

# The Utilization of Physician Services for Mental Health in Ontario



**July 1999**

# **THE UTILIZATION OF PHYSICIAN SERVICES FOR MENTAL HEALTH IN ONTARIO**

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## Summary of Findings

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- In fiscal year 1992/93, 18.7% of Ontario Health Insurance Plan (OHIP) users fit into the Ministry of Health's definition of mental health care (MOH-care). The majority of these (97%) also used medical services at the same time. MOH-care accounts for 6.0% of all OHIP physician visits and 10.7% of all OHIP billings.
- Shadow mental health care is defined as general procedures administered by frontline physicians for psychiatric conditions as defined by the International Classification of Diseases – 9th Revision (ICD-9). This type of care accounts for only 1.8% of the overall OHIP budget but is used by 15.2% of OHIP users. While there is some overlap with MOH-care, generally users of shadow services are distinct sociodemographically. Shadow care visits are most likely to be made by those over 65 years of age, particularly women.
- When mental health care is defined as including shadow services (MOH+shadow care), the percentage of OHIP users who use such care increases to 28.0%. The proportions of total OHIP visits and billings are 9.1% and 12.6%.
- Between 1992/93 and 1997/98, OHIP mental health care use rose sharply compared to total OHIP use. While the percentage of all users increased by 4%, the percentage using mental health services grew by 13%. Total OHIP billings rose by 11% (unadjusted dollars), yet mental health rose by 18%. Within mental health, the fastest rising portion was adjunct care – that is, mental health related procedures provided to individuals with medical rather than psychiatric conditions. Adjunct care users increased by 47% between 1992/93 and 1997/98, while related billings grew by 60%.
- General practitioners (GPs) play a critical role in the delivery of mental health care regardless of which definition of mental health care is used. They are the sole source of mental health services for the majority of users (76 to 84%), and deliver care to an additional 8 to 9% in conjunction with a psychiatrist. While they see comparatively large numbers of users for a small number of average visits (2 to 3), they also deliver intensive mental health care to a small group of OHIP users who tend to be elderly, institutionalized or hospitalized, and are likely to have chronic and severe conditions. GPs also appear to play a major role in the screening, treatment and referral of individuals with psychiatric or emotional problems.
- Comparisons between 1992/93 and 1997/98 suggest subtle but consistent changes in physician practice patterns. The role of psychiatrists in delivering mental health care seems to be diminishing slightly in comparison to the role of GPs and non-GP/non-psychiatrist physicians. Psychiatrists see proportionately fewer mental health care users and appear to be providing briefer episodes of care with only a marginal rise in average cost per visit (0.9%) compared to much larger increases for other types of mental health care.

- Mental health care resources are not allocated evenly across age-sex and regional groups with adolescents, males, the elderly and residents of less urbanized planning regions being particularly underrepresented. The age-sex group most likely to receive mental health care services is 20-44 year old females. These disparities have not changed noticeably in the five-year period between 1992/93 and 1997/98.
- Frequent mental health care users represent a small percentage of all mental health care users (from 0.2% to 6.3%, depending on the cutpoint chosen), but consume a far from trivial portion of the OHIP mental health dollar (approximately \$25 million for individuals making 105 or more visits during the 1992/93 fiscal year). Comparisons over time show that individuals making frequent visits (i.e. 13 or more visits) in 1992/93 were more likely to remain frequent users. However, the notion that large numbers of heavy users are permanent patients is not accurate. Sixteen (16) to 17% of those making 105 or more visits in 1992/93 still made that many visits in 1997/98, a percentage similar to the 17 to 19% of single-visit users and 17 to 20% of 2-to-4 visit users who continued to make the same number of visits.

### **Potential Implications**

- The percentages of OHIP users receiving either MOH-care or MOH+shadow care are considerably higher (3 to 4 times as high) than would be expected from population surveys such as the Ontario Mental Health Supplement (the Supplement). Policy implications are twofold: first, that mental health care is a significant portion of OHIP services; second, if the prevalences of psychiatric disorder reported by the Supplement are reasonably accurate, the rates of unmet need may be significantly lower than previously thought.
- There is a significant need to coordinate and integrate care even within the fee-for-service sector. Ninety-seven per cent (97%) of mental health care users also used medical OHIP services, and a small, but probably more seriously ill, proportion see both a general practitioner and a psychiatrist for their mental health care.
- The critical role that GPs play in mental health care delivery needs more careful examination to assess appropriateness, outcome and the availability of adequate backup and expertise.
- Provider availability, practice patterns and consumer preference are probably the most important factors underlying the age-sex and regional disparities in OHIP mental health services recipients.
- Frequent use patterns need closer examination to determine if they reflect cost-effective or inappropriate service use. Factors in these further analyses should include: the severity of need of the care recipient, the expertise of the service provider, and the match between the patient's needs and the service delivered. In addition, larger system issues should be considered such as the availability of providers, practice patterns, and system incentives that either encourage or hinder desired forms of practice.



## Background

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Ontario's Mental Health Reform plans to create an integrated system that provides a seamless continuum of care. Its primary concern to date has been the shift of resources from the provincial psychiatric hospitals (PPHs) to a community-based model of care. While the focus on the PPHs is understandable since they consume the largest portion of the financial pie' and represent what is now considered an expensive and more restrictive form of care, there has been a conspicuous neglect of the second largest sector that delivers mental health care – namely, the fee-for-service physicians.

The reasons for this neglect are, in part, political, but are also because of a lack of information. To address this need, we analyzed the National Physician Data Base (NPDB) – a database containing quarterly summaries of fee-for-service physician billings in each province – and found age-sex and regional variations in Ontario's mental health spending which did not match the provincial variations in need for mental health services. Groups that were comparatively underresourced included males, adolescents, the elderly and residents in less urban planning areas.<sup>1,2</sup>

These findings, while answering some questions, also led to new ones." Methodological issues arose because the NPDB, since it was organized by physicians, provided only limited patient information. Key missing variables included the patient's region of residence and diagnosis. If substantial numbers of patients were traveling to a different planning region for their mental health care, this would not have been reflected in our previous findings. Furthermore, anecdotal evidence suggested that the fee-code-based definition of mental health care used by the Ministry of Health (and employed in our analyses) did not capture all mental health related services. In particular, general procedures which were applicable to mental health as well as physical conditions would not have been counted. The amount of funding spent on this type of shadow care is unknown.

Other questions not answered by these earlier analyses but critical to Ontario's Mental Health Reform included – what role general and specialty providers played in delivering mental health care, who were the frequent users of services, and finally what changes (if any) Reform was effecting on the fee-for-service sector.

Consequently, when the OHIP claims data became available for analysis, we decided to focus on five sets of questions:

1. Do regional spending patterns significantly change when we use patient's region of residence instead of physician's region'? If so, what is the magnitude of such cross-regional service delivery?
2. What is the extent and nature of shadow mental health care? What percentage of OHIP mental health billings does it account for? Who delivers it, and who receives it?

3. Who receives mental health care from their general practitioner or family physician, who receives care from a psychiatrist, and who receives care from both types of providers?
4. Who are the frequent users of mental health care? Whom do they receive their care from, and what kinds of services do they receive?
5. Are there any changes over time in who is receiving mental health care, who is delivering it, or in the amount of money spent?

Each topic is addressed separately in the following five sections.

## 1.0 Regional Findings

### 1.1 Method

Per capita spending rates for mental health were calculated using the same procedure as previous analyses conducted by the Institute for Clinical Evaluative Sciences (ICES).<sup>1</sup> Mental health billings were identified using a list of fee codes defined by the Ontario Ministry of Health as mental-health-related (hereafter MOH-care). Rates were calculated using patient's residence for OHIP billings submitted during the 1992/93 fiscal year, the same time period used in an earlier work, and then compared to the previously reported findings. (For a listing of the fee codes used to define MOH-care claims see Appendix A). The two northern regions were grouped as in previous analyses (see Exhibit 1).

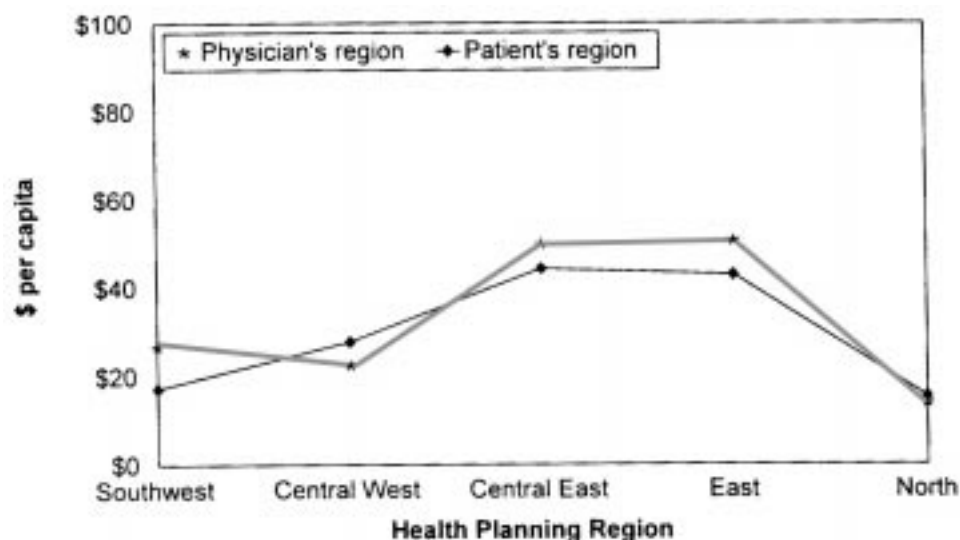
### 1.2 Results

Using the patient's region of residence rather than the physician's region evens out the distribution of per capita spending somewhat (Exhibit 2). However, the resulting profile does not approach the more even regional picture of need shown in the 1990/91 Mental Health Supplement (the Supplement) to the Ontario Health Survey.<sup>7</sup> The changes are in the expected places. Patients from the Central West are seeking care outside of their region, and cross-regional care is being delivered by providers in the Southwest (London), Central East (Metro Toronto), and Eastern (Ottawa, Kingston) regions where there are concentrations of urban areas with psychiatrists in treatment facilities. There is virtually no change for the North.

### 1.3 Conclusions

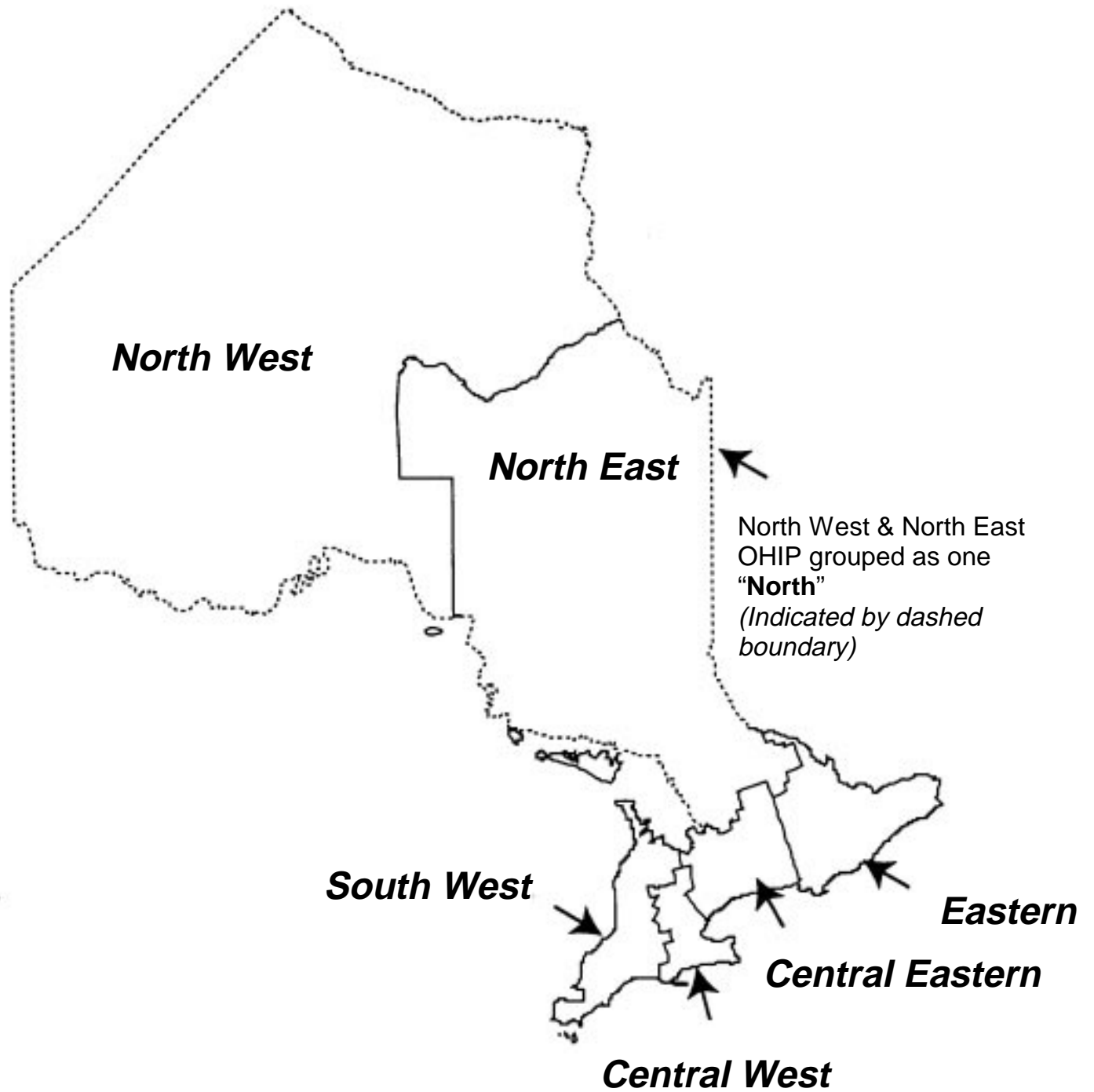
While using physician's region provides a similar picture to patient's region, it does have some systematic biases because of cross-regional service delivery.

**Exhibit 2: Per capita MOH-care Billings to the Ontario Health Insurance Plan by Health Planning Region, 1992/93**



**Exhibit 1:**

***Ontario Health Planning Regions, 1992***



## 2.0 Shadow Mental Health Care

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### 2.1 Method

The original notion behind shadow mental health care was that the Ministry's list of mental health related fee codes did not capture all mental health care delivered by OHIP providers. Our initial assumption was that all fee codes not on the Ministry's list of mental health codes, but associated with an ICD-9 psychiatric diagnosis, constituted shadow care. However, preliminary explorations showed that this definition also covered a high number of inappropriate claims (e.g. tooth extraction, administration of anesthesia). We then redefined shadow services as care delivered:

- 1) by front-line physicians or those in specialties closely related to psychiatry (General Practitioner/Family Physician (GP/FP), geriatrics, emergency medicine, neurology or pediatrics)
- 2) for general assessments/consultations or specialized procedures such as an electroencephalogram (VF(i) or Ministry of Community and Social Services (MCSS) evaluation (see Appendix B for complete list of fee codes)
- 3) to a person with an ICD-9 psychiatric diagnosis (see Appendix C).

The availability of diagnosis codes in the OHIP claims data also allowed us to examine the Ministry's original definition of mental health care in a more detailed fashion. MOH-care claims associated with an ICD-9 psychiatric diagnosis were labeled direct care; those associated with a non-psychiatric diagnosis were labeled adjunct care. Although we were confident that a psychiatric diagnostic code reflected the presence of significant emotional or mental distress, we were far less certain about the reliability of specific diagnoses. Anecdotal evidence from OHIP providers indicated consistent and possibly widespread miscoding of this information because of either administrative procedures or concern about stigma for the patient. Consequently, ICD-9 psychiatric diagnoses were used collectively with no analyses performed for individual diagnoses.

All analyses were done on 1992/93 fiscal year OHIP claims. Results in this section are reported in three parts: overall findings, shadow care, and adjunct care.

### 2.2 Results

#### **Overall findings:**

The percentages of users, visits and billings for the various categories of OHIP care are compared in Exhibit 3. The largest proportions are associated with medical services, however, a surprising 28.0% received some type of mental health care. The difference between the user proportions versus the visits or billings proportions is because 96.5% of mental health users also received medical services. The remaining 2.5% who used mental health services exclusively constitute only 0.7% of all OHIP users.

**Shadow mental health care:**

Shadow billings for 1992/93 totaled \$68.5 million compared to \$400.4 million for MOH-care – a ratio of 1:6. On first glance, shadow care would appear to be a negligible factor in the delivery of mental health services. However, a comparison of total numbers of visits (3.0 million shadow vs. 5.7 million MOH-care visits) and of users (1.2 million vs 1.4 million) reveals considerably lower ratios (1:2 and 1:1) indicating that shadow services are a significant source of mental health care. The difference between costs, and either visits or users, is partly due to the fact that shadow encounters are probably briefer than MOH-defined encounters.

**Exhibit 3: Type of Ontario Health Insurance Plan Care by Users, Visits and Billings, 1992/93**

Type of Care	Users	Visits	Billings
Total Number	7.6 million	95.8 million	\$3.7 billion
Medical Only*	72.0%	90.9%	87.4%
Mental Health**	28.0%	9.1%	12.6%
Direct	12.5%	5.0%	9.5%
Adjunct	8.5%	1.0%	1.2%
Shadow	15.2%	3.1%	1.8%

\* Refers to individuals using only medical services.

\*\* Refers to individuals using any mental health services whether or not they used medical services as well. Percentages of mental health users sum to greater than 28.0% because of overlapping types of use.

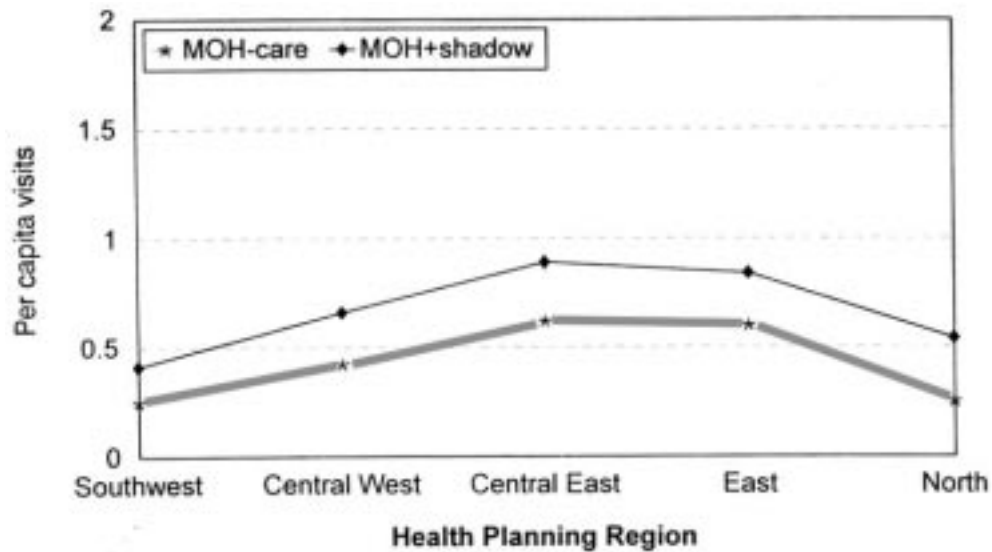
MOH-care users (i.e. those using direct or adjunct services) totaled 1.4 million or 18.7% of all OHIP users. If the definition of mental health care is expanded to include shadow care (hereafter MOH+shadow care), these numbers increase to 2.1 million and 28.0%.

Analysis of per capita visits and billings showed no striking regional differences when comparing MOH-care to MOH+shadow care (Exhibits 4a and 4b), although there are age-sex differences (Exhibits 5a to 5d). The gap (for both visits and costs) between MOH-care and MOH+shadow care widens as age increases with the largest difference occurring for the older age groups for both men and women. Probably a substantial portion of this difference in the elderly is the shadow care provided by geriatric specialists for patients with Alzheimer's Disease or some other form of dementia.

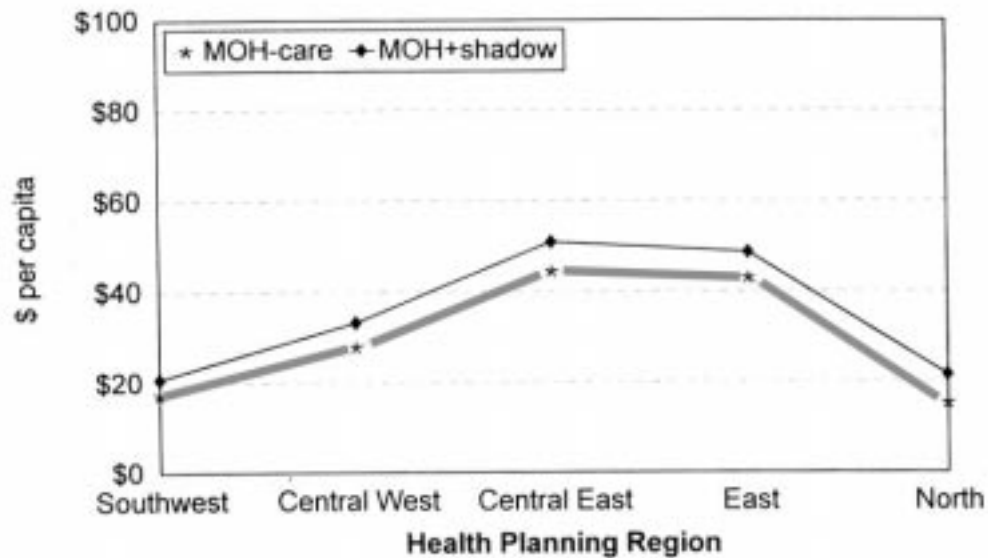
**Adjunct mental health care:**

In fiscal year 1992/93, 0.6 million OHIP users received adjunct mental health care. While this represents 8.5% of all OHIP users, adjunct services like shadow care account for only a small percentage of visits and billings (as shown earlier in Exhibit 3).

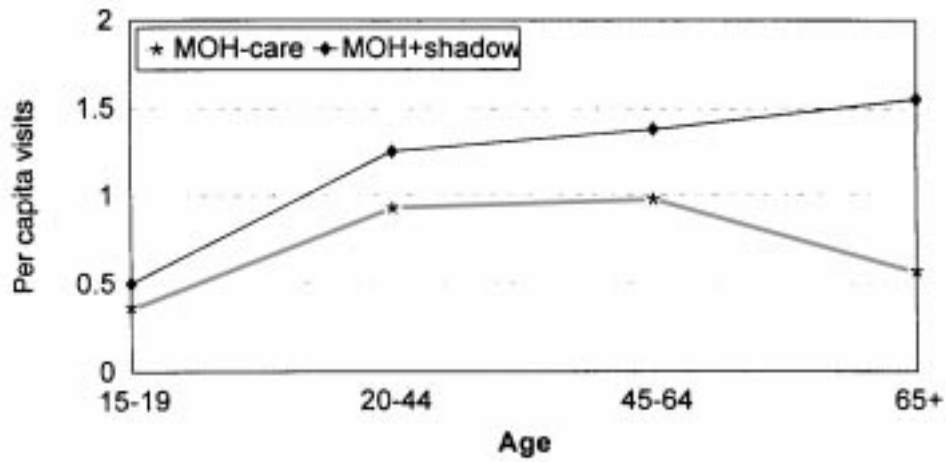
**Exhibit 4a: Per capita Visits for Ontario Health Insurance Plan MOH-care and MOH+shadow care by Health Planning region, 1992/93**



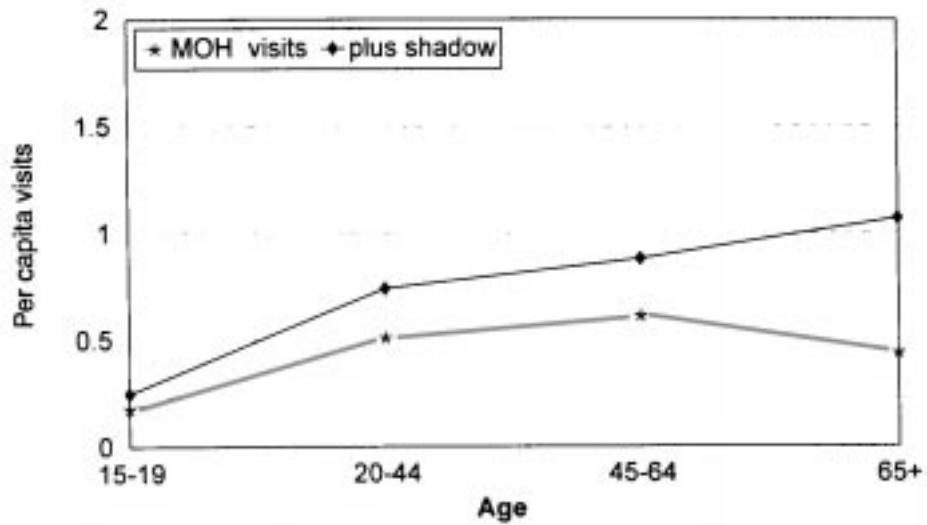
**Exhibit 4b: Per capita Billings for Ontario Health Insurance Plan MOH-care and MOH+shadow care by Health Planning region, 1992/93**



**Exhibit 5a: Age/Sex-specific Per capita Visits for Ontario Health Insurance Mental Health Care (Women), 1992/93**

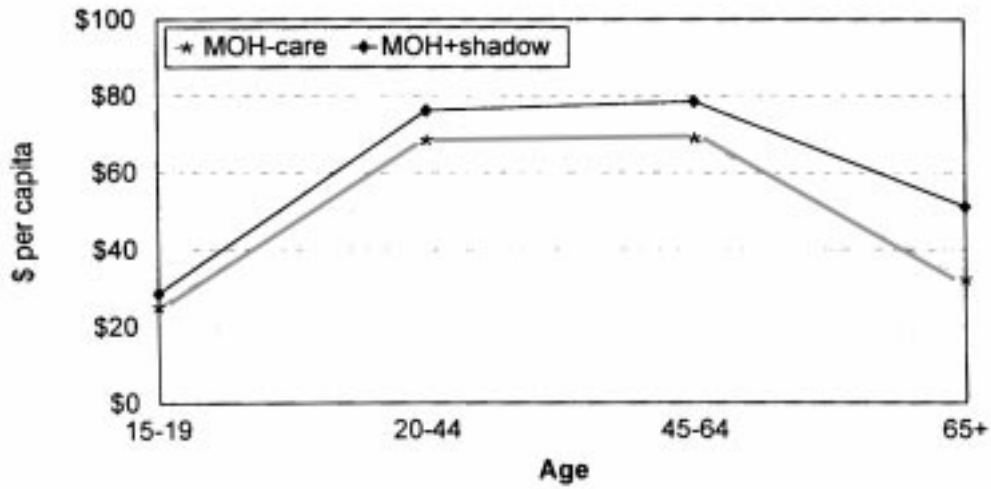


**Exhibit 5a: Age/Sex-specific Per capita Visits for Ontario Health Insurance Mental Health Care (Women), 1992/93**

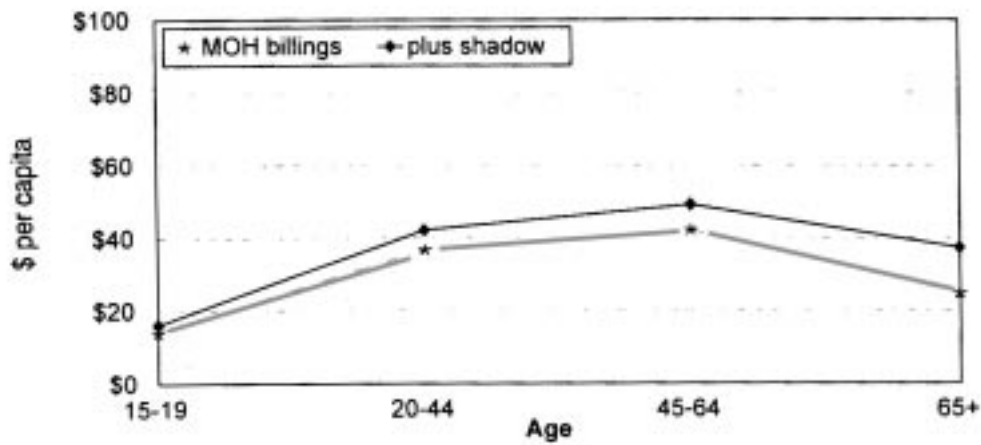




**Exhibit 5c: Age/Sex-specific Per capita Billings for Ontario Health Insurance Mental Health Care (Women), 1992/93**



**Exhibit 5d: Age/Sex-specific Per capita Billings for Ontario Health Insurance Mental Health Care (Men), 1992/93**



**Exhibit 6: Diagnoses Associated with Adjunct Mental Health Care in Ontario, 1992/93**

<b>Diagnostic Grouping</b>	<b>Percentage of Adjunct Mental Health Claims</b>
Endocrine, nutritional and immunity disorders	20.5
Symptoms, signs and ill-defined conditions	12.6
Genito-urinary	11.6
Family planning	10.0
Circulatory system	6.7
Neoplasms	6.2

The most common conditions associated with adjunct care are shown in Exhibit 6. The largest category, accounting for 20.5% of adjunct care claims, includes the delivery of MOH-care for endocrine, nutritional and immunity disorders; followed by ill-defined conditions, genito-urinary complaints (particularly reproductive problems) and family planning.

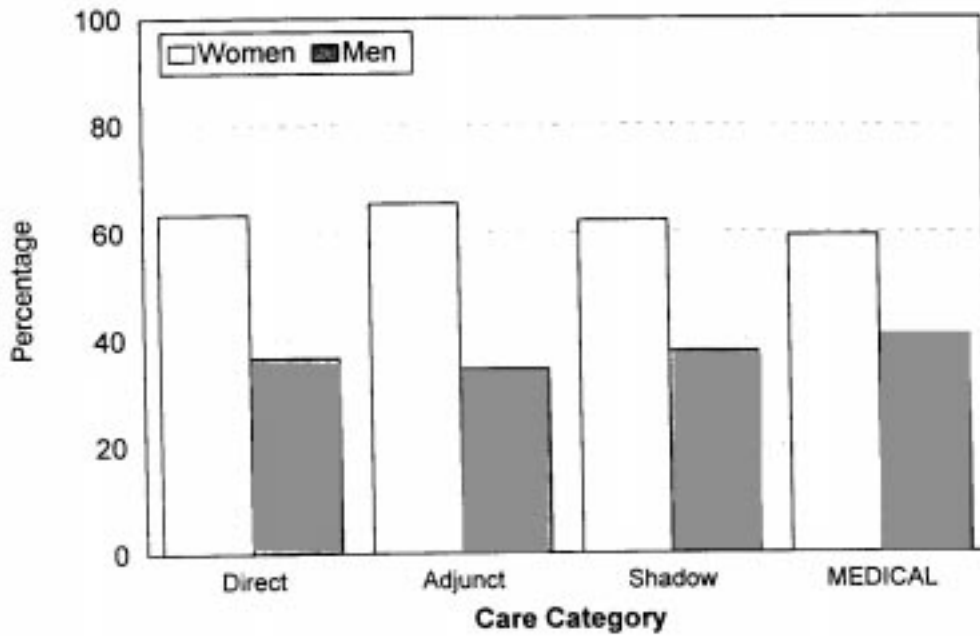
Comparisons between the distributions of medical and mental health OHIP visits across sex and age-sex groups are shown in Exhibits 7 and 8. While women make proportionately more visits than men regardless of the type of OHIP service, the gender gap widens slightly for all categories of mental health visits (Exhibit 7). When these distributions are further broken down by age groups (Exhibit 8), the patterns for direct and adjunct care are similar and distinct from the patterns for either shadow mental health care or medical care. Shadow care and medical care patterns are similar with the exception of a markedly higher proportion of shadow care visits made by women over 65 years of age.

### **2.3 Conclusions**

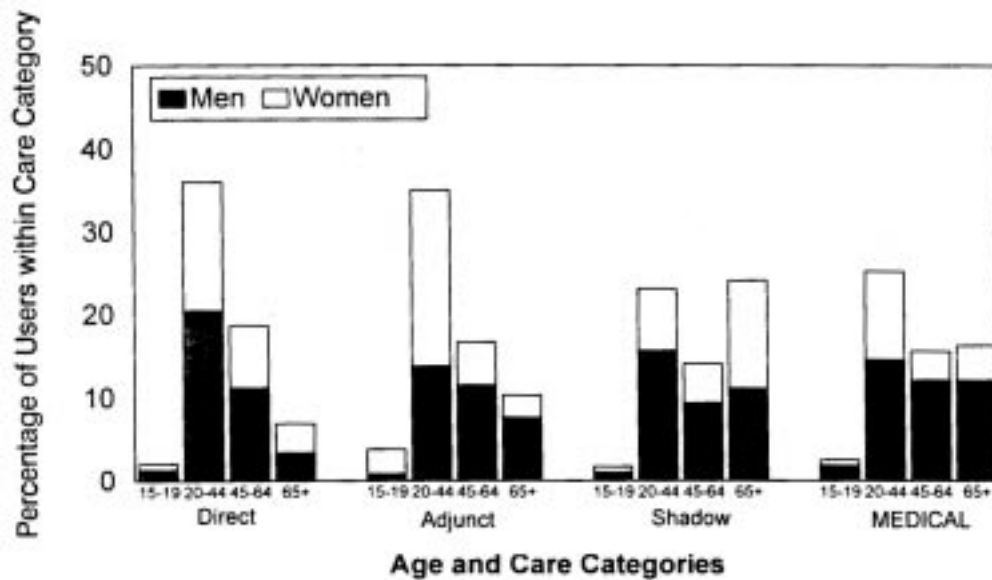
Both shadow and adjunct care account for modest portions of OHIP expenditures (1.8% and 1.2%) but significant numbers of OHIP users (15.2% and 8.5%). Including shadow care in mental health services increases the proportion of mental health users to 28% compared to 18.7% when using the Ministry's traditional definition. This finding, and the age-sex analyses, show that the recipients of such care are a distinct group from those using either direct or adjunct care. The consumers of MOH-care are most likely to be 20-44 year old women while older users (especially women) are more likely users of either shadow mental health or medical services. The groups most underrepresented, for both medical and mental health OHIP services, are the youngest males and females. Because of these findings, all further analyses will report MOH-care as well as MOH+shadow care.

It is interesting that the percentage of users of OHIP mental health services (whether MOH-care, MOH+shadow or one of the mental health care subcategories) far exceeds the percentage of self-reported use of formal mental health services reported in population surveys such as the Supplement (6.5%).<sup>4</sup> Assuming that the majority of the Ontario population are also OHIP users, there is clearly a marked difference between provider and user perceptions of mental health care. The current findings suggest that the unmet need in Ontario may not be as great as the Supplement data suggest, and that older women may not be as underserved as previously thought. Our results do, however, underscore that older men and, particularly, younger Ontarians are still underserved.

**Exhibit 7: Sex-specific Percentages of Ontario Health Insurance Mental Health Plan Visits 1992/93**



**Exhibit 8: Age/Sex-specific Percentages of Ontario Health Insurance Mental Health Plan Visits 1992/93**



## 3.0 General Medical versus Specialty Sector Delivery of Mental Health Care

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### 3.1 Method

1992/93 OHIP users of mental health services (both MOH-care and MOH+shadow) were categorized according to whether they received their mental health care from a general practitioner only, from both a general practitioner and a psychiatrist, or from a psychiatrist only (labeled as GP-only, GP+psychiatrist and psychiatrist-only). These groupings were compared in terms of their sociodemographic characteristics (age, sex, region, percentage rural) as well as the fee code categories associated with each provider source.

### 3.2 Results

Exhibit 9a shows the user, visit, billings and mean visits breakdown by provider source for users of MOH-care. The GP-only category accounts for the vast majority of MOH-care users (75.5%) and a lesser, but still substantial, portion of both visits (40.5%) and billings (34.7%). The reason for the decrease in percentages is that GP-only users average considerably fewer MOH-care visits (2.2) than users receiving care from other provider sources. The smallest proportion of users are those receiving care from both GPs and psychiatrists. However, because they average the highest number of visits, their portion of visits is greater than the psychiatrist-only group (32.0% vs. 25.2%) and their portion of billings nearly equals the GP-only users.

Some of the same patterns hold for MOH+shadow care (Exhibit 9b). Again the GP-only users constitute the largest proportion of users, visits and billings. However, because psychiatrists (by definition) deliver no shadow care, the psychiatrist-only category now accounts for the smallest percentages. As with MOH-care, the largest average number of visits is made by those using both the general and specialty sectors, the smallest by those seeing only their family physicians for mental health care.

Exhibit 10 shows the sex, age, regional and urban/rural distributions for both MOH-care and MOH+shadow care users, and compares them to the distributions for all OHIP users (last column). In general, the patterns found for MOH-care also hold true for MOH+shadow care. While women are more likely than men to use any OHIP services, they are even more likely to access the mental health care delivered by GPs – either alone or in combination with psychiatrists. Both the youngest and oldest age groups are underrepresented among users of mental health care. When the 15-19 year olds seek care, it is most likely from a psychiatrist alone. The elderly, in contrast, are most likely to receive care from GPs only. The age group most likely to combine the general and specialty sectors are the 20-44 year olds who, along with the 44-64 year olds, are overrepresented among mental health users compared to all OHIP users.

Regionally, it is the Central East and East regions which are overrepresented for both MOH-care and MOH+shadow care, and where the combination of GP and psychiatrist is most likely. Both the Southwest and North regions are underrepresented and more likely to use GPs only. The Central West region, while also underrepresented, is unusual in that when care is sought, it is most likely from the specialty sector alone. We originally assumed this pattern was related to the availability of psychiatrists. However, the explanation was not quite so simple. The Central West actually has both the second *lowest* rate of psychiatrists per 1,000 population (0.09 compared to the high of 0.23 in the Eastern region') and the *lowest* rate of GPs (0.84 compared to 1.1' in the East). Thus, our results probably reflect the comparative dearth of physicians in general in this region.

Rural users are proportionately less likely to receive either MOH-care or MOH+shadow care services. When they do, it is more often from GPs only.

Exhibits 1 la and 1 1b show the age-sex distributions by provider source for users of MOH-care and MOH+shadow care. For comparative purposes, the distributions for those users who only used medical services are also shown. The most obvious result is that the broad age-sex disparities shown earlier for direct and adjunct care (Exhibits 7 and 8) persist across provider source. Users of mental health care are more likely to be women, particularly women aged 20-44, and the adolescent and elderly age groups are considerably underrepresented. There are two interesting findings when provider source categories are compared. First, the gender gap narrows for the psychiatrist-only group. Second, one group of men is **overrepresented** compared to medical-only users. These are the 20-to-44 year old men who consult a psychiatrist either in combination with a GP or alone.

### Exhibit 9a: Provider Source for MOH-care in Ontario, 1992/93

Source of Care	Total Number of Users	% MOH-care Users	% All-OHIP Users
GP Only	1,066,201	75.5	14.1
GP + Psychiatrist	122,857	8.7	1.6
Psychiatrist Only	144,099	10.2	1.9
	Total Number of Visits	% MOH-care Visits	% All-OHIP Visits
GP Only	2,318,221	40.5	2.4
GP + Psychiatrist	1,828,321	32.0	1.9
Psychiatrist Only	1,440,659	25.2	1.5
	Total Billings	% MOH-care Billings	% All-OHIP Billings
GP Only	\$139,038,077	34.7	3.7
GP + Psychiatrist	\$134,780,995	33.7	3.6
Psychiatrist Only	\$119,070,678	29.7	3.2
	Mean MOH-care Visits	Mean MOH-care Billings	
GP Only	2.2	130.41	
GP+ Psychiatrist	14.9	\$1,097.06	
Psychiatrist Only	10.0	\$826.31	

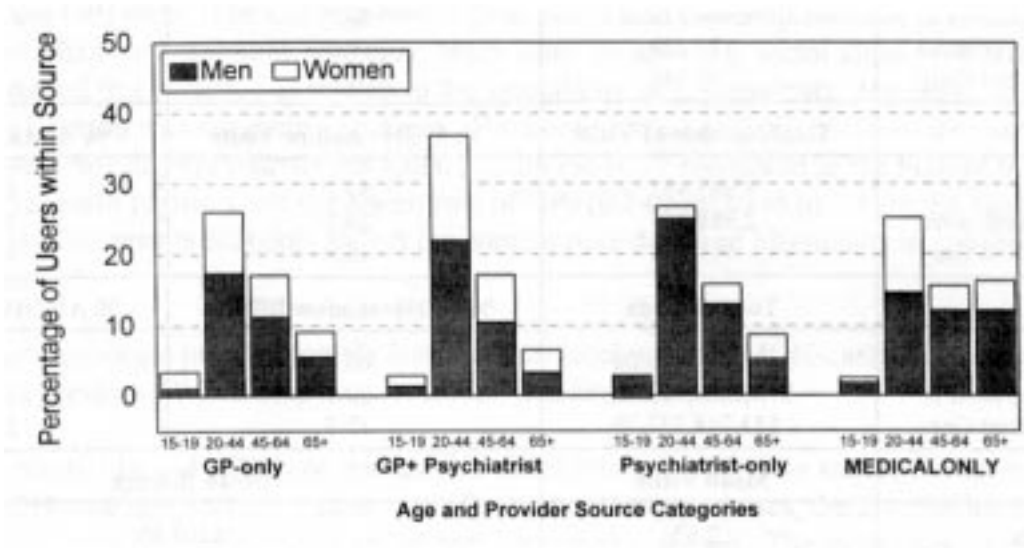
**Exhibit 9b: Provider Source for MOH+shadow Care in Ontario, 1992/93**

Source of Care	Total Number of Users	% MOH+shadow Users	% All OHIP Users
GP Only	1,744,172	83.7	23.5
GP + Psychiatrist	177,329	8.4	2.3
Psychiatrist Only	99,144	4.3	1.2
	Total Number of Visits	% MOH+shadow Visits	% All OHIP Visits
GP Only	4,645,453	53.2	4.8
GP + Psychiatrist	2,988,357	34.2	3.1
Psychiatrist Only	949,668	10.9	1.0
	Total Billings	% MOH+shadow Billings	% All OHIP Billings
GP Only	\$191,517,182.00	40.8	5.1
GP+ Psychiatrist	\$186,230,977.00	39.7	5.0
Psychiatrist Only	\$83,748,737.79	17.9	2.3
	Mean Visits	Mean Billings	
GP Only	2.62	\$107.95	
GP + Psychiatrist	16.85	\$1,050.20	
Psychiatrist Only	10.42	\$918.86	

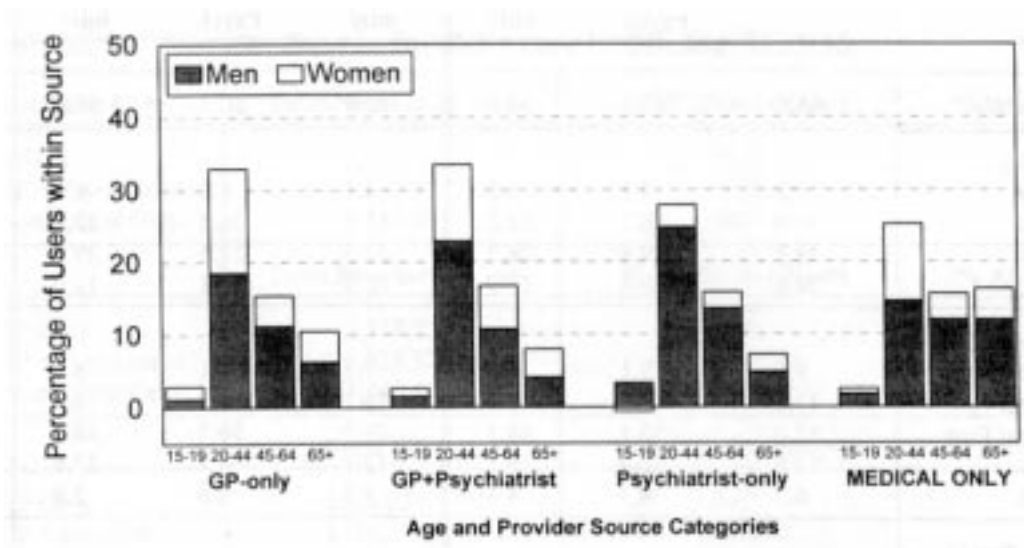
**Exhibit 10: Sociodemographic Characteristics of Users of Ontario Health Insurance Plan Mental Health Care, 1992/93**

Characteristic	MOH-care			MOH+Shadow			All OHIP
	GP-Only	GP+Psych	Psych only	GP-only	GP+Psych	Psych-only	
<b>Sex</b>							
% Female	65.0	63.2	54.0	62.9	60.7	53.6	53.7
<b>Age %</b>							
15-19	4.2	4.1	5.2	4.1	4.0	6.1	6.5
20-24	53.0	58.7	52.2	51.5	56.5	52.7	50.6
45-64	28.3	27.4	28.7	27.5	27.5	29.3	26.2
65+	14.6	9.8	13.9	16.9	12.1	12.0	16.7
<b>Region (%)</b>							
Southwest	7.4	7.1	6.7	7.5	7.1	6.5	8.0
Central	13.6	13.7	15.6	14.1	14.0	16.1	16.6
Central East	52.0	52.1	48.3	49.9	50.7	48.7	45.5
East	12.8	15.2	16.1	12.1	14.7	17.8	12.3
North	6.2	4.1	4.4	7.3	4.6	3.6	8.3
<b>Urban/ Rural</b>							
%Rural	9.5	7.2	6.6	9.6	7.1	6.3	10.6

**Exhibit 11a: Age/Sex Groups by Provider Source (MOH-care) in Ontario, 1992/93**



**Exhibit 11b: Age/Sex Groups by Provider Source (MOH+shadow care) in Ontario, 1992/93**





**Exhibit 12: Most Common Fee Code Categories by  
Source of Mental Health Care in Ontario, 1992/93**

Provider Source	FEE CODE CATEGORIES*			
	MOH-care (%)		MOH+shadow (%)	
	Individual Psychotherapy (GP)	53.8	Assessment (GP)	36.7
	Counselling (educational) (GP)	38.9	Individual Psychotherapy (GP)	26.4
			Counselling (educational) (GP)	19.1
			Institutional Visit (GP)	11.8
	Total	92.7	Total	94.0
<b>GP+ Psychiatrist</b>	Individual Psychotherapy (Psychiatrist)	33.5	Individual Psychotherapy (Psychiatrist)	27.3
	Individual Psychotherapy (GP)	20.5	Individual Psychotherapy (GP)	12.5
	In-patient (IP) Assessments/ Consultations (Psychiatrist)	11.7	Assessment (GP)	11.8
	Psychiatric Care - IP (Psychiatrist)	9.6	In-patient Assessments/ Consultations (Psychiatrist)	9.9
	Total	80.4	Total	77.4
<b>Psychiatrist Only</b>	Individual Psychotherapy (Psychiatrist)	58.1	Individual Psychotherapy (IP) (Psychiatrist)	66.5
	Psychiatric Care – IP (Psychiatrist)	12.8	In-patient Assessments/Consultations (Psychiatrist)	9.1
	Psychiatric Care – IP (Psychiatrist)	10.8	In-patient Assessments/ Consultations (Psychiatrist)	5.1
	Total	80.0	Total	82.4

\* Only fee codes accounting for 5% or more of claims are reported.

The fee code categories associated with each provider source are shown in Exhibit 12. The most common category, individual psychotherapy by either GP or Psychiatrist, accounts for over half of the MOH-care claims and between one-quarter and two-thirds of the MOH+shadow claims. Other categories include counseling (for GP-only and GP+psychiatrist users) and various types of inpatient or institutional care (for GP+psychiatrist and psychiatrist-only). Institutional visits made by GPs include visits to hospitals, convalescent facilities and other chronic or long-term care institutions. It is noteworthy that inpatient/institutional fee codes are the most frequent (about 26%) for the GP+psychiatrist group suggesting that users of both general and specialty sectors may have more serious conditions.

### 3.3 Conclusions

Between 76% and 84% of OHIP mental health care users receive this care solely from a general practitioner. Because they average a small number of visits and a portion of their care consists of short or minor assessments, they consume a much smaller percentage (35% to 41%) of OHIP mental health billings. Conversely, while those consulting both a GP and a psychiatrist or seeing a psychiatrist alone are a dramatically smaller percentage of mental health care users, they average 4 to 6 times as many visits and are likely to receive more labour- and time-intensive services. In particular, GP+psychiatrist users average between 3 and 4 visits more than the combined averages of those visiting either type of provider alone.

In the absence of data on outcomes and reliable information about severity, it is impossible to evaluate the cost-effectiveness or appropriateness of the care reflected in these findings. GP-only care may be reasonable and desirable if the recipients have milder conditions or if the providers are versed in the diagnosis and treatment of mental and emotional problems. On the other hand, the literature suggests that the general practitioner is not always adequately trained to deliver mental health care and effective therapies generally require more than two or three visits. Similarly, the more labour- intensive and costly services being delivered to the GP+psychiatrist group may be desirable if the recipients of this care have more complex and serious illnesses. Our findings show that over one-quarter of the care received by the GP+psychiatrist users is inpatient or institutional care which suggests that these users are indeed more severely ill individuals. However, other evidence suggests that fine-grained matching of the severity of need with intensity of resource consumption is a long way from being accomplished in Ontario,' and that there may be other mechanisms besides one-to-one fee-for-service care which will more effectively use the highly trained expertise of the psychiatrist.'

The sociodemographic and regional findings show strong effects consistent with both consumer help-seeking patterns and provider characteristics (specifically, availability and practice patterns). While women seek health care more than men, they seek mental health care even more, particularly from GPs. Both adolescents and the elderly are underrepresented among mental health care users, a pattern consistent with both consumer tastes and the limited availability of child psychiatrists and psychogeriatricians.' However, when they do access care, they tend to seek it from different provider sources – adolescents from psychiatrists only, the elderly from GPs alone – suggesting that there may also be different system

mechanisms operating for individuals seeking help in these two groups. In addition, the comparative overrepresentation of young to middle-aged males among those consulting psychiatrists- only suggests a possible consumer preference for specialty care among this age-sex group or a potential gatekeeper function that GPs may play for women, affecting their access to mental health care.

Again, the regional patterns emphasize the potential influence of both provider availability and practice/referral patterns. As would be expected, the planning regions with the largest urban centres (Central East and East) are both overrepresented among mental health care users and most likely to show the GP+psychiatrist combination of provider source. The expected pattern for areas with more rural residents – underrepresentation among users combined with care, when it is delivered, being received primarily from the GP – is shown for two regions (Southwest and North), but not for the Central West where GPs are in the shortest supply.

These results strongly underscore the need already voiced by both researchers and planners for micro-level examinations of mental health care delivery. Particular points of focus should include the severity of those using different provider sources and their points of entry or referral to different sectors of the mental health care system.

Simultaneously, attention is also necessary at the macro level. The roles played by general and specialty providers, both vis-a-vis each other and in the broad continuum of services envisaged by Mental Health Reform, need more detailed articulation. The availability of psychiatrists throughout the province and the patterns of psychiatric practice, already a concern to the profession, ” also deserve further examination.

## 4.0 Frequent Users of Mental Health Care

### 4.1 Method

The most difficult problem related to this question was how to define frequent use. Informal consultation with several psychiatrists (all actively practicing clinicians) yielded an astonishing range of thresholds from more than 6 visits per year to 105 visits or more. Because neither the literature nor our informants provided a consensus and this is such a heavily charged issue, we took a descriptive approach, matching our cutpoints to common patterns of appointment scheduling. Users were grouped according to the frequency of mental health visits during the OHIP 1992/93 fiscal year using the following rough cutpoints:

<b>CUTPOINT</b>	<b>Appointment Scheduling Equivalent*</b>
1 visit	Single contact
2-4 visits	A few contacts
5-12 visits	Once a month or less
13-24 visits	Twice a month or less
25-52 visits	Once a week or less
53-104 visits	Twice a week or less
105 or more visits	More than twice a week

\* These are only approximate since the actual timing of visits may vary. For example, 12 visits may reflect monthly contacts over a year or weekly contacts over a 3-month period.

In addition, four categories of frequent user were created based on the last four cutpoints: 13-plus, 25-plus, 53-plus and 105-plus.

Similar to the analyses in the previous section, the sociodemographic and regional characteristics of each group were compared. In addition, we examined their provider source (GP-only, GP+psychiatrist, psychiatrist-only) and associated fee codes.

### 4.2 Results

Exhibit 13 shows 1) the number of users in each visit frequency category and type of frequent user; 2) the percentage of mental health care users, visits and billings they represent; and 3) the billings/user ratio. The majority (94%) of mental health care users made 12 or less visits during the 1992/93 fiscal year and consumed less than half of the OHIP mental health dollar. Of this group, the largest subgroup was the single visit user. The percentage of frequent users drops rapidly as the cutpoint increases. For both MOH-care and MOH+shadow care, the percentages of mental health care users who average 53 or more visits are less than 1% (and would be between 0.2% and 0.3% of all OHIP users). As expected, frequent users consume a disproportionately large percentage of mental health billings with the billings/user ratio climbing as high as 32:1 for those making 105 visits or more during the fiscal year. Column 2 of Exhibit 13 shows a remarkably even increase, hovering around 50%, when the numbers of MOH+shadow users are compared to MOH-care users.

### Exhibit 13: Ontario Health Insurance Plan Mental Health Care Users by Visit Frequency, 1992/93

Visit Category	Total Number of Users	Mental Health Users (%)	Mental Health Visits (%)	Mental Health Billings (%)	% Billings/ % Users
<b>MOH-care Users</b>					
1 visit	771,856	54.7	13.5	10.0	0.2
2-4 visits	398,668	28.2	17.9	15.1	0.5
5-12 visits	153,249	10.9	19.8	20.2	1.9
13-24 visits	48,819	3.5	14.7	16.5	4.7
25-52 visits	29,493	2.1	18.3	21.2	10.1
53-104 visits	7,890	0.6	9.9	10.6	17.7
13-plus	88,510	6.3	48.8	54.7	8.7
25-plus	39,691	2.8	34.1	38.1	13.6
53-plus	10,198	0.7	15.8	16.9	24.1
105-plus	2,308	0.2	5.9	6.3	31.5
<b>MOH+shadow Users</b>					
1 visit	1,081,705	51.0	12.4	9.1	0.2
2-4 visits	665,761	31.4	19.7	16.0	0.5
5-12 visits	241,377	11.4	20.2	20.5	1.8
13-24 visits	70,091	3.3	13.8	16.2	4.9
25-52 visits	44,122	2.1	18.2	20.9	10.0
53-104 visits	12,588	0.6	10.1	10.9	18.2
13-plus	130,172	6.1	47.8	54.3	8.9
25-plus	60,081	2.8	33.9	38.1	13.6
53-plus	15,959	0.8	15.7	17.2	21.5
105-plus	3,371	0.2	5.6	6.3	31.5

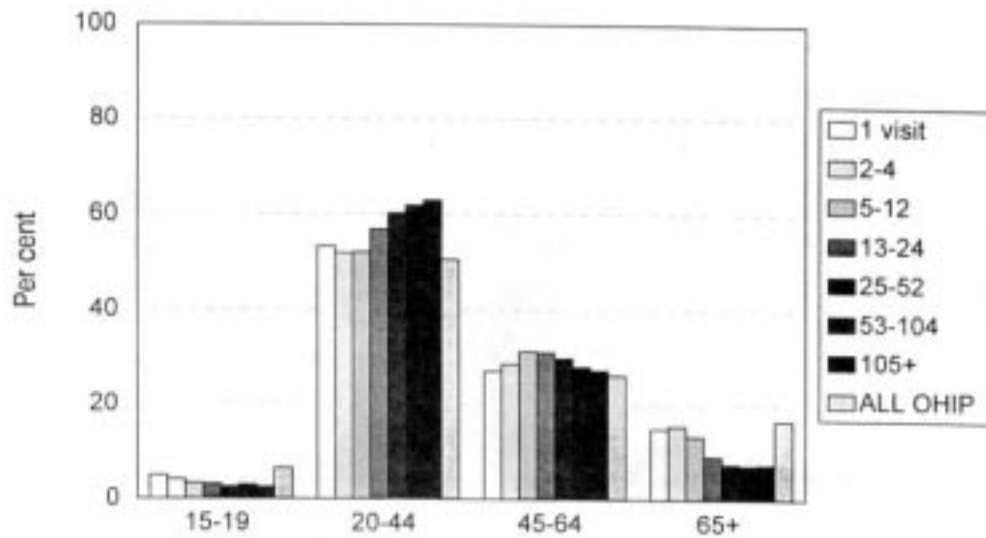
The sociodemographic and regional analyses showed few surprises. The percentage of women is quite constant across all MOH-care and MOH+shadow visit frequency categories (60.6% to 66.3%) and all categories of frequent user (62.3 to 64.5%). Patterns by age differed for MOH-care and MOH+shadow. Exhibits 14a and 14b compare the age distributions for these two kinds of mental health care with the distributions for all OHIP users. For MOH-care, the age distribution of users making only one visit is similar to the distribution for all OHIP users (i.e. the first and last bars in each age grouping are roughly the same height). However, as the number of visits increases, the percentages of the youngest (15 to 19 year olds) and oldest (65+) age groups decrease while the percentage of 20 to 44 year olds rises. Only the proportions for the 45 to 64 year olds remain relatively constant. For MOH+shadow care, the distributions are more even (i.e. the bars in each age grouping are closer in height) and in keeping with the proportions for all OHIP users.

Regional analyses (Exhibits 15a and 15b) showed that OHIP mental health care users in the Southwest, Central West and North regions are both underrepresented and more likely to make fewer visits. Conversely, in the Central East and East regions frequent users are disproportionately represented. These findings are also echoed when urban/rural users are examined. The rural percentage decreases steadily as visit frequency increases (from 9.5% to 2.5% for MOH-care, and 9.8% to 3.4% for MOH+shadow). Age-sex distributions show the same pattern as demonstrated in previous sections: 20-44 year old women are the predominant subgroup across all visit frequency categories (29.7% to 40.3%) and all categories of frequent user (30.1% to 40.3%). The smallest subgroup is the 15-19 year old males (0.5% to 1.7% visit frequency categories; 0.5% to 1.1% frequent user categories), and there is a gender gap in each age group across every visit frequency and frequent user category.

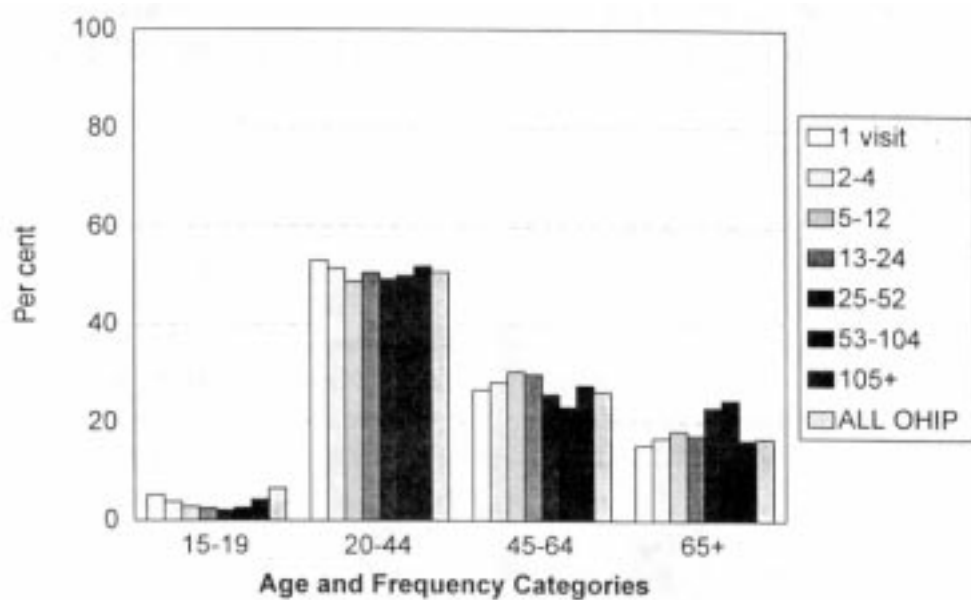
There is a clear association between visit frequency and source of care (Exhibit 16). For both MOH-care and MOH+shadow care, as the number of visits increases the proportion of users consulting GPs-only decreases steadily while the proportions seeing psychiatrists-only or GP+psychiatrist increase. The two types of mental health care differ, however, in how the increase occurs. For MOH-care, the psychiatrist-only and GP+psychiatrist proportions increase at roughly similar rates to approach a 48/46 split. For MOH+shadow care, the GP+psychiatrist proportion increases much more rapidly resulting in a 61/23 split. The difference is due to the way shadow care is defined and to the marked increase (nearly 50%) in the number of users when shadow care is added to the definition of mental health care.

The primary fee code categories associated with each visit frequency category and each definition of frequent use are shown in Exhibit 17. As the number of visits increases, the proportion of users receiving individual outpatient psychotherapy (from any specialty) increases. For both MOH-care and MOH+shadow care, the relationship of visit frequency to the likelihood of psychotherapy from a GP is roughly curvilinear (peaking at 2-4 and 5-12 visits), whereas the relationship to psychotherapy from a psychiatrist is more linear. A significant portion of users having 12 or less contacts receive educational counseling (10% to 62%) or general assessments (28% to 43%) from their GP.

**Exhibit 14a: Age-specific Mental Health Visit Frequency (MOH-care) by Health Planning Region in Ontario, 1992-93**



**Exhibit 14b: Age-specific Mental Health Visit Frequency (MOH-shadow) by Health Planning Region in Ontario, 1992-93**







**Exhibit 16: Mental Health Provider Source by Visit Frequency in Ontario, 1992/93**

Visit Frequency	PROVIDER SOURCE					
	MOH-care (%)			MOH+shadow (%)		
	GP Only	GP + Psychiatrist	Psychiatrist Only	GP Only	GP + Psychiatrist	Psychiatrist Only
1 visit	87.8	0.0	4.5	92.8	0.0	1.9
2-4 visits	76.8	8.5	10.4	87.7	5.8	4.0
5-12 visits	42.6	30.2	25.8	60.3	28.5	10.4
13-24 visits	22.9	46.6	29.7	34.4	52.1	12.9
25-52 visits	16.3	48.7	34.4	30.2	53.8	15.5
53-104	8.6	54.5	36.6	21.4	62.8	14.9
13-plus	19.0	48.0	32.3	31.2	53.9	14.2
25-plus	14.2	49.8	35.5	27.5	56.1	15.8
53-plus	7.9	53.1	38.7	19.9	62.4	16.6
105-plus	5.7	48.2	45.6	14.6	60.8	22.9

As might be expected, inpatient/institutional services – that is, care delivered to hospital inpatients and individuals in chronic care or convalescent facilities – are more prevalent among users who have more frequent contacts (i.e., 13 visits or more) and constitute as much as 36% to 43% of the services delivered to 105-plus users.

An examination of the fee codes for the different types of frequent users in Exhibit 17 shows some interesting findings particularly when comparing MOH-care with MOH+shadow care. As the cutpoint increases, the ratio of outpatient to inpatient/institutional services decreases from 3.0 to 1.4 for MOH-care users and 1.7 to 0.9 for MOH+shadow users. More intriguing is the proportion of care delivered by GPs versus psychiatrists. For both MOH-care and MOH+shadow outpatient fee codes, the psychiatrist-to-GP ratio has a similar magnitude and pattern of change across cutpoints (increasing from 1.8 to 4.6 for MOH-care and from 1.0 to 4.0 for MOH+shadow care). However, GP-delivered institutional services are negligible for MOH-care (less than 0.2% across all cutpoints) but significant for MOH+shadow care (13% to 19%). Findings reported in earlier sections indicate that shadow care includes a sizable portion of OHIP users, but involves fewer average numbers of visits. The current findings augment that picture and suggest a second type of shadow care in which the mental health provider makes frequent contact with individuals who may require intensive intervention. Results reported earlier in Section 2.0 (Shadow Mental Health) suggest that these may well be elderly individuals.

### 4.3 Conclusions

The numbers of frequent mental health care users and the percentages that they represent of either all mental health care users or all OHIP users are relatively small. Actual numbers range from a low of 2,308 to a high of 130,172 individuals depending on which threshold for frequent user is chosen and whether MOH-care or MOH+shadow care is being considered. The proportion of billings (and the actual dollars they represent), however, is not so trivial. Our most lenient definition of frequent user (13-plus visits) is associated with **54% to 55%** of the OHIP mental health dollar and is equivalent to \$216.6 million to \$253.1 million in 1992(93 dollars). Users in our most stringent category (105-plus visits) represent only **6.3%** of the mental health billings, yet consumed between \$24.9 million and \$29.4 million. Whether or not the most frequent users are consuming more than their fair share of the fiscal pie depends, of course, on factors such as the severity of their need, the availability of service alternatives and the province's priorities.

If frequency of visits are viewed as a measure of resources, then adding shadow care to the definition of mental health care creates a greater equality in the allocation of resources across age groups. It does not, however, address the sex, regional or urban-rural imbalances found for MOH-care.

Finally, while some of our findings support the idea that frequent use may be associated with individual psychotherapy (particularly psychoanalysis) delivered by psychiatrists, our results also document a surprisingly significant role played by general practitioners and family physicians in the delivery of both institutional and outpatient mental health care. Our results suggest that GPs are intensely involved in both the mental and physical health care of at least a subgroup of OHIP users, likely composed of elderly Ontarians. However, whether such care is truly integrated in the sense desired by Mental Health Reform requires more in-depth and qualitative information.

## Exhibit 17: Most Common Fee Code Categories by Visit Frequency in Ontario, 1992/93

Visit Frequency	FEE CODE CATEGORIES*			
	MOH-care (%)		MOH+shadow (%)	
<b>1 visit</b>	Counselling (educational) (GP)	62.1	Assessment (GP)	42.6
	Individual Psychotherapy (GP)	28.3	Counselling (educational) (GP)	36.2
			Individual Psychotherapy (GP)	13.9
	<b>Total</b>	<b>90.4</b>	<b>Total</b>	<b>92.7</b>
<b>2-4 visits</b>	Counselling (educational) (GP)	39.3	Assessment (GP)	39.4
	Individual Psychotherapy (GP)	38.9	Counselling (educational) (GP)	25.0
	Individual Psychotherapy	6.9	Individual Psychotherapy (GP)	21.2
	<b>Total</b>	<b>85.1</b>	<b>Total</b>	<b>85.6</b>
<b>5-12 visit</b>	Individual Psychotherapy (GP)	37.4	Assessment (GP)	27.9
	Individual Psychotherapy (Psych)	25.1	Individual Psychotherapy (GP)	25.6
	Counselling (educational) (GP)	12.6	Individual Psychotherapy (Psych)	14.7
	Psychiatric Care-IP (Psych)	7.4	Counselling (educational) (GP)	10.1
	<b>Total</b>	<b>82.5</b>	<b>Total</b>	<b>78.3</b>
<b>13-24 visits</b>	Individual Psychotherapy (Psych)	34.8	Individual Psychotherapy (Psych)	24.5
	Individual Psychotherapy (GP)	30.3	Individual Psychotherapy (GP)	22.8
	Psychiatric Care-IP (Psych)	8.9	Assessment (GP)	16.6
	IP Assessment/consultation (Psych)	5.3	Institutional Visits (GP)	8.8
	Total	79.3	Psychiatric Care-IP (Psych)	6.1
			Total	78.8
<b>25-52 visits</b>	Individual Psychotherapy (Psych)	40.1	Assessment (GP)	8.7
	Individual Psychotherapy (GP)	22.3	Institutional Visits (GP)	20.3
	IV Assessment/consultation (Psych)	9.3	IP Assessment/consultation (Psych)	5.8
	Psychiatric Care-IP (Psych)	8.5	Individual Psychotherapy (Psych)	27.1
			Individual Psychotherapy (GP)	16.0
	<b>Total</b>	<b>80.2</b>	Psychiatric Care-IP (Psych)	5.7
		<b>Total</b>	<b>83.6</b>	
<b>53-104 visits</b>	Individual Psychotherapy (Psych)	37.2	Individual Psychotherapy (Psych)	25.2
	IP Assessment/consultation (Psych)	17.1	Institutional Visits (C>P)	19.7
	Individual Psychotherapy (GP)	13.7	IP Assessment/consultation (Psych)	12.1
	Individual IP Psychotherapy (Psych)	6.9	Individual Psychotherapy (GP)	10.4
		9.2	Psychiatric Care-IP (Psych)	7.1
	Total	84.1	Assessment (GP)	5.5
			Individual IP Therapy (Psych)	5.1
			Total	85.1

Visit Frequency	FEE CODE CATEGORIES*			
	MOH-care (%)		MOH+shadow (%)	
<b>13-plus visits</b>	Individual Psychotherapy (Psych)	38.2	Individual Psychotherapy (Psych)	26.4
	Individual Psychotherapy (GP)	21.3	Institutional Visits (GP)	16.0
	IP Assessment/consultation (Psych)	11.0	Individual Psychotherapy (GP)	15.8
	Psychiatric Care-IP (Psych)	8.8	Assessment (GP)	9.7
			IP Assessment/consultation (Psych)	7.6
			Psychiatric Care-IP (Psych)	6.3
	Total	79.3	Total	81.8
<b>25-plus visits</b>	Individual Psychotherapy (Psych)	39.7	Individual Psychotherapy (Psych)	27.1
	Individual Psychotherapy (GP)	17.5	Institutional Visits (GP)	18.9
	IP Assessment/consultation (Psych)	13.5	Individual Psychotherapy (GP)	12.9
	Psychiatric Care-IP (Psych)	8.7	Assessment (GP)	9.6
			IP Assessment/consultation (Psych)	6.9
			Psychiatric Care-IP (Psych)	6.4
	Total	79.4	Total	81.8
<b>53-plus visits</b>	Individual Psychotherapy (Psych)	39.1	Individual Psychotherapy (Psych)	27.2
	Individual Psychotherapy (GP)	18.2	Institutional Visits (GP)	17.3
	IP Assessment/consultation (Psych)	12.0	Individual Psychotherapy (GP)	13.8
	Psychiatric Care-IP (Psych)	9.0	Assessment (GP)	9.4
		7.1	IP Assessment/consultation (Psych)	7.2
			Psychiatric Care-IP (Psych)	5.6
	Total	85.4	Total	85.5
<b>105-plus visits</b>	Individual Psychotherapy (Psych)	42.3	Individual Psychotherapy (Psych)	30.7
	Individual Psychotherapy (GP)	20.1	Institutional Visits (GP)	16.9
	IP Assessment/consultation (Psych)	9.2	Individual Psychotherapy (GP)	13.1
	Psychiatric Care-IP (Psych)	8.6	Assessment (GP)	7.6
		7.5	IP Assessment/consultation (Psych)	7.4
			Psychiatric Care-IP (Psych)	6.6
	Total	87.7	Total	82.3

\*Fee code categories were created by collapsing similar fee codes. Reporting only categories accounting for 5% or more of claims.

\*\* (Psych): Psychiatrist

\*\*\* (IP): In-patient

## 5.0 Longitudinal Patterns – Ontario Health Insurance Plan 1992/93 versus 1997/98

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### 5.1 Method

Data from fiscal years 1992/93 and 1997/98 were examined for possible changes in OHIP billings and patterns of use over time. Two types of comparisons were made:

- 1) The entire set of OHIP users from each year were compared to determine changes at the population level (panel comparisons).
- 2) OHIP users from 1992/93 were tracked to 1997/98 to determine changes in their patterns of use (cohort comparisons).

Figures for billings are not price-adjusted. While this should not affect comparisons based on percentages, results reported as actual dollars will not be directly comparable.

### 5.2 Results

#### 5.2.1 Panel comparisons

Exhibit 18 compares the two OHIP fiscal years in terms of users, visits and billings. In the five-year interval, the total number of OHIP users rose by 4.2%. Total visits increased by 5.3% (approximately 5.1 million visits) while total billings rose by 11.0% (\$408.0 million in unadjusted dollars). The most striking finding in Exhibit 18 is the steep rise in the use of mental health care. For both users and visits, the percentage increase for mental health is roughly three times the increase for all OHIP. The increase in billings was not quite so dramatic but followed the same pattern. While total OHIP billings increased by 11%, total mental health billings increased by nearly 18% compared to 10% for medical billings. Within types of mental health services, the most dramatic rise occurred for adjunct care where the percentage increases for users, visits, and raw billings (ranging between 47% to 60%) were over three times the increases for all mental health. Direct mental health care had more modest increases (compared to all mental health). Shadow care showed a contradictory pattern – while the actual numbers of users decreased very slightly over the five-year interval, total visits and billings increased.

Examination of the changes in mean visits and average cost per visit (Exhibit 19) indicates some changes in practice patterns. For direct care, the average number of visits has decreased while the average cost per visit has increased slightly (0.9%). In contrast, mean visits and cost per visit have risen for both adjunct and shadow mental health care, suggesting shifts to more visits as well as to more expensive procedures.

Sex, urban/rural, age, and regional patterns over the five-year interval (Exhibits 20 to 22b) show few changes. With the exception of the age findings (Exhibits 21a and 21b) which show the expected shift towards an older population, there are virtually no discernable changes in the sociodemographic characteristics either in the total population of OHIP users or the subgroup using mental health care services. Many of the differences between all OHIP users and mental health care users described earlier (larger gender gap; underrepresentation

of rural and adolescent Ontarians as well as those living in the Southwest, Central West, and North regions; overrepresentation of Ontarians living in the Central East and Eastern regions) continue in the 1997/98 OHIP data. There are only a few subtle changes in the proportions of 20-44 year olds and elderly using mental health care. In 1992/93, the 20-44 year olds using mental health care were slightly overrepresented (compared to all OHIP) while the elderly were underrepresented. In 1997/98, the reverse was true.

**Exhibit 18: Comparisons of Ontario Health Insurance Plan Mental Health Services, 1992/93 and 1997/98 Panels**

	1992/93			1997/98			Change
<b>USERS</b>	<b>Number (Thousands)</b>	<b>(%)</b>	<b>Number (Thousands)</b>	<b>(%)</b>	<b>Number (Thousands)</b>	<b>Change</b>	<b>Change</b>
Total Users	7,565	100.0	7,880	100.0	315		4.2
Medical Only	5,446	72.0	5,476	69.5	30		0.5
Any Mental Health	2,119	28.0	2,404	30.5	285		13.4
Direct*	943	12.5	1,066	13.5	123		13.0
Adjunct	641	8.5	942	12.0	301		47.0
Shadow	1,147	15.2	1,141	15.5	-6		-.05
<b>VISITS</b>	<b>Number (Thousands)</b>	<b>(%)</b>	<b>Number (Thousands)</b>	<b>(%)</b>	<b>Number (Thousands)</b>	<b>(%) Change</b>	<b>(%) Change</b>
Total Visits	95,802	100.0	100,919	100.0	5,118		5.3
Medical Visits	87,075	90.9	90,866	90.0	3,791		4.4
Mental Health (MOH+shadow)	8,727	9.1	10,054	10.0	1,327		15.2
MOH-care	5,719	6.0	6,784	6.7	1,065		18.6
Direct	4,800	5.0	5,351	5.3	551		11.5
Adjunct	919	1.0	1,434	1.4	515		56.0
Shadow	3,008	3.1	3,269	3.2	261		8.7
<b>BILLINGS**</b>	<b>Millions \$</b>	<b>(%)</b>	<b>Millions \$</b>	<b>(%)</b>	<b>Millions \$</b>	<b>(%)</b>	<b>(%)</b>
Total Billings	\$3,721	100.0	\$4,129	100.0	\$408		11.0
Medical Billings	\$3,252	87.4	\$3,577	86.6	\$324		10.0
Mental Health (MOH+shadow)	\$469	12.6	\$553	13.4	\$84		17.8
MOH-care	\$400	10.8	\$472	11.4	\$72		17.9
Direct	\$355	9.5	\$399	9.7	\$44		12.5
Adjunct	\$45	1.2	\$73	1.8	\$27		59.7
Shadow	\$69	1.8	\$81	2.0	\$12		17.6

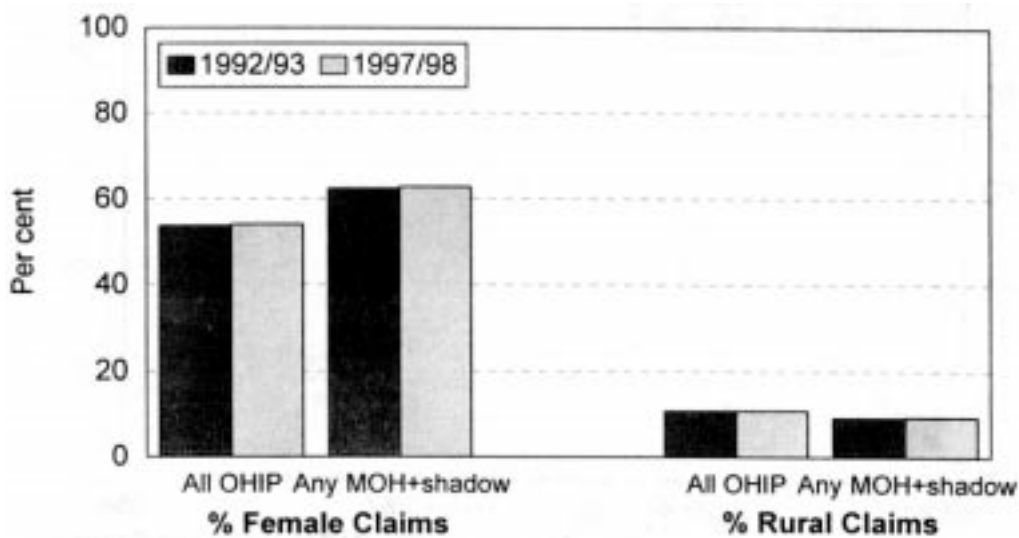
\*Number for direct, adjunct and shadow total more than 100% of users because of overlapping use

\*\*Dollars are not price-adjusted across the two fiscal years.

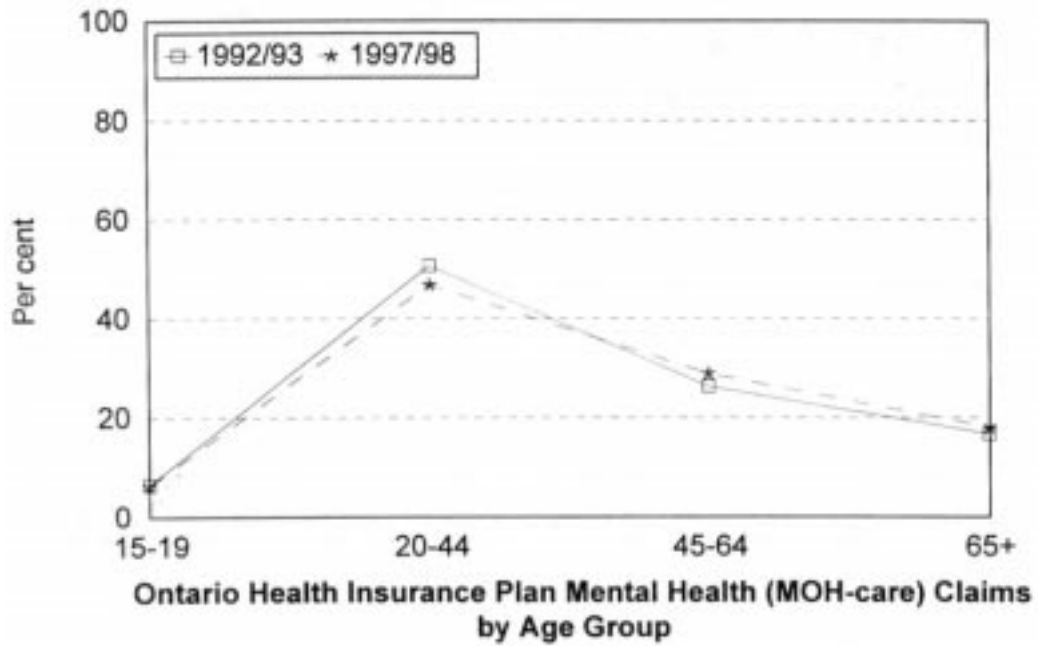
**Exhibit 19: Change in Mean Visits and Average Billings per Visit by Type of Mental Health Care 1992/93 and 1997/98 Panels**

<b>TYPE OF MENTAL HEALTH CARE</b>	<b>1992/93</b>	<b>1997/98</b>	<b>%CHANGE</b>
<b>MEAN VISITS</b>			
MOH+shadow	4.12	4.18	1.5
Direct	5.09	5.02	-1.4
Adjunct	1.43	1.52	6.2
Shadow	2.62	2.87	9.3
<b>AVERAGE BILLINGS PER VISIT</b>			
MOH+shadow	\$53.73	\$54.96	2.3
Direct	\$73.95	\$74.64	0.9
Adjunct	\$49.42	\$50.60	2.4
Shadow	\$22.79	\$24.67	8.2

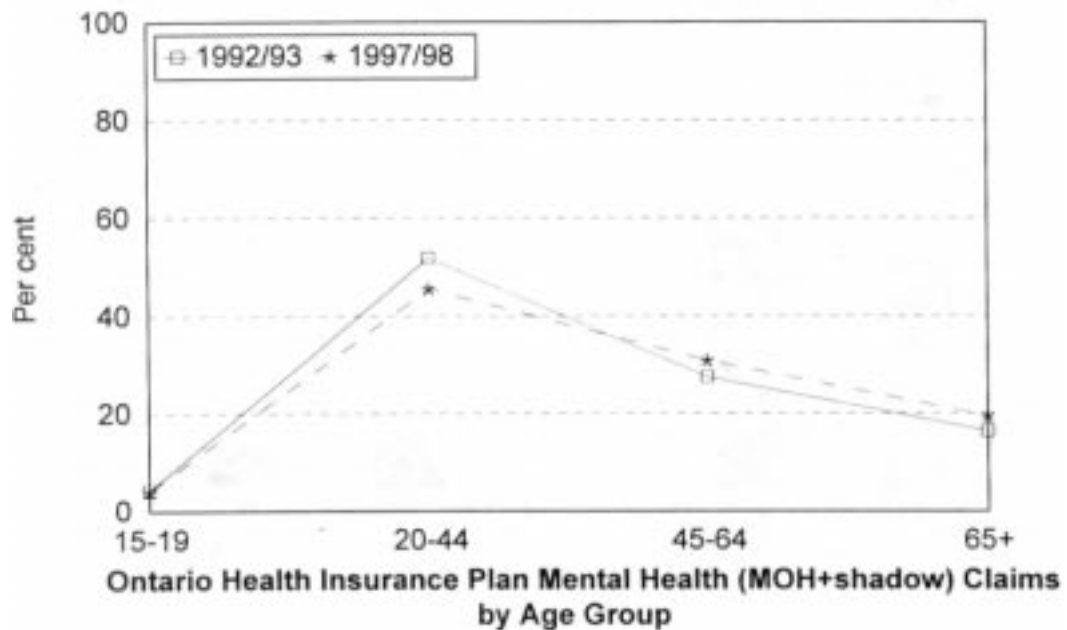
**Exhibit 20: Sex and Urban-rural Comparisons of Ontario Health Insurance Plan Claims for Mental Health, 1992/93 and 1997/98 Panels**



**Exhibit 21a: Age Comparisons of Ontario Health Insurance Plan Mental Health (MOH-Care) Claims, 1992/93 and 1997/98 Panels**

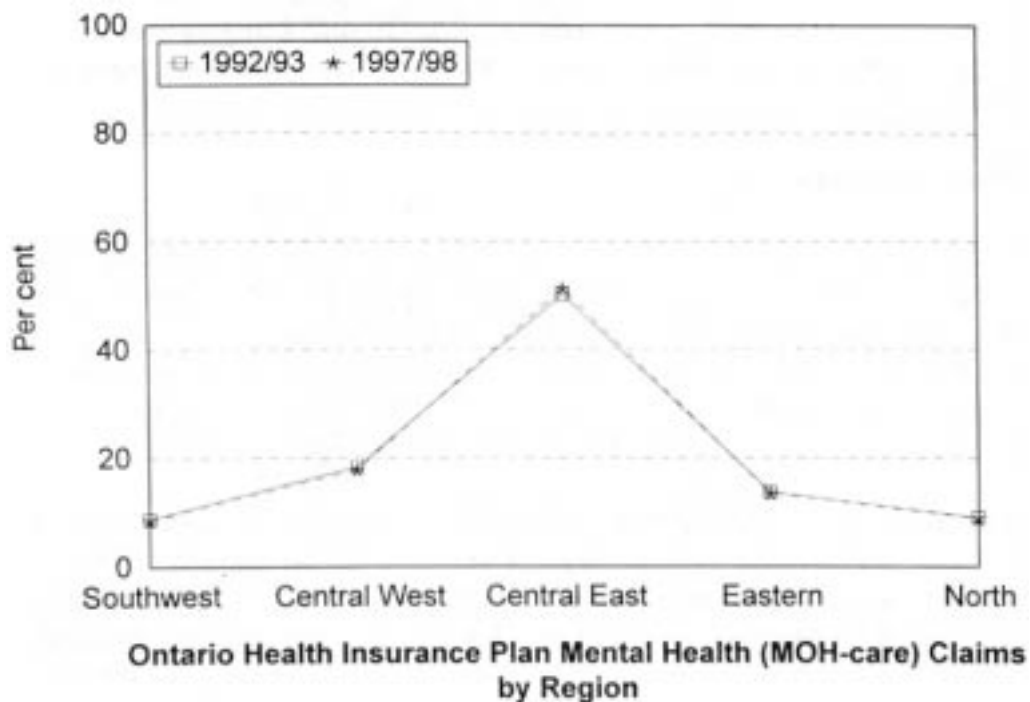


**Exhibit 21b: Age Comparisons of Ontario Health Insurance Plan Mental Health (MOH+shadow) Claims, 1992/93 and 1997/98 Panels**

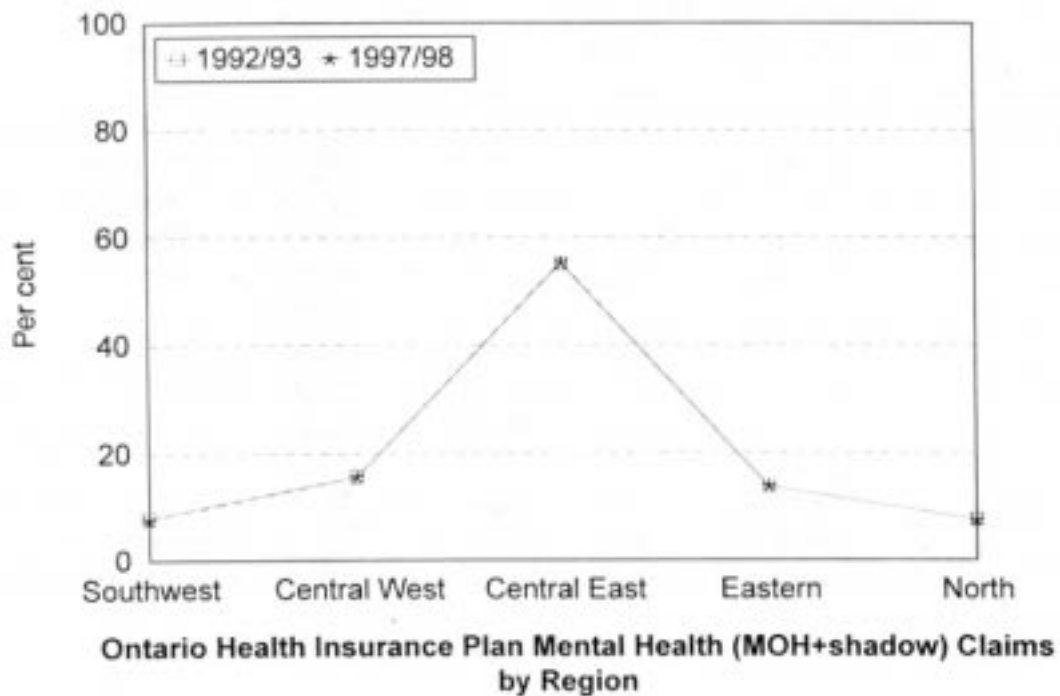




**Exhibit 22a: Regional Comparisons of Ontario Health Insurance Plan Mental Health (MOH-Care) Claims, 1992/93 and 1997/98 Panels**



**Exhibit 22b: Regional Comparisons of Ontario Health Insurance Plan Mental Health (MOH+shadow) Claims, 1992/93 and 1997/98 Panels**



Provider sources of care for MOH-care and MOH+shadow care for the two fiscal years are depicted in Exhibits 23a and 23b. While the changes are subtle, they are consistent. Psychiatrists, whether in the form of psychiatrist-only care or in combination with a GP, were in contact with a decreasing percentage of MOH-care and MOH+shadow care users while non-GP physicians showed a slight increase. The GP-only category showed a slight increase over the 5-year period for MOH-care, but remained about the same for MOH+shadow care.

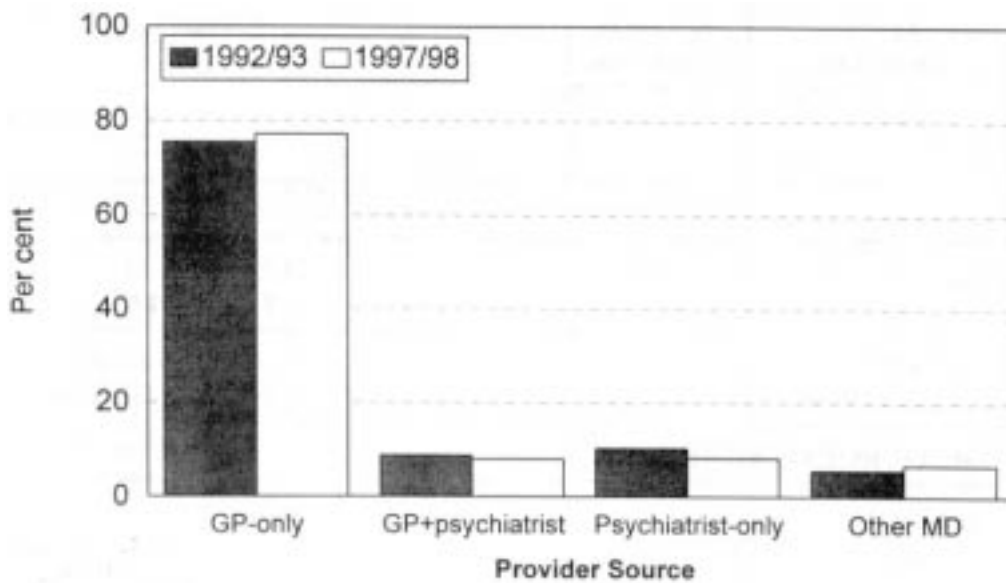
### **5.2.2 Cohort comparisons**

Longitudinal patterns for overall use and provider source for 1992/93 OHIP users who could be tracked in 1997/98 are shown in Exhibit 24. Approximately 15% to 20% were lost to follow-up in that they had no OHIP billings in 1997/98. Of the remainder, slightly over half of those who had used mental health care (i.e. MOH+shadow) in 1992/93 were no longer doing so. For those making medical-only visits in 1992/93, one-quarter were receiving some form of mental health care five years later.

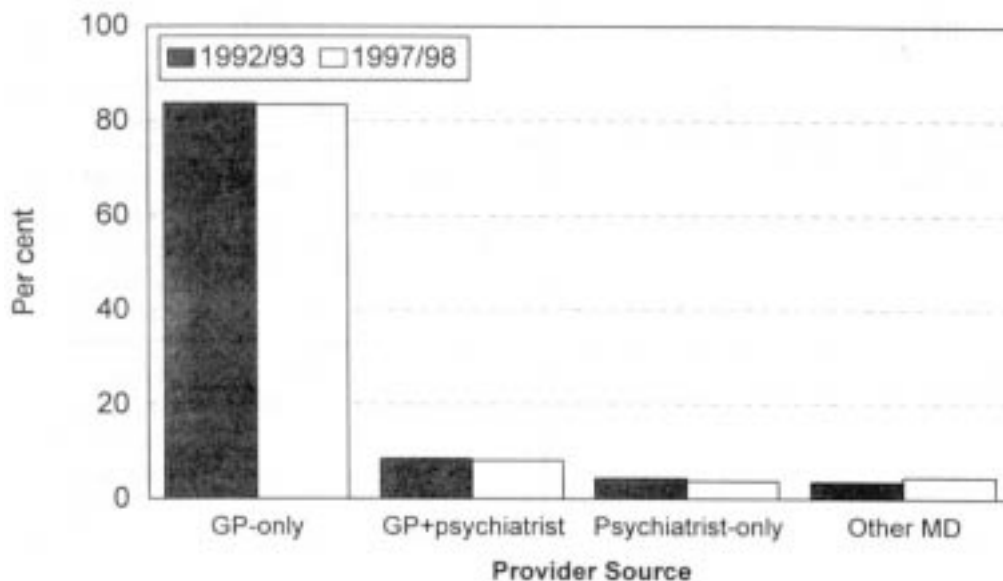
Data on the provider source show different flow patterns among the different types of providers. Of those who made medical-only visits in 1992/93, the majority (74% to 81%) were still making medical-only visits five years later. If they did receive mental health care, it was most likely from a GP alone. The GP-only group showed the highest retention rates (32.8% and 40.1%) of all the provider sources in the five-year interval. If users of this provider source changed status, it was to no mental health care (60.5% and 53.8%). Only a small percentage of this group received mental health care in 1997/98 from a non-GP-only source. OHIP users who originally received care from a psychiatrist, whether alone or in combination with a GP, were more likely to have changed provider source. Between 28% to 36% of those originally seeing a GP+psychiatrist were seeing a GP-only five years later with a smaller per cent (9% to 15%) seeing a psychiatrist-only. Of those originally seeing a psychiatrist-only in 1992/93, between 28.0% and 40.6% were now seeing either a GP-only or the GP+psychiatrist combination. It is noteworthy that sizeable proportions of GP+psychiatrist and psychiatrist-only users were no longer receiving mental health care in 1997/98 (36.5% and 44.8%, respectively for MOH-care; 27.6% and 37.7% for MOH+shadow care). Users of other types of physicians in 1992/93 were most likely to be receiving no mental health care in 1997/98 (80.6% for MOH-care; 60.8% for MOH+shadow). If they were receiving care, it was predominantly from GPs only.

Exhibit 25 shows the 1997/98 visit frequency for the 1992/93 cohort. Individuals who originally made no visits continued in large part to make no visits in 1997/98 (80.6% and 74.2%). For those who originally did receive mental health services, the retention rate was remarkably consistent across visit frequency (Column 3, Exhibit 25) – between 1 out of 5 and 1 out of 8 users were making similar numbers of visits in 1992/93 and five years later. The likelihood that a mental health user in 1992/93 would receive mental health services five years later increases as a function of his/her original visit frequency.

**Exhibit 23a: Provider Source Comparisons of Ontario Health Insurance Plan Mental Health (MOH-Care) Claims, 1992/93 and 1997/98 Panels**



**Exhibit 23b: Provider Source Comparisons of Ontario Health Insurance Plan Mental Health (MOH+shadow) Claims, 1992/93 and 1997/98 Panels**



### Exhibit 24: Overall Use and Mental Health Provider Source in 1997/98 for Ontario Health Insurance Plan 1992/93 Cohort

1992/93 User Characteristic	% Lost to Follow-up	Remainder		
		% Same Status	% 1997/98 Outcome	
<b>USER TYPE</b>				
Only Medical Visits	17.8	74.2	74.2	Only Medical Visits
			25.8	Any MOH_shadow Visit
Any Mental Health (MOH+shadow) Visit	15.2	48.9	51.1	Only Medical Visits
			48.9	Any MOH_shadow Visit
<b>PROVIDER SOURCE OF MOH-CARE</b>				
No MOH-care	17.6	80.6	80.6 15.6 1.1 1.2 1.5	No MOH-care General Practitioner (GP) Only GP + Psychiatrist Psychiatrist Only Other Doctor
General Practitioner Only	14.2	32.8	60.5 32.8 3.3 1.8 1.6	No MOH-care General Practitioner (GP) Only GP + Psychiatrist Psychiatrist Only Other Doctor
General Practitioner and Psychiatrist	13.8	19.6	36.4 27.9 19.6 14.9 1.2	No MOH-care General Practitioner (GP) Only GP + Psychiatrist Psychiatrist Only Other Doctor
Psychiatrist Only	17.4	25.8	44.8 15.8 12.2 25.8 1.3	No MOH-care General Practitioner (GP) Only GP + Psychiatrist Psychiatrist Only Other Doctor
Other Doctor	20.5	8.1	67.9 19.9 2.0 2.2 8.1	No MOH-care General Practitioner (GP) Only GP + Psychiatrist Psychiatrist Only Other Doctor

(Continued)

1992/93 User Characteristic	% Lost to Follow-up	Remainder		
		% Same Status	% 1997/98 Outcome	
<b>PROVIDER SOURCE OF MOH-CARE</b>				
No MOH+shadow Care	17.8	74.2	74.2 22.4 1.4 0.7 1.4	No MOH+shadow Care General Practitioner (GP) Only GP + Psychiatrist Psychiatrist Only Other Doctor
General Practitioner Only	14.9	40.1	53.8 40.1 3.7 1.1 1.4	No MOH+shadow Care General Practitioner (GP) Only GP + Psychiatrist Psychiatrist Only Other Doctor
General Practitioner and Psychiatrist	15.0	25.2	27.6 36.0 25.2 8.8 0.9	No MOH+shadow Care General Practitioner (GP) Only GP + Psychiatrist Psychiatrist Only Other Doctor
Psychiatrist Only	17.3	20.5	37.7 23.3 17.3 20.5 1.3	No MOH+shadow Care General Practitioner (GP) Only GP + Psychiatrist Psychiatrist Only Other Doctor
Other Doctor	20.4	7.3	60.8 27.7 2.6 1.5 7.3	No MOH+shadow Care General Practitioner (GP) Only GP + Psychiatrist Psychiatrist Only Other Doctor

**Exhibit 25: Visit Frequency in 1997/98 for 1992/93 Ontario Health Insurance Plan cohort**

1992/93 User Characteristic	% Lost to Follow-up	Remainder		
		% Same Status	% 1997/98 Outcome	
<b>MOH-CARE VISIT FREQUENCY</b>				
0 visits	17.6	80.6	80.6 11.4 7.3 0.7	0 visits 1 visit 2-12 visits 13-plus visits
1 visit	15.2	17.1	66.2 17.1 15.1 1.6	0 visits 1 visit 2-12 visits 13-plus visits
2-4 visits	14.8	16.7	53.9 18.5 24.4 3.3	0 visits 1 visit 2-12 visits 13-plus visits
5-12 visits	14.3	17.7	38.9 14.6 37.1 9.5	0 visits 1 visit 2-12 visits 13-plus visits
13-24 visits	13.4	12.6	29.4 11.7 37.6 21.3	0 visits 1 visit 2-12 visits 13-plus visits
25-52 visits	12.3	16.3	24.7 9.1 30.8 35.5	0 visits 1 visit 2-12 visits 13-plus visits
53-104 visits	11.7	12.0	17.9 7.5 26.4 48.1	0 visits 1 visit 2-12 visits 13-plus visits
105+visits	11.8	16.7	15.3 5.6 20.4 59.7	0 visits 1 visit 2-12 visits 13-plus visits

(Continued)

1992/93 User Characteristic	% Lost to Follow-up	Remainder		
		% Same Status	% 1997/98 Outcome	
<b>MOH+SHADOW CARE VISIT FREQUENCY</b>				
0 visits	17.8	74.2	74.2 14.3 10.5 1.0	0 visits 1 visit 2-12 visits 13-plus visits
1 visit	15.0	18.9	60.8 18.9 18.4 1.9	0 visits 1 visit 2-12 visits 13-plus visits
2-4 visits	14.6	19.5	48.2 19.9 28.4 3.6	0 visits 1 visit 2-12 visits 13-plus visits
5-12 visits	15.7	19.3	31.8 16.0 41.9 10.3	0 visits 1 visit 2-12 visits 13-plus visits
13-24 visits	17.6	13.8	22.4 11.5 42.1 24.0	0 visits 1 visit 2-12 visits 13-plus visits
25-52 visits	21.9	18.8	18.2 8.9 33.1 39.9	0 visits 1 visit 2-12 visits 13-plus visits
53-104 visits	22.6	13.5	13.2 6.3 28.0 52.5	0 visits 1 visit 2-12 visits 13-plus visits
105+visits	18.6	16.2	12.4 5.3 21.2 61.2	0 visits 1 visit 2-12 visits 13-plus visits

Frequent users were the most likely to still be receiving mental health care, infrequent users the least likely. Furthermore, the likelihood of comparatively frequent use (13-plus visits) in 1997/98 increases as a function of the number of visits made five years earlier. Approximately 29% of those originally making a single visit made 13 or more visits in 1997/98 compared to approximately 60% of those who originally made 105 or more visits.

### 5.3 Conclusions

The number of OHIP mental health care users and the dollar amount of OHIP mental health billings rose sharply between 1992/93 and 1997/98 and disproportionately when compared to the more moderate increases in overall OHIP use. Billings for medical services grew by 10% (equivalent to an increase of \$324.4 million unadjusted dollars), while those for mental health rose by 18% (equivalent to \$83.6 million). Within mental health services, the increases associated with adjunct care were particularly startling. Numbers of users rose by 47%, of visits by 56%, and of billings by 60% compared to increases of 13%, 15%, and 18% for any mental health (i.e. MOH+shadow care). While changes in practice patterns, discussed below, may partly underlie these increases, the magnitude is too great to be explained by practice patterns alone. It is possible that the prevalence or recognition of illnesses for which adjunct care is needed has increased or that physicians have become more sensitive to treating the emotional sequelae of physical illnesses – a desirable outcome from a population health perspective. However, to determine whether this is the case will require further analyses of both OHIP data and prevalence information.

Sociodemographic and regional analyses showed no striking changes over the 5-year period in the characteristics of OHIP users with the exception that the population is aging. Some subtle differences suggest that the 20-44 year olds and the elderly may be somewhat more appropriately represented among 1997/98 mental health care users than they were five years earlier, but these changes are slight indeed.

Our analyses of changes in provider source, average visits and average cost per visit suggest small but consistent changes in practice patterns. The role of the psychiatrist in delivering mental health care seems to have diminished slightly. The proportion of mental health care users they see (either alone or in combination with a GP) has decreased, average numbers of direct visits (the type of care they are most involved with) have decreased, and the average cost per direct care visit has risen only slightly compared to other forms of mental health services. The slack appears to have been taken up by non-GP, non-psychiatrist physicians and (in the case of MOH-care) by the Gp-only provider source. While the increased involvement of other MDs is currently minor, it may warrant monitoring if the trend continues.

The cohort analyses show clearly that there are different pathways to sources of care. Most notable is the finding that over half of those who received mental health services in 1992/93 were no longer doing so in 1997/98. Whether this is a positive finding (in the sense that the original condition was cured or alleviated) or a negative finding (in the sense that the intervention was inadequate and the patient gave up) depends very much on the specific provider and patient circumstances. Mental health care from a non-GP, non-psychiatrist is probably reasonable if adjunct to a condition appropriately treated by that specialist. It would, however, be inappropriate for serious psychiatric conditions.



The provider source most likely to be an endpoint in 1997/98 is GP-only. Users who changed provider source in the 5-year interval were most likely to seek help from GPs-only regardless of their 1992/93 category (including those in no mental health care or seeing a non-GP, non-psychiatrist physician). By contrast, users who moved to the GP+psychiatrist category primarily originated from the psychiatrist-only category and vice versa.

Our findings are very much consistent with a GP-as-gatekeeper model. However, because our analyses did not examine whether or not these changes were associated with specific referrals, it is impossible to comment on whether these are naturalistic or systematic flow patterns. In either case, these results (along with the findings of numerous other researchers) point to the key role played by the GP in screening, treating and referring psychiatric and emotional problems.

Finally, the cohort patterns in visit frequency contradict the notion that large numbers of frequent users are permanent patients. The proportions of users making similar numbers of visits in each of the two fiscal years we examined are remarkably consistent regardless of whether they originally made only 1 or more than 105 contacts. There are still good, cost-effectiveness reasons to examine frequent use patterns. Our results showing that frequent users (using a lenient definition of 13 or more visits) are more likely to remain frequent users may reflect the severe and chronic nature of these individuals' needs or a combination of traditional physician practice patterns with a lack of system incentives for discharge or briefer courses of therapy.

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## Appendix A: MOH-care Fee Codes

OHIP FEE CODE	DESCRIPTION
	<b>Psychiatrist</b>
A191	- Minor Assessment
A193	- Specific Assessment
A194	- Partial Assessment
A195	- Consultation
A196	- Repeat Consultation
A197	- Consultation on behalf of disturbed child (interview with parents)
A198	- Consultation on behalf of disturbed child (interview with child)
A395	- Limited Consultation
	<b>Psychiatrist</b>
C121	- Further (hospital) fees
C192	- visits due to intercurrent illness
C193	- Hospital Subsequent Visits (up to 5 weeks)
C194	- Hospital Specific Assessment
C195	- Hospital Specific Reassessment – Hospital Consultation
C196	- Hospital Repeat Consultation
C197	- Hospital Subsequent Visit (6 <sup>th</sup> -13 <sup>th</sup> week)
C198	- Hospital Concurrent Care
C199	- Hospital Subsequent Visit (after 13 <sup>th</sup> week)
C395	- Hospital Limited Consultation
C982	Palliative Care
G471	Electroconvulsive therapy (single/multiple)
K002	Interview with relatives on behalf of patient
K003	Interview with Children’s Aid Society or legal guardian on behalf of patient
K004	Family psychotherapy
K006	Hypnotherapy
K007	Individual Psychotherapy
K008	Diagnostic/therapeutic interview, child psychiatric problem/learning disability
K010	Group Psychotherapy - per member - (7th hour onward/day)
K011	Group Psychotherapy (hypnosis)
K012	Group Psychotherapy (4 people)
K013	Counseling (educational)
K014	Counseling (transplant recipients, donors, etc.)
K015	Counseling (relatives of terminally ill patients, etc.)
K016	Genetic assessment
K019	Genetic counseling (individual/family)
K020	Genetic counseling (relatives)
K024	Group psychotherapy (5 people)
K025	Group psychotherapy (6-12 people)
K190	Psychiatrist – Individual Psychotherapy

<b>OHIP FEE CODE</b>	<b>DESCRIPTION</b>
	<b>Psychiatrist</b>
K191	Family psychiatric care – Inpatient
K192	Individual hypnotherapy
K193	Family therapy (in-patient)
K194	Group hypnotherapy
K195	Family therapy (outpatient)
K196	Family psychiatric care - outpatient
K197	Individual psychotherapy (outpatient)
K198	Psychiatric care (inpatient)
K199	Psychiatric care (outpatient)
K200	- Group psychotherapy (in-patient 4 people) –
K201	- Group psychotherapy (in-patient 5 people)
K202	- Group psychotherapy (in-patient - 6-12 people)
K203	- Group psychotherapy (out-patient - 4 people)
K204	- Group psychotherapy (out-patient - 5 people)
K205	- Group psychotherapy (out-patient - 6-12 people)
K206	- Group psychotherapy (out-patient - per member, 7 <sup>th</sup> hour onward)
K207	- Group psychotherapy (in-patient - per member, 7 <sup>th</sup> hour onward)
K568	- Diagnostic interview of child/parent
K620	- Mental Health Act assessment - consultation
K623	- Mental Health Act assessment - application
K624	- Mental Health Act assessment - certification
K629	- Mental Health Act assessment - recertification
N110	Lobectomy
	<b>Psychiatrist</b>
W195	- Long-term institutional care- Consultation
W196	- Long-term institutional care- Repeat Consultation
W395	- Long-term institutional care- Limited Consultation
Z458	Electroconvulsive therapy (cerebral)

## Appendix B: Shadow-care Fee Codes\*

<b>OHIP FEE CODE</b>	<b>DESCRIPTION</b>
	<b>General Practitioner/Family Physician (GP/FP)</b>
A001	assessment
A003	general assessment
A004	general re-assessment
A005	consult
A006	repeat consultation
A007	GP/FP/Paediatrician - intermediate assessment/well baby care
A008	GP/FP- mini-assessment
	<b>Geriatrics</b>
A073	general assessment
A074	general re-assessment
A075	consultation
A076	repeat consultation
A078	partial assessment
	<b>Neurology</b>
A183	general assessment
A184	general re-assessment
A185	consultation
A186	repeat consultation
A188	partial assessment
	<b>Paediatrics</b>
A261	minor assessment
A263	general assessment
A264	general re-assessment
A265	consult
A266	repeat-consultation
A375	Geriatrics - Limited consultation
A385	Neurology – Limited consultation
A565	Paediatrics – Limited consultation
A775	Comprehensive geriatric consultation
	<b>General Practitioner/Family Physician (GP/FP)</b>
A901	housecall assessment
A905	limited consultation
A945	palliative care consultation

\* Defined as shadow mental health care only if:

1) provider is a General Practitioner/Family Physician, paediatrician, geriatrician, neurologist or emergency medicine specialist; and 2) associated diagnosis is an ICD-9 psychiatric diagnosis.

<b>OHIP FEE CODE</b>	<b>DESCRIPTION</b>
A990	Daytime special visit, office (Mon-Fri), 1st patient
A991	Each additional patient/Same visit minimum
A994	Nights special visit, office (5 pm-12 midnight), Sat/Sun/Hol- 1st patient
A995	Each additional patient/Same visit minimum
A996	Nights (12 midnight - 7 am), 1st patient
A997	Each additional patient/ Same visit minimum
B910	House call service home visit - day or evening, Mon-Fri, 1st patient
B911	additional patient seen
B914	House call service home visit - Sat/Sun/Hol – 1st patient
B915	additional patient seen
B196	House call service home visit - midnight-7 am any night – 1st patient
B917	each additional patient
B990	Daytime (Monday - Friday)
B991	Special visit
B992	Emergency call/Sacrifice office hours
B993	Special visit
B994	Nights (17:00 - 24:00 h), Sat/Sun/Hol
B995	Special visit
B996	Nights (00:00 h – 07:-00 h)
B997	Special visit
<b>General Practitioner/Family Physician</b>	
C002	subsequent visits – to 5 weeks - hospital
C003	general assessment - hospital
C004	general re-assessment - hospital
C005	consultation - hospital
C006	repeat consultation - hospital
C007	subsequent visits – 6 <sup>th</sup> to 13 <sup>th</sup> weeks inclusive - hospital
C008	concurrent care - (minor assessment) - hospital
C009	subsequent visits - after 13 <sup>th</sup> week - hospital
C010	support care – hospital
<b>Geriatrics</b>	
C072	subsequent visits - to 5 weeks – hospital
C073	general assessment - hospital
C074	general re-assessment - hospital
C075	consultation - hospital
C076	repeat consultation - hospital
C077	subsequent visits – 6 <sup>th</sup> to 13 <sup>th</sup> weeks inclusive - hospital
C078	concurrent care - (minor assessment) - hospital
C079	subsequent visits - after 13 <sup>th</sup> week - hospital

<b>OHIP FEE CODE</b>	<b>DESCRIPTION</b>
C101	Special care unit/Intensive care unit/Cardiac care unit add.
C109	5 pm-12 midnight Sat/Sun/Hol (Extra) Laboratory Medicine/Nuclear Medicine/DRadiology/DUltra
C110	As for C109 - (12 midnight - 7 am)
<b>Neurology</b>	
C182	subsequent visits - to 5 weeks- hospital
C183	general assessment - hospital
C184	general re-assessment - hospital
C185	consultation - hospital
C186	repeat consultation - hospital
C187	subsequent visits – 6 <sup>th</sup> to 13 <sup>th</sup> weeks inclusive – hospital
C188	concurrent Care – (minor assessment) - hospital
C189	subsequent visits – after 13 <sup>th</sup> week - hospital
<b>Paediatrics</b>	
C262	subsequent visits - to 6 weeks - hospital
C263	general assessment - hospital
C264	general re-assessment - hospital
C265	consultation - hospital
C266	repeat consultation – hospital
C267	subsequent visits – 7 <sup>th</sup> to 13 <sup>th</sup> weeks inclusive - hospital
C268	concurrent care - (minor assessment) - hospital
C269	subsequent visits – after 13 <sup>th</sup> week – hospital
C375	Geriatrics – Limited consultation – Hospital
C385	Neurology – Limited consultation – Hospital
C565	Paediatrics – Limited consultation – Hospital
C882	General Practitioner/Family Physician - palliative care A. Tr. Hosp.
C905	Limited consultation in hospital
C945	Non-emergency hospital in-patient service - special palliative care
<b>Hospital</b>	
C990	daytime special visit (Monday - Friday), 1 <sup>st</sup> patient
C991	each additional patient/Same visit minimum
C992	emergency call/Sacrifice office hours, 1 <sup>st</sup> patient
C993	each additional patient/Same visit minimum
C994	nights (5 pm – 12 midnight), Sat/Sun/Hol, 1st Patient
C995	each additional patient/Same visit minimum
C996	nights (12 am - 7 am), 1st patient
C997	each additional patient/Same visit minimum
<b>Critical/Intens Care (excluding ventilation support)</b>	
G400	physician in charge – 1 <sup>st</sup> day
G401	physician in charge – 2nd to 10 <sup>th</sup> day
G402	physician in charge – 11 <sup>th</sup> day onwards

<b>OHIP FEE CODE</b>	<b>DESCRIPTION</b>
G414	Neurology - Electroencephalogram (EEG) - technical component to G415
G415	Neurology - Electroencephalogram - professional component to G414
G416	EEG with activated sleep inducing drugs and/or sleep deprivation
G417	Neurology - EEG inserting subtemporal needle electrodes 16-21 channel
G418	EEG: professional component
G540	Videotape record clinical signs with EEG etc, technical to G545
G542	Radiotele/port recording monitor spont EEG freely moving patient
G544	Polygraph record 3 parameters/additional to EEG
G545	Video clinical signs with spontaneous EEG, per 1/4 hr, max 1hr, professional component to G540
G546	Radiotele/port recording monitor spontaneous EEG freely moving patient
G554	Neurology - Ambulatory EEG monitoring 12-24 hours, Technical
G555	Neurology - Ambulatory EEG monitoring to G554, Prof
<b>Critical Care and Ventilatory Support</b>	
G557	physician in charge – 1 <sup>st</sup> day
G558	physician in charge – 2 <sup>nd</sup> to 10 <sup>th</sup> days
G559	physician in charge – 11 <sup>th</sup> day onwards
G670	Sleep Studies Level Tech Component overnight sleep study
G671	Sleep Studies Level Professional 1 Component overnight sleep study
G672	Sleep Studies Level Prof 2 Comp interpretation G670
G673	Level 2 Tech Comp overnight sleep study with plethysnography
G674	Level 2 Prof 1 Comp overnight sleep study with plethysnography
G675	Level 2 Prof 21 Comp overnight sleep study with plethysnography
G676	Level 3 Tech Comp overnight sleep study stage sleep
G677	Level 3 Prof 1 Comp overnight sleep study stage sleep Level
G678	3 Prof 21 Comp overnight sleep study stage sleep
G679	Sleep Studies Level Tech Comp Multiple Sleep Latency Test
G680	Sleep Studies Level Prof 1 Comp Multiple Sleep Latency Test
G700	Basic Fee Diagnostic Therapeutic procedure
H055	Emergency Medicine Consult - FRCP
H065	Emergency Medicine Consult - other physicians
<b>Emergency Department</b>	
H101	minor assessment
H102	comprehensive assessment and care
H103	multiple system assessment
H104	re-assessment
H112	Physician on duty - 12 midnight to 8 am
H113	Physician on duty – Sat/Sun/Hol
H121	Physician on duty – Minor Assessment - 12 midnight to 8 am
H122	comprehensive assessment and care; 12 midnight to 8 am



<b>OHIP FEE CODE</b>	<b>DESCRIPTION</b>
	<b>Emergency Department</b>
H123	physician on duty - multiple system assessment - 12 midnight to 8 am
H124	physician on duty – re-assessment - 12 midnight to 8 am
H151	physician on duty - minor assessment - Sat/Sun/Hol
H152	comprehensive assessment and care - Sat/Sun/Hol
H153	physician on duty - multiple system assessment - Sat/Sun/Hol
H154	physician on duty - re-assessment - Sat/Sun/Hol
K005	Psychiatric Care - Individual Care - per ½ hr
K051	MCSS* Report of the attending physician
K052	MCSS Report by an Ophthalmologist
K053	MCSS Supplementary medical information
	* Ministry of Community and Social Services
	<b>Emergency Department/OPD</b>
K990	special visits day – 1 <sup>st</sup> patient
K991	special visits day - each additional patient
K992	emergency call sacrifice office hours – 1 <sup>st</sup> patient
K993	emergency call sacrifice office hours - each additional patient
K994	evenings - 5 pm to midnight (Sat/Sun/Hol) – 1 <sup>st</sup> patient
K995	evenings - 5 pm to midnight (Sat/Sun/Hol) each additional patient
K996	midnight to 7 am – 1 <sup>st</sup> patient
K997	midnight to 7 am - each additional patient
	<b>Other Setting</b>
Q990	daytime (Monday - Friday), 1 <sup>st</sup> patient
Q991	each additional patient/same visit minimum
Q992	emergency call/sacrifice office hours, 1 <sup>st</sup> patient
Q993	each additional patient/same visit minimum
Q994	nights (5 pm – 12 midnight), Sat/Sun/Hol, 1 <sup>st</sup> patient
Q995	each additional patient/same visit minimum
Q996	nights (12 am - 7 am), 1 <sup>st</sup> patient
Q997	each additional patient/same visit minimum
	<b>General Practitioner/Family Physician</b>
W001	Subsequent visits/month - chronic/convalescent hospital/LTIC
W002	first 4 visits per month - chronic/convalescent hospital/LTIC
W003	first 2 visits per month – nursing/home for the aged - covered by Ext. Care Legis.
W004	general re-assessment – nursing/home for the aged (as per Nursing Homes Act)
W008	subsequent visits – nursing/home for the aged - covered by Ext. Care legis.

<b>OHIP FEE CODE</b>	<b>DESCRIPTION</b>
	<b>Geriatrics</b>
	<b>LTIC/Chronic Care/Convalescent Hospital/Home for the Aged</b>
W071	subsequent visits/month
W072	first 4 visits/month
W073	first 2 visits/month
W074	general re-assessment of patient/nursing home & Covered Extended Care
W075	consultation
W076	repeat consultation
W078	subsequent visits/month
	<b>General Practitioner/Family Physician</b>
	<b>LTIC/Chronic Care/Convalescent Hospital/Home for the Aged</b>
W102	administrative assessment Type 1
W104	administrative assessment Type 2
W105	consultation
W106	repeat consultation
W107	administrative assessment Type 3
W121	LTIC acute intercurrent illness
	<b>Neurology</b>
	<b>LTIC/Chronic Care/Convalescent Hospital/Home for the Aged</b>
W181	subsequent visits/month
W182	first 4 visits/month
W183	nursing home for the aged - palliative care - first 2 visits/month
W184	general re-assessment of patient/nursing home & Cov. Ext. Care
W185	consultation – nursing/home for the aged/patients Cov. Ext. Care Legisl.
W186	nursing/home for the aged Cov. Ext. Care - repeat consultation
W188	nursing/home for the aged - palliative care - subsequent visits
	<b>Paediatrics</b>
W261	subsequent 8 visits/ month
W262	first 2 visits/ month
W265	chronic/convalescent hospital - consultation
W266	chronic/convalescent hospital - repeat consultation
	<b>General Practitioner/Family Physician</b>
	<b>LTIC/Chronic Care/Convalescent Hospital/Home for the Aged</b>
W272	admission assessment Type 1
W274	admission assessment Type 2
W277	admission assessment Type 3
W279	annual physical exam
W375	limited consultation
W385	Neurology - nursing/home for the aged patients Cov. Ext. Care - limited consultation

<b>OHIP FEE CODE</b>	<b>DESCRIPTION</b>
	<b>Paediatrics - Chronic Care/Convalescent Hospital</b>
W562	admission assessment Type 1
W564	admission assessment Type 2
W565	limited consultation
W567	admission assessment Type 3
	<b>General Practitioner/Family Physician</b>
W872	terminal care, nursing home
W882	terminal care, chronic care hospital/nursing homes, etc.
	<b>Long-term Institutional Care (LTIC)</b>
W990	daytime (Monday - Friday), 1 <sup>st</sup> patient
W991	each additional patient/same visit minimum
W992	emergency call/sacrifice office hours, 1 <sup>st</sup> patient
W993	each additional patient/same visit minimum
W994	nights (5 pm – 12 midnight), Sat/Sun/Hol, 1 <sup>st</sup> patient
W995	each additional patient/same visit minimum
W996	nights (12 am - 7 am), 1 <sup>st</sup> patient
W997	each additional patient/same visit minimum

## Appendix C: International Classification of Diseases 9th Revision (ICD-9) Psychiatric Diagnosis Codes

ICD-9 CODE	DESCRIPTION
290.0 - 299.9	Psychoses
300.0 - 319.9	Neurotic Disorders, Personality Disorders, and other Nonpsychotic Mental Disorders
317.0 - 319.9	Mental Retardation
780. 1	Hallucinations (excludes those associated with mental disorders, visual, and organic brain syndromes);
780.5	Sleep disturbances (excludes nonorganic origin);
797	Senility without mention of psychosis
799.2	Other ill-defined and unknown causes of morbidity and mortality: Nervousness ("nerves")
V 11.0 - V11.9	Personal history of mental disorder
V 17.0	Family history: of psychiatric condition
V40.0 - V40.9	Persons with a condition influencing their health status: mental and behavioral problems
V61.0 - V61.9	Persons encountering health services in other circumstances: other family circumstances (e.g. family disruption, marital problems, parent-child problems)
V62.0 - V62.9	Other psychosocial circumstances