Early Versus Late, it Doesn't Pay to Wait

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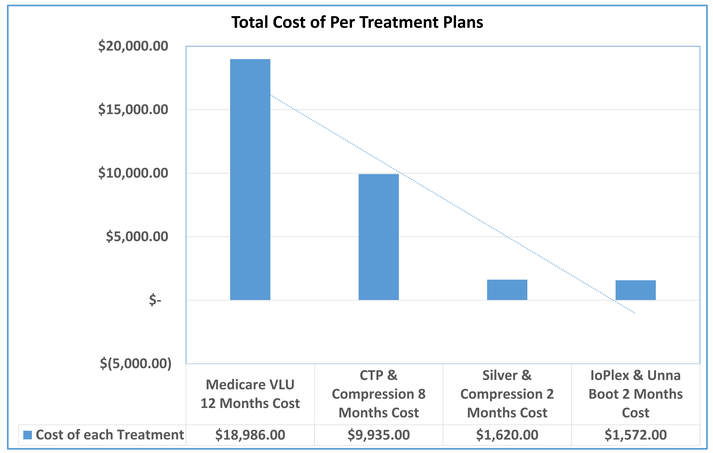
INTRODUCTION:

Venous Leg Ulcers (VLUs) are one of the most common wounds seen in a wound care center and has per patient annual cost burden to Medicare of $18,986 without achieving wound closure.[1] Multiple factors account for the high cost, and an incidence rate that is estimated to be as high as 2.2% among the Medicare population and will continue to increase the prevalence of VLUs in this population.[1] More cost effective treatments or combination of treatments are needed to step up and down the wound care and to get closure of these wounds.

METHODS:

This report looks at the financial outcomes of three different treatment combination over three different treatment periods. The visit cost weekly along with other cost are calculated to determine the total cost of care for each treatment on a VLU wound patient. A hypothetical population is then used to calculate the potential cost and revenue generation for the outpatient department using each of the treatments for a specific length of time. The example case is from an abstract presented by Richard Simman, MD at DLS in 2019[2]. Using current year reimbursement from Medicare[3] based on the procedures performed and reimbursement along with nursing time cost[4]. A conservative room cost of $70 per hour was used in the calculations. We calculated based only on the 5 application of Cellular Based Tissue Products (CTP) with Compression for eight months for the first treatment period. Then only the cost of the IoPlex and Unna Boot for 2 months and a silver dressing with compression for two additional months. No other cost were considered for this example.

Chart 1



RESULTS

Figure 1: Wound at the end of the 8 months of CTP applications with Compression
Figure 2: Wound at the end of IoPlex with Unna Boot treatment of two months
Figure 3: Wound at the start of Silver dressing with compression
Figure 4 Closed wound at the end of two months of silver dressings with compression

Pictures Courtesy of Richard Simman, MD

Fig. 1 Fig. 2 Fig. 3 Fig. 4

Chart 2

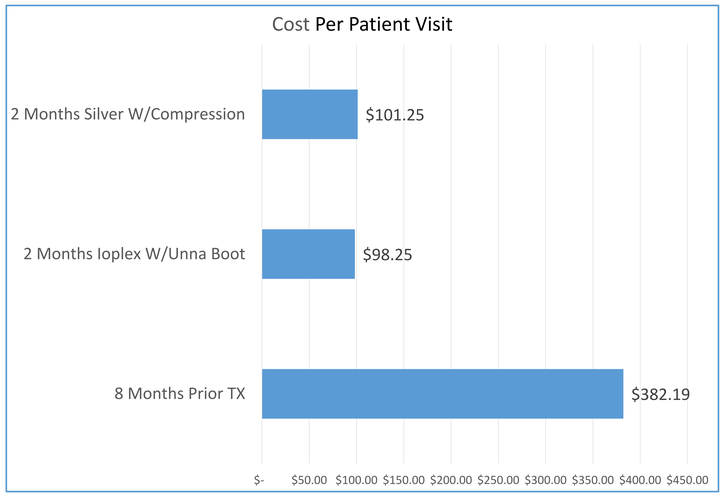


Chart 3

RESULTS:

Chart 1 shows the total cost of care was around $9,935 for the eight months of treatment using CTPs and other modalities. While the IoPlex and Unna Boot treatment was $1,572 and $1,620 for two months of a Silver dressing with compression. The average weekly cost for the most profitable treatment was more than three times the costs of the other two treatments as shown in Chart 2.

The most profitable treatment did not generate twice the revenue per visit even though it was three times the cost and lasted twice as long as the other two treatment combined and did not result in a closed wound.

Due to the reduction in time to closure, in a one year period, twice as many patients could be treated, thus generating more revenue annually.

DISCUSSION:

While the two lower cost treatments were not as profitable per visit as the most expensive treatment. The lower cost treatments would generate more revenue annually if used on a population of 100 patients in a year due to greater volume of patients treated because of the reduced length of treatment. There are additional benefits such as reduction in complication such as infections. The longer wounds are open the greater the risk of complication and a reduced quality of life. Moreover, the longer it takes to get a wound to closure, there are unseen cost to the facility. The patients who cannot be seen or who are not revenue generating especially if debridement or some other procedure cannot be performed.

Stepping up and using the most appropriate therapies even at what appears to be at a greater expense can allow a quicker step down to allow for more rapid wound closure and lower total cost of care and may even generate more revenue.

SOURCES:

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2. Simman R, Hermans M. Three cases of recalcitrant wounds, treated with an iodophor foam dressing. Poster presented at: Diabetic Limb Salvage Conference (DLS); 2019 April 4-6; Washington, DC
3. Centers for Medicare & Medicaid Services (CMS), Department of Health and Human Services (HHS). Addendum B. – OPPS Payment by HCPCS Code for CY 2022. Accessed online June 1, 2022.
4. U.S. Bureau of Labor Statistics (BLS) Occupational Employment and Wages, May 2020 29-1141 Registered Nurses. Accessed online November 21, 2021.

IoPlex is a Medline product.

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