

MedTech Consulting Case Study

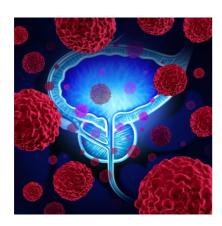
Lucida - Health Economic Evaluation



Lucida Medical develops software based on artificial intelligence methods (machine learning and image processing) to enable radiologists to find cancer accurately, consistently, and quickly using MRI.

The Brief

Innovators at Lucida Medical developed Prostate Intelligence (PITM) to support the diagnosis of prostate cancer in patients. Lucida Medical wanted to demonstrate the difference that PITM would make in the diagnosis pathway.



Our Approach

HEE used its know-how in the prostate cancer pathway to propose a cohort model which could quantify the benefits accrued over the lifetime of an average patient.

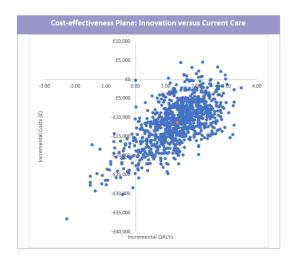
Our literature review identified several key publications as used by NICE, which became key sources for building a decision analytical model using iterative decision tree models combined with Markov models to simulate the cost and health outcomes of a patient cohort over their lifetime.

Cost and quality-adjusted life years (QALYs) for the cohort in the current care pathway were compared to the same outcomes with the innovation. Uncertainties were accounted for using probabilistic sensitivity analysis.



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The results from the analysis were visualized in an easy-to-understand infographic.



Outcomes

The cost-effectiveness analysis showed that the innovation improved the diagnosis of prostate cancer and generated a statistically significant cost saving for the NHS. The interactive model allowed the innovator to model different alternative scenarios and patient sub-groups, while the infographic became core material in the client's promotional market access material.

"Evelyne and her colleagues did a tremendous job to create a powerful model of current clinical practice in prostate cancer and how we could improve it, giving us insight into the dynamics of the NHS's needs as well as strong evidence of benefit." Dr Antony Rix, CEO, Lucida Medical

About Health Tech Enterprise

Our business and innovation management services support healthcare innovators throughout the product development journey, from concept to commercialisation and final roll-out.

We offer healthcare market and health economics insights and evaluation, as well as regulatory, business and IP advice and management. We also advise on strategic market access, support with securing funding and deliver training and entrepreneurship services.

Our experienced team has partnered with more than 180 technology companies from around the world, to successfully develop, commercialise and market their health technology products for the UK and international healthcare systems.