BACKGROUND: Paired tumor - normal specimen testing is standard of care to improve the timing and knowledge of genetic variations present in the brain tumor cell and germline. A new process was developed to ensure the paired normal specimen (PNS) testing was completed. METHODS: The Neuro-Oncology Advanced Practice Provider (APP) is integral in the process of ordering and obtaining the PNS. RESULTS: In the last 15 months, this tertiary care center has performed more than 90 pediatric brain tumor biopsies and/or resections. APPs identify patient surgery dates via the neurosurgery calendar. On the day of surgery a PNS is ordered for the Solid Tumor panel (predetermined by pathology and neuro-oncology) and “Include germline variant resolution information if applicable?” is answered as “No”. The laboratory runs the next generation sequencing (NGS) on PNS and tumor but the findings remain blinded until a second order is placed to “unblind” the specimen. By doing so, the treating physician collaborates with a genetics counselor prior to discussing with the family. Initial difficulty included patient identification, ordering, and collecting PNS. The APPs developed a shared list with patient identifiers, surgery date, order and collection date of PNS which has ensured less than 5% of PNS have been missed. Challenges include weekend surgeries, APPs out of office, and communication to nursing to collect PNS. Updated protocol includes ordering PNS, messaging shift nurse with order explanation and request to collect. Additionally, the pathology team now messages the APPs if a PNS is not submitted and the tumor is undergoing NGS. CONCLUSIONS: Comprehensive processes ensure that paired normal - tumor testing is completed in a timely manner and during the same admission with surgery to ensure better insurance coverage and less cost to families, as well as earlier results of somatic and germline variants.