

The Johns Hopkins ACG® System

How KPI Ninja, using the Johns Hopkins ACG System, provides integrated, advanced, comprehensive analytics to Health Information Exchanges (HIEs) and health care providers.



THE HIE LANDSCAPE

HIEs make important connections between health plans, hospitals, private practices, providers and public health. They integrate large amounts of vital patient data and make key pieces available for sharing and insight, at state and regional levels. HIEs are critical connectors for providers to view patient information.

Over the past few years, HIEs have made monumental strides in data integration and care alerts, and now are growing to enable population health. More advanced HIEs have grown from transactional data-sharing systems into state- and region-wide enablers of population health. To support this expanded role, HIEs need to leverage different technology beyond the traditional infrastructure.

Accessing the right data – combined with the right analytics – improves the ability of health plans,

92%

of the nation's
population
is represented
in HIEs

2019 HIE Survey¹

89%

percent of
providers feel
HIEs improve
quality of care

HIE Quality and Efficiency Review²

physicians and health system users to maximize HIE value for population-level health improvement. As these users embark on more value-based and risk-taking arrangements, providers are increasingly focused on quality measures, utilization, network and opportunities to reduce costs. A HIE-provided, whole-patient view helps providers understand patient activity outside of their own practice or health system.

Through HIE-enabled population health analytics, health plan, provider and system-level users can understand population make-up, identify interventions for risk prevention, and rapidly adjust care delivery models to meet priority patient needs.

APPLYING POPULATION-LEVEL HIE MARKERS

HIEs can scale the value of advanced, patient-centric analytics to large and small stakeholders alike. And when providers and payors enter performance-based agreements, the local HIE becomes vital to assist with data sharing, facilitate population-level markers, and generate a whole-patient view of diseases, prescriptions and health risk.

Leveraging the ACG System, KPI Ninja offers advanced technology solutions that help maximize the HIE infrastructure to meet the growing population health use cases and enable faster, more targeted results.

HOW KPI NINJA LEVERAGES THE ACG SYSTEM TO PROVIDE VALUE TO USERS

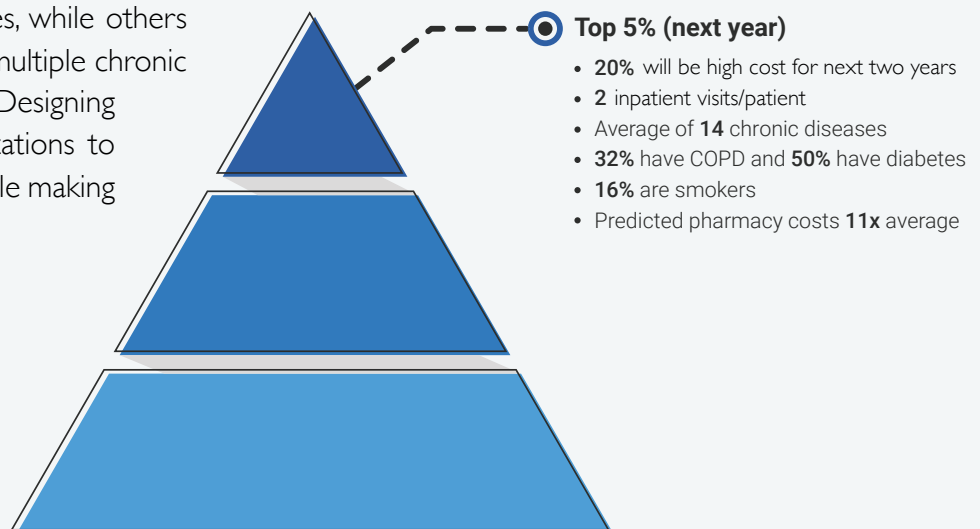
“Building a comprehensive population health management infrastructure for the HIE to support the diverse needs of its members requires expertise around several value-based programs and persistent focus to improve data quality.”

Here are three examples to illustrate how KPI Ninja utilizes the power of the ACG System to offer HIE-provided population health analytics to payors and provider groups in value-based care arrangements.

KPI Ninja’s market-leading interoperability capabilities, coupled with the power of the ACG System, affords HIEs and providers the opportunity to make more real-time and proactive changes to individualized treatment approaches, and supports population health planning and improvement.

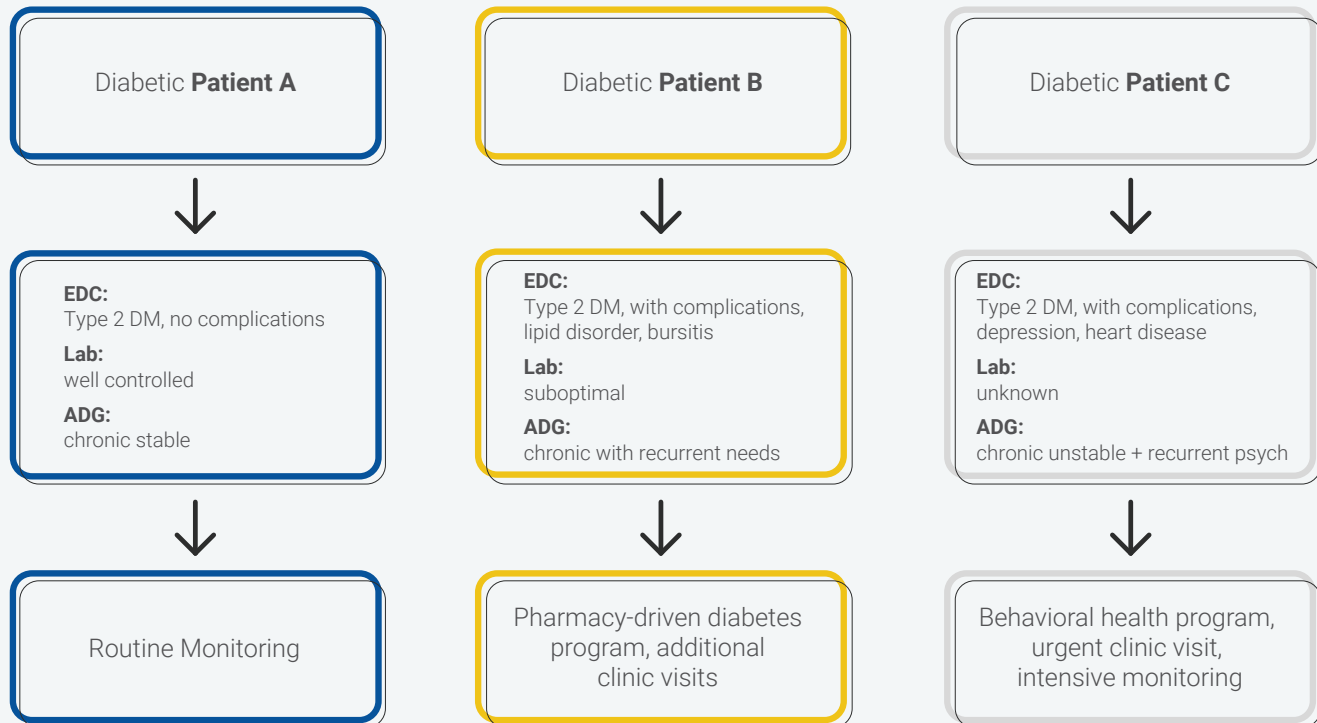
EXAMPLE ONE: INSIGHTFUL RISK STRATIFICATION

The right information – and the right understanding of patient needs – allows providers the ability to stratify patients into high, rising, moderate and low health risk tiers based on predicted future cost. Providers may use this information to understand patient needs and, more importantly, design initiatives to best meet the needs of each targeted group of patients. Some cohorts may benefit from preventive, disease-specific initiatives, while others may need more intensive help for multiple chronic diseases or smoking cessation. Designing projects in this way allows organizations to best meet the needs of patients while making best use of often-limited resources.



EXAMPLE TWO: TARGETED CLINICAL SERVICES

Understanding patient needs drives efficient workflows and matches patients to the best possible clinical interventions. KPI Ninja combines their own interoperability technology and proprietary Unified Data Model with the ACG System's predictive markers to enable physicians to refer patients to the best services. Using data markers to drive workflows ensures patients' priority needs are met, can improve resource allocation, and enables a patient-focused approach to overall health.

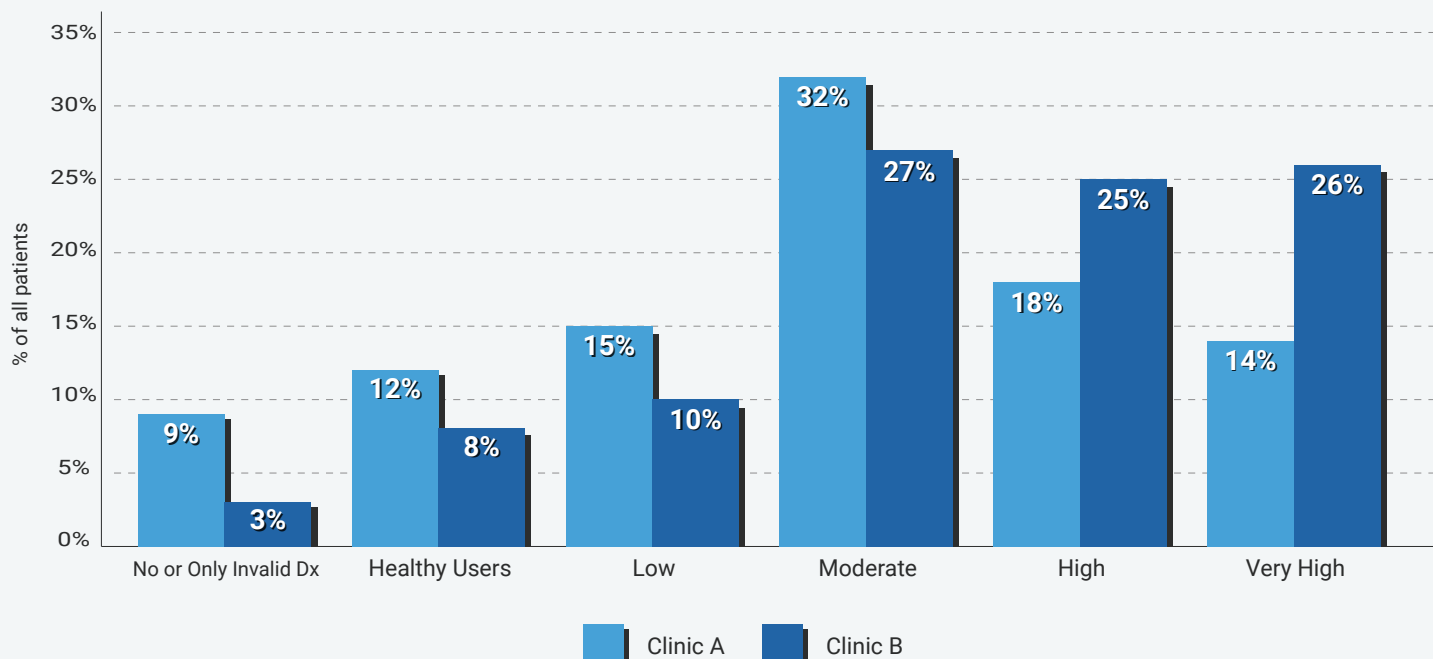


EXAMPLE THREE: MEASURING PERFORMANCE

ACG System markers generate a clinically-based measure of each patient's underlying health. These markers are commonly used to measure risk-adjusted performance at the practice-group level or, if panels are large enough, at the primary care physician level. KPI Ninja's utilization metrics, plus the risk-adjustment markers from the ACG System, enable measurement that accounts for patients' underlying health, creating a more equal playing field that accounts for variation in patient mix. The creation of risk scores as a blend of behavioral, demographic and clinical data provides practitioners with a holistic view of patients – and the ability to focus support on groups with sicker patients – while adopting best-practices from high performers.

Diagnosis Cluster	Clinic A	Clinic B	Population Average	Regional Benchmark
Type 2 Diabetes/1000	132	201	181	168
Hypertension/1000	512	551	534	530

Comparing Anticipated Health Care Needs at Two Clinic Locations



RESULTS

Powered by the ACG System, KPI Ninja provides interoperability-enabled, advanced analytics to understand population needs, track key trends, create risk-adjusted dashboards, and refer patients to the best services and programs to improve their health. These metrics can describe differences between a provider population's health, quality metrics, and risk stratification, allowing leadership to target effort on subgroups most in need of assistance. This sets decision makers up for success with metrics founded in clinical whole-person analysis.

- Understand morbidity of provider panels
- Inform development of clinical programs
- Support provider best practices and incentives
- Facilitate data-driven planning
- Focus quality improvement efforts



ABOUT THE JOHNS HOPKINS ACG SYSTEM:

The ACG System is a flexible, transparent set of tools developed and validated by scientists and clinicians at the Johns Hopkins Bloomberg School of Public Health. The ACG System is used by Medicare, Medicaid and commercial health plans in the U.S.; health care providers; and technology companies. Customers use the ACG System to segment their patient populations and to process their organization's existing medical,

pharmacy and lab data to generate clinical risk markers and predictive models at the population and patient level. The ACG System provides health care analytics teams with the insights they need to inform rapid decisions about patient care, resource planning and service design.



To learn more about the ACG System, or if you are a customer needing further guidance on using the ACG System for risk stratification, please contact acginfo@jh.edu

¹ <https://strategie.com/2019/08/19/first-survey-of-the-strategic-health-information-exchange-collaborative-shiec-shows-health-information-exchanges-hies-provide-critical-national-infrastructure/>

² <https://www.beckershospitalreview.com/healthcare-information-technology/hies-and-interoperability-6-statistics-on-quality-efficiency.html>