



The National Board of Veterinary Medical Examiners

Dr. Jay Hedrick, Chair-Elect

North American Veterinary Medical Education Consortium
Las Vegas, Nevada
July 15, 2010

The National Board of Veterinary Medical Examiners

- Formed by the AVMA in the late 1940's
- Reorganized and renamed the National Board Examination Committee in 1978
- Incorporated in 1994 as an independent not for profit corporation, 501(c)(3)
- Separated from the AVMA in December 1995
- 13 members, directly appointed by constituent groups
- Office in Bismarck, North Dakota since 1997
- www.nbvme.org



NBVME Membership 2009-2010

- AAVSB: Meg Glattly, Jay Hedrick, Lila Miller, Joyceanne Fick (public member)
- AAHA: Dennis Feinberg and Mike Thomas
- AABP: Tom Hairgrove
- AAEP: Ben Franklin
- AASV: Rick Tubbs
- AAVMC: Linda Blythe
- AVMA COE: Jayne Jensen
- Canadian NEB: Sylvie Latour
- NAFV: Gary Gackstetter
- Executive Director: John R. Boyce



NBVME Mission

The NBVME is a nonprofit, professional veterinary examination service that provides psychometrically sound, defensible examinations for use by governmental licensing agencies and other entities so that they can assure the protection of public and animal health and welfare by assessing professional competency.



NBVME Strategic Plan

- 2007-2010 Goals:
 - Assure continuous improvement of assessment instruments
 - Increase organizational effectiveness in order to ensure and sustain the NBVME mission
 - Maintain a financially stable organization that will ensure and sustain the NBVME mission
 - Develop programs for outreach to other organizations
- 2010-2013 plan update underway



NBVME Meetings

- Board meetings in January and July
- NAVLE form review in April
- Other activities as necessary:
 - Licensing board and other outreach visits
 - NAVLE and QE item bank reviews
 - NAVLE and QE standard setting exercises
 - Irregular behavior hearings
 - Job analysis task forces
 - Item writing

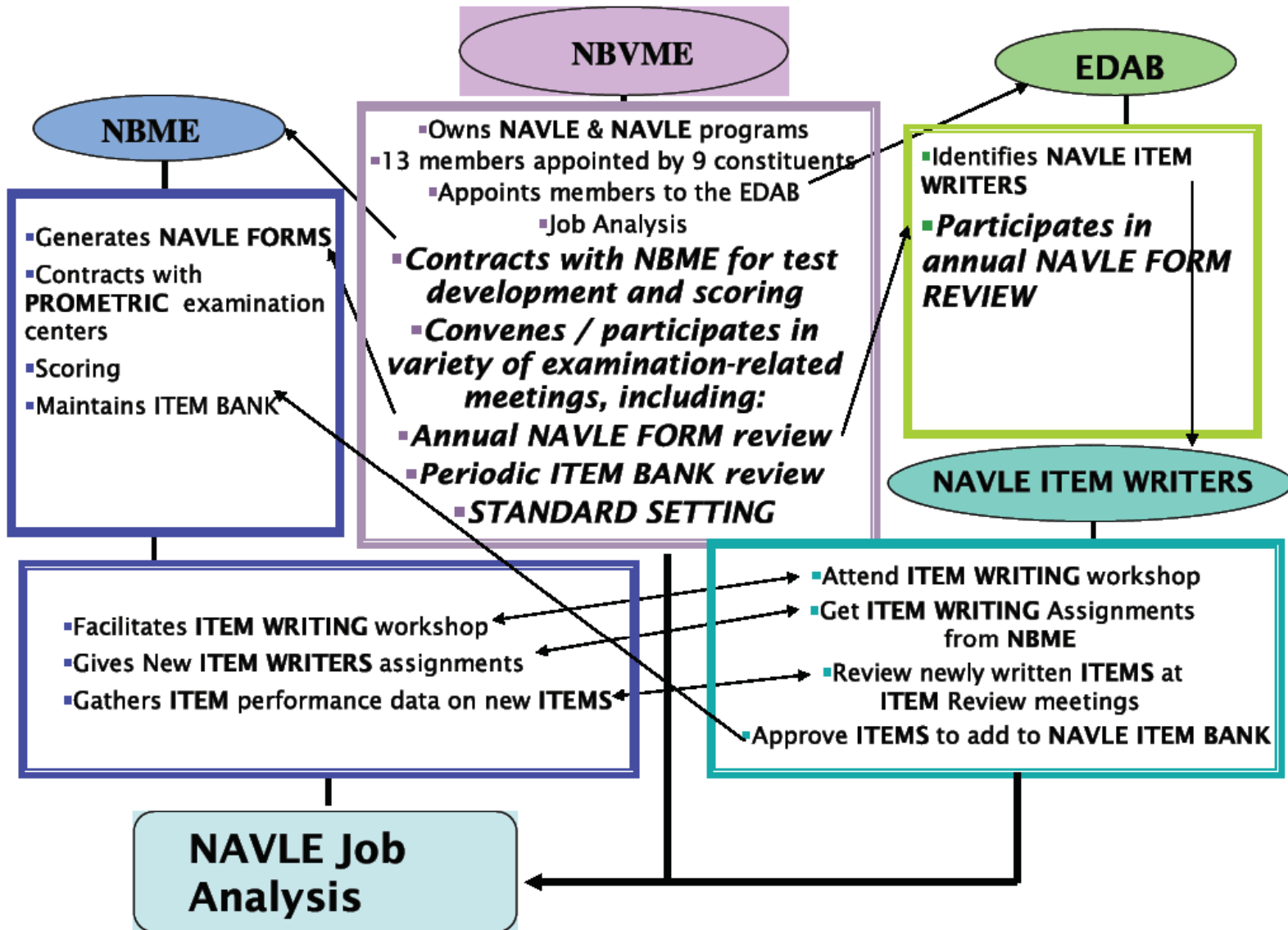
NBVME Examinations

- North American Veterinary Licensing Examination (NAVLE®)
- NAVLE Self-Assessments
- Qualifying Examination (QE)
- Veterinary Clinical Skills Assessment (VCSA)
- Species Specific Examinations

The NAVLE, the NAVLE Self-Assessments, and the QE are developed by the NBVME in cooperation with the National Board of Medical Examiners (NBME) in Philadelphia, PA



NAVLE[®] Process Overview



A complex process to support a critical need...

NAVLE

- 360-item computer-based multiple choice examination
- First offered in fall 2000
- Replaced both the National Board Examination (NBE) and Clinical Competency Test (CCT)
- Focuses on entry-level private clinical practice
- 300 scored items and 60 pretest items
- Includes pictorial items
- Most items are case-based
- French forms developed for use in Canada

Sample NAVLE Item

A 2-year old Quarter horse is being evaluated because of pyrexia, anorexia, and depression. Clinical examination shows a bilateral nasal discharge and retropharyngeal swelling. Which of the following is the most likely diagnosis?

- (A) Esophageal obstruction
- (B) Equine influenza
- (C) Equine viral rhinopneumonitis
- (D) Guttural pouch mycosis
- (E) Strangles

NAVLE Job Analysis

- Defines job activities of entry-level practitioners
- Advisory Committee and practitioner survey
- Examination forms administered through April 2011 are based on a job analysis approved in 2003-2004
- New job analysis completed in 2009 will be used to develop examination forms given beginning in 2011
- NAVLE Test Blueprint: Activities, Species, Diagnoses

NAVLE Test Blueprint: Activities

- Data Gathering and Interpretation (140 items; 47%)
 - e.g. Determine the status of the animal by observation and physical examination
- Health Maintenance and Problem Management (140 items; 47%)
 - e.g. Monitor the effectiveness of preventive and/or therapeutic measures
- Professional Behavior, Communications, and Practice Management (20 items; 6%)
 - e.g. Adhere to regulations regarding the veterinarian-client-patient relationship

NAVLE Test Blueprint: Species

- Canine (70 items; 23%)
- Feline (68 items; 23%)
- Pet Birds (10 items; 3%)
- Other Small Animals (10 items; 3%)
- Bovine (45 items; 15%)
- Porcine (17 items; 6%)
- Ovine/Caprine (10 items; 3%)
- Cervidae (2 items; 1%)
- Equine (47 items; 16%)
- Camelidae (2 items; 1%)
- Poultry (6 items; 2%)
- Public Health (10 items; 3%)
- Non-species Specific (3 items; 1%)

NAVLE Test Blueprint: Diagnoses

- 1,418 individual diagnoses, grouped by 11 animal species and 14 organ systems
- Systems includes infectious, behavior, and multi-systems
- e.g. Canine/Integumentary/Pyoderma
- e.g. Bovine/Reproductive/Abortion
- e.g. Feline/Behavior/Inappropriate elimination

NAVLE Security

- item writer and reviewer confidentiality agreements
- in-house security at NBME headquarters in Philadelphia
- security at Prometric testing centers
- candidate confidentiality statement
- multiple examination forms
- scrambled items
- irregular behavior investigations

Examination Development Advisory Board (EDAB)

- Canine: Julie Fixman and Darcy Shaw
- Feline: Susan Little and Helen Tuzio
- Bovine: Mark Hilton and Norman LaFaunce
- Equine: Benjamin Darien and Patricia Provost
- Porcine: Karen Lehe
- Public Health: Dale Boyle

NAVLE Item Writers

- Approximately 25 item writers per year
- Selected by EDAB members
- Academicians and private practitioners
- Item Writing Workshop for all new item writers
- Asked to submit 40 items each
- \$1500 honorarium

NAVLE Item Review

- Each year in November
- Newly written items are reviewed by teams of item writers, by content area, with assistance from NBME editorial staff
- All images are reviewed for quality
- New items are approved for addition to the NAVLE item bank

NAVLE Form Review

- Each year in April
- NBVME members, EDAB members, AAVSB representatives, and recent graduates review and approve all NAVLE forms to be given in the upcoming fall-spring testing cycle
- Review is done by examination form, across all content areas

NAVLE Administration

- The NAVLE is given at Prometric Testing Centers in the US, US Territories, and Canada
- Overseas testing is available at Prometric centers in countries where there is an accredited veterinary school, for an additional fee
- Four week testing window in November-December
- Two week testing window in April

NAVLE Standard Setting

- The present content-based passing standard was approved by the NBVME in January 2009, following a July 2008 workshop
- The passing standard is reviewed and approved each January by the NBVME Executive Committee
- The passing standard is expressed as 425 on a 200-800 scale
- All licensing boards in North America accept the same passing standard

NAVLE Score Reporting

- Scores are reported to licensing boards and AAVSB/VIVA approximately 30 days after the close of each testing window
- Failing candidates receive a diagnostic report
- Accredited veterinary schools receive interim school score reports in February, and summary school score reports in August
- Following each testing window, accredited veterinary schools receive individual candidate scores, for candidates who consent

NAVLE Statistics

- 18 administrations from fall 2000 - April 2010
- 42,473 candidates to date
- Overall passing rate at graduation for accredited school graduates: 95-98%
- Good correlation between NAVLE score and class rank
- Little or no correlation between score and class focus
- Detailed NAVLE Technical Reports at nbvme.org

NAVLE Letter of Agreement

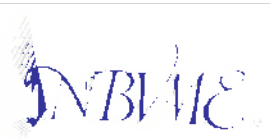
- Negotiated annually with each licensing board and the Canadian NEB
- Specifies details regarding eligibility, fees, deadlines, application procedures, score reporting, test accommodations, and irregular behavior
- For 2010-11, NBVME office will handle NAVLE approvals for 21 states: CO, FL, IN, IA, ME, MD, MI, MN, ME, NV, NH, NJ, NY, NC, OR, PA, SC, TX, UT, VT, and VA

NAVLE Self-Assessments

- 200-item web-based examinations using retired NAVLE items
- Two forms of each examination, in English and French (third English form will be available fall 2010)
- \$50 each
- Candidates receive score feedback reports with predicted NAVLE performance
- Available through *nbvme.org* since January 2008

Qualifying Examination (QE)

- 300-item web-based basic science examination covering anatomy, physiology, pharmacology, microbiology, and pathology
- Required for PAVE step 3
- Administered in September, January, and May
- 2,216 PAVE QE candidates since 2002
- Average pass rate for PAVE candidates is 78%
- Since 2005, 1,332 candidates at four accredited schools (Western, Iowa State, Tuskegee, and Minnesota) have taken the QE as a measure of basic science knowledge
- Detailed QE Technical Reports at nbvme.org



Veterinary Clinical Skills Assessment (VCSA)

- Two-day hands-on practical examination
- Step 4 option for PAVE candidates
- Given at Cedar Valley College in Dallas, TX
- 42 PAVE VCSA candidates since 2005, plus 19 reference candidates
- Includes four clinical encounters that evaluate communication skills using standardized clients

Foreign Graduate Certification

	ECFVG	PAVE
Sponsor	AVMA	AAVSB
Acceptance	All boards (and Canada)	33 boards (in addition to ECFVG)
Step 1	Credentials	Credentials
Step 2	English proficiency	English proficiency
Step 3	BCSE	QE
Step 4	CPE	Clinical year or VCSA
Licensure	NAVLE	NAVLE



Species Specific Examinations

- 100-item paper and pencil examinations
- Based on retired NAVLE items, but tailored to experienced practitioners rather than entry-level
- Companion animal and equine versions
- Two forms of each examination
- Revised in 2007
- Available to licensing boards on demand

Acronyms

NBVME: National Board of Veterinary Medical Examiners,
Bismarck, ND

EDAB: Examination Development Advisory Board (NBVME)

NAVLE: North American Veterinary Licensing Examination
(NBVME)

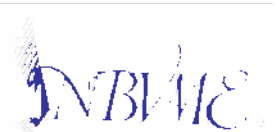
QE: Qualifying Examination (NBVME)

VCSA: Veterinary Clinical Skills Assessment (NBVME)

NBE: National Board Examination (NBVME)

CCT: Clinical Competency Test (NBVME)

NBME: National Board of Medical Examiners, Philadelphia,
PA



Acronyms

NEB: Canadian National Examining Board, Ottawa, ON

AAVSB: American Association of Veterinary State Boards,
Kansas City, MO

PAVE: Program for the Assessment of Veterinary Education
Equivalence (AAVSB)

AVMA: American Veterinary Medical Association,
Schaumburg, IL

ECFVG: Educational Commission for Foreign Veterinary
Graduates (AVMA)

BCSE: Basic and Clinical Sciences Examination (ECFVG)

CPE: Clinical Proficiency Examination (ECFVG)



