

Medical personnel and facilities have increased both in absolutes and in relation to population growth over an 11-year period, and use of such services as child welfare, home nursing visits, and home helpers has also grown.

Trends in the National Health Service in England and Wales, 1949-60

AGNES W. BREWSTER and ESTELLE SELDOWITZ

THE National Health Service Act of 1946 aimed at promoting "the establishment in England and Wales of a comprehensive health service, designed to secure improvement in the physical and mental health of the people . . . and the prevention, diagnosis and treatment of illness."

Treatment is freely available. The Service is financed by earmarked deductions from wages, employer contributions, taxation, and by charges for certain items.

Charges are made for prescriptions (2s. 0d., or 28 cents per item), dentures, eyeglasses, and other medical items. An initial charge of £1, or \$2.80, is made for dental treatment costing more than this. Children and expectant mothers are exempt from dental charges, and special arrangements are made to provide exemption from all charges in cases of financial hardship.

Since the program began operation on July 5, 1948, the evolution natural in such a large-scale undertaking has brought changes in personnel and in the services provided by the Service as well as in the demands by the English people on some branches of the program.

Recently the British Ministry of Health published summary data for England and Wales on the annual use made of services provided by the National Health Service and on person-

nel involved in the provision of services, together with some data on hospital service for the period 1949-60 (1, 2). To analyze what has been occurring, the material has been converted into annual rates per 1,000 population so that population growth could be eliminated as a factor in looking at the increased volume of services and need for additional personnel. The extent of changes in absolute numbers has been determined as well as changes in the rates per 1,000 population. The first measure of change is of interest in itself because it reflects both professional participation in the Service, and changes in patient use; the second measure shows the impact on the population.

The tabulations of the Ministry of Health are discussed under seven headings, selected as most nearly conforming to the categories of health services familiar to us in the United States. In "bending" the material in this fashion it is recognized that the organizational structure of the National Health Service is no longer reflected in these data. Trends in the availability of facilities and personnel and in use of services were felt to be worth examining statistically at a time when the British approach to providing medical care is frequently being discussed.

In the period from mid-1949 through mid-1960 the population of England and Wales expanded by nearly 2 million, from 43,785,000 to 45,755,000. This expansion of 4.5 percent can be related meaningfully to the expansion in the absolute numbers of physicians, dentists,

Mrs. Brewster is chief and Miss Seldowitz is a medical economist in the Health Economics Branch, Division of Community Health Services, Public Health Service.

nurses, hospital beds, and the like in the period under review since the Service is being used by all but a small fraction of the entire population.

The population totals are as of June 1, the financial sums are for the fiscal year ending March 31, and the counts of most of the personnel and beds are as of December 31 for the various years. The necessity of adapting data relating to 12-month periods ending in different months of the year introduced very minor variations from true rates, had all of the data related to identical 12-month periods.

Health Personnel

There has been an increase in both the absolute numbers of professional personnel working under the National Health Service and in the ratio of these providers of services to the population (table 1). Conversely the number of patients per practitioner has decreased, particularly among consultants.

Physicians on general service. When considering the supply of physicians, the pattern of medical practice in England and Wales should be noted. Physicians on general service are somewhat akin to the general practitioner in the United States. However, in Great Britain general physicians provide only office and home care and refer all patients to the hospital for specialist care and for diagnostic services beyond the more routine types. As a rule, physicians on the general service do not take care of their patients in the hospital. Unlike specialists in the United States, British consultants under the National Health Service function mainly in a hospital setting, on the inpatient and outpatient services, but they are also available for consultations in the home when the general practitioner thinks it advisable.

Table 1 indicates that there has been a greater increase (14.3 percent) in the number of physicians on general service than in the number of persons in the population (4.5 percent), but a far greater increase has occurred in the number of full-time and part-time consultants in the period under review (40.5 percent). Per 1,000 population, the number of physicians on the general service rose nearly 10 percent and the number of consultants by a third, to register a combined rate of 0.61 per 1,000 population in

Medical Manpower in Britain

"In every 1 of the last 5 years the number of general practitioners in the National Health Service has shown an increase. This has occurred in spite of the bulge of retirements in 1958 and 1959. It certainly owes little or nothing to the services of doctors from overseas. . . . Here, then, straight away is a fact which is utterly incompatible with any suggestion that doctors are quitting the Service and the country in appreciable numbers because of dissatisfaction with the opportunities and conditions of general practice as they obtain here today.

"The story is similar in the hospital service. The number of senior medical staff in our hospitals—here again the overseas contribution is negligible—has been continuing to increase annually, as it has done every year since the inception of the Service."—RT. HON. ENOCH POWELL, M.P., *Minister of Health, speaking at the annual dinner of the Faculty of Anaesthetists, Royal College of Surgeons, March 21, 1962.*

1960 in the National Health Service. To this number should be added the other junior medical and a small number of dental staff in hospitals and some portion of those counted in the eye care program, which would raise the rate. It does not include approximately 5,000 to 6,000 more doctors in research and teaching, public health, the armed forces, and other work.

In the United States there have been changes in the type of physician administering medical care. For all types of physicians, including those not caring for patients, the ratio of total physicians to population in the years from 1949 to 1960 has remained stable, 1.35 in 1949 and 1.34 in 1960 per 1,000 persons (3, 4). While the ratio of private practitioners in general practice declined from 0.65 per 1,000 civilian population in 1949 to 0.34 per 1,000 in 1960, the specialist, especially the internist, has assumed many of the functions previously executed by the general practitioner.

The last section of table 1 shows that in England and Wales there has been some improvement in the average number of persons per practitioner, since the number of patients per physician has declined. Currently the average

number of patients on a general practitioner's list is 2,223; the maximum number permitted is 3,500 names, reduced from 4,000 in 1953. In the United States in 1960 there was one general practitioner per 2,941 persons, but the comparison with the British is not meaningful in view of the wide use of internal medicine and pediatric specialists who serve as generalists in many situations in the United States.

Dentists. The supply of dentists on service in the National Health Service increased only slightly during the 11 years under review, no more than keeping pace with population growth. These data on dentists do not include hospital staff or school dentists. There were only 264 dental consultants on hospital staffs in 1960 and 1,591 school dentists (1,015 whole-time equivalents) in 1959, giving a ratio of approximately 0.27 dentist per 1,000 population.

In the United States there was a very slight decrease in dentists, from 0.57 in 1949 to 0.56 per 1,000 in 1960 (5).

Ophthalmic practitioners and opticians. The number of personnel concerned with eye care increased fairly rapidly in the early years of the NHS but leveled off in 1959 and 1960. As the use data presented later will show, there has been a reduction in requests to the Service for sight tests and glasses that undoubtedly is reflected in the stabilization in the number of personnel. No comparable data are available for the United States.

Hospital nurses. More than 25,000 full-time nurses were added to hospital staffs in the period, an increase of 31 percent in the ratio per 1,000 population (table 2). The supply of part-time nurses nearly doubled. The data suggest that the British have found methods of

Table 1. Medical and dental personnel in the National Health Service in England and Wales, 1949, 1958-60

Personnel	1949	1958	1959	1960	Percent change 1949-60
Number of practitioners					
Physicians on general service.....	18,000	20,389	20,424	20,579	+14.3
Consultant physicians full-time and part-time ¹	5,189	6,988	7,102	7,292	+40.5
Dentists on service.....	9,451	10,274	10,418	10,538	+11.5
Ophthalmic medical practitioners and opticians.....	6,735	7,262	7,306	7,272	+8.0
Other hospital medical and dental staff (whole-time equivalent) ²	7,229	9,116	9,294	9,727	+34.6
Number of practitioners per 1,000 population					
Physicians on general service.....	0.41	0.45	0.45	0.45	+9.8
Consultant physicians full-time and part-time ¹.....	.12	.15	.16	.16	+33.3
Dentists on service.....	.22	.23	.23	.23	+4.5
Ophthalmic medical practitioners and opticians.....	.15	.16	.16	.16	+6.7
Other hospital medical and dental staff (whole-time equivalent) ².....	.17	.20	.20	.21	+23.5
Population per practitioner					
Physicians on general service.....	2,433	2,219	2,222	2,223	³ -8.6
Consultant physicians full-time and part-time ¹	8,438	6,475	6,391	6,275	³ -25.6
Dentists on service.....	4,633	4,404	4,356	4,342	³ -6.3
Ophthalmic medical practitioners and opticians.....	6,501	6,230	6,212	6,292	³ -3.2
Other hospital medical and dental staff (whole-time equivalent) ²	6,057	4,963	4,883	4,704	³ -22.3

¹ Includes dental consultants in the hospital service.

² Whole-time equivalent equals total hours worked (whole- or part-time) divided by 38½.

³ Percent decrease in population per practitioner 1949-60.

NOTE: The total estimated population of England and Wales on June 1 of the stated years was as follows: 1949—43,785,000; 1958—45,244,000; 1959—45,386,000; and 1960—45,755,000, increasing by 4.5 percent from 1949 to 1960. The rates per 1,000 persons in this table and in the following tables are based on these statistics.

bringing nurses back to work by providing opportunities for part-time employment for those with family responsibilities. In National Health Service hospitals in 1960 there were 4.2 full-time, part-time, and student nurses per 1,000 population and 0.41 nurse per staffed bed.

Hospital midwives. Training in midwifery has been decidedly increased in the years since 1949. One pupil midwife is being trained for every 12 student nurses undergoing training. In 1960 there were 5,693 full-time, 1,528 part-time, and 4,647 pupil midwives in the hospital service, or 0.25 per 1,000 population. In addition, through the years from 7,500 to 7,800 midwives have been working on the home service. There is reportedly a very high retirement rate

among midwives mainly as a result of marriage, but many midwives also move on to other employment such as health visitors.

Hospitalization

Beds. In the documents on which this report is based the Ministry of Health reports all types of beds combined. Beds in general hospitals and those in mental hospitals and in institutions for the mentally defective are all reflected in the data. A distinction is made between existing beds and staffed beds, the latter being those that are actually available for use. Staffed beds have been used for bed rates in table 3.

The number of staffed beds increased 5.5 per-

Table 2. Nursing and midwifery staff in National Health Service hospitals in England and Wales, 1949, 1959-60

Personnel	1949	1959	1960	Percent change 1949-60
Number of nurses and midwives				
Nursing staff: ¹				
Full-time.....	71, 213	95, 653	97, 646	+37. 1
Part-time.....	22, 131	40, 333	42, 715	+93. 0
Student nurses.....	46, 182	54, 960	54, 075	+17. 1
Trained nurses:				
Full-time.....	41, 318	53, 311	54, 392	+31. 6
Part-time.....	6, 283	13, 271	14, 349	+128. 4
Midwives:				
Full-time.....	4, 755	5, 489	5, 693	+19. 7
Part-time.....	929	1, 453	1, 528	+64. 5
Pupil midwives.....	3, 602	4, 418	4, 647	+29. 0
Number per 1,000 population				
Nursing staff: ¹				
Full-time.....	1. 63	2. 11	2. 13	+30. 7
Part-time.....	. 51	. 89	. 93	+82. 4
Student nurses.....	1. 05	1. 21	1. 18	+12. 4
Trained nurses:				
Full-time.....	. 94	1. 17	1. 19	+26. 6
Part-time.....	. 14	. 29	. 31	+121. 4
Midwives:				
Full-time.....	. 11	. 12	. 12	+9. 1
Part-time.....	. 02	. 03	. 03	+50. 0
Pupil midwives.....	. 08	. 10	. 10	+25. 0
Number of nursing staff per staffed bed				
Full-time.....	0. 16	0. 20	0. 21	+31. 3
Part-time.....	. 05	. 08	. 09	+80. 0
Student nurses.....	. 10	. 12	. 11	+10. 0

¹ Includes trained nurses, student nurses, enrolled assistant nurses, pupil assistant nurses, and other nursing staff.

Table 3. Hospital services in National Health Service, general and mental hospitals in England and Wales, 1949, 1958-60

Facilities and utilization	1949	1958	1959	1960	Percent change 1949-60
Number					
Staffed beds.....	448, 057	476, 796	475, 286	472, 668	+5. 5
Occupied beds (daily average).....	398, 000	418, 000	413, 000	410, 000	+3. 0
Percentage of staffed beds occupied.....	88. 8	87. 7	86. 9	86. 8	-2. 3
Days of care (thousands).....	145, 270	152, 570	150, 745	150, 060	+3. 3
Discharges and deaths (thousands).....	2, 937	3, 963	4, 080	4, 221	+43. 7
Waiting lists (thousands).....	498	443	476	466	-6. 4
Average length of stay per discharge or death (days).....	49. 5	38. 5	36. 9	35. 6	-28. 1
Rate per 1,000 population					
Staffed beds.....	10. 2	10. 5	10. 5	10. 3	+1. 0
Occupied beds.....	9. 1	9. 2	9. 1	9. 0	-1. 1
Days of care.....	3, 318	3, 372	3, 321	3, 280	-1. 2
Discharges and deaths.....	67. 1	87. 6	89. 9	92. 3	+37. 6
Waiting lists.....	11. 4	9. 8	10. 5	10. 2	-10. 5

cent, just a little more than population growth (4.5 percent). The daily average of beds occupied and the number of beds per 1,000 changed surprisingly little over the 11-year period. Since the number of patients, as measured by discharges and deaths, rose markedly, one would expect a marked reduction in length of stay; the data, in fact, reflect this. Occupancy levels remained relatively high, 89 percent in 1949 and 87 percent in 1960. An occupancy rate is usually high when it includes beds for mental patients.

Within the National Health Service framework, there are currently 10.3 beds per 1,000 population in England and Wales. In the United States there are 9.2 hospital beds per 1,000 population; certain types of nursing home beds not counted in the U.S. ratio would be included in the British data.

Waiting lists. The Report of the Ministry of Health for 1960, part I, cites the numbers on the waiting lists for beds at the end of each year. According to these data 10 persons per 1,000 were on such lists in 1960, a decrease of 1 person per 1,000 over the years. While the National Health Service is reported to make no attempt to determine whether the persons on the lists at year's end are still in need of a hospital stay, many hospitals do review their waiting

lists. Some of the patients, it is stated, have obtained care as private patients in the amenity beds (accommodations in single rooms or small wards available to patients on payment of a small charge) or have been admitted to some other NHS hospital. Others may have recovered or died without hospitalization. Some of the patients waiting for beds were psychoneurotic persons for whom no mental hospital bed was available. The proportion on the waiting lists has diminished in relation to the number of persons per 1,000 admitted to the hospitals, from 1 in 7 to 1 in 10. No corresponding data are available in the United States, although unquestionably there are waiting lists for mental and tuberculosis hospital beds and occasional delays for elective surgery and the like.

Utilization rates. The National Health Service is providing per capita 3.3 days of hospital care of all types. Since 1958 there has been a slight decrease in this volume. The corresponding figure for the U.S. is 2.9 days per capita. However, exact comparisons may not be proper since the definitions of mental, tuberculosis, and long-term hospitals are not the same in the two countries.

Discharges, including deaths, closely equate with admissions for general hospital care but

may differ when long-term illnesses are included. The 1960 level of 92.3 discharges per 1,000 population may therefore not be a significant measure to compare with the U.S. admission rate of 141.0 per 1,000 population to all types of hospitals.

Newer methods of treatment have reduced length of hospital stay in Great Britain as well as in the United States. Much of the reduction has been brought about by the change in psychiatric treatment. Differences in the average length of hospitalization for specific diagnoses are known to exist in the two countries. A notable example is maternity: 4.5 days in the United States, 10.3 days in England and Wales.

Hospital outpatient services. Table 4 shows that the number of patients and the visits per 1,000 population to hospital outpatient services have both increased. Currently one person in six in England and Wales visits a consultant hospital outpatient department during a year, up from one in seven in 1949. The outpatients

in consultant departments averaged 4.1 attendances each in 1960. Total attendances in casualty outpatient departments also increased 21.6 percent from 1949 to 1960. Casualty cases averaged 2.2 attendances in 1960. The number of outpatients who see general practitioners in a hospital setting is relatively small and has been declining slightly over the years. Since 1952 new antenatal outpatients of hospital and general practitioner clinics have increased by 28 percent compared with an increase of 8 percent in other consultant departments.

Domiciliary specialist services. Domiciliary care provided by specialists is mainly for diagnosis for patients in the home. This service serves as a link between hospitals and general practitioners. It has grown rapidly, with the number of visits more than doubling since 1949 (table 4).

To weigh the trends in hospitalization and in the numbers and types of physicians, the availability of several kinds of care outside the hos-

Table 4. National Health Service hospital outpatient services in England and Wales, 1949, 1958-60

Outpatient departments	1949	1958	1959	1960	Percent change 1949-60
	Number				
Consultant departments:					
Sessions held (thousands).....	949	1, 215	1, 226	1, 254	+32. 1
New patients (thousands).....	6, 148	6, 969	7, 109	7, 123	+15. 9
Total attendances (thousands).....	26, 001	28, 038	28, 649	29, 063	+11. 8
Visits provided by domiciliary specialist service (thousands).....	132	294	310	(¹)	² +134. 8
Casualty departments:					
New patients (thousands).....	(¹)	5, 005	5, 477	5, 521	(¹)
Total attendances (thousands).....	10, 108	11, 377	12, 191	12, 290	+21. 6
General practitioner departments:					
New patients (thousands).....	(¹)	128	125	124	(¹)
Total attendances (thousands).....	(¹)	399	397	393	(¹)
	Rate per 1,000 population				
Consultant departments:					
Sessions held.....	21. 7	26. 9	27. 0	27. 4	+26. 3
New patients.....	140. 4	154. 0	156. 6	155. 7	+10. 9
Total attendances.....	593. 8	619. 7	631. 2	635. 2	+7. 0
Visits provided by domiciliary specialist service.....	3. 0	6. 5	6. 8	(¹)	² +126. 7
Casualty departments:					
New patients.....	(¹)	110. 6	120. 7	120. 7	(¹)
Total attendances.....	230. 9	251. 5	268. 6	268. 6	+16. 3
General practitioner departments:					
New patients.....	(¹)	2. 8	2. 8	2. 7	(¹)
Total attendances.....	(¹)	8. 8	8. 7	8. 6	(¹)

¹ Not available.

² Percentage change 1949-59.

Table 5. Services in the patient's home provided by the National Health Service in England and Wales, 1949, 1958-60

Visits and personnel	1949	1958	1959	1960	Percent change 1949-60
Number					
Visits by home nurses (thousands)	17, 277	24, 373	23, 566	23, 083	+33. 6
Home midwifery personnel.....	7, 781	7, 496	7, 552	7, 589	-2. 5
Domestic help personnel:					
Full-time.....	3, 967	2, 893	2, 895	2, 528	-36. 3
Part-time.....	14, 688	41, 996	44, 203	46, 786	+218. 5
Rate per 1,000 population					
Visits by home nurses.....	394. 60	538. 70	519. 24	504. 50	+27. 9
Home midwifery personnel.....	. 18	. 17	. 17	. 17	-5. 6
Domestic help personnel:					
Full-time.....	. 09	. 06	. 06	. 06	-33. 3
Part-time.....	. 34	. 93	. 97	1. 02	+200. 0

pital provided as a part of the National Health Service must always be kept in mind. The services of midwives have been mentioned. In addition, there are two other widely available services, visiting nurses and home helpers, discussed in the next section, and the day nurseries, considered later.

Services in the Patient's Home

The National Health Service includes a well-developed program of services to patients in their homes in addition to physicians' home calls. Table 5 indicates that the visiting nurse service has expanded its services from the 1949 level but that the home midwifery service has not been increased. Currently the home nurses provide 505 visits per 1,000 population. Domestic helpers ("homemakers" in the United States) have been greatly expanded by the use of part-time personnel, caused by or accompanied by a decrease in the number of full-time domestic helpers. The Service provides slightly more than 1 home helper per 1,000 population.

The almost complete absence of home care programs in the United States gives no basis for comparison with the British program. The British data give some insight to the levels that might be developed for these services, were they included as benefits under our voluntary health insurance system.

Pharmacist Services

The number of pharmacists, including those in drug stores and serving as suppliers of appliances, increased 10.5 percent from 1949 to 1960. The number of prescriptions dispensed during this period also increased by 8.3 percent. With the introduction of a 14-cent charge per prescription in June 1952, there was a yearly decline in the number of prescriptions dispensed after 1951, from 225.1 million in 1950-51 to 204 million in 1958. The downward trend has been reversed, however, and the number increased to 219 million in 1960. The number of prescriptions per 1,000 persons increased slightly (table 6).

The average cost per prescription over the years increased from 43 cents in 1949 to \$1.01 in 1960, an increase of 141.2 percent. Beginning March 1, 1961, the out-of-pocket charge was increased to 28 cents for each prescription made out by a physician and presented to the pharmacist for dispensing.

Eye Care

Most of the original heavy demand for eyeglasses has been met. During the period 1949-60 the number of eyeglasses supplied decreased 32.5 percent per 1,000 population. In May 1951 a charge of \$1.40 for each lens and a charge for the actual cost of the frame was

introduced. In recent years the demand for eyeglasses has been rising again, increasing by 6.0 percent per 1,000 population for the period 1958-60. In line with the demand for eyeglasses, the demand for sight tests declined 8.5 percent per 1,000 population in the period 1949-60, but the number of such tests per 1,000 population had increased 7 percent in 1960 compared with 1958.

Volume of Medical Supplies

The types of data contained in table 6 are only readily obtainable on a continuing basis under a system that provides national health benefits for a broad range of medical supplies as well as supplying hospitalization and physicians' and dentists' services. In Great Britain it is feasible to determine the number of prescriptions written, the eyeglasses supplied, and the dentures and other orthopedic appliances obtained for the whole population because the suppliers provide reports in order to collect their payments. In the United States, where most of the population purchases these items individually, we necessarily rely on reports of manufacturers and suppliers. Determination of the extent of U.S. demand for these items must fall back on estimates of the size of retail stocks, sample surveys of drug stores, and the like.

Of particular interest because of their frequent mention in discussions of the British

National Health Service are the rates for dentures and wigs. The reduction in the provision of dentures since 1948 could stem from (a) the introduction of a charge, (b) the catching up with the unmet need that existed before the Service was inaugurated, or (c) a combination of the two factors. The drop in supplying abdominal appliances appears to be the result of filling a previously unmet need, an increase in the number of hernia operations, and shortened waiting lists for hospital beds.

Demand for wigs has certainly been at a level far below the attention the subject has received; 2 wigs per 10,000 persons is the estimate for a total of 8,500 wigs in 1960. Were the average wig or hair piece to cost \$25, costs would be no more than about 0.1 percent of the program's total cost in 1960. Much of the increase in the number of invalid chairs and tricycles and of hearing aids appears to have been due to a supply problem in the earlier years.

Maternity and Child Welfare Services

Although maternity and child welfare services are in no sense compulsory, they are widely used. The number of children attending child welfare clinics has been increasing even though the child population under 5 years of England and Wales has declined since 1949 (table 7). In 1949, 38 percent of children under 5 attended such clinics; in 1960 the percentage was 42.3

Table 6. Rates per 1,000 population for items provided by the National Health Service in England and Wales, 1949, 1958-60

Items	1949	1958	1959	1960	Percent change 1949-60
Prescriptions.....	4, 613. 71	4, 495. 29	4, 715. 75	4, 779. 48	+3. 6
Sight tests.....	130. 18	111. 30	116. 91	119. 14	-8. 5
Eyeglasses.....	155. 30	98. 96	101. 03	104. 76	-32. 5
Artificial eyes.....	. 19	. 19	. 19	. 21	+10. 5
Dentures.....	64. 63	29. 55	32. 10	33. 46	-48. 2
Artificial legs.....	. 23	. 22	. 22	. 24	+4. 3
Artificial arms.....	. 04	. 04	. 04	. 04	0
Arm appliances.....	. 08	. 07	. 06	. 05	-37. 5
Surgical boots and adaptations to boots.....	4. 02	4. 77	4. 89	5. 16	+28. 4
Abdominal appliances.....	3. 53	1. 10	1. 03	. 97	-72. 5
Elastic hosiery.....	. 51	. 65	. 64	. 67	+31. 4
Wigs.....	. 20	. 16	. 17	. 19	-5. 0
Invalid chairs and tricycles.....	. 08	. 44	. 49	. 50	+525. 0
Hearing aids.....	. 94	1. 08	1. 05	1. 29	+37. 2
Other appliances.....	2. 10	5. 17	5. 36	5. 53	+163. 3

Table 7. Services for women and children provided by the Local Health Authority Services of the National Health Service in England and Wales, 1949, 1958-60

Service	1949	1958	1959	1960	Percent change 1949-60
Antenatal and postnatal clinics held.....	2, 182	2, 040	1, 981	2, 001	- 8. 3
Women who attended antenatal clinics (thousands)----	405	336	328	337	- 16. 8
Women who attended postnatal clinics (thousands)---	67	46	46	43	- 35. 8
Visits to child welfare centers by children under age 5 (thousands)-----	10, 106	9, 911	10, 201	10, 302	+ 1. 9
Children who attended child welfare centers (thousands) -	1, 405	1, 392	1, 433	1, 500	+ 6. 8
Estimated child population under age 5 (thousands) ----	3, 701	3, 383	3, 452	3, 546	- 4. 2
Day nurseries-----	910	501	486	477	- 47. 6
Places in day nurseries (thousands)-----	43	24	23	23	- 46. 5

percent. Of the 10,302,000 visits to child welfare clinics in 1960, 70 percent were for children under 1 year. It is probable that the increased attendances in recent years is entirely explainable by the increase in the number of births in the 1958-60 period. The large number of children under 5 in 1949 was the result of the sudden increase in births at the end of the war.

The number of women attending antenatal and postnatal clinics has been declining over the years, but in 1960 there was a slight resurgence in attendance. These data refer only to Local Authority Services and do not include antenatal and postnatal clinics held by general practitioners and hospitals. In 1960 there were 451,400 women attending such outpatient antenatal clinics. There is some duplication in the number who attend more than one of these services. Over the years there has been a change from home to hospital confinement.

Places in day nurseries are reserved for children with special needs such as handicapped children, children whose mothers are ill and unable to care for them, or children whose mothers must work. The number of day nurseries maintained by local health authorities as well as places in day nurseries has decreased by nearly half over the years. However, these totals do not mean that there are fewer working mothers in England and Wales, but rather that more children are being cared for by child-minder services and private nurseries.

Conclusions

Not surprisingly, the cost of the National Health Service has increased over the years.

Total net expenditures for the Service for the fiscal year 1949-50 amounted to £399 million, or approximately £9.1 (\$25.48) per person. In 1958-59, the net expenditure rose to £639 million, or approximately £14.1 (\$39.48) per person, a rise of 55 percent. Further increases occurred in 1959-60, and an estimated expenditure of approximately £800 million was contemplated for fiscal year 1960-61, or about \$50 per capita. As a proportion of the gross national product, the expenditure for the National Health Service medical care has remained fairly constant. In fiscal year 1949-50, the first full year of the Service, the percentage of gross national product going to the NHS amounted to 3.9 percent, declining to 3.6 percent in fiscal year 1958-59. Some additional expenditures made privately for medical care, of course, continue to exist.

The United States devoted \$26.5 billion, or 5.4 percent, of its gross national product in fiscal year 1959-60 to both private and public expenditures for health and medical care, rising from \$12.4 billion, or 4.7 percent, of the gross national product in 1949-50 (6). The average per capita expenditure in the United States in 1949-50 amounted to about \$82 and in 1959-60, to approximately \$147, increasing by 79 percent.

From the sums just cited, it would seem that the cost of the NHS, or for that matter, expenditures for medical care in England and Wales are not out of line with expenditures for medical care in the United States in terms of gross national product. Most countries have been experiencing increased costs for health and medical care during the past decade.

Summary

In terms of both absolutes and rates per 1,000 population, the number of physicians and dentists in the National Health Service increased during the period 1949-60. The number of physicians (including ophthalmic medical practitioners and ophthalmic opticians) and dentists is approximately 1.20 per 1,000 population, increasing from 1.07 per 1,000 population in 1949.

More than 25,000 full-time nurses have been added to the staffs of NHS hospitals since 1949. The number of part-time nurses and student nurses and full-time, part-time, and pupil midwives also increased substantially in the period 1949-60.

The number of staffed beds in Service hospitals has increased 5.5 percent since 1949, while the population of England and Wales increased 4.5 percent during this period. Daily average of beds occupied and the number of beds per 1,000 changed little from 1949 to 1960. Occupancy levels have remained high, but there has been a decided reduction in length of stay largely because of improved treatment for psychiatric patients.

In addition to physicians' home calls, the National Health Service includes a well-developed program of services to patients in their homes, including visiting nurse services and domestic helpers. Utilization of child wel-

fare services has also increased under the program.

Total net expenditures for the NHS increased from £399 million in fiscal year 1949-50, the first full year of the Service, to £639 million in 1958-59, to an estimated expenditure of £800 million in fiscal year 1960-61. The percentage of gross national product devoted to the NHS has remained relatively constant since 1949—3.9 percent in 1949-50 and 3.6 percent in 1958-59.

REFERENCES

- (1) Great Britain, Ministry of Health: Report of the Ministry of Health, 1960. Part I. The health and welfare services. Cmnd. 1418. Her Majesty's Stationery Office, London, July 1961.
- (2) Great Britain, British Information Services: Some statistics on the National Health Service. ID 1002 (revised). New York, November 1961.
- (3) American Medical Association: American medical directory. Chicago, 1950, p. 11.
- (4) American Medical Association, Directory Report Service: Quarterly tables of distribution of physicians by type of practice, mid-1960. Chicago, July 1960.
- (5) American Dental Association, Bureau of Economic Research and Statistics: Distribution of dentists in the United States by State, region, district, and county. Annual issues for 1950 and 1961. Chicago.
- (6) Merriam, I. C.: Social welfare expenditures, 1959-60. Social Security Bull. 24: 3-11 (table 5, p. 10), November 1961.

Consumer Protection Committee

The Departmental Committee for Consumer Protection was formed in the Department of Health, Education, and Welfare in July to help safeguard the four rights of the consumer proclaimed by President Kennedy earlier this year: the right to safety, the right to be informed, the right to choose, and the right to be heard.

The committee will review the department's programs to see if the best interests of consumers are being considered, suggest needed program changes and legislation, and channel information to consumers and consumer organizations.

Mary E. Cunningham, formerly chief of the Branch of Consumer Education, Food and Drug Administration, was appointed Special Assistant for Consumer Protection, a new post in the Office of the Secretary.