



Q. What's the # 1 thing employers have missed in 2nd opinions, Chronic Care Management, Behavioral Health, and Pharmacy Benefit Management?

A. Recognition of the serious financial and physical risks posed by current prescribing practices. Precision Prescribing is a breakthrough innovation that will both dramatically improve care and reduce waste and inefficiency.

Integrating Parallel Profile into Existing Programs

Parallel Profile™ incorporates the latest in genetics, and pharmacy safety information to create a new generation of 2nd opinion, chronic care, and PBM programs enhanced with Precision Prescribing. Because prescriptions are central to treatment and management of the most common and expensive conditions and also the documented cause of adverse drug reactions (ADRs) responsible for many of the most expensive inpatient admissions, increased length of stay, readmissions, disability, and avoidable deaths, it makes sense to focus on how to improve pharmaceutical outcomes.

Enhanced Traditional 2nd Opinions:

- **Diagnosis Confirmations:**
 - When Parallel Profile™ genetic impact study results are available, consider the effect of drug failures, side effects, or poly pharmacy interactions that could provide alternative explanation for the symptoms
 - When results are not available, consider ordering a Parallel Profile™ to rule out alternative explanations especially if diagnosis is equivocal
- **Treatment Recommendations:**
 - When Parallel Profile™ genetic impact study results are available, consider impact of genetic Profile on treatment recommendations
 - High-failure or high-risk drugs likely to be part of the treatment (behavioral health, oncology, cardiology—especially blood thinners, pain/muscular skeletal procedures, etc.)
 - When results are not available, consider ordering a Parallel Profile™ before recommending treatment plan
 - Incentive to participate in other 2nd opinion reviews
 - Note: anticipate increased engagement – 92% of consumers surveyed want this

New offering for 2nd Opinion Pharmacy Review to improve quality of care and reduce costs:

- Poly Pharmacy review with genetic impact Profile for all members on 4 or more prescriptions
- High Risk review with genetic impact Profile for all members on list of 25 most frequent drugs causing serious Adverse Drug Reaction (ADRs)

Enhanced Traditional Chronic Care Management:

- Treatment Review with genetic impact Profile for those not meeting their goals:
 - Note: Diabetes and cardiac drugs likely to be part of their treatment have high failure rates and higher risks due to genetics
- Offer as incentive to participation review with genetic impact
 - Note: anticipate increased engagement – 92% of consumers surveyed want this

Enhanced Traditional Behavioral Health Management:

- Treatment Review with genetic impact Profile for those not meeting their goals:
 - Note: High failure rates for most of the psych drugs that are likely to be part of their treatment:
- Offer as incentive to increase participation in the program
 - Note: anticipate increased engagement – 92% of consumers surveyed want this

Enhanced Traditional PreCert:

- When results are available, reviewing patient genetic impact Profile for proposed anesthesia, antibiotics, pain meds, and other expected post procedure drugs
 - When results are not available, consider ordering a Parallel Profile™ High failure or high risk drugs likely to be part of the treatment (behavioral health, oncology, cardiology—especially blood thinners, pain/muscular skeletal procedures, etc.) when time permits.

Enhanced Traditional Pharmacy Benefit Management:

- Identifying relevant candidates for a Parallel Profile™
 - On 4 or more drugs
 - On a high risk or high failure drug
- Creating individualized Precision Formularies to assure no patient is financially incented to use a medication that puts them at risk of medication failure or ADR and is prescribed the lowest cost appropriate drug.
 - Based on results of their Profile
- Integration with existing PBM to provide auto edits at the cash register
- Dramatically increasing ROI

Integrating with existing programs, Parallel Profile™ provides the connectivity, technology and physicians to do the reviews and consult with the Physicians on existing panels, nurses in existing programs, PBMs for auto edits, and/or patients and their personal physicians. Parallel Profile™ includes educational information, summaries, and an app and subscription for continuous updates so, as the knowledge base of pharmacogenetics expands, they have access to the latest information. In the last 3 years the number of drugs included in the Profile have increased 450%.

Parallel will promote this breakthrough benefit to members as highly significant and helpful sending them individualized invitations with a link and promo code based on their eligibility. Note that those who aren't eligible can get their Profile at the employers' rate using their HSA or FSA.

Engagement is always a challenge, but consumers are very interested, and prescriptions are so frequent, opportunities for identification and natural interception are plentiful. More than 30 million Americans have already used DNA testing home kits. An NIH funded survey done by Duke University and the University of North Carolina found enormous interest and willingness

for DNA for medications testing: **92% were interested if the test could assist in drug selection.**

Real World Stories:

Janelle was in the hospital for a routine outpatient procedure. Unfortunately, she had a bad reaction to a drug that ended up with her being admitted inpatient for several days. She decided to order a Parallel Profile™ to protect herself from other ADRs in the future. Just weeks after she received her profile showing she had 14 genetic variants that impacted 84 drugs, she was diagnosed with cancer. She pulled out her cell phone and entered the new drug into her Profile. Seconds later she was relieved to find that the chemo her oncologist recommended, Xeloda, was in her green zone. What she didn't expect is the alert warning her that the prescription heartburn medicine she was on may decrease the effectiveness of the chemo. Luckily several alternatives that don't interfere with her chemo were available.

Julie was diagnosed with early stage breast cancer and after a lumpectomy was prescribed Tamoxifen. Tamoxifen has proven to be very helpful in reducing reoccurrences but doesn't work for everyone. It doesn't work for those with certain genetic variants or anyone when taken in combination with over a dozen prescription and over the counter medications. Still it is generally recommended because of the lessened side effects for most women. Checking Julie's Profile, her oncologist found she had the genetic variant that put it in the red zone. Her oncologist called Parallel Profile and was given the detailed research on the finding. She prescribed an alternative.

Laurie got a Parallel Profile™ for her son who was on a number of medications and seemed to add another one almost every time they went to the doctor. He had been complaining for the last several months about a series of new disturbing symptoms for which his doctor added additional prescriptions to address. His Profile identified the 68 drugs impacted by his 20 genetic variants, and also listed the common, and the less common and more serious side effects of each of the drugs he was on—which explained his most recent problems could be a result of serotonin syndrome. Changing the medications responsible for his symptoms that were actually side effects, not only stopped the problems, it also allowed his doctor to eliminate several medications.

Jackson had been seeing a psychiatrist for about a year and was on his third medication to try. He ordered a Parallel Profile™ and quickly realized the prior drug failures were a result of his 12 genetic variants impacting 156 drugs including 59 psych drugs. With his Profile, his psychiatrist was able to identify quickly which drugs he could respond normally too and switched his prescription giving him both hope and relief.

Stats:

43% of all people tested are currently taking or considering a drug outside their green zone.

In over 120,000 people tested, 100% have had variants impacting drugs in the Parallel Profile™ panel.

Guaranteed savings with ROI of over 4:1

350 people die every day -- that's **128,000 or 3 times the number of people who die from breast cancer every year**) and another 2.7 million are admitted inpatient at a hospital with a serious ADR each year. In the last 10 years adverse drug reactions have hospitalized almost

30 million Americans. Parallel Profile™ is on a mission to save as many of those lives and avoid as many of those hospitalizations and the costs associated with them as possible.

Headquarters

Boca Raton, Florida

Founded

2016

Website

<https://paralleprofile.com/>

Genetic Lab

San Antonio, TX

Mission

We are committed to empowering consumers to protect themselves, and physicians to personalize medical treatment using genetic (PGx) testing to improve quality of care and its outcomes while reducing deaths and injuries caused by avoidable adverse reactions to common medications.

Product

An app that gives consumers and physicians instant access to both their genetic impact for over 1,000 drugs and interactions with other meds they are taking, to check their current drugs, and before taking a new drug—updated quarterly with latest CPIC findings.

Lab Credentials

- Over 120,000 genetic tests completed
- Funding received from the NIH for a “new standard of care” post-market trial of a proprietary test after passing a 6-month audit on entire lab operation of all genetic testing. 99% of labs never go through that.
- The only lab partner for the National Human Genome Center at Howard University for PGx research.
- The only U.S. lab chosen by the largest publicly traded lab company in China, CTI, <http://www.cti-cert.com/en/>
- Listed in Pharma Tech magazine as a top 10 genetic company for innovation

Leadership

CEO, Cathy Cather: 25 years in benefits consulting and enterprise deals, **leading the Health Care Strategy Practice at Willis Towers Watson**, and instrumental in growth acceleration at **HealthEquity, Quantum Health, Accolade, United HealthAllies, Teladoc, and Surgery Plus.**

President, Mark Kallan: 25 years in consumer products, including President and Director of two direct to consumer medical companies, Chairman and **CEO Helbros watches** selling 30+ million watches to **WalMart, QVC**, and senior management positions at 3 leading international ad agencies responsible for major accounts including **AT&T, Philips, MGM**, new product development for **Bristol Myers** and Carnegie Hall

Chief Medical Officer: Leonard Wisneski, M.D., F.A.C.P.: Professor at 3 Medical Schools including **Georgetown, George Washington, and University of Colorado**, Chairman of the Integrative Health Policy Consortium, **Chairman of NIH committees** and Medical Education Committee of American College of Physicians. Consultant to the **Veterans Administration**. Formerly CMO of **Marriott**.

Advisors

Edwin Addison: Artificial Intelligence expert **twice Entrepreneur of the Year**. Founded 6 companies and affiliations with Johns Hopkins, NC State, University of Florida and government contracts with CIA, NSA, USAF, NIH.

Todd Zander: Digital media and mobile health executive successfully built mobile and web businesses from 0-\$10M+ for **Discovery Channel, WebMD, and Doctor on Demand.**

Cathy@ParallelProfile.com

949-683-4968

<https://ParallelProfile.com>