

University of North Dakota School of Medicine and Health Sciences  
Testimony before the Senate Appropriations Committee  
January 18, 2021

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Senate Appropriations Committee  
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Joshua Wynne, MD, MBA, MPH  
Vice President for Health Affairs, UND  
Dean, UND SMHS  
Executive Secretary, Advisory Council

David Molmen, MPH  
Chair, UND SMHS Advisory Council  
CEO, Altru Health System

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LEADERS IN ACTION

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Overview of Today's Presentation

- Strategic direction of the UND SMHS – Dr. Wynne
  - Where we **were**
  - Where we **are** now, thanks in large measure to North Dakota's *Healthcare Workforce Initiative (HWI)*
  - Where we **hope to go**
- Executive Budget implications – Dr. Wynne
- Recommendations for the ND Legislature from the UND SMHS Advisory Council – Mr. Molmen
- Summary – Dr. Wynne

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Reference Materials

- Copy of PowerPoint slides used in today's presentation
- *UND SMHS Fact Sheet 2021* with overview of various UND SMHS programs, statistics, and answers to frequently asked questions
- Executive Summary of the *Sixth Biennial Report – Health Issues for the State of North Dakota 2021* with link to the full web-based report
- *Vital Signs – 2020 Community Report*

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Electronic and paper copies of all four reference materials have been provided.

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Healthcare Workforce Shortages in North Dakota Are **Not** New


- *Report of the Country Life Commission (1909)* – President Theodore Roosevelt  
“Physicians are further apart and are called in later in cases of sickness, and...medical attendance is...more expensive.”
- Carnegie Commission’s *Report on Medical Education (1970)*  
“The geographic distribution of health [providers] is highly uneven, and...there is little question that the supply of health [providers] is gravely deficient in some parts of the nation.”




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But We Have a Plan for Addressing Healthcare Workforce Shortages in North Dakota

“Perhaps the greatest achievement for Clifford was the establishment of the M.D. program for the University’s School of Medicine and Health Sciences. When it became clear that UND’s two-year transfer curriculum would no longer be viable, he worked with Medical School officials to develop an innovative community-based M.D. program that avoided the need for an expensive teaching hospital and would help North Dakota “grow its own” physicians.”




From the biography of UND President Emeritus Thomas J. Clifford, written by the Grand Forks Herald shortly after his death in 2009



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Impact of the UND SMHS on Healthcare Workforce

- The first four-year medical school graduate was Dr. Robert Arusel, a North Dakota native, who graduated on May 5, 1976.
- Dr. Arusel, a radiation oncologist at Sanford’s Roger Maris Cancer Center in Fargo and philanthropic supporter of the UND SMHS along with his wife Dr. Janelle Sanda, recently retired after over four decades of practice – in North Dakota!



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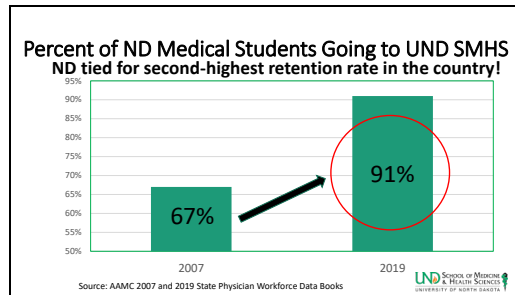
What is new is that we have a plan to address healthcare workforce issues



**North Dakota's Healthcare Workforce Initiative**

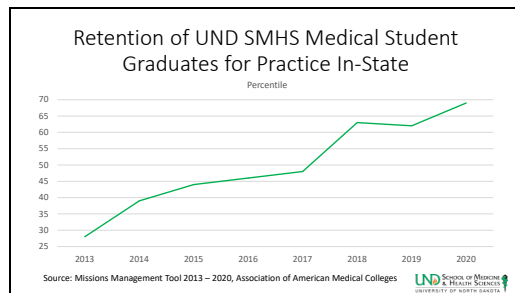
The Executive Summary of the *Sixth Biennial Report* has been provided to you, and the entire report is available on-line. The *Report* outlines in detail the implementation and accomplishments of the Healthcare Workforce Initiative (HWI).

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This chart looks at the cohort of North Dakotans who matriculate in any medical school in the United States in the specified year. In 2007, two out of three North Dakotans who entered medical school came to the UND SMHS. Last year that percentage increased to more than nine out of ten.

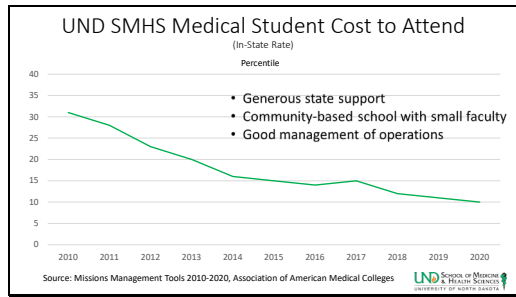
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This chart looks at the retention of UND SMHS medical student graduates for practice in-state. The data are shown as percentile, where our results are compared with all other medical schools. We have gone from well below average in 2013 to well above average in 2020. In 2020, our retention rate was better than that at more than two-thirds of the medical schools in the US.

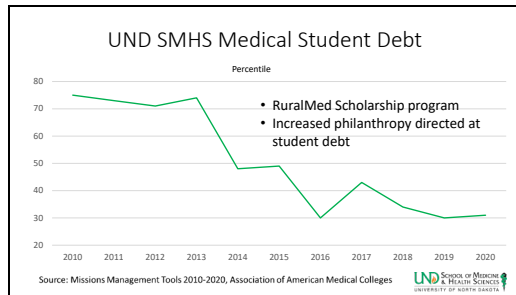
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This chart again looks at percentile rank (UND SMHS compared with all other medical schools). In 2020, the cost to attend UND SMHS for a student from North Dakota was lower than at nine out of ten of the medical schools in the US.

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This chart uses percentile rank to look at student debt over time. Our medical students in 2010 had average debt levels well about the national average at other medical schools, and we have now driven the debt level down so that in 2020 the medical students at more than two out of three medical schools had average debt levels more than our students did.

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UND SMHS Outcomes	
Metric	Percentile Rank
Percent of graduates practicing in rural areas (graduates 2005-2009)	99 <sup>th</sup>
Percent of graduates entering family medicine (2018)	99 <sup>th</sup>
Percent of graduates who are American Indian or Alaska Native	100 <sup>th</sup>

Source: Association of American Medical Colleges Missions Management Tool 2020


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**UND SMHS Outcomes**

Metric	Percent
Completion rate for medical students (MD program) (average of last five years)	93%
Completion rate for 4 major UND SMHS graduate programs (including MD) (average of last 5-9 years depending on program)	94%

Source: Vital Signs – 2020 Community Report prepared by UND SMHS




This chart looks at percent (not percentile). 93% of medical and 94% of all of our students graduate.

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**Value of the School and its Programs to the State**

Providing healthcare professionals

- 74% of Family Medicine Physicians
- 46% of Physicians
- 51% of Physical Therapists
- 52% of Occupational Therapists
- 39% of Physician Assistants
- 47% of Medical Laboratory Scientists




Source: Sixth Biennial Report 2021 – Health Issues for the State of North Dakota




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**Research Funding – FY2007 to FY2020**

- Over those 14 years, UND SMHS faculty and staff submitted \$1,301,697,374 in grant requests (over **\$1.3 billion!**).
- Over those same 14 years, they were awarded \$298,722,775 in grants (over a **quarter of a billion dollars!**).
- This is an effective yield of **23%!**



Source: UND School of Medicine & Health Sciences





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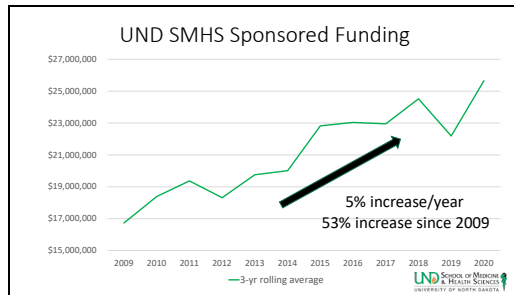
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Example of the Value of Research That Should Resonate!

- Dec. 31, 2019 - First confirmed case of SARS-CoV-2 (COVID-19) reported in Wuhan, China
- Jan. 10, 2020 – Genetic sequence of the virus first reported
- Sept. 2020 – 321 candidate vaccines in development
- Dec. 8, 2020 – First human inoculated with the Pfizer vaccine in the UK

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This chart looks at external (sponsored) funding over time. Most of the funding comes from the federal government, especially the National Institutes of Health. Other important funding sources include state agencies (especially the North Dakota Department of Health) and foundations.

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North Dakota's Healthcare Workforce Initiative  
 Started in the 2011-13 Biennium

- Reduce disease burden → focus on population health
  - Masters and Ph.D. public health degree programs (coordinated public health programs at UND and NDSU)
- Retain more healthcare provider graduates for North Dakota
  - RuralMed Program (that has been expanded over time to include more specialties needed in North Dakota)




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### Healthcare Workforce Initiative

- Train more healthcare providers
  - Medical student class increased by 16/year (total of 64)
    - 86% of medical students are from ND or have strong ties here
  - Health sciences students increased by 30/year (total of 90)
  - Resident (post-MD training required prior to clinical practice) slots increased by 35 with a plan to ramp up to 51 or more (aided by public "private" partnerships with healthcare systems)
- Improve the efficiency of the healthcare delivery system
  - Training in interprofessional healthcare teams
  - Developing "virtual care" approaches that bring the clinic to the patient rather than the other way around (especially important in rural areas)



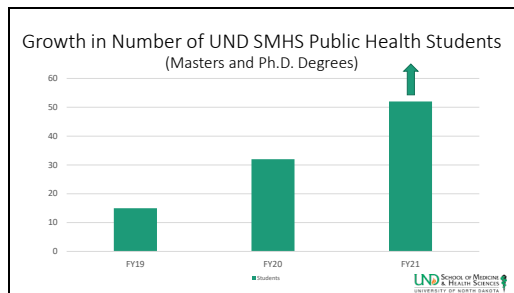
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### Implementation of Healthcare Workforce Initiative Over the Past Five Biennia

- Increased medical school class size by 25% and residencies by 35%
- Expanded medical student and other academic programs
  - Minot Integrated Longitudinal Experience (MILE) program for medical students
  - Departments of Population Health, Geriatrics, and Emergency Medicine
  - Public Health program
    - Masters in Public Health
    - First-ever Ph.D. program in Indigenous Health



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Implementation of Healthcare Workforce Initiative Over the Past Five Biennia


- Added new residency programs focusing on rural primary care and other physician provider shortage needs identified in North Dakota
- Intensified clinician retention efforts
  - Attract the vast majority of future doctors who are from North Dakota to the UND SMHS
  - RuralMed program
- Intensified efforts to train providers dedicated to transforming healthcare delivery
  - Interprofessional teams
  - Virtual medicine



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Summary of Impact of HWI over the Past Decade


- ✓ Retained more ND medical school matriculants than ever before (tied for second-highest in US)
- ✓ Retained more physicians and other clinicians for practice in North Dakota
- ✓ Trained more physicians and other clinicians for practice in North Dakota



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Limited Options for UND SMHS to Adjust to Executive Budget Recommendations

- Available options
  - Admit additional students to increase revenue
    - Admit out-of-state students
    - Limited clinical slots available in the state
  - Increase tuition more than planned
  - Eliminate programs to reduce expenses





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UND SMHS Degree Programs


1. Doctor of Medicine
2. Physical Therapy
3. Occupational Therapy
4. Medical Laboratory Science
5. Physician Assistant Studies
6. Sports Medicine/Athletic Training
7. Public Health (Masters and PhD in Indigenous Health)
8. Graduate programs in biomedical/translational sciences



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Executive Budget Compared With  
UND SMHS Needs-Based Budget


- The Executive Budget entails a **\$4,396,310** cut in appropriated funding compared with the UND SMHS needs-based budget submitted by the NDUS
- There are two major components to this shortfall:
  - A shortfall due to the proposed reduction of 7.5% in student credit hour funding
  - A shortfall due to the proposed 3% + 3% merit increase (to cover the additional expenses for non-appropriated salaries)



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Our Goals

- To be the best community-based school in the country
- To continue to be an innovator in education (with a focus on interprofessional teams)
- To continue to develop focused programs of research excellence
- To serve the people of North Dakota and beyond
  - Rural health
  - Healthcare workforce
    - Primary care (especially family medicine)
  - Health promotion
    - Interprofessional care
    - Virtual care



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David Molmen, MPH  
Chair, UND SMHS Advisory Council  
CEO, Altru Health System, Grand Forks, ND


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**Responsibilities of the UND SMHS Advisory Council**

"The advisory council...shall study and make recommendations regarding the strategic plan, programs, and facilities of the school of medicine...The recommendations must:

- (1) Address the healthcare needs of the people of the state;
- (2) Provide information regarding the state's healthcare workforce needs; and
- (3) Provide information that specifies the contributions that the university of North Dakota school of medicine and health sciences and the residency training programs in the state are making to meet the healthcare provider workforce needs of the state.


Source: North Dakota Century Code Section 15-52-04



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**UND SMHS Budget Proposal**

- The Healthcare Workforce Initiative (HWI) involved an agreement between the School and the Legislature for increased healthcare clinicians and healthcare programming for North Dakota provided by the UND SMHS to be supported by increased financial resources provided by the state.
- The UND SMHS is keeping its side of the agreement.
- Now the state needs to do the same.
- The School is not asking for more to do less; it is asking for the necessary funding so it can do even more (including further expansion of residency programs).




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Recommendations  
 UND SMHS Advisory Council Meeting 12/11/20

1. The highest recommendation is to provide the requisite funding for the UND SMHS and its Healthcare Workforce Initiative by approving the **needs-based budget** (an increase of **\$4,396,310** over the Executive Budget).
2. To ensure the recruitment and retention of high-performing faculty and staff, it is important to endorse the 3%+3% **salary merit increases** proposed by NDUS/SBHE.




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Comparison of UND SMHS Faculty Base Salaries  
 (Basic Sciences Faculty)

UND	All Other Medical Schools
Assistant Professor	-2%
Associate Professor	-7%
Full Professor	-22%
<b>All medical school faculty</b>	<b>-10%</b>

Source: Association of American Medical Colleges Adjusted FY 2019-20 public medical schools mean salary survey data




This chart shows basic sciences faculty salaries at the UND SMHS compared with those at all other medical schools in the US. Overall, our salaries are 10% below the average salaries elsewhere, and the disparity increases as faculty progress through the academic ranks. Thus, retention becomes an issue. A robust merit pool (3% + 3%) will help reduce this salary inequity and hopefully help with retention.

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Recommendations  
 UND SMHS Advisory Council Meeting 12/11/20

3. Because appropriated funding does not cover all the costs associated with a merit increase (non-appropriated salary sources and associated fringe benefits), it is strongly recommended that an additional amount be allocated to cover the remaining shortfall.




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Recommendations  
UND SMHS Advisory Council Meeting 12/11/20

Endorsement of these three funding recommendations by the legislature will enable the UND SMHS to continue its efforts to provide the necessary healthcare workforce and programming to improve the quality of life of North Dakotans (as specified in the North Dakota Century Code).



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Joshua Wynne, MD, MBA, MPH



Vice President for Health Affairs, UND  
Dean, UND SMHS  
Executive Secretary, UND SMHS Advisory Council



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Our Purpose as a School

- Educate
- Discover
- Serve



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