Chairman Lipps, Vice Chair Stewart, Ranking Member Liston, and members of the House Public Health Policy Committee, my name is Doctor Stephen Beck, I am speaking on my own behalf not on behalf of my employer or any other organization, and I will present facts related to HB68 as an interested party. I am a physician both trained and licensed in the state of Ohio, currently practicing telemedicine only. I am board certified in both internal medicine and clinical informatics and am honored to be recognized as a fellow of the American College of physicians. I have been researching gender medicine for almost ten years after a beloved family member began evaluation and eventual treatment at an Ohio clinic. Over that time, I have worked to understand the basis and ongoing science for current interventions, and to help educate parents across our State interested in facts about the current advice and guidance for gender confusion and gender dysphoria.

I am often asked why more Ohio physicians and other care professionals, parents, and patients have not spoken out regarding questions about these medical and surgical interventions. The truth is that Trans activists attack those who don't agree with an "affirmation only" approach. They are harassed, intimidated, labeled as transphobic, labeled as bad parents, as bad doctors and therapists, or worse. Acknowledging the sandy foundation or cracks in the walls surrounding the affirmative care approach apparently isn't allowed. One example is a national expert Psychiatrist who practices in Ohio. Simply the mere mention of his name caused activists to seek him out, and attempt to have him fired from his affiliated institution. So, I am asking you to listen to the facts, **acknowledge** the scientific research, and review the references provided.

We can all hope every provider in our State takes the charitable approach of aiming to deliver the best care possible. However, I believe there are many compassionate and well-meaning clinicians who are misguided by activism into delivering interventions not supported by the available evidence.

Today I will present referenced clinical and research details relative to the content of HB68 with multiple topic areas of fact.

1. People are dying.

In 2011, Dhejne et. al. (https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0016885) published the first nationwide population-based, long-term follow-up of sex-reassigned transsexual persons in Sweden, showing a high mortality rate in both male-to-females and female-to males, compared to the general population. 324 transsexual persons who underwent sex reassignment surgery and were assigned a new legal sex between 1973 and 2003. Fifty-nine percent (N = 191) were male-to-females and 41% (N = 133) female-to-males. This study found substantially higher rates of overall mortality, death from cardiovascular disease and suicide, suicide attempts, and psychiatric hospitalizations in sex-reassigned transsexual individuals compared to a healthy control population. People are dying prematurely due to interventions.

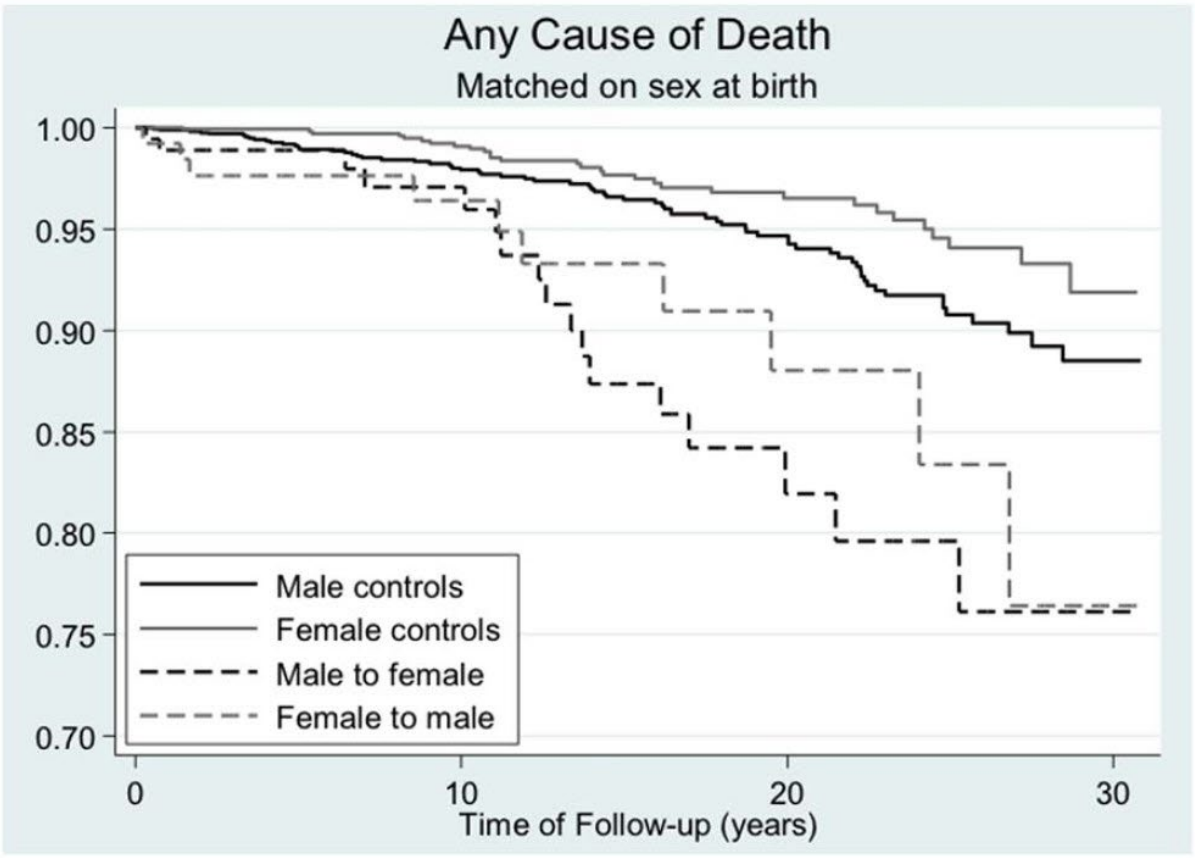

Figure 1. Death from any cause as a function of time after sex reassignment among 324 transsexual persons in Sweden (male-to-female: N = 191, female-to-male: N = 133), and population controls matched on birth year.
doi:10.1371/journal.pone.0016885.g001

In 2021, de Blok et. al. (https://pubmed.ncbi.nlm.nih.gov/34481559/) published a retrospective cohort study of adult transgender people who visited the gender identity clinic of Amsterdam University Medical Centre in the Netherlands. 2927 transgender women and 1641 transgender men were included in the study, which showed an increased mortality risk in transgender people using hormone treatment, regardless of treatment type. This increased mortality risk did not decrease over time. The cause-specific mortality risk was due to cancer, cardiovascular disease, HIV-related disease, and suicide. People are dying prematurely due to interventions.

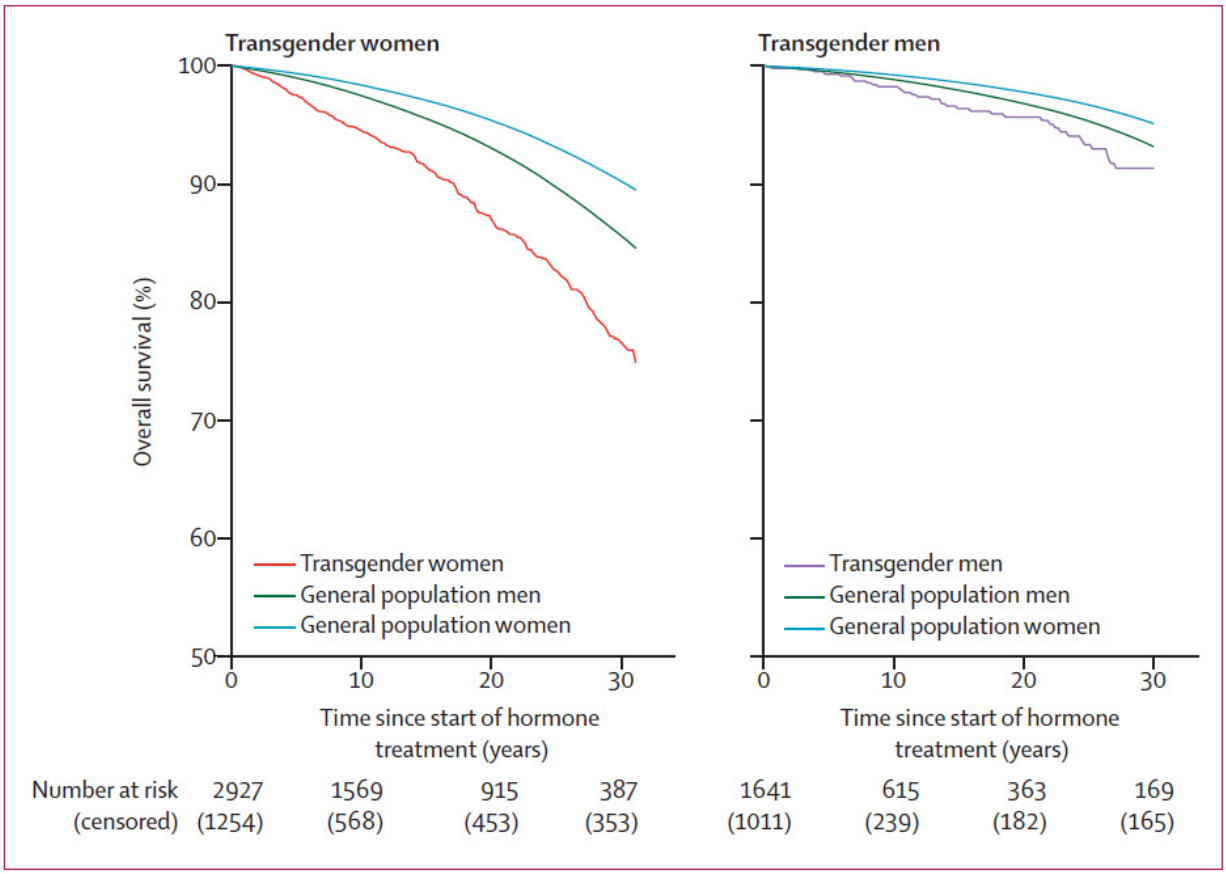

Figure 2: **Cumulative survival in transgender women and transgender men during follow-up**
2021 deBlok et.al.

2. Systematic Reviews show a lack of high-quality evidence.

None of the systematic reviews performed on gender affirming care have shown evidence beyond low or very low GRADE. Definition of GRADE evidence: https://doi.org/10.1016/j.jclinepi.2010.07.015 . This is true for the Baker (2021) meta-analysis, which was the commissioned review by WPATH as evidence for SOC8. It looked at four areas: Quality of Life, Depression, Anxiety, Death by Suicide. The

summary of three of the four sections stated: “The strength of evidence for this conclusion is low due to concerns about study designs, small sample sizes, and confounding.” Only a single study relating to suicide was reviewed, so the statement was: “We cannot draw any conclusions on the basis of this single study about whether hormone therapy affects death by suicide among transgender people.” And yet, the final analysis states: “…these benefits make hormone therapy an essential component of care that promotes the health and well-being of transgender people.”

Additionally, it is critical to point out the definition of GRADE quality:

- Low quality: Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect.
- Very low quality: We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of the effect.

There is NO international agreement on the care of gender incongruence or gender dysphoria. In addition, the review of guidelines continues to show a lack of quality evidence to support them and even prior to the latest version of the Endocrine Society guidelines (2017) being published, there was broad international disagreement regarding approach to caring for children and adolescents with gender dysphoria as noted in this 2015 article: https://www.jahonline.org/article/S1054-139X(15)00159-7/fulltext.

We also know there is a strong potential for bias and placebo effect in this research Honeymoon effect of drugs are infrequently mentioned but can certainly last a year or longer with hormone administration.

We should clearly acknowledge that short term studies have shown some improvements in both children and adolescents on GnRH analogues (puberty blockers) and cross sex hormones, but there are profound issues with nearly every study including:

- Very small size
- No control group
- High fall out rate (often up to 30% or higher)
- Short term studies
- Issues with methodology or interpretation of the data itself

International reviews and updated guidance now restrict GnRHa and cross sex hormones include the NIH CASS reviews, Cochrane, Finland (2020), Sweden (2022), Australia and New Zealand (2021), France (2022). Most recently Florida commissioned a review of existing systematic reviews (May, 2022) showing low certainty of evidence in all areas of surgical and medical interventions.

The NHS just released their interim service specifications on Gender Incongruence stating very clearly: “The primary intervention for children and young people who are

assessed as suitable for The Service is psychosocial (including psychoeducation) and psychological support and intervention; the main objective is to alleviate distress associated with gender incongruence and promote the individual's global functioning and wellbeing."

3. There is overwhelming activism and gender medicine including activism in publication of journals and journal articles.

A prime example is Tordoff et.al. (2022) Mental Health Outcomes in Transgender and Nonbinary Youths Receiving Gender-Affirming care. This study suggested that gender-affirming medical interventions were associated with lower depression and suicidality. There were many issues with the study design and reporting, but one of the worst was relative to their drop out rate. While this study of 104 youth was only for one year, only 62.5 percent completed their final survey at 12 months! There was no reasoning supplied for the missing 39 patients, which could have completely changed the outcome of the study itself. And yet, the headline reads just like the conclusion: medical interventions improved the outcomes. This research was published in the Pediatrics journal, highly promoted by activists (including clinicians) and despite multiple requests for the researchers to adjust their findings or retract the paper based on multiple inaccuracies, no action was ever taken by the publisher.

Many of us were excited to hear about the study publication by Chen et. al. This was a well-known study funded by the NIH, and the largest in the United States of its kind with 315 patients. It is still going on, in 4 different large gender clinics around the country. Once again, tremendous methodological errors were present (large amounts of missing baseline data, analysis, and lack of reported outcomes), but critically important was the two deaths by suicide and eleven other participants who had a documented suicidality. In a typical study of this size, a suicide would prompt either an urgent analysis, or a complete halt to the study. Of course, neither of these occurred and they were brushed aside without explanation. Once again, the headline prevails of "positive outcomes."

Even more recently, research by Diaz and Bailey (2023) was attacked by activists, demanding a retraction of the study by the publisher and to have the journal editor fired. The argument against publication was framed around methodology, but the argument loses relevance based on the strong opposition to the outcomes – a majority of parents reported being pressured to their clinical team to affirm their child, and pre-existing mental health issues were common.

4. Drugs administered for gender affirmation are neither fully reversible nor without permanent long-term side effects.

There's currently no evidence to prove the use of puberty blockers are either safe or reversible. It is disingenuous for a doctor to make such a statement without any evidence or reference. The fact is when normal puberty is stopped, so is normal development of bone, brain and psychosocial function, gametes and sexual organs, and the cardiovascular system. If puberty blockers are given for the FDA approved

indication of early (precocious) puberty, we know that puberty will resume when these drugs are stopped. However, the long-term effects of those who have started normal puberty have never been studied, and even the Endocrine Society suggests fertility preservation in these patients be always be offered. Is it being offered in Ohio clinics? If so, how many have decided to pursue this? A study by Nahata (2017) show it is less than 5% in North America. Sexual functioning has also not been studied, but reports from those who transitioned in their teens is not promising.

Again, it is disingenuous (or even ignorant) to state that cross sex hormones are reversible. Many physical effects are irreversible as early as one or two months.

- Testosterone in biological females cause (not all inclusive): fat redistribution, cessation of menses, vaginal atrophy, clitoral enlargement, facial hair growth, deepening of voice, male pattern baldness, high blood counts (erythrocytosis), liver dysfunction, coronary artery disease, stroke, hypertension, and breast/uterine cancer.
- Estrogen in biological males cause (not all inclusive): fat redistribution, decreased sexual desire, decreased erections, decreased testicular volume, decreased sperm production, decreased muscle mass, breast growth, thromboembolic disease, coronary artery disease, stroke, breast cancer, gall stones, and high triglycerides.

5. Affirmation is being conflated with confirmation.

We affirm the symptoms and distress or happiness of our patients. We confirm (validate) a diagnosis. As clinicians and medical systems, we should never confirm a patient's self-identification without significant, in-depth evaluation. “Affirmative care” short circuits this normal occurrence, setting up the expectation of confirmation of a patient’s belief immediately, assuring the patient it is not only valid but significant. We don’t practice medicine this way. We would never confirm the inappropriate behavior or belief of a patient. This is what affirmative care is asking providers to do.

6. Gender affirmative care is NOT lifesaving.

There is no evidence that gender affirmation saves lives. As noted above, the best long-term evidence we have demonstrates a decreased life expectancy with medical and surgical interventions. The suicide narrative was created and emphasized from multiple online biased convenience sample surveys where there is a clear conflation of suicide ideation and suicide attempt – two very different concepts. Wiepjes, et.al. (2020) looked at trends in suicide rate in the Amsterdam cohort and found that suicide deaths occurred at all stages of transition, but higher than the general population. Biggs (2022) showed that suicide rates were thankfully much lower than ongoing reports and have also not been adjusted for other co-morbidities, such as underlying trauma, Autism, or other psychological disorders.

7. Transition regret exists and should not be ignored.

An article published this month by Jorgensen (2023) reviews prominent issues with both transition and detransition. This includes the fact that minority stress is NOT a factor relative to high rates of mental illness and other co-morbidities evident before the onset of feelings of gender incongruence.

8. Some refer to medical and surgical interventions in children and young people as experimental – and there is a reason why.

There are no long-term studies in this group. In fact, we know very little about gender dysphoria in adolescence. Kaltiala (2018) reminds us that "virtually nothing is known regarding adolescent-onset Gender Dysphoria."

9. A story

Body Dysmorphia is a condition where you become preoccupied with nonexistent or slight defects in physical appearance that lead to abnormal behavior and mental distress or impairment.

Does this sound familiar? Anorexia Nervosa is one example of this – where patients have a poor body image, and constantly believe they weigh more than they should to the point of starving themselves to death.

So, imagine your child has anorexia. But all those around your child are affirming their condition. They agree with this abnormal thinking – telling your child indeed they are too fat.

Their friends affirm them. Their teachers affirm this.

The internet and their online friends agree they need to lose weight.

The headlines in the news suggest this is the right thing to do.

Even their doctors affirm this abnormality as though it was the truth.

And your doctor tells you – that you as parent also must affirm them, not simply because it is what is the right thing to do, but if you don't, your child will likely commit suicide. Of course, your child hears the same thing from the doctor, who encourages "treatment" for this affliction.

Now imagine your underweight child, who is starving themselves to become skinnier, is prescribed weight loss drugs. Because, after all, if they don't do so they will probably try to hurt themselves. The doctor also refers your child to a surgeon

for liposuction – a surgical treatment to make the child skinnier – because it will help their mental condition.

Does this sound crazy? Ridiculous? It is reality for kids with gender dysphoria. They are being gaslighted – convinced by everyone around them, that they are indeed born in the wrong body, and need to change their body to match their brain.

This is where activism in medicine has brought us.

In Summary,

If there is ONE recent article to read, the article by Block in the British Medical Journal (2023) summarizes much of the debate we are all experiencing. There is no consensus.

People ARE dying – based on long term studies, correlating with medical and surgical interventions.

There is no scientific evidence that you can be born in the wrong body. We should stop telling youth this is possible.

Puberty is NOT a disease. Can it create distress, yes. Should we stop normal puberty with drugs? There is no long-term evidence to support that intervention. If allowed to complete natural puberty, most patients who suffer from issues of gender dysphoria will resolve their distress and accept their biological sex.

We should be embracing gender non-conformity in youth, not simply pushing them into a traditional gender norm.

Detransition of those who have been affirmed and “treated” occurs commonly. We don’t know how often, but it far exceeds the 1% quoted by activists and is probably one of the most important groups we should continue to listen to.

Parents are victims too, when activists, practitioners, and social media vilifies them for questioning why their child believes they are born in the wrong body or are uncomfortable with their biology. This needs to stop.

What if we focused all our energy on helping young people accept their biology, rather than convincing them that we can change their sex to adapt to their way of thinking?