

## Long-Term Care Survey Alert

### **MEDICATION MANAGEMENT: Does Your Resident Have A Genetic Problem Metabolizing Certain Meds?**

**Pharmacogenetic testing can provide the answer.**

If a resident or her family tells you she hasn't been able to tolerate antidepressants or other medications in the past--or doesn't get any relief from certain ones--listen carefully.

The person may have a genetic variation that causes him or her to metabolize drugs too slowly or rapidly. Those who metabolize drugs poorly or not at all can become toxic on standard doses and/or be more likely to suffer serious adverse drug reactions. Ultra-rapid metabolizers don't get any effect from standard doses of certain medications, such as antidepressants.

**Did you know?** Medicare pays for pharmacogenetic testing for CYP2D6 and CYP2C19, the two genes that affect enzymes that metabolize numerous medications in the nursing home setting. For more information, go to

[www.roche.com/final\\_cyp\\_gene\\_family.pdf](http://www.roche.com/final_cyp_gene_family.pdf).

**Example:** Geropsychiatrist **Scott Armstrong, MD**, recently had a patient with intractable depression who had in the past experienced bad side effects on tricyclic antidepressants. Many of the tricyclics are primarily or secondarily metabolized by CYP2D6, he notes. So he ordered pharmacogenetic testing that confirmed the patient is a poor metabolizer for CYP2D6. "This information helped guide us" in ordering medications for the patient in the future, says Armstrong, medical director for **Tuality Center for Geriatric Psychiatry** and associate clinical professor of psychiatry at **Oregon Health and Science University**.

**Before you order testing:** Sometimes practitioners will assume someone having problems with many medications is a poor metabolizer for CYP2D6 or CYP2C19, says Armstrong. "But when you look at the patient's medication list, none of the medications is metabolized by those pathways," he notes. (Review a comprehensive list of medications metabolized by CYP2D6 and CYP2C19 at <http://medicine.iupui.edu/flockhart/table.htm>.)