Effects of Desegregation of a State Hospital System on Rates of Treated Mental Illnesses

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SEGREGATION OF white and Negro mental hospital patients was traditional for many years in the South and in most States bordering this area. In some States, this division was required by law while it persisted in others by local custom. Specific patterns varied, with some States providing separate hospitals for the two racial groups while others maintained separate buildings, units, or wards within the same facility. Beginning in the late 1950's, partly by administrative decision and partly by local legal action, programs for desegregation of these facilities gradually developed. All States have now desegregated their publicly operated mental hospitals. Efforts to achieve specified levels of integration through the transfer of resident patients and the realignment of catchment areas are generally of more recent origin and have frequently resulted from Federal intervention.

Extensive material is available in the literature on the relationship of mental health and segregation (*1*). The authors of a recently published monograph have summarized and listed a number of studies in which the reported rates of State hospital admissions and prevalence for Negroes were higher than comparable data for the white population, particularly in some diagnostic and age-sex groups (*2*). In a limited number of studies based on data from all psychiatric facilities, different results were reported. In some, higher rates were shown for nonwhites than whites, although this difference was smaller than the divergence reported in most studies based solely on State mental hospital statistics (*3*). Others showed higher rates for whites than nonwhites (*4*). We are not aware of any studies of the effect, if any, of desegregation of facilities on the rates of treated mental illnesses.

Questions can be raised regarding the validity of white-nonwhite comparisons based only on State hospital data. Largely because of socioeconomic differences, whites traditionally have made far greater use of privately operated facilities than nonwhites. Failure to include these admissions therefore results in substantial underenumeration among whites. Meaningful studies of the effects of desegregation require comparable before and after data based on reports from both types of facilities.

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In Maryland, a border State, a general pattern of segregated hospital services evolved which prevailed until January 1963. A statewide psychiatric case register of persons treated in all types of facilities was established as of July 1961. This source of data provided a unique opportunity to describe any immediate changes in patterns of utilization of facilities by whites and nonwhites following desegregation of the State mental hospital system. With a desegregated system of admissions firmly established, case register data could also be used to investigate white-nonwhite differentials in admission and prevalence rates.

Until January 1, 1963, white patients were admitted by area to one of three hospitals (Eastern Shore—675 beds, Springfield—3,300 beds, and Spring Grove—2,700 beds), while Negro patients went to one facility (Crownsville—2,275 beds). Although no fixed policy prevailed regarding the small number of nonwhite patients who were not Negro, they were usually admitted to one of the three hospitals for whites. Since these persons comprise less than 1 percent of all nonwhite patients, the terms "Negro" and "nonwhite" are used interchangeably in our paper.

The Maryland Department of Mental Hygiene consistently claimed that all four facilities offered comparable treatment services, but the segregation policy in reality provided the white population with three readily accessible regional hospitals while it required some Negroes to travel extended distances to receive inpatient care in the unit assigned to them. Two small specialized facilities, the 240-bed C. T. Perkins Hospital for criminally insane males and the 80-bed Institute for Children, had accepted patients on an integrated basis from their opening in 1959.

Since January 1963, admissions to the four major hospitals have been, by administrative action, on a regional basis regardless of race. However, since resident patients were not reassigned to hospitals on the same basis as those newly admitted, desegregation produced a very gradually emerging pattern of integration, which was concentrated largely in wards assigned to the short-term treatment of the acutely ill. Wards for the treatment of the long-term, chronically ill remained almost completely segregated.

On December 31, 1969, 65.2 percent of Crownsville's patients were Negroes, and this hospital had 52.6 percent of all the nonwhites who were under care in the four regional facilities. As of December 31, 1967, the proportion of the Crownsville patients who were Negroes was 69.4 percent, and these nonwhite patients comprised 60.9 percent of the nonwhites in regional facilities; as of December 31, 1966, Negroes comprised 71.1 percent of the patients at Crownsville and accounted for 64.3 percent of the nonwhites in regional facilities. The racial composition of the four hospitals has become more uniform since 1969 upon the reassignment and transfer of some resident patients on the basis of current catchment zones.

Mental health clinics in Maryland generally have been integrated for some time. Nevertheless, their adult caseloads have been minimal in many instances until recent years. The Veterans' Administration Hospital at Perry Point, as well as the psychiatric units of the Johns Hopkins Hospital and the University Hospital in Baltimore, have always admitted patients on a nondiscriminatory basis. Privately operated psychiatric hospitals, which in Maryland account for about 15 percent of all inpatient admissions, have had varying policies regarding the acceptance of Negroes for treatment. While some traditionally maintained an "open" policy, the patient population consistently has been almost completely white because relatively high charges have effectively barred all except a small number of nonwhites. Since the integrated clinics and hospitals mentioned provided only a small portion of all psychiatric care in Maryland, the Crownsville hospital, until 1963, was the treatment facility for the great majority of adult mentally ill Negroes.

In the period immediately preceding desegregation, a number of statements were made, or questions raised, regarding the probable effect of this action on the use of State mental hospitals and other psychiatric facilities by both racial groups. Some of them appear to have been tinged with bias—"Will whites go to a hospital formerly assigned solely to Negroes?" Others seemed more thoughtful, for example, anticipating changes in the diagnostic composition of some nonwhite cohorts when travel distance to the hospital was decreased. In our paper, we attempt to evaluate these issues on the basis of the available data for periods immediately before and after desegregation.

Methodology

Unless otherwise specified, data for our study were obtained from the Maryland Psychiatric Case Register, established July 1, 1961, by the Maryland

Department of Mental Hygiene in cooperation with the National Institute of Mental Health (*5*). (The Maryland State departments of health and of mental hygiene were merged as of July 1, 1969, to form the Maryland State Department of Health and Mental Hygiene.) The register was developed as a research tool and cannot legally be used for case management. It encompasses the entire State (population 3.9 million as of July 1, 1970, with a current annual increase of 70,000) and is based on routine, uniform reporting of information on all persons admitted to, or released from, more than 150 public and private psychiatric inpatient and outpatient facilities. Except for patients seen in private practice, these facilities provide nearly 100 percent of the psychiatric services received by Maryland residents in the State or in the adjacent District of Columbia.

Data on episodes of care are linked so that the register contains a longitudinal record of all treatment services received by each of the more than 110,000 Maryland residents (about 3 percent of the total population) identified since 1961 as being under psychiatric care. Approximately 30,000 persons are currently admitted annually to psychiatric facilties in Maryland. Admissions total about 45,000 per year.

Data on unduplicated admissions and prevalence by race, age, sex, diagnosis, place of residence, and type of facility were extracted from the register for three periods: (*a*) July 1, 1961, through December 31, 1962—the 18 months preceding desegregation, (*b*) January 1, 1963, through June 30, 1964—the 18 months following desegregation, and (*c*) July 1, 1964, through June 30, 1965.

For our paper, frequency distributions and unduplicated crude rates (based on population estimates released by the State department of health) of admissions to three types of facilities (the four State hospitals, non-State hospitals, and all psychiatric facilities) were computed separately for whites and nonwhites, before and after desegregation, by diagnostic category and area of residence (table 1). These statistics, along with percentage changes in rates, were then used to evaluate the accuracy of the statements made.

Our preliminary analysis was aimed only at identifying the shifts, if any, in patterns of utilization of facilities by whites and nonwhites after January 1963. A future paper, based on data from the third period, will provide a comparison of age-adjusted unduplicated admission rates for the two racial groups. Desegregation did not occur in a static environment. Maryland, like most other States, has

Table 1.—Division of Maryland into geographic areas, with estimated number of residents, by race, January 1, 1963

Area	Geographic location	Description	Number of residents		
			Total	White	Nonwhite
1. Baltimore City	Central Maryland	Center of large metropolitan area; decreasing population.	928, 256	577, 853	350, 403
2. Anne Arundel and Baltimore Counties.	Baltimore metropolitan area.	Suburban—decreasingly rural; rapid growth.	747, 202	698, 391	48, 811
3. Montgomery and Prince Georges Counties.	Washington metropolitan area.	Suburban—decreasingly rural; rapid growth—high average income.	805, 648	753, 894	51, 754
4. Calvert, Charles, and St. Marys Counties.	Southern Maryland	Rural and small towns, partly on fringe of Washington metropolitan area.	95, 232	67, 989	27, 243
5. Carroll, Frederick, Harford, and Howard Counties.	Central Maryland—fringe of metropolitan areas of Baltimore and Washington.	Rural, small towns, and increasingly suburban.	260, 412	240, 445	19, 967
6. Allegany, Garrett, and Washington Counties.	Western Maryland	Rural with a number of medium-sized towns.	207, 706	202, 799	4, 907
7. Caroline, Cecil, Dorchester, Kent, Queen Annes, Somerset, Talbot, Wicomico, and Worcester Counties.	Eastern Shore of Maryland.	Rural and small towns—stationary population.	258, 887	198, 814	60, 073
Total			3, 303, 343	2, 740, 185	563, 158

for some time been engaged in a program to develop and employ new treatment concepts and modalities, to improve staff-patient ratios, and to construct new facilities (*6*). While the net effect of these changes cannot be gauged, our observation has been that they occurred fairly uniformly in the four hospitals studied. We therefore have no reason to believe that they affected the white-nonwhite comparisons reported here.

Results

STATEMENT 1—Whites will not readily enter an integrated State hospital system. Admissions of appreciable numbers of Negroes to hospitals formerly limited to white patients will produce a decline in admissions of whites.

During the first 18 months after desegregation, Negroes comprised 16 percent of the persons admitted to Spring Grove State Hospital, 22 percent of those admitted to Eastern Shore, and 26 percent of those admitted to Springfield. Forty-two percent of those admitted to Crownsville, the former Negro hospital, were nonwhite. At each hospital, the vast majority of patients enter care by way of special admission units and are subsequently assigned to appropriate treatment wards on the basis of such factors as sex, diagnosis, and place of residence. Because of the relatively large numbers of Negroes admitted under these procedures to the hospitals formerly used only by whites, the racial mixing must have been clearly visible to white patients and their families.

A comparison of the periods preceding and following desegregation indicates increases for both whites and nonwhites in the number and rate of unduplicated admissions to the four State hospitals (table 2). While the rate for whites increased by 13 percent, the rate for Negroes increased by 24 percent, and Negroes constituted a somewhat larger proportion of the persons admitted to the system following desegregation (27 percent) than before (25 percent). Among white persons, however, the proportion of admissions to all facilities accounted for by the State hospitals increased slightly following desegregation (from 36 to 37 percent). For Negroes, this percentage rose from 47 to 54 over the same period.

Our data provide no evidence as to whether or not desegregation deterred any admissions of whites to State hospitals or on the attitudes of entering patients toward the integrated system. We believe that the net effect of the action was negligible since admissions of whites to State hospitals increased after desegregation and comprised a rising percentage of the admissions of whites to all psychiatric services.

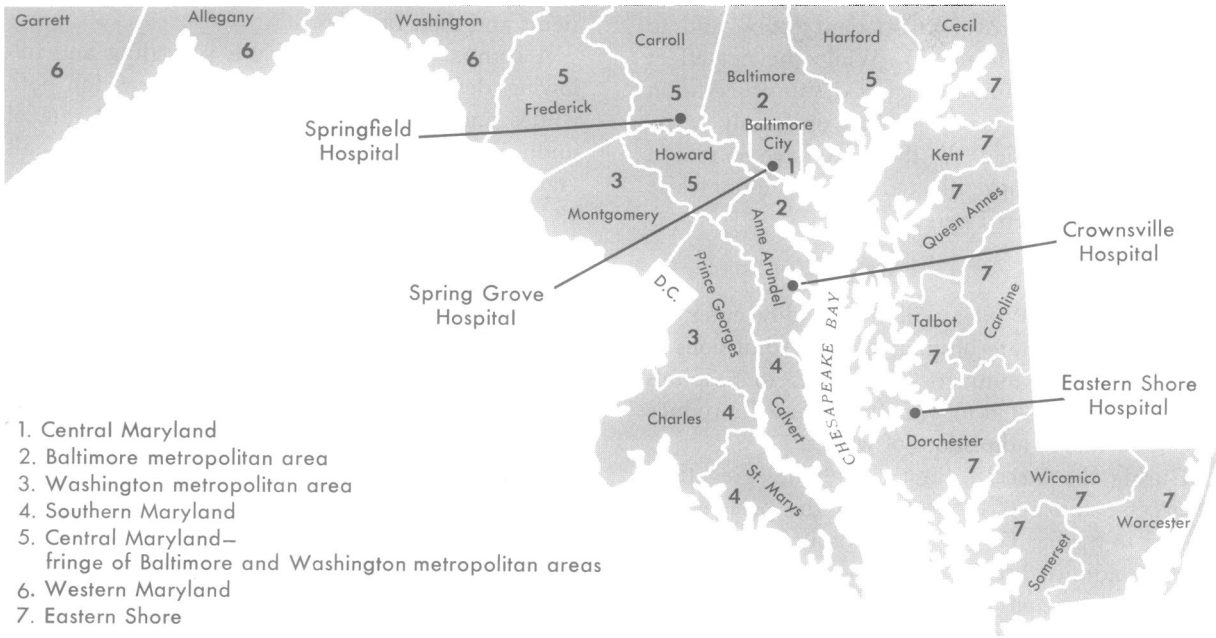
STATEMENT 2—White residents will not go readily to a hospital formerly limited to Negro patients.

Table 2.—Unduplicated admissions of whites and nonwhites to specified psychiatric facility (or facilities) in Maryland during the 18 months before and after desegregation of State facilities

Type of facility	Unduplicated admissions of whites					Unduplicated admissions of nonwhites				
	July 1, 1961–Dec. 31, 1962		Jan. 1, 1963–June 31, 1964		Percent change in rate	July 1, 1961–Dec. 31, 1962		Jan. 1, 1963–June 30, 1964		Percent change in rate
	Number	Rate [1]	Number	Rate [1]		Number	Rate [1]	Number	Rate [1]	
4 regional hospitals	6,844	286	8,041	324	+13	2,254	478	2,919	594	+24
Crownsville	12	----	1,654	----	----	2,225	----	1,199	----	----
Eastern Shore	715	----	728	----	----	0	----	206	----	----
Springfield	3,128	----	2,562	----	----	8	----	921	----	----
Spring Grove	2,989	----	3,097	----	----	21	----	593	----	----
Institute for Children	60	[2] 11	42	[2] 7	−36	12	[2] 9	12	[2] 9	0
C. T. Perkins	164	[3] 9	207	[3] 11	+21	116	[3] 34	161	[3] 45	+32
Non-State hospitals	4,549	190	5,006	202	+6	234	50	254	52	+4
Outpatient clinics	10,992	460	15,506	626	+36	3,208	681	3,343	680	0
Total admission actions [4]	26,179	----	30,733	----	----	6,782	----	7,870	----	----
Total persons admitted	19,167	802	21,947	885	+10	4,795	1,017	5,379	1,095	+8
Average admissions per person	1.37	----	1.40	----	----	1.41	----	1.46	----	----

[1] Per 100,000 estimated population 5 years and over in specific racial group and period unless otherwise indicated.
[2] Per 100,000 estimated population 5–14 years in specified racial group and period.
[3] Per 100,000 estimated population 15 years and over in specified racial group and period.
[4] The total admission actions are greater than the sum of the figures in each column since the figures for each facilty (or type of facility) represent only unduplicated admissions.

Maryland's geographic areas with sites of the four State mental hospitals



All or part of three of Maryland's seven geographic areas (table 1 and map) were assigned to Crownsville, the former Negro hospital, following desegregation. For white residents of those portions of Baltimore City included in the new catchment area and for most of the white residents in Anne Arundel County, the distance to a State hospital did not change appreciably following the reassignment. Three counties of southern Maryland (Calvert, Charles, and St. Marys), formerly part of the Spring Grove Hospital area, were assigned to the closer Crownsville facility. For residents of these counties, the distance was reduced about 20 miles.

Before desegregation, white residents of Baltimore City were assigned either to Springfield or Spring Grove. After desegregation, these two hospitals, as well as Crownsville, admitted whites and nonwhites from specified Baltimore City zones. While there were 2,782 unduplicated admissions of Baltimore City whites to the two hospitals before desegregation, the numbers of persons admitted to the three hospitals after this event increased 16 percent, to 3,223.

Admissions of whites from areas of the city newly assigned to Crownsville increased 19 percent (from 969 to 1,149) as compared with 13 percent (from 1,005 to 1,137) for Springfield's new catchment area and 28 percent (from 665 to 848) for Spring Grove. For a small number of persons, the specific place of residence within Baltimore City was not reported. It was not possible to compare rates for these three areas since suitable population estimates by race and census tract were not available. The extent to which admission figures may have been affected by changes in the size and composition of the population therefore could not be determined. While separate counts were not obtained for Anne Arundel County, admission rates for whites for the geographic area that included this county rose by 14 percent following desegregation (table 3).

The three southern Maryland counties experienced the largest proportional increase in unduplicated State hospital admissions of whites of any of the seven regions. This rate rose 31 percent in the specified period, from 221 to 290 per 100,000 estimated white population 5 years and older. Concurrently, the unduplicated non-State hospital rate for whites also increased by 29 percent while the rate of admission for whites to all facilities increased by only 19 percent. Admission rates for Negroes to all facilities decreased 7 percent and to State hospitals, 17 percent; admissions of Negroes from this area to non-State hospitals remained negligible (table 3). The decline in rates for Negroes in this and other nonmetropolitan areas is of interest and should be further explored.

The data do not support the notion of massive white resistance to entry into a former Negro hospital. We can find no indication that assignment of new areas to Crownsville reduced admissions of

whites from these sections. While it is possible that the action deterred some admissions, the number would have had to be small.

STATEMENT 3—Desegregation will produce a marked shift in admissions of whites to non-State hospitals. The shift will be most pronounced for patients with nonpsychotic diagnoses.

Unduplicated admission rates for whites to inpatient facilities not administered by the department of mental hygiene increased 6 percent following desegregation. This percentage increase compares with a 13 percent rise in the State hospital rate and a 10 percent increase in the rate for all facilities. The non-State-operated institutions admitted 24 percent of the whites entering all psychiatric services during the first 18-month period and 23 percent of those admitted following desegregation (table 2).

Admission rates for whites to these non-State-operated facilities declined after January 1963 in three of seven geographic areas. In only one region (Allegany, Garrett, and Washington Counties), did the increase in rates of admission for whites to non-State hospitals exceed the increase in rates of admission to State hospitals (table 3). This shift may have been due to the expansion of a private psychiatric hospital (Brook Lane Center) located in this area. Similarly, admission rates for whites to these facilities declined or remained unchanged for five of nine diagnostic categories. For the other four categories, the percentage increase in rates was less for non-State than for State hospitals (table 3).

Our conclusion is that the results do not indicate a major shift by white residents toward use of non-State-sponsored inpatient facilities during the 18 months following desegregation. Instead, an increasing proportion of white patients entered the State hospital system. Whether or not this proportion would have been even greater with continued segregation is, of course, impossible to determine.

STATEMENT 4—Changes in State hospital admission rates for Negroes will be related to the reduction resulting from desegregation in the distance from the patient's place of residence to the hospital. The greater this reduction, the greater will be the increase in admissions.

Desegregation reduced the distance to a State hospital for Negroes residing in three of the four nonmetropolitan areas studied. Of these, the region comprising Allegany, Garrett, and Washington Counties experienced a marked decline in admissions of nonwhites to all psychiatric facilities, including State and non-State hospitals. This region, however, contains only small numbers of Negroes, and the rates may therefore be subject to considerable fluctuation. Travel distance for residents of these three counties to any State hospital is considerable, and it is known that they frequently seek treatment in West Virginia and Pennsylvania, using facilities which do not report to the Maryland Psychiatric Case Register. In the area consisting of Carroll, Frederick, Harford, and Howard Counties, State hospital rates for Negroes rose by 10 percent while rates to non-State hospitals increased by 34 percent. Again, the rates must be interpreted cautiously because of the small population base and the limited number of cases involved (table 3).

The area that was expected to be most affected by desegregation was the Eastern Shore. A fairly large number of Negroes live in the nine counties comprising this area and, before 1963, they had to travel an appreciable distance (up to 150 miles) to reach the State hospital at Crownsville. Since 1963, these Negroes have gone mainly to the Eastern Shore State Hospital at Cambridge, which is as much as 75 miles closer in some instances. Following desegregation, the unduplicated State hospital admission rate for Eastern Shore Negroes rose 8 percent, from 422 to 457. At the same time, the unduplicated admission rates for Eastern Shore Negroes to non-State hospitals declined by 22 percent and to all facilities, by 12 percent (table 3).

The Springfield and Crownsville State Hospitals, both about 20 miles from Baltimore, do not have any regular public transportation link with the city. Spring Grove State Hospital, just west of the city limits, is on a bus line. After desegregation, the admission rate of Baltimore Negroes to State hospitals increased by 32 percent, to non-State hospitals by 5 percent, and to all facilities by 13 percent (table 3). While it might be thought that this rise was primarily related to the use by Negroes of Spring Grove after January 1963, this practice does not appear to have been a major factor. In the 18 months preceding desegregation, 18 percent of the 1,612 persons admitted to Crownsville from Baltimore City lived in the area that was subsequently assigned to Spring Grove. Following desegregation, 20 percent of the 2,187 Baltimore Negroes admitted to State hospitals went to Spring Grove. As previously stated, the extent to which these figures might have been affected by changes in the size and composition of

the population living in these areas could not be determined.

In suburban Montgomery and Prince Georges Counties, admission rates for Negroes to State hospitals after desegregation increased by only 4 percent while admission rates for Negroes to non-State-operated hospitals rose by 10 percent and those to all facilities combined rose by 16 percent (table 3). This result probably reflects the growing use by relatively affluent or insured Negro residents of outpatient clinics and general hospitals with psychiatric wards, both in Maryland and the nearby District of Columbia. Many of these Negroes are employed by the Federal Government and participate in insurance plans which provide such medical coverage.

The available data provided only meager means of evaluating statement 4, and the results were inconclusive. Our observations, however, were in the expected direction for the two areas most likely

Table 3.—Unduplicated admissions of whites and nonwhites to various psychiatric facilities in Maryland during the 18 months before and after desegregation of State facilities, by patient's residence

Place of residence	Unduplicated admissions of whites					Unduplicated admissions of nonwhites				
	July 1, 1961–Dec. 31, 1962		Jan. 1, 1963–June 30, 1964		Percent change in rate	July 1, 1961–Dec. 31, 1962		Jan. 1, 1963–June 30, 1964		Percent change in rate
	Number	Rate [1]	Number	Rate [1]		Number	Rate [1]	Number	Rate [1]	
	Admissions to the 4 regional State hospitals									
Total	6,844	286	8,041	324	+13	2,254	478	2,919	594	+24
Baltimore City	2,782	521	3,223	622	+19	1,628	551	2,187	725	+32
Anne Arundel and Baltimore Counties	1,419	235	1,700	269	+14	176	421	230	541	+29
Montgomery and Prince Georges Counties	947	149	1,176	173	+16	107	254	121	263	+4
Calvert, Charles, and St. Marys Counties	130	221	172	290	+31	70	326	61	269	−17
Carroll, Frederick, Harford, and Howard Counties	470	226	538	246	+9	44	273	54	300	+10
Allegany, Garrett, and Washington Counties	358	203	385	205	+1	17	421	13	268	−36
9 Eastern Shore counties	738	419	847	466	+11	212	422	253	457	+8
	Admissions to non-State hospitals									
Total	4,549	190	5,006	202	+6	234	50	254	52	+4
Baltimore City	942	177	907	175	−1	123	42	133	44	+5
Anne Arundel and Baltimore Counties	787	131	785	124	−5	13	31	6	14	−55
Montgomery and Prince Georges Counties	2,105	332	2,536	373	+12	74	176	89	193	+10
Calvert, Charles, and St. Marys Counties	58	99	76	128	+29	4	19	5	22	+16
Carroll, Frederick, Harford, and Howard Counties	231	111	249	114	+3	8	50	12	67	+34
Allegany, Garrett, and Washington Counties	291	165	339	180	+9	3	74	1	21	−72
9 Eastern Shore counties	135	77	114	63	−18	9	18	8	14	−22
	Admissions to all psychiatric facilities									
Total	19,167	802	21,947	885	+10	4,795	1,017	5,379	1,095	+8
Baltimore City	5,907	1,107	6,431	1,240	+12	3,311	1,120	3,806	1,261	+13
Anne Arundel and Baltimore Counties	4,087	678	4,594	727	+7	412	986	450	1,058	+7
Montgomery and Prince Georges Counties	4,430	698	5,520	811	+16	239	568	304	660	+16
Calvert, Charles, and St. Marys Counties	450	765	541	912	+19	140	651	137	604	−7
Carroll, Frederick, Harford, and Howard Counties	1,452	697	1,669	762	+9	121	750	130	723	−4
Allegany, Garrett, and Washington Counties	1,179	668	1,331	708	+6	37	916	34	701	−23
9 Eastern Shore counties	1,662	944	1,861	1,023	+8	535	1,066	518	935	+12

[1] Per 100,000 estimated population 5 years and older in specified racial group, period, and geographic area.

to have been affected by the distance factor. That is, State hospital admissions of Negroes did increase in the Baltimore City areas that were assigned to the more accessible Spring Grove hospital and in the nine counties of the Eastern Shore. In general, nevertheless, these increases were small and may or may not be attributable to decreases, following desegregation, in the distance to a State hospital.

STATEMENT 5—Desegregation of State mental hospitals will lead to increased use by Negroes of other types of psychiatric facilities.

The rationale apparently underlying statement 5 was that Maryland's formal recognition and elimination of discriminatory practices would affect all psychiatric services. Facilities not maintained by the State might be encouraged by this action to abolish existing policies of discrimination or "token" desegregation. Also, some persons anticipated that, for many Negroes, the psychological impact of the decision would be such that they would be increasingly aware of available psychiatric resources and more willing to use them when necessary.

The unduplicated admission rate for nonwhites to all facilities reporting to the Maryland Psychiatric Case Register increased 8 percent during the 18 months following desegregation. For the same period, comparable admission rates for whites increased 10 percent. Both racial groups experienced large increases in the rates of admission to C. T. Perkins, the State hospital for the criminally insane, and modest increases in the rates of admission to non-State hospitals. Admissions to the State-operated Institute for Children were unchanged for Negroes and declined 36 percent for whites. Negroes recorded a very slight decline in outpatient clinic admissions after January 1963, along with a 24 percent increase in the rates of admission to the four State mental hospitals. For whites, State hospital admission rates increased 13 percent and outpatient clinic rates, 36 percent.

In general, our results do not support the supposition that desegregation of State hospitals would lead to an increase in the number of Negroes admitted to other psychiatric facilities, at least for the 18 months immediately following desegregation. Rates of admission for Negroes to non-State hospitals increased slightly, but the outpatient rate remained the same. Overall, the data indicate that psychiatric care for Negroes became increasingly concentrated in the State hospital system. We have no evidence to determine whether or not this result was directly related to desegregation.

STATEMENT 6—Changes in admission rates for Negroes to State hospitals will be related to diagnosis. Admissions for alcoholism, diseases of the senium, and other nonpsychotic disturbances will rise substantially while admissions for psychotic disorders will be minimally affected.

Following desegregation, admission rates for Negroes to the four State hospitals rose for all diagnostic categories except mental deficiency (table 4). The rate for schizophrenic reactions increased 10 percent and that for other psychotic disorders, 12 percent. Rate increases were appreciably higher for key nonpsychotic diagnoses, with diseases of the senium rising 23 percent, alcoholic intoxication 41 percent, and psychoneurotic reactions and personality disorders 88 percent.

The increasing tendency of Negroes to seek psychiatric services within the State hospital system is evident when State hospital admissions in the various diagnostic categories are compared with similar admissions to all facilities before and after January 1963 (table 4). For each diagnostic group, Negroes admitted to a State hospital constituted a rising percentage of those admitted to all psychiatric facilities combined. For example, before desegregation, 994, or 64 percent, of the 1,556 Negroes with schizophrenia or other psychotic diagnoses were treated at Crownsville; after desegregation, 1,147 of 1,635, or 70 percent, received services in one of the four State regional hospitals. Concurrently, the proportion of all alcoholic Negroes seen in a State-operated facility increased from 82 to 86 percent, the proportion of Negroes with diseases of the senium seen in such a facility increased from 85 to 91 percent, and the proportion with psychoneurotic reactions and personality disorders seen in such a facility rose from 20 to 34 percent.

Much, but not all, of the rise in admissions of Negroes to State hospitals occurred among patients with nonpsychotic disorders. We believe that the apparent shift from outpatient to inpatient care seen across all diagnostic categories is most striking and may possibly have resulted from desegregation.

STATEMENT 7—Changes in admission rates for whites to State hospitals will be related to diagnosis. Admission for alcoholism and other nonpsychotic disturbances will decrease substantially; admissions for psychotic disorders will not change appreciably.

The admission rate for whites to the four regional hospitals increased appreciably—by 13 percent—

following desegregation (table 2). This overall figure possibly concealed differential responses by persons in the various diagnostic categories. One theory was that white patients with more severe disturbances requiring extended periods of hospitalization would probably continue to use State-operated facilities. Those with milder disorders, or their families, would seek alternative treatment services rather than enter a racially mixed system.

The admission rate for white schizophrenics declined 2 percent following desegregation. For all other diagnostic categories except convulsive disorders, however, the rates for whites rose; the smallest increases were observed for diseases of the senium (3 percent) and for other psychotic disorders (5 percent). Rates for alcoholic intoxication and for psychoneurotic reactions and personality disorders each rose by 25 percent. Following

Table 4.—Unduplicated admissions of whites and nonwhites to Maryland psychiatric facilities, by reported diagnosis

Reported diagnosis	Unduplicated admissions of whites					Unduplicated admissions of nonwhites				
	July 1, 1961–Dec. 31, 1962		Jan. 1, 1963–June 30, 1964		Percent change in rate	July 1, 1961–Dec. 31, 1962		Jan. 1, 1963–June 30, 1964		Percent change in rate
	Number	Rate [1]	Number	Rate [1]		Number	Rate [1]	Number	Rate [1]	
Admissions to the 4 regional State hospitals										
Total	6,844	286	8,041	324	+13	2,254	478	2,919	594	+24
Convulsive disorders	133	6	153	6	0	69	15	85	17	+13
Diseases of senium	895	38	957	39	+3	190	40	239	49	+23
Alcoholic intoxication	1,600	67	2,069	84	+25	495	105	725	148	+41
Schizophrenic reactions	2,059	86	2,087	84	−2	916	194	1,052	214	+10
Other psychotic disorders	495	21	547	22	+5	78	17	95	19	+12
Psychoneurotic reactions and personality disorders (except alcoholism)	1,048	44	1,353	55	+25	187	40	368	75	+88
Transient situational personality disturbance	117	5	212	9	+80	57	12	67	14	+17
Mental deficiency	126	5	154	6	+20	121	26	94	19	−27
All others	371	16	509	21	+31	141	30	194	40	+33
Admissions to non-State hospitals										
Total	4,549	190	5,006	202	+6	234	50	254	52	+4
Convulsive disorders	34	1	29	1	0	4	1	8	2	+100
Diseases of senium	178	7	156	6	−14	8	2	6	1	−50
Alcoholic intoxication	470	20	555	22	+10	28	6	23	5	−17
Schizophrenic reactions	1,176	49	1,177	48	−1	110	23	104	21	−9
Other psychotic disorders	535	22	530	21	−5	11	2	14	3	+50
Psychoneurotic reactions and personality disorders (except alcoholism)	1,737	73	2,057	83	+14	51	11	56	11	0
Transient situational personality disturbance	88	4	140	6	+50	2	------	7	1	------
Mental deficiency	34	1	30	1	0	0	0	2	0	------
All others	297	12	332	13	+8	20	4	34	7	+75
Admissions to all psychiatric facilities										
Total	19,167	802	21,947	885	+10	4,795	1,017	5,379	1,095	+8
Convulsive disorders	242	10	268	11	+10	126	27	137	28	+4
Diseases of senium	1,087	46	1,112	45	−2	223	47	262	53	+13
Alcoholic intoxication	2,134	89	2,715	110	+24	605	128	839	171	+34
Schizophrenic reactions	3,918	164	3,940	159	−3	1,434	304	1,494	304	0
Other psychotic disorders	1,148	48	1,180	48	0	122	26	141	29	+12
Psychoneurotic reactions and personality disorders (except alcoholism)	5,902	247	6,733	272	+10	956	203	1,093	222	+9
Transient situational personality disturbance	2,127	89	2,384	96	+8	354	75	398	81	+8
Mental deficiency	638	27	677	27	0	442	94	313	64	−32
All others	1,971	83	2,938	119	+43	533	113	702	143	+27

[1] Per 100,000 estimated population 5 years and older in specified racial group and period.

desegregation, rates of admission of whites to non-State hospitals declined or remained the same for five diagnostic groups, including the psychotic categories. While percentage increases in the rates of admission for whites were noted for four nonpsychotic groups—alcoholics, persons with psychoneurotic reactions and personality disorders, persons with transient situational personality disturbances, and all others—these increases were considerably less than the percentage increases in comparable State hospital rates (table 4).

After January 1963, for all diagnostic categories except "all others," whites admitted to State hospitals accounted for a somewhat greater percentage of the admissions to all psychiatric facilities than before. For example, in the 18 months before desegregation, 50 percent of the 5,066 whites with psychotic diagnoses were admitted to a State hospital. After January 1963, this proportion rose to 51 percent. Among white persons with a diagnosis of alcoholism who were admitted to a psychiatric facility, the proportion going to a State hospital increased from 75 percent before desegregation to 76 percent after this event; among those persons admitted with a diagnosis of psychoneurotic reactions and personality disorders, the proportion increased from 18 to 20 percent; among persons with diseases of the senium, the increase was from 82 to 86 percent.

Contrary to the opinions expressed in the numbered statements, the admission rates for whites to the four regional hospitals increased appreciably following desegregation. Further, the largest percentage increases were recorded for patients with nonpsychotic disturbances. Among all psychiatric patients, as was true for Negroes, the proportion who went to State hospitals increased during the period after desegregation for every major diagnostic category. We therefore conclude that if desegregation deterred any State hospital admissions of whites in certain diagnostic categories, the number was minimal.

As with all other publicly operated facilities, the issue of segregation or desegregation of mental hospitals has been resolved. In Maryland and Mississippi, as in Illinois or New York, Negro and white patients are now admitted to, and treated on, the same wards and, presumably, in the same manner. In Southern and border States, patterns of care, which in most cases had prevailed unchanged since the inception of the hospital system, have been altered. Although national data by race are not available, we estimate that approximately one-fourth of all whites and a majority of the Negroes admitted to such facilities were treated in these Southern and border States.

Generally, regardless of whether desegregation resulted voluntarily, through court action, or Federal intervention, our observation is that the change occurred quietly, with minimal direct protest by either racial group. The fears of some, the expectations of others, the cynicism of many have now been muted and relegated to the past as other issues have attained prominence, such as efforts to proceed beyond desegregation to specified levels of racial balance.

Data available in Maryland through the psychiatric case register for the 18-month periods preceding and following desegregation of the State hospitals show that, in general, measurable changes which may have resulted from this action were minimal. That is, the newly desegregated hospitals did not, as anticipated by some, experience a decline in admissions of whites concomitant with a massive influx of Negroes. Rather, there has been a continuing increase in admissions among both racial groups, particularly for the treatment of acute, nonpsychotic disorders. While the rate of increase in admissions has been somewhat greater among Negroes, it has produced only a slight rise in the percentage of all beds occupied by nonwhites. Our latest data indicate that 29 percent of the persons admitted to the State hospitals and 27 percent of the resident patients are Negro. These percentages reflect little change from comparable statistics before desegregation.

A number of other facts are also apparent. Desegregation did not produce a massive shift in admissions of whites from State to non-State-operated hospitals, where the number of Negro patients was known to be relatively small. While the number of whites admitted to both types of facilities rose, the increase was proportionally much greater in the State hospitals. In fact, percentage changes for major diagnostic categories were consistently less in non-State operated hospitals.

Desegregation apparently did not lead to increased use by Negroes of other types of psychiatric facilities. Our data do not confirm the expectation that removal of discriminatory practices in State hospitals would lead to a growing use by Negroes of all psychiatric services. Although unduplicated admission rates for nonwhites to all facilities remained higher than comparable figures for whites,

proportionally, whites had a greater increase in cases after desegregation.

Before and after desegregation, Baltimore City residents accounted for approximately 40 percent of all admissions of whites and 75 percent of all admissions of Negroes to the four regional hospitals. Before January 1963, the city's white patients were assigned geographically to two hospitals. Following desegregation, Baltimore was subdivided into three zones. Admissions from these areas increased by 13, 19, and 28 percent, with the median rise occurring in the Crownsville catchment area. Rates could not be computed since population estimates by race were not available for subsections of Baltimore City. It is our impression that some changes in population primarily due to migration occurred in the city during the study period. We would therefore limit our interpretation of these data to the statement that desegregation did not appreciably affect the number of admissions of whites.

In the 18 months preceding desegregation, 1,628 Baltimore Negroes were admitted to Crownsville. In the next 18-month period, the number of Negroes admitted to the three regional hospitals responsible for the care of city residents increased 32 percent, to 2,187. Concomitantly, admissions from the area assigned to Spring Grove, the only one of the three hospitals on a public transportation line, rose 51 percent. We do not know whether or not migration and other factors were related to this increase, but we believe that desegregation has produced some increase in hospital admissions of nonwhite Baltimore residents.

In Baltimore City, the nine counties of the Eastern Shore, and the two suburban counties adjoining the city, State hospital admissions of nonwhites increased concomitant with a decline in such admissions to other facilities. We believe that this reflects some shift from outpatient to inpatient care, particularly among those requiring psychiatric services for nonpsychotic diagnoses. It is our opinion that hospitalization is optional for some persons with certain types and levels of conditions—it occurs if the facility is accessible and does not occur if it is not. Since desegregation increased the accessibility of hospital facilities for many more Negroes than whites, State hospital admissions of Negroes rose more than those of whites, with a resultant shift from community to inpatient care.

An understanding of related facts and events places these results in proper context and aids in their interpretation. By 1963, Marylanders had generally become accustomed to the desegregation of schools, hospitals, and other publicly operated facilities. Racial mixing of patients at Rosewood, the State hospital for the retarded, had been instituted in 1955. Similar action in the State mental hospitals was commonly anticipated. When it finally occurred, the transition was smooth, uneventful, and provoked little or no anxiety or reaction. It is therefore not surprising that desegregation did not deter admissions of whites to any measurable extent.

Maryland's Negro community has traditionally considered Crownsville as its mental hospital. Even today, more than 7 years after the change in policy, this special relationship is very evident. Negroes have for years constituted a high proportion of the hospital's professional and nonprofessional staff. Many nonwhites in health professions who live throughout the State were trained there and have maintained contact with the facility. Although all Maryland mental hospital staffs have been racially mixed, the percentage of Negroes has remained considerably lower in the other facilities, particularly among professionals. Therefore, a massive influx of Negroes to the newly desegregated "white" hospitals should not have been anticipated, even from areas where the distance to a mental hospital was considerably reduced by desegregation.

In Baltimore, where the number of Negroes admitted from Spring Grove's new catchment area increased by more than half after January 1963, other special factors may also have played a role in the trends noted. A large proportion of admissions from the city are at the request of public authorities with minimal involvement of the patient's family. Many admissions, in fact, are handled by the police. Such authorities, rather than the patient or his peers, may have been influenced to hospitalize Baltimore residents at Spring Grove because of its relative accessibility.

The traditional close relationships between the Negro community and Crownsville provided the staff of this facility with the experience for developing similar contacts with the total population in the hospital's newly assigned service area. In the three southern Maryland counties which had formerly been assigned to Spring Grove, this approach could have led to casefinding in the white community and a resultant upsurge in hospital admissions.

We know that admission rates for all psychiatric facilities were higher for Negroes than for whites both before and after desegregation, although

whites had a relatively greater increase in admissions after desegregation. Further, desegregation produced some shift in admissions of Negroes from community to hospital care. We know also that desegregation made State hospitals more accessible to segments of both racial groups. We recognize that the occurrence of mental illnesses varies among population groups and is affected by such factors as family structure, age distribution, socioeconomic levels, and cultural patterns. Since comparative data on incidence are not available, we do not know the numerical relationship between rates of utilization of services and the need for care by different population groups before and after desegregation. In addition, the question as to whether or not desegregation per se significantly affected the effectiveness of psychiatric services remains unanswered.

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GORWITZ, KURT (Michigan Department of Public Health), **and WARTHEN, FRANCES JEAN:** ***Effects of desegregation of a State hospital system on rates of treated mental illnesses. HSMHA Health Reports, Vol. 86, January 1971, pp. 34–45.***

Maryland, a border State, desegregated its State mental hospital system at the beginning of January 1963. Before this date, white patients were admitted to one of three hospitals on a geographic basis while all Negroes went to one facility. Although most non-State-operated inpatient and outpatient centers accepted Negroes for treatment, the number of such admissions was relatively small.

Unduplicated data on admissions to virtually all facilities serving State residents are available through the Maryland Psychiatric Case Register. A comparison of data for the 18 months preceding and following desegregation indicated that admissions of both whites and nonwhites to State mental hospitals increased following desegregation. Nevertheless, while the number of admissions of whites rose 13 percent, the number of Negroes admitted increased 24 percent. Nonwhites comprised 25 percent of all persons admitted in the 18 months before desegregation and 27 percent of all those admitted in the following 18 months. During the year ending June 30, 1970, 29 percent of all persons admitted were Negro.

Desegregation reduced the distance to the mental hospital for white residents of one of Maryland's seven geographic areas. Admissions of whites from the counties in this area increased 31 percent, the largest rise in any of the seven areas. Desegregation did not produce a shift of white patients to non-State-operated hospitals. Non-State-operated facilities accounted for 24 percent of all whites admitted to psychiatric care before segregation and 23 percent afterwards. Desegregation increased the accessibility of mental hospitals for Negroes in two areas—a portion of Baltimore and the nine counties of the Eastern Shore. While the number of nonwhites admitted from these two areas increased, the rise was small and may or may not have been due to desegregation.

Desegregation of the State mental hospitals did not produce a rise in admissions of nonwhites to non-State psychiatric facilities. Rather, for persons in all major diagnostic groups, it produced an apparent shift to the State hospital system. While 47.0 percent of the Negroes admitted before desegregation went to the Crownsville State Mental Hospital, 54.3 percent went to the four State hospitals after desegregation.

Following desegregation, admission rates for whites to State mental hospitals declined slightly for schizophrenia, increased slightly for other psychotic disorders and diseases of the senium, and rose substantially for alcoholic intoxication, psychoneurotic reactions, and personality disorders.