



## Medical Management Guideline

<b>Title:</b> Positron Emission Tomography for Evaluation of Fever of Unknown Origin (FUO)	<b>Pages:</b> 2
<b>Department:</b> Medical Management	<b>Subsection:</b>
<b>Policy Reference:</b> <ol style="list-style-type: none"><li>1. Rothe AR, DO, Basello GM, DO. Approach to the Adult Patient with Fever of Unknown Origin. American Family Physicians, 2003.</li><li>2. Meller, Johannes; Sahlmann, Carsten-Oliver; Scheel, Alexander Konrad. F-FDG PET and PET/CT in Fever of Unknown Origin. The Journal of Nuclear Medicine, 2007; Vol 48, No 1.</li><li>3. <a href="http://www.uptodateonline.com">www.uptodateonline.com</a>. Approach to the Adult with Fever of Unknown Origin.</li></ol>	<b>Effective Date:</b> February 01, 2010
<b>Purpose:</b> Define current and up-to-date policy guidelines for the authorization of positron emission tomography (PET) for the evaluation of FUO.	

**POLICY STATEMENT:** PET scans for evaluation of FUO require prior authorization and must meet criteria for approval. The Milliman Care Guidelines are currently used for the authorization of PET scans. These guidelines, however, do not specifically address the use of PET scan for the evaluation of FUO.

In the past, FUO was defined as a temperature higher than 38.3 C lasting for more than three weeks with no obvious source after appropriate evaluation and investigation. (1) More recently, this definition has undergone modification and FUO is now defined as a fever without diagnosis after appropriate inpatient and/or outpatient evaluation. (2) The classic etiologies of FUO can be divided into the following three categories: infectious, malignant, and noninfectious inflammatory disease. (2) Initial evaluation of FUO begins with a comprehensive history, physical examination, and standard laboratory testing. (1) On occasion, this initial investigation may involve simple imaging procedures. (2) More invasive or complex techniques and imaging are indicated if the initial work-up proves inconclusive. (2) For patients who remain without a diagnosis after the initial evaluation, PET scanning has been of interest as PET is very sensitive to identify sites of inflammation and malignancy. (3) This imaging modality, however, is not a routine procedure in the work-up of FUO and remains a second-line of investigation. (2)

## **OPERATING PROTOCOL:**

PET scan for the evaluation of FUO may be indicated if the patient has undergone the initial evaluation and the diagnosis remains unknown. The initial evaluation should consist of the following:

- Comprehensive history and physical exam (documentation of fever and duration)
- Standard laboratory testing (ie: CBC, LFT, sed rate, UA, basic cultures)
- Imaging as indicated: CXR, abdominal/pelvic sonography, abdominal/pelvic/chest CT

## **REVISION HISTORY**

<b>Date</b>	<b>Reason for Change</b>
10/18/2010	Policy Review, Updated Reviewer Names
2/1/2010	New Criteria

**Reviewed and Approved by:** (Signatures on file)

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