

This is the accepted version of the following article: Barnsbee, Louise, Cheng, Qinglu, Tulleners, Ruth, Lee, Xing Ju, Brain, David, & Pacella, Rosana (2019) Measuring costs and quality of life for venous leg ulcers. International Wound Journal, 16(1), pp. 112-121., which has been published in final form at 10.1111/iwj.13000. This article may be used for non-commercial purposes in accordance with the Wiley Self-Archiving Policy [<http://www.wileyauthors.com/self-archiving>].

Table 1: Participant baseline characteristics (continuous variables)

Characteristic	All patients <i>Mean (SD)</i> n=80	Usual care <i>Mean (SD)</i> n=54	Optimal care <i>Mean (SD)</i> n=26	p-value
Age, years	75.1 (13.9)	73.3 (14.7)	79 (11.3)	0.053
Height, cm	170.2 (11.6)	171.7 (11.1)	166 (12.3)	0.094
Weight, kg	93.3 (33.0)	97.9 (34.3)	80.6 (26.2)	0.037
BMI, kg/m ²	33.1 (11.2)	34.1 (11.8)	30.0 (8.7)	0.260
Ankle circumference, <i>per leg, cm</i>	23.9 (2.5)	24.2 (2.6)	23.6 (2.5)	0.450
Calf circumference, <i>per leg, cm</i>	36.8 (4.9)	37.6 (5.2)	36.0 (4.5)	0.289
Left ABPI* ratio	1.01 (0.21)	1.2 (0)	0.98 (0.22)	-
Right ABPI ratio	0.99 (0.25)	1.09 (0.16)	0.97 (0.27)	-
Toe pressure index	0.69 (0.16)	0.84 (0.3)	0.64 (0.06)	-

*ABPI – ankle brachial pressure index

“–” designates samples with too few data collected, or too few data for statistical testing

Table 2: Participant baseline characteristics (categorical variables)

Characteristic	All patients n, (%) ⁺⁺⁺ n=80	Usual care patients n, (%) ⁺⁺⁺ n=54	Optimal care patients n, (%) ⁺⁺⁺ n=26	p-value
BMI Category				
Underweight	2 (3.9)	2 (5.3)	0 (0)	0.31
Normal	14 (27.5)	8 (21.1)	6 (46.2)	
Overweight	8 (15.7)	6 (15.8)	2 (15.4)	
Obese	27 (52.9)	22 (57.9)	5 (38.5)	
Gender, male	32 (40)	25 (46.3)	7 (26.9)	0.1
Venous insufficiency	65 (81.3)	46 (85.2)	19 (73.1)	0.19
Reduced Mobility	70 (87.5)	47 (87)	23(88.5)	0.86
Age >70	56 (70)	38 (70.4)	18 (69.2)	0.91
Clinical signs of infection (at admission)	18 (22.5)	11 (20.4)	7 (26.9)	0.52
Hypercholesterolemia	10 (12.5)	5 (9.3)	5 (19.2)	0.21
Lymphedema/ Oedema (history)	40 (49.4)	27 (50)	13 (50)	1
Oedema (at admission)	51 (63.8)	33 (61.1)	18 (69.2)	0.48
Eczema (at admission)	15 (18.8)	10 (18.5)	5 (19.2)	0.94
Hypertension	31 (38.8)	17 (31.5)	14 (53.8)	0.055
Peripheral arterial disease	4 (5)	3 (5.6)	1 (3.85)	0.73
Smoker	5 (6.25)	3 (5.6)	2 (7.7)	0.72
Deep vein thrombosis	2 (2.5)	1 (1.9)	1 (3.85)	0.60

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⁺⁺⁺Please note variables may not add to 100 in percentages, as each variable had different numbers of available data.

^BMI category was tested using Chi-Square analysis and all other tests were completed using z test

Table 3: Wound characteristics at baseline

Wound measurement, cm (per wound)	All patients n=80	Usual care patients n=54	Optimal care patients n=26	p-value
Wound length, <i>Mean (SD)</i>	2.9 (2.3)	3.4 (2.6)	2.6 (2.2)	0.426
Wound width, <i>Mean (SD)</i>	2.2 (1.5)	2.3 (1.6)	2.1 (1.4)	0.983
Wound depth, <i>Mean (SD)</i>	0.6 (0.5)	-	0.4 (0.3)	-
Ulcer duration, <i>Mean (SD), in months</i>	46.9 (91.3)	46.1 (86.8)	48.5 (100.7)	0.885
Ulcer duration, <i>Median (IQR)⁺, in months</i>	10 (42)	12 (45)	6 (29.75)	0.309

⁺IQR - interquartile range

⁺for analysis <1 was assumed to be 1 and >360 months was assumed to be 360 months

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Table 4: Average weekly costs per patient at baseline (AUD\$)

	Usual care Mean	Optimal care Mean	p-value
Transport cost	\$13.95	\$17.69	
Consultancy cost (out-of-pocket)	\$16.37	\$67.10	
Consultancy cost (health care system)	\$71.41	\$78.13	
Costs of using other medical services (out-of-pocket)	\$9.94	\$8.27	
Costs of using other medical services (health care system)	\$38.95	\$37.60	
Product cost	\$62.87	\$85.93	
Total weekly costs (health system)	\$110.36	\$115.73	0.736
Total weekly costs (out-of-pocket)	\$104.25	\$178.99	0.016
Total weekly costs	\$214.61	\$294.72	0.04

The “Totals” rows display the pooled results from the use of multiple imputation to handle missing data. Only the total weekly costs (by payer perspective and overall) were statistically tested.

Table 5: Baseline and three-month EQ-5D-5L scores

Time point	All patients Mean, (SD)	Usual care group Mean, (SD)	Optimal care group Mean, (SD)	Difference between optimal and usual care groups p-value, (95% CI*)
Baseline	0.67 (±0.24)	0.64 (±0.26)	0.75 (±0.16)	0.025 (0.014 - 0.206)
3 month	0.80 (±0.18)	0.78 (±0.19)	0.83 (± 0.15)	0.414 (-0.061 to 0.146)

*CI – Confidence interval

At baseline, the mean utility score of optimal and usual care patients were 0.75 (±0.16) and 0.64 (±0.26) respectively. The difference in these scores reached statistical significance (p=0.025).

Table 6: Time-to-healing

Number of ulcers healed after 1, 2, 3 and 6 months	Usual care (n=27)	Optimal care (n=19)	p-value
1 month healing <i>n,(%)</i>	5 (18.5)	5 (26.3)	0.045
2 month healing <i>n,(%)</i>	1 (3.7)	2 (10.5)	
3 month healing <i>n,(%)</i>	8 (29.6)	10 (52.6)	
6 month healing <i>n,(%)</i>	13 (48.1)	2 (10.5)	
Time-to-healing	Usual care (n=54)	Optimal care (n=26)	p-value
Time-to-healing (months) <i>Mean, per ulcer</i>	3.9	2.7	-
Time-to-healing (months) <i>Median (IQR⁺), per ulcer</i>	3 (3)	3 (1.5)	0.012
Total number of ulcers during the first 3 months	94	75	
Ulcers healed at 3 month data collection <i>(n, %)</i>	15 (16%)	17 (22.7%)	0.27
Patients healed at 3 month data collection <i>(n, %)</i>	12/42 (28.6%)	6/20 (30%)	0.912

⁺ IQR – Interquartile range

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Figure 1: Proportions of participants receiving care from different service providers

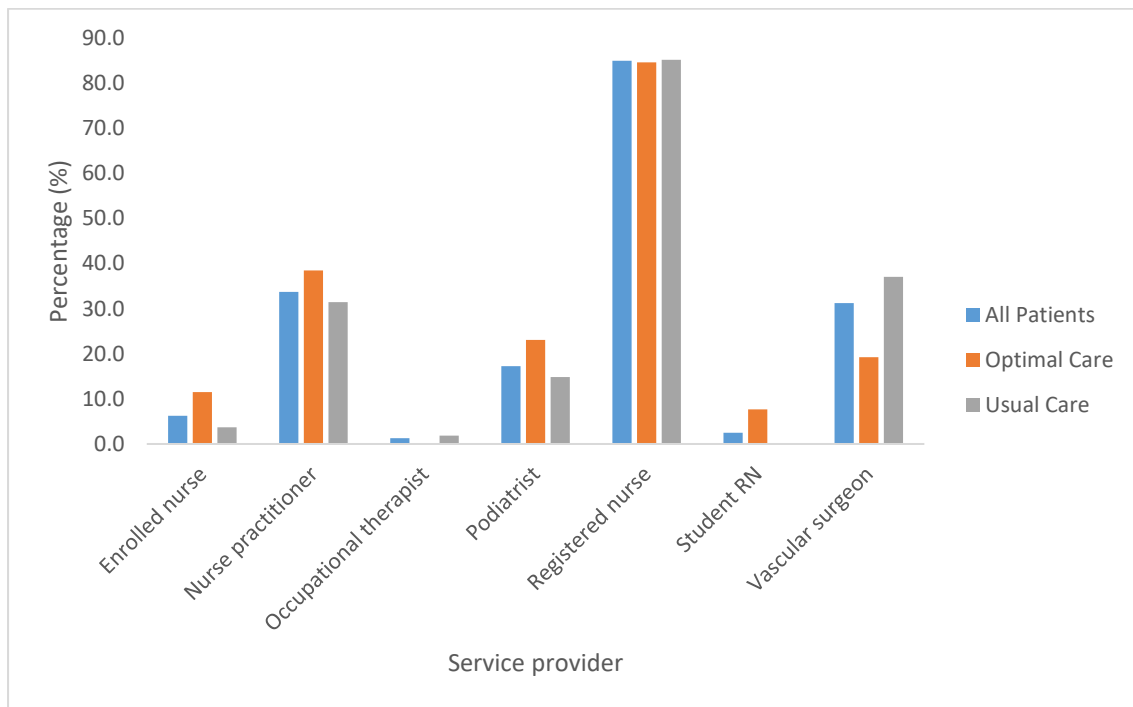


Figure 2: Use of additional services at baseline

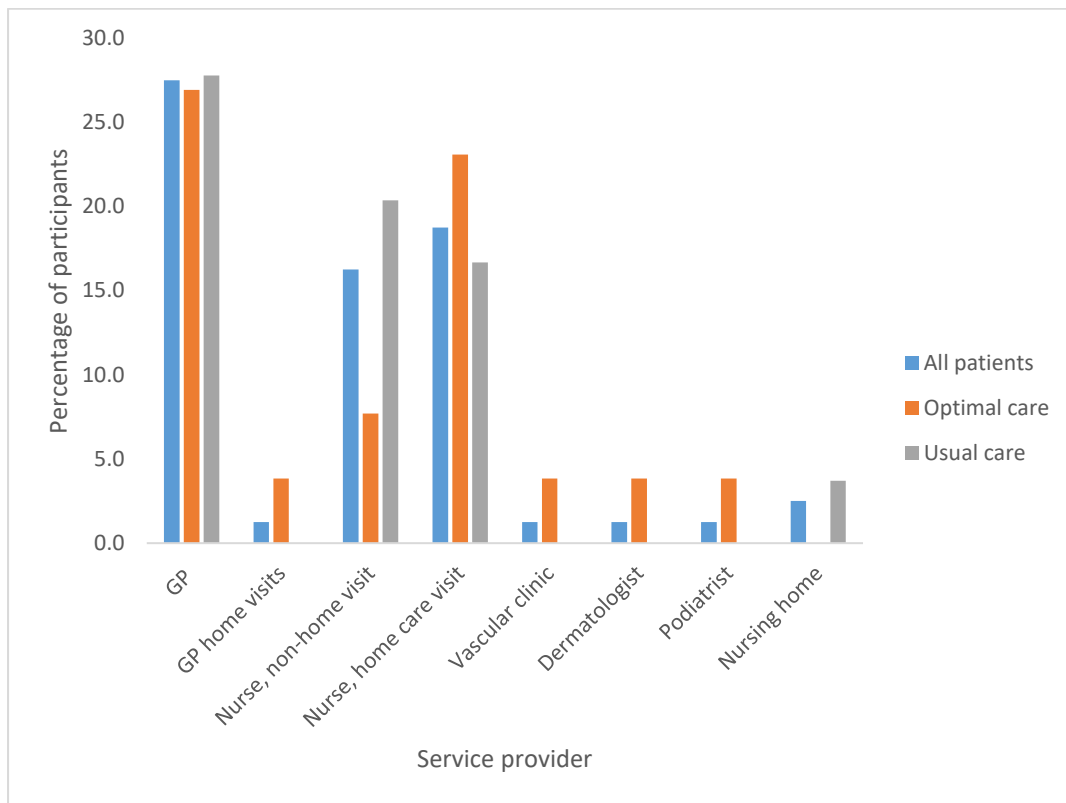


Figure 3: Weekly cost of VLU management by clinic

