Name of Policy: Magnetic Resonance Cholangiopancreatography (MRCP)

Policy #: 032
Category: Laboratory
Latest Review Date: January 2008
Policy Grade: **Effective 02/01/2011:**
*Active Policy but no longer scheduled for regular literature reviews and updates.*

**Background/Definitions:**
As a general rule, benefits are payable under Blue Cross and Blue Shield of Alabama health plans only in cases of medical necessity and only if services or supplies are not investigational, provided the customer group contracts have such coverage.

The following Association Technology Evaluation Criteria must be met for a service/supply to be considered for coverage:

1. The technology must have final approval from the appropriate government regulatory bodies;
2. The scientific evidence must permit conclusions concerning the effect of the technology on health outcomes;
3. The technology must improve the net health outcome;
4. The technology must be as beneficial as any established alternatives;
5. The improvement must be attainable outside the investigational setting.

Medical Necessity means that health care services (e.g., procedures, treatments, supplies, devices, equipment, facilities or drugs) that a physician, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury or disease or its symptoms, and that are:

1. In accordance with generally accepted standards of medical practice; and
2. Clinically appropriate in terms of type, frequency, extent, site and duration and considered effective for the patient’s illness, injury or disease; and
3. Not primarily for the convenience of the patient, physician or other health care provider; and
4. Not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient’s illness, injury or disease.
**Description of Procedure or Service:**

Magnetic resonance cholangiopancreatography is a noninvasive imaging method that shows fluid in the biliary and pancreatic ducts in an axial or three-dimensional image format. This technique is comparable in appearance and diagnostic accuracy to radiographic techniques seen with direct contrast endoscopic retrograde cholangiopancreatography (ERCP). Advantages of MRCP include: (1) MRCP does not require administration of exogenous contrast materials; and (2) the potential avoidance of a purely diagnostic ERCP with its potential complications of cholangitis and post-ERCP pancreatitis. The major disadvantages of MRCP are: (1) the lack of therapeutic capability; (2) MRCP images are not satisfactorily comparable to those provided by ERCP; (3) inability to provide information with regard to resectability of pancreatic cancer; and (4) MRCP equipment is not available at every institution.

**Policy:**

Magnetic resonance cholangiopancreatography meets Blue Cross and Blue Shield of Alabama’s medical criteria for coverage when any of the following are met:

1. Patient requires diagnosis of suspected pancreaticobiliary pathology without therapeutic intervention
2. Endoscopic retrograde cholangiopancreatography (ERCP) is inconclusive and patient needs further evaluation or patient requires definition of pancreaticobiliary anatomy proximal to a biliary tract system obstruction that can not be opened by ERCP
3. Patient has altered biliary tract anatomy that precludes ERCP (e.g., postsurgical biliary tract alterations, prior gastrectomy, choledochojejunostomy, etc.)
4. Evaluation of a suspected congenital anomaly of the pancreaticobiliary tract (e.g., aberrant ducts, choledochal cysts, pancreas divisum, etc.)
5. Patient is an infant or is so debilitated or uncooperative that ERCP is unsafe or can not be performed
6. Patient has a documented allergy to iodine based contrast

Blue Cross and Blue Shield of Alabama does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Cross and Blue Shield of Alabama administers benefits based on the members' contract and corporate medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.

**Key Points:**

Endoscopic retrograde cholangiopancreatography (ERCP) is the gold standard for imaging the bile and pancreatic ducts because it provides images with the highest resolution and also offers the opportunity for therapeutic intervention. However, this procedure is not without adverse effects including procedure induced pancreatitis, sepsis, bleeding, gastro-duodenal perforation, unsuccessful cannulation of the ducts and a mortality rate of 1%.
The rate of failure of ERCP in patients who have undergone previous biliary-enteric anastomosis or gastroenteric drainage procedure, such as a Billroth II resection, is considerably higher than the rate of failure in patients who have not undergone such procedures. In this group of patients, MRCP readily permits visualization of the site of the biliary-enteric anastomosis and shows the status of the intrahepatic ducts and the location of strictures, which help to determine appropriate therapy (i.e., surgical revision, percutaneous biliary drainage, or balloon dilation of a stenotic segment). Magnet resonance (MR) cholangiography has emerged as an accurate, noninvasive alternative to diagnostic (ERCP) in the evaluation of disease of the biliary tract. MRCP is performed with the use of heavily T2-weighted sequences that demonstrate the fluid-containing bile ducts as high-signal-intensity structures.

The rapid technologic advances in MR imaging have led to resurgence in the use of non-invasive imaging of the pancreaticobiliary system. Within the past several years numerous authors have reported very favorable results using MRCP to evaluate a variety of diseases. The clinical role of MRCP continues to evolve, but at least it can be used in patients with a contraindication to ERCP or those who have undergone an unsuccessful ERCP examination.

**January 2008 Update**
No new information has been located that would alter the coverage statement of this policy.

**Key Words:**
MRCP, magnetic resonance imaging

**Approved by Governing Bodies:**
FDA approved

**Benefit Application:**
Coverage is subject to member’s specific benefits. Group specific policy will supersede this policy when applicable.

ITS: Home Policy provisions apply
Pre-certification/Pre-determination requirements: Not applicable

**Coding:**
HCPCS code: S8037 Magnetic resonance cholangiopancreatography (MRCP)

**References:**

**Policy History:**
Medical Policy Group, December 2001
Medical Policy Administration Committee, February 2002
Medical Policy Group, January 2005 (1)
Medical Policy Group, January 2008 (1)
Medical Policy Group, February 2011: Effective February 1, 2011 this policy is still active Policy but no longer scheduled for regular literature reviews and updates.
Medical Policy Group, October 2013 (1): Removed ICD-9 Diagnosis codes; no change to policy statement.

*This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case by case basis according to the terms of the member’s plan in effect as of the date services are rendered. All medical policies are based on (i) research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. 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.*

*This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield’s administration of plan contracts.*