Case Study



IPRO's Comprehensive Data-driven Approach

IPRO Deploys Data-driven Approaches as a Core Component of our Efforts to Inform, Improve and Sustain Quality Outcomes

IPRO reduces provider burden with a comprehensive knowledge of specific EHR data formats and reporting dashboards to drive value-based healthcare

The Challenge

IPRO uses data and deploys systematic and comprehensive data-driven approaches to collect information and measure and report outcomes. We also use a range of processes, tools and services designed to minimize provider burden and to improve access to critical information for improvement. IPRO supports transparency of data, outcomes, activity review and more, ensuring that information drives our interventions. Clear, actionable reporting informs us and our collaborators in ascertaining what works, what does not work and how to calculate ROI for given activities. IPRO reviews data, identifies issues, and validates and monitors for improvement, with the goal of helping providers accurately reflect current clinical practice patterns through a variety of federal, state, and IPRO-generated reports, including individual measure analysis.

To accomplish this, IPRO maintains a robust data management infrastructure and an arsenal of tools and services that support timely capture and reporting of accurate data. Table 1 (on next page) describes some of our tools and approaches that provide direct and indirect benefits to providers.

The Approach

IPRO worked with Arnot Health, an integrated regional healthcare system, whose service area includes rural and underserved areas and has facilities located in Health Professional Shortage Areas in NYS's Finger Lakes region. Arnot participated in the Rochester-based High Blood



Pressure Collaborative and initiated improvements to improve patient outcomes. IPRO engaged FIGmd, a healthcare solutions company, to extract clinical and demographic EHR data from 250 participating clinicians



and transmit the data securely to IPRO's ONC-certified clinical data registry (CDR), which hosts 12 quality measures,

including the four Million Hearts® ABCS (aspirin, blood pressure control, cholesterol and smoking cessation) metrics, plus influenza and PPV (Pneumococcal Polysaccharide Vaccine) immunizations.

Results

IPRO created a dashboard of performance measures to focus and direct quality improvement efforts for Arnot. The transparency of Arnot's EHR enabled its clinicians to communicate patient information and monitor progress. Arnot achieved the highest rates of hypertension control in the nine-county Finger Lakes region, successfully managing its Stage 2 hypertension population and reducing its proportion of patients with uncontrolled hypertension having dangerously high blood pressure to 11.5%, surpassing the Collaborative's goal of 12.5%. This percentage is less

In-depth perspective of IPRO solutions at work



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continued

than half of the Finger Lakes region's rate of 25.1%. Arnot Health was selected as a finalist for the first phase of the 2018 Million Hearts[®] Hypertension Control Challenge. Sustainability is achieved through the ongoing use of the RPC and the associated dashboard. Once deployed, the registry is available for use indefinitely, for these and any future quality measures.

Data Tools and Approaches to Enable Quality Improvements

Data Tool/Approach	Provider Benefits/Burden Reduction
HL7-aware automated data extraction tools and processes	Speed data collection for faster reporting; improve data accuracy; eliminate manual extraction
Flexible, state-of-the-art data automation and visualization tools such as Tableau to produce heat maps, dashboards, and other visual data representations	Improve provider decision-making; real-time data updates for repeatable reports over time; users engage with data, ask questions, solve problems and create value; ability to spot patterns, trends or correlations; quicker assimilation of data to glean insights
Ability to ingest and process claims, clinical and other data from any source, at any volume	Reduce provider burden; reduce data lag and cost
Augment CMS data with data collection programs for individual provider settings	Improve opportunity to address quality improvement using readily accessible and timely provider-level data
HIPAA-compliant, FedRAMP- approved cloud infrastructure for data services	Partner with providers to maximize value of their data; scalable system to meet individual activity needs; leverage Amazon Web Services' FedRAMP "High" baseline, NIST compliance and HIPAA readiness
Use of SMART on FHIR	Integrate apps with EHRs, portals, HIEs for data collection or decision support
IPRO-developed ONC-certified clinical data registry (CDR)	Connect directly to EHR databases for nightly, unattended abstraction and dashboarding key quality indicators
Strong relationships with HIT entities, e.g., EHR-vendor community, health information networks, standards groups	Ability to interact and interoperate with any source of data, regardless of size, source or format, to meet provider quality improvement requirements

IPRO brings policy ideas to life

IPRO helps clients realize better health through its organizational competencies. We

- Support state and federal government agency problem solving
- Foster consensus among varied stakeholders for quality improvement action
- Evaluate and select most appropriate methodologies to investigate clinical quality problems
- Facilitate collaborative provider education and action
- Harness information technology to drive quality improvement
- Build and apply quality measures
- Collect and analyze data on large scale
- Create tools to assess performance

For information on IPRO, contact us at info@ipro.org.