

ESRD Clinical Performance Measures (CPM) Project
Frequently Asked Questions

Q.1. What is the ESRD Clinical Performance Measures (CPM) Project?

A.1. The ESRD Clinical Performance Measures (CPM) Project collects clinical information on dialysis patients to measure and track the quality of care received by these patients in dialysis facilities. Each year data are collected on a random sample of adult hemodialysis (HD) and peritoneal dialysis (PD) patients and on all pediatric HD patients. Beginning in 2005, information will be collected on all pediatric PD patients. CMS has been working with partners in the renal community for over ten years to improve care for these patients. Information is collected for the following areas of care: adequacy of dialysis, anemia management, vascular access, and nutrition. This project describes both national and ESRD Network results each year. An annual report with these findings is sent to all dialysis facilities in the country so staff can compare their facility's numbers to national and ESRD Network numbers. The results are also posted on CMS's website: <http://www.cms.hhs.gov/esrd/1.asp>

Q.2. What are the ESRD Clinical Performance Measures (CPMs)?

A.2. ESRD Clinical Performance Measures (CPMs) are indicators of care that measure how well established targets (or thresholds) of care for dialysis patients are met (compliance to clinical guidelines). The measure can be applied at the dialysis facility level; however, for this Project, CMS profiles the measures at the national level and at the ESRD Network level. The measures were developed from clinical practice guidelines established by a study conducted by the National Kidney Foundation called K/DOQI (link to K/DOQI site here). Currently, data to calculate thirteen ESRD CPMs in three different areas are collected: adequacy of dialysis, anemia management, and vascular access.

Q.3. What is K/DOQI?

A.3. The National Kidney Foundation's initiative to assemble kidney disease experts who look at all the research done about various aspects of kidney disease and make decisions or recommendations as to the most appropriate care for patients with kidney disease. Some of the guidelines already developed for patients with ESRD include:

- adequacy of hemodialysis,
- adequacy of peritoneal dialysis,
- management of vascular access, and

- management of anemia.

The draft guidelines are then circulated to a wider audience for comment and feedback before they are finalized. The project is called the Kidney Disease Outcomes Quality Initiative (K/DOQI). You can read more about the K/DOQI guidelines at

<http://www.kidney.org/professionals/kdoqi/index.cfm>

Q.4. How are the ESRD Clinical Performance Measures (CPMs) collected?

A.4. Currently, information to calculate the ESRD Clinical Performance Measures (CPMs) is collected each year from staff at dialysis facilities with one or more patients selected for the sample (adult patients) and from facilities caring for one or more pediatric patients. Information is collected both electronically and by using a paper data collection form.

Q.5. How are the ESRD Clinical Performance Measures (CPMs) used?

A.5. The ESRD Clinical Performance Measures (CPMs) are used to help guide quality improvement efforts in the facilities. For example, if a facility has a lower performance level on a CPM compared to either the national or the ESRD Network level, staff at that facility may decide to implement a quality improvement project to help them understand why their performance was lower and work towards improving their performance for that measure.

Q.6. What are some of the highlights of the findings from the ESRD Clinical Performance Measures Project?

A.6. Some of the highlights of the findings from the ESRD Clinical Performance Measures (CPM) Project include:

Adult (18 years or older) hemodialysis (HD) patients

In late 1998, 80% of patients achieved an average Kt/V \geq 1.2; by late 2003, 91% of patients met that target.

In late 1998, 26% of patients were dialyzed with an arteriovenous fistula (AVF); by late 2003, 35% of patients met this target.

In late 1998, 59% of patients had an average hemoglobin \geq 11 g/dL; by late 2003, 80% of patients met this target.

Adult (18 years or older) peritoneal dialysis (PD) patients

For the 1999 study year, 62% of patients had an average hemoglobin ≥ 11 g/dL; for the 2004 study year, 82% of patients met this target.

Pediatric (under 18 years old) HD patients

In late 2001, 62% of pediatric patients had an average hemoglobin ≥ 11 g/dL; by late 2003, 67% of patients met this target.

Q.7. What is anemia?

A.7. Anemia means you do not have enough red blood cells. Healthy red blood cells carry oxygen throughout the body. If you don't have enough red blood cells, the body does not get enough oxygen. Patients with anemia may look pale, feel tired, cold, and have muscle weakness or impotence. Anemia is common in people with Chronic Kidney Disease and people on Dialysis.

Q.8. What is adequacy of dialysis?

A.8. Adequacy of dialysis is a number that measures how well wastes were removed from your body during the dialysis treatment. A common measurement of adequacy in hemodialysis is the "Kt/V." This measurement takes into account your size and weight, the type of dialyzer (artificial kidney) that is being used, the total treatment time, and the total volume of urea in the body (using blood samples from before and after the hemodialysis treatment to measure the blood urea nitrogen [BUN]). The Kt/V is then figured using a mathematical formula. The adequacy of dialysis for Peritoneal Dialysis can be measured in several different ways.

Research has shown that patients who do not have a Kt/V of 1.2 or more are more likely to have symptoms such as nausea, vomiting, loss of appetite, weakness, or mental confusion. Having a Kt/V of 1.2 or more helps prevent these symptoms and helps prevent other health issues resulting from not receiving enough hemodialysis. A Kt/V of 1.2 or more is considered that you are getting adequate hemodialysis. If your facility uses Kt/V for the measurement of hemodialysis or if you are on peritoneal dialysis, it is advised that you discuss the adequacy of dialysis with your doctor or dialysis facility.

Q.9. What is vascular access?

A.9. All patients who are on hemodialysis need a "connection" that allows blood to flow from the patient's artery to a dialysis machine that cleans the blood and then returns the blood to the patient through a vein. A fistula is a

surgical connection of an artery to a vein in the forearm. When an arteriovenous fistula (AVF) is created, the vein enlarges and creates the safest, most reliable, and effective access, or way to remove, clean and return a dialysis patient's blood to them. AVFs are usually considered the best type of access for dialysis patients because they cause fewer infections, hospitalizations, clotting problems, as well as improving blood flow for better treatment. AVFs also usually last for years, compared to weeks or months for other access types.