



## The Quagmire

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With so much at stake in this era of healthcare reform, there's never been a greater need for critical decision-making.

With overall quality and budgetary responsibility extending beyond the walls of a hospital, clinic, or physician's office, there's no room for errors. While data collection, storage and interoperability characterize the embryonic phase of EHRs and HIEs, the real challenge of how to best use and leverage that data — Big Data — remains daunting. In essence, an acceptable value proposition has been lacking.

From a population health perspective, the most frustrating part of our work is attempting to arrive at the best solution for improving quality while reducing cost — without the right tools. Maslow hit it on the head literally and figuratively with his proverb, if all you have is a hammer, everything looks like a nail. In healthcare today, however, there's little time for banging nails.

Anyone in this field clearly recognizes that the key to effective analytics in such a multidimensional field is precisely matching the right approach to the task at hand.

### CHALLENGES INCLUDE:

- » Relying on routine monthly system-generated reports not designed to address specific issues as they arise.
- » Delegating the responsibility for finding the best answers to advanced IT support with requests that often wind up in a queue that for all intents and purposes seems like a bottomless pit.
- » Asking vendors to customize their solution to meet your needs. Imagine the audacity!
- » Presenting findings to the CFO who didn't quite see it your way. He immediately requests an alternative approach, and you are sent back to the drawing board — again without the right tools.

Frankly we've all been there... and only a select few have emerged unscathed.



SpeedTrack's Population Health Decision Support application is a **comprehensive, easy to use data analytics tool** that enables us to address patient care gaps, risk stratify and identify high-risk patients for referral to our Community Care Network.

**Dolores Green, CEO**

Foundation Accountable Care Network  
Inland Empire Foundation for Medical Care





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## A Transcendent Moment

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How can we expect to improve outcomes and reduce costs within a complex \$3 trillion healthcare system when we don't have the right tools? My answer to that question immediately shifted 180 degrees during my first demo of SpeedTrack's OSHPD CUPID analytics platform. As I progressively assimilated SpeedTrack's impressive array of features, my mind began to spin — imagining solutions to key population health challenges within the SpeedTrack framework. Knowing precisely how to make adjustments is the **key to improving health outcomes** and reducing potentially preventable costs.

- » Confidently showing up at critical meetings with the best answers, and the ability to back them up on the fly.
- » The ability to optimize strategic designs - leveraging clinical domain experience and knowledge with data science to maximize the value of explorative inquiries.

That moment was a true turning point. The excitement I personally felt that day has grown exponentially. It was soon transformed into a quest to work with the SpeedTrack team to develop a population health analytics solution.

I'm pleased to introduce PHDS, or **Population Health Decision Support** - **Barry Bittman, MD, Co-Developer of PHDS.**

## An Unparalleled Software Solution

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As the population health lead for the SpeedTrack development team, I describe PHDS' overall impact with a simple equation:

**Agility + Intelligence = Efficiency & Cost Effectiveness**

PHDS is surprisingly **agile** — enabling us to move quickly and easily through millions of claims and related data in fractions of a second. Termed Guided Information Access (GIA), the system, rather than relying on fixed queries, follows your line of thinking to evolve in accordance with your choices.

And when you elect to alter your path, PHDS is with you, branching out in virtually any direction while exploring that perspective from multiple points of reference. When your CFO sees the challenge differently, PHDS immediately adapts along that line of reasoning.

Yet PHDS does far more than just follow you — it guides you with an underlying **intelligence** — presenting options you may not have previously considered, yet are critical to your final analysis. PHDS' overall augmented curiosity framework was built upon on a heuristic platform, designed from the start as an aid to learning, discovery and problem-solving by

experimental and trial and error means. Imagine what you can discover and accomplish with a highly intelligent inexhaustible assistant that's never challenged by iterative inquiry?

Finally when **agility** is combined with **intelligence**, the result is an unprecedented level of **efficiency & cost effectiveness** that facilitates decision-making and strategic design in a manner you never imagined possible — immediately!

### PHDS ENABLES YOU TO:

- » Discover the answers you need when you need them — now.
- » Conduct meetings with real-time data exploration that accelerates interdisciplinary strategic design.
- » Uncover problems before they surface, and explore the factors that must be adjusted now to alter your critical trajectory.

PHDS is the cost-effective and time-saving solution we need to advance our healthcare delivery system. The possibilities are limitless. There's never been a better time to discover what we don't know!



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## PHDS

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SpeedTrack's PHDS (Population Health Decision Support) is a uniquely flexible outcomes-based explorative data management system that comprehensively serves the needs of ACOs as well as other value-based and alternate payment models.

This unique application provides objective rapid decision-making support essential for incremental practice changes that improve quality and reduce cost across the care continuum.

From a population health perspective, the myriad of complex multidimensional ACO challenges must not be underestimated. Alternative payment models often rely on a confusing calculus driving a report generator that fails to support meaningful transformation. In sharp contrast, PHDS introduces guided exploration that inspires critical thinking and real time assessments that drive effective clinical/operational decisions — and resultant transformational success.

To demonstrate PHDS potential, CMS ACO CCLF (CMS Claims Line Feeds) files have been seamlessly integrated in the background. Through its robust intuitive interface, the initiation of queries from distinct vantage points are precisely matched to key ACO management challenges. With full realization that a single approach cannot serve the needs of all users, preconfigured starting points include the following perspectives:

- » Provider-based: encompassing all ACO practices and providers;
- » Patient-based: focusing on individual beneficiaries;
- » Population-based: offering a comprehensive cohort-based perspective of care beyond ACO providers;
- » Performance-based: focusing on comparative analytics that guide operational improvements.

PHDS distinguishes itself by catalyzing ongoing exploration and deeper (often unanticipated) dives through an intuitive interface that essentially guides the user to progressively seek critical answers. Frankly when you need an assessment for an acute challenge with potentially serious consequences, you do not have to cross your fingers and hope that your EMR vendor or IT support team can fit you in and generate an essential report within a reasonable time frame. PHDS presents the answer precisely when it is needed — NOW!



Knowing precisely how to make adjustments is the **key to improving health outcomes** and reducing potentially preventable costs.

**Barry Bittman, MD**  
Co-Developer of PHDS





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## Seven Categorical Inquiry Examples

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**Risk Stratification:** Who are the at-risk patients, and what are the precise correlates that serve as key risk predictors of utilization? How is the RAF (Risk Adjustment Factor) score correlated with risk stratification?

**Post-Acute Utilization:** Which practices and providers have the highest post-acute utilization, readmissions and ED visits? Which hospitals and post-acute providers are associated with the highest expenditures and potentially preventable services, and why?

**Alignment/Leakage:** How many services and referrals exist within and outside the system or ACO? Are these expenditures associated with specific referral patterns.

**Expenditures:** How do practices and providers compare in terms of expenditures and utilization across the care continuum?

**Predictor Correlates:** Are readmissions and expenditures associated with longer post-discharge follow-up intervals?

**Practice Performance/Attribution:** Which practices have the highest percentage of patients not seen YTD, and which patients should be scheduled immediately? How can the often-overwhelming challenge of patient attribution churn be substantially reduced?

**Beneficiary Identification:** Who are the patients (sorted by relative risk and actual utilization patterns) with specific diseases and comorbidities who could benefit from care coordination strategies?

## SpeedTrack Distinguishing Features

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**PHDS is Smart** - utilizing an advanced faceted GIA navigation algorithm that guides the user through wide-ranging human/machine intelligence-based assessment pathways, you will precisely hone in on the information you need without the inherent constraints of traditional database systems.

**PHDS is Flexible** - while most programs offer a fixed set of structured reports, PHDS provides an open environment that guides both inquiry and reporting. The inherent ability to dynamically review associations on the fly often reveals unanticipated correlations that open new channels of inquiry. Imagine starting with a specific perspective and altering course mid-stream to address questions that arise as findings are progressively revealed. The bottom line is straightforward — the creative latitude afforded by PHDS' intuitive interface provides the answers you need to improve quality and efficiency while reducing expenditures.

**PHDS is Fast** - all data points are pre-associated within an advanced computational matrix platform. The unique advantage of linking or associating all related variables prior to the performance of a query assures optimized computational speed — literally millions of operations are performed generating near instant results.

**PHDS is Affordable** - rather than investing in a toolset that requires ongoing costly updates and customization yet ultimately fails to deliver what you really need when you need it, consider PHDS as a multidimensional learning tool that guides you through a solution-oriented approach. It's time to forget hiring additional IT staff just to generate a required report. It's time to stop struggling through your EMR vendor's maze-like project queue. It's time to work smarter and faster with greater flexibility and affordability than ever imagined possible. It's time to unleash your true potential with SpeedTrack!