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SUBJECT: Determining Costs Associated with the Renal Disease Provisions  
of P.L. 92-603

Many questions have arisen concerning the proper treatment for Medicare reimbursement purposes of various costs that are associated with pre-kidney transplant services, kidney transplant services and the furnishing of kidney dialysis services. The purpose of this intermediary letter is to address such problems in sufficient detail to facilitate the reimbursement of cost incurred in the furnishing of services related to the renal disease provision of P.L. 92-603.

In conjunction with this purpose, simplified reimbursement procedures have been designed to accommodate other provisions of title XVIII, without placing an undue burden on providers of services. In relation to this, requirements have been simplified for developing the kidney acquisition cost center (formerly referred to as the kidney excision cost center), the treatment of various routine and ancillary service costs, and the treatment of pre-entitlement services, various outpatient services, services of interns and residents not in approved teaching programs, and various physician services.

In order to expedite information to providers, intermediaries should extract and forward to those providers which render renal dialysis services and to those providers which excise and transplant kidneys all pertinent information in this document.

Due to the urgency of the need to immediately disseminate this information, consultation with intermediaries has not been possible; however, any questions on the material contained herein should be directed to the nearest health insurance regional office.

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TABLE OF CONTENTS

	<u>Page</u>
I. General.....	1
II. The Standard Kidney Acquisition Charge.....	2
III. Transplant Hospitals.....	2
A. Living Donor Transplants, Services Involved.....	2
1. Establishing the Standard Charge for Acquiring a Live Donor Kidney.....	3
B. Cadaveric Transplants, Services Involved.....	4
1. Establishing the Standard Charge for Acquiring a Cadaver Kidney.....	5
IV. Hospitals that Excise but do not Transplant Kidneys.....	6
A. Cadaver Excisions Yielding Two Kidneys.....	7
B. Accounting for Unusable Kidneys.....	7
V. Organ Procurement Mechanisms.....	8
A. Organ Procurement Agencies.....	9
B. Developing a Standard Charge.....	9
C. Monitoring the Standard Charge of Organ Procurement Agencies.....	10
D. Billing by Organ Procurement Agencies.....	10
VI. Accounting for the Costs of Kidney Acquisition.....	10
A. Accumulation of Statistics.....	14
VII. Program Billing for Transplants and Associated Services...	14
A. Billing for Blood and Tissue Typing of the Transplant Recipient Whether or not Medicare Entitlement is Established.....	14
B. Billing for Blood, and Tissue Typing and Other Pre-Transplant Evaluation of Live Donors.....	15
C. Cadaveric Donor Services.....	15
D. Billing for Services When a Transplant Occurs.....	16
VIII. Accounting for the Cost of Routine Maintenance Dialysis...	17
A. General.....	17
B. Accounting for Days of Care Associated with the Furnishing of Renal Dialysis.....	17
C. Extended Peritoneal Dialysis Treatments.....	19
D. Routine Laboratory Tests Performed in the Dialysis Department... ..	19
E. Accumulation of Statistics by Providers Furnishing Outpatient Maintenance Dialysis Services.....	21
IX. Glossary of Terms.....	22

## I. General

During the development of Medicare policies and procedures necessary to effectively implement the chronic renal disease provisions of the 1972 Amendments to the Social Security Act, special attention was necessarily given to the policies concerning the coverage and reimbursement of renal transplant services. Since renal transplantation is a principal form of treatment available to patients with end-stage renal disease, it was evident that the Medicare program should adopt policies which would contribute to the support of this method of treatment by providing an equitable means of reimbursement for the variety of medical services that are required to support a quality transplant program where it is appropriate to have such a program.

While there were many issues to consider in accomplishing this objective; there were two principal areas of concern. First, it was necessary to insure that Medicare would pay its share of the costs of organ procurement recognizing that in live donor organ procurement there would be a considerable amount of medical costs incurred in evaluating potential donors prior to the possible selection of a donor and that in the cadaver organ procurement program not all organs excised would eventually be transplanted. Second, an equitable means had to be developed for covering and reimbursing necessary medical services provided to potential donors and recipients, recognizing that in some situations these services would be provided prior to the effective date of the potential transplant recipients Medicare entitlement. For example, patients (recipients) or potential donors may be blood or tissue typed shortly after end-stage renal disease is diagnosed and transplantation is being planned. However, the specific patient's date of entitlement to Medicare may not occur until much later when the dialysis waiting period is satisfied or the patient is transplanted. Where no dialysis treatments are given, entitlement would not occur until the month of transplant (or the month before the month of transplant if the patient was admitted to the hospital in that month in preparation for and in anticipation of a transplant).

Therefore, in order to determine costs of Medicare covered services which are normally provided in preparation for a transplant and for kidneys acquired for the purpose of providing Medicare beneficiaries with renal transplants and to encourage the consideration of this treatment modality; i.e., allowing beneficiaries who are acceptable candidates for transplantation the opportunity to be transplanted irrespective of economic factors, the concept of the kidney acquisition cost center was developed. In addition to supporting the above objectives, the use of a kidney acquisition cost center (formerly referred to as a kidney excision cost center) also provides the mechanism for reviewing the costs of services provided between hospitals under arrangements. It also provides the mechanism to make more current reimbursement for some costs which, using preexisting reimbursement policy, could not be reimbursed by the program until they could be added to a billable service which is generated by a participating hospital.

The following instructions are intended to build on this last concept and explain how services normally provided during the process of providing a patient with a living or cadaveric transplant and how an excising hospital's or organ procurement organization's expenses in providing kidneys are covered and reimbursed, how a kidney acquisition cost center and a living or cadaveric acquisition charge is constructed, and finally how to bill the program for such services.

## II. The Standard Kidney Acquisition Charge

There are two basic standard charges which must be developed by transplant hospitals from costs expected to be incurred in the acquisition of kidneys:

1. the standard charge for acquiring a live donor kidney; and
2. the standard charge for acquiring a cadaver kidney.

The standard charge is not a charge representing the acquisition cost of a specific kidney; rather, it is a charge which reflects the average cost associated with each particular type of kidney acquisition.

When the transplant hospital bills the program for the transplant, it must show its standard kidney acquisition charge on a separate line on the billing form. Information concerning hospitals which perform excisions only is contained in section IV.

## III. Transplant Hospitals

### A. Living Donor Transplants, Services Involved

After end-stage renal disease is diagnosed, one of the first actions taken by many physicians is determining the suitability of the patient for transplantation. If it appears that the patient is a suitable transplant candidate, a live donor transplant is normally considered first because of its relatively high degree of success in comparison to a cadaveric transplant. Whether one or multiple potential donors are available, the following is a general description of the usual course of events which transpire in preparation for a live-donor transplant.

First, potential donors are identified. Generally, potential donors include only parents, brothers and sisters, or children. Those who are willing and medically able to donate a kidney to the recipient are first tested to determine whether they are of the same blood type as the recipient. After blood-typing, the

recipient and the donors are tissue typed. Only those candidates with blood and tissue types similar to the recipient are considered further. (See the glossary attached to this I.L. for a description of the tests involved in tissue typing.) After tissue typing, those donors who are medically suitable are evaluated based on physical, psychological and social factors. Those potential donors who remain after the above testing may be hospitalized for further evaluation using procedures not appropriately performed on outpatients. These procedures may include intravenous urography and renal arteriography. Hospitalization for 2 days appears to be the average stay for these services.

If the results of the above tests identify several suitable donors, the most suitable donor is selected and arrangements are made for the transplant. At such time, the donor and recipient will enter the hospital to undergo the excision and transplantation, respectively. Where tests do not identify an acceptable living donor, the patient will generally be considered for a cadaveric transplant and placed on hemo or peritoneal dialysis, if this has not already proved necessary. Also, if the ultimate goal is transplantation, the patient would be registered with a kidney transplant registry.

1. Establishing the Standard Charge for Acquiring a Live Donor Kidney

The standard "live donor" kidney acquisition charge must be established before a transplanting hospital bills its first live donor transplant to the program. The charge -- an average charge -- is constructed by estimating the costs to be incurred for services expected to be furnished to live donors and pre-admission services to be furnished recipients of live donor kidneys during the hospital's cost reporting period and dividing this estimated amount by the projected number of live donor kidneys to be excised or otherwise acquired by that hospital for transplant. If there is no such data, the charge which is arrived at by a comparable hospital performing comparable services may be used, with appropriate adjustments where they appear necessary.

Projected costs which would be used to formulate the "live donor" kidney acquisition charge include but are not limited to the following:

- a. tissue typing of donor and recipient;
- b. donor and recipient evaluation;
- c. other costs associated with excising kidneys, such as donor general routine and special care routine services;
- d. operating room and other inpatient ancillary services applicable to the donor;
- e. preservation and perfusion costs where applicable;
- f. charges for registration of recipient with a kidney transplant registry.

Tissue typing services provided to live donors and recipients during pre-entitlement period and after entitlement, but prior to admission into the hospital for transplantation must be billed to the transplant hospital. The pre-entitlement period constitutes services furnished in anticipation of a transplant after the patient has been diagnosed to have end-stage renal disease, but prior to such patient's actual Medicare entitlement. Where the tissue typing service is provided by the excising hospital to the donor, the cost incurred becomes an organ-procurement cost which would be taken into account in the charges for organs supplied by the excising hospital.

Tissue typing services billed to a transplant hospital will be treated by that hospital in the same manner as other services purchased under arrangement; i.e., the reasonable charge paid for the service becomes a cost to the hospital.

When an independent laboratory provides such services, whether to the donor or potential recipient, it must bill the transplant hospital or excising hospital, whichever is appropriate. Primarily, the independent laboratory would bill the excising hospital for cadaver tissue typing services ordered by the excising hospital.

B. Cadaveric Transplants, Services Involved

Where there is no suitable living donor, a patient with renal failure may be considered for a cadaveric transplant. In such cases the services provided to recipients of "live donor kidneys," i.e., tissue typing and other related tests, are also provided to potential recipients of cadaver kidneys. However, because a kidney may not be available for a long period of time, it is expected that additional

services will be provided in the form of direct physician care for the patient's renal condition, and certain tests will normally be performed on a regular basis to allow the physician to have current information regarding the status of the patient and his suitability for transplant. In addition, mixed lymphocyte cultures are prepared whenever a kidney is procured which may suit the recipient. The number of such tests performed depends directly on the number of kidneys which become available for transplant.

1. Establishing the Standard Charge for Acquiring a Cadaver Kidney

With the exception of personal identifiable physician services, such as office visits which can never be reimbursed until entitlement exists, the above services should be billed to the transplanting hospital (the hospital at which the patient will potentially receive a transplanted kidney) for inclusion in its kidney acquisition cost center or to the excision hospital as appropriate. The transplant hospital would determine such projected costs along with the hospital's expected costs to be incurred in the excision of cadaver kidneys. These costs combined with the costs of cadaver kidneys to be acquired from other sources should be divided by the expected number of usable cadaver kidneys to be transplanted, to arrive at the standard cadaver kidney acquisition charge.

Tissue typing services for cadaveric kidney recipients would be treated in a similar manner to the way in which such services are covered and reimbursed in live donor cases. Tissue typing of the cadaveric organ by the excising hospital becomes an organ acquisition cost which would be taken into account in the charges for organs which are supplied by the hospital.

Independent laboratories must meet the same billing requirements contained in section III.A.

2. Usual Provider Costs Related to the Excision of a Cadaver Kidney

Typical provider costs involved in excising a cadaver kidney whether or not eventually transplanted, which are covered include:

- a. intensive care costs;
- b. surgeon's services;
- c. anesthetist services;
- d. operating room;
- e. preservation supplies (perfusion materials and equipment);
- f. preservation technician's services;

- g. donor evaluation and support;
- h. pathology;
- i. central exchange costs (transportation and packaging);
- j. administration costs (overhead items);

#### IV. Hospitals that Excise but do not Transplant Kidneys

The excising hospital plays an important part in the national organ procurement effort. Most of these hospitals are community hospitals which excise kidneys on an irregular basis and do not themselves perform transplants. In order to make reimbursement to such hospitals as simple as possible, yet to assure full reimbursement for the reasonable costs incurred, such hospitals may establish a kidney acquisition cost center. It should be mentioned, however, that if the concept of the kidney acquisition cost center is not utilized, the excision hospital will not receive the more accurate reimbursement for all of the services furnished, as explained below.

A hospital that excises but does not transplant kidneys may perform excisions on cadaver or on live donors; however, regardless of the vital status of the donor, most of the hospital services utilized in the excision are the same. Where these costs are incurred by the excising hospital they should be billed to the transplant hospital or the organ procurement agency, using the excising hospital's usual charges for such services.

Where the excision hospital does not maintain a kidney acquisition cost center, such charges and costs would remain in the appropriate departments to be apportioned in the normal apportionment process which may not result in the more accurate reimbursement. An example of this is reimbursement for surgeon's fee in the case of a hospital that elects not to use a kidney acquisition cost center; in such case the cost (surgeon's fee) may be included in the costs of the operating room cost center or some other appropriate cost center. If included in operating room costs, the subsequent apportionment of operating room costs will not result in accurate reimbursement to the excising hospital of the surgeon's fee.

Where a resident physician of the excising hospital performs the surgical services, the excising hospital would be expected to bill the transplant hospital a compensation-related fee for the surgeon's services; i.e., a proportion of the compensation based on the amount of time spent by the resident physician on this procedure.

In the cost settlement process, all such charges should be included in Medicare charges as well as in total charges in the records of the excising hospital. All revenue received from such excisions is to be used as an

offset to Medicare costs. The charges related to excision are then included with other Medicare charges in the apportioning process to arrive at Medicare costs. Where the hospital has maintained a kidney acquisition cost center, the hospital can be assured of receiving the more accurate reimbursement for these services upon final settlement using the separate cost schedule now in preparation.

The costs of excising a cadaveric kidney cannot be billed directly to the program since excision of such a kidney is not in itself a covered service; rather, such costs are covered when they are incurred in obtaining a kidney which is intended for transplant.

A. Cadaver Excision Yielding Two Kidneys

On most occasions two kidneys will be obtained from a cadaver. Where both kidneys are shipped to the same transplant hospital or organ procurement agency, the hospital would bill its normal charges adjusted to reflect any increased perfusion, preservation, shipping and other costs because there are two kidneys rather than one. On the other hand, where the kidneys are sent to separate organizations or transplant hospitals, it is necessary for the excising hospital to prorate its charges to the receiving organizations so that in the aggregate the total charges do not exceed the total amount that would have been billed if only one transplant hospital or agency were to have received both kidneys.

B. Accounting for Unusable Kidneys

Usually, the excising hospital will notify a transplant hospital or organ procurement agency of the availability of a kidney. The contacted organization then determines if it can use the kidney and, if so, the excising hospital proceeds with the excision. Where in those instances after excision the kidney is determined to be unusable, the excising hospital should not bill the transplant hospital or organ procurement agency, but include charges and days for the services involved in the excision in its Medicare charges and days, as appropriate. Apportionment based on charges, including such charges, at the end of the provider's fiscal period will determine Medicare liability of the costs incurred. In those instances where the transplant hospital or organ procurement agency determines that the kidney is unusable upon receipt, the transplant hospital or organ procurement agency should pay the excising hospital the amount billed and include such acquisition costs in its kidney acquisition cost center. Such costs along with other costs associated with the acquisition of kidneys are used in determining the transplant

hospital's standard kidney acquisition charge or the organ procurement agency's reasonable charge. Where the transplant hospital or organ procurement agency does not reimburse the excising hospital for the unusable kidney, the excising hospital would treat the costs incurred as though the kidney were found to be unusable after excision. See section on Transplant Hospitals for instructions in determining the standard kidney acquisition charge and the following section on Organ Procurement Mechanisms.

#### V. Organ Procurement Mechanisms

A transplant hospital may acquire cadaver kidneys by:

1. excising kidneys from cadavers in its own hospital;
2. having its kidney procurement team excise kidneys from cadavers in other hospitals;
3. obtaining cadaver kidneys "under arrangements" from participating or nonparticipating community hospitals whether they excise kidneys on a regular or irregular basis;
4. arrangements with a kidney procurement organization which services the transplant hospital as a member of a network;
5. arrangements with a free-standing kidney procurement organization which provides cadaver kidneys to any transplant hospital.

Where the transplant hospital also excises the cadaver kidney the costs of the procedure will be included in its kidney acquisition costs and will be taken into account in arriving at its standard cadaveric kidney acquisition charge. Where the transplant hospital provides the kidney to another hospital it may use its standard cadaver kidney acquisition charge or its standard detailed departmental charges to bill the hospital. Where the excising hospital is not a transplant hospital, it will bill its customary charges for those services used in excising the cadaver kidney. Where the provider excising the kidney is a community hospital that does not participate in the Medicare program, its charge for the kidney will be subject to screens of \$1,200 (provider cost) and \$400 (physicians services). Where the hospital is not participating in the Medicare program, organs may be accepted from it only if they cannot be obtained from any other source.

Where the transplanting hospital's organ procurement team excises the cadaver kidney at another hospital the cost of operating such a team would be included in the transplanting hospital's kidney acquisition costs along with the reasonable charges billed by the other hospital for its services.

A. Organ Procurement Agencies

Organ procurement agencies in this context are organizations which provide services designed to coordinate the acquisition of usable kidneys for transplantation. In this respect, many of the services provided are similar to those of the hospital which excises kidneys for transplants which it performs. Such services may include, but are not limited to, operation of a recipient registry, tissue typing tests, excision of the cadaver (where the physicians are employed by the agency or are under contract or agreement with the agency), perfusion, preservation and shipping of the excised kidney.

As previously stated, where the organ procurement agency assumes the responsibility for the kidney upon excision, the excising hospital should bill the agency for the services the hospital provides. Such services would also include the surgeon's fee for excising cadaver kidneys where the surgeon is an employee of the hospital or the hospital has engaged the surgeon to perform the nephrectomy.

B. Developing a Standard Charge

After the excision has been performed, the organ procurement agency frequently accepts responsibility for the kidney until actual delivery to the transplant hospital. During this period the agency may also incur costs of perfusion and preservation of the kidney as well as various administrative costs including packaging and shipping. However, during this period, some kidneys may develop defects which render them unusable for transplant purposes.

In developing its charge, the organ procurement agency should consider all of its anticipated costs for the accounting period associated with the acquisition, care and subsequent delivery of kidneys to transplant hospitals even though some kidneys subsequently may become unusable prior to delivery to the transplant hospital. All such estimated costs should then be divided by the number of usable kidneys that the agency expects to deliver to transplant hospitals during the accounting period. The average cost so determined will be recognized as the agency's standard charge.

### C. Monitoring the Standard Charge of Organ Procurement Agencies

Some hospitals contribute to the basic financial support of an organ procurement agency. Other hospitals, while not contributing to the financial support of an agency, provide sufficient guidance and supervision over the operations of an agency in a way that represents control over the agency's operations by these hospitals. Where either of these arrangements exist, the intermediary should apply the provisions of chapter 10 of the Provider Reimbursement Manual (HRM-15), Cost to Related Organizations, in determining the allowable cost of the organ procurement agency that is reflected in the agency's charge for providing kidneys.

Where relationship or control exists between the agency and transplant hospitals, the agency, at the end of its accounting period, should determine its allowable costs of furnishing kidneys to transplant hospitals and compare such cost with the revenues received from the sale of kidneys. The allowable costs in excess of revenues or the excess of revenues over allowable costs should be allocated to the member hospitals based on the cost of services rendered to each hospital. The additional costs to be allocated should be included with the member hospital's other kidney acquisition costs whereas the excess revenue to be allocated should be used to offset kidney acquisition costs of the member hospital.

Where the provisions of chapter 10 of the Provider Reimbursement Manual are not applicable, the hospital is expected to acquire the kidney at a reasonably cost related charge. Such reasonable charge payment to the agency for a service under arrangement would be included as a cost of the transplant hospital.

### D. Billing by Organ Procurement Agencies

Normally, the organ procurement agency should receive an itemized bill from the excising hospital. The bill should separately list the various routine, ancillary and professional services paid for or incurred by the excising hospital. The organ procurement agency in turn, in billing the transplant hospital should bill its standard charge as determined according to section V.B.

## VI. Accounting for the Cost of Kidney Acquisition

A kidney acquisition cost center may be maintained by transplant hospitals and by excision only hospitals. This cost center will include but is not limited to the following direct costs:

1. fees for physician services (live donor or recipient pre-admission transplant tissue typing and such services on cadavers);
2. costs of kidneys acquired from other providers or kidney procurement organizations;
3. transportation;
4. kidney recipient registration fees;
5. surgeons' fees for excising cadaver kidneys;
6. tissue typing services furnished by independent laboratories.

Also included in the cost of kidney acquisition are:

1. Hospital costs normally classified as outpatient costs applicable to kidney excisions. (Services include donor and donee tissue typing, work-up, etc., furnished prior to admission.)
2. Cost of services applicable to kidney excisions which are rendered by residents and interns not in approved teaching programs.
3. All pre-admission physician services (laboratory, electroencephalography, surgeon fee for cadaver excision, etc.) applicable to kidney excisions (includes the costs of physician services whether or not combined billing is used).

The above three items include those costs which would otherwise be reimbursable under Part B of the program. Since such costs are applicable to kidney acquisitions which are many times donor related and incurred without an identifiable beneficiary, the services are not billable to a beneficiary at the time the service is rendered.

Also, if the charges for such services were treated under normal Part B reimbursement provisions, reimbursement would be at 80 percent of reasonable cost. However, special consideration has been given in determining reimbursement at 100 percent in order to ease the administrative burden on providers. The original cost reporting schedule (form SSA-2781) designed for this purpose has been simplified to include only the type of services listed above. As described later, the cost of the balance of the kidney acquisition services will be directly computed as part of Medicare service costs.

Physicians services applicable to kidney excisions involving live donors and donees (during the pre-entitlement period and after entitlement, but prior to entrance into the hospital for transplantation) and all physician services applicable to cadavers are considered hospital services (kidney acquisition costs). As such, the vast majority of these services would be reimbursable under Part A. Physicians not using combined billing would simply bill their fee to the servicing hospital for services rendered. Such hospital would include these fees in the kidney acquisition center direct costs. On the other hand, if combined billing is utilized, the hospital would accumulate and use the combined charges applicable to kidney excisions to distribute the appropriate amount of professional remuneration. By having all such services consistently billed and reimbursed through the hospital and ultimately through the intermediary, it will make the rules easier for providers and others to implement.

It has been stated previously that services furnished by independent laboratories to donors and recipients must be billed to the excising hospital or to the transplant hospital. The cost of recipient services furnished prior to admission to the hospital for transplantation are also to be accumulated in the kidney acquisition cost center. Consequently, for consistency and administrative simplification, all donor and recipient preadmission (for transplantation) services should therefore be accounted for through the kidney acquisition cost center.

If certain professional services (applicable to kidney excisions) of hospital-based physicians are to be treated as hospital services, the professional remuneration applicable to such services should be included in aggregate provider costs; the professional component of the provider's combined charges should be included in aggregate customary charges for purposes of applying the lower of cost or charges reimbursement limitation.

The total cost included in the kidney acquisition cost center will be treated as Medicare Part A costs not subject to cost apportionment.

With respect to inpatient ancillary services and inpatient routine services, the charges and patient day statistics applicable to kidney acquisitions will be considered Medicare Part A statistics. As such, the inpatient ancillary services will be apportioned to Medicare Part A as with all other such ancillary services. No distinction or separate identification from the Medicare inpatient ancillary service charges and cost needs to be made.

In a similar manner, the inpatient day statistics applicable to all kidney acquisitions (live donor and cadaveric) will be considered Medicare statistics. Accordingly, the inpatient routine service cost applicable to all kidney acquisitions will be apportioned to Medicare with all other routine services.

Based on the above, the program will be assuming the liability for the total costs of kidney acquisitions, including certain related professional services rendered by physicians. This will be true even if a transplant is known to be performed on and billed to a non-Medicare beneficiary or when one hospital furnishes a kidney to another hospital, whether or not the recipient is known. Consistent with this treatment of costs, the total revenue received for kidneys furnished to others or transplanted in non-Medicare patients will be treated as an offset against Medicare Part A costs.

There may be infrequent occasions when a kidney will be transplanted in a Medicare beneficiary who has only Part B coverage. As the inpatient services rendered to the donor will be routinely included as Part A services, the cost must be transferred to Part B since the beneficiary is liable for the coinsurance while the program is liable for 80 percent of the cost. However, since the program cannot be billed directly for the individual charges to effect the change in cost, the standard kidney acquisition charge (which is an approximation of the cost) will be subtracted from Part A Medicare costs and included in Part B Medicare costs. Additional instructions for properly accounting for such cost transfers will be included with form SSA-2781 now in preparation.

The standard kidney acquisition charges reasonably related to cost are only essential for transplant hospitals when billing the program for Medicare transplants, since there is no mechanism for billing individual donor inpatient days to the program. Because these standard kidney acquisition charges will not be used for cost apportionment, providers may bill their detailed departmental charges generated in the course of acquiring or excising kidneys which are furnished to others or transplanted in non-Medicare patients.

By requiring that the standard kidney acquisition charges billed to the program be reasonably related to cost, as they should be, they can through the billing mechanism, be used by the program for obtaining the cost of kidney acquisitions.

This method of handling kidney acquisition costs has the advantage of standardizing the billing mechanism for tissue typing and paying for certain physician services related to kidney excisions. Furthermore, providers are assured if they establish a kidney acquisition cost center, that they will receive the total amount of their kidney acquisition costs.

In addition, this method will assure reimbursement to a transplant hospital for its kidney acquisition costs where no transplants occur in the reporting period as the program assumes the total liability net of non-Medicare revenue.

### A. Accumulation of Statistics

In order to provide necessary data to determine the cost of kidney acquisition, providers should accumulate the following statistics:

1. total revenue received for kidneys furnished to others and for kidneys transplanted in the hospital into patients who are not Medicare beneficiaries;
2. kidney acquisition inpatient days (Part A);
3. outpatient charges applicable to kidney acquisitions;
4. professional component charges of hospital-based physician when combined billing is used;
5. total amount of kidney acquisition charges billed to Medicare under Part B;
6. number of kidneys transplanted (Medicare and non-Medicare);
7. number of kidneys furnished to others;
8. number of kidneys not suitable for transplant or used for other purposes.

Where the hospital elects not to use the kidney acquisition cost center concept, all charges and patient day statistics applicable to all kidney acquisition costs must, as a minimum, be recorded as "memoranda billing," included in total charges and patient day statistics, and maintained for audit verification.

### VII. Program Billing for Transplants and Associated Services

#### A. Billing for Blood and Tissue Typing of the Transplant Recipient Whether or not Medicare Entitlement is Established

Tissue typing and pre-transplant evaluation can be reflected only through the kidney acquisition charge of the hospital where the potential transplant will take place. The transplant hospital will include in its kidney acquisition cost center the reasonable charges it pays to the independent laboratory or other hospital which typed the potential transplant recipient prior to or after

his entitlement. It will also include reasonable charges paid for physician tissue typing services applicable to live donors and recipients (during the pre-entitlement period and after entitlement, but prior to hospital admission for transplantation).

B. Billing for Blood and Tissue Typing and Other Pre-Transplant Evaluation of Live Donors

The entitlement date of the beneficiary who will receive the transplant is not a consideration in reimbursing for the services to donors because no bill is to be submitted directly to Medicare for coverage of services furnished a donor. All charges for services to donors prior to admission into the hospital for excision are "billed" indirectly to Medicare through the live-donor acquisition charge of transplanting hospitals.

The person who is selected as the donor most likely to be suitable is usually admitted to the transplanting hospital for testing suitability, an arteriogram and an IVP (Intravenous Pyelogram). Instructions for billing for the inpatient days and ancillary charges incurred by the donor during the evaluation are contained in section VI.

C. Cadaveric Donor Services

Normally, various tests are performed to determine the type and suitability of a cadaver kidney. Such tests may be performed by the excising hospital which may also be a transplant hospital or by an independent laboratory. Where the tests are performed by the excising only hospital, it would include the related charges on its bill to the transplant hospital or to the organ procurement agency. The actual charges and costs would remain in the appropriate departments of the hospital for cost settlement purposes at the end of the accounting period. As previously stated, all such charges and related revenues are considered as Medicare charges and revenues.

Where the tests are performed by a transplant hospital, it would use the related costs in establishing the Standard Charge for Acquiring a Cadaver Kidney (see section IIIB(1)). The transplant hospital would include the costs and charges in the appropriate departments for final cost settlement purposes similar to the excision only hospital.

Where the tests are performed by an independent laboratory for the excising only hospital or the transplant hospital, the laboratory should bill the hospital which engages its services. The excising

hospital would include such charges in its charges to the transplant hospital or organ procurement agency and the transplant hospital would include such charges in developing its standard charge for acquiring a cadaver kidney.

The cost of these services cannot be billed directly to the program since such tests and other procedures performed on a cadaver are not identifiable to a specific patient.

D. Billing for Services When a Transplant Occurs

The SSA-1453 is completed for the beneficiary who receives a kidney transplant from either a living donor or cadaver according to existing instructions in Part A Intermediary Manual, section 3620ff and Hospital Manual (HIM-10) section 400ff. In addition, the living donor or cadaver kidney acquisition charge must be shown in item 19T of the SSA-1453 billing for the period when the transplant takes place. For example, if three interim bills are submitted for an inpatient stay during which a transplant is performed and the date of transplantation is within the billing dates of the second interim bill, the living donor or cadaver kidney acquisition charge must be shown on the second billing.

An SSA-1483 is completed when a transplant is performed and the beneficiary lacks Part A coverage. Covered ancillary services as explained in Part A Intermediary Manual, section 3640.2 and Hospital Manual (HIM-10) section 420, and the cadaver kidney acquisition charge are billed on the SSA-1483. The acquisition charge is shown in item 15I, Other.

When a transplant occurs and an SSA-1453 or SSA-1483 billing is prepared for the beneficiary, a corresponding SSA-2743 must also be prepared. Applicable identifying information in items 1-11 and items 28-33 must be completed. No itemization of laboratory services is required on the SSA-2743 when a transplant bill is submitted. Itemization of laboratory services in item 36 and 37 of the SSA-2743 is required for dialysis related lab work only.

Where the donor is released from the hospital and is subsequently readmitted to the hospital for further treatment directly and immediately attributable to the surgery for removal of the kidney, costs for services provided should be treated similar to the costs of services rendered the donor during the inpatient stay for the excision (see section II(a)(1)(c) of Part A I.L. 73-25).

Note: The charge for tissue typing and the results, items 34 and 35 on the SSA-2743 apply only to typing of the beneficiary, not donors.

Tissue typing charges for donors or cadavers are NOT extracted from the kidney acquisition charge shown in item 33. This corrects instructions for completing items 34 and 35 which were given in I.L. 73-25, section VII, page 46.

### VIII. Accounting for the Cost of Routine Maintenance Dialysis

#### A. General

There are two basic types of kidney dialysis, hemodialysis and peritoneal dialysis. Providers furnishing these services on a routine basis should follow instructions contained in section IIIB of Part A I.L. 73-25. In establishing a separate cost center for kidney dialysis as required in that intermediary letter, providers should accumulate costs associated with both types of dialysis where performed at the same basic frequency, and develop an average charge per dialysis based on such costs. The charge so developed would be subject to the \$150 screen for maintenance dialysis and \$190 screen for training dialysis.

Dialysis of a stabilized patient should not normally be provided in the inpatient setting. If the patient requires inpatient hospitalization because of medical necessity, the cost of the dialysis treatment while the patient is confined in the hospital is not subject to the reimbursement screen.

#### B. Accounting for Days of Care Associated with the Furnishing of Renal Dialysis

There are occasions where, due to the provider's policy or lack of other accommodations, a patient undergoing routine maintenance dialysis is assigned to a bed. Where the bed is located in the dialysis department there should be no separate charge for an inpatient day of care nor should the beneficiary be so charged. Costs incurred for the bed occupancy are included in the costs of the dialysis department. Such costs become part of the cost of the department and are accounted for in the normal cost-finding and apportionment process.

Normally, where a provider assigns a bed to a patient in the outpatient department, the provider charges its customary outpatient charge for this service and no bed days are counted. This practice should also be observed where renal dialysis treatments are the primary reason for the assignment of the bed, except that the provider's charge should reflect the added costs associated with the use of the bed. The provider would have to accumulate these charges separately and they would be included in total outpatient charges. After overhead costs have been allocated during cost finding to both the outpatient and dialysis cost centers, the provider would apportion outpatient costs to the dialysis cost center on form SSA-2781 by applying the ratio of the charges applicable to renal patient's occupancy of a bed in the outpatient department to the total outpatient charges applied to the total outpatient costs.

Where the patient is admitted as an inpatient for a condition other than maintenance dialysis, the days of care provided are charged as normal inpatient days even though the patient may receive a routine maintenance dialysis treatment while so confined. On the other hand, where a Medicare beneficiary is assigned an inpatient bed solely for the purpose of receiving a routine maintenance dialysis treatment, the beneficiary is not to be charged for the inpatient day of care.

The use of inpatient accommodations for the provision of routine dialysis is in virtually all cases unnecessary. However, where such accommodations must be utilized, the use normally amounts to less than one-half day. It is therefore necessary for providers to separately account for the cost of such partial days of care by an accounting based on the time associated with such treatments. Where a patient spends up to 12 hours as an inpatient receiving a dialysis treatment, one unit should be accumulated by the provider. Where the patient spends more than 12 hours receiving a dialysis treatment in an inpatient setting, the provider should use its normal method for accounting for such inpatient days. No accommodation days are charged to the beneficiary or billed for separately. Billing for this service must be on form SSA-1483 and is included in the dialysis charge. No admission notice will be issued under these circumstances. Such dialysis treatment does not begin a benefit period and will not qualify the beneficiary for a SNF stay or a Part A home health visit. The provider would accumulate these units and days by the following types of care:

1. routine service applicable to aged, pediatric and maternity patients;
2. routine service applicable to all patients other than aged, pediatric and maternity patients;
3. separate special care units under the Departmental Method, aggregate special care units under the Combination Method.

At the end of the provider's cost reporting period, for each type of care used in its cost settlement process, the provider would divide total units by two to arrive at the number of inpatient days attributable to dialysis treatments of 12 hours or less which would be added to the cumulative days representing dialysis treatments of more than 12 hours duration. These days would then be included in total inpatient days according to type of care. The cumulative costs associated with each type of care would then be divided by the total inpatient days by type of care to arrive at an average cost per diem by type of care. Each per diem cost multiplied by the applicable inpatient days for dialysis service will be computed on form SSA-2781 in the development of total dialysis costs. Not more than one inpatient day can be counted for any bed on the same calendar day.

#### C. Extended Peritoneal Dialysis Treatments

There are certain situations in which a patient who lives a great distance from the provider may receive no more than one routine maintenance dialysis treatment per week. In such instances, the normal treatment is given in an inpatient setting utilizing the peritoneal method which varies from 30 hours to 60 hours per treatment. Inpatient days associated with the provision of these services are treated as in the preceding section (Accounting for Days of Care Associated with the Furnishing of Renal Dialysis). The beneficiary's total benefit days are not reduced by such inpatient days of care.

Where the provider furnishes both hemodialysis and extended peritoneal dialysis, the provider should develop a charge for dialysis based on the costs associated with hemodialysis and a charge based on costs associated with extended peritoneal dialysis. Where the charge for hemodialysis exceeds the \$150 screen for maintenance dialysis or \$190 screen for training dialysis, or where the charge for extended peritoneal dialysis treatment of at least 30 hours duration exceeds \$450, the provider should file an exception request along with the necessary substantiating information as required in Part A I.L. 73-25. The Social Security Administration will review such request and determine whether to grant an exception to its guidelines.

#### D. Routine Laboratory Tests Performed in the Dialysis Department

Part A I.L. 73-25 contains the requirement that the cost of routine laboratory tests performed in the dialysis department become part of the dialysis costs and charges in arriving at the screen limitations. Where the provider has instituted a separate charge for these services,

such charges are combined with other routine maintenance dialysis charges for apportioning costs at the end of the provider's fiscal period. Where the tests performed in the dialysis department for beneficiary patients are in excess of the recommended number and the charges for the unnecessary tests are denied by the intermediary, the charges for those tests are to be included only in the dialysis department total charges. In the apportioning process only Medicare covered charges and total charges will be used to arrive at allowable program costs. Where the charges are in excess of the frequencies contained in Part A I.L. 73-25 but nevertheless are approved by the intermediary, such charges also remain in the dialysis department, but are considered Medicare charges in the apportioning process.

Example of Billing for Routine Tests

Facts:

Dialysis screen amount		\$150
Form SSA-2743:		
line 18 - Dialysis only charge		\$145
line 36A - In-unit routine lab		8
line 36B - Out-of-unit routine lab		5
line 37 - Nonroutine in unit		7
Total SSA-2743		<u>\$165</u>

The intermediary should total lines 18, 36A and 36B to determine the charge for dialysis which amounts to \$158. This is \$8 in excess of the screen. The SSA-1483 billing form would show the following:

Line

15C Laboratory	\$ 5
15I Other	\$160(a)
Amount in excess of screen	8
	<u>\$152</u>
Line 15C Laboratory	5
Total allowable on bill	<u>\$157</u>

- (a) Dialysis charge plus in-unit routine and nonroutine tests. Intermediary would line out \$160 and substitute \$152.

Charges for all tests, whether routine or nonroutine, performed in the dialysis department are added to the dialysis charge for billing purposes. Using data in the previous example, the provider would use \$153 (\$145 + \$8) for apportioning costs of the renal dialysis department on form SSA-2781 and the \$5 out-of-unit laboratory charge to apportion the costs of the laboratory department. The total costs so developed would be used to measure against the allowable screen. As the cost of the in-unit nonroutine lab tests are considered allowable, the provider should use the total \$160 charge to apportion the costs of the dialysis department to the program on the appropriate apportionment schedule.

E. Accumulation of Statistics by Providers Furnishing Outpatient Maintenance Dialysis Services

The following statistics should be accumulated by providers furnishing outpatient maintenance dialysis services:

1. total inpatient dialysis charges;
2. Medicare Part A inpatient dialysis charges;
3. Medicare Part B inpatient dialysis charges;
4. total Medicare outpatient dialysis charges;
5. total outpatient charges by type of dialysis service; i.e., hemodialysis, peritoneal dialysis and training dialysis;
6. number of dialysis sessions by type of dialysis;
7. total outpatient routine laboratory services applicable to each type of dialysis;
8. total Medicare Part B charges by type of dialysis including related routine outpatient laboratory charges;
9. inpatient days of care associated with inpatient admissions to receive routine maintenance dialysis only (see section VIII.B.).

IX. Glossary of Terms

Angiogram	Examination by roentgen rays of blood vessels which have been made visible by injection of a radiopaque substance.
Aortogram	The film produced by examination of abdominal aorta by X-ray after injection of contrast fluid.
Arteriogram	Recording or tracing of the arterial pulse by using sphygmograph; X-ray picture of an artery which contains a radiopaque dye.
Blood Typing	The method used to determine various factors when blood is tested according to blood group systems such as A-B-O, M-N, and Rh-Hr.
Cadaver Kidney	A kidney which has been surgically removed from an individual who has been pronounced dead according to medical and legal criteria.
Crossmatching	Comparison for the purpose of determining whether two or more specimens have similar or identical characteristics.
Donee	See recipient.
Donor	A person who allows his kidney to be surgically removed for the purpose of reimplantation in another person.
Donor Evaluation	General term to describe the screening to determine the suitability of a donor based on physical, psychological and social factors. Such tests may include but are not limited to the following: blood typing, histocompatibility testing, intravenous urography and renal arteriography.

Excising Hospital	A hospital where kidneys are excised and which offers no transplant services.
Organ Perfusion	To inject or propel fluid through an organ by way of its artery.
Organ Preservation	The maintenance of a kidney after it has been removed from the donor and until it has been transplanted into a recipient. Organ preservation is an integral part of kidney transplantation and may be accomplished by special solutions and cooling of the kidney, or by perfusion of the kidney.
Organ Procurement Agency	An organization which maintains a registry of potential transplant candidates and which matches excised kidneys to patients of the hospitals participating in the organization. <del>Participating hospitals generally pay</del> <del>to cover the agency's costs and</del> to register their patients and their vital statistics, such as blood characteristics. The organization may also accept responsibility for excised cadaver kidneys upon excision until delivery is accepted by the transplant hospital.
Recipient	A person who received a renal transplant.
Recipient Registry	A listing of patients (including certain medical data on these patients) who are awaiting a cadaver kidney transplant.
Tissue Typing	Laboratory procedures used to determine the degree of compatibility between a donor organ and a potential recipient of a kidney transplant. It includes (1) <del>identification of tissue types (HLA)</del> , (2) <del>determination of a cross match for cytotoxic antibodies</del> , and (3) <del>certain specialized tests of immunologic reactions such as mixed lymphocyte cultures (MLC) and cell mediated lympholysis</del> .

Transplant Hospital

A hospital where renal transplantations  
are performed on a regular basis.