The rise of liaison psychiatry: challenges and implications for sustainability

Liaison or general hospital psychiatry is experiencing unprecedented expansion in the UK. A liaison psychiatry team in a typical general hospital may deliver savings of up to £5 million a year. However, liaison psychiatry faces challenges associated with this pace of change, with consequences for its long-term sustainability.

Liaison psychiatry, the mental health care of persons attending general hospital services, is currently experiencing a period of unprecedented expansion in the UK (NHS Confederation, 2009; Plumridge, 2012; Royal College of Psychiatrists, 2015) but is this bubble likely to burst? This expansion has not been as a result of the benefits that accrue to acute services and patients when the mental health of these patients are optimized, for liaison psychiatry has existed in the UK since the 1980s (Lloyd, 2001). Its recent, rapid expansion may be attributed mainly to cost savings required by acute hospital services at a time of reduced financial resources.

Mental disorders are estimated to account for around 5% of accident and emergency attendances, 30% of acute inpatient bed occupancy and 30% of acute readmissions (Joint Commissioning Panel for Mental Health, 2013; Royal College of Psychiatrists, 2013). Between 150 000 and 170 000 accident and emergency attendances per year in England are attributable to self-harm (Yeo, 1993). Medically unexplained symptoms are thought to account for up to 50% of acute hospital outpatient activity (Reid et al, 2001) while 13–20% of all hospital admissions and up to 30% of hospital emergency admissions at weekends are related to alcohol consumption (Fernandes, 2011).

Using depression as just one example, compared with healthy people the risk of developing depression is estimated to be twice as high for people with diabetes, hypertension, coronary artery disease and heart failure, and three times as high in those with stroke, end-stage renal failure and chronic obstructive pulmonary disease (Egede, 2007; Joint Commissioning Panel for Mental Health, 2013). It is more than seven times more common among people with two or more chronic physical illness (Moussavi et al, 2007).One in five people with newly diagnosed cancer or first hospitalisation with a heart attack will develop depression or anxiety within 1 year (Burgess et al, 2005). In most cases, mental health conditions co-existing in patients with physical illness are not treated while patients are in hospital (NHS Confederation, 2009). Two thirds of hospital beds are occupied by older persons, up to 60% of whom have or will develop a mental disorder during their period of admission (NHS Confederation, 2009).

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Many types of patients may benefit from liaison psychiatry services being present in an accident and emergency department. They include:

- Persons who self-harm and/or are experiencing suicidal feelings
- Persons with physical and psychological consequences of alcohol and substance misuse
- Elderly persons with possible diagnoses of delirium, depression and/or dementia
- Persons with known severe mental illness possibly in relapse
- Persons admitted with medically unexplained physical symptoms
- People who attend the emergency department frequently and other vulnerable groups such as homeless people
- People with severe personality disorders
- People who may be subject to domestic violence and abuse
- Children and young people at risk (Aitken et al, 2014).

While the usefulness of treating comorbid mental and physical illnesses was intuitive, actual evidence of its effectiveness was slow to build. Most of these were anecdotal, based on lower hierarchical evidence as audits, surveys, studied limited numbers of sites (Kewley and Bolton, 2006; Lyne et al, 2009; Anderson et al, 2011; Gillies et al, 2015; Naidu et al, 2015; Aitken et al, 2016) and did not demonstrate economic impact. These may have been for reasons such as the complex nature of liaison interventions, small numbers of services, diverse nature of services and the limited research funding available at the time.

Dr Itoro Udo is Consultant Psychiatrist (Locum), Exeter and East Devon Community Mental Health Team, Exeter EX2 5AF

Dr Foluke Odeyale is Specialist Registrar in Older Persons' Mental Health Liaison, Queen Alexandra Hospital, Cosham, Portsmouth

Dr Amanda Gash is Consultant Liaison Psychiatrist, Darlington Memorial Hospital, Darlington

Mr Matt Fossey is Senior Associate in the Centre for Mental Health, London

Correspondence to: Dr I Udo (dr_itoro@yahoo.com)

The primary setting where cost savings were evidenced was in the Rapid Access Interface Discharge (RAID) model of liaison psychiatry at City Hospital, Birmingham (Tadros et al, 2013). The RAID model differs from previous models in that it offers a single point of contact for all mental health concerns and referrals from acute services, and it is proactive rather than reactive in its approach, offering 24-hour 7-day services. The staffing level is also much higher than previously obtainable in liaison psychiatry, consisting of old age, adult and addiction psychiatrists as well as specialist psychologists, nurses and occupational therapists. The economic evaluation of this model showed that a saving of £4 may be obtained for every £1 that was invested (Parsonage and Fossey, 2011). In City Hospital, which had 600 beds, the total saving in bed days through reducing length of stay and readmissions was 43–64 beds per day. The majority of bed savings were in the elderly care wards and the analysis did not include the impact of liaison psychiatry in the emergency department. Qualitative and quantitative improvements in patient care and outcomes were also demonstrated (Tadros et al, 2013). It is estimated that a liaison psychiatry service delivering interventions for comorbid physical and mental health conditions, in a typical general hospital of about 500 beds, could generate savings of up to £5 million a year. This is not just from saving bed days, but includes interventions for mental health conditions in long-term physical illness, medically unexplained illness interventions, and interventions for persons with depression, delirium and dementia (Parsonage et al, 2012).

Following independent evaluation by the Centre for Mental Health and dissemination of findings (NHS Confederation, 2011; Parsonage and Fossey, 2011), the task of scaling up liaison psychiatry has begun and more liaison services have been rapidly set up where none existed, or existing teams have been expanded. Expansion of existing teams included circumstances where pre-existing adult and old age teams have been merged to offer a single point of access. Most cases of expansion have been provisional, dependent upon evidence of cost savings.

This article articulates the changes and challenges that these teams have experienced and discusses the implications for the future of liaison psychiatry and acute services.

Rapid expansion

In most places, expansion has been very quick and recruitment of adequately skilled staff has not kept pace. Liaison psychiatry is highly specialized and specialists are required to have a special endorsement from the General Medical Council (2015). Specialized staff are needed to deliver high quality, often complex interventions across mental and physical health services. Some of the skills needed include:

- Understanding physical and mental ill health and how they interact
- Suicide risk assessment and prevention
- Recognition and management of delirium and dementia
- Understanding the complex relationship between mental illness and long-term physical health conditions in each physiological system
- Medically unexplained symptoms and distress
- Understanding how the mental health legislature operates in acute settings
- Complex mental capacity issues
- Availability of community mental health and social care services.

In the original RAID model, the specialists were highly experienced, worked flexibly across specialisms and together as a good team. Newer services have not always had these three ingredients. Working flexibly, in this context, may be akin to asking cardiologists to cross cover nephrology because both are subspecialties of medicine. Commenting on this challenge, liaison psychiatry staff have remarked that ‘I don’t believe that the team attracts the right standard of elderly nurses as they are reluctant to apply due to working with adults’ (Rowett and Sanderson, 2016).

Some new teams have consisted of the right level of experienced or number of skilled professionals but have not worked across specialisms or pulled as a team. Some have worked as a team, worked flexibly but have not had an adequate skill mix. The dilution of skill mix and/or level of experience needed is the most common adaptation of the RAID model. At times, this has simply been the result of a shortage of skilled staff: ‘169 A&E departments had a shortage of 1,270 trained nurses to support the delivery of liaison psychiatry, while 153 departments had a shortage of 230 trained consultants’ (Lintern, 2015). At other times, the dilution has been the result of limited availability of financial resources – the Royal Stoke University Hospital, an acute trust, was ‘ordered’ to remedy shortages of liaison psychiatric staff in its emergency department and funding was produced to make this happen (The Sentinel, 2015).

The dilution of the RAID model inevitably creates a situation in which available staff eventually become stretched by the number of cases or challenged by their complexity, such that staff retention becomes a problem. Discussing the implications of his second annual survey of liaison psychiatry in England at the Annual Liaison Psychiatry Faculty Conference in 2015, Dr William Lee, Reader in Psychiatric Epidemiology, Plymouth University, noted that ‘the rate of change of staff, location, roles, names, is huge’ and that ‘there is more liaison psychiatry but certain services are under attack’. Discussing the staff shortage, he observed that ‘there are about half as many WTE [whole time equivalent] doctors as we need, which is progress. The situation is a bit worse for nurses’. Dr Alex Thomson, Consultant Liaison Psychiatrist at Northwick Park Hospital, London has commented that: ‘my biggest concern at the moment is that the expansion won’t be backed up by the staffing we need. The danger is we have a national rollout which isn’t fully resourced and we find we can’t meet expectations and the whole thing collapses’

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(Lintern, 2015). The lived experience of a RAID modelled service has been that there is 'difficulty in recruiting and retaining staff' and there is a 'constant turnover of new staff whom need inducting' (Rowett and Sanderson, 2016). Also, it has been commented that it is 'important to ensure the service has everything in place and be clear about what can be delivered, otherwise not sustainable' (Minghella, 2013).

Some services such as that in East Kent have had to unexpectedly reduce operational hours because of staffing difficulties (BBC News, 2015; Care Quality Commission, 2015). Some services have advertised repeatedly for new staff, without success. In some newer teams, psychiatrists and psychologists have kept to their specialisms while nurses have worked across specialisms with the practical result that resentment occurs and team dynamics are affected.

Because most liaison psychiatry teams operate in emergency departments as a primary focus, they are exposed first hand to winter pressures in the use of services, creating potential for sicknesses, burnout or exhaustion among staff, including reducing supervision times. North Devon's liaison psychiatry report identified that 'the service has run with more limited staff during this first year due to some vacancies, sickness and time taken to recruit' (Burgess and Hickson, 2012).

Training challenges

There is an educational challenge in getting professionals including psychiatrists who trained in one subspecialty to work effectively in another, not least because the previous curriculum for advanced training in liaison psychiatry, from which most liaison psychiatrists were trained, was developed from that for adult liaison psychiatry, not from both adult and old age liaison psychiatry. This meant that the competencies for old age liaison psychiatry were embedded in the curriculum of old age psychiatry. In other words, it was possible to become a liaison psychiatrist and not have the skills to manage patients with advanced dementia. This anomaly was recognized in the UK as well as other countries (Wand et al, 2015). It has only been recently corrected, in March 2016, by the Royal College of Psychiatrists and the General Medical Council via the development of a new curriculum in liaison psychiatry (Royal College of Psychiatrists, 2016a) and also by opening liaison psychiatry endorsement to old age psychiatry trainees (Royal College of Psychiatrists, 2016b). There is also a legal impediment to providing care or advice in a subspecialty for which one is not licensed to do. People, including health-care professionals, often do not recognize just how specialized psychiatry now is.

There are not enough liaison psychiatrists in the NHS. It is estimated that there are about 200 in NHS England and this number needs to double (Barrett et al, 2015). It takes one liaison psychiatrist to train another and 1 year in a substantive consultant liaison psychiatrist position is required to become accredited to train higher specialty trainees. Nevertheless, new liaison services need to be adequately staffed with suitably skilled and qualified psychiatrists and nurses. The training element has not kept pace with the very welcome expansion of liaison services and as a consequence what was feared is now unravelling: that hard-pressed managers will fill vacancies with general psychiatrists who do not have all the requisite skill sets. As a result, liaison psychiatry services are at risk of never realizing their full potential.

> “Liaison psychiatry services are at risk of never realizing their full potential.”

In order to align with the needs of the NHS and in conjunction with Health Education England, credentialing is now being piloted in liaison psychiatry for consultants who already have a specialist qualification in general or old age psychiatry and who wish to work in a liaison psychiatry service as a liaison psychiatrist (Royal College of Psychiatrists, 2016c).

Skill drain and work hours

Where newer services have been set up from pre-existing ones, they have tended to be commissioned to provide a 24-hour 7-day service from a 9am–5pm 5-day service. This change has not always been unequivocally accepted by staff affected by the change. Experienced staff, struggling with the demands placed on their home lives and other interests and arrangements, have left liaison services. They took with them their practical knowledge of some complex patients and rapport built over years with acute wards, services and staff. These experienced staff have not always been easy to replace, with the result that patients may lose out. This was the practical experience of the authors working in Teesside Liaison Psychiatry, where no staff from the former North Tees Old Age Liaison team remained following the expansion into a RAID-modelled liaison psychiatry service.

Owing to the ready availability of liaison psychiatry services in some emergency departments, some have become default mental health crisis services out of hours, with patients choosing to present there or being directed to present there by stretched crisis teams or community mental health teams. In some areas like Liverpool, the operation times of crisis teams out of hours were cut back, with the result that mental health emergencies in the community are routed to liaison psychiatry in emergency departments. This draws resources and support away from hospital wards and other acute services like specialist clinics. Dr Peter Aitken, Chair of Liaison Psychiatry Faculty at the Royal College of Psychiatrists, has called for increased overall investment in mental health, warning that withdrawal of funding from other aspects of mental health care to fund accident and emergency liaison might yield short-term gains but would disadvantage patients and the health service in the longer term (Lintern, 2015).

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Impact on other mental health services

There were fears that increased identification of mental disorders or illnesses in acute settings and the subsequent requirement for management and treatment was likely to result in unplanned increases in referrals to community mental health services, with implications for workloads. Community mental health services are already experiencing unprecedented demand on their services (The King's Fund, 2015). In the original RAID evaluation, this was not found to be the case, but referrals back to primary care were increased (Parsonage and Fossey, 2011). This was thought to be a peculiar local effect of skill and experience which may not occur in other settings. About half of persons attending acute services are thought to have mental health needs which are often unrecognized (Parsonage et al, 2012); where mental health needs are prioritised and mental health professionals are available immediately, these needs are more likely to be recognized and met. The original RAID model screened all admissions to acute medical units for depression and substance misuse, thus increasing recognition. Liaison services are setting up other services, e.g. a delirium follow-up clinic to bridge the waiting times to memory services in Teesside, and a self-harm follow-up clinic in Newham, east London, to reduce waiting times to community mental health services or specialized services in primary care.

A review of liaison psychiatry services in south west England showed variations in team compositions and operational hours (Minghella, 2013). Only one of eight services operated 24 hours 7 days a week. Referrals to liaison services out of operational hours were being picked up by crisis teams or on-call junior doctors. For crisis teams, these patients, commonly viewed as being in a safe place, may be accorded less priority. This may lead to longer waiting times and reduced quality of patient experience. This altered or increased workload contributes to ill feelings towards liaison psychiatry services.

Challenge of implementing successful pilots

Many health-care pilots fail to translate into sustainable projects and, where they do, the time lag from innovation to widespread use can be long, averaging 17 years (Laja, 2011; Morris et al, 2011). The process by which deliberate efforts are made to increase the impact of health-care innovations tested in pilot or experimental projects, to benefit more people and to foster policy and programme development on a long-term basis, is called scaling up. Pilots fail to be successfully scaled up for various reasons, including the characteristics of the specific service being scaled up, characteristics of the implementers, the chosen delivery strategy, characteristics of the 'adopting' community, the sociopolitical context in which scaling up is taking place and the research context (Evashwick and Ory, 2003; Yamey, 2011).

Scaling up a service is more likely to be successful if its interventions are simple, scientifically robust and technically sound. Implementers need to exhibit strong leadership and governance as well as engage with stakeholders (Yamey, 2011). Innovations show faster diffusion if they address the needs of the adopter, are compatible with the belief systems of the adopter, can be simply applied and trialled by the adopter and where the adopter has the opportunity to observe the innovation and its results (Rogers, 1995). Innovations may be cascaded or phased into local environments, and can be integrated into existing health systems. They could be tailored to local situations or decentralized in delivery (Yamey, 2011).

In similar ways, the adopting community, including its patient population, needs to be engaged or interested in the intervention. Where there is a political will and national policies to back a project, scale up is more likely to be successful. Simmons and Shiffman (2007) state that successful scale up 'requires the systematic use of evidence to guide the process and incorporate new learning'. It is thought that results are better when these occur at the same time, facilitating 'learning and doing' (Peters et al, 2009).

Not every acute service has a liaison psychiatry service, even in London (Naidu et al, 2015). There has been unrelenting political will and an expanding evidence base that has created the context for scaling up liaison psychiatry services (Parsonage and Fossey, 2011; Plumridge, 2012; Royal College of Psychiatrists, 2013; NHS England, 2014). Other factors involved are shown in *Table 1*. Their relationships are likely to be complex and possibly dynamic.

Data collection and analysis, optimizing service design to local needs and embedding the service within acute trusts are the three key characteristics to delivering a good UK liaison psychiatry service. The demands placed upon services to demonstrate early economic impact distract from the true value of the service in that liaison psychiatry should be integral and complementary to existing services in acute hospitals. Understanding the true economic value of a liaison psychiatry service would require a complicated experimental design, something that is outside of the experience and financial envelope of most services.

State of evidence on economic gain

There is limited evidence that liaison psychiatry has an economic impact. A systematic review criticized the poor quality and methodological flaws within the existing literature, concluding that more high quality research is needed to answer this fundamental question (Wood and Wand, 2014). Efforts have been made to address the lack of good data that are collected by liaison psychiatry services (Fossey and Parsonage, 2014) and this approach has been endorsed by the Royal College of Psychiatry. However, it is very difficult to audit the quality and accuracy of data collection across NHS organizations. In an attempt to, in part, address this deficit, the National Institute for Health Research has commissioned the University of Leeds to lead on a major research programme, LP-MAESTRO, to examine the complexity and variety of liaison psychiatry services across the NHS in England. This project is due to report over the next 2 years. This builds on the earlier work of Parsonage et al (2012) which considered the characteristics of five liaison psychiatry services in England.

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Table 1. Interplay of factors affecting the scale up of liaison psychiatry services in the UK		
Factors	**Favourable for successful scale up**	**Against successful scale up**
Characteristics of liaison psychiatry services	The RAID model has simplified stakeholders' understanding of liaison psychiatry services	Liaison psychiatry interventions were regarded as complex
		Liaison psychiatry services were considered to be good to have, but not essential
Characteristics of implementers	Some clinical commissioning groups have implemented government policy and given due regard to parity of esteem	Some clinical commissioning groups have still not prioritised mental health spending
		Varied sources of funding for existing services
		Non-recurrent funding and pressure to justify investment and evidence immediate cost savings
Chosen delivery strategy	Some services have expanded on the back of pre-existing services and resources	Integrated care is still not the norm in the NHS
	Most liaison teams have prioritised service to emergency departments	
Characteristics of adopting communities	Support from acute specialities and acute services, advocating and contending for liaison psychiatry presence	Liaison psychiatry patients are primarily users of another service (acute services). They tend to be vulnerable people or from groups with limited use of advocacy
	Successful embedding of liaison psychiatry services within acute trusts	Attitudes of acute services, such as where there is a negative perception of the usefulness of liaison psychiatry
Sociopolitical context	Need to deliver Quality, Innovation, Productivity and Prevention (QIPP) initiative while delivering efficiency savings – liaison psychiatry is a good example of how this may be achieved	In practice, parity of esteem in funding of services yet to be realized
	Impetus within Department of Health and Health Education England to expand liaison psychiatry services	
Research context	More evidence showing moderate to high benefits to acute services, patients and the health economy, from liaison services	Benefits and savings tend to accrue over time whereas there is a need for immediate and short-term gains or benefits
		Many liaison interventions are complex and expensive to study

Conclusions

Liaison psychiatry services are experiencing rapid expansion in the UK, largely as a result of evidenced cost savings from the RAID model. Staffing, skill mix, flexible working, changes in other mental health services and the sheer rate of change and expansion are affecting these services. Not all liaison psychiatry services are adapting well to new models and not all services are created equal. The challenge for liaison psychiatry services is to train their staff to deliver complex interventions and retain them while continuously demonstrating cost savings. Acute services are likely to experience undulating patterns of support from liaison psychiatry services for complex, difficult or risky situations and if well supported, could lead to long-term sustainability of benefits of liaison psychiatry services. A salient lesson can be taken from the 17th century polymath, Robert Hooke, who described the relationship between force and extension of a spring. If too much force is applied the spring will lose its elasticity. Let us hope that the liaison psychiatry system is not having too much force applied to it or there is a danger that it too will fail. **BJHM**

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KEY POINTS

- Liaison psychiatry is a subspecialty of psychiatry which is concerned with the management of mental disorders and illnesses in general medical settings.
- It is also called consultation-liaison psychiatry or psychological medicine in the UK.
- Liaison psychiatry is experiencing a period of rapid expansion in the UK. This follows cost savings demonstrated by the Rapid Access Interface Discharge (RAID) model of liaison psychiatry in which subspecialties of psychiatry are embedded into general hospital settings with a single point of access.
- This growth is associated with challenges which may affect the sustainability of liaison services, such as sheer pace of expansion, training issues, staff shortages, skill mix, extended work hours, non-recurrent funding and pressure to justify funding early on in the development of a service.

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