2009 MedSolutions, Inc. Imaging Guidelines

Preface-1 Guideline Development
MedSolutions, Inc. (MSI) has developed and maintains evidence-based, proprietary clinical guidelines to evaluate CT, CTA, MRI, MRA, PET, bone mineral densitometry, and cardiac imaging studies.

MedSolutions reserves the right to change and update the guidelines from time to time and conducts a formal review of the clinical guidelines once a year.

MedSolutions’ guidelines are based upon the American College of Radiology (ACR) Appropriateness Criteria®, the National Comprehensive Cancer Network (NCCN) Clinical Guidelines in Oncology™, evidence-based clinical data to the extent available, consensus statements from specialty societies such as the American College of Cardiology, the American Heart Association, the American Academy of Neurology, the Institute for Clinical Systems Improvement, and the American Academy of Orthopedic Surgeons, published literature in peer-reviewed journals, input from health plans, and input from practicing clinicians from academic institutions as well as community-based physicians.

Preface-2 Benefits, Coverage Policies, and Eligibility Issues
Benefits, coverage policies, and eligibility issues pertaining to each Health Plan take precedence over MedSolutions’ guidelines.

Certain imaging studies described in these guidelines are considered investigational by various payers, and their coverage policies will take precedence over MedSolutions’ guidelines. Prior authorization does not guarantee payment of the study.

Preface-3 Clinical Information
Preface-3.1
• The philosophy behind MSI guidelines is using an evidence-based approach to determine the most appropriate imaging procedure for each patient, at the most appropriate time in the diagnostic and treatment cycle. MSI guidelines are driven by the patient’s clinical presentation, not by the studies requested.
• Thus, advanced imaging studies should not be ordered prior to clinical evaluation of a patient, including a recent detailed history, physical examination, appropriate laboratory studies, and the use of non-advanced imaging modalities such as plain x-ray, ultrasound, bone scan, etc. if applicable.
• A current history and physical examination are necessary for determining the medical necessity of advanced imaging requests.
• The clinical information should describe how the requested imaging study(ies) will affect patient management or treatment decisions.
• MedSolutions maintains that a sequential approach to obtaining imaging studies, that is, awaiting the results of initial tests or radiologic studies to rule in or out an entity on the differential diagnosis prior to obtaining further tests or radiologic studies, is generally the most appropriate approach to managing patients in the elective, outpatient setting.
• The information provided to MedSolutions should have clinical relevance to the imaging study(ies) requested.
  o If the information provided makes no reference to a potential indication for the requested imaging study(ies), then the medical necessity of the imaging study(ies) cannot be supported.
• Advanced imaging of a particular body part is generally not indicated in the absence of recent clinical, laboratory, or imaging data suggesting an abnormality of that body part.
• Repeat advanced imaging study(ies) are generally not indicated in the absence of evidence of progression of disease, evidence of new onset of disease, or if there is insufficient information as to how repeat imaging will affect patient management or treatment decisions.

Preface-3.2
• The clinical guidelines for imaging are not intended to supersede or replace sound medical judgment, but instead, should facilitate the identification of the most appropriate imaging procedure given the patient’s clinical condition.
• These guidelines are written to cover medical conditions as experienced by the majority of patients. However, these guidelines may not be applicable in certain clinical circumstances, and physician judgment can override the guidelines.
• Clinical decisions, including treatment decisions, are the responsibility of the patient and his/her provider. Clinicians are expected to use independent medical judgment which takes into account the clinical circumstances to determine patient management decisions.

Preface- 4 Coding Issues
Preface-4.1 3D Rendering
CPT 76376 and CPT 76377: Both of these codes share the following text in their definitions: “3D rendering with interpretation and reporting of computed tomography, magnetic resonance imaging, ultrasound or other tomographic modality.” These two codes differ in the need for and use of an independent workstation for post-processing. CPT 76376 is for procedures not requiring image post-processing on an independent workstation, and CPT 76377 is for procedures that require image post-processing on an independent workstation.

These 3D rendering codes should not be used for 2D reformatting. Two-dimensional reconstruction (e.g. reformatting an axial scan into the coronal plane) is now included in all cross-sectional imaging base codes and is not separately reimbursable.

Some payers do not reimburse for CPT 76376 or 76377. In addition, these CPT codes are not included in every MSI client's radiology management program.

CPT codes for 3D rendering should not be billed in conjunction with computer-aided detection (CAD) CPT codes, MRA, CTA, nuclear medicine SPECT studies, PET, PET/CT, CT colonoscopy (virtual colonoscopy), cardiac MRI, cardiac CT, or coronary CTA studies.
In general, MedSolutions maintains that CPT 76376 (3D rendering not requiring image post-processing on an independent workstation) should not be separately reimbursed, since this function is built into the imaging software and generally takes less than 15 minutes to perform.

CPT 76377 (3D rendering requiring image post-processing on an independent workstation) can be considered in the following clinical scenarios (Requests will be sent for Medical Director review):

1) Evaluation of congenital skull abnormalities in babies/toddlers (usually for preoperative planning).
2) Complex joint fractures or pelvis fractures
3) Spine fractures (usually for preoperative planning)
4) Complex facial fractures
5) Preoperative planning for other complex surgical cases

Preface-4.2 CT- or MR-Guided Procedures
Imaging studies performed as part of a CT- or MR-guided procedure (i.e. a separate diagnostic CT or MRI scan is not performed and dictated) should be coded using the following CPT codes:

- 75989 (radiological guidance (i.e. fluoroscopy, ultrasound, CT) for percutaneous drainage and catheter placement)
- 77011 (CT guidance for stereotactic localization)
- 77012 (CT guidance for needle placement [e.g. biopsy, aspiration, injection, or placement of localization device])
- 77013 (CT guidance for, and monitoring of parenchymal tissue ablation)
- 77021 (MR guidance for needle placement (e.g. biopsy, aspiration, injection, or placement of localization device)
- 77022 (MR guidance for, and monitoring of parenchymal tissue ablation)
- 76497 (unlisted CT procedure [e.g. diagnostic, interventional])
- 76498 (unlisted MR procedure [e.g. diagnostic, interventional])

For example, MR-guided breast biopsy should be coded as CPT 77021 and not as CPT 77058 or 77059 unless it is clear that a separate diagnostic breast MRI is being performed at the time of the biopsy, and there is a separate radiology report outlining the findings of the diagnostic study.

Preface-4.3 Unilateral versus Bilateral Breast MRI
Diagnostic MRI of both breasts should be coded as CPT 77059 regardless of whether both breasts are imaged simultaneously or whether unilateral breast MRI is performed in two separate imaging sessions.

Preface-5 Lifescan or Whole Body Scan
Life scan or whole body CT or MRI for screening of asymptomatic patients is not a covered benefit of any of the current health plans who have delegated utilization review to MedSolutions.
The performance of screening CT examinations in healthy patients does not meet any of the current validity criteria for screening studies and there is no clear documentation of benefit versus radiation risk.

**Preface-6 References**

References are embedded within the body of the guidelines. Complete reference citations for the journal articles can be found on the Reference page at the end of each guideline section.

The website addresses for certain references are included in the body of the guidelines but are not hyperlinked to the actual website.

The website address for the American College of Radiology (ACR) Appropriateness Criteria® is [http://www.acr.org](http://www.acr.org)
Click on Quality and Patient Safety, then click on ACR Appropriateness Criteria®.

The website address for the National Comprehensive Cancer Network (NCCN) Clinical Guidelines in Oncology™ is [http://www.nccn.org](http://www.nccn.org)
Click on NCCN Clinical Practice Guidelines in Oncology™.

**Preface-7 Copyright Information**

© 2009 MedSolutions, Inc. All rights reserved. No part of these materials may be changed, reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying or recording, or in any information storage or retrieval system, without the prior express written permission of MedSolutions, Inc.

**Preface-8 Trademarks**

CPT® (Current Procedural Terminology) is a registered trademark of the American Medical Association (AMA).