

Optimising Hospital-Funded Contact Lens Provision at Frimley Park Hospital

Targeting Resources to Maximise Patient Benefit and Cost Effectiveness

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Background

Within the National Health Service, contact lenses may be provided through hospital eye services for patients whose visual needs cannot be adequately met with spectacle correction alone. The rationale for hospital-funded contact lens provision depends on medical necessity, typically where spectacles would result in suboptimal visual rehabilitation, unacceptable optical aberrations, or intolerable aniseikonia.

Cornea clinics commonly assess eligibility based on established indications including corneal ectasia, such as keratoconus, where the irregular corneal surface precludes adequate spectacle correction; high ametropia exceeding thresholds where spectacle lens weight, thickness, and peripheral distortion significantly impair quality of vision; significant anisometropia causing symptomatic aniseikonia and compromised binocularity; aphakia, particularly where intraocular lens implantation is contraindicated or has failed; post-penetrating keratoplasty with resultant irregular astigmatism; and therapeutic or cosmetic indications including bandage lenses for corneal protection and prosthetic lenses(1,2).

The current criteria for hospital-funded contact lenses at Frimley Park Hospital comprise: high refractive error of 8 dioptres or greater; anisometropia of 4 dioptres or more; aphakia; keratoconus; history of penetrating keratoplasty; and bandage or cosmetic contact lenses.

Frimley Health NHS Foundation Trust currently subsidises the cost of patients' contact lenses, representing an annual expenditure exceeding £100,000 which is not reimbursed from a central NHS fund (3).

In light of this significant financial burden, by implementing refined contact lens referral guidelines, we aim to ensure equitable provision to patients with the greatest clinical need whilst delivering cost efficiencies for the Trust.

Proposed New Eligibility Criteria:

•Irregular astigmatism

•Conditions: keratoconus, pellucid marginal degeneration, post-PK/DALK, corneal scarring from microbial keratitis

•Best spectacle-corrected visual acuity (BSCVA) worse than 6/9 in both eyes with significant functional difficulty; specifically vision in glasses, not the contact lens vision.

•If fellow eye BSCVA ≥6/7.5, referral still considered if affected eye cannot be improved with spectacles alone and causes significant difficulty

•Lost/damaged lens replacement

•Maximum one replacement episode (1–2 lenses) per 12-month period

Aims

To implement a new eligibility criteria to ensure that hospital-funded contact lenses are offered to those patients with the greatest clinical need whilst achieving cost savings for the Trust.

Methods

A retrospective review of electronic records was undertaken for 177 patients currently receiving hospital-funded contact lenses.

Data collected:

•Underlying ocular condition

•Best spectacle-corrected Snellen visual acuity (BSCVA)

•Replacement contact lens requirements

Patients were categorised against the proposed refined criteria into three outcomes:

•Remain on hospital contact lens contract

•Discharged from contract (offered self-funding)

•Require a hospital consultation to determine ongoing eligibility

Diagnosis Distribution (n=177)

Diagnosis	Percentage
Keratoconus	66%
Corneal Scarring	6%
Other	28%

177

Patients Reviewed

44.9

Mean Age (years)

66%

Keratoconus (n=117)

26.5%

BSCVA <6/9 both eyes

Results

Of 177 patients, mean age was 44.9 years. Keratoconus was the most prevalent diagnosis (66%, n=117). The second most common indication was corneal scarring secondary to microbial or herpetic keratitis (n=11).

BSCVA was worse than 6/9 in both eyes in 26.5% of patients (n=47).

Following application of the proposed criteria:

•49.7% (n=88) met the threshold to remain on the hospital-funded contract

•32.8% (n=58) were recommended for discharge and offered self-funding

•25 patients require consultation to determine ongoing eligibility

•22 patients (12.4%) had insufficient visual acuity data

•1 patient was confirmed deceased

Patient Outcomes After Criteria Application

Outcome	Count (n)
Remain on contract	88
Discharged	58
Needs consultation	25
Data unavailable	22

Conclusion

Application of refined eligibility criteria for hospital-funded contact lens provision would result in approximately half of current patients (49.7%) continuing to receive funded contact lenses, with 32.8% of patients recommended for discharge from the contract and offered the option to self-fund privately.

The predominance of keratoconus as the underlying diagnosis (66%) reflects established patterns of hospital contact lens provision nationally (1,4).

Only 26.5% of patients had BSCVA worse than 6/9 in both eyes suggesting that a substantial proportion of patients currently on the contract may achieve functional vision with spectacles alone (5).

We identified patients benefiting from the contact lens contract whose vision was still reasonable in glasses. Implementing the criteria has the potential to deliver meaningful cost savings to the Trust. Patients discharged from the contract would continue to have the option to self –fund privately.

Assessment of significant functional difficulty was variable which underscores need for individualised clinical assessment alongside objective visual acuity thresholds.

Limitations

• 22 patients lacked accurate or up-to-date visual acuity measurements

• 25 patients require further consultation to assess functional difficulty and contact lens benefit

• Assessment of 'significant functional difficulty' was variable; some required contact lenses despite BSCVA better than 6/9, whilst others did not benefit or tolerate them

Further Work

•Extension of the study to capture a larger cohort of patients

•Full implementation and prospective evaluation of the new eligibility criteria

•Assessment of clinical and financial outcomes following criteria rollout

References

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