Doctor of Medical Science

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Goals for Today

• Answer the question, “Who is Lincoln Memorial University?”

• Address why Lincoln Memorial University developed the Doctor of Medical Science

• Address why Lincoln Memorial University is active in Washington State

• Describe the Doctor of Medical Science Program Developed at Lincoln Memorial University

• Discuss legislative efforts in Washington state regarding the Doctor of Medical Science

• Address the following common physician concerns regarding this proposed practitioner:
  – Education
  – Patient safety
  – Title
Lincoln Memorial University

- Founded in 1897 as a living memorial to President Abraham Lincoln
- Mission of serving Appalachia
- Accredited by SACS as a Level VI facility
- Enrollment has risen by 53% since 2003

- Largest Medical School in TN (240)
- Largest PA program in the Region (96)
- Largest Nursing School in TN
- Multiple allied health programs
- Newest Veterinary College in U.S.
558 DO Graduates Since 2011 - 346 PA Graduates since 2011

**DO**
- 71% in Primary Care
- 45% in Underserved Areas
- 24% in Appalachia
- 29% in Subspecialties
  (Examples: Cardiology, Physical Medicine and Rehab, Anesthesiology, Ophthalmology, Pathology)

**PA**
- 47% in underserved area
- 30% in rural area
- 48% in Appalachia
National Distribution of Lincoln Memorial University-DeBusk College of Osteopathic Medicine (LMU-DCOM) Graduates (2011-2014)

- 71% (384) of DO graduates practice a primary care specialty
- 46% (250) of DO graduates practice in an underserved area
- 48% (90) of PA graduates practice in an underserved area
- 10% (56) of DO graduates practice in a rural area
- 23% (43) of PA graduates practice in a rural area
- 47% (82) of PA graduates practice in Appalachia
- 24% (128) of DO graduates practice in Appalachia

Data Source: NCAHD's Enhanced State Licensure Data (2014), Rural based on OMB's metro/non-metro counties/census tracts (10/2010); Underserved based on HHS/HRSA MUA/MUP and PC-HPSA (9/14)

Map created by the National Center for the Analysis of Healthcare Data December, 2014

Lincoln Memorial University
Appalachian Region
One or more LMU-DCOM Osteopathic Physician graduate practice location (547)
One or more LMU-DCOM Physician Assistant graduate practice location (188)
Other DCOM facts

• Lincoln Memorial University-DeBusk College of Osteopathic Medicine (LMU-DCOM) has been ranked #2 by *U.S. News and World Report* in medical schools that produce the highest percentage of primary care residents. The ranking is based on 2013-2015 data averages.

• LMU-DCOM PA program was ranked 10th in the nation by the Rural Health Research Center for percentage of graduates practicing in rural areas based on 2000-2012 data.
Why a Doctor of Medical Science?
The need....

• Limited healthcare access as a result of:
  – ACA and 32 million new patients
  – 46% increase of the over 65 population by 2025\textsuperscript{1}
  – Anticipated 250,000 physicians retiring by 2025\textsuperscript{1}
  – Projected shortfall of primary care physicians of 43,000 by 2030\textsuperscript{1}
  – Federal cap on residency training dollars

In Short

• With our current model, there are not enough, and *we* cannot train enough primary care doctors to meet the expanding needs.
Why Active in Washington State?
Washington has:

- 155 HPSAs (22 entire counties)
- 1,291,662 – population of HPSAs
- 45.42% of need has been met
- 231 practitioners to meet the “needs”

Kaiser Family Foundation based on 2016 data

Washington has:

- 47 MUAs (12 entire counties)
- 39 Critical Access Hospitals
- 119 Medicare certified Rural Health Clinics
- 28 Community health centers operating 291 sites
- 22.9% of Washington adults do not have a personal doctor
In the April 2015 edition of the AAMC reporter, the AAMC Chief Health Care Officer when addressing the doctor shortage noted that “the doctor shortage will not be solved by any one approach, but rather will require a number of strategies. Medical Schools and teaching hospitals must do their part in care, delivery, and medical education.”
About the DMS Program

The Physician Assistant Profession is the Foundation of this Program
• Physician assistants are high quality healthcare providers trained in the *medical model*.

• Physician Assistant training was:
  – Developed by physicians
  – Based on the WWII fast track physician training model
Didactic Curriculum:
  - Anatomy
  - Physiology
  - Pharmacology
  - Physical Exam/Diagnosis
  - Clinical skills
  - Clinical Medicine

Clinical Curriculum (rotations)
  - Family Medicine
  - Internal Medicine
  - Emergency Medicine
  - Pediatrics
  - Women’s Health
  - General Surgery
  - Behavioral Medicine
  - Orthopedics
  - Electives
Curriculum comparison of TN Schools*

**MD/DO**

- Didactic phase:
  - Avg **1237** contact hours

- Clinical phase:
  - Avg **80** weeks

**PA**

- Didactic Phase:
  - Avg **1210** contact hours

- Clinical phase:
  - Avg **47** weeks

*Data taken from website publications

^Multiple Osteopathic and Allopathic programs have a 1 year clinical phase discussed in following slides
PA Certification/Licensure

• PAs must sit for a national licensing exam every 6/10 years.

• PAs must complete 100 CME hours every two years.

• PAs are licensed to practice *supervised medicine* by the state. The scope of practice is directly dependent on statutory language and delegation by the supervising physician.
Doctor of Medical Science
What is the Functional Goal?

• Capitalize on an already well trained clinician, provide additional training and create a highly skilled, even higher quality primary care provider- similar to the Vietnam medic philosophy as the foundation of the PA profession.
What are we **NOT** doing?

- Adding to / changing PA accredited education
  - This program depends on the continued success of the current PA training model
- Creating a shortcut to medical school
- Training Physicians
- Adding to the pool of potential ACGME residents
This is a medical school program

• Developed by the DeBusk College of Osteopathic Medicine, its administrators, physicians and academicians
• Administared by and taught by the DeBusk College of Osteopathic Medicine*
• Not associated with the LMU PA program

*https://www.lmunet.edu/academics/schools/debusk-college-of-osteopathic-medicine/dms/dms-faculty
Who are we recruiting?

• High functioning PAs, with a *minimum* of three years of clinical experience, *and* their supervising physicians.

• Current class average is **10** years of clinical experience.
How will our medical school do this?

• Utilize the latest technologies to train experienced Physician Assistants while they continue to work in their current clinical setting.

• Deliver online curriculum with the expertise of instructional designers, academicians and experienced physicians.

• Capitalize on the PA/Supervising Physician relationships.
ECHO model

• Curriculum delivery will mimic the UNMMC project ECHO, whose purpose is to train physicians, PAs, and NPs
  – Taught by medical specialist
  – Designed to resemble medical rounds of residency
  – Allows the provider to be trained in place
  – 17 Years of outcomes data demonstrating its success
  – Over 70 project replications nationally and internationally

http://echo.unm.edu/
Based on the 6 core competencies of medicine: Medical Knowledge, Patient Care, Professionalism, Systems based Practice, Interpersonal and Communication Skills, and Practice Based Learning.

Year 1
Using MKSAP 17, UpToDate, appropriate texts

- Advanced Clinical Anatomy
- Advanced Biochemistry and Pharmacology
- Advanced Immunology
  - Rheumatology and Allergy
- Clinical Medicine 1-3
  - Cardiology, Pulmonology, Hematology, Nephrology, Endocrinology, Behavioral Medicine, Neurology, Infectious Disease, Gastroenterology
- Point of Care Ultrasound
- Research Design and Writing

All clinical modules are taught by board certified specialists and academicians
• Year 2
  Using NEJM Knowledge Plus, Residency 360

  – Case based learning/Symptom based problem solving:
    • Areas of primary focus:
      – Hospital Medicine
      – Primary Care (outpatient medicine)
      – Emergency Medicine
    • Additional areas of teaching
      – Pediatrics
      – Women’s health

  – Students work towards achieving the clinical competencies starting day 1 of the program.
Clinical Component

• The Program and Course Directors define the competencies that relate to the PAs clinical practice and communicates with the supervising physicians in regards to evaluating these competencies.

• Students log their clinical exposures in a data system.

• Supervising Physician is key here.
• Doctor of Medical Science – justified by:
  – Master’s degree in medicine (as a PA), plus
  – 3 years of clinical experience, plus
  – 2 years of additional didactics, clinical experience, and competencies
    (achieving 50 graduate medical credit hours) equals...

  – 7 years of medical training and clinical experience before achieving
    the doctoral degree.
  – Minimum average of 300 weeks of clinical training and experience
Accreditation

• Approved to offer the program by SACS-COC, one of the regional accrediting bodies for the U.S. Dept. of Education

• No other accreditation exists currently
Mission

• Have a positive impact on the access and quality of primary healthcare in underserved populations

Please note
—Not in lieu of MD and DO family physicians, rather in conjunction with.
—This program is **NOT** replacing physicians
Establishing an independent board of examiners to develop and administer an external examination to be accepted by states as an appropriate licensure examination (similar to PANCE or USMLE).

– The cost and R&D for such an exam will not be placed on the state of Washington. This will be developed and offered to the state for approval.

Recruit likeminded medical schools to recreate the DMS program.
Establish a scope of practice appropriate to the level of training which allows a DMS to have a meaningful impact on primary care.
Current Legislative Wording

• DMS is a new profession (no longer practices under PA licensure)
• New Licensure establishment
  – Initial and renewal requirements (including examination)
• Establish the regulatory body (Proposed to be under the MQAC)
• Includes language of physician collaboration
• Scope of practice defined as unsupervised “Primary Care”
• Establishment of minimal standards for DMS education (including a requirement that qualifying DMS graduates must come from a program associated with a medical school)
Common Concerns Regarding the DMS

- Education
- Patient Safety
- Title
Education

DMS Compared to Current Health Care Providers in Washington
Curriculum comparison of TN Schools*

**MD/DO**

- Didactic phase:
  - Avg 1237 contact hours

- Clinical phase:
  - Avg 80 weeks^*

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300 Weeks Compared to...

• ARNP – Training
  – WSU DNP (entry level) – 15 weeks (600 hours minimum) of clinical experience
  – UW DNP (entry level) – 18-25 weeks (720 hours minimum) of clinical experience

• ARNP – Scope of Practice
  – WAC 256-840-300 “The ARNP is prepared and qualified to assume primary responsibility and accountability for the care of patients.”
  – RCW 18.79.250 “Specialized and advanced Nursing as recognized by Medical and Nursing Professions.”
300 Weeks Compared to...

• Physician Assistants
  – UW MEDEX – 40 weeks of clinical experience
  – Heritage – 50 weeks of clinical experience
  – LMU-DCOM – 48 weeks of clinical experience

• Scope of Practice
  – RCW 18.71A.030 “...may provide services ...based on their education, training, and experience ... consistent with their commission-approved delegation agreement. ..shall determine which procedures may be performed and the degree of supervision .... ...not beyond the supervising physician's own scope of expertise and practice.

All institutional data taken directly from website publications
300 Weeks Compared to...

- **Doctors of Osteopathy**
  - PNWU – **80** weeks of clinical experience
  - LECOM accelerated primary care track – **56** weeks of clinical experience.

- **Scope of Practice**
  - **RCW 18.57.020** “…evidence that a diploma has been issued to the applicant by an accredited school of osteopathic medicine and surgery.... *not less than one year* in a postgraduate training program... +/- **52 weeks (108-132)**
  - **RCW 18.57.001** (4) "Osteopathic medicine and surgery" means the use of any and all methods in the treatment of disease, injuries, deformities, and all other physical and mental conditions in and of human beings, including the use of osteopathic manipulative therapy.”

*All institutional data taken directly from website publications*
300 Weeks Compared to...

- Allopathic Medicine –
  - UW – **88** weeks of clinical experience
  - Mercer Primary Care Track – **52** weeks of clinical experience
  - Univ. Wisconsin 3 year program – **43** weeks of clinical experience
  - UMKC BA/MD program – **54** weeks of clinical experience

Licensure
- Plus +/-52 weeks of internship to obtain **licensure** (95-140 weeks)

Residency completion
- Additional +/-104 weeks to complete 3 year FM residency for a total of 199-244 weeks of clinical experience

All institutional data taken directly from website publications
How common are three year medical curricula?

- New York University
- Lake Erie College of Osteopathic Medicine
- University of Pennsylvania – Hershey
- Ohio State University
- Mercer
- Medical College of Wisconsin
- Columbia University
- McMaster University – Canada
- University of Calgary – Canada
- Texas Tech UHS – 3 campuses
- University of California – Davis
- Meharry
- University of Missouri – Kansas City*
- Penn State College

* 6 year BA-MD program with the equivalent of 1 year of clinical rotations
• Allopathic Scope of Practice –
  – **RCW 18.71.011** - A person is practicing medicine if he or she does one or more of the following:

  1. Offers or undertakes to diagnose, cure, advise, or prescribe for any human disease, ailment, injury, infirmity, deformity, pain or other condition, physical or mental, real or imaginary, by any means or instrumentality;
  2. Administers or prescribes drugs or medicinal preparations to be used by any other person;
  3. Severs or penetrates the tissues of human beings;
  4. Uses... designation "doctor of medicine," "physician," "surgeon," "m.d.,” or any combination thereof unless such designation additionally contains the description of another branch of the healing arts for which a person has a license...
Safety
Measures to ensure patient safety

- DMS candidate must have current NCCPA certification throughout the program
- DMS candidate must not have any negative medical liability history
- DMS candidate must have a minimum of three years of clinical experience in primary care as a board certified PA.
- DMS candidate must successfully complete the doctoral program
- DMS graduate must succeed in the board exam being developed*
- DMS graduate must obtain licensure under the Medical Quality Assurance Commission*
- DMS graduate will have equivalent or greater didactic contact hours and clinical experience before achieving the doctoral degree and licensure* compared to other healthcare providers
- DMS will be required to achieve 100 hours of CME biannually*

* As proposed
Title Concerns

• Are you going to call them “Doctor...?”
  – LMU has investigated many title options, reached out to many professions (including physicians) and engaged in this as a serious discussion.
  – What title should be given to a medical practitioner, trained in the medical model, to the doctoral level, whose proposed practice is based on the doctoral training?
  – The term “Doctor” is an academic term shared by multiple professions, academicians, researchers and philosophers to reflect the level of training. The term “Physician” is reserved for one trained in the traditional medical school/ACGME model.
  – Legislation ultimately dictates the use of professional titles. The LMU-DMS program is open to alternative title suggestions.
Summary

• Primary care shortage is real in Washington
• DMS is one solution to having a positive impact on Washington’s primary care shortage
  – Physician developed
  – Physician trained
  – Physician supervised clinical experience
  – Physician regulated by board of medicine (as proposed)
  – Scope of practice limited to primary care
• The Curriculum and clinical experience of the DMS graduate justifies the proposed scope of practice and addresses patient safety concerns