Regarding HB 1254

Dear members of the Senate Human Services Committee,

My testimony is in strong opposition to HB 1254.
I respectfully ask that you DO NOT PASS this bill.

My name is Dr. Amanda Dahl and I am a board-certified Pediatric Endocrinologist who chose to come back to practice in the state of North Dakota. I live with my husband and 2 children in District 16. I was born in North Dakota and have lived here my entire life apart from the 6 years I completed specialty medical education before returning to this state to practice. While growing up, my dad was a Lutheran pastor and my mom was a high school choir teacher. My training after college includes 4 years of medical school at the University of North Dakota, 3 years of Pediatric & Adolescent Medicine and an additional 3 years of Pediatric Endocrinology fellowship. As one of two pediatric endocrinologists in the state, I have the distinct privilege and pleasure of caring for patients throughout the state with hormone problems. My scope includes caring for those with diabetes, thyroid disorders, adrenal problems, endocrine tumors, bone metabolism problems, growth concerns, early/late puberty, and gender affirming medical care for transgender individuals.

As a board-certified physician, I follow expert committee guidelines and strictly follow best practices established by these governing bodies. The expert committee guidelines that I follow for gender affirming medical care for transgender adolescence are compiled, validated, and supported by to name a few: American Academy of Pediatrics, Endocrine Society, Pediatric Endocrine Society, and World Professional Association for Transgender Health. WPATH and Endocrine society guidelines have been in use for over 3 decades and are updated regularly by expert committees.

As one of two Pediatric Endocrinologists in the state, I work with a multidisciplinary team to provide medical care for transgender individuals. I would like to describe our multidisciplinary team approach to the committee.

Stakeholders involved in the care of transgender adolescents in this state include Pediatric Endocrinology, Psychologist trained in gender care, Psychiatry/Psychologist/therapist/counselor trained to assess, diagnose, and treat other mental health conditions, primary care providers, Reproductive Endocrinology, and most importantly the patient and parents/guardians.

Our relationship with these individuals starts after a primary care provider or mental health provider places a referral to Pediatric Endocrinology & a Gender specialized psychologist. Our first visit is the longest of any endocrine visits. During this visit we are evaluating for any hormone imbalance (like we would for any other patient), then gathering more information as to when the patient and family members noticed signs of gender dysphoria. We have a lengthy discussion on their stage of transition which first starts with the social transition then hormone transition. Some with gender dysphoria will go through all the transition stages, some of the

transition changes or none. It is recommended that before starting hormone transition, the adolescent socially transition for at least 1 year before starting hormone treatment. In my experience, by the time they present to me, they have been exploring their gender identity and have started the social transition for years.

During our visit, we discuss the typical puberty timing and pace. Depending on their stage of puberty, we modify our next discussion. For any pre-pubertal patient, we are only providing information. We do not provide puberty suppression when they are prepubertal because there is no point since there's nothing to block. Once a patient has started puberty, we then consider puberty suppressors where we are pausing the signal from the pituitary to the ovaries/testes. **This is 100% reversible.** Once we stop this medication, normal puberty resumes.

For a patient born girl, if he has had his first period, he has fully developed breasts, the hourglass figure, and is bleeding every month. These 3 features are incredibly distressing for these patients. The first thing we discuss is menstrual management. We discuss different forms of birth control to help lighten or make periods less frequent.

For a patient born boy, if she is fully pubertal, she will have a deep voice, have body/facial hair, and possibly have an Adams apple. In these individuals, the deep voice, excessive hairiness and Adams apple are exceptionally distressing. We can provide a medication that is an androgen receptor blocker. The point of this medication is to decrease acne and hair growth in transgender females (both of which are caused by testosterone).

All of things I have discussed so far are 100% reversible and are not cross hormones which is where we are giving the hormone that is in line with their gender identity – for example estrogen for transgender female and testosterone for transgender males.

Also at their first visit, each patient and family member is given a 4-page consent form outlining the changes they will notice with gender affirming hormone therapy and the risks associated. We go over this in detail to address the specific physical changes, emotional changes, reproductive changes, and sexual changes they will notice after starting gender affirming therapy. We obtain baseline labs which we will then follow during treatment. We discuss that if/when we are starting gender affirming treatment, depending on what changes they've noticed, some aspects will not be reversible because even natural puberty is not reversible. We have a lengthy discussion regarding the impact this might have on future adult fertility and recommend a referral to Reproductive Endocrinology. I educate on the way the medications are given – estrogen as a daily pill, testosterone as an intramuscular injection. We mimic puberty by starting at a low dose and slowly titrate up so that it is a gradual transition. We see these patients every 3-4 months when on gender affirming hormone therapy and at each visit are assessing both their mental and physical health and changes they've noticed while being on hormone therapy.

BUT BEFORE ANY HORMONES ARE PRESCRIBED, 3 things must be completed:

1. The individual must be evaluated by a gender care psychologist who has assessed their mental health & proven that they meet WPATH 8 guideline criteria for gender dysphoria
2. Collaboration between mental health and medical providers to determine whether gender affirming medical care is appropriate
3. The 4 page consent form is reviewed and a parent/guardian signs. The adolescent signs saying they are assenting to gender affirming therapy.

The process of starting gender affirming hormone therapy can take months to years.

The reason why we don't wait until 18 years old is because some of the normal effects of puberty are irreversible. For example, testosterone makes the voice deepen by lengthening the vocal cords. Estrogen causes breast development and once these have developed, they are present forever. By providing puberty suppression, we are protecting them from seeing these irreversible effects and allowing them more time to work with their mental health providers to assess if they meet criteria for the medical diagnosis of gender dysphoria.

My all-time favorite visit with an adolescent is the first visit AFTER starting gender affirming hormone therapy. Typically, during our first visit, the adolescent is withdrawn and has poor eye contact. They describe feeling uncomfortable in their own skin causing severe depression, anxiety, and suicidal ideation. **When they hear they are ready to start gender affirming therapy, I usually see their smile for the first time as they start to see some semblance of hope.** The first visit after starting hormone therapy, they walk in with confidence, have great eye contact, and can tell me all the positives they've noticed including improvements in their mental health. This experience is with EVERY adolescent I have provided gender affirming hormone therapy care to.

In my practice, I personally have had zero of my patients detransition.

All medical treatments have risks.

There was a recent peer reviewed article published in New England Journal of Medicine on January 2023 addressing the impact of gender affirming hormones on transgender adolescents. This was a prospective study of psychosocial functioning during 2 years after gender affirming hormones. A total of 315 transgender and nonbinary participants aged 12-20 (average age 16) were enrolled in the study. ALL WERE PUBERTAL. All were involved in a multidisciplinary team. 25 participants had already received puberty suppression. During the study, all received either testosterone or estrogen for their respective gender affirming medical care. Measures analyzed were transgender congruence scale, depression inventory, anxiety scale, and positive affect and life satisfaction scores. Appearance congruence is when someone's physical appearance aligns with their gender.

Appearance congruence, positive affect, and life satisfaction significantly increased, and depression and anxiety symptoms significantly decreased. An important clinical finding from the study is that participants who received pubertal suppression before gender affirming

hormone therapy or who started gender affirming hormone therapy at earlier pubertal stages reported great appearance congruence and better psychosocial functioning at baseline than those with no puberty suppression or who started gender affirming hormone therapy at a later stage, suggesting earlier intervention could have a protective effect.
If this bill passes, patients and families will still seek gender affirming medical care which could result in a large exodus of families to other states or families resorting to the black market on the web for gender affirming therapy. Further, removing doctors' ability to follow established standards of care in their medical practices will drive some physicians away and impede recruitment efforts going forward.

HB 1254 proponents say this bill was created to protect children. It does just the opposite. The medications I use to help those experiencing gender dysphoria are the same medications I prescribe to treat numerous other conditions related to hormone imbalances. It is evidence-based care I was trained to provide. Denying patients access to this life-changing care is an unnecessary state law that will take away hope from the patients I serve and their families.

Coming from a family of faith, science helps to see what God created and God doesn't make junk. Please listen to the science that has been proven to be effective for these individuals.

Thank you for allowing me to speak and for your time in this important matter. I trust that the ND senate will do what is best for the state and that includes **opposing HB1254.**

Sincerely,

Dr. Amanda Dahl
Pediatric Endocrinologist