



## Medical PA Criteria Document

Medical Procedure Class:	<b>MRI of Chest</b>
Date:	July 17, 2006
Updated:	July 28, 2009

### Executive Summary

<b>Purpose:</b>	To encourage more appropriate utilization and resource management of costly diagnostic imaging studies, in this case magnetic resonance imaging of the chest.
<b>Why was this Issue Selected:</b>	<p>An analysis of Missouri Medicaid claims data has identified imaging of the chest as one of the most highly utilized diagnostic imaging exams performed. From Oct 2004-Sept 2005, the State spent over \$68,000 for over 260 of these high cost, high-test studies. The results of utilization management programs have suggested that a meaningful percentage of such exams are ordered inappropriately due to any of the following:</p> <ul style="list-style-type: none"> <li>• The absence of appropriate clinical indications, e.g. established diagnoses or signs and symptoms</li> <li>• The absence of initial and appropriate screening exams, e.g. prior Chest X-ray</li> <li>• Layering and redundancy of prior and recent definitive exams, CT, MRI or otherwise</li> </ul>
<b>Procedures subject to Pre-Certification</b>	<ul style="list-style-type: none"> <li>• 71550 Magnetic resonance (eg, proton) imaging, chest; without contrast material(s)</li> <li>• 71551 Magnetic resonance (eg, proton) imaging, chest; with contrast material(s)</li> <li>• 71552 Magnetic resonance (eg, proton) imaging, chest; without contrast material(s) followed by contrast material(s) and further sequences</li> <li>• 71555 Magnetic resonance angiography, chest (excluding myocardium) with or without contrast material(s)</li> </ul>
<b>Setting &amp; Population:</b>	All Medicaid fee-for-service patients

<b>Type of Criteria:</b>	<input type="checkbox"/> Increased risk of ADE <input checked="" type="checkbox"/> Appropriate Indications	<input type="checkbox"/> Non-Preferred Agent <input type="checkbox"/>
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<b>Data Sources:</b>	<input type="checkbox"/> Only administrative databases	<input checked="" type="checkbox"/> Databases + Prescriber-supplied
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## Setting & Population

- Procedure Group for review: Magnetic Resonance Imaging Chest
- Age range: All patients

## Approval Criteria

- Diagnosis of Pneumonia with > 4 weeks of antibiotic therapy
- Pulmonary Embolus, Hemoptysis or Superior Vena Cava Syndrome without history of MRI Chest in previous 6 weeks
- Diagnosis of Suspected or known tumor
- Documented Lung Screening
- Emergency/Trauma claims and Inpatient claims will not require above criteria

## Approval Diagnoses (Appendix A)

	<b>Submitted ICD-9 Diagnoses</b>	<b>Date Range</b>
Malignant neoplasm associated with transplant organ	199.2	12 months
Plasma cell leukemia, in relapse	203.12	12 months
Other immunoproliferative neoplasms, in relapse	203.82	12 months
Acute lymphoid leukemia, in relapse	204.02	12 months
Chronic lymphoid leukemia, in relapse	204.12	12 months
Subacute lymphoid leukemia, in relapse	204.22	12 months
Other lymphoid leukemia, in relapse	204.82	12 months
Unspecified lymphoid leukemia, in relapse	204.92	12 months
Acute myeloid leukemia, in relapse	205.02	12 months
Chronic myeloid leukemia, in relapse	205.12	12 months
Subacute myeloid leukemia, in relapse	205.22	12 months
Myeloid sarcoma, in relapse	205.32	12 months
Other myeloid leukemia, in relapse	205.82	12 months
Unspecified myeloid leukemia, in relapse	205.92	12 months
Acute monocytic leukemia, in relapse	206.02	12 months
Chronic monocytic leukemia, in relapse	206.12	12 months
Subacute monocytic leukemia, in relapse	206.22	12 months
Other monocytic leukemia, in relapse	206.82	12 months
Unspecified monocytic leukemia, in relapse	206.92	12 months

	<b>Submitted ICD-9 Diagnoses</b>	<b>Date Range</b>
Acute erythremia and erythroleukemia, in relapse	207.02	12 months
Chronic erythremia, in relapse	207.12	12 months
Megakaryocytic leukemia, in relapse	207.22	12 months
Other specified leukemia, in relapse	207.82	12 months
Acute leukemia of unspecified cell type, in relapse	208.02	12 months
Chronic leukemia of unspecified cell type, in relapse	208.12	12 months
Subacute leukemia of unspecified cell type, in relapse	208.22	12 months
Other leukemia of unspecified cell type, in relapse	208.82	12 months
Unspecified leukemia, in relapse	208.92	12 months
Malignant carcinoid tumor of the small intestine, unspecified portion	209.00	12 months
Malignant carcinoid tumor of the duodenum	209.01	12 months
Malignant carcinoid tumor of the jejunum	209.02	12 months
Malignant carcinoid tumor of the ileum	209.03	12 months
Malignant carcinoid tumor of the large intestine, unspecified portion	209.10	12 months
Malignant carcinoid tumor of the appendix	209.11	12 months
Malignant carcinoid tumor of the cecum	209.12	12 months
Malignant carcinoid tumor of the ascending colon	209.13	12 months
Malignant carcinoid tumor of the transverse colon	209.14	12 months
Malignant carcinoid tumor of the descending colon	209.15	12 months
Malignant carcinoid tumor of the sigmoid colon	209.16	12 months
Malignant carcinoid tumor of the rectum	209.17	12 months
Malignant carcinoid tumor of unknown primary site	209.20	12 months
Malignant carcinoid tumor of the bronchus and lung	209.21	12 months
Malignant carcinoid tumor of the thymus	209.22	12 months
Malignant carcinoid tumor of the stomach	209.23	12 months
Malignant carcinoid tumor of the kidney	209.24	12 months
Malignant carcinoid tumor of foregut, not otherwise specified	209.25	12 months
Malignant carcinoid tumor of midgut, not otherwise specified	209.26	12 months
Malignant carcinoid tumor of hindgut, not otherwise specified	209.27	12 months
Malignant carcinoid tumor of other sites	209.29	12 months
Malignant poorly differentiated neuroendocrine carcinoma, any site	209.30	12 months
Ventilator associated pneumonia	997.31	12 months
Other respiratory complications	997.39	12 months
Malignant Neoplasm of Esophagus	150	12 months

	<b>Submitted ICD-9 Diagnoses</b>	<b>Date Range</b>
Malignant Neoplasm of Stomach	151	12 months
Malignant Neoplasm of Small Intestine including Duod	152	12 months
Malignant Neoplasm of Colon	153	12 months
Malignant Neoplasm Rectum Rectosigmoid Junct	154	12 months
Malignant Neoplasm of Liver and Intrahep	155	12 months
Malignant Neoplasm Gallbladder & Extrahepatic	156	12 months
Malignant Neoplasm of Pancreas	157	12 months
Malignant Neoplasm of Retroperitoneum & PE	158	12 months
Malignant Neoplasm Digestive, Organs& Pancreas – other site	159	12 months
Malignant Neoplasm Nasal Cavities Mid Ear & Acss	160	12 months
Malignant Neoplasm of Larynx	161	12 months
Malignant Neoplasm of Trachea Bronchus A	162	12 months
Malignant Neoplasm of Pleura	163	12 months
Malignant Neoplasm of Thymus Heart & Media	164	12 months
Malignant Neoplasm-other Ill – Def /Resp Sys – Intrathorac	165	12 months
Malignant Neoplasm of Cervical Esophagus	1500	12 months
Malignant Neoplasm of Thoracic Esophagus	1501	12 months
Malignant Neoplasm of Abdominal Esophagus	1502	12 months
Malignant Neoplasm of Upper Third of Esophagus	1503	12 months
Malignant Neoplasm of Middle Third of Esophagus	1504	12 months
Malignant Neoplasm of Lower Third of Esophagus	1505	12 months
Malignant Neoplasm Other Spec Part Esophagus	1508	12 months
Malignant Neoplasm of Esophagus unspecified	1509	12 months
Malignant Neoplasm of Cardia	1510	12 months
Malignant Neoplasm of Pylorus	1511	12 months
Malignant Neoplasm of Pyloric Antrum	1512	12 months
Malignant Neoplasm of Fundus of Stomach	1513	12 months
Malignant Neoplasm of Body of Stomach	1514	12 months
Malignant Neoplasm Lesser Curv Stomach U	1515	12 months
Malignant Neoplasm Greater Curv Stomach	1516	12 months
Malignant Neoplasm Other Specified Sites	1518	12 months
Malignant Neoplasm of Stomach Unspecified	1519	12 months
Malignant Neoplasm of Duodenum	1520	12 months
Malignant Neoplasm of Jejunum	1521	12 months
Malignant Neoplasm of Ileum	1522	12 months
Malignant Neoplasm of Meckels Diverticul	1523	12 months

	<b>Submitted ICD-9 Diagnoses</b>	<b>Date Range</b>
Malignant Neoplasm Other Spec Sites Small Intestine	1528	12 months
Malignant Neoplasm Small Intestine Unspecified	1529	12 months
Malignant Neoplasm of Hepatic Flexure	1530	12 months
Malignant Neoplasm of Transverse Colon	1531	12 months
Malignant Neoplasm of Descending Colon	1532	12 months
Malignant Neoplasm of Sigmoid Colon	1533	12 months
Malignant Neoplasm of Cecum	1534	12 months
Malignant Neoplasm of Appendix	1535	12 months
Malignant Neoplasm of Ascending Colon	1536	12 months
Malignant Neoplasm of Splenic Flexure	1537	12 months
Malignant Neoplasm Other Spec Sites Large Intestine	1538	12 months
Malignant Neoplasm of Colon Unspecified	1539	12 months
Malignant Neoplasm of Rectosigmoid Junct	1540	12 months
Malignant Neoplasm of Rectum	1541	12 months
Malignant Neoplasm of Anal Canal	1542	12 months
Malignant Neoplasm of Anus Unspecified S	1543	12 months
Malignant Neoplasm Other Site Rect Rectosigmoid Junct	1548	12 months
Malignant Neoplasm of Liver Primary	1550	12 months
Malignant Neoplasm of Intrahepatic Bile	1551	12 months
Malignant Neoplasm Liver Not Spec As Pri	1552	12 months
Malignant Neoplasm of Gallbladder	1560	12 months
Malignant Neoplasm of Extrahepatic Bile	1561	12 months
Malignant Neoplasm of Ampulla of Vater	1562	12 months
Malignant Neoplasm Other Spec Site GB & Extrahepatic Bile	1568	12 months
Malignant Neoplasm Biliary Tract Part Unspecified	1569	12 months
Malignant Neoplasm of Head of Pancreas	1570	12 months
Malignant Neoplasm of Body of Pancreas	1571	12 months
Malignant Neoplasm of Tail of Pancreas	1572	12 months
Malignant Neoplasm of Pancreatic Duct	1573	12 months
Malignant Neoplasm of Islets of Langerha	1574	12 months
Malignant Neoplasm Other Spec Sites Pancreas	1578	12 months
Malignant Neoplasm of Pancreas Part Unspecified	1579	12 months
Malignant Neoplasm of Retroperitoneum	1580	12 months
Malignant Neoplasm Specified Parts Peritoneum	1588	12 months
Malignant Neoplasm of Peritoneum Unspecified	1589	12 months
Malignant Neoplasm Intestinal Tract Part	1590	12 months

	<b>Submitted ICD-9 Diagnoses</b>	<b>Date Range</b>
Malignant Neoplasm of Spleen NEC	1591	12 months
Malignant Neoplasm Other Site Digest System & Intra-A	1598	12 months
Malignant Neoplasm Ill-Defind Site Digestive Organ	1599	12 months
Malignant Neoplasm of Nasal Cavities	1600	12 months
Malignant Neoplasm Auditory Tube Mid Ear & Mastoid Air	1601	12 months
Malignant Neoplasm of Maxillary Sinus	1602	12 months
Malignant Neoplasm of Ethmoidal Sinus	1603	12 months
Malignant Neoplasm of Frontal Sinus	1604	12 months
Malignant Neoplasm of Sphenoidal Sinus	1605	12 months
Malignant Neoplasm Other Sites – Nasal Cav/Mid Ear	1608	12 months
Malignant Neoplasm Nasal Cavi/Mid Ear & ACSS Sinus Unspec	1609	12 months
Malignant Neoplasm of Glottis	1610	12 months
Malignant Neoplasm of Supraglottis	1611	12 months
Malignant Neoplasm of Subglottis	1612	12 months
Malignant Neoplasm of Laryngeal Cartilage	1613	12 months
Malignant Neoplasm Other Specified Sites	1618	12 months
Malignant Neoplasm of Larynx Unspecified	1619	12 months
Malignant Neoplasm of Trachea	1620	12 months
Malignant Neoplasm of Main Bronchus	1622	12 months
Malignant Neoplasm Upper Lobe Bronchus O	1623	12 months
Malignant Neoplasm Middle Lobe Bronchus	1624	12 months
Malignant Neoplasm Lower Lobe Bronchus	1625	12 months
Malignant Neoplasm Other Parts Bronchus	1628	12 months
Malignant Neoplasm of Bronchus & Lung Unspecified	1629	12 months
Malignant Neoplasm of Parietal Pleura	1630	12 months
Malignant Neoplasm of Visceral Pleura	1631	12 months
Malignant Neoplasm Other Specified Sites	1638	12 months
Malignant Neoplasm of Pleura Unspecified	1639	12 months
Malignant Neoplasm of Thymus	1640	12 months
Malignant Neoplasm of Heart	1641	12 months
Malignant Neoplasm of Anterior Mediastin	1642	12 months
Malignant Neoplasm of Posterior Mediastin	1643	12 months
Malignant Neoplasm of Other Parts of Mediastin	1648	12 months
Malignant Neoplasm Medmalignant Neoplasm	1649	12 months
Malignant Neoplasm Upper Resp Tract Part Unspec	1650	12 months
Malignant Neoplasm Other Site within Resp Sys & Intrath	1658	12 months

	<b>Submitted ICD-9 Diagnoses</b>	<b>Date Range</b>
Malignant Neoplasm ILL – Defind Site within Res	1659	12 months
Malignant Neoplasm Cervical Esophagus	15000	12 months
Malignant Neoplasm Thoracic Esophagus	15010	12 months
Malignant Neoplasm Abdominal Esophagus	15020	12 months
Malignant Neoplasm Upper 3 <sup>rd</sup> Esophagus	15030	12 months
Malignant Neoplasm Middle 3 <sup>rd</sup> Esophagus	15040	12 months
Malignant Neoplasm Lower 3 <sup>rd</sup> Esophagus	15050	12 months
Malignant Neoplasm Esophagus NEC	15080	12 months
Malignant Neoplasm Esophagus NOS	15090	12 months
Malignant Neoplasm Stomach Cardia	15100	12 months
Malignant Neoplasm Pylorus	15110	12 months
Malignant Neoplasm Pyloric Antrum	15120	12 months
Malignant Neoplasm Stomach Fundus	15130	12 months
Malignant Neoplasm Stomach Body	15140	12 months
Malignant Neoplasm Stomach Lesser Curv	15150	12 months
Malignant Neoplasm Stomach Great Curv	15160	12 months
Malignant Neoplasm Stomach NEC	15180	12 months
Malignant Neoplasm Stomach NOS	15190	12 months
Malignant Neoplasm Duodenum	15200	12 months
Malignant Neoplasm Jejunum	15210	12 months
Malignant Neoplasm Ileum	15220	12 months
Malignant Neoplasm Meckel's Divert	15230	12 months
Malignant Neoplasm Small Bowel NEC	15280	12 months
Malignant Neoplasm Small Bowel NOS	15290	12 months
Malignant Neoplasm Hepatic Flexure	15300	12 months
Malignant Neoplasm Transverse Colon	15310	12 months
Malignant Neoplasm Descending Colon	15320	12 months
Malignant Neoplasm Sigmoid Colon	15330	12 months
Malignant Neoplasm Cecum	15340	12 months
Malignant Neoplasm Appendix	15350	12 months
Malignant Neoplasm Ascending Colon	15360	12 months
Malignant Neoplasm Splenic Flexure	15370	12 months
Malignant Neoplasm Colon NEC	15380	12 months
Malignant Neoplasm Colon NOS	15390	12 months
Malignant Neoplasm Rectosigmoid Jct	15400	12 months
Malignant Neoplasm Rectum	15410	12 months
Malignant Neoplasm Anal Canal	15420	12 months

	<b>Submitted ICD-9 Diagnoses</b>	<b>Date Range</b>
Malignant Neoplasm Anus NOS	15430	12 months
Malignant Neoplasm Rectum/Anus NEC	15480	12 months
Malignant Neoplasm Liver, Primary	15500	12 months
Malignant Neoplasm Intrahepatic Ducts	15510	12 months
Malignant Neoplasm Liver NOS	15520	12 months
Malignant Neoplasm Gallbladder	15600	12 months
Malignant Neoplasm Extrahepatic Ducts	15610	12 months
Malignant Neoplasm Ampulla of Vater	15620	12 months
Malignant Neoplasm Biliary NEC	15680	12 months
Malignant Neoplasm Biliary NOS	15690	12 months
Malignant Neoplasm Pancreas Head	15700	12 months
Malignant Neoplasm Pancreas Body	15710	12 months
Malignant Neoplasm Pancreas Tail	15720	12 months
Malignant Neoplasm Pancreatic Duct	15730	12 months
Malignant Neoplasm Islet Langerhans	15740	12 months
Malignant Neoplasm Pancreas NEC	15780	12 months
Malignant Neoplasm Pancreas NOS	15790	12 months
Malignant Neoplasm Retroperitoneum	15800	12 months
Malignant Neoplasm Peritoneum NEC	15880	12 months
Malignant Neoplasm Peritoneum NOS	15890	12 months
Malignant Neoplasm Intestine NOS	15900	12 months
Malignant Neoplasm Spleen NEC	15910	12 months
Malignant Neoplasm GI/Intra-Abd NEC	15980	12 months
Malignant Neoplasm GI Tract ill-def	15990	12 months
Malignant Neoplasm Nasal Cavities	16000	12 months
Malignant Neoplasm Middle Ear	16010	12 months
Malignant Neoplasm Maxillary Sinus	16020	12 months
Malignant Neoplasm Ethmoidal Sinus	16030	12 months
Malignant Neoplasm Frontal Sinus	16040	12 months
Malignant Neoplasm Sphenoid Sinus	16050	12 months
Malignant Neoplasm Access Sinus NEC	16080	12 months
Malignant Neoplasm Access Sinus NOS	16090	12 months
Malignant Neoplasm Glottis	16100	12 months
Malignant Neoplasm Supraglottis	16110	12 months
Malignant Neoplasm Subglottis	16120	12 months
Malignant Neoplasm Cartilage Larynx	16130	12 months
Malignant Neoplasm Larynx NEC	16180	12 months



	<b>Submitted ICD-9 Diagnoses</b>	<b>Date Range</b>
Malignant Neoplasm Larynx NOS	16190	12 months
Malignant Neoplasm Trachea	16200	12 months
Malignant Neoplasm Main Bronchus	16220	12 months
Malignant Neoplasm Upper Lobe Lung	16230	12 months
Malignant Neoplasm Middle Lobe Lung	16240	12 months
Malignant Neoplasm Lower Lobe Lung	16250	12 months
Malignant Neoplasm Bronchus/Lung NEC	16280	12 months
Malignant Neoplasm Bronchus/Lung NOS	16290	12 months
Malignant Neoplasm Parietal Pleura	16300	12 months
Malignant Neoplasm Visceral Pleura	16310	12 months
Malignant Neoplasm Pleura NEC	16380	12 months
Malignant Neoplasm Pleura NOS	16390	12 months
Malignant Neoplasm Thymus	16400	12 months
Malignant Neoplasm Heart	16410	12 months
Malignant Neoplasm Ant Mediastinum	16420	12 months
Malignant Neoplasm Post Mediastinum	16430	12 months
Other Malignant Neoplasm of Thymus/Heart	16480	12 months
Malignant Neoplasm Mediastinum NOS	16490	12 months
Malignant Neoplasm Upper Resp NOS	16500	12 months
Malignant Neoplasm Thorax/Resp NEC	16580	12 months
Malignant Neoplasm Resp System NOS	16590	12 months

## Denial Criteria

- History of MRI Scan of chest in previous 60 days
- Absence of Chest X-Ray in previous 30 days
- Absence of Antibiotic therapy with diagnosis of Pneumonia
- Previous MRI Scan of chest with diagnosis of Pulmonary Embolus, Hemoptysis or Superior Vena Cava Syndrome
- Absence of Tumor and no history of Lung Cancer Screening