

Why do we need a competency model for healthcare analytics?

ThotWave’s Healthcare Analytics Competency Model© defines the knowledge, skills, abilities, and characteristics necessary to succeed in the field of healthcare analytics.

A competency model anchors what it means to 'do' health analytics by mapping the analytics functions, skills, tasks, and knowledge to a defined set of competencies that can be mixed and matched to define different roles on an analytics team. The reality is, healthcare is relatively new to adding analytical techniques to the portfolio of business functions. Individuals that thrive on analytics teams often come from diverse and sometimes non-traditional backgrounds. Teams that provide healthcare analytics services often develop by way of evolution, not selection. This means that existing job descriptions can be poor representations of the work required.

How do you define the competencies?

Developed through a process of healthcare analytic workplace analysis and expert knowledge, our model includes nine domains of knowledge, skills, and behaviors that need to be demonstrated within a healthcare analytics team. We have identified 42 competencies that align with 280 distinct learning objectives.

 <p>Healthcare Serve as a subject matter expert within the team</p>	 <p>Analytical Thinking Use statistical methods to guide answering questions.</p>	 <p>Data Management Ensure data’s availability, usability, integrity, and security</p>
 <p>Data Exploration Develop structured processes to explore data</p>	 <p>Data Viz Communicate data insights through the art of storytelling</p>	 <p>Technology Literacy Utilize a wide variety of technology to support decision making</p>
 <p>Strategic Thinking Utilize innovation and systems thinking to move the organization forward</p>	 <p>Leadership Encourage the growth of individual team members for healthy environments</p>	 <p>Product Mgmt Ensure the team reaches goals as product manager</p>

What job roles fit with the competency model?

We have created a collection of 19 distinct job role profiles having detailed competency benchmarks for health analytics that cover up to four experience levels for five professional job families.

Technical Analysis

Technical Analysis spans a variety of technical roles where quantum data and data products are cleaned, manipulated, modeled, and transformed into substrate that can be leveraged by those who seek insight from enterprise data. Roles in this job family understand the implications of technology frameworks on the ability to organize, retrieve, and share data insights.

Statistical Analysis

Statistical Analysis refers to the core capability of analyzing data for insights and solutions that address business challenges. Typically, this is done using advanced knowledge of statistics, data visualization, and some algorithmic programming. Roles in this job category are expected to be highly consultative with business owners across the enterprise as they produce information to be consumed by wider audiences include senior leaders, researchers, frontline care staff, and even patients.

Business Analysis

Business Analysis refers to the ability to achieve organizational goals by combining business knowledge, clinical workflow, and data analysis

within a continuing improvement mindset. Within this family, roles may have a technical emphasis or focus on information synthesis. All roles require strength in requirements analysis and quantitative skills (either in the analysis or management of data).

Analytical Product Management

This family includes those roles that focus on developing, managing, and enforcing process around products, projects, and portfolios. They are essential to the Analytic Lifecycle and govern many of the processes that are core to turning insights into action. They will scope projects, maintain project plans, manage products, set team priorities, and even mentor teams in effectively using good processes. Some individuals in this role also manage small teams.

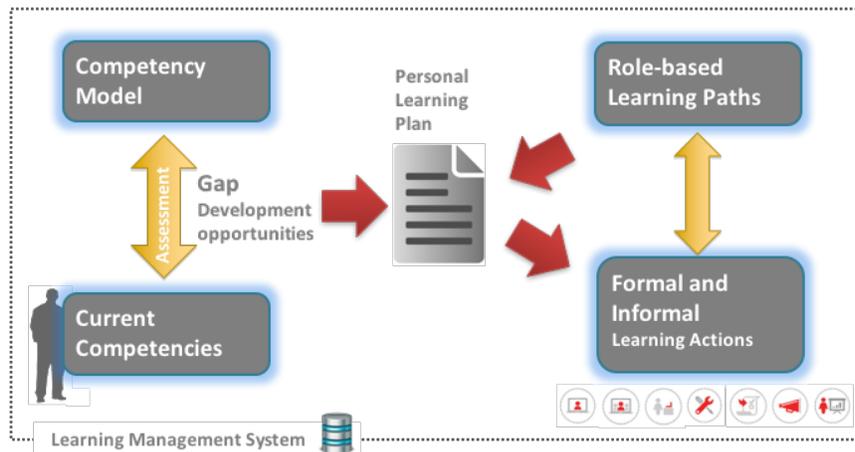
Leadership

The Leadership family include both line managers and director-level leaders that guide analytic teams. They assist the organization in consuming data and analytic products as to impact business decisions. They bring together business, quality, technical, and analytic interests of the enterprise to drive collaboration, best practice sharing, and deployment of shared intellectual assets.

What does the assessment do?

The self-assessment allows both teams and individuals to identify the gap between current capabilities and those needed to move forward along a career path. Once identified, the competency gaps can be used to create an individualized learning plan to get individuals where they want to go.

ThotWave’s Competency-based Learning Process



Advantages of this approach include:

- Uses a comparative benchmark that can be specific to the perceived competency imperatives of the assessed individual
- Supports consistency and accuracy of job classifications for staff.
- Clarifies the competencies needed for career progression as well as the paths that should be taken to develop talent.
- Ensures a foundation in the tools and methodologies to achieve competency analysis moving forward as staff grows and changes.

Who uses this assessment?

The Healthcare Analytics Competency Model© can be used by individual analysts, their employers, human resources professionals, and educators. We use it extensively to guide our consulting work for healthcare organizations that seek to improve the capabilities of their staff.