Fetal genome sequencing must strike balance of too much information

Once you go beyond looking for specific genetic mutations—such as those that cause Down syndrome or cystic fibrosis—and begin exploring a fetus' whole genome, genetic mapping moves into a fuzzier territory: a place in which the information is no longer deterministic, but instead merely predictive. Genetic data may suggest that a child is more likely to develop a certain condition, such as diabetes or heart disease, but it's more a possibility than a diagnosis, since other behavioral and environmental factors also play a role.

What happens, for instance, if a genetic map indicates an unborn child will be prone to a particularly debilitating disease when they reach adulthood? Would that make parents consider terminating the pregnancy? Then there's the matter of genome editing, which could soon make it possible to change a baby's DNA long before the onset of a disease. For instance, the parents of a baby girl with the gene that significantly raises the risk of developing breast cancer may be able to choose to have it removed. That seems a reasonable choice. On the other hand, what if the same process would allow parents to increase the likelihood that their child will be particularly athletic or have a certain hair or eye color? That makes the concept of tailor-made kids closer to reality than science fiction.

Read the full, original story: Will Genome Sequencing Make Us Smarter About Dealing With Diseases in Our Genes—Or Just More Anxious?