RATIONALE FOR INCLUSION IN PA PROGRAM

Background
Remicade and Inflectra are tumor necrosis factor (TNFα) block. Tumor necrosis factor is an endogenous protein that regulates a number of physiologic processes, including the inflammation response associated with some autoimmune inflammatory diseases (1-2). Inflectra is a biosimilar to Remicade (2).

Outpatient hospital infusion costs may be 2-3 times more compared to other sites of care suggesting an immediate opportunity exists for lowering spend on select specialty medications that require infusion. Services for patients requiring infused specialty medications may be provided through a physician’s in office infusion program or free standing ambulatory infusion center. These options provide access to quality care at a lower cost that may be more convenient for the patient. In addition, patients that receive home infusion therapy have been shown to experience better outcomes, fewer complications for patients with certain conditions and, improved quality of life and preference, including more personalized attention which helps avoid stress (3).

Regulatory Status
Remicade and Inflectra are FDA-approved for the following indications: (1-2)

Crohn’s Disease – Remicade is indicated for reducing signs and symptoms and inducing and maintaining clinical remission in patients 6 years of age and older with moderately to severely active Crohn’s disease who have had an inadequate response to conventional therapy. Remicade is indicated for reducing the number of draining enterocutaneous and rectovaginal fistulas and maintaining fistula closure in adult patients with fistulizing Crohn's disease.

Ulcerative Colitis - Remicade is indicated for reducing signs and symptoms, inducing and maintaining clinical remission and mucosal healing, and eliminating corticosteroid use in adult patients with moderately to severely active ulcerative colitis who have had an inadequate response to conventional therapy.

Rheumatoid Arthritis - Remicade, in combination with methotrexate, is indicated for reducing signs and symptoms, inhibiting the progression of structural damage, and improving physical function in
patients with moderately to severely active rheumatoid arthritis.

**Ankylosing Spondylitis** - Remicade is indicated for reducing signs and symptoms in patients with active ankylosing spondylitis.

**Psoriatic Arthritis** - Remicade is indicated for reducing signs and symptoms of active arthritis, inhibiting the progression of structural damage, and improving physical function in patients with psoriatic arthritis.

**Plaque Psoriasis** - Remicade is indicated for the treatment of adult patients with chronic severe (i.e., extensive and/or disabling) plaque psoriasis who are candidates for systemic therapy and when other systemic therapies are medically less appropriate.

**Remicade Only:**

**Pediatric Ulcerative Colitis** - Remicade is indicated for reducing signs and symptoms and inducing and maintaining clinical remission in pediatric patients 6 years of age and older with moderately to severely active ulcerative colitis who have had an inadequate response to conventional therapy.

**Off-label use:**

Although Remicade is not FDA approved for the treatment of juvenile rheumatoid arthritis there are small series and an open trial comparing Remicade to Enbrel demonstrating effectiveness of Remicade in treating juveniles with arthritis (4-7).

Remicade and Inflectra both carry a boxed warning regarding the increased risk of serious infections and malignancies. Patients treated with Remicade are at increased risk for developing serious infections that may lead to hospitalization or death. Lymphoma and other malignancies, some fatal, have been reported in children and adolescent patients treated with TNF blockers, including Remicade and Inflectra. Treatment with Remicade and Inflectra should not be initiated in patients with an active infection, including clinically important localized infections. Patients greater than 65 years of age, patients with co-morbid conditions and/or patients taking concomitant immunosuppressants such as corticosteroids or methotrexate may be at greater risk of infection (1-2).
REMICADE, INFLECTRA
(infliximab), (infliximab-dyyb)

The use of tocilizumab in combination with biological DMARDs such as TNF antagonists, including Remicade and Inflectra, should be avoided because of the possibility of increased immunosuppression and increased risk of infection (1-2).

Cases of leukopenia, neutropenia, thrombocytopenia, and pancytopenia, some with a fatal outcome, have been reported in patients receiving Remicade and Inflectra. Prescribers should exercise caution in considering the use of Remicade and Inflectra in patients with these neurologic disorders and should consider discontinuation of Remicade and Inflectra if these disorders develop (1-2).

Cases of reactivation of tuberculosis or new tuberculosis infections have been observed in patients receiving Remicade and Inflectra, including patients who have previously received treatment for latent or active tuberculosis. Patients should be evaluated for tuberculosis risk factors and tested for latent infection prior to initiating Remicade and Inflectra and periodically during therapy (1-2).

Use of TNF blockers, including Remicade and Inflectra, has been associated with reactivation of hepatitis B virus (HBV) in patients who are chronic carriers of this virus. In some instances, HBV reactivation occurring in conjunction with TNF blocker therapy has been fatal. Patients should be tested for HBV infection before initiating TNF blocker therapy, including Remicade and Inflectra (1-2).

Remicade and Inflectra has been associated with adverse outcomes in patients with moderate to severe heart failure, and should be used in patients with heart failure only after consideration of other treatment options (1-2).

It is recommended that live vaccines not be given concurrently. At least a six month waiting period following birth is recommended before the administration of live vaccines to infants born to females patients treated with Remicade and Inflectra (1).

It is recommended that all pediatric patients be brought up to date with all vaccinations prior to initiating Remicade and Inflectra therapy. The interval between vaccination and initiation of Remicade and Inflectra therapy should be in accordance with current vaccination guidelines (1-2).

Summary
Remicade and Inflectra (infliximab) are tumor necrosis factor (TNFα) blocker. Tumor necrosis factor is
an endogenous protein that regulates a number of physiologic processes, including the inflammation response associated with some autoimmune inflammatory diseases (1-2).

Prior authorization is required to ensure the safe, clinically appropriate and cost effective use of Remicade and Inflectra while maintaining optimal therapeutic outcomes.

References
2. Inflectra [package insert]. Lake Forest, IL: Hospira; April 2016