



Visualizing Health & Healthcare Data

Instructor-Led Course
Virtual or On-site

Course Overview

This **non-technical course** delivers hard-to-find, hands-on training in data visualization best practices for health and healthcare professionals. A combination of interactive lectures, discussions, and short case studies, this course is highly interactive and designed to fully engage participants in learning how to display complex health and healthcare data in a way that makes the story clear. This course is grounded in the foundational principles of data visualization and does not utilize or require any specific visualization software application or technical skills; it is a design course that encompasses three (3) broad topic areas.

Topic 1: Effectively Communicating Health and Healthcare Data Visually. Communicating your data visually is not intuitive. It is a technical and creative skill to be learned and developed like any other. Grounded in state-of-the-art research about human cognition, participants will learn how humans see and understand data and information—their visual perception—and how the best practices of table, graph, and chart design are informed by it. Learning about and adopting these best practices will ensure that people see what they never expected to and that the story you must communicate is clear and compelling.

Topic 2: Dashboard Design for Communicating Health and Healthcare Data. When properly designed, data dashboards have enormous potential to help health and healthcare professionals visually identify and monitor the most critical information needed to think, reason, and make informed health and healthcare decisions. Designed correctly, they raise awareness about important issues and topics and encourage all stakeholders to learn more and be moved to act. During this session, we will establish a working definition of a dashboard, discuss requirement-gathering techniques, and explore how dashboards fit into a guided analytics framework. Session 1 is a prerequisite for the Session 2 Dashboard Design Workshop.

Topic 3: Individual Session – Get feedback on your dashboard, other data displays, or upcoming project. For virtual or small group courses, each participant or small group working on a project together can sign-up for a 30-minute one-on-one virtual session to review a current data display you have developed or a new project you have coming up. We will provide direct coaching and pointers to incorporate the workshop lessons during this session.

Learning Objectives

After taking this course, learners will be able to:

- Describe the research that informs the best practices of data visualization
- Describe and explain the common mistakes people make when displaying data
- Identify what conditions determine the use of a table v. a graph
- Describe the characteristics of data that can be displayed graphically
- Explain when the use of a graph is the best medium to display healthcare data
- Create a graphical display of the data using actual case studies
- Describe why some charts and graphs do not work well and better alternatives
- Define what a data dashboard is
- Define what an infographic is
- Define what a Multidimensional Exploratory Display (MED™) is
- Describe common mistakes people make when they create a display of data
- Describe how to utilize visual perception principles in creating an effective display
- Explain effective techniques to gather requirements
- Describe the features of a guided analytic framework to provide deeper data insights
- Describe factors that determine the usability and accessibility of a data dashboard

Course Details

Technology Needed: Virtual learners need to have a computer or laptop with access to the internet and will access the course via a link to a cloud-based learning platform. Learners can access audio via phone or computer. A headset and webcam are recommended.

Customization: Private group courses can be customized with a select number of examples you provide. We currently include a broad range of health and healthcare examples and will work with the samples you send, incorporating them into exercises and case studies for your group. All custom examples will be confidential and used only for your group. We require your report samples at least 30-days before the scheduled workshop.

Course Instructor(s): Our instructors are data visualization experts with experience in public health and healthcare.

Course Resources: Learners will receive:

- Our [Visualizing Health and Healthcare Data](#) book
- Course handouts

Course Details

	Open to Public	Open to Just Your Team		
How is it delivered?	Virtual	Virtual	Virtual	Onsite
How many can enroll?	Standard size Up to 15 Learners	Small size Up to 8 Learners	Standard size Up to 15 Learners	Standard size Up to 15 Learners
How is it scheduled?	Two half-days + 1:1 coaching session(s) 1:00pm – 4:00pm	Two half-days + 1:1 coaching session(s) scheduled	Two half-days + 1:1 coaching session(s) scheduled	One full day + 1:1 coaching 9:00am – 4:00pm
How is it priced?	Per seat in any scheduled course discounted for volume	Flat fee	Flat fee	Flat fee plus travel costs

Course Content by Day

ONSITE COURSE DAY 1		ONSITE COURSE DAY 2
VIRTUAL COURSE DAY 1	VIRTUAL COURSE DAY 2	1:1 COACHING SESSIONS
<ul style="list-style-type: none"> Course overview and approach How research informs the best practices of data visualization When to use a table vs. a graph Best practices of table design Introduction to graphs <p>Graphs</p> <ul style="list-style-type: none"> The four basic shapes that are foundational to data visualization Graph dos and don'ts with examples and explanations 	<p>Maps</p> <ul style="list-style-type: none"> Overview of maps and pitfalls to avoid <p>Dashboards, Reports, and Multidimensional Exploratory Data Tools (MEDs) Defined</p> <ul style="list-style-type: none"> Why definitions matter Guided Analytics Framework Dashboard design 	<p>Participant examples and advisory session. Groups of participants may share current work or potential projects, and the instructor will provide feedback and direction. All participants are encouraged to join to hear and understand the feedback provided.</p>

Have questions about this course or need pricing information? Contact us at info@healthdataviz.com.