Funding the Future of Pharmacy Education in North Dakota at NDSU

As North Dakota's Land-Grant R1 university, North Dakota State University's (NDSU) School of Pharmacy plays a critical role in training the next generation of pharmacists, advancing research, and addressing healthcare challenges state-wide in ALL ND communities. To meet the growing demands of the profession, additional funding is essential in 2025 for future workforce needs.

In 2023, HB 1003 identified NDSU Pharmacy as a high cost program, similar to UND Medicine. However, the student credit hour (SCH) weighting cost factor is currently a 9 for professional programs in health sciences such as the pharmacy (Doctor of Pharmacy – PharmD) program at NDSU. As comparators, Medicine (MD) is given a 34.5, and Law (JD) is given a 14. NDSU offers the only professional pharmacy program in the state, and it provides graduates that make up the vast majority of pharmacists that serve the people of North Dakota.

Listed below are illustrations of costs (in no particular order) associated with offering a professional pharmacy program. Many of the costs have *increased* since the initial multiplier was set at 9 for professional programs in health sciences (pharmacy) in 2013. Also, of note, many of these general expense lines are characteristic of high cost programs such as medicine and pharmacy.

By securing targeted investments, such as an adjustment in the student credit hour funding formula, NDSU can continue to lead in pharmacy education, drive healthcare innovation, and address critical workforce shortages across North Dakota and beyond.

Program Costs

- Supplies and equipment for training students
 - The North Dakota pharmacy practice act (scope of practice) specified in the ND Century
 Code allows for expanded services to meet the healthcare needs of the state.
 - Delivery of pharmacy education is resource intensive for costly supplies and sophisticated equipment. Medical grade equipment and specialty chemicals are required to train students in a variety of skills necessary to provide contemporary pharmacy services in ND and beyond. In the past three years, the cost for chemical supplies has tripled along with escalation in prices for medical grade equipment.
- Software and educational resources
 - Several software and educational resources are necessary to provide support for student learning both in the classroom and for experiential education. These include library resources, exam proctoring software, teaching technology and accreditation monitoring software.
- A variety of faculty expertise is needed to train students in the profession of pharmacy according to the Accreditation Council for Pharmacy Education (ACPE) standards. The practice of pharmacy is quite diverse (similar to medicine).
 - Two departments make up the School of Pharmacy and collaborate to deliver the professional pharmacy degree. The departments are Pharmacy Practice (PHRM) and Pharmaceutical Sciences (PSCI).

- For PHRM faculty, many of which are practicing pharmacists provide training associated with acute care, pediatrics, geriatrics, oncology, ambulatory care, point-of-care testing, population health and disease prevention, telepharmacy, sterile compounding, traditional dispensing, psychiatry, cardiology, pharmacy management, pharmacogenomics, etc. Additionally, the School collaborates with clinical partners to ensure quality experiential education (site visits, etc). Experiential education is 31% of the pharmacy curriculum.
- For PSCI faculty expertise is necessary in drug delivery and drug discovery, pharmacology, pharmacogenomics, pharmacogenetics, biotechnology etc. The faculty need lab space and equipment for research in order to provide research experiences to professional and graduate students.
- ACPE accreditation standards specify the need for support staff in the areas of experiential education onboarding, affiliation agreement management, assessment, admissions, program requirements for students, student affairs, etc.
- Membership dues
 - ACPE annual fees, American Association of Colleges of Pharmacy (AACP) annual fees
- Salaries for pharmacist faculty need to be comparable to pharmacists in the area to recruit and retain high quality faculty. With increasing pharmacy shortages and competition for talent, competitive-market driven salaries are required to maintain and recruit faculty.
- Ongoing faculty development funds are necessary to support growth in research innovation
 and expenditures. Research outputs deliver meaningful programs and results to the people of
 ND, including chronic disease management, opioid abuse management and prevention, drug
 discovery and delivery, etc. These development funds are vital to attract and retain top faculty.