# Implementation of Social Services for the Chronically Mentally ill in a Polish Mental Health District: Consequences for Service Use and Costs

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#### Abstract

Background: In accordance with the mental health reform in Poland, from 1970 to 1980 the following mental health facilities were established within the general health system in the Warsaw District of Targówek: general hospital psychiatric ward, day hospital, outpatient clinic (OC), and community mobile team (CMT) with some procedures of assertive community treatment (ACT). In 1998 (according to the Mental Health Act of 1994), within the social welfare system, new community facilities were established in this district with psychosocial rehabilitation programs for the chronically mentally ill. These new social welfare facilities were a vocational rehabilitation center (VCR), community center of mutual help (CCOMH), and specialized social help services at client homes (SSHS).

Aim of the Study: To determine the change of care delivered to chronic psychiatric patients in both the mental health and social welfare systems, and to compare the costs of care during two 2-year periods: before (Period A) and after (Period B) the 1998 implementation of the new social welfare facilities in the Warsaw District of Targówek.

**Methods:** The sample consisted of 73 chronic psychiatric patients, admitted since 1998 to the new social welfare facilities. The authors evaluated and calculated the costs of the patients' use of mental health facilities during the two years *before* their first admission to VCR, CCOMH or SSHS in 1998 (Period A: 1996-1998) and their use of mental health and social welfare facilities during the two years *after* their admission to VCR, CCOMH or SSHS in 1998 (Period B: 1998-2000).

Results: In this group of chronic patients, during Period B, the total duration of both full and partial hospitalizations decreased (-75.9% and -78.9% respectively), while the total number of outpatient mental health visits went up (+62.9%). In Period B the new social welfare facilities offered a substantial amount of day care and the global amount of supplied day care increased markedly. The total

costs of the mental health system significantly decreased in Period B (-65.7%), but new costs emerged in the social welfare system. Taken together, the total costs of care provided by the two systems in Period B were higher than the costs incurred by the mental health system alone in Period A (+33.9%), but the increase in the total amount of services delivered was also relevant (+98.3%). The "out of pocket" expenses incurred by patients increased in Period B (+13.9%).

**Discussion:** The activity of the new social welfare facilities (VRC, CCOMH, SSHS) seems to reduce both full time and partial hospitalizations. Despite the increasing costs of medication reimbursement, and the increased use of CMT and OC, the overall costs for the mental health system were substantially reduced. The decrease in day hospital use is probably due to the large amount of daily social support and home services offered in VRC, CCOMH and SSHS. The results emphasize the importance of evaluating the coordination of care for chronically mentally ill patients in the mental health and social welfare systems.

Received 7 April 2003; accepted 8 April 2004

#### Introduction

## Mental Health Reform in Poland

The mental health reform in Poland, starting in the 1970s, focused on the development of a community-based model of treatment. According to this model, the following services were created and developed: a network of outpatient clinics (OC), psychiatric wards in general hospitals, and psychiatric day hospitals. A small number of community mobile teams (CMT) delivering "home based treatment", 2,3 with some assertive community treatment (ACT) strategies, 4,5 were also introduced.

The establishment of services pertaining to geographically defined catchment areas and the continuity of inpatient and outpatient treatment were the main principles of the reform. Since 1970 the total number of beds in psychiatric hospitals, as well as the total number of long stay patients (longer than one year) has gradually decreased. The average length of psychiatric hospitalization has decreased and the number of

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Table 1. Mental Health Services in Poland 1970-2000

Mental Health Services	1970	1980	1992	2000
Inpatient services - Full time hospitalization				
Psychiatric hospitals (PH) (no.)	34	41	48	54
Psychiatric wards in general hospitals (PWGH) (no.)	21	35	49	78
Beds in Psychiatric Hospitals	38,996	37,052	31433	23623
Psychiatric beds in general hospitals (n°)	1,458	2,446	3,368	5,377
Total psychiatric beds (PH + PWGH) (n°)	40,454	39,498	34,801	29,000
Psychiatric beds per 10,000 population (PH + PWGH) (no.)	12.3	11.1	9.1	8.6
Average length of hospital stay (PH + PWGH) (no. of days)	_	97.6	71.0	63.5
Number of long-stay inpatients (PH + PWGH) (> 1 year)	16,152	13,290	8,419	4,951
Episodes of inpatient care (PH + PWGH) (no. per 100,000)	377.5	453.9	440.6	582.4
Intermediate services – Partial hospitalization				
Psychiatric day hospitals (no.)	33	53	80	132
Patients in day hospitals (no. per 100,000)	_	17.4	18.1	32.8
Outpatient Services				
Psychiatric outpatient clinics (no.)	417	524	635	591
Patients in outpatient clinics (no. per 100,000)	1,394	1,279	1,363	2,069
Community mobile teems - CMT (no.)	_	_	12	17
Patients in community based treatment -CMT (no. per 100,000)	_	_	3.2	5.6

patients treated in outpatient clinics has risen. However, the number of inpatient treatment episodes (mainly rehospitalizations) has been growing. These changes are illustrated in **Table 1**.

Until 1989, due to Poland's political and economic system, the reform of mental health care was centrally planned and controlled. The state undertook all costs of psychiatric treatment (inpatient, outpatient and transitional forms). Psychotropic medications were fully refunded. Mentally disabled people relied on a well-developed network of public institutions for sheltered employment and social support.

The political changes in 1989, with the introduction of a free market economy, caused the collapse of almost all sheltered employment institutions for the mentally ill. The social conditions of the mentally ill living in the community drastically worsened, with growing unemployment, poverty and homelessness. There was an increasing number of "new chronics," requiring prolonged stay in the hospital or intensive community care. The lack of social support for them in the community was a serious problem.

Further reforms in Poland's mental health system have been strictly connected with the reforms of the state. New legislation – the "Social Aid Act" and the "Mental Health Act" of 1994 – obliged municipalities to establish, in the framework of the local social welfare system and with partial financial support from the region, facilities aimed at "...rehabilitation and support for mentally ill or retarded persons with great difficulties in everyday functioning and social contact. The activity of private persons and nongovernmental organizations in that field is recommended".

Two kinds of facilities recommended in the Mental Health

Act have been implemented broadly throughout the country since 1995:

- (i) Community centers of mutual help (CCOMH): day units with occupational therapy, basic living and social skills training and leisure time activities.<sup>8</sup>
- (ii) Specialized social help services (SSHS): services supporting everyday living skills at the client's own home, as well as social activities outside their homes.<sup>9</sup>
- (iii) Sheltered accommodation in special apartments, each for a group of three to five patients under the care of SSHS services, is also available.<sup>7</sup>

In 2000 there were 291 CCOMHs with 8,393 clients. In the same year the total number of clients in SSCHSs, conducted at their homes, reached 11,113.

Since 1995 the Governmental Fund for the Rehabilitation of Disabled Persons, according to "The Rehabilitation and Employment of Disabled Persons Act," has been financing vocational rehabilitation centers (VRC). VRCs are day units that provide pre-vocational skills training, specific job training and liaison with employers to severely disabled persons in general, including those with disabling mental illnesses. <sup>10,11</sup>

It is worth noticing that since 1995, these new social welfare facilities (VRC, CCOMH and SSHS) have undertaken many of the tasks of assertive community treatment that in other countries belong to the mental health care system.<sup>4</sup> For example, in Poland services like "supporting daily living skills and medication," "housing assistance," "financial management," and "help with social and family relationships" are currently provided by SSHS at

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clients' homes; "occupational therapy," "time structuring," "enhancement of social contacts" and "leisure time activities" are delivered by CCOMH; and "prevocational training," "providing liaison with and educating employers" and "finding vocational opportunities" are provided by VRC. For this reason, since 1995 the case management model<sup>12</sup> has been the cornerstone of CMTs' activities.<sup>13</sup> There is an urgent need for additional CMTs. The interventions they perform (case management, assertive medication monitoring, crisis intervention, counseling, linking and coordinating services) are especially important because of the growing multiplicity of community services for the mentally ill. 14 In addition, all these services are divided into two separate systems: mental health (dependent on the Ministry of Health) and social welfare (dependent on the Ministry of Labor and Social Policy). These systems rely (at the regional level) on two independently financing separate bodies: the health funds and the social welfare budget.

# The National Mental Health Program and General Health System Reform in Poland

Poland's National Mental Health Program was developed in 1995. According to that program, mental health policy was to be planned at the regional level by the regional health care administration, with the participation of a coordinator and an advisory committee (including representatives of local communities and patients' associations). Each region (about 2 million inhabitants) was to be divided into smaller units (mental health centers), providing a complex array of psychiatric care (inpatient, outpatient and transitory forms of treatment) for catchment areas of about 100,000-150,000 inhabitants, and financed through a capitation system.

The program was approved by the Ministry of Health in 1995, but failed to be established as a governmental program. Thus, as of this writing Poland does not have a separate budget for mental health and the financing through capitation has not been established anywhere in the country. These delays are probably raising many obstacles for the further development of community-based psychiatry.

The reform of the mental health system in Poland is actually subordinated to the reform of the health system in general, in which the medical model of psychiatry predominates. The new system of financing care through contracts with the Regional Health Funds does not help further the progress of outpatient and transitional forms of treatment, in both their medical and psychosocial aspects. This is because the usual contractual arrangements prefer the reimbursement of diagnostic and treatment services if they are provided in a hospital setting or if they can be coded as "one-time visits" in ambulatory care. This attitude may facilitate hospitalization more on the grounds of reimbursement than of the clinical course of an illness. For example, in the case of schizophrenia, there are growing financial and organizational obstacles to the widespread implementation of effective treatment and rehabilitation procedures such as the following: medication with atypical antipsychotics, 15 cognitive behavioral interventions, social skills training, training in illness self-management, <sup>16-18</sup> integrated treatment for co-occurring substance use disorder, family education and support <sup>15,16</sup> and case management. <sup>3,5,13</sup> The number of transitional employment and supported employment settings <sup>19-21</sup> for mentally ill patients is also insufficient.

The closure of some psychiatric outpatient clinics and the privatization of the others, and the reduced refunds for psychotropic medicines – especially atypical antipsychotics – are generating a new burden for patients and their families who are subjected to out-of-pocket expenses for treatment.

Under these circumstances, today's development of new facilities in the social welfare system seems to be a new chance for creating an integrated community psychiatric care system. However, financial resources must be coordinated for the sake of continuous, well integrated care in both the mental health and social welfare spheres.

The situation is raising the question of whether a specific budget for mental health should be separated from the general health budget to serve mental health clinical services only, and whether this should cover both clinical and social welfare facilities for persons affected by mental illness.

# District of Targówek in Warsaw

In the Warsaw District of Targówek (population 120,000; 4.5 psychiatric beds per 10,000), the following psychiatric services were introduced between 1970 and 1980 within the general healthcare system: psychiatric ward in general hospital (54 beds), psychiatric day hospital (25 places), outpatient psychiatric clinic (OC), and community mobile team (CMT). In this district it was observed that the implementation of CMT with some of the assertive community treatment practices was reducing full time and partial hospitalizations, and the overall costs of treating schizophrenia in the mental health system.<sup>22</sup> However, further de-hospitalization has been limited in this district because of a lack of community support services for chronic patients discharged from the hospital. The efforts of the CMT alone were found to be unable to solve that problem. In 1998, new social welfare facilities supporting heavily disabled mentally ill patients were implemented in the district. <sup>23,24</sup>. These were a vocational rehabilitation center (VRC – 25 places), a community center of mutual help (CCOMH – 25 places), and specialized social services at clients' homes (SSHS- 40 persons).

#### Aim of the Study

The aim of the study was to determine the changes in care provided to chronically mentally ill patients, during two 2-year periods: before (Period A) and after (Period B) the 1998 implementation of the new social welfare system facilities (VCR, CCOMH, SSHS) in the Warsaw district of Targówek, and to compare the costs of the mental health facilities in both periods, taking into account the added costs of the new social welfare facilities in Period B.

#### Method

The prospective sample consisted of 90 disabled adult psychiatric patients, admitted in the year 1998 for the first time to the new social welfare facilities (VCR, CCOMH, SSHS) in the Warsaw District of Targówek. Seventy-three of them gave their consent to participate and were thus enrolled in the study. They had the following ICD-10 clinical diagnoses: schizophrenia (51; 70%), schizoaffective disorder (six; 8%), delusional psychosis (seven; 9,5%), mood (affective) disorders (seven; 9,5%), and organic depressive disorders (two; 3%). Thirty-four were males (47%) with an average age of 42.3 years (SD 10.97), and 39 were females (59%), average age 52.1 (SD 16.9). The average duration of illness was 17.8 years (SD 12.52). The number of hospitalizations in the past ranged from 0 to 43, average 8.01 (SD 9.3). According to administrative data, their disability was coded as "mild" (1.4%), "moderate" (79.5 %), or "severe" (15.1 %). The social conditions and living situations of the sample were mostly poor. Sixty-three percent had only basic education. Fourty-seven percent were living in difficult environments: nineteen were living alone, one was living alone with one child in pre-school age, eight were living with another mentally ill person only (mother, father, adult child, partner or other person), and six were living with one mentally ill person and other healthy family members together at home.

## Rules of Admission to the New Services

Full hospitalization was considered as excluding from all the other programs. Day hospital use was considered as excluding from outpatient clinic and CMT, as well as from the social welfare day programs in CCOMH or VRC. The

patients were advised to participate in the psychosocial rehabilitation program in social welfare facilities at the same time as receiving outpatient care in mental health facilities (outpatient clinic or CMT). Those with severe disability were advised to receive SSHS simultaneously with day hospital use, CCOMH or VRC.

#### Data Collection

Data collection relied on the documentation available in the mental health and social welfare facilities, and from personal structured interviews with the staff members and with each of the 73 patients.

The data collection focused on two 2-year periods: the 24 months before and the 24 months after the day of admission to one of the new social welfare system units (VRC, CCOMH or SSHS). The compared years were 1996 to 1998 (here defined as "Period A"), and 1998 to 2000 ("Period B").

During the two 24-month periods indicated above the following data were evaluated:

- Total duration of full and partial hospitalizations (months x persons).
- Total "months x persons" in care in outpatient clinic or CMT, and combined number of visits provided by outpatient clinic and CMT.
- Total duration (months x persons) of psychosocial rehabilitation in each of the new social welfare facilities (VRC, CCOMH, SSHS).
- Cost of medication for the persons in outpatient clinic or CMT.
- Total amount of care, and total costs, in all the mental health facilities and in all the social welfare facilities, both separately and comprehensively.

Table 2. Total Number of Months x Persons (m.x.p.) in Mental Health and Social Welfare Facilities

Facilities	N° months x persons				
	Period A	Period B	%		
Mental Health System					
Full time hospitalization - Psychiatric ward in general hospital	282	68	-75.9%		
Partial hospitalization - Day hospital	114	24	-78.9%		
Outpatient care					
Outpatient clinic	(225)	(276)	+18.5%		
CMT	(1,132)	(1,384)	+18.2%		
Both Outpatient Clinic and CMT	1,357	1,660	+22.3%		
Total Mental Health System	1,753	1,752	-0.06%		
Social Welfare System					
VRC	_	569	+100%		
CCOMH	_	347	+100%		
SSHS	_	809	+100%		
Total Social Welfare System	282 114  (225) (1,132) (1,357 1 1,753 1	1,725	+100%		
Total Mental Health + Social Welfare Systems	1,753	3,477	+98.3%		

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Table 3. Costs in Mental Health and Social Welfare Systems for 73 Chronic Psychiatric Patients in Two 2-year Periods: Before and After Admission to the New Social Welfare Facilities

Facilities		change			
	Peri	od A	Period B		%
	PLN*	Euro	PLN	Euro	
Mental Health System					
Full time hospitalization - Ward in general hospital	1,010,265	223,509.95	244,752.5	54,148.78	-75.8%
Partial Hospitalization - Day hospital	190,355	42,113.94	40,315	8,919.25	-78.9%
Outpatient care					
Outpatient clinic (visits)	6,390	1,413.72	7,350	1,626.11	+15.0%
CMT (visits)	31,602	6,991.6	55,590	12,298.67	+75.9%
Reimbursed drugs †	86,630	19,165.93	105,974	23,445.57	+22.3%
Total outpatient costs	124,622	27,571.24	168,914	37,370.35	+35.5%
Total Mental Health costs	1,325,242	293,195.13	453,981.5	100,438.38	-65.7%
Social Welfare System					
VRC	_	_	787,496	174,224.77	+100%
CCOMH	_	_	295,030	65,272.12	+100%
SSHS	_	_	237,846	52,620.80	+100%
Total Social Welfare costs	_	-	1,320,372	292,117.69	+100%
Total Costs Mental Healt + Social Welfeare System	1,325,242	293,195.13	1,774,353.5	392,556.08	+33.9%

<sup>\* 1</sup> Euro = 4,52 New Polish Zloty (PLN)

### Calculation of Costs

The total duration of full time and partial hospitalizations, treatment by CMT or outpatient clinic, and care in social welfare facilities (CCOMH, VRC, SSHS) was estimated as months x persons (or recalculated from day x persons to months x persons, with a two-week approximation).

The costs of care in each of the facilities were calculated on the basis of "one day for one person" or "one visit" prices designated in contracts with the regional health fund, fund for rehabilitation, or social welfare program for the years 1996-2000. The costs are expressed in New Polish Zloty (PLN) and the correspondent value in Euro is reported (1 Euro = 4.52 PLN).

The monthly cost of care for one person in the hospital ward (full hospitalization) was PLN 3,583.7 (Euro 792.85); in day hospital (partial hospitalization) PLN 1,677.0 (Euro 371.02); in VRC PLN 1,384 (Euro 306.19); in CCOMH PLN 815 (Euro180.31); and in SSHS PLN 294 (Euro 65.04). In outpatient treatment (OC or CMT) the cost was PLN 92.84 (Euro 20.54) in Period A and PLN 101.84 (Euro 22.53) in Period B.

The cost of medication in the general hospital psychiatric ward or day hospital was included in the contracted prices. The cost of medication administered in outpatient care (OC or CMT) was calculated on the basis of the doses of medication administered, and their prices for both

reimbursed medication in Poland in 2000<sup>25</sup> and "out of pocket" expenditures. The total average monthly cost of medication for one person was PLN 75.74 (Euro 16.76) in Period A and PLN 75.14 (Euro 16.62) in Period B.

#### **Results**

Services Use in Mental Health and Social Welfare Systems

The use of mental health and social welfare facilities (in terms of total number of months x persons) by the entire group of 73 patients, during the two 2-year periods before (Period A) and after (Period B) their admission to the new social welfare facilities (CCOMH, VRC, SSHS), is presented in **Table 2**.

The following findings were observed in Period B in comparison with Period A.

• Use of the general hospital psychiatric ward decreased from 282 to 68 months x persons (-75.9%), and the use of day hospital from 114 m. x p. to 24 m. x p. (-78.9%). However, the overall number of visits provided to the 73 patients in CMT and outpatient clinic increased from 1,157 in Period A to 1,885 in Period B (+62.9%). This increase was more relevant in CMT (+73.7%) than in the outpatient clinic (+15.0%).

<sup>†</sup> Out-of-pocket expenditures incurred by patients in outpatient services. Years A: PLN 16,152 (Euro 3,573.45); Years B: PLN 18,754 (Euro 4,149.12); increase (+13.9%).

Table 4. Patients Admitted	d in 1998 to Social	Welfare Facilities in	Targówek (	Warsaw)

Social welfare facilities	Number of persons	Additional SSHS at home	Patient age			Persons employed after 2 years	
			Mean	SD	Min	Max	
SSHS only	23	_	57.70	17.67	26	86	- -
VRC	28	5 (17.8%)	39.32	10.24	24	62	11 (39.3%)
CCOMH	20	9 (45.0%)	46.80	11.47	25	71	1 (5.0%)
Switch VRC/CCOMH	2	2	53.50	7.78	48	59	_
Total	73		47.55	15.19	24	86	12

• The psychosocial rehabilitation and support supplied by the new social welfare services (VRC, CCOMH, SSHS) during Period B reached a total amount of 1,725 months x persons in the entire sample (VRC: 569 m.x.p.; CCOMH: 347 m.x.p.; SSHS: 809 m.x.p.).

# Service Costs in Mental Health and Social Welfare Facilities

The total costs of care for the entire sample in each of the facilities within the mental health system and the social welfare system, during Period A and Period B, are shown in **Table 3.** 

#### Service Costs in Period A - Before Implementation of the New Social Welfare Facilities

The total cost of full time hospitalizations in Period A was the highest of all costs in the mental health system: PLN 1,010,265 (Euro 223,509.95). It was five times higher than the cost of partial hospitalization – PLN 190,355 (Euro 42,113.94) – and eight times higher than the total cost of outpatient mental health services (visits and reimbursed medication in OC and CMT), which amounted to PLN 124,622 (Euro 27,571.24). The reimbursed medication costs for outpatient treatment were PLN 86,630 (Euro 19,165.93) and the patients' out-of-pocket expenditures for medication were PLN 16,152 (Euro 3,573.45).

# Services Costs in Period B - After Implementation of the New Social Welfare Facilities

There was a considerable reduction in the cost of both full time hospitalization (-75.8%) to PLN 244,752.5 (Euro 54,148.78) and partial hospitalization (-78.9%) to PLN 40,315 (Euro 8,919.25). Conversely, the cost of outpatient mental health care (CMT, OC reimbursed medicines) increased (+35.5%), reaching PLN 168,914 (Euro 37,370.35) and exceeding the total costs of the partial hospitalizations in that period. In these rising costs for outpatient care, the dominant factor was the increase in CMT costs (+75.9%). The patients' out-of-pocket expenditures for medication also increased (+13.9%), to PLN 18,754 (Euro 4,149.12). It can be concluded that after the implementation of the new

facilities in the social welfare system, the total costs of the mental health system decreased from PLN 1,325,242 (Euro 293,195.13) to PLN 453,981.50 (Euro 100,438.38), but the new costs of the social welfare facilities emerged in the amount of PLN 1,320,372 (Euro 292,117.69).

VRC had a substantial role in the new costs for social welfare facilities: costs in Period B were PLN 787,496 (Euro 174,224.77). Table 4 presents data on the patients admitted in 1998 to different social welfare facilities. Twenty-eight persons were admitted to the VRC day program. They were significantly younger (average age 39.32 SD 10.24) than 23 persons receiving only SSHS at their own homes (average age 57.7 SD 17.67). The average age of 20 persons admitted to the CCOMH day program was (46.8 SD 11.24). Nine persons (45%) in CCOMH received additional SSHS at their own home because of poor functioning. In the group of 28 VRC clients there were only five (17.8%) persons receiving additional SSHS. The total costs of VRC were 1.5 times higher than the other remaining costs of both social welfare facilities combined: CCOMH costs were PLN 295,030.0 (Euro 65,272.12) and SSHS costs were PLN 237,846 (Euro 52,620.80). Table 4 also reports data on employment after two years of rehabilitation: at that time, 11 persons from VRC (39.3%) and only one person (5%) from CCOMH were employed.

In conclusion, the total combined costs in both the mental health and social welfare systems increased in Period B (+33.9%), and the total amount of services supplied in both systems rose substantially (+98.3%). Since implementation of the new social welfare facilities there has been a noticeable decrease in the use of the most expensive full time hospital care (from 282 months x persons in Period A to 68 m.x p. in Period B). Despite the considerable decrease in day hospital use (from 114 m. x p. to 24 m. x p.), the total amount of all the day care services supplied in both mental health and social welfare facilities during Period B increased (from 114 m. x p. to 940 m. x p), mainly due to the relevant amount of day care supplied by new social welfare facilities (CCOMH: 347 m. x p.; VRC: 569 m. x p.). Moreover, additional help and support was supplied in Period B to the most disabled chronically mentally ill patients at their own homes by specialized social help services (SSHS).

#### **Discussion**

Previous studies have shown that intensive community care by CMT and partial hospitalizations are reducing the need for full time hospitalization. F,22 In our investigation, the daily care and home services supplied (in Period B) by the new social welfare facilities (VRC, CCOMH, SSHS) seem to be more effective in decreasing full time hospitalization than the day hospital with CMT only (Period A). In our view, the eight-fold increase in daily care supplied by VRC, CCOMH, and the services supplied at clients homes by SSHS offered an adequate amount of services to compensate for the decrease in full time and partial hospitalization observed during Period B and reduce the burden of these illnesses on the patients' families.

Since implementation of the new social welfare facilities, the need for CMT activities has been rising because of the growing number of patients living extramural. The decrease in day hospital use in Period B is probably connected with the social support offered by the social welfare facilities (VRC, CCOMH, SSHS), facilities that are less expensive than day hospital and may replace to some degree its functions.

The relatively high costs of VRC programs are partly due to the pocket money given to all participants, and the preliminary results of these programs in terms of enabling patients to undertake employment after the training seem promising. The participants in VRC programs were younger than in other facilities, and further research should analyze in greater detail their clinical status and functional deficits before admission to VRC programs, and monitor them during the program in order to refine the goals of rehabilitation and improve the patients' ability to use the vocational training.

The concurrency between day hospital and VRC or CCOMH seems to be only apparent. The former, socially supportive role of day hospital could be replaced in a new system by increasing its diagnostic and therapeutic role. The same concurrency or complementarity of roles are possible between CMT and SSHS-both active in home care.

The psychosocial rehabilitation programs of the new social welfare services described above seem to be comparable with the assertive community treatment practices described by Philips. 4 They reduce the role of CMT in conducting Assertive Community Treatment (ACT) strategies. At the same time, however, there is a growing need for other CMT activities, 3,12 especially evidence-based practices such as treatment with antipsychotics and assertive monitoring of medication, <sup>26,27</sup> counseling, skills training, training in illness self-management, crisis intervention, family support and education, and integrated treatment for co-occurring substance use disorder. 17,21,27,28 Moreover, the VRC program is creating a new need for supported employment of clients discharged from VRC after vocational training. 10,19-21 Case management appears to be particularly important for linking and coordinating the new facilities and

Our study raises the issue of analyzing the allocation of financial resources between the health system and the social

welfare system. The provision of complementary care in both systems needs to be coordinated at the municipal level. In our opinion, with the two systems financed separately rather than by a single source – as they are at present – there could be a growing tendency to spare costs or to gain money in one system by sending patients to or accepting them from the other. On the other hand, if the financing of social welfare facilities for the mentally ill were to depend on one budget shared with mental health services, separately targeted to the management of the mentally ill, it could raise concerns of an over-medicalization of community social support for those affected by mental illness. Up to now, community services with psychosocial rehabilitation in the social welfare system have been fully separate from mental health services. Their activity is geared toward social reintegration and support for the persons who are undergoing psychiatric treatment in the mental health system. This situation is advantageous from many patients' point of view. Several stated that the staff members of social welfare facilities (CCOMH, VRC, SSHS) have started to play an important supportive role in their everyday healthy life.<sup>24</sup>

Research is needed to evaluate the cost-effectiveness of various services provided in mental health and social welfare systems and the influence they have on each other. For example, it would be of interest to analyze whether financing by the mental health system of a broad implementation of evidence-based care strategies in the early stages of schizophrenia (i.e. antipsychotic medication, cognitive behavioral therapy with skills training and training in illness self-management, family psycho-education, and integrated treatment for co-occurring substance use disorder) would affect the cost of social support for the chronically ill in the welfare system some years down the line.

#### **Conclusions**

The implementation of new facilities for the chronically mentally ill in the social welfare system reduces the use of full and partial hospitalizations, but increases the need for outpatient care and CMT. Total expenses in the mental health system went down, but expenses related to community care for chronically mentally ill persons increased. This is explained by the substantial amount of daily care and home services provided in new social welfare facilities. Further study is required to assess the cost/effectiveness of the new social welfare units in terms of social functioning, capacity for employment, and the quality of life of the chronically mentally ill. Out-of-pocket expenses for patients and their families, a recent phenomenon in Poland, have increased. Coordinated financing of the mental health and social welfare systems would be beneficial, but common financing for both systems is questionable due to the risk of overmedicalizing social support for mentally ill persons in the community. It may be helpful to allocate the financial resources saved by decreased hospitalization to new CMT programs and to strengthening the diagnostic and therapeutic roles of day hospitals, especially in early schizophrenia, if this can save on future expenditures for chronically mentally

ill persons. The long-term effectiveness and cost/effectiveness of these strategies should be investigated in further research.

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