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LIFE SCIENCES

CORIGIN[®]

Medication Safety Program

Available through
HealthTrust



Presented by:

Kerry Horne, Assistant Wellness Manager, HealthTrust

Scott Megill, President and Chief Executive Officer, Coriell Life Sciences

Tom Eckel, Vice President Sales, Coriell Life Sciences





AGENDA

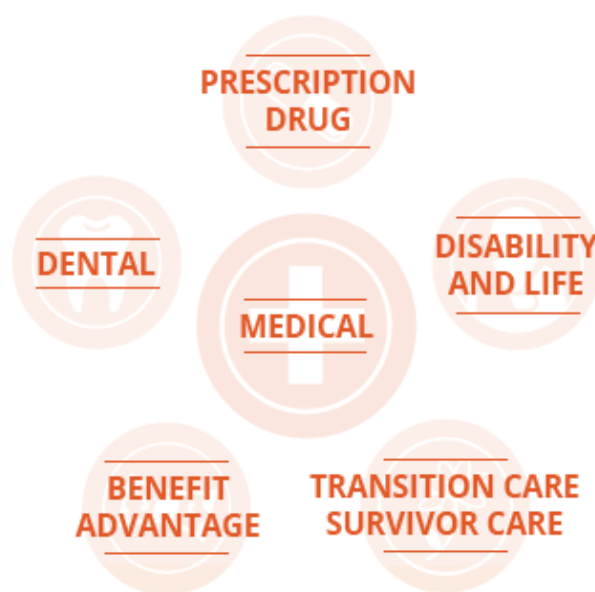
- HealthTrust Overview
 - Goals - Optimal Health for our Enrollees
- Coriell Life Sciences – Overview
- Medication – Expense and Risk
- Corigen Medication Safety Program Process
- Case Study
- HealthTrust Experience
- HealthTrust Implementation | Engagement plan
- Testimonials and Participant Feedback
- Questions



HealthTrust Overview

HealthTrust is a nonprofit Risk Pool providing high quality, cost effective medical, dental, prescription drug and ancillary benefit plans exclusively for public sector employers and their employees in New Hampshire.

HealthTrust Member Groups include schools, towns, cities, counties and quasi-governmental entities in New Hampshire.



HealthTrust's staff of 58 employees provide in-house expertise and support for Member Groups and covered individuals, including:

Group Administration, Enrollee Support and Member Engagement:

- Enrollee Services
- Benefits Advisors
- Wellness Advisors
- Communications Team



HEALTHTRUST'S VISION = *OPTIMAL HEALTH*

We strive to be New Hampshire communities' most trusted partner in achieving optimum health through a culture of wellness.

Our Slice of Life program offers resources to help our covered individuals achieve and maintain optimal health, and rewards them when they make smart lifestyle choices.

HealthTrust's Mission, Vision and Values form the foundation of all we do. We are proud to be New Hampshire communities' most trusted partner in achieving optimum health through a culture of wellness.

By helping to keep our public sector employees and their families safe and healthy, **HealthTrust** strives to make New Hampshire a better place to live and work – and that's a goal we share with all our Members.

INTEGRITY * SERVICE * COLLABORATION * INNOVATION

MEMBER OVERVIEW

As of January 1, 2022

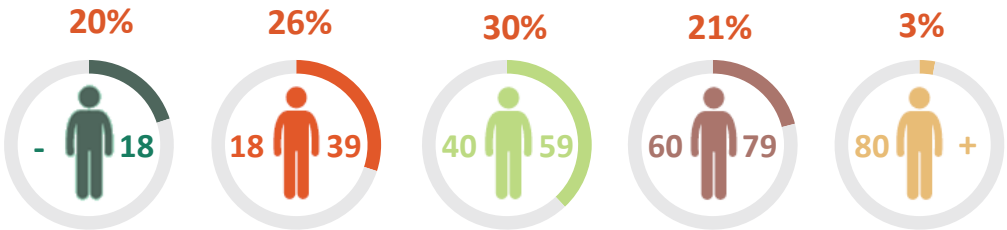
TOTAL
MEDICAL
COVERED
LIVES



53,268

Active 44,483 | Retirees 8,785

MEDICAL COVERED LIVES BY AGE BANDS



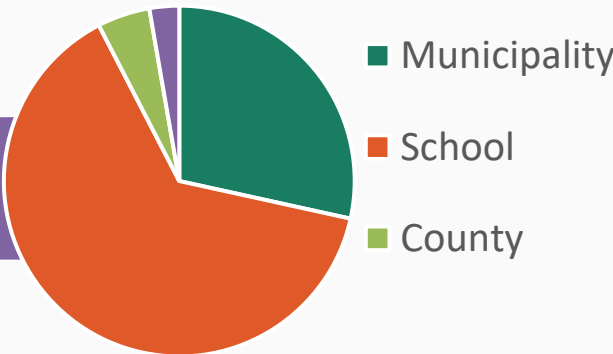
Many Enrollees covered through retirement

OVER 300 MEDICAL MEMBER GROUPS
with 400 Collective Bargaining Units

Anticipated savings of over
\$37M for 10,000 at-risk members
over 3 years

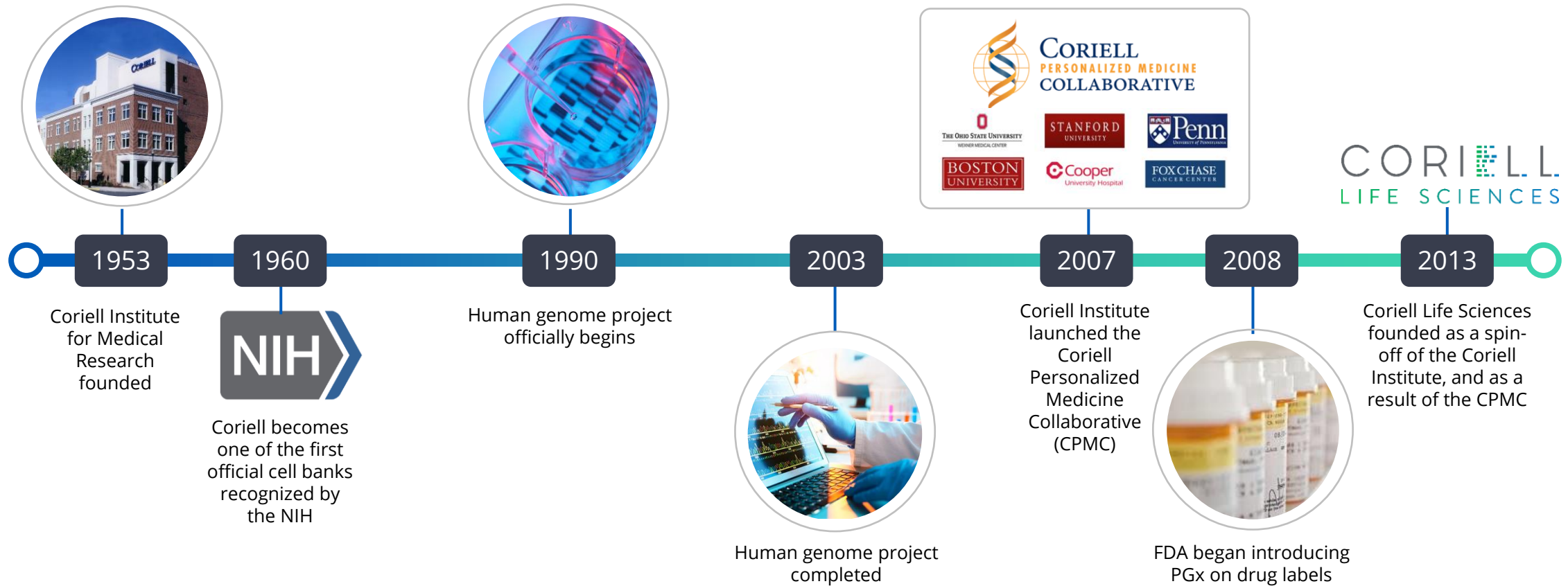
59% of covered individuals are on
at least one medication
affected by genetics

2022 COVERED
PERSONS BY TYPE



2022

A Strong Foundation



Medication: Expense and Risk



Prescription drug spending has exceeded \$300 billion a year since 2015.



Adverse drug events account for nearly 700,000 emergency department visits and 100,000 hospitalizations a year.



Medication errors occur in 3.8 million inpatient admissions and 3.3 million outpatient visits.

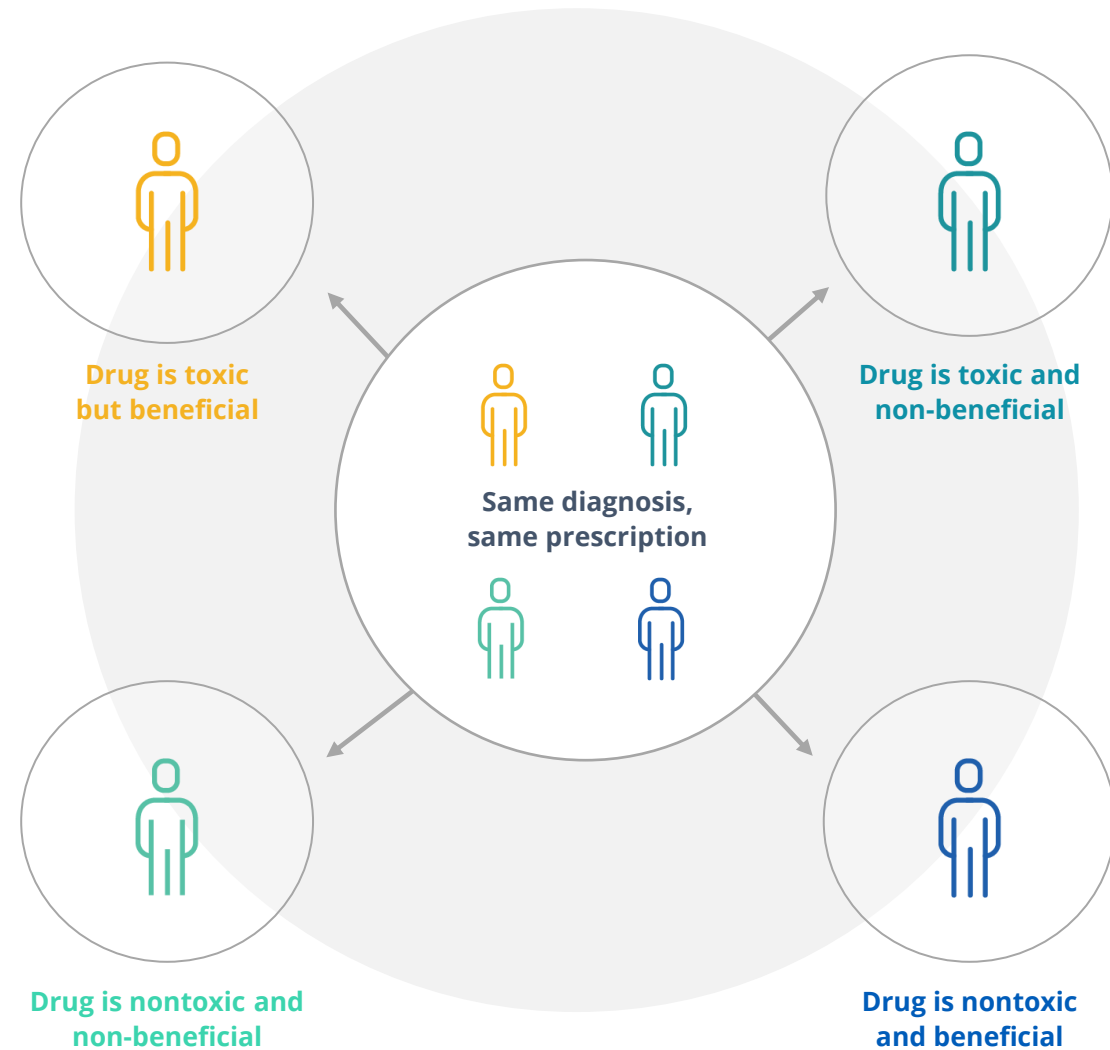


There are 275,689 deaths a year attributable to medication errors.

Your DNA Really Matters

Pharmacogenomics (PGx)

Using DNA to see what drugs
will be safe and effective



DNA Testing is NOT Sufficient

Corigen®, CLS' Medication Safety Program brings together rigorously-vetted genetic guidance with **dozens of other factors** of patient-specific prescribing risk.

Healthcare providers are **empowered with answers** rather than research materials.

Real-time modeling allows pharmacists and doctors to see the results of medication changes **before they experiment** with them on their patients.

CORIGEN®
Medication Safety Program



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Medication Safety Program

Process Overview

How It Works

The Corigen process is designed to provide you with the information to **make informed decisions**.

With your input, **we take care of everything** from an initial ROI assessment, to member communications, all the way through to test results delivery and detailed reporting.



Population Analytics



POPULATION ANALYTICS



MEMBER ENGAGEMENT & ENROLLMENT



SAMPLE PROCESSING



PHARMACIST REVIEW & REPORT



IMPROVED MEMBER HEALTH & SAVINGS

To begin, complete an ROI Analysis

- Predictive population analysis provides insight into the **appropriateness** of a comprehensive medication safety program for your organization.
- Identifies which **members of the population** would benefit.
- Details potential **ROI**.



Engagement & Enrollment



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MEMBER ENGAGEMENT & ENROLLMENT



SAMPLE PROCESSING



PHARMACIST REVIEW & REPORT



IMPROVED MEMBER HEALTH & SAVINGS

1

Invite to eligible individuals to enroll & request at-home DNA kit

2

DNA kit received

3

Submit DNA sample via mail

4

Re-engagement (if needed)

+

Electronic status alerts throughout

Knowledge is power
Your DNA can help determine how safe and effective some medications will be for you. This test will empower you and your doctors with genetic information that may improve which medications you are prescribed. These results may reduce adverse drug reactions and side effects and improve how you feel every day.

Interested?
To enroll, we will need the following information from you:
• Date of birth
• Current mailing address
• You will also be asked about certain lifestyle factors, foods, and drinks that can impact the safety and effectiveness of your medications.
Your answers will only be used by your healthcare providers and never shared with your employer.

To enroll, or for more information, please visit:
coriell.com/enroll-thermoFisher

Medication Management Program Leveraging Pharmacogenomics Testing
A subsidiary of
CORIELL LIFE SCIENCES
Power In Knowing™

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...will then call you in a few days to discuss your results and discuss your medications.
Medications do not work in the same way for everyone. Your DNA determines how safe and effective many medications will be for you. New genetic tests can help your pharmacist and doctors make better choices for you.
...the initial phone, only those members who directly revealed this invite? invitation will be able to enroll.

Testing designed to ensure your medications are effective, safe, and beneficial for you.

Dear Healthcare Provider,
You are receiving this communication because one of your patients have been invited by their health plan to participate in a new pharmacogenomics program with Coriell Life Sciences. As an employee benefit, selected members are invited to participate in pharmacogenomics testing at no cost. These patients will be receiving a copy of the letter attached for your reference.

The health plan is fully committed to this program and requests your assistance in making this a success by supporting your patient's participation. Your patient will receive a genetic test, followed by a medication review by a team of pharmacists. From that review, the pharmacist will create a Medication Action Plan (MAP). This MAP will be carefully created for you to use when considering a treatment plan. We have taken great care to ensure the information you receive is concise and actionable.

HOW DOES IT WORK?
Coriell Life Sciences will send your patient a saliva collection kit. With that sample, we use the CeraDose™ Genetic Assay to produce a pharmacogenomics report detailing the clinical implications of your patient's DNA. This data is then entered into our CeraDose™ LIVE tool for complete medication risk modeling that incorporates your patient's genetics, lifestyle factors, demographics, current medication regimen, and therapeutic indications to provide rapid medication safety profiling. This application is used by our pharmacists to identify problematic medications and suggest alternative treatment options in real time.

WHAT WILL I RECEIVE?
The pharmacists will fax you your patient's MAP, which will highlight any recommended changes based on your patient's current medication regimen and associated genetic risk (please see example above). The MAP will also include medication risk charts comparing the current and recommended medication regimen, and a summary chart of the patient's genotype results and clinical implications. The pharmacists will be available to discuss any recommendations with you.

Best regards,
Jeffrey Shamis
Jeffrey Shamis, PhD, MS
Chief Science Officer
Coriell Life Sciences

Confidential and optional
If you coverage or benefits, and no one at Quest will know your results. The and maintained securely, just like any other medical record. Coriell Life Sciences to provide an analysis of your DNA and will maintain your healthcare with Insurance Portability and Accountability Act (HIPAA). If you choose, in medical research with your identifying information removed.

...but we are confident that the results could benefit your overall health are you money – by ensuring you are on medications that are right for you and with taking advantage of this new test, which you can do right from your at brochure and a letter for your physician. For more information or to enroll, call the Coriell Life Sciences Enrollment Center at (888) 456-9184.

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Power In Knowing™

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Sample Processing



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MEMBER ENGAGEMENT & ENROLLMENT



SAMPLE PROCESSING



PHARMACIST REVIEW & REPORT



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1 DNA kit shipped to home after enrollment

2 Kit arrives with instructions for collection of a small amount of saliva

3 Sample gets sealed in box and placed in mailbox (Return label & postage are provided)

4 DNA test results analyzed by CLS & sent for pharmacist review

5 Alert received to schedule pharmacist consultation



Pharmacist Review & Report



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SAMPLE PROCESSING



PHARMACIST REVIEW & REPORT



IMPROVED MEMBER HEALTH & SAVINGS

CLS proprietary software, GeneDose LIVE™ allows teams of pharmacists and physicians to review the genetic and non-genetic concerns for individual patients and **quickly shows which alternatives would be best suited.**

GeneDose Medication Action Plan

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Created by: Coriell Life Sciences
Pharmacist: Thomas, Chris
Phone: (888)345-0987
Email: R345@coriell.com

Patient: Fisher, Doris
Date of Birth: Jan 1, 1945
Gender: FEMALE
Patient Identifier: 487655

1. About This Report

This GeneDose Medication Action Plan (MAP) is the result of a Medication Risk Assessment that consists of clinical pharmacogenomic assays that together with clinical, demographic, lifestyle information, and pharmacist's review provide a Medication Action Plan, Pharmaceutical safety, healthcare best practices, lifestyle factors, side effects, medical conditions, and more were analyzed.

The Pharmacist's Notes & Recommendations below provide clinical suggestions for your consideration.

2. Results

The Pharmacist's recommended changes to the patient's current medications are based on the Medication Risk Assessment.

Remove (S) ...	+++ Add (S) +++	/// Do Not Change (S) ///
1. Acetaminophen 2. Hydrocodone Bitartrate 3. Atorvastatin Calcium 4. Clopidogrel Bisulfate 5. Pantoprazole Sodium 6. Trandolapril Hydrochloride	1. Fluvastatin Sodium 2. Hydromorphone Hydrochloride 3. Lithoprostil Sodium 4. Misoprostol 5. Prasugrel	1. Allopurinol 2. Amlodipine Besylate 3. Baclofen 4. Brimonidine Tartrate 5. Carvedilol 6. Dorzolamide Hydrochloride 7. Duloxetine 8. Latanoprost 9. Linagliptin 10. Metoprolol Hydrochloride 11. Sevelamer Carbonate

Pharmacist's Notes & Recommendations:

1. SEVERE The patient is an intermediate metabolizer of clopidogrel. This means she has difficulty converting this medication to the active form. This medication is not recommended because it may not provide the most optimal protection. If there is concern about this therapy based on this information and other risk factors, it is important to note that an alternative antiplatelet such as Effient (Prasugrel) may be more suitable because it is less likely to be affected by her altered metabolism.

2. MAJOR The patient is an ultra-rapid metabolizer of atorvastatin. This means she eliminates this

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The MAP document provides a clear and concise way for the pharmacist to communicate the updated plan to the prescriber.

Medication Compatibility Report (MCR)



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MEMBER ENGAGEMENT & ENROLLMENT



SAMPLE PROCESSING



PHARMACIST REVIEW & REPORT



IMPROVED MEMBER HEALTH & SAVINGS



The MCR is sent directly to you and will tell you which medications may be best for you **now AND in the future!**

What's in the report?

- Current recommendations (if applicable)
- Future prescribing recommendations
- Additional medications tested
- Next steps
- Genotype results
- References

Improved Member Health & Savings



POPULATION ANALYTICS



MEMBER ENGAGEMENT & ENROLLMENT



SAMPLE PROCESSING



PHARMACIST REVIEW & REPORT



IMPROVED MEMBER HEALTH & SAVINGS

Actionable Results & Benefits

- Improved overall **health outcomes**.
- Improved **quality of life**.
- Reduced **pharmacy spend**.
- Reduced medication **side effects & adverse reactions**.
- Decrease in number & cost of **outpatient visits**.
- Reduction in number of **emergency department visits & hospitalizations**.



CORIGEN[®]

Medication Safety Program

Case Studies

Solutions proven to advance patient health and reduce costs

Case Study 1: Program Success

US-based Manufacturer

1,000+

have already enrolled!



51%

members were on medications that react poorly with DNA



3 out of 5

Members had a change to their medications recommended



37%

Members were at high-risk of drug interactions

100% of enrolled members received a report with actionable impact!

Case Study 1: **Cost Savings Achieved at 5 months**

A **decrease of \$266.3 PMPM** in the intervention group results in a cumulative cost **savings of \$243,665 over the initial 5-month** course of the post-program period.

Resulting PMPM cost avoidance of **\$266.30**

Cumulative cost savings at 5 months: **\$243,665**

Case Study 2: **Program Success**

Out-of-state Retirement System

10,000+

retired teachers have already enrolled!



48%

Participants were on medications that react poorly with DNA



3 out of 5

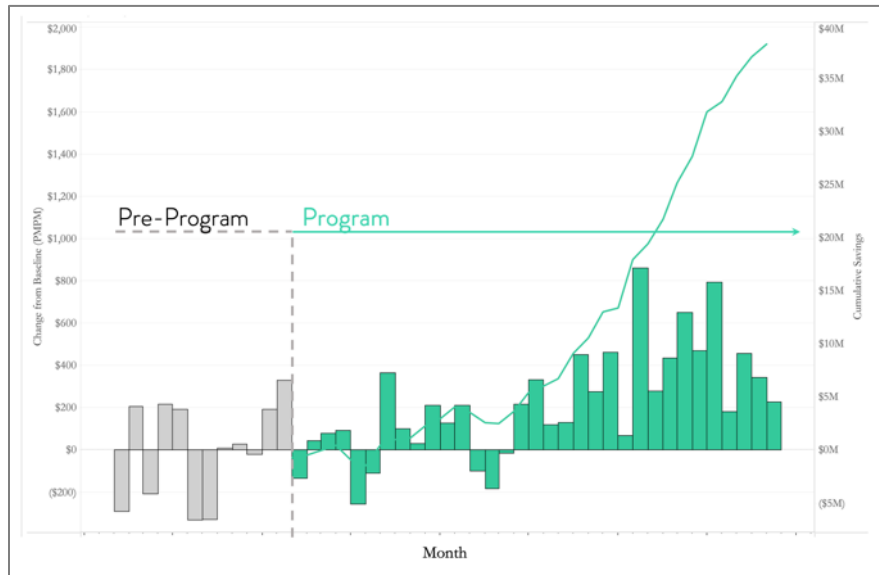
Retirees had a change to their medications recommended



67%

Retirees were at high-risk of drug interactions

Case Study 2: Cost Savings Achieved at 32 months



Resulting PMPM cost avoidance of **\$218.82**

Per member cost savings at 32 months: **\$7,002.24**

Cumulative cost savings at 32 months: **\$37M**

New Programs: **Launched in Previous 12 Months**

Self-funded International Reference Lab

47,000 employees

US-Based Equipment Manufacturer

70,000 employees



New Hampshire Public Sector Employees

55,000 eligible individuals (includes Actives, Retirees and Covered Dependents.)

Statewide Public Employee Retirement System with PBM

189,000 members

International Hotel Chain

127,000 employees

National Single-payer Healthcare System

35,000,000 residents



Discover if medications you take now—or could take in the future—are the safest and most effective for you with the Corigen® Medication Safety Program



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HealthTrust Implementation Timeline



Engagement Plan



Pre-Launch

- Communication materials developed and designed
 - Internal Teams Review
 - HIPAA Team Review
- Association meetings, conferences and webinars
 - Member Group outreach & Training
 - Association Workshops & Webinars
 - Newsletter Articles



Go Live and Beyond

- Post cards & Emails to Enrollees
- Secure Portal Promotions
- Wellness Coordinator Promotions
- Corigen Medication Safety Program Video
- Developed testimonials through feedback
- HealthTrust Annual Summit Presentation
- Continued communications and messages

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WEBSITE TILE

Participant Testimonials

“On my “Medications I should avoid,” three of the four drugs belonged to a class of drugs I had tried back in my twenties; I really wish I had had this program back then! Suddenly, I had an explanation for why those medications didn’t work for me, and why I experienced so many side effects from them. On my “Use With Caution” list there were 25 medications, several of which, given my age and health history, I might have been prescribed in the future, such as a well-known blood thinner, certain drugs that treat high blood pressure, heartburn and gastroesophageal reflux. **Now I know to seek alternatives to those medications if I need to treat those conditions in the future.** If I have an organ transplant in the future, there is a common medication, that helps prevent organ rejection, which will not be effective for me based on my “Caution” list. **How powerful is it to know that? This information could potentially save my life in the future!”**



*Wendy Lee Parker
HealthTrust Executive Director*

Participant Testimonials

“As a parent of a **young child with ADHD** and other complex medical conditions, my spouse and I have been contemplating whether or not it’s **time to consider medications to help manage his ADHD**. We knew the “trial and error” prescribing that is often associated with ADHD can be a lot on children, parents, and other caregivers. That’s where this **new Medication Safety Program** has essentially provided us with a road map of **medications that may be safer and more effective for him**. We look forward to discussing these options with his provider.

Beyond assisting us with our current need, the **Medication Compatibility Report will be an extremely useful resource for us and his providers in the future**. Having this new program available to us through HealthTrust, is another great tool in our toolbox as parents to **help navigate caring for a child.**”

“the Medication Compatibility Report will be an extremely useful resource for us and his providers in the future”



*Jennifer Thompson
HealthTrust Risk & Control Officer*

Participant Testimonials

“A lot of people, like myself, will deal with depression at some point in their life. **If you could eliminate the trial-and-error of antidepressants, wouldn't you want to?** That can save so much time and effort and help you start to feel better mentally a lot faster.

Knowing the medications that will work for me in the future is huge. Health is something that we sometimes take for granted. Just because I am fairly healthy right now, doesn't mean that can't change in the future.

Knowing the medications that work for me and the ones that don't give me a **peace of mind that if anything were to happen with my health, I am prepared.**”



*Krista Bouchard
HealthTrust Wellness Advisor*

If a medication is unsafe or won't work for you,
wouldn't you want to know?



Thank You

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