

Herefordshire & Worcestershire Clinical Commissioning Policy Collaborative Brief Technology Assessment:

AREA: Laser Treatment for Myopia and Hyperopia

<p>Background</p>	<p>Laser refractive eye surgery is used to correct eyesight defects such as short-sight (myopia), long-sight (hyperopia) and astigmatism (uneven focusing power) by changing the shape of the cornea. The cornea is a clear layer that covers the surface of the eye – its shape determines the eyes focusing power.</p> <p>The purpose of laser surgery is to reduce the need for glasses and contact lenses. For most patient’s vision after laser correction is similar to vision in contact lenses before surgery, without the potential discomfort and limitations on activity. Glasses may still be required for some activities after treatment.</p> <p>There are a number of different laser refractive surgery techniques available:</p> <ul style="list-style-type: none"> ➤ LASIK (Laser In Situ Keratomileusis) ➤ SMILE (Small Incision Lenticule Extraction) ➤ Surface laser treatments (PRK, LASEK, TransPRK) <p>Problems can occur in all forms of eye surgery during the operation or afterwards in the healing period. Problems can result in permanent, serious loss of vision. More commonly, problems can be corrected with changes in medication or additional surgery. Side-effects after surgery may include:</p> <ul style="list-style-type: none"> ○ light scatter, increased flare from oncoming car headlights and difficulty driving at night. Lasting problems are unusual but may still occur. ○ Intermittent blurring and eye surface discomfort. This normally returns to normal within a few months. ○ Subconjunctival haemorrhages (red blotches) on the white of the eye. They are particularly common after LASIK. They do not affect eye health but can take up to 6 weeks to go away completely.
<p>Evidence to support the Technology</p>	<p>NICE IPG164 March 2006: Photorefractive (laser) surgery for the correction of refractive errors is safe and efficacious for use in appropriately selected patients. However, patients need to understand the potential risks associated with having the procedure which include failure to achieve the expected improvement in unaided vision, development of new visual disturbances, corneal infection and flap complications. Clinicians should have adequate training before performing these procedures and they should audit and review clinical outcomes of all patients. In seven randomised controlled trials included in the systematic review of the evidence there were no significant differences between the three procedures (PRK, LASEK, LASIK) in the proportion of eyes treated for myopia or myopic astigmatism achieving the predicted refractive outcome. Data from more than 2000 eyes treated with PRK for myopia showed that 69% of eyes had achieved within 0.5Dioptres (a unit of measurement for the power of the eye) of their intended correction, and 89% had achieved within 1.0D. Data from a case series of more than 1800 eyes undergoing LASEK for myopia or</p>

	<p>astigmatism showed that a median of 75% of eyes were within 0.5D and a median of 92% of eyes were within 1.0D of their intended correction at 3-6 months follow-up. Data from eyes treated with LASIK for myopia or astigmatism showed that 77% were within 0.5D and 91% were within 1.0D of their intended correction at 3-12 months. One RCT found LASEK to be significantly more accurate than PRK for eyes with hyperopia. Final uncorrected visual acuity achieved was similar for all three techniques.</p> <p>A search of the Cochrane database established four systematic reviews; each review compared two of the different laser refractive eye surgery techniques. A need for large, well-designed RCTs to estimate any magnitude of difference in efficacy or adverse events was identified.</p> <p>The Royal College of Ophthalmologists website has information for both health care professionals and patients on refractive surgery. Royal College of Ophthalmologists Professional Standards for Refractive Surgery (reviewed May 2018) provides clear guidance on the level of experience and knowledge refractive surgeons should have, as well as the environment for performing surgery safely, good communication and teamwork, continuity of care, and maintaining trust. Refractive eye surgery is functional, not cosmetic, and can reduce dependence on spectacles and contact lenses however, it does share many similarities with cosmetic surgery. For most patients, refractive surgery is elective and self-funded and is predominantly provided by the private sector.</p> <p>The General Medical Council has indicated that refractive surgery is considered by them to be within the scope of their April 2016 'Guidance for doctors who offer cosmetic interventions'. Cosmetic intervention means any intervention, procedure or treatment carried out with the primary objective of changing an aspect of a patient's physical appearance.</p>
Future Pathways of Care	This statement has no impact on current or future pathways of care for patients with eye health conditions. This guidance will be reviewed in line with the publication of any update to the NICE guidance referred to in this document.
Financial implications arising from new pathway of care	No financial implications are identified currently.
Implications	There are no perceived implications to the CCG as a result of the application of this statement on the responsible population.
CCPC Recommendations	<p>Laser refractive eye surgery for myopia and hyperopia is not routinely commissioned by Hereford and Worcestershire CCG.</p> <p>Eye tests and optical vouchers are provided free of charge by the NHS to eligible patients to correct myopia and hyperopia. Corrective laser surgery is considered a cosmetic treatment and compared to the use of spectacles or contact lenses, not an efficient use of NHS resources.</p>
<p>Approved by Herefordshire & Worcestershire Clinical Commissioning Executive Committee:</p> <p>1st July 2020</p> <p>Published: 01/07/2020</p>	<p>Date to Initiate Review: July 2023</p> <p>Documents will be reviewed as a minimum every 3 years. However, earlier revisions to the policy may be made in light of published updates to local and national evidence of effectiveness and cost effectiveness and/or recommendations and guidelines from local, national and international clinical professional bodies.</p>