The purpose of this study was to describe current prenatal and pediatric genetic counseling practice following a non-invasive prenatal testing (NIPT) result positive for a sex chromosome abnormality (SCA). While test sensitivity and specificity for SCA remains high, the positive predictive value (PPV) is lower than seen for Trisomy 21 due to natural loss of the X chromosome from maternal cells during aging, confined placental mosaicism, and undiagnosed maternal sex chromosome abnormality. Except for 45,X, individuals with SCA usually have no ultrasound or postnatal physical findings making it difficult for counselors to determine best follow-up practice. This study used a prospective anonymous questionnaire to survey 176 clinical prenatal and pediatric genetic counselors. Greater than 70% of pediatric respondents and >80% of prenatal respondents were somewhat or extremely comfortable counseling patients about SCAs. However, prenatal respondents in the field for <5 years were significantly less comfortable for every condition except 45, X (p<0.02). A majority of prenatal respondents always offered diagnostic testing (>88%), and anatomy ultrasound (~90%), but those always offering maternal karyotype (22-52%) and postnatal evaluation (28-87%) varied widely. Maternal karyotype offer was more likely if NIPT positive for 45,X or 47,XXX had normal diagnostic testing (p<0.023) or declined testing (p<0.019). Postnatal evaluation was more likely if diagnostic testing was declined (p<0.01). A majority of pediatric respondents always offered their patient a karyotype (>72%) but the percent always offering maternal karyotype (6-46%) varied widely with those positive for 45,X or 47,XXX more likely to be offered if there was a normal karyotype (p<0.048). While most counselors indicated consistently offering diagnostic testing and imaging, maternal testing and postnatal evaluation were offered with great variability. Therefore, there is a need for professional guidelines to help guide best clinical practice for patients with NIPT positive for SCA.