

Population Builder Application

Increase analyst effectiveness and reduce analytics development time by quickly defining custom populations for ad-hoc analytics, quality improvement, and research

Type: Software Application

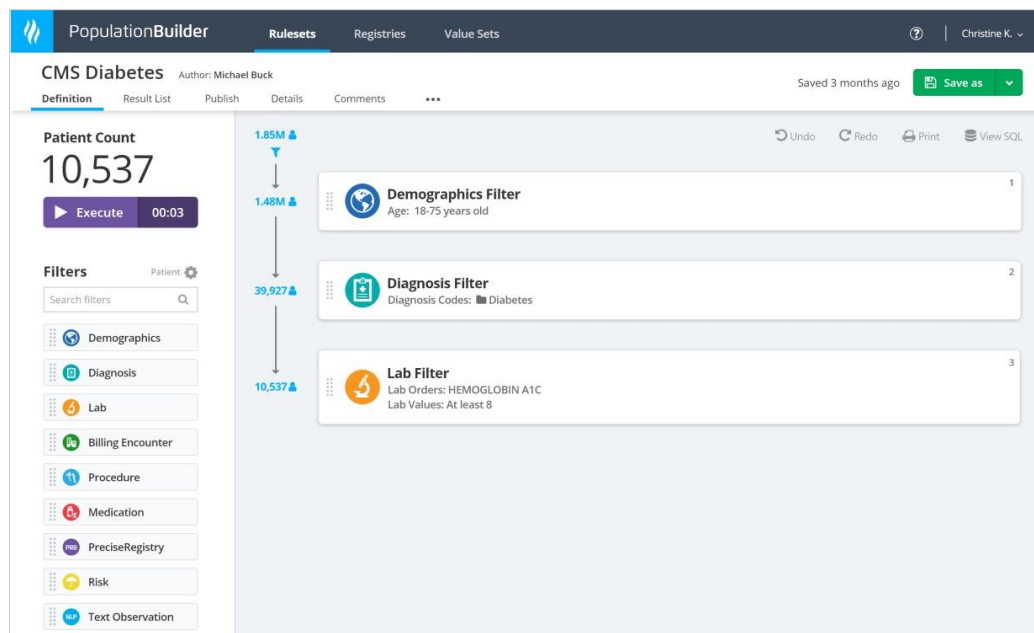
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The **Population Builder™ Application** is a visually-oriented application that allows users to define populations quickly, without using sophisticated or customized SQL coding. Through rapid ad-hoc analysis capabilities, Population Builder enables organizations to reduce analyst workload and increase analytics productivity. Analysts can leverage Population Builder's reusable elements such as value sets and populations to improve data governance and consistency.

Organizations can also use Population Builder to author reusable population definitions that can be used for analytics initiatives in other applications, including feasibility analysis for research opportunities.



The screenshot displays the Population Builder application interface. At the top, it shows the application name 'PopulationBuilder' and navigation tabs for 'Rulesets', 'Registries', and 'Value Sets'. The current view is for a 'CMS Diabetes' population definition, created by Michael Buck, saved 3 months ago. The interface shows a patient count of 10,537. A flow diagram illustrates the population building process: starting with 1.85M patients, applying a 'Demographics Filter' (Age: 18-75 years old) results in 1.48M patients, then applying a 'Diagnosis Filter' (Diagnosis Codes: Diabetes) results in 39,927 patients, and finally applying a 'Lab Filter' (Lab Orders: HEMOGLOBIN A1C, Lab Values: At least 8) results in the final population of 10,537 patients. A sidebar on the left lists various filter categories like Demographics, Diagnosis, Lab, Billing Encounter, Procedure, Medication, PreciseRegistry, Risk, and Text Observation.

Population Builder enables users to dynamically build patient populations on the fly.

The problem

Healthcare organizations constantly struggle to decrease the time-to-value for their analytics investments. And existing analytics staff are overwhelmed by high volumes of custom analytics requests, requiring organizations to consider hiring additional expensive analytics to scale capacity.

Population Builder enables organizations to do more with their existing analytics resources, while expanding the benefits of their analytics investments to a broader range of stakeholders. Population Builder not only helps relieve the pressure on overburdened analysts with too many report requests, it also helps healthcare organizations realize the potential ROI of their analytics investments.

Intended Users

- Quality improvement leadership
- Care management leadership
- Clinical analysts
- Researchers
- Application developers

Potential data sources

- EMR - Clinical
- Claims
- Finance/Costing
- Health Catalyst Subject Area Marts (SAM)
- Health Catalyst Source Marts
- EMR
- IDEA
- Any SQL Server Data Source

Success stories

For examples of how customers have used Health Catalyst products and services to improve outcomes, visit <https://www.healthcatalyst.com/knowledge-center/success-stories/>

Our approach

Population Builder provides an elegant interface that helps clinicians, analysts, and other stakeholders collaborate to quickly build populations of interest. This simplified process decreases population definition time by 50% or more—guaranteed. Analysts can immediately export these populations for use in improvement applications, reporting, and research.

Benefits and features

- **Dramatically reduce analytics development time** – Replace lower-level reporting work with a collaborative process, using a visual population-building interface.
- **Unleash the analytic use of data throughout your organization** – Democratize and govern access to your data assets throughout your organization and reduce stakeholder dependence on expensive, hard-to-find SQL experts.
- **Improve stakeholder buy-in and trust throughout the analytics process** – Population Builder's elegant drag-and-drop interface enables non-technical analysts and stakeholders to build and modify populations, exposing transparent definitions to all stakeholders.
- **Speed up analysis and accuracy** – The Population Builder library includes access to 400 nationally recognized populations, as well as national quality improvement and regulatory code sets to build accurate populations faster.
- **Maintain and govern organization-wide population definitions for key populations** – Reusable population and value sets are built across clients using shared data marts—and published and reused across the Health Catalyst Data Operating System (DOS™).
- **Reduce costs** – Grow analytics team capabilities without increasing headcount.

Use cases

- **A quality improvement leadership team** needs to define and identify high-risk cohorts that need targeted intervention in the coming year—potential opioid abusers and patients with severe persistent mental illness. The team works together to define these populations based on multiple regulatory and operational criteria.
- **A clinical analyst** needs to fulfill a request for high-level patient counts for an emerging program under consideration by a clinical department. Using predefined content, she quickly shares a preliminary result and then refines the result in collaboration with a clinician from the clinical program.
- **A researcher** has identified a new grant opportunity that requires a specific enrollment threshold to qualify. Using a non-PHI role within Population Builder (limiting the researcher to view selected, non-PHI information only), the researcher can quickly determine if they have the minimum number of eligible patients to apply for the grant.
- **A care management coordinator** needs to reach out to a specific sub-population of high-risk patients to alert them to take particular action. He defines and sends the appropriate population definition to the Care Management application for follow-up.
- **An application developer** reuses the population definitions found in one Health Catalyst application in an emerging solution, simplifying installation and maintenance tasks.

Contact us

For more information on how Health Catalyst products and services can help your organization, please contact us:

- Reach out to your sales representative
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- Email us at info@healthcatalyst.com

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