

CXL being offered on average for a year longer than privately.

Regarding units not currently offering CXL, the majority (64%) plan to initiate services in the near future.

Rapid CXL, in which UV power is increased and exposure time reduced, is used by 54% whereas 46% used standard CXL (all consultants offering CXL only under the NHS only use standard CXL). Lastly, 77% infuse riboflavin after removing the epithelium, 8% use transepithelial riboflavin infusion and 15% use both methods.

In summary, CXL is becoming more commonly available with the majority of departments planning to initiate services. Rapid CXL is becoming the favoured choice; however, the majority still remove the corneal epithelium. The NHS Commissioning Board has added CXL service to its consultation for specialized commissioning. Hence, CXL will probably be limited to specialist centres.

Online surveys are easily applied and useful in gauging a snapshot of opinion, but must be used with caution because of difficulty in responses subgroup analysis.

Conflict of interest

The authors declare no conflict of interest.

References

- 1 Raiskup-Wolf F, Hoyer A, Spoerl E, Pillunat LE. Collagen crosslinking with riboflavin and ultraviolet-A light in keratoconus: long-term results. *J Cataract Refract Surg* 2008; **34**(5): 796–801.
- 2 Caporossi A, Mazzotta C, Baiocchi S, Caporossi T. Long-term results of riboflavin ultraviolet a corneal collagen cross-linking for keratoconus in Italy: the Siena eye cross study. *Am J Ophthalmol* 2010; **149**(4): 585–593.
- 3 O'Brart D, Chan E, Samaras K, Patel P, Shah SP. A randomised, prospective study to investigate the efficacy of riboflavin/ultraviolet A (370 nm) corneal collagen cross-linkage to halt the progression of keratoconus. *Br J Ophthalmol* 2011; **95**(11): 1519–1524.
- 4 Wittig-Silva C, Whiting M, Lamoureux E, Lindsay RG, Sullivan LJ, Snibson GR. A randomized controlled trial of corneal collagen cross-linking in progressive keratoconus: preliminary results. *J Refract Surg* 2008; **24**(7): S720–S725.
- 5 Hersh PS, Greenstein SA, Fry KL. Corneal collagen-crosslinking for keratoconus and corneal ectasias: one year results. *J Cataract Refract Surg* 2011; **37**(1): 149–160.

E Papamichael¹ and F Harman²

¹Department of Ophthalmology, North West London Hospital NHS Trust, Central Middlesex Hospital, London, UK

²Department of Ophthalmology, Hillingdon Hospital NHS Foundation Trust, Uxbridge, UK
E-mail: estherpapamichael@doctors.org.uk

Work presented as oral and poster presentation in the UKISCRS XXXVI conference, 27 and 28 September 2012, Brighton, UK.

Eye (2013) **27**, 989–990; doi:10.1038/eye.2013.86; published online 3 May 2013

Sir,

Potential effect of 'cut-off intensity' on correlation between light meter measurements and time outdoors

The study by Dharani *et al.*¹ represents a very informative comparison between objective light meter measurements and the more subjective diary monitoring of time spent outdoors, both of which have implications for myopia. They found a poor to fair correlation. They reasonably used a cut-off value of >1000 Lux to compare light meter measurements with time spent outdoors, as this was similar to cut-offs in previous studies. If they had used a higher cut-off (which might be justifiable as their pilot test revealed that being indoors with a stream of bright sunlight could yield means of 1573 and 4445 Lux), then this could lower the values for the light meter measurements in their Table 1, which would bring them closer to the diary measurements of time outdoors, and could potentially affect the strength of the correlation. Thus, it would be useful to calculate means and test correlation with different cut-off values, or even to test the strength of the correlation between the raw total light meter measurements and time outdoors.

Also, they excluded days on which all intensity readings were consistently <100 Lux, as this implied the light meter was not worn. It would be useful to know how many days were excluded as a result. If it were the case, for example, that the light meter was more likely to be left at home on days when children were spending more time outdoors, which is potentially plausible, then this would suggest that the overall measurements underestimate light exposure and outdoor activity. The authors could compare the outdoor diary for these days to investigate this hypothesis. Such an effect would of course be small if very few days were excluded.

Conflict of interest

The authors declare no conflict of interest.

Reference

- 1 Dharani R, Lee CF, Theng ZX, Drury VB, Ngo C, Sandar M *et al.* Comparison of measurements of time outdoors and light levels as risk factors for myopia in young Singapore children. *Eye (Lond)* 2012; **26**(7): 911–918.

OA Mahroo^{1,2}, EA Gavin², KM Williams^{1,2}, E De Smit²,
CJ Hammond^{1,2} and DA Morrison²

¹Department of Ophthalmology, King's College
London, St Thomas' Hospital, London, UK

²Department of Ophthalmology, St Thomas' Hospital,
London, UK

E-mail: omar.mahroo@kcl.ac.uk

Eye (2013) **27**, 990–991; doi:10.1038/eye.2013.88;
published online 24 May 2013

Sir,

Response to Mahroo *et al*

In response to the comment by Mahroo *et al.*¹ on determining the accuracy of higher cut-off values of light meter readings to determine time spent outdoors *vs* indoors, we have evaluated the accuracy of cut-offs higher than 1000 Lux of 1200 and 1500 Lux.

The Intra Class correlation for the cut-off values of 1200 and 1500 Lux showed higher correlations between the light meter and diary recordings during the week in a school term and school holidays, compared with cut-offs of 800 and 1000 Lux (Table 1).

Thus, we agree with the proposal that the best cut-off value for evaluating outdoor *vs* indoor activities is 1500 Lux instead of 1000 Lux.

Table 1 Intra Class Correlation co-efficients (ICC) for cut-off values of 800, 1000, 1200, and 1500 Lux during the school term and school holidays

Cut-off light intensity (in Lux)	ICC—school term	ICC—school holidays
800	0.1 (−0.13, 0.32)	0.23 (−0.07, 0.49)
1000	0.21 (−0.02, 0.42)	0.28 (−0.02, 0.53)
1200	0.26 (0.03, 0.46)	0.28 (−0.02, 0.53)
1500	0.29 (0.07, 0.49)	0.25 (−0.05, 0.50)

Conflict of interest

The authors declare no conflict of interest.

Reference

- Mahroo OA, Gavin EA, Williams KM, De Smit E, Hammond CJ, Morrison DA. Potential effect of 'cut-off intensity' on correlation between light meter measurements and time outdoors. *Eye* 2013; **27**(8): 990–991.

R Dharani¹, C-F Lee^{2,3}, EA Finkelstein⁴ and S-M Saw⁵

¹Department of Optometry/Ophthalmology, SRM Medical College Hospital and Research Centre, SRM University, TamilNadu, India

²Department of Biostatistics, Singapore Clinical Research Institute, Singapore

³Center for Quantitative Medicine, Office of Clinical Sciences, Duke-NUS Graduate Medical School, Singapore

⁴Saw Swee Hock School of Public Health, National University of Singapore, Singapore

⁵Health Services Research Program, Duke-NUS Graduate Medical School, Singapore

Eye (2013) **27**, 991; doi:10.1038/eye.2013.89;
published online 24 May 2013

Sir,

In vivo confocal microscopy detects preclinical corneal lattice dystrophy

Lattice dystrophy of the cornea is caused by the deposition of amyloid in characteristic linear branching patterns in the corneal stroma. *In vivo* laser confocal microscopy (IVCM) images the different layers of the cornea with a resolution of up to 4 microns and has the potential to provide ultra-structural information that may not be visible on slit-lamp examination. The IVCM appearance in lattice dystrophy is well described.¹

Case report

A 25-year-old male patient was referred to the ophthalmologist by his optician, who noted lattice

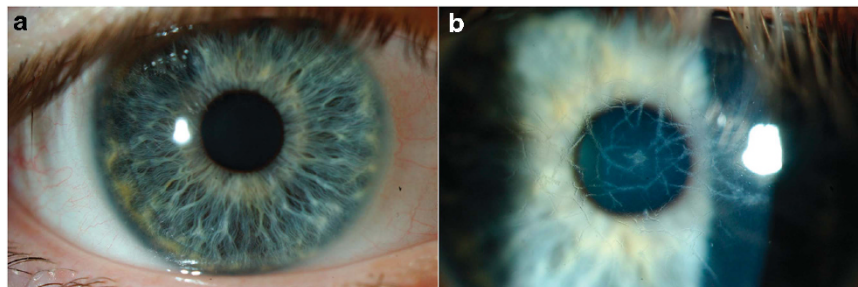


Figure 1 Colour photos of (a) the right eye and (b) left eye.