# Healthy aging. It's vital.

## enCORE 17 The leading edge of DXA applications



# This trio of new enCORE 17 functions will take your clinical assessment capability to the next level.

We are pleased to announce the latest upgrade to our enCORE software that further improves our world-class DXA family of products. With enCORE v17, you'll particularly benefit from three features that focus on incipient **Atypical Femur Fracture**, **Sarcopenia**, and **Cybersecurity** measures.



# enCORE 17 adds these **three** crucial functions to your existing system:

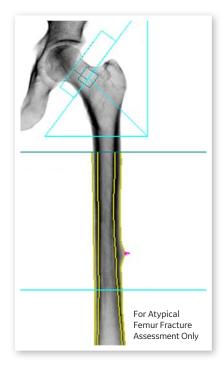
## For AFF analysis, a quick (yet thorough) way to quantify focal thickening of the lateral cortex

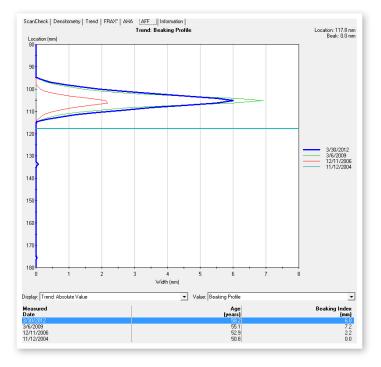
AFFs are an increasing concern for patients and clinicians alike due to the potential connection with long-term Bisphosphonate use. Your enCORE 17 upgrade offers optional AFF software – a potent tool for Prodigy<sup>™</sup> and Lunar iDXA<sup>™</sup> systems. This feature allows you to quantify focal thickening of the lateral cortex along the entire femoral shaft to the knee.

We have created a "Beaking Index," that is a measure of the magnitude of the increase in the cortical width (mm) at the location of the localized periosteal reaction. Beaking is a key to assessing the presence of a potential AFF. This analysis can quickly be run on a single femur scan (for both BMD and AFF); you'll be able to trend the serial measurements graphically, allowing for visualization of any potential AFF sites.

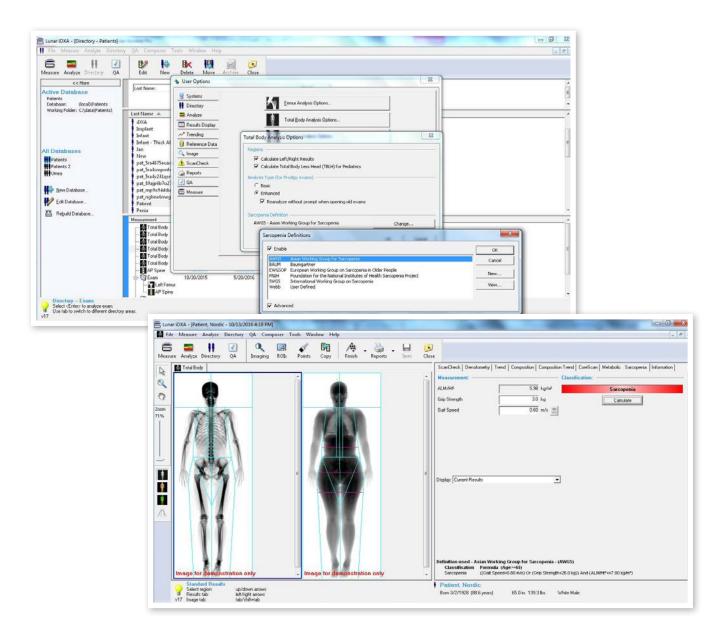
It's comprehensive, as well: the software automatically connects with the entire patient database, to offer a comparative analysis with past exams, even your standard proximal femur scans. BMD results from typical femur scans and proximal femurs are equivalent.

# **AFF Analysis**





# Sarcopenia



## For Sarcopenia, a complete assessment package that allows the use of either a published or custom definition

With our aging population, Sarcopenia is a common concern. We've developed enCORE's optional Sarcopenia Toolset to facilitate diagnosis and monitoring of Sarcopenia on your Prodigy or Lunar iDXA system. It's a comprehensive way to measure and report the patient's Appendicular Lean Mass (ALM) seamlessly with Muscle Strength and Muscle/Physical Performance metrics...for a complete, integrated Sarcopenia assessment. From there, you enjoy great flexibility. You can choose between the common published definitions, or create a custom definition, to support your clinical decision-making.

## For improved cybersecurity, a robust suite of built-in safety features that meet federal standards

Our DXA Bone Densitometers with enCORE v17 were designed to meet the cybersecurity control measures as defined in recently published FDA cybersecurity guidance.

As a result the cybersecurity vulnerability of our DXA systems is minimized to an acceptable level.

Please ask for our Manufacturer Disclosure Statement for Medical Device Security (MDS2).

MDS2 is one of most critical documents for you during the procurement stage. MDS2 facilitates the review and analysis of the large volume of security-related information supplied by manufacturers for devices on the customer's inventories. MDS2 also allows medical device manufacturers like GE Healthcare to publish the basic security and privacy properties of a specific medical device including operating systems, type of network connection, the ability of the operator to install Antivirus software, or what PHI (Protected Health Information) is stored on the device and whether it is transient or permanent. GE Healthcare is committed to provide the MDS2 using latest released revision of the form to our customers to ensure customers have the most current information as well.



# Cybersecurity

## A wide set of clinical applications

GE Healthcare's Windows®-based enCORE software platform brings speed and automation to today's bone densitometry. Daily testing of multi-point calibration coupled with a large reference population database ensures accurate and precise bone assessments. GE Healthcare's versatile family of bone densitometers provides comprehensive applications covering crucial BMD clinical and research needs:

## **Atypical Femur** Fracture (AFF)

AFF measurement and analysis provides an x-ray image of the entire femur for both gualitative visual

assessment and quantitative measures in order to identify areas of focal thickening along the lateral cortex of the femoral shaft.

## Color Mapping/ **Color Coding**

**Color Mapping** can be used to set thresholds on fat %.

while color coding can be used to code bone, lean tissue and fat tissue.

## Femur/ **Dual Femur**

Measures both single femur or both the femurs in one scan, helping you assess the weakest

femur through measuring bone mineral density for the proximal femur.

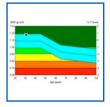
## Forearm

Measures radius and ulna, providing additional clinical information on BMD for the distal forearm. This

measurement can be taken in both sitting or supine position.

### **BMD**

Measures the bone mineral density of a preferred skeletal site that can be compared to an adult reference



population at the sole discretion of the physician. Generates a reference chart with z-score and t-score.

### Sarcopenia

Sarcopenia software calculates values based on published definitions and thresholds using measured appendicular

lean mass in combination with patient demographics and entered values of muscle strength and physical performance.

## **Lateral Spine** Measurement

Lateral Spine measurement and analysis provides an estimate of bone mineral density for the lumbar spine.





FRAX 10-Year Fracture Risk provides an estimate of 10-year probability of hip fracture and 10-year

probability of a major osteoporotic fracture for men and post-menopausal women ages 40-90 years.

## Hand Measurement

Hand measurement and analysis provides an estimate of the bone mineral density for the hand.



## **Hip Axis** Length (HAL)

Measurement of the distance along the femoral neck axis, extending from the bone edge at the

base of the trochanter to the bone edge at the inner pelvic brim.

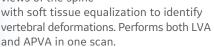
### Metabolic Information

Provides insight on metabolic information such as Resting Metabolic Rate (RMR) and Relative Skeletal

Muscle Index (RSMI) with ability to capture Total Body Water (TBW), Intracellular Water (ICW), & Extracellular Water (ECW).

### **Dual-energy** Vertebral Assessment (DVA)

Lateral and anterior



## **Orthopedic** -**Hip Implant**

Measure the delicate region around the hip implant and visualizes 19 Gruen zones.



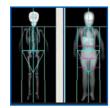
### Bodv **Composition** -**Total/Regional**

Performs total body scan to measure bone mass. lean

mass and fat mass. Also measures regional and whole body bone mineral density (BMD), lean and fat tissue mass.

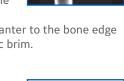
## **Pediatrics**

Pediatric measurement and analysis feature provides BMD, BMC. fat mass, and lean mass for patients from birth to 20 years old.









views of the spine

## A wide set of clinical applications (cont.)

## **CoreScan**<sup>™</sup>

CoreScan software feature estimates the VAT (Visceral Adipose Tissue) mass and volume within the android region.

## **Small Animal Body Scan**

Small Animal measurement and analysis is for investigational use on laboratory

animals or for other tests that do not involve human subjects.

## OneScan

**OneScan** performs an AP Spine and Dual Femur exam without repositioning between scans.

## Trabecular **Bone Score** (TBS)

Provides trabecular bone score based on bone structure

assessment of the trabecular region of the bone.

## LVA Morphometry & Spine Geometry

LVA Morphometry measurement and

analysis provides an x-ray image of the spine for qualitative visual assessment in order to identify vertebral deformations and estimate vertebral heights (morphometry), while LVA and APVA Spine Geometry measure Cobb angles.

## Practice Management

Provides generalpurpose business reporting tools to view existing patient population as well as follow-up on next site visit.

## **OneVision**

The OneVision feature allows you to set up multiple measurements in one exam. This eliminates

keystrokes and improves throughput for customers that routinely perform multiple measurements on each patient.

## Custom Reference **Population**

create a custom

and use that population for comparison to your patients' results.

## **QuickView**

QuickView offers a fast, 10 second spine or femur scan. Measurement and analysis procedures are the same as other scan modes.

## ScanCheck

ScanCheck assists the user in detecting Spine, Femur, Forearm and Total Body abnormalities.

## **AP Spine**

Provides an estimate of bone mineral density for the lumbar spine.



Physicians can

reference population

## Orthopedic

Orthopedic Knee measurement and analysis provides an estimate of the bone mineral density

around knee implants pre and postsurgery.

## Patient BMD Trending

Monitoring tool to view changes in a patient's BMD over time. To view trending results, all

of the trended measurements must be from the same site.

## **Multi-User** Database Access

Allows multiple users to access and analyze data from the same patient database.

## Composer

Composer feature provides many pre-generated report formats as well as ability to create custom reports.

## MirrorImage Scan

The MirrorImage function can be used to estimate the total body composition and bone mineral

density (BMD) when regions of the body are outside of the scan window by using scanned data from the corresponding region(s) on the opposite half of the body.

























Knee

## Your enCORE package will continue to offer the comprehensive, user-friendly features you already rely on that provide:

- Clinical confidence; the precision across a broad range of patient sizes and conditions
- The productivity-enhancers that keep you cost effective
- The data management and security you require

Just in case you are a few releases of enCORE software behind, here is an overview of features that we have released over the past couple of years:

| Feature/SW version | 2011 v13  | 2012 v14                      | 2013 v15                      | 2014v16                                | 2016 v17      |
|--------------------|---|-------------------------------|-------------------------------|--|---------------|
| Skeletal Health    | FRAX Spine<br>Geometry                          | Dose Reporting                | OneScan<br>JSBMR Ref          | Ortho Knee<br>Peds TB                  | AFF           |
| Body Composition   | CoreScan  | Advanced Body<br>Composition  |                               |  | Sarcopenia    |
| Connectivity       | DICOM®  |                               | EMR Suppliers<br>ICD-10 Codes |  |               |
| Acquisition        | Supine Forearm                                  |                               |                               | Seated Forearm<br>Over Table<br>Weight |               |
| Database           | Peds BMDCS<br>Reference                         | NHANES                        | SQL Server                    | MUDBA 40                               |               |
| PC OS/Security     | W-XP/W7 32 Bit<br>Microsoft<br>Security Patches | Microsoft<br>Security Patches | Application<br>Access Control | W7 – 64 Bit                            | Cybersecurity |

### Imagination at work

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