3D Interpretation and Reporting of Imaging Studies

[For the list of services and procedures that need preauthorization, please refer to www.mcs.com.pr. Go to “Proveedores”, and click “Políticas Médicas”.

Medical Policy: MP-RAD-02-13
Original Effective Date: August 15, 2013
Revised: May 04, 2020
Next Revision: May 2021

This policy applies to products subscribed by the following corporations, MCS Life Insurance Company (Commercial), and MCS Advantage, Inc. (Classicare) and Medical Card System, Inc., provider’s contract, unless specific contract limitations, exclusions or exceptions apply. Please refer to the member’s benefit certification language for benefit availability. Managed care guidelines related to referral authorization, and precertification of inpatient hospitalization, home health, home infusion, and hospice services apply subject to the aforementioned exceptions.

DESCRIPTION

The technological approach of multi-slice imaging along with the enhanced imaging techniques has allowed for the generation of three-dimensional (3D) images known as 3D reconstruction or 3D rendering. Three-dimensional imaging has been applied to ultrasound, echocardiography, computed tomography (CT), magnetic resonance imaging (MRI) and other tomographic modalities. Applications of this technology include, for example, coronary artery imaging, visualization of central nervous system vasculature, and enhanced imaging of the thorax which includes, for example, aortic aneurysms, embolic disease, and inflammatory and neoplastic lesions (CMS L33256, 2019).

COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate member certificate and subscriber agreement contract for applicable diagnostic imaging, DME, laboratory, machine tests, benefits and coverage.

INDICATIONS

Medical Card System, Inc. (MCS) will consider as medically necessary the use of 3D Interpretation and Reporting of Imaging Studies, for Both the Commercial & Classicare Lines of Business (LOB), when the patient meets All of the following requirements:

1. As with any diagnostic testing, the imaging procedure should be furnished in accordance with accepted standards of medical practice based on the patient’s diagnosis, signs, and symptoms; and

2. This additional imaging modality applied to a base procedure, must meet but, not exceed the patient’s medical need; and

3. This imaging modality should be reserved for situations where the additional image is necessary for a complete depiction of an abnormality from the 2D study, or for surgical planning; and
4. The outcome of this imaging modality will potentially impact the diagnosis or clinical course of the patient; and

5. This imaging modality must be ordered by the physician/non-physician practitioner who is treating the patient, that is, the physician/non-physician practitioner who furnishes a consultation or treats a patient for a specific medical problem and who uses the results in the management of the patient’s specific medical problem.

LIMITATIONS for Both the Commercial & Classicare (Advantage) LOB

1. For non-hospital based outpatient services, in the medical record documentation it is expected that the ordering/referring physician/non-physician practitioner generate a written order/referral indicating the medical necessity for the additional 3D imaging. In addition, it is expected that the interpreting physician maintain a copy of the test results and interpretation along with a copy of the ordering/referring physician/non-physician practitioner’s order for the study. The interpreting physician’s report should address the medical necessity identified by the ordering/referring physician/non-physician practitioner. In the event it is deemed by the interpreting physician that a 3D interpretation is urgently needed and the ordering/referring physician/non-physician practitioner is not immediately available, the interpreting physician must document All of the following on the radiology report:

   a. The time of the study; and

   b. Specific medical need for the study; and

   c. A legible summary of the findings that were urgently transmitted to the ordering/referring physician/non-physician practitioner, whose name is on the order for the study.

2. For hospital based services (inpatient/outpatient), it is expected that there should be an order for the 3D image. In the absence of the order for the 3D image, if the hospital’s interpreting physician deems that the 3D interpretation is needed, he or she should clearly state in the interpretation the medical necessity for this separate service, in addition to the base procedure.

3. CPT codes 76376 and 76377 Will Not be considered medically reasonable and necessary, and hence, Not Covered, if equivalent information obtained from the test has already been provided by another procedure (Ultrasound, MRI, Angiography, etc.), or if it could be provided by a standard CT scan (two-dimensional) without reconstruction.

4. 3D rendering with interpretation and reporting during a radiation oncology episode of care is included in 3D simulation when applicable or IMRT plan when applicable and, therefore, should Not be billed.

5. The provider is responsible for ensuring the medical necessity of procedures and maintaining the medical record, which must be made available upon request.
6. Three-dimensional (3D) imaging **Will Not** be medically covered when performed based on internal protocols of the testing facility; a referral for one 3D imaging is not a blanket referral for all studies. In most cases, it is expected that the provider treating the patient specifically orders the procedure in writing and, that the order should be on record for each 3D imaging performed.

7. Three-dimensional (3D) imaging **Not** ordered by the physician/non-physician practitioner who is treating the patient, are **Not** reasonable and medically necessary, and therefore, **Not** Covered.

8. The following documentation must be included in the patient’s medical record:

   a. For non-hospital based outpatient services, the medical record documentation maintained by the ordering/referring physician/non-physician practitioner must clearly indicate the medical necessity of the 3D imaging and includes, but is not limited to, relevant medical history, physical examination, and results of pertinent diagnostic tests or procedures.

   b. Documentation should clearly support one of the covered secondary diagnosis code(s) for medical necessity of 3D rendering and interpretation.

   c. The documentation should state the need for this separate service and should be included in the interpretation. The documentation should be legible, must be maintained in the patient’s medical record, and must be made available upon request. Every page of the record must be legible and include appropriate patient identification information (e.g., complete name, dates of service[s]). The documentation must include the legible signature of the physician or non-physician practitioner responsible for and providing the care to the patient.

   d. When 3D interpretation is deemed urgently needed by the interpreting physician, the documentation must include the time of the study, the specific medical need for the study, and a summary of the findings that were urgently needed and transmitted to the ordering/referring physician/non-physician practitioner whose name is on the order/referral for the study. This documentation should be legible, must be maintained by the interpreting physician, and must be made available upon request.

   e. The submitted medical record must support the use of the selected ICD-10-CM code(s). The submitted CPT/HCPCS code must describe the service performed.

**CODING INFORMATION for Both the Commercial & Classicare (Advantage) LOB**

**CPT® Codes (List may not be all inclusive)**

<table>
<thead>
<tr>
<th><strong>CPT® Codes</strong></th>
<th><strong>DESCRIPTION</strong></th>
</tr>
</thead>
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This document is designated for informational purposes only and is not an authorization, or an explanation of benefits (EOB), or a contract. Medical technology is constantly changing and we reserves the right to review and update our policies periodically.
76376  3D rendering with interpretation and reporting of computed tomography, magnetic resonance imaging, ultrasound, or other tomographic modality with image postprocessing under concurrent supervision; not requiring image postprocessing on an independent workstation

76377  3D rendering with interpretation and reporting of computed tomography, magnetic resonance imaging, ultrasound, or other tomographic modality with image postprocessing under concurrent supervision; requiring image postprocessing on an independent workstation

Note: CPT® Codes 76376 and 76377 require concurrent supervision of image postprocessing 3D manipulation of volumetric data set and image rendering.

Note: Use 76376 in conjunction with code [s] for base imaging procedure [s]. Do not report 76376 in conjunction with 31627, 34839, 70496, 70498, 70544-70549, 71275, 71555, 72159, 72191, 72198, 73206, 73225, 73706, 73725, 74174, 74175, 74185, 74261-74263, 75557, 75559, 75561, 75563, 75565, 75571-75574, 75635, 76377, 77046, 77047, 77048, 77049, 77061-77063, 78012-78999, 93355, 0523T, 0559T, 0560T, 0561T, and 0562T.

Note: Use 76377 in conjunction with code [s] for base imaging procedure [s]. Do not report 76377 in conjunction with 34839, 70496, 70498, 70544-70549, 71275, 71555, 72159, 72191, 72198, 73206, 73225, 73706, 73725, 74174, 74175, 74185, 74261-74263, 75557, 75559, 75561, 75563, 75565, 75571-75574, 75635, 76376, 77046, 77047, 77048, 77049, 77061-77063, 78012-78999, 93355, 0523T, 0559T, 0560T, 0561T, and 0562T.

ICD-10-CM® Codes (List may not be all inclusive)

<table>
<thead>
<tr>
<th>ICD-10 Codes*</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>R91.1</td>
<td>Solitary pulmonary nodule</td>
</tr>
<tr>
<td>R91.8</td>
<td>Other nonspecific abnormal finding of lung field</td>
</tr>
<tr>
<td>R93.0</td>
<td>Abnormal findings on diagnostic imaging of skull and head, not elsewhere classified</td>
</tr>
<tr>
<td>R93.1</td>
<td>Abnormal findings on diagnostic imaging of heart and coronary circulation</td>
</tr>
<tr>
<td>R93.2</td>
<td>Abnormal findings on diagnostic imaging of liver and biliary tract</td>
</tr>
<tr>
<td>R93.3</td>
<td>Abnormal findings on diagnostic imaging of other parts of digestive tract</td>
</tr>
<tr>
<td>R93.41</td>
<td>Abnormal radiologic findings on diagnostic imaging of renal pelvis, ureter, or bladder</td>
</tr>
<tr>
<td>R93.421</td>
<td>Abnormal radiologic findings on diagnostic imaging of right kidney</td>
</tr>
<tr>
<td>R93.422</td>
<td>Abnormal radiologic findings on diagnostic imaging of left kidney</td>
</tr>
<tr>
<td>R93.49</td>
<td>Abnormal radiologic findings on diagnostic imaging of other urinary organs</td>
</tr>
<tr>
<td>R93.5</td>
<td>Abnormal findings on diagnostic imaging of other abdominal regions, including retroperitoneum</td>
</tr>
<tr>
<td>R93.6</td>
<td>Abnormal findings on diagnostic imaging of limbs</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>R93.7</td>
<td>Abnormal findings on diagnostic imaging of other parts of musculoskeletal system</td>
</tr>
<tr>
<td>R93.811</td>
<td>Abnormal radiologic findings on diagnostic imaging of right testicle</td>
</tr>
<tr>
<td>R93.812</td>
<td>Abnormal radiologic findings on diagnostic imaging of left testicle</td>
</tr>
<tr>
<td>R93.813</td>
<td>Abnormal radiologic findings on diagnostic imaging of testicles, bilateral</td>
</tr>
<tr>
<td>R93.89</td>
<td>Abnormal findings on diagnostic imaging of other’s specified body structures</td>
</tr>
<tr>
<td>R93.9</td>
<td>Diagnostic imaging inconclusive due to excess body fat of patient</td>
</tr>
</tbody>
</table>

**Note:** The list of ICD-10 diagnoses has been established as limited coverage for CPT codes 76376 and 76377 and must be accompanied by a primary diagnosis code on the claim indicating medical necessity for the study.

**REFERENCES**


### POLICY HISTORY

<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTION</th>
<th>COMMENT</th>
</tr>
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<tbody>
<tr>
<td>August 15, 2013</td>
<td>Origination of Policy</td>
<td></td>
</tr>
<tr>
<td>February 21, 2014</td>
<td>Revised</td>
<td>To the Coding section: A new ICD-10 Codes (Preview Draft) section was added to the policy.</td>
</tr>
<tr>
<td>November 5, 2014</td>
<td>Revised</td>
<td>References updated. New reference was added, number 32.</td>
</tr>
</tbody>
</table>

- Deleted: As with any diagnostic testing, the procedure should be furnished in accordance with accepted standards of medical practice based on the patient’s diagnosis, signs, and symptoms. This additional procedure applied to a base procedure must meet but not exceed the patient’s medical need. Three dimensional rendering codes should be reserved for situations where the additional image is necessary for a complete depiction of an abnormality from the 2D study or for surgical planning (First Coast Inc. 2013).
- Deleted: 3D image diagnostic equipments such as CT scanners, MRI, 3-4D ultrasound etc. have been used widely in development countries and used just at some high quality...
hospitals and medical centers. These equipments have been alternative assisted by information technology, which need strong computers with dedicated softwares (Vu Cong, Huynh Quang Linh).

- Added corresponding citation to previous information: (CMS L32312, 2013).

To the Indications Section:
- Deleted: Medical Card System Inc. will considers three dimensional (3D) reconstruction / rendering of computed tomography (CT) or magnetic resonance imaging (MRI) requiring image post processing on an independent workstation, medically necessary only when the information to be obtained from the test cannot be provided by another procedure (magnetic resonance imaging, ultrasound, angiography, etc.) or could be provided by a standard CT scan (two-dimensional) without reconstruction. Indications for 3D reconstruction/rendering may include, but are not limited to, any of the following:
  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).
  5. Preoperative planning for other complex surgical cases.
- Revised, modified and restructured Indications Section, as it follows: Medical Card System, Inc. (MCS) will consider as medically necessary the use of 3D Interpretation and Reporting of Imaging Studies, for Both the Commercial & Classicare Lines of Business (LOB), when the patient meets ALL of the following requirements:
  1. As with any diagnostic testing, the imaging procedure should be furnished in accordance with accepted standards of medical practice based on the patient’s diagnosis, signs, and symptoms; and
  2. This additional imaging modality applied to a base procedure, must meet but, not exceed the patient’s medical need; and
  3. This imaging modality should be reserved for situations where the additional image is necessary for a complete depiction of an abnormality from the 2D study, or for surgical planning; and
  4. The outcome of this imaging modality will potentially impact the diagnosis or clinical course of the patient; and
  5. This imaging modality Must be Ordered by the physician/non-physician practitioner who is treating the patient, that is, the physician/non-physician practitioner who furnishes a consultation or, treats a patient for a specific medical problem and, who uses the results in the management of the patient’s specific medical problem.

To the Limitations Section:
- Deleted Contraindications from the section heading.
- Deleted: Medical Card System Inc. considers 3D reconstruction/rendering of computed tomography or magnetic resonance imaging, not medically necessary, if the equivalent information to that obtained from the test has already been provided by another procedure (magnetic resonance imaging, ultrasound, angiography, etc.) or could be provided by a standard CT scan (two-dimensional) without reconstruction.
- Deleted: Investigational Section – Medical Card System Inc. considers the routine use of 3D rendering (post-processing) in
conjunction with ultrasound investigational.

- Revised, modified and restructured Limitations Section, as it follows:
  1. For non-hospital based outpatient services, it is expected that the ordering/referring physician/non-physician practitioner generate a written order/referral indicating the medical necessity for the additional 3D imaging. In addition, it is expected that the interpreting physician maintain a copy of the test results and interpretation along with a copy of the ordering/referring physician/non-physician practitioner’s order for the study. The interpreting physician’s report should address the medical necessity identified by the ordering/referring physician/non-physician practitioner. In the event it is deemed by the interpreting physician that a 3D interpretation is urgently needed and the ordering/referring physician/non-physician practitioner is not immediately available, the interpreting physician must document all of the following on the radiology report: a. The time of the study; and b. Specific medical need for the study; and c. A legible summary of the findings that were urgently transmitted to the ordering/referring physician/non-physician practitioner, whose name is on the order for the study.
  2. For hospital based services (inpatient/outpatient), it is expected that there should be an order for the 3D image. In the absence of the order for the 3D image, if the hospital’s interpreting physician deems that the 3D interpretation is needed, he or she should clearly state in the interpretation the medical necessity for this separate service, in addition to the base procedure.
  3. CPT codes 76376 and 76377 Will Not be considered medically reasonable and necessary, and hence, Not Covered, if equivalent information obtained from the test has already been provided by another procedure (Ultrasound, MRI, Angiography, etc.), or if it could be provided by a standard CT scan (two-dimensional) without reconstruction.
  4. 3D rendering with interpretation and reporting during a radiation oncology episode of care is included in 3D simulation when applicable or IMRT plan when applicable and, therefore, should Not be billed.
  5. The provider is responsible for ensuring the medical necessity of procedures and maintaining the medical record, which must be made available upon request.
  6. Three-dimensional (3D) imaging Will Not be medically covered when performed based on internal protocols of the testing facility; a referral for one 3D imaging is not a blanket referral for all studies. In most cases, it is expected that the provider treating the patient specifically orders the procedure in writing and, that the order should be on record for each 3D imaging performed.
  7. Three-dimensional (3D) imaging Not ordered by the physician/non-physician practitioner who is treating the patient, is Not reasonable and medically necessary, and therefore, Not Covered.
  8. The following documentation must be included in the patient’s medical record:
     a. For non-hospital based outpatient services, the medical record documentation maintained by the ordering/referring physician/non-physician practitioner must clearly indicate
the medical necessity of the 3D imaging and includes, but is not limited to, relevant medical history, physical examination, and results of pertinent diagnostic tests or procedures.

b. Documentation should clearly support one of the covered secondary diagnosis code(s) for medical necessity of 3D rendering and interpretation.

c. The documentation should state the need for this separate service and should be included in the interpretation. The documentation should be legible, must be maintained in the patient's medical record, and must be made available upon request.

d. When 3D interpretation is deemed urgently needed by the interpreting physician, the documentation must include the time of the study, the specific medical need for the study, and a summary of the findings that were urgently needed and transmitted to the ordering/referring physician/non-physician practitioner whose name is on the order/referral for the study. This documentation should be legible, must be maintained by the interpreting physician, and must be made available upon request.

To the Coding Information:
- Updated CPT® Codes' Descriptions according to AMA's CPT® Manual 2014.
- Added Note 1: To report computer-aided detection, including computer algorithm analysis of MRI data for lesion detection / characterization / pharmacokinetic analysis, breast MRI, use category III code 0159T (AMA CPT®, 2014).
- Added Note 2: CPT® Codes 76376 & 76377 require concurrent supervision of image post-processing 3D manipulation of volumetric data set and image rendering (AMA CPT®, 2014).
- Updated ICD-9-CM® Codes heading title to read as follows: ICD-9-CM® Diagnosis Codes (List may not be all inclusive). The following list of diagnoses have been established as limited coverage for CPT codes 76376 and 76377 and must be accompanied by a primary diagnosis code on the claim indicating medical necessity for the imaging study.

November 23, 2015 Revised
- Eliminate ICD-9 codes since they are no longer valid for diagnosis classification.
- Add new section of ICD-10 codes which are the valid diagnosis classification system since October 1, 2015.

May 11, 2018 Revised
- References updated. Deleted #6.

To the Description Section:
- Updated citation to read: CMS L33256, 2016.

To the Coding Section:
- To the CPT Codes table: Eliminated notes from the code description section.
- To notes 1 & 2: Deleted citations: AMA CPT, 2014.
- Added new note 3, which was previously in CPT Code table, which reads: Use 76376 in conjunction with code [s] for base imaging procedure[s]. Do not report 76376 in conjunction with 31627, 34839, 70496, 70498, 70544-70549, 71275, 71555,
<table>
<thead>
<tr>
<th>May 13, 2019</th>
<th>Revised</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>To the Limitations Section:</strong></td>
<td></td>
</tr>
<tr>
<td>Word “in” was added to the sentence to make a better meaning and the word “maintained” was deleted because not make sense in description of the limitation #1.</td>
<td></td>
</tr>
<tr>
<td><strong>To the Coding Information Section:</strong></td>
<td></td>
</tr>
<tr>
<td>• Note #1 was deleted because this code instruction was not included in the LCD (L33256) neither in the Current Procedural Terminology (CPT®) 2019 American Medical Association Book.</td>
<td></td>
</tr>
<tr>
<td>• The CPTs codes 77046, 77047, 77048, 77049, and 0523T were added to the NOTE #3 according to Current Procedural Terminology (CPT®) 2019 American Medical Association Book. - CPT 0159T was deleted from NOTE #3 according to Current Procedural Terminology (CPT®) 2019 American Medical Association Book.</td>
<td></td>
</tr>
<tr>
<td>• The CPTs codes 77046, 77047, 77048, 77049, and 0523T were added to the NOTE #4 according to Current Procedural Terminology (CPT®) 2019 American Medical Association Book. - CPT 0159T was deleted from NOTE #4 according to Current Procedural Terminology (CPT®) 2019 American Medical Association Book.</td>
<td></td>
</tr>
<tr>
<td>• <strong>To the ICD-10 Codes Section:</strong></td>
<td></td>
</tr>
<tr>
<td>The following ICD-10 Codes were added to the Policy: R93.2, R93.421, R93.422, R93.49, R93.811, R93.812, R93.813, and R93.9.</td>
<td></td>
</tr>
<tr>
<td><strong>To the References Section:</strong></td>
<td></td>
</tr>
<tr>
<td>The following References were deleted from this Policy: 5, 6, 7, 10, 11, 13, 14, 17, 19, 22, 25, 27, 32, and 33.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>May 4, 2020, 2020</th>
<th>Revised</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>To the Limitations Section:</strong></td>
<td></td>
</tr>
<tr>
<td>New information was added to the Letter “C”: Every page of the record must be legible and include appropriate patient identification information (e.g., complete name, dates of service[s]). The documentation must include the legible signature of the physician or non-physician practitioner responsible for and providing the care to the patient.</td>
<td></td>
</tr>
<tr>
<td>New Letter “E” information for the Medical Record was added to the Policy.</td>
<td></td>
</tr>
</tbody>
</table>
To the Coding Information Section:
To the CPT's Code Section:
- NEW CPTs codes 0559T, 0560T, 0561T, and 0562T were added to the NOTE #3.
- New CPTs codes 0559T, 0560T, 0561T, and 0562T were added to the NOTE #4.

To the References Section:
- The following References were added to this Policy:
  #7.
- The following References were deleted from this Policy:
  #9, 10, 11, 12, 13, 14, 15, 16, and 17.

This document is for informational purposes only. It is not an authorization, certification, explanation of benefits, or contract. Receipt of benefits is subject to satisfaction of all terms and conditions of coverage. Eligibility and benefit coverage are determined in accordance with the terms of the member's plan in effect as of the date services are rendered. Medical Card System, Inc. (MCS) medical policies are developed with the assistance of medical professionals and are based upon a review of published and unpublished information including, but not limited to, current medical literature, guidelines published by public health and health research agencies, and community medical practices in the treatment and diagnosis of disease. Because medical practice, information, and technology are constantly changing, Medical Card System, Inc. (MCS) reserves the right to review and update its medical policies at its discretion. Medical Card System, Inc. (MCS) medical policies are intended to serve as a resource to the plan. They are not intended to limit the plan's ability to interpret plan language as deemed appropriate. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment they choose to provide.