ALLIANCE OF WOUND CARE STAKEHOLDERS
POWER THROUGH COLLECTIVE ADVOCACY
★CELEBRATING 15 YEARS★

FACT SHEET:

A new study published in the International Society For Pharmacoeconomics and Outcomes Research's *Value in Health* journal demonstrates the economic impact of chronic nonhealing wounds in the Medicare population and highlights the associated need for quality measures and reimbursement models for wound care within CMS payment policies. The findings – particularly the insights regarding the costs of diabetic foot ulcers and diabetic infections – are of particular interest to the podiatry community.

Ascertaining the true cost of wounds in the Medicare population: a retrospective analysis

The study, "**An Economic Evaluation of the Impact, Cost, and Medicare Policy Implications of Chronic Nonhealing Wounds**" analyzed the Medicare 5% Limited Data Set for CY2014 to determine the cost of chronic wound care for Medicare beneficiaries in aggregate, by wound type, and by setting. The retrospective analysis included beneficiaries who experienced episodes of care for 1 or more of the following: arterial ulcers, chronic ulcers**, diabetic foot ulcers, diabetic infections, pressure ulcers**, skin disorders, skin infections, surgical wounds, surgical infections, traumatic wounds, venous ulcers, or venous infections.

Key Findings Relevant to the Podiatry Community:

- **Chronic nonhealing wounds impact nearly 15% of Medicare beneficiaries (8.2 million).**
- A conservative estimate of the annual cost is **$28 billion** when the wound is the primary diagnosis on the claim. When the analysis included wounds as a secondary diagnosis, the cost for wounds is conservatively estimated at **$31.7 billion**.
  - The highest cost estimates in regard to site of service were for **hospital outpatient services** ($9.9*-$11.4** billion) – demonstrating a **major shift in costs from hospital inpatient to outpatient settings**. *[table 4]*
  - Including cost of infections, the most expensive chronic wounds were surgical wounds ($11.7* to $13** billion) followed by **diabetic foot ulcers** ($6.2* to $6.9** billion). *[table 2]*
  - On an individual wound basis, mean Medicare spending per wound was $3,415* to $3,859**. The most expensive wounds per beneficiary were **arterial ulcers** ($9,105* to $9,418**) followed by **pressure ulcers** ($3,696* to $4,436**). Diabetic infections ranged from $2,846 to $3,106; Diabetic foot ulcers from $1,555 to $2,169. *[table 3]*
  - Surgical infections were the largest prevalence category (4.0%), followed by **diabetic wound infections** (3.4%). *[table 1]*

** Estimates include Medicare provider payments only when a wound was the primary diagnosis on a claim.*
*** Estimates include the entire payment of a claim if a wound diagnosis was the primary diagnosis and also attributed partial payments, per a pre-defined methodology, when a wound was a secondary diagnosis.*

Why these findings matter: A call to action to address wound care in value-based care models

The true burden of wound care to Medicare has been relatively hidden. The study's calculation and documentation of the economic costs and impacts can have important implications for Federal research funding and CMS policies, such as the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA). With quality measure-based payment models driving reimbursement under MACRA, wound care practitioners have been particularly challenged – with no reportable performance measures relevant to wound care under the Merit-based Incentive Payment System (MIPS). The documentation of the specific, significant burden of chronic wounds in the Medicare population illustrates the need for CMS and health policy makers to include wound-relevant quality measures in all care settings as well as develop episode of care measures, chronic care models and reimbursement models to drive better health outcomes and smarter spending in the wound care space.

At a Glance: Study Findings Most Relevant to Podiatry

Table 2 – Medicare spending for wound care in 2014 by wound type, in millions of U.S. dollars*.

Wound type	Principal diagnosis	Principal diagnosis and attributed portion as secondary	Principal diagnosis or any secondary
Arterial ulcers	2085.0	2156.7	3107.7
Chronic ulcers	1420.7	1,772.2	6438.5
Diabetic foot ulcers	631.4 (6,178.0)	880.7 (6,933.6)	4499.9 (18,743.6)
Pressure ulcer	3870.2	4,644.5	22,050.1
Skin disorders	773.3 (786.1)	922.9 (936.2)	3225.6 (3,243.0)
Surgical wounds	5775.6 (11,714.4)	6699.0 (13,063.7)	24,300.1 (38,319.4)
Traumatic wounds	1292.3	1430.6	3411.4
Venous	569.0 (715.7)	605.6 (778.7)	1,027.1 (1,500.0)
Diabetes infections	5546.6	6052.9	14,243.7
Skin infections	12.8	13.3	17.4
Surgical infections	5938.8	6364.7	14,019.3
Venous infections	146.7	173.1	472.9
Total all wounds	28,062.1	31,716.1	96,813.8

* Figures in parentheses represent total costs for types of wounds when cost of infections is included.

Table 3 – Medicare spending for wound care per beneficiary (mean values) in 2014 by wound type, in U.S. dollars.

Wound type	Principal diagnosis	Principal diagnosis and attributed portion as secondary	Principal diagnosis or any secondary
Arterial ulcer	9105	9418	13,571
Chronic ulcer	1104	1377	5003
Diabetic foot ulcer	1555	2169	11,083
Diabetic infections	2846	3106	7308
Pressure ulcer	3696	4436	21,060
Skin disorders	514	614	2145
Skin infections	346	359	470
Surgical wounds	3364	3902	14,153
Surgical infections	2604	2790	6585
Traumatic wounds	830	919	2191
Venous	1138	1211	2054
Venous infections	114	134	366
Total all wounds	3415	3859	11,781

Tables from*: An Economic Evaluation of the Impact, Cost, and Medicare Policy Implications of Chronic Nonhealing Wounds:* Nussbaum, Samuel R. et al., Value in Health, in press

*-Low-range estimates include only Medicare provider payments when a wound was the **primary diagnosis** on a claim.*
*-Mid-range estimates attribute the entire payment of a claim if a wound diagnosis was the **primary diagnosis** and also attribute payments per a pre-defined methodology when a wound was a **secondary diagnosis**.*
*-High-range estimates include payments when a wound was either the **primary or secondary** diagnosis and provided an upper bound estimate to total spending associated with wound care **assuming the wound was always the underlying cause of the service**.*