

# A unique service delivery model for genetic counseling services



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## Background

The recently published joint statement by Edwards, et al.<sup>1</sup>, addresses post-test genetic counseling to facilitate patient understanding of expanded carrier screening results. Narod<sup>2</sup> also recently commented on genetic counseling for patients undergoing BRCA testing, stating that, “It is disingenuous to think that we can maintain the status quo in terms of universal 1-on-1 pretest counseling if we are to fully realize the technical advances in genetic sequencing and apply these to the practice of personalized medicine. We should test as widely as possible to find as many carriers as we can. To do this, we need to find adequate alternatives to 1-on-1 counseling and focus our attention on those with positive test results.”

Counsyl, a laboratory which has performed genetic screening on over 500,000 patients since 2009, has integrated genetic counseling into its screening services since inception, and developed a unique service delivery model in order to scale this service with mass population utilization.

## Accommodating increased testing volume

In a recently published survey<sup>3</sup>, over 50% of genetic counselors expressed concern about the amount of time they would have to spend on counseling and follow-up for expanded carrier screening results. In 2014, over 1400 genetic counselors were surveyed<sup>4</sup> and nearly 40% report spending 46–60 minutes on the face-to-face counseling time for each patient. By comparison, Counsyl genetic counselors spend an average of 17 minutes on a case. This means that in the same time in which one patient can be seen in a traditional setting, our team can counsel 3–4 patients on their screening results. The reality is that a “counseling model that was born in an era when a small number of women needed information about a finite number of heritable diseases will not suffice when virtually all pregnant women need information about an enormous number of genetic disorders.”<sup>5</sup> There are already many genetic counseling clinics which utilize Counsyl’s genetic counseling service for their own patients so they continue to have time to focus on acute clinic needs while knowing that their patients are receiving integral follow-up to screening results.

## Description of service

See Figure 1. Upon results availability, providers are first notified; then, patients are contacted by email and are instructed to view their results. Patients log into their secure account online to view results, watch tailored informational videos and request immediate genetic counseling with our on-call service. Patients may also opt to schedule a consult at a later point if preferred. Following the consult, a detailed consult summary is sent to the ordering provider.

Counsyl has performed over 35,000 genetic counseling sessions since 2009 (see Figure 2) and over 5,000 sessions have been “on-demand” through the on-call service which began in April 2014, with an average wait time of six minutes. Counsyl employs over 40 genetic counselors and currently 31 of these genetic counselors perform patient consults.

## Conclusion

Our combined web/telephone results delivery service aims to fulfill genetic counseling expectations set forth by clinicians such as Narod and Edwards, et al. Initial analysis finds that the current delivery model saves time and scales with high test volume, in comparison to other models (see Poster #9 by Lazarin, et al). Further assessments of effects on clinician and patient’s time, satisfaction and experience are planned.

Figure 1: Workflow for delivery of most low-severity results

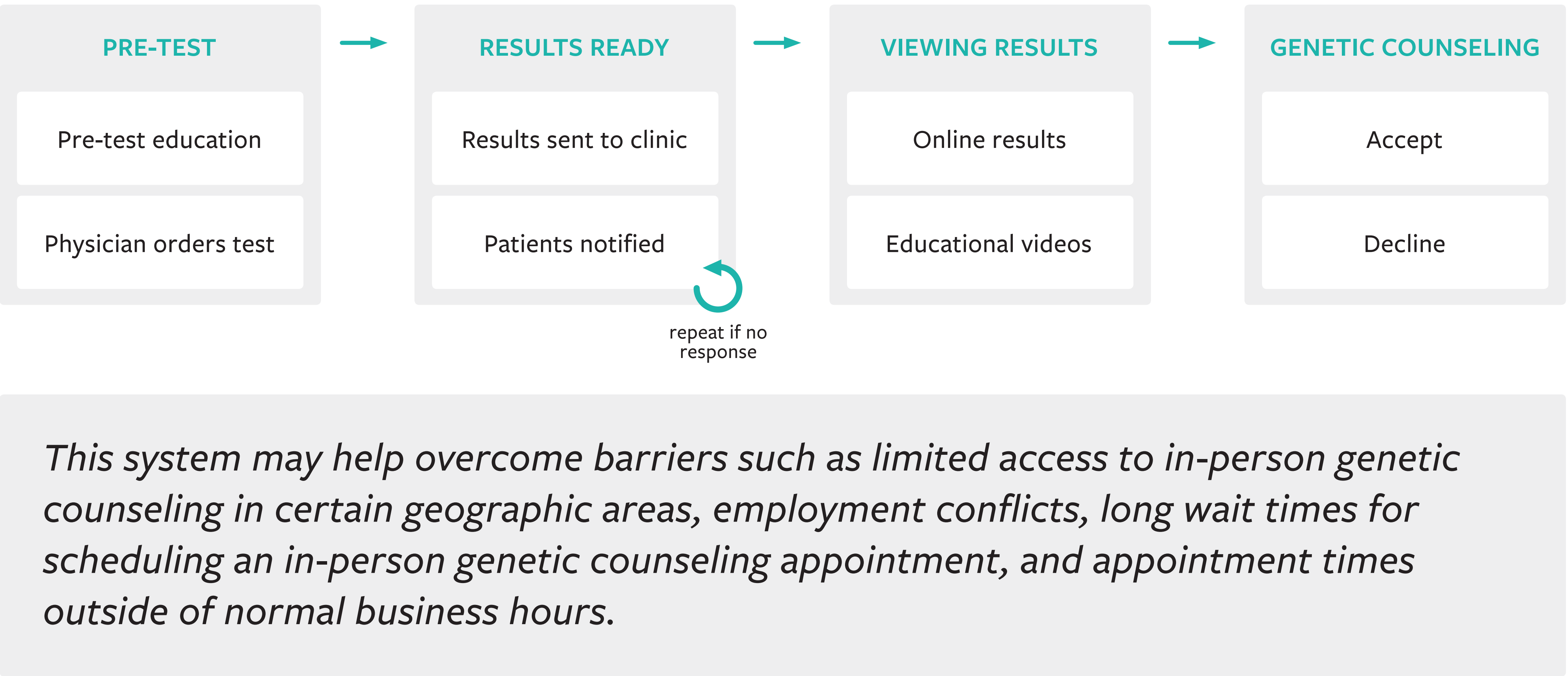
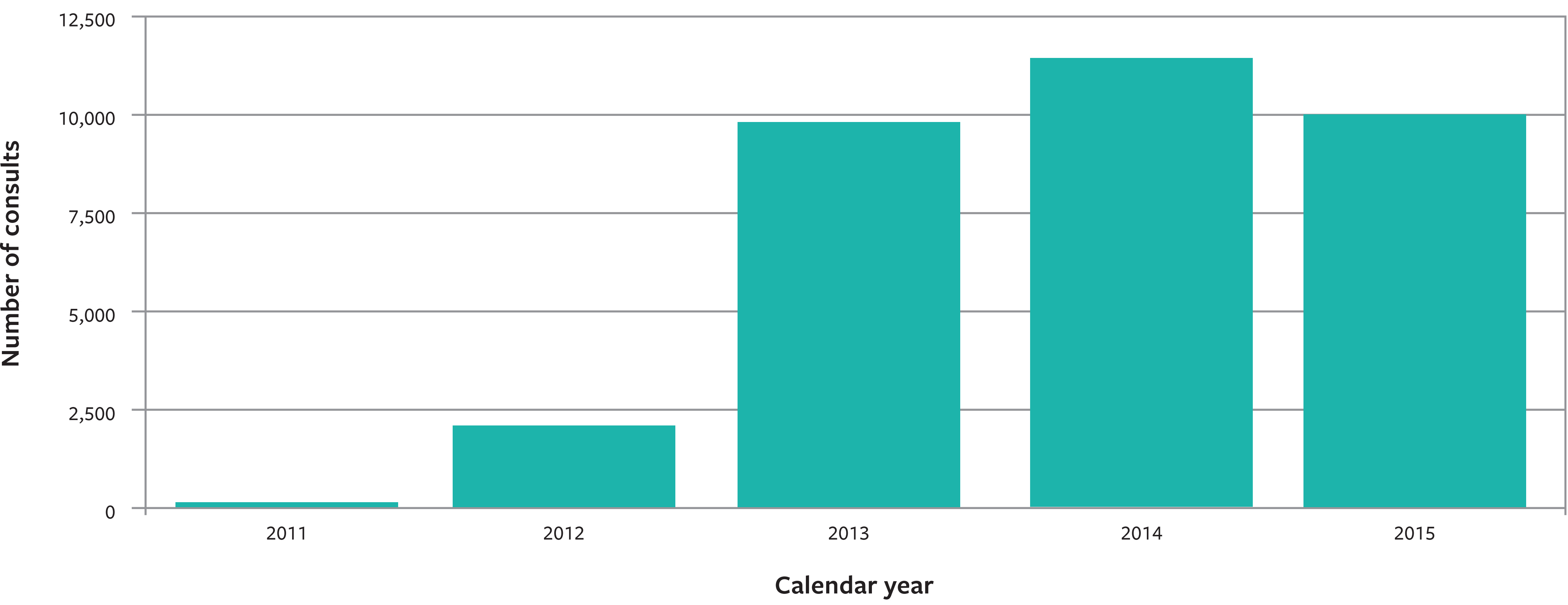


Figure 2: Increase in consult numbers by year



➤ See Poster #9 for more data from this service:

“Next-generation counseling: increased efficiency and high patient satisfaction utilizing web technology and telephone for post-test counseling and education in carrier and inherited cancer screening”

1. Edwards, JG et. al. (2015) Obstet Gyn, 125 (3), 653-662 | 2. Narod, S (2015) JAMA Onc, DOI:10.1001/jamaoncol.2015.3269 | 3. Lazarin, et. al (2015) J Genet Couns, DOI: 10.1007/s10897-015-9881-1 | 4. NSGC 2014 Professional Status Survey: Work Environment, p.11 | 5. Minkoff H, Berkowitz R. (2014) ObstetGyn, 123(6),1335-1338