Public consultation on draft registration standard for continuing professional development and guidelines for continuing professional development

March 2018

Responses to consultation questions

Please provide your feedback as a word document (not PDF) by email to optomconsultation@ahpra.gov.au by close of business on 4 May 2018

Stakeholder Details

If you wish to include background information about your organisation please provide this as a separate word document (not PDF).

Organisation name
This submission represents the following approved CPD providers: Optometry QLD/NT Optometry NSW/ACT Optometry Victoria Optometry Tasmania Optometry SA Optometry WA It also represents the views of the national body Optometry Australia and the thoughts and feedback from the body currently accrediting CPD for Australian optometrists: *Eye On CPD*
Contact information *(please include contact person's name and email address)*
Luke Arundel, National Professional Services Manager,

Submission confidentiality

Submission confidentiality *Submissions will generally be published unless you request otherwise[1]. Please indicate below if you* ***do not*** *want your submission published, or want all or part of it treated as confidential.*

[1] The Board retains the right not to publish submissions at its discretion, and will not place on its website, or make available to the public, submissions that contain offensive or defamatory comments or which are outside the scope of the consultation

Registration standard: Continuing professional development (CPD) *Please provide your responses to any or all questions in the blank boxes to the right of the question*		
1.	From your perspective, how is the current CPD registration standard working?	Optometry Australia is the leading national optometric association in the country. Over 80 per cent of practising optometrists are members of the association. We are a significant national CPD provider through our state organisations and we provide CPD accreditation services through our *Eye on CPD* team on behalf of the Optometry Board of Australia (OBA). This gives us significant insight into how the standard and guidelines are working from a CPD provider point of view along with an understanding of the quality of CPD currently on offer. We also assist members in meeting their regulatory requirements including those who have been flagged as deficient through the OBA's annual audit process. This provides us with a unique and multifaceted perspective on the effectiveness of the current CPD registration standard. As outlined previously we receive many complaints from CPD providers and optometrists that the current system governed by the standard is unnecessarily complicated. Through our regular and ongoing engagement with our members we can confirm that key issues experienced by practising optometrists include: confusion regarding point types, limits and categories; a significant lack of knowledge about the current requirement to develop a learning plan (and therefore low levels of compliance) and poor general understanding of accredited vs non-accredited CPD and the differences in recording requirements. This confusion can lead to inadvertent non-compliance to the standard. In addition, very few optometrists are aware of the ability to take a 12 month exemption from CPD under certain circumstances. We believe there is also poor compliance with the CPR requirement due to the need to complete this once every three years leading to optometrists forgetting to renew their CPD certification on time. (We have attempted to improve compliance in this area by enabling a CPD certificate to be loaded to a member's record and reminder notification to be set when due as we believe most non-compliance in this area is non-intentional). We are not suggesting this compulsory interval be shortened, rather are flagging a logistical issue we have observed.
2.	From your perspective, how are the current CPD guidelines working?	Optometrists and CPD providers frequently comment that the guidelines are too long, although this is clearly linked to the complexities of the current system as noted above, and that they are difficult to navigate due to the text-heavy presentation. This is particularly problematic for practising optometrists who are often incredibly time-poor with full patient schedules, often coupled with the responsibilities of running busy practices. The *Eye on CPD* team therefore often spends significant administrative time highlighting areas of these guidelines for both optometrists and providers. We also note that in particular, the guideline component which deals with additional allocation of points for inclusion of optional CPD assessment questions does not necessarily result in delivery of additional value to adult learning, particularly with face to face CPD. We have observed some providers do this very well with formative questions embedded in the content while for other providers these questions are simply a mechanism for maximising points allocation and do not add significant value to the learning experience. We therefore support the current revised proposal to eliminate this assessment as this would assist in simplifying the system. Key issues regularly raised by providers are: that the current therapeutic definition is not clear which means that confusion exists in classifying educational content, the CPD guidelines are poorly understood and the length and complexity of the guidelines act as a barrier to providers using them efficiently and effectively.

Optometry Board of Australia Public consultation: Registration standards and guidelines - CPD

3.	Which option do you prefer and why?	Optometry Australia believes that an overall simplification to the registration standard and guidelines will benefit Australian optometrists and their patients by enhancing compliance to the CPD system. Consequently, we do not support Option 1 – Status Quo. However, we also do not support Option 2 – Proposed revised standard and guidelines in its current format. We would suggest a third option - which is to simplify the standard and guidelines whilst retaining a streamlined accreditation model as an important quality control measure. As the peak body for optometrists, Optometry Australia is well placed to assist in a campaign to educate optometrists on any changes and facilitate recording of accredited and non-accredited CPD completed through our online portals and new education institute, improving compliance to the standard and reducing the administrative burden on practicing optometrists. As AHPRA's own research on CPD points out, CPD accreditation for health care professionals is still common in other countries with comparable economies to Australia. The USA, UK and NZ optometry regulators have maintained accreditation models after recent reviews to ensure delivery of quality CPD. We feel removing accreditation will result in a drop in the quality of CPD being undertaken by Australian optometrists and an increase in the difficulty for the regulator to effectively audit or determine if practitioners have undertaken their CPD requirements, which may have adverse flow on effects to patient safety. We also propose reducing the proposed 30 hours of CPD per annum for optometrists with scheduled medicines endorsement to the same/base number of hours for all practitioners, with at least half of the hours to be related to the prescribing of scheduled medicines for those with therapeutic endorsement. This proposal would result in optometrists having to undertake more CPD than professions such as dentistry, physiotherapy, osteopathy, chinese medicine and chiropractors and does not bring optometry board CPD requirements into alignment with those of the other boards. When presented with **only** Option 1 or Option 2, over 95% of members who responded to our call for comments on the consultation selected Option 1 – remain with status quo.
4.	Is the content and structure of the draft revised CPD registration standard helpful, clear, relevant and more workable than the current standard?	Optometry Australia believes that the content and structure of the revised registration standard is generally an improvement over the current standard. However, in the interest of simplifying this document, and improving reading accessibility, points 4, 6 and 10 could be considered for deletion as point 18 is sufficient. Further changes and clarifications would still be needed as per suggestions in this consultation paper response.

Optometry Board of Australia Public consultation: Registration standards and guidelines - CPD

5.	What are the benefits or risks of simplifying the CPD requirements to a minimum of 20 CPD hours?	The OBA's consultation paper notes that the revision of the CPD registration standard and guidelines is driven by feedback requesting a more user-friendly and less onerous requirement. This is an approach that Optometry Australia thoroughly supports. Currently all optometrists must accrue 40 CPD points (in one year), ***which equates to approximately 13.3 hours of clinical CPD activity where assessment is included***, or 20 hours without assessment. The board has not provided any evidence or rationale for why the amount of mandatory CPD should be increased for the profession as we remain low risk in terms of notifications and malpractice. The additional requirements associated with developing and maintaining a reflective plan, along with removal of one of the other advantages of accredited CPD – automatic recording of activities completed, also increases the input required from optometrists, making the new proposal significantly more onerous for practitioners. We are also concerned that the current proposal for therapeutically endorsed optometrists (who are now the majority of the profession and will be the entirety of the profession in the near future) to undertake 30 hours of CPD per annum is **significantly** more onerous than the current CPD requirements. (Expanded on at point 8).

Optometry Board of Australia Public consultation: Registration standards and guidelines - CPD

6.	What are the benefits or risks of simplifying the CPD requirements to one registration period (12 months)?	A key benefit of simplifying the CPD requirement to one registration period would be to facilitate compliance to the standard for optometrists. The ***rolling*** two year CPD period is confusing for many practitioners, particularly early career optometrists who are just starting out in the profession. Anecdotally we know that many optometrists already plan their CPD obligations annually rather than over a two year period. So this proposal would neatly align with and reflect what already happens in practice. Simplifying the reporting period to one year could potentially make it harder for optometrists to meet their CPD requirements whilst studying for things like ocular therapeutics (which currently counts as two years of CPD quota in the year of graduation). This could result in an 'oversupply' of required CPD in the year of graduation and the need to obtain additional CPD whilst actively studying another course. It could also possibly be a disincentive to completing special interest courses, fellowships or attending conferences which often run as multi-day events annually. This risk could be addressed by allowing counting or accruing of points for multi-year courses at key points throughout the process rather than in one lump sum on completion. If the standard moves to hours rather than points his would simplify this process. Whether the CPD period stays at one or two years, consideration should be given to aligning the CPD and registration year to match the calendar year, which would simplify reporting especially in audit periods. We have observed the 1 Dec to 30 Nov period to cause considerable confusion. Optometry is increasingly a feminised profession. Nationally 54 per cent of registered practitioners are women, and estimates suggest that the proportion of women in the profession will continue to increase over time. It is important therefore that we give consideration to the typical career trajectory of many women, which will often include periods of maternity leave of up to 12 months, or possibly more, from the profession. It may be difficult for practitioners who wish to take leave of more than 12 months (which would include men taking parental leave, or any practitioner taking extended leave due to illness for example) to comply with the CPD requirement if it's only over a one year period / a CPD exemption is granted for one year only. We have previously flagged concerns about the recency of practice standard and the difficulties faced by optometrists in returning to general registration type after an absence from practice (but concede these concerns do not relate directly to this CPD consultation and are happy to discuss further with the OBA at any stage). This risk could be addressed however through the development and delivery of a communication strategy regarding CPD exemption options. This strategy could aim to ensure that optometrists are clearly aware of when they can apply for an exemption and what is required. It could be delivered as a stand-alone strategy or be part of a broader communication strategy regarding changes to the CPD requirements.
7.	What are the benefits or risks of the maximum of five hours of non-scientific/non-clinical CPD activities?	Optometry Australia believes that there are significant benefits associated with limiting non-scientific or non-clinical CPD activities to a maximum of five hours. The proposal is consistent with current restrictions on 'Manufacturer/Supplier' and other non-clinical CPD activities, and supports the principle of CPD being essential for optometrists to maintain their competence and develop the personal qualities required to deliver the quality of care that the community expects (*Guidelines for continuing professional development for endorsed and non-endorsed optometrists* pg. 1). This will also ensure that the majority of CPD activities undertaken by optometrists are specifically focused on clinical topics that are essential for ensuring the highest quality of care in the profession. There is a very high risk that without accreditation and any oversight on quality or use of evidence based medicine these may become simple paid advertorials rather than useful CPD.

Optometry Board of Australia Public consultation: Registration standards and guidelines - CPD

8.	What are the benefits or risks to the additional requirement for optometrists with an endorsement for scheduled medicines to complete an additional 10 hrs of CPD related to scheduled medicines, including a minimum of two hours CPD in an interactive setting with other practitioners?	We believe the risk of imposing a two tier level of CPD that includes additional requirements for therapeutic optometrists, would act as a significant disincentive for non-therapeutic optometrists to complete training for endorsement of scheduled medicines. For those optometrists who have graduated without this endorsement completing this training is expensive, time consuming and does not necessarily increase remuneration. Adding an ongoing requirement to complete additional CPD would be viewed as another barrier and make completing this training less appealing. The Board notes that there is evidence to suggest specific training in the area of prescribing results in improved patient outcomes, and Optometry Australia supports this assertion. However this could be achieved by requiring the same overall hours (or points) be completed by all registered optometrists, with a specified number of those to be focused on therapeutic prescribing for optometrists endorsed to prescribe medications. For example 20 hours total (with 10 of the 20 hours relating to therapeutics for those with an endorsement). The attached paper “Malpractice payments by optometrists: An analysis of the national practitioner databank over 18 years” from the American journal *Optometry* lists that therapeutic prescribing errors accounted for only two per cent of cases, which would seem to make this additional requirement unnecessary from a public safety point of view. The paper also found that the risk of an optometrist being involved in malpractice increased only nominally over a 17 year period during which therapeutic privileges and management of eye diseases became widespread. Undertaking 30 hours of CPD per annum is significantly more onerous than the current CPD requirements, and has been proposed without any substantial evidence of the need for this increase. Currently optometrists must accrue 40 CPD points (in one year), which equates to approximately 13.3 hours of clinical CPD activity where assessment is included, or 20 hours without assessment. For optometrists with a scheduled medicines endorsement currently 20 points per year must be completed on activities in this area, which equates to 6.67 hours at the assessed rate (or 10 hours without assessment), and the new requirement may also be perceived as increasing the amount of therapeutic education required. The additional 10 hours per year required under the current proposal for therapeutically endorsed optometrists – who are now the majority of the profession and we hope will be the entirety of the profession in the near future – is more onerous than the current arrangements. The OBA’s 2018 Public Consultation Document notes at point 26 that the revision of the CPD registration standard and guidelines is driven by feedback requesting a more user-friendly and less onerous requirement. This is an approach that Optometry Australia thoroughly supports. However this proposal flies in the face of this objective, and we don’t believe it will be readily accepted by practising optometrists. One of Optometry Australia’s strategic goals is to encourage therapeutic uptake in the profession and initial feedback received has indicated that as it stands the current “additional requirement for optometrists with an endorsement for scheduled medicines to complete an additional 10 hours of CPD related to “scheduled medicines” will actually result in many optometrists ‘surrendering’ their therapeutic rights. For many optometrists this additional CPD burden seems to be viewed as punitive and not worth it to continue with very limited prescribing available in practice.

Optometry Board of Australia Public consultation: Registration standards and guidelines - CPD

8. continued	Furthermore, when we examine other boards within the AHPRA structure 30 hours per year for the majority of the profession would seem high (e.g. compared to dentistry or physiotherapy with an average of 20 hours per year of required CPD). Drawing a parallel with nursing and podiatry requirements of an additional 10 hours of CPD does not seem appropriate for the optometry profession due to the greatly reduced list of therapeutic agents able to be prescribed by optometrists and the minimal potential for patient harm. Furthermore, optometry's list of medicines able to be prescribed does not include oral or injectable drugs, or Schedule 8 medications. We do support a change in the guidelines for 'therapeutic" CPD to have a broader definition (and removal of the terms "therapeutic medication management"), which will be more useful for future moves for the profession in expanding scope of practice. The current definition has been a source of confusion for practitioners and providers and needs refinement or clarification in any future standard and guideline change. From the paper listed above ("Malpractice payments by optometrists: An analysis of the national practitioner databank over 18 years") the majority of litigation involving US practitioners was relating to "failure to diagnose" "delay in diagnosis" or "wrong or misdiagnosis" (> 55 per cent) and not medication errors.

Optometry Board of Australia Public consultation: Registration standards and guidelines - CPD

9.	Are there any benefits or risks in removing the regulatory requirement for CPD activities to be accredited, that we have not identified? If you answer 'yes', please provide more detail.	As Optometry Australia has for many years accredited CPD for the profession (and more recently on behalf of AHPRA/OBA) we are in a unique position to comment on this area. We acknowledge that the JBI review was unable to find any direct evidence concerning accreditation and effective CPD, but also note that there is limited data on this topic. A lack of research performed on the subject **does not necessarily prove that accreditation is of limited value**. **Furthermore, no actual evidence has been presented by the OBA to suggest that it is *not* effective.** We would like to highlight that our US, UK and NZ counterparts still retain CPD accreditation. We note that the US Association of Regulatory Boards of Optometry has recently re-confirmed continuation of accreditation to ensure they have quality control mechanisms in place for CPD/CE. While evidence is absent one way or the other, our experience suggests that leaving decisions regarding quality of CPD to the practitioner would not lead to the best selection of CPD. Practitioners are generally unable to determine whether a CPD event is consistent with Board requirements and will choose CPD in other ways such as on the basis of how well the event is promoted, its location or ease of access, cost etc. It is unrealistic to think that meeting the Board standard will be anything but a minor consideration, no matter what guidelines are drawn up. We would comment that we have observed accreditation to be an important quality assurance tool for both optometrists undertaking CPD and the regulatory body. Over the last couple of years the accreditation model has undertaken considerable modification and improvement with the inception of a tri-level accreditation model from late 2014. Rather than just a desktop assessment of activities prior to their being run, we now have an independent assessment panel providing 'on the ground' reports of activities not compliant to the standard and an independent post activity audit by OCANZ. Particularly with the post activity audits we have been able to provide valuable quality improvement suggestions for providers that are raising the quality of CPD being provided to Australian optometrists. This has been verified by a reduction in the number of activities not meeting the Board's requirements over the first three years of random CPD Provider audits. In our role as accrediting body we also have refused accredited CPD status for a significant number of activities that have not met one or more of the requirements in the current guidelines. A risk of removing accreditation is that this could result in a flood of poor quality CPD being offered to optometrists, along with an influx of CPD which may not be appropriate for Australian optometrists (*Eye on CPD* currently rejects a significant amount of corporate CPD from overseas from being delivered in Australia). We note that we are the only profession with CPD currently being accredited at a regulatory board level. However, in the medical profession the specialist colleges provide an accreditation function. Optometry does not have any recognised specialties or colleges and therefore does not have this option. As we hope to see an expansion in the scope of practice of optometry further into medical and clinical optometry it would make sense to ensure our CPD system remains of the highest quality possible rather than the profession being pressured into harmonisation and adopting a system with no quality assurances. A CPD system that follows the medical and specialist colleges and includes accreditation may be more appropriate for the profession as we fight to secure expanded scope of practice in areas such as oral therapeutics. As we expand scope of practice further to the American model it could be anticipated that certain medical groups/colleges could use a CPD system without accreditation or quality controls as a reason to reject such expansion. Advances in IT platforms mean that some of the intangible benefits of accredited CPD are now able to be easily utilized – accredited CPD is advertised on a central, easily accessible calendar. As per above, additional information such as learning objectives is now also displayed. With no accredited CPD there would be no central CPD calendar making it harder for optometrists to review and compare available CPD relevant to their learning needs. Small enhancements to the current platform could easily be made eg to facilitate an optometrist entering their learning plan online and receiving selected prompts of available courses which align with their selected interests when they are entered into the system by providers.

Optometry Board of Australia Public consultation: Registration standards and guidelines - CPD

9.	Continued	Accredited CPD assists with record keeping obligations and due to the requirements for learning objectives to be supplied (and subsequently displayed on event information / calendars) **also assists optometrists to ensure that the selected activity will meet their learning needs**. It is highly unlikely that this would continue for the majority of CPD providers under a non-accredited system. Optometry Australia would propose that a streamlined accreditation and hours recording system remain in place with a simplified CPD system. This could be considered a stepping-stone to ease the profession into broader change and a move to the adult learning concepts outlined, including more emphasis on reflective learning and greater responsibility to self- manage learning needs and recording. The inclusion of accreditation could be reviewed again at the five year review of the CPD standard. A further risk of removing accreditation is the loss of central points/hours recording for optometrists. In addition to an easily accessible record of activities and points types/hours completed, under the accreditation contract OA has also conducted targeted campaigns to optometrists with low point tallies in the approach to renewal period to increase compliance to the CPD standard. With the removal of accreditation there would be no requirement for any CPD provider to send attendance or activity completion records to the accrediting body for recording and an important tool in increasing compliance and assisting optometrists to meet their requirements would be lost. We appreciate that ideally optometrists would effectively record and manage their CPD information themselves. The reality is that many optometrists already struggle to comply under the current system and this change may result in higher levels of non-compliance to the standard. One of the comments frequently received from optometrists is that recording non- accredited CPD is onerous. Some simple changes to the current IT infrastructure would be able to accommodate the more reflective recording model in the proposed CPD portfolio while making this type of recording less onerous for optometrists. The optometry profession has a very low incidence of complaints and notifications. We feel that this has in part been through delivery of a high quality and appropriately controlled and checked CPD system. Removing accreditation and lowering the overall quality of CPD, along with greater possibility of non-compliance to the standards may negatively impact on this. As Optometry Australia provides Professional Indemnity Insurance for over 80 per cent of the profession we would not want an increase in complaints, notifications and legal proceedings against optometrists, as these would indicate poorer patient and safety outcomes occurring for the regulator, and would negatively affect insurance premiums with raised flow on costs to registered optometrists. . The Board has provided limited evidence to support any benefits of removing accreditation and we note it would be very difficult to re-introduce the accreditation system once it was removed. Accreditation is currently outsourced by the OBA on a cost recovery model funded by providers, **which means this service runs at no cost to the public, AHPRA (or the OBA) or to registered optometrists**. With a simplification to the CPD system the accreditation process could also be streamlined, resulting in a reduction in accreditation fee for providers and the potential for more CPD to come under the accredited CPD category. As per comments below, this greatly assists in audit and compliance checks. Under the current system the annual audit process is significantly streamlined for the regulator by the accredited CPD system. Removing accreditation would place a much higher administrative burden on the OBA when assessing compliance to the CPD standard, and possible cost increases to registrants through OBA fees. The majority of optometrists assisted through audit over the last five years appeared to have met the standard predominantly through accredited CPD, resulting in a quick and easy sign off from the AHPRA auditors. We have noticed multiple occasions over the last few years where there has been an unacceptably long delay (often six to 12 months) in submitted non-accredited CPD being 'approved' during audits, leaving optometrists unnecessarily anxious as to whether they have indeed met the standard. If during audits the OBA/AHPRA is taking that long to check a small portion of optometrists with non-accredited CPD, then is it logistically ready or resourced to move to having to individually check and assess *every* audited optometrists 'non-accredited' CPD evidence? We think this is a significant risk that has been overlooked in the current proposal.

Optometry Board of Australia Public consultation: Registration standards and guidelines - CPD

10.	What are the benefits or risks of the proposed increased focus on reflective practice and will this concept be understood?	While we understand that some evidence points to the reflective learning plan being useful for adult learning we would like to flag that this move makes compliance to the standard more onerous and will require extensive retraining of the profession (or at least anyone who has graduated more than five years ago) to understand how to develop and implement such a plan. Examination of the recent introduction of learning plans to the pharmacy profession and RACGP would support this statement. As discussed, despite the fact that the basic learning plan is currently compulsory, our audit support would indicate that a majority of optometrists have *never* heard of the current learning plans, which bodes poorly for the chance of successfully introducing expanded reflective learning plans without development and implementation of a comprehensive communication and training strategy.
11.	Are there any elements of the current guidelines that the draft guidelines included here should maintain?	As mentioned above we feel it is premature to scrap accreditation based on the limited evidence presented, therefore a modified element of the current guidelines detailing this process should remain. As stated at point 23 Optometry Australia would be happy to provide further suggestions on this proposed model.
12.	Does this proposal clearly identify what would be acceptable CPD for optometrists?	A question will inevitably be raised by our members as to how detailed 'notes' on journal reading have to be. (i.e. we are suggesting examples of these notes would be useful). The previous guidelines stated that 3,000 printed words are equivalent to one learning hour. It would be useful for any future guidelines to further clarify or simplify this. For example could taking a quiz or passing MCQ be acceptable for independent CPD record keeping requirements instead of note taking? In addition we anticipate that academics and university clinical supervisors, along with optometrists who lecture to the profession will want to know if teaching and peer-reviewed publications and preparation of academic posters counts as CPD. This is a common question from our members along with whether 'supervising' students on external placements counts as CPD. In addition, these guidelines should also clarify if *volunteer* supervision/teaching (e.g. overseas) or "observation" of surgery (e.g. refractive surgery, cataract surgery, etc.) would be considered an acceptable form of CPD? If there is a move away from accreditation (which is NOT supported by OA), more detail on what is acceptable CPD including how to provide evidence of these activities would be essential.
13.	Is there any content that needs to be changed or deleted in the revised draft CPD registration standard?	There seems to be unnecessary duplication of text between the two documents (Registration Standard/Guidelines). For example, information on ProRata (point 7), What doesn't count (point 8) and Exemptions (point 9) is duplicated on both documents. As well as Definitions (21 to 27 and 48 to 58).
14.	Is there anything missing that needs to be added to the revised draft CPD registration standard?	No.

Optometry Board of Australia Public consultation: Registration standards and guidelines - CPD

15.	Is the content and structure of the draft <u>CPD guidelines</u> helpful, clear and is it a useful addition to the draft revised CPD registration standard?	The presentation of the draft CPD guidelines can be improved to enhance user readability and accessibility. As mentioned before, it is rare to encounter an optometrist that has actually read the existing guidelines. We would suggest the following changes: a) Change each heading into a QUESTION, where possible, to reflect real and popular questions the *Eye on CPD* team are often asked (e.g. See presentation style of current Dental guidelines and the Medical Board Registration Standards) E.g. 'CPD activities' becomes 'How Do I Choose Appropriate CPD activities?' E.g. 'Pro Rata CPD' becomes 'What are the requirements if I am applying for registration for the first time or register part-way through a registration period?' E.g. 'What are the requirements if I am returning after a period of absence?' E.g. 'What defines a therapeutic activity?' b) Using more info-graphics and/or boxed-in texts to highlight key areas/sections where possible or interactive format for the website version.
16.	Is there any content that needs to be changed or deleted in the draft CPD guidelines?	We would suggest the following changes. a) DELETE the following points to minimise the amount of text. Point 5 (Having a summary is not necessary – see Nursing and Dental Guidelines); Point 36; Point 23 'Therapeutic management' needs to be further elaborated. The question of what is therapeutic and not therapeutic is a **daily** question from our members for the *Eye on CPD* team. Q) Is it therapeutic management within the scope of *Australian* optometrists only? E.g. Does a webinar on oral antibiotics count? Q) What about magazine article on nutritional supplements for macular degeneration? Are nutritional supplements counted as 'therapeutic' medication management?
17.	Does including the statement 'The Board does not endorse/accredit CPD providers or activities but expects practitioners to select CPD activities that are consistent with the ethical and professional standards set out by the Board' add clarity to the CPD guidelines?	We don't believe that the statement adds clarity to the CPD guidelines. The intention that the Board no longer approve/endorse/accredit CPD providers or activities and will expect practitioners to select CPD activities that are consistent with the ethical and professional standards set out by the Board is unrealistic, given the current lack of general awareness about the current guidelines.

Optometry Board of Australia Public consultation: Registration standards and guidelines - CPD

18.	Is there additional clarification from the draft revised CPD registration standard that needs to be added to the draft CPD guidelines?	No.
19.	Is the draft CPD portfolio template helpful and is there anything missing that needs to be added or changed?	We believe that the draft CPD portfolio is more helpful than the previous version but represents a significant increase in record keeping as compared to the current system. Adding more cases or examples could be useful. We would also suggest that this sample portfolio be added to the draft guidelines as an Appendix, not as a separate/stand-alone, downloadable document on the OBA's website (see example of the last pages of the Physiotherapy Guidelines www.physiotherapyboard.gov.au/Codes-Guidelines/FAQ/CPD-resources.aspx). This will mean that: a) Optometrists only have to refer to two documents (registration and guidelines), not three documents. b) The entire first page of the draft CPD portfolio can be deleted as this first page is a duplication of content already in the Guidelines.
20.	Are there any other ways that the Board can support practitioners to best engage in CPD?	A significant investment in education would need to be made to made to ensure practitioners understood (particularly the reflective learning part of) the new guidelines/standard. **We would confidentially advise that despite the majority of practitioners submitting (often after repeated additional requests) learning plans along with the CPD portfolio, 70–90 per cent of these are generated only *after* an audit form is received. At least 60 per cent of these optometrists have never heard of a CPD Portfolio and less still have ever read the guidelines.** This would indicate the OBA would possibly be over-estimating the current level of understanding and readiness to move to a new model. We suggest that the OBA use short video tools and/or animations to communicate the new model as part of a comprehensive communication strategy. Please refer to Pharmacy Board's explanatory webinar www.pharmacyboard.gov.au/Codes-Guidelines/FAQ/CPD-FAQ.aspx

Optometry Board of Australia Public consultation: Registration standards and guidelines - CPD

21.	Would it be helpful for the Board to recommend topics for CPD from time to time in its newsletter? (for example, CPD might be recommended on record keeping if this issue arises regularly in notifications or audit data)	We believe that the Board could consider providing or distributing some information on, for example, record keeping, boundary violations, case examples and explanations to assist with illustrating accepted practice. Very limited CPD exists in these areas so simply suggesting that practitioners should seek out this (largely non-existent) CPD may not be enough to address the problem. Optometry Australia has run similar articles from our PII Insurer AVANT over the last decade which has been well received by members. As an example the New Zealand Optometrists and Dispensing Opticians Board also hosts Board Commissioned CPD on its website on topics of relevance to the profession. Current eDM software allows the sender to determine open and bounce rates for electronic newsletters which would assist in evaluating the 'cut through' rates for this type of communication. We note however, that the 'open' rate for an average eDM from an Australian professional association was around 30 per cent in 2017, with a click through rate onto a linked document of 17 per cent. This suggests that a combination of communication strategies and mechanisms would be required. This could include close communication channels with Optometry Australia and use of other platforms such as social media which could assist in communicating effectively with practitioners. Given our reach to over 80 per cent of practising optometrists, we would be happy to work with the OBA on developing and implementing an effective, multi-faceted, communication strategy to support the implementation of the new requirements and guidelines.
22.	Is there anything else the National Board should take into account in its review of the CPD registration standard and guidelines, such as impacts on workforce or access to health services?	As highlighted already, we have significant concerns about the introduction of reflective learning models. We note that the introduction of reflective learning models in pharmacy were not well received resulting in non-compliance. We therefore believe that any change would need to be communicated to optometrists very clearly and with an appropriate transition period. As mentioned above we also don't support the removal of CPD accreditation. If it was removed, we believe that the National Board and AHPRA would need to re-evaluate its resourcing and ability to undertake a greatly increased audit workload for verifying adherence to the CPD standard. There are also potentially significant impacts on the accessibility of therapeutic eye care by the general public if optometrists are to surrender their scheduled medicines endorsement due to onerous CPD requirements.
23.	Do you have any other comments on the revised draft CPD registration standard and guidelines?	Thank you for the opportunity to respond to the revised draft CPD registration standard and guidelines. We value this opportunity and hope that our feedback is valuable and useful to the Board. Optometry Australia would be happy to work with the Board on developing and writing a standard and guidelines that included a simplified CPD model and accreditation structure. We are also happy to answer any questions or assist further at any stage.

Optometry Board of Australia Public consultation: Registration standards and guidelines - CPD

Optometry (2011) 82, 32-37

Malpractice payments by optometrists: An analysis of the national practitioner databank over 18 years

Robert S. Duszak, O.D.,[a] and Richard Duszak, Jr., M.D.[b,c]

[a]*Philadelphia Veterans Affairs Medical Center, Philadelphia, Pennsylvania;* [b]*Mid-South Imaging and Therapeutics, Memphis, Tennessee; and* [c]*University of Tennessee Health Science Center, Memphis, Tennessee.*

KEYWORDS
National Practitioner Data Bank;
Optometrist malpractice;
Optometrist prescriptive authority

Abstract

PURPOSE: The aim of this analysis was to describe characteristics and trends of malpractice payments by optometrists since the inception of the National Provider Data Bank (NPDB) as they assumed increasing prescriptive authority.

METHODS: NPDB data files were analyzed for details of optometrist malpractice payments from 1991 through 2008. Payment amounts, sources, and allegations were all identified and summarized, along with geographic and demographic data.

RESULTS: Between 1991 and 2008, a total of 609 optometrist malpractice payments were reported nationally, ranging from $50 to $2,050,000 (median, $57,500; mean, $156,055 ± 246,556), with 603 (99%) less than $1,000,000. Annual inflation-adjusted mean dollars and frequency of payments increased only nominally over the 18-year interval, from $154,573 to $155,151, and 30 to 40, respectively. More than half of all cases originated in 11 states. Alleged errors in diagnosis accounted for 55% of all cases.

CONCLUSION: Malpractice payments on behalf of optometrists are relatively infrequent (on average, less than 34 nationally each year) and usually relatively small (almost half less than $50,000). The frequency of payments and mean payments have increased little over the last 2 decades.

Optometry 2011;82:32-37

Optometrists' scope of practice has dramatically changed over the last 20 years. Whereas in 1990 only half of all states granted optometrists any therapeutic privileges, 49 states currently allow optometrists to treat glaucoma, 47 states permit oral prescriptive authority, 43 states permit controlled substance prescriptive authority, and 32 states allow injectable authority (*see* Table 1).[1,2] Given the marked increase in optometric prescribing privileging over the last 2 decades, issues pertaining to quality and safety have become more important than ever. The impact of increasing treatment autonomy on optometric risk management and malpractice, however, is unknown.

The Health Care Quality Improvement Act of 1986 led to the establishment of the National Practitioner Data Bank (NPDB), an electronic repository containing information on adverse hospital privileging actions, professional society reports, and malpractice payments made on behalf of licensed health care practitioners.[3,4] With regard to the latter, any entity (e.g., insurance company or organization) making a payment on behalf of a provider as the result of a malpractice settlement or judgment must report that payment to the NPDB within 30 days. The NPDB contains data beginning September 1990 and is maintained under the authority of the United States Department of Health & Human Services.[4]

Disclosure: The authors have no financial or other relationships that might lead to a conflict of interest.

Corresponding author: Robert S. Duszak, O.D., Philadelphia Veterans Affairs Medical Center, 3800 Woodland Avenue, Philadelphia, Pennsylvania 19104.

E-mail: bduszak@mac.com

1529-1839/$ - see front matter–This is a U.S. government work. There are no restrictions on its use. Published by Elsevier Inc. on behalf of the American Optometric Association.
doi:10.1016/j.optm.2010.05.009

Table 1 Optometric prescriptive authority timeline, by state

Year	Therapeutic medications*	Glaucoma medications*	Oral medications*	Injectable agents*
Pre-1980	WV, NC	WV, NC	IN, NC	NC
1980-1990	IN, OK, NM, IA, RI, KY, SD, NE, MO, FL, WY, AR, ID, ND, KS, TN, MT, ME, GA, VA, CO, WA, WI	IN, OK, NM, KY, FL, WY, AR, IA, WA, WI	IA, MO, MT, ND, CO, WI	ND, WI
1990				
1991	UT, TX, OR	UT, OR	SD, UT	UT
1992	NJ, OH, CT, AK	NJ, OH, AK	CT, OH	NJ
1993	AZ, MN, SC, LA, NH	ID, AZ, MN, SC, LA, TN	ID, LA, NE, NH, SC, TN	ID, LA, TN, NH
1994	MS, VT, DE, MI	SD, MS, GA, DE	DE, GA, OK	OK
1995	MD, AL, NV, IL, NY	MD, MO, AL, IL, NY	AL, IL, MD, NV, NM, WY	AL, MD, ME
1996	CA, HI, PA	VA, KS, ME, CT, CO	CA, KY, ME, PA, VA	CT, KY, VA
1997	MA	RI, ND, MI	AR, WV	AR
1998		NE		
1999		MT, NV, TX	AZ, KS, TX	AZ, MT, TX
2000		CA		CA
2001			OR	OR
2002		NH, PA	MI	IA
2003			MN, WA	MN, WA
2004		HI, VT	HI, NJ, VT	HI, VT
2005			MS	MS
2006				
2007			AK	AK, IL, NM, OH
2008			RI	
2009				
Total	50 states	49 states	47 states	32 states

Data from the American Optometric Association, and modified for publication.

* No distinction is made between type(s) of medication permitted in each category; the table only identifies the year in which some type(s) of prescriptive authority was given for each category.

Public use files from the NPDB have recently been used to study trends in malpractice payments made on behalf of physicians, anesthesia providers, dentists, and physical therapists, but to our knowledge no such evaluation has been performed for optometrists.[5-8] We report that analysis herein.

Materials and methods

Public use data files were obtained from the NPDB in late 2009. These raw data files contain selected variables pertaining to medical malpractice payments and adverse licensure, privileging, professional society membership, and Drug Enforcement Administration reports received by the NPDB concerning physicians and other licensed health care professionals. It also includes reports of Medicare and Medicaid exclusion actions taken by the Department of Health & Human Services Office of Inspector General. These patient- and provider-redacted raw data files were reformatted for database and spreadsheet analysis. The data file included 464,921 adverse reports between September 1990 and September 2009. To facilitate annual full year comparative analysis, partial year 1990 and 2009 year data were extracted, resulting in 446,443 reports between January 1, 1991, and December 31, 2008. The NPDB identifies providers by their state license type (e.g., physician, dentist, psychologist) using approximately 100 code-designated categories. Optometrists are all assigned a unique license field code (636).

Of the 609 optometrist malpractice cases identified, encounter-specific variable data were extracted. Payment information included the total amount, number of defendant health care providers contributing to the total payment, and payment designation as either a settlement or judgment. Additional encounter information included the "specific malpractice act or omission code" (the database characterization of the allegation by payer entity coded category), state in which the event occurred, and the defendant optometrist's age (categorized by decade) at the time of the event.

Payments were evaluated on an annual basis with regard to frequency and mean amount. Adjusted annual payments were also calculated, correcting for 2008 dollars using Consumer Price Index conversion factors obtained from the United States Bureau of Labor Statistics.[9] All analysis was performed using commercially available database and spreadsheet software (Access 2007 and Excel 2007; Microsoft, Redmond, Washington).

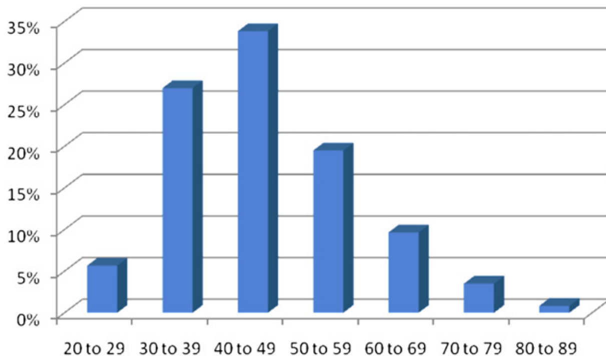

Figure 1 Age of optometrists at the time of event leading to malpractice payment.

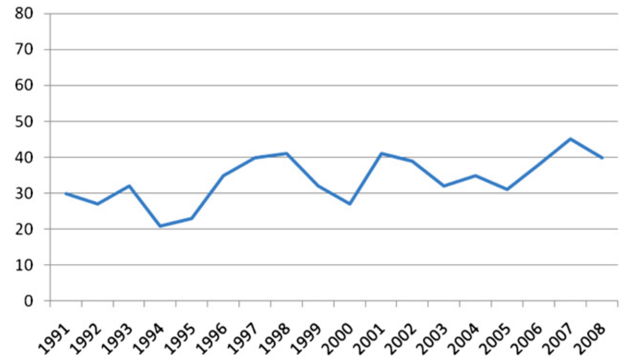

Figure 3 Number of malpractice payments made on behalf of optometrists nationally per year.

Results

Of 609 targeted encounter reports for which age information was available (600), 90% of defendant optometrists were between the ages of 30 and 59. The age distribution of optometrists by NPDB decade groupings is outlined in Figure 1. More than half (51%) of the cases originated in just 11 states (*see* Figure 2).

Optometrist malpractice payments ranged nationally from 21 to 45 per year (mean, 33.8 ± 6.7), with a slight upward trend from 30 in 1991 to 40 in 2008. Annual payment frequency is plotted in Figure 3. Payment sources were insurance companies or insurance guarantee funds in 588 of 609 (97%), self-insurance organizations in 9 (1%) and state medical malpractice funds in 12 (2%). Of the 518 cases for which litigation disposition details were available, 508 (98%) were the result of negotiated settlements and only 10 (2%) the result of court judgments. More than half (59%) of the payments were made within 4 years of the alleged event, with the interval from event to payment ranging from 0 to 23 years (mean, 4.4 ± 2.6). In 12 cases, no co-defendant information was available. Of the others, payment was made solely on behalf of the index optometrist in 566 cases (95%). In 21 (4%) cases, a second co-defendant contributed to the malpractice payment. In 10 (2%) cases, 3 or more defendants were involved.

Total payment per case ranged from $50 to $2,050,000 (mean, $156,055 ± $246,556), with the distribution noted in Figure 4. The median payment was $57,500, with only 6 payments (1%) exceeding $1,000,000. Indexing to 2008 dollars, the mean payment was $190,175, with a nominal increase over time. Annual and adjusted annual average payments are plotted in Figure 5. By comparison, payment for all 325,104 malpractice cases for all health care providers in the NPDB during the same period ranged from $50 to $27,500,000 (mean, $207,054 ± 394,090). Optometrists accounted for only 0.19% of all malpractice payment cases and 0.14% of all payments.

A total of 37 "malpractice act or omission" codes were identified in 609 optometric cases, but 82 cases were designated only by the nonspecific "allegation not otherwise specified" code. With these excluded, of the 527 cases assigned a specific identifiable allegation category, diagnostic errors (combined categories "failure to diagnose," "delay in diagnosis," and "wrong or misdiagnosis") accounted for more than half (55%) of all cases. Along with those categories, "improper management," "failure/delay in referral or consultation," "improper performance," "improper technique," "failure to monitor," "failure to instruct or communicate with patient or family," "delay in treatment," "failure to treat," "failure to recognize a complication," and "wrong procedure or treatment" together accounted for 90% of all identifiable allegations.

Figure 2 Frequency of payments between 1991 and 2008 by state, in descending order. Of all 50 states, these 11 account for more than half of all malpractice cases against optometrists resulting in payment.

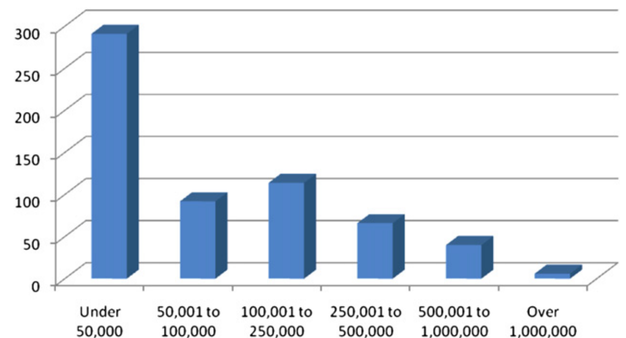

Figure 4 Distribution of all malpractice payments, by dollar amount, made on behalf of optometrists between 1991 and 2008.

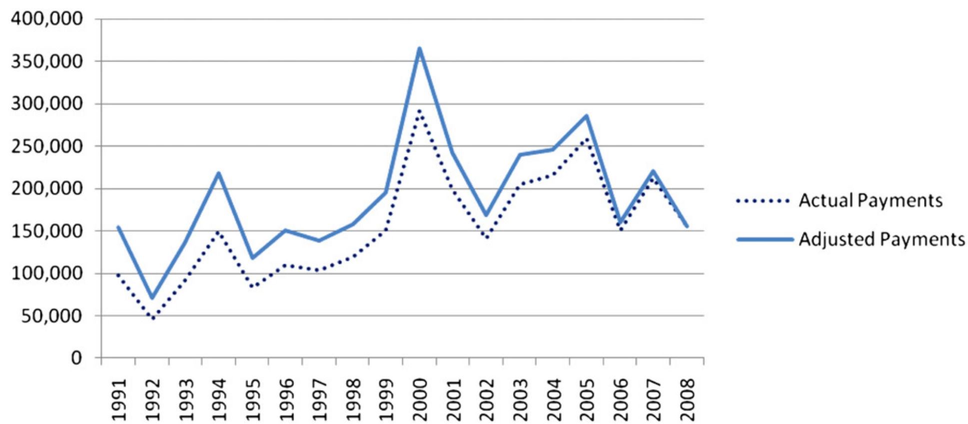

Figure 5 Annual average actual and adjusted optometrist malpractice payments. Adjusted payments are indexed to 2008 dollars.

The frequency of the most common allegations is outlined in Figure 6.

Allegation codes indicated as medication errors potentially attributable to increasing prescription authority (combined categories "failure to order appropriate medication," "wrong medication ordered," "wrong dosage administered," "agent use or selection error," and "wrong medication administered") accounted for only 12 of the 609 cases (2%).

Discussion

To date, little comprehensive data about the frequency and amounts of optometry-related malpractice payments have been available to guide optometrists in their risk management efforts. In particular, given controversial concerns about optometrists' expanded prescriptive authority compromising patient safety and welfare, objective information regarding adverse events is necessary to validate or refute such claims.[10] Since NPDB data were acquired over nearly 2 decades, including the most active years of optometry's expanding therapeutic privileging, it provides needed information about a broad spectrum of issues pertaining to optometric malpractice exposure. The NPDB represents the largest central repository of professional liability information and includes considerably more claim information than those included in carefully controlled data sets occasionally released by liability insurers.

Despite the expansion of optometric privileging and prescriptive authority, the overall risk of a malpractice payment for an individual optometrist remains very low. With just 40 malpractice payments in 2008, and the U.S. Bureau of Labor Statistics indicating 34,800 practicing optometrists that year, we estimate the annual risk of a malpractice payment per optometrist at just 0.1%.[11] Since 1991, optometry-related claims accounted for only 0.19% of all malpractice payments nationally and 0.14% of dollars paid. Although our analysis shows that optometry-related malpractice payments are both infrequent and relatively small, both have nonetheless increased nominally over the last 2 decades. Although a 1992 independent insurance company report claimed that almost half of optometry malpractice cases stemmed from contact lens–related

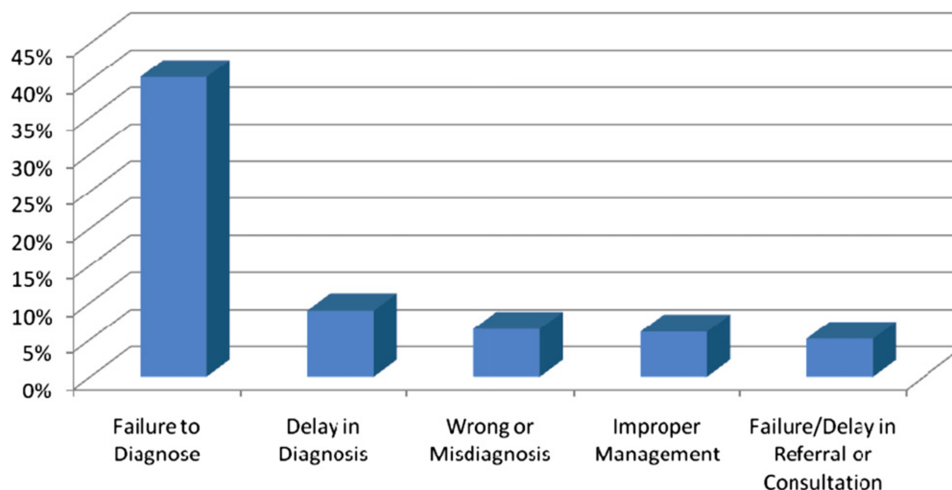

Figure 6 Frequency of most common malpractice allegations for optometrist malpractice payments by NPDB "specific malpractice act or omission code" category. Of the 527 cases of specifically categorized allegations, these 5 accounted for two thirds of all cases.

negligence and breach of informed consent, our long-term national analysis instead indicates that the most common cause for a successful malpractice claim against an optometrist was for failure to diagnose or a delay in diagnosis.[12]

Because the scope of practice has changed greatly over the last 2 decades and may continue to expand in the future, the impact of increasing prescriptive autonomy on optometric risk management and malpractice merits discussion. Whereas 20 years ago optometrists were not regularly treating ocular diseases, this is now common practice. Optometrists currently treat or comanage two thirds of their glaucoma patients and four fifths of their patients with anterior segment disorders.[13] Although such frequencies are not known before 1990, at that time, few states granted optometrists prescribing autonomy that would permit treatment of many ocular diseases (*see* Table 1), particularly glaucoma. With optometrists now treating so many more conditions than in the past, one might speculate that malpractice rates and payments would have paralleled optometric prescriptive autonomy, but that has not been the case. Over the 18 years of contiguous data from the NPDB, there was an increase of only 10 annual successful malpractice cases across the country, with the overall annual inflation-adjusted mean payment increasing nominally from $154,573 to $155,151. The largest number of claims resulting in payment have been the result of alleged diagnostic errors; improper management from therapeutic and medication issues constituted less than 2% of all cases against optometrists.

As comanagement of pre- and postoperative cases with ophthalmologists increases, it might similarly be considered a contributor to malpractice exposure for optometrists. Comanagement of laser-assisted in situ keratomileusis (LASIK) and photorefractive keratectomy (PRK) have been identified specifically as risk factors for increased malpractice claims against ophthalmologists.[17] Although that report does not mention the role of optometrists as defendants in comanaged surgical cases, it is plausible that they were involved in at least some cases. Similar to the reported higher risk of malpractice in comanaged LASIK and PRK, there may be increased exposure for other comanaged ophthalmic surgical cases, such as cataract extraction, retinal surgery, and glaucoma procedures. Such exposure for optometrists, however, is relatively low, as the 2 allegation categories we believe would most likely apply are "improper management" and "failure to recognize a complication" and together account for only 5% of malpractice cases against optometrists resulting in payment. Because our study is primarily a descriptive one—the necessary result of analyzing a government-established and maintained partially redacted database without the benefit of real clinical records—we are unfortunately unable to more deeply explore the reasons for the various observations and trends described. Nonetheless, we believe that some commentary is necessary.

The explanation for the relative stability in optometric malpractice payments is unclear. Between 1991 and 2008, United States Census Bureau estimates that the nation's population increased 20%, from 252,980,941 to 304,059,724.[14] During that time, there was also an expansion in the number of optometry schools across the country and an associated increase in students enrolled in optometry schools. The number of optometrists as well has increased 11.4% from 1997 to 2008, and above that, the annual number of complete eye examinations performed by each optometrist has increased 2.5% from 1996 to 2006.[15,16] Undoubtedly, the increase between 1991 and 2008 is even larger. With more optometrists seeing more patients, one might expect an increase in malpractice cases as well.

Geographically, considerable state heterogeneity exists, with more than half of all cases originating in just 11 states. In 2007, the American Medical Association identified 17 states in malpractice "crisis."[18] Although there are many potential reasons to explain these regional medical liability crises, one of the leading explanations is plaintiff attorneys' aggressive pursuit of clients, capitalizing on recent public concerns regarding medical errors.[19] Despite medical liability reform efforts in several jurisdictions, tort reform has either not been undertaken or has been largely ineffective.[20] Interestingly, the 2 states that lead in NPDB optometric malpractice payments—Florida and Pennsylvania—are specifically mentioned in that report. Eventually, alternatives to adversarial litigation may mitigate the crisis in those areas, but in the meantime, health care providers will likely remain sensitive to swings in the litigation climate, continuing their practice of defensive medicine.[21]

Although defensive medicine likely accounts for some of the relative stability in optometric malpractice payments, ideally much of the explanation reflects continued improvement in the quality of optometric care. A more competitive application process to optometry schools, more rigorous curriculum at those schools, more extensive postgraduate residency training, more rigorous board examinations, the acceptance of pupillary dilation throughout the profession, increased continuing education and licensure requirements, higher thresholds for institutional and insurance credentialing, the conservative nature of optometric care, and better risk management knowledge likely all contribute. Future changes in the profession, such as board certification by the newly formed American Board of Optometry, may similarly increase quality and stabilize malpractice risks for years to come.[22] Although these many processes are accepted widely as surrogates of quality, it should be noted, however, that lawsuits have been described as poor proxies of both the credentials of the health care provider and the quality of the care he or she delivers.[23,24]

Although NPDB data analysis provides a large amount of case data, the categorical database nature of that information introduces a number of limitations in an analysis such as ours. First, the seemingly arbitrary and overlapping allegation categories (e.g., how exactly does one distinguish "failure to diagnose" from "wrong or

misdiagnosis"?) precludes us from establishing a list of practical "take home" risk management tips based on optometrists' experiences nationally. That limitation aside, the fact that more than one half of cases involve diagnostic errors should serve as a reminder to all in the optometric community that the courts and society often expect perfect diagnoses and perfect outcomes in all cases—a goal that is clearly elusive.[25-27]

In addition, although malpractice dollar amounts are reported for all paid claims, we believe that summary NPDB payment data likely overestimate the overall impact of malpractice directly attributable to optometrists. NPDB dollar amounts are not apportioned to individual providers but instead to all defendants together. For example, if a jury rules against both an optometrist and an ophthalmologist, attributing $10,000 and $90,000 in damages, respectively, the NPDB assigns both providers a payment entry of $100,000—the total payment for the case. In addition, the database includes a large number of relatively small payments—17% of them less than $10,000 and 32% less than $25,000. The frequency of such small payments suggests a frequent business decision by insurers to settle rather than engaging in costly litigation. Most of these, then, do not reflect concessions that the optometrist truly engaged in malpractice.

Finally, because the NPDB only reports actual payments, its database is unable to capture the frequency with which health care providers are sued but ultimately prevail. Dismissed or dropped lawsuits or verdicts in their favor are never reported to the NPDB but are still costly to defend and potentially bear even higher emotional costs on defendant optometrists.

Despite widespread perceptions of an increasingly litigious environment for health care providers, successful lawsuits against optometrists remain infrequent and have increased only nominally over the last 2 decades with regard to both their frequency and amount. Increasing optometrist prescriptive autonomy and surgical comanagement appear to have affected malpractice exposure little, if at all.

Acknowledgments

The authors appreciate the assistance of Sherry Cooper, associate director, State Government Relations Center of the American Optometric Association, and Stacey Liles, coordinator, Research and Information Center of the American Optometric Association, in providing historical state-specific optometric prescriptive authority information.

References

1. American Optometric Association. Subjective Ranking-Summary-Legend Drug Prescriptive Authority for Optometrists. Available at: *http://www.aoa.org/documents/SubjectiveTandOChart.pdf*. Last accessed January 08, 2010.
2. Jensen AD. Evolving ophthalmology-optometry relationships. *Arch Ophthalmol* 1991;109(2):238-9.
3. West RW, Sipe CY. National practitioner data bank: information on physicians. *J Am Coll Radiol* 2004;1(10):777-9.
4. US Department of Health and Human Services. National Practitioner Data Bank Guidebook. Available at: *http://www.npdb-hipdb.hrsa.gov/pubs/gb/NPDB_Guidebook.pdf*. Last accessed December 22, 2009.
5. Chandra A, Nundy S, Seabury SA. The growth of physician medical malpractice payments: evidence from the National Practitioner Data Bank. Health Aff (Millwood) 2005. Jan-Jun; Suppl Web Exclusives: W5-240-W5-249.
6. Kain ZN. The National Practitioner Data Bank and anesthesia malpractice payments. *Anesth Analg* 2006;103(3):646-9.
7. Shulman JD, Sutherland JN. Reports to the National Practitioner Data Bank involving dentists, 1990-2004. *J Am Dent Assoc* 2006;137(4): 523-8.
8. Sandstrom R. Malpractice by physical therapists: descriptive analysis of reports in the National Practitioner Data Bank public use data file, 1991-2004. *J Allied Health* 2007;36(4):201-8.
9. United States Bureau of Labor Statistics Consumer Price Index Inflation Calculator. Available at: *http://data.bls.gov/cgi-bin/cpicalc.pl*. Last accessed December 30, 2009.
10. *2008 State Legislative Agenda*. Tallahassee: Florida Medical Association; 2008.
11. Bureau of Labor Statistics, U.S. Department of Labor, *Occupational outlook handbook, 2010-11 Edition,* Optometrists. Available at: *http://www.bls.gov/oco/ocos073.htm*. Last accessed January 8, 2010.
12. Classé JG. Avoiding liability in contact lens practice. *Optom Clin* 1994;4(1):1-12.
13. American Optometric Association. 2008 scope of practice survey. Available at: *http://www.aoa.org/x12646.xml*. Last accessed January 8, 2010.
14. US Census Bureau population estimates. Available at: *http://www.census.gov/popest/archives/*. Last accessed December 30, 2009.
15. Workforce study of optometrists. St. Louis: American Optometric Association; 2000.
16. American Optometric Association. 2008 State of the profession. Available at: *http://www.aoa.org/x10651.xml*. Last accessed January 7, 2010.
17. Abbott RL. Medical malpractice predictors and risk factors for ophthalmologists performing LASIK and PRK surgery. *Trans Am Ophthalmol Soc* 2003;101:239-74.
18. American Medical News. State of liability. Available at: *http://www.ama-assn.org/amednews/2007/03/05/prca0305.htm*. Last accessed January 6, 2010.
19. Mello MM, Studdert DM, Brennan TA. The new medical malpractice crisis. *N Engl J Med* 2003;348(23):2281-4.
20. Nepps ME. The basics of medical malpractice: a primer on navigating the system. *Chest* 2008;134(5):1051-5.
21. Studdert DM, Mello MM, Sage WM, et al. Defensive medicine among high-risk specialist physicians in a volatile malpractice environment. *JAMA* 2005;293:2609-17.
22. American Optometric Association. Board certification motion amendment. Available at *http://www.aoa.org/documents/BoardCertMotionAmended.pdf*. Last accessed January 11, 2010.
23. Ely JW, Dawson JD, Young PR, et al. Malpractice claims against family physicians are the best doctors sued more? *J Fam Pract* 1999; 48(1):23-30.
24. Bartholomew LA. Quality of care and the National Practitioner Data Bank: are the two related? *J Med Pract Manage* 1999;15(2):64-7.
25. Berlin L. Radiologic errors and malpractice: a blurry distinction. *AJR Am J Roentgenol* 2007;189(3):517-22.
26. Berlin L. Defending the "missed" radiographic diagnosis. *AJR Am J Roentgenol* 2001;176(2):317-22.
27. Berlin L. Hindsight bias. *AJR Am J Roentgenol* 2000;175(3): 597-601.