Providing a vital body composition service
GE Lunar iDXA at the Bone Density and Body Composition Center

About the Bone Density and Body Composition Center
The Bone Density and Body Composition Center is a physician-owned and operated practice in Redwood City, California, that performs dual-energy X-ray absorptiometry (DXA) exams. Leonard A. Valentino, M.D., opened the practice in 1996 with Amy Stanbery as lead technician. The Center initially conducted bone mineral density (BMD) testing with DXA. In 2002, it expanded its services by offering DXA measurements of lean and fat mass. Recently, the Center enhanced its body composition offering by upgrading to GE's flagship DXA system – the Lunar iDXA. The Center also added GE's CoreScan application so it could include visceral fat measurements as part of a comprehensive body composition assessment.

About body composition with DXA
Weight and body mass index (BMI) are limited measurements of an individual's health. DXA body composition analysis is considered a “gold standard” for health assessment since it goes beyond weight and BMI to deliver an accurate and precise measurement of the body. By quantifying the fat mass, lean mass, and bone of each segment of the body, GE DXA systems can help show the benefits of improving diet, exercise, and lifestyle. And now with GE's CoreScan application, DXA systems can quantify visceral fat to help in the management of cardiometabolic diseases associated with excess visceral fat – including type 2 diabetes.

DXA at the Bone Density and Body Composition Center
Amy Stanbery, lead technician at the Bone Density and Body Composition Center, has overseen its testing service since Dr. Valentino opened the practice in 1996. It has been “very busy” – assessing bone health to help referring physicians diagnose osteoporosis and assess fracture risk. “We have scanned approximately 40,000 bone density patients,” said Amy.

The Center also began conducting lean and fat tissue measurements with its DXA system. Body composition measurements with DXA help clients precisely monitor the results of weight management and exercise efforts. To optimize for recent health care trends, the Center recently expanded its body composition service by installing the Lunar iDXA with the CoreScan application to measure visceral fat.

Body composition testing with DXA
The Center began by offering total body composition with DXA on the GE Prodigy® DXA system in 2002. Amy was impressed by the capabilities of Prodigy’s DXA technology to precisely measure lean and fat mass, in addition to assessing bone health. She also recognized other practical benefits of offering total body composition assessments.

“A body composition assessment could be done in less time than a bone density exam and we don’t have to deal with transcriptions or insurance companies.”
– Amy Stanbery, CDT

Where BMD testing is a reimbursable procedure, total body assessments are an out-of-pocket payment. This provided a new revenue stream on the DXA system the Center already had for its bone health practice.

Upgrading to the Lunar iDXA with CoreScan
The Center recognized the opportunity to do even more with DXA when GE released the CoreScan application. CoreScan enables DXA systems to quantify visceral fat to help physicians manage various cardiometabolic diseases like type 2 diabetes. The Center upgraded to GE’s flagship DXA system, the Lunar iDXA with CoreScan. “We wanted CoreScan. We wanted the weight increase to go from Prodigy’s 350 lb table weight limit to 450 lb on iDXA,” Amy explained. The iDXA is also wider and longer than the Prodigy, which allowed the Center to accommodate more patient body types. Amy added, “If we were going to provide this service, we needed to go in with the best GE had to offer.”

Lunar iDXA total body skeletal and body composition images
Body composition workflow
The Center developed an efficient patient workflow for body composition exams with the iDXA. Appointments are made for 15 minutes, with actual scan time at 4 to 7 minutes depending on client height and weight. Clients are asked not to wear any metal and are scanned in loose clothing. Once the scan is completed, the Center prints and emails a 3-page color report.

Body composition report
The technician then reviews the report with the client, focusing on the measurements of lean, fat, and bone of each segment of the body. If it is a returning client, the technician also reviews the percent changes to see how lean and fat mass have changed since previous exams. “The total process takes about 15 minutes,” Amy said.

Client reaction
Clients are extremely enthusiastic about the experience and results. “Most have done their homework or they have already been frustrated by the poor reproducibility they’ve experienced on other body composition technology,” Amy said. “DXA’s reproducibility makes them confident in the results they’re seeing.”

They are impressed by the images, but especially about the trending. “It’s interesting the first time, but it’s even more interesting if you’re trying to lose weight and you want to see changes with your fat mass. It’s really motivating,” said Amy.

Visceral fat measurements
Clients are also interested in their visceral fat measurements. With minimal explanation, clients understand why visceral fat is important and why it needs to be measured separate from subcutaneous fat. “It’s fascinating to see how you can have someone with 4 lbs of fat in the abdominal region and 2 lbs of it is visceral. And then I can look at someone else with the same amount of fat in the same region and it’s all visceral. The ability to see the proportion of visceral and subcutaneous fat and how it can vary from person to person is really insightful,” describes Amy.

Enthusiastic word of mouth
The Center receives many referrals from those who have been scanned. Positive word of mouth is “mostly how people learn about the Center.” Amy describes, “People are so excited about the information that they tell others to come.” She also noted, “We have gotten a lot of positive feedback from clients via social media.”

Promoting body composition testing
The Center also undertook successful outreach efforts. It developed a website and search engine campaign to target weight loss and athletic performance clients. The Center emphasized how DXA testing can help athletes attain peak performance by monitoring the effects of training on body composition. For those in weight loss programs, the Center promoted how DXA body composition scans can inform and motivate. “People leave here understanding how losing fat should not be the primary goal, but how maintaining and gaining muscle are important to their bodies,” Amy said.

The Center also provides volume discounts to businesses with corporate wellness programs for employees. The Center has been especially successful by partnering with personal trainers who want to monitor their clients’ progress and help motivate their efforts.

Vital DXA body composition testing
As a result of the expanded and enhanced body composition offering, the Center has added 20 to 30 body composition scans a week to the 50 BMD tests it was already conducting. The Lunar iDXA with CoreScan has helped the Bone Density and Body Composition Center continue to address bone health needs while incorporating a differentiating body composition service to help ensure the ongoing vitality of its patients and practice.