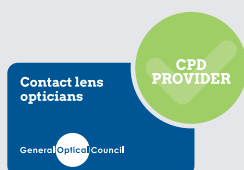
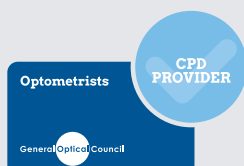


LEARNING DOMAINS

CLINICAL
PRACTICE

PROFESSIONAL GROUPS

**CLOSING DATE:** 10 May 2022**ANSWER PUBLISHED:** 1 June 2022**CPD CODE:** C-100263**ONLINE ONLY MCQS**

This CPD session is open to all FBDO members and associate member optometrists. Successful completion of this CPD session will provide you with a certificate of completion of one non-interactive CPD point. The multiple-choice questions (MCQs) are available online only from Tuesday 1 February 2022. Visit www.abdo.org.uk. After member login, scroll down and you will find CPD Online within your personalised dashboard. Six questions will be presented in a random order. Please ensure that your email address and GOC number are up-to-date. The pass mark is 60 per cent.

SELF-DIRECTED LEARNING CPD

Myopia management and research resources

By Alexandra Webster MSc, PGDipE, FBDO CL, FHEA, FBCLA

Identifying and supporting patients who may be at risk of developing and/or progressing with myopia is becoming more common in everyday practice. Many optical businesses in the UK now offer one or more interventions that may potentially slow down the progression of a child's myopia, rather than just provide an option to help them see better.

There are a number of contact lens and spectacle interventions now available, which have been specifically developed to help manage myopia. Additionally, advice can be provided on environmental and lifestyle factors that may be influential in the development of myopia, as well as signposting parents to helpful resources.

Manufacturers of products that support the management of myopia will normally provide information and training to eyecare professionals, to support the sale of their products to the patient. Information provided may be based on clinical research studies that have been undertaken, as well as commercial explanations to support communication about the products with patients and parents.

Whichever professional role is being conducted in practice, it is important that the eyecare professional is fully knowledgeable about the products they are recommending, to ensure they are providing the best care to their patients and are able to honestly communicate about which product is appropriate and why, given the individual patient circumstances.

Whatever the clinical area in discussion, as General Optical Council (GOC) registrants, it is also important to have a broad understanding of best and current practice, based on the research and evidence available at the time – removed from commercial interests.

This self-directed learning, continuing professional development (CPD) article has two aims: firstly, to support a greater understanding of the need to engage in identifying and supporting children who are at risk of developing and/or progressing with myopia; and secondly, to help practise reviewing academic research, a skill that can support everyday clinical practice and patient care.

**CPD CODE: C-100263****EYECARE PROFESSIONALS SHOULD BE FULLY KNOWLEDGEABLE ABOUT THE PRODUCTS THEY RECOMMEND**

Scarlett

AGE: 11

Scarlett's prescription has steadily increased in myopia since she started wearing spectacles aged eight. There has been an increase of -1.00DS in both eyes since her previous eye examination 12 months ago. Neither of Scarlett's parents require a refractive correction.

Scarlett currently has standard single vision lenses in her spectacles and there is no record of any discussions about contact lenses on her records.

Scarlett is academically bright and a member of the school maths club and STEM club. Outside of school she attends gymnastics and Taekwondo clubs.

BOX 1

PRESCRIPTION

	Sph	Cyl	Axis	VA
Right	-3.50	-0.75	10	6/4
Left	-3.50	-1.00	170	6/4

Dominic

AGE: 6

Dominic attended for his first eye examination today. His parents have no concerns about his eyesight, but both regularly attend the practice for eye examinations themselves.

Dominic's father is myopic and usually wears contact lenses as he doesn't like the cosmesis of his spectacle lenses. Dominic's mother does not require a refractive correction.

Dominic's grandparents on his mother's side are Hong Kong Chinese and moved to the UK in the 1970s.

Dominic is an active boy who loves playing football with his friends and is a member of his local Beavers troop.

BOX 2

PRESCRIPTION

	Sph	Cyl	Axis	VA
Right	Plano			6/4
Left	-0.50DS			6/4

MAKING POSITIVE CHANGES

The new GOC CPD scheme enables registrants to undertake learning in areas they have identified as important in their professional development plans, without the previous restrictions of the core competencies¹. Additionally, it is now possible to submit CPD not conducted through a GOC-approved provider, and this may include forms of independent learning submitted with a reflective justification of why this was appropriate and what took place.

This opens the opportunity for GOC registrants to take greater control over the areas of their practice they would like to conduct their CPD in, as well as conduct and submit alternative forms of CPD than has previously been possible in our field. Reviewing the available research in an area of professional interest, and reflecting on how this could impact your clinical practice, can be a valuable way to make positive changes in your patient care.

TWO PAEDIATRIC CASES

This article presents two paediatric patient cases – **Box 1 and Box 2** – for you to consider, alongside two academic research resources, which may influence how you would consider supporting these patients.

More research is now being published through 'open access', making it easier for all eyecare professionals to directly obtain evidence-based information that may inform their clinical practice and decision making. There is still a need to confirm that the information you are accessing is robust and the research has been rigorously conducted.

Research that is published in academic journals will go through a process of peer-review before publication. This process involves other academic experts in the field reviewing the information to be published, to confirm the research was conducted and reported appropriately. It also allows for any corrections required to be made.

Before you attempt the multiple-choice questions for this article, review the two patient cases and access the suggested resources. You may also like to conduct further research in this area.

RESOURCE ONE: IMI WHITE PAPER

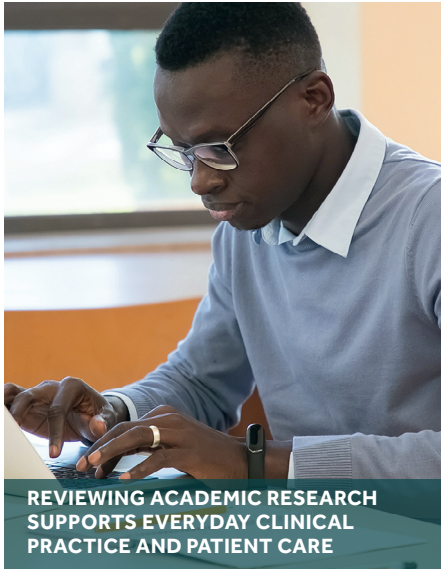
Resource one is the International Myopia Institute (IMI) White Paper for 'IMI 2021 Reports and Digest – Reflection on the Implications for Clinical Practice'². This three-page report summarises, for the optical professional, the latest systematic review of the available global research in the field of myopia development and management and provides an evidence-based clinical approach.

This paper was originally published in *Investigative Ophthalmology & Visual Science*, a journal with a high impact factor ranking in the field of ophthalmology. Impact factors are related to the number of times an article published in a journal is then mentioned or 'cited' in further published research or academic writing.

Understanding the impact factor of a journal can be seen as a way of considering if the research was robustly conducted and reported, and is relevant or beneficial to the area of concern. However, there have been incidences reported of 'nonsense' papers making it to publication in high impact factor journals³.

PLAN YOUR CPD TODAY

For all the latest available CPD from ABDO, visit www.abdo.org.uk. All online and face-to-face interactive CPD events open for booking can be found on the Events pages. CPD articles and recorded lectures can be accessed in your personal membership area. Resources to help you plan and reflect on your CPD are available in the Professional Development Toolbox. GOC registrants are now responsible for submitting their own CPD and points are no longer uploaded by providers. **On successful completion of this CPD session, log into your MyGOC account and follow the steps to submit this session using your certificate of completion as evidence. For more information on the new GOC CPD scheme, visit www.optical.org**



REVIEWING ACADEMIC RESEARCH SUPPORTS EVERYDAY CLINICAL PRACTICE AND PATIENT CARE

Therefore, although it may be one possible indicator, where an article is published is not a standalone way to confirm research quality.

Visit <https://myopiainstitute.org/imi-white-papers/> and download the paper: IMI 2021 Reports and Digest – Reflections on the Implications for Clinical Practice.

RESOURCE TWO: NICER STUDY/PREMO

Resource two has two elements and includes the Northern Ireland Childhood Errors of Refraction (NICER) Study background information⁴ – and Predicting Myopia Onset and progression (PreMO): an evidence-based risk indicator for eyecare practitioners⁵.

The NICER Study, based out of Ulster University, started in 2006 and examines how children's vision changes throughout their childhood and into adolescence. The study has produced a number of key findings and helped to develop resources to support optical professionals in practice including the PreMO Risk Indicator.

This resource has two parts. Firstly, the webpage describes the longitudinal research study the university is undertaking and summarises the current findings from the research, rather than providing access to the published research itself. So, is this webpage a trustworthy source of information?

Well, the University of Ulster Optometry and Vision Science Department is a well-respected educational centre in the UK, but you may not be aware of that. If you were to go to

Google Scholar (just type 'Google Scholar' into your web browser) and type in 'NICER Study', the top four returns (when accessed on 1 December 2021) would provide you with links to published research from this study. Three of these studies were published in *Investigative Ophthalmology & Visual Science*.

There are other ways to consider if the information provided on a webpage is a reliable source. If the text is referenced, it is possible to look these references up and consider if you think the information on the webpage is evidence-based from a reliable source.

Secondly, the NICER Study webpage provides a link to the PreMO Risk Indicator. This is a tool that has been developed using data collected from the study. This tool is designed for use by eyecare practitioners and may be used in High Street practice in conjunction with one of the other tools available on this webpage: Estimate Axial Length.

Together these tools can help the eyecare practitioner consider how they might support their paediatric patients depending on individual patient factors.

Visit: <https://www.ulster.ac.uk/research/topic/biomedical-sciences/research/optometry-and-vision-science/research/myopia-and-the-nicer-study> to read the webpage and download the PreMO Risk Indicator.

REFERENCES

1. General Optical Council. Information for registrants. Available at: <https://optical.org/en/education-and-cpd/continuing-professional-development/information-for-registrants>
2. Wolffsohn JS, Jong M, Smith EL III et al. IMI 2021 Reports and Digest – Reflections on the Implications for Clinical Practice. *Invest Ophthalmol Vis Sci*. 2021;62(5):1.

Available at:

<https://myopiainstitute.org/imi-white-papers>

3. Van Noorden, R. Publishers withdraw more than 120 gibberish papers. *Nature* (2014). Available at: <https://doi.org/10.1038/nature.2014.14763>
4. Ulster University. The NICER Study 2021. Available at: <https://www.ulster.ac.uk/research/topic/biomedical-sciences/research/optometry-and-vision-science/research/myopia-and-the-nicer-study>
5. Ulster University. Predicting Myopia Onset and progression (PreMo): an evidence-based risk indicator for eyecare practitioners. Available at: https://www.ulster.ac.uk/__data/assets/pdf_file/0011/826184/PreMO-risk-indicator-for-website.pdf

ALEXANDRA WEBSTER MSc, PGDipE, FBDO CL, FHEA, FBCLA is a qualified dispensing optician and contact lens optician and has worked in both independent and multiple practice. She is an international practical examiner and theory paper marker for ophthalmic dispensing and a practical contact lens examiner for ABDO. Alex is head of CPD at ABDO and has worked in contact lens professional services and optical education for more than seven years, gaining a Master's degree in Healthcare Professional Education. She is currently undertaking a Professional Doctorate in Education, and has worked part-time as a lecturer in ophthalmic dispensing and contact lenses at Bradford College. Alex is an experienced presenter and facilitator, as well as an author of CET and CPD.

LEARNING OUTCOMES FOR THIS CPD ARTICLE

DOMAIN: Clinical Practice

5.3: Develop a greater understanding of the need to access robust, up-to-date research literature in myopia management, to be able to provide good practice and patient care.

7.5: Appraise up-to-date research literature to enable the provision of effective patient care and treatments.

7.6: Develop a greater understanding of the currently recommended management strategies for paediatric patients who are at risk of developing or progressing with myopia, including the provision of advice, optical appliances and medical devices.