

FUNDAMENTAL FACTS ON THE COSTS OF MEDICAL CARE¹

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I

IT is my privilege to give you an aeroplane view of problems in medical economics. Adhering to a discussion of problems, I shall not occupy your time with a review of what is good, effective, and praiseworthy in the medical world. Of necessity, I deal with ills and with a diagnosis, not with a prescription of treatment.

For the facts in the case, I draw upon the studies conducted by the research staff of the Committee on the Costs of Medical Care.³ These apply variously to the years 1928 to 1931—years which run the gamut from good times to bad through a “boom” period. Since the completion of these inquiries, the country has plunged into a new and more acute stage of the economic recession. The facts which I present, however, apply not to the chaos of an emergency, but to the emergent chaos of so-called normal times.

In 1929, and in each year or two immediately preceding and following, the people of the United States received medical services and consumed medical commodities worth three

¹A summary presented to orient a round-table conference on the costs of medical care, held at the annual meetings of the Boards of Counsel of the Milbank Memorial Fund, March 15, 1933. This paper is a preliminary fraction of a larger study undertaken by the Fund on ways of applying the insurance principle to problems in the provision of medical care and in meeting the costs.

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³For a complete summary, consult Falk, I. S.; Rorem, C. Rufus; and Ring, Martha D.: *The Costs of Medical Care: A Summary of Investigations on the Economic Aspects of the Prevention and Care of Illness*. Chicago, University of Chicago Press, 1933. Tables and charts are reproduced from this volume (and other reports of the Committee on the Costs of Medical Care) with the permission of the University of Chicago Press.

and two-thirds billions of dollars or 4 per cent of the then current national income. The sources of the funds and services for which the expenditures were made are shown in Table 1. Of the grand total, federal, state, and local governments provided from tax funds 14 per cent, philanthropy supplied 5 per cent, and industry 2 per cent. The remaining 79 per cent was paid from the private purses of families and individuals. Figure 1 shows the sources of the funds and Figure 2, the agencies to whom the expenditures are made.

II

One million, one hundred thousand persons earn their livelihood in the service of providing medical care. Six

Table 1. Total expenditures¹ for medical care in the United States.²

SERVICE	TOTAL	SOURCES OF FUNDS				PER CAPITA (1929)
		Pa-tients	Gov-ern-ments	Phi-lan-thropy	Indus-try	
TOTAL	\$3,656	\$2,886	\$510	\$182	\$79	\$30.08
Physicians in private practice ³	1,090 ⁴	1,040 ⁴			50	8.97
Dentists in private practice ³	445 ⁴	445 ⁴				3.66
Secondary and sectarian practitioners	193	193				1.59
Graduate nurses, private duty	142	142				1.17
Practical nurses, private duty	60	60				0.49
Hospitals: operating expenses	656	278	300	54	24	5.40
Hospitals: new construction	200		100	100		1.64
Public health	121		94	28		1.00
Private laboratories ⁵	3	3				0.02
Orthopedic and other supplies ⁶	2	2				0.02
Glasses ⁵	50	50				0.41
Drugs ⁵	665	665				5.47
Organized medical services ⁶	29	8	16	7	5	0.24

¹All figures in millions of dollars. Discrepancies which appear in this table are due to the use of rounded numbers.

²With a few minor and unimportant exceptions the data apply to the year 1929. They are probably representative of any normal year of recent times.

³Physicians and dentists holding part-time salaried positions are included with private practitioners. Expenditures for the services of those employed in hospitals, clinics, public health departments, and organized medical services are included under total expenditures for the respective agencies.

⁴These totals include payments by government and philanthropic agencies to private practitioners for services to indigent persons.

⁵Not included in other items.

⁶University, industrial, and Army and Navy medical services, exclusive of hospital care.

⁷\$210,000.

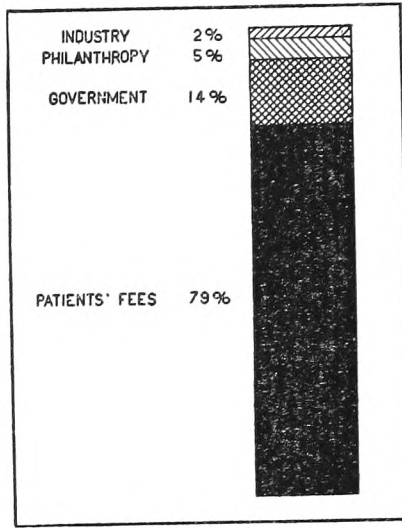


Fig. 1. Sources of medical funds.

billion dollars of the nation's capital are invested in the plant and equipment of medicine. This service "industry," whether measured in terms of invested capital, annual expenditures, or personnel, ranks fifth or sixth in the nation.

The provision of medical care is more than an industry, even as medical service is more than a commodity. He who purchases medical service has little or no basis for critical

judgment of what he seeks; he who supplies medical service is judge both of the patient's needs, of the time and conditions of sale, and—not unusually—of the price. Only within certain important limitations is medical service an economic commodity, subject to prevailing forces of

supply and demand. There are psychological and emotional factors which nullify any purely economic analysis of the economics of medical care. These words are not introduced merely "to make the riddle harder"; they touch upon an essential aspect of the subject. They must not be lost from sight.

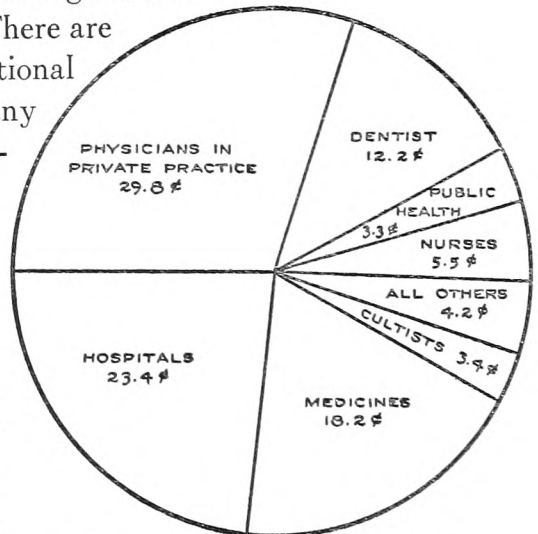


Fig. 2. How we spend the medical dollar.

III

The total expenditures for medical care are divided almost equally between private practitioners and institutions. You will note in Table 2 that 1.9 billions of dollars are spent for the services of 554,000 private practitioners; the remaining 1.7 billions of dollars are spent for services rendered in medical institutions, for commodities (chiefly drugs and medicines), and for the remuneration of the 530,000 persons engaged in these activities and enumerated in Table 3. Of expenditures for private practitioners, the lion's share falls to the 121,000 physicians. Dentistry and nursing are the next largest items. Among the institutions, hospitals consume 856 millions, drugs and medicines 665 millions, public health 121 millions, and all others 90 millions. These are, perhaps, the essential facts concerning the composition of the nation's

Table 2. Personnel in private practice and expenditures for their services.

Practitioners ¹	Number	Expenditures		
		Total	Per Cent	Per Capita
TOTAL	554,100	\$1,930,000,000	100.0	\$15.88
Physicians	121,000	1,090,000,000	56.5	8.97
Dentists	56,800	445,000,000	23.0	3.66
Graduate nurses	118,000	142,000,000	7.3	1.17
Practical nurses	150,000	60,000,000	3.1	0.49
Midwives	47,000	3,000,000	0.2	0.03
Chiropodists	4,900	15,000,000	0.8	0.12
Optometrists	20,200	50,000,000 ²	2.6	0.41
Osteopaths	7,700	42,000,000	2.2	0.35
Chiropractors	16,000	63,000,000	3.3	0.52
Naturopaths	2,500	10,000,000	0.5	0.08
Religious healers	10,000	10,000,000	0.5	0.08

¹Including part-time personnel.

²Including glasses which they dispense.

bill.

The national bill for medical care amounts to 4 per cent of the national income. Certainly this cannot be considered an excessive burden. Consider the fact that in the same years in which we customarily spend 3.66 billions for medical care, we spend more than 20 billions

for luxuries, amusements, and nonessentials of various sorts. If standards of good medical care call for larger expenditures, an additional billion or two—that is, up to 5 or 6

per cent of the national income—could be spent for medical service in normal times, and *if spent on a national basis* would still induce no hardship.

If the national bill for medical care (public and private) were equally distributed among the people of this country, the annual charge would be \$30 per person or \$123 per family.

For the white population, the fraction of the total medical bill which is paid from private—as distinguished from public—purses is equivalent to an average annual charge of \$23 or \$24 per person or \$108 per family. This average of \$108 per white family for the private purchase of medical care is a composite average which takes into account the averages for families of different economic levels and living in various types of communities (Fig. 3), and the proportions in these different levels or communities in the years 1928-1931. You will observe that the average cost for families in each income class is in general higher in large than in small communities. You will note, also, that from the poorest to the wealthiest families the average cost increases tenfold. If the average cost for all families combined were distributed among families uniformly according to annual income, each family would have to spend 4 per cent of its income and, we might say, there would be an end of the problem of medical costs, even if 95 per cent of the people had to shoulder in addition the costs for the 5 per cent who in normal times are indigent or semi-indigent.

Table 3. Personnel in medical institutions.

Personnel	Number
TOTAL	530,400
Physicians	21,000
Dentists	5,600
Graduate nurses	77,000
Student nurses	80,000
Public health, visiting, and industrial nurses	18,800
Pharmacists	132,000
Lay personnel ¹	196,000

¹In hospitals and clinics and in public health agencies.

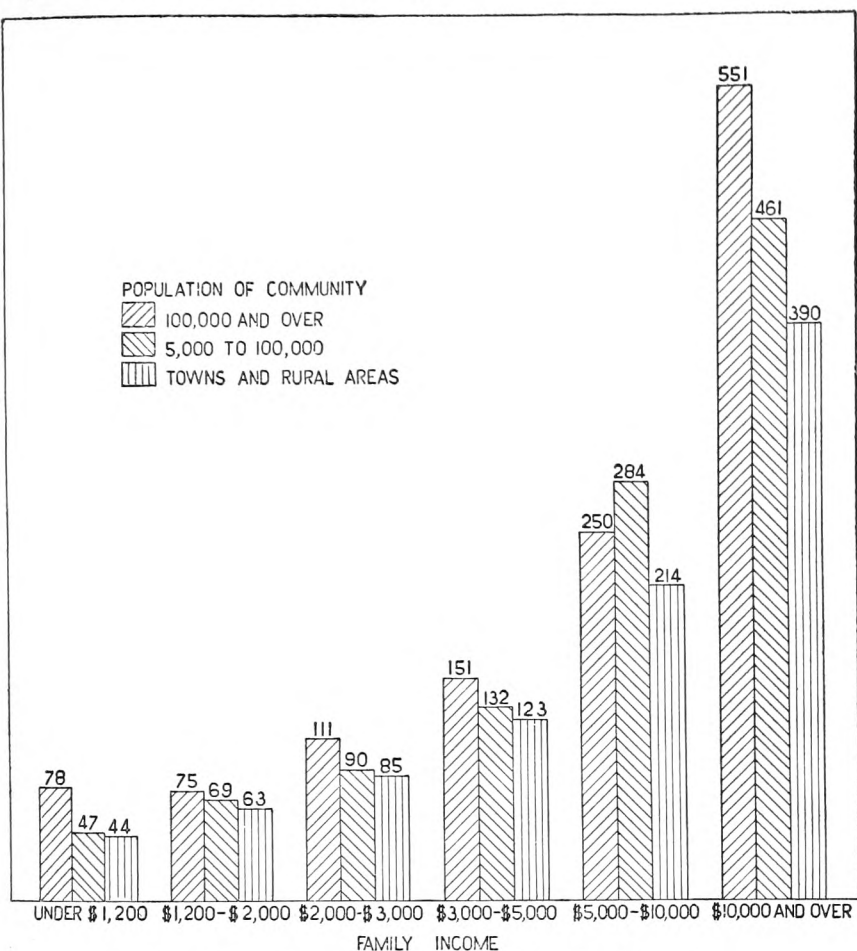


Fig. 3. The average annual charges for medical care.

Unfortunately, the costs of medical care are not like the costs of food, clothing, or shelter—fixed and regular within the reasonable limits determined by the spending habits of an economic class and by the standards of living. The purchase of food or clothing and the payment of rent recur regularly; and except for those whose incomes are below the minimum for reasonable subsistence, to procure these essentials involves only the common problem of living within one's means. Unlike the costs of food, clothing, and shelter, the

cost of medical care is determined only to a minor extent by regular, periodic, physiological need; it is dependent almost entirely upon the incidence of sickness and the receipt of medical care. The financial obligation for medical service would create no special problem if the average incidence of sickness applied with comparative regularity and certainty to each family or to each individual. How irregular the incidence actually is appears from the following figures. In a normal year, of all individuals:

- 47.1 per cent have no illness
- 32.2 per cent have 1 illness each
- 13.6 per cent have 2 illnesses each
- 4.8 per cent have 3 illnesses each
- 1.6 per cent have 4 illnesses each
- 0.7 per cent have 5 or more illnesses each

Variations like these recur year after year; but no individual or family can anticipate whether *it* will be the one to experience a year of life with little or no illness or the one that will be heavily loaded with the need for medical care.

These percentages, applying to a composite population like that of a typical 100,000 in the United States, give a fair picture of the situation for families at each level of the economic ladder. Furthermore, the costs of sickness vary even more than the incidence of sickness, because of variations in both the kinds and the amounts of care needed and received.

In each income class, only about 10 or 15 per cent of the families incur charges approximately equal to the average for all families in the class; a large proportion of the families normally incur small charges; and the remaining families incur charges which range from the average to five, ten, or even twenty times the average. The facts are summarized in Table 4. For the family so fortunate as to need little or no

medical care during a twelve-month period, the costs present no problem. For the families with charges of the average amounts, or twice the average, there is no serious problem except for those with the most meager incomes. But what of those whose medical charges attain the levels of three, four, six, eight, ten times the average—that is, 12 to 40 or 50 per cent of income?

The average charge for all families in a normal white population is \$108; but it will be noted in Figure 4 that charges of less than \$60 each are incurred by 58 per cent of the families and their medical costs are only 18 per cent of the total; charges of \$60 to \$250 each are incurred by 32 per cent of the families and their costs are 41 per cent of the total; the 10 per cent who incur charges of \$250 and more each, become

Table 4. The variation in family charges. Percentage distribution of families in different income groups according to total charges for medical care; based on data for 8,581 white families with known income, surveyed for twelve consecutive months, 1928-1931.¹

INCOME GROUP	AVERAGE CHARGE	PER CENT OF FAMILIES WHOSE TOTAL ANNUAL CHARGES WERE IN THE SPECIFIED RANGES									Total
		Under \$10	\$10-\$20	\$20-\$40	\$40-\$60	\$60-\$100	\$100-\$200	\$200-\$500	\$500-\$1,000	\$1,000 and Over	
ALL INCOMES ²	\$108.14	15.9	12.8	17.4	11.7	13.7	14.9	9.9	2.7	1.0	100.0
Under \$1,200	49.17	30.7	18.1	20.2	10.4	9.9	5.9	3.8	0.9	0.1	100.0
\$1,200-2,000	66.81	18.9	15.5	20.2	14.3	13.0	11.0	6.0	0.9	0.2	100.0
\$2,000-3,000	94.84	12.9	12.3	17.5	11.7	16.2	16.8	10.4	2.0	0.2	100.0
\$3,000-5,000	137.92	8.6	8.1	12.9	10.7	17.3	23.3	14.7	3.6	0.8	100.0
\$5,000-10,000	249.35	3.1	5.3	12.1	7.5	12.5	23.6	23.3	9.6	3.0	100.0
\$10,000 and over	503.19	1.2	1.4	6.9	2.2	4.1	26.1	25.3	16.1	16.7	100.0

¹Excludes 58 families with unknown total charges.

²For all income classes combined the proportions of families in the several classes have been adjusted to the income distribution which prevailed in the years 1928-1931.

responsible for 41 per cent of the total bill. Is it any wonder, then, with one family in ten in this last class, that there are members of the community, in no negligible numbers, who

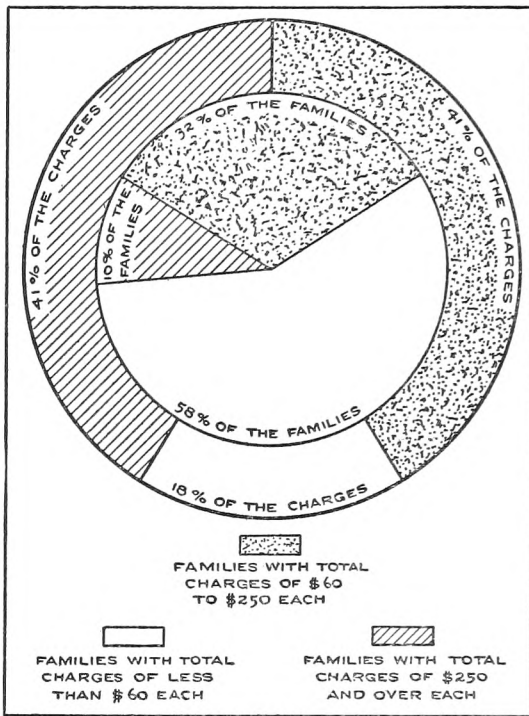


Fig. 4. Charges and the families which incur them.

edly and involuntarily, the amazing thing is that there has been in the United States so complacent an attitude toward the financial burdens created by an essential of modern life.

IV

There will be no sound understanding of dissatisfaction with the costs of medical care until it is recognized that the drain of medical charges upon the family purse is of two quite different kinds: the costs of frequent and comparatively inexpensive illnesses or medical needs and the occasional occurrence of the so-called "high-cost" illness. The difference is of fundamental importance to the family. The

raise their voices in protest and fill the air with complaints against "the high cost of medical care"? Is it remarkable that magazines carry a steady stream of diatribes against the burdens of medical costs? Is it surprising that those who incur large charges pay only 50 to 90 per cent of their bills? Considering that heavy medical charges are generally incurred unexpectedly

occasional, or even frequent, incidence of minor illness and comparatively small costs for medical care may be easily and complacently absorbed in the family budget; but the occurrence of a "high-cost" illness, even when moderate rates are charged for each unit of service, may be a financial catastrophe for the family of small or modest means. At the one extreme, medical care for a "cold" or an attack of some other minor respiratory disease or for a minor digestive disturbance costs, on the average, \$6; at the other extreme, a case of pneumonia costs, on the average, \$59, a confinement \$95, an appendicitis \$168, a cancer \$342. Even each of these figures is an average among widely varying costs.

Infection, organic disease, and malfunction are not respectful of persons or considerate of the state of the family exchequer. Large costs may fall upon small purses. Experience shows it is futile to caution people that these uncertainties are certain. The plain fact is that families do not and will not individually budget against a cost which fluctuates within a very broad range and which may even attain a magnitude which cannot be budgeted—for a family's medical cost may, in the extremest case, exceed annual income. Individual budgeting provides an answer only for wealthy families and for those families of moderate means so fortunate as to have but few illnesses which involve extensive, costly, or protracted professional care.

v

An attack upon the problems presented by variations in costs must be predicated upon knowledge of the factors responsible for the variations. It has already been seen that variation in the incidence of illness is first among the causes. Variations in incidence and in the nature of care entailed by illness are not subject to economic regulation. As the next step, we may inquire which types of medical service are

principally responsible for the variations in costs. To what extent would variations in total costs be eliminated in a group of families if the costs of particular types of services were budgeted among groups of families or were paid by taxation or insurance? To this point it is possible to direct quantitative answers.

The average medical bill of \$108 per annum among white families has the composition

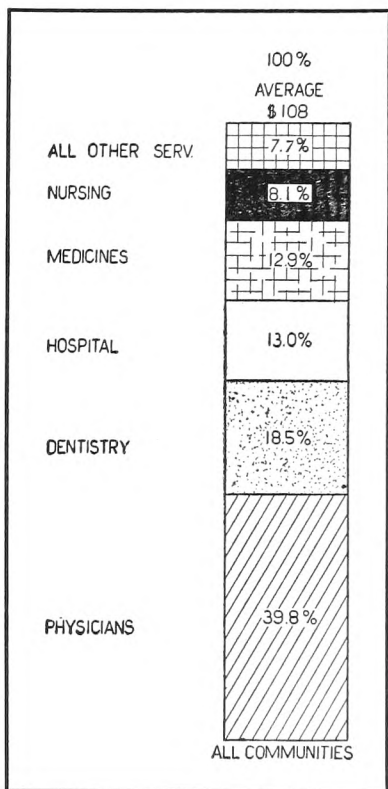


Fig. 5. Composition of the average medical bill among white families.

shown in Figure 5. Though the proportions differ somewhat among families at different income levels and among families living in communities of various sizes, the differences are neither large nor important. The purposes for which the expenditures are made are shown in Figure 6 and the types of illness for which the expenditures are made in Figure 7. The most important points in these two charts are that (1) the private purchase of medical care is almost entirely for curative—as distinguished from preventive—service, and (2) in all income classes and regardless of the size of the average costs, illnesses which involve hospitalization are responsible for one-half the total costs.

Furthermore, a study of variations in the costs of each type of service (physician, dentist, hospital, drugstore, nurse,

et cetera) demonstrates that among families in each income level variations are common in four (physician, dentist, hospital, and nurse). The extent to which the responsibility rests on each was determined. This was accomplished, for groups of families, by measuring how much variation remains in their total bills after the actual costs incurred for each type of service are in turn replaced in the records by the average cost for the service. In other words, each family in a group is presumed to have a total charge such as it might have had if it had been paying for a particular service (or a combination of services) on an

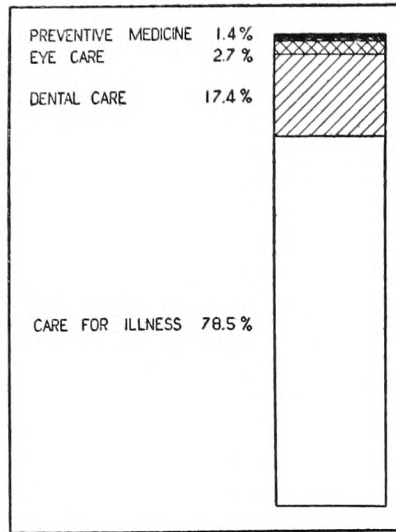


Fig. 6. Percentage of charges incurred for curative and preventive services.

insurance instead of on an individual basis. Such an analysis reveals that the responsibility for variation in costs is broad and rests upon all the important types of service—physician, dentist, hospital, and nurse. Averaging the costs of any one, or two, or three of these solves part of the problem created by variations in costs. If the costs for a particular group of families are to be brought within a range which extends only reasonably above and below the average for the group, the averaging process (or insurance) must include all four—physician, dentist, hospital, and nurse. Less than this leaves each family with an appreciable probability that its own annual costs will attain burdensome magnitudes.

VI

Up to this point we have considered only the problems of

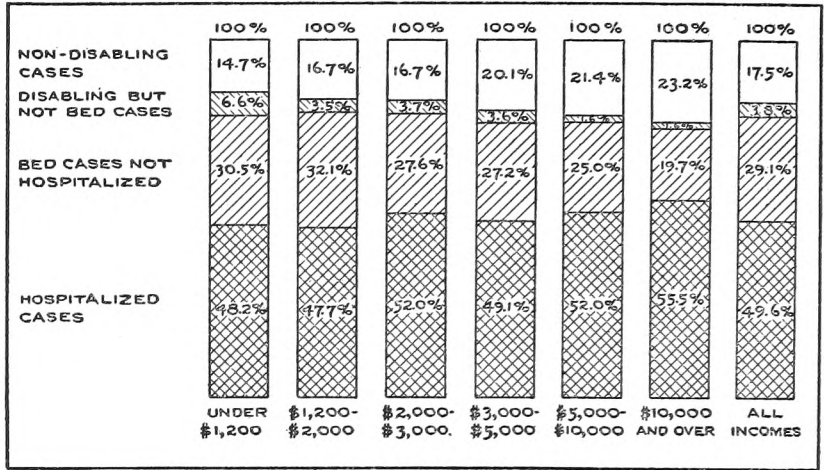


Fig. 7. Percentage of family medical costs due to illness of a specified severity.

costs. Questions of quality and adequacy have been ignored. Many of the findings from recent studies (particularly the community and the family surveys conducted by the Committee on the Costs of Medical Care) are *prima facie* evidences of moderate, sore, or even wanton neglects and very few give evidences of pampering medical excesses. Comparisons of care that is received by representative groups with reasonable estimates of care that is needed demonstrate that neither the rich nor the poor receive the care which they need. The deficiencies appear in respect to care of all major types (except the purchase of commodities in the drugstore) and are especially notable in the receipt of dentistry and of preventive services from physicians. The benefits which medicine offers are on the whole very inadequately realized.

Nor is the lag between the availability of skill and its utilization determined by costs alone. Other contributing factors include widespread public ignorance of opportunity, deeply rooted spending habits, the excessive use of self-prescribed pharmaceuticals, resort to quacks and charlatans,

DEGREE OF SPECIALIZATION	GROSS INCOME		NET INCOME		RATIO OF NET TO GROSS INCOME	
	Mean	Median	Mean	Median	Mean	Median
ALL PRACTITIONERS	\$9,461	\$7,026	\$5,700	\$4,100	0.602	0.584
General practitioners	6,421	5,245	3,900	2,900	0.607	0.553
Partial specialists	9,995	8,292	6,100	5,000	0.610	0.603
Complete specialists	16,304	12,239	10,000	7,500	0.613	0.613

Table 5. Average gross and net incomes of physicians in private practice, according to degree of specialization, 1929.

and—among urban people—a helplessness and incapacity to search out the medical service needed from the welter of practitioners and agencies which are available. Indeed, the diatribes of the laity against modern medical practice are directed as much against the lack of integration of facilities under trustworthy authority and against the difficulty of making a safe and judicious selection of physician, dentist, or hospital, as against the costs themselves.

VII

The uneven burden of medical costs upon individuals and families has its counterpart in the uneven distribution of income among the physicians, dentists, and nurses who minister to them. The *average gross* incomes of physicians, summarized in Table 5, imply reasonably adequate remuneration; but the *average net* incomes introduce some doubt on this point, for 40 per cent of the physician's gross income is consumed by professional expenses. Substantially the same is true for dentists. When the incomes of these practitioners are examined to see how many receive the average and how many larger-than-average or smaller-than-average incomes, the issues are clarified. This is readily evident from Figures 8 and 9 which show the variations in the net incomes of physicians and dentists.

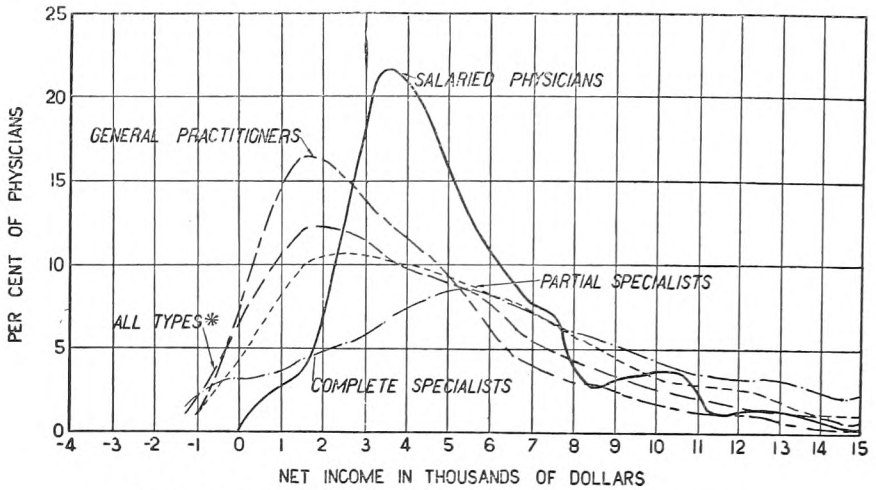


Fig. 8. Variation of net income among physicians in 1929.

The average income of the physician or dentist no more describes the economic status of the individual practitioner than the average cost describes the problem of the individual family. If \$2,500 be arbitrarily taken as the amount below which net income may be termed inadequate by definition, it is found that even in the heyday of 1929, 33 per cent of the physicians and 22 per cent of the dentists had inadequate incomes (40,000 physicians and 12,500 dentists). If the standard be set as low as \$1,500 per annum, about 18 per cent of the physicians and about 8 per cent of the dentists fell below even this point. The people who complain against the high costs of medical care, and especially against the charges of physicians, consider only the large income of the financially successful practitioner. They are not ordinarily aware that for every physician who receives more than \$10,000 as an annual net income, there are two who receive less than \$2,500.

If time permitted, it would be interesting to call to your attention the evidences which place the responsibility upon two factors above all others—excessive specialization within the profession of medicine and the inability of most people

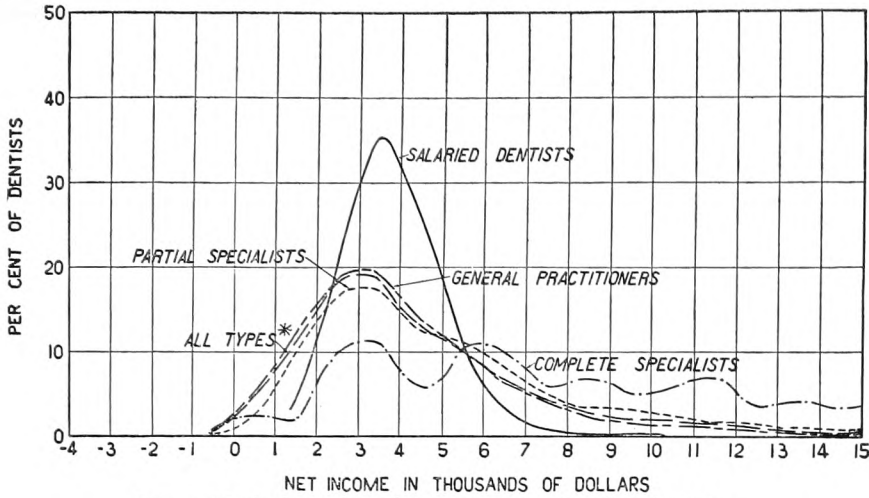


Fig. 9. Variation of net income among dentists in 1929.

to spend adequately for the services they need because they pay for medical care on a fee-for-service (i.e., pay-as-you-go) basis. The extent of unemployment among physicians is so large that even in 1929 the services which they rendered could have been supplied by little more than 50 per cent of those in active practice if each of these had had a reasonably complete quota of patients to provide full utilization of working time.

The private practice of nursing was in desperate economic straits even in 1928 and 1929. The supply of graduate nurses has increased rapidly, from 16 per 100,000 population in 1900 to 240 in 1929. These numbers are exclusive of 77,000 graduate and 80,000 student nurses in American hospitals and 150,000 untrained nurses. Employment for even the well-trained nurse is intermittent and income is inadequate even in "good times." Unemployment is increased by the graduation of approximately 25,000 students annually from the 2,000 hospitals which conduct nurses' training schools.

The present situation is unsatisfactory alike to nurses and patients. The graduate nurse finds private duty nursing

an overcrowded field, in which she cannot look forward to professional advancement or substantial increase of professional income. The patient objects to the high fees for nursing service (\$5.00 to \$8.00 per day) and goes without needed care which the unemployed nurse would gladly provide. An economic barrier stands between them. How shall they remove it?

VIII

The hospitals of the United States are facing a financial crisis which has been approaching for several years. Hospital capacity has been adequate for general care, although inadequate for patients afflicted with tuberculosis or mental disease. Although large numbers of people go without needed hospital care because they cannot afford it, general hospitals are on the average occupied to only 65 per cent of capacity.

The present demand for "free service" in both government and private nonprofit hospitals has emphasized the need for more adequate and more stable revenue. Of the \$656,000,000 spent annually for operating costs, approximately \$302,000,000 is paid by patients through the medium of fees, \$54,000,000 represents contributions and endowments, and about \$300,000,000 is derived from taxation. Most of the \$302,000,000 from fees is paid not by the 120 million potential patients but by the 5 million "pay" patients admitted to the nongovernment institutions for acute medical and surgical conditions. Most of the \$300,000,000 spent by governments is used to support hospitals for nervous and mental and tuberculosis cases, or the treatment of "indigent" patients requiring general medical or surgical care. Voluntary contributions have greatly declined. Endowment income, which reached its maximum with \$20,000,000 in 1929, shows little prospect of growth in the near future.

A crying need is the stabilization of hospital income and

the development of administrative arrangements whereby the economic barrier shall be removed from the path of the individual who needs hospital care, without, at the same time, placing an impossible burden of charity service upon the hospital. To recognize the difficulties which the costs of hospitalization entail for many families, it is important to carry in mind these facts: (1) though only one family in five receives hospital care, hospital costs are responsible for 13 per cent of all costs to the average family; (2) though the average hospital bill is about \$50, this is only 39 per cent of the average cost (\$140) of a hospitalized case when professional charges and other costs are added to the hospital bill. Illness which involves hospitalization, it will be recalled, is responsible for 50 per cent of all costs to families. Thus, even though the hospital's bill may of itself be moderate, it usually comes as one more bill in a series which may have been and may continue to be long. The hospital's bill is not uncommonly the proverbial last straw, especially since its payment must usually be made at once. This quality of hospital costs is of the essence in the problem of financing the hospitals of the country. We must think of hospital costs and the burdens they involve, not in terms of \$5.40 per person in the United States, but in terms of \$50.00 per average hospital patient or \$140.00 per average hospitalized case.

IX

If the degree of utilization of physicians, dentists, nurses, and hospitals is the measuring rod, one must conclude we have too many physicians, too many dentists, far too many nurses, and too many general hospital beds. But this conclusion is specious on at least two grounds. (1) The distribution of personnel and facilities follows the dollar, not the need. Where there is spendable wealth, there are physicians, dentists, and hospitals—usually in excess; where there is little

spendable money, there is a dearth. Our metropolitan areas are oversupplied; many rural areas are undersupplied. (2) The measuring rod—current rate of utilization—is one which modern society cannot accept. Acceptance would mean complacency with the forces which are responsible for the fact that people do not receive the medical care which they need.

If the supply of medical personnel and institutional facilities were adequate for the true need for medical care, we should need more physicians, far more dentists and dental assistants, more public health nurses, more private duty nurses, more hospital beds than we now have. This is evident in Table 6 where the personnel and facilities which were available in 1930 are compared with the estimated need.

Table 6. Personnel and facilities available and estimated number needed in the United States in 1930.

PERSONNEL AND FACILITIES	PER 100,000 POPULATION		FOR UNITED STATES	
	Number in 1930	Estimated Number Needed	Number in 1930	Estimated Number Needed
Physicians	126	142	144,000	173,848
Dentists (1928)	56	179 ¹ 99 ²	68,000	219,444 ¹ 121,081 ²
Public health and visiting nurses ³	16	44	18,800	54,032
Home and hospital nurses ⁴	99	176	118,000	216,128
Hospital beds:				
General ⁵	328 ⁶	462 ⁷	452,010 ⁶	566,833 ⁷
Mental	350 ⁶	558 ⁸	437,919 ⁶	685,740 ⁸
Tuberculosis	52 ⁶	138 ⁸	65,940 ⁶	169,427 ⁸
Total hospital beds	730 ⁶	1,158	955,869 ⁶	1,422,000

¹Calculated on the assumption that dentists work without technical assistants.

²Based on the assumption that X-ray and laboratory technicians and dental hygienists perform all but chair work. The total number of these subsidiary persons required would be 109,907.

³Including industrial nurses.

⁴Staff nurses in hospitals and sanatoria are included in this count.

⁵Includes in addition to general hospitals, maternity; industrial; convalescent and rest; isolation; children's; eye, ear, nose, and throat; orthopedic; skin and cancer; hospital departments of institutions; and all other hospitals, exclusive of nervous and mental and tuberculosis.

⁶Compiled from the American Medical Association Hospital Register, 1931.

⁷Assuming an occupancy of 300 days a year.

⁸Assuming an occupancy of 340 days a year.

I hasten to add, however, that this is no plea for hasty expansion of personnel or facilities. Until the public is educated to recognize the full need for—and the full value of—medical care, until the population is more generally able to pay for these services, increasing personnel and facilities would merely increase the so-called “normal” degree of unemployment among physicians, dentists, and nurses, and would increase the number of unoccupied hospital beds. Administrative and economic problems must first be solved before the receipt of medical care can be commensurate with true need and the demand for care justify a larger medical equipment for society.

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The primary objective of our consideration is to provide adequate medical care to the people as a whole. I have touched upon the increased personnel and facilities which this concept of adequacy entails. With pardonable temerity, we may face the question of the cost of adequate care. One of the detailed studies of the Committee on the Costs of Medical Care has provided quantitative estimates of what may be meant by “good medical care.” Applying 1928-1931 cost figures to these estimates—with due allowance for elimination of obvious wastes and with adjustment for the accumulated medical neglect of years—it appears that reasonably adequate medical care would cost approximately \$36 per person for the types of service ordinarily purchased by people privately. The largest single item in this total, \$10.70, is for dentistry; all other recommended services would cost about \$25.30 per person.

These estimates are independent of the form of organization of personnel and facilities. Other studies of the Committee on the Costs of Medical Care have shown that, with well-designed organization, large economies are possible in

providing medical service without sacrifice of quality and with larger and more stable financial returns for the professions. Assuming effective organization, the estimated costs can be reduced from \$36 to \$25-\$30 per person. In addition, the cost of good medical care would require, instead of what we now spend, about \$1.25 per person for the institutional care of the tuberculous, about \$2.85 per person for the institutional care of the mentally diseased, and about \$2.50 (instead of the present average of \$1.00) per person for public health activities. All told, good medical care calls for approximately \$32 to \$37 per person (we spend about \$30). How much of this should lie within the sphere of governments and how much should remain in the field of private purchase, may be disregarded for the present. The question is, can the people of the United States pay these costs?

The concept of adequate care and of its cost—as presented above—is an average. If people had to purchase most of it individually and privately, services and costs would be distributed in the same erratic and uneven way as prevails at present. The problem of paying the costs would be the same in kind but larger in degree than is the case for present-day practice. A close study of the point shows that the burden of costs would be great or too great for the 90 per cent of the families who in normal times have annual incomes below \$5,000.

If the costs were met by the entire population (or some substantial fraction of the total as a unit) and if all incomes were charged *pro rata*, the total cost of adequate care would constitute no serious burden for the country. If the cost were distributed on an insurance basis—i.e., each family were to pay an equal amount regardless of income—the burden would probably be large or too large for the 50 per cent of all families whose incomes are ordinarily under \$2,000.

If the costs of adequate dentistry are subtracted from the total and treated separately, it is probable that uniform, periodic payment of the costs for other care would not be burdensome for 85 to 90 per cent of the families. Adequate dentistry would still remain beyond the financial reach of 50 per cent of the families.

These considerations of ability to pay must be faced, remembering that the cost figures cited are in a sense minima. They have already assumed elimination of wastes through: (1) efficient organization and administration and reduction of overhead in professional practice; (2) reduction of excessive medication; (3) wise location and efficient operation of hospitals and clinics; (4) conservation of the funds wasted on incompetent practitioners (primary and secondary) and on cultists and quacks.

Among some groups it has become almost a pastime to lay the blame for the burden of medical costs on the drug-store and the cultists. Others frequently imply that most of our troubles would be over if these expenditures were eliminated and other recognized wastes were curtailed. We should not fall into the habit of taking these delusions too seriously. The obvious savings which are possible would amount to three-quarters of a billion dollars a year, or 20 per cent of the total bill in a normal year. But to effect savings of these kinds would, in the best of circumstances, be a slow, difficult, and arduous task, for spending habits are deeply rooted and ignorance is not easily overcome. Even granting that these savings were effected, the facts in the case point conclusively that the major problems of medical costs would still wait on other solutions.

At this point I should like to offer one suggestion. In principle it is obviously desirable that any plan designed to equalize costs should also discourage waste. Experience in

many places has shown that it is possible to combine these two desirable objectives. I would go further. I know of no successful going organization which equalizes costs whose success does not in greater or lesser measure depend upon the fact that it reduces wastes and familiarizes the beneficiaries with the path to authorized medical agencies. By comparison with what has been and is easily accomplished in the reduction of wastes through organized medical agencies operating under insurance plans, reduction in wastes by educational measures alone is costly and ineffective. Economy and efficiency tie reduction of costs and elimination of wastes to equalization of costs.

XI

To recapitulate: 1. The cost of medical care in a normal year of recent times consumes 4 per cent of national income. The cost of medical care purchased privately consumes 4 per cent of family income.

2. If the costs were equably spread over the entire national income, they would involve no considerable burden.

3. The essential problem in costs for the individual family is their uneven, uncertain, and unbudgetable size, for the individual family bill ranges from 0 to more than 100 per cent of annual income.

4. The care received by the people is inadequate in amount and is at many points and in many cases measurably below professional standards of good quality.

5. The incomes of practitioners are not, on the whole, excessive and for large fractions are not even adequate.

6. Unrestricted specialization, uncoordinated establishment of facilities, and uneconomical distribution of personnel and institutions are responsible for extensive wastes, overcrowding in some places and undersupply in others.

7. The prevailing fee-for-service tradition is chiefly respon-

sible for many of the real and apparent burdens of medical costs to the family, and for the expenditure of smaller sums than the need for care requires and the means of the people permits. By the same token, the fee-for-service basis is also principally responsible for inadequate financial support of practitioners and institutions.

8. Adequate medical care is within the nation's means if the costs are met on a national basis. This assumes distribution of the costs over all people and according to their means. Next to this, distribution of costs on an insurance basis brings the costs nearly within the means, but still leaves burdens even if fixed insurance payments are smaller in the classes with low incomes and are larger in the classes with high incomes. On an individual basis, adequate medical care is a luxury beyond the means of a large proportion of the people.

The analysis of ability to pay has tacitly or explicitly assumed the economies and the professional advantages which accrue from such efficient organization and operation of practitioners and agencies as experience in certain well-conducted medical services has shown to be possible.

All of you are aware that in the United States there is a ferment at work, in experimentation with means of distributing the costs of medical care and with ways of coordinating and integrating the provision of medical service and reducing its costs. Many of the experiments have served effectively and efficiently to solve (in part or in whole) the problems of medical costs for groups of people and for localities. Others, though working towards these ends, have introduced new problems and even new evils. But these in turn must be solved by careful study and administrative revisions, not by discontinuance of the experiments.