



# Resource impact summary report

Resource impact

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NICE has recommended AposHealth as a cost saving option to manage knee osteoarthritis in people 16 years and over 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 they 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.

Around 4.8 million people aged 16 years and older in England have symptomatic clinically diagnosed osteoarthritis ([Swain et al. 2020](#)). Of them, 83% (3.96 million) are estimated to have knee osteoarthritis ([Vos et al. 2012](#)). It is not known how many would not sufficiently benefit from non-surgical standard care treatment and could be eligible for AposHealth. However, each year around 84,000 knee replacement procedures are carried out in the NHS ([NHS National Cost Collection data, 2020/21](#)).

AposHealth costs £875 (excluding 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). Total upfront cost with AposHealth is estimated at £1,050 including VAT. There could be additional costs for backfill of staff attending training.

Potential cost savings from AposHealth mainly come from a reduction in non-surgical standard care resource use and a reduction in knee replacement surgery. The weighted average cost of knee replacement surgery is £9,800 (NHS National Cost Collection data, 2020/21). This cost could be avoided if AposHealth prevent progression to the requirement for surgery. Table 1 shows potential savings with AposHealth compared with surgery.

Details	Year 1	Year 2	Year 3	Year 4	Year 5	5-year cumulative total
<b>Upfront cost with AposHealth</b>	<b>£105,000</b>					<b>£105,000</b>
People receiving AposHealth	100	92	84	77	71	100
<b>Number of people receiving knee surgery</b>						

With AposHealth	8	7	6	6	5	32
With standard care	33	22	14	9	6	84
<b>Capacity saving per year</b>	<b>25</b>	<b>15</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>52</b>
Equivalent list saved (per 4-hour theatre list), based on <a href="#">GIRFT standards</a>	12.5	7.5	4	1.5	0.5	26
<b>Cost of knee surgery, based on average cost (NHS National Cost Collection Data 2020/21)</b>						
With AposHealth	£78,400	£68,600	£58,800	£58,800	£49,000	£313,600
With standard care	£323,400	£215,600	£137,200	£88,200	£58,800	£823,200
<b>Savings per year</b>	<b>£245,000</b>	<b>£147,000</b>	<b>£78,400</b>	<b>£29,400</b>	<b>£9,800</b>	<b>£509,600</b>

In addition to the savings from reduced surgery, 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 appointments.

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, therefore saving 39 GP appointments per year.

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. 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.

Due to uncertainty around the eligible population and the potential benefits when used in the NHS, the size of the resource impact should be determined at a local level. A local [resource impact template](#) is available to help organisations estimate the resource impact.

The AposHealth treatment plan takes place over the course of 1 year and consists of an initial patient assessment, personalisation of the device, at home treatment and ongoing monitoring. Patients should be offered 1 to 2 follow ups per year after the treatment plan as part of ongoing monitoring if continuing to use AposHealth.

AposHealth improves pain, stiffness and function. Clinical evidence also suggests that AposHealth may delay knee surgery, but the length of the delay is uncertain. Clinical and patient expert advisers noted that the reduction of knee replacement surgery seen in the evidence reflects their real-world experience of using the technology for up to 7 years in the NHS.

Arthritis services are commissioned by integrated care systems. Providers are NHS hospital trusts and primary care providers, including GPs.