Turning Your Data into Knowledge and Action:
Creating Shareable Information
Part 3 of 3

August 15, 2019
Jessie Rouder, MA
Webinar Video and Handouts

Today’s webinar is being recorded

The slides were e-mailed to you prior to the webinar

If you did not receive the message, check your spam e-mail folder

The video will be made available on the Suicide Prevention Data Center (SPDC)
https://www.suicideprevention-datacenter.com
and the Suicide Prevention Resource Center website
https://www.sprc.org/
Need Assistance?

For technical support:

Contact us via the Chat Pod

E-mail: Connie.Maples@icf.com
Previous Webinars Recap

• Define goal, audience, and priorities.

• Identify NOE and secondary data.

• Translate data into meaningful and actionable findings.
Where are we going?

- What is your goal?
- Who is your audience?
- What is the message?
- What action should the audience take?
- What GLS related data are available?
- How do you translate the data?
- How do you visually display your data?
- How do you create an infographic?
Why is visualization important?

• Helps to communicate more effectively

• Engages your audiences

• Think critically about your findings
What is visualization?

Helps people understand the significance of data by placing it in a visual context.
OUR BRAIN PROCESSES VISUALS 60,000x FASTER THAN TEXT

90%
OF INFO TRANSMITTED TO THE BRAIN IS VISUAL

50%
OF YOUR BRAIN IS ACTIVE IN VISUAL PROCESSING

70%
OF YOUR SENSORY RECEPTORS ARE IN YOUR EYES

40%
OF PEOPLE RESPOND BETTER TO VISUALS
What the data is telling you?
  ▪ What is the best chart or graphic to display this data?

What key message do you want to convey?
  ▪ What information needs to be displayed?

Who your audience includes and what is relevant for them?

What visual strategies should be used?
  ▪ Colors, fonts, headers, labels, layout
What are the best **visual tools**?

- **Color**
- **Font**
  - Thin
  - Thin Italic
  - Light
  - Light Italic
  - Regular
  - Italic
  - Medium
  - Medium Italic
  - Bold
  - Bold Italic
- **Icons & graphs**
- **Flow & layout**
Color

Clearly defined color palette

– Avoid bringing in too many colors
– Rely on online tools that help with color palettes

https://www.design-seeds.com/
https://www.canva.com/color-palette/

Generate a color palette based on an uploaded photo
TIPS AND TRICKS

Eyedropper Fill
Pick a fill color by clicking within the app window. To pick a color outside of the app window, click and drag.
TIPS AND TRICKS
TIPS AND TRICKS
TIPS AND TRICKS
TIPS AND TRICKS
Font

Use different font sizes and CAPITALIZATION to call attention to particular text.
Font

Bold or use large fonts to call attention to important numbers
Use icons and graphs to break up the text

Icons and graphs

But, don’t use so many icons or clipart that your project looks juvenile!
Icons and graphs

Vary the types of charts or graphs as appropriate
Flow and layout

Consider the way you line up data

Use the *align button* so everything is lined up

Use headers to guide the reader through the information

Arrows may help the reader to understand the flow of information

Create balance

Make sure you have white space
TIPS AND TRICKS
What are visualization **best practices**?

Keep charts and tables minimal—remove chart junk (grid lines, titles that don’t add value)

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Carbohydrates are all essentially sugars our body converts to glucose (blood sugar) which is stored for energy. The Glycemic Index measures how much a particular food raises your blood sugar level when you eat it.

**HIGH GI = BAD CARBS**

High-GI foods are quickly digested and absorbed. This rapid fluctuation in blood sugar level has often been called a sugar crash, which leaves you feeling tired and hungry faster.

**LOW GI = GOOD CARBS**

Low-GI foods are digested and absorbed slower which produces a gradual rise in blood sugar. They have benefits for weight control because they help control appetite and delay hunger.
What are visualization best practices?

What are visualization best practices?

White space improves readability and reduces cognitive overload

BEFORE YOU START

Before you jump straight into setting up your business, there are a few key things to consider beforehand which can really make life easier and give your business a fighting chance of success.

STEP 1
RESEARCH YOUR MARKET
Before you launch, it’s crucial to research your market. Look at exactly who your customer base is and also your competitors - can you learn from them?

STEP 2
DEVELOP AND PLAN
A clear plan from the outset will help clarify your business idea, spot potential problems, outline your goals and most importantly, measure your progress.

STEP 3
FIND A MENTOR
Finding a mentor can really help you manage the pressures of running your own business. Someone you can trust to offer support and guidance.
What are visualization **best practices?**

Consider how to include a threshold/target/benchmark

Two of the three grantee groups did not meet performance **benchmarks** this year.
What are visualization **best practices**?

Use color consistently, and be purposeful with the colors you select (usually, less is more)

What are visualization best practices?

Use color consistently, and be purposeful with the colors you select (usually, less is more)

Use gray for less important elements to make sure the critical elements stand out.

https://www.dataquest.io/blog/what-to-consider-when-choosing-colors-for-data-visualization/
What are visualization **best practices**?

Use color consistently, and be purposeful with the colors you select (usually, less is more)

If you need more than seven colors in a chart, consider using another chart type or to group categories together.
Bars should be in a meaningful order:

- High to low
- Logical (alphabetical, ordinal)

*2016 Electricity consumption by household - Top 10 European countries*

- **Germany** is the only country where the household electricity consumption has decreased compared to 1990
- Units on tonnes of oil equivalent

<table>
<thead>
<tr>
<th>Country</th>
<th>Consumption</th>
</tr>
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<tbody>
<tr>
<td>France</td>
<td>13.7K</td>
</tr>
<tr>
<td>Germany</td>
<td>11.0K</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>9.3K</td>
</tr>
<tr>
<td>Spain</td>
<td>6.0K</td>
</tr>
<tr>
<td>Italy</td>
<td>5.5K</td>
</tr>
<tr>
<td>Turkey</td>
<td>4.4K</td>
</tr>
<tr>
<td>Sweden</td>
<td>3.8K</td>
</tr>
<tr>
<td>Norway</td>
<td>3.3K</td>
</tr>
<tr>
<td>Poland</td>
<td>2.5K</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1.9K</td>
</tr>
</tbody>
</table>

- 8.3K
- 11.8K
- 8.1K
- 2.6K
- 4.5K
- 0.8K
- 3.3K
- 2.6K
- 1.7K
- 1.3K
What are visualization **best practices**?

Consider the type of data and the graph you are using.

<table>
<thead>
<tr>
<th>REMEMBER THIS IMPORTANT NUMBER</th>
<th>Big Number</th>
<th>Icon Array</th>
<th>Pie/Donut</th>
<th>Bar/Column</th>
</tr>
</thead>
<tbody>
<tr>
<td>23%</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPARE 2 OR MORE THINGS</th>
<th>Side by Side</th>
<th>Slopegraph</th>
<th>Back-to-Back</th>
<th>Dot Plot</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>COMPARE TO A TARGET</th>
<th>Benchmark Line</th>
<th>Combo</th>
<th>Bullet Chart</th>
<th>Indicator Dots</th>
</tr>
</thead>
<tbody>
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</table>

<table>
<thead>
<tr>
<th>SHOW SURVEY RESPONSES</th>
<th>Stacked Bar</th>
<th>Small Multiples</th>
<th>Diverging Bar</th>
<th>Bar/Column</th>
<th>Number &amp; Icon</th>
<th>Nested</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
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What are visualization best practices?

Consider the type of data and the graph you are using

For more see
STEPHANIEEVERGREEN.COM/TAG/STEP-BY-STEP
STEPHANIEEVERGREEN.COM/BLOG
PRESENTING DATA EFFECTIVELY
Line charts show the values of two variables plotted along two axes, the pattern of the resulting points revealing any correlation present between them.

Bar charts show the proportion of a whole.

Pie charts show changes or trends over time and show the relationship between two or more variables.

Scatterplot compare quantities of different categories.
Line charts show the values of two variables plotted along two axes, the pattern of the resulting points revealing any correlation present between them.

Bar charts show the proportion of a whole.

Pie charts compare quantities of different categories.

Scatterplot changes or trends over time and show the relationship between two or more variables.
Line charts show the values of two variables plotted along two axes, the pattern of the resulting points revealing any correlation present between them.

Bar charts represent proportion of a whole.

Pie charts show changes or trends over time and show the relationship between two or more variables.

Scatterplot compare quantities of different categories.

Can you match the graph and the description?
What is the *right way* to present this data?
In 2013, there were a total of 640,000 training participants.

- South: 215,000
- North: 205,000
- East: 190,000
- West: 30,000
In 2013, the West significantly underperformed the other three regions.

- South: 215,000
- North: 205,000
- East: 190,000
- West: 30,000
What is the right way to present this data?
Mapping data

https://mapchart.net/usa.html
Mapping data

Step 1: Coloring/Editing the Map

- **Single Selection**
  Select the color you want and click on a county on the map. Right-click on a county to remove its color or hide it.

- **State Selection**
  Select a State and click COLOR STATE to color all counties in that state with the selected Fill Color.

Make a Map of a Single State (with county names shown)

Select the State that you want to isolate and click ISOLATE STATE. The single state map also features the county names on the map. To return to the whole map view again, choose RESTORE STATES.

Isolate Multiple States

Fill the field below with the *abbreviations of the States (comma-separated)* you want to isolate on the map and click ISOLATE. All other States will be hidden. Use the zoom tool to enlarge the map and center it on the remaining States.

https://mapchart.net/usa.html
Mapping data

Step 1: Coloring/Editing the Map

- **Single Selection**
  Select the color you want and click on a county on the map. Right-click on a county to remove its color or hide it.

  - **Fill Color:** [Red]

- **State Selection**
  Select a State and click **COLOR STATE** to color all counties in that state with the selected Fill Color.

  - **State to Color:** [Select State]

Search for a County and Color it

Search for the county you want and click **COLOR COUNTY** to fill it with the current Fill Color. To remove the color of the selected county, choose **REMOVE COLOR**.

- **Search for a county...**
- **COLOR COUNTY**
- **REMOVE COLOR**

More Options

- **County Borders:** [Off]
- **State Borders:** [Off]
- **Background:** [White]
- **Borders Color:** [Black]
- **Show County Names:** [On] *Available only on single-state maps

Make a Map of a Single State (with county names shown)

Select the State that you want to isolate and click **ISOLATE STATE**. The single state map also features the county names on the map. To return to the whole map view again, choose **RESTORE STATES**.

- **State to Isolate:** [Select State]

Isolate Multiple States

Fill the field below with the abbreviations of the States (comma-separated) you want to isolate on the map and click **ISOLATE**. All other States will be hidden. Use the zoom tool to enlarge the map and center it on the remaining States.

- **States to Isolate:** [comma-separated]

- **ISOLATE STATE**
- **RESTORE STATES**

https://mapchart.net/usa.html
Mapping data

https://mapchart.net/usa.html
How do I get started?

What the data is telling you?
  ▪ What is the best chart or graphic to display this data?

What key message do you want to convey?
  ▪ What information needs to be displayed?

Who your audience includes and what is relevant for them?

What visual strategies should be used?
  ▪ Colors, fonts, headers, labels, layout
How can you translate the findings for the counseling services scenario?

Length of time to eliminate the wait-list with one additional counselor on staff
Social Math – Counseling Services

• 200 students are on a wait list for an initial intake assessment; students must wait up to 2 weeks from requesting appointment to intake.

• Hiring an additional counselor would mean that 6 additional students per day could receive services.

\[
\begin{align*}
\text{200 students} & \div \text{6 students per day} \\
&= \text{Wait time reduced within 34 working days}
\end{align*}
\]
To whom it may concern,

I am pleased to share the following information about the success of our GLS program during AY 2018-19. As a result of our grant, we successfully screened 500 students at four major screening events. During the Fall, we screened a total of 80 students. Our Spring mental health awareness events were a huge success— we screened 420 students. Our increased efforts to screen have resulted in a higher number of students coming to our counseling center. Unfortunately, this has resulted in a waitlist for students to access services. It is our recommendation that additional funds be allocated to the counseling center to hire an additional counselor. An additional counselor can see up to 6 students a day for risk assessment, and would thereby reduce the current waitlist dramatically. We appreciate your consideration.

Best,
GLS staff
## OPTION 2

<table>
<thead>
<tr>
<th>Name of Event</th>
<th>Date</th>
<th>Number Screened</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event 1</td>
<td>9/15/18</td>
<td>25</td>
</tr>
<tr>
<td>Event 2</td>
<td>10/5/18</td>
<td>55</td>
</tr>
<tr>
<td>Event 3</td>
<td>2/12/19</td>
<td>200</td>
</tr>
<tr>
<td>Event 4</td>
<td>5/1/19</td>
<td>220</td>
</tr>
</tbody>
</table>
Since Fall 2018, Campus has conducted 4 major mental health awareness events resulting in more students being screened.
LABEL THE
CHART/GRAHIC

EVENT 1  EVENT 2  EVENT 3  EVENT 4
9/15/18   10/5/18   2/12/19   5/1/19
25        55        200       220
500 STUDENTS SCREENED

Since Fall 2018, Campus has conducted 4 major mental health awareness events resulting in more students being screened.
500 STUDENTS SCREENED DURING ACADEMIC YEAR ‘18-’19

EVENT 4
5/1/19

EVENT 3
2/12/19

EVENT 2
10/5/18

EVENT 1
9/15/18

Since Fall 2018, Campus has conducted 4 major mental health awareness events resulting in more students being screened.
500 STUDENTS SCREENED DURING ACADEMIC YEAR ‘18-’19

EVENT 4
5/1/19

EVENT 3
2/12/19

EVENT 2
10/5/18

EVENT 1
9/15/18

220

200

55

25

In Spring 2019, campus had two Mental Health Awareness Runs that lead to a surge in screenings.
500 students screened during academic year ‘18-’19

Since Fall 2018, Campus has conducted 4 major mental health awareness events resulting in more students being screened.

- **EVENT 4**: 5/1/19
  - Total: 220

- **EVENT 3**: 2/12/19
  - Total: 200

- **EVENT 2**: 10/5/18
  - Total: 55

- **EVENT 1**: 9/15/18
  - Total: 25

Because of the increase in students screened...

200 students are on a wait list for an initial assessment.

Include relevant information to tell your story.
500 STUDENTS SCREENED DURING ACADEMIC YEAR ‘18-'19

Since Fall 2018, Campus has conducted 4 major mental health awareness events resulting in more students being screened.

EVENT 1
9/15/18

EVENT 2
10/5/18

EVENT 3
2/12/19

EVENT 4
5/1/19

BECAUSE OF THE INCREASE IN STUDENTS SCREENED...

200 students are on a wait list for an initial assessment.
Since Fall 2018, Campus has conducted 4 major mental health awareness events resulting in more students being screened.

Because of the increase in students screened...

200 students are on a WAIT LIST for an initial assessment.
500 STUDENTS SCREENED DURING ACADEMIC YEAR ‘18-’19

Since Fall 2018, Campus has conducted 4 major mental health awareness events resulting in more students being screened.

- **EVENT 4**
  - 5/1/19
  - 220

- **EVENT 3**
  - 2/12/19
  - 200

- **EVENT 2**
  - 10/5/18
  - 55

- **EVENT 1**
  - 9/15/18
  - 25

Because of the increase in students screened...

200 STUDENTS ARE ON A WAIT LIST FOR AN INITIAL ASSESSMENT

How can we eliminate the waitlist?

1. additional counselor
2. additional students would receive services per day
3. 34 days to serve all students on the waitlist and provide better treatment
How can you translate the findings for the ongoing support scenario?

Number of at-risk youth per year that would have previously not been connected to services
Social Math – Ongoing Support

- Average gatekeeper identifies 0.37 youth
- In the county there are 684 emergency department staff

75% of ED staff = 513 staff

By training 75% of ED staff, 190 youth could be identified as at-risk for suicide who had not previously been identified
Pictorial: Infogram
Pictorial: PowerPoint
75% of 684 emergency department staff in the county are trained.
75% OF EMERGENCY DEPARTMENT STAFF ARE TRAINED

684 EMERGENCY DEPARTMENT STAFF IN THE COUNTY
Proportion

Average gatekeeper identifies 0.37 youth

Series 1
Series 2
Category 1
Category 2
Average gatekeeper identifies 0.37 youth
75% of emergency department staff are trained.

By training 75% of ED staff, 190 youth could be identified as at-risk for suicide who had not previously been identified.

Each trained staff identifies 0.37 youth.

684 emergency department staff in the county.
QUESTIONS?
Jessie Rouder

Data Collection Lead
Jessie.rouder@icf.com
516-887-3201
## Contact Information

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Email 1</th>
<th>Phone 1</th>
<th>Email 2</th>
<th>Phone 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jessie Rouder</td>
<td>SBHF Data Collection Lead (DCL)</td>
<td><a href="mailto:gls-sbhf@icf.com">gls-sbhf@icf.com</a></td>
<td>516-887-3201 (EST)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brandee Hicks</td>
<td>Training DCL</td>
<td><a href="mailto:gls-tasp@icf.com">gls-tasp@icf.com</a></td>
<td>404-592-2198 (EST)</td>
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<tr>
<td>Nora Kuiper</td>
<td>PSI &amp; EIRF DCL</td>
<td><a href="mailto:gls-psi@icf.com">gls-psi@icf.com</a></td>
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<td>404-592-2139 (EST)</td>
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<tr>
<td>Connie Maples</td>
<td>TAL</td>
<td><a href="mailto:connie.maples@icf.com">connie.maples@icf.com</a></td>
<td>956-722-0474 (CST)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taylor Moore</td>
<td>Site Management Lead and TAL</td>
<td><a href="mailto:taylor.moore@icf.com">taylor.moore@icf.com</a></td>
<td>404-320-4425 (EST)</td>
<td></td>
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</tr>
<tr>
<td>Sophia Zanakos</td>
<td>Project Director and TAL</td>
<td><a href="mailto:sophia.zanakos@icf.com">sophia.zanakos@icf.com</a></td>
<td>301-572-0239 (EST)</td>
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THANK YOU!