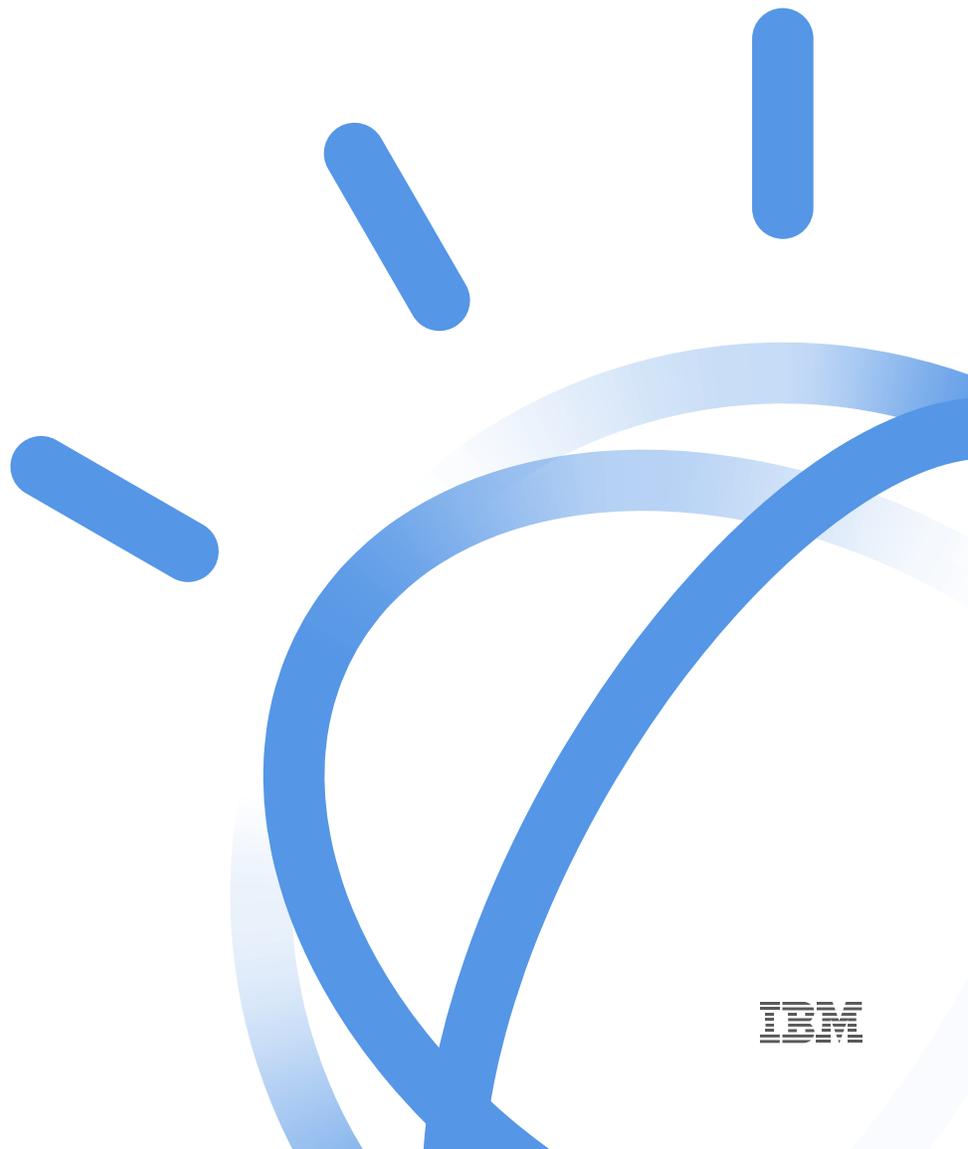# IBM Explorys EPM: Measure

Comparative metrics for providers, groups and locations

Watson Health™

IBM

- SaaS-based applications that enable rapid population management, and performance measurement
- Utilize industry standard user interfaces and security mechanisms
- Enable holistic population measurement and performance measurement of quality and adherence to care guidelines
- Action-driven benchmarks and scorecards support comparison at the enterprise, department, provider, and patient levels
- Enable users to compare and identify outliers among providers and their patients
- Integrated framework allows for correlation of millions of clinical, operational, and financial events
- Open framework with extensive measurement libraries

Healthcare big data put to work

The IBM Explorys EPM Application

The IBM® Explorys EPM Application Suite is a set of Software-as-a-Service (SaaS)-based applications that enables rapid population management, performance measurement, and effective engagement and outreach to patients and providers. These applications were built to help users easily identify opportunities, measure performance toward objectives, and engage providers, care coordinators, and patients.

Designed for off-the-shelf use, these applications were built to run on standard web browsers and utilize industry standard user interfaces and security mechanisms.

Population Performance Management

IBM® Explorys EPM: Measure enables users to conduct holistic population measurement and performance measurement of quality and evaluate adherence to care guidelines across providers and patients who are attributed to them. It enables users to compare and identify outliers among providers and their patients, as well as variations in care that can drive expenses such as the over-utilization of certain services or high readmission and length of stay rates.

Help enable providers to deliver targeted healthcare

The EPM: Measure application is an integrated framework for correlating billions of clinical, operational, and financial events into action-driven benchmarks and scorecards for comparison at the enterprise, department, provider, and patient levels. Designed to serve multiple roles and audiences within a healthcare organization, EPM: Measure enables senior leadership, quality officers, care coordinators, and individual providers to establish benchmark targets, view historical performance against those targets, and take action based upon specific information.

Leverage an industry-leading healthcare data platform

EPM: Measure utilizes the IBM® Explorys Data Grid, a private cloud-computing platform with integrated data curation and standardization and high-speed data access. The application also works in conjunction with the other components of the IBM Explorys EPM Suite of Applications.

Open framework with extensive measurement libraries

By applying pre-built/purpose-driven libraries containing hundreds of measures for disease management, wellness, and pay-for-performance analytics, organizations can begin rolling out programs across their network in weeks. These libraries are based upon industry standards endorsed by NQF, NCQA, and CMS. Using the Watson Health™ Measure Definition Language (MDL), these measures can be easily customized and configured to help meet the specific needs of an organization and its programs.

Figure 1: Example of an easy-to-read measure definition available through the Measure Highlighting document

Figure 2: Measure Highlighting document. The Evidence Highlighting document is the same as the Measure Highlighting document, but with patient data added.

Easy to understand Measure Definition Language

In addition to presenting measure criteria in MDL, a more narrative, human-readable version is available in the EPM: Measure Highlighting Document. EPM: Measure Highlighting provides critical measure information in an easy-to-read format that focuses on key aspects of the measure such as denominator, numerator, exclusions, exceptions and reference period.

Evidence Highlighting

Evidence Highlighting accelerates measure validation by highlighting the specific criteria that caused a patient to be included in, or excluded from a measure result. The ability to view the patients and correlating system identifiers in each aspect of the measure provides key insights on the measure results. This saves on analysis time and provides a clear evidence profile for the measure.

EPM: Measure catalog

The EPM: Measure catalog contains a diverse list of libraries containing hundreds of measures for disease management, wellness, and P4P analytics endorsed by industry standards including NQF, NCQA, and HEDIS as well as risk adjusted outcomes. The following is a sampling of the available measure libraries:

- ACO Clinical Management
- IQI
- PQI
- HEDIS
- Hospital Compare
- Asthma
- Cardiovascular Disease
- Diabetes
- Hospital Acquired Conditions
- Community Care
- Inpatient
- Infectious Disease
- Risk Adjustment

Figure 3: Scorecards support a complete library of the most recent versions of program defined measures with the flexibility to build role specific views, including the ability to customize the organizational chart and attribution to make sure that the most important information is made available to drive the right action

Note: The names and information that appear in the figures in this paper are used fictitiously for sample purposes only, and any resemblance to actual persons is entirely coincidental.

Disease management (process)

- Diabetes: A1c ordered
- Diabetes: Pneumococcal vaccination
- Diabetes: Eye examination
- Diabetes: Kidney disease screening/treatment
- Hypertension: BP measurement
- Hypertension: Kidney disease screening
- Heart failure: LV systolic function assessed (i.e., echo)
- Heart failure: Weight assessment
- Heart failure: Blood pressure assessment
- Heart failure: Laboratory workup
- Heart failure: ACE/ARB treatment for Systolic HF
- Heart failure: Beta-blocker treatment for Systolic HF
- Heart failure: Use of Warfarin with co-morbid Atrial Fib
- CKD: BP measurement
- CAD: Use of aspirin
- CAD: Use of beta-blocker

Disease management (outcomes)

- Diabetes good control: A1c < 8 percent
- Diabetes bad control: A1c > 9 percent
- Diabetes: BP < 140/90
- Diabetes: LDL < 100 or Statin prescribed
- Diabetes: BMI < 30
- Diabetes: Non-smoker
- Hypertension: Good control: BP < 140/90
- Heart failure: Readmission rate within 30 days

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IBM Explorys EPM: Measure

Health and wellness
 – Hypertension screening
 – Hyperlipidemia screening
 – Adult weight screening
 – Adult weight counseling
 – Influenza vaccination
 – Pneumococcal vaccination
 – Adult hyperlipidemia screening
 – Adult diabetes screening
 – Cervical cancer screening
 – Colorectal cancer screening
 – Breast cancer screening
 – Chlamydia screening
 – Tobacco screening
 – Tobacco use counseling
 – Child and adolescent screenings

Operational metrics
 – Number of hospital admissions
 – Patient panel

About IBM Watson Health

Watson is the first commercially available cognitive computing capability representing a new era in computing. The system, delivered through the cloud, analyzes high volumes of data, understands complex questions posed in natural language, and proposes evidence-based answers. Watson continuously learns, gaining in value and knowledge over time, from previous interactions. In April 2015, the company launched IBM Watson Health and the Watson Health Cloud platform. The new unit works with doctors, researchers and insurers to help them innovate by surfacing insights from the massive amount of personal health data being created and shared daily. The Watson Health Cloud can mask patient identities and allow for information to be shared and combined with a dynamic and constantly growing aggregated view of clinical, research and social health data.

For more information on IBM Watson Health, visit: ibm.com/watsonhealth, and for more information on IBM Healthcare, visit: ibm.com/healthcare.

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