

<b>Case Number:</b>	CM14-0024888		
<b>Date Assigned:</b>	06/11/2014	<b>Date of Injury:</b>	04/30/2012
<b>Decision Date:</b>	07/25/2014	<b>UR Denial Date:</b>	01/29/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	02/27/2014

### HOW THE IMR FINAL DETERMINATION WAS MADE

MAXIMUS Federal Services sent the complete case file to an expert reviewer. He/she has no affiliation with the employer, employee, providers or the claims administrator. The expert reviewer is Board Certified in Internal Medicine and is licensed to practice in California. He/she has been in active clinical practice for more than five years and is currently working at least 24 hours a week in active practice. The expert reviewer was selected based on his/her clinical experience, education, background, and expertise in the same or similar specialties that evaluate and/or treat the medical condition and disputed items/services. He/she is familiar with governing laws and regulations, including the strength of evidence hierarchy that applies to Independent Medical Review determinations.

### CLINICAL CASE SUMMARY

The expert reviewer developed the following clinical case summary based on a review of the case file, including all medical records:

According to the records made available for review, this is a 51 year old male who suffered an industrial accident originally on 11/21/2011. The injury caused low back pain with radiation down his low extremities. When seen by his treating physician on 12/2/2013 he had developed hypertension secondary to anti-inflammatory medication he was prescribed for his industrial injury. His blood pressure at that time was 205/111. At that visit, he was complaining of cough with yellow expectoration and had taken Sudafed recently and not taken his clonidine for the last 2 days. He was given Bystolic in the office and blood pressure came down to 180/100. The patient then returned for a follow up on 12/16/2013 and had reported that his blood pressure had been running between 150-180/90-110. In the office his blood pressure was found to be 209/115. Once again, the patient did not report chest pains or shortness of breath. The patient had a follow up visit on 1/6/2014 and blood pressure in the office was found to be 135/85 and he had no complaints of chest pains or shortness of breath.

### IMR ISSUES, DECISIONS AND RATIONALES

The Final Determination was based on decisions for the disputed items/services set forth below:

**HEMODYNAMIC STUDY:** Upheld

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation BlueCrossBlueShield Corporate Medical Policy; Cardiac Hemodynamic Monitoring in the Outpatient Setting; Last Reviewed June 12, 2014, Online Version.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Other Medical Treatment Guideline or Medical Evidence: BlueCrossBlueShield Corporate Medical Policy; Cardiac Hemodynamic Monitoring in the Outpatient Setting; Last Reviewed June 12, 2014, Online Version.

**Decision rationale:** A variety of hemodynamic studies have been proposed to decrease episodes of acute decompensation in individuals with heart failure. The four main methods are thoracic bioimpedance, inert gas rebreathing, arterial pressure during Valsalva to estimate left ventricular end diastolic pressure, and pulmonary artery pressure measurement to estimate left ventricular end diastolic pressure. These methods for the management of heart failure are considered investigational and are not the standard of care. Both the MTUS and ODG do not address the issue of hemodynamic testing for hypertension. There is not enough evidence to determine that hemodynamic monitoring of patients with hypertension or heart failure improves outcomes. Evidence from randomized controlled trials of invasive pulmonary artery pressure monitoring has shown some correlation between increased pressure readings and increased heart failure event risk. Guidelines are lacking when trying to establish optimal filling pressures and threshold readings to avoid adverse outcomes. There do not appear to be any double blinded randomized controlled trials to help address these issues. There are 2 single blinded studies, one is the CHAMPION RCT and the other is the REDUCEhf study. The CHAMPION trial reported that pressure readings can be used to reduce heart failure related hospitalizations, while the REDUCEhf trial reported no differences in the heart failure event rates. Both studies are single blinded as noted previously and are not the ideal when trying to establish beneficial outcomes related to interventions. Based on current available literature, and review of the evidence in this case, the request for hemodynamic testing is not medically necessary.