"The Stark Facts"

Irish Psychiatric Association survey of psychiatric services in Ireland: a regional comparison of clinical resources and affluence, and specialist services

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Summary:

The results of a survey of psychiatric services in Ireland, conducted by the Irish Psychiatric Association (IPA), indicate that clinical resources in mental health are over-stretched. They are not concentrated in areas of greatest need but paradoxically have been best developed in areas of greatest affluence. The absence of an up-to-date national mental health strategy for service development is one of the main causes of current inequities in clinical resource distribution. Lack of a national strategy has also led to a situation where there is very limited availability of specialist services. There is an urgent need for forward planning of mental health services in Ireland to avoid *ad hoc* and inequitable clinical resource distribution.

We call for the establishment of a National Lead Service for Psychiatry.

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Introduction

The budget for adult mental health services in Ireland is devolved to local Health Boards resulting in a psychiatric service that is completely locally determined, i.e. Health Board controlled. There are 10 Health Boards in Ireland, servicing a total population of 3.9m (2002 census: CSO ref 183/2002). This administrative splintering is exceptional, when compared to local health authorities in the UK, which often service populations that average 3.5 m. A country more comparable to Ireland demographically, Scotland, has both a local, and a central, administrative system. The advantage of such a locally determined administrative structure is that it is potentially sensitive to the needs of the local population. The disadvantages of local administration are that clinical resources* may not be equally distributed, or necessarily concentrated in areas that have greater needs. More importantly, the sole reliance on local administration is at the cost of having no central budget for the development of national services. Many specialist services such as Learning Disability, Perinatal, Neuropsychiatry, Forensic Psychiatry or those for Eating Disorders need to be evolved nationally because of low population densities.

The impression of inequality in service provision across and within some Health Board Services and the absence of specialist services, may relate to this idiosyncratic administrative structure. Health Boards with high levels of social deprivation, which tend to be concentrated geographically, can be easily identified. For example, levels of deprivation in the South Western Area Health Board in Dublin of 42% compare to levels in the East Coast Area Health Board in Dublin of 4%. The same pattern is apparent outside the Dublin area, where levels of 30% in the South Eastern Health Board, compare to levels of 4% in the Midland Health Board.

The other major determinant of need for public psychiatric services is the relative number of medical cardholders in a local area. This can vary widely from area to area, e.g. 17% in South Dublin compared to 51% in Donegal. Psychiatric services should thus be primarily concentrated in regions that are socially deprived and that have high levels of medical cardholders.

Because of apparent inequities in the distribution of mental health resources among different regions in Ireland, The Irish Psychiatric

* Clinical resources solely refers to the availability of multidisciplinary staff, a range of treatment options and access to a variety of specialist expertise, and should not be confused with the financial allocations to services.

Association (IPA) decided to conduct a survey to examine whether the perceived inequities were actual or due to observer bias. The overall rationale of the survey was to provide a global, cross-sectional view of public psychiatric services in Ireland in 2002, in relation to the relative affluence of each catchment area[*]. The purpose in conducting the survey was not just to provide a factual reference document but also to analyse service availability in order to suggest direction for the national development of psychiatric services.

[*] See glossary

Methods

The Eastern Regional Health Authority (ERHA) comprises three Area Health Boards, and there are seven further Health Boards nationally. Each Health Board is composed of between 2 and 5 catchment area services for psychiatry. There are a total of 32 psychiatric catchment areas, each servicing a geographically circumscribed area: and each of which is further subdivided into individual sector* areas served by a consultant-led Community Mental Health Team (CMHT)*.

A consultant Psychiatrist (IPA member) from each catchment area was sent a postal survey form, requesting basic demographic (Part 1, Appendix 1) and clinical service information (Part 2, Appendix 2). Part 3 of the survey examined the clinical resources within individual Community Mental Health Teams of the catchment area (Appendix 3), and Part 4 examined access to basic specialist services (Appendix 4). The forms were sent in July-August 2002 with a request to return them within 2 months.

The data received from each returned form was cross-referenced with the data from the *Report of the Inspector of Mental Hospitals, for the year ending the 31 December, 2001* (Department of Health and Children). This report has been published annually since 1987 by Government Publications and provides a report of the procedures, practices, clinical resources and service plans for each psychiatric service in the country. The report also provides basic demographic information and the budget allocation for each catchment area service. Data from the *"We Have no Beds..."* report (Keogh *et al* 1999), which provides detailed information about the catchment area services within the ERHA, was also used as a reference document to cross-check data returned from the relevant services.

In order to assess the relative affluence of each area, the Small Area Health Research Unit (SAHRU) index was utilised. The SAHRU index has been compiled by the Department of Community Health & General Practice in Trinity College, Dublin and is based geographically on District Electoral Divisions (DEDs). It rates indices of relative poverty on a 1 to 5 scale, where 1 is the most affluent and 5 the most deprived. Deprivation is rated in terms specific to the particular socio-demographic conditions in Ireland. Important international indices of deprivation, such as the Jarman index (Jarman 1983; Jarman *et al* 1992) are relevant to situations of high-density population, such as UK cities; and are not

sensitive to conditions of poverty associated with rural communities. Overcrowding is an example of an index of poverty relevant to city, but not rural populations, whereas absence of a family car may reflect rural, but not city, poverty.

Lastly, examining the percentage medical cardholders in each county assessed relative deprivation, or more specifically, need for services. This information was sourced from the General Medical Services (Payment) Board. An understanding of the relative deprivation regionally is important because areas of social deprivation will have the highest rates of psychiatric disorders and the greatest need for services.

The data was thus analysed in two ways: the first analysis examined the results of the survey, comparing clinical resources among different catchment areas that returned completed questionnaires, and relating this to indices of poverty and need, as outlined above. The second analysis, derived from the relevant government publications described above, compared a more limited number of clinical resources but included every catchment area in Ireland. Data were also analysed separately for the ERHA and non-ERHA Health Boards. For each catchment area, individual services were examined in relation to the population density, in order to standardise the data for comparative analysis. The computerised statistical package SPSS was used for data analysis. Both simple and multiple regression analyses were employed as statistical tools, with socio-demographic data as the independent variables and clinical resources as the dependent variables. Chi square analysis was used for categorical analysis. Significance was set at $p<0.05$.

Results

A total of 23 consultants returned the survey forms, representing a 72% response rate. For the 9 catchment area services where no form was returned, a more limited analysis of the service was conducted, utilising information available in the above documents. This analysis examined basic demographic information in relation to some readily available information on clinical resources, such as acute beds per head of population, but no information was available on specialist services for these areas.

In general terms, there were marked differences between catchment area services in most measures. Sector populations varied from 16,447 to 42,929. Numbers of Psychologists in each catchment area service varied from 0 to 4. There was a similar variance in Psychiatric Social Worker (PSW) and Occupational Therapy (OT) services. Acute bed provision, community residence[*] availability and day facility provision demonstrated a similar wide variance (See Table 1).

Acute bed numbers

Given that the wide variance in the availability of these clinical resources could be accounted for by the varying needs of the individual catchment area, clinical data were correlated with the number of medical cardholders in each area. This revealed that the number of acute beds/100,000 of the population for catchment areas in Ireland (n=32) were negatively, rather than positively, correlated with the number of medical cardholders for each area (rho = -0.39, p= 0.01). This association was significant for both the ERHA region (r= -0.75, n=10, p= 0.007), and the rest of the country (r=-0.36, n= 22, p=0.05).

Medical staffing

A similar inverse relationship was found between the number of medical cardholders and the number of consultant psychiatrists per 100,000 population for all catchment areas surveyed (rho=-0.39, n=23, p=0.03). This national trend appears to be accounted for by very stark significance in the ERHA region (r=-0.6, n=10, p=0.02). Catchment areas in the rest of the country demonstrated a similar trend but this did not reach significance (r=-0.35, p=0.12). There was also a statistical correlation between the ratio of temporary to permanent consultant appointments and deprivations indices (the % DEDs 4-5: r=0.35, n=23, p=0.048).

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[*] See glossary

Fifty five percent (55%) (n=17) of Clinical Directors held temporary positions. When areas were divided into those with populations where >25%, and <25%, held medical cards, 16 out of 17 areas with temporary Clinical Directors had populations where >25% were medical card holders. When analysed categorically using Chi-Square testing, this was highly significant (p=0.004).

Non-medical staffing
Psychology services were not available for 23% of services surveyed, and a similar pattern of erratic clinical resourcing emerged when this was cross-tabulated with need indices. Although not reaching statistical significance, there was a strong trend for the ratio of Psychologists to be inversely related to the number of medical cardholders among catchment areas (r=-0.36, n= 23, p=0.09). Similar trends were seen in Occupational Therapy provision across catchment areas, with the negative association between the ratios of Occupational Therapists to medical cardholders almost reaching significance (r=-0.31, n=23, p=0.07). The inverse ratio of Occupational Therapists to SAHRU deprivation scores for the ERHA region catchment area services almost reached statistical significance (r=-0.5, n=10, p=0.06). There was no relationship between indices of need and the provision of Psychiatric Social Workers.

Specialist services
See Table 2. The vast majority of services surveyed had no ready access to a range of specialist services: 94% had no access to Neuropsychiatry; **88% to services for Eating Disorders; 88% to Adolescent Psychiatry (dedicated services for children up to the age of 18 years old)** and 59% to Forensic Psychiatry. The main determinant of access to a specialist service appeared to be geographical proximity to places where these services were provided (Central Mental Hospital for Forensic Psychiatry; St Vincent’s Hospital for Eating Disorders, and Beaumont Hospital for Neuropsychiatry) (See Table 2). One voluntary service provider in the East Coast Area Health Board in Dublin purchased places in a private setting for public patients with Eating Disorders. There was not a general perception that national specialist services were operating as such.

Discussion

Rather than clinical resources following need, the survey found that the reverse was true. This survey found that there was actually an inverse relationship between acute bed availability and percentage of medical cardholders. The number of acute beds per head of population is widely accepted as a reliable index of clinical resources, although in Community Mental Health settings, having well developed community facilities will diminish high reliance on beds.

Consistent with the finding of less well developed services in deprived areas, this survey also found that the number of Consultant Psychiatrists, relative to population levels, was significantly reduced in areas with the highest levels of social deprivation. More specifically, the number of temporary, relative to permanent, Consultant Psychiatrist appointments was greater in deprived areas. The relative number of temporary appointments is important because long-term temporary Consultant Psychiatrists may be undermined by their temporary status and consequently cannot advocate effectively for necessary service developments. In relation to temporary appointments, a startling 55% of services surveyed had non-permanent Clinical Directors – many of these in post for long numbers of years. Clinical Directors are Consultant Psychiatrists who are appointed to take overall responsibility for service planning and development in each local service, and form part of the service management team (32 in total). The responsibility for employing staff and determining whether posts are filled in a temporary or permanent basis rests with health service employers – namely Health Boards.

These findings are disquieting, and indicate that service development in Ireland has progressed without reference to socio-political or demographic realities. It has been established consistently that psychiatric morbidity and service utilization is directly related to socioeconomic deprivation (Jarman 1993). This clearly should promote increased concentration of psychiatric services and clinical resources in deprived, relative to more affluent, areas. The finding that the reverse is occurring throughout Ireland for key mental health services indicates that the current system is further disadvantaging and already deprived group. The most obvious reason for this anomaly is that clinical resource allocation is being wholly determined by local politics. The finding in this survey supports this hypothesis. Clinical resources also appear to follow effective clinical leadership, as demonstrated by the association between poorer clinical resource allocation and temporary consultant

appointments, both at a Community Mental Health Team and a Clinical Director level. The other glaring potential cause for the mismatch between need and resources is the absence of a centralized policy that could oversee relative clinical resource allocation.

Basic specialist services, outside of Child Psychiatry and Psychiatry of Old Age, were generally not available outside of Dublin and availability within Dublin appeared to be contingent upon geographical proximity to specialist services. Dedicated Adolescent Psychiatry services were not available to 88% of the population. Specialist services dedicated to young people are very important, as the late teenage years tends to be the time of onset of schizophrenia and other major psychiatric disorders and rates of males suicide are soaring in this age group. There is virtually no specialist Neuropsychiatry services available to Irish patients with psychiatric disorders: this means that individuals with brain injury, brain disease, or those with psychiatric disorders as a result of a neurological disease, do not receive specialist treatment. Availability of public Eating Disorder services is largely restricted to those domiciled in the East Coast Area Health Board in Dublin. In the opinion of the authors, The National Forensic Psychiatry Service (Central Mental Hospital at Dundrum), is not resourced adequately to provide an acceptable level of service outside the Dublin area.

Psychiatric services differ from other areas in medicine, where it can be difficult to separate public from private health care delivery. The vast majority of individuals with private medical insurance and requiring psychiatric care receive this care within the private psychiatric hospitals. There was one exception to this in the Dublin area, where one of the publicly funded psychiatric services purchased their acute inpatient beds in a private hospital. In that area, which is the least deprived nationally, no particular advantage would have been conferred from the point of view of accessing an acute private psychiatric bed by opting for private patient status, and for those with chronic and enduring mental illness, being a fully private patient could actually severely limit community mental health aftercare.

In contrast to general hospitals, public psychiatric hospitals have very limited facilities for admitting private patients, accounting for only about 3-5% of admissions. The medical cardholders in any given catchment area thus represent the service users and services ought to be directed towards this population, rather than the total population.

To summarise, the findings from this IPA survey indicate that, rather than psychiatric resources being available in areas of greatest need, clinical resources have developed in the most affluent areas. This relates to the longstanding under-funding of the mental health services with the total expenditure on the mental health services dropping in the past 15 years from 12% to 7.2% of the overall health budget. It may also be partly explained by problems in exercising clinical leadership in areas where there are high levels of temporary consultant staff and acting Clinical Directors whose influence is undermined by their temporary status. More importantly, we see the absence of an up-to-date mental health national strategy as being a significant cause of the current inequities in clinical resource distribution, and limited availability of specialist services.

Conclusion

The results of this survey indicate that for many key services within mental health, clinical resources tend to be concentrated in the least deprived, rather than the most deprived, areas. The most deprived areas, as defined by either SAHRU or medical card status, have significantly fewer acute beds, larger sector sizes, and a greater temporary-to-permanent Consultant Psychiatrist staffing ratio. There are almost significant trends for the less deprived areas to have better access to Psychology and Occupational Therapy services. Basic specialist services were not readily accessible to the vast majority of services surveyed. Lastly, services with higher medical cardholder ratios are significantly more likely to have temporary Clinical Directors in post.

This seed document has been produced by the Irish Psychiatric Association in the hope that we can work in partnership with service users, Health Boards and the Department of Health & Children to produce a rational needs based strategy for the development of an improved psychiatric service for public patients. The authors see the absence of a national strategy for service development as being one of the main causes of the current inequities in resource distribution. The absence of a national strategy has also led to a situation where there is very limited availability of specialist services. There is an urgent need for forward planning of services in Ireland to avoid ad hoc and inequitable resource distribution. We call for the establishment of a National Lead Service for Psychiatry.

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Glossary:

Catchment Area: Refers to the area traditionally served by a district mental hospital. In many cases catchment areas correspond with county boundaries. In Dublin and Cork, the catchment boundaries correspond in most cases with those of the community care areas of the health boards.

Community Mental Health Team: The involvement of people from a number of professional disciplines is required to cater adequately for the needs of the mentally ill. Each team has a Consultant Psychiatrist as its leader and includes Psychiatric Nurses, Clinical Psychologists, Psychiatric Social Workers, Occupational Therapists and secretarial/administrative support.

Community Residence: A staffed non-institutional domicile used as a residential, assessment, crisis or rehabilitation facility for those following an episode of acute mental illness.

Sector: In many parts of the country, psychiatric services are organized to provide a service to a clearly defined district, with a recommended population size of 25-30,000 population.

Descriptive Statistics: Table 1

	N	Minimum	Maximum	Mean	Std. Deviation
% medical card	32	17.80	51.00	33.3	6.9
SAHRU level 4-5 (%pop)	32	4.00	41.90	19.8	11.9
Acute bed/10,000pop	32	1.17	9.13	3.5	1.5
Medical card holders/acute beds	32	2617.92	42445.61	14777.2	8907.8
Day hospital places/ 10,000pop	32	.00	12.5	3.58	2.85
Community residential places/10,000pop	32	1.8	24.7	8.86	4.56
Catchment area size	23	16447.00	42929.33	28460.7	7085.3
Medical card holders/psychologists	23	.00	2546.74	724.7	654.5
Medical card holders/ psychiatric social workers	23	145.44	6791.30	1252.8	1377.5
Medical card holders/ Occupational therapists	23	.00	6791.30	1200.1	1380.5

Legend Table 1: Values (mean, maximum, minimum, and standard deviation) for key clinical resources for the 32 catchment areas combined. SAHRU= small area health research unit (level 4-5 is an index of relative poverty).

Table 2:
Specialist Service availability for all areas combined in Ireland

Legend Table 2: Rehab (rehabilitation psychiatry); oldage (psychiatry of later life, > 65 years); liaison (general hospital psychiatry); perinatal (psychiatry for women who have given birth); adolescent (psychiatry for children >16 < 18 years); eatdis (eating disorder psychiatry); neuropsy (neuropsychiatry: psychiatry for those with brain diseases).

	rehab	oldage	liaison	forensic	perinatal	child	adolescent	eatdis	neuropsy
present	65%	53%	59%	41%	6%	82%	12%	12%	6%
absent	35%	47%	41%	59%	93%	18%	88%	88%	94%

Appendix 1

IPA Questionnaire: Part 1

Basic demographics for each catchment area

1. To which Health Board does your service belong
2. What is the name of the hospital serving your catchment area?
3. How many acute adult beds does this hospital have?
4. Is the Acute Unit in a General Hospital?
5. How many acute general medical beds does your catchment area have (i.e. in your District General Hospital, if any)?

If you are unable to answer Questions 9 to 15, please proceed to Part 2

6. What is the population of your catchment area?
7. What % of your Health Board population live in this catchment area?
8. What % of the population in your catchment area are socially deprived?
9. What % of the population in your catchment area have a Medical Card?
10. What % of the population are <16 years old?
11. What % of the population are >65 years old?
12. What is the budget for your catchment area (per head of population)?

Appendix 2

Questionnaire……..Part 2

Basic Clinical Services for each catchment area

General Adult Services

1. How many General Adult Psychiatrists are there in your catchment area?
2. How many are permanent posts?
3. How many are temporary posts?
4. Is the Clinical Director a permanent (i.e., non-locum) appointment?
5. Is there an acute Day Hospital facility in your catchment area?
   If present, how many beds are there?
   Can acutely ill psychiatric patients be treated there?
6. Is there access to high-support community placements?
   If present, how many high-support placess are there?
7. Is there access to medium-support places?
   If present, how many medium-support places are there?
8. Is there access to low-support placements?
   If present, how many low-support places are there?
9. Does your service have a Day Centre?
   If present, how many places are there?
   How many places have no duration on the limit-of-stay?
10. Are there any formal or informal links with housing associations (e.g. Local Authority, Voluntary Housing Ass) to provide housing for psychiatric patients?
    If present, how many places/year are reserved for psychiatric patients?
11. How many psychologists are attached to your catchment area?
12. If there is a psychology service, what is the waiting list time for an appointment (in weeks)?
13. How many Psychiatric Social Workers are there within your service?
14. How many O.T.s are attached to your service?
15. Is there a Speech and Language service available?
16. Is there a Physiotherapy service available?
17. Is there a Music Therapy service available?
18. Are Art Therapy services available to patients in your catchment area?

Appendix 3

Questionnaire……..Part 3

General Adult Psychiatry

<u>Individual sectors: breakdown of services for each Community Mental Health Team</u> (CMHT): a sector or CMHT may be shared by 2 consultants (e.g. academic post-holders or those job-sharing): if so, please give information for the sector, rather than the individual consultant.

CMHT 1

1. Initials of consultant………………….
2. Number of trainee doctors………….
3. Does your service have premises to work from?…………….
4. Is there a Senior Registrar attached to this service?………….
5. Is there a CPN service?…….. If yes, how many CPNs?……..
6. Does this service have a psychologist? ………..Describe (fulltime/parttime, number of sessions, etc)…………………………………………………
7. Does this service have a Social Worker?…………. Describe (fulltime/ parttime, number of sessions, etc)……………………………………………………
8. Does this service have an Occupational Therapist?…………. Describe (fulltime/ parttime, number of sessions, etc)……………………………………………
9. Does this sector have any Day Hospital places?…………How many?…………
10. Does this sector have any Day Centre places?…………How many?…………
11. Does this sector have an assertive outreach team?……………………………
12. Does this service have a CPN or other non-hospital based out-of-hours service?………………………………………………………………
13. Comments on aspects of this service not covered by this questionnaire..………

CMHT 2-10, repeat of above questions

Appendix 4

Questionnaire……..Part 4

Basic specialist services in catchment area

1. Is there a Rehabilitation Psychiatry service available to your patients?…………
2. Is there a **Rehabilitation Psychiatry** consultant in your service?………………
3. Does he/she have trainee doctors?…………If yes, how many…………………
4. Does he/she have access to beds?…………If yes, how many?…………………
5. Does this service have a CPN?…………..If yes, how many?…………………
6. Does this service have access to psychology servics?……….Describe…………
7. Does this service have access to S.W. services?…………..Describe……………
8. Does this service have access to O.T. services?………….Describe…………
9. Are there any other relevant personnel attached to this service?…………………

10. Is there a Psychiatry of Old Age service available to your patients?……………
11. Is there a **Psychiatrist of Old Age** consultant in your service?………………
12. Does he/she have trainee doctors?…………If yes, how many…………………
13. Does he/she have access to beds?…………If yes, how many?…………………
14. Does this service have a CPN?…………..If yes, how many?…………………
15. Does this service have access to psychology servics?……….Describe…………
16. Does this service have access to S.W. services?…………..Describe……………
17. Does this service have access to O.T. services?………….Describe…………
18. Are there any other relevant personnel attached to this service?…………………

19. Is there a General Hospital Psychiatry service available to your patients?………
20. Is there a **General Hospital (Liaison) Psychiatry** consultant in your service?…
21. Does he/she have trainee doctors?…………If yes, how many…………………
22. Does he/she have access to beds?…………If yes, how many?…………………
23. Does this service have a CPN?…………..If yes, how many?…………………
24. Does this service have access to psychology servics?……….Describe…………
25. Does this service have access to S.W. services?…………..Describe……………
26. Does this service have access to O.T. services?………….Describe…………
27. Are there any other relevant personnel attached to this service?…………………

28. Is there access to **Forensic Psychiatry** services in your catchment area?………
    Describe…………………

29. Is there access to **Perinatal Psychiatry** services in your catchment area?………
    Describe…………………
30. Is there access to mother-and-baby beds?……………….

31. Is there access to acute **Child Psychiatry** services in your catchment area?……
    Describe…………………
32. Is there access to acute child beds?……………….
33. Are there any **Adolescent Psychiatry** services available?……………………
    Describe…………………..

34. Is there access to **Substance Misuse** services in your catchment area?…………
    Describe…………………

35. Is there access to **Eating Disorder** services in your catchment area?…………
    Describe…………………

36. Is there access to **Neuropsychiatry** services in your catchment area?…………
    Describe…………………

37. Is there access to **Resistant Depression** services in your catchment area?………
    Describe…………………

38. Is there access to **Resistant Psychosis** services in your catchment area?………
    Describe…………………