Priority Health

**MEDICAL POLICY**
**No. 91603-R3**

# FECAL MICROBIOTA TRANSPLANTATION/ FECAL BACTERIOTHERAPY

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## I. POLICY/CRITERIA

A. Fecal Microbiota Transplantation (FMT)/Fecal Bacteriotherapy is considered medically necessary for any of the following:

1. Recurrent or relapsing *C. difficile* infection (CDI) defined as one of the following:

   a. At least 3 episodes of mild to moderate CDI and failure of a 6-8 week taper with vancomycin with or without an alternative antibiotic (e.g. rifaximin, nitazoxanide) OR
   b. At least 2 episodes of severe CDI resulting in hospitalization and associated with significant morbidity.

2. Moderate CDI not responding to standard therapy (vancomycin) for at least a week.

3. Severe or fulminant *C. difficile* colitis with no response to standard therapy after 48 hours.

B. Testing for donor selection is a covered benefit if the FMT recipient is a Priority Health member.

## II. EXCLUSIONS

A. FMT for all indications not defined in I A above are considered experimental and investigational and are not covered by Priority Health (e.g. Crohn's disease, Inflammatory Bowel Disease).
B. Oral administration of FMT/fecal bacteriotherapy is considered experimental and investigational.
C. Use of standardized stool sample preparations from a stool bank[1] or similar (e.g., FMT products from OpenBiome) is considered experimental and investigational.

Note: See the Priority Health *Medical Benefit Drug List (MBDL)* for coverage details for Rebyota™ (fecal microbiota live-jslm) suspension, for rectal use.

[1] A stool bank is defined as an establishment that collects, prepares, and stores FMT product for distribution to other establishments, health care providers, or other entities for use in patient therapy or clinical research.

## III. MEDICAL NECESSITY REVIEW

Prior authorization for certain drugs, services, and procedures may or may not be required. In cases where prior authorization is required, providers will submit a request demonstrating that a drug, service, or procedure is medically necessary. For more information, please refer to the Priority Health Provider Manual.

## IV. APPLICATION TO PRODUCTS

Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

- **HMO/EPO:** ***This policy applies to insured HMO/EPO plans.***
- **POS:** ***This policy applies to insured POS plans.***
- **PPO:** ***This policy applies to insured PPO plans. Consult individual plan documents as state mandated benefits may apply. If there is a conflict between this policy and a plan document, the provisions of the plan document will govern.***
- **ASO:** ***For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.***
- **INDIVIDUAL:** ***For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.***
- **MEDICARE:** ***Coverage is determined by the Centers for Medicare and Medicaid Services (CMS) and/or the Evidence of Coverage (EOC); if a coverage determination has not been adopted by CMS, this policy applies.***
- **MEDICAID/HEALTHY MICHIGAN PLAN:** ***For Medicaid/Healthy Michigan Plan members, this policy will apply. Coverage is based on medical necessity criteria being met and the appropriate code(s) from the coding section of this policy being included on the Michigan Medicaid Fee Schedule located at: http://www.michigan.gov/mdch/0,1607,7-132-2945_42542_42543_42546_42551-159815--,00.html. If there is a discrepancy between this policy and the Michigan Medicaid Provider Manual located at: http://www.michigan.gov/mdch/0,1607,7-132-2945_5100-87572--,00.html, the Michigan Medicaid Provider Manual will govern. For Medical Supplies/DME/Prosthetics and Orthotics, please refer to the Michigan Medicaid Fee Schedule to verify coverage.***

## V. DESCRIPTION

Hayes Prognosis Overview, April 2012:

Fecal bacteriotherapy, also called fecal biotherapy, fecal microbiota transplantation, or stool transplantation, was first described in 1958 as a

successful treatment for antibiotic-induced diarrhea in patients who did not respond to other treatments and whose critical condition continued to worsen. Since then, fecal bacteriotherapy has continued to be used rarely in the United States and sporadically in other countries. Interest in this procedure has grown substantially over the past few years due to the increasing incidence and severity of C. difficile infection (CDI) and Clostridium difficile (C. difficile)-associated disease (CDAD), as well as the increasing resistance of CDI to current care antibiotic therapy. Approximately 20% of patients with CDI will have multiple recurrences; persistent CDI causes chronic debilitating symptoms, including toxic megacolon, septic shock, and death.

Fecal bacteriotherapy is currently being used as a last resort therapy for patients with severe recurrent and refractory CDAD. The procedure involves the instillation of a solution derived from a healthy donor's fecal matter via a nasogastric tube, retention enema, or colonoscope. The clinical goal of fecal bacteriotherapy is to replenish the healthy gut microflora to reconstitute natural intestinal defenses against C. difficile.

Although reports of the procedure first appeared in 1958, published evidence to date is limited to small case series and case reports on a total of approximately 300 patients. Reported success rates range from 83% to 100%.

Two randomized clinical trials are ongoing. The Fecal Therapy to Eliminate Clostridium difficile-Associated Longstanding Diarrhoea (FECAL) trial is being conducted in the Netherlands and has enrolled a total of 120 patients. The trial began in 2008 and is comparing fecal bacteriotherapy with current care antibiotics alone or in combination with a colon-cleansing laxative. A Canadian trial (NCT01226992) began in 2010 and is comparing oral vancomycin followed by fecal bacteriotherapy with tapering oral vancomycin in 146 patients with recurrent CDI. Results have not yet been reported.

Results from ongoing randomized clinical trials, if positive, will increase utilization of fecal bacteriotherapy and possibly elevate it from a last-resort therapy to a first-line or second-line clinical alternative.

Interest in fecal bacteriotherapy as a treatment for CDAD is expected to continue to grow due to the increasing prevalence and severity of CDI and CDAD in hospital patients, and the recent observed increase in community-acquired CDI.

It is theorized that fecal bacteriotherapy reduces C. difficile dominance and allows the reconstitution of healthy gut flora. Metagenomic analysis of bacterial DNA from fecal samples from CDAD patients and healthy individuals has demonstrated that the intestinal microflora of CDAD patients is substantially disrupted. Following fecal bacteriotherapy, metagenomic analysis showed that healthy donor bacteria were rapidly established in CDAD patients and were

maintained as the dominant microflora. A recent analysis of fecal samples from healthy donors and 10 patients undergoing fecal bacteriotherapy from pretreatment to 24 weeks post procedure showed that microflora were restored to resemble the healthy bacterial populations of the donors. After fecal bacteriotherapy, C. difficile were eliminated and previously absent healthy flora were found in the patients' intestinal bacterial population.

The fecal bacteriotherapy procedure involves collection of fecal samples from a healthy donor, usually a family member. Immunological matching is not necessary as it is with blood transfusion or organ transplant. Only recently have donor screening protocols been implemented. However, donor health history and screening of donor's blood and fecal samples are necessary. Donors must not have a history of gastrointestinal problems, colon polyps or malignancy, recent antibiotic treatment, bowel surgery, systemic autoimmunity, metabolic syndrome, or extensive travel. Laboratory screening of donor fecal samples includes intestinal pathogens, ova and parasites, and C. difficile. Donor blood is tested for chronic viral infections (e.g., hepatitis, HIV, cytomegalovirus, Epstein-Barr).

Although the impact of the recent FDA approval of Dificid (fidaxomicin) as a treatment for CDAD is not yet known, fecal bacteriotherapy is expected to continue to be investigated and applied as a therapy for patients with recurrent and severe CDAD.

It is expected that fecal bacteriotherapy will begin to be considered as a first-line treatment for recurrent and severe CDI in certain patient populations, as rates of postcolectomy CDI and CDI-related mortality continue to increase. The high cost of multiple regimens of vancomycin and the newly approved fidaxomicin will also contribute to greater interest in fecal bacteriotherapy as an alternative first-line and second-line treatment.

The science behind fecal bacteriotherapy is expected to continue to advance now that genomic sequencing and microbiological analysis technologies that allow more complex study of human gut flora have been introduced. These new technologies and results from randomized clinical trials, if positive, will increase utilization of fecal bacteriotherapy and contribute to its potential elevation from last-resort therapy to a first-line or second-line clinical alternative.

The increasing prevalence of community-acquired CDI will affect hospital resources as more patients with CDI are admitted to hospitals. At this time, the role of fecal bacteriotherapy in treating community-acquired CDI is not yet defined.

In the United States, the number of hospital discharges for CDI more than doubled between 2001 and 2005, and since then, CDI rates have continued to increase; in 2008, almost 350,000 hospital discharges were CDI diagnoses.

According to the latest information from the CDC's Emerging Infections Program, in 2010, 94% of CDI occurred in patients who had received healthcare as an inpatient, outpatient, or both in the 12 weeks prior to CDI diagnosis. Incidence of CDI has also increased in Canada and Europe. While increases have occurred in both pediatric and adult patients, elderly patients have been disproportionately affected. More than two-thirds of patients with CDAD are aged 65 years or older. Along with increasing CDI rates, the severity of the disease has also increased and is associated with the BI/NAP1/027 strain of C. difficile. This strain produces 10 times more toxin A and up to 23 times more toxin B than other strains, and also produces a third toxin (binary toxin), which all contribute to its greater virulence. This strain is also highly resistant to treatment with fluoroquinolones. The death rate of hospital patients with CDAD is approximately 4.5 times higher than the average hospital inpatient. From 2000 to 2007, deaths from CDI increased by 400%; currently, annual deaths number approximately 14000 in the United States.

## V. CODING INFORMATION

**ICD-10 Codes** that <u>may</u> support medical necessity:
A04.71 Enterocolitis due to Clostridium difficile, recurrent
A04.72 Enterocolitis due to Clostridium difficile, not specified as recurrent

**CPT/HCPCS Codes:**
J1440 Fecal microbiota, live - jslm, 1 ml – See Priority Health Medical Benefit Drug List for current coverage
44705 Preparation of fecal microbiota for instillation, including assessment of donor specimen
G0455 Preparation with instillation of fecal microbiota by any method, including assessment of donor specimen
0780T Instillation of fecal microbiota suspension via rectal enema into lower gastrointestinal tract *(Not Covered for Medicaid)*
44799 Unlisted procedure, small intestine (*submit with explanatory notes if administration is via NG tube or enema*)
*Use appropriate EGD or colonoscopy codes for administration if applicable.*

## VI. REFERENCES

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3. Hayes, Inc. Emerging Technology Report. Rebyota (Fecal Microbiota, Live-jslm) for Prevention of Recurrent Clostridioides Difficile Infection. Hayes, Inc. December 2, 2022.
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