



## Foot-in-Wallet Disease: Tripped Up by “Cost-Saving” Reductions?

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In the U.S., podiatric medical services are considered to be optional under Medicaid statutes, with an underlying assumption that these services are elective and can be performed by other providers. It may have been easily anticipated, therefore, that podiatric services were often included in line-item cuts in a number of state budgets under the recent period of economic austerity. Given this, the current research report used Agency for Healthcare Research and Quality (AHRQ) Healthcare Cost and Utilization Project (HCUP) inpatient discharge records spanning 2006–2011 to assess changes in inpatient hospitalizations associated with diabetic foot ulcers (DFUs) among adult beneficiaries of Arizona Medicaid (Arizona Health Care Cost Containment System [AHCCCS]) following the October 2009 announcement of coverage cancellation to podiatric physicians intended to reduce costs (i.e., \$351,000 saved from the \$8.7 billion general fund, SB1003 and HB2003 within the 7th Special Session of Arizona’s 49th Legislature). Outcomes assessed included pre/postannouncement changes in inpatient admissions, charges, length of stay, and severe aggregate outcomes (SAOs) of mortality, amputation, sepsis, or surgical complications. A multivariate autoregressive integrated moving average (ARIMA) interrupted time series was used to estimate postannouncement changes on these outcomes while controlling for

Arizona Medicaid enrollment changes, age, sex, and the Deyo-Charlson Comorbidity Index.

Figure 1 presents the crude, unadjusted inpatient case volume for DFUs and total AHCCCS enrollment from 2006–2011. Relative to prior years, results of multivariate analysis suggested that the legislative bill announcement was associated with significantly ( $P \leq 0.001$ ) higher aggregate hospital admissions, charges, lengths of stay, and SAOs of +36.7%, +37.5%, +22.5%, and +49.0%, respectively. Sensitivity analyses focusing upon the signing of the legislative bill (March 2010) and formal implementation of the reimbursement change (June 2010) yielded consistent results. Overall, these findings suggest that for each \$1 saved by the elimination of podiatrist reimbursement, the associated increase in hospitalization charges was \$48 (i.e., \$351,000 saved annually from podiatry vs. \$16.7 million incurred per year via increased hospitalizations). This finding parallels other work that suggests that podiatric preventative care offers benefits from \$27 to \$54 for each dollar consumed (1).

Historically, other research has found that Medicaid cost-containment programs often fail to achieve their goals, often resulting in cases being shifted from ambulatory to acute care settings while increasing costs and worsening

clinical outcomes (2–5). Our findings indicate that restricting access to preventive care among people with diabetes may not be inconsequential, particularly concerning the poor and underserved. In Arizona’s Medicaid, the volume of admissions with DFUs has climbed to their highest recorded level, a development that appears to be at least temporally related to the elimination of low-cost preventative services provided by podiatric physicians. The association between these events may be a cause for concern, though recognizing that further analyses will be necessary to ascertain root causes, to more thoroughly quantify the impact of the 2007–2008 financial crisis, and to comprehensively evaluate care across both ambulatory and acute care settings. Investigating this potential unintended and undesirable adverse impact of cost containment in other states is important to patients, providers, and legislators alike.

**Duality of Interest.** No potential conflicts of interest relevant to this article were reported.

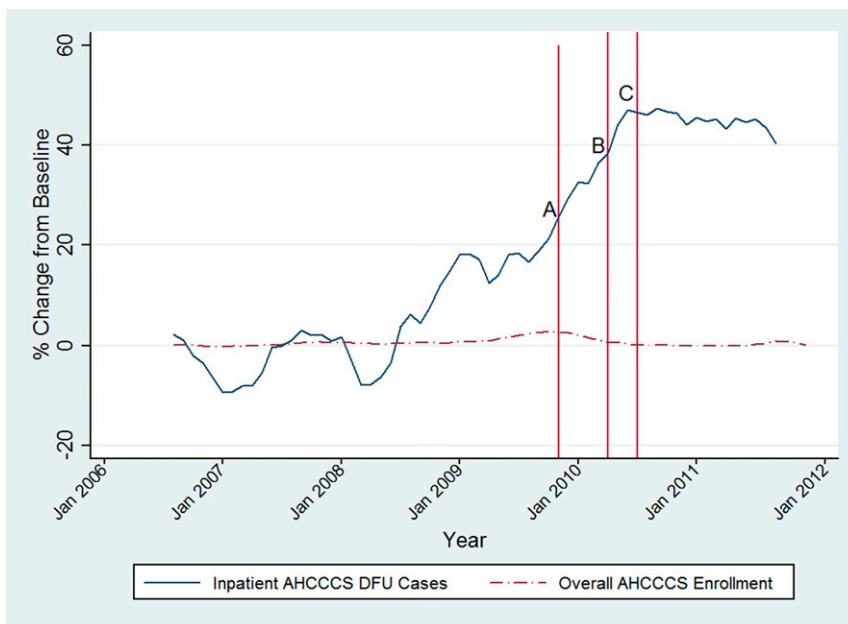
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**Figure 1**—Unadjusted, overall DFU hospitalizations among AHCCCS beneficiaries (6-month moving average). Time point A: Announced recommendation to eliminate reimbursements to podiatrists within AHCCCS; Arizona 49th Legislature SB1003 and HB2003 (October 2009). Time point B: Arizona 49th Legislature SB1003 and HB2003 legislation signed (March 2010). Time point C: Official date of podiatric service coverage elimination (June 2010).

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