House Human Services Committee HB1434 January 30, 2017

Committee Members, I am a practicing physician and father of a child with autism. My wife Carolyn was appointed to the Governor's Autism Task Force when now Senator Hoeven was in the Governor's office. I have many hats as my testimony to the committee last week demonstrated. My grassroots efforts in researching how to better help our society deal with the difficulties of autism are a key thread of research that has led me to the board of the Institute for Pure and Applied Knowledge. I am currently working on a public policy implementation of "ethical vaccinomics" that may have merit here in the macroeconomics of this bill. It is a concept of cost savings in one area of healthcare that can be used in another for a budget neutral approach.

Autism is costing society much more than the policy numbers show, these are big numbers and growing every year. The syndrome is more complicated than cancer in its genetic and exposure risk assessments. Even my specialty of radiology may be playing a role in exposures as my written testimony last week described research in non-human mammals showing in utero exposure to ultrasound can induce autism-like behaviors after birth. The President of the United States, Mr. Donald J. Trump and many others in society are well aware we have an epidemic on our hands. Toxins that immunostimulators are playing a role in this epidemic, neuroimmunological hyper-stimulation is a key common thread in the development of autism. By ALARA principles, which the state's radiology technologists discussed last week, we should never expose our most vulnerable children to genetic or autoimmune induction agents unnecessarily. Unfortunately, federal health policies enacted in the 1980's and promoted by the CDC have created a particularly illogical situation in vaccine schedules that now should be looked at for some thoughtful changes and resulting in cost savings for insurance systems and state governments.

In the long standing progressive increase of vaccine distribution to our children beginning in the 1980's, there is one vaccine in the guidelines that is an overstep of glaring nature into the realm of ethics, consent, autonomy, and respect for first amendment rights even. That is the first year of life dosing of a vaccine for a sexually transmitted or body fluids transmitted disease. By the ALARA principle, because of its use on day one of life in newborn babies Hepatitis B vaccine is particularly problematic. However, it is the area of greatest cost savings in a titerchecked CDC vaccine protocol modification.

By using a real world scenario of North Dakota birth statistics with regards to a Hep B titer check protocol, we can see a resource savings as well as a diversion of resources from global pharmaceutical companies into the individualized care needs for North Dakota families and a diagnostics shift of resources that has not previously been realized. In 2015 we had a little over 11,000 births in ND. Making the math a little simpler by round numbers, the following economic analysis shows the derived resource changes:

10,000 ND Births in a 4 shot Hep B protocol at \$50 per shot leads to cost outlay of \$2 million. 10,000 ND Births in a Titer-checked protocol at \$50 for the shot and \$50 for the lab (titers) will follow the basic bioeconomometrics on the appended email to my research colleague, James Lyons-Weiler, PhD. After doing the math, we see a 19.4% cost savings in the titer check protocol over the standard approach. The resource shift from pharmaceutical companies to North Dakota hospitals for the lab work is in addition to that cost savings, and in the first round of labs it is \$500,000 into hospitals, the additional rounds of labs providing lesser derived resource transfer since we are culling the need for many boosters as the 19.4% savings in the protocol. A 20% savings on \$2 million is \$400,000.

This is but one example of where we can save money, improve care, rely on our local resources and do the right thing for our future generations of North Dakotans. There are others in the CDC schedule, but this is the logical one to define the new art and practice. Dr. Todd Twogood and I have performed whole schedule titer check protocols for several families in Bismarck and the benefits across the whole schedule in this hand for of cases is an approximately 50% reduction of vaccine boostering across the whole schedule. This is precession medicine and it saves money, builds rapport between families and pediatricians in a political climate where our dear president is going to clean up the up the swamp in Atlanta, Georgia known as the CDC.

Long story short, just as my Bismarck Tribune letter to the editor from 9 years ago states, we can do this better here because of our social fabric, professional kinship and common sense values. Funding the behavioral neuro-plastics medical exercise of the current generation of children with what an old ND veterinarian once described to me as vaccinosis through this pathway will make our state a leader in crossroads of civics and health policy. Thank you for your time and attention. If there are any questions I would be grateful to have the opportunity to respond. Ted Fogarty, MD