

The Impacts of Medicaid Status on Venous Leg Ulcer Outcomes

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OBJECTIVE

To compare the profiles and health outcomes of individuals with Medicare only versus Medicare/Medicaid dual-enrollees with a hard-to-heal Venous Leg Ulcer (VLU).

METHODS

Medicare Limited Data Standard Analytic Hospital Inpatient and Outpatient Department Files were used to follow VLU episodes from October 1, 2015, through October 2, 2019. Patients diagnosed with Chronic Venous Insufficiency (CVI) and a VLU were propensity matched based on their treatment regimen, those receiving advanced treatment (AT) and those receiving no AT (NAT).¹ The cohorts were then divided into those enrolled in Medicare only (76%), or dual-enrollees (24%). Outcomes such as length of VLU treatment (time from first to last claim), rates of complications, hospital utilization rates, and QoL metrics (i.e., pain) were compared across propensity-matched groups.

RESULTS

A total of 1,225,278 Medicare beneficiaries had a diagnosis claim of CVI between 1 October 2015 and 2 October 2019. A metagroup of 555,284 Medicare beneficiaries had a confirmed claim of a VLU (Fig. 1). A subset of this group became the treatment evaluation cohort (AT vs NAT, 30,547 episodes).

Only 3% of Medicare-only patients and 6% of dual-enrollees had an Advantage plan, which is lower than the general Medicare population. Dual enrollees were more likely to be from ethnic minorities (11% of Medicare only vs. 27% of dual enrollees), have a higher Charlson Comorbidity Index (CCI) (1 point greater, $p < 0.0001$), incur higher rates of hospital utilization, and complications such as cellulitis, sepsis, and necrosis, (Fig 1) and experience longer treatment durations (Fig 2) compared to the Medicare-only cohort.

RESULTS

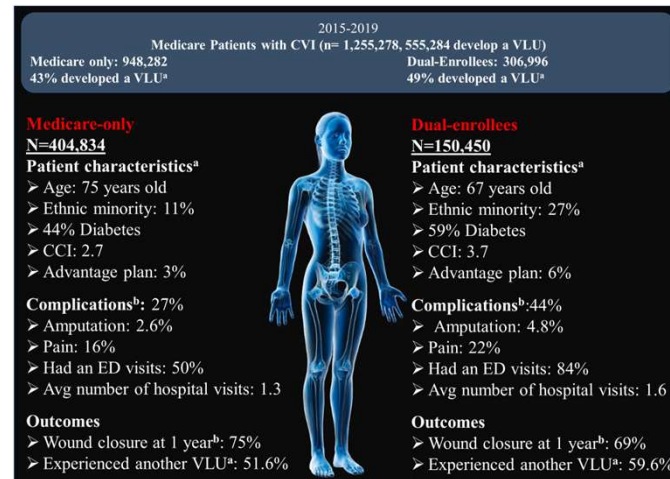


Figure 1. Profile of Medicare enrollees and dual-enrollees (those also on Medicaid) with CVI and the complications for those who develop VLUs. ^a Profile in VLU Meta-group =555,284 patients. ^b Profile in propensity matched treatment group 1=30,547 episodes.

RESULTS

Dual-enrollees who received AT treatment such as Dehydrated Amnion Chorion Membrane (DHACM),* following parameters for use (FPFU, defined as initiation of an AT within 30 to 45 days of the first claim, with applications every 7 to 14 days until episode resolution)¹, had significant reductions in time to ulcer closure, healthcare utilization, and VLU complications (a reduction of 21.3 days to a total length of treatment of 128.9 days ($p=0.0027$) (Fig 2).

CONCLUSION

Dual enrollees are more likely to be from low-income and ethnic minority groups and have a greater number of comorbidities. When dual enrollees develop a VLU, their outcomes—including length of treatment, complications, and use of hospital resources—are significantly worse than those of Medicare-only enrollees. Patients with CVI experience cycles of ulceration, healing, and recurrence, which can lead to increased pain, odor, reduced mobility, social isolation, job loss, economic hardship, and dependency on caregivers for activities of daily living. Given the greater toll on dual-enrollee outcomes, there are likely increased impacts beyond health outcomes- emotional, social, employment, and overall health-related QoL.

Outcomes significantly improved when VLU episodes were provided an AT like DHACM, while FPFU. Greater access for dual-enrollees to ATs, such as DHACM, has the potential to improve clinical outcomes and QoL while concomitantly reducing overall healthcare expenditures.

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Abbreviations: VLU: venous leg ulcer; QoL: Quality of Life; CVI: chronic venous insufficiency; CCI: Charlson Comorbidity Index; DHACM: dehydrated amnion chorion membrane, ED: Emergency Department; FPFU: following parameters for use.

Disclosures:

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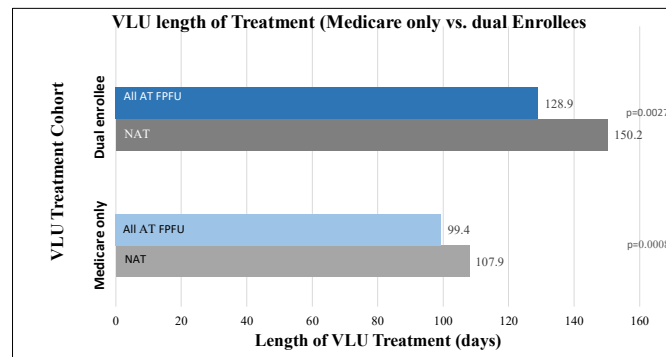


Figure 2. Venous leg ulcer (VLU) length of treatment for Medicare and Medicaid enrollees shortens when patients receive an advanced treatment (AT) following parameters for use (FPFU). Length of treatment was measured as the time from start to end of a claim. NAT, no advanced treatment;

References:

¹Tettelbach WH, Driver V, Oropallo A, et al. Treatment patterns and outcomes of Medicare enrollees who developed venous leg ulcers. *J Wound Care.* 2023;32(11):704-718. doi:10.12968/JOWC.2023.32.11.704

*DHACM = EPIFIX (MIMEDX Group, Inc., Marietta, GA, USA.)