



Standard Operating Procedures Worksheet

Each question must be answered.

DXA Acquisition/Analysis – Baseline and Serial Scanning Procedures

1. Does your DXA facility have its own procedures manual for documenting your routine DXA activities?	<input type="checkbox"/> Y <input type="checkbox"/> N
2. Do you consistently use the same positioning devices for spine and femur scans?	<input type="checkbox"/> Y <input type="checkbox"/> N
3. Do you have a protocol for excluding vertebrae due to fracture, hardware, or artifact?	<input type="checkbox"/> Y <input type="checkbox"/> N
4. Do you use the lesser trochanter as a guide to determine sufficient and consistent internal rotation of the femur?	<input type="checkbox"/> Y <input type="checkbox"/> N
5. a. Whenever possible, do you use the same DXA machine used for patient's baseline to acquire his/her follow-up scans?	<input type="checkbox"/> Y <input type="checkbox"/> N
b. If you answered "no" to question 5 above, did your facility perform a cross-calibration between scanners? If so, submit cross-calibration.	<input type="checkbox"/> Y <input type="checkbox"/> N
6. Are you careful to reproduce the same positioning and ROI placement for a patient's baseline and follow-up scans?	<input type="checkbox"/> Y <input type="checkbox"/> N

Do you obtain and record the following patient history information?

7. Current height measurement.....	<input type="checkbox"/> Y <input type="checkbox"/> N
8. Current weight measurement.....	<input type="checkbox"/> Y <input type="checkbox"/> N
9. Menopausal status for women.....	<input type="checkbox"/> Y <input type="checkbox"/> N
10. Personal fracture after age 50.....	<input type="checkbox"/> Y <input type="checkbox"/> N
11. Hip fracture in mother or father.....	<input type="checkbox"/> Y <input type="checkbox"/> N
12. Osteoporosis medication history.....	<input type="checkbox"/> Y <input type="checkbox"/> N
13. Current smoking history	<input type="checkbox"/> Y <input type="checkbox"/> N
14. Glucocorticoid exposure history.....	<input type="checkbox"/> Y <input type="checkbox"/> N
15. Diagnosed rheumatoid arthritis.....	<input type="checkbox"/> Y <input type="checkbox"/> N
16. Primary hyperparathyroidism.....	<input type="checkbox"/> Y <input type="checkbox"/> N
17. Other secondary osteoporosis.....	<input type="checkbox"/> Y <input type="checkbox"/> N
18. Alcohol use (3 or more units* per day).....	<input type="checkbox"/> Y <input type="checkbox"/> N

*one unit of alcohol is 13 gm ethanol, 5 oz wine, 12 oz beer, 1.5 oz spirits

DXA Facility in-vivo Precision Assessment Procedures

19. For Precision Assessment procedures at your facility, are the individuals being scanned representative of your facility's patient population (i.e. similar ages, gender, and health status)?	<input type="checkbox"/> Y <input type="checkbox"/> N
20. Are the individuals in your precision assessment(s) repositioned after each scan?	<input type="checkbox"/> Y <input type="checkbox"/> N
21. Do you require retraining of technologists whose precision values are not within the acceptable range according to the ISCD Official Positions?	<input type="checkbox"/> Y <input type="checkbox"/> N
22. Do you require individual's to sign a consent form to participate in in-vivo precision assessment at your facility?	<input type="checkbox"/> Y <input type="checkbox"/> N
23. Do you perform a short-term in-vivo precision assessment on every DXA machine?	<input type="checkbox"/> Y <input type="checkbox"/> N
24. Do all of your DXA technologists perform short-term in-vivo precision assessments?	<input type="checkbox"/> Y <input type="checkbox"/> N
25. Do you calculate your LSC values using information from only one technologist?	<input type="checkbox"/> Y <input type="checkbox"/> N
26. Do you calculate your LSC values using information from the precision assessments of multiple technologists?	<input type="checkbox"/> Y <input type="checkbox"/> N



Submit one of these forms for EACH DXA scanner at your facility.

For DXA Scanner: _____ (scanner serial number)

For EACH DXA Scanner submit:

- One worksheet
- One Spine Phantom Scan
- One Spine Phantom Plot Graph

Spine Phantom(s) Inventory:

Complete information for the primary Spine Phantom* assigned to this scanner

Do you use more than one Spine Phantom with this DXA scanner? YES NO

Spine Phantom Type ¹	Serial Number	Date Placed into Service	Total ² phantom BMD (gm/cm ²)	Upper Limit (gm/cm ²)	Lower Limit (gm/cm ²)

*This is NOT the calibration block phantom

¹See glossary for types of Spine Phantoms

²Total BMD established by the manufacturer or it is determined at time the spine phantom placed into service or as of most recent system calibration (as the average value of a series of spine phantom scans).

³Upper Limit should be +1.5% of the Total Spine Phantom BMD

⁴Lower Limit should be -1.5% of the Total Spine Phantom BMD

Spine Phantom Plot Graph (control chart):

- Graph trends Spine Phantom BMD over Time for the purpose of monitoring the stability of the DXA scanner
- Show approximately 50 recent Spine Phantom BMD values (or all since the scanner was put into service or recalibrated, whichever is less)
- Total Spine Phantom BMD should be the center horizontal line on the graph (GE users must set this by opening a spine scan, select trend tab, scroll down to a value equal to the Total BMD, right click to select it as baseline)
- Upper and Lower Limits of the acceptable range should visible on the graph (center line = 0%; upper = +1.5; lower = -1.5%)

Spine Phantom Evaluation: Rules/Procedures used to determine machine failure

Please indicate any additional QA/QC analyses you perform on a regular basis on your primary spine phantom. Check all that apply.

	QC/QA Rule or Process Applied to Phantom Results	Each Day	Every Week	Every Month	Before Service	After Service	Other Freq.	N/A
1.	Visual Inspection of BMD plots for Drifts/Shifts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	One value exceeds upper or lower limits of 1.5% (3 SD) from the mean verified by a second phantom scan on the same day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Plots of Total Spine Phantom BMC and/or AREA are evaluated for Drifts/Shifts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	We contract with outside QA Service (attach supporting document)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Describe any additional or alternative procedures or rules that your facility used to evaluate your Spine Phantom results:

Which, if any, of the above QC/QA rules or processes (which you indicated above that you routinely performed) would **independently** be sufficient to remove a scanner from service until repaired or recalibrated at your facility. Check all that apply:

1. 2. 3. 4. N/A

Comments