A new era in genomic medicine: decentralized AI-powered interpretation with centralized intelligence

GeneDx to acquire Fabric Genomics

April 16, 2025

GeneDx

Forward Looking Statements

This presentation contains forward-looking statements within the meaning of the federal securities laws, including statements regarding GeneDx's agreement to acquire Fabric Genomics ("Merger") and the transactions contemplated thereby, including statements regarding the anticipated benefits of the Merger, the anticipated timing of the Merger, and the achievement of certain financial metrics by Fabric Genomics. These forward-looking statements generally are identified by the words “believe,” “project,” “expect,” “anticipate,” “estimate,” “intend,” “strategy,” “future,” “opportunity,” “plan,” “may,” “should,” “will,” “would,” “will be,” “will continue,” “will likely result,” and similar expressions. Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and assumptions and, as a result, are subject to risks and uncertainties. Many factors could cause actual future events to differ materially from the forward-looking statements in this Report, including, but not limited to: (i) the risk that the Merger may not be completed in a timely manner or at all, which may adversely affect the price of the Company’s securities, (ii) our ability to implement business plans, goals and forecasts, and identify and realize additional opportunities with respect to the Merger, (iii) the failure to satisfy the conditions to the consummation of the Merger, (iv) the occurrence of any event, change or other circumstance that could give rise to the termination of the Merger Agreement, (v) the risk of downturns and a changing regulatory landscape in the highly competitive healthcare industry, and (vi) the size and growth of the market in which we and Fabrics Genomic operate. The foregoing list of factors is not exhaustive. You should carefully consider the foregoing factors and the other risks and uncertainties described in the “Risk Factors” section of our Annual Report on Form 10-K for the fiscal year ended December 31, 2024, filed with the SEC on February 20, 2025, and other documents filed by us from time to time with the SEC. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and we assume no obligation and do not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. We do not give any assurance that we will achieve our expectations.

This presentation contains estimates, projections and other information concerning our industry, our business, and the markets for our products and services. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties, and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from our own internal estimates and research as well as from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources. While we believe our internal company research as to such matters is reliable and the market definitions are appropriate, neither such research nor these definitions have been verified by any independent source.

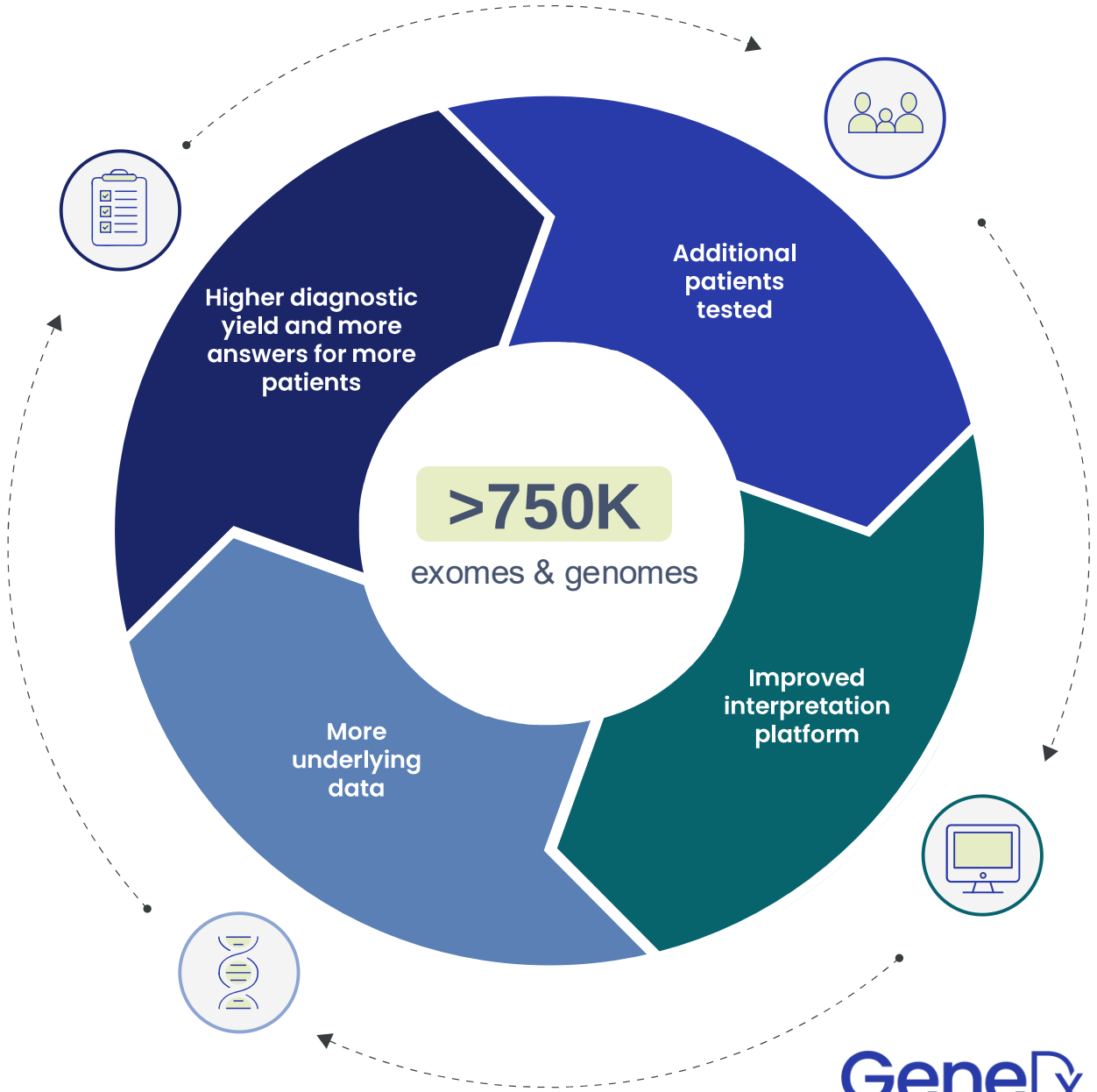
We discuss these and other risks and uncertainties in greater detail in the sections entitled “Risk Factors” and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our periodic reports and other filings we make with the SEC from time to time. Given these uncertainties, you should not place undue reliance on the forward-looking statements. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this presentation to conform these statements to actual results or to changes in our expectations. We file reports, proxy statements, and other information with the SEC. Such reports, proxy statements, and other information concerning us are available www.sec.gov. Requests for copies of such documents should be directed to our Investor Relations department at GeneDx Holdings Corp. 333 Ludlow Street, North Tower 6th Floor, Stamford, Connecticut, 06902. Our telephone number is 888-729-1206.

We envision a world where any genetic disorder is diagnosed quickly to prevent disease progression and ensure long and healthy lives for all.

GeneDx is uncovering genetic diagnoses with an industry-leading interpretation engine

Pay-it-forward data strategy: The snowball effect of data accumulated with every patient tested drives our underlying interpretation platform to get smarter, faster, and more scalable.

Each patient's data strengthens our network of knowledge and helps uncover novel gene-disease connections—enabling more diagnoses for more patients.



Decentralized testing with centralized intelligence, accelerating diagnoses – globally

GeneDx

Two companies, one shared goal: earlier diagnoses for all

GeneDx

Largest rare disease database in the US

- Proprietary genotypic and phenotypic dataset informing interpretation
- State of the art, automated, AI-informed centralized laboratory
- Increasing scale and profitability with high throughput and fast turnaround time

Fabric will enable GeneDx's interpretation excellence to reach more patients

FABRIC GENOMICS

AI driven interpretation-as-a-service platform

- Cloud based, turnkey, scalable, sequencer-agnostic platform
- Proven leadership in scaling complex interpretation services
- Domestic and global commercial footprint

Augmenting Fabric's platform with GeneDx's dataset will further differentiate its capabilities

GeneDx

GeneDx + Fabric Genomics will create a full spectrum of genomics offerings, from GeneDx's centralized lab to decentralized interpretation-as-a-service

Ultimately, this model will accelerate faster and earlier diagnosis of genetic disease, delivering improved outcomes for patients and reducing unnecessary costs for healthcare systems in the United States and globally.

CENTRALIZED

From sample to sequence to report.

GeneDx supports patients and providers with end-to-end exome and genome testing solutions

Customers

Ordering Clinicians
Health Systems

DECENTRALIZED

Sequence locally, interpret globally.

Fabric Genomics' state-of-the-art interpretation platform extracts expert insights from a standard sequencing file

Customers

International Clients
Health Systems
Clinical Labs
Clinical Research

The acquisition will expand GeneDx's addressable market with multiple scalable revenue streams

NICU Genomic Testing

With Fabric Genomics' platform integrated into clinical workflows across major institutions, GeneDx can rapidly deploy interpretation infrastructure to hospitals already sequencing in-house, capturing untapped demand and opening up access.

Genomic Newborn Screening (gNBS)

GeneDx's leadership in early evidence generation—17,000+ healthy newborns sequenced via the GUARDIAN Study—and Fabric Genomics' proven scalability position the combined company to support state and federal gNBS programs

Decentralization Drives Global Commercial Expansion

Fabric Genomics' cloud-native platform will enable GeneDx to deliver centralized AI interpretation while complying with local regulations, supporting flexible go-to-market strategies and expanding GeneDx's ability to serve global markets with tailored commercial models

Platform Economics at Scale

Combining GeneDx's proprietary data set with Fabric Genomics' dynamic, recurring revenue-generating platform can drive growth through software margins and high-leverage interpretation services across geographies and clinical use cases

Combining GeneDx and Fabric Genomics will unlock leverage within both companies

Growth Synergies	**Suite of Solutions**	○ Complete suite of solutions for hospital systems including full outsourcing, software-as-a-service and interpretation-as-a-service
	Additional Data	○ Merging of data and technology from both companies will enable each respective platform to serve an even broader market
	International Markets	○ Immediate access to international opportunity without having to set up physical locations and operationally intensive local sequencing centers
	NICU Amplification	○ Increase genomic test adoption by supporting NICU clients that prefer in-house testing and full-service laboratory services
	Diversified Revenue Model	○ Inclusion of new revenue models beyond traditional insurance-based reimbursement
Cost Synergies	**Operating Expenses**	○ Integrate the “best of” research & development, product & technology and bioinformatics capabilities and merge back-office G&A functions with scale
	Optimizing Operations	○ Integrate the “best of” Fabric Genomics and GeneDx to streamline testing COGS and TAT using AI-powered technology to reduce hands-on time

Terms of the Transaction

Purchase price of $33 million upfront with total consideration to reach up to a potential $51 million in the aggregate, payable as follows:

$33 million in cash at closing (subject to customary adjustments for cash, debt, transaction expenses and working capital);

Up to a maximum of $10.5 million upon achievement of certain revenue target gross margin targets for the Fabric Genomics business in FY2025

Up to a maximum of $7.5 million upon achievement of certain revenue target and gross margin targets for the Fabric Genomics business in FY2026

Milestone payments for FY 2025 and FY 2026 may be satisfied through cash, shares of GeneDx stock (based on an agreed value as of the signing) or a combination of the two, at GeneDx's sole discretion

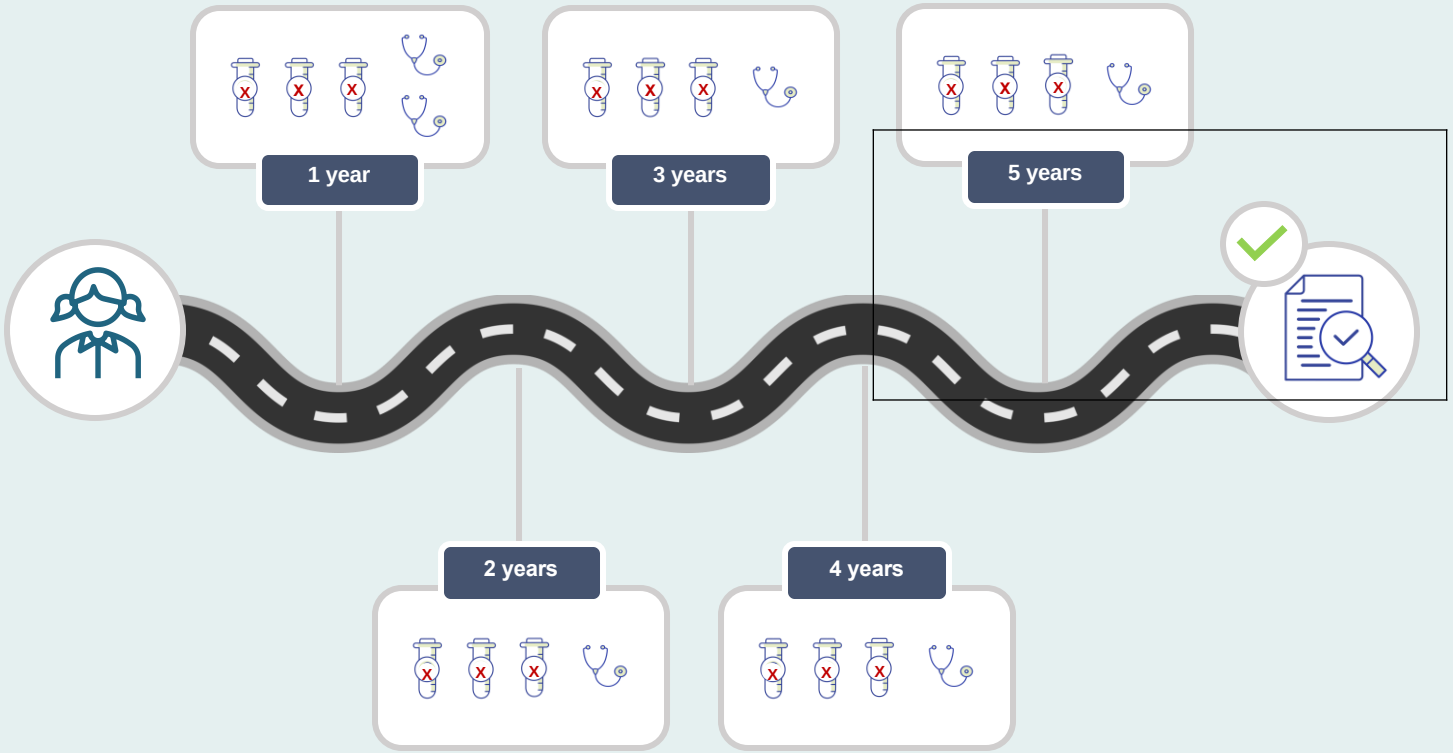
Healthcare is at an inflection point where integrating genomic insights into standard care is becoming essential – both for better clinical outcomes and for saving the healthcare system valuable dollars.

Together, GeneDx and Fabric Genomics are positioned to transform access to genomic testing globally, driving improved outcomes on an even larger scale.

Appendix

1 in 10 families face an unnecessary diagnostic journey

On average**: 16 tests** and **5 years** before an accurate diagnosis



GeneDx can provide an answer in **days**

References: 1. Marwaha S, Knowles JW, and Ashley EA. A guide for the diagnosis of rare and undiagnosed disease: beyond the exome. Genome Med. 2022 Feb 28;14(1):23. doi: 10.1186/s13073-022-01026-w. 2. Willmen, T., Ronicke, S., Gabriel, H., & Wagner, A. D. (2023). *Rare diseases: why is a rapid referral to an expert center so important?*. BMC Health Services Research, 23(1), 904. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC10463573/ 3.Marshall, D. A., & Spolador, G. (2021). The complexity of diagnosing rare disease: An organizing framework for outcomes research and health economics based on real-world evidence. Current Opinion in Structural Biology, 68, 1-9. Retrieved from https://www.sciencedirect.com/science/article/pii/S1098360021053831

The diagnostic odyssey: common, critical, and costly

Millions of Americans with a rare disease are urgently searching for answers. Most are children.

Every day without a diagnosis is a missed opportunity for patients—and burden the healthcare system as a whole.

The journey to an accurate diagnosis can take up to **five years**.[1]

5 years

3x

On their journey to a diagnosis, rare disease patients will be misdiagnosed an **average of three times.**[2]

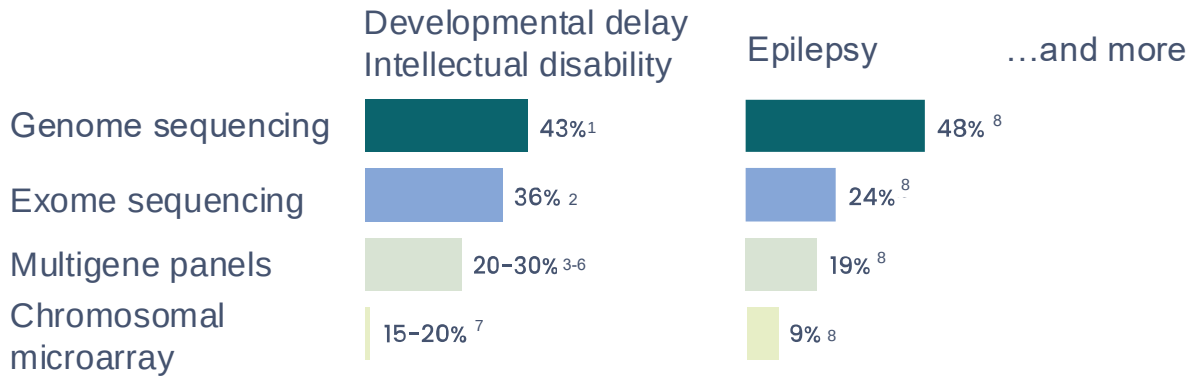
Rare diseases impact **1 in 10 people**, and **over half of them are children.**[3]

The estimated economic burden of rare diseases on the US healthcare system is **nearly $1 trillion** annually.[4]

References: 1. Marwaha S, Knowles JW, and Ashley EA. A guide for the diagnosis of rare and undiagnosed disease: beyond the exome. Genome Med. 2022 Feb 28;14(1):23. doi: 10.1186/s13073-022-01026-w. 2. Genetic Alliance UK. The Rare Reality 2016. Retrieved from: https://geneticalliance.org.uk/wp-content/uploads/2024/02/the-rare-reality-an-insight-into-the-patient-and-family-experience-of-rare-disease.pdf. on June 4, 2024 3. National Organization for Rare Disorders (NORD). Hope for Millions of Children Living With Rare Diseases. Retrieved fromhttps://rarediseases.org/wp-content/uploads/2024/07/NORD-PRV-One-Pager.pdf 4. EveryLife Foundation for Rare Diseases. Economic Burden of Rare Diseases in the U.S. Approached $1 Trillion in 2019, Surpassing Cost Estimates for Many Chronic Diseases. Retrieved fromhttps://everylifefoundation.org/economic-burden-of-rare-diseases-in-the-u-s-approached-1-trillion-in-2019-surpassing-cost-estimates-for-many-chronic-diseases/

Exome and genome testing offer answers sooner—leading to more effective treatments and more efficient healthcare spend

Superior diagnostic rate for many indications including:



Recommended by leading medical societies as a first-line test:

American College of Medical Genetics & Genomics (ACMG)
2021 evidence-based guideline[5]

National Society of Genetic Counselors (NSGC)
2022 evidence-based guideline[6]

An earlier genetic diagnosis is proven to:[7,9]

- ✓ change medical management
- ✓ reduce medical intervention
- ✓ result in more timely treatment options
- ✓ reduce healthcare costs for patients and the healthcare system
- ✓ identify resources and support for parents and family members

References: 1. Manickam K, McClain MR, Demmer LA, et al. Genet Med. 2021 Nov;23(11):2029-2037. doi: 10.1038/s41436-021-01242-6. Epub 2021 Jul 1. **2**. Srivastava S, Love- Nichols JA, Dies KA, et al. Genet Med. 2019 Nov;21(11):2413–2421. doi: 0.1038/s41436-019-0554-6. **3**. Pekeles H, Accogli A, Boudrahem-Addour N, Russell L, Parente F, Srour M. Pediatr Neurol. 2019 Mar;92:32-36. doi: 10.1016/j.pediatrneurol.2018.11.005. **4**. Stefanski A, Calle-López Y, Leu C, et al. Epilepsia. 2021 Jan;62(1):143-151. doi: 10.1111/epi.16755. **5**. Mellone S, Puricelli C, Vurchio D, et al. Front Genet. 2022 Aug 11;13:875182. doi: 10.3389/fgene.2022.875182. **6**. Spataro N, Trujillo-Quintero JP, Manso C, et al. Genes (Basel). 2023 Mar 13;14(3):708. doi: 10.3390/genes14030708. **7**. Savatt JM, Myers SM. Front Pediatr. 2021 Feb 19;9:526779. doi: 10.1186/s13073-022-01026-w. **8**. Sheidley BR, Malinowski J, Bergner AL, et al. Epilepsia. 2022 Feb;63(2):375-387. doi: 10.1111/epi.17141. Epub 2021 Dec 10. **9.** Malinowski, J., Miller, D.T., Demmer, L. et al. Genet Med. 22, 986–1004 (2020). https://doi.org/10.1038/s41436-020-0771-z.

Common diseases are in fact a constellation of genetic diagnoses

One example is epilepsy. At least 768 different genes are related to seizures.

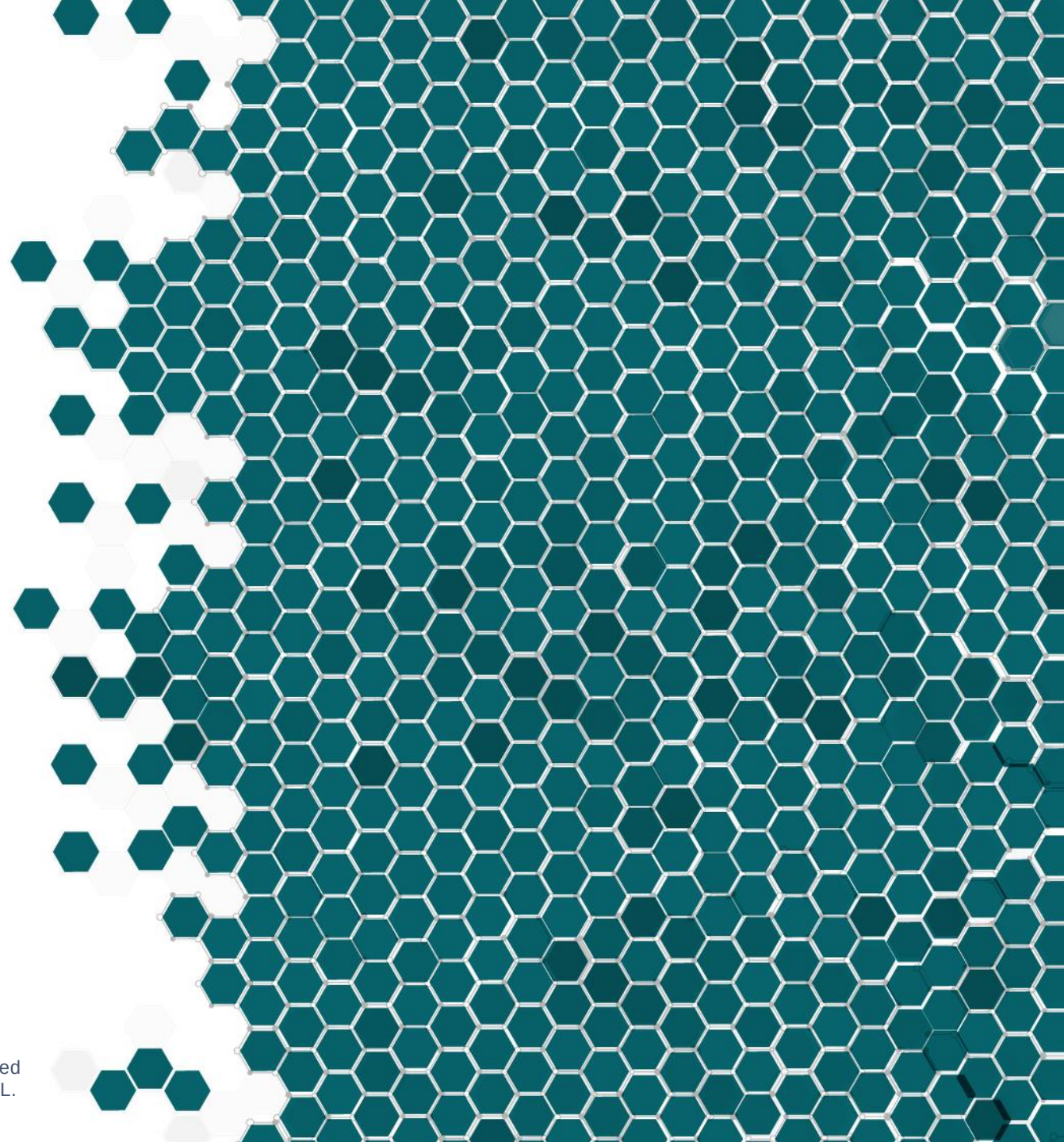
Only 43% of epilepsy genes are tested on many commercial epilepsy panels

Reference: Butler L. *et al.* Exome-based testing for patients with seizures: Advantages over panel-based testing. Poster presented at American Epilepsy Society Annual Meeting; December 2, 2023; Orlando, FL.

Common diseases are in fact a constellation of genetic diagnoses

One example is epilepsy. At least 768 different genes are related to seizures.

- Only 43% of epilepsy genes are tested on many commercial epilepsy panels
- Exome and genome sequencing checks all 768 genes



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GeneDx has spent over a decade solving for the limitations of the past and we're working to change the perception of exome and genome sequencing

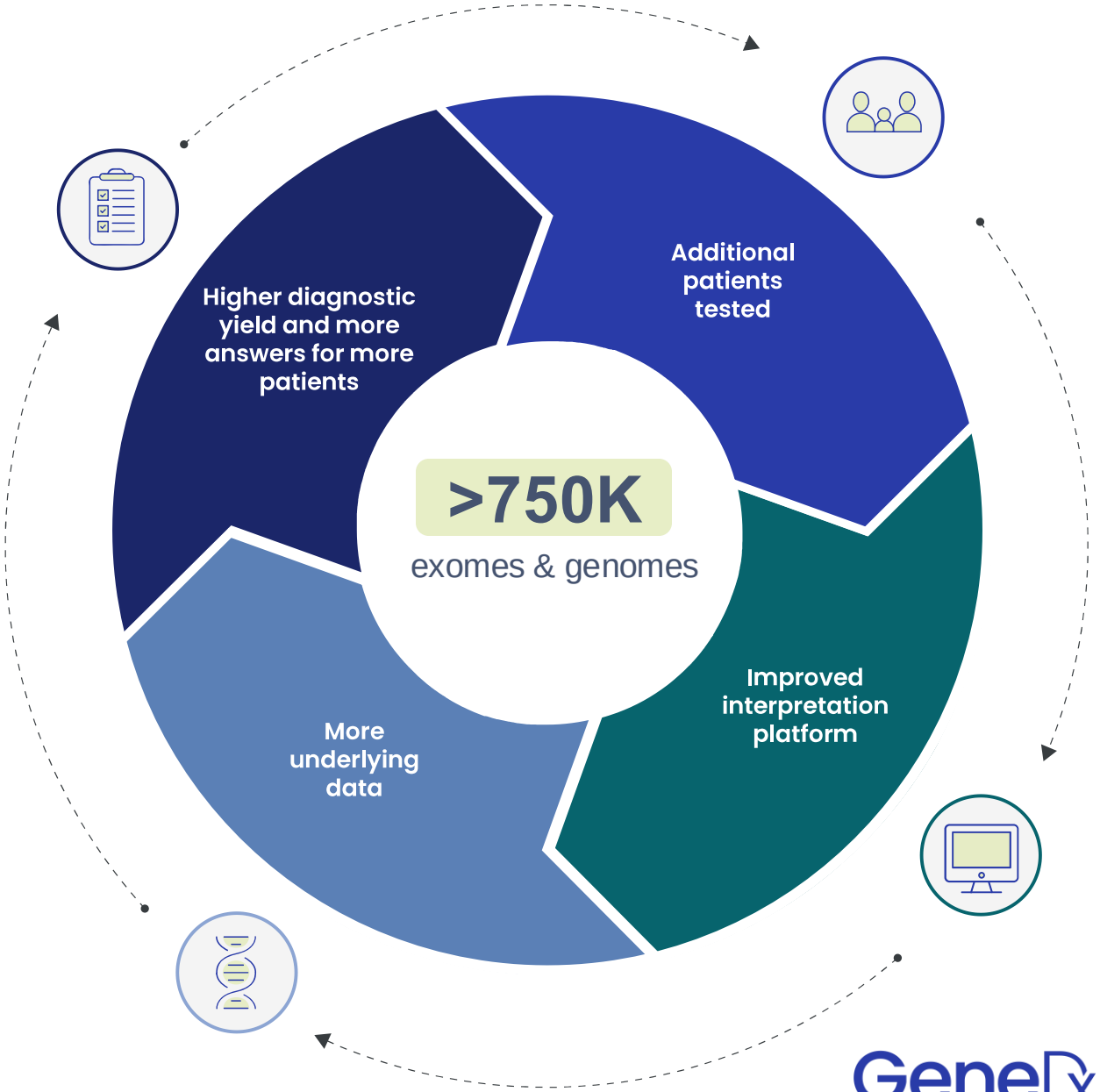
	Then	Now
Turnaround time	Results take months	GeneDx delivers results in hours, days or weeks
Cost	Tests are prohibitively expensive	GeneDx's tests are accessible and widely covered by insurance
Interpretation	Results are confusing, filled with useless information	Patients receive fewer variants of uncertain significance and more definitive answers
Actionability	Nothing to do or change based on the results	Results unlock a growing number of approved therapies, clinical trials, dietary and behavioral health therapies
Value	Other testing (CT scan, MRI, gene panels) offers the same information	Exome and genome uncover what other tests don't, which saves time & money

Accelerating and deepening our competitive advantage with every patient

Pay it forward data strategy: the snowballing effect of data accumulated with ever patient we test drives our underlying interpretation platform to get smarter, faster, and more scalable

That's enable us to identify more than **400 new disease-gene relationships—and counting**.

Patent applications have been filed to develop an IP portfolio directed to our innovative platform of **genetic variant identification, clinical interpretation** and **innovative diagnostic tools** developed using artificial intelligence.

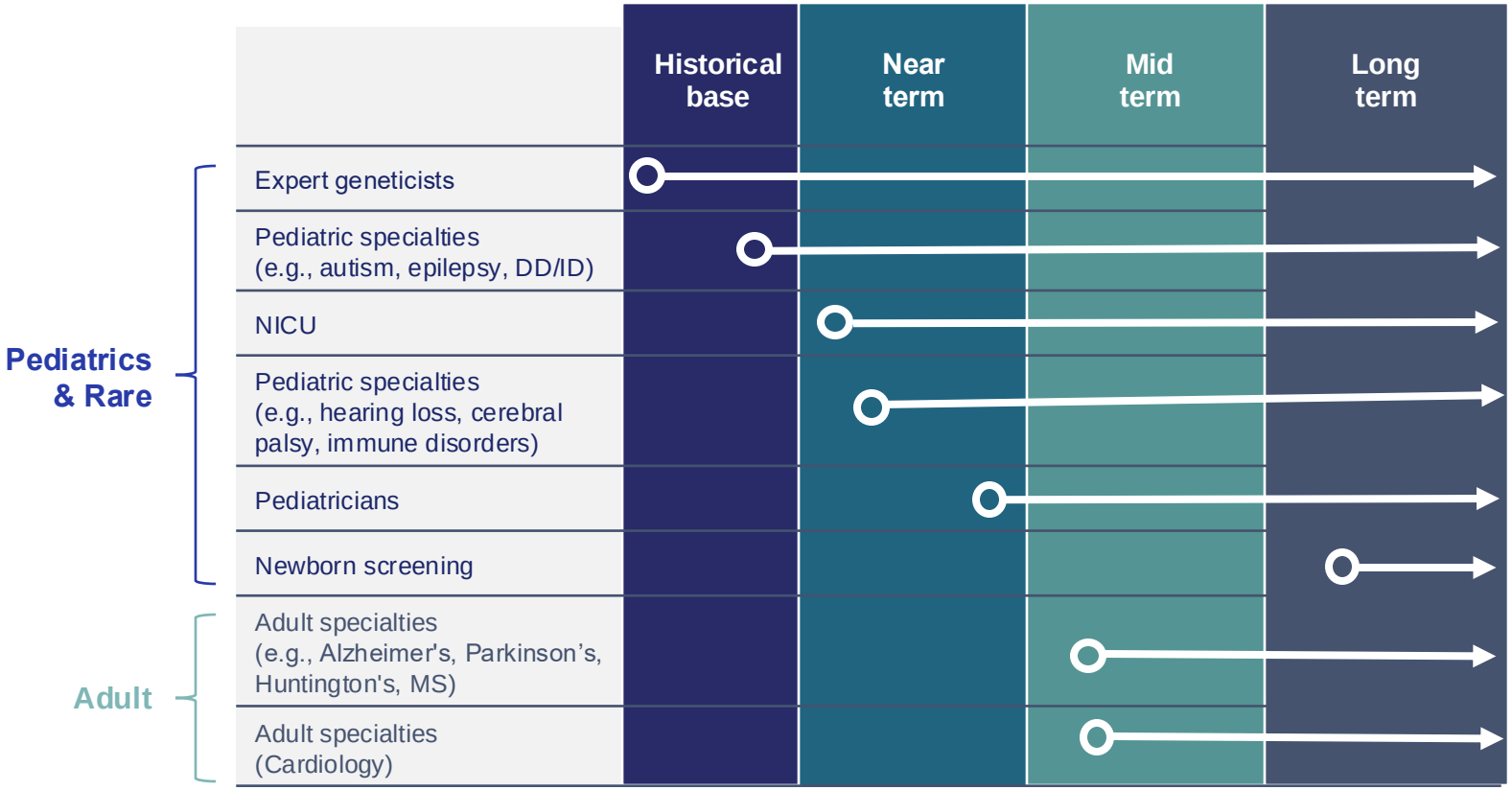


Our data is unmatched in size, breadth, and depth—making it highly infeasible for competitors to recreate

- **Enriched for rare disease**
  Diagnosing even the rarest conditions for 25 years
- **60% of our exomes/genomes are parent/child trios**
  Enabling *de novo* findings, sequencing asymptomatic parents
- **6 million phenotypic datapoints**
  Bridging clinical information and genomic insights
- **10+ years of Medicaid patients tested**
  Representing the full US population diversity
- **All underpinned by expert annotation and curation**
  Bringing answers to more patients today—without future reanalysis

Our market opportunity is massive and poised to expand over time

Taking a disciplined approach entering markets as reimbursement pathways open



Rolling expansion of exome/genome use cases fuels a:

$25 billion ***(pediatrics & rare)***

$20 billion ***(adult)***

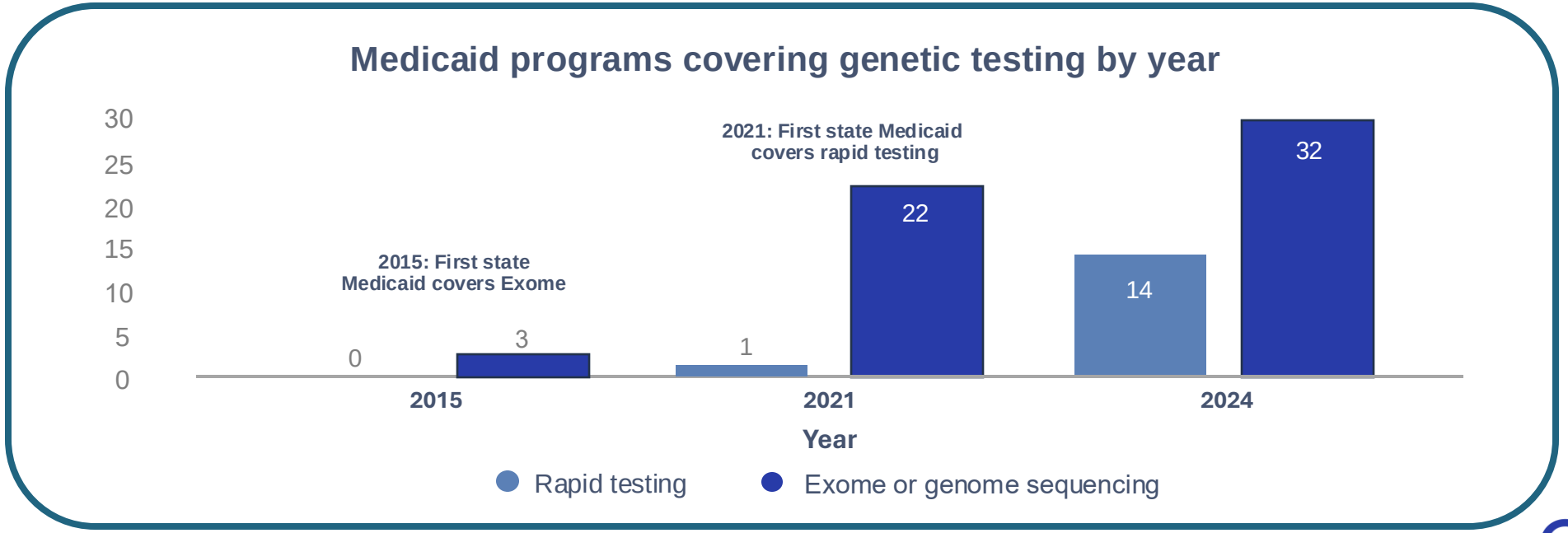
$45 billion market opportunity *(total)*

Five-year outlook

Supplemented by a developing biopharma business

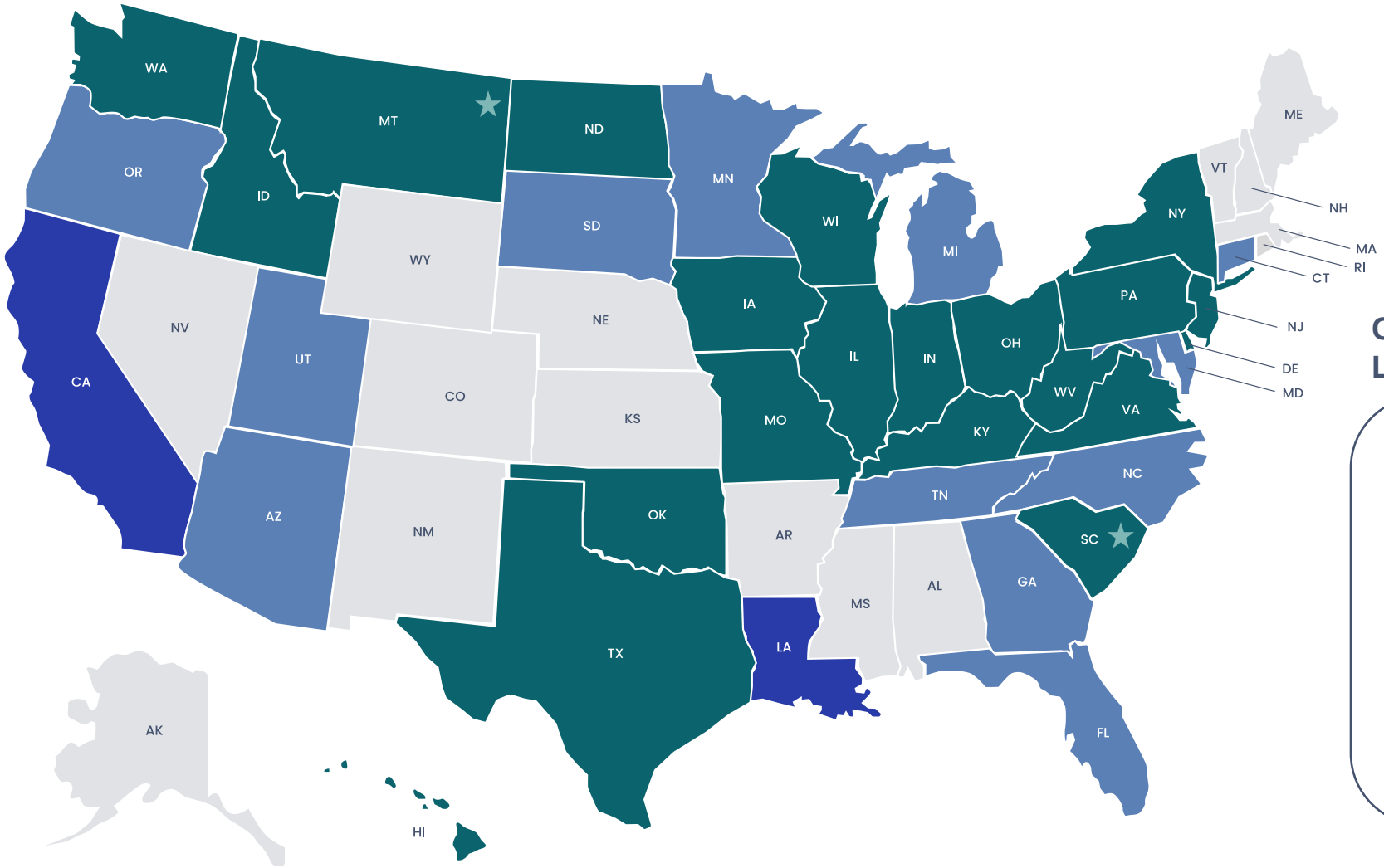
Payor coverage for exome and genome sequencing is expanding

- GeneDx is **contracted with 80% of covered lives**, including all large national commercial payers
- **Medicaid and commercial insurance coverage continues to grow** for exome and genome
  - **32 states** cover exome or genome sequencing
    - In Q4, Montana and South Carolina added or enhanced coverage for exome and/or genome sequencing
  - **14 states** cover rapid genome sequencing
  - **Biomarker bills** are driving momentum in Medicaid coverage for exome and genome testing



Data through October 2024.

Medicaid programs across the country are expanding access



Current Medicaid Coverage Landscape

- Exome or Genome Sequencing
- Rapid Genome Sequencing
- Both
- No Coverage
- ★ New or Enhanced Coverage

Data through February 2025

Outpatient market expansion: Fueling growth with new indications, coverage and guidelines

Today, GeneDx primarily targets epilepsy, autism and intellectual disability/developmental delay, congenital anomalies, and rare disease

- **We have 80% market share among genetics experts, 13% among pediatric neurologists, and the rest is untapped**

A disciplined approach to expand into **additional indications starting with** hearing loss, cerebral palsy and eventually adult disorders including various neurological, cardiology and other domains

Expect expanded clinical guidelines and reimbursement coverage over time

- **American Academy of Pediatrics (AAP) last updated their genetic testing guidelines in 2014**
- Contracted with ~80% of commercially-insured lives
- Medicaid coverage continues to expand

Inpatient (NICU) market expansion: A clear unmet need, underscored by decades of earned trust and improved workflows

60% of infants in Level IV NICUs should receive a rapid genome test[1]

- Genome testing is severely underutilized, currently **ordered for <5% of children** who could benefit[2]

GeneDx has decades of earned trust amongst children's hospitals and geneticists with 10+ years of exome/genome experience

EPIC Aura is live and GeneDx is penetrating the NICU opportunity with a more seamless experience

Ultrarapid Whole Genome Sequencing launched, which delivers results in as soon as 48 hours

References: 1. SeqFirst **2.** Kingsmore SF, Nofsinger R. & Ellsworth K. *NPJ Genom. Med. 2024;*9(17). doi:10.1038/s41525-024-00404-0.

Genetic evidence is one of the most powerful tools to improve the therapeutic development process

Today

The average therapeutic development cycle:

Costs $2.6B

- Up to 60% of this cost is spent in the clinical phase.

Takes 12 years

- Inefficient trials—driven by patient identification and recruitment challenges—extend timelines.

Fails 90% of the time

- Most trials fail due to safety and efficacy concerns.

Tomorrow

Including genetic evidence can dramatically reduce cost, shorten timelines, and improve success rates:

Genetic evidence can **reduce development costs by up to 25%**.

Leveraging genetic data can **cut development timelines by up to 5 years**.

Drugs with supporting genetic evidence are **2.6 times more likely to succeed**.

Our partnerships with biopharma companies help accelerate treatments—from early discovery through commercialization

Our collaborations are impacting the lives of patients today:

Akouos (Eli Lilly)

GeneDx partnered with Akouos to match patients with the clinical trial that enabled Aissam Dam to hear for the first time.

The New York Times

Gene Therapy Allows an 11-Year-Old Boy to Hear for the First Time

After receiving treatment, Aissam said: "There's no sound I don't like. They're all good."

Regeneron

Through a data partnership with GeneDx, Regeneron received valuable insights into the landscape of hearing loss patients and their associated variants.

The Washington Post
Democracy Dies in Darkness

Deaf baby hears for the first time after 'groundbreaking' gene therapy trial

Opal heard her mother's voice for the first time after participating in Regeneron's clinical trial.

GeneDx

We believe in a future where every newborn's genome is sequenced at birth

Every year, thousands of newborns with actionable conditions are missed by traditional newborn screening (NBS).

Federal NBS guidelines recommend testing for 37 conditions with biomarkers—measurable changes in the baby's blood that indicate the baby may have a disorder.

However, there are hundreds of actionable conditions that lack biomarkers.

Genomic sequencing can detect conditions without biomarkers, expanding the number of conditions screened to ~450.

By supplementing traditional NBS with genomic sequencing, we can offer crucial information to improve health outcomes.

GeneDx is the leader set to revolutionize the standard approach to today's newborn screening, enabling diagnoses before symptoms even start

GeneDx has screened more newborns than any other commercial laboratory. This experience gives GeneDx a deep understanding of how to offer this testing at scale.

Screened 17,000 healthy infants with genome sequencing, toward goal of >100,000

Without this screening, the average age of diagnosis for these conditions is **7-11 years old**

3.2% true positive rate, and **92%** of true positives would not have been detected with today's standard newborn screening

More than **70% of parents consented to gNBS,** with 90% of those opting for inclusion of optional neurodevelopmental disorders

Early diagnosis for conditions like long QT syndrome and Wilson disease **not included in standard newborn** screening, **resulted in life-saving treatments**

Results from the GUARDIAN study, published in ***Journal of the American Medical Association***, set the foundation for clinically-actionable, ethical and responsible gNBS

References: 1. Ziegler A, Koval-Burt C, Kay DM, et al. Expanded Newborn Screening Using Genome Sequencing for Early Actionable Conditions. JAMA. Published online October 24, 2024. doi:10.1001/jama.2024.1966

Multiple drivers to profitable, sustainable growth

Expanding serviceable market

- New use cases/ indications / call points stemming from emerging guidelines, expanding and, secular tailwinds towards greater acceptance of exome/genome
- The American Academy of Pediatrics last issued their genetic testing guidelines in 2014. An update in support of an exome/genome first approach for genetics may unlock the pediatrician call point, of which there are nearly 60,000 in the U.S.

Driving into the inpatient NICU setting

- SeqFirst and other study data supporting the clinical and economic case for a first-line approach in the NICU
- Epic Aura launched in Q1 and orders expected to ramp in the back half of the year

Increasing penetration in outpatient setting

- GeneDx enjoys an ~80% market share of clinical exome/genome ordered in the U.S. today yet we are still only ~13% penetrated in the pediatric neurology market

Reducing denials improving coverage

- Reduction in Medicaid denials via additional states providing exome/genome reimbursement policies
- Reduction in third-party commercial denials through continued refinement of operational processes

New product launches

- Launch additional solutions for biopharma
- Alternative pathways for access and ordering
- Newborn screening (future)

Expanding margins

- Further cost per test declines via introduction of automation/AI across various dry-side processes
- Leverageable commercial spend

Strong capital base

- Turned adj. EBITDA profitable in Q3 2024
- Q4 2024 delivered our second consecutive quarter with adjusted net income and our first quarter of positive operational cash flow

A rare opportunity to fuel seismic healthcare shifts

From years of disease progression

From unnecessary and bloated health costs

From generalized treatments

From diagnosing symptomatic disease

to

early interventions

streamlined economic efficiency

precision medicines

universal genomic newborn screening