Name of Policy:  
Chelation Therapy

Policy #: 085  
Latest Review Date: June 2014
Category: Therapy  
Policy Grade: A

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:**
Chelation therapy, an established treatment for treating heavy metal toxicities, has been investigated for a variety of other applications including treatment of atherosclerosis, Alzheimer’s disease and autism.

Chelation therapy is an established treatment for the removal of metal toxins by converting them to a chemically inert form that can be excreted in the urine. Chelation therapy consists of the intravenous or oral administration of chelating agents that remove metal ions such as lead, aluminum, mercury, arsenic, zinc, iron, copper, and calcium from the body.

Specific chelating agents are used for particular heavy metal toxicities. For example, deferoxamine is used for patients with iron toxicity, and calcium-ethylenediaminetetraacetic acid (-EDTA) is used for patients with lead poisoning. Note that disodium-EDTA is not recommended for acute lead poisoning due to the increased risk of death from hypocalcemia. Another class of chelating agents, called metal protein attenuating compounds (MPACs), is under investigation for the treatment of Alzheimer’s disease, which is associated with the disequilibrium of cerebral metals. Unlike traditional systemic chelators that bind and remove metals from tissues systemically, MPACs have subtle effects on metal homeostasis and abnormal metal interactions. In animal models of Alzheimer’s disease, they promote the solubilization and clearance of Aβ-amyloid protein by binding its metal-ion complex and also inhibit redox reactions that generate neurotoxic free radicals. MPACs therefore interrupt two putative pathogenic processes of Alzheimer’s disease. However, no MPACs have received U.S. Food and Drug Administration (FDA) approval for the treatment of Alzheimer’s disease.

Chelation therapy has also been discussed as a treatment for other indications including atherosclerosis, Alzheimer’s disease and autism. For example, EDTA chelation therapy has been proposed in patients with atherosclerosis as a method of decreasing obstruction in the arteries.

**Policy:**
**Effective for dates of service on or after November 3, 2013:**
Chelation therapy meets Blue Cross and Blue Shield of Alabama’s medical criteria for coverage in the treatment of each of the following conditions when performed in the in-patient setting:
- Control of ventricular arrhythmias or heart block associated with digitalis toxicity;
- Emergency treatment of hypercalcemia;
- *Extreme conditions of metal toxicity;* (Note: This criteria is marked with an asterisk and may not be applicable in all cases)
- Treatment of chronic iron overload due to blood transfusions (transfusional hemosiderosis) and due to non-transfusion-dependent thalassemia (NDTD);
- Wilson's disease (hepatolenticular degeneration); and
- Lead poisoning.

Chelation therapy for the treatment of sickle cell anemia thalassemias and iron overload in patients requiring frequent transfusion meets Blue Cross and Blue Shield of Alabama’s medical criteria for coverage when taken orally or performed as an outpatient procedure or in the home health setting.
Other applications of chelation therapy in any form (IV, PO, transdermal, transdermal, topical or rectal) does not meet Blue Cross and Blue Shield of Alabama’s medical criteria for coverage when performed for any condition in a setting other than inpatient hospital and is considered investigational (except as noted above).

- Atherosclerosis (e.g., coronary artery disease, secondary prevention in patients with myocardial infarction, or peripheral vascular disease);
- Peripheral arterial disease
- Arteriosclerosis
- Hypercholesterolemia
- Multiple sclerosis;
- Arthritis (includes rheumatoid arthritis);
- Hypoglycemia;
- Autism;
- Cystinuria
- Environmental allergies
- Hypoglycemia,
- Renal insufficiency
- Alzheimer’s disease; and
- Diabetes

*Chelation therapy performed to treat heavy metal and/or lead poisoning detected by a provocative urine test does not meet Blue Cross and Blue Shield of Alabama’s medical criteria for coverage.

Additional treatments associated with non-covered chelation, including, but not limited to glutathione, vitamin C, does not meet criteria Blue Cross and Blue Shield of Alabama’s medical criteria for coverage and is investigational along with the non-covered chelation therapy.

Effective for dates of service prior to November 3, 2013:
Chelation therapy does not meet Blue Cross and Blue Shield of Alabama’s medical criteria for coverage in the treatment of:

1. Coronary artery disease
2. Peripheral artery disease
3. Atherosclerosis
4. Arteriosclerosis
5. Hypercholesterolemia

Chelation Therapy does not meet Blue Cross and Blue Shield of Alabama’s medical criteria for coverage in the treatment for the following conditions and is considered investigational conditions:

1. Alzheimer’s disease
2. Arthritis
3. Autism
4. Cystinuria
5. Diabetes
6. Environmental allergies
7. Hypoglycemia
8. Multiple Sclerosis
9. Renal insufficiency

Chelation Therapy meets Blue Cross and Blue Shield of Alabama’s medical criteria for coverage when performed as an inpatient procedure in the treatment of the following conditions:

2. Extreme conditions of metal toxicity, including thalassemia intermedia with hemosiderosis.
3. Lead poisoning.
4. Wilson’s disease (hepatolenticular degeneration)
5. Toxic metal ingestion
6. Control of ventricular arrhythmias or heart block associated with digitalis toxicity

Chelation therapy for the treatment of sickle cell anemia thalassemias and iron overload in patients requiring frequent transfusion meets Blue Cross and Blue Shield of Alabama’s medical criteria for coverage when taken orally or performed as an outpatient procedure or in the home health setting.

Chelation therapy performed to treat heavy metal and/or lead poisoning detected by a provocative urine test does not meet medical criteria for coverage.

Chelation therapy using DMPS (dimercaptopropanesulfonic acid) in any form (IV, PO, or transdermal) does not meet Blue Cross and Blue Shield of Alabama’s medical criteria for coverage and is considered investigational.

Chelating agents in the form of oral (other than those listed above), transdermal, topical or rectal do not meet Blue Cross and Blue Shield of Alabama’s medical criteria for coverage and are considered investigational.

Chelation therapy does not meet Blue Cross and Blue Shield of Alabama’s medical criteria for coverage when performed for any condition in a setting other than inpatient hospital and is considered investigational (except as noted above in the second coverage statement).

Chelation therapy that has been determined non-covered or investigational and includes additional treatments associated with chelation, such as but not limited to glutathione, vitamin C, etc., does not meet criteria for coverage and is considered non-covered or investigational along with the non-covered or investigational chelation therapy.

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:**
This policy was updated with a literature search through May 2014.

Chelation therapy is an established treatment for the medically necessary indications listed here, particularly for the treatment of metal toxicity and transfusional hemosiderosis. Thus, literature searches have focused on the use of chelation therapy for other conditions including, but not limited to, atherosclerosis, autism, Alzheimer’s disease, multiple sclerosis and diabetes.

**Atherosclerosis**
In 2002, a Cochrane review was published evaluating studies on EDTA chelation therapy for treating patients with atherosclerotic cardiovascular disease. Five placebo-controlled randomized-controlled trials (RCTs) were identified, none of which reported mortality, non-fatal events and cerebrovascular vascular events. Four of the five studies (total n=250) found no significant benefits of EDTA chelation therapy on outcomes reported including direct or indirect measurement of disease severity and subjective measures of improvement. The fifth study, which included only ten patients, was apparently stopped early due to benefit, but relevant outcome data were not available. The Cochrane reviewers concluded that there was insufficient evidence to draw conclusions of the efficacy of chelation therapy for treating atherosclerosis; additional RCTs that report health outcomes including mortality and cerebrovascular events.

Among the published RCTs, Knudtson and colleagues randomized 84 patients with coronary artery disease and a positive treadmill test to receive EDTA chelation therapy or placebo, three hours per treatment twice weekly for 15 weeks, and once per month for an additional three months. The main outcome measures included change in time to ischemia, functional reserve for exercise, and quality of life. There was no significant difference between the two groups. Another double-blind, randomized controlled study of EDTA chelation or placebo showed no change in short- or long-term improvement in vasomotor response to EDTA when compared to placebo. Two small randomized trials have also reported no benefit of chelation therapy as a treatment of peripheral arterial disease.

In summary, several RCTs have been published on chelation therapy for treating atherosclerosis; these have generally reported intermediate outcomes and have not found EDTA chelation therapy to be more effective than placebo. Additional RCTs that report health outcomes are needed to establish the efficacy of this treatment.

**Autism**
Based on similarities between mercury poisoning and autism spectrum disorder symptoms, Bernard and colleagues hypothesized a link between environmental mercury and autism. This theory was rejected by Nelson and Bauman, who found that many of the characteristics of mercury poisoning such as ataxia, constricted visual fields, peripheral neuropathy, hypertension,
skin eruption, and thrombocytopenia, are never seen in autistic children. In 2007, a systematic review by Ng and colleagues concluded that there was no association between mercury poisoning and autism.

In 2009, Rossignol published a systematic review of novel and emerging treatments for autism and did not identify any studies that included a control group. The author stated the case series suggest that chelation might be a viable form of treatment in some autistic individuals with known elevated heavy metal levels and that this possibility needs to be further investigated in controlled studies.

**Alzheimer’s disease**
A 2008 Cochrane Review evaluated metal protein attenuating compounds (MPAC) for treating Alzheimer’s disease. The review identified one placebo-controlled RCT. This study, by Richie and colleagues, was published in 2003. Patients were treated patients with PBT1, a MPAC also known as clioquinol, an anti-fungal medication that crosses the blood-brain barrier. Clioquinol was withdrawn for oral use in 1970 because of its association with subacute myelooptic neuropathy. In the study, oral clioquinol was administered in doses increasing to 375 mg twice daily to 16 Alzheimer’s disease patients and the effects were compared to 16 matched controls who received placebo. At 36 weeks, there was no statistically significant between-group difference in cognition measured by the Alzheimer’s disease Assessment Scale – Cognitive (ADAS-Cog scale). One patient in the treatment group developed impaired visual acuity and color vision during weeks 31 to 36 while she was receiving clioquinol, 375 mg twice daily. Her symptoms resolved on treatment cessation.

Further studies of PBT1 have been abandoned in favor of a successor compound, PBT2. Lannfelt and colleagues completed a double-blind, placebo-controlled RCT in which 78 Alzheimer’s disease patients were treated for 12 weeks with 50 mg PBT2 (n=20), 250 mg PBT2 (n=29), or placebo (n=29). There was no statistically significant difference in ADAS-Cog scale or Mini-Mental Status Exam scores among groups in this short-term study. The most common adverse event was headache. Two serious adverse events (urosepsis and transient ischemic event) were reported, both by patients receiving placebo.

Ongoing investigations in chelation therapy for the treatment of Alzheimer’s disease and other neurodegenerative diseases include linking a carbohydrate moiety to drug molecules to enhance drug delivery across the blood-brain barrier; this strategy may solve the potential problem of premature and indiscriminate metal binding. In addition, multi-function drugs that not only bind metal but also have significant antioxidant capacity are in development.

There is insufficient evidence on the safety and efficacy of chelation therapy for treating patients with Alzheimer’s disease. The few published RCTs did not find that the treatment was superior to placebo for improving health outcomes.

**Diabetes**
**Cardiovascular disease in patients with diabetes**

A 2009 trial by Cooper and colleagues in New Zealand evaluated the effect of copper chelation using oral trientine on left-ventricular hypertrophy in 30 patients with type 2 diabetes. A total of
21/30 (70%) of the participants completed the 12-month follow-up. At 12 months, there was a significantly greater change in left ventricular mass indexed to body surface area (LVM) in the group receiving active treatment compared to placebo (-10.6 g/m² vs. -0.1 g/m², p=0.01). The study was limited by the small sample size and high drop-out rate.

**Diabetic nephropathy**
Chen and colleagues in China investigated the effect of chelation therapy on the progression of diabetic nephropathy in patients with high-normal lead levels. Their 2012 single-blind study included 50 patients with diabetes, high-normal body lead burden (80-6,000 ug) and serum creatinine 3.8 mg/dL or lower. At baseline, the mean blood lead level was 6.3 ug/dL in the treatment group and 7.1 ug/dL in the control group and the mean body lead burden was 151 ug for patients in the treatment group and 142 ug for patients in the control group. According to the U.S. Occupational and Health Safety Administration (OSHA), the maximum acceptable blood lead level in adults is 40 ug/dL. Patients were randomized to three months of calcium disodium EDTA or placebo. During the following 24 months, patients in the chelation group received additional chelation treatments as needed (i.e., if serum creatinine level exceeded pre-treatment levels or body lead burden was >60 ug) and patients in the placebo group continued to receive placebo medication. All patients completed the 27-month study. The primary outcome was change in estimated glomerular filtration rate (eGFR). The yearly rate of decrease in eGFR was 5.6 mL/min/173 m² (standard deviation [SD]: 5.0) in the chelation group and 9.2 mL/min/173 m² (SD: 3.6) in the control group. The difference between groups was statistically significant, p=0.04. The secondary endpoint was the number of patients in whom the baseline serum creatinine doubled or who required renal replacement therapy. A total of nine patients (36%) in the treatment group and 17 (68%) in the control group attained the secondary endpoint; the difference between groups was statistically significant (p=0.02). There were no reported side effects of chelation therapy during the 27-month study period.

In summary, two small RCTs with limitations represent insufficient evidence that chelation therapy is effective for treating cardiovascular disease in patients with diabetes. One small single-blind RCT is insufficient evidence that chelation therapy is effective for treating diabetic nephropathy in patients with high-normal lead levels. Additional RCTs with larger numbers of patients and that report health outcomes such as cardiovascular events, end-stage renal disease and mortality are needed.

**Myocardial infarction (MI)**
In 2013, findings of the randomized double-blind multicenter Trial to Assess Chelation Therapy (TACT) study were published. The study included 1,708 individuals, age 50 or older, who had a history of a myocardial infarction at least six weeks previous and a serum creatinine level of 2.0 mg/dL or less. Patients were randomized to receive 40 infusions of disodium EDTA (n=839) or placebo (n=869). The first 30 infusions were given weekly, and the remaining 10 infusions were given two to eight weeks apart. The primary endpoint was a composite outcome that included death from any cause, reinfarction, stroke, coronary revascularization or hospitalization for angina at five years. A total of 361 patients in the chelation group (43%) and 464 patients in the placebo group (57%) discontinued treatment after starting it, withdrew consent during follow-up or were lost to follow-up. The Kaplan-Meier five year estimates for the primary endpoint were 32.8% (95% confidence interval [CI]: 29.1% to 36.5%) in the chelation group and 38.5% (95% CI: 34.6% to 42.3%) in the control group. The difference between groups was statistically
significant; the p value was 0.035, which was below the significance threshold required due to multiple interim analyses, 0.036. The most common individual clinical endpoint was coronary revascularization, which occurred in 130 of 839 patients (15%) in the chelation group and 157 of 869 patients (18%) in the control group, p value=0.08. The next most frequent endpoint was death. This occurred in 87 of 839 (10%) of patients in the chelation group and 93 of 869 (11%) of patients in the placebo group, p value=0.64. None of the individual components of the primary outcome differed significantly between groups; however, the study was not powered to detect difference in individual components. Four severe adverse events occurred that were definitely or possibly related to study therapy. There were two events each in the treatment and control group, including one death in each group.

The study is limited by the low follow-up rate, including a greater number of patients who withdrew consent in the placebo group compared to the treatment group. The primary endpoint included components of varying clinical significance, with most of the difference between groups occurring for revascularization events. The primary endpoint barely met the significance threshold and if more patients had been retained in the study and experienced events, results could have differed. Moreover, as noted in an editorial accompanying the publication, 60% of patients were enrolled at centers described as complementary and alternative medicine sites, and this may have resulted in a population that is not generalizable to that seen in clinical care.

Escolar et al (2014) published results of a prespecified subgroup analysis of diabetic patients in TACT. In TACT, there was a statistically significant interaction between treatment (EDTA or placebo) and presence of diabetes: Among 538 self-reported diabetic patients (31% of the trial sample), those randomized to EDTA had a 39% reduced risk of the primary composite outcome compared with placebo (hazard ratio [HR], 0.61; 95% CI, 0.45 to 0.83; log rank test, p=0.02); among 1170 nondiabetic patients, risk of the primary outcome did not differ statistically between treatment groups (HR=0.96; 95% CI, 0.77 to 1.20; log rank test, p=0.73). For the subsequent subgroup analysis, the definition of diabetes mellitus was broadened to include self-reported diabetes, use of oral or insulin treatment for diabetes, or fasting blood glucose 126 μg/dL or more at trial entry. Of 1708 patients in TACT, 633 (37%) had diabetes mellitus by this definition; 322 were randomized to EDTA, and 311 to placebo. Compared with all other trial participants, this subgroup of diabetic patients had higher body mass index, fasting blood glucose, and prevalence of heart failure, stroke, hypertension, peripheral artery disease, and hypercholesterolemia. Within this subgroup, baseline characteristics were similar between treatment groups. With approximately five years of follow-up, the primary composite end point occurred in 25% of the EDTA group and 38% of the placebo group (HR=0.59; 99.4% CI [adjusted for multiple subgroups], 0.39 to 0.88; log rank test, p=0.002). In adjusted analysis of the individual components of the primary end point, there were no statistically significant differences between treatment groups. There were 36 adverse events attributable to study drug that led to trial withdrawal, 16 in the EDTA group and 20 in the placebo group.

This substudy has the same limitations as the parent study previously described, namely, high and differential withdrawal and heterogeneous composite end point. Additionally, because diabetes was not a stratification factor in TACT, results of this subgroup analysis are preliminary and require replication.
In summary, one RCT with limitations, including high dropout with differential drop-out between groups, reported that cardiovascular events are reduced in patients treated with chelation therapy. This effect was greater among patients with diabetes mellitus. However, this was not a high-quality trial and therefore the results could have arisen from bias. Further trials that are of high quality are needed to corroborate whether chelation therapy improves outcomes in patients with prior MI.

Other potential indications
No RCTs or other controlled studies were identified that evaluated the safety and efficacy of chelation therapy for other conditions such as multiple sclerosis or arthritis. Iron chelation therapy is being investigated for Parkinson disease and endotoxemia.

Summary
Chelation therapy is an established treatment for the medically necessary indications listed in the policy statement, such as treatment of metal toxicity and transfusional hemosiderosis. There is insufficient evidence that chelation therapy improves health outcomes for patients with other conditions including, but not limited to, atherosclerosis, autism, Alzheimer’s disease, diabetes and arthritis. Thus, chelation therapy for these other applications is considered investigational.

Practice Guidelines and Position Statements
In 2012, the American College of Physicians, American College of Cardiology Foundation, American Heart Association, American Association for Thoracic Surgery, Preventive Cardiovascular Nurses Association and Society of Thoracic Surgeons published a clinical practice guideline on management of stable ischemic heart disease (IHD). The organizations recommended that “chelation therapy should not be used with the intent of improving symptoms or reducing cardiovascular risk in patients with stable IHD. (Grade: strong recommendation; low-quality evidence)”

A 2004 clinical practice guideline from the American College of Physicians states that chelation “should not be used to prevent myocardial infarction or death or to reduce symptoms in patients with symptomatic chronic stable angina. (Level of evidence B: Based on evidence from a limited number of randomized trials with small numbers of patients, careful analyses of nonrandomized studies, or observational registries.)”

In 2005, the American College of Cardiology stated that chelation “is not indicated for treatment of intermittent claudication and may have harmful adverse effects. (Level of Evidence A: Data derived from multiple randomized clinical trials or meta-analyses.)”

Key Words:
Chelation therapy, toxic metal ions, dimercaprol, edetate calcium disodium, deferoxamine, penicillamine, succimer

Approved by Governing Bodies:
Calcium-EDTA was approved by the FDA for lowering blood lead levels among patients with lead poisoning. Disodium-EDTA was approved by the FDA for use in selected patients with hypercalcemia and for use in patients with heart rhythm problems due to intoxication with the drug, digitalis.

In 2008, the FDA withdrew approval of disodium-EDTA due to safety concerns and recommended that other forms of chelation therapy be used.

Several iron chelating agents have received FDA approval. Deferoxamine for subcutaneous, intramuscular or intravenous injections was approved for treating acute iron intoxication and chronic iron overload due to transfusion-dependent anemia.

Deferasirox, approved in 2005, is available as a tablet for oral suspension and is indicated for the treatment of chronic iron overload due to blood transfusions in patients age two years and older.

In 2011, the FDA approved the iron chelator deferiprone for the treatment of patients with transfusional overload due to thalassemia syndromes when other chelation therapy is inadequate. Deferiprone is available in tablet form for oral use.

Under the accelerated approval program, the FDA expanded approval of deferasirox in 2013 to include the treatment of patients age 10 and older with chronic iron overload due to non-transfusion-dependent thalassemia (NTDT)

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

ITS: Home Policy provisions apply
FEP contracts: FEP does not consider investigational if FDA approved. Will be reviewed for medical necessity. Special benefit consideration may apply. Refer to member’s benefit plan. Pre-certification/Pre-determination requirements: Not applicable

Current Coding:
HCPCS codes:  
M0300  IV chelation therapy (chemical endarterectomy)  
J0470  Injection, dimercaprol  
J0600  Injection, edetate calcium disodium, up to 1,000 mg  
J0895  Injection, deferoxamine mesylate, 500 mg  
J3520  Edetate disodium (EDTA, Diostate) per 150 mg
References:
16. Escolar E, Lamas GA, Mark DB et al. The effect of an EDTA-based chelation regimen on patients with diabetes mellitus and prior myocardial infarction in the Trial to Assess


24. Jacobs DS, DeMott WR and Oxley DK. Laboratory test handbook. 5th edition. Lexi-Comp, Inc Cleveland, OH.


Policy History:
Medical Policy Group, December 2002
Medical Policy Administration Committee, January 2003
Available for comment February 6-March 24, 2003
Medical Policy Group, December 2005 (1)
Medical Policy Group, January 2006 (1)
Medical Policy Administration Committee, February 2006
Available for comment March 1-April 14, 2006
Medical Policy Group, April 2006 (2)
Medical Policy Administration Committee, April 2006
Available for comment April 20-June 5, 2006
Medical Policy Group June 2006 (2)  
Medical Policy Administration Committee, June 2006  
Available for comment July 5-August 18, 2006  
Medical Policy Group, June 2009 (1)  
Medical Policy Administration Committee, July 2009  
Available for comment July 1-August 14, 2009  
Medical Policy Panel, April 2012  
Medical Policy Group, April 2012 (2) Update Key Points, References, Governing Agencies information  
Medical Policy Panel, June 2013  
Medical Policy Group, September (2): Chronic iron overload due to non-transfusion-dependent thalassemia (NDTD) added to medically necessary statement based on new FDA approval.  
Secondary prevention in patients with myocardial infarction added to bullet point in investigational statement on atherosclerosis. Key Points and References updated to support policy changes. Old references removed.  
Medical Policy Administration Committee, September 2013  
Available for comment September 19 through November 2, 2013  
Medical Policy Panel, June 2014  
Medical Policy Group, June 2014 (4): Updated Key Points, Practice and Position Statement and References. No changes to the policy statement at this time.

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.