Should all community mental health teams be sectorised?

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Objectives. Sectorised catchment areas have characterised Irish mental health service delivery since the devolution of institutional care. Unlike other catchment areas, the Cluain Mhuire Community Mental Health Service (CMCMHS) never sectorised. With the development of Community Health Networks (CHNs) and Primary Care Centres, the CMCMHS has come under renewed pressure for structural change. We aimed to consider the implications of these proposed changes on staff and service users.

Method. We obtained demographic information comparing the CHNs with respect to attendee numbers, new referrals and admissions over a 1- year period. Secondly, we conducted an anonymous survey seeking opinions on the proposals to switch to a sector-based model and/or specialist inpatient care.

Results. Referral and admission rates differed across CHNs, broadly consistent with populations. About 36% of staff and 33% of service users supported changing to a sector-based system. In the event of a sector-based system of care being implemented, 66% of service users felt that existing service users should remain under the care of their current team. There was little support among any group for the development of specialist inpatient teams.

Conclusions. We discuss the benefits and drawbacks of sectorisation of mental health service provision. Most patients did not want to change teams either as current service users or as re-referrals (indicating it will take a significant time to transition to a sectorbased system). Without clear pathways towards integration with primary care teams, the advantages of sectorisation may not outweigh the challenges associated with its implementation.

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Introduction

The division of the population into sectors for the purpose of delivering community mental health services has been a cornerstone of mental health policy in Ireland over the past 50 years (Walsh & Daly, 2004). From the Commission of Inquiry on Mental Illness (1967) to Planning for the Future (Study Group on the Development of the Psychiatric Services, 1984) and A Vision for Change (Expert Group on Mental Health Policy, 2006), sectorised catchment areas have been seen as a key component of delivering an alternative to hospital-based mental health care. It was recommended that each sector would comprise a general population of 25-30 000 and would be served by a multidisciplinary team (Kelly, 2016). More recently, the Health Service Executive (HSE) has commenced reorganising primary care and community mental health services around Community Health Networks (CHNs) (Integrated Service Area Review Group, 2014). CHNs will deliver Primary Health Care Services across an average population of 50 000 and will consist of between 4 and 6 primary care teams based in Primary Care Centres (PCCs). It is envisaged that this will allow for better integration with other community services, including Community Mental Health services.

The Cluain Mhuire Community Mental Health Service (CMCMHS) has been in operation since 1972 and in 2018 provided general adult community mental health services to a catchment area population of approximately 195000 in the southeast of County Dublin (HSE, 2018). The service covers 4.5 CHNs: CHN 3, CHN 4 and CHN 5 and 50% of CHN2 (see Fig. 1 for respective populations). Unlike all other catchment areas in Ireland, the CMCMHS never sectorised. Instead a different way of allocating referrals was devised, based on the team that were on call during the week of the service user's initial referral. The reasons why the CMCMHS decided not to follow all other services into sectorisation are not documented. It is safe to assume that this decision related to the service being the only non-HSE community mental health service in Ireland, the catchment being predominantly urban and suburban as well as to the fact that all available clinical spaces were in a central location. CMCMHS's per-capita bed use has been consistently among the

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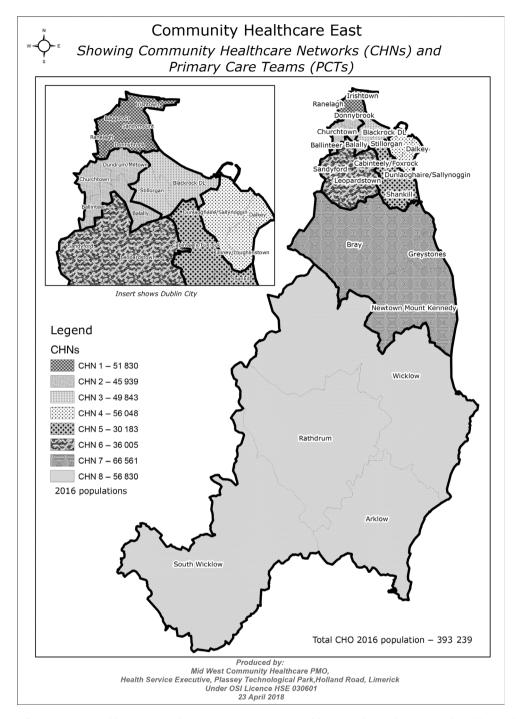


Fig. 1. Map of Community Healthcare East and respective Community Health Network Populations (produced by Health Service Executive, 2016).

lowest of community mental health services (36 acute hospital admissions per 100 000 per quarter compared to 77 per 100 000 and 72 per 100 000 per quarter in neighbouring Dublin South East Community Mental Health Services and Wicklow Community Mental Health Services, respectively; Health Research Board, Quarter 2 2019) (quarterly 3-month figures). This efficiency, despite the relative paucity of community staffing resources, has contributed to the maintenance of this centralised system over the intervening years (HSE, 2016). With the development of CHNs and PCCs, the CMCMHS has come under renewed pressure to move to a sector-based system, in line with all other services.

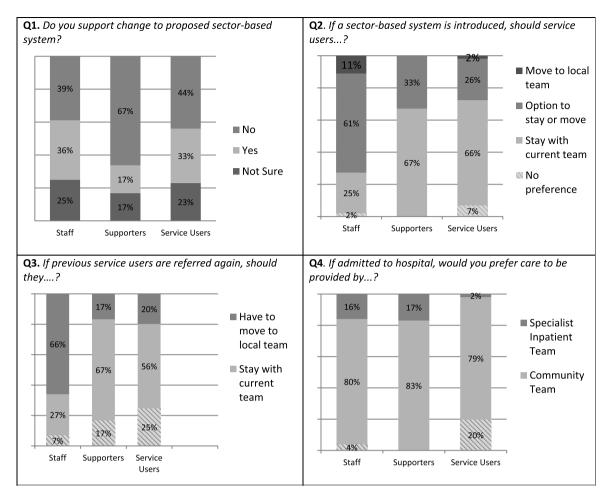


Fig. 2. Responses to anonymous survey regarding proposed changes to sectorised/specialist inpatient care by groups (staff, n = 44; supporters, n = 6; service users, n = 61).

The CMCMHS is unique among Irish publicly funded community mental health services in one other way: people needing inpatient care are admitted to a private psychiatric hospital, St John of God Hospital. The CMCMHS and St John of God Hospital are part of separate companies within the St John of God group and the CMCMHS is charged a daily rate for each admission, similar to that paid by insurance companies for private admissions. However, current arrangements facilitate the CMCMHS multidisciplinary teams to continue to provide clinical care, other than nursing and pharmacy, to their patients while in St John of God Hospital. As part of ongoing debates between the HSE, the CMCMHS and St John of God Hospital, it has been suggested that this arrangement should be changed to one where a specialist inpatient team would provide inpatient care.

We set out to consider the implications of these proposed changes. Firstly, we wanted to establish demographic, new referral, attendance and admission relativities for each of the CHNs within the CMCMHS catchment area. Secondly, we aimed to survey the opinions of service users, supporters and staff members with regard to the proposed changes.

Methods

Health Atlas was used to obtain demographic information with which to compare the various CHNs (Health Atlas Ireland, 2018). Business Intelligence software allowed us to obtain information from the service's electronic patient record, the Mental Health Information System, regarding the current patient numbers attending the service, new referrals and hospital admissions over a 1-year period up to June 2018 (St John of God Hospitaller Ministries, 2014).

Survey

We designed a simple anonymous survey seeking opinions and comments on the proposals to switch to a sector-based model and to having inpatient care provided by a specialist team (see survey questions detailed in Fig. 2). The survey was made available to patients and supporters attending outpatient appointments in Cluain Mhuire during May 2018. Staff members were alerted to the survey by email and invited to complete a hard copy and submit it anonymously. Each participant was provided with a written information sheet detailing the voluntary nature of the survey, purposes of the study, anonymity of data, storage of data and likelihood of publication. Participants signed a separate written consent form prior to participation in the study. Data were stored on a password protected, encrypted internal server maintained by the service IT department. We analysed data using SPSS version 21 (IBM Corp., 2013). We organised comments thematically. Ethical approval was granted by the Provincial Ethics Committee, St John of God Community Services.

Results

There were no important demographic differences between the populations of the 4.5 CHNs in the Cluain Mhuire catchment area. In each CHN, the population showed higher percentages than the national average of older people (except in Ballinteer/Stepaside/ Kilternan); below average levels of deprivation (range 2% of population classed as deprived in Blackrock/ Stillorgan to 14% deprived in Dun Laoghaire/Dalkey/ Loughlinstown) versus national average of 22.5% deprived; below average unemployment levels (range 2.4% in Blackrock/Stillorgan to 3.9% in Dun Laoghaire/ Dalkey/Loughlinstown) versus national average of 5.6% unemployed; above average third level education (range 29% in Dun Laoghaire/Dalkey/Loughlinstown to 40% in Blackrock/Stillorgan) versus national average of 18.5%; average numbers of non-nationals but fewer from Eastern Europe and below average numbers of travellers (range 0.1% in Blackrock/Stillorgan to 0.3% in Foxrock/ Carrickmines/Shankill) compared to a national average number of travellers of 0.7% of population.

We randomly sampled just over 10% of current service users (168/1583) on January 15th 2018, with regard to the CHN in which they were residing and the breakdown was broadly consistent with their respective populations. We also ascertained the CHN of each admission (307 in total) over a 1-year period from June 2017. There was a slightly higher than expected admission rate from CHN 3 (27% of admissions v. 25% of population, not statistically significant) but otherwise the percentages were consistent with the populations. CHN 3 and 4 accounted for a larger proportion of admissions (27% and 28%, respectively) compared to CHN 5 and 6 (11% and 13%, respectively), indicative of their larger populations. Finally, we looked at a consecutive sample of 200 new referrals from November 1st 2017 for the CHN in which they resided, excluding any non-catchment area referrals. The results showed a higher percentage of referrals than

expected in CHN 5 and 6, but again the difference was not statistically significant (22% of referrals v. 15% of population, and 20% of referrals v. 18% of population, respectively). CHN 4 accounted for a larger proportion of new referrals (27%) compared to other CHNs in the catchment area (range 11–20%).

Survey

Sixty-one service users responded out of approximately 300 that attended outpatient appointments in Cluain Mhuire during May 2018 (20%); of these 16 made at least one comment. Forty-four staff members returned the survey out of approximately 125 staff employed in May 2018 (35%); 28 of them made at least one comment. Only six supporters filled in the survey, one of whom made a comment. There were 64 comments in total.

The responses to the survey questions are displayed in Fig 2. Roughly, one-third of staff (n = 44) and service users (n = 61) support changing to a sector-based system (36% and 33%, respectively), whereas only 17% of supporters (n = 6) support sectorisation. Should a sector-based system of care be implemented, 66% of service users (n = 40) and 67% of supporters (n = 4) feel that existing service users should stay with their own team. In contrast, the majority of staff members (61%, n = 27) feel that existing service users should be given a choice to remain with their own team or move to the (new) local team. There is little support for the idea that existing service users should be forced to move to the local team if sectorisation were implemented (2% of service users, n = 1,0% of supporters and 11%, n = 5 of staff members surveyed). Again, most service users and supporters feel that if previous service users are referred again, they should stay with their current team (56%, n = 34% and 67%, n = 4, respectively), but the majority of staff feel the patients re-referred should have to move to the new sector team (66%, n = 29). There was very little support among any group for the development of specialist inpatient teams; this proposal was especially unpopular among service users [2% of service users (n = 1) v. 16% of staff (n = 7) and 17% of supporters (n = 1)].

Broad themes noted in respondents' comments included the importance of continuity of care, the challenges for both staff and patients associated with change, equitable resource distribution and the benefits of anonymity (i.e. current system allows for family members to be treated by separate teams). Examples of representative comments can be seen in Table 1.

Discussion

While sectorisation has many proponents, the policy has not been universally extolled. A polemic essay written after the introduction of sectorisation in Canadian

	Staff	Service user	Staff	Service user
	Negative comments		Positive comments	
Sectorisation	 'Would require more staff' 'Areas with greater socioeconomic deprivation would require increased resources' 'A model based on need rather than sectors is more sensible' 'When treating members of the same family, conflicts of interests can arise, particularly in safe-guarding situations' 'Current system works better, particularly in urban areas' 	 'I don't want to change Consultant/ team' 'It would be difficult to attend mental health services in the same place as my GP' 'Meeting my neighbours at appointments if the service is sector based would compromise my privacy' 	'There is a need to be truly community based as team to enhance local networks, increase social inclusion and better transitions between social, physical and mental health services' 'Important also for staff to have the opportunity to move team to reduce [their] commute'	'Should have the option to go back to their old team or to the team closest to their home if re-referred'
Specialist inpatient teams	'Disconnect between inpatient and outpatient teams' 'Reduced rapport' 'Fragmented care'	 'Seeing known Consultant [in inpatient setting] reduced my anxiety' 'Very important [to have] continuity of care from community to hospital and on discharge back to the community' 	 'Separate inpatient team promotes greater attention to inpatient needs and supports more thorough care planning' 'A specialised inpatient team based in SJOGH makes more sense' 	'As long as good communication between teams was present it would be ok'

Table 1. Representative comments by staff and service users in a survey regarding proposed changes to sectorised and/or specialist inpatient team models of care

mental health systems (Borgeat, 1994) details many unintended consequences of the transition to sectorised care: the isolation of psychiatry within the medical community, the hermetic microculture of the community mental health teams resulting in deeply embedded modes of action not necessarily aligned to best practice and the idea that community psychiatry is not conducive to the engagement in clinical research when compared to centralised care in an academic teaching centre. One of the peculiarities of the CMHT is that it becomes the only specialist in mental health in the area and therefore does not need to measure itself against other groups, which does not encourage a culture of reform (Borgeat, 1994). Indeed, not all psychiatric services are sectorised in Ireland; Old Age Psychiatry services and Intellectual Disability Psychiatry services are centralised and operate various methods of allocation of cases depending on clinical need/residential category (e.g. community v. residential care) or indeed by random allocation.

It is clear from our survey results that change to a sectorised system of care would be difficult for both staff and patients and may be a source of undue anxiety for patients whose main concern is continuity of care, as evidenced by two-thirds of service users stating a preference to remain with their own team even in the event of a change to a sector-based system. Sectorisation based on geographical boundaries also presents the potential for unfair distribution of resources given the disparate levels of disadvantage, referral rates and clinical needs evident across sectors, as highlighted by staff comments (see Table 1), whereas the current system lends itself to equality of workload. The current system is efficient in the face of low resources and poorly developed PCCs at this time in the area.

The advantages of sectorisation in the development of improved communication and integration between primary care teams and CMHTs are laid out in A Vision For Change (HSE 2006). Sectorisation along geographical boundaries not only allows for better coordination with other agencies (including primary care) but also affords improved knowledge and use of community resources, and promotes the development of agreed protocols with local police services and with other agencies (e.g. employment and housing) (Thornicroft et al., 1995). Given the plans to develop primary care teams and infrastructure in Community Healthcare East, it would seem an opportune moment to align mental health services with this process. It would also align with a uniform nationwide approach, contributing to equity of mental health service provision across the country. This is reflected in the HSE Community Healthcare East Operational Plan 2018 (HSE, 2018) which lays out plans to continue to work towards the alignment of all Community Mental

Health Teams with Primary Care CHNs. It is important to reflect that simple co-location of mental health and primary care services does not equate to integration (Sharpe & Naylor, 2016) and therefore, the ostensible benefits of sectorisation may be overstated in this regard, unless there are further efforts to meaningfully integrate services at a clinical level and case manage patients across primary care and CMHTs.

It is evident from our survey of catchment area demographics and activity that sectorisation along CHN boundaries will result in inequity of resource provision, given CHN 4 in particular has a higher rate of cases and admissions, which is reflective of the higher levels of deprivation in that area. Staff and patient responses indicated that one-third of our survey population were in favour of sectorisation in principle, but most patients did not want to change teams either as existing patients or following re-referral (indicating it will take a significant time to transition to a sector-based system).

There was very little support for the development of a specialist inpatient team. This tallies with a recent meta-analysis suggesting favourable outcomes for a continuity community-based service over specialist inpatient/outpatient care in terms of number of hospitalisations, length of stay, patient and staff preference (Omer et al., 2015). The results of our survey are also in agreement with another Irish survey (Khan et al., 2018) indicating that patients prefer a continuity model of care. Our study is limited by a potential response bias in both patients and staff, although this was mitigated by the anonymous nature of the survey. In addition, the suburban nature of the CMCMHT catchment area (with lower than average levels of deprivation and unemployment) may limit the generalisability of our findings to more rural catchments across Ireland, although there are several comparable catchment areas in suburban areas which could feasibly adopt a similar model.

Although sectorisation of mental health services has been adopted by all other community mental health teams in Ireland, this paper describes the advantages, challenges and drawbacks associated with its implementation. Without clear pathways towards integration with primary care teams, the advantages of sectorisation may not necessarily outweigh the challenges associated with its implementation for the delivery of patient-centred care.

Conflict of interest

The authors have no conflicts of interest to disclose.

Ethical standards

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committee on human experimentation with the Helsinki Declaration of 1975, as revised in 2008. The authors assert that ethical approval for publication of this study has been provided by their local Ethics Committee.

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References

- **Borgeat F** (1994). Some consequences of catchment area psychiatry: a stand against sectorization. *Revue Canadienne de Psychiatrie* **39**, 85–90. (article in French).
- **Commission of Inquiry on Mental Illness** (1967). *Report of the Commission of Inquiry on Mental Illness*. The Stationery Office: Dublin.
- Health Research Board (2019, Quarter 2). Community Health Organisation (CHO) 6 Performance Indicator Report, Dublin 2 (https://www.hrb.ie/data-collections-evidence/ psychiatric-admissions-and-discharges/latest-data/).
- **Expert Group on Mental Health Policy** (2006). *A Vision for Change: Report of the Expert Group on Mental Health Policy.* The Stationary Office: Dublin.
- Health Atlas Ireland (2018). Health Intelligence Unit, Health Service Executive, Dr. Steevens Hospital, Dublin 8 (https:// www.healthatlasireland.ie/). Accessed 21 June 2019.
- HSE Community Healthcare East Operational Plan (2018). Health Service Executive (https://www.hse.ie/eng/ services/publications/serviceplans/service-plan-2018/ operational-plans-2018/cho6-community-healthcare-eastoperational-plan-2018.pdf). Accessed 24 June 2019.
- **IBM Corp.** (2013). *IBM SPSS Statistics for Windows, Version* 21.0. IBM Corp: Armonk, NY.

- Integrated Service Area Review Group (2014). Community Healthcare Organisations Report & Recommendations of the Integrated Service Area Review Group (https:// www.hse.ie/eng/services/publications/corporate/ choreport.html). Accessed 24 June 2019.
- Kelly BD (2016). *Hearing Voices: The History of Psychiatry in Ireland*. Newbridge: Irish Academic Press.
- Khan S, Kashif M, Wilson L, McCauley M, Roche E (2018). Patients prefer a continuity model of inpatient psychiatric consultant care: a patient survey in the Louth Mental Health Service. *Irish Journal of Psychological Medicine* **1**, 1–4.
- National Service Plan (2016) Mental Health Key Performance Indicator Metadata (2016). Health Service Executive (https://www.hse.ie/eng/services/ publications/kpis/mental%20health%20kpi%20metadata %202016.pdf). Accessed 24 June 2019.
- Omer S, Priebe S, Giacco D (2015). Continuity across inpatient and outpatient mental health care or specialisation of teams? A systematic review. *European Psychiatry* **30**, 258–270.
- Sharpe M, Naylor C (2016). Integration of mental and physical health care: from aspiration to practice. *The Lancet Psychiatry* **3**, 312–313.
- St John of God Hospitaller Ministries (2014). Mental Health Information System (http://www.mhis.ie/ profilesummary.htm). Accessed 13 September 2017.
- **Study Group on the Development of the Psychiatric Services** (1984). *The Psychiatric Services – Planning for the Future*. The Stationary Office: Dublin.
- **Thornicroft G, Strathdee G, Johnson S** (1995). The case for catchment areas for mental health services. *Psychiatric Bulletin* **19**, 343–345.
- Walsh D, Daly A (2004). Mental Illness in Ireland 1750–2002: Reflections on the Rise and Fall of Institutional Care. Health Research Board: Dublin.