

Forty Years of Deinstitutionalization of Psychiatric Services in Canada: An Empirical Assessment

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Objective: To empirically analyze the implementation of the policy of deinstitutionalization of psychiatric services over a 40-year period.

Method: We assessed the policy of deinstitutionalization in terms of the following components: 1) population-based psychiatric beds, days of care in psychiatric hospitals (PHs); 2) days of care in psychiatric units in general hospitals (GHs); and 3) per capita expenditures on psychiatric services.

Results: There was a rapid closure of beds in PHs in the 1970s and 1980s, but this was associated with an increasing rate of days of care in psychiatric units in GHs (that is, transinstitutionalization). It was not until the 1990s that the overall days of inpatient care began to decrease. Per capita expenditures on community-based psychiatric services increased throughout this period.

Conclusions: Standardized rates reveal tremendous variation among the provinces in the timing and intensity of deinstitutionalization.

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Clinical Implications

- Research must identify the stage of deinstitutionalization, since it may have an impact on the results.
- Research is needed to determine when the level of community-based services is enough and should not be expanded further. No one suggests that inpatient psychiatric services be eliminated.

Limitations

- Expenditures on psychiatric services tend to focus on allocations to institutions rather than on the functions of psychiatric services.
- There may be errors in the calculation of institutional and community-based psychiatric expenditures, since a national standardized system of data collection on psychiatric expenditures does not exist.
- We aggregated the data at a provincial level, and the specific increases or decreases in the number of psychiatric beds or rates of inpatient days of care across facilities cannot be calculated.

Key Words: *deinstitutionalization, psychiatric services, transinstitutionalization, mental health*

For many people, the deinstitutionalization of psychiatric services connotes an event that took place through the late 1960s and 1970s, when many psychiatric hospitals (PHs) and inpatient beds were closed and psychiatric inpatients were discharged into the community. However, the deinstitutionalization of psychiatric services has in fact been been

continuous for the past 40 years. The idea that deinstitutionalization is a completed event is related to the perception that the policy was largely borne of fiscal and legal necessity and not of logically analyzed mental health considerations. It is also related to the critics' perceptions that mental health patients were released onto the streets. What in fact occurred

was rapid movement of mental health patients out of hospitals and into the community, accompanied by a slow growth of community mental health services. Deinstitutionalization appeared to be a policy of moving patients out of the mental hospitals for legal and financial reasons, and the results were felt not just in the community but also on the street.

Many researchers have critically examined the social, economic, and political factors that have contributed to the policy of psychiatric-service deinstitutionalization. Here, we assess the process of deinstitutionalization—the first crucial step in evaluating this policy. Evaluations of the outcomes of deinstitutionalization can be meaningful only when it is empirically established that the policy has been implemented.

Definition

We believe, as do many mental health workers, that deinstitutionalization must be conceptualized in broader terms. Fundamentally, deinstitutionalization comprises 3 processes: 1) the shift away from dependence on mental hospitals; 2) “transinstitutionalization,” or an increase in the number of mental health beds in general hospitals (GHs); and 3) the growth of community-based outpatient services for people with mental illness. Weaving together these processes for the treatment of mental illness is what Bachrach sees as complex structural changes in the delivery of services (1,2) and what Lewis and colleagues refer to as a “set of organizational arrangements” (3) seriously modifying the ways in which services are delivered. Bachrach (1,2), Mechanic (4), and Mechanic and Rochefort (5) argue that the policy of deinstitutionalization has not been implemented consistently across geographical areas. Unfortunately, the policy does not articulate either the conditions under which full implementation would exist or the expected outcomes from successful implementation.

Purpose

We empirically trace the extent to which deinstitutionalization has been achieved in Canada. We address whether the process has been uniform, whether it is complete, and whether it is just transinstitutionalization that appears to be deinstitutionalization.

Method

Measures

To appreciate when and to what extent deinstitutionalization has taken place in Canada, it is important to trace the timing of changes that correspond to the 3 facets of deinstitutionalization. We considered the number of psychiatric beds, the days of care in institutions, the average length of stay in institutions, and the expenditures on community-based psychiatric services. We standardized these measures into

population-based rates to enable meaningful comparisons across the provinces. A review of these indicators allows for an empirically based assessment of the extent to which the provinces have become deinstitutionalized. It is important to note that, because all data were aggregated at a provincial level, we could not calculate the specific increases or decreases in the number of psychiatric beds or rates of inpatient days of care across facilities.

Sources of Data

We used multiple sources of data. Statistics Canada published data on inpatient psychiatric bed-days and expenditures between 1960 and 1990. The Canadian Institute for Health Information provides data regarding total days of care in PHs and psychiatric units in GHs for 1994–1995 and 1998–1999 (P Walsh, personal communication, 2001). In some cases, expenditures on mental health services are published in annual reports of the provinces. In most cases, we obtained calculations of expenditures from ministry personnel according to costs for PHs, costs for psychiatric units in GHs, and costs for community-based psychiatric services. This information is not routinely calculated or made public.

Time Periods

We examined deinstitutionalization in 2 time periods: 1960 to 1980 and 1981 to 1999. Certainly, deinstitutionalization began before 1960, but reliable and valid national data are not available prior to 1960. In analyzing the process of deinstitutionalization from 1960 to 1980, we focused generally on the number of psychiatric beds closed across Canada. We subdivided the analysis of deinstitutionalization between 1981 and 1999 according to various components in the process of deinstitutionalization.

Results

Deinstitutionalization 1960 to 1980

Between 1960 and 1980, all the provinces instituted some elements of psychiatric-service deinstitutionalization, but there were tremendous regional differences in the timing and the rates of bed closures. Health and Welfare Canada estimates that the number of inpatient beds in PHs decreased from 4 beds per 1000 population in 1964 to less than 1 bed per 1000 population in 1979 (6). Table 1 shows that most bed closures in PHs (from 53 801 beds to 20 301 beds: 62.2%) occurred in Canada between 1975 and 1980–1981 (7).

In 1965, Alberta had the highest number of beds per population with 4.1 per 1000; however, by 1980–1981 Alberta closed the greatest number of beds per population (with 3.4 beds per 1000), resulting in a rate of 0.7 beds per 1000 population in 1980–1981. Quebec closed the most beds in this time period (16 149: 84.3%). This accounted for a decrease of

Table 1 Rated bed capacity of operating institutions by province per 1000 population, 1965 to 1980–1981

Year	Canada	NF	PEI	NS	NB	QC	ON	MB	SK	AB	BC
1965	69 128	844	391	3043	2102	19 157	23 968	3686	3586	5980	6371
1970	64 758	895	391	1897	1877	20 771	21 342	2933	2861	5023	6768
1975	53 801	525	295	1792	1318	17 477	17 546	2670	1895	4681	5602
1980–1981	20 301	357	256	821	1074	3008	7935	1157	702	1619	3372
1965–1981 decrease	48 827	487	135	2222	1028	16 149	16 033	2529	2884	4361	2999
% Decrease	70.6	57	34.5	73	48.9	84.3	66.9	68.6	80.4	72.9	47
1965 rate per population	3.5	1.7	3.6	4	3.4	3.4	3.6	3.8	3.8	4.1	3.6
1980–1981 rate per population	1.0	0.6	2	1	1.5	0.5	0.9	1.1	0.7	0.7	1.3
% Change	-71.4	-64.7	-44.4	-75.0	-55.9	-85.3	-75.0	-71.1	-81.6	-82.9	-63.9

Statistics Canada Mental Health Statistics (1983): Vol. III Institutional facilities services and finances 1980 to 1981:15 (7).

Table 2 Days of care per 1000 population in psychiatric hospitals, and average length of stay by province, 1985 to 1999

Year	Canada	NF	PEI	NS	NB	QC	ON	MB	SK	AB	BC
Days of care per 1000 population											
1985–1986	280.0	145.5	192.1	152.7	—	627.8	174.6	—	120.3	166.3	213.9
1990–1991	254.9	287.5	133.4	157.5	—	537.4	163.2	—	103.9	163.8	230.4
1994–1995	312.5	767.0	601.0	108.9	440.5	597.4	144.8	1109.1	133.3	166.9	109.4
1998–1999	163.5	185.5	764.0	42.7	237.6	316.5	110.2	227.3	85.3	102.3	77.3
% Change 1985–1999	-41.6	27.5	297.7	-72.0	—	-49.6	-36.9	—	-29.1	-38.5	-63.9
Average length of stay, days											
1985	207.5	76.4	171.8	48.9	—	440.4	93.3	—	288.7	177.7	539.4
1990	223.0	151.6	53.8	50.8	—	475.1	107.3	—	486.2	180.09	559.4
1994–1995	271.3	342.1	286.7	74.2	2035	526.8	99.5	413.2	555.3	195.1	499.2
1998–1999	196.8	70.6	239.7	37.7	1119	703.2	86.5	378.3	524.1	109.2	468.4
% Change 1985–1999	-5.2	-7.6	39.5	-22.9	—	59.7	-7.3	—	81.5	-38.5	-13.2

Statistics Canada Mental Health Statistics 1985 to 1986 (9); 1990 to 1991(10). *The Daily* (Statistics Canada 2001) (11).

2.9 beds per 1000 population, leaving Quebec with the lowest rate of beds (0.5 beds per 1000 population) in 1980–1981. Saskatchewan closed 2884 beds (80.4%) in PHs. In contrast, Newfoundland was not as institutionalized as some of the other provinces, with 1.7 beds per 1000 population in 1965. Nevertheless, Newfoundland closed some of its beds and, by 1980–1981, had the second-lowest rate of psychiatric beds, at 0.6 per 1000 population. Prince Edward Island was the slowest province to embrace deinstitutionalization. It closed the fewest beds per 1000 population between 1965 and 1980–1981 (135: 34.5%) and had the highest rate of beds in 1980–1981, with 2.0 per 1000 population (Table 1). Wasylenki, Goering, and MacNaughton state that the policy of deinstitutionalization contributed to the closure of 32 622 beds (68.5%) in PHs between 1960 and 1976 (8). The number of beds in PHs decreased from 47 633 beds in 1960 to 15 011 beds in 1976. Concomitantly, beds in psychiatric units in GHs

increased by 4992 (591.5%), from 844 beds in 1960 to 5836 beds in 1976. Although some of the beds from PHs were reallocated to psychiatric units in GHs, 27 630 net beds were removed from the system of psychiatric services. In addition, community clinics and residential care were developed, presumably from the “savings” that occurred from closing the beds in PHs.

Deinstitutionalization 1981 to 1999

Table 2 shows that deinstitutionalization contributed to changes in patterns of admission to PHs, with many patients with mental illness experiencing multiple and shorter admissions to PHs or psychiatric units in GHs (9–11) (P Walsh, personal communication, 2001). In most cases, the data on psychiatric service use were not calculated. We have calculated rates for each province using population estimates from Statistics Canada. In Canada, between 1985 and 1999, the process of deinstitutionalization of PHs continued. Table 2

Table 3 Days of care per 1000 population in psychiatric units in general hospitals, and average length of stay by province, 1985 to 1999

Year	Canada	NF	PEI	NS	NB	QC	ON	MB	SK	AB	BC
Days of care per 1000 population in psychiatric units											
1985–1986	183.6	123.9	168.7	97.9	168.0	243.0	137.7	156.6	134.5	181.7	264.7
1990–1991	201.0	109.7	203.9	97.8	141.2	289.4	149.9	180.4	163.0	112.4	322.8
1994–1995	203.0	94.3	166.2	91.2	169.0	329.0	117.2	166.4	142.1	159.5	326.5
1998–1999	121.8	86.6	116.2	96.7	137.3	126.8	60.9	155.6	78.2	92.8	320.0
% Change 1985–1999	-33.7	-30.1	-31.1	-1.2	-18.3	-47.8	-55.8	-0.6	-41.9	-48.9	20.9
Average length of stay in psychiatric units, days											
1985	29.5	20.4	15.2	16.7	21.8	44.5	23.6	26.2	15.9	23.7	38.5
1990	33.4	21.9	14.8	18.0	19.4	52.0	26.3	32.2	20.0	17.9	45.1
1994–1995	32.6	19.7	14.2	15.0	21.2	55.1	20.1	28.1	18.0	25.2	45.9
1998–1999	22.0	18.1	13.9	18.1	17.4	22.6	12.5	25.5	13.5	17.3	46.2
% Change 1985–1999	-25.4	-11.3	-8.6	8.4	-20.2	-49.2	-47.0	-2.7	-15.1	-27.0	20.0

Statistics Canada Mental Health Statistics 1985–1986 (9); 1990–1991 (10). *The Daily* (Statistics Canada 2001) (11).

shows that, overall, the average number of days of care decreased in PHs by 41.6% (280 beds per 1000 population in 1985–1986 to 163.5 beds per 1000 in 1998–1999). There was marked variation among the provinces. Manitoba had the highest rate of days of care in PHs in 1994–1995, with 1109 per 1000 population. Nova Scotia had the lowest rate of days of care in PHs in 1998–1999, with 42.7 days per 1000 population. All provinces except Newfoundland and Prince Edward Island decreased their days of care in psychiatric facilities during this time period. Newfoundland's days of care in PHs peaked around 1994–1995 and then began to decrease. Prince Edward Island's days of care decreased from 1985–1986 to 1990–1991 before increasing to surpass the 1985–1986 rates. Evidence of transinstitutionalization from PHs to psychiatric units in GHs is demonstrated by the 10.6% increase in the average number of days of care in psychiatric units in GHs from 183.6 days per 1000 population in 1985–1986 to 203.0 per 1000 in 1994–1995 (Table 3) (9–11; P Walsh, personal communication, 2001). Deinstitutionalization of psychiatric units is evidenced by the 40% decrease in days of care between 1994–1995 and 1998–1999. All provinces decreased their days of care in psychiatric units between 1985–1986 and 1998–1999, except British Columbia.

Overall, the combined days of care in PHs and psychiatric units in GHs decreased by 38.4%, from 463.6 per 1000 population in 1985–1986 to 285.6 per 1000 population in 1998–1999 (Table 4) (9,10; P Walsh, personal communication, 2001). Nova Scotia, Quebec, Ontario, and Alberta decreased their days of care in these institutions by 44% to 49%. In contrast, Prince Edward Island, New Brunswick, and Manitoba actually increased their rate of days of care in psychiatric facilities. In 1985–1986, 60.4% of days of care for

people with mental illness were within PHs, and the percentage decreased to 57.2% in 1990–1991.

In Canada, the average length of stay decreased 5.2% for PHs between 1985–1986 and 1998–1999 (Table 2), whereas the average length of stay decreased 25.4% for psychiatric units in GHs in the same time period (Table 3). The length of stay in psychiatric units in GHs increased between 1985–1996 and 1994–1995 and then began to decrease. Nova Scotia has the lowest average length of stay in PHs and psychiatric units in GHs throughout this time period, indicating deinstitutionalization. In contrast, British Columbia has the highest length of stay in both settings during this time period: the average length of stay decreased in PHs, but increased in psychiatric units in GHs, indicating transinstitutionalization. Nevertheless, most inpatient days of care clearly continued to be within PHs (Table 4).

Expenditures on Psychiatric Services in Canada: 1979 to 1998

Inpatient days in PHs and psychiatric units consume the largest proportion of mental health expenditures. Part of the impetus for deinstitutionalization was the desire to decrease the costs of inpatient care and reallocate this money toward building community-based programs that could serve more people. Thus, it is important to understand the patterns of expenditures (that is, inpatient vs community-based programs) to evaluate the progress of deinstitutionalization.

Overall, the expenditures on PHs increased by \$4.84 to \$23.45 per capita from 1970 to 1980 (rate not adjusted for inflation); however, Table 5 shows marked regional differences (12–14). There were increases of over \$20.00 per capita in Prince Edward Island, Nova Scotia, and New Brunswick where 1980 rates of expenditures ranged from \$33.00 to

Table 4 Days of care per 1000 population in psychiatric hospitals and general hospitals, and percentage of days of care solely in psychiatric hospitals by province, 1985 to 1999

Year	Canada	NF	PEI	NS	NB	QC	ON	MB	SK	AB	BC
Days of care per 1000 population in psychiatric hospitals and general hospitals											
1985–1986	463.6	269.4	360.8	250.6	168.0	870.7	312.2	157.0	255.0	348.0	479.0
1990–1991	455.9	397.2	337.3	255.3	141.2	826.8	313.1	180.4	266.9	276.2	553.2
1994–1995	515.3	861.3	767.2	200.1	609.5	926.4	262.0	1275.4	275.4	326.4	435.9
1998–1999	285.6	272.0	880.2	139.5	374.9	443.3	171.1	382.8	163.5	195.2	396.8
% Change 1985–1999	-38.4	1.0	144.0	-44.3	123.2	-49.1	-45.2	143.8	-35.9	-43.9	-17.2
Percentage of care in psychiatric hospitals											
% 1985–1986	60.4	54	53.2	60.9	—	72.1	55.9	—	47.2	47.8	44.7
% 1990–1991	55.9	72.4	39.5	61.7	—	65.0	52.1	—	38.9	59.3	41.7
% 1994–1995	60.6	89.0	78.3	45.0	72.3	64.5	55.3	87.0	48.4	51.1	25.1
% 1998–1999	57.2	68.2	86.8	30.6	63.3	71.4	64.4	59.4	52.2	52.4	19.5
% Change 1985–1999	-5.3	26.3	63.2	-49.8	—	-1.0	15.2	—	10.6	9.6	-56.4

Statistics Canada Mental Health Statistics 1985–1986 (9); 1990–1991 (10).

Table 5 Reported operating expenditures on psychiatric hospitals (in thousands of dollars) by province, 1970 to 1980–1981

Year	Canada	NF	PEI	NS	NB	QC	ON	MB	SK	AB	BC
Total											
1970	396 908	4705	1662	10 712	7414	126 759	154 082	15 304	14 461	26 571	35 238
1980	411 761	8886	4874	30 836	23 390	—	215 474	26 081	11 357	36 156	54 707
Per capita											
1970	18.56	9.08	15.11	13.98	11.88	21.08	20.16	15.6	15.35	16.6	16.49
1980	23.45	15.34	39.21	36.16	33.05	—	25.13	25.33	11.70	17.37	20.72
Change 1970–1980	4.84	6.26	24.10	22.18	21.17	—	4.95	9.73	-3.65	0.76	4.23
Daily cost											
1970	19.74	—	14.2	20.05	13.68	19.05	24.58	15.1	16.47	14.93	16.8
1980	114.11	—	59.61	160	78.52	—	140.47	75.29	118.6	97.63	89.47
Change 1970–1980	94.37	—	45.41	139.5	64.84	—	115.89	60.19	102.1	82.7	72.67

Statistics Canada Mental Health Statistics. Volume III. Institutional facilities services and finances (12). Population estimates are from Statistics Canada (13) and Statistics Canada Causes of Death (14).

\$39.00 per capita; Saskatchewan's expenditures decreased by \$3.65 per capita; Newfoundland, Saskatchewan, Alberta, and British Columbia spent less than the 1980 national average.

The costs of providing inpatient services increased rapidly between 1970 and 1980. Prince Edward Island experienced the smallest level of increase at \$45.41 daily, followed by Manitoba and New Brunswick with increases in per capita expenditures between \$60.19 and \$64.84. Both Ontario and Nova Scotia experienced above average increases in expenditures at \$116 to \$140 daily. Grob suggests that some of the increases in per capita expenditures are the result of the "shrinking inpatient census since operating costs were distributed among fewer patients" (15).

Expenditures on Community-Based Services: 1994–1995 and 1998–1999

Data examining community-based expenditures on psychiatric services are limited for the late 1980s, with much information not published in the format we developed. Whenever possible, we included data from the 1980s to provide baseline information, but their analytical value for comparisons over time is questionable, since the methods of data collection may have varied. We contacted the provincial ministries of health to obtain information on mental health expenditures in 1994–1995 and 1998–1999 (Tables 6 and 7) (6,16–21). We requested information on the amounts of public expenditures on PHs, psychiatric units in GHs, and community-based psychiatric services.

Table 6 Reported operating expenditures on psychiatric hospitals and on psychiatric units in general hospitals (in thousands of dollars) by province in the late 1980s to 1998–1999

Year	Canada ^a	NF ^d	PEI ^e	NS ^c	NB ^d	QC ^d	ON ^b	MB ^c	SK ^c	AB ^d	BC ^e
Psychiatric hospitals											
Late 1980s	140.96	35.17	8.00	58.41	33.8	600.00	357.96	—	7.42	83.10	84.8
1994–1995	70.61	32.97	7.45	7.66 ^f	14.64	307.16 ^f	—	—	10.04	89.76	95.18
1998–1999	51.86	17.96	2.69	3.82 ^f	9.96	207.56 ^f	—	20.52	11.81	90.65	101.77
Psychiatric units in general hospitals											
Late 1980s	110.28	5.97	—	—	10.40	300.0	229.22	—	5.82	—	—
1994–1995	130.72	—	—	11.12 ^f	9.75	293.61 ^f	—	—	10.00	—	329.10
1998–1999	52.97	7.62	—	17.37 ^f	11.55	166.89 ^f	—	24.88	12.94	49.31	133.16
Total institutional expenditures											
Late 1980s	317.15	41.14	—	—	44.20	900.0	587.18	—	13.24	—	—
1994–1995	221.06	—	—	18.78	24.39	600.77	415.18	43.95	20.04	—	424.28
1998–1999	160.60	25.58	—	21.19	21.51	374.45	557.66	45.40	24.75	139.96	234.93

Health and Welfare Canada 1990 (6). Population Data: Statistics Canada Mental Health Statistics (16–20).
 Population Statistics are from Statistics Canada. Mortality—Summary list of causes 1994 (appendix 3) (21).
^aData for Canada are averages of the 10 provinces. Data for the late 1980s were collected as follows: ^b1986–1987; ^c1987–1988; ^d1988–1989; ^e1989–1990;
^fEstimates calculated by the authors

Analyzing the impact of expenditures on community-based psychiatric services is complex. Only Ontario publishes annual government expenditures according to inpatient psychiatric services and community-based psychiatric services (22,23), but Ontario does not separately categorize the expenditures for PHs and inpatient psychiatric services in GHs. In most cases, these statistics have not been calculated in a manner amenable to evaluating deinstitutionalization. Most provinces collect data according to the amount of spending on various facilities. Some ministries reorganized this information and reported it to us in a form consistent with our request (that is, by categories of facilities). In other cases, we recategorized the information. Manitoba relies on information in the Manitoba Health Annual Report (24,25). We obtained information on the 1998–1999 expenditures on psychiatric units in GHs for the provinces that are unable to calculate these data (T Turner, personal communication, 2002), but no such data are available for 1994–1995. Manitoba's community-based expenditures are calculated by subtracting the expenditures for days of care in psychiatric units in GHs from the total expenditures. Newfoundland is unable to calculate expenditures for 1994–1995 because of an internal reorganization of departmental and regional responsibilities (K Legge, personal communication, 2002). Per capita expenditures on community-based psychiatric services for Nova Scotia and Quebec are calculated from total expenditures (F Hersey, personal communication, 2001; A Lachance, personal communication, 2002) minus the estimated cost of days of care. We used the daily rates from New Brunswick, since it is a neighbouring province, and has complete data.

According to the available data, the overall expenditures on psychiatric institutions are decreasing (Table 6). Expenditures on PHs in Canada decreased 63.2% from an average of 140.96 million dollars in the late 1980s to 51.86 million in 1998–1999 (expenditures have not been adjusted for inflation). During the period of more standardized data collection, expenditures on PHs decreased by 26.6% from 1994–1995 to 1998–1999. Nevertheless, there continues to be tremendous variability among the provinces. All provinces decreased their expenditures on PHs with the exceptions of Saskatchewan, Alberta, and British Columbia. Data are limited on expenditures on psychiatric units in GHs between the late 1980s and 1998–1999, with only 5 provinces reporting information. Between the late 1980s and 1994–1995, the average expenditures on psychiatric units in GHs increased by 18.5%. In contrast, these expenditures decreased by 59.5% between 1994–1995 and 1998–1999. Nevertheless, Saskatchewan, Newfoundland, Nova Scotia, and New Brunswick identify increases in expenditures on psychiatric units in GHs.

Table 7 shows that expenditures on community-based psychiatric services increased (1261%) from an average of \$8.31 million in the late 1980s to \$113.08 million in 1998–1999. In the late 1980s, expenditures on community-based psychiatric services averaged \$6.97 per capita, compared with \$35.90 per capita in 1998–1999 (rates not adjusted for inflation). Per capita expenditures on community-based psychiatric services increased by 37.7% between 1994–1995 and 1998–1999. All provinces experienced an increase except British Columbia, which identified an 11.5% decrease. Even in British Columbia, the proportion of community-based expenditures on psychiatric services with respect to the total amount of

Table 7 Reported operating expenditures on psychiatric hospitals and community-based psychiatric services (in millions) by province 1994–1995

Year	Canada	NF	PEI	NS	NB	QC	ON	MB	SK	AB	BC
Community psychiatric services											
Late 1980s	8.31	1.18	1.03	—	7.80	10.00	—	—	11.904	17.97	—
1994–1995	81.65	—	1.51	42.90 ^a	14.87	252.73 ^a	144.16	9.80 ^a	30.75	30.09	208.00
1998–1999	113.08	7.17	7.49	45.20 ^a	17.44	515.55 ^a	210.62	28.13 ^a	35.69	62.58	200.89
Per capita expenditures on community-based psychiatric services											
Late 1980s	6.97	2.07	7.92	—	10.99	1.53	—	—	11.73	7.59	—
1994–1995	26.08	—	11.21	45.93 ^a	19.62	34.68	13.18	8.67	30.39	14.40	56.68
1998–1999	35.90	13.17	54.65	48.23 ^a	23.12	70.32	18.43	24.70 ^a	34.78	21.41	50.15
Total expenditures on psychiatric services (institutions and community)											
Late 1980s	—	—	9.03	144.30	52.00	910.00	1016.00	200.00	29.70	176.96	155.43
1994–1995	321.51	—	—	61.68	39.26	853.50	559.35	53.74	50.79	—	632.26
1998–1999	285.41	32.75	—	66.39	38.95	890.0	768.28	73.53	60.44	202.54	435.82
Percentage of total expenditures on community-based psychiatric services											
1994–1995	39.2	—	—	69.6 ^a	37.9	29.6	25.8	18.2	60.5	—	32.9
1998–1999	43.8	21.9	—	68.1	44.8	57.9	27.4	38.3	59.1	30.9	46.1

Health and Welfare Canada 1990 (6). Population Data: Statistics Canada Mental Health Statistics (16–20). Population Statistics are from Statistics Canada. Mortality—Summary List of Causes 1994 (appendix 3) (21).
^aEstimates calculated by the authors

expenditures on psychiatric services is increasing (Table 7). Only Saskatchewan and Nova Scotia identify minor decreases of 1% to 2%.

It is difficult to interpret the total expenditures on psychiatric services for the late 1980s, since the list of expenditures is not always included. Thus, our analysis examines only the differences in total expenditures on psychiatric services from 1994–1995 to 1998–1999. The Canadian average of total expenditures on psychiatric services decreased by 11.2% during this period. This overall statistic is affected by the notable decrease of 31% in expenditures in British Columbia. In all other provinces, total expenditures increased, except for a minor decrease of 1% in New Brunswick.

Ontario and British Columbia data provide an excellent example of why it is important to examine both total expenditures and per capita expenditures on psychiatric services. Ontario increased its expenditures on all psychiatric services by \$16.09 per capita between 1994–1995 and 1998–1999, but the percentage of the total expenditures on psychiatric services spent on community-based psychiatric services only increased from 25.8% to 27.4%. In contrast, British Columbia decreased its overall level of expenditures by \$63.49 per capita from 1994–1995 to 1998–1999, but most of this decrease was for psychiatric units in GHs. The community-based percentage of total expenditures increased from 32.9% to 46.1%, even though the total community expenditures decreased by \$7.11 million. British Columbia increased the proportion of its allocation for community-based psychiatric services from 32.9% to 46.1% of its total budget for

psychiatric services between 1994–1995 and 1998–1999. Some of this decrease is artifact because \$31 million for mental health programs was transferred to another ministry in 1997.

New Brunswick increased its proportion of community-based psychiatric services by 6.9 percentage points to 44.8% in 1998–1999. Based on estimates, Nova Scotia spent the highest proportion of its mental health expenditures on community-based services: 69.6% in 1994–1995 and 68.1% in 1998–1999. Manitoba closed a long-term PH in 1998 (25) and increased its total expenditures on community-based psychiatric services from 18.2% in 1994–1995 to 38.3% in 1998–1999.

Discussion

To evaluate the process of deinstitutionalization, it is critical to move beyond the examination of bed closures. The process of transinstitutionalization requires an analysis of days of care in psychiatric facilities and psychiatric units in GHs. Deinstitutionalization, however, requires the analysis of both increases in per capita expenditures on community-based psychiatric services and decreases in the rate of days of care in psychiatric institutions.

The evidence indicates that the policy of the deinstitutionalization of psychiatric services has been implemented over the past 40 years and that there has been tremendous regional variation in the extent and timing among the provinces. Most provinces began a process of transinstitutionalization with decreased days of care in PHs and increased

days of care in psychiatric units in GHs. It is not surprising that the length of stay initially increased for PHs between 1985–1986 and 1994–1995. The clients who are easiest to place in the community are discharged first. Many of the remaining clients have more acute needs or are more resistant to treatment and need specialized services in the community to be discharged (26–28). Days of care for psychiatric illness peaked in 1994–1995, but the deinstitutionalization process from PHs and psychiatric units in GHs began in earnest between 1994–1995 and 1998–1999.

The national data on psychiatric-service expenditures support decreased expenditures on psychiatric institutions and increases in per capita expenditures on community-based psychiatric services. There is tremendous variation among provinces with respect to their per capita expenditures on PHs and community-based psychiatric services. The evidence suggests that most psychiatric expenditures are usually related to the number of inpatient days. Fewer resources have been allocated to community-based services. For most provinces, these data do not support the contention that monies were removed from the psychiatric system and diverted into areas other than community-based psychiatric services. Nevertheless, these findings must be reviewed cautiously, since there is no standardized system of calculating expenditures on psychiatric services across Canada.

Saskatchewan was the first province to begin deinstitutionalization of the PHs, but by 1994–1995, Nova Scotia assumed the lead role in the deinstitutionalization of psychiatric services. Quebec and Manitoba implemented deinstitutionalization rapidly between 1994–1995 and 1998–1999. Prince Edward Island was implementing deinstitutionalization until 1990–1991, when days of care in PHs began to increase.

Conclusions

The data support the hypothesis that deinstitutionalization of psychiatric services has spanned at least 40 years for most of the provinces. Deinstitutionalization of psychiatric services is a fact in Canada. Transinstitutionalization did occur throughout the 1980s, but total days of care in PHs and psychiatric units in GHs decreased during the 1990s. This indicates that transinstitutionalization is a major component in the transition from institutionalization to deinstitutionalization. Per capita expenditures on community-based psychiatric services also increased throughout these time periods. These data support the contentions of the Clarke Institute of Psychiatry (29); of Goering, Wasylenki, and MacNaughton (30); of Health and Welfare Canada (6); and of the annual reports and policy documents of the provincial Ministries of Health (24,25,31–37) that identify the progress of PH deinstitutionalizing and the subsequent reallocation of resources to the community.

Ample evidence supports the contention of Bachrach (1,2), Mechanic (4) and Mechanic and Rochefort (5) that the policy of deinstitutionalization has not been implemented consistently across geographical areas. This finding has major implications for future policy implementation and for research evaluating the impact of deinstitutionalizing psychiatric services. First, if research is being conducted between regions, the stage in the process of deinstitutionalization must be considered as having a potential impact on the results. Second, these data suggest that it is possible to compare provinces that have clearly implemented the process of deinstitutionalization earlier with provinces that have implemented the policy later to determine whether there are differences in population-based outcomes, such as levels of psychological distress and access to psychiatric services. Third, it is apparent that deinstitutionalization is still occurring, even if we cannot identify the precise circumstances under which it would be completed. There is no criterion to determine when the level of community-based services is high enough and should not be expanded further. No one suggests that inpatient psychiatric services be eliminated.

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References

1. Bachrach LL. A conceptual approach to deinstitutionalization. *Hosp Community Psychiatry* 1978;29:573–8.
2. Bachrach LL. The state of the state mental hospital in 1996. *Psychiatr Serv* 1996;47:1071–8.
3. Lewis DA, Riger S, Rosenberg H, Wagenaar H, Lurigio A, Reed S. *Worlds of the mentally ill: how deinstitutionalization works in the city*. Carbondale and Edwardsville: Southern Illinois Press; 1991.
4. Mechanic D. The challenge of chronic mental illness: a retrospective and prospective view. *Hosp Community Psychiatry* 1986;37:891–6.
5. Mechanic D, Rochefort DA. Deinstitutionalization: an appraisal of reform. *Annu Rev Sociol* 1990;16:301–27.
6. Health and Welfare Canada. *Mental health services in Canada*. Ottawa: Minister of Supply and Services Canada; 1990.
7. Statistics Canada. *Mental Health Statistics. Volume III. Institutional facilities, services and finances 1980–1981*. Ottawa: Minister of Supply and Service Canada; 1983.
8. Wasylenki D, Goering P, MacNaughton E. Planning mental health services: I. Background and key issues. *Can J Psychiatry* 1992;37:199–205.
9. Statistics Canada. *Health report Supplement No 3: mental health statistics 1985–1986. Volume 2 (revision)*. Ottawa: Minister of Supply and Services Canada; 1990.
10. Statistics Canada. *Mental health statistics 1990–1991*. Ottawa: Minister of Industry, Science and Technology; 1994.
11. Canadian Institute for Health Information. *Mental health statistics. The Daily (on-line)* 12 July, 2001. Available: <http://www.statcan.ca/Daily/English/010712a.html>. Accessed November 2001.
12. Statistics Canada. *Mental health statistics. Volume III. Institutional facilities, services and finances 1980–1981*. Ottawa: Minister of Supply and Service Canada; 1983.
13. Statistics Canada. *Causes of death 1970*. Ottawa: Minister of Industry Trade and Commerce; 1971 (introduction).
14. Statistics Canada. *Causes of death 1980*. Ottawa: Minister of Supply and Services Canada; 1982.
15. Grob GN. The paradox of deinstitutionalization. *Social Science and Modern Society* 1995; 32(5)217:51–9.

16. Statistics Canada. Health reports. Supplement No 3: mental health statistics 1985–1986 (revised). Volume 2 (1). Ottawa: Minister of Supply and Services Canada; 1990.
17. Statistics Canada. Health reports. Supplement No 3: mental health statistics 1986–1987. Volume 2 (2). Ottawa: Minister of Supply and Services Canada; 1990.
18. Statistics Canada. Health reports. Supplement No 3: mental health statistics 1987–1988. Volume 2 (2). Ottawa: Minister of Supply and Services Canada; 1990.
19. Statistics Canada. Health reports. Supplement No 3: mental health statistics 1988–1989. Volume 3 (2). Ottawa: Minister of Industry, Science and Technology; 1991.
20. Statistics Canada. Health reports. Supplement No 3: mental health statistics 1989–1990. Volume 4(1). Ottawa: Minister of Industry, Science and Technology; 1992.
21. Statistics Canada. Mortality—summary list of causes 1994 Appendix 3. Ottawa: Ministry of Industry; 1996.
22. Ontario Ministry of Finance. Public Accounts of Ontario. Toronto: Queen's Printer for Ontario; 1995.
23. Ontario Ministry of Finance. Public Accounts of Ontario. Toronto: Queen's Printer for Ontario; 1999.
24. Manitoba Health. Annual Report 1994–1995. Winnipeg: Ministry of Health Manitoba; 1995.
25. Manitoba Health. Annual Report 1998–1999. Winnipeg: Ministry of Health Manitoba; 1999.
26. DeRisi W, Vega WA. The impact of deinstitutionalization on California's state hospital population. *Hosp Community Psychiatry* 1983;34:140–5.
27. Lamb HR. The new state mental hospitals in the community. *Psychiatr Serv* 1997;48:1307–10.
28. Witkin MJ, Atay J, Manderscheid RW. Trends in state and county mental hospitals in the US from 1970 to 1992. *Psychiatr Serv* 1996;47:1079–81.
29. Clarke Institute of Psychiatry. Best practices in mental health reform. Ottawa: Minister of Public Works and Government Services Canada; 1997. Discussion paper.
30. Goering P, Wasylenki D, MacNaughton E. Planning mental health services: II. Current Canadian initiatives. *Can J Psychiatry* 1992;37:259–63.
31. British Columbia Ministry of Health. Revitalizing and rebalancing British Columbia's mental health system; 1998. Available from <http://www.hlth.gov.bc.ca/mhd/pdf/mhpd.pdf>. Accessed January 2002.
32. Alberta Mental Health Board. Building a mental health system for Alberta: a ten year retrospective; 2001. Available: <http://www.amhb.ab.ca/Building%20a%20Mental%20Health%20System%20for%20Alberta%20-Final%Copy.pdf>. Accessed January 2002.
33. Manitoba Health. Annual Report 2000–2001. Winnipeg: Ministry of Health Manitoba; 2001.
34. Mercier C, White D. Mental health policy in Quebec: challenges for an integrated system. In: Bachrach LL, Goering P, Wasylenki D, editors. *Mental health care in Canada*. San Francisco: Jossey-Bass; 1994. p 41–52.
35. Ontario Ministry of Health. Putting people first: the reform of the mental health services in Ontario. Toronto: Queen's Printer for Ontario; 1993.
36. Ontario Ministry of Health. Implementation planning guidelines for mental health reform. Toronto: Queen's Printer for Ontario; 1995.
37. Ontario Ministry of Health. Making it happen: operational framework for the delivery of mental health services and support. Toronto: Queen's Printer for Ontario; 1999.

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Résumé : Quarante ans de désinstitutionnalisation des services psychiatriques au Canada : une évaluation empirique

Objectif : Effectuer une analyse empirique de la mise en oeuvre de la politique de désinstitutionnalisation des services psychiatriques sur une période de 40 ans.

Méthode : Nous avons évalué la politique de désinstitutionnalisation selon les composantes suivantes : 1) les lits psychiatriques selon la population, les jours de soins reçus dans des hôpitaux psychiatriques (HP); 2) les jours de soins reçus dans des unités psychiatriques d'hôpitaux généraux (HG); et 3) les dépenses par habitant engagées par les services psychiatriques.

Résultats : Il y a eu une fermeture rapide des lits des HP dans les années 1970 et 1980, mais cela était associé au taux croissant des jours de soins reçus dans des unités psychiatriques d'HG (transinstitutionnalisation). Ce n'est que dans les années 1990 que la totalité des jours de soins aux patients hospitalisés a commencé à diminuer. Les dépenses par habitant engagées par les services psychiatriques communautaires se sont accrues pendant toute cette période.

Conclusions : Les taux normalisés révèlent une immense variation parmi les provinces dans la chronologie et l'intensité de la désinstitutionnalisation.