

## EXECUTIVE SUMMARY

Inovalon proposes a fully integrated modular platform which includes a truly unique suite of data aggregation, data warehouse, advanced analytics, and business intelligence solutions which address multiple enterprise business needs for CVS Health and its clients.

Inovalon is in a unique position to enable CVS Health to achieve its business objectives for the following reasons:

- We have the physical infrastructure, security, disaster recovery, and business continuity plans to ensure confidentiality of data, continuity of operations, and regulatory compliance
- Our thought leadership, strategy development, and project management experience represent the industry's best collection of expertise and experience around data aggregation, analytics, and performance measurement
- Our robust data integration system, iPORT™, seamlessly transfers data between disparate data sources allowing rapid data integration and enabling client to unlock the power of massive data sets to help drive business objectives
- Our industry-leading support team consists of a dedicated Client Services Manager throughout the project, as well as access to an implementation manager and clinical and IT support
- Inovalon's solutions are flexible, scalable, and cost effective
- We provide a single platform for risk score accuracy, quality improvement, cost and utilization and regulatory compliance reporting, as well as resources and services to support these functions
- Over 65 percent of the outsourced managed care quality reporting in the United States uses Inovalon's Quality Spectrum® platform
- Inovalon continuously invests in innovation, strategic alliances, infrastructure, and technology to significantly decrease delivery cost and provide maximum program control and flexibility to clients

### Value Proposition to CVS Health

- Advanced technologies enabling the import of disparate quality performance, risk and third party data through an automated process and EHR interoperability
- Confidentiality of data, continuity of operations, and regulatory compliance through physical infrastructure, security, disaster recovery, and business continuity plans – all U.S.-based
- Industry-leading member-level advanced, predictive analytics Big Data platform delivering quality, HCC risk, medical and pharmacy utilization, and other health care dimensions
- Benchmarked comparisons of performance across quality, utilization, cost, and other dimensions at the national, state, and county levels
- User-friendly, intuitive business intelligence visualization to monitor member and aggregate-level metrics to manage costs
- Highly seasoned professionals offering deep subject matter expertise and a nationwide presence

- Inovalon works with commercial, commercial ACA, Medicare Advantage, and managed Medicaid lines of business and with dual integrated plans across the United States, Puerto Rico, and the District of Columbia.

## Our Proposed Solutions

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For CVS Health, we recommend our tailored solutions comprised of the following:

- iPORT™ data integration engine and data warehouse
- Quality Spectrum® predictive analytics which support intervention planning, aggregate and member-level measurement across numerous domains and overall population and program development
- INDICES® – business intelligence and financial reporting

### **iPORT™ data integration engine and data warehouse**

Inovalon can integrate data from multiple systems by using Inovalon’s proprietary iPORT™ system. iPORT™ seamlessly transfers and links data between disparate data sources including EHRs, lab results, radiology data, membership data, provider data, behavioral data, medical and pharmacy claims, vision and dental claims, case management, HRA/patient-reported data, and post-acute care—enabling access to underlying data structures of this data for internal analytic outcome studies.

Inovalon places significant focus and resources on ensuring that client data is as complete and accurate as possible. This is accomplished through the application of more than 1,100 data integrity analyses deployed through multi-tier, longitudinal data quality checks; configurable validation rules; and the identification and correction of duplicate and conflicting data through the inclusion of benchmarking thresholds from one of the nation’s largest referential datasets, the Medical Outcomes Research for Effectiveness and Economics Registry (MORE<sup>2</sup> Registry®).

Inovalon’s data integrity capabilities offer the flexibility to change file formats and structure as system or table changes occur within CVS Health . Additionally, our “third party” position allows it to, without bias, identify and address data anomalies that are found through aggressive interrogation of data originating from a myriad of CVS Health source systems.

Inovalon’s Master Patient Index (MPI) engine matches patients on data elements including, name, ID number, gender, date of birth, address, and other unique identifiers such as an HIC number or a Medicaid beneficiary number. We are also able to incorporate additional matching data elements, as appropriate, upon client request. Each of these elements is used in a two-step data matching process that is a hybrid of a deterministic, direct one-to-one matching precision, as well as a second tier probabilistic matching on derivations of the same fields used in the prior step. This hybrid approach is used in certain use cases such as with EHR interoperability.

## Quality Spectrum<sup>®</sup> – Analytics Solution

Quality Spectrum<sup>®</sup> focuses on the clinical measures that impact member outcomes, and applies advanced cloud-based prescriptive analytics to identify impactable patient behavior based on their utilization history. Powered from one of the industry’s largest health care datasets, Quality Spectrum<sup>®</sup> is able to compare a client’s data to national and regional benchmarks, and then create data-driven patient-specific intervention strategies. Partnering with clients to address unique or specific goals, Quality Spectrum<sup>™</sup> provides measurable targets and data analysis to assist in setting targets, identification of care gaps, and the implementation of interventions that improve care quality and financial outcomes (Figure 2). Additionally, Inovalon’s analytics platform employs the numerous measures and groupers to assess intervention and network effectiveness.

In addition to our advanced analytical and intervention capabilities, Inovalon brings 17 years of pertinent clinical experience; a proven performance track record; strategic independence; a single platform for risk accuracy, quality measurement, and improvement; redundant infrastructure; and an unparalleled understanding of the commercial ACA, Medicare Advantage, and Managed Medicaid technical specifications and compliance requirements. As the nation’s largest and leading quality analytics and risk accuracy company, Inovalon offers a comprehensive, flexible, and integrated solution to meet CVS Health’s operational objectives (Figure 1).



Figure 1. The Quality Spectrum<sup>®</sup> Quality Improvement Solution



**Figure 2. Inovalon’s Integrated Gap Closure Solution**

Inovalon’s turnkey solution includes comprehensive analytics, timely actionable reports, and collaborative consultative strategic planning – coupled with written, telephonic, Web-based, and face-to-face communication and care coordination campaigns. These campaigns can be delivered all or in part by Inovalon in partnership with CVS Health to actively drive care gap closures and achieve measurable quality score improvement. At a high level, Quality Spectrum®:

- Delivers market-leading sophistication of analysis, leveraging extensive comparative data, as well as both member and provider predictive analytics
- Enables highly targeted identification of specific member-measure improvements and the method, message, and timing needed to achieve meaningful impact in an ROI-sensitive manner

Inovalon groups clinical events (inpatient and outpatient encounters for example) to patient cohorts and often chronic-disease patient populations in several applications on our platform. At the highest level, Inovalon’s INDICES® visualization platform groups all patient experience across dimensions of inpatient, outpatient, and medical/pharmacy cost and utilization. There are numerous dimensional sub-groupers for both medical and pharmacy utilization that either are updated from national sources (e.g., MS-DRGs and HCCs from CMS), or they are organically developed by Inovalon and are informed by our clinical experts such as pharmacy groupers that link NDCs and NDC families to maintenance drug classes.

Grouping both inpatient and outpatient events, not only across the common groupers described above for INDICES® also occurs within our Quality Spectrum® analytics platforms where event and event categories are created and attached to population cohorts when identifying patient risk (such as HCC groupers) or even clinical quality compliance as is found in many of the event groupers applied for HEDIS® and common quality measurement. Utilizing the Quality Spectrum® platform, Inovalon has the ability to design measures supporting the Prevention Quality Indicators (PQI) that may be used to identify quality of care for ambulatory care sensitive conditions such as diabetes long-term complications, bacterial pneumonia, heart failure, and hypertension. Our platform and visualization solutions enable the end-user to sort by and group cohorts and analyze patients on these PQI cohorts.

- As it relates to episode groupers, our platform leverages integrated and normalized Part A and Part B claims – grouping all utilizations from the beginning of the episode through 30, 60, or 90 days depending on the length of the episode, and prorates the payment amounts and lengths of stay for any utilization that starts during the episode but does not finish before the episode runs out. The result of this process is a set of summary files that contain payment and utilization data particular to that episode. Finally, claim payment amounts are aggregated within each episode to mirror CMS financial performance calculations, specifically applying proration, claim exclusions, and outlier thresholds.

## INDICES® – Business Intelligence and Reporting Solution

Inovalon provides comprehensive management reporting and data analysis, allowing CVS Health to review and analyze program results at an executive level, as well as drill down to conduct analysis at a detailed or granular member or provider level. INDICES®, our business intelligence and reporting solution, offers a wide suite of standard reports and self-service dashboards that can be easily configured to create a desired view of the data to meet the end users' business needs. The user-friendly interface, built on an integrated platform utilizing Microsoft and Tableau technologies, is directly accessing data residing in the Inovalon data lake. INDICES® provides real-time access and insight into data analytics and analysis that is critical to success in today's competitive Health care marketplace.

Standard filters; such as, provider group, age, geography, payer group, line-of-business, date/month, etc. are available on every dashboard and reports in the INDICES® portal in real time. Additionally, drill-downs and slice-and-dice techniques can be performed to create a custom view, such as:

- *Decomposition tree*: This gives the user the ability to filter into specific dimensions and dive deeper into presented data in a hierarchical manner.
- *Drill down/drill up*: This gives the user the ability to customize and filter the dashboard views to reflect the appropriate representation. Gives users the ability to analyze data across different datasets or dimensions (such as: age, gender, geography, and provider groups) and intersections.
- *Member, provider, and provider group searches*: Allows the user to filter and view individual profile reporting.

- *Customizable member cohorts:* Created directly by CVS Health through an easy-to-use member ID upload process.
- *Raw data access:* Ability to access and export raw data for additional analysis using 3<sup>rd</sup> party applications and software.

The reports and dashboards have many dimensions, such as: age, gender, payer, provider, geography, interventions, population, and contract, which users can configure to reflect results and visualizations. This wide suite of reports and dashboards are compiled based on collective feedback provided by our various partners, including some of the country's largest Health plans. All INDICES<sup>®</sup> reports and dashboards are print-friendly and are downloadable in several formats for further analysis or third-party application integration, such as Excel, CSV, PDF, Word, PowerPoint, and HTML. The user has the ability to export the entire dashboard or different parts (charts visualizations or numerical details) of the dashboard based on need.

Inovalon is able to expand on the reporting capabilities within INDICES<sup>®</sup> by creating customized reports based on the business needs of CVS Health. As an example, Inovalon generated a custom *Rheumatoid Arthritis* (RA) member detail report to support one of our health plan clients. This monthly report identified compliant DMARD members with suspected RA diagnosis gaps, to drive year-end medical record review strategies (see Figure 3 for sample INDICES<sup>®</sup> reports).



Figure 3. INDICES<sup>®</sup> Sample Dashboard Reports



In closing, Inovalon appreciates the opportunity to respond to CVS Health's Request for Information for Database Warehouse and Analytical Services solution. We are excited to further discuss the benefits of CVS Health leveraging our cloud-based big data analytics solutions to facilitate informed decision making and look forward to the opportunity to review this information in more detail with CVS Health in the very near future.