



MRG DEXA Reporting Policy

The purpose of this guideline is to facilitate and promote a standardized, consistent and accurate DEXA report that is easy for clinicians to interpret. These guidelines are based on the 2013 ISCD official position statement, which can be reviewed in detail at <http://www.iscd.org/official-positions/2013-iscd-official-positions-adult>.

GENERAL

- A standard DEXA report template, titled "Dexa Form," has been made available at all sites and should be used for reporting all DEXAs in postmenopausal women and in men over age 50
- Personal or modified DEXA templates should not be used
- Each report should include a title, indication, comparisons, technique, findings and impression/recommendations
- WHO classification of osteoporosis may be diagnosed in postmenopausal women and in men age 50 and older if the T-score of the lumbar spine, total hip, or femoral neck is -2.5 or less
 - In certain circumstances the 33% radius (also called 1/3 radius) may be utilized
- BMD Reporting in Females Prior to Menopause and in Males Younger Than Age 50
 - Z-scores, not T-scores, are preferred. This is particularly important in children
 - A Z-score of -2.0 or lower is defined as "below the expected range for age", and a Z-score above -2.0 is "within the expected range for age."
 - Osteoporosis cannot be diagnosed in men under age 50 on the basis of BMD alone
 - The WHO diagnostic criteria (i.e., osteoporosis) may be applied to women in the menopausal transition

FINDINGS SECTION

- Lumbar Spine ROI
 - Comment on degenerative findings, scoliosis, hardware, cement or other ancillary findings
 - Report BMD, and T-score for L1-L4, unless one or more of those vertebral bodies is not evaluable
 - Use all evaluable vertebrae and only exclude vertebrae that are affected by local structural change or artifact. Use three vertebrae if four cannot be used and two if three cannot be used
 - BMD based diagnostic classification should not be made using a single vertebra.
 - Anatomically abnormal vertebrae may be excluded from analysis if:
 - They are clearly abnormal and non-assessable within the resolution of the system; or
 - There is more than a 1.0 T-score difference between the vertebra in question and adjacent vertebrae
 - When vertebrae are excluded, the BMD of the remaining vertebrae is used to derive the T-score
 - If only one evaluable vertebra remains after excluding other vertebrae, diagnosis should be based on a different valid skeletal site

- If the exam has a comparison from the same facility, report the percent change in BMD if statistically significant (denoted by an asterisk)
 - If there is no statistically significant change, provide a statement conveying that
 - Comparison to other facilities cannot be made
- Hip ROI
 - Comment on ancillary findings such as hardware, skeletal deformities or obvious degenerative arthrosis
 - Report the MEAN BMD and T-score for the total hip(s) (depending on whether one or both hips were analyzed) since this will be used to evaluate for changes in BMD over time.
 - If the patient has a comparison from the same facility state the percent change in MEAN BMD compared to the prior exam if statistically significant (denoted by an asterisk)
 - If there has been no statistically significant change, provide a statement conveying that
 - Report BMD and T-score for either the femoral neck OR total proximal femur, whichever is LOWEST
 - If both hips were analyzed chose the side with the lowest T-score
 - Ward's area and the greater trochanter should NOT be used for diagnosis
- Forearm ROI
 - Use under the following circumstances
 - Hip and/or spine cannot be measured or interpreted
 - Hyperparathyroidism
 - Morbidly obese patient that is over the weight limit of the DEXA table
 - Report BMD, and T-score for the 33% radius of the non-dominant hand

IMPRESSION

- Provide a single WHO diagnosis (normal bmd, osteopenia or osteoporosis) based on the site with lowest T-score. Do NOT list separate diagnoses for separate regions of interest (e.g., osteopenia in the hip and osteoporosis in the spine.)
- Report statistically significant changes in bone mineral density (e.g., bone mineral density has increased since the prior exam)
 - If there has been no statistically significant change, provide a statement conveying that
 - If there has been no statistically significant change since the prior exam, but there has been a trend toward increasing or decreasing BMD over several years, it would be reasonable to convey such information
- Follow-up recommendations
 - A standard set of recommendations for normal BMD, osteopenia and osteoporosis have been developed and will auto-populate in the DEXA FORM template using the commands "insert density normal," "insert density osteopenia" or "insert density osteoporosis"
 - Normal BMD
 - Consider follow-up DEXA in 5-10 years, unless clinically indicated sooner.
 - Osteopenia
 - Lifestyle measures: Intake adequate calcium and vitamin D, engage in regular exercise for at least 30 minutes at least 3 times per week, undergo smoking cessation if needed, obtain counseling on fall prevention, avoid of heavy alcohol use.
 - If possible, avoid the use of drugs that can increase bone loss, such as glucocorticoids.

- Consider pharmacologic therapy for high risk patients, such as post-menopausal women with a history of hip or vertebral fracture.
- Return for follow-up in 1 to 2 years after initiation or change in therapy, with longer intervals once therapeutic effect is established.
- Osteoporosis
 - Lifestyle measures: Intake adequate calcium and vitamin D, engage in regular exercise for at least 30 minutes at least 3 times per week, undergo smoking cessation if needed, obtain counseling on fall prevention, avoid heavy alcohol use.
 - If possible, avoid the use of drugs that can increase bone loss, such as glucocorticoids.
 - Consider initiating pharmacologic therapy.
 - Return for follow-up in 1 year after initiation or change in therapy, and then every 2 years or longer intervals once therapeutic effect is established.