

**MEDICAL CARE POLICY:  
A DOSE OF COMPETITION**

**FOOTING THE  
MEDICAL CARE BILL**

**THREE-TIER THERAPY**

**THE FED IN PRINT**



**SEPTEMBER 1971**

**FEDERAL RESERVE BANK**

**BUSINESS REVIEW**

**OF PHILADELPHIA**

### IN THIS ISSUE

Providing the medical care society deems essential is no easy task. Policymakers must come to grips with the problems of steadily rising costs, uneven access to facilities, and providing care for the poor. This issue attempts to bring some of these problems into focus and suggests alternative directions policy might take.

#### **Medical Care Policy: A Dose of Competition**

. . . Harnessing market forces to the medical care industry may prove a potent antidote to its current afflictions.

#### **Footing the Medical Care Bill**

. . . Who ultimately pays for rising medical outlays?

#### **Three-Tier Therapy**

. . . Distribution of medical facilities in the District suggests a major restructuring of the medical care delivery system might result in substantial medical gains.

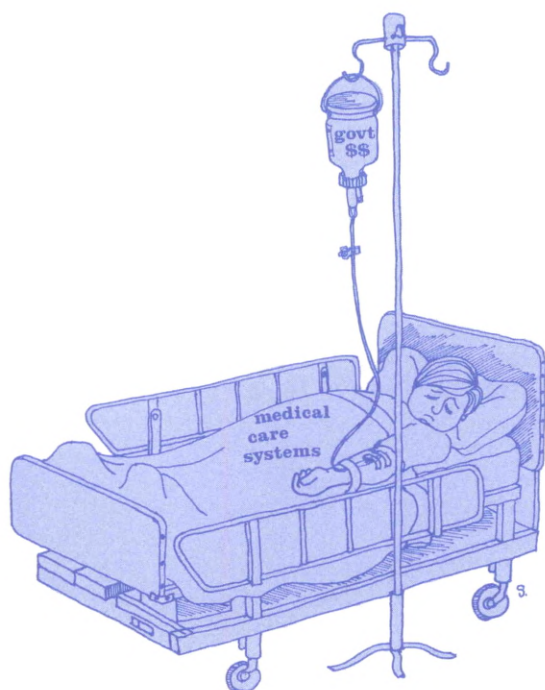
---

**BUSINESS REVIEW** is produced in the Department of Research. Ronald B. Williams is Art Director. The authors will be glad to receive comments on their articles.

Requests for additional copies should be addressed to Public Information, Federal Reserve Bank of Philadelphia, Philadelphia, Pennsylvania 19101.

## Medical Care Policy: A Dose of Competition

by W. Lee Hoskins



Although doctors long ago abandoned the practice of bloodletting, Americans claim they are still being bled by the medical sector — through their wallets. As the cost of getting ill continues to rise at an unprecedented rate, the cry that Government bind the wound has reached new decibel levels. Thus, Congress is currently sifting through a host of palliatives designed to provide medical care on the basis of “need” rather than ability to pay (see box).

Government programs that attempt to achieve this goal by simply injecting massive doses of dollars into the veins of the existing medical care systems may be, at best, inefficient, and, at worst, self-defeating. The underlying issue at stake is the ability of the medical care industry as it currently operates to deliver the increased level of services that may be demanded under Government-financed programs or insurance. Success in achieving more or better medical care for every American and the cost to society will depend crucially upon the impact of the program selected on the organization of the medical care delivery system.



## MAJOR CONGRESSIONAL PROPOSALS FOR A HEALTHIER NATION

### **Human Security Program**

A national health insurance plan financed partly from Social Security taxes and partly from general revenues, the Human Security Program would insure all citizens comprehensive health care by 1973. The plan would require no minimum fees or deductibles, and the benefits would run the gamut from preventive care to home nursing care. Cost estimates range anywhere from \$53 billion to \$60 billion by 1974. Employees would pay a 1 per cent payroll tax on their income up to \$15,000 annually, and a 3.5 per cent tax would be levied on employers. The Federal Government would match the employers' portion from general revenues. The Government would finance and administer the program, but services would still be provided by the private sector.

### **Medicredit**

A program of income tax credit for private health insurance, Medicredit would be based on the individual's tax liability. The program could provide tax credit anywhere from 0 to 100 per cent, thereby virtually guaranteeing health care which is free to the poor and paid by the Federal Government. Under this plan, the Medicare program would not be altered, but the Medicaid program would be eliminated. Private insurance plans would have to meet certain standards to qualify for the program, and individuals (except the poor) would have to pay deductibles. The cost to the Federal Government is estimated at \$4.5 billion.

### **National Health Insurance and Health Services Improvement Act**

This plan encompasses a program of health care for the entire population similar to the present program for the elderly, but with coverage provided by private carriers. Contributions of .7 per cent each would be made by both employers and employees, with a matching contribution by the Federal Government of .7 per cent. In 1973, this percentage would increase to 2 per cent for all and 3 per cent by 1975. Subscribers would be entitled to 90 days' hospital care, post-hospital care, all physician-related services, with appropriate deductibles and co-insurance. As in the Human Security Program, these taxes would be levied only upon the first \$15,000 of earnings of employees and on the total payroll of employers. The estimated cost to the Federal Government by 1975 is \$68.1 billion.

Individuals can avoid the Government plan by purchasing an approved private health insurance plan. The contribution of the poor would be assumed by the Federal Government.

### **Administration's Health Plan**

(1) The main thrust of this plan is passage of the National Insurance Standards Act, which requires employers to provide their employees with insurance covering up to \$50,000 of medical expenses for each worker and each family member. Effective in 1973, employers would initially assume 65 per cent of the insurance cost, increasing to 75 per cent by 1976. Employers' payments would be tax deductible. Beneficiaries would be required to pay 25 percent of the costs up to



\$5,000, plus certain other deductibles. The plan would pay the remaining full costs of care from \$5,000 to \$50,000.

(2) The second focus would be on the Family Health Insurance Program for low-income families, which would replace a portion of the existing Federal-state Medicaid program. The maximum eligibility ceiling would be \$5,000 for a family of four. Families of four with income below \$3,000 would have their medical costs completely assumed by the Federal Government. Families with incomes between \$3,000 and \$5,000 would have to make individual contributions on a graduated scale for items like deductibles.

(3) Premiums paid by the elderly for doctor-bill coverage under Medicare's Part B would be financed through Social Security payroll taxes. This would force a rise in the Social Security wage base to \$9,800 a year. (It currently is \$7,800.)

(4) The development of health maintenance programs — groups of doctors furnishing prepaid health care with emphasis on service outside of the hospital — would be given impetus. An estimated \$45 million, an increase of \$43 million, will be sought for this. Both of the above programs must offer their beneficiaries the option of receiving care from these health maintenance organizations. These programs would be the key step to reorganizing the health care delivery system.

(5) The program also seeks to promote the formation of more family health centers in the urban ghettos and to instigate a HEW commission to study the rising cost of malpractice insurance.

(6) Increased grants to medical schools will be given, the size of which will be determined by the number of graduating students. Also grants to students from low-income families would be increased.

The overall plan calls for \$80 million in additional appropriations in the fiscal year beginning July 1.

### **National Health Care Act**

The National Health Care Act proposes a program of health insurance which would be jointly financed by private payments, tax deductions, and the Government. State-assigned risk pools would cover the poor. Services provided include physicians' service and visits, nursing-home care, and some dental care. Cost to the Federal Government for the first year is estimated to be \$3.3 billion.

## **MEDICAL CARE AND SCARCITY**

Health policymakers are faced with an indomitable fact of life that has marked man's trek through time — scarcity. There are, and always have been, an unlimited number of competing uses to which man can devote his limited resources. Hence, even the wealthiest of nations cannot have all it wants of everything. Choices must be made. The problem of obtaining more or better medical care is painful testimony to

this pervasive and inescapable fact. Society simply does not have the resources to take all known steps to prevent or cure illness and postpone death while continuing to meet the claims of housing, food, and pursuit of "the good life." Moreover, classifying particular economic goods such as housing, food, or medical care as "needs" does not alter the fact that the world in which we live is one of too few resources relative to our desires.

"Needs" are not readily observable abso-



lutes, nor are they costless to satisfy. Consequently, the problem society faces is to determine the *level* of medical "needs" or wants it is willing to pay for. In other words, what are we willing to give up for more or better medical care? To say we are willing to supply all that is "needed," while laudable, is misleading. At some point, society will find that additional resources are more valuable in other areas, such as poverty or education programs, than in medical care. Further complicating the issue is how best to use those resources that are devoted to medical care. For example, more resources placed in hospital capacity mean less available for out-patient care, drugs, dental services, or training of doctors. Hence, some difficult decisions or choices must be made as to not only the amount of resources devoted to medical care, but also how they are to be employed. Scarcity is a tough and unfeeling taskmaster.

Yet, the problem posed by scarcity is effectively dealt with daily in most areas of our economy. Why does it seem to reach crisis proportion in the medical sector? An important part of the answer can be found in the crippling of the market system usually employed to resolve scarcity difficulties.

**The Crippled Hand.** The U. S. economy relies primarily on private incentives and consumer wants expressed through competitive market forces to settle problems posed by a world of too few resources. The underlying notion behind this form of economic organization is simply that individuals in their role as consumers and producers, by attempting to make themselves better off, end up putting their *privately* owned resources to uses most highly valued by *society* as a whole. That is, resources automatically would be put to socially desirable uses and in the appropriate amounts. This notion works surprisingly well in a market-oriented economy when markets are open to all comers and are allowed to respond to competitive forces. All the information and incentives needed to make the system work

are guided by the "invisible hand" of the market.<sup>1</sup>

The medical care system, for the most part, is shielded from this process, and market forces are severely crippled. Despite the fact that about 60 per cent of the funds paid out for health and medical care are private expenditures made in a market situation, the market signals yielded are confused and often go unheeded. Little *information* is generated on the most economically productive combination of medical resources (doctors, nurses, and hospitals). For example, since neither doctors nor hospitals openly compete on price, charges vary for similar services. Among other things, this lack of competition hides information about the most efficient methods, hospitals, and doctors.

<sup>1</sup> The process works this way. Competitive prices are signals which direct the flow of resources to uses most highly valued by society as a whole. And consumers play the dominant role in determining which uses are most highly valued by bidding up the prices of goods they prefer more of relative to those they prefer less of. As a result, relative market prices reflect the taste and desires, or *values*, consumers attach to having additional units of each good. This information about society's tastes and desires is essential, for it tells producers where to direct resources.

Profit-seeking producers are important cogs in the workings of the system. Noticing a change in relative market prices (or anticipating one), a sharp-eyed producer bids resources away from the lower valued uses and directs them to the production of goods and services for which consumers have expressed a desire (or can be expected to desire). His incentive to do this is an increase in wealth. But, as production expands, a point will be reached where the additional resources are going to cost the producer more than they can add to his return. He will stop producing goods which use these resources before that point is reached, if he is interested in achieving the largest return possible. This return will be kept to a minimum by competition (or the threat of it) from other producers. Hence, market prices provide producers with both the necessary information and incentive to insure that resources flow to uses most highly valued by society. And, as a consequence, any rearrangement of society's output would leave it worse off, providing that the current distribution of wealth is acceptable, competitive markets prevail, and that individuals bear the consequences of their actions.



Moreover, much of the *incentive* for efficiently combining these resources is weak or nonexistent. Hospitals are rarely "for-profit" institutions, which means they may lack the incentive to respond to a profitable situation, such as demands by consumers in a particular area for more hospital beds. In addition, hospitals are rarely selected on the basis of costs by a patient, since he is usually hospitalized where his doctor is affiliated. And last, an individual covered by some form of third-party payment (private health insurance or government program) has little incentive to shop for price among doctors and hospitals since the insurer is paying the bill.

**Treating the Poor.** Further complicating the problem of dealing with scarcity is the issue of the poor. Even if the medical care delivery system functioned as a competitive market, a family's income would still be crucial in determining the amount and quality of care received. Since the rewards in a free-enterprise system are unevenly distributed among individuals, some people may lack the funds to purchase the level of care (either through insurance or from out-of-pocket expenditures) that society deems they ought to have. And as medical costs continue to soar (see "Footing the Medical Care Bill" in this issue), this problem is exacerbated. Hence, some means of insuring that the poorer members of society (or those with large medical bills relative to their incomes) receive this level of care is required.

## THE FIRST ATTEMPT

The Federal Government's first large-scale attempt to cope with the medical care dilemma took the form of the Medicaid and Medicare programs. Medicare and Medicaid are aimed respectively at the old, whose medical demands are large, and at low-income members of society. Since 1966, these two programs have injected billions of dollars into the medical system each year. Yet, the hue and cry about "inadequate" care

continues, in part because these programs did nothing to improve the organization and operation of the medical system. Moreover, these national programs suffer from an underlying flaw which could easily lead to a deterioration in the care they attempt to provide.

**Some Side Effects.** The Medicare and Medicaid programs were simply grafted on to the existing medical care delivery system. These programs did nothing to reorganize or improve the efficiency of that system, while at the same time, they expanded the demands placed on it.<sup>2</sup> As a result, many observers have placed a good portion of the blame for the recent rapid rise in medical costs on the doorstep of the Medicare-Medicaid programs.

People making use of these programs are clearly benefitting. However, the fate of others is less certain. To the extent that the jump in medical prices is caused by Medicare and Medicaid, people outside these programs must pay more than they would had there been no Government program. These people may seek less or lower quality medical care. In addition, in areas where hospital beds are relatively scarce, a larger proportion of hospital care goes to those covered under Medicare than goes to the rest of the population. Hence, the young may receive less hospital care in these areas than they would if there had been no such programs.<sup>3</sup> Nor have the increased expendi-

<sup>2</sup> There is evidence that both the quality and quantity of hospital care demanded because of these programs has increased. Since the inception of these programs, there has been a doubling in the rate of increase in real inputs per patient-day, which indicates people choose higher quality service when hospital bills are paid for them. See J. P. Newhouse and V. Taylor, "The Insurance Subsidy in Hospital Insurance," *Journal of Business* (October, 1970), p. 453. In addition, the hospital admission rate per 1,000 people covered under Medicare alone has risen 8.5 per cent over the past four years.

<sup>3</sup> M. S. Feldstein, "Econometric Model of the Medical System," *Quarterly Journal of Economics* (February, 1971), p. 9.

tures noticeably made access to care any easier for those in ghetto and rural areas where medical services are hard to come by.

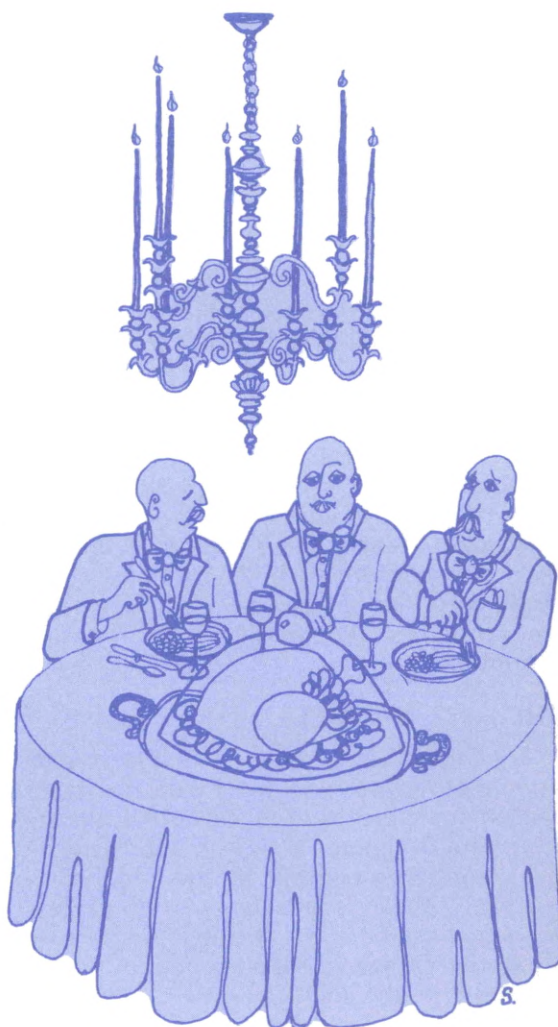
**The Split Decision.** Perhaps even more disturbing is the fact that these national programs suffer from an underlying flaw. The decision about how much care people want or demand is separated from the decision on the amount to be supplied or financed through the programs.

Supply and demand decisions pose a problem if they are split up because individuals behave differently when making choice decisions through *groups* (governments) than when making *private* decisions.<sup>4</sup> For example, if a national health program or insurance scheme is financed through Government, as the Medicare-Medicaid programs are, an individual citizen is involved in a "group" choice on the amount of medical services to finance through Government. Higher levels of medical care then imply higher taxes for individuals. The gains (more or better medical care) are weighed against the costs (higher taxes) by the individual through his Congressional Representative and a *specific* level of care is set for a *specific* dollar amount in taxes. Medical care on the supply side is in no sense "free."

But if the decision on the demand side to use medical care is an individual one where a good deal of care is offered "free" (or at nominal charges) after joining the program, then individuals would attempt to obtain more or better quality medical care than they indicated they were willing to pay for through the group or Government decision. This behavior is perfectly consistent. Even under a Government program, the amount or quality of medical care people actually seek is a private decision or choice. They weigh the added benefits from more

service against the added cost. But since the added cost is essentially zero or minimal *to them* once they have joined the program, people seek more or better quality medical care than they would if each had to pay for it out of his own pocket.

A simple analogy would be a luncheon in which a group of people agree to split the bill. Each person has an incentive to order a more expensive lunch than the next fellow, since everyone in the group will bear part



<sup>4</sup> For the development and analysis of this problem in Britain's National Health Service, see J. M. Buchanan, "The Inconsistencies of the National Health Service," Occasional Paper 7 (Institute of Economic Affairs, Ltd., Great Britain, 1964), pp. 3-23.



of the added cost. As a result, the total bill is likely to be larger than if each had agreed to pay for his own lunch separately.

It could be argued that a lower price or cost of "needed" care will not induce an individual to purchase more of it. It is certainly true that for some types of medical care, price will have little effect on the *amount* people seek. It is doubtful that a lower price would have much influence on the number of broken limbs repaired or slashed arteries stitched. But it may have a considerable impact on whether the more expensive hospitals or doctors are selected. Thus, for medical care as a whole, price or cost does have an impact on the amount and quality sought. People want ("need") more or better medical care when the price to them is lower.

The outcome of splitting the supply and demand decision is that the actual Government expenditures run far in excess of the planned amounts. (In 1969, actual Federal expenditures for Medicaid alone were 50 per cent greater than the estimated cost.) At some point the group decisionmakers — Congress — will try to limit the overruns, since they imply even higher taxes. The first attempt to do so under the Medicare-Medicaid programs took the form of tighter administrative controls. Now there is a proposal under consideration by Congress to extend these controls to doctors' fees, limiting increases to the rate of increase in Social Security benefits. The likely outcome of such controls would be a breakdown in the quality of service.<sup>5</sup> Doctors may refuse to treat patients covered under Government programs or give less time to them. A simi-

lar result may occur if hospital charges are also directly controlled.

## NEW DIRECTIONS

The experience with Medicare and Medicaid suggests that new medical or health care proposals must prescribe something more potent than dollar injections if efficiency and "adequate" care for all are to be achieved. Two problems must be faced. First, the financial mechanism or "insurance" scheme designed to make medical care available to the poor (or any other group) must get around the problem of the split decision. Second, some provision must be made for insuring greater efficiency in the operation of the medical care delivery system or market.

**Financing Medical Care.** One way to skirt the problem of the split decision associated with national health plans is to have Government make both the supply and demand decision for a *portion* of medical care. Government could choose the total amount it wishes to finance (a supply decision) and hand out "health vouchers" totaling to that amount (a demand decision) to the poor. There would be no cost overruns, hence, no incentive to curtail or control services. The size of the voucher, of course, could differ over location, age, and income group. Additional medical care (or insurance for additional care) would then be a *private* choice on *both* the demand and supply sides.

Moreover, there are a number of ways to couple a voucher scheme with insurance programs to induce people to seek out the lower cost producers of medical care. One method would be to set the voucher equal to the cost of an "acceptable" benefits plan, based on *average* hospital charges. Next, allow the vouchers to be "cashed" only with insurance companies that rank hospitals according to expense. Let the voucher holder choose how expensive a hospital he will use in case of illness. Those who select hospitals classed above the average in charges would have to pay something over and above their

<sup>5</sup> The British experience demonstrates this point. In 1965, over 70 per cent of Britain's family doctors threatened to resign pending the outcome of negotiations with the Minister of Health. Hospitals were crowded, and there were lengthy delays in obtaining treatment, except in emergency cases. Moreover, the number of new entrants to the medical profession became fewer, while British doctors continued to emigrate (Buchanan, *op. cit.*).



voucher for the insurance. However, people choosing hospitals classed below average in charges could apply the unused portion of their voucher to dental care or optician services. (A cash refund might provide even greater incentive to seek the lower cost facilities.) Unlike current medical insurance programs, either public or private, this plan provides some built-in incentive to seek the lower cost hospitals.<sup>6</sup> "Deductibles" and "coinsurance" features, which tend to make people cost-conscious when purchasing medical care, can also be woven into a voucher or subsidy plan.

While this type of voucher or subsidy system would help those covered, it is not likely to lead to any basic changes in the organization of the medical care delivery system. Yet it is the organization and operation of the medical care system that play an important part in determining how much of a subsidy or voucher is required to achieve a particular level of medical care.

#### **Towards a More Competitive System.**

There are several ways to reorganize or coordinate medical care delivery in order to serve the consumer better and keep cost under control. One method would entail a streamlining of the present system by medical planners. (For a discussion of one such systemized approach, see "Three-Tier Therapy" by Cynthia Elinoff in this issue.) An alternative approach would rely on increasing competitive forces to tailor medical care delivery. It may be the case that a combina-

tion of these two methods may serve us best.

One method of bringing the cutting edge of competition to bear more heavily on the operation and organization of the medical care system is to adopt measures which permit and encourage "for-profit" institutions or corporations. While such measures may not be workable under all circumstances because of the nature of the product and its relationship to human life, maximal extension of market forces would further the goal of a more efficient health care delivery system.

The seeds for bringing medicine to the marketplace are already planted — prepaid group practice plans.<sup>7</sup> Prepaid group plans differ from ordinary health insurance in that they provide the hospitals, doctors, and laboratory services for a fixed yearly fee (which is paid monthly) rather than simply paying the bills when certain types of sickness or injury occurs. More importantly, these plans have a vested interest in keeping you healthy rather than just paying your bills. The healthier a member is, the less he will use the facilities, hence, the smaller the cost to the organization.

The organization takes on the responsibility of *insuring* medical care for members and suffers the consequences of failing to keep members healthy. Doctors are paid salaries and are provided with monetary incentives to use the facilities and treatment techniques efficiently. If revenues are more than costs at year's end, they can receive a bonus. Moreover, they spend all their time practicing medicine rather than engaging in billing, worrying about patient's financial status, gearing treatment to fit the type of insurance coverage he has, and hiring and supervising office personnel. There is no incentive for needless surgery or medication, since doctors are paid salaries. Moreover, such organizations have built-in incen-

<sup>6</sup> A number of other variations on this scheme can be employed. For example, the voucher could be used just for catastrophic illness or injury insurance which would come into effect after some amount, say 10 per cent of a family's income, is spent for medical care. For development of these plans and others, see J. P. Newhouse and V. Taylor, "How Shall We Pay for Hospital Care?" *Public Interest* (Spring, 1971), pp. 78-92; M. S. Feldstein, "A New Approach to National Health Insurance," *Public Interest* (Spring, 1971), pp. 93-105; R. Eilers, "Postpayment Medical Expense Coverage: A Proposed Salvation for Insured and Insurer," *Medical Care* (May-June, 1969), pp. 191-208.

<sup>7</sup> The Kaiser Foundation Plan in California and the Health Insurance Plan of Greater New York are the two most well-known prepaid group practices.



tives to uncover and fire incompetent doctors, since they can serve only to raise costs.<sup>8</sup>

Prepaid group plans are just one form of medical service organization that could develop in a more competitive atmosphere. It takes little imagination to visualize the many forms this model for reform might take, if given the chance. Large corporations, with stockholders to undertake the risk, might develop in the medical care field. These organizations could easily extend the program on a nationwide scale, providing insurance, doctors, hospitals, and laboratory service for its members any place in the nation or world.

The competition between several of these "medical corporations" in addition to that from doctors in private practice and independent hospitals would keep continual downward pressure on costs and lead to attempts to extend services to more people. One method of obtaining more customers is advertising. And advertising can benefit the consumers since it often is an important source of information for comparing price and quality — information that is sadly lacking in today's medical system.

The advantage of a competitive marketplace is not that a particular type or form of organization will develop but, rather, that it generates the information and incentive for altering organizations to meet the changing demands of society. The forces of a competitive marketplace are wedded to flexibility and variety, rather than to a particular structure.

Moreover, there is nothing inherently immutable about the existing organization of the medical system. Other "necessities" of life, such as food, clothing, and shelter, are provided by profit-motivated enterprise in a competitive environment. Finally, much of

the impetus for a national health scheme comes from Government's desire to finance medical expenditures for those too poor to do so. Achievement of this goal through an appropriate national insurance or financing program would remove a major objection to a competitive marketplace for medical care.

But if a more competitive medical system is to thrive, many of the laws and practices which thwart its development must be eliminated. There are currently 22 states which prohibit or greatly limit the role of prepayment group practice organizations. And at least one state legislature is considering a proposal to outlaw proprietary or "for-profit" hospitals. Moreover, restrictive licensing practices can prevent doctors from delegating many tasks to competent assistants. This delegation would enable doctors to organize and deliver medical care more efficiently. In addition, current licensing procedures give professional medical societies the power to discipline doctors who introduce more competitive methods, such as advertising and price cutting, into their practices and to control entry into the profession. Some believe tight control over entry to the profession is responsible for the "doctor shortage" and is the most important area for reform.<sup>9</sup> Eliminating these

<sup>8</sup> For a comprehensive discussion of prepaid group practice plans, see E. K. Faltermayer, "Better Care at Less Cost Without Miracles," *Fortune* (January, 1970), p. 80f.

<sup>9</sup> In concern over the quality of medical care, almost every state government requires prospective practitioners to obtain a license. State medical examining boards set the requirements for a license. These requirements are practically the same as those of the American Medical Association, which through its affiliated local medical societies plays a large role in the selection of the state examining boards. In effect, government has given the medical profession power to set standards and police the actions of its members. This power also extends to medical school training standards, since in most states a condition for obtaining a license is graduation from an "approved" (by the American Medical Association) medical school. Moreover, actions by doctors such as advertising, openly competing on prices, and organizing prepayment group practice plans can be, and have been, restricted in the name of quality control. While this power might be used to raise the quality of doctors, it can also be employed as a device to raise or protect incomes of existing practitioners by restricting

legal obstacles to competition in the medical industry would be a step in the direction of increased efficiency in the organization and operation of the system. An efficient system would mean more or better care without increased expenditures.

### MORE "HEALTH" PER DOLLAR

Improving the efficiency of the medical care system is not sought for its own sake. The more efficiently this industry is organized, the better it would serve the sick. Greater efficiency also implies more resources available for helping the poor obtain medical care. Perhaps even more im-

portant over the long haul would be the resources released for preventing or reducing the incidences of those very ills that confound doctors and doctoring and account for so much sickness and death in America — heart and kidney disease, alcohol and drug abuse, and cancer.

With all the demands on the consumer's dollar for better housing, education, nutrition, and safety programs (all of which may have substantial health benefits), policy-makers must take a long, hard look at alternative ways of achieving a healthier society if they are interested in getting the most "health" per dollar spent.

entry to the profession and policing actions of recalcitrant members.

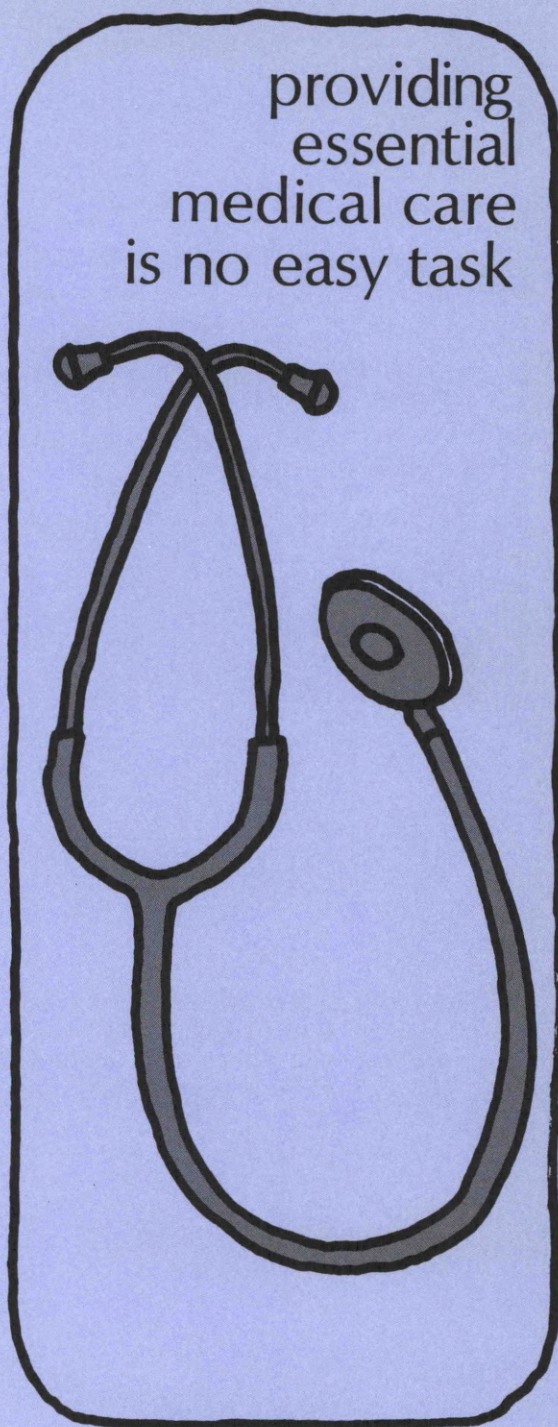
These actions, to the extent that they are employed, tend to reduce the effectiveness of market forces in allocating medical resources. Nor is it clear that they insure high-quality care. Licensure only indicates a man's competence at the time he takes the examination and tells little about his competence a quarter century later. Moreover, it may limit the number of practitioners available, which means some people may do without medical care, take home remedies, or seek advice of untrained people. Any relevant measure of medical care quality ought to include the impact of any reduction in the amount of care for the society as a whole. If licensure does improve the quality of medical care, it does so only for those who have access to the care.

One way around the problem posed by licensure is certification. Universities certify a level of quality when they grant doctorates, masters, and bachelors degrees to physicists, chemists, engineers, and others in

professional and scientific groups. And some members of these groups do deal with life-and-death situations. Astronauts trust their lives with the engineers and physicists that send them millions of miles into space. Other unlicensed scientific personnel insure the food and water we consume will not kill us. The threat of law suits and competitive pressure from rival firms tends to eliminate potentially dangerous incompetents from responsible positions. For discussions of how the American Medical Association exerts its control and monopoly returns in medicine, see M. Friedman, *Capitalism and Freedom* (Chicago: University of Chicago Press, 1963), pp. 149-160; M. Friedman and S. Kuznets, *Income from Independent Professional Practice* (New York: National Bureau of Economic Research, 1945); R. Kessel, "AMA and the Supply of Physicians," *Law and Contemporary Problems* (Spring, 1970), pp. 267-283. Elton Rayack, *Professional Power and American Medicine* (New York: World Publishing Company, 1967). ■



providing  
essential  
medical care  
is no easy task

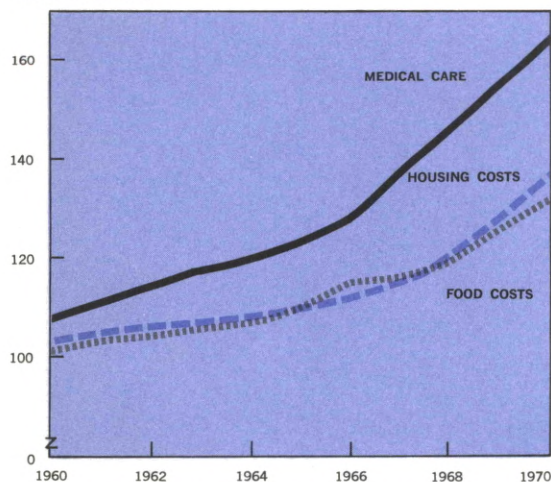




# Footing the Medical Care Bill

## WHILE ALL MEDICAL PRICES HAVE RISEN . . .

Index (1957-59=100)



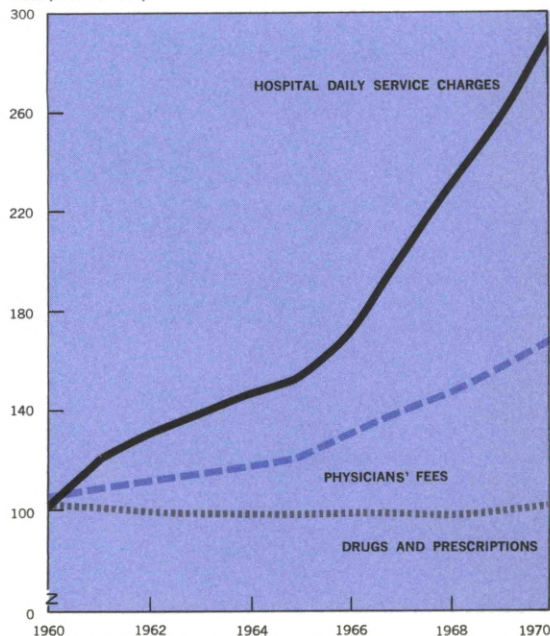
Source: U.S. Department of Labor, Bureau of Labor Statistics.

Hospital charges have tripled since 1960, while physicians' fees have jumped nearly 40 percent. The most stable component of medical costs has been drugs and prescriptions.

Although inflation has become commonplace for consumers in recent years, the rise in the cost of medical care has far outpaced the hike in cost of most other goods. For instance, over the past decade, medical costs have increased nearly twice as fast as the prices of two of life's other necessities — food and housing.

## THE COST OF A DAY IN THE HOSPITAL HAS ZOOMED.

Index (1957-59=100)

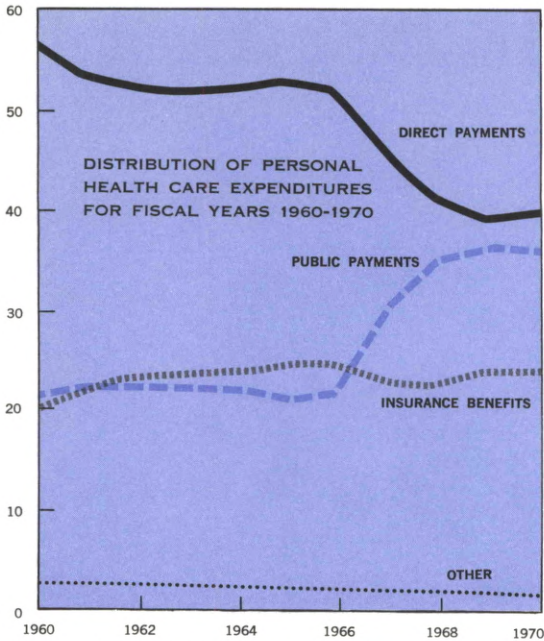


Source: U.S. Department of Labor, Bureau of Labor Statistics.



# GOVERNMENT HAS SHOULDERED MORE OF THE MEDICAL CARE COSTS . . .

Per Cent of Total Expenditures



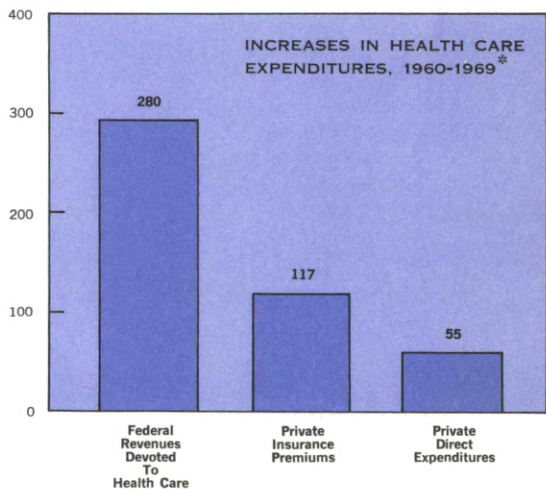
Source: U.S. Department of Health, Education, and Welfare, Social Security Administration.

Because the Federal Government has accepted much of the responsibility for financing these large increases in medical costs, ultimately, it is the taxpayer who pays the bill. Since Government expenditures are financed principally by tax dollars, any increase in these expenditures means additional taxes or a sacrifice of other Government programs. Hence, while direct personal outlays in the form of out-of-pocket expenses and insurance premiums have increased 55 per cent and 117 per cent respectively, indirect payments by individuals through taxes have leaped 280 per cent since 1960. It is apparent, therefore, that the individual still pays dearly for the costs of health care. And it is primarily for this reason the nation's health care system has been subject to increasing scrutiny and criticism.

Although private and public payments have all increased in absolute terms, payments by Federal and State Governments have taken a tremendous jump. Since the introduction of Medicare and Medicaid in fiscal 1966, public payments pushed their share of total payments to an all-time high of 35 per cent. Direct payments from consumers dropped from 52 per cent to under 40 per cent of total payments in this same period, while the share paid by private insurance benefits registered little change.

## CAUSING THE TAXPAYER'S BURDEN FOR HEALTH CARE TO INCREASE 280 PER CENT.

Per Cent



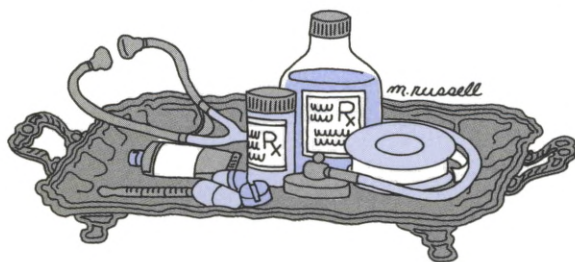
\*Percentage increases in expenditures for health care from fiscal 1960 to 1969, current dollars. Yearly figures for private insurance premiums adjusted to fiscal years.

Source: Health Insurance Association of America; Department of Health, Education, and Welfare, Social Security Administration.

## Three-Tier Therapy

by Cynthia A. Elinoff

Medicare and Medicaid, the first attempts by the Government to aid the old and the needy to achieve better medical care, were manifestations of an attitude among many Americans that some minimum level of health care is a right rather than a privilege.



As this attitude spreads, and the cost of medical care continues its upward climb, a large portion of the public is beginning to expect the Government to articulate some program which would make basic medical services available to all people, regardless of income level, age, location, or any other

characteristic. If such a Government program were implemented, it is likely that lower or middle income families would seek—and seek more often<sup>1</sup>—the types of medical care they avoided before because of the prohibitive cost.

Whether such government programs would result in real and significant increases in health care is not yet clear. To register real gains, manpower and facilities must become more efficient and adapt to the new pressures facing them. This expanding demand for health care, coupled with increasing private demand, is already straining the aggregate capacity of hospitals and medical personnel, and exposing imbalances in the

<sup>1</sup> Many Government programs would be prepaid plans, whose introduction would also amplify demand for medical services. When people prepay a set annual fee for all medical services, they tend to make greater use of medical services than if they paid for each service individually.



location and the tools of the medical care industry.<sup>2</sup>

Hospitals — the centers of community health services — are feeling a particular strain upon existing facilities and consequently are under great pressure to expand and smooth the distribution of their services. If this burgeoning demand is to be met head on, medical planners urge movement toward a systemized approach in which hospitals are made accessible to the population and have the facilities to provide adequate service efficiently.

The Third District is not exempt from these nationwide pressures. An examination of the problems of the distribution of health facilities in this region — the hospitals and the services they provide — points up some benefits that might be gained from reorganizing health care delivery.

## HOW AVAILABLE IS HOSPITAL CARE?

At first glance, the Third District appears to be well-endowed with hospitals. The region contains just over 300 hospitals<sup>3</sup>, two-thirds of which are general hospitals offering a wide scope of services. Overall, the number of medical facilities in both urban and rural regions in the District corresponds to typical levels throughout the nation. One

rough measure of the provision of hospital facilities in an area is the ratio of population to the number of hospital beds. Generally, the District's population-to-bed ratio is on par with the national average — around 254 persons per bed.

**Looking Deeper.** However, there are substantial differences among parts of the District. While the District's endowment of hospitals is in line with national averages, several areas — Lancaster, Reading, Allentown-Bethlehem-Easton, and the southeastern rural area (including counties in New Jersey and Delaware) — have a lean supply of hospitals (see Map 1). Even more striking, there are actually six counties with no hospitals at all.<sup>4</sup> People in these counties rely solely upon the neighboring areas for their hospital care.

Why this lack of hospital facilities in certain areas? Population and income provide the keys. The absence of sufficient demand in a sparsely populated county makes the construction of a hospital economically infeasible. Likewise, poor regions cannot shoulder the cost of maintaining a hospital.<sup>5</sup> Five of the six counties without any hospital have per capita incomes in the lowest third of the District. The other county, Cameron, is a relatively wealthy area, but has the second fewest number of people of any county in the District.

Of course, there are alternatives to hospital care; the primary option is a well-equipped doctor's office. But in the rural areas, the availability of doctors seems to be even more of a problem than the supply of hospital beds. As we can see in Map 2,

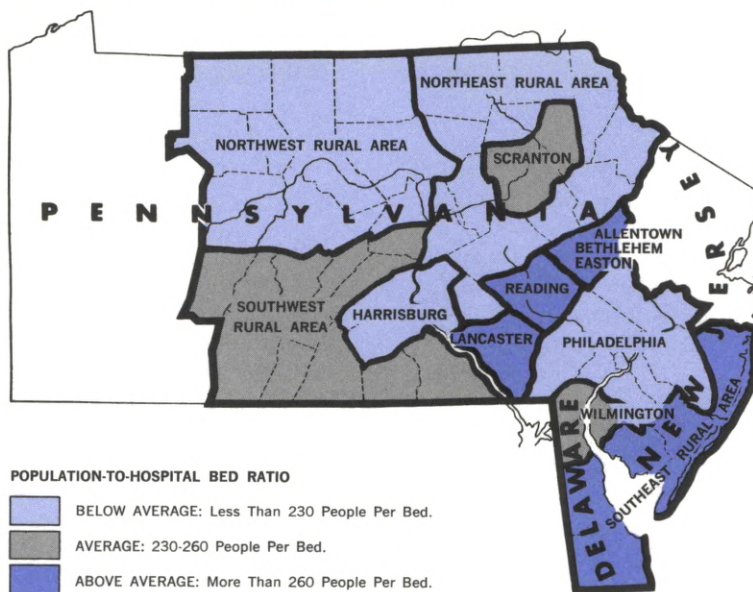
<sup>2</sup> The medical personnel problem is severe in many areas. To help meet the anticipated increase in demand, as well as to fill the gaps which now exist, paramedics are being trained to take over some of the more routine tasks of the physician, leaving him to the more technical work. Salaries of personnel are also being hiked to induce new people to enter the health professions. If demand continues to increase under the present system of health care delivery, then it will be necessary to increase the number of new physicians. The medical schools today are straining with the number of students they now have. In the future, expanded enrollment in medical schools as well as additional facilities for training the future physician may well be a major consideration.

<sup>3</sup> The only data available was for hospitals registered by the American Hospital Association, and, therefore, this study confined itself to those AHA-registered hospitals.

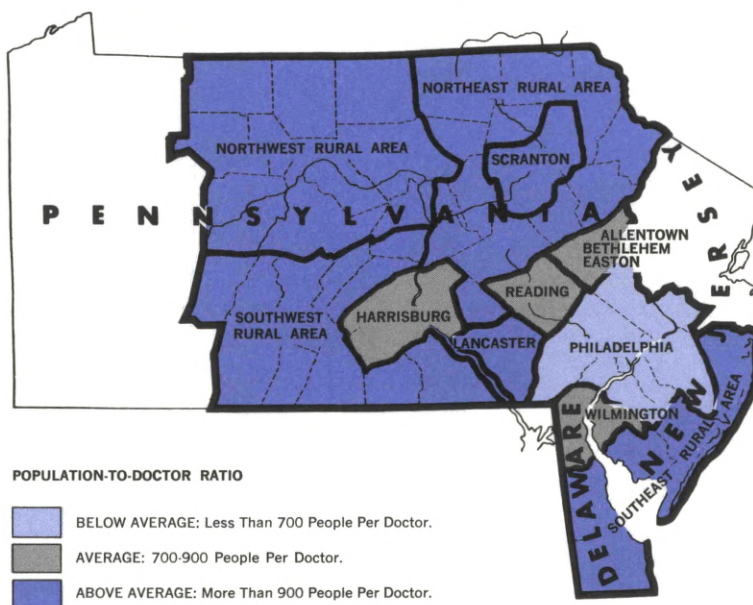
<sup>4</sup> Cameron, Juniata, Perry, Pike, Snyder, and Sullivan counties do not have any general hospitals.

<sup>5</sup> This situation raises two difficult questions regarding health care. If normal economic forces do not provide hospitals in a particular area, should the people in that area be denied the right to adequate hospital facilities? A second question, more medical in nature is, does the patient, in fact, need to be situated near a hospital?

MAP 1  
AVAILABILITY OF HOSPITAL BEDS VARIES  
THROUGHOUT THE THIRD DISTRICT...



MAP 2  
BUT AVAILABILITY OF DOCTORS IS MORE UNEVEN.





the ratio of population to doctor for every rural area is sharply above the national average. Moreover, counties with no hospitals are among those with the fewest doctors per capita. Cameron County, for example, had only two physicians for 7,000 people in 1969, as compared to a national average of 814 people per physician.<sup>6</sup> A second alternative is the outpatient clinic. This type of facility, as it now exists elsewhere, has the equipment to provide basic and preventative medical care. However, there appear to be no outpatient clinics existing independently of general hospitals in the District's rural areas.

Many in the medical profession consider neither the doctor's office nor an outpatient clinic, in itself, a good substitute for a general hospital. Therefore, even an abundance of doctors' offices and clinics would not fulfill the needs of rural areas. General hospitals provide a collection of services for which traveling great distances is thought to be undesirable. According to the National Commission of Community Health, "Health services, operated to meet the health needs of every individual, should be located within the environment of the individual's home community." Health services in several rural areas in the District do not appear to meet this criteria. On the whole, they lack hospitals, physicians, or any reasonable substitute.

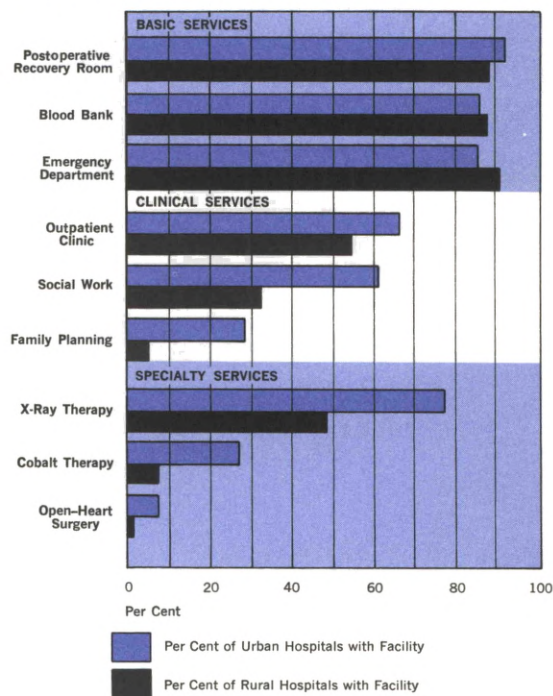
**Inside the Hospitals.** Further evidence of the heterogeneous distribution of health care in the District lies in the kinds of service hospitals provide. The mere existence of a hospital does not insure adequate health care. All hospitals we have discussed at least have an operating room, a clinical laboratory, diagnostic X-ray service, and a pharmacy. While these facilities might have

seemed extensive in another age, today's medical problems and procedures often call for a wider range of facilities.

An overview of some important additional facilities is shown in the Table. These facilities are broken down into three categories: basic services, clinical services, and specialized services. A further breakdown of some of these facilities by urban and rural distribution can be seen in the Chart.

Basic services are those which are generally associated with hospitals, and are used in servicing a large proportion of patients. These should be made readily available to the surrounding community, but are not required in order to become a registered hospital. The District is well-supplied with these facilities (see Table). Many of these services are presently found in at least 70 per cent of the District's general hospi-

**HOSPITALS IN MOST AREAS OFFER BASIC SERVICES, BUT SPECIALIZED FACILITIES CENTER IN URBAN LOCALES.**



<sup>6</sup> In general, District averages do not compare favorably with the national average: urban areas of the Third District average 902 people per doctor; the rural average is 1221 to 1.

## TABLE

## DISTRIBUTION OF FACILITIES IS FAR FROM UNIFORM IN THE THIRD DISTRICT

## I. BASIC SERVICES

|  | General Hospitals<br>With Facility* |
|--|-------------------------------------|
| Postoperative Recovery Room .....        | 91.8%                               |
| Emergency Department .....               | 89.7                                |
| Blood Bank .....                         | 89.2                                |
| Physical Therapy Department .....        | 79.5                                |
| Full-time Registered Pharmacist .....    | 78.5                                |
| Hospital Auxiliary .....                 | 78.5                                |
| Histopathology Laboratory .....          | 72.8                                |
| Premature Nursery .....                  | 70.8                                |
| Inhalation Therapy Department .....      | 63.6                                |
| Intensive Care Unit .....                | 63.0                                |
| Electroencephalography .....             | 50.2                                |
| Psychiatric Emergency Service .....      | 36.4                                |
| Part-time Registered Pharmacist .....    | 22.0                                |
| Rehabilitation Services, Inpatient ..... | 15.4                                |

## II. CLINICAL SERVICE

|   |      |
|---|------|
| Organized Outpatient Department .....     | 62.6 |
| Dental Services .....                     | 54.9 |
| Social Work Department .....              | 49.2 |
| Occupational Therapy Department .....     | 18.5 |
| Family Planning Service .....             | 14.3 |
| Psychiatric Outpatient Department .....   | 13.8 |
| Rehabilitation Services, Outpatient ..... | 13.3 |

## III. SPECIALTY SERVICE

|                                   |      |
|-----------------------------------|------|
| X-ray Therapy .....               | 65.1 |
| Radioisotope Facility .....       | 60.0 |
| Radium Therapy .....              | 53.8 |
| Intensive Cardiac Care .....      | 48.7 |
| Cobalt Therapy .....              | 17.9 |
| Renal Dialysis, Inpatient .....   | 17.4 |
| Renal Dialysis, Outpatient .....  | 12.8 |
| Self Care Unit .....              | 9.7  |
| Open Heart Surgery Facility ..... | 7.7  |
| Extended Care Unit .....          | 6.7  |
| Organ Bank .....                  | 2.0  |

\*There are 215 General Hospitals registered by the American Hospital Association in the Third District; 195 General Hospitals reported facilities.  
Source: Guide Issue, *Hospitals* (August, 1970).

tals, but some facilities, such as Rehabilitative Services and Psychiatric Emergency Rooms, are found in less than 40 per cent of the hospitals. As shown in the Chart, there appears to be little difference between the urban and rural areas.

Clinical services are those which need not be located within a hospital, but often are. Outpatient Clinic and Dental Services are found in over half the District's hospitals. The distribution of the rest of the clinical services is quite limited (see Table).



In contrast to urban areas, rural areas lack clinical services (see Chart). For example, one-third of rural hospitals have Social Work Departments, and only 5 per cent have Family Planning Services.

Specialty services are those facilities which require both extremely expensive equipment as well as highly trained personnel to perform the service. Provision of these facilities follows no uniform pattern. Some, such as Radium Therapy and Radioisotope Facilities, are found in many hospitals in the District, while others, such as Open Heart Surgery and Organ Banks, are found in a small number of hospitals.

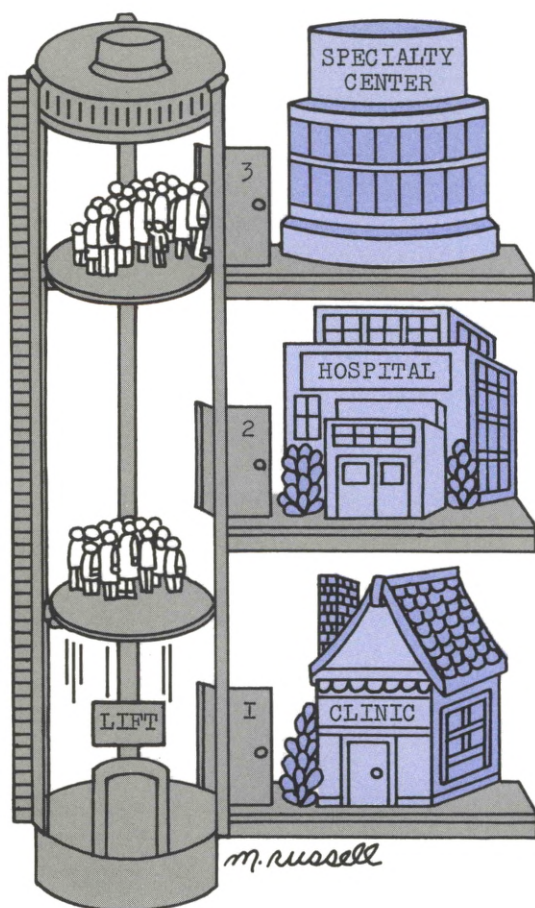
As might be expected, most of these specialty facilities are located in urban areas (see Chart). While over one-quarter of urban area hospitals have Cobalt Therapy, only 8 per cent of rural area hospitals have this service. Further, a majority of these specialty services are found in the Philadelphia region. For instance, this area has most of the Organ Bank facilities. One of the major reasons why the specialty services are not found all over the District is that a dense population may be necessary if a specialized

facility is to be fully utilized. As a general rule, the more specialized the facility, the larger the population it must draw from if it is to be economically efficient.

**One Further Consideration.** An inventory of hospital facilities in the District does not fully define the health situation. A hospital may indeed have the facilities, but its equipment may be faulty, its staff may not be able to cope with the patient load, and so on. A facility only provides a service to a hospital and the community when it can efficiently be put into use.

While the Third District has many facilities, the level of availability of health care varies dramatically throughout the District and among individual hospitals. If such gaps between demand and supply increase, most medical savants see the problem of health care delivery reaching crisis proportions. This growing gap cannot be plugged merely by building more hospitals or randomly installing more facilities. What is needed, if equal access to medical services is to be provided, is a major restructuring of the health care delivery system.





### BLUEPRINT FOR CHANGE

One proposal capturing the attention of more and more physicians and medical planners is creation of a three-tier system of health care delivery — one consisting of neighborhood clinics, general hospitals, and specialty centers. One of the virtues of such a plan is that it creates a rational definition of the roles of each of the facilities.<sup>7</sup> (For an

expanded description of the roles of each level, see box.)

The neighborhood clinic would provide the most basic level of medical care in the reorganization. An essential feature at this primary level would be its ability to meet basic health needs of the people of the community conveniently and efficiently. The beginnings of this level can be found in the few neighborhood clinics that are opening in Philadelphia, primarily in urban low-income areas. General hospitals are now carrying much of this burden in outpatient clinics. In the future, the general hospital could maintain its outpatient clinic; however, it would serve only the immediate neighborhood.

These clinics also would help alleviate difficulties of rural areas since clinics can serve a small number of people efficiently. Neighborhood clinics could provide the preventative and basic health services for the people in the rural areas. However, such clinics cannot substitute for a general hospital. If the rural areas are to have a comprehensive health care delivery system, government at some level may have to subsidize such facilities.

As the center of medical resources upon which all health facilities, services, and personnel focus, the hospital is the single most important element upon which a new delivery system might be based. The diagnostic, general medical, and surgical procedures would be performed at the general hospitals that now exist. Hospitals in most areas of the District are able to provide a firm core for this second level of the proposed system. Some functions now performed at general hospitals would be shifted to another, more efficient level. For example, Family Planning programs would be moved to the neighborhood clinic, while functions such as Cobalt Therapy would be shifted to a third, more specialized area. Once these changes were made, the general hospitals would be in a better position to improve quality and efficiency of their service.

<sup>7</sup> E. L. Crosby, "Hospitals as the Center of the Health Care Universe," *Hospitals* (January 1, 1970), pp. 52-56. A. M. Haynes, "Unifying Health Care," *Hospitals* (March 16, 1970), pp. 67-70. P. Rogatz, "The Health Care System," *Hospitals* (April 16, 1970), pp. 45-50.



## PUTTING SYSTEM INTO HEALTH CARE DELIVERY

The reorganization of the health care system, many experts would agree, requires three levels of service. Such a plan would necessitate the cooperation of hospitals and medical groups.

I. A major dispersion of outpatient (ambulatory) service in the form of community health centers would deliver the basic and preventative level of health care. The convenience of these health centers would help to encourage routine health care, such as physical examinations and vaccinations. Proximity to the community is, therefore, a major feature of this phase.

Unlike more sophisticated health care facilities, these centers would not require elaborate equipment and could make greater use of the paramedical profession. Because these facilities can be provided in small units at low cost, such centers could be 'storefront' clinics as recommended by the American Medical Association.

II. The general hospital would provide inpatient facilities: laboratory, medical, and surgical diagnosis, as well as most medical and surgical procedures. Because of the type of service the general hospital provides, accessibility is an important factor. Most emergencies, maternity care, and therapy would be handled here.

The continuous demand for services provided at this level would compensate for the expensive equipment and trained per-

sonnel a general hospital typically would maintain. Experts point out that general hospitals should not perform those services which could be more efficiently handled elsewhere. They should not be overburdened with outpatient work, nor should they attempt to support underutilized specialty facilities.

III. The most sophisticated, highly specialized medical services require expensive but infrequently used equipment and personnel. Since most of these services are not needed in emergencies, geographic proximity is not an important consideration.

Experts recommend these types of facilities be regionalized, perhaps in a large medical center or in teaching hospitals in order to achieve peak efficiency and to avoid unnecessary duplication. Presently, some specialty services are conducted in such a manner, while many are not. Psychiatric hospitals are good examples of specialized health centers which are already functioning. On the other hand, some services, such as Cardiac Care or Cancer Therapy, are presently provided in an uncoordinated manner at both specialty centers and general hospitals.

The basis of the proposals to consolidate the facilities and personnel into regional units is the efficiency of specialization. These centers can concentrate their efforts on what they do best—thus avoiding inefficiency resulting from underutilization and duplication.

The specialty services would be found at the third level, where they would be most efficiently provided by consolidating extremely expensive equipment and highly trained personnel. The Third District appears to be well-supplied with the specialty facilities; therefore, future efforts might well be directed towards a reorganization of what we now have, rather than widespread construction of new facilities. The District has several large medical centers and six medical schools which could become the basis of such specialty centers.

### **BUILDING ON WHAT WE HAVE**

Efficient facility provision and utilization requires a coordinated effort in which the forces and interests of hospitals in the Third District are merged. Efforts of hospital administrators would be coordinated, focusing on facilities needed by the community, rather than concentrating solely on the problems of their own hospitals. There are several methods of achieving this end—bringing to bear competitive forces on the health care delivery system, implementation of public programs, or some combination of the two, for example. Whatever route is chosen, the three-tier system of services might better channel resources towards the

low-income urban areas and rural areas so that they can receive the health care they want so badly.

As the costs of medical services skyrocket and increasing efforts are made by the Government to provide high-quality medical care to all, people are quickly beginning to realize the benefit of an effective, well-organized health care delivery system. The beginnings of such a coordinated system already exist in the form of neighborhood clinics, general hospitals, and large medical centers. Although the foundation of this health care delivery system can be found in the District, a critical period still lies ahead. If we are to solve the health care delivery problem, we must build a strong program upon this foundation.

The changes will be slow in developing, since human adjustments will have to be made. Both doctor and patient will have to accept the changes inherent in implementing a new system of health care delivery. Attitudes towards the use of hospitals and clinics must be altered as more effective methods for health care delivery become apparent. If these problems are kept in mind, the three-tier proposal stands a good chance of helping all people obtain at least a minimum level of health care. ■



## The Fed in Print

### Business Review Topics, Second Quarter 1971, Selected by Doris Zimmermann

Articles appearing in the *Federal Reserve Bulletin* and in the business reviews of the Federal Reserve banks during the second quarter of 1971 are included in this compilation. To receive copies of the *Federal Reserve Bulletin*, mail sixty cents for each to the Federal Reserve Board at the Washington address on page 29. You may send for business reviews of the Federal Reserve banks, free of charge, by writing directly to the *issuing banks*, whose addresses also appear on page 29.

#### AGRIBUSINESS

Farm firm growth: Transition to an industrialized agriculture? —  
Kansas City May 71 p 3

#### AGRICULTURE

AGRICULTURAL LETTER *available* —  
Chic June 71 p 16

#### BALANCE OF PAYMENTS

Summary of U.S. balance of payments:  
1970 — St. Louis April 71 p 28  
Accounting for the balance of payments —  
Bost May 71 p 3

#### BANK ACCOUNTING

Average functional cost and revenue for  
banks in three size categories  
1966-1969 — Cleve April 71 p 3

#### BANK EARNINGS

Western banks' income — San Fran  
April 71 p 69

OPERATING RATIOS *available* — Phila  
May 71 p 8

Member bank income, 1970 — F R Bull  
June 71 p 445

#### BANK HOLDING COMPANIES

1970 bank holding company amendments:  
What is closely related to banking? —  
Atlanta June 71 p 98

Orders affecting, June 22, 1971 — F R Bull  
July 71 p 627



**BANK HOLDING COMPANY ACT 1956**

Antitrust and the new Bank Holding Company Act: Part III — Rich April 71 p 3

The amended Bank Holding Company Act — Kansas City May 71 p 11

**BANK LIQUIDITY**

A straightforward concept but hard to measure — Dallas May 71 p 1

**BANK LOANS — BUSINESS**

Bank rates on business loans, revised series — F R Bull June 71 p 468

**BANK MERGERS**

A decade of Sixth District bank merger activity — Atlanta April 71 p 62

**BANK PORTFOLIOS**

Adjustment and disequilibrium costs and the estimated Brainard-Tobin model — F R Bull July 71 p 577

**BANK RESERVES**

Reserve adjustments — some empirical findings — Kansas City June 71 p 12

**BANKING — FOREIGN BRANCHES**

Economic events force changes on several fronts — Dallas June 71 p 1

**BANKING STRUCTURE**

Market for bank services: Changes in Texas — Dallas April 71 p 1

**BRIMMER, ANDREW F.**

Statement to Congress May 19, 1971 (foreign credit) — F R Bull June 71 p 486

Statement to Congress June 16, 1971 (VFCR) — F R Bull June 71 p 494

**BUDGET**

The 1972 Federal budget and economic activity — Cleve May 71 p 18

The 1972 fiscal year budget: Another year of moderate stimulation — Bost March 71 p 22

**BURNS, ARTHUR F.**

Statement to Congress April 26, 1971 (interlocking directorates) — F R Bull May 71 p 386

Statement to Congress May 19, 1971 (balance of payments) — F R Bull June 71 p 478

**BURNS, ARTHUR F. (continued)**

Two key issues of monetary policy May 28, 1971 — F R Bull June 71 p 452

Statement to Congress June 16, 1971 (govt. loans to industry) — F R Bull June 71 p 491

Statement before Foreign Economic Policy Subcommittee June 30, 1971 — F R Bull July 71 p 592

**BUSINESS FORECASTS AND REVIEWS**

Forecasting and policymaking: Some lessons from experience (Eastburn) — Phila April 71 p 3

Economic review of 1970: The Fifth District — Rich April 71 p 9

Financial developments, Q<sub>1</sub> 1971 — F R Bull July 71 p 592

How well do economists forecast? — Phila May 71 p 9

**CAPACITY**

Capacity utilization indexes — Rich May 71 p 6

**CAPITAL EXPENDITURES**

Capital spending in major metropolitan areas in the Fourth District — Cleve June 71 p 3

**CENTRAL BANKS**

TOWARD A WORLD CENTRAL BANK by Wm. McC. Martin *available* — N.Y. April 71 p 79

Commentary on central bank activities — Chic April 71 p 6

Social priorities and the market allocation of credit — St. Louis May 71 p 8

**CONSTRUCTION INDUSTRY**

Calibrating the building trades — San Fran June 71 p 101

Housing leads construction rise — Chic May 71 p 2

**CONSUMER EXPENDITURES**

Consumer income spending and saving, 1960-1970 — Cleve June 71 p 10

**CORPORATE FINANCE**

Liquidity patterns in corporate financing — Rich May 71 p 2

**CREDIT BUREAUS**

Fair Credit Reporting Act 1971: Questions and answers — F R Bull June 71 p 547



## DEBT MANAGEMENT

- The Federal debt: Composition and ownership — Rich May 71 p 10
- The Treasury debt and bond rate ceilings — Kansas City April 71 p 9

## DISCOUNT RATES

- Change July 15, 1971 — F R Bull July 71 p 627

## ECONOMIC CONDITIONS

- ECONOMIC COMMENTARY published weekly *available* — Cleve April 71 p 23

- Social man and the new stationary state (Eastburn) — Phila May 71 p 3

## EDUCATION — FINANCE

- State dollars to school districts — Phila June 71 p 3
- How to pay for higher education — Bost March 71 p 3

## ELECTRIC POWER INDUSTRY

- Pressures in the powerhouse — Phila April 71 p 9

## EURODOLLARS

- Eurobonds and the Eurobond market — Cleve April 71 p 3

## FARM EXPORTS

- Major crops lag in export growth — Dallas June 71 p 7

## FARM OUTLOOK

- Agricultural outlook for 1971 — Rich April 71 p 13
- Farm prospects in '71 — San Fran April 71 p 80

## FEDERAL RESERVE BANKS — OPERATIONS

- Western central banking — San Fran April 71 p 75

## FEDERAL RESERVE SYSTEM —

## PUBLICATIONS

- The Fed in Print — Phila June 71 p 24

## FLOAT

- Check collection and Federal Reserve float — Rich June 71 p 11

## FLORIDA

- Sunny skies ahead? — Atlanta April 71 p 71

## FOOD PRICES

- Food prices higher in 1971 — Chic April 71 p 2

## FOOD STAMP PLAN

- Food programs — increased emphasis — Chic June 71 p 2

## FOREIGN EXCHANGE

- DEFENDING THE DOLLAR *available* from Bank and Public Services Dept. — Phila April 71 p 26
- Anatomy of an international monetary crisis — Chic May 71 p 12

## GEORGIA

- The Georgia economy: Building momentum for a quicker pace? — Atlanta June 71 p 112

## GERMANY, WEST — CREDIT CONTROL

- Controlling money in an open economy: The German case — St. Louis April 71 p 10

## INCOME, GUARANTEED

- Income maintenance programs: Spending the benefits — Phila April 71 p 15

## INCOME, PERSONAL

- Personal income in Texas accelerates to rate faster than the nation's — Dallas May 71 p 5

## INDUSTRIAL PRODUCTION INDEX

- Industrial production — revised and new measures — F R Bull July 71 p 551

## INFLATION

- The road to accelerating inflation is paved with good intentions (Francis) — St. Louis June 71 p 9

## INTEREST RATES

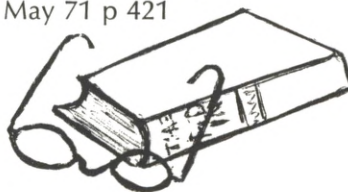
- Interest rates, credit flows, and monetary aggregates since 1964 — F R Bull June 71 p 425

## LIVESTOCK INDUSTRY

- The move to greener pastures — Atlanta June 71 p 107

## MACLAURY, BRUCE K.

- Appointed president Federal Reserve Bank of Minneapolis — F R Bull May 71 p 421



**MONETARY POLICY**

Monetary aggregates and recent economic trends — St. Louis April 71 p 2

**MONEY CIRCULATION**

Growing appetite for cash — Chic April 71 p 12

**MONEY MARKET**

Financial developments Q<sub>1</sub> 1971 — F R Bull May 71 p 365

**MONEY SUPPLY**

International banking institutions and the understatement of the money supply — N.Y. May 71 p 109

The year 1970 — A “modest” beginning for monetary aggregates — St. Louis May 71 p 14

What is money? — Chic June 71 p 9

How fast is money growing? — St. Louis June 71 p 2

**MORTGAGES**

Mortgage commitment data of life insurance companies — F R Bull June 71 p 547

**NATIONAL PARKS**

Congested parks — a pricing dilemma — Kansas City June 71 p 3

**OPEN MARKET OPERATIONS**

Monetary aggregates and Federal Reserve open market operations — N.Y. April 71 p 80

Record of policy actions — F R Bull May 71 p 391

Record of policy actions — F R Bull June 71 p 503

Record of policy actions — F R Bull July 71 p 599

**OVER-THE-COUNTER MARKET**

Revised list of stocks subject to margin regulations July 12, 1971 — F R Bull July 71 p 628

**OWNERSHIP OF DEPOSITS**

Survey of demand deposit ownership — F R Bull June 71 p 456

**POPULATION**

Population growth in the Third District: Scorecard from the Census — Phila June 71 p 12

**POPULATION — MIGRATION**

Wage differentials spur rural-to-urban movement — Dallas April 71 p 7

**PRICE LEVEL**

The relative importance of monetary and fiscal variables in determining price level movements: A note — F R Bull June 71 p 441

**PRICES**

Estimation of the investment and price equations of a macroeconomic model — F R Bull June 71 p 442

**PRODUCTIVITY**

Productivity changes — Kansas City April 71 p 3

Productivity and its measurement — Rich June 71 p 2

**REGULATION Q**

Interest on deposits act extended — F R Bull June 71 p 512

**REGULATION U**

Amended April 16, 1971 — F R Bull May 71 p 399

Amendment July 10, 1971 — F R Bull July 71 p 607

**REGULATION Y**

Amendments to Regulation Y — F R Bull June 71 p 512

Amendment June 30, 1971 — F R Bull July 71 p 607

**ROBERTSON, J. L.**

Statement to Congress May 19, 1971 (foreign investment) — F R Bull June 71 p 482

**SAVINGS AND LOAN ASSOCIATIONS**

Diversifying the S & L's? — San Fran June 71 p 116

**SAVINGS DEPOSITS**

Inundated with savings — San Fran May 71 p 95

**SAVINGS, PERSONAL**

The household as a saver — Phila June 71 p 14

**SELECTIVE CREDIT CONTROLS**

The experience and recent interest — Atlanta May 71 p 78



**TENNESSEE**

Economic horizon brightens — Atlanta  
May 71 p 87

**TIME DEPOSITS**

Changes in time and savings deposits,  
October 1970-January 1971 —  
F R Bull May 71 p 375

**TIME DEPOSITS (continued)**

Changes in time and savings deposits,  
January-April 1971 — F R Bull July 71  
p 579

**TRANSFER OF FUNDS**

Statement of policy on payments  
mechanism — F R Bull June 71 p 546

## FEDERAL RESERVE BANKS AND BOARD OF GOVERNORS

Publications Services  
Division of Administrative Services  
Board of Governors of the  
Federal Reserve System  
Washington, D. C. 20551

Federal Reserve Bank of Atlanta  
Federal Reserve Station  
Atlanta, Georgia 30303

Federal Reserve Bank of Boston  
30 Pearl Street  
Boston, Massachusetts 02106

Federal Reserve Bank of Chicago  
Box 834  
Chicago, Illinois 60690

Federal Reserve Bank of Cleveland  
P.O. Box 6387  
Cleveland, Ohio 44101

Federal Reserve Bank of Dallas  
Station K  
Dallas, Texas 75222

Federal Reserve Bank of Kansas City  
Federal Reserve Station  
Kansas City, Missouri 64198

Federal Reserve Bank of Minneapolis  
Minneapolis, Minnesota 55440

Federal Reserve Bank of New York  
Federal Reserve P.O. Station  
New York, New York 10045

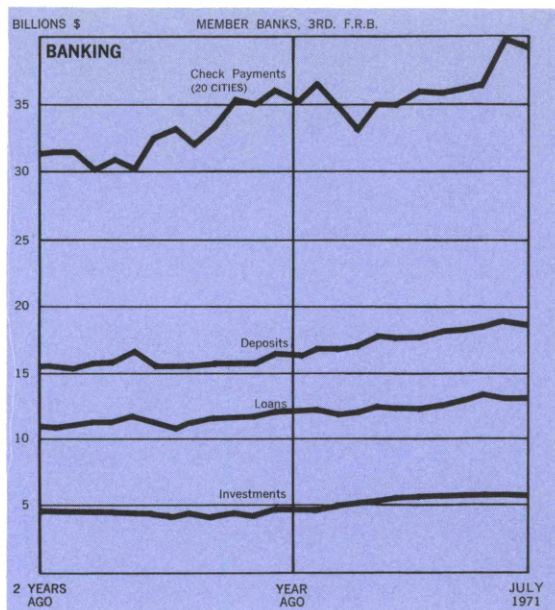
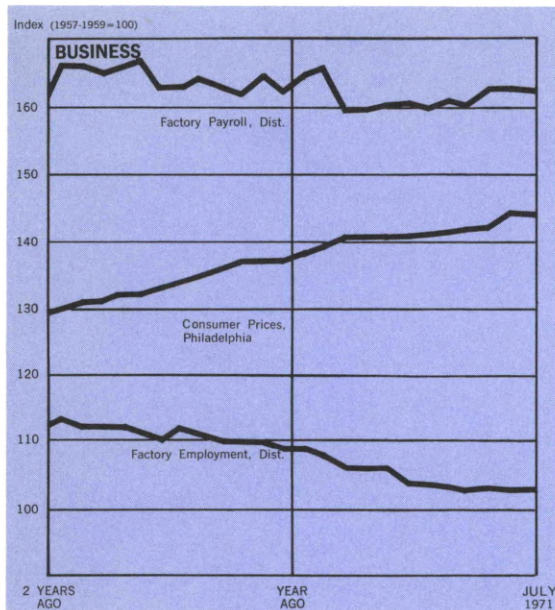
Federal Reserve Bank of Philadelphia  
925 Chestnut Street  
Philadelphia, Pennsylvania 19101

Federal Reserve Bank of Richmond  
P.O. Box 27622  
Richmond, Virginia 23261

Federal Reserve Bank of St. Louis  
P.O. Box 442  
St. Louis, Missouri 63166

Federal Reserve Bank of San Francisco  
San Francisco, California 94120

# FOR THE RECORD...



| SUMMARY                              | Third Federal Reserve District |          |                  | United States   |          |                  |
|--------------------------------------|--------------------------------|----------|------------------|-----------------|----------|------------------|
|                                      | Per cent change                |          |                  | Per cent change |          |                  |
|                                      | July 1971 from                 |          | 7 mos. 1971 from | July 1971 from  |          | 7 mos. 1971 from |
|                                      | mo. ago                        | year ago | year ago         | mo. ago         | year ago | year ago         |
| <b>MANUFACTURING</b>                 |                                |          |                  |                 |          |                  |
| Production .....                     |                                |          |                  | - 8             | - 2      | N/A              |
| Electric power consumed .....        | - 4                            | 0        | 0                |                 |          |                  |
| Man-hours, total* .....              | 0                              | - 7      | - 8              |                 |          |                  |
| Employment, total .....              | 0                              | - 6      | - 7              |                 |          |                  |
| Wage income* .....                   | - 1                            | 0        | - 1              |                 |          |                  |
| CONSTRUCTION** .....                 | -15                            | +14      | +15              | - 5             | +24      | +14              |
| COAL PRODUCTION .....                | -11                            | +14      | N/A              | -32             | - 4      | N/A              |
| <b>BANKING</b><br>(All member banks) |                                |          |                  |                 |          |                  |
| Deposits .....                       | + 3                            | +15      | +16              | - 3             | +15      | +16              |
| Loans .....                          | 0                              | + 8      | +10              | 0               | + 7      | + 7              |
| Investments .....                    | 0                              | +29      | +26              | 0               | +22      | +23              |
| U.S. Govt. securities .....          | - 3                            | +11      | +12              | - 2             | +10      | +16              |
| Other .....                          | + 1                            | +41      | +36              | + 1             | +30      | +27              |
| Check payments*** .....              | - 5†                           | + 8†     | + 5†             | 0               | +15      | +15              |
| <b>PRICES</b>                        |                                |          |                  |                 |          |                  |
| Wholesale .....                      |                                |          |                  | 0               | + 3      | + 3              |
| Consumer .....                       | 0‡                             | + 5‡     | + 6‡             | 0               | + 4      | + 5              |

\*Production workers only  
 \*\*Value of contracts  
 \*\*\*Adjusted for seasonal variation

†15 SMSA's  
 ‡Philadelphia

| LOCAL CHANGES<br><br>Standard Metropolitan Statistical Areas* | Manufacturing                  |          |                                |          | Banking                        |          |                                |          |
|---|--------------------------------|----------|--------------------------------|----------|--------------------------------|----------|--------------------------------|----------|
|   | Employment                     |          | Payrolls                       |          | Check Payments**               |          | Total Deposits***              |          |
|   | Per cent change July 1971 from |          | Per cent change July 1971 from |          | Per cent change July 1971 from |          | Per cent change July 1971 from |          |
|   | month ago                      | year ago | month ago                      | year ago | month ago                      | year ago | month ago                      | year ago |
| Wilmington .....  | 0                              | - 4      | - 6                            | + 3      | + 2                            | + 4      | - 6                            | +24      |
| Atlantic City .....   |                                |          |                                |          | -10                            | +12      | + 2                            | +24      |
| Trenton .....   | - 2                            | - 7      | - 5                            | - 2      | - 6                            | +11      | + 2                            | +12      |
| Altoona .....   | + 1                            | - 1      | 0                              | + 6      | -14                            | + 3      | 0                              | +15      |
| Harrisburg .....  | - 1                            | - 4      | - 1                            | 0        | - 1                            | +10      | - 4                            | +11      |
| Johnstown .....   | - 6                            | - 7      | -13                            | - 1      | - 9                            | +24      | 0                              | +18      |
| Lancaster .....   | 0                              | - 7      | 0                              | 0        | 0                              | - 5      | - 2                            | +89      |
| Lehigh Valley .....   | - 1                            | - 7      | - 1                            | + 1      | - 7                            | + 8      | - 1                            | +18      |
| Philadelphia .....  | + 1                            | - 6      | + 1                            | + 1      | - 6                            | + 8      | + 7                            | +13      |
| Reading .....   | - 3                            | - 4      | - 4                            | + 1      | - 2                            | +17      | - 3                            | + 8      |
| Scranton .....  | - 4                            | - 5      | - 1                            | + 4      | + 1                            | +16      | - 1                            | +17      |
| Wilkes-Barre .....  | - 3                            | 0        | - 3                            | + 8      | - 5                            | +11      | 0                              | +14      |
| York .....  | 0                              | - 5      | + 1                            | + 4      | -29                            | +10      | - 2                            | -40      |

\*Not restricted to corporate limits of cities but covers areas of one or more counties.  
 \*\*All commercial banks. Adjusted for seasonal variation.  
 \*\*\*Member banks only. Last Wednesday of the month.