Beyond the Binary – How Insurance Companies Can Adapt to Meet the Needs of Transgender, Non-binary, and Intersex Individuals

Jonah von der Embse

The views and ideas expressed in this essay do not represent the views or ideas of the author's employer, the Society of Actuaries, or any organization the author is involved in.

Male or female? The simple, seemingly innocuous question we all likely encounter throughout our lifetimes, right after asking for one's name. Life insurance applications are no different – in the U.S., companies currently ask individuals to select one of these two options. Although underwriting and risk classification can differentiate an individual's risk, and thus the price of the insurance product, the underlying cost structure and cash value is significantly influenced by this male/female classification. If only it was so clean-cut.

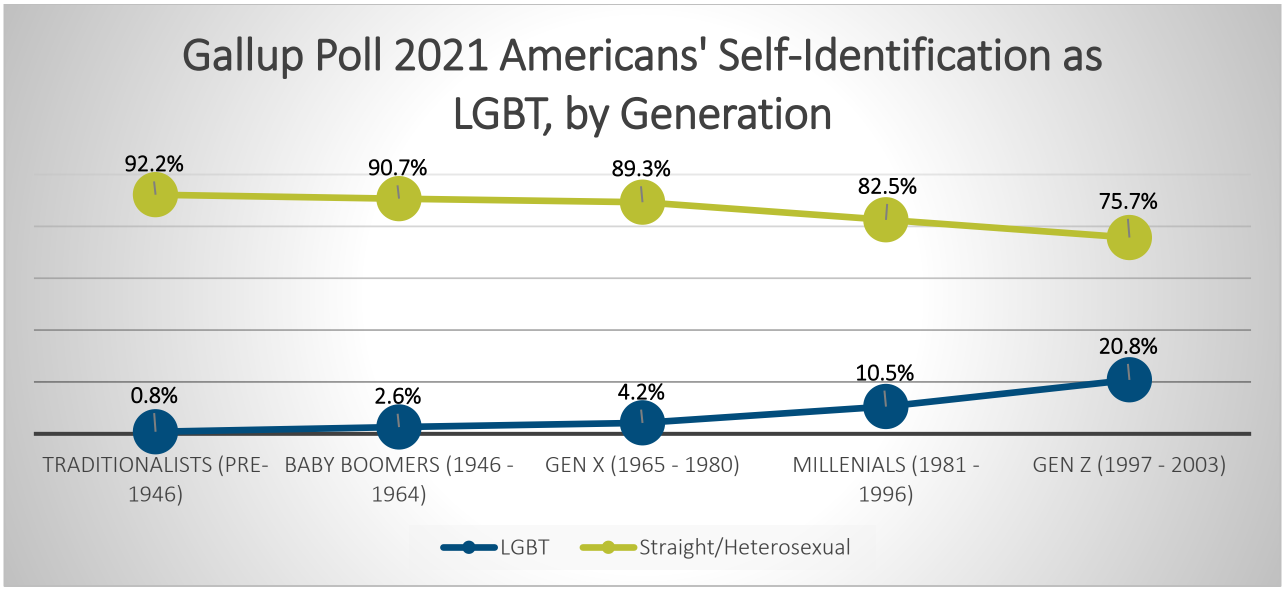
Transgender, non-binary, and intersex individuals have long been a part of society, and as they and younger generations challenge traditional ways of thinking about sex and gender, insurance companies will need to learn to adapt to a changing world. The use of sex, gender, or both is a good place to start, especially how it uniquely impacts the LGBTQ+ population and their ability to access fair and affordable insurance.

This essay is limited in scope to only a few of the myriad of issues faced by a segment of the LGBTQ+ population. However, it will give readers a brief education of the LGBTQ+ population, the importance of clarifying sex vs. gender, and how a binary classification system indirectly adds additional barriers to an already marginalized population. Finally, it will discuss what actuaries should consider for future research and discussion.

For the purposes of this essay, sex is biologically defined characteristics, while gender is a social construct, as defined by the Human Rights Campaign (HRC)[i]. The HRC defines transgender as an umbrella term for individuals whose gender identity differs from the sex assigned to them at birth. Some (but not all) transgender individuals undergo gender affirming surgery to align their sex with their gender identity. Non-binary is an identity used by individuals who do not identify as male or female. Although many non-binary individuals identify as transgender, not all do. Intersex people are born with a variety of differences in their sex traits and reproductive anatomy, and can identify as intersex, non-binary, male, female or a different gender.

The U.S. LGBTQ+ Population

A 2022 poll by Gallup[ii] estimated the LGBTQ+ population in the U.S. is 7.1%, doubling in the last decade. Broken down by generation, more than one in five members of the youngest cohort (Generation Z) identify as LGBT, likely signaling future growth. A Pew research study in June 2022 further highlighted the gap based on age and generation, finding slightly more than 5% of adults aged 18-29 say their gender is different from their sex assigned at birth (including 3% who identify as non-binary).[iii]



The intersex population can be difficult to quantify due to many individuals going through medical procedures early in life. However, the Center of American Progress[iv] estimates up to 1.7% of the population has an intersex trait, and approximately 0.5% of people have clinically identifiable sexual or reproductive variations (an estimated 5.6 million and 1.6 million Americans, respectively).

Millions of Americans do not easily fall into the buckets of “Male” and “Female”, and this population is only likely to grow in the future. So why do insurance companies insist on this split?

A Brief History of Sex and Insurance

In the late 19th century, life insurance companies commonly charged different rates based on race or geographic location, but not sex (although females were often charged more, or offered lower payouts, for annuities). In 1955, Phoenix Mutual Life Insurance company became the first company to offer females lower premiums on life insurance.[v] However, U.S. statutory reserve mortality tables were unisex. Many companies adopted a simplification for female mortality rates through an age set back, or, in other words, using rates of a younger male.

A Brief Timeline of Sex, Gender, and Insurance

1840s
- Insurance companies begin charging females more for annuities compared to similar aged males, despite using unisex life insurance rates

1880s
- Insurance companies begin charging different life insurance premiums based on race

1955
- Phoenix Mutual becomes first company to offer female rates for life insurance

1964
- The Civil Rights Act bans the practice of race-based insurance premiums

1975
- In *Weinberger vs Weisenfeld*, the Supreme Court mandates that social security benefits become gender-neutral

1980
- The 1980 CSO mortality table becomes the first to be split by sex (a unisex version was added after the 1983 court case below)

1983
- In *Norris vs Arizona Governing Committee for Tax Deferred Annuities*, the Supreme Court mandates that there must be a gender-neutral retirement option for state employees when offered only a limited number of annuities.
- Montana becomes the first (and only) U.S. state to mandate gender-neutral insurance. This law was repealed in 2021.

1988
- The Massachusetts Insurance commissioner mandates gender-neutral insurance. However, the mandate was overturned by the state supreme court in 1991 due to the way it was enacted

2012
- The European Union mandates all types of insurance become gender-neutral on a prospective basis

2014
- The Affordable Care Act creates gender-neutral health insurance

2017
- California becomes the first U.S. state to allow for gender X birth certificates

2020
- California and Michigan become the sixth and seventh states to mandate gender neutral auto insurance
- In *Bostock*, the Supreme Court held that Title VII extends to sexual orientation and "transgender status"

2022
- New York mandates a Gender X option for Auto Insurance to go alongside male and female options
- The U.S. issues its first gender X passport

Due to the uneven nature of the "mortality setback" and the rise of the feminist movement, state legislatures across the U.S. began to ban this practice. In response, the NAIC requested the Society of Actuaries to form a task force in the mid-1970s to study whether a new mortality table should be unisex or sex distinct (Special Committee to Recommend New Mortality Tables for Valuation). In the Record of Society of Actuaries VOL. 5 NO. 4 (1979)[vi], the moderator Charles Ormsby stated, "It is highly likely that … adopting new mortality tables today will involve stronger political crosscurrents and more controversy than heretofore."

Wilbur Bolton, a member of this committee, also recognized the complexity of the issue. He stated the difference in female vs. male mortality "cannot be rationally challenged" but admitted there were questions about the difference "outside the normal domain of actuarial investigations" and "anti-discrimination proponents claim it is morally indefensible for insurance companies to recognize differences based on past cultural influences or past patterns of employment."

As anticipated, these sex distinct tables were challenged in the court system after their adoption. In *Norris* (1983)[vii], the Supreme Court held a state pension plan that allowed employees to choose retirement benefits from a list of companies selected by the employer, all of which paid lower benefits to women (due to sex distinct pricing), violated Title VII of the Civil Rights Act (which had previously banned race-based pricing). Although narrow in scope, the Court nonetheless explained "if it would be unlawful to use race-based actuarial tables, it must also be unlawful to use sex-based tables" because race and sex distinctions stand on the same footing under the Civil Rights Act[viii]. In response, the NAIC added a unisex version of the table.

However, for transgender and non-binary individuals, many legal questions remain. Most recently, in *Bostock* (2020)[ix], the Supreme Court analyzed several employment discrimination claims and held Title VII's language prohibiting discrimination "on the basis of sex" included sexual orientation and "transgender status." While the Court arguably expanded the scope of the term "sex," it is yet to be seen if this will include gender identity and non-binary individuals and impact the insurance industry.**

Current Practice and Guidance

The use of sex and gender varies by company, with vague regulatory and best practice guidance. The American Academy of Actuaries Risk Classification Working Group published a public policy monograph on risk classification[x] in the fall of 2011. The Working Group stated desirable risk characteristics should have "objective determinability" and referenced gender as an example due to its "binary characteristic."

In February 2021, the Society of Actuaries' Emerging Issues in Underwriting Survey[xi] had a question about what companies ask for on their application. As expected, responses showed a large variation in the use of sex or gender.

What does your company ask in its application?

Response	U.S.	Canada	# of Responses
Sex	12	6	18
Gender	10	3	13
Sex at birth	0	2	2
Both sex and gender	0	0	0
Total # of Respondents	**22**	**11**	**33**

Several states have limited the use of sex and gender in other insurance products. Eight states mandated auto insurance become gender neutral[xii], and in 2022, New York began requiring auto insurers to offer a gender X option.[xiii] Meanwhile, Montana, which previously was the only state to be gender neutral since 1983, repealed its unisex mandate[xiv] in 2021. Although all states allow for an individual to officially change one's gender and the U.S. issues gender X passports, only 16 states allow for a gender X birth certificate[xv], which can make it difficult for some individuals to obtain what could be considered appropriate documentation before applying for life insurance.

Due to the varied guidance and regulations, LGBTQ+ consumers are left to bear the burden. Quotacy[xvi] aggregated a list of companies on how they would rate a transgender individual and received answers ranging from "gender they identify as" to "birth sex," with varying requirements on sex reassignment surgery. Non-binary individuals also face an uphill battle – as of today, no insurance companies offer a gender-neutral life insurance policy[xvii]. These additional barriers are potentially preventing millions of individuals from receiving the financial stability and security provided by life insurance.

Are There Other Models?

In 2012, the European Union, one of the largest insurance marketplaces in the world, went through a significant change due to a lawsuit over auto insurance rates. The entire insurance industry was mandated to become gender neutral.

The E.U. justices referenced the U.S. Supreme Court's decision to make Social Security gender-neutral on the basis of equal rights as a foundation to their decision[xviii]. The advocate general stated the following in their arguments to the justices:

> "There is a sweeping assumption that the different life expectancies of male and female insured persons… which merely come to light statistically – are essentially due to their sex… it is especially easy to implement distinctions on the basis of sex… correct recording and evaluation of economic and social conditions and of habits of insured persons is much more complicated… [use of sex] as a kind of substitution criterion for other distinguishing features is incompatible with the principle of equal treatment for men and women."

After the ruling, the industry was given eighteen months to transition to gender neutral pricing. Hato Schmeiser and his coauthors put together a survey in the summer of 2012 to measure consumer attitudes in Europe about the use of risk factors and possible market implications[xix]. First, they referenced a study that found a positive correlation between consumers' willingness to buy insurance and their perception of the fairness of premiums and benefits. Next, they designed a study to measure consumers' perception of what is fair and justified. The study found consumers perceived gender as either neutral or unagreeable to be used as a risk differentiation criterion, and the differences in price due to gender to be higher than "acceptable."

The researchers then considered the market implications from the gender-neutral mandate. They estimated adverse selection effects and cross subsidization could increase, and in markets with low price elasticity and non-compulsory purchasing, this could cause the subsidizing policyholders to lapse, raise prices for remaining policyholders, and reduce demand. The decrease in demand could lead to future limitations on product offerings and a withdrawal of companies from different markets. Consumers might switch to alternative products or self-insurance solutions. The overall market could decrease in size along with the quality of insurance benefits, with the strongest impact likely to occur in life and annuity marketplaces due to the voluntary nature (compared to compulsory auto insurance).

However, the article also stated gender neutral insurance could spur positive consumer reactions. As their research showed, consumers were more inclined to buy policies they perceived as fair, and consumers currently view the use of gender as disagreeable (unfair). In the decade since the switch to gender neutral, the E.U. insurance marketplace has performed similarly to the U.S. market[xx] [xxi], showing the worst fears of the authors had not come to pass.

Something to consider is gender neutral insurance does not mean all females and males pay the same rate, or even the average female pays the same as the average male.

Five years after gender-neutral auto insurance went into effect, an analysis by The Guardian[xxii] confirmed two identical profiles that only varied by male and female received the same quote from several auto insurance companies in the U.K. However, when aggregating data, the researcher found the difference in premium paid by the average male vs. the averaged female tripled compared to what it was prior to gender neutral pricing.

A common thought is making life insurance gender neutral would raise female rates and lower male rates (and the opposite for annuities) until the premiums paid between the two are the same. Although this would happen for policyholders with identical risk profiles, this may not necessarily be the case across a large population because a large difference in premium paid is attributable due to other risk attributes (smoking, medical history, etc.). In other words, although rates may not explicitly vary by male vs. female, they may implicitly vary through other pricing variables with a non-zero correlation to sex.

What Can Actuaries Do?

In a rapidly evolving world, it is worth pausing and viewing things comprehensively and fundamentally. Actuaries are essential in developing and managing risk classification systems that underpin the insurance industry to provide affordable and fair products. However, how to determine what is "fair" is hardly a straightforward process.

Gender and sex are far from "binary, objectively determinable" characteristics, and there will never be a clean-cut way to sort them into two buckets. Thus, actuaries should critically examine whether using sex or gender is a fair and accurate way to assess risk. Without even considering how difficult it is to sort transgender, non-binary, and intersex individuals into these pre-determined categories, we must consider whether this is the right way to assess risk fairly. The E.U. demonstrates a mature and developed marketplace could work effectively under a gender-neutral framework, but it's not the only option.

If actuaries (and regulators) decide to continue using sex or gender to assess risk, the next step would be to settle on consistent use – should actuaries use sex, gender, or sex assigned at birth?

Gender expression would appear to be the most client friendly option, especially for transgender individuals. However, in a "male/female" world, this option would not work for non-binary individuals. Sex assigned at birth is another logical option, but this may be a challenging data point to collect from a privacy standpoint, and it may be hard to justify, for example, the use of male rates for a fully transitioned transgender female. Asking for a birth certificate may also not be a viable solution as most states allow for them to be amended for transgender individuals, in addition to more than a dozen states now allowing for gender X (both as an amendment and for newborns).

Yet another option could be the approach New York has taken with auto insurance: allowing for sex distinct rates, but also mandating a third, gender neutral option be available for all residents of the state. However, how companies create the assumptions and prices for a third, gender neutral option could be a complex process, and there is a risk consumers could anti select against companies. Yet another ethical quandary could occur if emerging experience warrants higher prices for the third option vs. male/female.

As confusing and difficult as this may seem for actuaries, it can be even more so for all the consumers on the other side of the equation. Every additional requirement placed on underinsured communities further hinders their ability to achieve financial stability and security. The Academy's monograph on risk classification states classification systems should be acceptable to the public, recognize the values of society, and respect personal privacy. As societal values evolve, actuaries and insurance companies should evolve as well. Millions of individuals may depend on how actuaries and regulators approach and handle this in the years to come.

Jonah von der Embse, FSA, CERA, MAAA, is an actuary in the life insurance industry and a member of the Sexuality and Gender Alliance of Actuaries. He can be reached at Jonah.vonderembse@gmail.com.

References

[i] Glossary of Terms. *https://www.hrc.org*, https://www.hrc.org/resources/glossary-of-terms.
[ii] Jones, Jeffrey M. LGBT Identification in U.S. Ticks Up to 7.1%. *https://news.gallup.com*, Feb 17, 2022, https://news.gallup.com/poll/389792/lgbt-identification-ticks-up.aspx
[iii] Brown, Anna. About 5% of young adults in the U.S. say their gender is different from their sex assigned at birth. *https://pewresearch.org*, June 7, 2022, https://www.pewresearch.org/fact-tank/2022/06/07/about-5-of-young-adults-in-the-u-s-say-their-gender-is-different-from-their-sex-assigned-at-birth/
[iv] Mahowald, Lindsay and Caroline Medina. https://americanprogress.org, Oct 26, 2021, https://www.americanprogress.org/article/key-issues-facing-people-intersex-traits/#:~:text=It%20is%20estimated%20that%20up,identifiable%20sexual%20or%20reproductive%20variations
[v] https://nfg.com/insurance-company-history.html
[vi] Record of Society of Actuaries 1979 Vol. 5 No. 4 – New Valuation Mortality Tables for Individual Life Insurance
[vii] Timeline of Major Supreme Court Decisions on Women's Rights. *https://www.aclu.org*, https://www.aclu.org/other/timeline-major-supreme-court-decisions-womens-rights
[viii] Timeline of Major Supreme Court Decisions on Women's Rights. *https://www.aclu.org*, https://www.aclu.org/other/timeline-major-supreme-court-decisions-womens-rights
[ix] Supreme Court of the United States Syllabus*. https://www.supremecourt.gov*, October Term 2019. https://www.supremecourt.gov/opinions/19pdf/17-1618_hfci.pdf
[x] On Risk Classification. *https://www.actuary.org*, Nov 2011, https://www.actuary.org/sites/default/files/files/publications/RCWG_RiskMonograph_Nov2011.pdf
[xi] Emerging Issues in Underwriting. *https://www.soa.org*, Feb 2021, https://www.soa.org/globalassets/assets/files/resources/research-report/2021/emerging-issues-underwriting-survey-report.pdf
[xii] Manning, Susan. How your gender affects auto insurance rates. *https://www.insure.com*, Aug 8, 2021, https://www.insure.com/car-insurance/gender-auto-insurance-rates/
[xiii] Insurance Circular Letter No. 7 (2022). *https://www.dfs.ny.gov*, April 22, 2022, https://www.dfs.ny.gov/industry_guidance/circular_letters/cl2022_07
[xiv] Downing, Troy. Comments to CSI Regarding HB 379 Memo. *https://leg.mt.gov*, Feb 18, 2021, https://leg.mt.gov/bills/2021/Minutes/House/Exhibits/buh34a05.pdf
[xv] Identity Document Laws and Policies. *https://www.lgbtmap.org*, https://www.lgbtmap.org/equality-maps/identity_document_laws
[xvi] Cornelius, Natasha. Does Being Transgender Affect Life Insurance Rates. *https://www.quotacy.com*, June 2, 2022, https://www.quotacy.com/does-being-transgender-affect-life-insurance-rates/
[xvii] Fontinelle, Amy. How Being Nonbinary Affects Getting Life Insurance. *https://www.investopedia.com*, Sep 1, 2022, https://www.investopedia.com/how-being-nonbinary-affects-getting-life-insurance-4869749
[xviii] End to Gender Discrimination. *https://www.hfw.com*, https://www.hfw.com/End-to-gender-discrimination
[xix] Schmeiser, Hato, Tina Stormer and Joel Wagner. Unisex Insurance Pricing: Consumers' Perception and Market Implications. *https://link.springer.com*, Dec 4, 2013, https://link.springer.com/article/10.1057/gpp.2013.24
[xx] Life Insurance and Annuities in the US. *https://www.ibisworld.com*, Aug 30, 2022, https://www.ibisworld.com/industry-statistics/market-size/life-insurance-annuities-united-states/

[xxi] https://www.insuranceeurope.eu/statistics
[xxii] Collinson, Patrick. How an EU Gender equality ruling widened inequality. *https://www.theguardian.com*, Jun 14, 2017, https://www.theguardian.com/money/blog/2017/jan/14/eu-gender-ruling-car-insurance-inequality-worse