Insights from the NHS England Hospital Episode Statistics on Hospital Admissions for Patients with Chronic Limb Ischemia in Superficial Femoral and Popliteal Arteries

Iqbal K, Lyons J

W. L. Gore & Associates (U.K.) Ltd.

OBJECTIVE

Chronic limb ischemia (CLI) is the most severe stage of peripheral arterial disease and is characterized by chronic pain at rest, tissue loss and a high risk of amputation¹ and death.² CLI is a major burden for patients and health care systems,³ necessitating costly interventions to restore blood flow and prevent limb loss.

This study aimed to provide an overview of inpatient characteristics and the cost of treating patients with CLI in the superficial femoral and popliteal arteries (SFA/PA).

METHODS

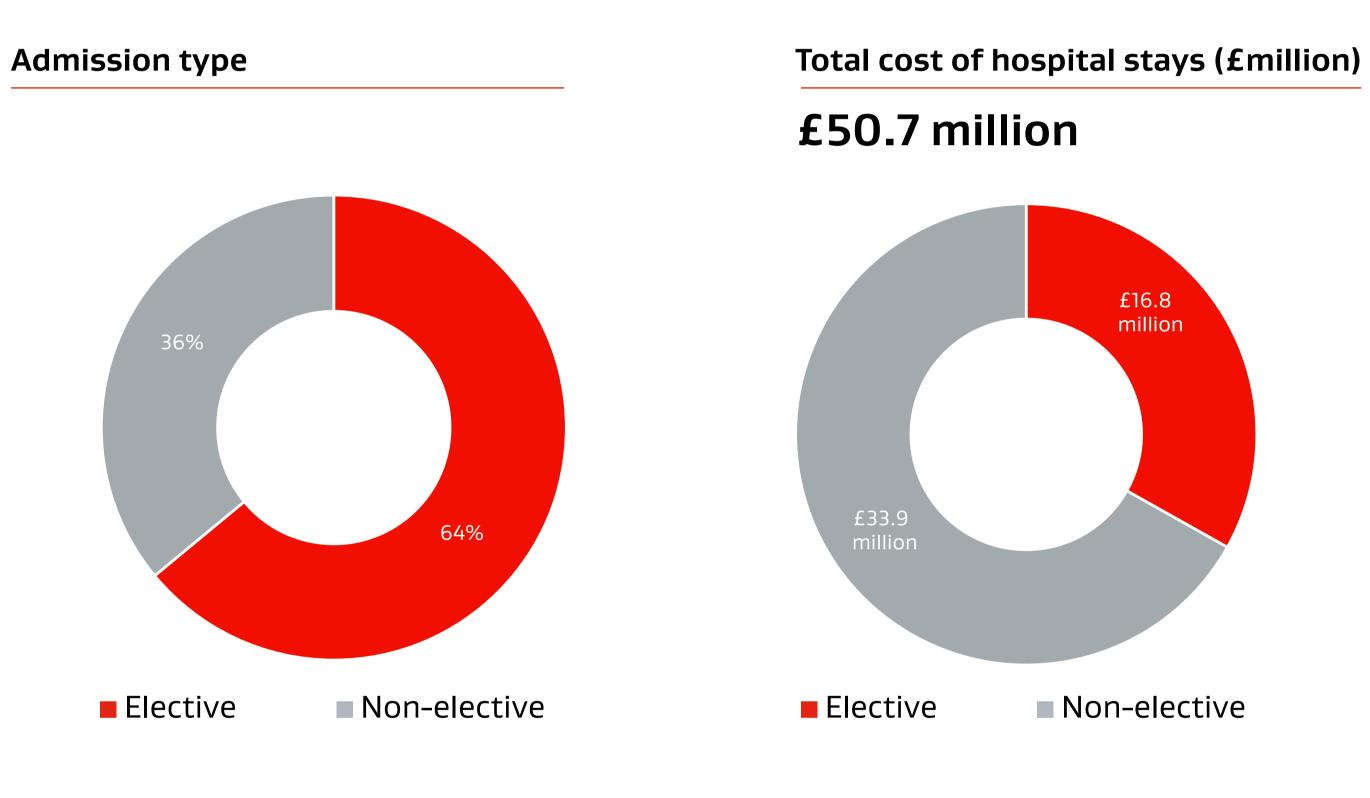
Patients diagnosed with CLI between April 2022 and March 2023 were identified from the Hospital Episode Statistics (HES) dataset* based on specific diagnosis (ICD) and procedure (OPSC) codes. Age, gender, treatment cost, type of admission and return to care were analyzed.

RESULTS

- The study identified 7,325 CLI patients who had undergone revascularization of the SFA/PA.
- Most were men (67%) over 65 years old (73%). Tissue loss had occurred in 36% of patients.
- Overall, 64% of admissions were elective (planned) and 36% non-elective (emergency).

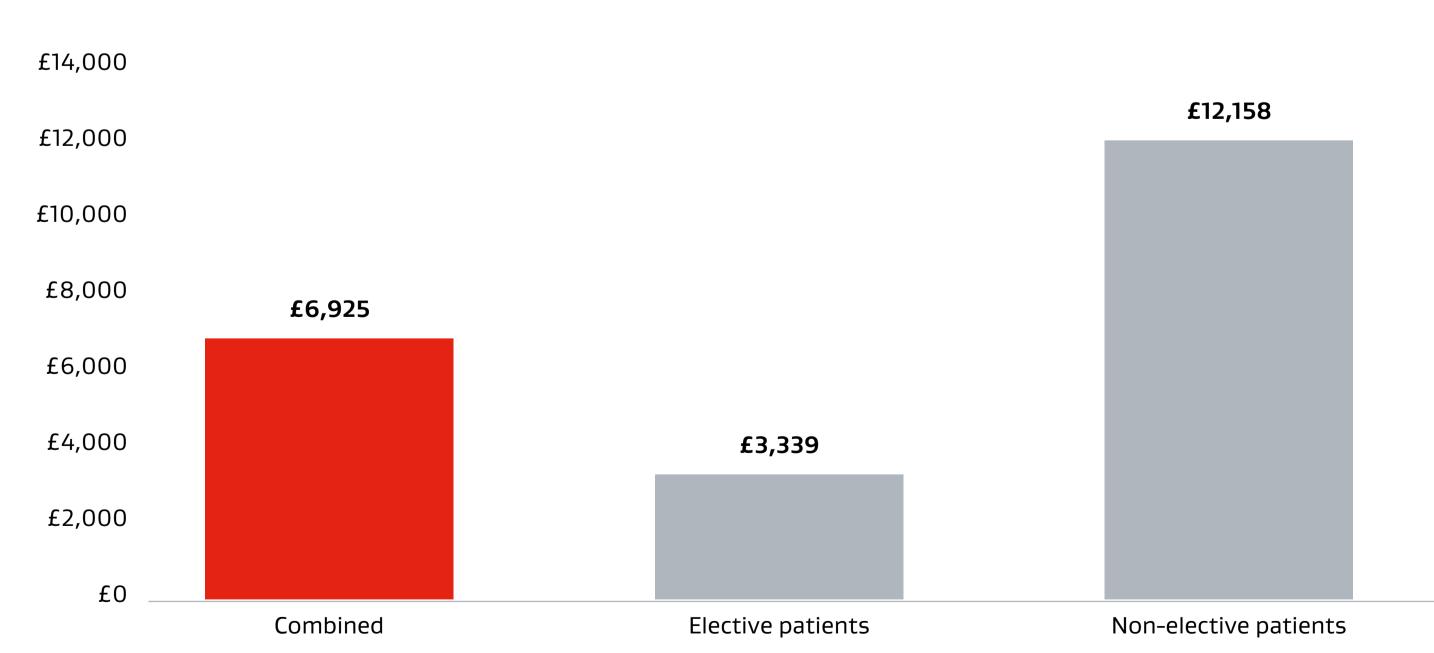
The total cost of the hospital stays was £50.7 million, of which 67% (£33.9 million) was spent on non-elective procedures and 33% (£16.8 million) on elective procedures (Figure 1).

Figure 1 – Admission type and total cost of hospital stays



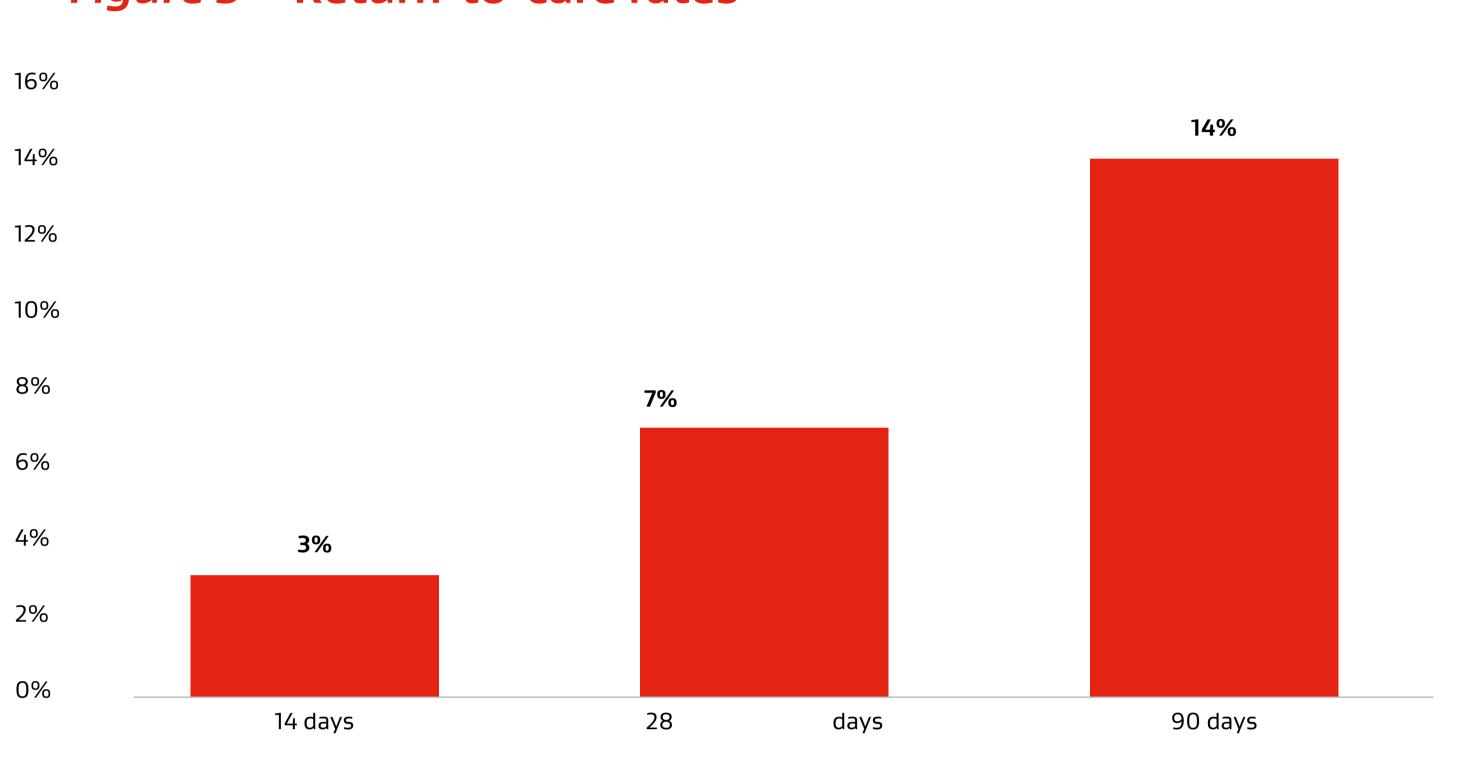
Overall, the average hospital cost per patient was £6,925. The average hospital cost per patient for non-elective admissions was £12,158, over 3.5 times higher than elective admissions at £3,339 (*Figure 2*).

Figure 2 – Average hospital cost per patient



Return-to-care rates ranged from 3% at 14 days to 14% at 90 days (*Figure 3*). The 30-day emergency re-admission rate was 7%.

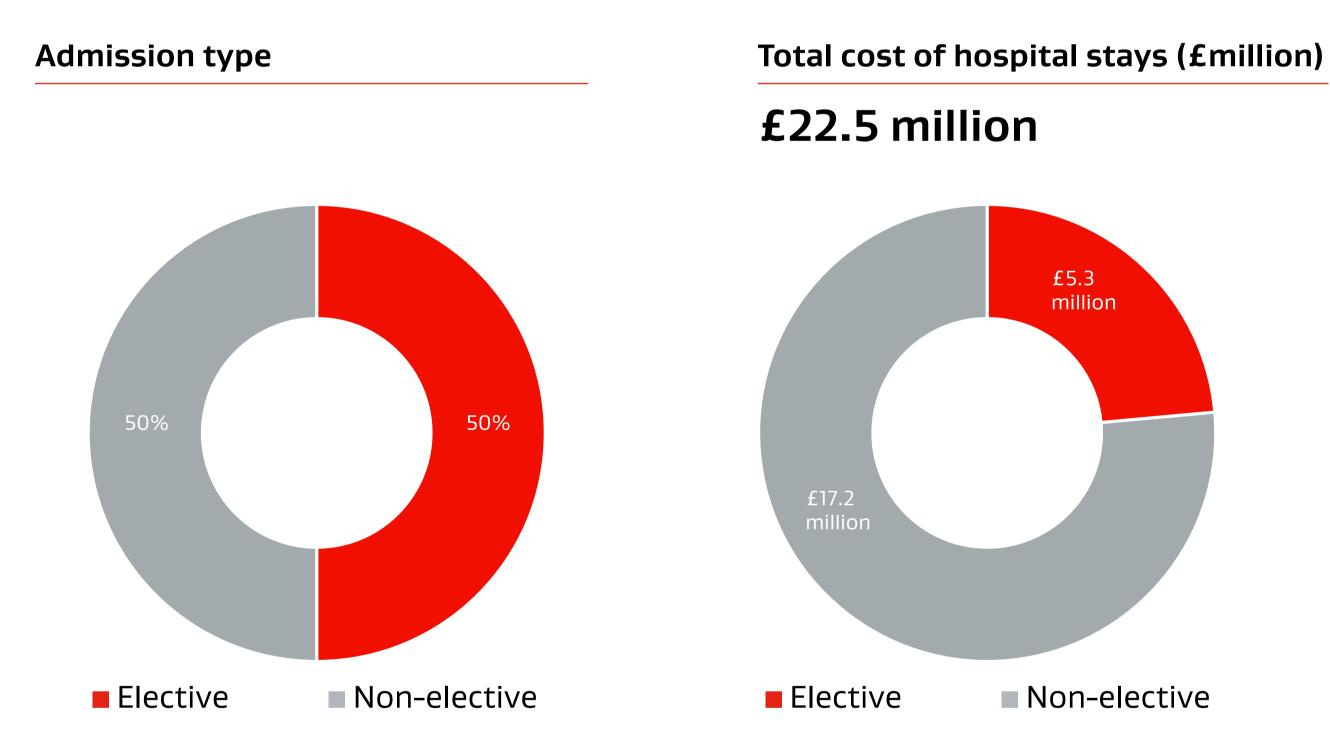
Figure 3 – Return-to-care rates



In the subgroup with tissue loss, the total cost of hospital stays was £22.5 million; the rate of non-elective admissions was higher at 50% (*Figure 4*). The average hospital cost per patient was higher, at £8,532.

Figure 4 – Subgroup of patients with tissue loss

Admission type and total cost of hospital stays



CONCLUSIONS

This study provides an overview of the CLI inpatient characteristics using real-world evidence from HES.

The results show that CLI is a costly condition, with a high proportion of patients presenting with tissue loss and requiring non-elective admissions.

These findings can inform future research and decision-making on the optimal management of CLI patients in NHS England.

* HES data sourced from: VANTAGE® UK Copyright 2024 CorEvitas LLC, all rights reserved.

REFERENCES

- 1. Reinecke H, Unrath M, Freisinger E, et al. Peripheral arterial disease and critical limb ischaemia: still poor outcomes and lack of guideline adherence. European Heart Journal 2015;36(15):932-938.
- 2. Stern JR, Wong CK, Yerovinkina M, et al. A meta-analysis of long-term mortality and associated risk factors following lower extremity amputation. *Annals of Vascular Surgery* 2017;42:322-327.
- 3. Duff S, Mafilios MS, Bhounsule P, *et al*. The burden of critical limb ischemia: a review of recent literature. *Vascular Health and Risk Management*. 2019;15:187-208. DOI: 10.2147/VHRM. S209241.



Refer to Instructions for Use at eifu.goremedical.com for a complete description of all applicable indications, warnings, precautions and contraindications for the markets where this product is available. Ryonly

Products listed may not be available in all markets.
VANTAGE is a trademark of CorEvitas LLC.

eifu.goremedical.com

GORE, Together, improving life and design

GORE, Together, improving life and designs are trademarks of W. L. Gore & Associates. © 2024 W. L. Gore & Associates GmbH 24PL2134-EN01 OCTOBER 2024

