



State of the UND SMHS

March 2, 2022

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Vice President for Health Affairs
Dean
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Overview of Today's Presentation

- Status and strategic direction of the UND SMHS utilizing presentation materials to be used in our March 10, 2022, strategy session with Gov. Burgum and staff (in preparation for the upcoming legislative session starting Jan. 2023)
 - Where we **are**
 - Where we **hope to go**
- Pandemic issues, especially regarding mask policy
 - New CDC guidance released Feb. 25, 2022
- Discussion/Feedback/Suggestions/Questions



UND SCHOOL OF MEDICINE & HEALTH SCIENCES

WHO WE ARE

177 **1,253**

Full-time faculty members

Students & trainees

1,349 **262**

Part-time & community faculty

Benefitted staff members

WHAT WE'RE ABOUT

Mission: To be a leader in ensuring the necessary healthcare workforce for North Dakota and engage in discovery and service that improves the quality of life of North Dakotans.

Vision: To be the best community-based medical and health sciences school in the country (community-based schools are those that don't own or operate a hospital).

Values: Community – a spirit of collaboration and connectedness; Discovery – enthusiasm for inquiry, creativity and innovation; Diversity – an understanding and appreciation of diverse people, experiences, and ideas; Inclusivity – a welcoming and supportive environment for all; Lifelong Learning – a passion for ongoing learning and community engagement.

Goals/Objectives: Learning, Discovery and Service.

WHO WE SERVE

People of North Dakota

To educate healthcare providers for subsequent practice in North Dakota and to enhance the quality of life of its people.



Students/Trainees

To provide an outstanding educational and training environment that optimally prepares students/trainees.



Faculty/Staff

To offer a welcoming and supportive environment that provides robust opportunities for professional development.



Underserved People

To provide educational pathways and support for underserved people to pursue careers in healthcare.



Healthcare Providers

To provide continuing medical education and career development opportunities for healthcare providers in the state.



The World Beyond

To discover knowledge that benefits the people of this state and beyond and enhances the quality of their lives.



HOW WE DO IT

Total Agency Budget 2021-23: \$215.8M

- Salaries: \$119.5 M
- Fringes: \$37.4 M
- Operating: \$58.9 M

(In \$ Millions)

- State
- Mil Levy
- Tuition
- Grants
- Clinical/Alumni/Other



WHAT WE'RE PROUD OF

Indigenous Health

Our Indians into Medicine (INMED) program has encouraged and facilitated the entry of American Indians into medical school. Our Department of Indigenous Health is a first!

Healthcare Workforce Expansion

We expanded medical and health sciences class sizes and increased the number of residencies in partnership with private healthcare institutions (P3).

Service to Rural Communities

Through our Center for Rural Health, we facilitate the provision of resources and knowledge to improve the health of people in rural communities.

Annual growth of
12.5%
in grants & contract awards

We train
HALF
of all the health providers in the state

We train
20%
of all Native American physicians in US

We attract
MOST
ND grads entering med school

WHAT WE DO



Center for Rural Health

Provides resources, expertise, and support to all 53 counties in ND with the goal of optimizing rural healthcare delivery.



Rural Opportunities for Medical Education (ROME)

Provides opportunities for med students to learn in multiple rural communities.



Indians into Medicine (INMED)

Provides pathway programs to encourage students to enter medical school and supports them after matriculation.



Grants and Contracts

External funding (mainly federal but also state and foundation) that supports research and service activities.



Centers for Family Medicine

Clinics that provide medical student and resident training along with care for often underserved populations.



Forensic Medicine

Based in Grand Forks, the unit provides death investigation and autopsy services for eastern ND and western MN.

HOW WE MEASURE SUCCESS

In-State Retention of Graduates

Utilizing independently-derived national data, we compare our retention of medical school graduates for practice in-state 10 years after graduation. We have gone from well-below to well-above the national average.

Grant Funding

We measure year-to-year growth in grant and contract funding; over the past decade, we have increased 12.5%/year. We also look at comparisons of our funding with other similar schools; we have moved up an impressive 10 positions recently.

Student Debt

We use independently-derived national data to compare our medical students' debt with all other medical students. We have gone from well-above to well-below the national average. This was the result of keeping cost growth low and increasing scholarships support.

Attractiveness to Student Applicants

Using data collected from across the US, we follow the fraction of in-state college grads who enter medical school at UND vs. anywhere else in the US. The percentage coming to the SMHS has increased from 67% to 91%.

STRATEGY REVIEW

University of North Dakota School of Medicine & Health Sciences

Joshua Wynne
Vice President for Health Affairs
Dean
March 10, 2022

NORTH
Dakota
Be Legendary.

Vision, Mission, and Core Values

- **Vision/Mission:** The UND SMHS is the only institution within NDUS to have its **Purpose** defined in ND Century Code (NDCC 15-52-01):

“The primary purpose of the University of North Dakota School of Medicine and Health Sciences is to educate physicians and other health professionals for subsequent service in North Dakota and to enhance the quality of life of its people. Other purposes include the discovery of knowledge that benefits the people of this state and enhances the quality of their lives.”

Opportunities

- UND SMHS research is growing substantially, with a doubling of grants and contracts (most federal, especially from NIH) over the past decade
 - In addition to the obvious health care benefits, such research also is an economic driver for North Dakota
- Public-private partnerships, especially with healthcare entities, is vital to the success of the SMHS
- Fundraising campaign supports student scholarships and faculty
 - Expanded scholarship support has reduced medical student debt and thus encouraged clinical practice in-state after graduation
 - Endowed chairs vitally important for faculty recruitment and retention

Challenges

- Because of the expansion of our research enterprise, availability of additional dry and wet lab space is beginning to become an issue
- Attracting and retaining talent
- Limited opportunities to expand class size further due to saturation of clinical sites with our trainees
- Relatively homogeneous patient population
- Student well-being issues specifically related to the pandemic

Objectives and Goals

- Objectives from the *One UND* Strategic Plan
 - Liberal Arts
 - Retention
 - Enrollment
 - Research
 - Inclusive campus
 - Serving military
 - Engaging alumni
 - Healthcare workforce development
- Updated SMHS strategic plan to be developed following the release of the UND plan

ACTION PLAN



Focus and Act: Healthcare Workforce Development

- **Goal**

- Our goal, as stated in NDCC, is “...to educate physicians and other health professionals for subsequent service in North Dakota and to enhance the quality of life of its people.”

- **Actions**

- Pathway programs focused on American Indian and rural students, with the goal of increased matriculation at SMHS
- Rural experience for all medical students
- Scholarships and other programs to reduce student debt
 - Major challenge recently with intense competition for American Indian students

Focus and Act: Research and Economic Diversification

- **Goal**

- Engage in research activities consistent with high-performing medical/health sciences schools
 - Be in the top three of all community-based medical schools in terms of grants and contract awards

- **Actions**

- Build on success
 - Engage in productive research that benefits the people of North Dakota
 - Aging
 - Epigenetics
 - Viral diseases (“host-pathogen interactions”)
 - Neurodegenerative disease (especially Alzheimer’s)

Focus and Act: Research and Economic Diversification

- Be the future
 - Virtual care
 - Telehealth – partnering with College of Nursing and healthcare firms
 - Wearable/home devices – partnering with Engineering and industry
 - Autonomous systems – partnering with Aerospace, Grand Sky, and industry
 - Translational research (“bench to bedside”)
 - Develop a network of Clinical Research Units (CRUs)

Focus and Act: Research and Economic Diversification

- Be the future
 - Study the impact of historical trauma on Indigenous health
 - Possible role of epigenetic factors
 - Expand the healthcare and research workforce to be more inclusive and diverse
 - Women
 - Indigenous people

Focus and Act: Inclusive Campus

- **Goals**

- Foster a welcoming, safe, and inclusive campus environment
- Increase the diversity of our student, faculty and staff populations

- **Actions**

- Indians into Medicine (INMED) and various pathway programs
- Only college in NDUS with Associate Dean for Diversity, Equity and Inclusion and Assistant Dean for Gender Equity
 - Recruitment of American Indian and rural students specific focus of our diversity initiative
- Expansion of mental and behavioral health programs
 - SMHS has two wellness advocates to service SMHS students at main and regional campuses

Focus and Act: Summary of Where SMHS Is Headed

- The “What” will remain unchanged
 - Teach
 - Discover
 - Serve
- The “How” will change dramatically
 - Teach – More hybrid learning (but tough to teach team and procedural approaches virtually)
 - Discover – Big focus on translational (“bench to bedside”) research
 - Serve – Bring medical care to the patient, rather than have the patient come to a medical care facility
- The “Who” will change too
 - More diverse and inclusive healthcare workforce

Pandemic-Related Issues

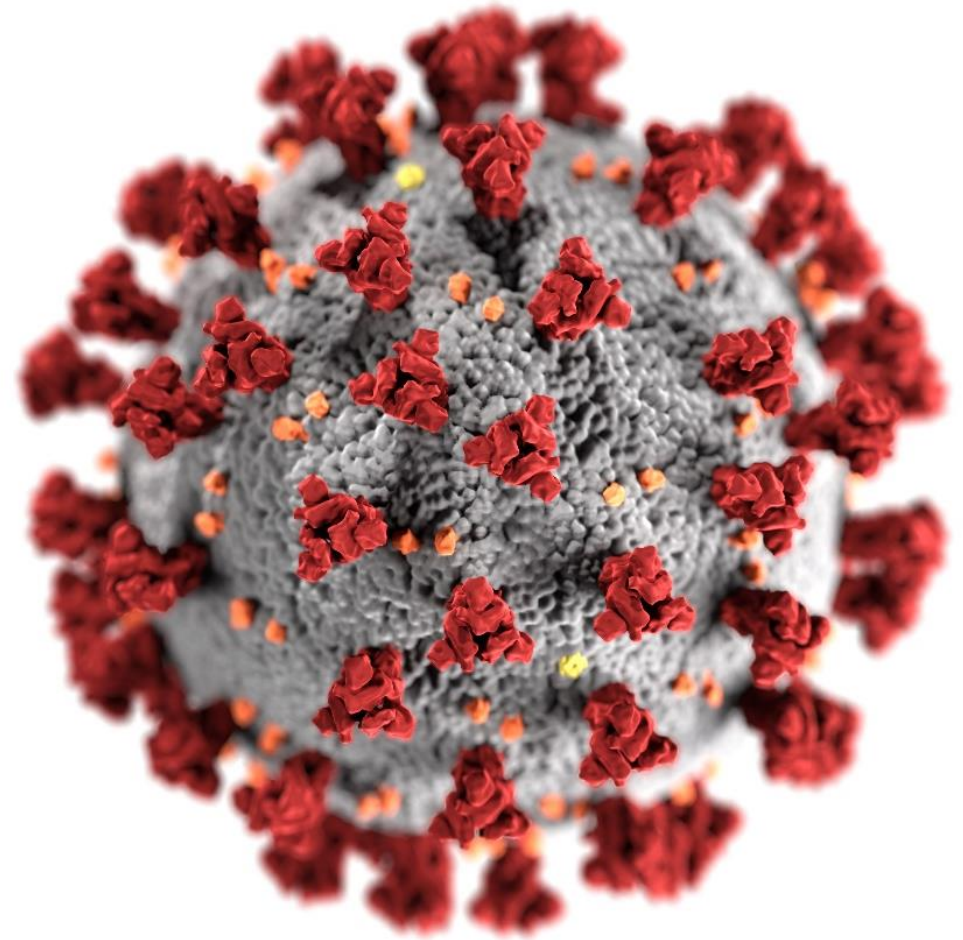
- Impact of the pandemic on emotional health of faculty, staff, and students
- Challenging task of trying to be fair and consistent in a constantly changing pandemic environment
- Challenging to have an effective policy when there are many other policies, approaches, and practices extant!
- So is there any help going forward?

Indicators for Monitoring COVID-19 Community Levels and COVID-19 and Implementing COVID-19 Prevention Strategies

Accessible Version: <https://www.cdc.gov/coronavirus/2019-ncov/science/community-levels.html>

Overview and Scientific Rationale

February 25, 2022



[cdc.gov/coronavirus](https://www.cdc.gov/coronavirus)

Why refocus efforts for monitoring COVID-19 in communities?

- **Shift from eliminating SARS-CoV-2 transmission towards more relevant metrics given current levels of population immunity and tools available**
 - **Current high levels of population immunity reduce risk of severe outcomes**
 - High rates of vaccination in population as a whole
 - Availability of boosters, and booster coverage among populations at high risk
 - In unvaccinated, high rates of infection-induced protection
 - **Breadth of tools available for public health and clinical care**
 - Broad access to vaccines, therapeutics, testing
- **Community measures should focus on minimizing the impact of severe COVID-19 illness on health and society**
 - Preventing medically significant illness
 - Minimizing burden on the healthcare system
 - Protecting the most vulnerable through vaccines, therapeutics, and COVID-19 prevention

CDC's Indicators of Community Transmission

Indicator	Low Transmission	Moderate Transmission	Substantial Transmission	High Transmission
Total new cases per 100,000 persons in the past 7 days	0-9	10-49	50-99	≥100
Percentage of Nucleic Acid Amplification Test results that are positive during the past 7 days	<5.0%	5.0%-7.9%	8.0%-9.9%	≥10.0%

- First released in September 2020
- Relied on two metrics to define community transmission: Total new cases per 100,000 persons in the past 7 days, and percentage of Nucleic Acid Amplification Test results that are positive during the past 7 days
- Used by CDC to inform setting-specific guidance and layered prevention strategies (e.g., screening testing in schools, masking, etc.)
- Public health practitioners, schools, businesses, and community organizations also rely on these metrics to inform decisions about prevention measures

The current state of the pandemic requires a refined approach to monitoring COVID-19

- Community transmission indicators were developed in fall 2020 (prior to availability of vaccines) and reflect goal of limiting transmission in anticipation of vaccines being available
- **Neither of the community transmission indicators reflects medically significant disease or healthcare strain**
- Community transmission levels are largely driven by case incidence, which does not differentiate mild and severe disease

Criteria for Selecting Community Indicators

- Indicators had to meet several criteria:
 1. Data available at the county level or allocated to county level from health service areas
 2. Data source provides nation-wide coverage
 3. Data reflect intended goals of emphasizing medically significant disease and healthcare strain
 4. Data reported at least weekly (or more often) with sufficient timeliness to allow data to inform decisions about prevention measures

Final Selection of COVID-19 Community Indicators

- Narrowed the list of candidate indicators based on criteria:
 - *New hospital admissions with confirmed COVID-19/100,000 people and percent of inpatient beds occupied with COVID-19 patients* selected as best candidates
 - ICU beds occupied, new hospital admissions/100 beds, test positivity, and metrics reflecting percent change (e.g., in new admissions, new cases) eliminated
 - New cases retained as a potential candidate to assess performance as leading indicator

Establishing Thresholds for COVID-19 Community Levels

- Used correlation analyses and thresholds from Community Profile Reports and State Profile Reports to assess potential thresholds
- Correlations indicate:
 - 100 cases/100,000 population per week corresponds to about 3-4% of COVID-19 inpatient bed utilization, 6-10 new admissions/100,000 population
 - Inpatient bed occupancy is about half that of ICU occupancy
 - Fewer new admissions, fewer admissions per case, and lower inpatient bed utilization in areas with higher vaccination coverage
- Established candidate thresholds, then tested to calibrate levels

CDC's COVID-19 Community Levels and Indicators

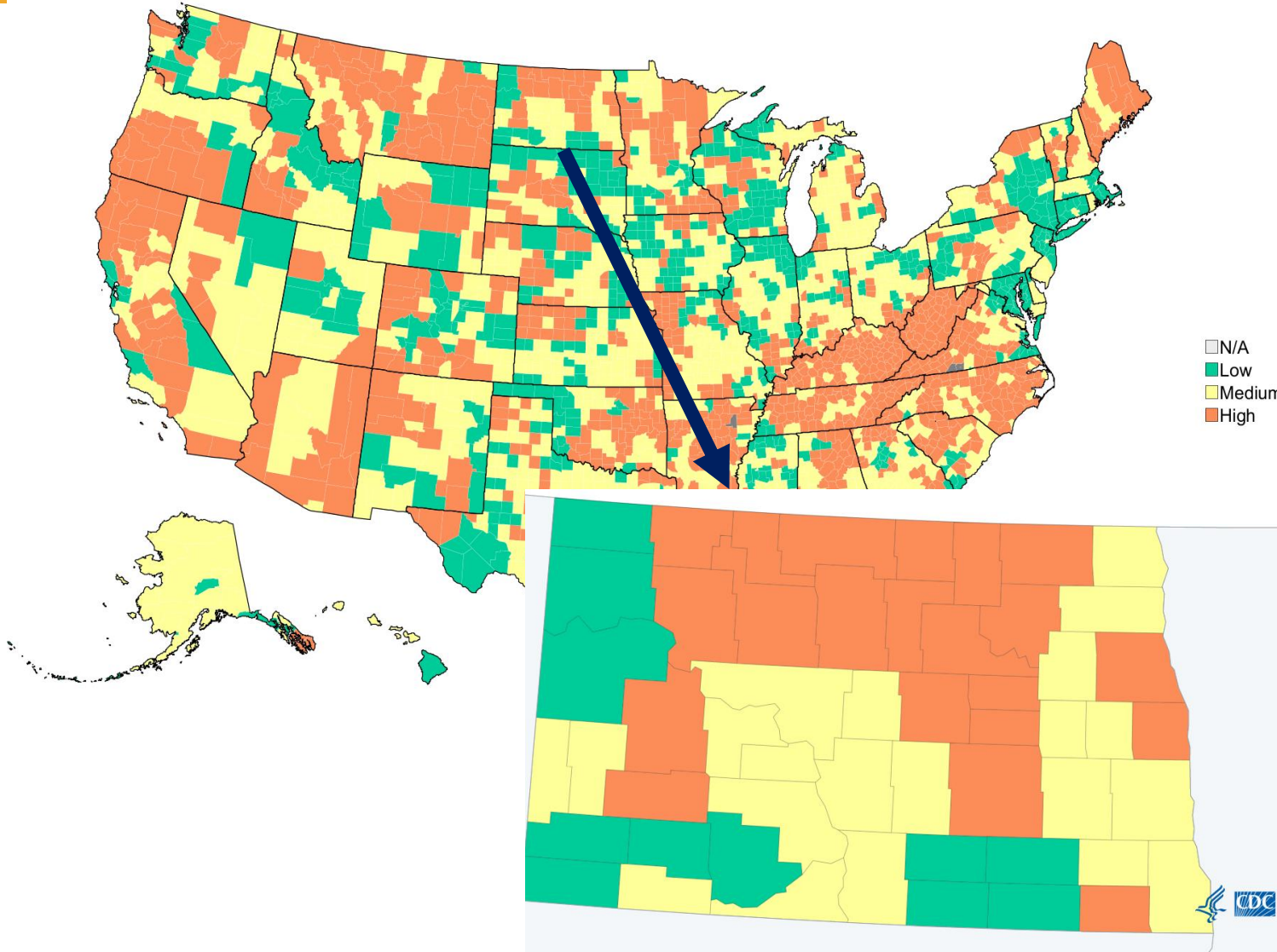
New Cases (per 100,000 population in the last 7 days)	Indicators	Low	Medium	High
Fewer than 200	New COVID-19 admissions per 100,000 population (7-day total)	<10.0	10.0-19.9	≥20.0
	Percent of staffed inpatient beds occupied by COVID-19 patients (7-day average)	<10.0%	10.0-14.9%	≥15.0%
200 or more	New COVID-19 admissions per 100,000 population (7-day total)	NA	<10.0	≥10.0
	Percent of staffed inpatient beds occupied by COVID-19 patients (7-day average)	NA	<10.0%	≥10.0%

The COVID-19 community level is determined by the higher of the inpatient beds and new admissions indicators, based on the current level of new cases per 100,000 population in the past 7 days

Implications for Using COVID-19 Community Levels to Inform Public Health Recommendations

- COVID-19 community levels can inform recommendations for **community-level preventive strategies** and **individual preventive behaviors**
- At higher COVID-19 community levels recommendation would include:
 - Masking
 - Testing Strategies (e.g., screening testing)
 - High-risk individuals and their household or social contacts (e.g., masking, testing, and access to treatments)
 - Setting-specific recommendations (e.g., K-12 schools, healthcare)
 - High-risk congregate settings (e.g., masking and screening testing)

COVID-19 community levels on February 24, 2022



	% of Counties	% of Pop.
Low	23.0%	29.5%
Medium	39.6%	42.2%
High	37.3%	28.2%

Grand Forks	High
Fargo	Medium
Bismarck	Medium
Minot	High

Where Do We Go From Here Regarding Mask and Mitigation Policy?

- Maintain current policy through the end of the spring semester and then reassess
- Defer to UND policy
- Develop a new policy consistent with the newly promulgated CDC guidelines (that presumably would be county-specific)
- Other

→ I'd welcome feedback now or off-line!

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Discussion/Feedback/Suggestions/Questions?

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