

Harnessing predictive analytics to improve the impact of care delivery



Introductions

Healthcare is facing fundamental changes, with an increasingly aggressive shift to value-based-care.

Health IT was supposed to enable this transition—but instead it has added cost, stress, and complexity.



HDAI is a care optimization and provider enablement company powered by big data, proprietary predictive analytics, expert insights, and point of care technology solutions.

We partner with leading health systems, ACOs, MA plans, and payers to improve care delivery, population health and cost.

Our integrated capabilities help organizations understand every dimension of performance and provide a direct path to patient specific actionability.

A teal-tinted photograph of a female doctor in a white lab coat with a stethoscope, smiling warmly at an elderly female patient. The patient is also smiling and looking up at the doctor. The background is a solid teal color with large, faint, abstract white and light teal shapes. The word "Background" is written in a large, white, sans-serif font across the center of the image.

Background

PRIVILEGED DATA ACCESS

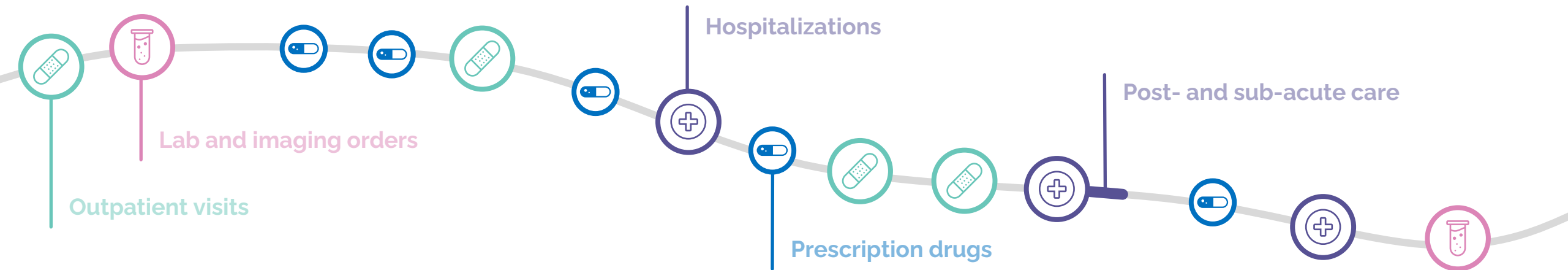
We leverage our privileged access the country's best longitudinal data set

Access to the full Medicare data set, with a broad data use agreement covering commercial applications

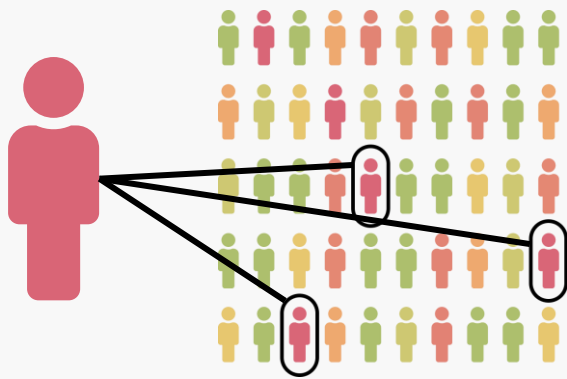
100 million Total patients

100+ billion Clinical encounters

22 years Longitudinal data



Proprietary predictive models and nationwide assessments through “digital twins”



Twins have same:

- Baseline Risk
- Age, sex, race
- Enrollment reason
- Dwelling status
- Patient county
- Patient cohort

Bottom-up assessment of every Medicare patient and encounter to enable better performance

- Digital twinning evaluates billions of candidates to compare outcomes vs. risk-matched twins
- Our assessments enable internal performance management and external network construction



We have built 200+ predictive models and generate 20 million weekly predictions today

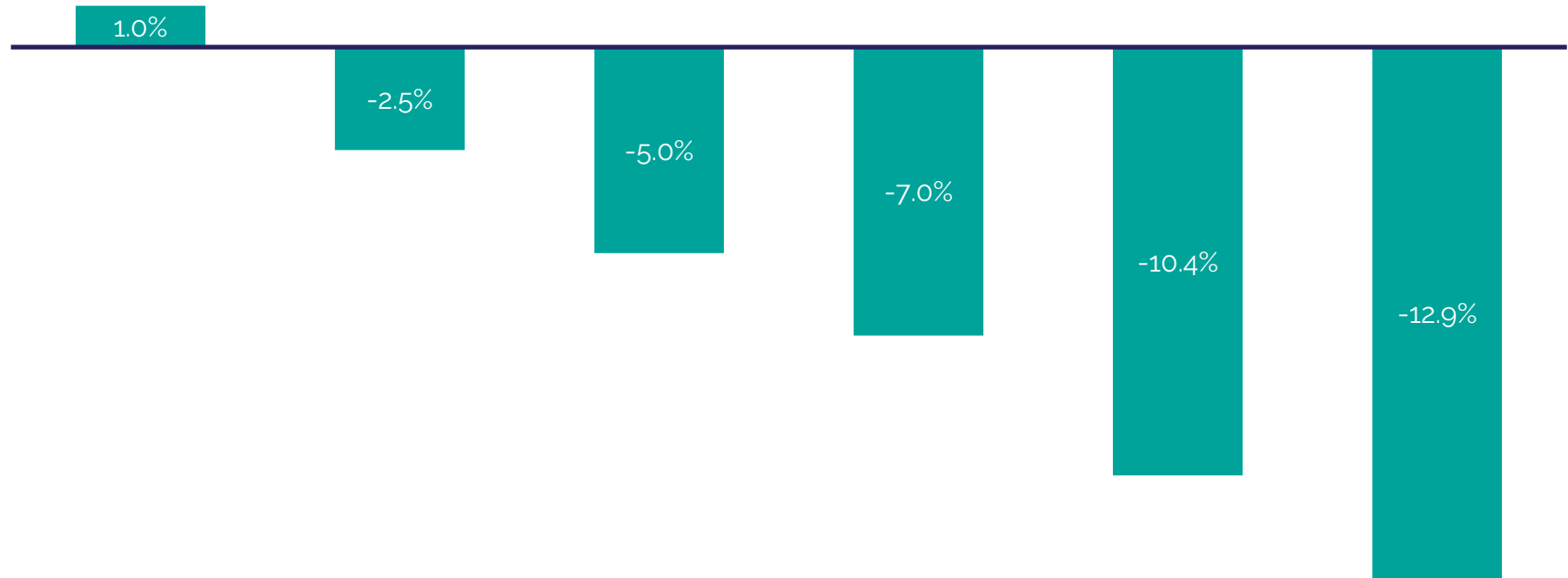
- Robust models built and validated on national data
- Precise targeting enables users to pinpoint “impactable” cohorts with defined needs
- Predictive models built and validated with access to Medicare Advantage, Medicaid, state all-payer, and health system data as well



Top ACOs are creating significant savings

HDAI cost savings give a true snapshot of patient-management-based performance, rather than benchmark or attribution advantages

HDAI Savings Rate, by Quintile



Cost Quintile

Bottom


2

3

4

Top

Top 10%

A teal-tinted photograph of a doctor in a white coat and stethoscope examining a patient. The doctor is leaning over the patient, who is smiling. The image is overlaid with a teal gradient and large, abstract, light-colored shapes on the right side. The text 'Health Vision Platform' is centered in white.

Health Vision Platform



What is Health Vision?

HEALTH VISION
PLATFORM

HEALTH VISION Network Insights

Provider, facility, and market performance and actuarial data for health systems, payers, and ecosystem partners

- ACO and hospital recruiting
- Post-acute network optimization
- Provider performance profiling
- Organization opportunity-spotting

HEALTH VISION Population Health

Smart cohorts and patient profiles with advanced predictive analytics for population health managers and payers

- Targeted smart cohort interventions
- Curated, multi-payer patient profiles
- Coding and attribution optimization
- ADT-driven, real-time cohorts

HEALTH VISION Point of Care

EHR-embedded predictive analytics enabling quantitative care pathways and personalized care delivery

- EHR-embedded, real-time profiles
- Specialty-specific risks/workflows
- Provider-focused care insights
- Tailored to resolve data/coding gaps

ADVISORY
SERVICES

Strategic and analytic services

Strategic and operational guidance for population health and point-of-care customers using VRDC data

Care optimization services

Customized smart cohorts, predictors, and clinical pathways using live customer data (claims/EHR)



What is unique about Health Vision?

Vendor & Provider Agnostic

HDAI's access to Medicare FFS data provides a wider view of the patient's health history – which is provider and EMR agnostic. Diagnosis, procedures, care teams from any providers outside the network, nationally

Risk Specific Outcomes

The HDAI suite of predictors are outcome-specific (i.e., COPD exacerbation, Hospice admission, etc.) to better approach patient needs without having to mine through the patient chart. Unlike “Composite” or index predictors (like Frailty index) that aggregate several underlying risks, HDAI's predictors are designed for specific endpoint or outcomes

Timely Data

Data is updated weekly with fully adjudicated claims through BCDA API for more recent data than CCLF.

Risk Adjustment

HDAI's privileged access to Medicare dataset enables digital twinning the performance of your ACO and providers against other ACOs with clinically similar patients for high resolution performance management

Generalizability

HDAI's models are built on an average sample size of 3 million patients to ensure they are robust and accurate when applied to patients



What tools comes out of the box?

Segmentation Analysis

Stratifying populations into 5 risk segments based on clinical history into Low Risk, Rising Risk, Complex Care, Advanced Illness and Hospice. Comparing your management of these segments to the top 10% ACOs in the country to identify best practices via *Smart Cohorts*.

Smart Cohorts

Creating data-driven patient lists that synthesizes prior utilization, clinical characteristics, patient risk segmentation and individualized clinical predictors to target the most impactable populations.

Post-Acute Analysis

Transforming claims datasets into actionable insights for your Post-Acute Network – SNF and Home Health, including trends in admissions/readmissions, LOS, and DRG patterns to assist with building or maintaining your post acute network. Additionally, patient level reports provide insight into discharge disposition.

Attribution Analysis

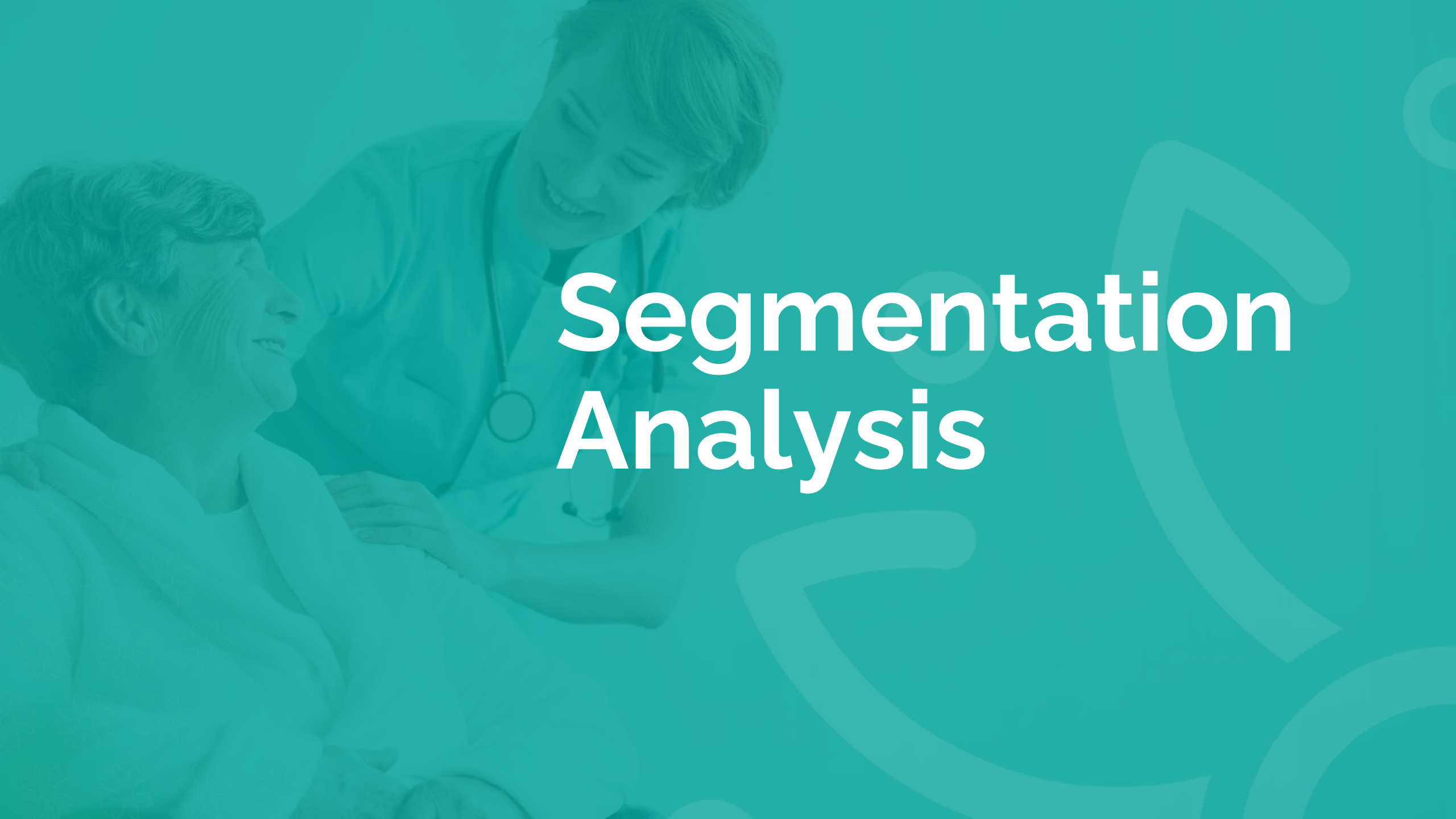
Identifying patients that are assignable to the network by the provider closest to gaining attribution and identify patients that are at risk of being de-attributed ranked by lowest \$ amount.

HCC Gap Analysis

Identifying practices and providers within practices that have sub-optimal recapture rates for conditions that are predicted to persist and drill down to the patient to ICD level.

Leakage Analysis

Identifying “avoidable” procedures, surgeries, specialties, hospice and home health that are being referred out of the network

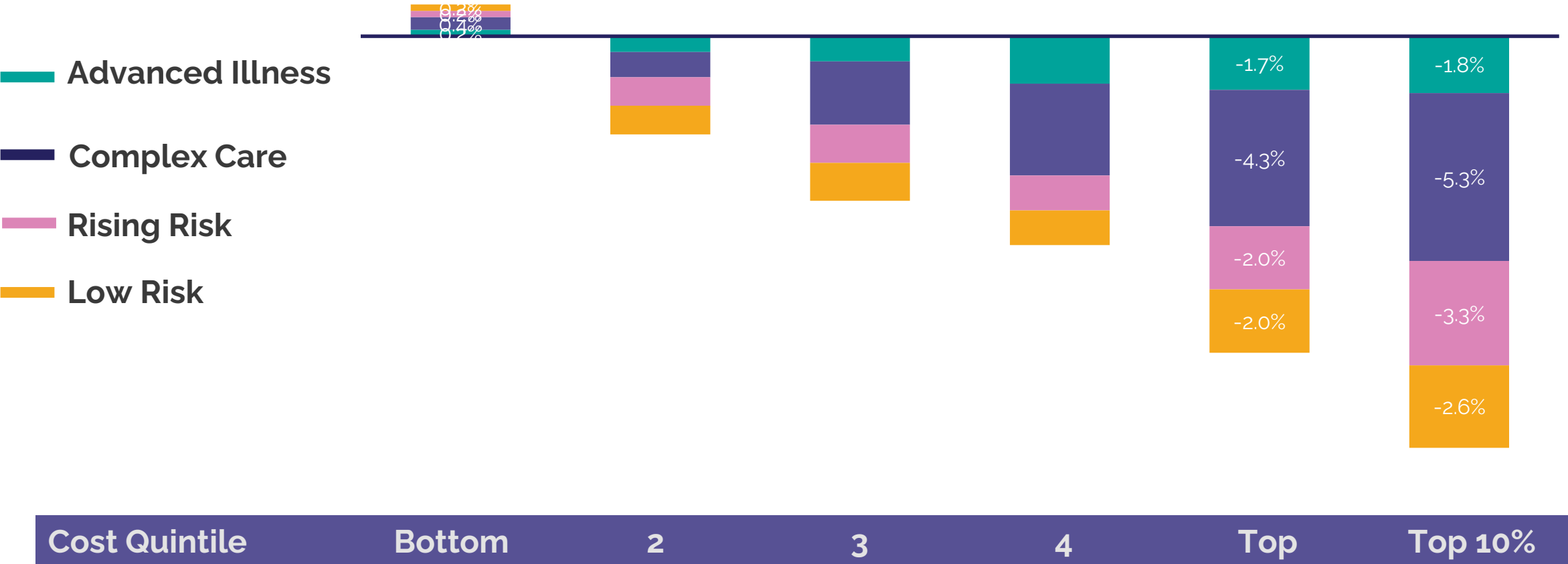
A teal-tinted photograph of a doctor in a white coat and stethoscope examining an elderly patient. The doctor is leaning over the patient, who is smiling. The background is a solid teal color with large, faint, abstract white shapes. The text 'Segmentation Analysis' is overlaid in white, bold, sans-serif font.

Segmentation Analysis



Segmentation Analysis

Contribution to Savings Rate by Cohort, by Overall Cost Quintile



Forward looking selection captures major cost segments (2022)

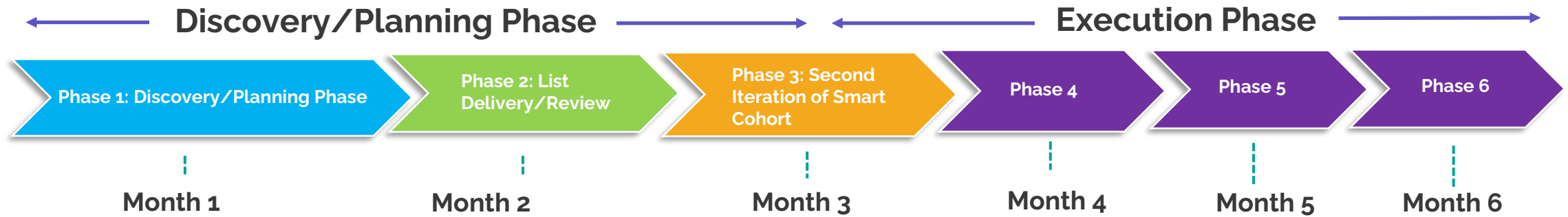
	Low Risk	Rising risk	Complex	Advanced illness	Hospice
Characteristics	<ul style="list-style-type: none"> No recent hospitalization Few discernible risks 	<ul style="list-style-type: none"> No recent hospitalization Diverse range of underlying risk factors 	<ul style="list-style-type: none"> No recent hospitalization, but high admit risk Multiple risk factors 	<ul style="list-style-type: none"> Approaching end of life High hospice utilization 	<ul style="list-style-type: none"> Patients with a recent hospice claim
% of patients	49.1%	25.5%	19.0%	5.9%	0.6%
% of costs	16.3%	18.7%	36.1%	25.7%	3.1%
\$ PMPM	\$309	\$614	\$1,582	\$3,798	\$4,709



Smart Cohort



What is a Smart Cohort?

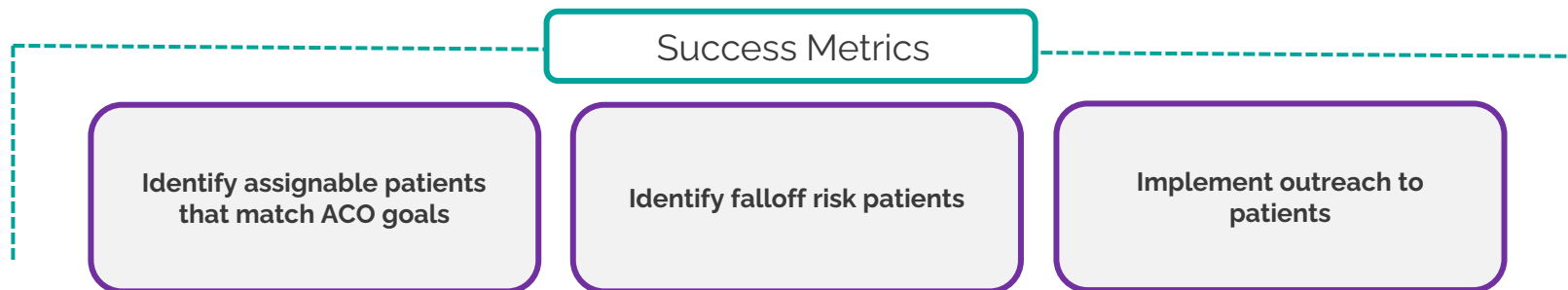
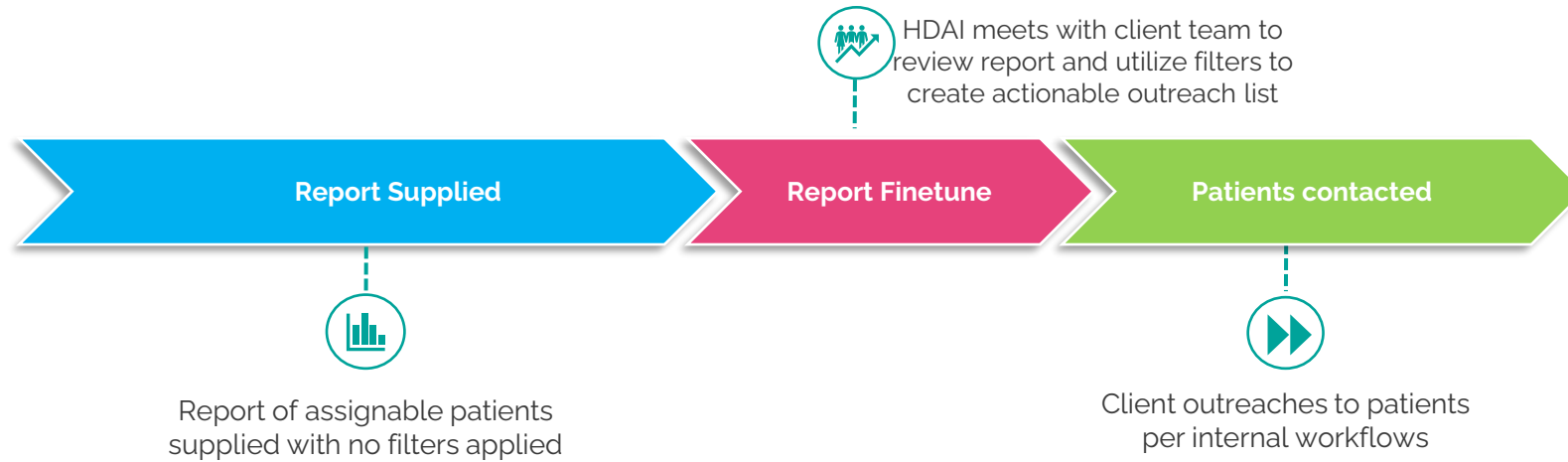


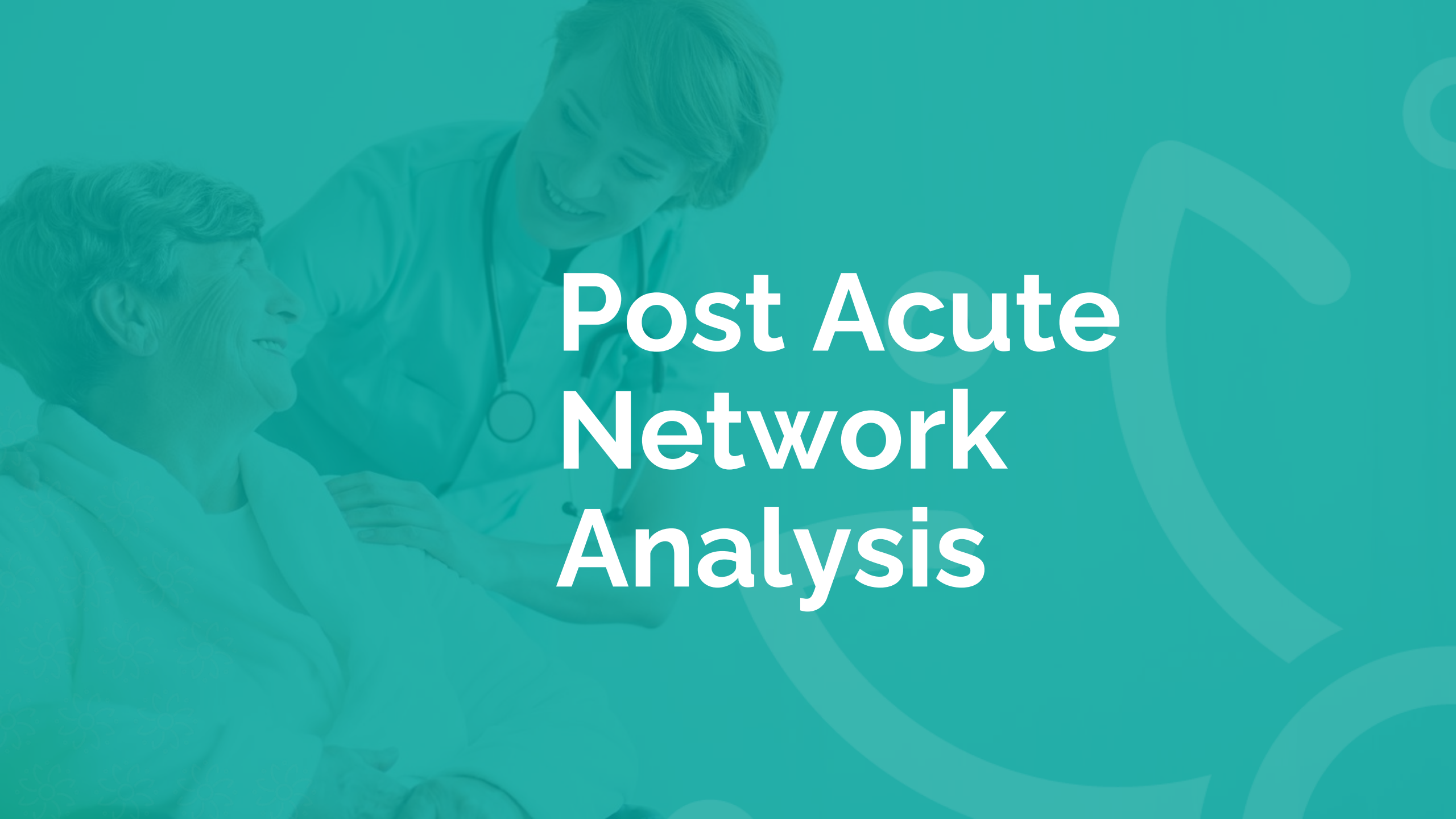


Attribution Gaps

What is an Attribution Gap Report?

- A patient level report of your assignable patients with \$ distance from full attribution and provider to **facilitate outreach to assignable patients**
- A patient level report of your currently attributed patients with \$ difference from fallout to **facilitate prevention of patient loss**





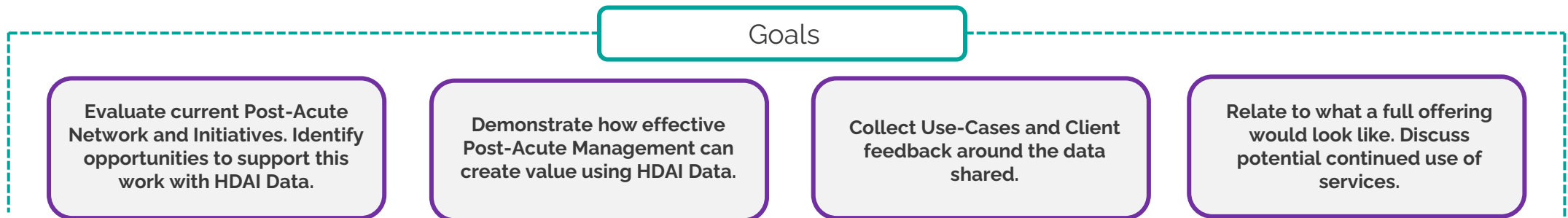
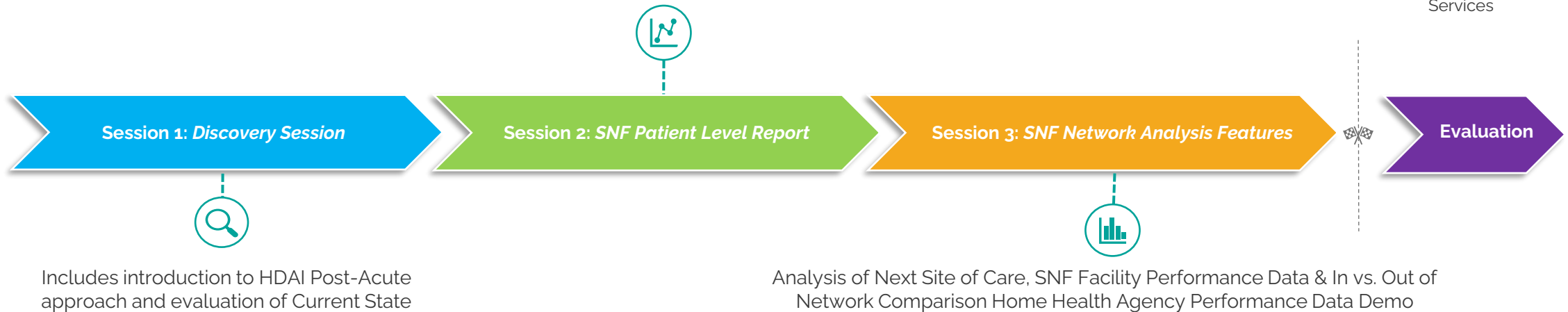
Post Acute Network Analysis



What is a Post-Acute Analysis?

SNF Patient Level Report and analyze metrics such as Patient Demographics, Second Site of Care, Star Rating Utilization and construct a Patient Journey from your data

Evaluate and discuss continued use-cases for Post-Acute Services



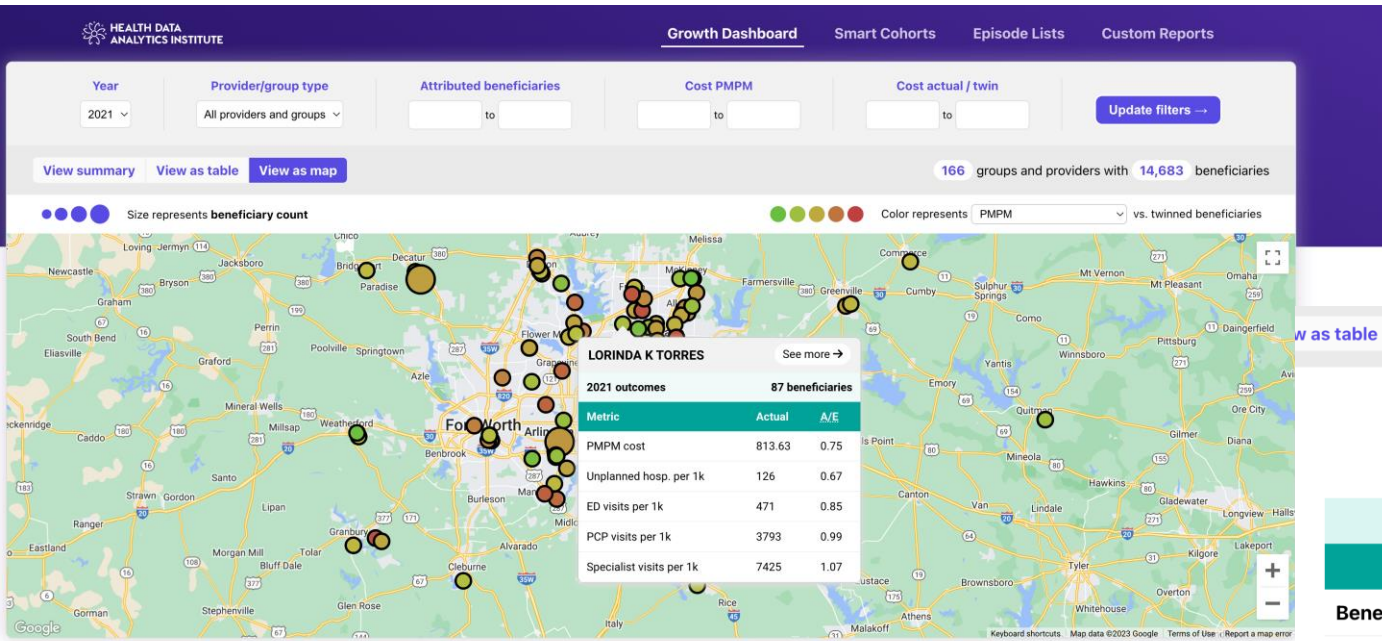


Recruitment



What is a Recruitment Report?

A curated listed of providers in your area with their past performance based on HDAL's digital twins to **facilitate physician recruitment into your ACO**



View as table | View as map | Simulate adding 1 group → | 166 groups and providers

Your simulated organization

How would your organization have performed last year with your chosen groups and providers included?

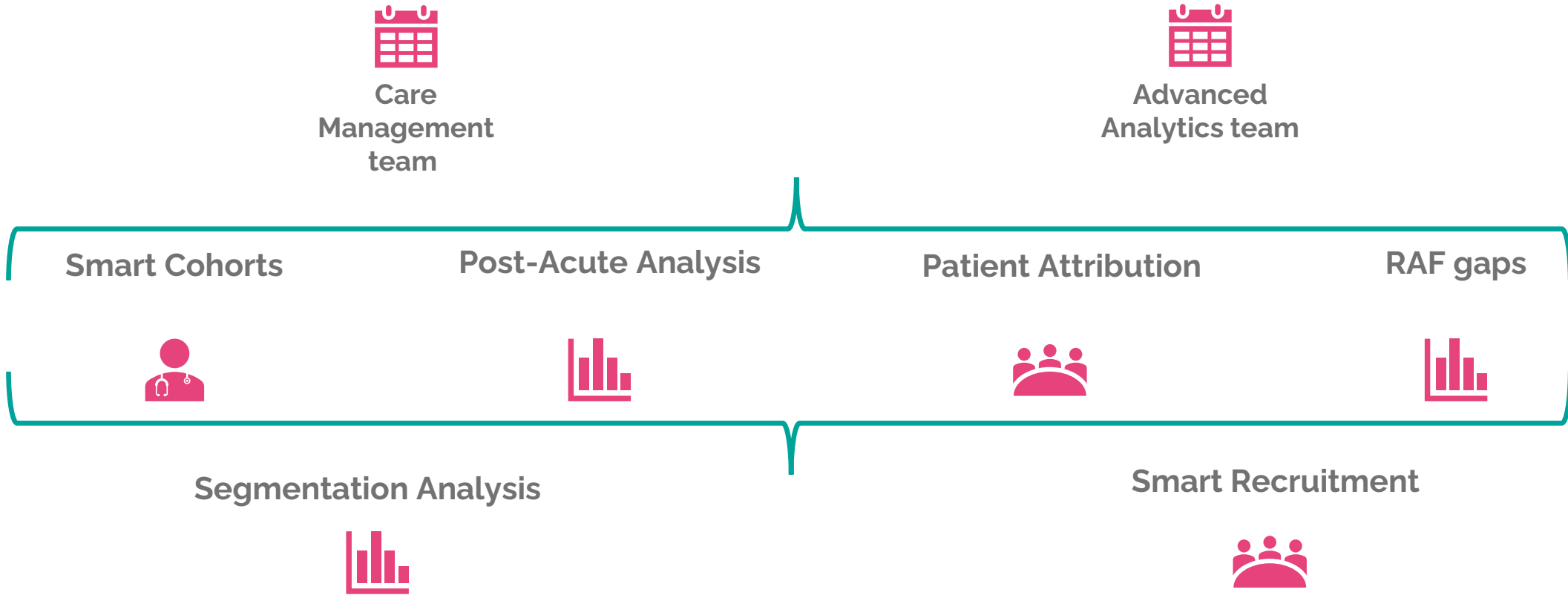
	Today's ACO		New additions		Simulated ACO	
	Actual	A/E	Actual	A/E	Actual	A/E
Beneficiaries	7,224	—	450	—	7,674	—
PMPM cost	\$1,076	0.97	\$2,269	0.89	\$1,146	0.97
Unplanned hospitalizations per 1k	157	1.04	375	1.03	170	1.04
ED visits per 1k	582	1.03	898	1.02	601	1.03
Primary care visits per 1k	2,048	1.28	6,054	1.89	2,283	1.32
Specialist visits per 1k	3,250	0.95	3,681	0.93	3,275	0.95
	\$2,798,289 saved vs. expected		\$1,347,780 saved vs. expected		\$4,146,069 saved vs. expected	

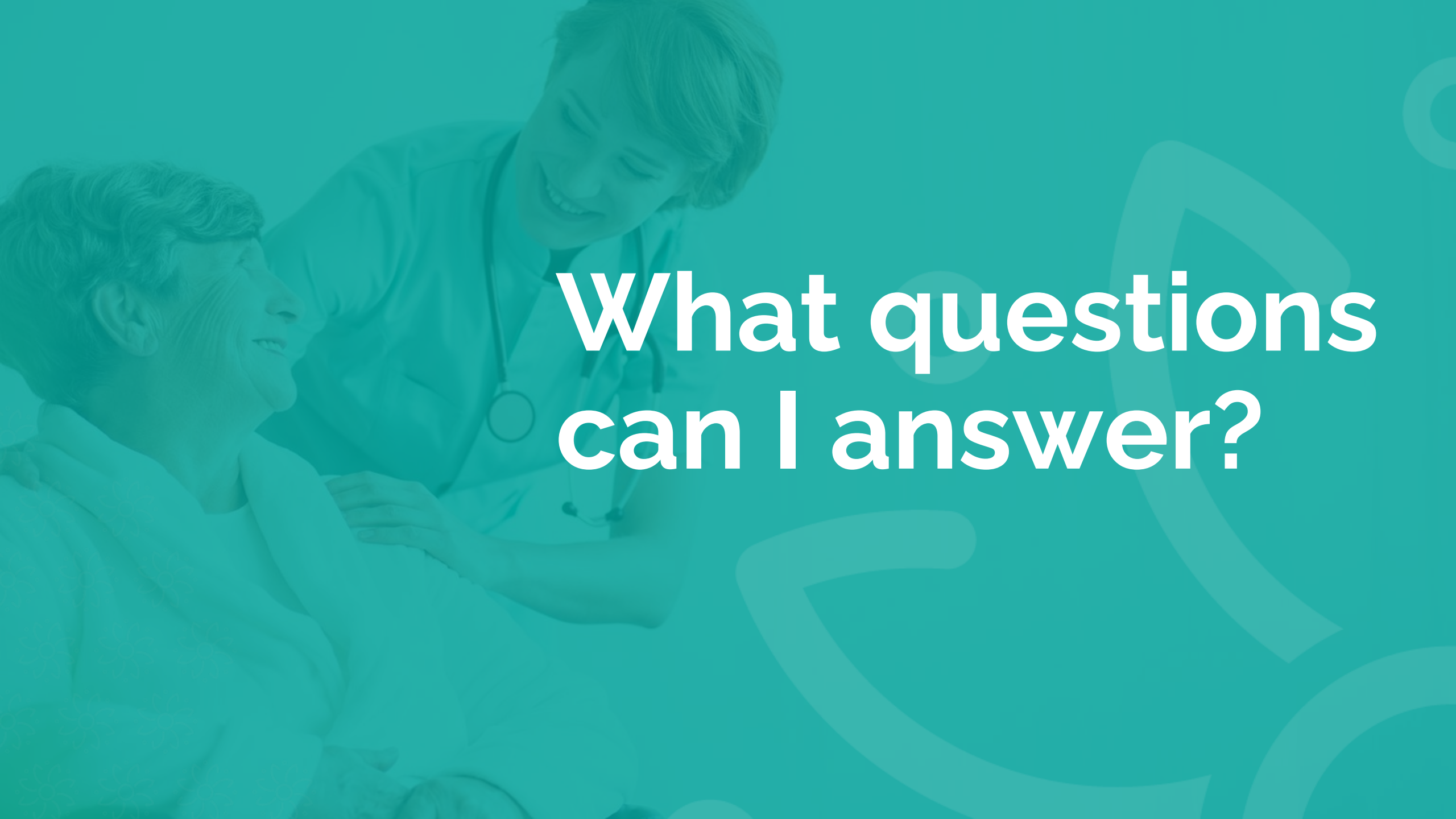
A teal-tinted photograph of a female doctor in a white lab coat with a stethoscope, smiling warmly at an elderly female patient. The patient is also smiling and looking up at the doctor. The background is a solid teal color with faint, large, light-colored abstract shapes. The text 'Secret Sauce' is overlaid in the center in a white, bold, sans-serif font.

Secret Sauce



What does partnering with HDAI look like?



A teal-tinted photograph of a female doctor in a white lab coat with a stethoscope, smiling warmly at an elderly female patient. The patient is also smiling and looking up at the doctor. The background is a solid teal color with faint, large, light-colored abstract shapes.

**What questions
can I answer?**



Stop by our VBCExhibitHall.com Virtual Booth

HEALTH DATA ANALYTICS INSTITUTE

REQUEST INFO

in YouTube

A versatile analytic platform that creates a shared understanding of quantified health risks and personalized care profiles to inform actions with the greatest potential to benefit patients.

Contact us

RESOURCES

info@hda-institute.com

NETWORK INSIGHTS
Identify top-performing and lagging groups and facilities across the country

PERFORMANCE ANALYTICS
Understand cost and quality outcomes by provider, group, facility, and subpopulation

PATIENT HEALTH/ RISK PROFILES
Curated histories and risk predictions for your attributed patients—no IT integration

VBC NEWSSTAND
FLASH INTERVIEWS
VBCExhibitHall.com

THIS WEEK'S GUEST
KARAN VARTY, MD, MHA
DIRECTOR HEALTHCARE PARTNERSHIPS

HEALTH DATA ANALYTICS INSTITUTE

HOSTED BY
JOHN E. SCOTT, MBA, PhD
VP & CO-FOUNDER, VBCExhibitHall.com

Transform patient care with predictive analytics

- Delivers predictors from bedside to boardroom
- Growing library of pre-built, tested algorithms
- No IT resources needed - Start seeing your predictions quickly
- Models built on 100M+ patients

← EXIT BOOTH

VBCExhibitHall.com MAIN LOBBY EXHIBIT HALL EVENTS EXHIBIT WITH US BOARD ROOM LIBRARY CONTACT US



**HEALTH
DATA ANALYTICS
INSTITUTE**

Thank you

Contact us for a review of your 2023 performance.

<https://www.hda-institute.com/>

Kay Mansukhani, VP – Business Development, k.mansukhani@hda-institute.com

Paul Cummings, Senior Manager - Business Development, paul.cummings@HDA-Institute.com

Carola Endicott, VP Customer Engagement and Marketing, carola.endicott@hda-institute.com