

Senior Project to have the Michigan State Board of Licensing
Accept National Board of Examiners in Optometry Examination Part III
An Ongoing Endeavor

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Charles Prentice suggested the first board of optometry in 1896. It provided that all eye care persons, physicians, optometrists, and opticians, would be regulated by one board. The idea failed to pass the New York State Assembly. Subsequently, there were no boards formed to regulate optometry until the Minnesota optometry practice act of 1901. This act established a definition of the practice of optometry, created a board to carry out the provisions of the law, requirements for licensure, listed causes for discipline and the procedures to be utilized, and exemptions from the law. All other 49 states adopted similar practice acts over the next 20 years.¹

The function of state boards of optometry is to protect the public. Boards have been classified into five main models based upon the organizational structure and the administration of the law.¹ All boards have the duty of ensuring that those individuals who apply for licensure are qualified. Depending upon the individual board, they may offer their own testing or accept that of a larger organization. All fifty states accept parts I and II, while forty-three of the fifty states accept part III of the national board of examiners in optometry series.³

State administered board exams may be necessary in those states where the scope of practice exceeds that of the majority of the states. The state of Michigan, however, has a scope of practice that is actually lower than the majority of states. Only twelve other states have a scope of practice, at least using pharmaceuticals as a guide, equal to or less than that of Michigan.⁴

Differences in the examination used for licensure also affect the ability of an individual with a license in one state to obtain a license in another state. Michigan will accept a valid license from any other state, if it has been maintained for at least five years, as a substitute for taking the Michigan board exam. Many other states, however, are not as easy as that. Indiana, according to the optometry statute IC 25-24-1-3, probably would not accept a Michigan license as proof that the individual is capable of practicing optometry in that state. It is necessary for an applicant trying by endorsement in the state of Indiana, to prove that they have been practicing in the same scope as optometrists in Indiana, while under the current license, by providing proper documentation that the requirements of the other state are equivalent to Indiana. In the case of Michigan optometrists, they have no oral drug privileges and therefore do not practice in the same scope and would not be eligible.

Other health care providers in the state of Michigan do not have the same licensing requirements as optometry. Chiropractors, for example, have the option of taking parts I and II of national board exams or taking state boards. Dentistry also has more flexibility in licensure examination. They are required to take parts I and II of national boards, as well as a northeastern regional board exam.

Optometry as a profession is different in Michigan and across the country. Different states have very different laws and different qualifications to practice in each respective state. Many people feel there should be much more uniform laws and standards in

optometry. Presently the American Board of Optometric Practitioners, ABOP, is envisioned as a way to promote ongoing clinical competency through a distinct level of continuing education and assessment. While ABOP looks at a national certification, optometry should head toward equalizing the entry qualifications among different states.⁵

An attempt has been made to bring Michigan closer to the majority of other states as far as required tests for licensure. The glaring difference is exam part III of NBEO. This creates difficulty in multiple state licensure, and redundancy of examinations for licensure by newly licensed optometrists. A presentation was devised through careful research, surveying of newly licensed optometrists, and logical opinion. This presentation was three fold and was designed to benefit future optometrists interested in Michigan licensure, multiple state licensure, or undecided optometrists considering Michigan. The presentation was intended not to make things easier for graduating optometry students, however to make for logical conveniences and bring Michigan up to national levels as compared to other states. This was in no way designed to take authority away from the Michigan licensing board or place the public more in jeopardy from unqualified optometrists. On the contrary, It was felt that national standards would actually raise the Michigan licensed optometrist standard of excellence to a nationally recognized level.

The following packet was given to the state board at the time of the presentation.

Presentation to the
Michigan State Board of Optometry

By the

Michigan Optometric Student
Association

May 12, 1999

Goals of this Presentation

1. Move the State Board Exam test date ahead
2. Eliminate the State Board Clinical Exam in favor of National Board Exam Part III
3. Eliminate written and oral sections of the State Board Exam

Outline of the Presentation

- A. What National Board Part III entails
 1. Clinical Skills
 2. Visual Recognition and Interpretation of Clinical Signs
 3. Patient Management
- B. What Michigan State Board entails
 1. Clinical
 2. Written
 3. Oral
 4. Law
- C. Advantage of National Board Part III
 1. Convenience
 - a. More widely accepted
 - b. Time of year offered
 - c. Exam offered twice a year
 2. Comprehensive exam
- D. Disadvantages of National Board Part III
 1. Increased cost
 - a. American Optometric Student Association is working toward decreasing fees
 2. Exam not offered in Michigan presently
- E. Advantage of Michigan State Board Exam
 1. Exam offered in Michigan
 2. Less expensive
- F. Disadvantage of Michigan State Board Exam
 1. Time of exam delays licensure for new graduates
 2. Only provides for Michigan
 3. Offered once a year

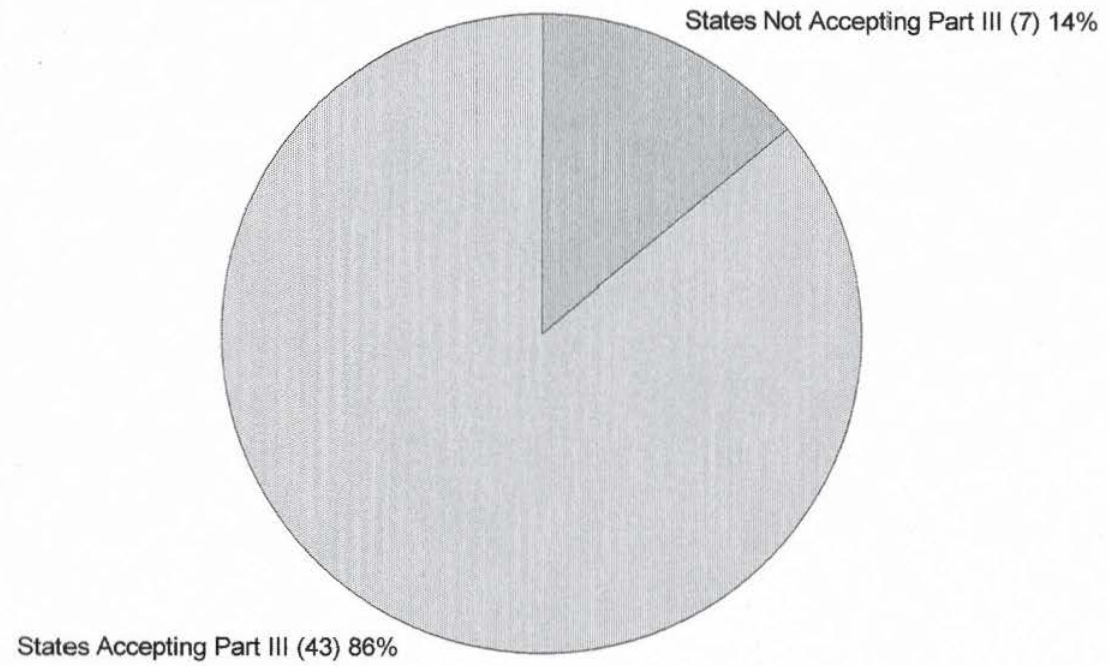
Reasons for the Proposed Changes

- A. Moving the exam will help prospective new optometrists
- B. New optometrists want more state licensing flexibility
- C. The comprehensive National Board Exam Part III passes qualified applicants
- D. The advantages of the State Board Exam appear to be out numbered by the advantages of the National Board Exam

Supporting Arguments

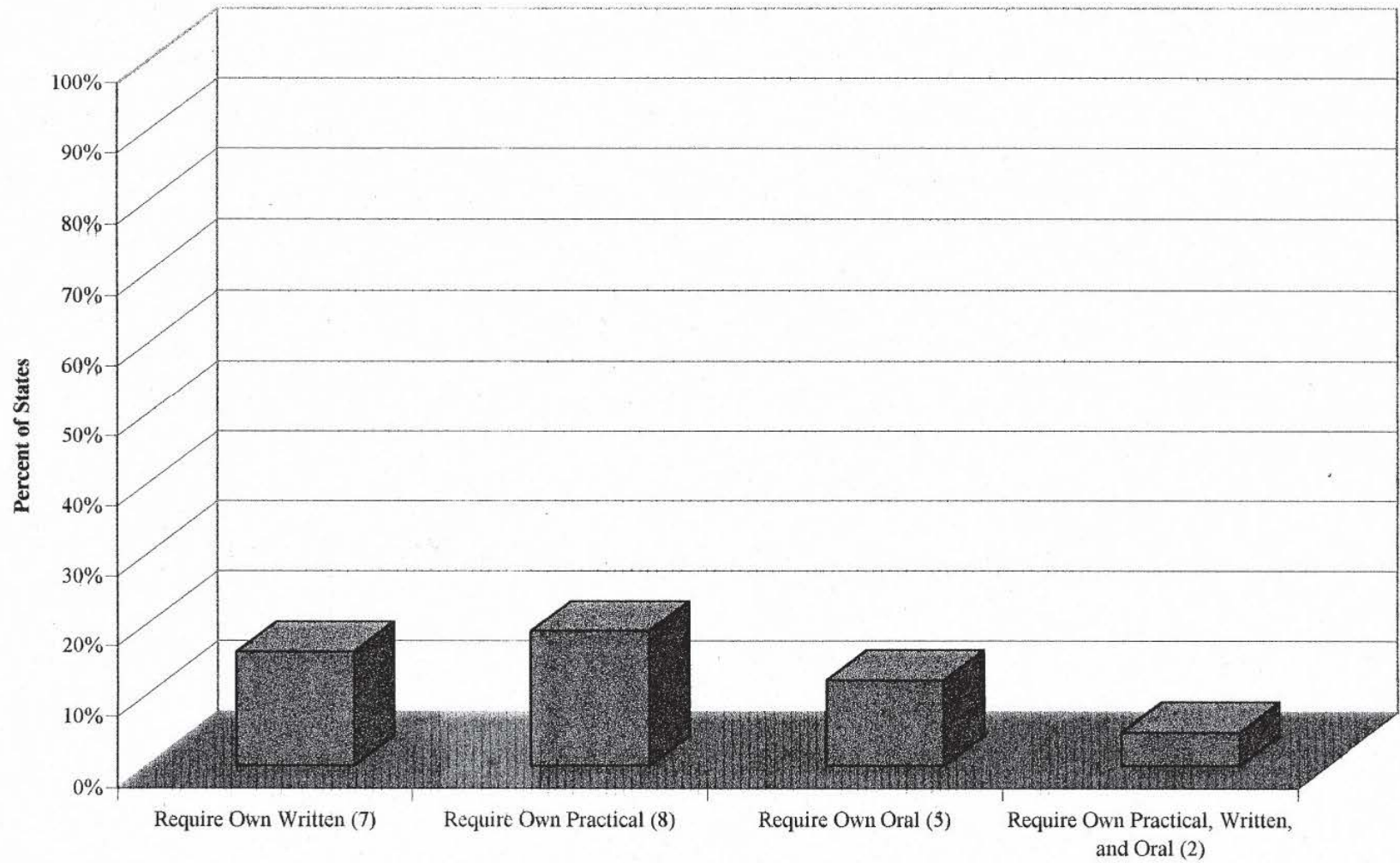
1. Requirements of other states: Forty-three of 50 states accept National Board Exam Part III for licensure. Of the 43 states accepting Part III, 8 require their own practical exam, 7 require their own written exam, 5 require their own oral, and 2 require all additional exams. (See appendix 1 and 2) The International Association of Boards of Examiners in Optometry recommends individual states accept Part III of National Boards.
2. The time of the year the Michigan State Board Exam is given for prospective licensees is inopportune for graduating optometrists. Graduation of all Optometry school students is done by early June, and since the Michigan Board Exam is not given until July, a minimum of two licensed months time is lost.
3. Data from a survey of 1998 licensed Optometrists in the state of Michigan show that many people take Part III of the National Board despite it not being offered in Michigan, and 100% of people feel the National Board Exam adequately assesses clinical skills necessary for entry level practice optometry. Also, 96.8% of responses feel Part III of the National Board Exam, not the Michigan State Board Exam, is a more comprehensive and better representation of skills necessary to be an optometrist. Over 50% of responses felt the examination time of Michigan Board Exams affected their job opportunities after graduation. (See appendix 3)
4. Other suggestions were given to help the Michigan State Board of Examiners in Optometry better serve fellow optometrists and were listed as comments in the survey. (See appendix 4)

Appendix 1
Acceptance of Part III Nationwide



Appendix 2

Additional Requirements of The 43 States that Require Part III



Appendix 3
MOSA Survey of Newly Licensed Optometrists

In an attempt to have the State of Michigan accept Part III of the National Boards, instead of requiring its own Clinical Board exam, we would like you to take a couple minutes to fill out this questionnaire and return it by March 1, 1999 in the enclosed self addressed stamped envelope. Thank you. MOSA Committee to evaluate the necessity of state board exams

Please circle your responses. Any additional comments may be made on the back.

1. Did you take Part III of the National Boards? 81.6% Yes 18.4% No

2. Did you take any state exams (other than MI)? 34.2% Yes 65.8% No
 Which state? Which parts? Law (L) Practical (P) Written (W) Oral (O)
 MN-L; FL-L,P,W; WI-W; MD-L; 2GA-L,P; 3IN-L; AZ-L,P,Slide; NC-P; CO-L; WA-L

3. Do you feel the Michigan State exams adequately assess the clinical skills necessary to practice entry level optometry in Michigan today? 2.7% Uncertain 86.8% Yes 10.5% No

4. Do you feel the National Board of Examiners Part III adequately assessed the clinical skills necessary to practice entry level optometry in Michigan today? 100% Yes 0% No

5. In your opinion, which exam was more comprehensive and a better representation of the skills necessary to be an optometrist? 3.2% MI 96.8% Part III

6. Did the time frame of the MI State exams and Licensing affect your job opportunities? 2.7% Uncertain 52.6% Yes 39.5% No
 Please explain:

7. Are you considering endorsement or reciprocity (please circle which) 15.8% Yes 68.4% No

8. If you have any additional comments about the exams or if there are any other services you would like to see the State Board of Examiners provide, please write them below or on the back of the page.

Comments for question 6: Did the time frame of the MI State exams and Licensing affect your job opportunities? Please explain.

1. Because the exam is only given once a year.
2. Because we did not take the exam until mid July, I did not get my results until late August. Essentially, I lost one job and three months salary because the office needed a doctor ASAP.
3. I made a special trip back to Michigan from Massachusetts just to take the exam. I had to postpone two interviews in Massachusetts.
4. No, because I decided to practice in Colorado.
5. Several companies wanted someone sooner than the end of August. Also, my friends in other states started practicing the end of June because National Board scores were back by then.
6. I could not start as soon as I wanted.
7. I could work in Ohio in July and not in Michigan until September.
8. Graduation is in May, Part III scores are received in June/July and you can begin practice. Michigan exams aren't until July therefore delaying your time to practice.
9. Very much so! I had to practice an entire year at one-half licensed salary waiting for Michigan State Board's one time administration date.
10. I got a job before I received my Michigan license, during the wait I only was paid 2/3 my hourly wage.
11. I could have started working in the private practice I joined much sooner than I did! Lots of lost income, wasted time! Not a good thing when you owe \$100,000 in school loans!
12. I received lower pay doing similar work until I received my license. I had to take off work to take the exam.
13. It is nice to have the summer off, however financially it's not very practical. I did a lot of job hunting during the summer months but everything was contingent on passing MI Boards.
14. I worked for a very low wage until I received my license.
15. I had to wait to begin my job because of my license coming in mid August.
16. I was poor all summer for no reason.
17. No, however, you do have to wait around for three months post graduation to find out if you can practice on your own without supervision. It was frustrating for me. It was difficult knowing you know how to treat ocular pathology but you couldn't legally write an Rx. What kind of a message does this convey to our patients?
18. Difficult to get a well paying job without a license.

Comments for question 8: If you have any additional comments about the exams or if there are any other services you would like to see the State Board of Examiners provide, please write them below or on the back of the page.

1. To explain #1, I did not take Part III because I was going to practice in Michigan and I did not have enough money to take both. I wanted to take Part III so I could

get another license in another state for backup but I just could not afford it. Now that I am working I am considering taking Part III so that I can get licensed in other states.

2. If they want to give their own test, that's fine. It's less expensive than Part III but it needs to be given a lot sooner, like maybe mid May.
3. The Michigan State Board was a repeat of Part III (although Part III was more thorough).
4. Part III of National Boards was very thorough in all parts of the exam. Instructions were very clear as to what was expected of you in order to pass. Grading was also very fair – no way to show preference to any individual candidate. Also, Part III was much more convenient for those of us that didn't attend Ferris State! The early test date was a huge advantage as well!
5. Why should I have to pay twice, for two exams when they both cover about the same material. I would not be against having to take a law test for Michigan. The guidelines given for the test were very vague. For example, the subjective test section said to perform entrance tests. Which entrance tests? How many entrance tests? On Part III of the National Boards everybody takes the written portion at the same time. In Michigan, the written portion is taken on different days by the candidates, allowing communication between the candidates with their friends who have already taken the written law test as well as what to expect on the rest of the test. I don't think this is fair to the candidates that have the first test day versus the last test day!
6. Excellent idea! Just an observation: The depth of Part III's examination of clinical skills was twice as intense as Michigan Boards.
7. Not only was the Michigan Board not as comprehensive, it was not very well organized.
8. Michigan exam: computer portion of the exam is a joke. It does not assess my ability as a clinician in any way. The VT question was disgusting. This portion of the exam seemed to be a waste of time and just a means to allow the MI B.O.E. to hold the key to our futures. Practical tests were just like Part III (refraction, tonometry, etc., how can these be different? They can't.) Michigan Boards miss out on fundamental entry level procedures that Part III does not.
9. I feel the Michigan Board should be dropped and Part III taken in its place. If the state wants to require a law exam, it should be offered on a Saturday in late April or early May so that we can be fully licensed after graduation.
10. I feel state board exams are not necessary with taking National Boards. State Boards could consist of a law only test.
11. I believe the Michigan practical was nothing more than one last way to get a few more dollars. Part III was far more comprehensive.
12. At the very least, Michigan Board Exams should be given in May, shortly after graduation to expedite licensing.
13. I felt Part III was a more standardized test and more comprehensive than the Michigan State Exam. Michigan should accept the National Boards.
14. Although both were difficult exams, I felt Part III did a better job of assessment. Perhaps it was solely because of the length of the exam but I felt it did a better job at allowing me to demonstrate my skills. If the grading of the Michigan State

Boards and the somewhat inconsistent administration could be cleaned up, I feel that the Michigan and Part III Exams would be equivalent.

15. I would like the Michigan Exam to be given at least two times a year. Anything can happen during an examination. If you don't pass you have to wait all year to have another chance. What about loans?...self-confidence? That's the only suggestion I have. Thank you. (note: This was not the same individual who wrote comment number nine to question six.)
16. This is an excellent idea, however, I wish it was implemented before I graduated. NBEO III is a much better gauge. Try your hardest to get this done.

Part III of the National Board Exam Information

A. Clinical Skills - 5 Stations, 21 Skills (65%)

"Clinical Skills" is comprised of 21 clinical procedures tested during a 3.5-hour practical examination using actual patients.

Listed below are the clinical assessments that are to be performed at each station. These will be posted in the appropriate examination rooms for your review during the examination. Copies of the Clinical Skills Answers Sheets used by examiners to assess candidate performance are provided for your review.

Station 1

1. General Case History/Patient Communication

You are to obtain a case history from a patient. The patient will be portrayed by one of two examiners in the room. You should assume that the "examiner/patient" is visiting the office for the first time and is "presenting" for a routine eye examination. You are to obtain the relevant information to allow all subsequent and appropriate diagnostic procedures to be performed effectively. After completion of the case history, you should dismiss the examiner/patient with the assumption that other tests or examination procedures will be performed by other candidates.

2. Patient Education/Patient Communication

You are to educate an examiner/patient regarding his/her diagnosis and related treatment. This patient will be different than the patient portrayed in the skill 1 assessment. The diagnosis and treatment information to be conveyed to the examiner/patient will be listed in an outline given to you. Your explanation to the examiner/patient must be accurate and clear, and be in non-technical terms.

3. Blood Pressure Measurement

You are to obtain a blood pressure measurement on the right arm of the same person, whose prior scripted demographics should be ignored. You should assume that the procedure is being done as part of a routine examination. You must state your findings to the examiner as they should be recorded in a patient record.

Station 2

4. Biomicroscopy

You are to perform a routine slit lamp examination on one eye of a patient, as indicated by the examiner, and to assume no previous knowledge of the patient. During your examination of the structures, you are required to sustain the image for examiner observation. You must state your findings to the examiner as they should be recorded in a patient record.

5. Goldmann Applanation Tonometry

You are to perform Goldmann applanation tonometry on one eye of the same patient, as indicated by the examiner, to assume that the tonometer probe has been properly cleaned and disinfected, and that there is nothing in the patient's general health or ocular history that should contraindicate this procedure. You must state your findings to the examiner as they should be recorded in a patient record.

6. Gonioscopy

You are to perform gonioscopy on one eye of the same patient, as indicated by the examiner. You may instill an additional drop of anesthetic, if necessary. During this procedure, you are expected to:

- a. obtain and sustain a clear gonioscopic view of the anterior chamber angle;
- b. perform a systematic examination of all 4 quadrants; and
- c. state your findings for the inferior quadrant to the examiner as they should be recorded in a patient record.

7. Collagen Implant Insertion and Removal

You are to prepare and insert a collagen implant halfway into the inferior punctum on one lid of the patient, as indicated by the examiner. The implant is not to be moved into the inferior canaliculus, but should be held in place for 2-3 seconds and then removed. You should assume that there is nothing in the patient's general health or ocular history that would contraindicate or preclude this procedure and that the forceps are fully disinfected. Upon removal, the implant is to be discarded. You must describe to the examiner how the collagen implant should be moved into the inferior canaliculus.

Station 3

8. Retinoscopy

You are to perform retinoscopy on both eyes of a patient, who will be uncorrected, and to assume that there is nothing in the patient's general health or ocular history that would preclude this procedure. You must state your findings to the examiner as they should be recorded in a patient record.

9. Distance Subjective Refraction

Based on the static retinoscopy and PD findings previously obtained, you are to perform a distance subjective refraction on both eyes of the same patient. You should assume that there is nothing in the patient's general health or ocular history that would preclude this procedure. You must state your findings to the examiner as they should be recorded in a patient record.

10. Heterophoria Measurements

You are to conduct a von Graefe measurement (the "flash" technique is not to be used) of the same patient's lateral and vertical heterophorias at distance and near. You should assume that the patient is non-strabismic, and use the findings from your distance subjective refraction for this procedure, as well as the PDs determined earlier in this station. You must state your findings to the examiner as they should be recorded in a patient record.

11. Accommodation Testing

You are to measure the same patient's relative accommodation and perform the binocular crossed-cylinder tests at near. You should assume that the patient is non-strabismic, the subjective refraction and Add (if needed) are in place, and the best corrected VA is 20/20 OD and OS. You must state your findings to the examiner as they should be recorded in a patient record.

12. Vergence Testing

You are to measure the same patient's horizontal and vertical vergences at near. You should assume that the patient is non-strabismic and use the refractive findings from Skill 9. You must state your findings to the examiner as they should be recorded in a patient record.

Station 4

13. Cover Test Evaluation

You are to perform the near cover test on both eyes of a patient and objectively measure any deviation. You should assume that the patient is wearing his or her habitual spectacle or contact lens prescription and is corrected to a VA of 20/20 OD and OS at distance and at 40 cm. You must state your findings to the examiner as they should be recorded in a patient record.

14. Pupil Testing

You are to assess and describe the pupillary responses of the same patient and assume no previous knowledge of the patient. You must state your findings to the examiner as they should be recorded in a patient record.

15. Pressure Patching

You are to properly apply a pressure patch to one eye of the same patient, as specified by the examiner. You should assume that the patient has a corneal epithelial abrasion, for which a topical anesthetic, cycloplegic drop, and antibiotic ointment have just been instilled.

16. Patient Education: Instilling Ophthalmic Medication

You are to instruct the patient on how to instill an ophthalmic solution. You should assume that the patient is newly diagnosed with glaucoma and is being placed on timolol maleate for the first time.

17. Ophthalmic Materials Evaluation

You are to evaluate the fabrication quality of a pair of bifocal spectacles that will be provided (these do not belong to the patient at the station). You should write, on the form provided, all of the data needed to duplicate this pair of bifocal spectacles.

Station 5

18. Binocular Indirect Ophthalmoscopy

You are to perform binocular indirect ophthalmoscopy on one eye of a patient that has been appropriately dilated, as indicated by the examiner. The examiner will also inform you regarding whether the procedure should be performed with the patient reclined or upright. During this examination, you are expected to:

- a. obtain a full, clear retinal image in the condensing lens;
- b. maintain a full image in the condensing lens while scanning the ocular fundus; and
- c. perform a systematic examination of the fundus periphery.

During your examination of the structures, you are required to sustain the image for examiner observation. If an image in the teaching mirror is not seen by the examiner because of positioning difficulties, you may be requested (1-2 times) to place a specified quadrant into view. You must state your findings to the examiner as they should be recorded in a patient record.

19. Non-Contact Fundus Lens Evaluation

You are to perform a fundus evaluation on one eye of the same patient, as indicated by the examiner, using a non-contact fundus lens, and to assume no previous knowledge of the patient. During your examination of the structures, you are required to sustain the image for examiner observation. You must state your findings to the examiner as they should be recorded in a patient record.

20. Soft Contact Lens Insertion, Evaluation, and Removal

You are to properly prepare and insert a soft contact lens on one eye of the same patient, as indicated by the examiner. Using a slit lamp, you are expected to evaluate the lens on the patient's eye, and subsequently, to remove the lens. You should assume that there is nothing in the patient's general health or ocular history that would contraindicate or preclude placing any properly prepared soft contact lens on the eye, and that the lens provided has been fully disinfected. After insertion and evaluation, you should remove the contact lens from the patient's eye and discard it. Suction cups and other mechanical removers are not permitted. You must state your findings to the examiner as they should be recorded in a patient record.

21. Rigid Gas Permeable Contact Lens Insertion, Evaluation, and Removal

You are to properly prepare and insert a rigid gas permeable contact lens on one eye of the same patient, as indicated by the examiner. You should assume that there is nothing in the patient's general health or ocular history that would contraindicate or preclude placing any properly prepared contact lens on the eye, and that the lens provided has been fully disinfected. Using a slit lamp, you are expected to evaluate the lens on the patient's eye, and subsequently, to remove the lens. Next, you should remove the contact lens from the patient's eye and properly prepare the lens for storage. A variety of contact lens solutions will be available to you; however, suction cups and other mechanical removers are not permitted. You must state your findings to the examiner as they should be recorded in a patient record.

Equipment That Must Be Brought To The Examination

The Clinical Skills section will be administered at fully equipped ambulatory eye care centers, and therefore standard clinical equipment will be available in each examination room. "Standard equipment" includes ophthalmic materials kits, all customary refractive equipment, biomicroscopes, and binocular indirect ophthalmoscopes. All necessary pharmaceuticals and supplemental supplies, such as tissues, cotton swabs, alcohol pads, and eye pads, will be provided as "standard equipment."

Candidates are expected to bring the following equipment with them to the examination:

1. PD Rule
2. Retinoscope
3. BIO condensing lens (clear or yellow)
(Note: A binocular indirect ophthalmoscope will be provided. You will be allowed to use your own, but it must have a teaching mirror.)
4. Paddle (occluder)
5. Near point cards for phorometry
6. Penlight or transilluminator
7. Horizontal prism bar or loose prisms
8. Non-contact hand-held fundus lens
(Note: Neither a lens holder nor a Hruby lens is permitted).
9. Goniolens (any type)

In addition, be sure these items are in good working order and that you have extra power supplies if appropriate

If you fail to bring any of the above-listed items with you to the exam center, you may be unable to complete the skills that are dependent on this equipment. If you are missing a piece of required equipment and you find a comparable piece of equipment in the exam room, you will be permitted to use that piece of equipment; however, it must be stressed that you are responsible for bringing the required equipment to the

exam center. There is no guarantee that any of the equipment listed above will be available in the exam rooms, and even if the equipment is available, it may not be a brand that you are familiar with.

If you do not bring the above-listed items and cannot perform the clinical skill requested, you will be scored as if the skill was not performed correctly.

Candidate Familiarity with Exam Equipment

Candidates are expected to be familiar with the equipment used on the Clinical Skills examination. This includes familiarity with different brands of instrumentation. An example is biomicroscopes. Different manufacturers and models of biomicroscopes are used at different test centers. Candidates should be familiar with each of the manufacturers and models of all of the equipment used on the exam as they cannot request, or anticipate, a favorite manufacturer or model of equipment.

Please note candidates will not be permitted to visit a testing center in advance of the Clinical Skills exam in order to familiarize themselves with the exam equipment.

Candidate Orientation to Examination Procedures

The Clinical Skills section begins with an orientation that all candidates are required to attend. Examination procedures are discussed during this session with regard to time limits, equipment, patients and safety, candidate and examiner responsibilities, and appeals.

Candidates who are late for the orientation session may be disqualified from the examination unless there are documentable extenuating circumstances. Candidates who are late for the first examining session will be disqualified.

The candidate orientation is led by the Chief Examiner, who also serves as the candidate advocate, assisting candidates with any problems that may arise. This would include situations in which candidates felt that they were examined unfairly or arbitrarily by an examiner, or where a particular patient behaved in an uncooperative or hostile manner.

Listed below are the rules and regulations that govern clinical skills assessment. All candidates are responsible for reading these rules and regulations prior to arrival at the test center and abiding fully with them. Candidates are responsible for raising any questions or concerns about the rules and regulations with the Chief Examiner during the candidate orientation.

1. Following the 15-minute orientation session, candidates will be assigned to a particular room at a particular station for the beginning of their rotation through the stations. The clinical skills to be assessed are the same at all test centers and utilize the same criteria.
2. The examination is composed of 21 clinical skills which candidates will demonstrate at five stations. The total testing time at each station is 30 minutes.
3. Candidates are responsible for monitoring their time. Examiners will not remind candidates of the remaining time at a station. If time expires before a candidate has completed the station, the items not performed will be scored as incorrect.
4. Five minutes are allotted for rotation between stations. Candidates may familiarize themselves with the equipment during this 5-minute period. No clinical procedures should be performed before the station examination officially begins.

5. Each candidate is evaluated by one examiner per station. Five examiners contribute to each candidate's Clinical Skills score.

6. A set of instructions is posted in every examination room. Candidates may reread the instructions before the station examination begins. However, no clinical evaluation scales or other notes may be taken into the examination room. Similarly, candidates may not bring the Examination Guide with them. All notes and Examination Guides must be left in the orientation room. Violation of this policy shall be cause for disqualification from, or failure of, the examination.

7. A whistle officially begins the examination at each station. The purpose of this formal (albeit loud) beginning is to standardize the amount of examining time for all candidates. Therefore, examiners have been instructed to ignore any candidate procedures that precede the whistle, including general station procedures. Candidates who begin before the whistle must repeat any task performed in order to receive credit. Similarly, no notes are to be written before the whistle blows, since examiners may be unable to distinguish notes created in the room, from notes illegally brought into the room. Writing notes in the room before the whistle blows may be cause for disqualification. Candidates should stay in the examination room until the whistle blows again, indicating the end of that station.

8. The examiners will not enter the examination room until the whistle blows. Upon entry, candidates may ask questions regarding the equipment. However, no additional examination time will be provided for these questions and answers, and this will be the only point at which such questions may be asked of the examiner during the station. Examiners will exit the room immediately after the whistle blows concluding the station, or after the candidate has indicated completion of the procedures at the station.

9. The evaluation forms in Appendix A of the Examination Guide contain the criteria that examiners use to assess candidate performance. The criteria are in the form of yes-no checklists, and with the exception of items comprising skills 1 and 2 in Station 1, the performance items are sequenced in the order in which they should be conducted.

10. The first clinical skill at each station begins with 1-2 general station procedures, such as greeting the patient. As candidates remain with, and examine the same patient within a station, these procedures are conducted once within the station. However, these procedures are not inherently a part of the first clinical skill assessed. Therefore, although these performance items are evaluated with the initial clinical skill at the station, they are scored separately. Similarly two of the five stations have a general station procedure at the conclusion of the last clinical skill assessed (i.e., maintaining proper hygiene throughout the station examination).

11. At Station 1 for skills 1 and 2, a second examiner performs in the role of a patient. Candidates should be prepared to respond to this individual based on the patient being portrayed, rather than on the examiner's personal characteristics. For example, the examiner may be a white female in her mid-forties portraying an elderly black male. Skill 1 assesses candidate performance in conducting a case history and in the ability to communicate with the patient. The examiner patient subsequently portrays a different patient in skill 2. For this skill, candidates are given the patient's diagnosis, treatment regimen, and follow-up schedule, and are graded on their performance in explaining these technical data to the patient in lay terminology to promote patient understanding and compliance. For skill 3, which assesses performance in blood pressure measurement, candidates should ignore the prior demographic and clinical data that were scripted in skills 1-2 and assume that they are examining a third patient.

12. Candidates examine "real" patients at Stations 2-5. A different patient will be examined at each station, and generally, all of the clinical skills assessed at a given station will be performed on the same patient. Occasionally candidates may be asked to examine a second patient at a given station, if for example, patient discomfort or fatigue preclude further examination. The assessment of ophthalmic materials in Station 4 is the only clinical skill for which there is no patient. This evaluation consists of candidate assessment and verification of the ophthalmic materials that are provided.

13. Each examination room will have blank paper to record patient data as they are obtained if desired by the candidate. This paper is for recording notes or data and is not graded. At the conclusion of each station, candidates must leave behind any notes or data recorded during the preceding patient examination.

14. At Station 4, in addition to blank paper, the Ophthalmic Materials assessment has a designated form which candidates are required to use for recording their findings. This form is then submitted for grading. A copy of this form is available for viewing: Ophthalmic Materials Form.

15. Stations 2-5 contain items requiring candidates to state clinical findings to the examiner or give instructions to the patient. Speaking clearly is important for these performance items, as these items test communication skills.

16. In Station 3, results from one clinical skill are used in the performance of a subsequent skill. This design simulates clinical reality and facilitates a smooth flow in the station. Although it is inevitable that some errors may affect the results in performing a subsequent clinical skill, steps have been taken to minimize the impact of this linkage by emphasizing the process of how the candidate examines the patient, rather than the findings.

17. In order to be evaluated objectively and uniformly, candidates must not have any prior knowledge of a patient whom they are to examine. Therefore, during the course of the examination, if candidates are acquainted with an assigned patient or have knowledge of the patient's condition (e.g. refractive error, disease, etc.), they will be required to notify the examiner of this familiarity. An alternate patient will be provided for examination at that time. Failure to disclose this familiarity with a patient may result in disqualification.

18. Candidates are randomly matched with examiners. If, for a valid reason, candidates feel that they may not be evaluated fairly by the examiner with whom they have been matched, it is their responsibility to immediately request another examiner. Candidates are to refer to themselves by their Candidate ID number and not by name.

19. Examiners may appear to be unfriendly. Candidates should not regard this as a personal dislike or an indication of performance quality. Examiners are instructed to conduct the examination in a personally neutral manner to promote uniform, equal treatment of candidates. The examiners' detachment produces a more objective, impartial evaluation.

20. During the evaluations, examiners are responsible for ensuring patients' safety. If an examiner feels that the examination techniques or procedures used by a candidate place the patient at risk, the examiner has the responsibility to terminate the clinical skill being assessed. If such intervention is necessary, the candidate will receive a zero for that item and the remaining items for his or her performance on that clinical skill, but will be allowed to perform the remaining clinical skills at the station and may continue with the remainder of the Clinical Skills examination.

21. Candidates who wish to repeat a particular aspect of a clinical skill may do so (except for retinoscopy after having performed subjective refraction), but they must repeat the entire skill and announce their intent to the examiner. However, this may leave insufficient time to complete other skills at the station. Candidates are responsible for facilitating examiner observations. It is your responsibility to make sure that the examiner has a view through the teaching mirror or tube. Candidates who are amblyopic or monocular are advised to use the better eye for observing through the same optical path as the examiner. Occasionally, the examiner may ask candidates to repeat a procedure or part, if he or she was not able to observe it. However, if the examiner feels that repeating a procedure may require too much time, he or she may have to mark that the item was not performed correctly.

22. Candidates are reminded that specific performance items in most stations require that the obtained findings be stated to the examiner as they should be recorded in a patient record. Despite obtaining the correct findings, any candidate neglecting to state them, or who states them incorrectly, will not receive

credit for that item. The evaluation forms printed in the Examination Guide indicate the specific items with this requirement.

23. Candidates are responsible for bringing the equipment listed in the section Equipment That Must Be Brought to The Examination. If they bring their own BIO, it must have a teaching mirror. Candidates may be asked by other candidates who have forgotten various items to borrow equipment. If a candidate lends any equipment and does not receive it back in time to begin the examination, or the equipment is broken by the borrower, the lending candidate will be scored as if he or she forgot the equipment. Therefore, candidates are advised to not lend any equipment to other candidates. This Examination Guide was produced with sufficient time for all candidates to have more than ample time to prepare. Therefore, there is no excuse for any candidate arriving without the required equipment in working order.

24. Candidates should indicate to the examiner when they have completed each clinical skill and all of the station procedures.

25. Any procedural questions that candidates have should be addressed directly to the Chief Examiner or a supervising or clinical examiner. No other conversations should occur between candidates and examiners, or among candidates during the examination, including breaks between stations. Conversations between candidates and patients beyond those required to perform the necessary skills are limited to non-optometric topics. The National Board reserves the right to dismiss any candidate from any examination session if this condition is breached.

26. It is advisable for candidates to use the lavatory before the examination begins or during breaks. No time allowance is given for lavatory use during the examination sessions.

27. Examination Committee members and observers may enter the rooms during the examination. No more than one observer may be present in any examination room. Observers have been instructed to not converse with candidates or with examiners in the examination rooms.

28. Candidates must not leave the test center until dismissed, or re-enter the test center after dismissal. Candidates must return their badges and must not remove any testing materials from the test center; doing so may invalidate a candidate's test performance. Relatedly, any inappropriate or disruptive behavior shall be cause for removal from the test center and failure of the examination.

29. The National Board uses quantitative and qualitative data to evaluate examination uniformity and fairness to detect potentially harsh measurement. Quantitative data are derived from a statistical composite examiner analysis to assess interrater (i.e., inter-examiner) reliability to detect possible harshness in grading. Qualitative data are based on candidate and examiner incident reports that document any administrative irregularity (e.g., malfunctioning equipment, unresponsive patient). Candidates who feel that their performance may have been adversely affected by an administrative irregularity are responsible for completing the test incident form.

30. If the National Board concludes that potentially harsh measurement may have contributed to a failing performance on Part III, the National Board will re-examine that candidate within several weeks, free-of-charge. For the April/May administration, the retake is scheduled for August 1, 1998, in Memphis, Tennessee, at Southern College of Optometry. For the November administration, retakes will be scheduled by the National Board on an ad-hoc basis. The occurrence of potentially harsh measurement is not an indication of grading with prejudice, but rather a random or unexpected outcome. The National Board will contact candidates if such a re-examination is appropriate.

31. Candidates may appeal their tests results. All appeals should contain substantive issues to be considered and shall be filed in writing at the National Board office within 60 days of the corresponding score release date posted in the Examination Guide. All appeals are reviewed first by the Board's staff, the results of which will be communicated to the candidate. If the initial appeal is denied, candidates will then have an additional 60 days to file an appeal directly to the Judicial Committee of the Board of Directors. Appeals that are upheld within the first 3 weeks following release of scores will be re-examined at the

regularly scheduled special retake of the Clinical Skills examination

B. Visual Recognition and Interpretation of Clinical Signs (VRICS) - 65 Items (20%)

"VRICS" consists of 65 multiple-choice items based on color photographs and other graphic images. The VRICS content outline is printed below. Adjacent to each of the three major headings is the range of items that candidates may expect on the examination. As should be evident, the majority of items are in the Ocular Disease/Trauma area, with the fewest number of items within the Ophthalmic Materials area.

1. Oculomotor Neuropathology/Strabismus (10-14 Items)
 - a. Extraocular Muscle Conditions
 - b. Cranial Nerve Conditions
 - c. Visual Fields

2. Ocular Disease/Trauma (33-39 Items)
 - a. Ocular Adnexa/Lacrimal System
 - b. Conjunctiva
 - c. Cornea
 - d. Sclera/Episclera
 - e. Anterior Uvea (Iris and Ciliary Body)
 - f. Pupil
 - g. Orbit
 - h. Anterior Chamber
 - i. Lens/Aphakia/Pseudophakia
 - j. Posterior Pole/Peripheral Fundus
 - k. Optic Nerve
 - l. Fluorescein Angiography

3. Contact Lenses (13-17 Items)
 - a. Lens Condition
 - b. Fluorescein Pattern Evaluation
 - c. Physiological Complications
 - d. Corneal Topography

4. Ophthalmic Materials (2-3 Items)
 - a. Spectacle Frame Alignment
 - b. Ophthalmic Lens Orientation
 - c. Cosmetic Considerations

VRICS is an extension of the Clinical Skills examination. The logistical and time constraints of one-on-one clinical skill assessments inhibit the "real time" evaluation of candidates' ability to attain and assess patient data. The advantage of the VRICS examination is that it provides a broad, comprehensive assessment of candidates' abilities to evaluate patient data as obtained and seen through clinical instrumentation or by gross inspection.

Each color photograph is accompanied by a list of supportive clinical data, including patient demographic characteristics, chief complaint, and clinical signs and symptoms. These data are presented in abbreviations in outline form in order to reduce the time required for reading. The items are arranged in random order.

As VRICS is an entry-level examination, the clinical data provided may be considered typical of patients with the presenting condition. For example, a visual depiction of age-related maculopathy would typically be for a patient greater than age 60. This type of clinical photograph is not likely to portray a young person (e.g., 20 years old), as this depiction would be a highly unusual occurrence and perhaps not entry-level. Some of the clinical data accompanying a photograph may be coincidental and not related to the patient's underlying condition. These data are provided because real patient encounters contain both relevant

and irrelevant data from which the candidate must determine the patient's diagnosis.

Epidemiological considerations are paramount in the selection of clinical photographs. The primary consideration is frequency. Ocular conditions with high frequency are selected with higher priority over conditions with low frequency. Similarly, conditions with a high criticality (i.e., severe consequences for the patient if mis-diagnosed) are selected with higher priority over conditions with low criticality. As the frequency dimension is the primary basis for selecting photographs, and prototypical patient data accompany these photographs, knowledge of epidemiology and public health are very important in preparing for the VRICS examination. Similarly, the epidemiological orientation of this examination has great significance for the protection of the public at the point of entry-level licensure.

In addition to the clinical data, both visual and written, each VRICS item culminates in a stem (e.g., What is this patient's condition?). The stem is then followed by 3-5 options, one of which is correct. Incorrect options, may represent various types of candidate errors. Examples of misconceptions upon which distracters are based include diagnoses:

- as a result of having been misled by irrelevant clinical data;
- similar to, but sufficiently different from, the correct diagnosis; and
- based on having "missed" or misinterpreted key findings.

Paramount in the design of the VRICS examination is the attempt to simulate, as closely as possible, the visual and supportive data typically seen in an office setting and the types of decisions that must follow. The candidate is referred to the "Part III (Patient Care)" section of the Sample Test Items for a sample VRICS test item.

Three sets of materials are inserted in each test booklet. First, a multipage atlas contains each of the photographs. Consecutive items in the test booklet refer to consecutive photos in the atlas. Occasionally, an item may refer to more than one photo, or two or more items may refer to the same photo. Therefore, each item must be read very carefully, to ensure reference to the appropriate photo(s). All items are considered independent of each other, unless an item specifically refers to prior patient data. A copy of these directions is included in the atlas. The two additional inserted materials are an answer sheet and a test critique form.

C. Patient Management (PMPs) - 5 Simulations (15%)

"Patient Management" consists of five written patient simulations known as patient management problems (PMPs). A full description of the PMP format, including a sample PMP, completed answer form, and accompanying narrative and discussion can be viewed by clicking on "PMP" here or in the title above.

The PMP presentation is standardized. Thus, each PMP offers candidates the same options with respect to clinical findings, diagnoses, treatment regimens, prognoses, and follow-up. The sample PMP provided on this web site is in the same form as the PMPs that will be presented on the examination. Within one month of the examination

The End of the Original Packet

The goal of moving the exam ahead was immediately shot down. Reasons of time constraints to get examiners, the graduation dates of the colleges of optometry, and state law requiring that an individual has graduated from a college of optometry prior to testing were given. The timing of the exam is not a minor point. It directly affects students and as a result the public. States accepting the part III of NBEO can result in licensure almost two months earlier than in Michigan. Indiana, for example, accepts part III and has a law exam that can be taken at the same time. If the application for licensure is turned in early after graduation, it can be approved and a license issued about two weeks after the part III scores are released on June 23.

This earlier licensure allows the new doctors to care for the public earlier. The individuals who are licensed in Michigan have a longer period with minimal or no income. When they finally can practice, they have gone longer without using their skills, and also need to see more patients in order to make up for lost income over the summer months. This need for additional income may drive some optometrist into forms of practice they would otherwise not have chosen and may have to spend less time providing appropriate care for each patient, as they need to see more patients to make the income necessary. The General Rules of the Michigan State Board of Examiners in Optometry need to be changed to allow any changes. The following are the rules that apply for both the timing and the requirement of a separate examination.²

R 338.252 Licensure By Examination

Rule 2.

1. An applicant for a Michigan optometry license by examination shall submit a completed application on forms provided by the department, together with the requisite fee. In addition to meeting the requirements to the code and the administrative rules promulgated pursuant thereto, an applicant shall satisfy all of the following requirements of this rule:
2. An applicant shall have graduated from a college of optometry or school of optometry approved by the board.
3. An applicant shall have achieved a score of not less than 75 on each part of the Michigan board of optometry clinical examination.
4. An applicant shall have achieved a score of not less than 75 on part 1, a score of not less than 75 on part 11A, and a score of not less than 75 on part 11B of the examination developed and scored by the national board of examiners in optometry or achieve a score of not less than 75 on the basic science examination and a score of not less than 75 on the clinical science examination developed and scored by the national board of examiners in optometry.

R 338.253 Licensure By Endorsement.

Rule 3.

1. An applicant for a Michigan optometry license by endorsement shall submit a completed application on forms provided by the department, together with the requisite fee. In addition to meeting the requirements to the code and the administrative rules promulgated pursuant thereto, an applicant shall have

- graduated from a school or college of optometry approved by the board and satisfy the following requirements of this rule.
2. If an applicant was first licensed in another state before June 1, 1985, and has engaged in the practice of optometry for a minimum of 5 years before the date of filing an application for a Michigan optometrist license, it will be presumed that the applicant meets the requirements of section 16186(1) (a) and (d) of the code.
 3. If an applicant does not meet the requirements of subrule (2) of this rule, the applicant shall satisfy the following requirements as applicable:
 - a. An applicant who was first licensed in another state on or after June 1, 1985 shall have either achieved a score of not less than 75 on part 1, a score of not less than 75 on part 11A, a score of not less than 75 on part 11B of the examination developed and scored by the national board of examiners in optometry or achieved a score of not less than 75 on the basic science examination and a score of not less than 75 on the clinical science examination developed and scored by the national board of examiners in optometry.
 - b. An applicant who has not been licensed in another state for a minimum of 5 years and engaged in the practice of optometry for a minimum of 5 years before the date of filling an application for a Michigan optometrist license shall achieve a score of not less than 75 on each part of the Michigan board of optometry clinical examination.

R 338.255 Michigan Board of Optometry Clinical Examination; Eligibility.

Rule 5.

1. To assure eligibility for the Michigan board of optometry clinical examination, an applicant shall file a completed application not less than 30 days before the date of the examination. To be eligible to sit for the examination, an applicant shall have graduated from a school or college of optometry approved by the board and establish 1 of the following:
 - a. That he or she has achieved a score of not less than 75 on part 1, a score of not less than 75 on part 11A, and a score of not less than 75 on part 11B of the examination developed and scored by the national board of examiners in optometry
 - b. That he or she has achieved a score of not less than 75 on the basic science examination and a score of not less than 75 on the clinical science examination developed and scored by the national board of examiners in optometry.
 - c. That he or she was first licensed in another state before June 1, 1985.
2. An applicant who fails to achieve a score of not less than 75 on each part of the Michigan board of optometry clinical examination within 2 attempts shall be required to retake and achieve a score of not less than 75 on all parts of the examination in each subsequent sitting.

Table comparing additional requirements beyond part I and II of NBEO to therapeutic pharmaceutical agents that may be used by optometrists licensed in that state^{3,4}

State	Part III	Written Exam	Practical Exam	Oral Exam	Allergy Meds	Infection Meds	Glaucoma Meds	Inflammation Meds	Oral Pain Meds
Alabama	Y	Y			T-O	T-O	T-O	T-O	O
Alaska	Y	Y	Y	Y	T	T	T	T	
Arizona			Y		T-O	T-O	T	T-O*	O
Arkansas	Y				T-O	T-O	T-O	T-O	O
California	C		Y		T	T-O		T*	
Colorado	Y				T-O	T-O	T-O	T-O*	O
Connecticut	Y				T-O	T-O	T-O	T-O	O
Delaware	Y				T-O	T-O	T-O	T	O**
Florida		Y	Y		T	T	T	T	
Georgia			Y		T	T	T	T	O
Hawaii	Y				T	T		T	
Idaho	Y				T-O	T-O	T-O	T-O	O
Illinois	Y				T	T	T	T	O**
Indiana	Y				T-O	T-O	T-O	T-O*	O**
Iowa	Y	Y	Y		T-O	T-O	T-O	T	O
Kansas	Y	Y	Y		T-O	T-O	T-O	T-O	O
Kentucky	Y				T-O	T-O	T-O	T-O	O
Louisiana			Y		T-O	T-O	T	T	
Maine	Y			Y	T-O	T-O	T	T-O*	O
Maryland	Y				T	T-O	T	T*	
Massachusetts	Y				T	T		T	
Michigan		Y	Y	Y	T	T	T	T	
Minnesota	Y				T	T	T	T	
Mississippi	Y	Y			T	T	T	T	
Missouri	Y				T-O	T-O	T-O	T-O	O
Montana	Y				T-O	T-O	T-O	T-O	O
Nebraska	Y				T-O	T-O	T	T-O*	O
Nevada	Y				T-O*	T-O	T-O	T	O
New Hampshire	Y				T	T-O		T*-O*	O
New Jersey	Y				T	T	T	T	
New Mexico	Y		Y		T-O	T-O	T-O	T-O*	O
New York	Y				T	T	T	T	
North Carolina			Y		T-O	T-O	T-O	T-O	O
North Dakota	Y				T-O	T-O	T-O	T-O	O
Ohio	Y				T-O	T-O	T-O	T-O	
Oklahoma	Y	Y		Y	T-O	T-O	T-O	T-O	O
Oregon	Y				T	T	T	T	
Pennsylvania	Y				T	T-O		T*	O
Rhode Island	Y		Y		T	T	T	T	
South Carolina	Y		Y	Y	T-O	T-O	T-O	T	O
South Dakota	Y				T	T	T	T	O
Tennessee	Y				T-O	T-O	T-O	T-O	O
Texas	Y				T-O	T-O	T-O	T-O*	O
Utah	Y				T-O	T-O	T-O	T-O	O
Vermont	Y				T	T		T	
Virginia	Y				T	T	T-O	T-O	O
Washington	Y				T	T	T	T	
West Virginia		Y		Y	T-O	T-O	T-O	T-O	
Wisconsin	Y	Y			T-O	T-O	T-O	T-O	O
Wyoming	Y	Y	Y	Y	T-O	T-O	T-O	T-O*	O

Key: Y=Accepted or Required, C=Clinical Skill Only, T=Topicals, O=Orals, *=No Steroids, **=No Controlled Substances

The next goal of acceptance of exam part III of the NBEO is where further efforts need to be directed. Swaying the opinion of board members is not something that is done with one discussion. Setting the groundwork for further discussion can only come from the students. In communication with the present MOSA president it was concluded a consistent committee should be formed of 1-2 first year, 2 second year, and 2-3 third year students. This committee can be in charge of formulating a yearly presentation to the board. The goals of the presentation can stay the same, or they can be modified slightly. There must be continued effort on acceptance of exam part III through communication between the board and the students.

The table on the previous page attempts to organize the requirements of the states for the "clinical" testing they feel is necessary to ensure only competent optometrists are licensed. All states require part I and II. It also compares those requirements to the level of therapeutic pharmaceutical privileges that are allowed by the states. It is easy to see there is no consistent requirement by different states as to what level of testing is needed for a particular level of treatment. Alaska, for example, requires part III and three state exams, yet only allows optometrists to use topicals. On the other hand, Arkansas and eight other states have no additional exam requirements beyond part III and allow the optometrists to use topicals and orals, including steroids and controlled substances, to provide care for their patients. Most states with therapeutic privileges equal to or greater than that of Michigan require part III as the only clinical exam necessary. Michigan is the only state that does not accept part III and requires three exams; written, oral, and practical that are administered by the state. These differences demonstrate the need, not only for Michigan to accept part III, but also for all states to have consistent licensing requirements and practicing privileges.

The original survey was sent out to all newly licensed optometrists in the state of Michigan who were members of the MOA. They were chosen as the recipients because they had recently taken the examinations, and it was felt they would be most likely to respond to the survey. Questionnaires were returned by 38 of the 59 optometrists that were polled. Upon suggestion by one of the board members it was decided a yearly survey of newly licensed optometrists would be a good piece of information. This particular member was interested to see comparable Michigan to part III of NBEO pass/fail rates not just personal opinion. He was particularly concerned, that if license prospects were passing exam part III and failing the state board that this proposal could not work. However, if anyone was failing the national exam and passing the state, he thought the national exam would be adequate to protect the public, which he saw as his job. These future efforts need to be directed at how this legislative change can help to protect the public further, and not only that it will help license interested optometrists. A new questionnaire was devised reflecting what was desired but has not yet gone out to recent licensees.

New Questionnaire:

In an attempt to have the State of Michigan accept Part III of the National Boards, instead of requiring its own Clinical Board exam, we would like you to take a couple minutes to fill out this questionnaire and return it by _____ in the enclosed self addressed stamped envelope. The questions are designed to gather the information the state board feels is necessary to consider a change. Thank you. MOSA Committee to evaluate the necessity of state board exams

Please circle your responses. Any additional comments may be made on the back.

1. Did you take Part III of the National Boards? Yes No
2. Did you take any state exams (other than MI)? Yes No
Which state? Which parts? Law Practical Written Oral
3. Do you feel the Michigan State exams adequately assess the clinical skills necessary to practice entry level optometry in Michigan today? Yes No
4. Do you feel the National Board of Examiners Part III adequately assessed the clinical skills necessary to practice entry level optometry in Michigan today? Yes No
5. If you took both the Michigan State exam and Part III, which exam(s) did you pass? MI Part III
6. In your opinion, which exam was more comprehensive and a better representation of the skills necessary to be an optometrist? MI Part III
7. Did the time frame of the MI State exams and Licensing affect your job opportunities? Yes No
Please explain:
8. Are you considering endorsement or reciprocity (please circle which) Yes No
9. What was your overall grade point average in optometry school _____
10. If you have any additional comments about the exams or if there are any other services you would like to see the State Board of Michigan provide, please write them below or on the back of the page.

A couple of changes have taken place since the initial presentation that affect the future efforts. The previous part III exam of NBEO was considerably more expensive than the state of Michigan exam. It was \$800 but is now \$585. This reduction in price may help the board accept that the exam is also more beneficial to the students. The price was not a huge concern for student in the past as the necessity of the exam outweighed the cost. The majority of graduating students already take the exam.³

Recently the National Board of Examiners in Optometry also made changes to examination part III. The VRICS and PMP were replaced with the Patient Assessment and Management (PAM) section. The following is NBEO's information regarding the PAM section.³

The Patient Assessment and Management (PAM) examination consists of 40 patient scenarios and is administered in a single 4-hour session. This is a new National Board examination being administered in the year 2000 for the first time. This exam replaces the old 4-hour Patient Management Problems (PMP) examination and the 2.25-hour VRICS examination. The examination consists of 40 abridged patient encounters. Each encounter begins with a scenario in which the case history and related clinical data are presented. These data include at least 1 graphic (e.g., color photo depicting pathology, fluorescein pattern, or frame fitting problem; visual field plot; instrumentation readings; or other clinically relevant visual data). The scenario is followed by 3 multiple-choice questions (MCQs). Each MCQ contains as many as 10 options, only one of which is correct. The combination of a scenario and 3 MCQs comprises a patient encounter or question cluster. A patient encounter will focus on either issues related to assessment and diagnosis or issues related to management and treatment. There are four sample PAM questions available on the web site. The test content outline is available also.

Scoring the PAM examination involves different scoring weights for the three MCQs within each cluster. The first question in each cluster focuses on either a diagnosis or treatment issue. This is the most important or critical question within the cluster and is worth 2 points. The 2 questions that follow are worth 1 point each. These 2 questions can be answered correctly even if the first question is "missed." However, as the initial question is related to the subsequent 2 questions, the probability of answering the latter questions correctly is diminished if the first question is answered incorrectly. There is no penalty for wrong answers, and candidates are expected to answer all questions.

The pass-fail standard is based on correctly answering, across the overall PAM section, the first question and either of the 2 subsequent questions. This standard results in a pass-fail cutoff score of 75%. In other words, missing the first question automatically produces a deficient score for the cluster, even if the companion questions are answered correctly, because the candidate fails to render a correct diagnosis or treatment. This relationship between criticality and scoring is similar to that of the Clinical Skills section in which not correctly performing the most critical task or item within a skill automatically produces a deficient score for the skill. In both sections, compensatory scoring allows candidates to overcome a deficiency in one cluster or skill by exhibiting superior performance in one or more other clusters or skills. Compensatory scoring extends to the integration of both sections for determining the overall pass-fail score and a candidate's pass/fail status. The cutoff score of 75% for the Patient Assessment and Management section is averaged (on a weighted basis, reflecting the percentage of the Part score contributed by the Section) with the cutoff score for the Clinical Skills section to produce the overall Part III pass-fail cutoff score. Although some state boards may require candidates to pass both sections, the National Board determines passing on the basis of a candidate's overall part score, as the National Board does on all Part examinations.

In the past, groups of groups of students have directed attention toward the state licensing board to move the Michigan state board exam ahead, accept exam part III of NBEO, and eliminate what is felt to be redundant, unnecessary sections of the Michigan state board. Through poor focus, the students' efforts have fallen short of desired goals, and their arguments were not as serious as necessary. In mid 1999 a carefully thought out presentation was designed to be successful and groundwork for future efforts was set and written down. While the official presentation seemed to do little, additional effort was put forth to achieving the desired goals for future students. Hopefully, with dedicated students and some proper guidance by the founder, the legislation will eventually be changed to reflect the present goals.

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