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End-Stage Renal Disease (ESRD) Program Under Medicare

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ROBERT J. DOLE, *Chairman*

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FOREWORD

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CONTENTS

END STAGE RENAL DISEASE (ESRD) PROGRAM UNDER MEDICARE

I. BACKGROUND

End Stage Renal Disease

The function of the human kidneys is to collect and dispose of body wastes formed in the blood during the process of metabolism. End-stage renal, or kidney, disease represents the permanent and irreversible breakdown of the capacity of the kidneys to carry out their disposal function and requires either the artificial removal of wastes through a procedure known as dialysis or the replacement of the kidney through organ transplantation. Failure to provide treatment results in death.

Dialysis and Organ Transplantation

There are two general types of dialysis--hemodialysis and peritoneal dialysis. Hemodialysis, the more widely used, filters the blood through a kidney machine, where wastes are removed before the blood is returned to the body. In peritoneal dialysis, the filtering takes place within the patient's abdominal cavity without the blood leaving the body.

Periodic dialysis given to patients with end-stage renal disease is called routine maintenance dialysis. Such treatments are given at intervals determined by a physician, usually two or three times a week. Self-dialysis is routine maintenance dialysis performed by the patient at home or in a dialysis facility. Self-dialysis requires special training of the patient and the availability of a helper. Patients on maintenance dialysis, whether performed in the home or in

a facility, are normally able to carry on their ordinary daily activities, often continuing to work at their usual occupation.

Transplantation is a surgical procedure which involves the implantation of healthy kidneys obtained either from living donors or from cadavers. A living donor is the preferred source since the rejection rate by the body of living donor organs is much lower.

The Health Care Financing Administration estimates that 60,000 persons a year now require treatment for end stage renal disease. In 1980, about 4,700 were recipients of transplants, while the remainder required dialysis. About 85.3 percent of the dialysis population received their treatments at renal facilities; 14.6 percent were dialyzing at home. (See Section VI--Program Experience.)

Costs of Treatment

While dialysis and transplantation have become generally available, both methods of treatment are still extremely expensive. According to the Health Care Financing Administration, the estimated annual cost of dialysis is $15,000 a year when done at home, excluding hospitalizations and physician and lab fees, and $21,500 annually when performed in a dialysis center, excluding hospitalizations and physician and lab fees. Kidney transplantation surgery amounts to about $14,400 not including physician fees. And even a successful transplant patient will incur costs of about $45 to $103 a year following transplantation for drugs and other items not reimbursed by Medicare and approximately $350 a month for medical and hospital care. Medicare payments for end-stage renal disease patients are expected to reach $1.8 billion during FY 1982.

II. LEGISLATIVE HISTORY OF ESRD PROGRAM UNDER MEDICARE

Prior to enactment of the Medicare renal disease program, the decision to provide treatment was often influenced by financial considerations because of the enormous costs involved. In addition, because so few individuals could afford treatment and so few hospitals could afford to provide it, there were shortages in renal disease equipment, trained personnel, and treatment facilities. In short, the medical profession knew how to aid victims of renal disease, but many were going untreated because of the lack of financing.

In 1967, the Bureau of the Budget created a Committee on Chronic Renal Disease, known also as the Gottschalk Committee, after its chairman. This committee was charged with "the responsibility of considering all aspects of the problems posed by chronic kidney disease and of making recommendations directed towards meeting these problems." The committee recommended that:

> A national program be initiated for the treatment of end-stage renal disease with the aim of providing, at the earliest possible date, treatment in the form of chronic dialysis and/or transplantation for all the American population for whom it is medically indicated.

The committee proposed that such a program be financed by amending the Social Security Act "to cover the permanently disabled regardless of age." Various bills to provide assistance to patients in meeting the enormous costs of renal disease treatment were introduced in the 89th, 90th, and subsequent Congresses. During the late Sixties, a great deal of research was conducted on legislative solutions to the problems of kidney disease treatment expenses.

On September 30, 1972, during the Senate's consideration of H.R. 1, the Social Security Amendments of 1972, an amendment was proposed to extend Medicare

coverage to those individuals under age 65 with chronic renal disease who are not disability benefit recipients. The amendment provided that every individual who had not attained the age of 65, who was medically determined to have chronic renal disease, and who required hemodialysis or renal transplantation, would be deemed to be a disability benefits recipient for purposes of coverage under Parts A and B of Medicare, subject to the deductible, premium, and co-payment provisions of title XVIII. Such individuals were required, in addition, to be either: fully or currently insured or entitled to a monthly insurance benefit under the Social Security or Railroad Retirement Act; or be the spouse or dependent of individuals who are so entitled or insured. Medicare eligibility on the basis of chronic kidney failure would begin with the sixth month after the month of chronic kidney failure and end with the twelfth month after the month in which the person had a renal transplant.

In addition, the amendment authorized the Secretary to limit reimbursement under Medicare for kidney transplant and dialysis to centers which met such requirements as he might prescribe by regulation. At a minimum, such requirements must include a minimal utilization rate for covered procedures and a medical review board to screen the appropriateness of patients for the proposed treatment.

After a brief debate, the Senate agreed to the amendment, 52 yeas to 3 nays. (See Congressional Record, September 30, 1972, p. 33003-9 for debate on the amendment in the Senate.)

On October 14, 1972, the conferees on H.R. 1 issued their report. The conferees retained the Senate's provision for chronic renal disease coverage under Medicare, but modified the period which an individual must wait before becoming entitled to this coverage. Medicare eligibility on the basis of chronic kidney failure would begin with the third month, instead of the sixth, after the month

in which a course of renal dialysis was initiated. On October 17, both the Senate and the House considered and agreed to this report (H. Rept. No. 92-1605). On October 30, 1972, H.R. 1 was signed into law to become Public Law 92-603. The effective date for Medicare coverage for chronic kidney failure (Sec. 299I) was July 1, 1973.

Major changes in the ESRD program were enacted by Congress as part of the End Stage Renal Disease Amendments of 1978 (Public Law 95-292; June 13, 1978). This legislation was intended to accomplish five objectives: provide incentives for the use of lower cost, medically appropriate self-dialysis (particularly home dialysis), as an alternative to high-cost institutional dialysis; eliminate program disincentives to the use of transplantation; provide for the implementation of incentive reimbursement methods to assure more cost-effective delivery of services to patients dialyzing in institutions and at home; develop a long-range national objective, on the basis of the continuing review and judgment of professional peer review organizations, with respect to the most effective use of resources for treating renal disease; and provide for studies of alternative ways to improve the program and for regular reporting to the Congress on the renal disease program.

More recently, changes to the ESRD program were also included in the Omnibus Budget Reconciliation Act of 1981 (Public Law 97-35; August 13, 1981). This legislation directed that regulations be prescribed establishing a method or methods for prospectively determining incentive reimbursement rates for dialysis services provided in differing institutional settings and at home. The Act also modified the benefit coordination arrangements between the ESRD program and any private group health benefits that certain beneficiaries may otherwise have.

III. MEDICARE BENEFITS UNDER THE ESRD PROGRAM

Coverage

Medicare covers individuals, under age 65 (known as section 299I beneficiaries), who suffer from end-stage renal disease (ESRD), if they (1) are fully insured for old-age and survivor insurance benefits (including employees in the Railroad Retirement System), or (2) are entitled to either monthly social security benefits (or a railroad retirement annuity), or (3) are spouses or dependent children of individuals described in (2). Such persons must be medically determined to have end-stage renal disease and must file an application for benefits. Approximately 7 percent of the ESRD population does not meet any of these requirements and thus are not covered for Medicare renal benefits. Renal disease patients age 65 and over are protected under the regular Medicare coverage provisions.

Start and Termination of Coverage

Coverage for dialyzing patients begins with the third month after the month in which a course of renal dialysis is initiated, except that this entire 3-month waiting period may be waived in the case of an individual who participates in a self-care training program (in the expectation of completing the training and entering self-dialysis) before the beginning of the third month after the one in which he initiates a regular course of dialysis. In the case of a transplant candidate, coverage can begin as early as the month in which the patient is hospitalized for transplantation, provided the surgery takes place in that month or within the following 2 months.

In the case of an individual who receives a kidney transplant, coverage ends with the 36th month after the month of the transplant. In the case of an individual who has not received a transplant, coverage ends with the 12th month after the one in which a regular course of dialysis was ended.

If a transplant fails, and as a result the individual initiates or resumes a regular course of dialysis, entitlement begins again with the first day of the month in which the course is initiated or resumed. Similarly, in any case in which the regular course of dialysis is resumed subsequent to the termination of an earlier course, entitlement resumes with the first day of the month in which a regular course of dialysis is resumed.

Benefits

Benefits for qualified end-stage renal disease beneficiaries include all Part A (Hospital Insurance) and Part B (Supplemental Medical Insurance) medical items and services. ESRD beneficiaries are automatically enrolled in the Part B portion of Medicare and must pay the monthly premium for such protection.

Except for specified deductible amounts and other benefit limits, the Part A hospital insurance program covers the reasonable and medically necessary services a person receives as a patient in a hospital which participates in the Medicare program. In addition, once certain specified conditions of the law are met by the beneficiary, Part A covers services received as an inpatient of a participating skilled nursing facility, or as a homebound patient receiving services at home from a participating home health agency after leaving a hospital or skilled nursing facility.

Medicare Part B provides coverage for physicians' services, durable medical equipment, outpatient hospital services, laboratory services, and certain other services including home health care for homebound patients whether or not they were institutionalized previously. During any calendar year, the supplementary

medical insurance Part B program pays 80 percent of the reasonable charges (or reasonable costs when applicable) for all covered services above an annual deductible amount.

Coverage of Dialysis Treatments

Dialysis treatments are covered in various settings: hospital inpatient, hospital outpatient, nonhospital renal dialysis facility, or patient's home. Generally speaking, maintenance dialysis treatments are covered on an outpatient basis. But, if the patient's medical condition requires the availability of specialized inpatient hospital services, maintenance dialysis treatments are covered by the hospital insurance portion of Medicare. Medical insurance helps pay for outpatient maintenance dialysis (either at a hospital or nonhospital facility). Payments are made directly to the facility. Charges for maintenance dialysis can vary from one approved facility to another (see section V of this report: Reimbursement Policies). The facilities' charges are based on their costs of providing dialysis treatments. The cost of treatment will depend on various factors such as costs of professional services and equipment in the area, the size of the facility, and other justifiable operating costs that can differ between one approved facility and another.

The medical insurance program also pays for physicians' services required in connection with maintenance dialysis in one of two ways. The physician can choose to receive a monthly payment for the services related to the renal problem furnished to a maintenance dialysis patient. When the monthly payment method is used, Medicare pays 80 percent of the fee after the annual medical insurance deductible has been satisfied. If the physician does not choose the monthly payment method, and the dialysis treatments are provided in an outpatient facility, the services of the physician are included in the facility's bill for each dialysis treatment. The physician may also bill separately for any additional services--such as those

needed to treat a complication that arises during dialysis—and services needed when not being dialyzed. Payments in these circumstances are paid under Medicare's regular "reasonable charge" procedure. Likewise, if the patient self-dialyzes—either in an outpatient facility or at home—and the physician does not choose the monthly method, the physician's services are paid on the usual Medicare "reasonable charge" basis.

Self-Dialysis Training

Self-dialysis training is covered by medical insurance on an outpatient basis. Such training includes instruction of the patient and a person who will assist the patient with maintenance self-dialysis at home. (Except in certain circumstances, the program does not cover the costs of paid dialysis aides to assist the self-dialyzing patient at home.) In addition to instruction, medical insurance covers the maintenance dialysis treatment, laboratory tests, and other supplies associated with the treatment.

Charges for self-dialysis training sessions may be higher than for dialysis treatments. For the services of a doctor who is responsible for conducting the training, the maximum total charge recognized by Medicare is $500. Retraining for self-dialysis—e.g., in the use of new equipment—is also covered by the medical insurance portion of Medicare.

Home Dialysis

Medical insurance covers home dialysis equipment, all necessary supplies, and a wide range of home support services. Home dialysis includes home hemodialysis, home intermittent peritoneal dialysis (IPD), and home continuous ambulatory peritoneal dialysis (CAPD).

Medicare medical insurance covers rental or purchase of kidney dialysis equipment for use in the home. Delivery and installation service charges are

included as part of the charge recognized by the program. After satisfying the annual deductible, medical insurance pays 80 percent of the recognized monthly rental charge or the recognized monthly installment purchase price for home dialysis equipment.

A special rule applies if the patient obtains home dialysis equipment from an approved hospital or facility which reserves the equipment for the exclusive use of Medicare patients on home dialysis. If secured under this arrangement, Medicare will pay the hospital or facility for the full reasonable cost of the equipment, including installation and maintenance for as long as needed. The deductible or coinsurance do not apply.

Medical insurance covers all supplies necessary to perform home dialysis, including disposable items such as alcohol wipes, sterile drapes and rubber gloves, and forceps, scissors and topical anesthetics. After the annual deductible, medical insurance pays 80 percent of the recognized charges for all covered services.

Medical insurance covers periodic support services, furnished by an approved hospital or facility, which may be necessary to enable the patient to remain on home dialysis. After a doctor approves the plan of treatment, such support services may include visits by trained hospital or facility personnel to periodically monitor home dialysis, to assist in emergencies when necessary, and to occasionally serve as a dialysis aide. In addition, medical insurance covers the services of qualified facility or hospital personnel to help with the installation and maintenance of dialysis equipment and to test and appropriately treat the water supply system.

Medical insurance can cover the services of a trained dialysis aide to assist with self-dialysis at home if all three of the following conditions are met: (1) an approved hospital or facility which is supervising treatments provides all

home dialysis equipment and supplies and support services; (2) the services of a trained aide are necessary to enable the patient to be on self-dialysis at home; (3) the hospital or facility has in effect a special payment agreement with Medicare.

Kidney Transplantation

Both parts of Medicare help pay for kidney transplant surgery.

Subject to the deductible and coinsurance amounts, Medicare hospital insurance covers inpatient hospital services in an approved hospital when the patient is admitted for kidney transplant surgery. Hospital insurance also covers hospital services in preparation for kidney transplant. This includes the Kidney Registry fee and services such as laboratory and other tests that are required to evaluate the patient's medical condition and the medical conditions of potential kidney donors. These preparatory services are covered whether they are done by the approved hospital where the transplant surgery will take place or by another hospital that participates in Medicare. If there is no kidney donor, the costs of obtaining a suitable kidney for transplant surgery are also covered.

Hospital insurance also pays the full cost of care for a person who donates a kidney for transplant surgery. This includes all reasonable preparatory, operation, and post-operative recovery expenses connected with the donation. There is no deductible or daily amount for the donor's hospital stay, and the number of days the donor uses does not reduce the number of inpatient days that the renal patient may use in a benefit period. The inpatient hospital stay does not qualify the donor for any Medicare benefits not associated with the kidney donation.

Medicare medical insurance covers the surgeon's services for performing the kidney transplant operation. This includes pre-operative care, the surgical procedure, and follow-up care. Medical insurance also covers physicians' services

84-295 O - 81 - 3

provided to the kidney donor during his or her inpatient hospital stay while the renal patient is receiving a kidney transplant.

After the annual medical insurance deductible is met, Medicare medical insurance pays 80 percent of the recognized charge for a surgeon's services and the physicians' services provided to the kidney donor.

Some approved hosptials will include the surgeon's fee in their costs for transplant surgery. In this case, if the annual deductible has already been met, Medicare pays the hospital for the surgeon's services except for 20 percent of the surgeon's fee.

IV. RENAL DISEASE FACILITIES AND ESRD NETWORKS

The Medicare End Stage Renal Disease (ESRD) program has the following objectives:

(1) To assist beneficiaries who have been diagnosed as having ESRD to receive the care they need;

(2) To encourage proper distribution and effective utilization of ESRD treatment resources while maintaining or improving quality of care;

(3) To provide the flexibility necessary for the efficient delivery of appropriate care by physicians and facilities; and

(4) To encourage self-dialysis or transplantation for the maximum practical number of patients who are medically, socially, and psychologically suitable candidates for such treatment.

To achieve these goals, the Secretary of Health and Human Services is given broad authority (section 1881 of the Social Security Act) to establish requirements and regulations in connection with payments for dialysis and transplantation services under Medicare.

The law also contains specific requirements that must be met by approved providers or renal dialysis facilities that enter into agreements with the Secretary to furnish home dialysis supplies and equipment and self-care home dialysis support services to certain patients or to providers or facilities making equipment available for the use of individuals dialyzing at home. Accordingly, the Secretary has prescribed regulations (42 CFR Subpart U) which describe the health and safety requirements that facilities furnishing ESRD care must meet and which establish a system of ESRD facility networks (see below) to furnish needed care for renal patients.

Conditions for Coverage of ESRD Services

In order to have their services covered under the program, individual ESRD facilities must meet:

1. Minimal utilization rates. To be granted unconditional status a renal transplantation center must perform 15 or more transplants annually; conditional status is granted if it performs 7 to 14 transplants annually.

The status of a dialysis facility or center is based upon the number of dialyses it performs per week and the number of dialysis stations it has. Also important is the percentage of dialyses it performs on outpatients and on whether or not it is located in a large metropolitan area. Dialyses performed at self-care dialysis training stations and the training stations themselves are excluded in the calculation of utilization rates if at least six self-dialysis patients per station per year are trained.

2. Provider status. Hospitals operating renal transplantation centers or dialysis centers must be approved providers under Medicare.

3. Fulfillment of service needs in network. Any proposed expansion of ESRD services or any proposed ESRD facility must fill the otherwise inadequate service needs in the network area and be qualified to perform the services.

4. Medical information system. An essential element in the ESRD program is a medical information system. All ESRD facilities, histocompability testing laboratories, and organ procurement agencies participating in the program will be required to supply data to this system.

5. Membership in a network. An ESRD facility must have executed a membership agreement with an approved network and must have appointed at least one member to the network council.

6. Compliance with Federal, State, and local laws and regulations. The facility must be in compliance with applicable Federal, State, and local laws and regulations.

7. Governing body and management. An identifiable governing body, or designated person(s) so functioning, must have legal authority and responsibility for the ESRD facility. The governing body must receive and act upon recommendations and communications from the Medical Review Board and Network Coordinating Council.

The ESRD facility must disclose its ownership to the State survey agency. Operational objectives of the facility, including the services it provides, must be established in writing by the governing body. The administrator of the facility, appointed by the governing body, has responsibility for its overall management, which includes the annual development of a detailed budgetary program and ensuring that the staff has the opportunity for continuing education.

The facility must have written patient care policies including scope of services, admission and discharge policies, medical supervision and physician services, patient long-term programs, care of patients in emergencies, pharmaceutical services records, maintenance of the physical plant, qualifications for consultants, and surveillance of home adaptation if the faciltiy has responsibility for home dialysis patients. Hours for dialysis must be scheduled for patient convenience where feasible. There must always be medical care for emergencies 24 hours a day, 7 days a week. Every patient must be under a physician's supervision.

8. Patient long-term program and patient care plan. A written long-term program representing the selection of a suitable treatment modality (i.e., dialysis or transplantation) and dialysis setting (e.g., home, self-care) must be developed for each patient and reviewed and revised as necessary by a professional team. The team must include, but is not limited to, the physician-director of the facility.

Another professional team is responsible for the patient care plan, which reflects the psychological, social, and functional need of the patient, indicates the care required and methods to reach long term and short term goals, and is reviewed once a month and revised when necessary.

9. Patients' rights and responsibilities. Patients have the opportunity to participate in planning their treatment. Their transfer or discharge may occur only for certain specified reasons. Provision is made for translators where a significant number exhibit language barriers. All are assured confidential treatment and the means to express grievances.

10. Medical records. Complete medical records must be maintained on all patients, including self-dialysis patients within the self-dialysis unit and home dialysis patients for whom the facility has accepted responsibility.

11. Physical environment. A safe, sanitary, and comfortable setting for patients must be maintained. The physical structure must conform to several standards to ensure its safety, including an alternate power source, maintenance of appropriate purity of the water used for dialysis purposes, and fire safety precautions. There must be written policies and procedures for preventing and controlling hepatitis and other infections. Treatment areas must assure adequate, safe, private, and comfortable dialysis therapy. Techniques must be employed to prevent cross-contamination between the unit and adjacent hospital or public areas. Specific emergency preparedness procedures must be developed, reviewed, and tested at least annually.

12. Affiliation agreement or arrangement. Facilities that furnish dialysis services must have affiliation agreements with dialysis centers that furnish such services for the provision of inpatient care and other hospital services.

13. Director of a renal dialysis facility or renal dialysis center. The director of a renal dialysis facility and/or center must be a qualified

physician-director who, among other things, participates in the selection of suitable treatment modalities for patients and assures adequate training in dialysis techniques.

14. Staff of a renal dialysis facility or renal dialysis center. A dialysis facility must employ at least one full-time qualified nurse responsible for the nursing service. When patients are undergoing dialysis, other than self-care dialysis, there must be one licensed, experienced, professional on duty, along with adequate numbers of other personnel. A qualified nurse must be in charge of self-care dialysis training.

15. Minimal service requirements for a renal dialysis facility or renal dialysis center. In addition to dialysis services, the facility must provide adequate laboratory, social, and dietetic services as needed to meet the needs of ESRD patients.

16. Director of a renal transplantation center. Such a center must be under the general supervision of a qualified transplantation surgeon or a qualified physician-director. This director must, among other things, participate in the selection of a suitable treatment modality for each patient, assure adequate training of nurses in the care of transplant patients, and assure that tissue typing and organ procurement services are available directly or under arrangement.

17. Minimal service requirements for a renal transplantation center. Kidney transplantation must be furnished directly by a hospital which is participating as a provider of services in the Medicare program and is approved by the Secretary as a renal transplantation center. Such a center must participate in a patient registry program for patients who are awaiting cadaveric donor transplantation. Social services must be provided and must be directed at supporting and maximizing the social functioning and adjustment of the patient. Each patient must be evaluated as to his nutritional needs by the attending physician and a qualified dietitian. Laboratory services, available directly, or under arrangements, must

be performed in a facility approved under Medicare and, for histocompatability programs, must meet certain additional requirements.

The regulations contain definitions of four types of ESRD units, which are:

- Renal transplantation center. A hospital unit which is approved to furnish directly transplantation and other medical and surgical specialty services required for the care of the ESRD transplant patients, including inpatient dialysis furnished directly or under arrangement. A renal transplantation center may also be a renal dialysis center.
- Renal dialysis center. A hospital unit which is approved to furnish the full spectrum of diagnostic, therapeutic, and rehabilitative services required for the care of ESRD dialysis patients (including inpatient dialysis furnished directly or under arrangement). A hospital need not provide renal transplantation to qualify as a renal dialysis center.
- Renal dialysis facility. A unit which is approved to furnish dialysis service(s) to ESRD patients.
- Self-dialysis unit. A unit that is part of an approved renal transplantation center, renal dialysis center, or renal dialysis facility, and furnishes self-dialysis services.

TABLE 1. Suppliers of ESRD Services, by Service Type (as of 07/07/81)

Transplantion centers	156
Transplantion center only	7
Dialysis and transplantation center	149
Total dialysis facilities centers	1,093
Dialysis center only	393
Dialysis facility-hospital	106
Dialysis facility-non-hospital	445
Dialysis and transplantation center	149

SOURCE: Health Care Financing Administration

Networks

Regulations also include requirements for the minimal utilization rates and the medical review boards mandated by law. The regulations describe a system of end-stage renal disease networks. These networks have been designated for the purpose of geographically describing the location of groups of end-stage renal

disease facilities which share a collective responsibility to provide access to the various levels and treatment modalities of ESRD care.

The population base of each network must be large enough to permit the delivery of a full range of ESRD diagnostic and therapeutic services needed by all patients within the network area. Accordingly, each of the 32 network areas presently designated (appendix A) is intended to serve a minimum population base of 3.5 million, though some areas serve smaller population bases, because this minimum is not feasible. In order to accommodate patient choice, and to allow for sufficient peer review within the network, each network is required to have at least two transplant centers whenever feasible.

A network area may cross State and HHS regional boundaries and, to the greatest extent practicable, will be coterminous with Health Service Areas and PSRO areas. Collectively, the member facilities must have the capability for: kidney transplantation, inpatient dialysis, chronic maintenance dialysis, self-care dialysis training, support services for patients dialyzing themselves at home, organ (kidney) procurement, and histocompatibility testing.

The designation of network areas does not require a patient to seek access to care only through the facilities in the designated network area in which the patient resides, nor does the designation of network areas preclude patient choice of physicians or facilities or patient referral by physicians to a facility in another designated network area.

Network Coordinating Councils

Each ESRD network must organize itself through the establishment of a Network Coordinating Council, with representation from all ESRD facilities in the network.

The Network Coordinating Councils must establish the Medical Review Boards mandated by law (see below). The Councils also serve as liaisons between the Federal Government and available community resources, supplying to the Secretary

information which he may use to make determinations. Furthermore, Councils must make recommendations to member facilities as needed to achieve the objectives of the network.

Medical Review Board

The Medical Review Board is required by law and is appointed by the Network Coordinating Council. It consists of a maximum of seven members, including three or more physicians, a social worker, and a nurse. It performs the following functions: (1) monitors the effectiveness of the patient long-term program; (2) evaluates, with the aid of aggregate data, the performance of facilities, physicians, and other personnel and the appropriateness of patients for the proposed treatment procedures; (3) coordinates the performance of medical care evaluation studies; and, (4) as necessary, performs or delegates the performance of other in-depth studies.

On the basis of these reviews and studies, the Medical Review Board recommends improvements in ESRD care. The Board supplies the Secretary with all facts concerning facilities or physicians that continue to deliver what the Board considers to be substandard or inappropriate care. It also is required to make an annual report on its activities to the Secretary.

Relationship of Network Organizations to Health Care Review Organizations and to Health Service Planning Organizations

The Network Coordinating Council must develop written working arrangements with Health Systems Agencies and State Health Coordinating Councils whose designated planning area is wholly or in part included in the ESRD network area to assure that these organizations receive appropriate professional advice concerning the need for ESRD facilities and services.

In order to avoid the duplication of activities, the Medical Review Board must assure that PSROs whose designated area is wholly or in part included in the

ESRD network area receive appropriate professional advice concerning the quality of medical services required by and given to ESRD patients. With regard to continued medical review assistance, the Medical Review Board will accept review responsibility as requested by PSROs.

Minimal Utilization Rates

Reimbursement for ESRD care is limited, under the regulations, to facilities which meet minimal utilization rates. These rates pertain to the number of dialyses per week or the number of transplantations per year that a facility performs, and may be changed from time to time in accordance with program experience. They are based on the performance of ESRD facilities, the availability of care, and the efficient utilization of equipment and personnel.

ESRD facilities may be granted unconditional, conditional, or exceptions status in regard to meeting this requirement. Conditional status may be granted to a facility which meets the minimal rates for conditional status or to a facility which has not previously participated in the program and which submits written plans detailing how conditional status will be achieved by the conclusion of the first calendar year of its operation under the program and, additionally, how unconditional utilization rates will be achieved during the third year of operation under the program.

A time-limited exceptions status is available for a facility which meets all other conditions for coverage except the minimal utilization rate and which is located in an area lacking a sufficient population base of support, if the objectives of the program would be adversely affected by its absence. In addition, special exceptions also apply to a hospital that furnishes renal transplantation services primarily to pediatric patients and is approved as a renal dialysis center.

Expansion of ESRD Network Functions

The role and functions of the ESRD network system were broadened and clarified by enactment of the End-Stage Renal Disease Program Amendments of 1978 (Public Law 95-292). New requirements (section 1881(c)) were added to law providing that each network organization would be responsible for the following functions:

(1) Encouraging the use of the treatment setting most appropriate for the successful rehabilitation of the patient;

(2) Developing criteria and standards for quality patient care, as well as developing network goals for placing patients in self-care settings, or transplantation;

(3) Evaluating the procedure by which facilities assess the appropriateness of patients for proposed treatment settings;

(4) Identifying facilities not cooperating with network goals and assisting those facilities in developing appropriate plans for correction;

(5) Submitting an annual report to the Secretary on July 1 of each year which includes a statement of network goals; data on network performance in meeting goals; identifcation of facilities failing to cooperate with network goals; and recommendations with respect to the need for additional or alternative services in the network, including self-dialysis training, transplantation and organ procurement facilities; and

(6) Furnishing data to the Health Care Financing Administration (HCFA) on approval or expansion of ESRD services in the network area.

Congress further directed that the Health Care Financing Administration be responsible for:

(1) Establishing network areas and organizations and a national renal disease medical information system;

(2) Developing regulations (if necessary) for the coordination of network planning and quality assurance activities;

(3) Developing regulations (if necessary) for the exchange of data with quality assurance and health planning agencies;

(4) Developing regulations with respect to network organization members (and their relatives) to prevent conflicts of interest on patient care decisions;

(5) Terminating facilities that consistently fail to cooperate with network goals;

(6) Taking into account network goals and performance when determining whether to certify additional facilities or allow for expansion of existing facilities;

(7) Submitting to the Congress legislative recommendations to further the national objective of maximizing the use of self-dialysis and transplantation consistent with good medical practice;

(8) Publishing guidelines and instructions to assit networks in developing goals to promote the optimum use of home dialysis, self-dialysis, and kidney transplantation; and

(9) Assuring patient representation on the network coordinating council and the network executive committee.

In July 1978 the Health Care Financing Administration proposed implementing regulations (44 Federal Register 41841) relating to the organization and function of the ESRD networks. After noting that existing network regulations were already generally consistent with the requirements of the 1978 legislation, some additional modifications were needed. The proposed new regulations were intended to (1) Give ESRD patients and the general public a more active role in network decisionmaking processes; (2) encourage maximum use of the lower cost forms of treatment, self-dialysis and kidney transplantation; and (3) encourage greater objectivity in network decisionmaking.

Specific regulatory changes were proposed with respect to patient representation on the network coordinating council and its executive committee; conflict of interest in network organizations; network goals; network annual reports; network functions; network meeting; network medical review activities; and network incorporation. However, final regulations in these areas have not been adopted by the Health Care Financing Administration.

V. REIMBURSEMENT POLICIES

Background

When Congress enacted the renal disease program in 1972, little information was available about treatment costs or prevailing charges. As a result, the Secretary was given broad authority to develop and apply reimbursement policies and procedures on the basis of evolving experience. The Department of Health and Human Services (HHS) subsequently devised reimbursement policies which, though grounded in Medicare's traditional practices of paying reasonable costs and reasonable charges, are somewhat unique to the renal disease program.

In 1978, and again in 1981, Congress amended the law to make changes in both the method for paying facilities for dialysis services rendered patients dialyzing in the facilities and in the method by which payment is made for expenses incurred by patients dialyzing at home under the supervision of approved facilities. These and a number of other changes were intended to promote use of the most cost-effective delivery of needed services, consistent with quality, by end-stage renal disease patients.

Payments to Facilities for Dialysis and Self-Dialysis Training

The ESRD program pays on the basis of the reasonable costs for dialysis treatments in hospital-based (i.e., provider) facilities and on the basis of reasonable charges for treatments in free-standing (i.e., nonprovider) renal disease facilities. Payments for maintenance treatments on an outpatient basis at both types of facilities are further limited by "payment screens" that Medicare recognizes in the absence of special justifications and approval. The

particular screen applicable in any given case depends in part on whether or not the facility (either a hospital or free-standing facility) bills for the services of physicians (see below) and whether the facility incurs certain added expenses in connection with self-dialysis training. (Payments for dialysis treatments provided to any hospital inpatient are made under Medicare's ordinary reasonable cost rules without application of the dialysis screens applicable to outpatients receiving dialysis services, providing the inpatient stay is reasonable and medically necessary.)

Currently, Medicare will pay 80 percent of the average cost to a hospital-based facility, or 80 percent of the reasonable charges in the case of a free-standing renal facility, for furnishing outpatient maintenance dialysis up to a screen (or limit) of $138 ($133 if routine laboratory services are not included) per treatment (excluding physicians' services), unless an exception is requested and granted. If the services of the physician for supervisory care are included in the facility's costs (see below), then the screen or limit amount is increased by $12 to $150 ($145 if routine laboratory services are not included).

Payments to hospital-based or free-standing facilities for self-dialysis training are limited by somewhat higher screens than are applicable in the case of maintenance dialysis. This is because the training process requires closer medical and other types of supervision. Consequently, the costs for training the patient normally exceed the costs incurred by a facility in delivering services to a stable patient on maintenance dialysis. Currently, the facility payment screen (where the physician is reimbursed through the facility for his services--see below) is $170 ($165 if lab services are excluded). However, if the physician elects the comprehensive payment method (see below), the facility payment screen is reduced to $158 ($152 if lab services are excluded).

The End-Stage Renal Disease Program Amendments of 1978 (Public Law 95-292) authorized establishment of an incentive reimbursement system with respect to dialysis services furnished to Medicare patients dialyzing in a hospital or free-standing renal facility. The purpose of the incentive system is to encourage more cost-effecitve delivery of services, consistent with quality care. In developing the system, the Secretary is authorized to utilize such approaches as prospectively set rates, a system for classifying comparable facilities, the use of target rates (adjusted for regional differences) with shared savings, and any other incentives necessary for efficient performance. In September 1980 (45 Federal Register 64008), the Department of Health and Human Services proposed implementing regulations. Under that proposal, facilities would be classified into groups according to the setting and the type of facility. Prospective payments would be established for various types of dialysis treatments through a set of national rates, periodically adjusted. The Reagan Administration subsequently proposed to establish a single reimbursement rate for such services, applicable to all facilities that would be based on the cost experience of the less expensive free-standing facilities.

Congress, however, expressed some concerns about the Administration proposal, noting that it could have a negative impact on the objective of encouraging lower cost home dialysis. As a result, Congress further amended the law (through the Omnibus Budget Reconciliation Act of 1981, Public Law 97-35) to require the Secretary to establish prospectively determined rates on the basis of separately calculated composite weighted formulas for hospital-based facilities and for other renal facilities. These formulas are to take into account the proportions of patients dialyzing in a facility and those dialyzing at home and the relative costs of providing services in each of these settings. The legislation requires the Secretary to issue implementing regulations by October 1, 1981.

Payments to Physicians for Dialysis and Self-Dialysis Training

Physicians may choose from one of two methods of payment for certain services rendered to renal dialysis patients. Under the first method (known as the "initial" or Physician Reimbursement Method No. 1) the supervisory services provided by the physician are reimbursable to the facility by the intermediary as a facility service part of the dialysis session if the physician has actually furnished the service. Supervisory services include non-episodic services that are furnished during the dialysis session and reflect the facility's responsibility to provide services under the general supervision of a physician. The physician looks to the facility for payment for his routine dialysis services. Any non-routine services rendered during dialysis, or services that must be rendered at a time other than during the dialysis procedure, are paid in accordance with Medicare's usual reasonable charge criteria. Any administrative services rendered by the physician that are related to the support of the facility are a part of the facility's cost or charge for dialysis.

Alternatively, physicians may elect to receive a comprehensive monthly payment (know as Physician Reimbursement Method No. 2) for patients on maintenance dialysis or who are training for self-dialysis. A physician may elect the comprehensive payment method only where all of the physicians in the facility who render services to patients on maintenance dialysis or undergoing self-dialysis training elect to do so with respect to that facility. Subject to the deductible and coinsurance, payment of the monthly amount is made by the carrier either to the physician (in assignment cases) or the patient (in nonassignment cases). This reimbursement methodology is intended to recognize the needs of patients on maintenance dialysis for continuing medical management over relatively long periods of time and reflects the reduced need for physician services for self-dialysis patients at a reduced monthly amount. Services provided by the physician not

related to the patient's renal condition (and under certain other circumstances) are reimbursed in accordance with the usual reasonable charge criteria.

The factors used to determine the monthly payment amounts are related to program experience and to the charging practices of comparable physicians for comparable services. Such factors are reevaluated periodically on the basis of program experience and can be adjusted as necessary to refelct changes in charging practices and modes of furnishing services.

The monthly payment is based on the lesser of (1) the amount derived by multiplying the physician's customary charge for a followup office visit by a conversion factor of 20, or (2) the amount derived by multiplying the weighted frequency of the prevailing charges in all localities (for months beginning in July 1, 1978, not to be less than $9 or more than $13) in the carrier's service area for followup visits by a conversion factor of 20. With a minimum of $9 times 20, or $180, and a maximum of $13 times 20, or $260, the amounts of the monthly payments result in a national average of about $220. The use of the conversion factor and followup office visits is intended to yield a monthly amount that reflects an averaging out of the frequency and the kinds of services, and payments therefor, that the physician renders to stabilized patients on maintenance (staff-assisted) dialysis.

Physicians who elect the comprehensive monthly method of payment for services rendered to self-dialysis patients, whether in the facility or at home, receive a payment using the same methodology described above, except that the carrier uses a conversion factor of 14 rather than 20. The lower conversion factor is intended to reflect the fact that self-dialysis patients usually do not receive or require as extensive services as patients in facilities who are not on self-dialysis.

Reimbursement for physicians' services (regardless of the physician payment method elected) rendered to patients undergoing self-dialysis training is limited

to a flat amount (currently no more than $500, subject to the deductible and coinsurance provisions), to be determined from program experience and reviewed periodically.

Payments for Home Dialysis

The choice of dialysis location has major cost implications; the annual cost for home dialysis is about $15,000, while the cost of outpatient facility dialysis is about $21,500. For this reason, the End-Stage Renal Disease Amendments of 1978 included major changes in reimbusement policies designed to encourage dialysis at home. Among other things, the Secretary is authorized to reimburse approved dialysis facilities and non-profit entities for the full (without payment of any deductible and coinsurance) reasonable cost of purchase, installation, maintenance, and reconditioning for subsequent reuse of artificial kidney and automated dialysis peritoneal machines (including supporting equipment) which are reserved for the exclusive use of Medicare-entitled renal disease patients dialyzing at home. The facility must agree to: (1) make the equipment available for use only by Medicare home patients, (2) maintain the equipment and recondition it for reuse, (3) provide access to records on equipment use, and (4) submit required reports (costs, statistics, etc.).

The 1978 legislation also authorized payment on the basis of target rates to approved facilities for the cost of home dialysis supplies, equipment and support services (including the services of qualified home dialysis aides on a selective basis) furnished to patients dialyzing at home whose care is under the supervision of the facility. The Secretary was authorized to utilize any procedure he determines appropriate and feasible in establishing the home dialysis target rate. The 1978 law limits the maximum target rate to no more than 70 percent (recently increased to 75 percent by the Omnibus Budget Reconciliation Act of 1981) of the national average payment for in-facility maintenance dialysis services furnished

during the preceding fiscal year, adjusted for regional variations and before application of the Part B deductible and coinsurance. The target rate does not apply in the case of continuous ambulatory peritoneal dialysis (CAPD) which is paid for on a fee-for-service basis (see below).

The target rate reimbursement system differs from the ordinary Medicare reasonable cost or reasonable charge payment system in two ways. First, in addition to all of the home dialysis items and services already covered under the ESRD program, it also includes payment for the costs of furnishing home dialysis aides. Second, it is intended to be an incentive system in that a facility has the right to retain the difference between its actual costs for covered supplies, equipment and services and the target payment rate.

Regulations published earlier this year (46 Federal Register 3985) establish for calendar year 1981 two rates for home hemodialysis. The higher rate applies where the facility is furnishing the equipment, but not under the provision for 100 percent reimbursement of home dialysis equipment costs. The lower amount applies where the facility is furnishing the equipment under that provision. In either case, if the facility chooses target rate reimbursement, it must furnish the equipment (including installation, maintenance and repair) either directly or under arrangements.

TABLE 2. Schedule of Target Reimbursement Rates per Treatment for Home Hemodialysis—Calendar Year 1981 (Effective for services furnished on or after January 1, 1981, through December 31, 1981)

HHS region	Including equipment costs a/	Excluding equipment costs a/
Boston—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	$108	$106
New York—New Jersey, New York, Puerto Rico, Virgin Islands	111	109
Philadelphia—Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia	98	97
Atlanta—Alabama, North Carolina, South Carolina, Florida, Georgia, Kentucky, Mississippi, Tennessee	97	95
Chicago—Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin	111	109
Dallas—Arkansas, Louisiana, New Mexico, Oklahoma, Texas	104	102
Kansas City—Iowa, Kansas, Missouri, Nebraska	109	106
Denver—Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming	99	97
San Francisco—American Samoa, Arizona, California, Guam, Hawaii, Nevada	120	117
Seattle—Alaska, Idaho, Oregon, Washington	116	114

a/ Depreciation or rental, installation, maintenance and repair.

Payments for peritoneal dialysis are also tied to the rates established for hemodialysis. Peritoneal dialysis sessions of less of 20 hours duration a session are paid at the same rate; those of more than 20 hours, but less than 30, are paid at one and one-half times the hemodialysis rate; and those of 30 hours or more are three times the hemodialysis rate.

Continuous ambulatory peritoneal dialysis (CAPD) is an alternative mode of dialysis for home dialysis patients. CAPD is a continuous process using the patient's peritoneal membrane as a dialyzer. Because no machine is used, CAPD frees the patient from the confinement of a machine, and because it is continuous, CAPD frees the patient from the dietary restrictions associated with intermittent hemodialysis or intermittent peritoneal dialysis. Once the patient is trained, CAPD is primarily a home service. Hospital-based facilities are reimbursed on the basis of the reasonable cost of items and services furnished to home patients on CAPD; non-provider facilities are reimbursed on a reasonable charge basis. CAPD training at a facility is paid in a manner similar to that used to reimburse for maintenance dialysis training.

Payments for Transplantation Services

Transplantation services are covered by Medicare's end-stage renal disease program. Such services include: excision of a kidney from a live or cadaveric donor, implantation in the ESRD patient and supportive care furnished to the living donor and the recipient following the transplant. The costs of care for actual or potential donors are fully covered by the program and include all reasonable preparatory, operation and post-operation expenses, without regard to deductibles, coinsurance or premium payments. Reimbursement for the surgery is payable only if performed in a renal transplantation center approved under the Medicare program.

Payments for physicians' services in the case of transplantation are made on the basis of a comprehensive payment to surgeons who perform the procedures and assumes responsibility for post-operative surgical care for 60 days, or such care and the related course of immunosuppressant therapy for such period.

Comprehensive payments may not be based on amounts that exceed either the actual charges made for the transplantation services, or amounts the carriers derive from overall national payment levels established under the ESRD program and adjusted to give effect to variations in physicians' charges throughout the Nation. These adjusted amounts are the maximum allowances in a carrier's service area for renal transplantation surgery and related services by surgeons. The maximum allowances are computed at the beginning of each 12-month fee screen year to the extent permitted by the lesser of: changes in the physicians' fee economic index or percentage changes, from one year to the succeeding year, in the weighted average of the servicing carrier's prevailing charges (before adjustment by the economic index) for a unilateral nephrectomy. Payments for covered medical services provided to the transplant recipient by other specialists, as well as for services provided to the transplant surgeon after the 60-day period covered by the comprehensive payment, are made under the ordinary reasonable charge criteria.

Hospital services are reimbursed under Medicare's ordinary reasonable cost principles of reimbursement. Hospitals are reimbursed for expenses they incur in obtaining kidneys from organ procurement agencies in amounts that do not exceed the costs incurred by those agencies in acquiring the kidneys.

VI. PROGRAM EXPERIENCE

Medicare ESRD Population

At the end of calendar year 1980, the total ESRD population was 63,214, an increase of nearly 250 percent over 1974.

TABLE 3. All ESRD Medicare Enrolled a/ Beneficiaries

Period ending	Number Ever Enrolled--Living
12/31/74	18,412
12/31/75	26,584
12/31/76	34,332
12/31/77	40,224
12/31/78	46,241
12/31/79	54,962
12/31/80	63,214

a/ "All ESRD" refers to those persons with ESRD who receive Medicare coverage because they are: (1) entitled to monthly insurance benefits under the Social Security Act (OASI or DI beneficiaries), or (2) fully or currently insured under the Social Security Act ("299I" beneficiaries), or (3) the spouse or dependent child of such individuals.

SOURCE: Health Care Financing Administration

Basis for Entitlement

The vast majority of beneficiaries, about 89 percent, who become entitled to benefits do so on the basis of their need for dialysis under the ESRD program. Approximately 11 percent of beneficiaries are entitled to Medicare ESRD benefits because of transplantation:

TABLE 4. Estimated Enrollment for Persons Suffering from End-Stage Renal Disease
(in thousands)
All ESRD a/
(May 1981 Trustees' Reports Assumptions)

Calendar year	Average annual enrollment by reason for entitlement		
	Total	Transplants b/	Dialysis
1974	19	2	17
1975	27	2	25
1976	35	3	32
1977	42	3	39
1978	48	3	45
1979	56	4	52
1980	64	7	57

a/ "All ESRD" refers to those persons with ESRD who receive Medicare coverage because they are: (1) entitled to monthly insurance benefits under the Social Security Act (OASI or DI beneficiaries), or (2) fully or currently insured under the Social Security Act ("299I" beneficiaries), or (3) the spouse or dependent child of such individuals.

b/ "Transplants" refers to the number of successfully transplanted patients who are currently entitled to Medicare benefits. P.L. 95-292 increased the period of entitlement after a successful transplant from 12 months to 36 months.

SOURCE: Health Care Financing Administration

ESRD Beneficiaries by Benefit Category

ESRD beneficiaries fall into one of three different benefit categories—Sec. 299I beneficiaries, disabled beneficiaries, and aged renal beneficiaries. Sec. 299I beneficiaries meet the appropriate age, medical and social security criteria, and fulfill the waiting period described earlier in this report. About 40 percent of the average annual ESRD enrollment involves such beneficiaries. Disabled beneficiaries under 65 may begin as Sec. 299I beneficiaries, obtain disability status and are reclassified from Sec. 299I status to disabled ESRD status. The aged likewise may begin as Sec. 299I or disabled beneficiaries, pass their 65th birthday, and be classified as aged ESRD beneficiaries:

TABLE 5. Estimated Enrollment for Persons Suffering from End-Stage Renal Disease
(in thousands)
All ESRD a/
(May 1981 Trustees' Reports Assumptions)

Calendar year	Total	Aged	DI	299I
1974	19	1	5	13
1975	27	3	8	16
1976	35	6	11	18
1977	42	8	14	20
1978	48	9	17	22
1979	56	11	20	25
1980	64	13	23	28

a/ "All ESRD" refers to those persons with ESRD who receive Medicare coverage because they are: (1) entitled to monthly insurance benefits under the Social Security Act (OASI or DI beneficiaries), or (2) fully or currently insured under the Social Security Act ("299I" beneficiaries), or (3) the spouse or dependent child of such individuals.

SOURCE: Health Care Financing Administration

Benefits Paid for Medicare ESRD Beneficiaries

Benefits paid to or on behalf of beneficiaries with end-stage renal disease have risen more than five-fold, from $283 million in 1974 to $1.443 billion in 1980. Expenditures for dialysis accounted for $1.289 billion and represent nearly 90 percent of total program expenditures:

TABLE 6. Estimated Medicare Payments on an Incurred Basis for ESRD Beneficiaries
(dollars in millions)
(1981 Trustees' Reports Assumptions)

Calendar year	Dialysis a/	Transplants b/	Total ESRD c/
1974	$232	$51	$283
1975	377	73	450
1976	528	78	606
1977	690	97	787
1978	867	109	976
1979	1,068	128	1,196
1980	1,289	154	1,443

a/ "Dialysis" refers to benefit payments for all types of dialysis regardless of place of dialysis. Medicare benefit payments for nondialysis-related services to these persons with ESRD (dialysis) are also included in this category.

b/ "Transplants" refers to the sum of benefit payments for transplants performed plus benefit payments for the maintenance of successfully transplanted patients on the Medicare rolls for up to 36 months after transplantation. Medicare benefit payments for nontransplant-related services to these persons with ESRD (transplant) are also included in this category.

c/ "Total ESRD" refers to those persons with ESRD who receive Medicare coverage because they are: (1) entitled to monthly insurance benefits under the Social Security Act (OASI or DI beneficiaries), or (2) fully or currently insured under the Social Security Act ("299I" beneficiaries), or (3) the spouse or dependent child of such individuals.

SOURCE: Health Care Financing Administration

Benefit payments on the basis of benefit category generally parallel the distribution of the total ESRD population by beneficiary category:

TABLE 7. Benefit Payments for Medicare ESRD Beneficiaries by Benefit Category (Incurred Basis) (dollars in millions)

Calendar year	299I	Aged ESRD	Disabled ESRD	Total
1974	$170	$34	$79	$283
1975	248	75	127	450
1976	313	119	174	606
1977	396	159	232	787
1978	478	205	293	976
1979	573	260	363	1,196
1980	677	322	444	1,443

SOURCE: Health Care Financing Administration

Impact of ESRD Program on Medicare Trust Funds

Benefit payments for persons with end-stage renal disease have steadily accounted for an increasing percentage of all benefits paid from the Hospital Insurance (Part A) and the Supplementary Medical Insurance (Part B) trust funds. Nearly 10 percent of all Part B benefits are paid to or on behalf of ESRD beneficiaries:

TABLE 8. Aggregate Medicare Benefit Payments on a Cash Basis a/
(dollars in millions)

Calendar year	Part A			Part B			Total		
	ESRD b/	Total	Percent	ESRD b/	Total	Percent	ESRD b/	Total	Percent
1974	$69	$9,099	.8%	$143	$3,318	4.3%	$212	$12,417	1.7%
1975	115	11,315	1.0	252	4,273	5.9	367	15,588	2.4
1976	146	13,340	1.1	376	5,080	7.4	522	18,420	2.8
1977	189	15,737	1.2	509	6,038	8.4	698	21,775	3.2
1978	232	17,682	1.3	649	7,252	8.9	881	24,934	3.5
1979	281	20,623	1.4	809	8,708	9.3	1,090	29,331	3.7
1980	341	25,064	1.4	983	10,635	9.2	1,324	35,699	3.7

a/ Cash basis figures are those actually paid out; they are lower than incurred basis figures due to the lag between incurred obligations and actual expenditures

b/ "All ESRD" refers to those persons with ESRD who receive Medicare coverage because they are: (1) entitled to monthly insurance benefits under the Social Security Act (OASI or DI beneficiaries), or (2) fully or currently insured under the Social Security Act ("299I" beneficiaries), or (3) the spouse or dependent child of such individuals.

SOURCE: Health Care Financing Administration

Future Growth of ESRD Program

The Health Care Financing Administration estimates that the number of enrollments in Medicare's ESRD program will increase from 69,000 in calendar year 1982 to 87,000 by calendar year 1986, or about 17.5 percent. Benefit payments, however, are expected to increase by more than 65 percent during that same period--from $1.842 billion to $3.047 billion:

TABLE 9. Estimated Enrollment and Aggregate Benefit Payments on a Cash Basis—Total ESRD Medicare Program

Calendar year	Total benefit payments (in millions)	Average annual enrollment (in thousands)
1983	$1,576	69
1984	1,842	74
1985	2,126	78
1986	2,423	81
1985	2,731	85
1986	3,047	87

NOTE: These figures are based on the 1981 Trustees' Reports assumptions. They do not reflect the effects of the 1981 Reconciliation Act.

SOURCE: Health Care Financing Administration

APPENDIX A

END-STAGE RENAL DISEASE (ESRD) NETWORK AREAS

ESRD Network No. 1

American Samoa, Guam, The State of Hawaii, The Trust Territory of the Pacific Islands

ESRD Network No. 2

The State of Alaska
The State of Idaho
The State of Montana
The State of Oregon
The State of Washington

ESRD Network No. 3

The following counties in northern California:

Alameda	Lake	Nevada	Sierra
Alpine	Lassen	Placer	Siskiyou
Amador	Madera	Plumas	Solano
Butte	Marin	Sacramento	Sonoma
Calaveras	Mariposa	San Benito	Stanislaus
Colusa	Mendocino	San Francisco	Sutter
Contra Costa	Merced	San Joaquin	Tehama
Del Norte	Modoc	San Mateo	Trinity
El Dorado	Mono	Santa Clara	Tuolumne
Fresno	Monterey	Santa Cruz	Yolo
Glenn	Napa	Shasta	Yuba
Humboldt			

The State of Nevada excluding Clark County which is included in Network area 4.

ESRD Network No. 4

The following counties in southern California:

Imperial	Kings	Riverside	San Luis Obispo
Inyo	Los Angeles	San Bernardino	Santa Barbara
Kern	Orange	San Diego	Tulare
			Ventura

The following county in Southern Nevada:

Clark

ESRD Network No. 5

The State of Colorado
The State of Utah excluding the Navaho Reservation portion of San Juan County which is in Network area 6
The State of Wyoming

The following counties in the State of Nebraska:

Banner	Dawes	Kimball	Sheridan
Box Butte	Deuel	Morrill	Sioux
Cheyenne	Garden	Scotts Bluff	

ESRD Network No. 6

The State of Arizona
The State of New Mexico
The Navaho Reservation portion of San Juan County, Utah

ESRD Network No. 7

The State of Minnesota
The State of North Dakota
The State of South Dakota

The following counties in the State of Michigan:

Alger	Dickinson	Iron	Menominee
Baraga	Gogebic	Keweenaw	Ontonagon
Delta	Houghton	Marquette	Schoolcraft

The following counties in the State of Wisconsin:

Ashland	Burnett	Iron	Sawyer
Bayfield	Douglas	Price	Washburn

ESRD Network No. 8

Composed of:

The State of Iowa
The State of Nebraska excluding the following counties which are included in Network area 5:

Banner	Dawes	Kimball	Sheridan
Box Butte	Deuel	Morrill	Sioux
Cheyenne	Garden	Scotts Bluff	

The following counties in the State of Illinois:

Henry	Mercer	Rock Island

ESRD Network No. 9

The State of Kansas
The State of Missouri excluding the following counties which are included in Network area 18:

Dunklin	New Madrid	Scott
Mississippi	Pemiscot	Stoddard

The following counties in the State of Illinois:

Clinton	Madison	Monroe	St. Clair

ESRD Network No. 10

The State of Arkansas excluding the following counties which are included in Network area 18:

Crittenden	Mississippi

The State of Oklahoma

ESRD Network No. 11

The State of Texas

ESRD Network No. 12

The State of Louisiana

ESRD Network No. 13

The State of Wisconsin excluding the following counties which are included in Network area 7:

Ashland	Burnett	Iron	Sawyer
Bayfield	Douglas	Price	Washburn

ESRD Network No. 14

The State of Michigan excluding the following counties which are included in Network area 7:

Alger	Dickinson	Iron	Menominee
Baraga	Gogebic	Keweenaw	Ontonagon
Delta	Houghton	Marquette	Schoolcraft

ESRD Network No. 15

The State of Illinois excluding the following counties which are included in Network area 8:

Henry	Mercer	Rock Island

and the following counties which are included in Network area 9:

Clinton	Madison	Monroe	St. Clair

ESRD Network No. 16

The State of Indiana

ESRD Network No. 17

The State of Kentucky

The following counties in the State of Ohio:

Adams	Clark	Greene	Montgomery
Brown	Clermont	Hamilton	Preble
Butler	Clinton	Highland	Shelby
Champaign	Darke	Miami	Warren

ESRD Network No. 18

The State of Alabama excluding the following county which is included in Network area 20:

Russell

The State of Mississippi
The State of Tennessee

The following counties in the State of Arkansas:

Crittenden	Mississippi

The following counties in the State of Georgia:

Catoosa	Dade	Walker

The following counties in the State of Missouri:

Dunklin	New Madrid	Scott
Mississippi	Pemiscot	Stoddard

The following counties in the State of Virgnia:

Scott	Washington

ESRD Network No. 19

The State of Florida

ESRD Network No. 20

The State of Georgia excluding the following counties which are included in Network area 18:

Catoosa	Dade	Walker

The State of South Carolina

The following county in the State of Alabama:

Russell

ESRD Network No. 21

The State of North Carolina

ESRD Network No. 22

Composed of the State of Ohio excluding the following counties which are included in network area 17:

Adams	Clark	Greene	Montgomery
Brown	Clermont	Hamilton	Preble
Butler	Clinton	Highland	Shelby
Champaign	Darke	Miami	Warren

The following counties of Western Pennsylvania:

Allegheny	Cameron	Fulton	Potter
Armstrong	Clarion	Greene	Somerset
Beaver	Crawford	Huntington	Venango
Bedford	Elk	Indiana	Warren
Blair	Erie	Lawrence	Washington
Butler	Fayette	McKean	Westmoreland
Cambria	Forest	Mercer	

ESRD Network No. 23

The District of Columbia

The following counties in the State of Virginia:

Arlington	Fairfax	Loudoun	Prince William

ESRD Network No. 23 (continued)

The following counties in the State of Maryland:

Calvert	Montgomery	St. Mary's
Charles	Prince Georges	

ESRD Network No. 24

The State of Delaware

The following counties of eastern Pennsylvania:

Adams	Cumberland	Lehigh	Perry
Berks	Dauphin	Luzerne	Pike
Bucks	Delaware	Lycoming	Philadelphia
Carbon	Franklin	Mifflin	Schuylkill
Centre	Jefferson	Monroe	Snyder
Chester	Juniata	Montgomery	Union
Clearfield	Lackawanna	Montour	Wayne
Clinton	Lancaster	Northampton	Wyoming
Columbia	Lebanon	Northumberland	York

ESRD Network No. 25

The following counties of Metropolitan New York:

Bronx	New York	Richmond	Ulster
Dutchess	Orange	Rockland	Westchester
Kings	Putnam	Suffolk	
Nassau	Queens	Sullivan	

ESRD Network No. 26

The State of New York excluding the following counties which are included in in Network area 25:

Bronx	New York	Richmond	Ulster
Dutchess	Orange	Rockland	Westchester
Kings	Putnam	Suffolk	
Nassau	Queens	Sullivan	

The following counties in the State of Pennsylvania:

Bradford	Susquehanna	Sullivan	Tioga

ESRD Network No. 27

The State of Connecticut

ESRD Network No. 28

The State of Maine
The State of Massachusetts
The State of New Hampshire
The State of Rhode Island
The State of Vermont

ESRD Network No. 29

Puerto Rico
Virgin Islands

ESRD Network No. 30

The State of Virginia excluding the following counties which are included in Network area 18:

Scott	Washington		

and the following counties which are included in Network area 23:

Arlington	Fairfax	Loudon	Prince William

The State of West Virginia

ESRD Network No. 31

The State of Maryland excluding the following counties which are included in Network area 23:

Calvery	Montgomery	St. Mary's
Charles	Prince Georges	

ESRD Network No. 32

The State of New Jersey

TABLE 1 - NUMBER OF SUPPLIERS OF ESRD SERVICES AND APPROVED DIALYSIS STATIONS FOR ESRD NETWORKS BY SERVICE TYPE

07/07/81

	TOTAL	(1) TOTAL TRANSPLANT CENTERS	(2) TRANSPLANT CENTER ONLY	(3) DIALYSIS & TRANSPLANT CENTER	(4) TOTAL DIALYSIS FACILITIES CENTERS	(5) DIALYSIS CENTER ONLY	(6) DIALYSIS FACILITY-HOSPITAL	(7) DIALYSIS FACILITY-NON-HOSPITAL	(8) INPATIENT CARE	NUMBER OF APPROVED DIALYSIS STATIONS
U.S. TOTAL	1,111	156	7	149	1,083	393	106	445	11	13,069
NETWORK 1	8	1	0	1	8	2	5	0	0	92
2	27	4	3	1	24	15	1	7	0	227
3	49	3	0	3	48	18	4	23	1	554
4	91	11	0	11	85	24	6	44	6	1,074
5	27	3	0	3	27	9	1	14	0	248
6	25	5	0	5	25	6	7	7	0	231
7	26	3	0	3	26	5	17	1	0	209
8	17	2	0	2	17	8	5	2	0	167
9	29	8	0	8	29	6	6	9	0	336
10	31	5	0	5	31	11	5	10	0	231
11	72	7	2	5	69	30	6	26	1	948
12	26	5	0	5	26	6	2	13	0	303
13	21	2	0	2	21	15	2	2	0	163
14	34	11	0	11	33	12	6	4	1	484
15	60	7	0	7	60	26	5	22	0	754
16	12	3	0	3	12	9	0	0	0	208
17	22	6	0	6	22	2	3	11	0	296
18	58	4	0	4	58	14	3	37	0	711
19	67	4	0	4	67	17	1	45	0	885
20	48	5	1	4	47	9	4	34	0	676
21	18	5	0	5	18	2	0	11	0	318
22	43	6	0	6	43	18	4	15	0	540
23	22	5	0	5	22	2	0	15	0	288
24	54	7	0	7	52	23	0	22	2	647
25	58	6	0	6	58	38	2	12	0	713
26	24	6	1	5	23	15	2	1	0	169
27	14	2	0	2	14	10	0	2	0	182
28	33	9	0	9	33	15	0	9	0	377
29	14	1	0	1	14	9	1	3	0	137
30	40	4	0	4	40	11	4	21	0	444
31	15	3	0	3	15	6	1	5	0	158
32	26	3	0	3	26	14	3	6	0	361

TOTAL = 2 + 4 + 8
(1) = 2 + 3
(4) = 3 + 5 + 6 + 7

TABLE 2 - NUMBER OF OPERATIONAL SUPPLIERS OF ESRD SERVICES AND APPROVED DIALYSIS STATIONS FOR DHEW REGIONS AND STATES BY SERVICE TYPE AND FACILITY LOCATION

07/07/81

	TOTAL	(1) TOTAL TRANSPLANT CENTERS	(2) TRANSPLANT CENTER ONLY	(3) DIALYSIS & TRANSPLANT CENTER	(4) TOTAL DIALYSIS FACILITIES CENTERS	(5) DIALYSIS CENTER ONLY	(6) DIALYSIS FACILITY-HOSPITAL	(7) DIALYSIS FACILITY-NON-HOSPITAL	(8) INPATIENT CARE	NUMBER OF APPROVED DIALYSIS STATIONS
U.S. TOTAL	1,111	156	7	149	1,093	393	106	445	11	13,089
REGION 1	47•	11•	0•	11•	47•	25•	0•	11•	0•	539
CONNECTICUT	14	2	0	2	14	10	0	2	0	162
MAINE	4	1	0	1	4	2	0	1	0	43
MASSACHUSETTS	21	7	0	7	21	8	0	6	0	225
NEW HAMPSHIRE	3	0	0	0	3	2	0	1	0	22
RHODE ISLAND	4	0	0	0	4	3	0	1	0	76
VERMONT	1	1	0	1	1	0	0	0	0	11
REGION 2	121•	16•	1•	15•	120•	75•	8•	22•	0•	1,376
NEW JERSEY	26	3	0	3	26	14	3	6	0	361
NEW YORK	81	12	1	11	80	52	4	13	0	878
PUERTO RICO	12	1	0	1	12	7	1	3	0	131
VIRGIN ISLANDS	2	0	0	0	2	2	0	0	0	6
CANADA	0	0	0	0	0	0	0	0	0	0
REGION 3	149•	20•	0•	20•	147•	49•	7•	71•	2•	1,738
DELAWARE	3	0	0	0	3	1	0	2	0	45
WASHINGTON,DC	10	5	0	5	10	1	0	4	0	145
MARYLAND	21	3	0	3	21	7	1	10	0	238
PENNSYLVANIA	69	8	0	8	67	29	2	28	2	803
VIRGINIA	37	4	0	4	37	7	2	24	0	420
WEST VIRGINIA	9	0	0	0	9	4	2	3	0	87
REGION 4	203•	20•	1•	19•	202•	38•	9•	136•	0•	2,707
ALABAMA	20	1	0	1	20	6	0	13	0	253
FLORIDA	67	4	0	4	67	17	1	45	0	885
GEORGIA	31	4	1	3	30	4	2	21	0	468
KENTUCKY	14	2	0	2	14	0	3	9	0	135
MISSISSIPPI	15	1	0	1	15	3	1	10	0	152
NORTH CAROLINA	18	5	0	5	18	2	0	11	0	316
SOUTH CAROLINA	17	1	0	1	17	1	2	13	0	208
TENNESSEE	21	2	0	2	21	5	0	14	0	290
REGION 5	178•	35•	0•	35•	177•	81•	23•	38•	1•	2,240
ILLINOIS	61	7	0	7	61	27	5	22	0	761
INDIANA	12	3	0	3	12	9	0	0	0	208
MICHIGAN	36	11	0	11	35	13	7	4	1	491
MINNESOTA	14	3	0	3	14	3	7	1	0	153
OHIO	34	9	0	9	34	14	2	9	0	464
WISCONSIN	21	2	0	2	21	15	2	2	0	163

TOTAL = 2 + 4 + 8
(1) = 2 + 3
(4) = 3 + 5 + 6 + 7

TABLE 2 - NUMBER OF OPERATIONAL SUPPLIERS OF ESRD SERVICES AND APPROVED DIALYSIS STATIONS FOR DHEW REGIONS AND STATES BY SERVICE TYPE AND FACILITY LOCATION

07/07/81

	TOTAL	(1) TOTAL TRANSPLANT CENTERS	(2) TRANSPLANT CENTER ONLY	(3) DIALYSIS & TRANSPLANT CENTER	(4) TOTAL DIALYSIS FACILITIES CENTERS	(5) DIALYSIS CENTER ONLY	(6) DIALYSIS FACILITY-HOSPITAL	(7) DIALYSIS FACILITY-NON-HOSPITAL	(8) INPATIENT CARE	NUMBER OF APPROVED DIALYSIS STATIONS
REGION 6	141•	18•	2•	16•	138•	41•	18•	83•	1•	1,874
ARKANSAS	15	1	0	1	15	6	1	7	0	116
LOUISIANA	26	5	0	5	26	6	2	13	0	303
NEW MEXICO	11	1	0	1	11	4	4	2	0	84
OKLAHOMA	17	4	0	4	17	5	5	3	0	123
TEXAS	72	7	2	5	69	20	6	38	1	948
REGION 7	47•	10•	0•	10•	47•	13•	13•	11•	0•	509
IOWA	10	1	0	1	10	7	1	1	0	108
KANSAS	5	2	0	2	5	1	1	1	0	76
MISSOURI	24	6	0	6	24	4	6	8	0	261
NEBRASKA	8	1	0	1	8	1	5	1	0	64
REGION 8	40•	3•	0•	3•	40•	14•	9•	14•	0•	317
COLORADO	16	2	0	2	16	8	0	8	0	161
MONTANA	4	0	0	0	4	4	0	0	0	25
NORTH DAKOTA	4	0	0	0	4	1	3	0	0	23
SOUTH DAKOTA	6	0	0	0	6	0	6	0	0	26
UTAH	9	1	0	1	9	1	0	7	0	77
WYOMING	1	0	0	0	1	0	0	1	0	5
REGION 9	162•	19•	0•	19•	155•	46•	18•	72•	7•	1,867
ARIZONA	14	4	0	4	14	2	3	5	0	147
CALIFORNIA	137	14	0	14	130	39	10	67	7	1,581
HAWAII	7	1	0	1	7	1	5	0	0	86
NEVADA	3	0	0	0	3	3	0	0	0	47
MEXICO	0	0	0	0	0	0	0	0	0	0
AMERICAN SAMOA	0	0	0	0	0	0	0	0	0	0
GUAM	1	0	0	0	1	1	0	0	0	6
REGION 10	23•	4•	3•	1•	20•	11•	1•	7•	0•	202
ALASKA	2	0	0	0	2	1	0	1	0	9
IDAHO	2	0	0	0	2	2	0	0	0	10
OREGON	7	1	0	1	7	3	0	3	0	95
WASHINGTON	12	3	3	0	9	5	1	3	0	88

TOTAL = 2 + 4 + 8
(1) = 2 + 3
(4) = 3 + 5 + 6 + 7