Testimony on SB 2284
Gail Pederson, SPRN, HN-BC

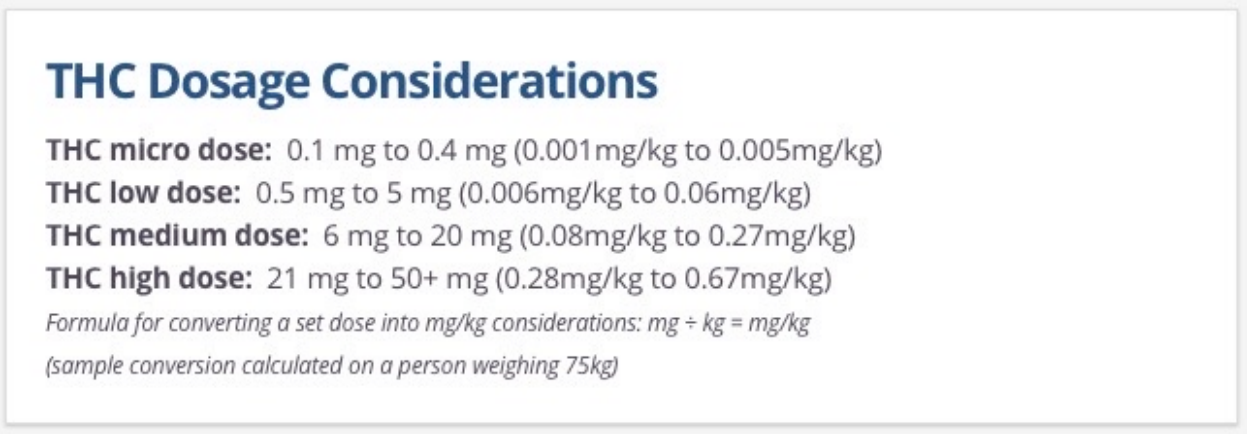
Thank you Chairwoman Lee and the Senate Human Services Committee for allowing me to speak today. Many thanks to Senators Weber and Poolman, and Representative Pyle for sponsoring this bill. I am here speaking for SB 2284, but I would like to offer an amendment to the proposed changes.

I am Gail Pederson from Valley City, District 24. I am a Special Practice Registered Nurse in Holistic Nursing, a nationally recognized Board Certified Holistic Nurse and a trained cannabis nurse. A lot has changed since I first spoke before this committee against SB 2344 in 2016. My knowledge of cannabis therapeutics, and I will refer to it as cannabis, has increased 100 fold. I am a member of the American Nurses Association, The Cannabis Nurses Network and The American Cannabis Nurses Association and I have over 40 hours of cannabis therapeutics education in the last 2 years. I have the extensive network of these organizations and medical professionals. We are researching, educating and solving problems with legislation and implementation of medical cannabis in our states and federally. As a SPRN, my scope of practice includes cannabis education and consultation. I have a continuing education program approved by the ND BON for 1.5 hrs CEU's, entitled "Cannabis 101: What Medical Professionals Need to Know" based on the National Counsel for State Boards of Nursing "Guidelines for the Nursing Care of Patients Who Use Marijuana.

I would like to enter an amendment to the bill proposed, with 2 changes. The amendment as rewritten is attached as another file. First, the 6% THC cap is irrelevant. It needs to go away completely. Cannabis is measured in mg/ml for our commercial solutions, whether it is a pediatrics or adult preparation. To establish dosing in a pediatrics cannabis patient, it is measured in mg/kg. That is it! It should make no difference in the dilution

rate. This is the same as with any medication we would give to a pediatrics patient.

This chart of dosing guidelines comes from a database called CannaKeys. It is a new resource that compiles research information from around the globe. 18 out of 20 studies have proven that cannabinoids have been proven effective for ASD. www.cannakeys.com



The 6% cap that is in place would actually create a stronger solution than what I have seen for adult medical use. The new “pediatrics solution” is a little over 3%. 1000mg of THC in 30ml is a little over 3%! This is stronger than the adult solutions. Now, this is a good thing, for the fact that it can be difficult for some children to take. It doesn’t taste that great. The less volume the better. Even then, getting a child to take a cannabis product is a challenge. For the most part a child may not need that high a concentration.

The second part of the amendment is to allow caregivers to make their own solution out of flower/plant material. The difficulty is the definition of flower as a combustible product which is the current definition. This is not what caregivers wish to do and I have tried to define the changes proposed to reflect that.

Why should we allow parents to make their own product? Using

a child on the ASD, there is a lot that goes in to this reasoning. We were fortunate to acquire a video presentation by Dr. Bonni Goldstein in support of our children with autism and these changes. Clinical Endocannabinoid Deficiency is suggested in many conditions. The theory with an ASD child is their system disregulates instead of regulating vital brain functions because they do not make enough of these naturally occurring endocannabinoid molecules. Supplementation with a CBD/THC product can reduce behaviors and improve quality of life, greatly. CB1 receptors are mostly located in the brain and nervous system. The THC molecule fits almost perfectly, while the CBD molecule attaches to the side of this receptor. What happens when the dose is too low? Unlike a normal person's brain that may not have any response, the nonneurotypical brain reacts paradoxically, injurious behaviors increase, interactions with others retreat and there can be a regression of normal activities. For about 15% of these children, high THC doses are needed to overcome this. This is outlined on the circle graph here and handed out. I do want to point out that Dr Bonni Goldstein disputes the myth that cannabis causes a multitude of problems for teens in the video she made for this legislative session. Cannabis can repair brains!

Cost and quality is a big concern for the caregiver of an ASD child. The cannabis plant has hundreds of identifiable cannabinoids, terpenes, and flavinoids, each playing a role in interacting with our ECS. This is called the Entourage Effect. It is the synergistic action of all these parts together. That is why whole plant products are best for anyone. That is why parents need the choice to determine what cultivar works for their child. Terpenes are of particular importance to the success of a child using cannabis solutions.That is the essential oil of the cannabis plant. Terpenes may drive a successful treatment more than THC content. Our commercial products are made from a full spectrum oil (FSO) and diluted with a MCT oil. There are trace amounts of alcohol in the solutions according to the label. We do not have

access to the Certificate of Analysis of these products nor do we test for terpene profiles as many states do. Are the terpenes adequate to provide a quality solution? We do not know.

Allowing caregivers to find a chemovar that works without spending a lot of money is another factor in allowing plant material or concentrate to be used. I hate the thought of anyone buying a 1000mg bottle with no recourse for return and using up a portion of their monthly allotment for a product that may not work. That is another question this poses. That goes against the 4000mg monthly allotment. What if it doesn't work for that child. It can't be returned, Their allotment is not credited back. By allowing caregivers to make their own solutions with a small amount of flower they purchase can ensure that the terpene profile is correct and the product has a better chance of working. That the carrier oil used is more palatable or doesn't upset a digestive system. It is not too much to ask for our kids.

There are many factors which could prove detrimental to an ASD patient with current production, including the processing techniques and the carrier oil used. The quality of the product is also pertinent and there have been problems as outlined in other hearings.There are a lot of variables in pediatrics treatment, that allowing caregivers to manufacture their own solutions would solve. This is the first legislative cycle that we have had products. Changes need to be made. Removing the irrelevant 6% THC cap cleans the law up a little more. Allowing caregivers to use flower/ plant material to find the plant that works best for their child should be a logical move when cannabis therapeutics is involved.

Thank you and I stand for questions.