enCORE **v18**

Powerful New DXA
Clinical Applications

Introducing enCORE **v18**

Powerful New Clinical Applications for Greater Bone and Body Composition Insights
Featuring new DXAVision™ technology.

DXAVision™ provides BMD and Body Composition in one easy, unified workflow. The DXAVision™ scan is designed to improve operator efficiency, resulting in a DXA scan that is up to 40% faster[*] and a better experience for your patients.

Announcing the latest innovation in DXA software, enCORE v18. Making our DXA products even more powerful.
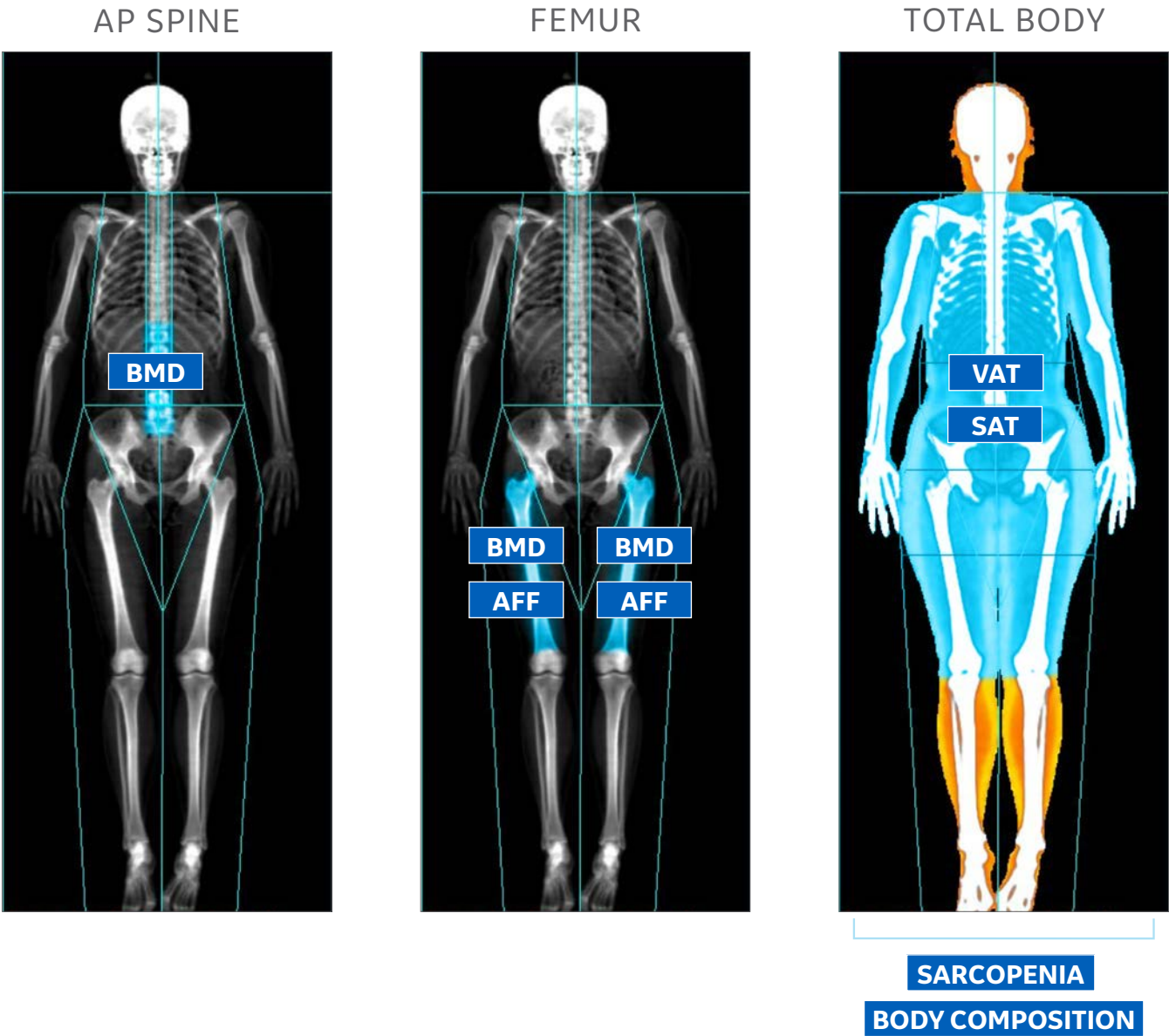
* Data on file with GE Healthcare, April 2019.

Smarter Scanning with DXAVision™

One Unified Workflow for BMD, AFF, VAT and SAT

- Body Composition provides comprehensive reporting that includes Subcutaneous Adipose Tissue (SAT) and Visceral Adipose Tissue (VAT) measurements
- One scan sequence captures BMD for AP Spine, Femur and Total Body, plus Body Composition
- Includes estimated Sarcopenia measurement
- Easy-to-use customization of sequencing for skeletal site exams

This feature requires CoreScan.

AP SPINE	FEMUR	TOTAL BODY

BMD

BMD BMD
AFF AFF

VAT
SAT

SARCOPENIA
BODY COMPOSITION

SAME PRECISION AND ACCURACY. UP TO 40% FASTER SCAN TIME.*

* Data on file with GE Healthcare, April 2019.

Versatility of DXA Technology

BONE HEALTH

Bone Mineral Density
➤➤ Spine, Femur, Forearm, and various skeletal sites

Advanced Bone Apps
➤➤ Atypical Femur Fracture, Ortho Knee, Ortho Hip, Hand, LVA

Bone Quality
➤➤ Trabecular Bone Score

Metabolic Health
➤➤ Visceral Fat & Subcutaneous Fat, Resting Metabolic Rate

Body Composition
➤➤ Lean Mass, Fat Mass and Lean/Fat Mass Trending

METABOLIC HEALTH

Sarcopenia
➤➤ Appendicular Lean Mass

A New Modern Interface

Same Efficient User Workflow

enCORE v18's interface offers intuitive navigation, plus quick access to exam site selection options.

New Button Style

Quick and Easy Exam Site Selection

New Style for Patient Directory

1. Patient Databases

2. Patient List

3. Examinations Performed

New Advancements in Bone Health

BMD Insights using AFF User Customizable Threshold

Setting a Custom Threshold for femoral shaft "beaking" allows the user to search for clinical evidence of correlation between "beaking" and the probability of occurrence of an Atypical Femoral Fracture (AFF).
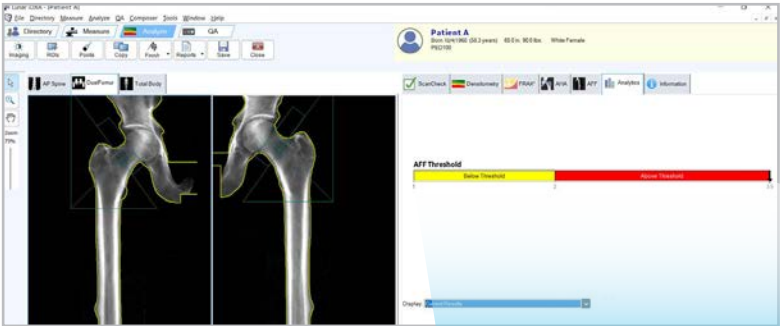
This is a metric that can be enabled using the Advanced Analytics Feature.
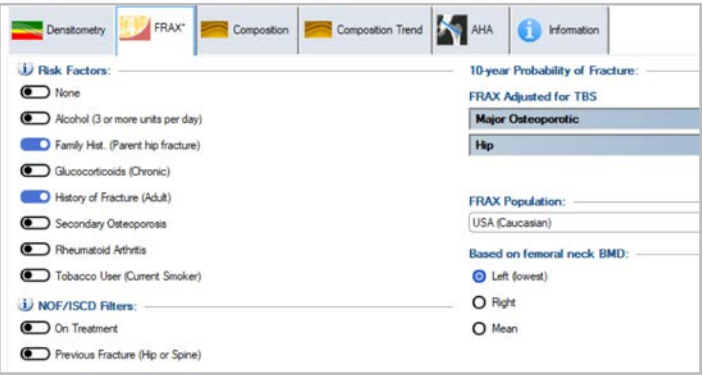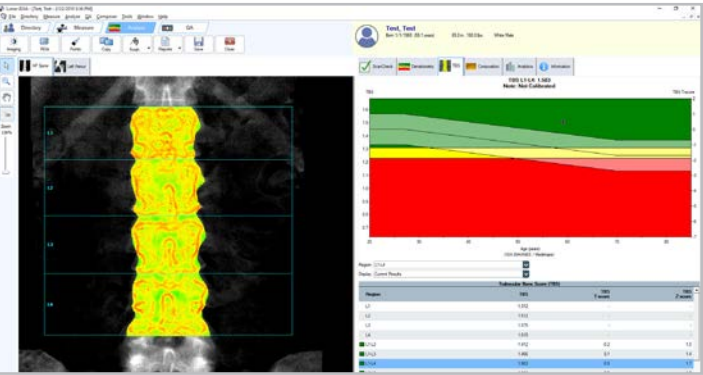
AFF User Customizable Threshold feature requires:

• *Atypical Femur Fracture*

• *Advanced Analytics*

AFF Threshold

Below Threshold	Above Threshold
1	2	3.5

DXA and TBS Together: Integrated Trabecular Bone Score (TBS)

Improve productivity with an integrated workflow that provides analysis and reporting together for TBS and bone density.

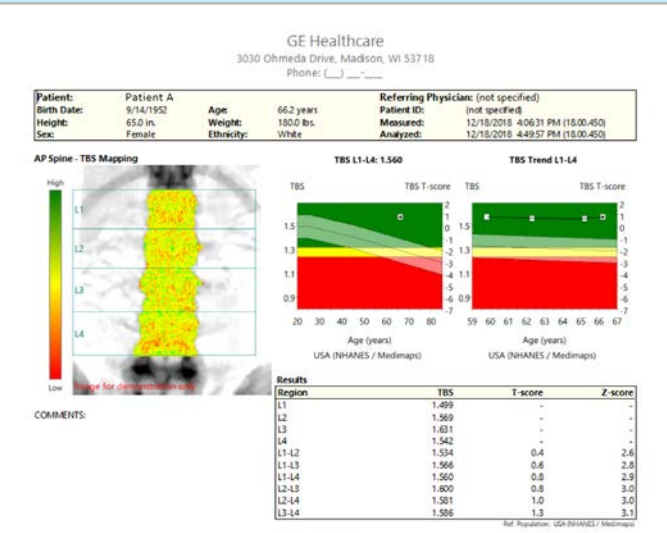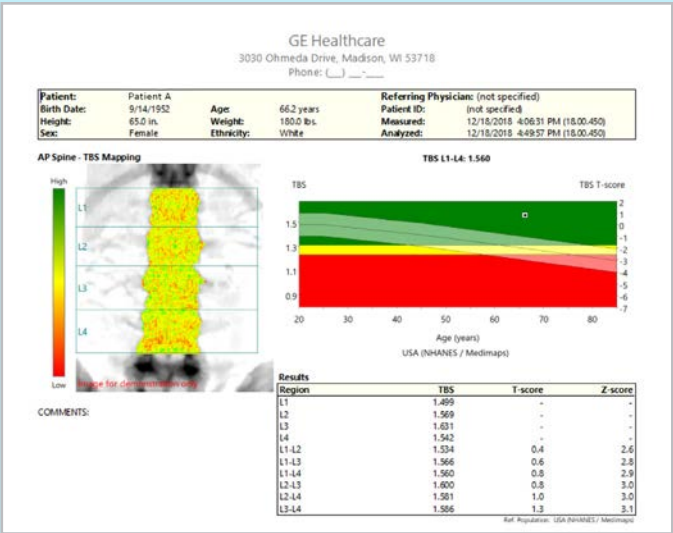### TBS Is Now Embedded into enCORE Software

Simply open an AP Spine exam and select the TBS tab to view results.

FRAX Adjusted TBS

FRAX values can be optionally adjusted for TBS. Simply select "Adjust for TBS" option to enable.

Built-In Reporting Templates for TBS

Includes TBS results integrated into bone density reports. TBS field codes can be added to custom reports.

New Advancements in Metabolic Health

Newly Available: VAT Area and SAT Results

Within CoreScan, view detailed reporting of adipose tissue and gain greater insights into trends of body composition over time. See separate SAT and VAT results, with details including volume, mass and area for each.
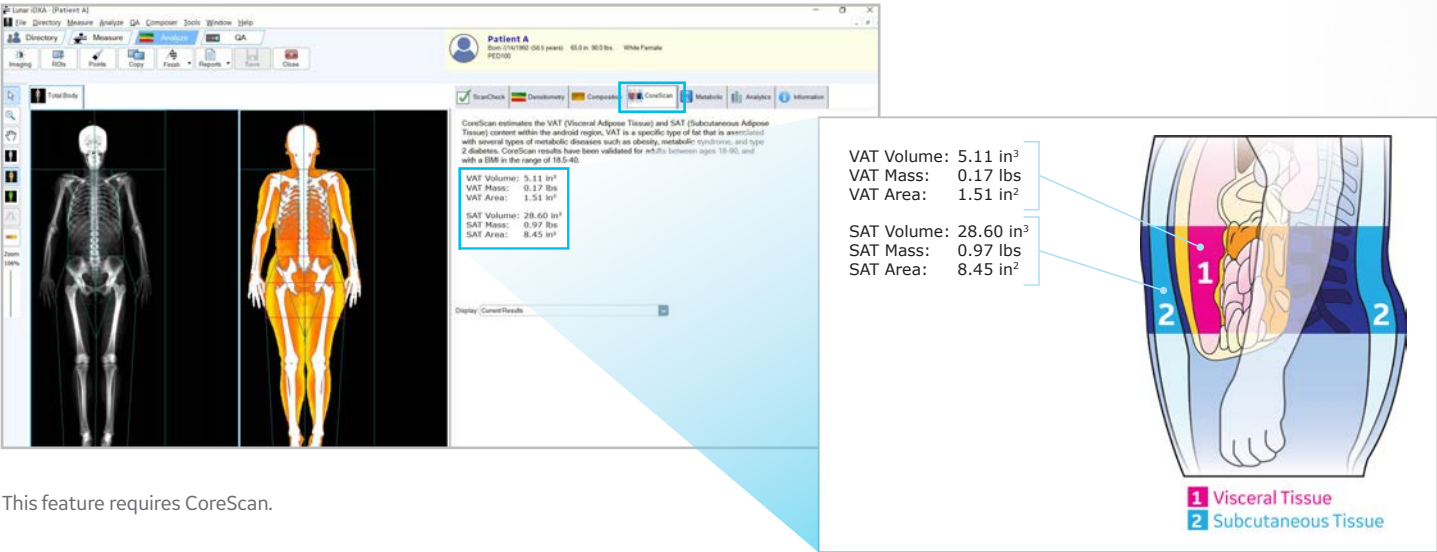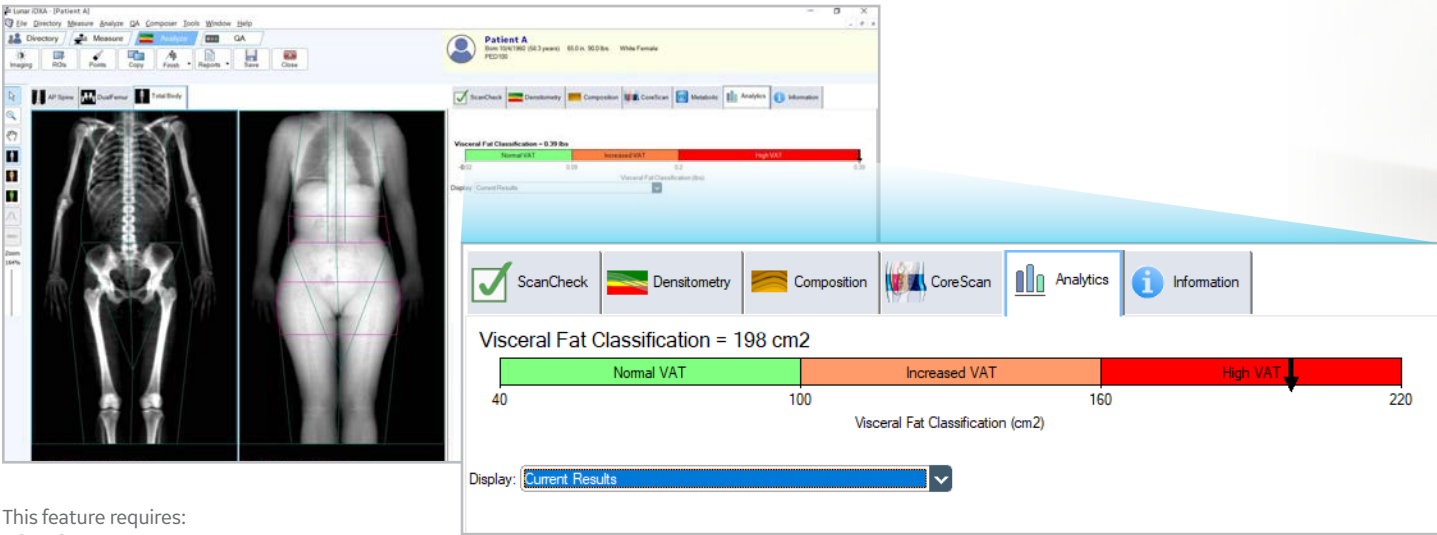

This feature requires CoreScan.

Body Composition Insights using VAT Customizable Thresholds

VAT user customizable threshold offers the ability to set thresholds for the visceral adipose tissue fat (VAT) measured on a patient or an athlete after a total body scan and help in drawing correlation between VAT and metabolic disorders such as diabetes, cardiovascular diseases, and obesity.

VAT or SAT Customizable Threshold is a metric that can be set up on the Analytics Dashboard through the Advanced Analytics Feature.


This feature requires:
• CoreScan
• Advanced Analytics

Smaller Body Composition Regions of Interest

Easily monitor and report on regions of interest (ROI) including upper arm, lower arm, upper leg and lower leg. This tool enables the ability to study changes in body composition in these regions.

Suitable for sports medicine professionals and researchers needing to monitor changes in lean mass.

Smaller Body Composition/Regions of Interest feature requires DXAVision or Sports Athletics package


Upper arm

Lower arm

Upper leg

Lower leg
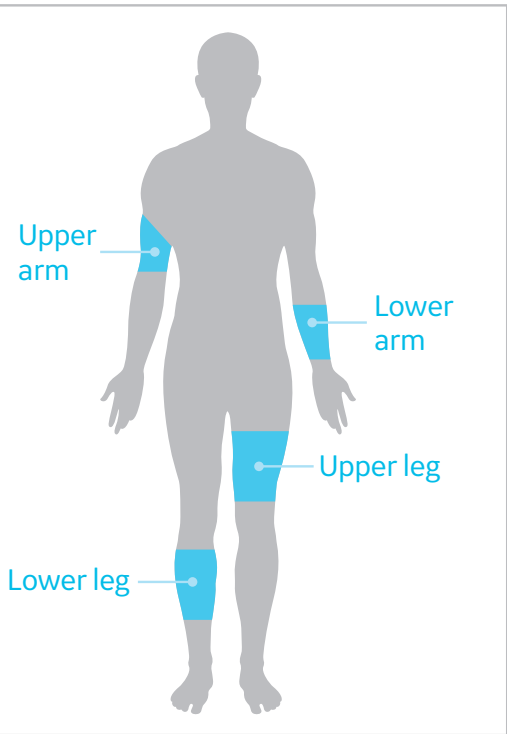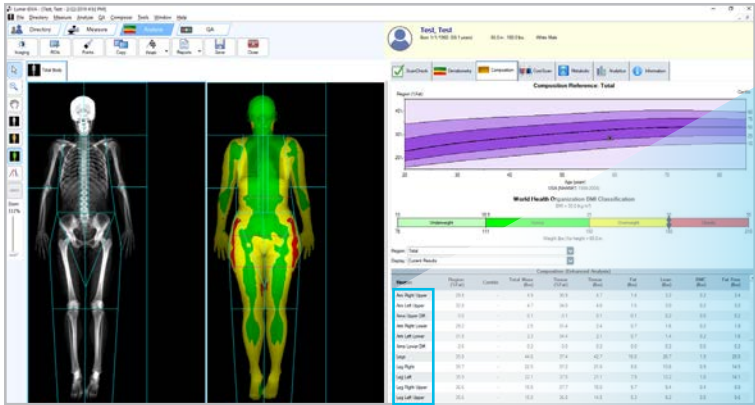
Flexible Scanning Options

Total Body Less Head (TBLH) for Adults is an optional feature that excludes the head, scanning from the neck through the rest of the body. Including the head can mask changes occurring in the rest of the skeleton.

Ideal for assessing athletes and taller patients that may not fit on the scan window.

"Neck-to-Knee" Scan for Adults is an optional feature that performs an even faster scan, that estimates total body composition, starting from just below the chin to the knee caps.

Suitable for athletes as well as patients that may be challenged with the longer scan time of a traditional total body scan.


Scan

Scan

**Total Body Less Head*
(TBLH)
(Exclude head)**

Neck to Knee
(Exclude head and
lower legs)**
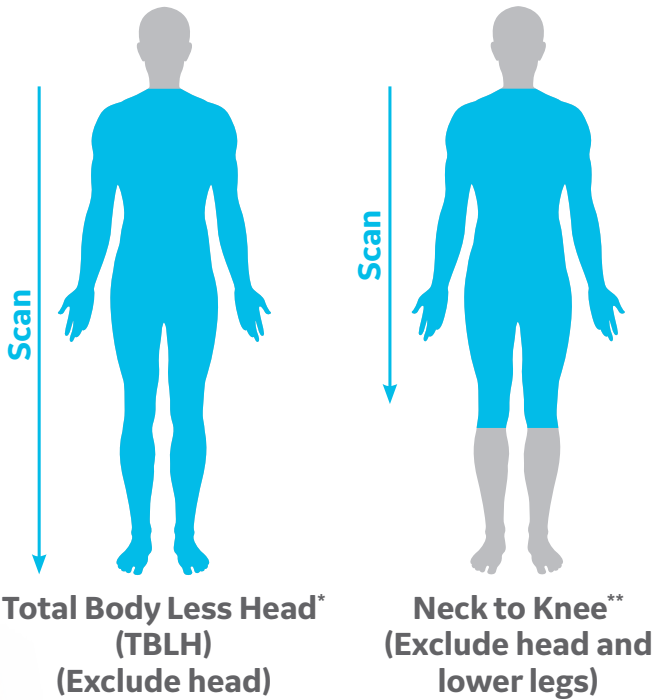
*TBLH feature requires DXAVision or Sports Athletics package
**Neck-to-Knee" feature requires DXAVision

Improved Reporting Capabilities

Improved Composer™ Reporting

Improved Composer™ Reporting offers a WYSIWYG (What you see is what you get) interface to easily insert DXA bone & body composition parameters, patient demographic data, DXA images, and external images to easily create rich Composer Reporting stylesheets.
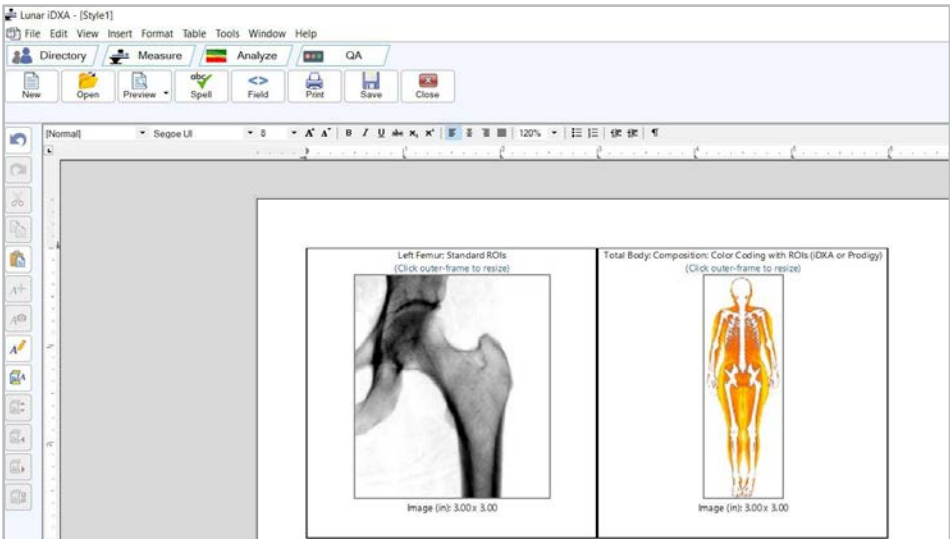
Composer reports are created from default style sheets that you can create and edit. The contents may include images, measured results, charts, trend information, and other information such as automated assessments and recommendations.

Ability to insert DXA bone and body composition parameters, along with ability to also import custom metrics created through the Advanced Analytics feature.
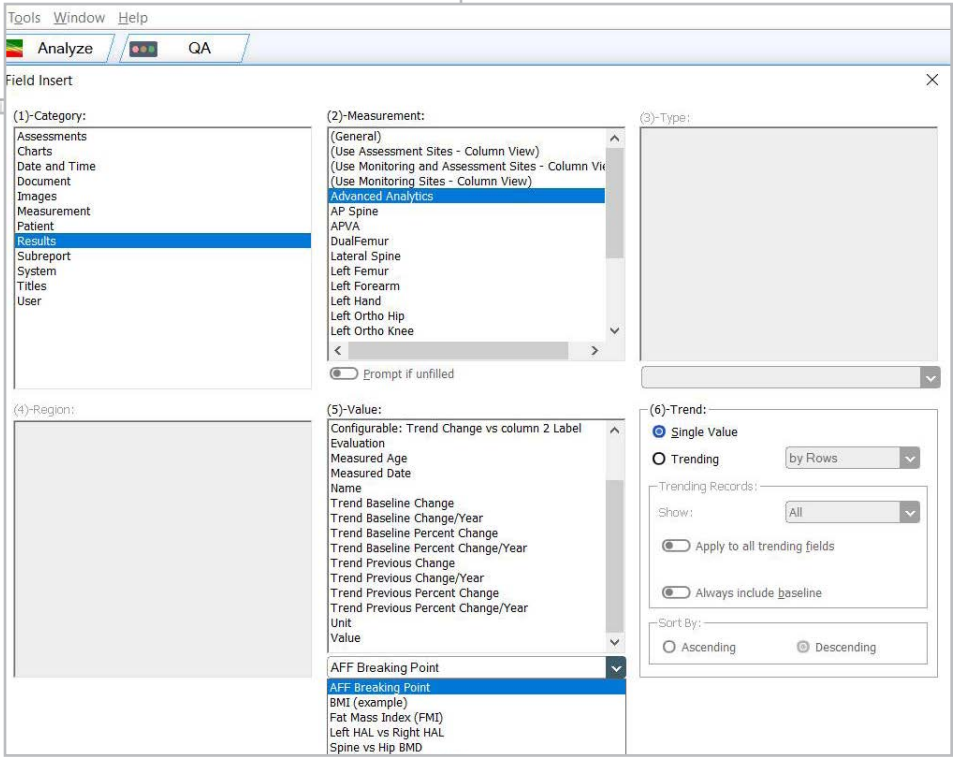
Advanced Analytics

Remarkable Tools for DXA

Advanced Analytics is a remarkable tool that provides deep BMD and body composition insights to:

• Sports Medicine Professionals

• Bone and Body Composition Researchers

• Clinicians

This tool allows users to easily create custom equations and metrics. Use Advanced Analytics within your DXA system to:

• Create custom metrics and ratios based on 200+ DXA bone and body composition parameters
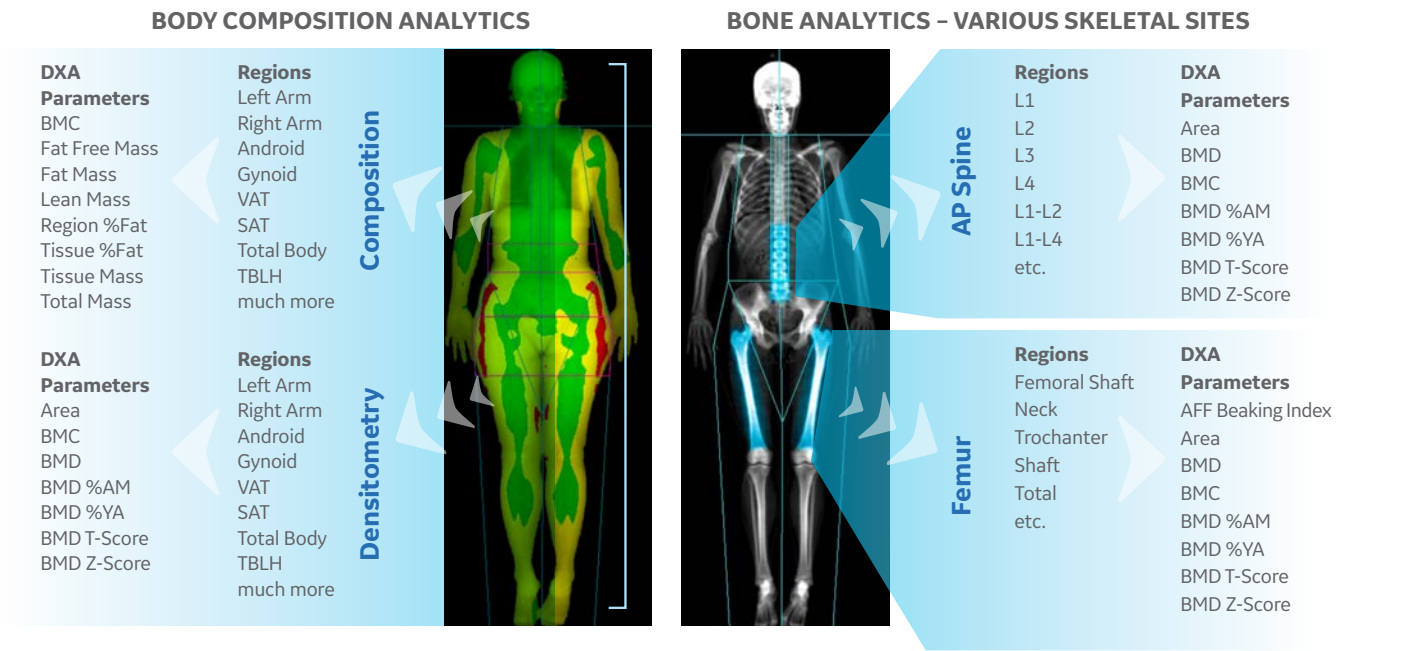
• Set user-defined classification thresholds

• Actionable patient goals based on evaluation of the results

• Easily share custom-built reports with patients

The built-in dashboard allows pinning of select metrics and tracking of patient changes over time. Use Advanced Analytics to:

• Understand changes in BMD and body composition within various Regions of Interest

• Perform retrospective trending using past patient data

• Manage research studies with custom metrics for both BMD and body composition

MORE THAN **200** BONE AND BODY COMPOSITION PARAMETERS FOR ANALYSIS.

Sample Metric = VAT Mass/Total Fat Mass

BODY COMPOSITION ANALYTICS

DXA Parameters	Regions
BMC	Left Arm
Fat Free Mass	Right Arm
Fat Mass	Android
Lean Mass	Gynoid
Region %Fat	VAT
Tissue %Fat	SAT
Tissue Mass	Total Body
Total Mass	TBLH
	much more

DXA Parameters	Regions
Area	Left Arm
BMC	Right Arm
BMD	Android
BMD %AM	Gynoid
BMD %YA	VAT
BMD T-Score	SAT
BMD Z-Score	Total Body
	TBLH
	much more

Composition / Densitometry

BONE ANALYTICS – VARIOUS SKELETAL SITES

AP Spine

Regions	DXA Parameters
L1	Area
L2	BMD
L3	BMC
L4	BMD %AM
L1-L2	BMD %YA
L1-L4	BMD T-Score
etc.	BMD Z-Score

Femur

Regions	DXA Parameters
Femoral Shaft	AFF Beaking Index
Neck	Area
Trochanter	BMD
Shaft	BMC
Total	BMD %AM
etc.	BMD %YA
	BMD T-Score
	BMD Z-Score

In addition, Custom Regions of Interest (ROI) can also be used with Advanced Analytics feature.

Productivity and Security

Windows 10 Compatibility

enCORE v18 offers compatibility with the Windows 10 operating system and a new PC configuration.

	New Configuration	Previous Configuration
Computer Configuration	HP Z240	HP RP5810
Processing	Intel i3-8100 3.6G 4 processing cores	Intel Core i3-4330 3.5G 2 processing cores
Memory	8GB DDR4-2400	4GB DDR3-1600
Storage	1 TB	500 GB
Monitor	24"	20"

• New computer configuration
  • Faster processing power
    • More memory (RAM)
      • More storage
        • Larger monitor

enCORE v18: A Secure Platform

enCORE v18 offers advanced security features to protect your data. This includes powerful encryption features for data storage and transit, plus an audit trail of software users.

New Feature	Added Security Benefit
IPv6 for DICOM and HL7	Communication protocol integrating IPSec for better security during data exchange
FIPS 140-2 Encryption	Federally compliant encryption standard that protects patient exam files using 256-bit encryption
Audit Trails	Logs information related to: • Software configuration and user access changes, destination IP addresses • Database events including authentication, patient modification/deletion • Events supported by the DICOM Audit Trail Profile
TLS for DICOM®	Provides security at the transport layer of a DICOM transaction by using encryption and node authentication. TLS is an updated, more secure, version of the SSL protocol.

Department of Defense (DOD) RMF Security Compatible

Enhanced Cybersecurity protection is an optional feature available for those facilities needing to comply with U.S. Department of Defense (DOD) RMF security requirements.

Recognized Leadership in DXA Technology

DXA systems from GE Healthcare are built on an exceptional foundation and enCORE v18 offers advanced bone and metabolic health clinical applications.

• **Patented Narrow Fan Beam Scan**
  Combining the features of pencil beams and wide fan beams, Narrow Fan Beam technology offers a shorter scan time with reduced magnification error (inherent to wide-angle fan beam scans).

• **Low-Dose Photon Counting Technology**
  Dose-efficient photon counting detector technology more efficiently counts X-ray photons, lowering dosage to the patient.

• **Innovative SmartScan™**
  Our SmartScan technology reduces scan time and X-ray dosage by identifying bone regions after each transverse sweep and estimating where to begin scanning on the subsequent sweep.

• **K-edge Filter**
  An exceptional "K-edge filter" that creates a dual energy beam and absorbs the X-rays in the middle energy range and protects the patient against unnecessary exposure.

• **Multi-View Image Reconstruction (MVIR)**
  By performing multiple transverse sweeps across the site of interest, MVIR accurately determines bone-height above the tabletop, minimizes magnification errors and provides excellent precision and accuracy.

• **Low Scattered Radiation**
  Narrow-fan beam technology results in low scatter radiation in comparison to wide-angle fan beam systems.*

enCORE v18: *Offering More Possibilities from Your DXA Investment.*

* Data on file with GE Healthcare, January 2017.

gehealthcare.com