**Meniscal repair is a cost-effective treatment for most patients**
Better outcomes and lower overall costs shown relative to partial meniscectomy

### Study design

- A decision-analytic disease progression model† was developed to assess clinical outcomes and costs associated with meniscal repair and partial meniscectomy over a 30-year time horizon

### Key results

- Compared with partial meniscectomy, meniscal repair was associated with a lower incidence of osteoarthritis (OA) and total knee replacement (TKR)
- $2,384 per-patient cost savings associated with meniscal repair when compared with partial meniscectomy
- $43 million annual projected savings if 10% of current meniscectomies were repaired

### Conclusion

When compared with meniscectomy, meniscal repair is associated with improved long-term outcomes and lower overall costs making it the dominant treatment strategy from a health-economic perspective

### Considerations

- Projected savings may be considered conservative as costs are taken from Medicare third-party payer perspective, and private payer costs for these treatments are likely be higher
- The overall savings were adjusted to represent 2014 market value

### Study citation


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*Decision analytical modelling compares the expected costs and consequences of decision options by synthesising information from multiple sources and applying mathematical techniques, usually with computer software. BMJ. 2011;342:d1766
There is an overall cost-saving of $2,384 per patient with meniscal repair vs. meniscectomy. How was this calculated?

- The cost model considers:
  - Costs per intervention (meniscal repair vs. meniscectomy)
  - The risk of developing, and subsequent costs associated with progression to OA or TKR for each group
- These costs are looked at over a 30-year timeline; considered reasonable for a degenerative condition

Result
Taking into consideration the cost of the index surgery and subsequent associated costs, the average cost/patient for meniscal repair was calculated at $12,046 and $14,430 for meniscectomy, the difference being $2,384.

How did the authors project a saving of $43 million by performing 10% more meniscal repairs?

- The projected saving is based on the findings of the cost model
- The authors determined:
  - The current number of meniscal repair and meniscectomy procedures per age-group (15-70 year range)
  - In all age groups, the percentage of meniscectomies vs repair was considerably higher
  - The age-specific per-patient cost (index surgery and costs associated with treating future disease)
- The authors then looked at the impact of treating 10% more patients, in each age group, with repair in place of meniscectomy, and projected the cost saving
- The 10% increase was chosen by the author to represent a realistic shift in treatment choice