

Evolution of Approaches for CLTI Management after the Publication of BEST-CLI

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BACKGROUND

- Chronic limb-threatening ischemia (CLTI) is the most severe peripheral arterial disease process and requires revascularization treatment for limb salvage
- The BEST-CLI study demonstrated the benefit of an open surgical first over endovascular first approach in patients with CLTI
- It remains to be evaluated if the findings of the BEST-CLI study have affected the treatment choices of surgeons dealing with CLTI

METHODS

Study Design

- The VQI database was used to identify patients with CLTI who underwent Peripheral Vascular Intervention (PVI) or open bypass for infrainguinal revascularization from June 2022 to September 2023 (5 months pre and 11 post BEST-CLI study, the results of which were published in November 2022)

Outcomes and Analysis

Trends in the proportions of PVI or bypass over time were analyzed using Chi-squared trend test

- PVI and bypass groups were stratified by gender and disease extent (femoropopliteal, infrapopliteal, or multilevel treatment)
- Bypass patients were further stratified by graft or vein type
- PVI was further stratified by TransAtlantic Inter-Society Consensus for the Management of Peripheral Arterial Disease (TASC II) classification

Figure 1. Proportions of PVI versus bypass in the VQI before and after BEST CLI publication, stratified by extent of treatment.

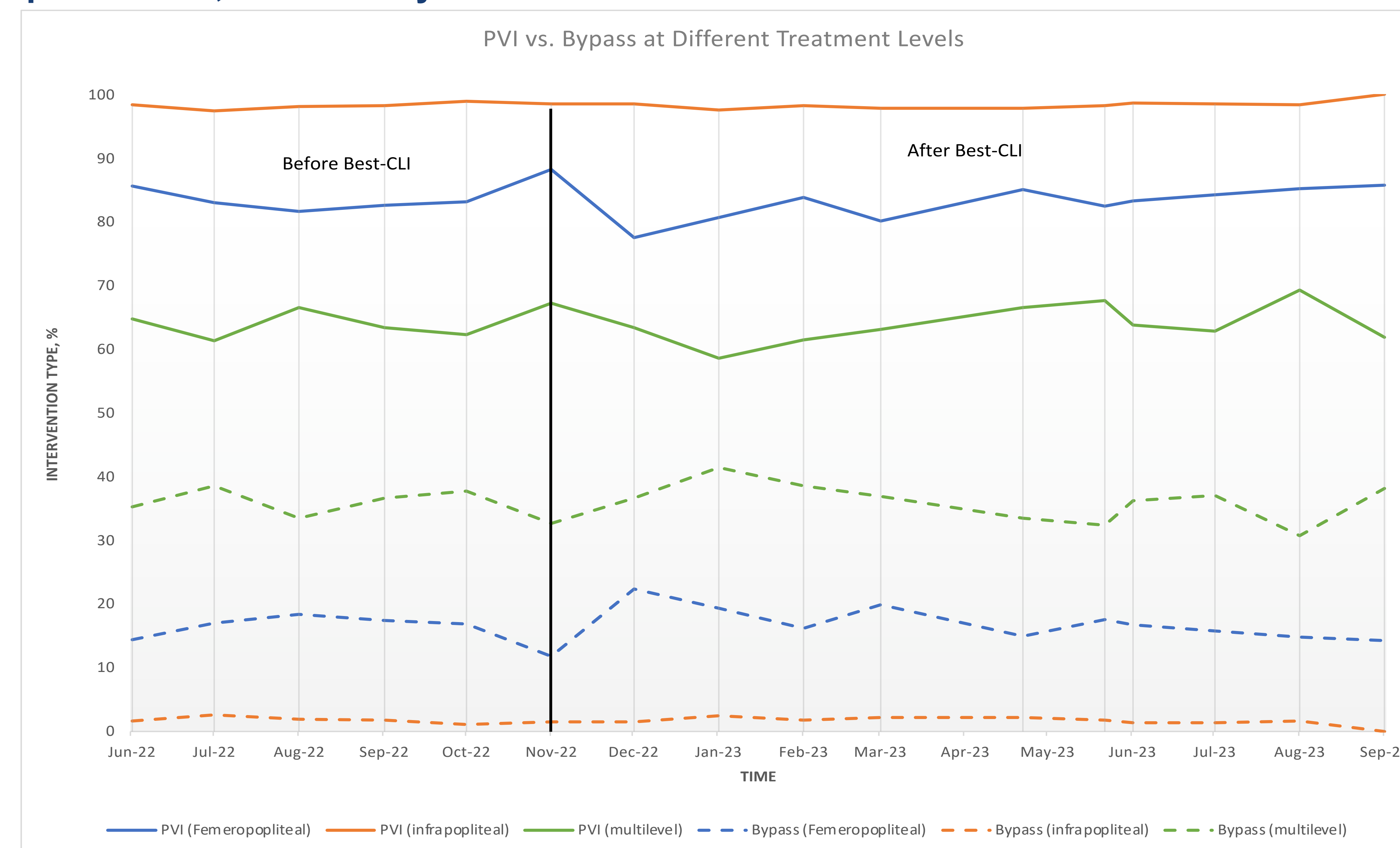
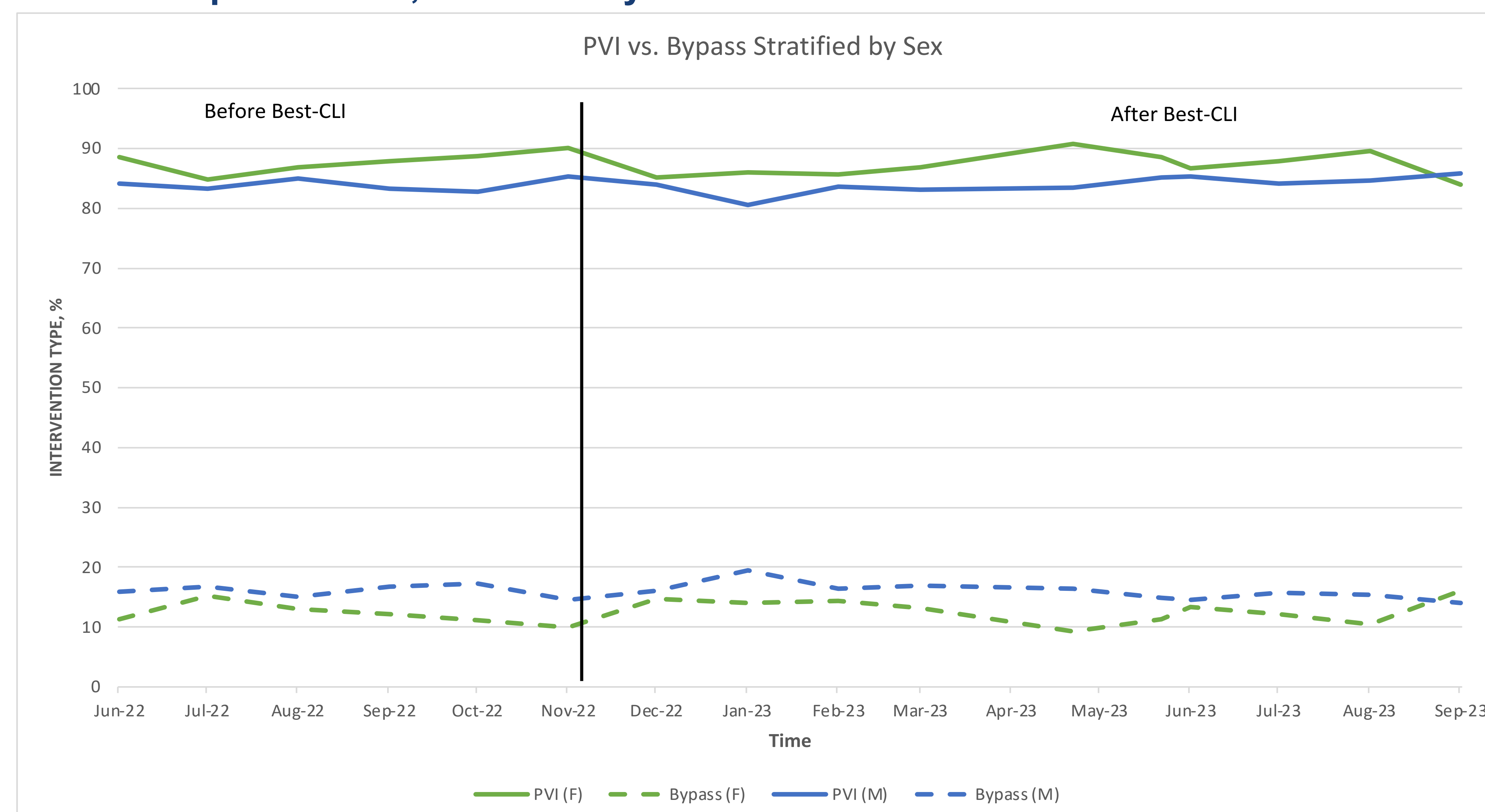


Figure 2. Proportions of PVI versus bypass in the VQI before and after BEST CLI publication, stratified by sex.



RESULTS

- A total of 184,130 patients were identified (21% bypass).
- No significant change over time was noted in the proportion of bypass procedures (14% to 15%; $p=0.397$).
- Stratification by gender showed the bypass proportion remained constant over time in males (16% to 14%; $p=0.777$)(Figure 2) and females (11% to 16%; $p=0.388$)(Figure 2).
- No significant change over time in femoropopliteal (14% to 14%; $p=0.145$)(Figure 1), infrapopliteal (1.6% to 0%; $p=0.814$)(Figure 1), and multilevel treatment (35% to 38%; $p=0.667$)(Figure 1).
- No significant trends were seen after stratification by vein type for bypass ($p=0.927$), or by TASC classification for PVI ($p=0.276$).
- Although only 21% of the overall cohort underwent bypass, this proportion was considerably higher in those with multilevel treatment (36%).

CONCLUSION

- In almost a year following the BEST-CLI study publication in November 2022, there was no significant change in CLTI treatment preferences within US centers participating in the VQI.
- This could be explained due to uncertainty of practicing physicians regarding the generalizability of the trial results considering the exclusion criteria for participants and/or the alarmingly low PVI technical success rate as reported in the trial.