



One test. Big picture. Brighter futures.

GeneDx (Nasdaq: WGS)
2Q 2024 Earnings Presentation

July 30, 2024

GeneDx

Disclaimer

This presentation contains forward-looking statements under the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are statements that do not relate to historical facts and events and such statements and opinions pertaining to the future that, for example, contain wording such as “may,” “might,” “will,” “could,” “would,” “should,” “expect,” “intend,” “plan,” “objective,” “anticipate,” “believe,” “estimate,” “predict,” “potential,” “continue,” “ongoing,” or the negative of these terms, or other comparable terminology intended to identify statements about the future. Forward-looking statements contained in this presentation may include, but are not limited to, statements about: our future performance and our market opportunity, our expectations regarding full year 2024 revenue, adjusted gross margin profile and cash burn in 2024 and our expectation of turning profitable in 2025. We cannot assure that the forward-looking statements in this presentation will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements.

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WGS Q2 2024 Results



Second quarter 2024 revenue from continuing operations¹ of \$68.9M with 77% year-over-year revenue growth for exome and genome test revenue



Expanded second quarter 2024 adjusted gross margin from continuing operations^{1,2} to 62%



Second quarter 2024 total cash burn of \$6M; ending June 30, 2024 with cash, cash equivalents, marketable securities and restricted cash of \$108M



Raising guidance to deliver between \$255M and \$265M in FY 2024 revenue and reiterate path to profitability in 2025

1. Results from continuing operations, which represents our ongoing business strategy, exclude any revenue and cost of goods sold of the exited Legacy Sema4 diagnostic testing business for the current and all comparative periods. Total company results include GeneDx's continuing operations and the financial impacts of exited Legacy Sema4 business activities.

2. Adjusted gross margin is a non-GAAP financial measure. For a reconciliation of GAAP and non-GAAP results, please refer to the reconciliation contained at the end of this earnings presentation.

Revenue – strong growth driven by high value whole exome and genome

77%

Increase in 2Q24 exome/genome revenue year-over-year; +15% sequentially

52%

Increase in 2Q24 exome/genome test result volume year-over-year; +9% sequentially

Revenue ¹	Q2 2024
Revenue from continuing operations	\$68.9M
<i>Growth year-over-year</i>	52%
<i>Growth sequentially</i>	12%

Exome and genome test revenue	\$50.7M
<i>Growth year-over-year</i>	77%
<i>Growth sequentially</i>	15%

1. Total company revenues were \$70.5M for the second quarter 2024. Results from continuing operations exclude the results of the exited Legacy Sema4 diagnostic testing business. Total company results include GeneDx's continuing operations and the financial impacts of exited Legacy Sema4 business activities.

Gross profit – expansion driven by mix shift, cost per test reductions and improved reimbursement

Exome/genome can be the best test for patients. They are also best for our business.

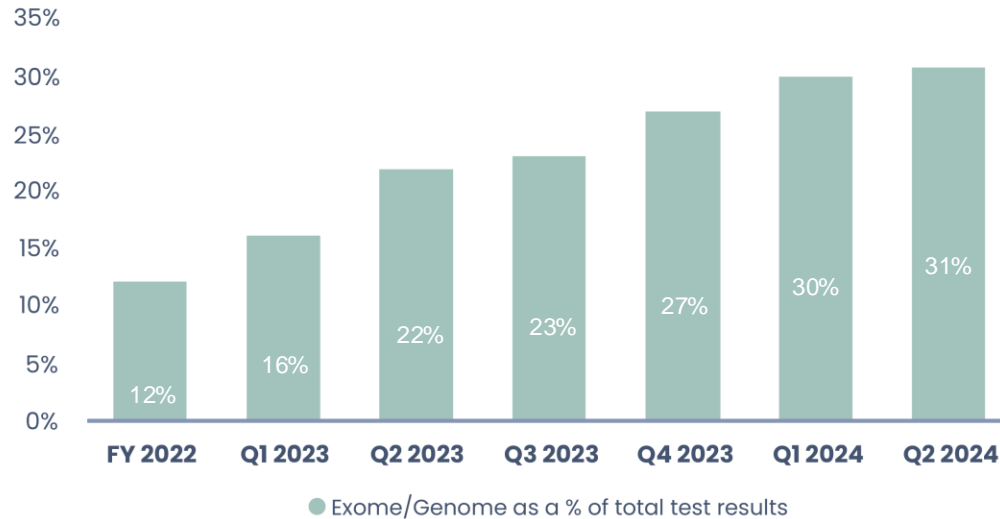
31%

Exome/genome test result volume

62%

Adjusted gross margins¹ from continuing operations in 2Q24, up from 37% in 2Q23 and 61% in 1Q24

Exome/Genome Test Mix



Gross Profit ¹	2Q24	QoQ Sequential	YoY
Adj. Gross Profit ²	\$42.4M	13%	153%
Adj. Gross Margin % ²	62%	+73bps	+2,443bps

1. Total company gross profit was \$42.9M for the second quarter of 2024, and total company gross margin was 61%. Adjusted gross profit from continuing operations and adjusted gross margin for continuing operations exclude the results of the exited Legacy Sema4 diagnostic testing business as well as depreciation, amortization and stock-based compensation. Total company gross profit and company gross margin include GeneDx's continuing operations and the financial impacts of exited Legacy Sema4 business activities.

2. Adjusted gross profit and adjusted gross margin are non-GAAP financial measures. For a reconciliation of GAAP and non-GAAP results, please refer to the reconciliation contained at the end of this earnings presentation.

Cash – balance sheet bolstered to execute growth strategy

\$108M¹

Cash, cash equivalents, marketable securities and restricted cash on hand at June 30, 2024

\$6M

Net use of cash for the total company in Q2

89%

Improvement in total company net cash burn rate year-over-year; improved 65% sequentially

9

Consecutive quarters of cash burn reduction since acquiring GeneDx

1. An additional \$25M in debt capacity is contingently available to use under the five-year senior secured credit facility with Perceptive Advisors entered into on October 27, 2023. The agreement provides access of up to \$75M, consisting of an initial tranche of \$50M, which has been drawn and is represented in the Company's quarter-end cash position, and a subsequent tranche of \$25M is available – at the Company's option, subject to certain timelines and other defined criteria.

2024 Guidance Update

Drive full year 2024 revenues between \$255 to \$265 million
(previous guidance was between \$235 to \$245 million)

Expand full year 2024 adjusted gross margin profile to at least 60%
(no change)

Use between \$65 to \$70 million of net cash for full year 2024
(previous guidance was between \$70 to \$80 million)

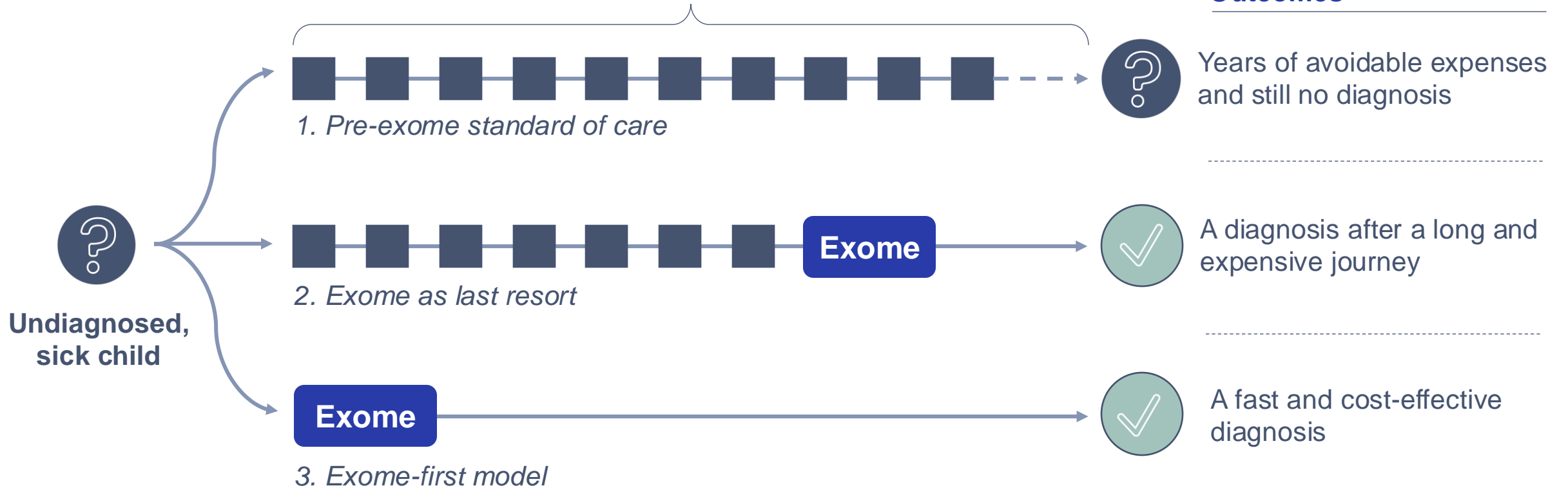
Turn profitable in 2025
(no change)

Appendix

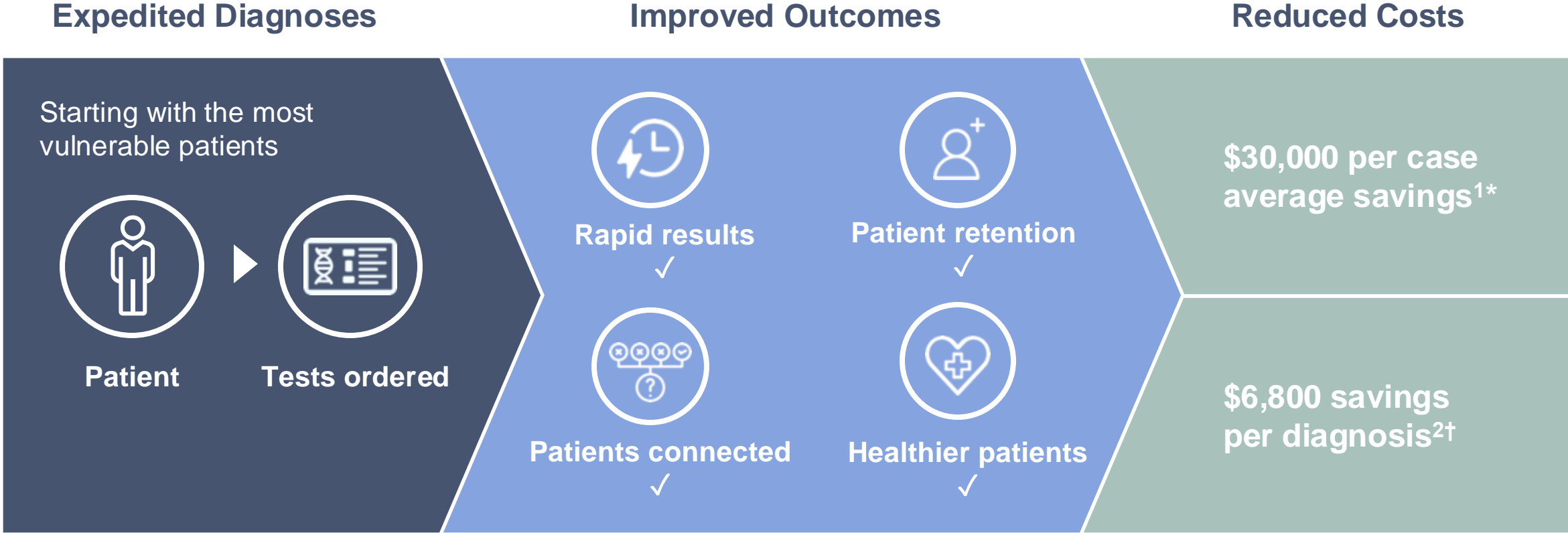
GeneDx is a leader in improving health outcomes through genomic insights.

We address the costly and prolonged path to diagnosis

The diagnostic odyssey: Endless specialist visits, ongoing mismanagement of undiagnosed disease, and expensive, ineffective and often invasive diagnostic testing



Exome sequencing can break the cycle of misdiagnosis and uncertainty



*In the NICU from reduced length of stay, unnecessary care (inpatient).
 †When tested at first tertiary presentation for Pediatric Delay Disorder (outpatient).

References: 1. ScienceDaily. (2017, October 19). Rapid whole-genome sequencing of neonatal ICU patients is useful and cost-effective. ScienceDaily. 2. Tan TY, Dillon OJ, Stark Z, et al. Diagnostic Impact and Cost-effectiveness of Whole-Exome Sequencing for Ambulant Children With Suspected Monogenic Conditions. *JAMA Pediatrics*. 2017;171(9):855. doi:10.1001/jamapediatrics.2017.1755



Exome sequencing is a cost-effective solution to avoid the diagnostic odyssey

A look at the average diagnostic odyssey

3

misdiagnoses¹

5

uninformative tests³

6+

years to an accurate diagnosis²

>\$10k

in additional healthcare costs³

>70%

have a change in management with a genetic diagnosis⁴

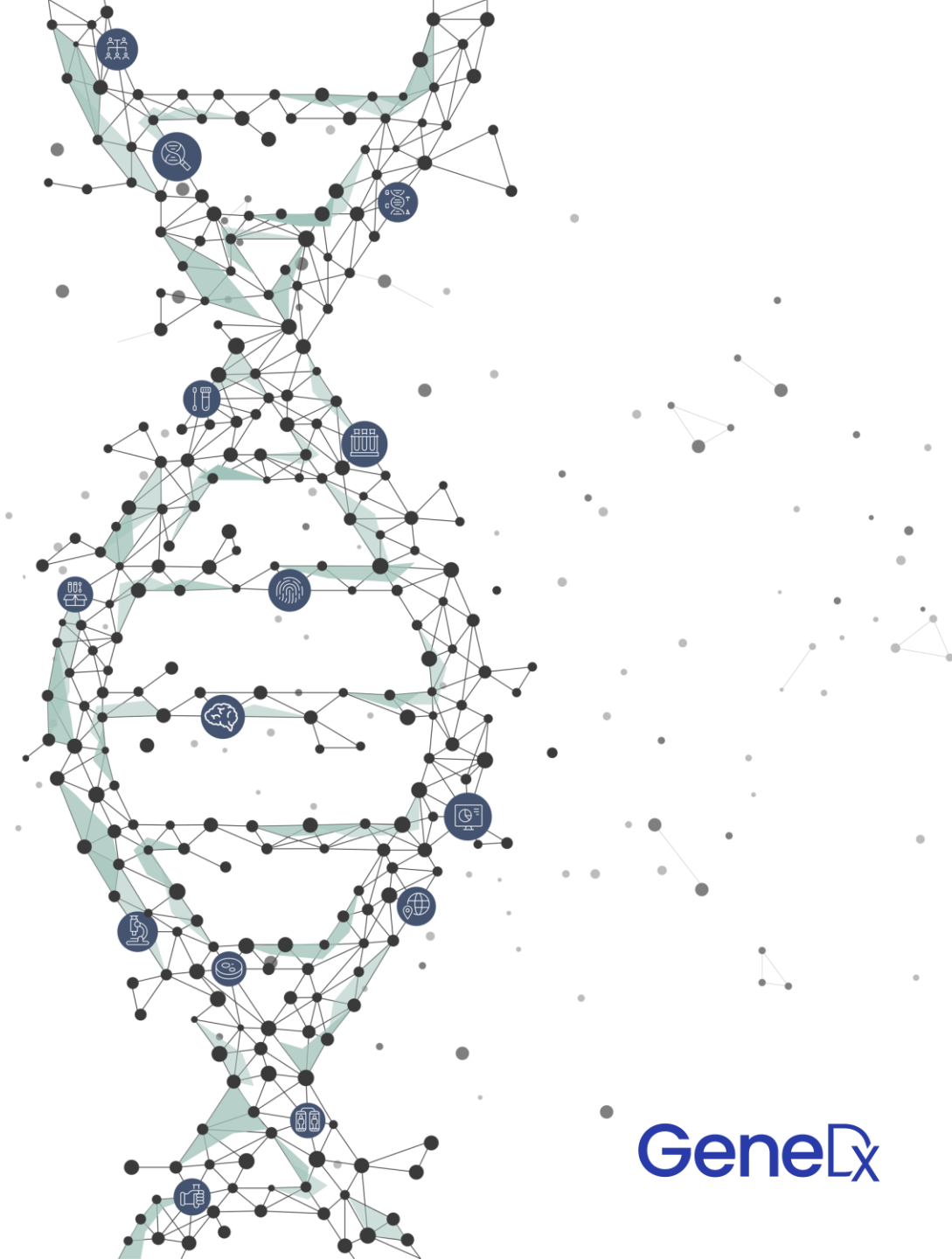


1. Genetic Alliance UK. The Rare Reality 2016. Retrieved from: <https://geneticalliance.org.uk/wp-content/uploads/2024/02/the-rare-reality-an-insight-into-the-patient-and-family-experience-of-rare-disease.pdf> on June 4, 2024
2. Global Genes. RARE Disease Facts. Retrieved from: www.globalgenes.org/rare-disease-facts/ on June 4, 2024
3. Soden SE, Saunders CJ, et al. Effectiveness of exome and genome sequencing guided by acuity of illness for diagnosis of neurodevelopmental disorders. *Sci Transl Med*. 2014 Dec 3;6(265):265ra168. doi: 10.1126/scitranslmed.3010076.
4. Fung JLF, Yu MHC, et al. A three-year follow-up study evaluating clinical utility of exome sequencing and diagnostic potential of reanalysis. *NPJ Genom Med*. 2020 Sep 10;5(1):37. doi: 10.1038/s41525-020-00144-x. PMID: 32963807

GeneDx offers leading exome and genome products

Translating complex genomic data into definitive diagnoses for patients

- **Genome sequencing** – Analyzes the entirety of an individual's DNA, which is known as the genome. The genome includes ~20,000 genes.
- **Exome sequencing** – Analyzes the protein coding regions of the ~20,000 genes in an individual's genome, which is known as the exome. The exome is thought to contain a majority of disease-causing genetic variants.



Changing the perception of exome and genome sequencing

GeneDx has spent over a decade solving for limitations of the past and differentiating our products

Then

GeneDx Now



Turnaround time

“These tests take months to get results”



“I can get results in days to weeks”



Cost

“These tests are wildly expensive”



“Tests are affordable and widely covered”



Interpretation

“Results are confusing and filled with useless information”



“My patient can get a definitive diagnosis”

GeneDx

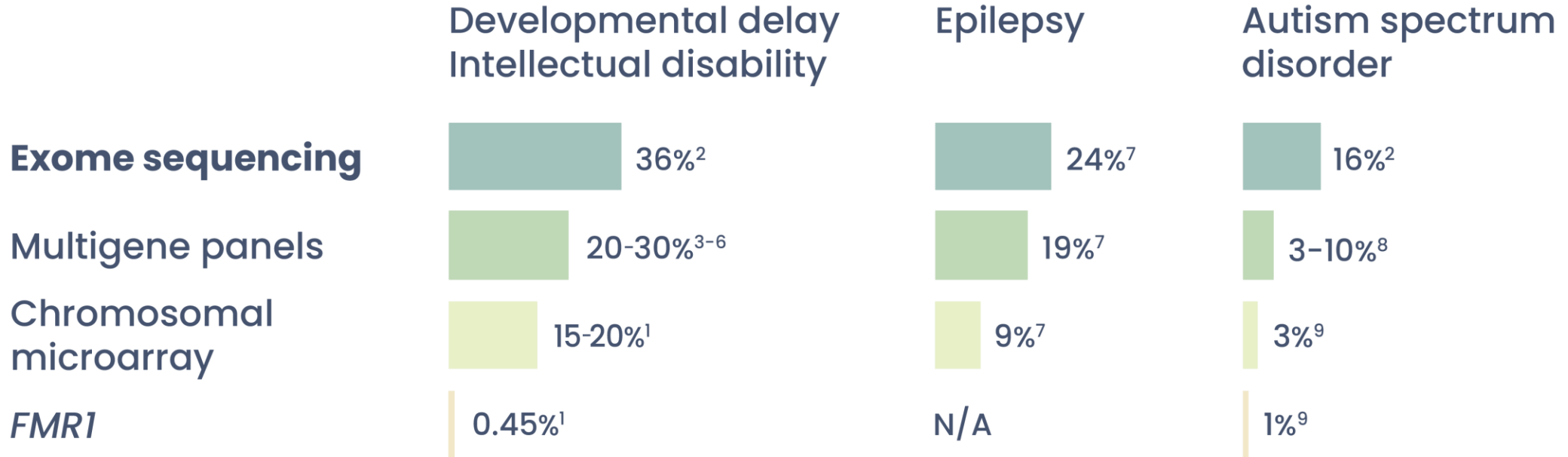
Patients we serve today are difficult to diagnose and have complex needs

Patients typically have 2+ of the indications below

- Congenital abnormalities (birth defects)
- Significant Intellectual disability
- Global developmental delay
- Seizures/epilepsy
- Failure to thrive or other growth concerns
- Autism spectrum disorder
- Complex neurodevelopmental disorder
- Severe neuropsychiatric condition
- Cerebral palsy
- Dysmorphic features
- Significant hearing or visual impairment
- Period of unexplained developmental regression
- Biochemical findings suggesting inborn error of metabolism
- Family history strongly suggestive of a genetic etiology



Exome sequencing offers greater diagnostic yields vs. other technologies

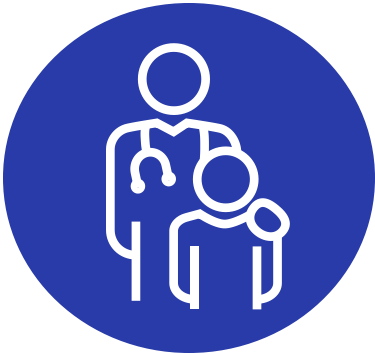


1. Savatt JM *et al. Front Pediatr.* 2021;9:526779. 2. Srivastava S *et al. Genet Med.* 2019;21(11):2413–2421. 3. Pেকেles H *et al. Pediatr Neurol.* 2019;92:32-36. 4. Stefanski A *et al. Epilepsia.* 2021;62(1):143-151. 5. Mellone S *et al. Front Genet.* 2022;13:875182. 6. Spataro N *et al. Genes (Basel).* 2023;14(3):708. 7. Sheidley BR *et al. Epilepsia.* 2022;63(2):375-387. 8. Ni Ghráiligh F *et al. J Autism Dev Disord.* 2023;53(1):484-488. 9. Arteche-López A *et al. Genes.* 2021(12):560.

GeneDx is positioned to enable a data-informed future for healthcare.

New market expansion enables us to serve more patients

GeneDx is starting with a focus on rare disease and pediatrics and then expanding into larger markets



**Rare Disease
& Pediatrics: \$3B**

Rapidly growing patient opportunity and substantial cost savings via early screening



**Newborn
Screening: \$10B**

Currently participating in studies to evaluate exome and genome sequencing at birth



Adults: \$16B

Expanding into adult markets to replace multi-gene panel and individual gene tests

Conservatively, our total addressable market is **~\$30 billion.***



*Company Estimates supported by DefinitiveHC diagnosis data.

We're focused on the Rare Disease & Pediatrics market today



Rare Disease & Pediatrics: \$3B

Rapidly growing patient opportunity and substantial cost savings via early screening

Inpatient

Target Clinicians:

- Geneticists
- Neonatologists

Products:

- Primarily rapid whole genome sequencing

Primary Clinical Indications:

- Unexplained critical illness
- Congenital anomalies

Inpatient
~1/3 of TAM

Outpatient
~2/3 of TAM

Outpatient

Target Clinicians:

- Geneticists
- Pediatric Neurologists
- Developmental Pediatricians
- Pediatricians (long-term)

Products:

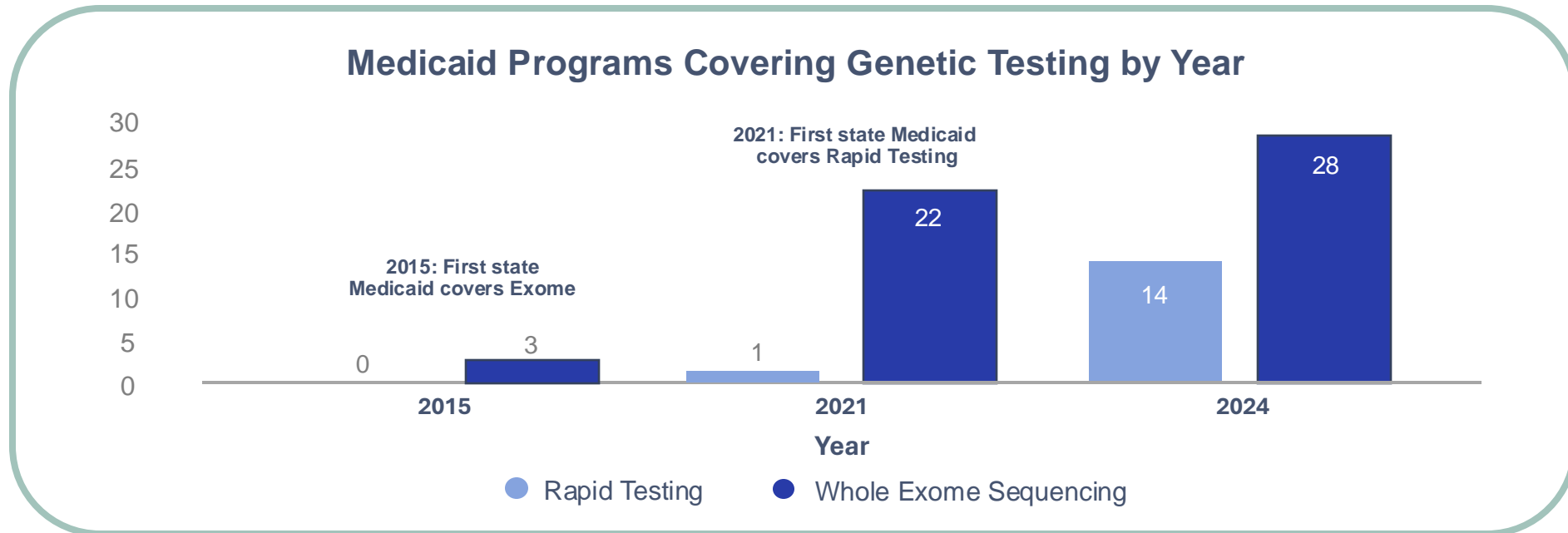
- Primarily exome and growing genome

Primary Clinical Indications:

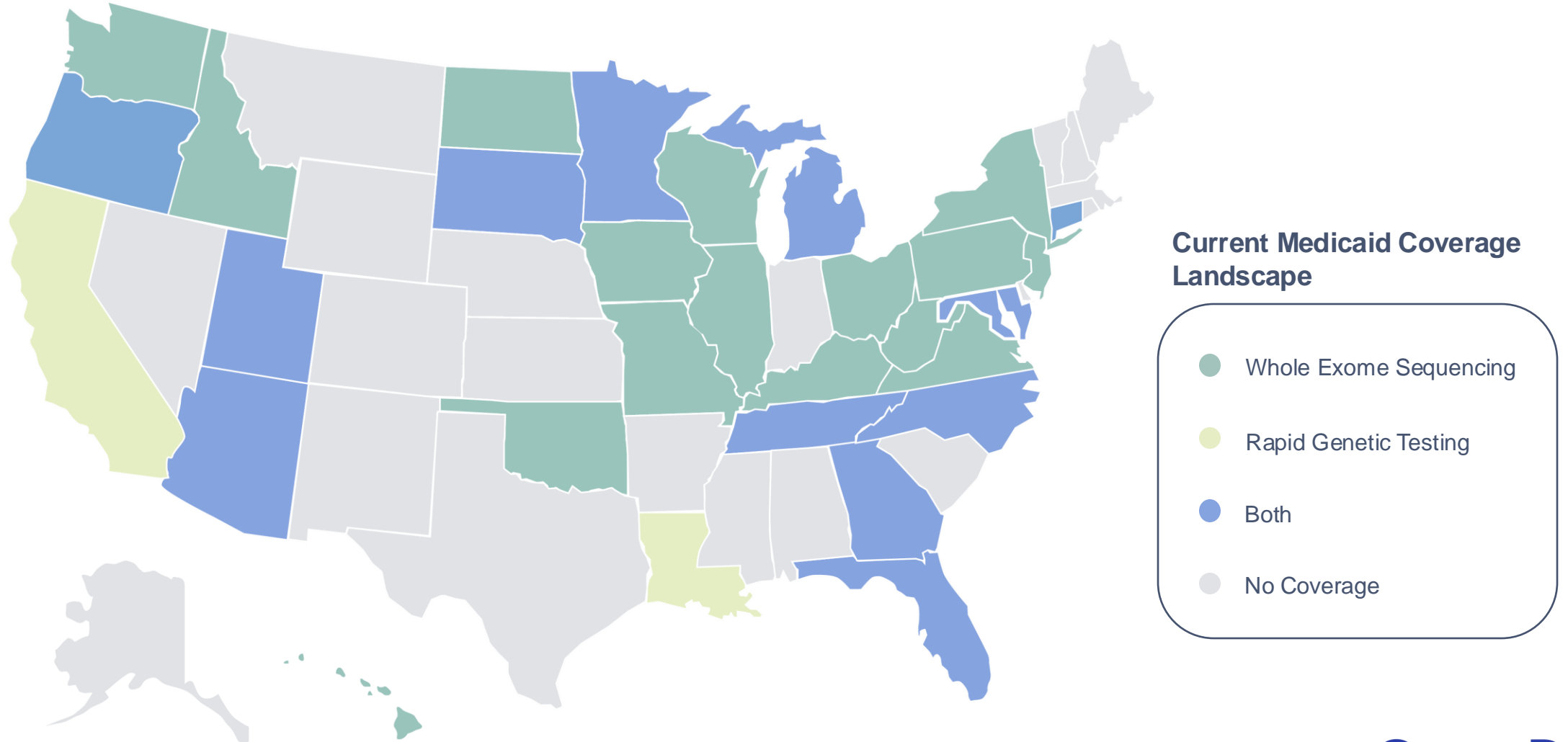
- Epilepsy
- Intellectual disability
- Developmental delay

Payor coverage for exome and genome sequencing is expanding

- GeneDx is **contracted with over 80% of covered lives**, including all large national commercial payers
- **Medicaid and commercial insurance coverage continues to grow** for exome and genome
 - **28 states** cover exome sequencing
 - **14 states** cover rapid genome sequencing
 - **Biomarker bills** are driving momentum in Medicaid coverage for exome and genome testing



Medicaid programs across the country are expanding access



Medical practice guidelines recommend exome and genome sequencing for patients



ACMG Practice Guideline¹:

“Strong recommendation based on the available evidence to support the use of ES/GS as either a first- (or second-) line test in patients ES/ GS demonstrates clinical utility for the patients and their families with limited evidence for negative outcomes and the ever-increasing emerging evidence of therapeutic benefit.”



NSGC Guideline²:

“Recommending Exome Sequencing as a First-Tier Genetic Test for Unexplained Epilepsies”

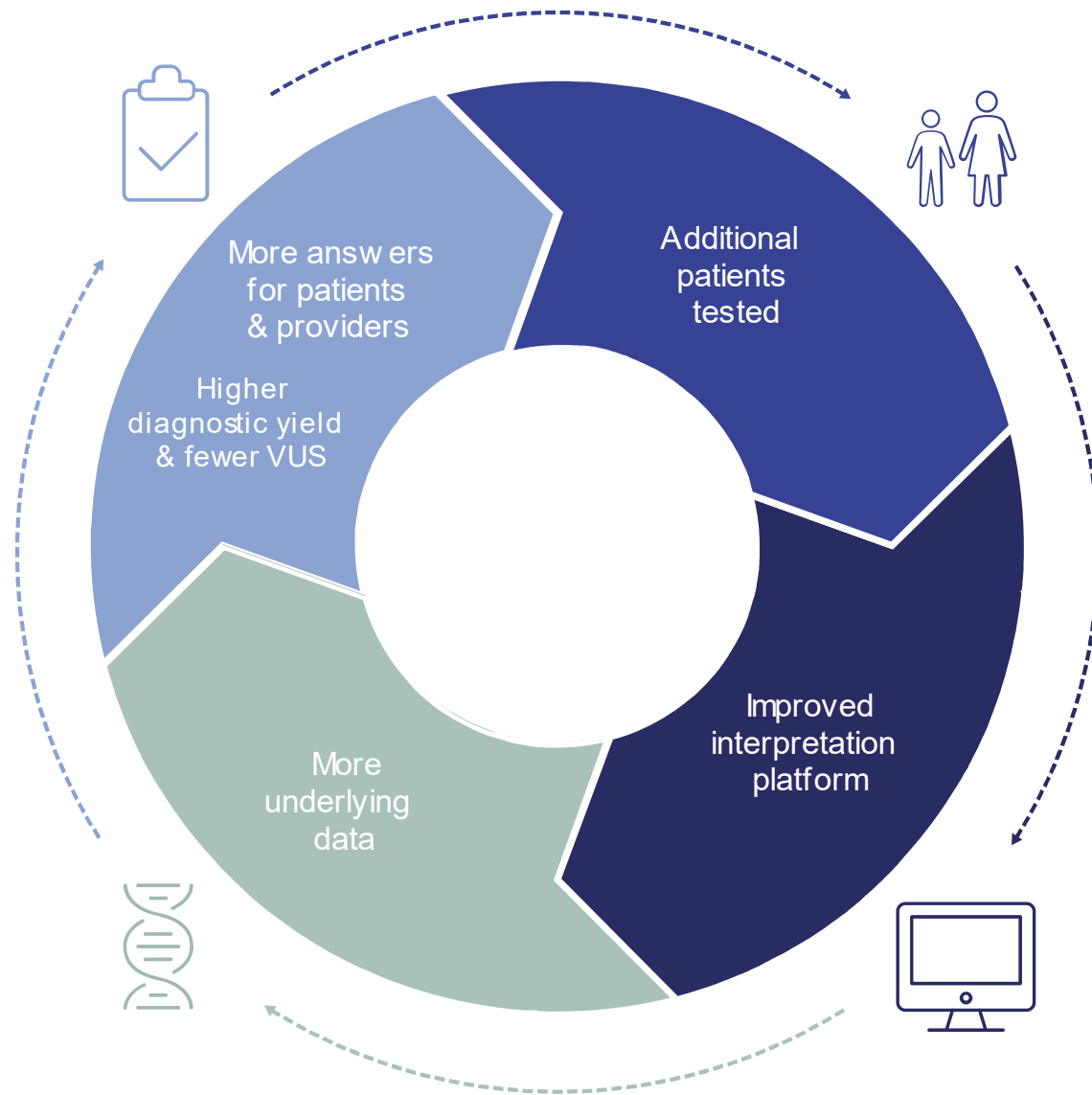


American Epilepsy Society:

“Exome or genome sequencing are favored for most scenarios, as they are more likely to provide a diagnosis.”

1. Manickam K, McClain MR, Demmer LA, et al. Exome and genome sequencing for pediatric patients with congenital anomalies or intellectual disability: an evidence-based clinical guideline of the American College of Medical Genetics and Genomics (ACMG). *Genet Med*. 2021 Nov;23(11):2029-2037. doi: 10.1038/s41436-021-01242-6. Epub 2021 Jul 1.

2. Smith L, Malinowski J, Ceulemans S, et al. Genetic testing and counseling for the unexplained epilepsies: An evidence-based practice guideline of the National Society of Genetic Counselors. *J Genet Couns*. 2022 Oct 24. doi.org/10.1002/jgc4.1646



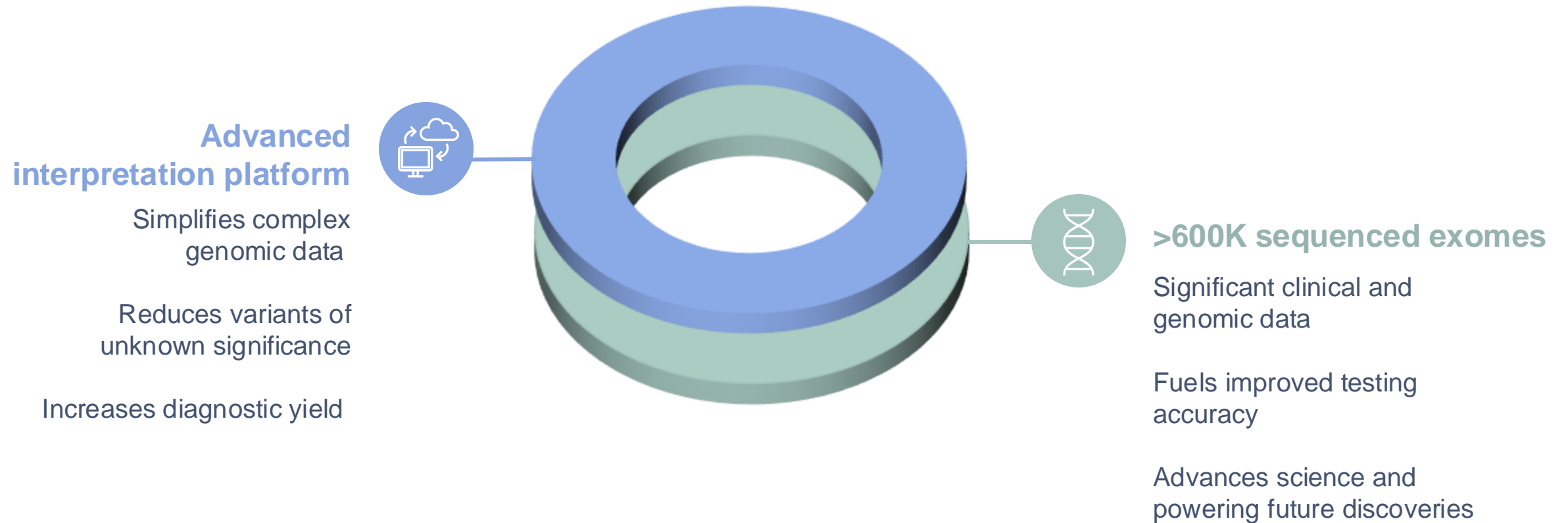
Pay-it-forward data strategy

For every patient that we test, our underlying interpretation platform gets smarter, and we can offer more answers to more patients.

The impact scales as we capture more and more of the market.

Data is at the center of our business

Our huge dataset and intelligent interpretation platform set us apart and fuel innovation



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% are tested on many commercial epilepsy panels

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% are tested on many commercial epilepsy panels



Exome sequencing checks all 768 genes

We are translating our leadership in exome and investing in a genome future

It's the right time to lean in and improve solutions for our providers to deliver the best patient care

Integrating with Epic Aura

Expanding access by integrating into existing health system and provider workflows



Improving WGS products

Adding repeat expansions to increase diagnostic yield and decrease the need for follow-up testing



Reducing rWGS turnaround time

Written results in as soon as 5 days



Expanding sample collection options

Improving WGS accessibility with cheek swabs



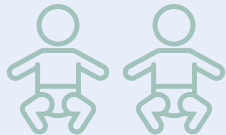
1 in 3 babies in the NICU is likely to have a genetic condition that could be diagnosed with rapid whole genome sequencing (rWGS)¹



Cost associated with NICU/PICU care for suspected or confirmed genetic disease is ~ \$26B, or **50% of the US pediatric inpatient health spend**^{2,3}

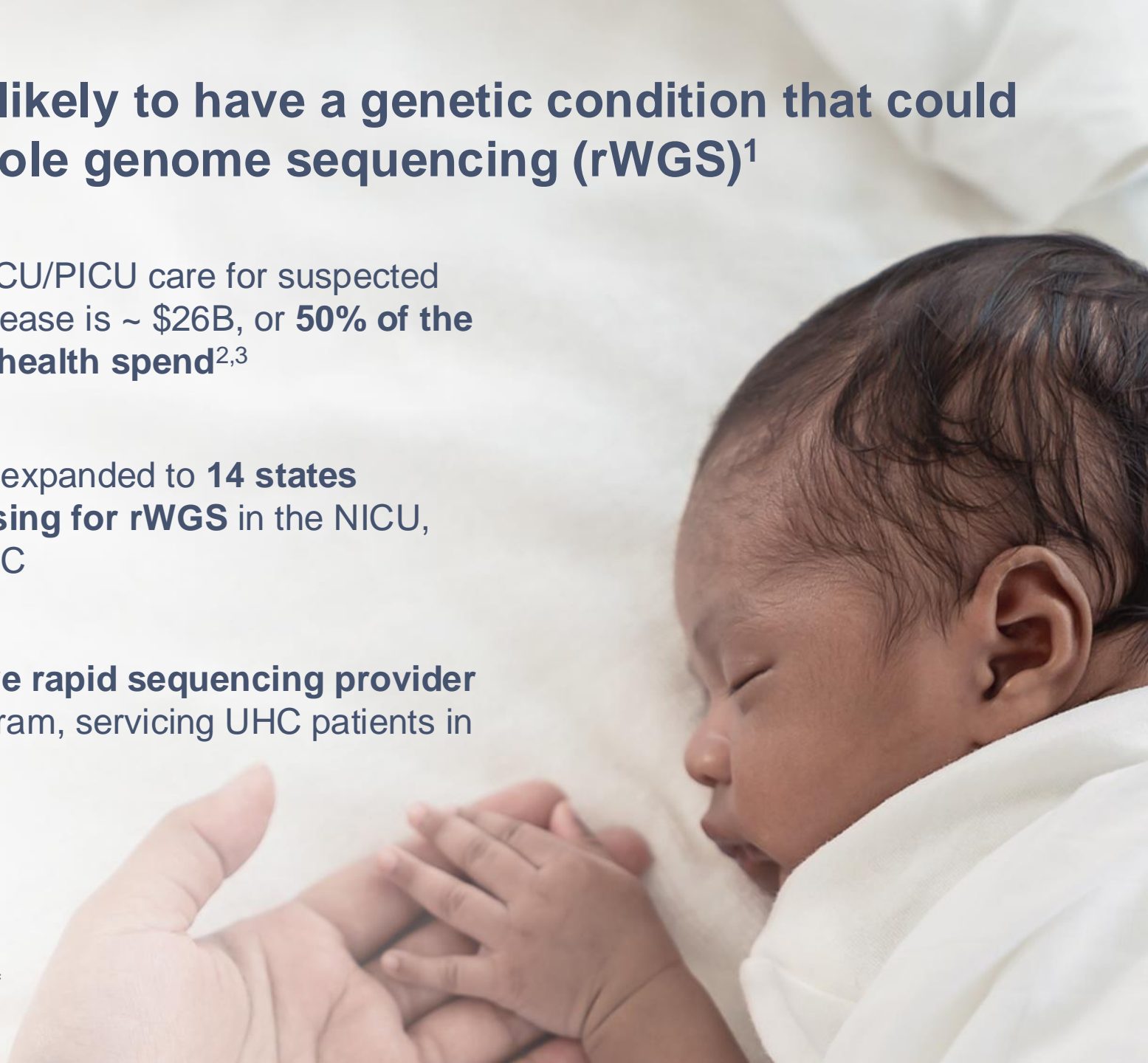


Medicaid coverage has expanded to **14 states covering and reimbursing for rWGS** in the NICU, including CT, TN, and NC



GeneDx is the **exclusive rapid sequencing provider** for the UHC NICU Program, servicing UHC patients in NICUs nationwide

1. NICUSeq Study Group, Krantz ID, Medne L, et al. Effect of whole-genome sequencing on the clinical management of acutely ill infants with suspected genetic disease: a randomized clinical trial. *JAMA Pediatr.* 2021 Dec 1;175(12):1218-1226. doi: 10.1001/jamapediatrics.2021.3496
2. Dukhovny D and Zupanci JAF. Economic Evaluation With Clinical Trials in Neonatology. *Neoreviews* (2011) 12 (2): e69–e75 <https://doi.org/10.1542/neo.12-2-e69>
3. Gonzaludo N, Belmont JW, Gainullin VG, et al. Estimating the burden and economic impact of pediatric genetic disease. *Genet Med.* 2019 Aug;21(8):1781-1789. doi: 10.1038/s41436-018-0398-5



**Today, we shorten the diagnostic journey.
Tomorrow, we hope to prevent it.**

Building the future: The SeqFirst Study

Shorter hospital stays. Less uncertainty. Better care.

In phase one of the SeqFirst study, 125 infants were offered rapid WGS:



63% of infants had abnormal rapid WGS results, and **88%** of these cases resulted in a change in management



90% of diagnoses made by WGS would not have been predicted by clinical features



Families of enrolled infants reported an **overall positive experience**, regardless of rapid WGS test outcome



Building the future: Newborn screening

Fast diagnosis. Clear next steps.
Reduced healthcare costs.



Screened **5,000** healthy infants, toward goal of >100,000



4.3% positive rate



Average age of diagnosis for these conditions is **7-11** years old

GeneDx



Building the future: Partnerships

Enriched data. Empowered
drug discovery. Improved outcomes.

GeneDx offers solutions across the
pharma drug development pipeline

Find

Connect

Understand



**One test.
Big picture.
Brighter futures.**



Reconciliation of Non-GAAP Financial Measures

	Three months ended June 30,						Three months ended March 31,		
	2024			2023			2024		
	GeneDx	Legacy Sema4	Total	GeneDx	Legacy Sema4	Total	GeneDx	Legacy Sema4	Total
Revenue	\$ 68,924	\$ 1,590	\$ 70,514	\$ 45,226	\$ 3,480	\$ 48,706	\$ 61,461	\$ 961	\$ 62,422
Cost of services	27,417	145	27,562	29,949	–	29,949	25,011	–	25,011
Gross profit	\$ 41,507	\$ 1,445	\$ 42,952	\$ 15,277	\$ 3,480	\$ 18,757	\$ 36,450	\$ 961	\$ 37,411
<i>Gross margin</i>	60%	91%	61%	34%	100%	39%	59%	100%	60%
<i>Reconciliations:</i>									
Depreciation and amortization	808	–	808	1,233	–	1,233	816	–	816
Stock-based compensation	86	–	86	251	–	251	48	–	48
Restructuring charges	–	–	–	13	–	13	48	–	48
Adjusted gross profit	\$ 42,401	\$ 1,445	\$ 43,846	\$ 16,774	\$ 3,480	\$ 20,254	\$ 37,362	\$ 961	\$ 38,323
<i>Adjusted gross margin</i>	62%	91%	62%	37%	100%	42%	61%	100%	61%