approach to developing and evaluating services, with twin key areas: adequate

staffing and information systems to capture data on service need and activity.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

AUTHOR CONTRIBUTIONS

AD, MC, EK, EC, EB, EG, and SM conceived of the research. WL provided external advice. RP, KM, and AD carried out the survey. AD carried out the statistical analysis and wrote the first draught. All authors contributed to the manuscript and approved the final version.

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SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fpsyt.2021.748224/full#supplementary-material

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EAPM Paper

Challenges and opportunities for Consultation-Liaison psychiatry services in Ireland

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1. Introduction

Consultation-Liaison Psychiatry (CLP), or liaison psychiatry, is a subspecialty of adult psychiatry which provides specialist medical expertise of the management of conditions occurring in areas overlapping mental and physical health [1]. It is a specialty of acute hospital settings, including the Emergency Departments (ED) of these hospitals.

In Ireland, the 2006 document guiding policy in the development of mental health services *A Vision for Change*, outlined the staffing levels for all mental health services [2]. There has been no oversight of the resourcing of CLP services to this standard.

Internationally, the past decade has seen a considerable body of service-based research aimed to quantify the activity and best practice of CLP services internationally. The Rapid Assessment and Interface Discharge (RAID) study published in 2011, outlined the economic evaluation of a Birmingham service, and drew the attention of UK healthcare funders to the cost-saving potential of CLP services [3,4]. Further research has confirmed the clinical effectiveness and the economic impact of CLP [5–9].

In Ireland there are two levels of hospital providing emergency and specialist care: Model 3 hospitals have 24/7 EDs and provides acute medical and surgical care, equivalent to a district general hospital. Model 4 hospitals are university hospitals providing 24/7 ED, acute surgery, acute medicine, critical care, tertiary care and supra-regional care. There are nine Model 4 hospitals, eighteen Model 3 hospitals and two tertiary paediatric hospitals. Hospitals with supra-regional or national programmes such as organ transplantation programmes, neurological services or haematology-oncology hubs require dedicated specialist CLP resources to support the associated complex mental health need. Most tertiary CLP services provide outpatient services, which accept referrals from medical and surgical clinics.

As part of the process of developing a National Model of Care for Liaison psychiatry in Ireland, members of the College of Psychiatrists of Ireland examined the national provision of CLP services. We identified some keen challenges and opportunities:

2. Challenges

2.1. Lack of resources in the context of rising demand

Overwhelmed community services mean that more patients attend the ED for urgent care. Yet, no CLP services meet the minimum level of staffing as per A Vision for Change, and all are 'sub core' as per the NHS/NICE standards [10]. No services meet the staffing requirements set out in Australia for Victoria by the Royal Australian & New Zealand College of Psychiatrists [11]. No services operated 24/7: the majority of sites out of hours have an on-call junior doctor on site only and an off-site consultant available for advice. Model 4 hospitals have a more complex mix of CLP rather than the predominance of emergency psychiatry at the smaller sites. With suboptimal levels of nursing staff for 9-5 level staffing, notwithstanding these deficits, 33% of services provided some form of extended hours services, although none provided a 24hour service. Resourcing levels in Ireland compare poorly to English levels of staffing and service delivery. With all services 'sub-core', resources are not in place to provide high quality 24/7 care. In England by contrast, 21% met at least Core standards, and 10.1% were at least Core24 [12].

2.2. Funding and governance

Many CLP services fall between two governance and funding streams: mental health services (with the exception of CLP teams) are funded separately to acute medicine. The two paediatric hospitals fund their CLP services. In the majority of Model 4 Hospitals (67%) CLP services are funded principally by the acute hospital, the remainder by mental health services, or a hybrid model. The CLP services in Model 3 hospitals are entirely funded by mental health services, with the exception of two hospitals where there is a hybrid model in place. This can create confusion and tension around the governance of CLP services.

2.3. Information systems and Data collection

There is an absence of systematic consistent activity data across the sites. At smaller sites where self-harm data represents a significant

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proportion of the workload, this is captured by the National Clinical Programme for people presenting to EDs following self-harm (NCP-SH). However, it is difficult for clinical teams with little administrative support, struggling to meet clinical demand for their services, to prioritise data collection ahead of delivering clinical care. There is a clear need for robust data to be routinely collected to identify areas of need, in addition to describing activity [13]. Such data would facilitate activity-based commissioning of services to meet the needs of their patients [14].

2.4. Services for children

CLP services in paediatric hospitals similarly struggle with under-resourcing. There is a particular gap in the provision of services for those aged 16–18, who are seen at not paediatric hospitals, and instead attend adult hospitals. At these adult sites they receive the same CLP service as adult patients, rather than specialist adolescent mental health services.

3. Opportunities

3.1. International innovations

International innovations especially in other English-speaking countries with similar free-at-the-point-of-access health care can be extrapolated to the Irish context, and are starting to be recognised for the opportunities they bring to improving Irish healthcare [7,12].

3.2. National Clinical Programmes

One of the opportunities for CLP in Ireland has been the rollout of National Clinical Programmes.

The NCP-SH has provided mental health nursing staffing for EDs and developed robust practice guidelines including universal full bio-psychosocial assessments, parallel assessment, the co-production of an emergency care plan, communication with a carer, and bridging to next care [15]. The NCP-SH has set the standard for the staffing of mental health services at EDs at 1 CNS/200 presentations per annum [15,16].

The Perinatal Model of Care has provided guidance in best practice for the management of perinatal mental health difficulties, and resources for delivering care. This has improved care in acute hospitals which have obstetric departments located [17].

In 2020 the National Cancer Care Programme funded the development of posts for specialist multi-disciplinary psycho-oncology services.

4. Conclusions

Despite strong data on the economic benefits of a well-functioning CLP service the development of services in Ireland lag behind national policy and international best practice. CLP services are grossly under-resourced, and report high levels of clinical activity.

Competing interest

The authors have no competing interests to report.

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Contributors

AMD, MC, EK, EC, EV, EG and SMcH conceived of the research. WL provided external advice. RP, KMcE and AMD carried out the survey. AMD carried out the statistical analysis and wrote the first draft. All other authors contributed to the manuscript and approved the final version.

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Appendix 2

PAEDIATRIC LIAISON SERVICES FOR THE NATIONAL CHILDREN'S HOSPITAL

This document was approved by the Paediatric Liaison Psychiatry peer group on 17/7/2018 following road mapping with Accenture, and endorsed by the CAP members of this group.

Setting the scene: paediatric mental health

It is well recognised that, in order to become healthy individuals, children need safety and security within their primary relationships, opportunities to play and learn, and the positive self-esteem that comes from knowing they are valued and cherished by families, carers and friends (DoH, 2006). The prevalence of mental health disorders is increasing (HSE, 2014, Collishaw et al., 2004). According to the World Health Organization (WHO), it accounts for 16 per cent of the global burden of disease in 10–19 year-olds, and half of all mental health conditions start by age 14 (CDC, 2016). Thus, in children and adolescents, affecting around 20 per cent of the population under 16 at any one time – 2 per cent with significant disability, and recently there is much interest in adolescent cohorts and transition issues (Costello et al., 2011).

Young people with pre-existing mental health disorders and medical illness are also extremely vulnerable. Mental health difficulties in children and adolescents are both prevalent and impairing, with accepted worldwide rates of 10–20 per cent. Recent data concludes that mental health disorders contribute substantively to the burden of disability among youth, with depressive disorders now ranked as the third most common cause of YLDs among children and adolescents (Kieling et al., 2011, Kyu et al., 2016, WHO, 2014).

Increasingly paediatricians are aware that young people with existing medical conditions are also at increased risk of mental health disorders, and that with psychological medicine services in place, much can be done about this (Bennett et al., 2015).

Why this matters: Good emotional health in childhood is a stronger predictor of high adult life satisfaction than any other factor, including wealth, education and physical health (Layard et al., 2014). Influence on children's development, educational attainments and their potential to live fulfilling and productive lives. Children with mental disorders face major challenges with stigma, isolation and discrimination, access to healthcare and education facilities (Jones, 2013).

About paediatric liaison services

Consultation-Liaison Child and Adolescent Psychiatry, also known as Medical Psychiatry or Psychological Medicine, is the medical speciality that caters for children with medical illnesses and psychiatric co-morbidity. It has long been recognised that children with medical illnesses experience significant psychological and psychiatric co-morbidity – rates may be as high as 30 per cent, and even higher in some studies. The WHO now identifies mental health disorders as the second largest cause of co-morbidity for children and adolescents.

Children with mental health disorders and their families have as great a right to provision of healthcare as those with other health needs. Strategies such as 'no health without mental health' campaigns underpin equity and fairness and highlight these needs. We offer expertise in managing mental health issues across the continuum of paediatric illness, where young people are attending medical teams in paediatric hospitals.

Paediatric liaison psychiatry teams may be designed to operate in hospital emergency departments, wards and outpatient settings. Multidisciplinary teams and groups and integration with teaching and training are valuable experiences for trainees. We provide significant teaching and training opportunities for paediatric trainees and psychiatry trainees, and we provide interdisciplinary teaching at a range of settings (including university, undergraduate paediatric and psychiatry training, nursing training and ED training).

They work in the context of both acute and chronic illness, for example, supporting adherence to treatment regimes and treating co-morbidity including depression, managing anxiety disorders, side effects of medication use, suicidal ideation and risk assessment during treatment or facilitating referral to local services. They have a role in supporting young people with somatoform disorders, or with psychosomatic presentations as part of medical disorders. Diagnosis and management of medical illness have an impact on perceived parental and child stress and anxiety, as caregiver burden may be greater with concurrent medical and psychiatric morbidity. Psychiatric illness has an impact on adherence to treatment, and thus outcomes, in chronic illnesses. Psychiatric and medical co-morbidity have a profound influence on children from a developmental perspective and a significant impact on rates and duration of hospitalisation. Treatment itself may cause psychiatric morbidity and children and adolescents with these complex needs may present management challenges in paediatric settings. Thus we support the psychiatric needs of children and young people with a constellation of physical and mental health needs. This includes seeing a range of first presentations (including relating to mood disorders, anxiety disorders, psychosis, somatoform complaints, eating disorders, mental health disorders in the context of specific genetic disorders and other difficulties (Dhroove et al., 2010, Lynch et al., 2017, Woodgate and Elena Garralda, 2006, Griffin and Christie, 2008, Ansari et al., 2021, Davie, 2016, Bennett et al., 2015, Pinquart and Shen, 2011, McWilliams et al., 2016, Campo et al., 2000).

'In the USA it has been shown that it is more economic to have mental health services co-located with paediatrics. Fiscal success was associated with … better integration of the psychiatry program within the children's hospital'. (Campo et al., 2000)

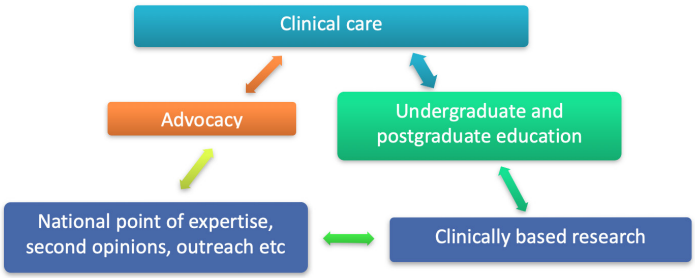

Figure A1: The roles of the paediatric liaison team

Effective Interagency Working: Psychological medicine services do not exist in a vacuum.
Currently three liaison teams exist, and a new team has recently been recruited in Cork. Currently, CAMHS teams have approximately 50 per cent of the staffing recommended by AVFC. They have limited crisis provision, day hospital services remain underdeveloped, with only four day hospitals in operation compared with the AVFC recommendation of fifteen (based on census changes). Due to both staffing shortages and physical infrastructure (inadequate beds), access to inpatient beds can be extremely limited, resulting in care occurring in inappropriate paediatric settings. There are very limited services for children with intellectual disability in many parts of the country. This is currently a challenging environment for the existing liaison services, particularly given the absence of crisis teams, assertive outreach teams and emergency care pathways.

Child and Adolescent Mental Health Services	Recommended
Community Child and Adolescent MHTs	77
Adolescent Day Hospital Teams	15
Hospital Liaison MHTs	15
National Eating Disorder MHT	8
National Forensic MHTs	2
Substance Misuse MHTs	4
Intellectual Disability MHTs	15
Total	**129**

Table A1: A Vision for Change recommendations for mental health services for children and adolescents

In order to respond comprehensively to the needs of children, interagency or multi-agency working by liaison services, CAMHS, AMHS, involving not just primary and social care but also the child and family agencies (for example, Tusla), educational and judicial services are vital, as are general health services at primary care and secondary care level. There is an urgent need to provide increased community services for children with social care needs, including 'out-of-hours' services.

Areas for development in Ireland

- There is an urgent need for the provision of the fifteen paediatric liaison psychiatry teams nationally as envisaged in A Vision for Change. CAMHS, ID and related services are also under-supported at present.
- Existing teams require additional resourcing for increasing demands, in particular to increase staffing levels in line with A Vision for Change recommendations.
- Local service level agreements will have a valuable role in supporting arrangements for the assessment of emergency presentations.
- Resourcing and standardisation of emergency psychiatry and on-call provision to children aged under 16 years, not to mention development of services for those aged 16–17 year-olds requires urgent attention.
- Transition planning: Within the defined mental health services as a whole, it is recognised that there can be difficulties in ensuring a smooth transition between paediatric and adult medical (and related mental health) services.
- Recognition of the role of liaison services in advocacy, education and research, with resourcing of these roles, currently treated as a 'grace and favour' role.
- Liaison teams across Ireland in adult and child services also lead initiative such as Schwartz Rounds and Balint reflective practice groups, promoting psychological care and mental health across the hospital.
- In designing services, attending to physical supports; including such issues as:
    - Rooms in ED – suitable for purpose?
    - Acute risk, safety issues around A&E settings. Safety issues.
    - Re-presentations/older children from the inpatient unit?
    - De-escalation training of staff in MH and in A&E, hospital wide approaches to delirium etc.
    - Treatment versus office space.
    - Basics like printing, dictating, typing, administration support, stationery, computer access data, IT interface, IT needs.
    - Accessing records – who can access, when and where? Electronic records?
    - Links with other IT services like CAMHS services, NIDD, hospital systems, ED systems (which can link with organisations like TUSLA).
    - Data protection issues.
    - Outcomes – clinician outcome measures, child and family outcome measures.

Referral pathways

Paediatric liaison psychiatry teams can be designed in flexible ways, and this is reflected in current services in Ireland, and indeed internationally. In some services, teams offer support to inpatients in paediatric beds. Other services offer outpatient work. In some services, emergent referrals are supported – whereas in others, this work is undertaken by CAMHS services. This is very much determined by local funding of provision of services. Some teams can offer a broad range of multi-disciplinary intervention, while others have nursing and psychiatry team members. Some offer out of hours, others do not. This is in part dependent on local resourcing. Generally, there is a need for support for a range of referrals, with some more specialist inputs required.

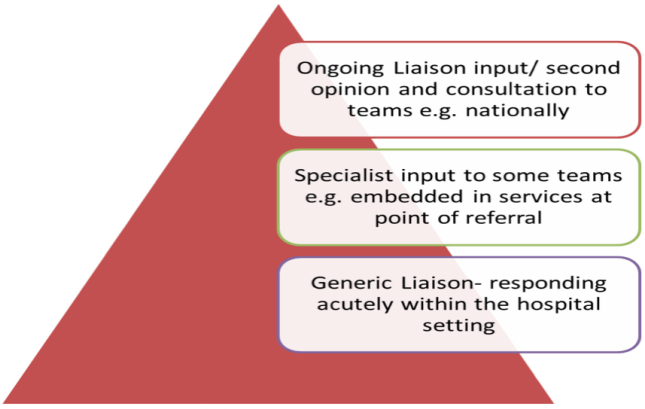

Figure A2: Roles of Paediatric Liaison Psychiatry Teams

Some examples of particular presentations benefitting from input from a paediatric liaison psychiatry service include:

- Mental and physical co-morbidity – supporting children who experience mental health disorders in the context of physical illness.
- The evaluation of children and adolescents who are having difficulties adhering to their medical treatment regimen, along with support around treatment issues like concordance, transplant and end of life care.
- Where young people experience co-morbid mental illnesses such as depression, psychosis and post-traumatic stress disorder.
- Mental health issues due to chronic or long-term illness or which are treatment-induced.
- Psychosomatic diagnostic problems in children admitted primarily with physical symptoms but which, on assessment, have mainly psychological or social causation.
- Evaluation and treatment of eating and feeding disorders.
- Neuropsychiatric disorders such as movement/tic disorders, behavioural difficulties in the context of epilepsy or metabolic disorder and many others.
- Emergency psychiatry: Support for self-harm and children presenting with suicidal ideation or mental health disorders as an emergency.

Reflecting the range of referral sources, the assessment and service delivery may occur across a range of settings within the acute paediatric hospital. These include:

- Outpatient clinics: referrals come from outpatient medical and surgical hospital teams requiring assessment or follow-up of young people with mental health struggles in the context of physical illness. This service may also be needed by those discharged from an inpatient stay. Examples might include young people with diabetes, CF and a range of long-term illnesses.
- Inpatient wards: referrals come from medical and surgical teams, and where the child is too unwell to leave the ward, the assessment is carried out by the bedside or in an appropriate room on the ward.
- Short-term stabilisation of children with acute psychiatric presentations and at high risk, like suicidal children and children with acute onset of psychosis, while awaiting admission to a CAMHS specialist bed or medically unwell young people with eating disorders. There may also be a role in supporting referrals from other services requesting second opinions – for example from other CAMHS consultants specifically for eating disorders, neuropsychiatry and other conditions.
- The Emergency Department: responsive acute liaison support may be required and the assessment is best managed in a safe, quiet room away from the busy section, but also ensures safety for the child, family and clinical staff.

Liaison psychiatry for the new Children's Hospital

Consultants from the three existing hospitals have been meeting regularly since 2015 to look at best practice and models of care. We engage with several international psychological medicine networks. The model of care in paediatric liaison psychiatry is primarily to support the mental health needs of paediatric patients attending inpatient and outpatient services at the new hospital currently under construction. In line with other psychological medicine services, with A Vision for Change, and with international best practice, the paediatric liaison team should be consultant-led and multidisciplinary, and this is agreed across all stakeholders.

Several extant award-winning initiatives have been recognised that allow cross-hospital collaboration presently. Examples include HSE national recognition of the Eating Disorder Cross Hospital Group, Hospital Professional Awards recognition of the Schwartz rounds teams in 2018 and the Liaison Team at Temple Street in 2019, introduction of intake proforma/routine measures, SPACE Programme open to all referrers, Specialist 22q11 clinic, EDMHT team of the year 2017 at Temple Street, summer research projects across three hospitals, cross hospital guideline on de-escalation that are examples of good practice across the existing services.

Road-mapping exercises undertaken across Dublin in 2015 and 2016 highlighted inpatient, outpatient and ongoing care roles, emergency care and national roles in both clinical care and associated national roles in teaching (undergraduate and postgraduate), national SR and SPR training in paediatrics and psychiatry, clinically-based research and patient-oriented research.

A vision for the Department of Psychological Medicine at Children's Health Ireland
As our three liaison services merge, our vision is to provide a psychological medicine service for young people attending the National Paediatric Hospital. This national service will provide expertise and will be a leading national and international service, capable of being benchmarked alongside other leading international paediatric psychological medicine services.

This will be a child and carer-centred service, encompassing a depth of assessment (to build strong roots and engage with families) and responsive care at the right time, in the right place and offering the right (evidenced) treatment. We will develop supports for sub-specialist work and strong branches to support outreach, inreach, community services, education and

training. We will seek to promote parity of esteem and mental health across the hospital.

Multidisciplinary teamwork: psychological medicine services in the new paediatric hospital will be multi-disciplinary, with input from psychiatry, mental health nursing, psychology, social work, occupational therapy, speech and language therapy and dietetics. We will need to develop a shared multidisciplinary vision.

Emergency psychiatry for children and adolescents

Suicide is the second commonest cause of death in young people, and self-harm is one of the strongest predictors of suicide (Ougrin et al., 2012, Carroll et al., 2016). Internationally, there is an evident increasing rate of emergency presentations to child and adolescent emergency departments. Ireland has not met this need or addressed it as yet with the development of alternative pathways, as is happening elsewhere (Pittsenbarger and Mannix, 2014, Mapelli et al., 2015).

These findings are also reflected in the NSRF recorded data for 2016

- Average rate of self-harm (SH) among 10–24 year olds: 318 per 100,000. Peak rates were observed in 15–19 year-old females (546 per 100,000) and 20–24 year-old males (448 per 100,000).
- Between 2007 and 2016, rates of self-harm increased by 22 per cent.
- Increases observed in: females and those around 10–14 years; the use of highly lethal methods for SH. Onset of SH is arising at a younger age (Griffin et al., 2018).

Case example:
Temple Street Children's University Hospital (TSCUH) is a tertiary paediatric hospital in Dublin, having over 50,000 attendances annually. Currently, TSCUH has an on-site multi-disciplinary paediatric mental health liaison team providing crisis consultation when requested by the treating ED paediatrician between the hours of 09.00–17.00, Monday–Friday. Outside of these hours an off-site on-call service is provided by a psychiatric registrar and consultant child and adolescent psychiatrist. There is no other crisis psychiatry support available in the region at night (Fitzgerald et al., 2020).

The number of mental health presentations increased from 69 in 2006 to a peak of 432 in 2016, a 526% increase (see Figure A3). During this same period, the total ED attendance increased from 48,742 in 2006 to a peak of 52,287 in 2016, representing a 7% increase (Fitzgerald et al., 2020).

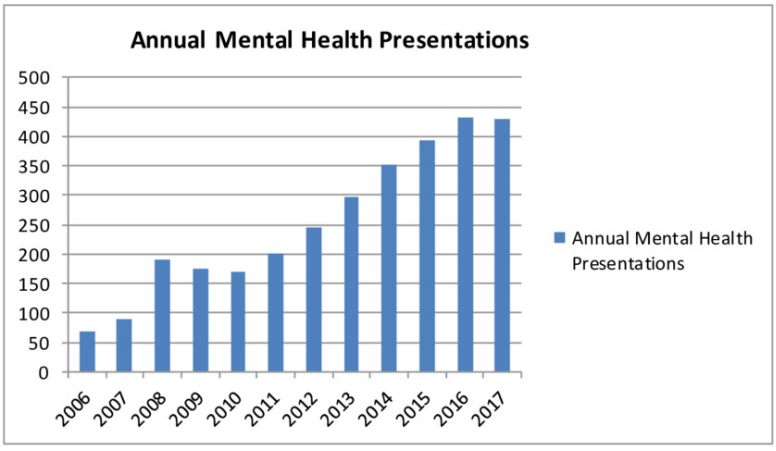

Figure A3: Annual Mental Health presentations to CHI Temple Street (Fitzgerald et al., 2020).

Analysing the breakdown of mental health presentations over one year, the most common presenting issue was suicidal ideation (34.7 per cent), followed by self-harm (31 per cent). Other presentations included eating disorders, behavioural disturbance, depression, anxiety disorders and psychotic episodes. The admission rate to a paediatric bed for acute support for this cohort during this period was 33.3 per cent (Fitzgerald et al., 2020).

There are also important roles for paediatric liaison teams in teaching and training for EDs. Given that paediatric ED staff are often rotating through posts and may not have received formal training in the practical management of mental health presentations, the above figures highlight the hugely important role that the out-of-hours specialist psychiatric cover provides. Their input undoubtedly helps to signpost and support referral to local services and avoid unnecessary admissions, which may ultimately be unhelpful to young people and families. This interaction with the psychiatry team also provides training and opportunities for learning for ED staff in managing these presentations. It has been recognised in the UK that paediatric trainees should develop basic skills in managing mental health presentations as part of their training. It has also been suggested that closer working relationships between paediatric and mental health services will help to further reduce the stigma associated with mental illness. Secondly, an Australian study has highlighted several factors that improve patient experience during this challenging time. In particular they noted that the availability of staff with psychiatric qualifications and experience in dealing with mental illness correlated with higher levels of patient satisfaction (Starling et al., 2006).

There remains a significant shortage of resources available to community-based paediatric mental health services, likely contributing to the increased emergency department attendances. While the emergency department plays a valuable role in managing certain crisis presentations, it is not the best place for all young people. In such cases it would be preferable to have timely access to community-based services, providing care in the right place, at the right time, and by the right person. Thus many children with mental health concerns present for the first time to the emergency department, and this interface provides an opportunity for the paediatric and psychiatry specialties to work together to provide early intervention services and optimise patient care. Gill et al show that up to half of children and youths presenting to the emergency department with mental health presentations have no previous psychiatric history and no contact with mental health services (Starling et al., 2006, Gill et al., 2017).

This highlights the need to manage these presentations effectively if successful outcomes are to be achieved, given that patients and their families are likely to be more receptive to engagement at this time of crisis. Given the dramatic increase in the number of children presenting with mental health complaints, it is clear that carefully designed and integrated management strategies and additional resources will be required to pro-actively tackle this growing epidemic. Teaching and training strategies, national approaches to supporting expertise and the collaborative work to develop supports for carers is likely to be crucial (Ougrin et al., 2012). This has similarly been noted in Ireland (Power et al., 2009, Byrne et al., 2008).

Appendix 3

INTEGRATED CARE

Innovative models of integrated mind-body care

Internationally, there are a number of key examples of embedded mental health services in physical healthcare teams. TEAMcare is a novel initiative that was developed by Wayne Katon and colleagues in Seattle. They devised a treatment programme for patients who had co-morbid depression, along with diabetes or heart failure. This programme was delivered in primary care, primarily by a mental health nurse who provided psychological therapies, mainly based on a cognitive behaviour therapy model. This nurse had access to a psychiatrist if psychotropic medications were required, and the primary care physician provided the cardiac and diabetes care. This service model was found to be effective both clinically and in terms of cost effectiveness (Katon et al., 2010, Katon et al., 2012). A number of papers from this group have demonstrated that integrating mental and physical healthcare in this way is successful for both the patients' health and the efficiency of the healthcare organisation.

Similarly, in south London, Khalida Ismail and her group have delivered a number of complex interventions in both research and clinical settings, demonstrating that integrating diabetes and mental healthcare can significantly improve mental health and physical health outcomes (Ismail et al., 2019, Ismail et al., 2010, Doherty et al., 2016).

A systematic review of collaborative care by Atlantis concluded that collaborative care significantly improved depression and glycaemic control in individuals with diabetes and depression. However, the overall weighted mean difference was small, the meaning of collaborative care varied widely and most studies had limited generalisability outside the United States (Atlantis et al., 2014). A clustered randomised control trial of collaborative care in a UK primary care setting found a modest improvement in depressive symptoms at four months, but did not examine glycaemic control or any physical health outcomes (Coventry et al., 2015). Subsequent analysis showed that it was a cost-effective intervention, based on improvements in quality of life (QALY) (Camacho et al., 2016).

Similar models of care have been implemented in Sweden and in the UK for older patients with depression, alongside physical multimorbidity, and these models are acceptable to the patients and practical to implement (Sharpe et al., 2024, Af Winklerfelt Hammarberg et al., 2022).

Appendix 4

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