

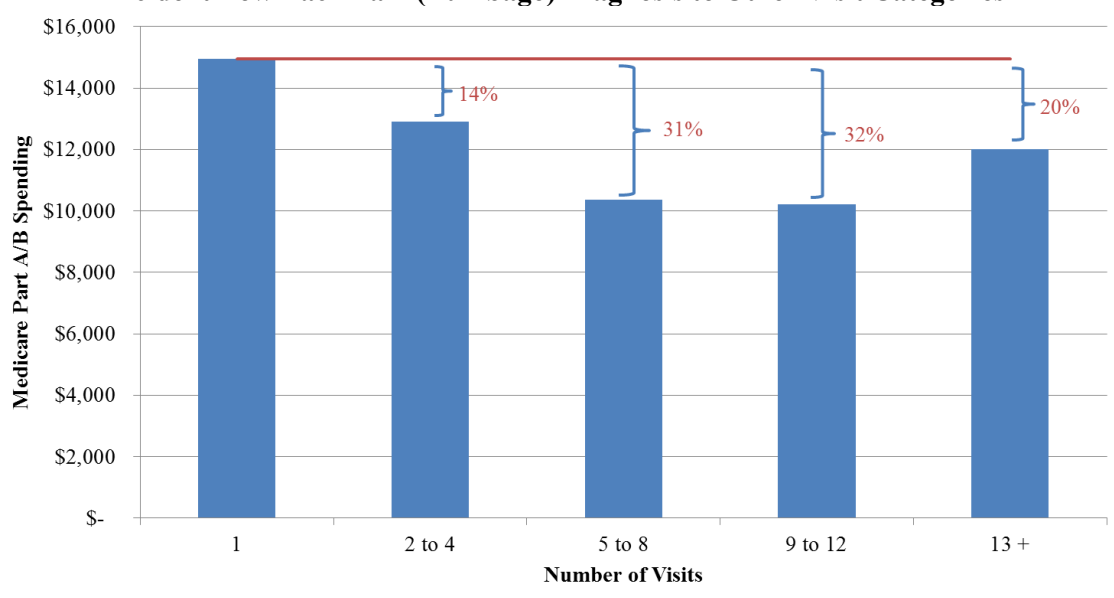
## Physical Therapy Episodes for Low Back Pain: Medicare Spending and Intensity of Physical Therapy Services – Report Overview

The Moran Company analyzed all Medicare Part A/B claims for a population of fee for service (FFS) beneficiaries with newly diagnosed low back pain and identifiable episode(s) of outpatient physical therapy in order to evaluate the hypothesis that beneficiaries who receive more therapy visits have lower overall Medicare spending than do beneficiaries with fewer outpatient therapy visits.<sup>1</sup>

Highlights of study findings include:

- A nationally representative study population of 38,260 Medicare fee for service beneficiaries with an incident lumbago diagnosis and an identifiable outpatient physical therapy episode for low back pain in the year following first diagnosis were identified.
- Most of these beneficiaries (94%) had one episode of therapy for low back pain in the year following diagnosis which involved, on average, \$625 in spending on outpatient therapy services.
- Approximately 22% of study beneficiaries utilized a single therapy visit. The remaining beneficiaries utilized, on average, 9.1 therapy visits over the course of approximately 8 weeks (56.2 days).
- Beneficiaries with multiple therapy visits incurred between 14% and 32% lower average total Medicare Part A/B spending in the year following diagnosis than did beneficiaries with one therapy visit.

**Figure 1 - Comparing the One Visit Average Total Medicare Part A/B Spending One Year After Incident Low Back Pain (Lumbago) Diagnosis to Other Visit Categories**



These findings suggest that intensity of therapy (as defined by number of visits) is inversely related to total Medicare Part A/B spending.<sup>2</sup> This may signal that physical therapy utilization, as a relatively low-cost option, possibly contributes to less overall spending downstream. This raises important considerations for benefit design and mechanisms to reduce barriers to access physical therapy services. These results are consistent with previous work that found that adherence to recommended active forms of physical therapy results in lower healthcare costs due to lower likelihood of receiving opioid prescription medications, epidural injections, follow-up advanced imaging, follow-up physician visits, and other health resource use metrics without compromising patient outcomes.<sup>3-6</sup>

<sup>1</sup> This study population was based on a nationally representative sample of beneficiaries with incident lumbago (ICD-9-CM Code 724.2.) in calendar year (CY) 2014 (Incident lumbago beneficiaries identified during the period 02/01/14-9/30/14) and focused on the cohort who received physical therapy within 12 months of first diagnosis. Beneficiaries were selected based on the presence of a Centers for Medicare and Medicaid Services (CMS) established Healthcare Common Procedure Coding System (HCPCS) “G” code that identified the outset of a therapy episode. The Medicare Part A and B Limited Data Sets (LDS) used in this analysis include the Standard Analytic File (SAF) five percent sample data from the CMS carrier, outpatient, inpatient, SNF, home health, and DME files and corresponding denominator files years 2013-2015. Estimates presented are projected to national levels per the standard CMS weighting process.

<sup>2</sup> This analysis was based on computational comparisons of total average Medicare spending by therapy intensity categories. This analysis does not reflect a detailed statistical evaluation of the link between therapy intensity and spending and accordingly does not demonstrate a causal relationship.

<sup>3</sup> Fritz JM, Cleland JA, Speckman M, Brennan GP, Hunter SJ. Physical therapy for acute low back pain: Associations with subsequent healthcare costs. *Spine (Phila Pa 1976)*. 2008;33(16):1800-1805.

<sup>4</sup> Childs JD, Fritz JM, Wu SS, et al. Implications of early and guideline adherent physical therapy for low back pain on utilization and costs. *BMC Health Serv Res*. 2015;15(1):150.

<sup>5</sup> Fritz JM, Childs JD, Wainner RS, Flynn TW. Primary care referral of patients with low back pain to physical therapy: Impact on future healthcare utilization and costs. *Spine (Phila Pa 1976)*. 2012;37(25):2114-2121.

<sup>6</sup> Ojha, H. A., Wyrsta, N. J., Davenport, T. E., Egan, W. E., & Gellhorn, A. C. (2016). Timing of Physical Therapy Initiation for Nonsurgical Management of Musculoskeletal Disorders and Effects on Patient Outcomes: A Systematic Review. *Journal of orthopaedic & sports physical therapy*, 46(2), 56-70.