

Mental health trends among federal inmates

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In 1988, the Correctional Service of Canada (CSC) conducted a national study to determine the prevalence, nature and severity of mental health problems among federal inmates. Recognizing that estimates of the prevalence and severity of mental health problems would be invaluable to the Service in future years, provisions to collect proxy measures of mental health problems were embedded into the Offender Intake Assessment (OIA) process.

Analyzing these proxy measures, the population of federal inmates with OIA mental health indicators appears to be growing; especially considering that overall admission and institutional population counts have been in decline. Moreover, although mentally disordered offenders still represent a relatively small proportion of the overall population, the fact that their numbers are increasing is a matter of concern for the Service.

Background

In 1988, CSC conducted a study to determine the prevalence, nature and severity of mental health problems among federal inmates.² The 'Mental Health Survey' was unique in that it relied on a structured interviewing instrument - the Diagnostic Interview Schedule (DIS) and employed stringent diagnostic criteria described in the Diagnostic and Statistical Manual (DSM III) of the American Psychiatric Association.

At the time of the Mental Health Survey, the wide DIS lifetime prevalence rate of 'psychotic' disorder among the federal male inmate population was found to be 10.4%. The Report also noted that inmates who have suffered from 'psychotic' symptoms in the past would appear to have also endured a variety of other mental health problems during their lifetime.

Recognizing that estimates of the prevalence and severity of mental health problems would be invaluable to the Service in future years, the Research Branch embedded provisions to collect proxy measures of mental health problems at the design stage of the Offender Intake Assessment (OIA) process.³ The intent was that these OIA indicators would permit the Service to estimate prevalence rates and track trends over time, and that the indicators would also be

useful to alert managers and staff to cases where additional clinical assessments would be warranted.

Mental health indicators for federal offenders

Four mental health indicators were selected from the OIA for this analysis, each of which has a "current" and "past" dimension, as seen in Table 1.

Table 1

Indicators of the Offender's health status ⁴	
Current mental health	Previous mental health
Diagnosed as disordered currently?	Diagnosed as disordered previously?
Prescribed medication currently?	Prescribed medication previously?
Current hospitalization?	Previous hospitalization?
Receiving outpatient services prior to admission?	Received outpatient services prior to current admission?

These indicators are collected with reference to both the "current" and "previous" status of the offender (i.e., the condition that prevailed when they were first admitted on their current sentence; or prior to that admission for the history component).

Mental health profiles at admission

Flow trends were examined of offenders into the federal corrections system by analyzing offender intake assessments (OIA) for male and female admissions from calendar year 1997 to calendar year 2001. The data show a clear and significant increase over this period in the number and proportion of positive assessments on the mental health indicators embedded in OIA.

During the period from 1997 to 2001, the annual number of new admissions into federal custody decreased from a high of 4,590 admissions in 1998 to 4,298 admissions in 2001 (See Table 2).

Table 2

Federal admission trends					
Calendar year	1997	1998	1999	2000	2001
Total Admissions	4,491	4,590	4,319	4,309	4,298

Table 3

Number and percentage of admissions with a mental health indicator

Calendar year	1997 n (%)	1998 n (%)	1999 n (%)	2000 n (%)	2001 n (%)
Diagnosed current	265 (6.2)	280 (6.4)	292 (7.0)	289 (6.9)	355 (8.5)
Prescribed current	443 (10.3)	495 (11.2)	564 (13.4)	605 (14.3)	751 (17.9)
Hospitalized current	80 (1.8)	81 (1.8)	73 (1.7)	77 (1.8)	89 (2.1)
Outpatient current	211 (4.9)	206 (4.7)	235 (5.6)	263 (6.2)	287 (6.8)
Diagnosed past	418 (9.8)	439 (10.0)	480 (11.4)	509 (12.2)	555 (13.4)
Prescribed past	962 (22.5)	1,039 (23.8)	1,139 (27.3)	1,207 (29.0)	1,351 (32.6)
Hospitalized past	687 (16.0)	678 (15.4)	713 (17.0)	719 (17.2)	789 (19.0)
Outpatient past	724 (17.0)	677 (15.5)	791 (18.9)	910 (21.8)	885 (21.4)
Estimated valid assessments *	4,338	4,448	4,237	4,243	4,231

* The estimate of valid OIA assessments is based on responses to "Hospitalized current". The response to other indicators will be very similar but not identical.

On the other hand, since 1997 the number of admissions with a current diagnosis at intake increased by 37%, from 265 to 355 cases in 2001 (see Table 3).

Figure 1 shows the proportion of offenders in each admission cohort with a mental health indicator for each of the four "current" mental health issues. When the numbers of positive assessments for each calendar year are compared, the proportion with a positive assessment is found to have increased significantly since 1997.

- Six out of every one hundred new federal admissions arriving from the court in 1997 were "Diagnosed as disordered currently". By 2001, this proportion had increased to 8.5 per 100, an increase of nearly 40% from five years earlier or 90 more diagnosed inmates

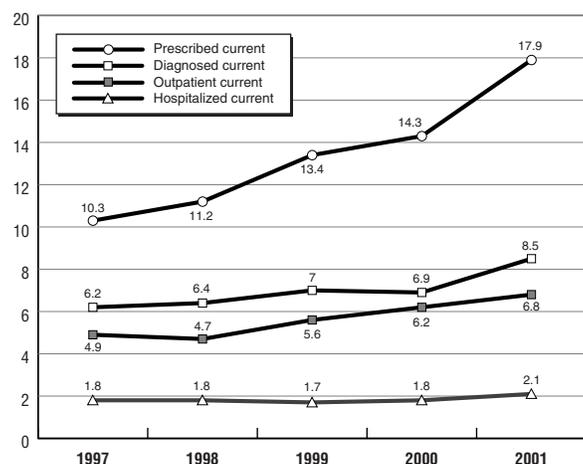
during a period where there had been an overall decline of 90 admissions during the same period.

- In 1997, about 10% of all admissions were "Prescribed medication currently". This proportion had increased to almost 18% on 2001, nearly an 80% increase from five years earlier.
- Just fewer than 2 per 100 federal admissions (1.8%) in 1997 were "Hospitalized current", and this proportion remained relatively constant until 2001 when it jumped to 2.1% (a 17% increase).
- Finally, the proportion of admissions that were indicated as "Outpatient current" in 1997 (5%) was 40% higher by 2001 (at 7%).

Thus, with the exception of "Hospitalized current, all the changes since 1997 were statistically significant.⁵ Similar trends were found examining the same variables for the "prior" existence of a mental health issue. The proportions of new federal inmates with a prior history also increased at about the same rate from 1997 to 2001, as those with a "current" indicator. Detailed admission assessments are provided in Table 3.

Figure 1

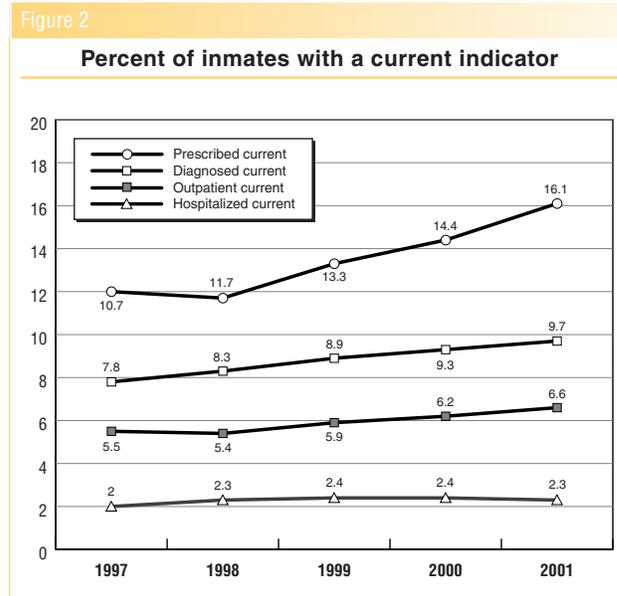
Percent admissions with a current mental health indicator



Mental health profiles of in-custody inmates

An examination of the distribution of cases with positive OIA indicators among the federal in-custody population was also undertaken. Analysis was made from a series of snapshots of all inmates in-custody at year-end (December 31st) of successive proportion of inmates with positive mental health assessments.

Figure 2 shows the proportion (%) of offenders in each snapshot with a positive OIA “current indicator” for one of the four mental health issues. When the numbers of mental health assessments for each year are compared, the proportion with current indicator is found to have increased significantly since 1997.



- On December 31st, 1997 nearly eight out of every hundred federal inmates had a positive OIA assessment as “Diagnosed as disordered currently”. By December 2001, this proportion had increased to nearly 10 per 100, an increase in the proportion by 24% from five years earlier. Among those with an OIA assessment, the number increased from 615 to 953, or an increase of nearly 340 cases, as reflected in Table 4.

- In December 1997, about 11% of all admissions were “Prescribed medication currently”. This proportion had increased to 16% in December 2001, about a 50% increase from five years earlier.
- 2% of the inmate population in 1997 were “Hospitalized current”, and this proportion increased to 2.3% in 1998 and remained at or near that level throughout the period up to December 2001 (a 15% increase over 1997). Although the proportions are small, the increase represented a growth in some of the most severe cases of just over 70 offenders, from 161 to 232 during that period (see Table 4).
- Finally the proportion who were indicated as “Outpatient current” in 1997 (5.5%) was 20% higher by 2001 (at 6.6%)

The proportion of federal inmates with an assessed prior history of mental illness was also found to have increased during this period. The proportion of each indicator increased at roughly the same rate as for the “current” indicator. Table 4 provides a statistical summary of these results.

Indicator coverage for the snapshot populations

Data coverage for OIA indicators is generally about 98% for the CSC admission population since OIA was implemented in November 1994. Under-coverage is a problem only when a sufficient waiting period is not observed before data is collected for a specific period, since CSC policy allows for intake assessments to be completed within 8 weeks of offender admission.

Table 4

Calendar year	Number and percentage of inmates with an OIA Indicator ⁶				
	1997	1998	1999	2000	2001
Diagnosed current	615 (7.8)	724 (8.3)	811 (8.9)	885 (9.3)	953 (9.7)
Prescribed current	849 (10.7)	1,028 (11.7)	1,221 (13.3)	1,379 (14.4)	1,590 (16.1)
Hospitalized current	161 (2.0)	199 (2.3)	225 (2.4)	229 (2.4)	232 (2.3)
Outpatient current	441 (5.5)	475 (5.4)	544 (5.9)	597 (6.2)	649 (6.6)
Diagnosed past	899 (11.4)	1,064 (12.3)	1,192 (13.1)	1,333 (14.0)	1,438 (14.7)
Prescribed past	1,833 (23.3)	2,163 (25.0)	2,468 (27.3)	2,799 (29.6)	3,091 (31.7)
Hospitalized past	1,381 (17.4)	1,559 (17.9)	1,678 (18.4)	1,815 (19.1)	1,941 (19.8)
Outpatient past	1,387 (17.6)	1,557 (18.0)	1,684 (18.5)	2,016 (21.2)	2,139 (21.9)
Estimated valid assessments*	8,034	8,839	9,244	9,660	9,977

* The estimate of valid OIA assessments is based on responses to “Hospitalized current”. The response to other indicators will be very similar but not identical.

However, unlike the near full-coverage found with admission data there will be significant under-coverage in the early years of the historical data for the in-custody population, and this under-coverage increases the farther back one goes. The number of inmates in-custody who did not have an intake assessment was about 40% as of December 31 1997. By contrast, only about 21% of inmates in-custody on December 31, 2001 were missing an intake assessment (see Table 5). The cause of this early under coverage is due mainly to longer-sentenced inmates (i.e., those *admitted prior to November 15th, 1994*⁷ and still serving their sentence in 1997 or 2001).

Table 5

Snapshot assessment coverage

Snapshot for Dec. 31 st	Custodial Count	OIA* Assessment	No OIA Assessment	Under Coverage Rate
1997	13,385	8,034	5,351	40.0%
1998	13,039	8,839	4,200	32.2%
1999	12,711	9,244	3,467	27.3%
2000	12,604	9,660	2,944	23.4%
2001	12,608	9,977	2,631	20.9%

** The estimate of valid OIA assessments is based on responses to "Hospitalized current". The response to other indicators will be very similar but not identical.

Summary

Managing offenders with mental health issues presents the Correctional Service of Canada with additional challenges beyond those normally associated with federal offenders. Mentally challenged or chronically mentally disordered inmates often require special assistance, to follow their correctional plan and to enhance their abilities to cope with daily prison life. With mental or behaviour disorder problems, these inmates typically require additional interventions to help them better adapt to their environment. Often, the regular inmate population shuns these inmates and, fearing for their safety and or the safety of others, they require special supervision, accommodation and interventions.

Based on the trends we have just examined, the percentage of the federal population with mental health problems is growing, even though overall prison admission and the institutional population counts have been in decline. Although mentally disordered offenders still represent a relatively small proportion of the overall population, the fact that their numbers are growing (as indicated by the OIA assessment proxies) is a matter of concern. ■

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² Motiuk, L., and Porporino, F. (1991). *The prevalence, nature and severity of mental health problems among federal male inmates in Canadian penitentiaries*. Research Report R-24. Ottawa, ON: Correctional Service of Canada.

³ The OIA was implemented by the Correctional Service of Canada in November 1994, and is applied to every new offender as they enter federal custody. The conceptual underpinning for this approach to offender Risk/Needs assessment is presented in: Andrews, D. A. (1989). Recidivism is predictable and can be influenced: Using risk assessments to reduce recidivism. *Forum on Corrections Research*, 1(2), 11-17. For an overview of the implementation of OIA, see: Motiuk, L. L. (1993). Where Are We in Our Ability to Assess Risk? *Forum on Corrections Research*, 5(2), 14-18. Since implementation in November 1994, standard and comprehensive offender intake assessments have been conducted on over 27,000 federal admissions.

⁴ The following description maps the indicators selected from OIA: (Diagnosed current, from the Disordered sub-component, Mental Health component, Personal/Emotional Orientation domain); (Prescribed current, from the Medication sub-component, Interventions component, Personal/Emotional Orientation domain); (Hospitalized current - from the Psychological/Psychiatric sub-component, Interventions

component, Personal/Emotional Orientation domain; (Outpatient current, from the Psychological/Psychiatric sub-component, Interventions component, Personal/Emotional Orientation domain); (Diagnosed past, from the Disordered sub-component, Mental Health component, Personal/Emotional Orientation domain); (Prescribed past, from the Medication sub-component, Interventions component, Personal/Emotional Orientation domain); (Hospitalized past, from the Psychological/Psychiatric sub-component, Interventions component, Personal/Emotional Orientation domain) and; (Outpatient past, from the Psychological/Psychiatric sub-component, Interventions component, Personal/Emotional Orientation domain).

⁵ χ^2 p<.001.

⁶ Definitions for the indicators can be found in: "Offender Intake Assessment and Correctional Planning: Standard Operating Practices (Interim) 700-04". See in particular: "Annex 700-4C Dynamic Factor Analysis".

⁷ A back-fill assessment was undertaken in 1997 to gather information on all federal in-custody offenders who were missing an OIA assessment from intake. However, these assessments were completed only at the domain level (i.e., overall risk and need scores, etc.), so did not collect detailed indicator-level information.