

Zaher Karp, MPH

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SUMMARY

Data platform leader building production analytics systems in regulated healthcare for 15+ years. Deep expertise in HEDIS, CMS Medicare Stars, and HIPAA-compliant data handling across Epic, Cerner, Veradigm, and athenahealth.

EXPERIENCE

Baltimore Health Analytics | Lead Data Engineer

Nov 2025 – Present

MariaDB, Python, JavaScript, Ruby on Rails, Docker

- Own the data platform for a Medicare Advantage analytics product, including ETL/ELT architecture, stored procedure design, and the regulatory validation layer against CMS technical specifications
- Hardened and validated an ETS forecasting pipeline for Stars cutpoint prediction under regulatory scrutiny, reducing forecast error 34–53% versus standard Holt-Winters by downweighting COVID-era outliers with robust M-estimators
- Built HEDIS TRC, BPD, and CBP benchmarking pipelines using a pooled top-decile denominator methodology to produce structurally defensible performance ceilings
- Ported a legacy Perl pharmacy claims pipeline (Diabetes, RAS Antagonists, Statins PDC) to Python with pre-flight validation, structured logging, and MariaDB compatibility
- Lead a distributed engineering and QA team across schema design, code review, and release decisions; design data quality frameworks and release-readiness rubrics

Healthfinch (acquired by Health Catalyst) | Analytics Manager

Dec 2017 – Aug 2025

AWS (S3, Redshift), Azure, Databricks, dbt, SQL, Python (pandas, PySpark, Jinja), Airflow, Tableau, Sisense, DataDog

- First analytics hire; built HIPAA and HITRUST certified data infrastructure on AWS and promoted to Manager after one year
- Built and scaled the data platform supporting value-based care and billing analytics across 50+ health systems on Epic, Cerner, Veradigm, and athenahealth
- Led analytics integration through Health Catalyst acquisition, migrating infrastructure from AWS to Azure and Databricks and rebuilding the analytics layer using medallion architecture (bronze/silver/gold) while maintaining continuity of service across the combined portfolio
- Reduced AWS S3 storage costs ~50% and ETL load time 24+ hours through infrastructure redesign, storage-tier rationalization, and partitioning strategy
- Standardized legacy analytics into governed ELT pipelines and shared stored procedures (~70% codebase reduction); established semantic layers and data governance practices enabling 7x Sisense user growth and eliminating 400+ manual hours per quarter
- Designed HIPAA and HITRUST compliant security architecture and observability for analytics platforms; built ROI models supporting \$1MM+ in recurring revenue decisions

University of Wisconsin-Madison | Researcher and Research Specialist

Sep 2009 – Jun 2018

SAS, Stata, R, NVivo, Qualtrics, Epic

- Co-authored 6+ peer-reviewed publications on ACO shared savings, cancer screening performance, and Electronic Health Record (EHR) optimization; contributed across Family Medicine, Internal Medicine, Pediatrics, and Population Health Sciences
- Supported \$250,000+ in federal grants (AHRQ, NIH, PCORI) through quantitative and qualitative analysis, manuscript writing, and IRB compliance

SKILLS

Data platform: SQL (Postgres, SQL Server, MySQL, MariaDB), Python (pandas, PySpark, Jinja), JavaScript, dbt, Airflow, Docker, AWS (S3, Redshift), Databricks, Azure, Ruby on Rails, Perl, R, git

Healthcare domain: HEDIS, CMS Medicare Stars, HIPAA, HITRUST, Electronic Health Record (EHR) systems (Epic Clarity, Cerner, Veradigm, athenahealth), FHIR, HL7, CMS technical specifications, value-based care, ACO / MSSP

Governance and delivery: ETL/ELT architecture, data modeling, semantic layers, metric governance, release readiness, data quality frameworks, cross-functional stakeholder communication

BI and observability: Tableau, Sisense, Power BI, QuickSight, Grafana, DataDog, SumoLogic

Research methods: Biostatistics, mixed-methods research, survey methodology, IRB compliance, qualitative coding (NVivo)

EDUCATION

Master of Public Health, Biostatistics | University of Wisconsin-Madison | Dec 2015

Graduate Certificate, Patient Safety (Industrial & Systems Engineering) | University of Wisconsin-Madison | Dec 2015

Bachelor of Arts, English Literature | University of Wisconsin-Madison | May 2007

AWARDS AND RECOGNITION

Wisconsin Entrepreneurial Bootcamp Fellow | Patient Choice Award (NAPCRG 2015, co-authored with Pandhi) | Digital Fellow | International IPM Excellence Award