future cardiac events within 3 years when compared to fasting LDL-C.

Previous strategies supported lower target LDL-C for higher risk patients. In order to achieve lower target LDL-C, clinicians treated high-risk patients more aggressively and these individuals received much more benefit. Patients who had borderline high lipids were prescribed a weaker dosage of lipid-lowering drugs or none at all.

These days lipid management strategies no longer endorse a target LDL-C or titrated dosage of lipid-lowering medications. Rather, the new ACC/AHA recommendations call for prescribing a specific dosage of statins based on a patient’s baseline risk (24). This recommendation is based on data from dozens of randomized clinical trials and is in agreement with the concept of “the lower the better.” ACC/AHA do recommend a fasting lipid panel prior to starting statin therapy or adjusting dosages. However, initial screening and long-term monitoring of lipid lowering are minimally affected by non-fasting.

As a thought experiment, consider two lipid scenarios for a hypothetical patient (Table 2). In the first scenario, a fasting sample has a calculated LDL-C of 162 mg/dL (high by conventional terminology). As triglycerides increase due to non-fasting, the calculated LDL-C is reduced. Assuming this is an initial screen, then calculated risk is the criterion of interest, and fasting has no impact. If this were an annual follow-up for a patient on therapy, even a triglyceride increase of 50% would result in a reported LDL-C of 143 mg/dL (borderline high). This difference is of questionable clinical import. Furthermore, a non-fasting triglyceride >200 mg/dL would trigger a request for a follow-up fasting lipid panel.

In the second scenario, the fasting sample has a calculated LDL-C of 194 mg/dL, suggesting familial hypercholesterolemia. Calculated LDL-C falls to 188 mg/dL if triglycerides increase 20% (the median increase) for a non-fasting sample. In this worst case scenario, the calculated LDL-C falls below the diagnostic threshold due to the non-fasting elevation. However, the reported LDL-C in non-fasting