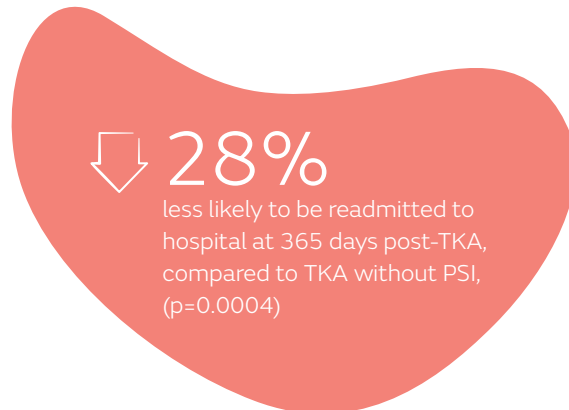
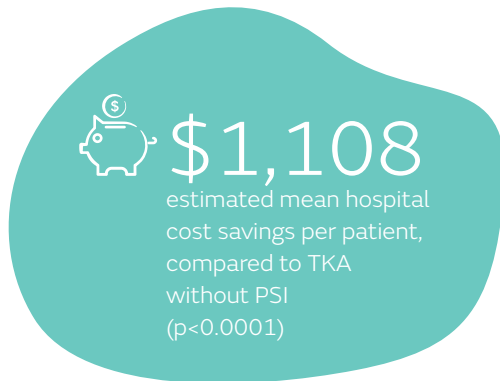


+ Evidence in focus

Poster summary: Thomas S, et al. *J Knee Surg* (2020)*

VISIONAIRE[◇] Patient Matched Technology patient-specific instrument (PSI) guided total knee arthroplasty (TKA) is associated with significantly reduced estimated total hospital cost and hospital readmissions within the first year post-TKA compared to TKAs without PSI

+ Plus points



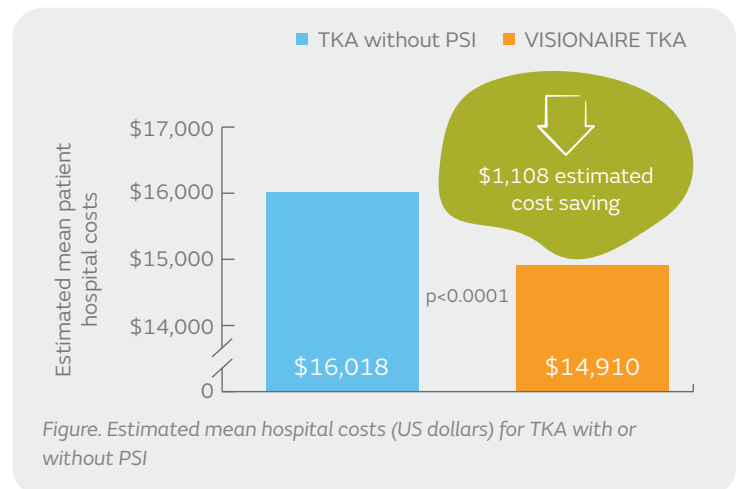
Overview

- Retrospective review of patients who underwent primary TKA for osteoarthritis with PSI (VISIONAIRE) or without PSI in the Premier Healthcare database (2014-Q2 2017)
- Study matched 3,358 TKAs with VISIONAIRE against 3,358 TKAs without PSI
- Groups were matched to control for patient, hospital and clinical characteristics using 1:1 propensity score matching
- Models were used to estimate hospital-related costs (2017 US dollars) and readmission rates at 30, 60, 90 and 365 days post-TKA

Results

Compared with patients receiving TKA without PSI, those receiving TKA with VISIONAIRE:

- Experienced significantly reduced estimated mean patient hospital costs (p<0.0001; Figure)
- Were significantly less likely to be readmitted during the first 365 days:
 - 31% less likely at 30 days (p=0.0218)
 - 35% less likely at 60 days (p=0.0022)
 - 32% less likely at 90 days (p=0.0031)
 - 28% less likely at 365 days (p=0.0004)



Conclusions

VISIONAIRE PSI guided TKA is associated with significant reductions in estimated total hospital cost and likelihood of being readmitted to hospital within 1 year post-TKA, compared to TKAs without PSI.

Citation

*Thomas S, Patel A, Patrick C, Delhougne G. Total hospital costs and readmission rate of patient-specific instrument in total knee arthroplasty patients. *J Knee Surg*. 2020. doi:10.1055/s-0040-1713353.

Available at: [The Journal of Knee Surgery](https://www.thekneesurgery.com)