Medication Omission or Errors

Fact	Source
More than half of respondents in the *Health and Safety Survey to Improve Patient Safety in End Stage Renal Disease* conducted by the RPA indicated that a patient was never given the wrong medication (57%) or given medication at the wrong time (54%).	*Health and Safety Survey to Improve Patient Safety in End Stage Renal Disease*, page 8
The most likely medication error appears to be a patient failing to receive one of their medications (63% sometimes or rarely) or being given the wrong dose of a medication (37% sometimes or rarely)	*Health and Safety Survey to Improve Patient Safety in End Stage Renal Disease*, page 8
Most ESRD patients take between six and 10 medications per day. While mediation errors occur infrequently, considering the number and occurrences of medications taken, the effect of medication omissions may be quite large, particularly when assessed over longer time frames	*Health and Safety Survey to Improve Patient Safety in End Stage Renal Disease*, page 18
A study of medication-related problems in hemodialysis patients found a positive correlation between problems and number of co-morbidities. The results showed 1 medication-related problem for every 3.1 medication exposures. Most common problems were • drug use without indication (30.9%) • lack of laboratory testing to monitor medication therapy (27.6%) • indication without drug use (17.5%) • dosing errors (15.4%).	H. J. Manley et al., "Factors Associated With Medication-Related Problems in Ambulatory Hemodialysis Patients," *American Journal of Kidney Disease* 41, no. 2. (February 2003): 386-393.
The prevalence of medication errors within dialysis facilities is unknown. Facilities may underestimate the number of medication errors that occur. One small chain of dialysis facilities reported after institution of a fully integrated electronic medical record, medication errors, predicted at <1%/month were found to be 12.5%. Following trend identification and staff re-education, errors dropped to an average of 2%/month.	J. P. Capelli, M. Jacoby, K. Taraschi, "Enhancing Dialysis Services, Revenue, Quality, and Efficiency Through Computerization. The Impact of Medication Error Reduction," *Nephrology News & Issues* 16, no. 13 (December 2002): 34-36, 38-41.

DID YOU KNOW
-Medication Omission or Errors

The most common errors in dosage result in pediatric and geriatric populations. The age (and weight) of a patient can help dispensing health care professionals in their double check of the appropriate drug and dose.	National Coordinating Council for Medication Error Reporting and Prevention
Patients taking more than six medications are the most likely to be among the millions of Americans who receive treatment each year due to adverse drug-related events.	U Sarkar, A López , JH Maselli, R Gonzales. Adverse Drug Events in U.S. Adult Ambulatory Medical Care Health Serv Res. 2011 May 10. [Epub ahead of print]
Patients 65 and older were more than twice as likely as middle-age patients and nearly three times likelier than patients between 25 and 44 to experience adverse drug events serious enough to send them to a doctor or an ED.	U Sarkar, A López , JH Maselli, R Gonzales. Adverse Drug Events in U.S. Adult Ambulatory Medical Care Health Serv Res. 2011 May 10. [Epub ahead of print]
Nearly three out of four Americans admit they do not always take their medications as directed.	NCL Medication Adherence Campaign.
Using "quick check" charts for common medication interactions can help reduce math and drug knowledge errors.	A. Pié and T.L. Warholak, "Medication Safety: What You Can Do to Prevent Errors" Renal Business Today. 3(12) (December 2008): 28-31.
Health professionals who continually update their knowledge of drugs make fewer medication errors than those who do not.	A. Pié and T.L. Warholak, "Medication Safety: What You Can Do to Prevent Errors" Renal Business Today. 3(12) (December 2008): 28-31.

Anticoagulants (inadequate therapeutic dosing, no laboratory follow-up); cardiovascular agents (overdose); chemotherapeutic agents (overdose); diuretics (overdose, no laboratory follow-up); diabetic medications (overdose, wrong type of insulin); nonsteroidal anti-inflammatory drugs (extended use, overdose); and total parenteral nutrition solutions (given peripherally, inaccurate component amount) are among the ten drug types that are identified as being associated with common errors.	R.G. Hughes and E. Ortiz, "Medication Errors: Why They Happen, and How They Can be Prevented" American Journal of Nursing. 2005;105(3):14-24.
Warfarin is frequently cites as a leading drug involved in adverse drug events. Patients who reported receiving medication instructions from a physician or nurse as well as a pharmacist, had a 60% reduced rate of a wayfarin-related hospitalization in the subsequent two years.	J.P. Metlay, S. Hennessy, A.R. Localio, X. Han, W. Yang, A. Cohen, et al. "Patient reported receipt of medication instructions for warfarin is associated with reduced risk of serious bleeding events." Journal of General Internal Medicine (October 2008) 23: 1589-94.