Midland Health Region

Survey of Mental Health Consumers with Extreme and Complex Needs

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Executive Summary

This project was commissioned by the Waikato DHB MHS on behalf of the Midland Region's High and Complex Needs Steering Group. It reports on the numbers of consumers with extremely high and complex needs (ECN) in the Midland Region and proposes, in addition to existing services, services and systems that should better address their needs.

A general questionnaire based on the work of Kazarian et al (1996) was used to screen consumers most at risk from the caseloads of Psychiatrists and Case Managers in each of the DHBs. A more specific questionnaire was specifically developed for the purpose of identifying consumers most at risk and presenting services with the greatest challenges.

Overall 95 consumers were identified. They comprised a number of sub-groups including:

- Those with persistently active and/or "brittle" psychoses who have anti-social personality traits complicated by substance abuse and who need 24 hour supervised care and/or immediate access to assessment and treatment.
- Those who have head injuries complicated by substance mis-use, psychosis and/or impulsive and aggressive behaviour.
- Those who have intellectual disabilities complicated by substance mis-use, psychosis and/or impulsive and aggressive behaviour.
- Those with borderline personality disorder or to a lesser extent anti-social personality disorder, who are impulsively aggressive and have a chaotic lifestyle in many cases complicated by substance abuse.

In addition there were smaller sub-groups who had specific conditions such as:

- Eating disorders
- Post-traumatic stress disorder

This said more detailed analysis of the group showed that 63% of the group had double and triple diagnoses which when combined with Risk Profile data indicated that the group was much more homogeneous in terms of services requirements than first seemed evident. Moreover the data indicated that Personality Disorder diagnoses in all likelihood lacked precision while those consumers who had diagnoses of Intellectual Disability and/or Head Injury had diagnoses co-morbid with Schizophrenia and Affective Disorder related conditions.

The gender mix was 64% males 35% females whose ages. While ages ranged from 20-70, 70% were aged 20-40. The ethnic mix was 53% New Zealand European, 45% Maori. Interestingly while other ethnicities are increasing in the region they were not significantly represented in the survey.

The Risk Profile of the consumers identified in the survey was alarming in terms of the vulnerability of the consumers identified and the risk carried by clinical staff and the DHBs in providing services for them. While there were some consumers who appeared to be managing reasonably well with the range of services to which they had access, the overwhelming majority were not able to access the services which their clinicians thought were needed to properly address their needs and reduce the risk to the public at large.

Services currently utilised by the group involved a mixture of out-patient and in-patient care. In the former case CMHTs, NGO accommodation and the frequent use of Crisis Services were most commonly utilised. In the latter in-patient care focussed on Acute Inpatient Care.

In terms of services required but not available, clinicians specified that access to clinically staffed residential programmes (both inpatient and community based NGO services) were urgently required. In addition they indicated that Acute Day Programmes and more emphasis on Assertive Community Treatment Teams were required.

They also felt that specialised programmes for people with head injuries, intellectual disability, substance abuse and borderline personality disorders while available were inadequate in terms of both volume and staff expertise and needed to be specifically purchased to address the needs of the identified consumers.

Notwithstanding these views, it is the conclusion of this report that within the group the numbers of consumers who have these conditions, *as the dominant cause of their disability and behavioural problems* are not large enough to warrant specific services being set up at this stage. Lowering the risk profile threshold for the group may well reveal another picture. Nevertheless the survey shows quite clearly that there is a pressing need is for

a more generic range of services, both local and regional, to be immediately planned and implemented without delay.

1. Introduction

The establishment of the Mental Health Commission's Blueprint (1998) was a major step forward in specifying a standard set of services for a given population of people to fulfil the Ministry of Health's National Mental Health Strategy. It also specified the staffing that would be required to run the services and thus allowed a funding path to be created for service development.

However, while the Blueprint took into account the need for specialist services for 3% of the population it could not predict what actually might be required in a particular district or region within New Zealand. Such a situation depends on a variety of local and regional clinical, personnel, historical and other factors.

Services have grown substantially since 1998. However it has become clinically apparent that while MHS in NZ are addressing a broader range of need than before, there are still a number of consumers whose needs are not being adequately met in terms of their being a risk to themselves and in some cases the public at large.

The request for this survey came via the Waikato DHB MHS Clinical Director from the MHS High and Complex Needs Steering Group. This group meets monthly. Over the past 2 years it has expressed increasing concern about a relatively small group of consumers with extreme and complex needs for safety and treatment that remain unmet despite consuming a high amount of clinical resource.

Various treatment and residential options have been proposed for this group, but have not been actioned because of a lack of consensus about the size of the problem, the clinical profile of the consumers involved, and the systems and services they require to better meet their needs.

To this end this project seeks to identify the actual numbers of consumers in this group, the services they are currently utilizing, what additional services might be required to more adequately address their needs and how they could be deployed to achieve this.

In developing the survey methodology reference was made to other work that has been done in New Zealand to identify consumers with high and complex needs. In particular work done by the Department of Psychiatry in the Auckland Medical School, the Otago University Department of Psychological Medicine at the Wellington Medical School and latterly the Counties-Manukau DHB in South Auckland.

2. Terms of Reference

- To define the number of consumers in the Midland region who sit at the highest needs end of the high and complex needs spectrum.
  - These patients' clinical needs cannot be met by current community facilities (including supported accommodation) even with the addition of Assertive Community Treatment Team follow-up.
  - They will require intensive rehabilitation over longer periods (longer than three months).
  - They may be currently receiving Packages of Care.
  - They will need a new type of rehabilitation service or facility (at this stage this service component remains undefined and is outside the scope of this Terms of Reference).
  - A standard methodology will be used across each of the Midland District Health Boards, Bay of Plenty, Lakes, Waikato, Taranaki.

a) To interpret and comment on any relationship between the numbers of consumers identified with current levels of supported accommodation / rehabilitation / community bed provision / Packages of Care in each individual DHB.

3. Methodology

3.1 Background

The work done by the Universities referred to above was extensive and employed a research team which utilised a number of instruments including the Camberwell Needs Assessment. By contrast in terms that undertaken by Counties-Manukau used an approach based on high service utilization as a proxy for identifying those with high and complex needs. Consumers were identified through their Information System and then subsequently reviewed in terms of the specific services they might require.

In the current survey a methodology was decided upon that fitted between these approaches. It incorporates work already done by the Midland Region Clinical Directors Group and aims to focus attention on those consumers with the highest and most complex needs. Inter alia this group was anticipated to include consumers whose clinical management and community support had been extremely challenging and as a consequence presented considerable risk to themselves and the community.

3.2 The Survey Process:

1. Provider Arm MHS (PAMHS) Clinical Directors[1] were contacted to inform them of the survey taking place, its parameters and in general what would be required of them and DHB MHS staff. Once this had been done a draft survey instrument was circulated for comment, additions and alterations. The agreed instrument[2] was then sent to Case Managers and/or Psychiatrists to complete and return to the author for analysis.

   The survey instrument is comprised of a number of sections

   a) In the first instance using the Level of Community Support Scale (LOCSS), developed by Kazarian (ibid) and adapted for the purposes of the survey by the author in consultation with the Clinical Directors group, Case Managers and/or Psychiatrists were asked to identify, from their caseloads, those consumers who needed the highest level of community support and scored 7 on the 1-7 scale as specified by the following criteria:

   - Consumer does not take medication as prescribed, is unwilling to attend clinical appointments, has frequent and severe crises involving threats or violence[3] to self and/or others requiring frequent hospitalisations, often uses alcohol and/or drugs in a hazardous manner, has been frequently asked to leave residences supplied by supported accommodation providers, needs help in most aspects of life, is unable to access community services on their own, and has needs that cannot be adequately met by a standard high level of community support.

   For those scoring 7 (the target group) Case Managers and/or Psychiatrists were then asked to fill in the rest of the survey instrument which included:

   b) General background data – length of time in MHS, age, gender, ethnicity and Mental Health Status.

   c) A Risk Profile section focusing more specifically on their high risk symptoms and behaviours including, arrests, multiple contacts with CAT, frequent and/or lengthy hospitalisations, multiple NGO placements and non-compliance with community treatment.

   d) The range of services utilised by each consumer over the past year and those required to better meet their needs but unavailable at the time of the survey.

   e) After the survey the findings were returned and tabulated on a spreadsheet

2. Each of the DHBs was then visited by the Consultant to:

   - complete the data base
   - discuss the possible elimination from it of those whose inclusion was questionable
   - get a first hand clinical briefing on each of the identified consumers
   - discuss the DHB's profile of services for those with high and complex needs, gaps in the continuum and potential solutions for their better care[4].

3. The data was then collated and summary graphs of initial findings were circulated tothe DHBs and arrangements made to discuss the report with the Regional High and Complex Needs group, the Provider Arm Clinical Directors and Managers and the Funding Managers.

4. Following the meeting a draft report was prepared and circulated to High and Complex Needs group and DHB Manager and Clinical Directors. Feedback was received and the final report prepared and circulated.

3.3 Report

1. The overall findings of the study were analysed for each DHB and for the region as a whole and graphically represented within the following parameters[5,6]:

[1] To ensure the comprehensiveness of the survey it was also decided to survey consumers from Hauora Waikato and the Forensic Service and consequently these services were also involved in the survey.
[2] See Appendix 1
[3] Including physical and/or sexual events
[4] In turn they consulted with their funders regarding service provision for HCN consumers and in particular the numbers of places in 24 hour supervised (L4+) accommodation being purchased. The data was then forwarded to the author.
[5] Although included in the original survey instrument "recent period under Mental Health Act and non-compliance with Day Programmes" were not included because information was frequently unknown or based uncertain.

- General
    - Age
    - Gender
    - Ethnicity
    - Length of time in MHS (LOS)
    - DSM IV[7] Diagnoses
        - Axis I (Clinical Disorders)
        - Axis II (Personality Disorders and Intellectual Disability)
        - Axis III (General Medical Disorders)
        - Axis V (Global Assessment of Functioning)
    - Mental Health Act Status
- Risk Profile
    - Arrests (year to date - YTD)
    - Violent Delusions
    - Command Hallucinations
    - Significant threats and/or assaults on others or property damage
    - Serious suicide attempts
    - 3 or more contacts with Crisis team YTD
    - 3 or more hospitalisations YTD
    - Average length of stay in hospital YTD > 50days
    - 3 or more residential placements with Community Providers
    - 3 or more residential placements terminated by NGO
    - Deterioration in mental state related to use of alcohol and other drugs
    - Frequent non-attendance at appointments
    - Non-compliance with prescribed medications
    - Whereabouts often unknown
    - Socially isolated and/or homeless
- Services utilised
    - Crisis Assessment and Treatment Team (CATT)
    - Crisis Respite (CR)
    - Planned Respite (PR)
    - Acute Inpatient Unit (AIPU)
    - Acute Day Programme/Day Hospital (ADP)
    - Community Mental Health Team (CMHT)
    - Mobile Intensive Team/Assertive Community Treatment Team (MIT/ACT)
    - Alcohol and other Drugs Service (AOD)
    - 24 hours supervised [Level 4+] accommodation (L4+ Accom)
    - Work Opportunities (Work Opps)
    - Inpatient Rehabilitation (IPR)
    - Forensic Inpatient Unit (FIP)
    - Other

To establish the degree to which the overall group could be sub-grouped for the purposes of establishing whether specific services should be recommended, further analysis of the data was undertaken to establish the numbers of people who had single, double and triple diagnoses. While a multi-variate analysis could be undertaken for each of the risk factors time and resources did not allow for this. Instead the risk profiles of the group as a whole were averaged to establish a measure of risk for the group as a whole and the DHB profiles compared with it as a measure of risk for the DHBs.

Existing service utilisation and profiles were then compared with the services clinicians indicated were required to better address the needs of the group. The results were in turn interpreted in terms of the gaps and functioning of current service profiles, systems and what could be derived from the survey in terms of possible limitations in clinical practice.

Finally recommendations are made with respect to how processes and services could be improved for the group to improve their care, treatment and safety.

4.0 Findings:

The graphs below summarise the findings for the region as a whole. The glossary of abbreviations is included in Appendix II. Results for each DHB are to be found in Appendix III.
The following vignettes however illustrate the challenges of the group in terms of service provision.

[6] Abbreviations used in Tables and Graphs
[7] American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders

4.1 Vignettes

These vignettes represent but a small measure of the variance of the group as a whole. Apart from challenges for their carers and clinicians, the histories of the consumers surveyed involve considerable suffering affecting both them as individuals, their families and carers.

1) A is a male in his 40s has spent 2 years in the Forensic Inpatient Unit after taking an axe to his Case Manager. He lives alone having refused supervised accommodation. He has had and continues to have multiple Acute Hospitalisations. He is intelligent but easily disorganised. He has a $100K Package of Care provided for him and is gradually making a transition to Supervised Accommodation. His fragility and aggression are a constant concern to his clinicians and carers.

2) B is a female who has been diagnosed with Bipolar Affective Disorder and Borderline Personality Disorder, is non-compliant with medications and appointments with the MHS. Her whereabouts are often unknown. Her family is not able to provide support for her. They are involved with drug abuse and crime. B gets exploited by those with whom she comes into contact. Her money has often been taken by her family. She makes contact with the MHS when her social problems overwhelm her.

3) C is a male in his 40s who has an Intellectual Disability, Epilepsy, Frontal lobe damage and Schizophrenia. It has been is difficult to find a suitable placement for him because existing NGO providers cannot manage his physical disabilities and his frequently aggressive and unpredictable behaviour.

4) D is a 28 year old male who has a 10 year history of disorganised Schizophrenia and hazardous use of Solvents, Drugs and Alcohol. He lives with his father who is also a misuses drugs and alcohol. He is unable to care for himself in terms of his activities of daily living to such an extent that NGOs will no longer take him into their care.

5) E is a 30 year female with diagnoses of Schizophrenia and Obsessive-Compulsive Disorder. She has a history of extensive sexual abuse and rape. She ritualistically cleans. She spent recently underwent a prison sentence after being charged with stabbing a person. Although she needs supervised accommodation, NGOs will not accept her because of the risk of violence that she presents to other residents and is felt to be a fire risk because of her unwillingness not to smoke in bed.

4.2.1 Gender, Ages and Ethnicity

Overall the group included 95 consumers (Fig 1). Of these while the findings varied between the DHBs (see appendix II), Figs 2-3 indicate that regionally the proportions of male out-numbered females (61:34) and that while ages cluster in the 21-40[8] age range there are a number of consumers in the older age groups, Fig 4 shows that Maori were over-represented (43%) and New Zealand European were under-represented (51%) in the group.

Figure 1

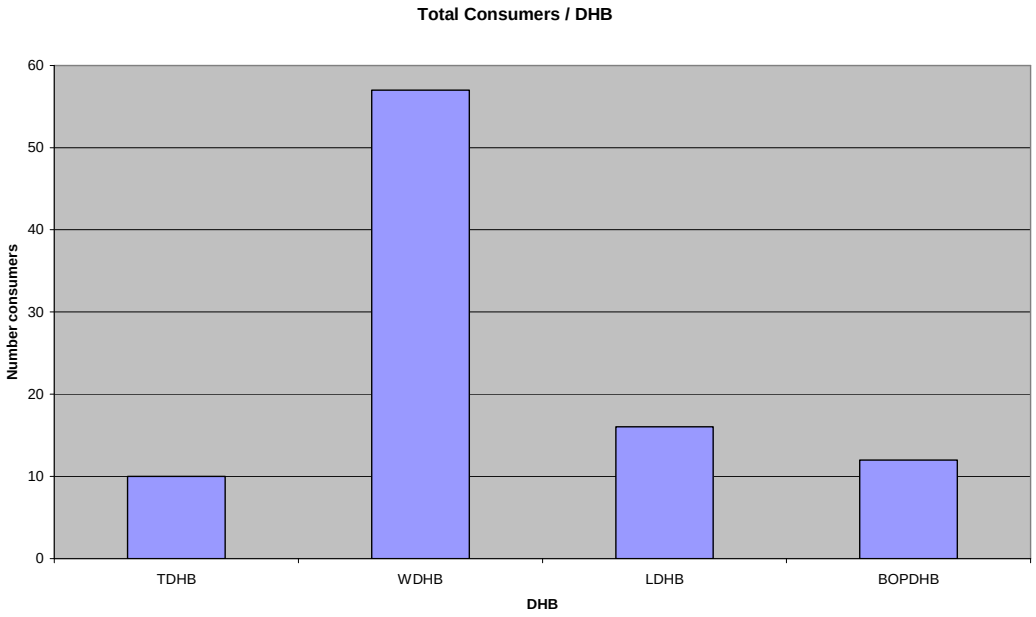


Figure 2

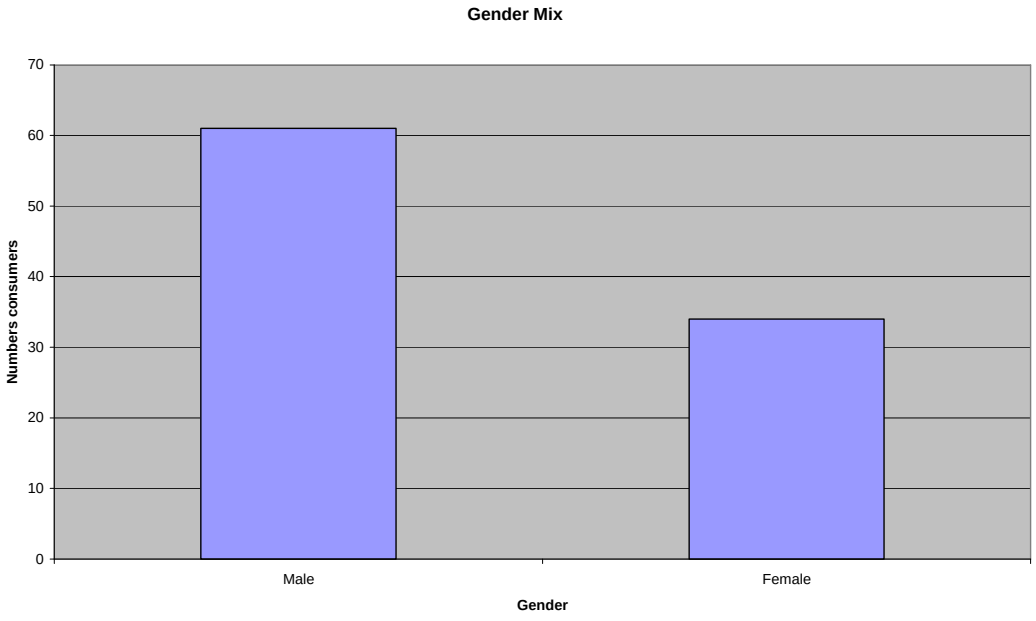


Figure 3

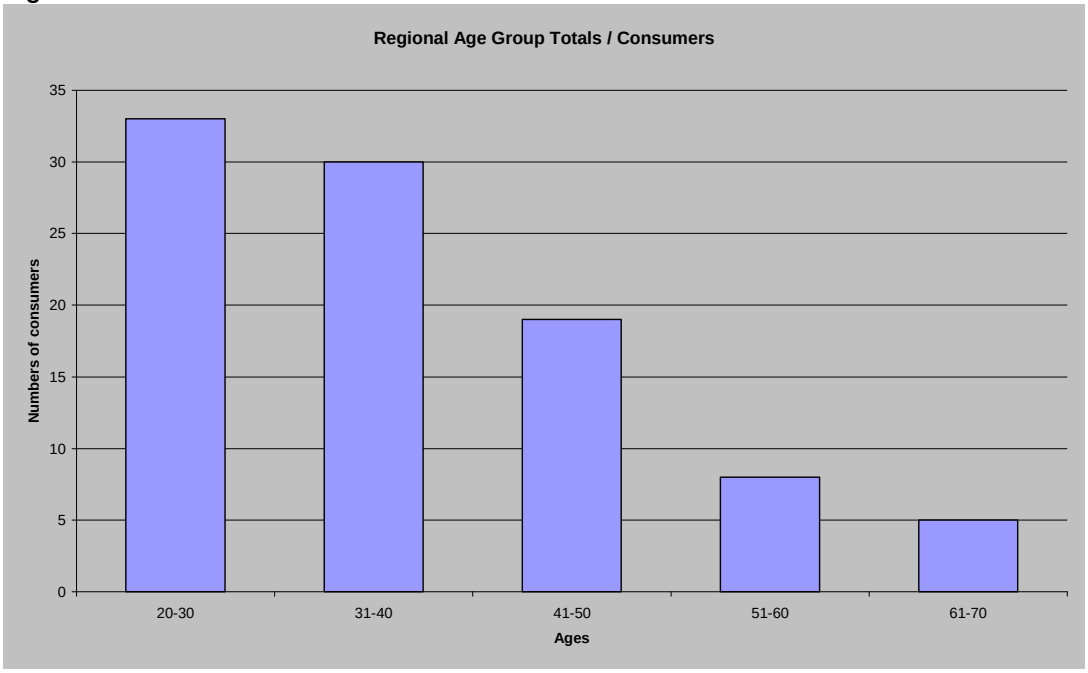
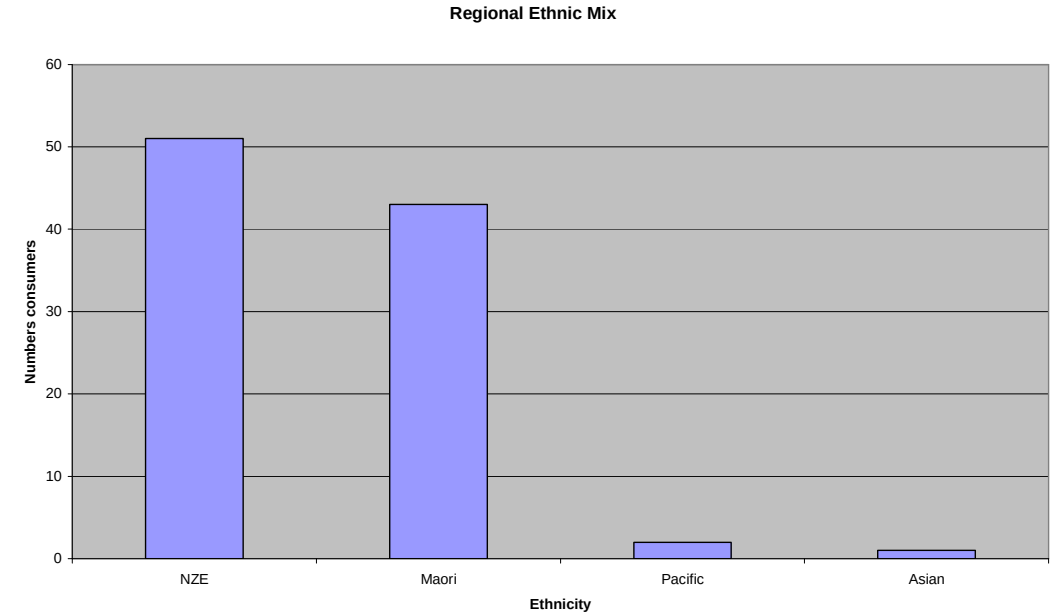


Figure 4



4.2.2 Diagnoses

4.2.2.1 Axis I Diagnoses

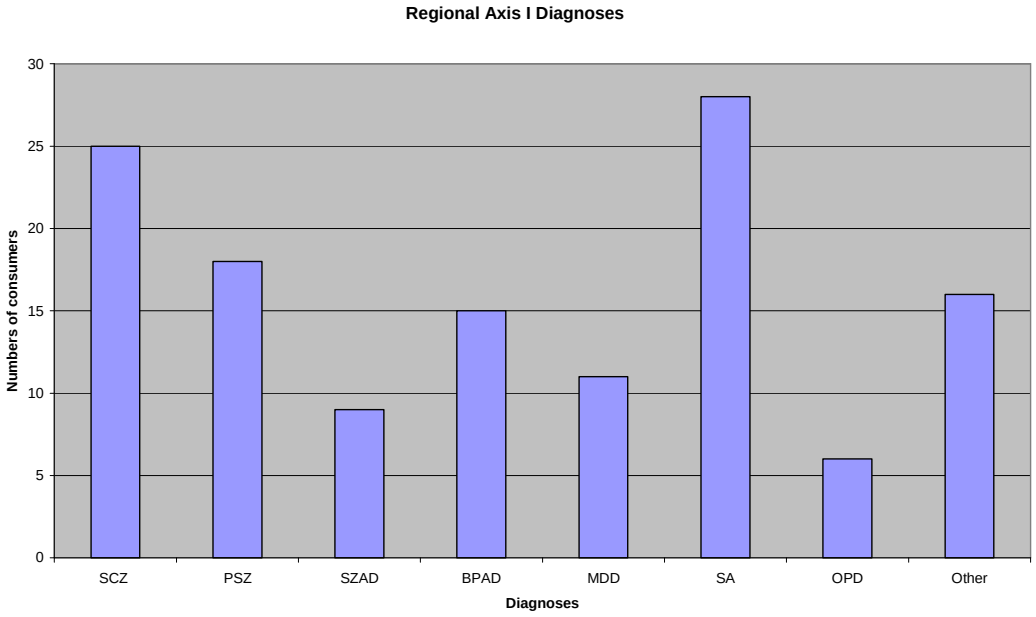
Figs 5 shows that 52 consumers (54%) of the group were diagnosed with Schizophrenia related psychoses (Schizophrenia, Paranoid Schizophrenia and Schizo-affective disorder[9]). Those with Affective Disorders (Bi-polar Affective Disorder and Major Depressive Disorder) accounted for 26 (27%) of the group.

28 (29%) of the group were identified as having Substance Abuse Disorder. All had dual or triple diagnoses with other Axis I and/or II diagnoses. Given Risk Profile data which indicates that 56% of the overall group demonstrate hazardous use of alcohol and other drugs (see Fig 9) this figure is undoubtedly underestimated.

Other diagnoses including PTSD, Obsessive Compulsive Disorder, Eating disorders, Organic Psychotic Disorders and others account with Axis I diagnoses.

[9] For convenience this diagnosis was grouped with the Schizophrenia related group rather than the Affective Disorder related group.

Figure 5

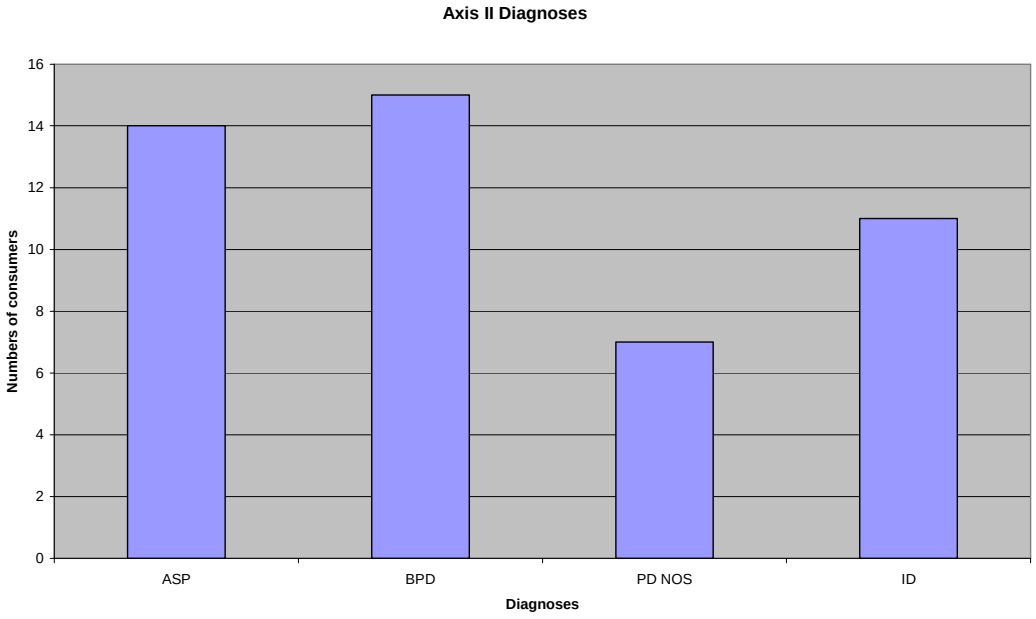


4.2.2.2 Axis II Diagnoses

Fig 6 shows the numbers of people with Axis II diagnoses. While there were 14 consumers diagnosed as having Anti-Social Personality disorder (ASP) this diagnosis varied from DHB to DHB and as was the case for the Axis I diagnosis of Substance Abuse Disorder, bore little or no relationship to the Risk Profile in terms of offending behaviour. Again given the high level of offending in the group as a whole, the Risk Profile data should be taken into account for planning purposes rather than the Axis II diagnosis of ASP.

22 consumers were identified as having Borderline Personality Disorder, significant Borderline traits[10] or Personality Disorder Not Otherwise Specified (PD NOS). It is noteworthy that this diagnosis appeared to be used loosely possibly as a proxy for those with challenging behaviours in a similar fashion to the "diagnosis" of Anti-social Personality.

Figure 6



[10] Who for practical purposes were grouped together.

4.2.2.3 Single, Double and Triple Diagnoses

On initial analysis there appeared to be a number of consumers that could be clearly delineated into diagnostic sub-groups within the overall group namely:

- Those with persistently active and/or "brittle" psychoses and/affective disorders whose condition in the majority of cases was complicated by anti-social problems and substance abuse and who needed 24 hour supervised care and/or immediate access to assessment and treatment (78)
- Those who have head injuries with or without psychosis, who are impulsive and aggressive (6)
- Those who have intellectual disabilities with or without psychosis and who are impulsive and aggressive (11)
- Those with borderline personality disorder or to a lesser extent anti-social personality disorder, who are impulsively aggressive and have a chaotic lifestyle in many cases complicated by substance abuse (22)

However on further analysis, as the following table shows, only 33 consumers (33%) had single diagnoses while 67% had dual and triple diagnoses. Moreover Tables 1-4 show that of those with head injuries, intellectual disability and personality disorder only 4 cases (1 individual within former two categories and 2 within the latter) were associated with a single diagnosis.

Table 1

Single Diagnoses	
Schizophrenia related	16
Affective Disorder related	9
Personality Disorder NOS	2
Organic Brain Syndrome	1
Intellectual Disability	1
Other	4
Total	**33**

Table 2

Head injury				
	Schizophrenia related	Affective Disorder related	Personality Disorder related	Head injury related
Taranaki	0	0	0	0
Waikato	3	1	0	2
Lakeland	1	0	0	
Bay of Plenty	0	0	0	

Table3

Intellectual Disability[11]				
	Scz related	AD related	PD related	Head inj
Taranaki	0	0	0	
Waikato	5	1	1	2[12]
Lakeland	4	0	0	
Bay of Plenty	2	0	0	

Table 4

Personality Disorder				
	Schizophrenia related[13]	Affective Disorder related	Intellectual Disability	Other
BPD	4	6	1	2
PD NOS	4	2	1	0
Total BPD+PD NOS	20[14]			
ASP	12	2	1	1
Total PD (36)	20	10	3	3

The same is true for the additional small number of consumers who had additional diagnoses overlapping with these groups of whom only 4 had single diagnoses albeit serious disorders.

[11] Note: in one case Intellectual Disability was the sole diagnosis
[12] Note: 2 cases Tri-morbid with Schizophrenia related conditions and Head injury
[13] Includes Schizo-affective Disorder
[14] Leaving two other consumers with a sole diagnosis of BPD

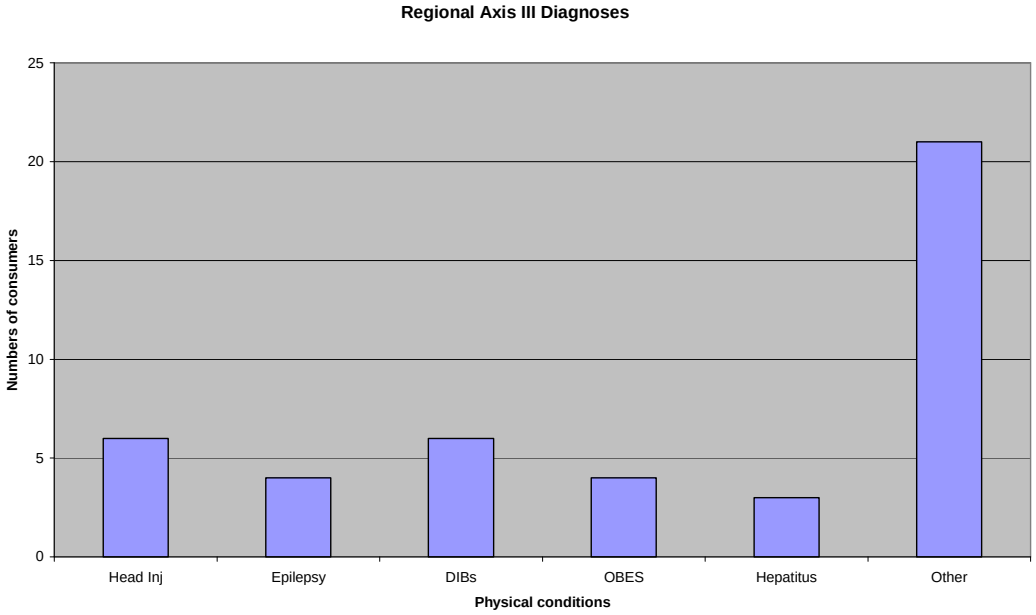
- Eating disorders
- Obsessive-compulsive disorder
- Post-traumatic Stress Disorder
- Intermittent Explosive Disorder
- Adult Attention-deficit/Hyperactivity Disorder
- Generalised Anxiety Disorder

Therefore while a more specific needs assessment may reveal cases that could be better managed with more targeted "packages of care", each of the diagnostic groups overlap to such an extent that "*in terms of service planning"* the group can be considered as being relatively homogeneous.This view is reinforced when the risk profile is taken into account. For example 21 of the group with single diagnoses had a history of significant offending ie only 9[15] consumers of the group did not have this risk factor. When other aspects of the Risk Profile are taken into account the differences between the sub-groups can be expected to reduce again.

4.2.2.4 Axis III Diagnoses (Physical Health)

Fig 7 indicates the physical diagnoses identified in the group. Those identified with head injuries align with Axis I diagnoses of Organic Psychotic Disorder, however it is likely that those with Obesity is underestimated as indeed are those with Diabetes given the relationship between Diabetes and anti-psychotic medications. There were a range of other diagnoses identified including Asthma, Hypertension, Hypo-thyroidism and Back injury to suggest that a more comprehensive survey of physical health problems would be useful to do at some point in the near future.

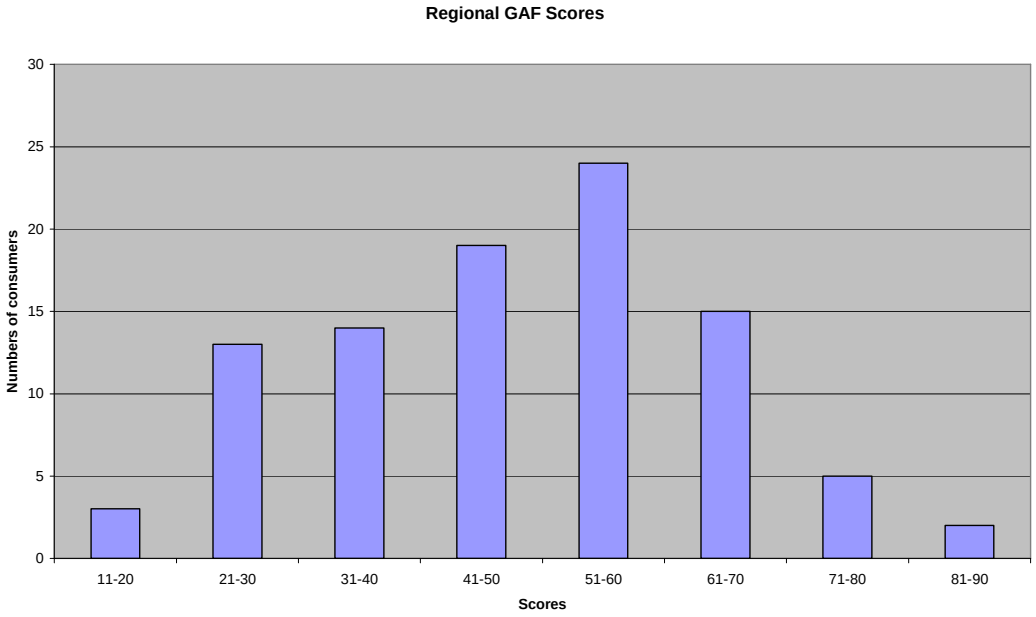
Figure 6



[15] And as such could perhaps be removed from consideration in terms of service planning for the group

4.2.2.5 Axis V (Global Assessment of Functioning)

Figure 7

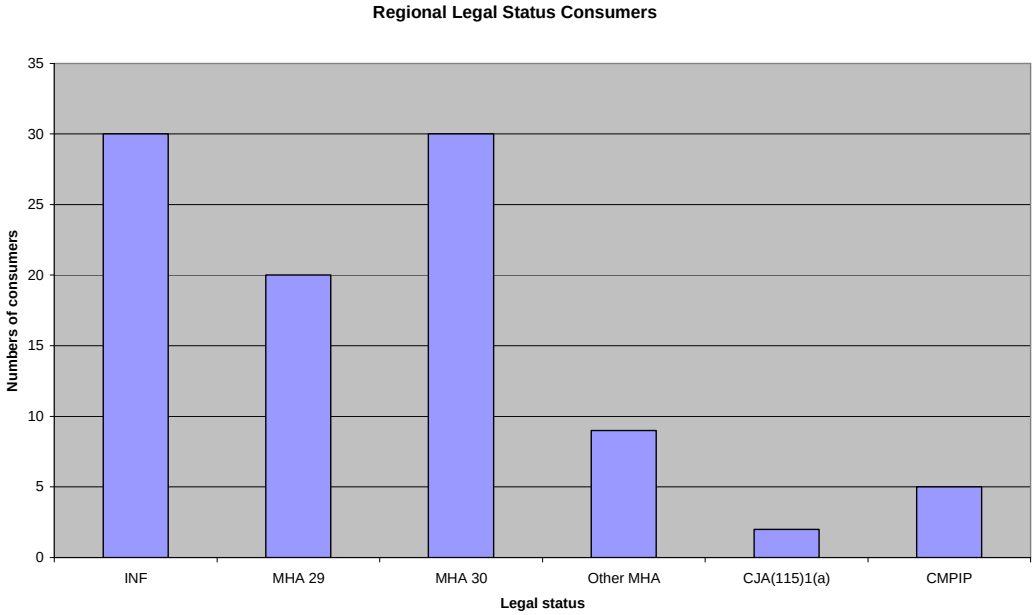


While the GAF (Global Assessment of Functioning Scale) is widely used in other settings and is listed in the DSM IV, it is not considered to be an accurate measure of functioning in a setting where such measures are not routinely used. Consideration had been given to using the HONOSS, however again it is not routinely used and is a more complex measure than the GAF.

Bearing these considerations in mind it was surprising to find that the GAF varied so markedly from the findings of the Risk Profile (See Fig 10). In fact given that 51-60 refers to moderate symptoms and above 61 mild, transient, minimal or absent symptoms for each 10 points on the scale, either the GAF scores are totally irrelevant or there were some people who should not have been included in the group. The view of the author is that the Risk Profile is a much more accurate measure of impairment and disability but that there may be a small group of around 10 people in the Waikato group in particular who perhaps should not have been included in the group.

4.3 Legal Status

Figure 8



Perhaps supporting the latter point is the fact that Fig 9 indicates that 30 people were informal consumers of MHS. In this regard while a recovery oriented service might not necessarily have all people with high and complex needs placed under the auspices of statutory legislation it might be expected that those with extreme needs would be.

4.4 Risk Profile

Notwithstanding the forgoing the Risk Profile (Fig 10) of the group indicates that overall the group is represented by people who have considerable unmet needs. Given the high threshold set for individual risk factors and taking into account that the scale is comprised of 15 such factors, the average score of around 8 (7.8) for each consumer gives a very strong indication of the unmet need and extreme risk consumers and carers are carrying in their present circumstances.

Figure 9
4.5 Services currently utilised by Consumers

4.5.1 Existing Service Profiles

Table 5 shows the range and volume of services currently available to HCN consumers. While progress is being made towards funding additional services for this group (of which this survey is a part) the actual service configuration is "patchy" and needs further work in terms of service objectives, protocols and coordination.

The numbers of Acute In-patient beds/100,000 vary from 27 to 14. Some acute beds have been allocated to the needs of longer stay patients in TDHB and WDHB while LDHB and BOP DHB have no specific access to such services.

There was also a variation of L4+ beds/100,000 in each of the DHBs with TDHB having around 20/100,000, while LDHB and BOP have 10/100,000. Waikato presented a more complicated picture in that while there appear to be in excess of 150 beds these are counted in terms of Level 3+ rather than 4+ apart from forensic medium and minimum secure beds[16].

Other services were not well defined in terms of their resourcing and functioning. For examples data relating to the utilisation of Acute Day Programmes was forthcoming (see Fig 10) but it was difficult to determine what specific programmes were in place approximating a "partial hospitalisation" programme. Again while Mobile Intensive/ Assertive Community Treatment Teams have been established in some form in WDHB, BOP DHB and TDHB, WDHB is changing theirs to become an ACT team whereas TDHB has only 2 staff allocated to an ACT function while BOP DHB is also just building up its service on the basis of 3 staff.

In terms of Packages of Care for HCN consumers all DHB funders were making this available but at this point in time it is still limited and depends on a NGO infra-structure to deliver appropriate services. In the latter case some very good services are available but as far as those consumers with more extreme needs clinicians felt there was a notable shortfall in the capacity of the NGOs to safely address their needs.

Notwithstanding the uncertainty about the capacity and functioning of services currently in place or the FTEs involved it would appear that TDHB is best resourced DHB to deal with the HCN group possibly followed by the BOP DHB.

Mention should also be made of Maori Mental Health Services which while they did not receive a specific focus in the survey appeared to be making good progress towards meeting the needs of their HCN consumers. In particular, while they had residential facilities that enabled specific needs to be met, Hauora Waikato's services were addressing themselves to the needs of the HCN group in a way that seemed to provide a benchmark for other Maori MH Services. This said given the numbers of consumers who were of Maori ethnicity the capacity of existing services to meet need should be more specifically determined.

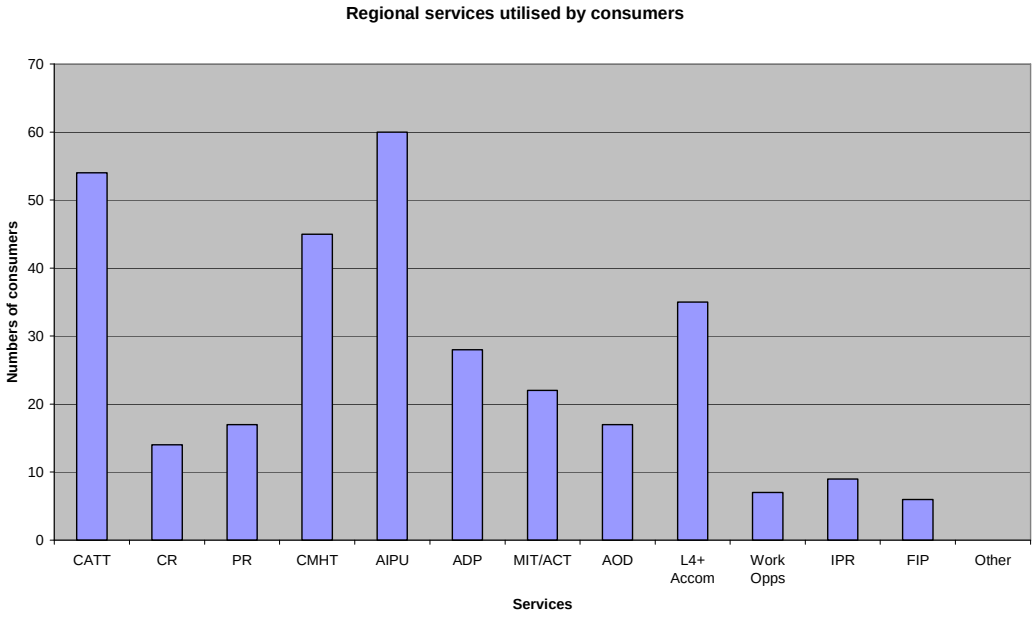
[16] Which are shared between WDHB's PAMHS and Hauora Waikato and serve a regional function.

Table 5

	TDHB	WDHB	LDHB	BOP
Population	100,000	320,000	101,000	163,000
Residential Services				
Acute Inpatient Unit (AIPU)	27	53	14	32
Acute Beds/100,000	27[17]	16.5	14	20
Inpatient Rehabilitation (IPR)	0	"12"	0	0
Forensic Inpatient (FIP)	0	30	0	0
L4+ supported accommodation	15+5	(40[18])	10	12+7
L4+ beds/100,000	20	<10	10	10
Community Services				
Acute Day programme	?	?	?	?
Assertive/Mobile Intensive Team		✓		✓
Alcohol and other Drugs (AOD)	✓	✓	✓	✓
Maori Mental Health	✓	✓	✓	✓
HCN Packages of Care (POC)		✓		✓

Fig 10 shows the services that are currently being utilised by consumers. Comment is made below about the individual DHB service profiles. There are undoubtedly a number of services purchased to deal with people with high and complex needs. However in general the findings of the survey support the view that the numbers and needs of many consumers has been underestimated and that reliance has been unduly placed on a range of generic services including CMHTs, Acute Inpatient Units and generic accommodation options.

Figure 10



It is important to note that both Crisis and Planned Respite and Alcohol and Drug Services (notwithstanding the latter being rated as a major hazard in 53% of cases) appear to be rarely used. Moreover Work Opportunities appear to be seldom utilised if indeed they are available.

Furthermore the graph shows that a number of services are apparently being utilised by consumers including Acute Day Programmes (ADP), Mobile Intensive Teams (MIT) and Inpatient Rehabilitation (IPR) that as indicated above are limited in terms of their service provision or have had problems in terms of defining their service objectives and/or target populations

Again despite the fact that DHBs referred to the use of Inpatient Rehabilitation, this involved in the case of one DHB (TDHB) the allocation of Acute Inpatient Beds to longer term care, in another (WDHB) there was a move to

[17] Of which 5-7 at any point in time are set aside for longer term patients (ie with an ALOS>50 days)
[18] Estimate only

combine step-down beds from Forensic and Acute Units into a IPR Unit, while in the other two DHBs there was no access to sub-acute/medium term rehabilitation beds at all.

4.6 Services required but not available for Consumers

Figure 11

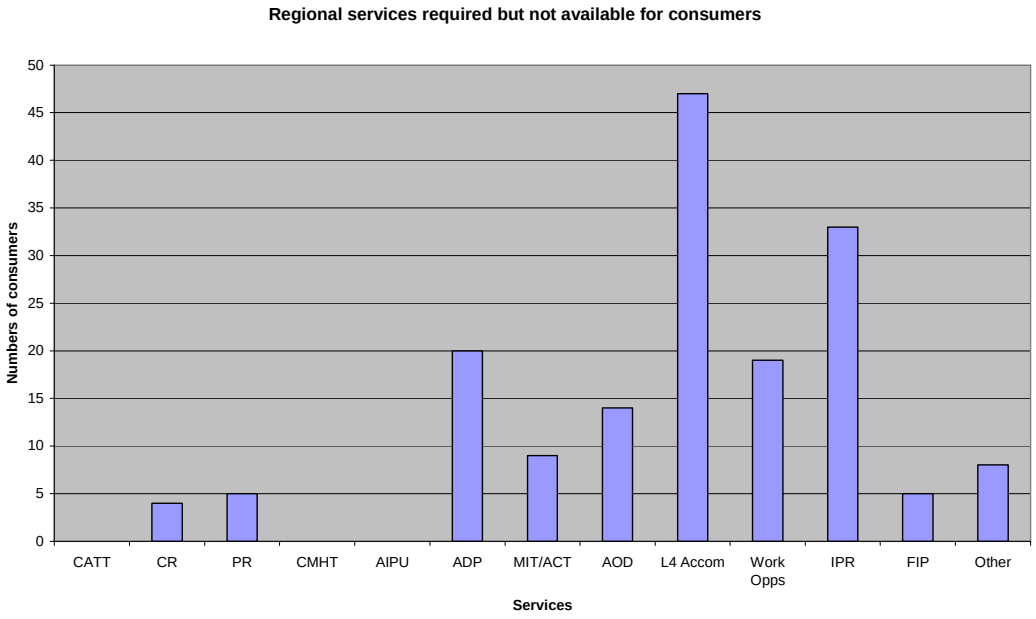


Fig 11 shows that clinicians felt that a greater range and volume of high support NGO and In-patient Rehabilitation Services were required to address the needs of ECN consumers in their districts and across the region as a whole. They also emphasised the need for more Day Programmes and AOD Services focussed on the needs of those with dual diagnoses was required. These points are elaborated in the Discussion and Recommendations.

5.0 Discussion

The findings indicate that there are a sizeable number of consumers in the Midland Region, with high and complex needs who present a considerable risk to themselves or others, whose needs are not being realistically met by the existing service continuum.

Specification of the types of services and the capacity needed to better address the needs of the group are attempted at the end of this section. However it is a major concern that even though the threshold for people being categorised as having high and complex needs in this survey was extremely high at least 85-95 consumers met the stated criteria. This means that not only are the consumers who were identified very vulnerable but that the public at large could easily suffer by their situation not being properly addressed. In these circumstances DHB clinical staff, the DHBs and consumers themselves are likely to be exposed to considerable risk.

A more detailed examination of the cases and systems involved in the care of consumers identified in the survey would be needed to specify more precisely the risk the DHBs are carrying, however as a proxy of immediate risk the Risk Profile data relating to arrests, suicidality, and incidents involving assaults, property damage and serious threats could be used to consider how the findings of this study relates to levels of risk and risk management.

The impression was gained however that the cases spoke for themselves and this was particularly true in the case vignettes.

Key questions in making sense of the findings is whether the unmet needs of the identified group and in turn their sub-groups, is best explained by gaps in the service continuum, its functioning, the service delivery philosophy, the clinical practice of the staff involved or some combination of these factors.

5.1 Service Continuum

5.1.1 Structure

In the first instance there is no doubt that for the ECN group there are gaps in the service continuum, which may have been brought about by an undue emphasis on developing community services that assume that crises:

1. are evenly spread across the consumer population
2. are relatively infrequent
3. present little risk to the consumer or the public at large
4. that once treated can be brought under rapid control
5. and then be subject to long term periods of remission.

The analysis of existing service utilisation reveals that ECN consumers were mainly accessing a combination of CMHT, CATT, Acute Inpatient services (AIPU) and supervised accommodation. The problem however is that the services were not only being frequently used but in the case of AIPU stays were lengthy resulting in the "blocking of beds" to those requiring urgent admission. Moreover in the case of NGOs placements were being terminated because of the inability of providers to manage risks to other residents the end result of which has led "banishment pressures" and homelessness.

In addition to these issues, while POC and Assertive follow-up were being utilised in a number of DHBs with apparently increasing success, the development of such services in many cases was patchy and insufficient in terms of funding and infrastructure to address the needs of the identified group.

The consequences of this situation are that

1. urgent assessment and treatment for people experiencing new crisis is likely to be delayed with a escalation of acute clinical risk
2. The utilisation of AIPUs for longer stay patients and the lack of rehabilitation and recovery focus will lead to their institutionalisation
3. Existing acute beds will be blocked to those in the community requiring inpatient care
4. Political pressure for more acute beds will siphon off funding from services providing longer term solutions
5. Patient rights in terms of the right to appropriate care will be compromised
6. Clinical risk will increase rather abate

Overall gaps identified in local continua call for a more and higher level of:

- Crisis and Planned Respite
- Acute Day Programmes (partial hospitalisation)
- Assertive follow-up services
- Community based rehabilitation programmes
- Supported employment opportunities
- Specialised supported accommodation involving direct Nursing and OT input
- Inpatient rehabilitation services (intensive and extended care)

While there was some variation of views about how such services should be distributed overall it was felt that the following configuration of additional services should be planned

Service	**DHB Places**				**Total**
	Taranaki	*Waikato*	*Lakeland*	*Bay of Plenty*	
CR+PR	1	0	5	3	8
ADP	1	9	8	2	20
ACT	0	1	8	0	9
AOD	0	6	3	5	14
WorkOps	3	6	5	5	19
L4+ Acc[19]	4 (0)	30 (6)	12 (5)	6 (5)	52 (16)
IPR	4	14	8	8	34
FIP	1	1	1	2	5
Other	0	6	0	2	8

[19] Note: Apart from Taranaki, other DHBs said that certain consumers could utilise either clinically staffed L4+ accommodation or In-patient rehab. The numbers of these people are indicated in brackets and in terms of planning would result in a need to ncrease provision of whatever option was preferred and decreasing the other.

Beyond these services while the most consumers had double and triple diagnoses overlapping with other conditions, most clinicians felt that more attention should be focussed on the potential subgroups of consumers identified in the survey and the particular services that they need to adequately address their needs. Further needs analysis would be required of those with lesser degrees of disability. However they indicated that while an immediate increase in generic services were needed for the ECN group that more specific services should be considered for those with head injuries, intellectual disability, Borderline Personality and Eating Disorder. In this regard they also felt strongly that if a Regional In-patient Unit was to be established ultimately it should focus on the needs of those who had major mental illness and substance abuse dual diagnoses. Furthermore they were emphatic that consumers with acute disorders should not be mixed with those whose condition required longer term residential care and rehabilitation.

The question about whether the services should be local or regional will be important. In essence, and notwithstanding the fact that the overall group is sizeable, this may come down to a matter of the costs of services and the critical mass of expertise needed for the treatment of relatively small groups of people. There was a variation of opinion about this with one DHB (Bay of Plenty DHB) indicating a wish to continue to address the issues locally, or at least sub-regionally with Lakeland and others (Taranaki, Waikato and Lakeland) more inclined towards regional solutions.

In the opinion of the author there could be a combination of either sub-regional or regional solutions with special support for the families of consumers to maintain contact with their family members in their home DHB. On the other hand if the establishment of a Regional In-patient Rehabilitation Unit was deemed a priority for those consumers with more mixed disorders the assignation of it to the DHB with the highest number of ECN consumers and expertise in their inpatient care would seem sensible.

Notwithstanding residential services however there was an equally urgent need to increase Assertive Community Treatment, Partial Hospitalisation, Community based Day Programmes and Home based Treatment. There was also a need to increase the in which the sharing of problems and knowledge regarding the ways in which Assertive follow-up combined with Packages of Care could work better.

Given the increasing reliance which is placed on NGO services and the need to increase the provision of community based supervised residential programmes, NGO providers need to be identified who are willing to provide high level services with the engagement of clinical staff. They should then be intimately involved in the planning, implementation and coordination of the new services as they come on-stream.

Finally it is also critical that given the numbers of Maori consumers identified in the survey it is essential that Maori providers are given the opportunity to be involved in the development and delivery of new services.

5.1.2 Functioning

A more detailed analysis of the ways in which the DHB and Regional Services functioned and interfaced with one another would be required to address how well the services are integrated for ECN consumers. Moreover it was beyond the scope of this survey to assess the specific practices of individual clinicians. This said there appeared to be circumstantial grounds indicating room for improvement.

In terms of service coordination the functional relationship between teams within the DHBs and between the DHB provider arm MHS and NGOs appeared to lack clarity in terms of service objectives and clinical pathways. In terms of the Provider Arm Mental Health Services, crisis presentations, readmissions and ALOS gives evidence of the difficulties the current system has in addressing the needs of the ECN group. In the case of NGOs there were limits to the complexity and acuity of consumers that they could safely manage as evidenced by the numbers of consumers in the sample who had had been placed with 3 or more NGOs over the past year and/or had had 3 or more of their placements terminated.

Of course these issues are more likely to come to attention with complex cases. Nevertheless at a service level the incentives to make shifts towards to individualised care for ECN consumers seemed to be hampered for want of resources, understanding of needs, systems for coordinating care between providers and changes in the ways that services were configured.

It is possible that more specific work on interfaces and clinical pathways and the development of regional forums to share experience would help. Again however, while in many instances the relationship between the DHB Provider Arm Services and the NGOs was cordial, the failure to align incentives and establish common objectives and protocols for the care of ECN consumers was apparent as were the consequences as evidenced by the numbers within the identified group and their risk profiles. All of this may be related to short-comings of the DHB structure and legislation in which regional coordination at an operational level is limited by the responsibilities DHBs have to their own populations. Nevertheless the collective risk will continue unless these matters are more satisfactorily resolved.

5.2 Clinical Practice

In terms of clinical practice the clinicians spoken with seemed knowledgeable, in most cases doing excellent work and concerned with achieving the highest quality of life for their consumers. Nevertheless the way in which many of the forms were filled in suggested a lack of knowledge of diagnosis and the DSM IV, service utilisation, available and potential services and at a "team level" limitations in communication between key staff. All of these "quality" areas could be critical to the outcomes being achieved at present for the group.

Specific recommendations for improvements and how the issues raised by this survey might be addressed are made in the next section. However in discussion with the Regional ECN Steering Group it was suggested that a more detailed needs analysis[20] than that undertaken in the current survey is required. It was thought that this should be undertaken before any definitive conclusions were reached about the adequacy of existing services and the additional services that might need to be provided. In regard to the latter the specific concern related to the possibility of "institutional" services being given precedence over more "recovery" focussed alternatives was considered a major issue.

This certainly makes sense in terms of individual consumers and in any event should be undertaken, but in the view of the author a radical re-think of service philosophy regarding the needs of ECN consumers is required and more to the point the establishment of a range of specific services needs to be urgently undertaken to rectify what is a critical high risk situation.

While a high threshold for ECN criteria almost certainly means that there are potentially other high needs consumers who might be identified with even a slight lowering of the threshold, it should also increase confidence in the fact that those identified have needs which must be met and by a range of alternatives that takes both safety and recovery into account.

6.0 Recommendations

1. That the DHB MH Funding Managers, the Midland Regional MH Network and the High and Complex Needs Steering Group work together to prepare recommendations for additional services to be included in the 2005-2006 Regional MHS Plan and aimed at improving the care of consumers identified in this report. This should give priority to

    a. The development of additional 24 hour supervised residential (Level 4+) programmes comprising 40-46 places (allocated on the basis of population) with clinical input into staffing and service delivery
    b. The development of a Regional In-patient Rehabilitation Service comprised of 40 beds, allocated on the basis of DHB populations and coordinated by a Regional Clinical Governance Group[21]
    c. The establishment of clinically viable Assertive Community Treatment Teams in each DHB catering for the needs of 10-15 HCN consumers / 100,000 population at any point in time.
    d. The establishment of Acute Day Programmes in each DHB catering for the needs of 5-10 consumers/100,000 at any point in time.
    e. The identification of a range of work opportunities catering for the needs of 10-15 HCN conusmers/100,000 at any point in time.

2. That the DHB Clinical Directors discuss and agree on models of services that will clarify and improve the functioning of Assertive Community Treatment Teams and the utilisation of HCN Packages of Care.

3. That clinical staff within the DHBs and NGOs are made aware of these models of service and their objectives and given the opportunity to make submissions on how these models can be improved in practice.

4. That services for the delivery of AOD are reviewed to ensure that they are addressing the needs of the ECN group and that if they aren't that initiatives and resources are committed to ensuring they are made effective.

5. That while services are being developed a consumer focussed needs assessment process is undertaken to ensure that every effort is made to address consumer needs on an individual basis and that the services being implemented take into account additional information as it is identified.

6. That over the course of the coming year risk and needs assessments[22] of consumers with head injuries, intellectual disability, eating disorders and personality disorder are undertaken to identify whether service

[20] Using for example a version of the Camberwell Needs Assessment instrument
[21] Note: Reference should be made to the Central Region's management of the Inpatient Rehabilitation Service as a possible model for service delivery and integration.

continua are adequately addressing the risk and needs of those surveyed and if not that specific services are planned to better meet their needs.

7. That ways in which Maori providers can be further and more precisely involved in the delivery of services for ECN consumers are identified and implemented.

8. That NGO representatives, willing and able to develop high level services for those identified in the survey, are included on the HCN Steering Group so that ways by which NGO services can be better aligned with PAMHS to best meet the needs of ECN consumers are achieved.

9. That the HCN Steering Group develops a monitoring system of risk and quality indicators to enable DHB Clinical Directors to report to them on a 6 monthly basis the clinical status and progress of consumers identified by the survey.

10. That training of PAMHS clinical staff in the methodology and importance of diagnosis and understanding of the functioning of service continua is ensured by DHBs Clinical Directors.

11. That strength based and recovery approaches to care are developed and emphasised along with the recommendation 8.

12. That a presentation based on the findings of this survey is made to DHB staff and that plans stemming from the recommendations is made known to them when appropriate.

[22] Perhaps based on a score of 5-6 on the LOCCS

Appendix I

Survey of consumers with high and complex needs (ECN)

Introduction
Earlier this year clinicians in the Midland Region DHBs filled in a survey aimed at identifying the consumers in each DHB's Mental Health Services with the highest and most complex needs. The information gathered provided a very helpful overview of the consumer group. As a result I have been asked by the DHB MHS Clinical Directors to undertake a more specific survey to identify the numbers of people involved, their risk profile, their needs and what services should be available to best address them. This will help the Clinical Directors to communicate with the DHB funders/planners about the group. Hopefully this will in turn assist the latter to decide precisely what sort of services should be purchased to better and more safely meet the needs of the consumer group.

Procedure
Using the person's NHI number rather than their name, please fill in the survey questionnaire for all consumerswho score 7 on the Level of Community Support Systems Scale below.

It should be completed by all Psychiatrists and/or Case Managers in Inpatient and Community Adult Teams who are accountable for Case Management and Mental Health Act procedures relating to the people concerned.

Level Of Community Support Systems Scale (adapted from Kazadin)

The level of Community Support Systems Scale is designed to screen consumers for psychosocial rehabilitation programmes. The questionnaire that follows specifies the actual profile of the person.

For each of consumers on your caseload, circle the number associated with the level of community support services required**.**

Minimal support 1 2 3 4 5 6 7 High support

Minimal Support

Consumer comes regularly for appointments, rarely has crises requiring readmission, and is able to access community support components: outpatient treatment, housing, income support, psychosocial rehabilitation, general health care, day care, community worker and family support.

High Level of Support:

Consumer does not take medication as prescribed, is unwilling to attend clinical appointments, has frequent and severe crises involving threats or violence[23] to self and/or others requiring frequent hospitalisations, often uses alcohol and/or drugs in a hazardous manner, has been frequently asked to leave residences supplied by supported accommodation providers, needs help in most aspects of life, is unable to access community services on own, and has needs that cannot be adequately met by a standard high level of community support.

[23] Including physical and/or sexual events

Midland DHB MHS
Survey of consumers with high and complex needs

Note: ONLY fill in for those consumers scoring 7 on the Level of Community Support Systems Scale

1) Your DHB:

2) Patients: NHI……..

3) Gender Male/Female

4) Age

5) Ethnicity European / Maori / Pacific Island / Asian / Other (specify)

6) Length of time in service < 6mths : >6 mths : >1 year : >18mths : >2 years : > 3 years

7) Your role in regard to the consumer:

Case Manager : Psychiatrist : Both : Other(state).

8) Diagnoses (DSMIV):

Axis I :……..

Axis II ……..

Axis III …….

Axis V (Global Assessment of Functioning Score - DSM IV)…….

9) Mental Health Act Status:

10) Period of time under the MHA under last order (months):

11) Number of arrests for violence to others, sexual harassment and/or property damage:

0 : 1 : 2 : 3 : 4 : > 4

Risk profile

Item	Yes	No
Has violent delusions		
Has command hallucinations		
Has made specific threats to people and/or assaulted others or seriously damaged property		
Has made significant life threatening suicide attempts		
4 or more contacts with the Crisis team over the past year ?		
3 or more admissions to hospital over the past year (to date)		
Overall average length of stay during each admission 50 days or more[24]		
3 or more placements with NGO providers		
3 or more placements that have been terminated by NGO provider		
Has significant problems with alcohol and/or drugs that are related to a deterioration of mental status, associated with aggression to property or others, physical injury and/or lack of self care		
Is non-compliant with medication associated with deterioration or non-improving mental status		
Regularly fails to attend appointments		
Whereabouts often unknown		
Is unwilling to participate in day programmes		
Is often isolated and homeless		

Personal strengths and community support (state briefly)

[24] Note Sum ALOSs for all admissions over the past year to date and then average for overall ALOS

Services utilised by the consumer over the past 3 months (tick)

Service	Utilised
Crisis team	
Crisis-respite	
Planned respite	
Acute in-patient unit	
Acute day programme (partial hospitalisation)	
Community Mental Health Team	
Mobile Intensive Team	
Alcohol and other Drugs programme	
24 hours supervised accommodation	
Work Opportunities	
Inpatient rehabilitation	
Forensic inpatient services	
Other	

Services required by the consumer but not available (tick)

Service	Required but not available
Crisis team	
Crisis-respite	
Planned respite	
Acute in-patient unit	
Acute day programme	
Community Mental Health Team	
Mobile Intensive Team	
Alcohol and other Drugs programme	
24 hours supervised accommodation	
Work Opportunities	
Inpatient rehabilitation	
Forensic inpatient services	
Other	

Thank you for your cooperation

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Appendix II
Glossary

General

CJA	Criminal Justice Act
CMIP	
GAF	Global Assessment of Functioning
LOS	Length of stay
MHA	Mental Health Act

Ethnicity

A	Asian
M	Maori
NZE	NZ European
PI	Pacific Island

Risk Profile

>3 CATT YTD	3 or more contacts with Crisis Assessment and Treatment Team
>3 Hosps	3 or more hospitalisations YTD
>3 NGOs	3 or more placements with Community Providers
>3 NGO terms	3 or more placements with Community Providers terminated
ALOS	Average length of stay in hospital
AOD	Deterioration in mental state associated with alcohol or other drugs
CMHT	Community Mental Health Team
DNA	Frequent non-attendance at appointments
NC Meds	Non-compliant with prescribed medications
Arrests YTD	Arrests
Com Hals	Command Hallucinations
Isol/hmless	Socially isolated and/or homeless
LOS	Overall length of time in DHB MHS
NGOs	Non-government organisations
PR	Planned Respite
Suicidality	Serious/life threatening suicide attempts
Threats	Significant threats and/or assaults on others
Viol dels	Violent Delusions
WOUK	Whereabouts often unknown
YTD	Year to date

Services

ADP	Acute Day Programme/Day Hospital
AIPU	Acute Inpatient Unit
AODS	Alcohol and other Drugs Service
CATT	Crisis Assessment and Treatment Team
CMHT	Community Mental Health Team
CR	Crisis Respite
FIP	Forensic Inpatient Unit
IPR	In-patient rehabilitation
MIT/ACT	Mobile Intensive Team/Assertive Community Team
PLR	Planned Respite
SPVA	24 hours supervised [Level 4] accommodation)
Work Opps	Work skills development and/or Supported Employment opportunities

Diagnoses

ASTH	Asthma
ASP	Anti-Social Personality Disorder
BDL ID	Borderline Intellectual Disabilithy
BPAD	Bi-polar Affective Disorder
BPD	Borderline Personality Disorder
DD	Dual Diagnosis
DIBS	Diabetes
EPI	Epilepsy
HINJ	Head injury
IEXD	Intermittent Explosive Disorder
MDD	Major Depressive Disorder
OBES	Obesity
OCD	Obsessive-compulsive Disorder
OPD	Organic Psychotic Disorder
PSZ	Paranoid Schizophrenia
PD NOS	Personality Disorder Not otherwise specified
PSY NOS	Psychotic disorder Not otherwise specified
PTSD	Post Traumatic Stress Disorder
SA	Substance Abuse
SZAD	Schizo-affective Disorder
SCZ	Schizophrenia

Appendix II

DHB Findings[25]

DHB consumer and service profiles

The Regional patterns are influenced by Waikato DHB however while the numbers of the other DHB makes interpretation of their data difficult some differences are able to be discerned.

The Gender mix of the group with the exception of Lakeland is comparable with the Regional Findings. The age range varies in that while ages concentrate 20-40 group BOPDHB and to some extent LDHB has a wider spread. In terms of ethnic mix TDHB has a higher proportion of NZE to Maori than the other DHBs.

While the DHB patterns of Axis I and II reflect the Regional diagnostic mix the number of Axis III diagnoses are not numerous enough to draw any conclusions on a DHB basis.

The GAF scores of WDHB influence and mirror the regional result.. However there is a tendency for BOP DHB and to a lesser extent TDHB to have lower (ie higher disability and impairment) scores than WDHB and LDHB.

With exception of LDHB (and this is only to a minor extent) the risk profiles in general mirror the Regional patterns.

In terms of legal status Taranaki's consumers were less likely to be informal than the other DHBs. The high numbers of Waikato DHBs consumers who were informal is notable although on a population basis they are roughly comparable with Lakeland and Bay of Plenty. Again however there are a considerable number of indefinite Inpatient Orders.

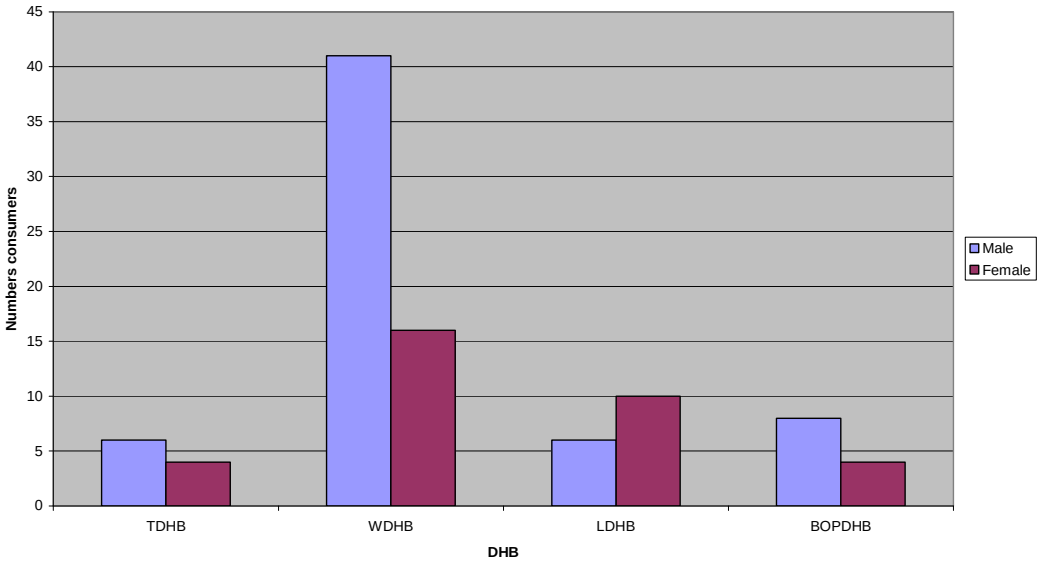
The pattern of current services being utilised is again similar across the DHBs with differences being accounted for the by presence or absence of certain services such as Acute Day Programmes and Mobile Intensive/Assertive Community Treatment Teams. The emphasis on CMHT, Acute Inpatient care and Supported Accommodation is similar for all DHBs.

When it comes to proposed services there are similarities and differences in that all DHBs indicated that consumers needed more access to clinically support NGO residential programmes and/or Inpatient Rehabilitation. On the other hand Lakeland recommended the establishment of a properly staff Assertive Community Treatment Team and an Acute Day programme. Waikato wanted to see the establishment of an ADP but placed most of its emphasis on Supported Accommodation and the provision of Inpatient Rehabilitation.

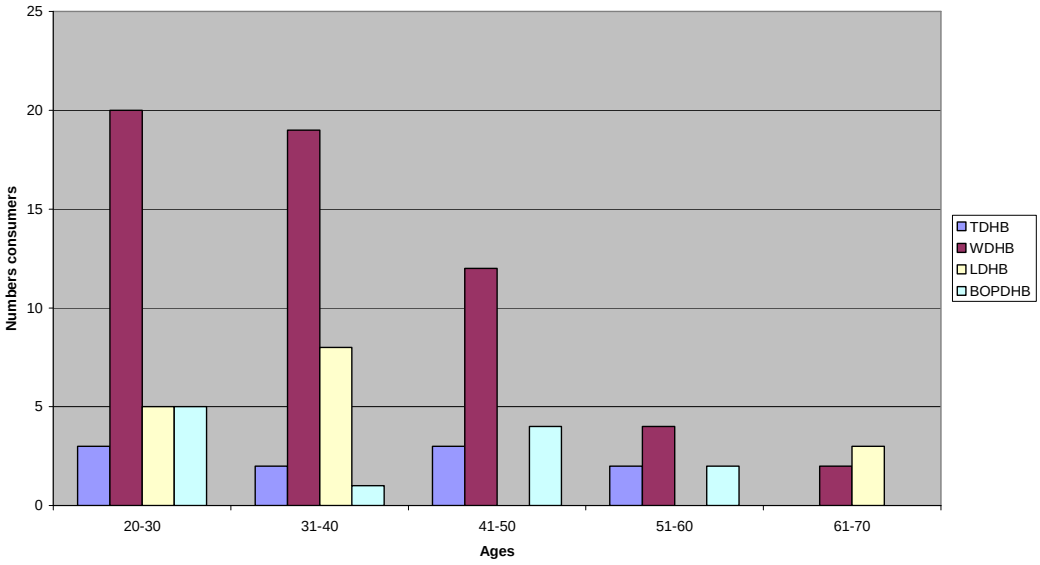
All services mentioned additional work opportunities but this option received less emphasis overall than residential services. In this regard all DHBs spoke of the need for a greater range of high input specialised residential services for consumers with head injuries, intellectual disability, dual diagnosis alcohol and drug users and borderline personality disorder.

[25] Note: Datasets relating to individual DHBs will be sent to DHB Managers and Clinical Directors by email.

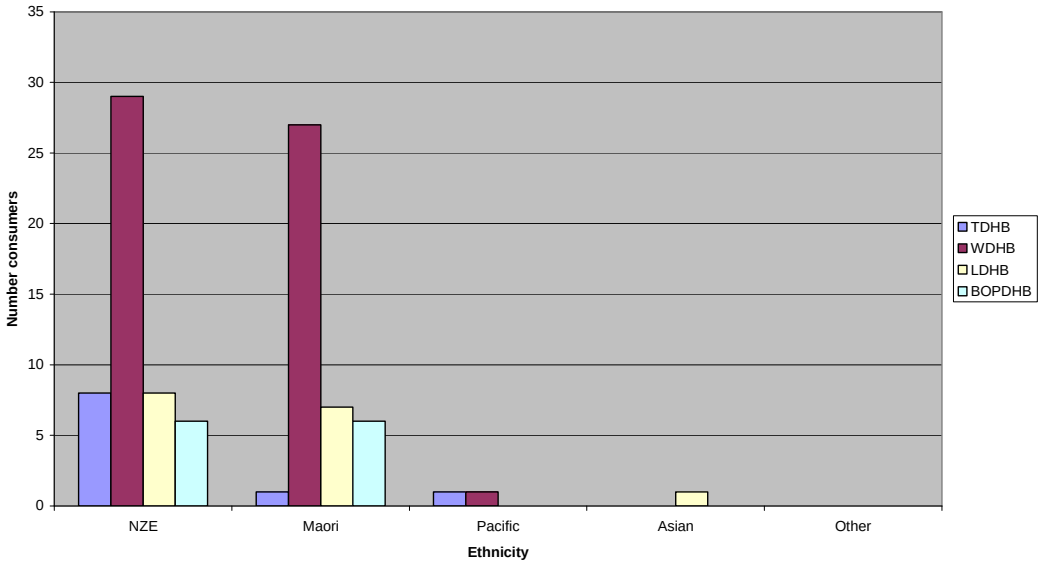
Gender mix / DHB consumers



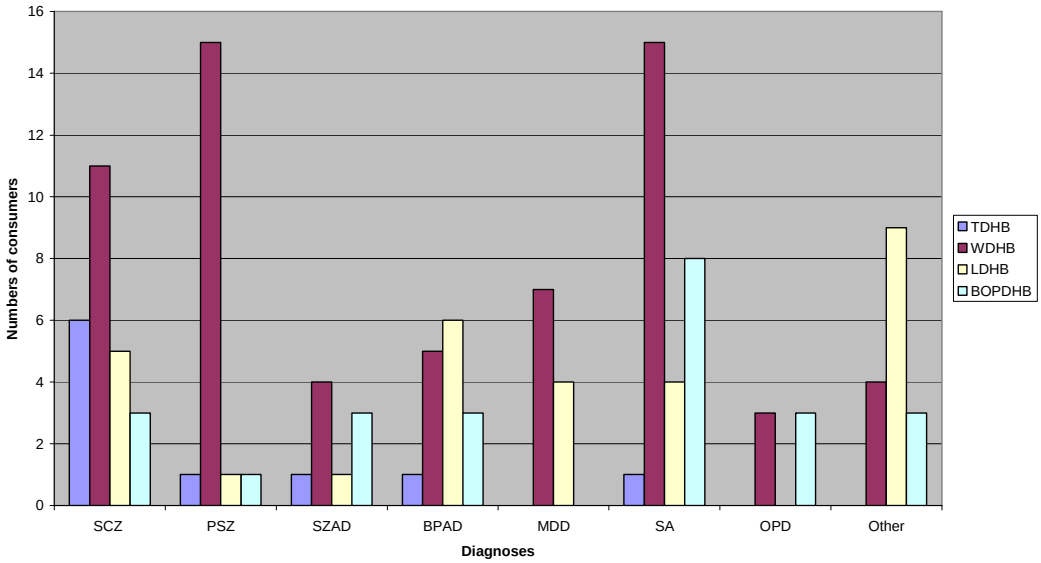
Ages / DHB consumers



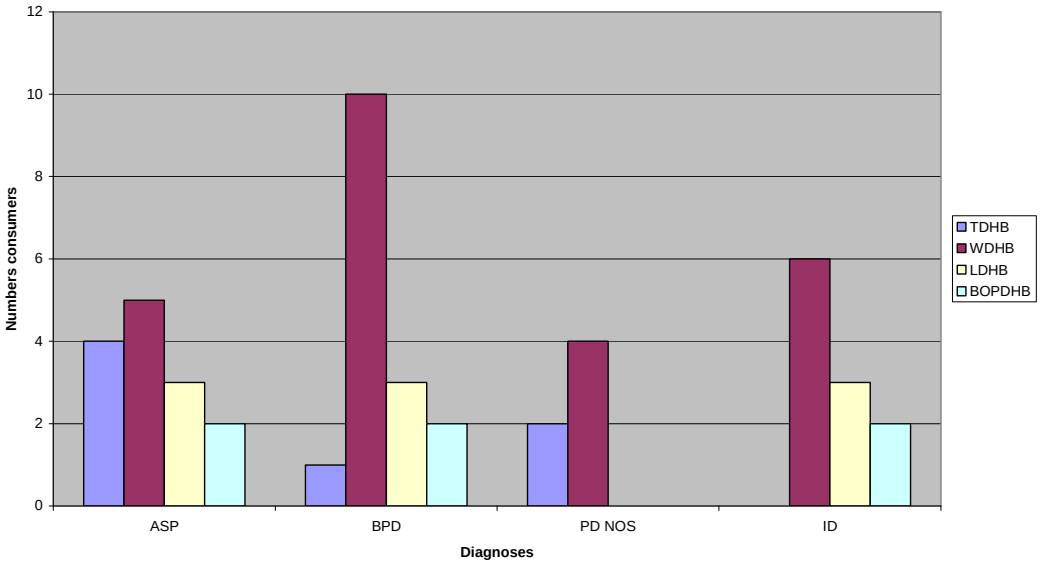
Ethnic mix / DHB consumers



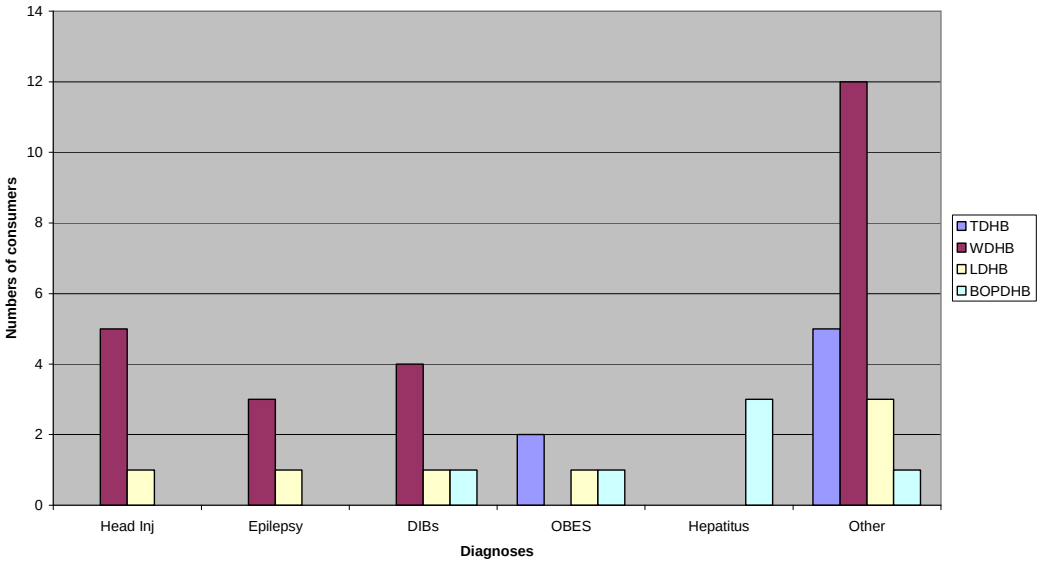
Axis I Diagnoses / DHB consumers



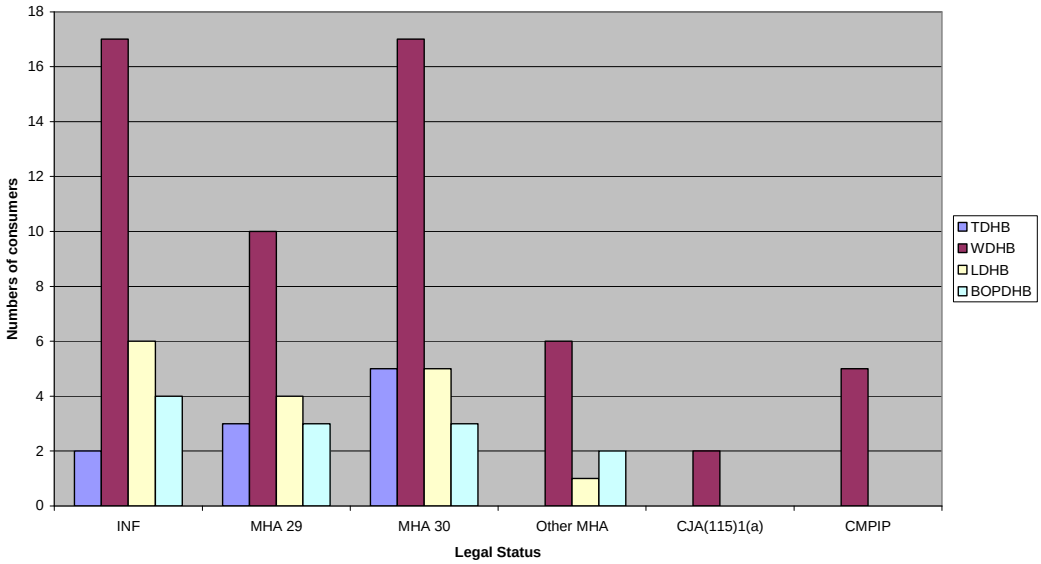
Axis II Diagnoses / DHB consumers



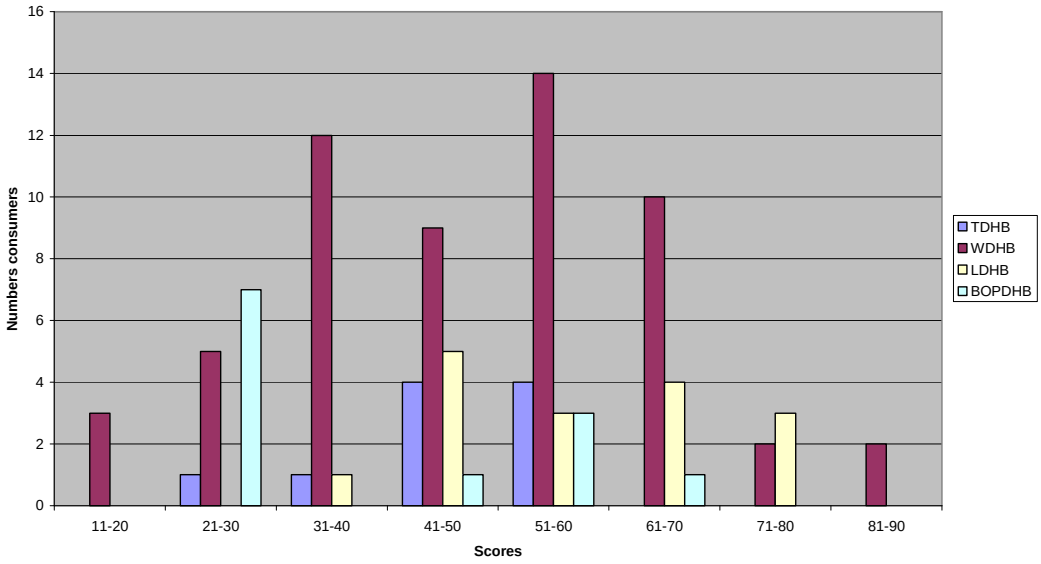
Axis III Diagnoses / DHB



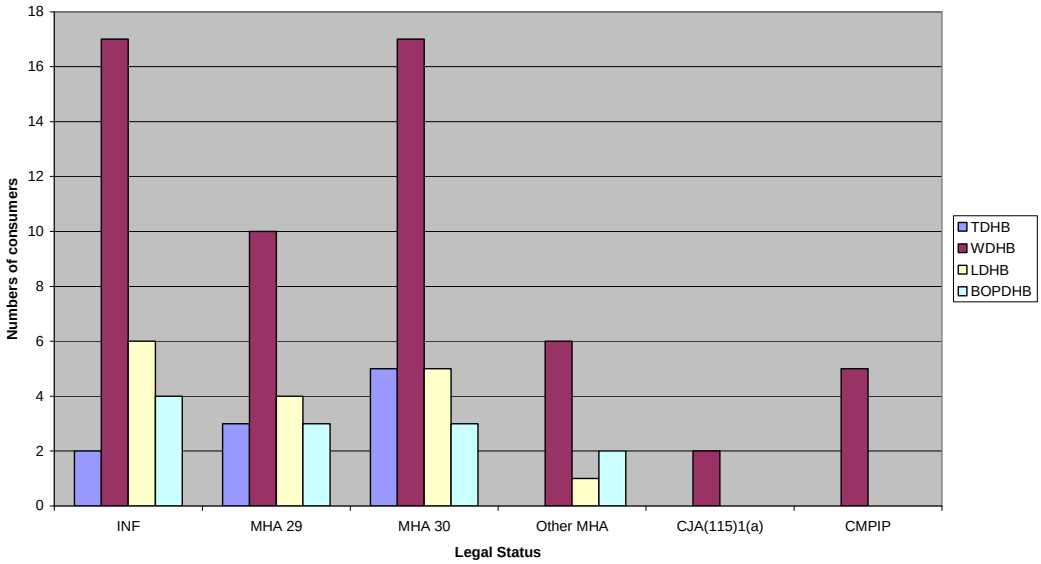
Consumer Legal Status / DHB



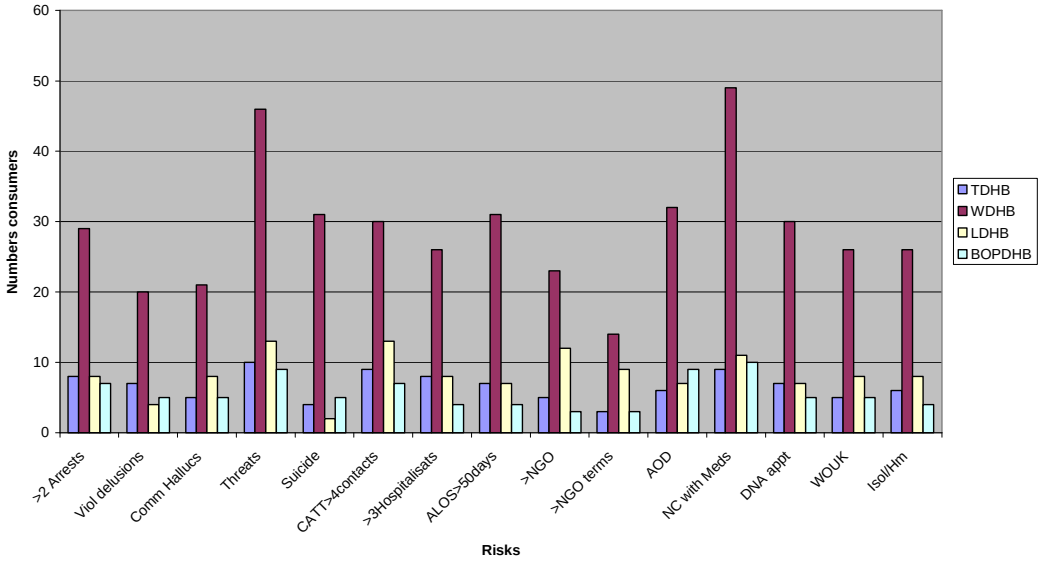
GAF Scores / DHB consumers



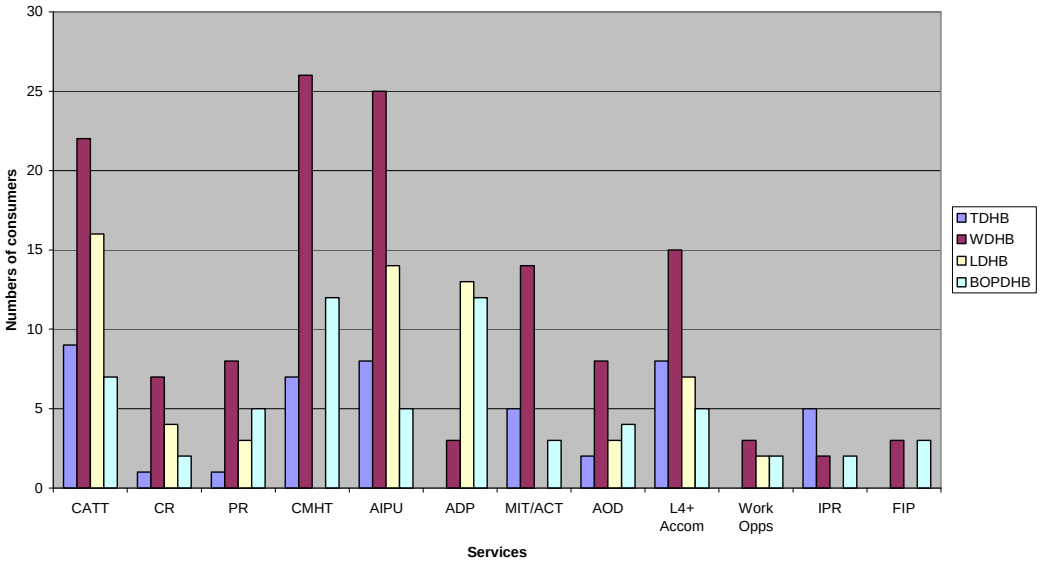
Consumer Legal Status / DHB



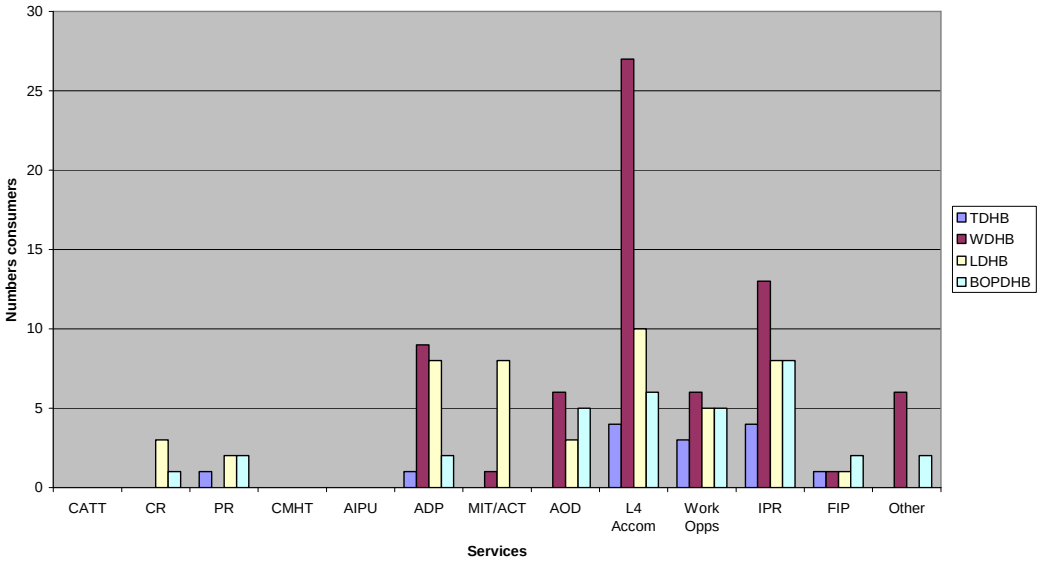
Risk profile / DHB consumers



Current services utilised / DHB consumers



Services required by consumers but not available / DHB



APPENDIX 1V - REGIONAL AND DHB RAW DATA								
Total consumers								
TDHB	10							
WDHB	57							
LDHB	16							
BOPDHB	12							
Total	95							
Age								
	20-30	**31-40**	**41-50**	**51-60**	**61-70**			
TDHB	3	2	3	2	0			
WDHB	20	19	12	4	2			
LDHB	5	8	0	0	3			
BOPDHB	5	1	4	2	0			
Total	33	30	19	8	5			
Gender								
	Male	**Female**						
TDHB	6	4						
WDHB	41	16						
LDHB	6	10						
BOPDHB	8	4						
Total	61	34						
Ethnicity								
	NZE	**Maori**	**Pacific**	**Asian**	**Other**			
TDHB	8	1	1	0				
WDHB	29	27	1	0				
LDHB	8	7	0	1				
BOPDHB	6	6	0	0				
Total	51	43	2	1				
Diagnoses Axis I								
	SCZ	**PSZ**	**SZAD**	**BPAD**	**MDD**	**SA**	**OPD**	**Other**
TDHB	6	1	1	1	0	1	0	0
WDHB	11	15	4	5	7	15	3	4
LDHB	5	1	1	6	4	4	0	5
BOPDHB	3	1	3	3	0	8	0	3
Total	25	18	9	15	11	28	3	12
Diagnoses Axis II								
	ASP	**BPD**	**PD NOS**	**ID**				
TDHB	4	1	1	0				
WDHB	5	10	5	6				
LDHB	3	3	1	3				
BOPDHB	2	1	0	2				
Total	14	15	7	11				

Diagnosis Related Groups								
SCZR	**ADR**	**SA**	**Other**					
52	26	21	17					
BP+PD NOS	**ID**	**HINJ**						
22	11	6						
Diagnoses Axis III								
	Head Inj	**Epilepsy**	**DIBs**	**OBES**	**Hepatitus**	**Other**		
TDHB	0	0	0	2	0	5		
WDHB	5	3	4	0	0	12		
LDHB	1	1	1	1	0	3		
BOPDHB	0	0	1	1	3	1		
Total	6	4	6	4	3	21		
GAF								
	11-20	**21-30**	**31-40**	**41-50**	**51-60**	**61-70**	**71-80**	**81-90**
TDHB	0	1	1	4	4	0	0	0
WDHB	3	5	12	9	14	10	2	2
LDHB	0	0	1	5	3	4	3	0
BOPDHB	0	7	0	1	3	1	0	0
Total	3	13	14	19	24	15	5	2
MHA								
	INF	**MHA 29**	**MHA 30**	**Other MHA**	**CJA(115) 1(a)**	**CMPIP**		
TDHB	2	3	5	0	0	0		
WDHB	17	10	17	6	2	5		
LDHB	6	4	5	1	0	0		
BOPDHB	4	3	3	2	0	0		
	INF	MHA 29	MHA 30	Other MHA	CJA(115) 1(a)	CMPIP		
Total	30	20	30	9	2	5		
Risk Profile								
	TDHB	**WDHB**	**LDHB**	**BOPDHB**			**Totals**	
Arrests>2	8	29	8	7		>2 Arrests	52	
Viol delusions	7	20	4	5		Viol delusions	36	
Comm Hallucs	5	21	8	5		Comm Hallucs	39	
Threats	10	46	13	9		Threats	76	
Suicide	4	31	2	5		Suicide	42	
CATT>4contacts	9	30	13	7		CATT>4cts	59	
Hospitalisats>3	8	26	8	4		>3Hosps	46	
ALOS>50days	7	31	7	4		ALOS>50 days	49	
NGO>3	5	23	12	3		>NGO	43	
NGO>3 terms	3	14	9	3		>NGO terms	29	
AOD	6	32	7	9		AOD	54	
NC with Meds	9	49	11	10		NC with Meds	79	
DNA appt	7	30	7	5		DNA appt	50	
WOUK	5	26	8	5		WOUK	44	
Isol/Hm	6	26	8	4		Isol/Hm	44	

Services utilised								
	TDHB	**WDHB**	**LDHB**	**BOPDHB**		**Total**		
CATT	9	22	16	7		54		
CR	1	7	4	2		14		
PR	1	8	3	5		17		
CMHT	7	26	0	12		45		
AIPU	8	25	14	5		60		
ADP	na	3	13	12		28		
MIT/ACT	5	14	0	3		22		
AOD	2	8	3	4		17		
L4+ Accom	8	15	7	5		35		
Work Opps	na	3	2	2		7		
IPR	5	2	0	2		9		
FIP	0	3	0	3		6		
Other								
Services required								
	TDHB	**WDHB**	**LDHB**	**BOPDHB**		**Total**		
CATT	0	0	0	0		0		
CR	0	0	3	1		4		
PR	1	0	2	2		5		
CMHT	0	0	0	0		0		
AIPU	0	0	0	0		0		
ADP	1	9	8	2		20		
MIT/ACT	0	1	8	0		9		
AOD	0	6	3	5		14		
L4+ Accom	4	30	12	6		52		
Work Opps	3	6	5	5		19		
IPR	4	13	8	8		33		
FIP	1	1	1	2		5		
Other	0	6	0	2		8		
		HBS		EDS				
		PSYTH						
		DBT						
		OT						
		CL PSY						
		SXAC						