Individuals with end-stage renal disease (ESRD)—irreversible loss of kidney function—require either dialysis or kidney transplantation to survive. In 1972, the Social Security Act extended all Medicare Part A and Part B benefits to individuals with ESRD who are entitled to receive Social Security benefits. This entitlement is nearly universal, covering more than 90 percent of all people with ESRD in the United States.

Because of the scarcity of kidneys available for transplantation, most patients with ESRD (70 percent) receive maintenance dialysis. Medicare spending for outpatient dialysis and injectable drugs administered during dialysis was about $10.7 billion in 2012 and is a predominant share of revenues for dialysis facilities.

Since 1983, Medicare has paid dialysis facilities a predetermined rate intended to cover a specific bundle of services provided to patients in a given dialysis treatment. To improve provider efficiency, Medicare began in 2011 to phase in a modernized prospective payment system (PPS) for outpatient dialysis services. The Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) broadened the payment bundle to include dialysis drugs, laboratory tests, and other ESRD-related items and services that were previously separately billable. MIPPA also required CMS to implement a pay-for-performance program beginning in 2012. Most dialysis facilities elected to be paid under the modernized PPS instead of the four-year transition. Table 1 summarizes key differences between the modernized and the prior payment systems.

Defining the care that Medicare buys

Medicare covers two methods of dialysis—hemodialysis and peritoneal dialysis. In hemodialysis, a patient’s blood is cycled through a dialysis machine, which filters out body waste. More than 90 percent of all dialysis patients undergo hemodialysis three times per week in dialysis facilities. Peritoneal dialysis uses the lining of the peritoneal cavity to filter excess waste products, which are then drained from the abdomen. Patients undergo peritoneal dialysis five to seven times per week in their homes.

The unit of payment is a single dialysis treatment. Although different equipment, supplies, and labor are needed for hemodialysis and peritoneal dialysis, the payment system that began in 2011 does not differentiate payment based on dialysis method for adults. Medicare’s payment rate is based on a regimen of three dialysis treatments per week.

Under the modernized payment method, facilities are paid a single case-mix-adjusted payment which includes composite rate services and ESRD-related drugs, laboratory services, and medical equipment and supplies. The ESRD drugs included under the broader payment bundle include: (1) Part B ESRD-related drugs (including erythropoietin, injectable iron, and vitamin D analogs), and their oral equivalents; and (2) Part D oral ESRD-related drugs with no injectable equivalent (oral-only drugs include calcimimetics and phosphate binders). The Protecting Access to Medicare Act of 2014 (PAMA) delays the inclusion of oral-only ESRD-related drugs into the payment bundle until 2024.

Setting the base rate

The base payment under the broader bundle is intended to cover all operating and capital costs that efficient providers would incur in furnishing dialysis treatment episodes in dialysis facilities or in patients’ homes. For 2015, the base payment rate is proposed at $239.33 for freestanding facilities and for hospital-based facilities (Figure 1). The base rate
reflects the 0 percent update to the 2014 base rate mandated by PAMA.

The American Taxpayer Relief Act of 2012 mandates that the Secretary rebase the outpatient dialysis payment rate in 2014 to reflect the reduction in the use of ESRD-related drugs between 2007 and 2012. The Secretary applied a drug utilization adjustment of $8.16 per treatment in 2014. PAMA supersedes any additional adjustment by the Secretary by setting the update in 2015 through 2018.

**Patient-level adjustments**—For adults, CMS adjusts the base rate for case mix using the following measures:

- age (18–44, 45–59, 60–69, 70–79, ≥80 years),
- two body measurement variables—body surface area and body mass index,

---

*Figures 1 and 2, Dialysis prospective payment system in 2015 and 2011. Note: This figure represents the payment method for beneficiaries 18 and older. For beneficiaries under 18: (1) the base rate, adjusted for geographic factors, is multiplied by patient case-mix characteristics (age and dialysis method); (2) the low-volume adjustment factor does not apply; and (3) the outlier payment policy and add-on for self-dialysis training do apply. *Represents values proposed by CMS in the 2015 end-stage renal disease proposed rule. Source: MedPAC analysis of CMS’s proposed rule for the end-stage renal disease prospective payment system for calendar year 2015 and the quality incentive program for payment year 2017 and 2018.*
• six specific acute and chronic comorbidities, and
• onset of dialysis (for the first four months a patient receives dialysis).

For children under the age of 18 years, CMS adjusts the base rate by age and dialysis modality.

**Facility-level adjustments**—CMS includes two facility-level adjustments to the base rate. First, CMS adjusts the base rate for differences in local input prices by using the Office of Management and Budget’s Core-Based Statistical Areas. The wage index values used under the ESRD PPS are the inpatient PPS wage index values calculated without regard to geographic reclassifications and utilize pre-floor hospital data that are unadjusted for occupational mix. The labor-related portion of the composite rate is proposed at 50.7 percent for both freestanding and hospital-based facilities.

Second, CMS includes an 18.9 percent adjustment to account for the costs that low-volume facilities incur. A low-volume facility is defined as one that furnishes fewer than 4,000 treatments in each of the three years before the payment year and that has not opened, closed or received a new provider number due to a change in ownership during the three-year period. In addition, for new facilities that are Medicare-certified after 2011, CMS considers the facility’s proximity to other commonly-owned facilities.

**Outlier payments**—Under the modernized system, CMS pays facilities an outlier payment when a beneficiary’s payment per treatment for outlier services exceeds a threshold, which is the beneficiary’s predicted payment amount per treatment for the outlier services plus a fixed dollar loss amount. Outlier services include drugs, laboratory services, and other items that facilities separately billed under the old payment method. The fixed dollar loss amount for 2015 is proposed at $85.24 for adults. Medicare pays 80 percent of the facilities’ costs above the threshold.

**Self-dialysis training add-on payment**

The modernized payment method includes a dialysis training add-on payment of $50.16 per treatment that is adjusted based on the same hospital wage index used to adjust the base payment rate. CMS pays up to 15 training sessions for peritoneal dialysis and 25 sessions for hemodialysis.

**Transitioning to the modernized payment method**

The four-year transition to the new payment method began in 2011. Beginning on January 1, 2014, all facilities will be paid 100 percent under the modernized payment system.

**Payment updates**

There is a mechanism in the law that annually updates payments to outpatient dialysis facilities. This mechanism measures the price increases of goods and services facilities buy to produce patient care, reduced by a productivity adjustment. PAMA overrides this mechanism and sets the payment update at 0 percent for 2015, and reduces the update by 1.25 percentage points in 2016 and 2017 and by 1 percentage point in 2018.

**Quality incentive payment program**

The modernized payment also includes a quality incentive payment program. Beginning in 2012, the bundled payment rate is reduced by up to 2 percent for facilities that do not achieve or make progress toward specified quality measures. Facility-level scores are publicly reported on-line and posted within dialysis facilities. For the 2015 payment year, the ESRD quality incentive program includes 10 measures:

- Three clinical measures that assess dialysis adequacy (i.e., the extent to which dialysis is removing enough wastes and fluid from the body);
Table 1  Key features of the prior dialysis payment method and the modernized prospective payment method

<table>
<thead>
<tr>
<th>Payment method feature</th>
<th>Prior payment method</th>
<th>Modernized payment method</th>
</tr>
</thead>
</table>
| Payment bundle         | Composite rate services, which include: nursing, dietary counseling and other clinical services, dialysis equipment and supplies, social services, and certain laboratory tests and drugs | • Composite rate services  
• Separately billable (Part B) injectable dialysis drugs and their oral equivalents  
• ESRD-related laboratory tests  
• Selected ESRD Part D drugs  
• Self-dialysis training services |
| Unit of payment        | Single dialysis treatment | Single dialysis treatment |
| Add-on payment to the composite rate | Yes | None |
| Self-dialysis training services adjustment | Yes | Yes |
| Beneficiary-level adjustments | • For adults: age, body surface, and body mass  
• For pediatric beneficiaries: none | • For adults: age, dialysis onset, body surface, body mass, 6 comorbidities  
• For pediatric patients: age, dialysis method |
| Facility-level adjustments | Wage index | • Wage index  
• Low-volume adjustment |
| Outlier policy         | None | Applies to the portion of the broader payment bundle composed of the drugs and services that were previously separately billable |
| Quality incentive program | None | For 2015, 6 clinical measures assess the quality of care and 4 reporting measures assess the use of ESRD processes of care. |

Note: ESRD (end-stage renal disease). The low-volume adjustment does not apply to pediatric patients.


- A clinical measure that assesses anemia management—the percentage of beneficiaries receiving erythropoietin stimulating agents with an average hemoglobin greater than 12.0 g/dL;
- Two clinical measures that assess hemodialysis vascular access—use of autogenous AV fistulas and intravenous catheters;
- A reporting measure that assesses facility participation in the Centers for Disease Control and Prevention’s National Healthcare Safety Network Dialysis event reporting system;
- A reporting measure that assesses facility administration of the in-center hemodialysis Consumer Assessment of Healthcare Providers and Systems Survey instrument (which collects patient satisfaction information);
- A reporting measure that assesses whether facilities attest to monitoring patients’ mineral metabolism (phosphorus and calcium) levels on a monthly basis; and
- A reporting measure that assesses whether facilities report the dosage of erythropoietin stimulating agents (as applicable) and hemoglobin/hematocrit of in-center and home hemodialysis beneficiaries.