



Resource impact summary report

Resource impact

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Resource impact summary report

This summary report is based on the NICE assumptions used in the [resource impact template](#). Users can amend the 'Inputs and eligible population' and 'Unit costs' worksheets in the template to reflect local data and assumptions.

Recommendations

NICE has recommended AposHealth as a cost-saving option to manage knee osteoarthritis in adults only if non-surgical standard care has not worked well enough and their condition meets the referral criteria for total knee replacement surgery, but they do not want surgery.

Further data collection is recommended on quality of life, health resource use and long-term rates of knee replacement for people with knee osteoarthritis that meets the criteria for total knee replacement surgery, but who do not want surgery and are using AposHealth in the NHS.

Further research is recommended on AposHealth for people with knee osteoarthritis that meets the criteria for total knee replacement surgery who cannot have surgery and people who do not meet the referral criteria for total knee replacement surgery.

Eligible population for AposHealth

Around 4.8 million people aged 16 years and over in England have symptomatic clinically diagnosed osteoarthritis (Swain et al. 2020). Of these, 83% (3.96 million) are estimated to have knee osteoarthritis (Vos, Theo et al. 2012).

It is not known how many of these would not sufficiently benefit from non-surgical standard care treatment and could be eligible for AposHealth.

Based on the [National Joint Registry 20th Annual Report \(2023\)](#), around 84,400 knee replacement procedures were carried out by the NHS in England and Wales in 2022. Of these it is estimated around 97.4% (82,200) were attributable to osteoarthritis.

Treatment options for the eligible population

Treatment of knee osteoarthritis depends on the severity of symptoms. Current standard care treatment options include pharmacological and non-pharmacological treatments. See the [care pathway section in the guidance](#).

Referral for knee surgery should be considered for people who experience joint symptoms (such as pain, stiffness, reduced function or progressive joint deformity) that have a substantial impact on their quality of life, and if non-surgical management is ineffective or unsuitable. Non-surgical standard care includes many different elements of healthcare resources, and it is not clear what elements of non-surgical standard care resources are avoided when using AposHealth. The non-surgical standard care resources avoided when using AposHealth will need to be estimated at a local level as this will be determined by the non-standard care that is currently in place.

For more information about the treatments, such as dose and average treatment duration, see the [resource impact template](#).

Financial resource impact (cash items)

The total upfront cost of AposHealth is estimated at £800 excluding VAT (£960 including VAT) per person per treatment programme for both knees. The treatment programme includes AposHealth shoes and parts (unlimited while in the programme), access to standardised outcome measures on the AposHealth clinical tracking system and training of healthcare professionals (typically consisting of 6 hours theory training, and 5 to 10 observed calibrations that are delivered as part of routine service provision). There could be additional costs for backfill of staff attending training.

Potential cost savings from AposHealth mainly come from a reduction in surgical standard care resource use and a reduction in knee replacement surgery. The unit cost of knee replacement surgery is £9,872 ([NHS National Cost Collection data, 2022-23](#)) based on the average prices of knee surgery per integrated care board (ICB).

A [resource impact template](#) has been developed and published alongside this report. The template provides an illustration of the potential resource impact based on an estimated 100 people using AposHealth over 5 years compared to standard care. The figures are based on the economic model (national prices tab in the template).

Table 1 highlights the most significant savings that are attributable to fewer surgeries associated with AposHealth compared to standard care. Users will need to use local assumptions to estimate the potential resource impact for their locality.

Table 1 Financial impact (cash items) in England

Details	Year 1	Year 2	Year 3	Year 4	Year 5	5-year cumulative total
Upfront cost with AposHealth, £	96,000	–	–	–	–	96,000
Number of people having AposHealth	100	91	84	76	70	100
Number of people having knee surgery	–	–	–	–	–	–
With AposHealth	9	9	8	7	7	40
With standard care	34	23	15	10	7	89
Capacity saving per year	25	14	7	3	0	49
Equivalent list saved (per 4-hour theatre list; a)	12	7	3.5	1.5	0	24
Cost of knee surgery (b)	–	–	–	–	–	–
With AposHealth, £	93,150	85,050	77,660	70,920	64,760	391,540
With standard care, £	336,050	225,150	150,850	101,070	67,720	880,840
Savings per year, £	242,900	140,100	73,190	30,150	2,960	489,300
Cost of standard care	–	–	–	–	–	–
With AposHealth, £	1,710	1,560	1,420	1,300	1,190	7,180
With standard care, £	6,160	4,130	2,770	1,850	1,240	16,150
Savings per year, £	4,450	2,570	1,350	550	50	8,970
Net savings, £	247,350	142,670	74,540	30,700	3,010	498,270

The equivalent list data is based on the Getting it Right First Time (GIRFT) theatre productivity standards HVLC (high-volume, low complexity) cases per 4-hour theatre list.

For further analysis or to calculate the financial impact of cash items, see the [resource impact template](#).

Capacity impact

The use of AposHealth may also save costs associated with surgery complications, and revision of knee surgery and rehabilitation. Also, available evidence further suggests a 15% reduction in healthcare resource use such as GP, orthotic services and orthopaedic appointments.

The economic model included the benefit associated with these non-surgical interventions with a 15% reduction when AposHealth is used instead of standard care. But the economic model did not provide a breakdown of the elements that constituted the benefit.

The evidence indicates non-surgical standard care for people with severe osteoarthritis is associated with an additional 2.58 GP appointments per person per year compared to people without osteoarthritis. Based on 100 people this translates to 258 GP appointments per year. With AposHealth this reduces to 218, so saving 39 GP appointments per year.

Because the evidence for the potential cost savings is limited, further data collection is recommended to understand if cost savings are made once AposHealth is used in the NHS.

For further analysis or to calculate the financial capacity impact from a commissioner (national) and provider (local) perspective, see the [resource impact template](#).

Key information

Table 2 Key information

Time from publication to routine commissioning funding	N/A
Programme budgeting category	PBC15 Problems of the Musculoskeletal system
Commissioner(s)	Integrated care boards
Provider(s)	Primary care, community health care and secondary care - acute

Pathway position	N/A
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About this resource impact summary report

This resource impact summary report accompanies the [NICE medical technologies guidance on AposHealth for knee osteoarthritis](#) and should be read with it.

References

1. S. Swain y, A. Sarmanova z, C. Mallen x, C.F. Kuo k, C. Coupland, M. Doherty y and W. Zhang y. Trends in incidence and prevalence of osteoarthritis in the United Kingdom: findings from the Clinical Practice Research Datalink (CPRD). *Osteoarthritis and Cartilage* volume 2, issue 6, June 2020, Pages 792-801.
2. Vos, Theo et al. "Years lived with disability (YLDs) for 1160 sequelae of 289 diseases and injuries 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010." *Lancet* (London, England) vol. 380,9859 (2012): 2163-96. doi:10.1016/S0140-6736(12)61729-2.
3. NHS National Cost Collection data, 2020-21. National Schedule of NHS Costs Year – All NHS trusts and NHS foundation trusts – HRG Data. [NHS England 2023](#).