Anthem

Clinical UM Guideline

Subject: Site of Care: Advanced Radiologic Imaging
Guideline #: CG-MED-55
Status: Reviewed

Publish Date: 09/27/2023
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Description

This document addresses the clinical features that may increase an individual's risk of requiring access to care available in a hospital outpatient department for advanced radiologic imaging.

Note: In some plans, "level of care," "site of service" or another term such as "setting" or "place of service" may be the term used in benefit plans, provider contracts, or other materials instead of or in addition to "site of care" and, in some plans, these terms may be used interchangeably.

Note: Please see the following related documents for additional information:

- CG-SURG-10 Ambulatory or Outpatient Surgery Center Procedures
- CG-SURG-52 Site of Care: Hospital-Based Ambulatory Surgical Procedures and Endoscopic Services

Clinical Indications

Note: The medical necessity of the advanced radiologic imaging procedure may be separately reviewed against the appropriate criteria. This guideline is for determination of the medical necessity of hospital outpatient site of care for the advanced radiologic imaging procedure.

Medically Necessary:

An advanced radiologic imaging procedure in the hospital outpatient department is considered **medically necessary** when any of the following are present:

A. The services being provided are only available in the hospital setting; **or**
B. The individual is less than 19 years old; **or**
C. The individual requires an obstetrical observation; **or**
D. The individual is receiving perinatology services; **or**
E. There are no other geographically accessible appropriate alternative sites for the individual to undergo the procedure, including but not limited to the following:
    1. Moderate or deep sedation or general anesthesia is required for the procedure and a freestanding facility providing such sedation is not available; **or**
    2. The equipment for the size of the individual (that is, very small or very large) is not available in a freestanding facility; **or**
    3. The individual has a documented diagnosis of claustrophobia requiring open magnetic resonance imaging which is not available in a freestanding facility; **or**
F. The individual has a known chronic disease that is expected to require imaging at multiple time points and the individual has had prior radiology imaging procedures for the diagnosis, management or surveillance of the disease at the hospital outpatient department or clinic (for example, follow-up of lung nodules, individuals with multiple sclerosis, aortic aneurysms, or inflammatory bowel disease, or individuals with cancer); **or**
G. The individual has a known contrast allergy; **or**
H. The imaging is pre-operative or pre-procedure where the surgery or procedure is being performed at the hospital or affiliated site; **or**
I. Performance or imaging outside the hospital outpatient department or clinic would reasonably be expected to adversely impact or delay care.

Not Medically Necessary:

All other advanced radiologic imaging procedures in the hospital outpatient department are considered **not medically necessary** when the above criteria are not met.

Coding

Coding edits for medical necessity review are not implemented for this guideline. Where a more specific policy or guideline exists, that document will take precedence and may include specific coding edits and/or instructions. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

Discussion/General Information

Hospital-based advanced radiologic imaging procedures are generally more appropriate for individuals whose health status or age requires the availability of more or different supportive care to minimize the risks of adverse health events.

Children can require specialized pediatric equipment which may not be as readily available outside a hospital-based facility and may require sedation more often than adults. Children are also more radiosensitive than adults. Using equipment and exposure settings designed for adults may result in excessive exposure to radiation for children. Care must be taken to minimize radiation exposure and to ensure safety and appropriate selection and performance of advanced radiology procedures.

Sadigh (2018) assessed variation in estimated radiation dose indices for computed tomography (CT) scans of the head in children. The authors looked at the records of 295,296 single-phase, noncontrast head CT scans for children 18 years of age and younger. The median volume CT dose index was 33 mGy. Median volume CT dose index was 26 mGy at children's hospital, 32 mGy at academic

hospitals, and 40 mGy at community hospitals. The authors also noted differences in CT dose indexes between level I and level II trauma centers (median 27 mGy and 32 mGy respectively) compared to nontrauma centers (median 40 mGy) and differences between facilities in metropolitan locations (median 30 mGy) versus suburban or rural locations (median 41 mGy).

Rostad (2018) looked at multiphase acquisitions and radiation dose indices in CT scans of the abdomen and pelvis done at outside imaging facilities and later transferred to a pediatric hospital for care. The outside image metrics were compared to CT scans of the abdomen and pelvis performed internally at the pediatric facility. There were 754 CT scans of the abdomen and pelvis from outside imaging facilities compared to 939 scans at the pediatric hospital. Of the outside images, 415/754 had multiphase exams versus 115/939 images with multiphase exams at the pediatric facility. Mean radiation dose index at the outside facility was 9.4 mGy compared to 3.5 mGy at the pediatric hospital.

Strauss and colleagues (2019) compared pediatric CT dose indexes and analyzed the differences between academic pediatric, nonacademic pediatric, academic adult, and nonacademic adult facilities. Looking at noncontrast brain CT, noncontrast chest CT, and contrast CT of the abdomen and pelvis, the authors found the lowest dose radiation with less variability in academic pediatric facilities compared to the other facilities. These studies show there is clinically significant variation in radiation doses used in CT imaging for children and adolescents. Average doses are lower in pediatric facilities compared to general care facilities.

Certain medical conditions can create a need for an anesthesiologist to be present during the advanced radiologic imaging. Facility-based imaging may be appropriate for individuals whose condition requires or could require advanced medical care during or after the procedure.

The size of an individual may also contribute to need for specialized equipment. Large individuals or those with claustrophobia may require specialized equipment which could include an open MRI as opposed to a traditional MRI scanner.

Examples of advanced radiologic imaging may include CT, computed tomography angiography, magnetic resonance imaging, magnetic resonance angiography, nuclear medicine scans (for example, single photon emission computed tomography), nuclear cardiac imaging procedures (for example, myocardial perfusion scans), and positron emission tomography scans.

References

Peer Reviewed Publications:

1. Rostad BS, Applegate KE, Kim T, et al. Multiphase acquisitions in pediatric abdominal-pelvic CT are a common practice and contribute to unnecessary radiation dose. Pediatr Radiol. 2018; 48(12):1714-1723.
2. Sadigh G, Kadom N, Karthik P, et al. Noncontrast head CT in children: national variation in radiation dose indices in the United States. AJNR Am J Neuroradiol. 2018; 39(8):1400-1405.
3. Strauss KJ, Somasundaram E, Sengupta D, et al. Radiation dose for pediatric CT: comparison of pediatric versus adult imaging facilities. Radiology. 2019; 291(1):158-167.

Government Agency, Medical Society, and Other Authoritative Publications:

1. American College of Obstetricians and Gynecologists. Committee opinion 723: Guidelines for diagnostic imaging during pregnancy and lactation. 2017; reaffirmed 2021. Available at: https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/10/guidelines-for-diagnostic-imaging-during-pregnancy-and-lactation. Accessed on July 10, 2023.
2. American Society of Anesthesiologists. Available at: https://www.asahq.org/quality-and-practice-management/standards-guidelines-and-related-resources-search. Accessed on July 10, 2023.
    - Practice Advisory on Anesthetic Care for Magnetic Resonance Imaging. 2015.
    - Statement on Nonoperating Room Anesthetizing Locations. 2018.
    - Statement on Practice Recommendations for Pediatric Anesthesia. 2021.

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History

Status	Date	Action
Reviewed	08/10/2023	Medical Policy & Technology Assessment Committee (MPTAC) review. Updated References section.
Reviewed	08/11/2022	MPTAC review. Updated References section.
Revised	08/12/2021	MPTAC review. Revised MN statement from “the individual is less than 10 years old” to “the individual is less than 19 years old.” Updated Discussion/General Information and References sections.
Revised	08/13/2020	MPTAC review. Title changed to “Site of Care: Advanced Radiologic Imaging.” Updated Description, Discussion/General Information, References, and Index sections.
Reviewed	02/20/2020	MPTAC review. Updated References section.
Reviewed	03/21/2019	MPTAC review. Updated References section.
Reviewed	03/22/2018	MPTAC review. Updated References section.
Revised	11/02/2017	MPTAC review. Revisions made to MN statement. Updated header language from “Current Effective Date” to “Publish Date.”
	07/19/2017	Updated Description Section.
Revised	05/04/2017	MPTAC review. Revised MN statement regarding geographically accessible appropriate alternatives. Updated References section.
Revised	11/03/2016	MPTAC review. Clarified NMN statement.
New	08/04/2016	MPTAC review. Initial document development.

Federal and State law, as well as contract language, and Medical Policy take precedence over Clinical UM Guidelines. We reserve the right to review and update Clinical UM Guidelines periodically. Clinical guidelines approved by the Medical Policy & Technology Assessment Committee are available for general adoption by plans or lines of business for consistent review of the medical necessity of services related to the clinical guideline when the plan performs utilization review for the subject. Due to variances in utilization patterns, each plan may choose whether to adopt a particular Clinical UM Guideline. To determine if review is required for this Clinical UM Guideline, please contact the customer service number on the member's card.

Alternatively, commercial or FEP plans or lines of business which determine there is not a need to adopt the guideline to review services generally across all providers delivering services to Plan’s or line of business’s members may instead use the clinical guideline for provider education and/or to review the medical necessity of services for any provider who has been notified that his/her/its claims will be reviewed for medical necessity due to billing practices or claims that are not consistent with other providers, in terms of frequency or in some other manner.