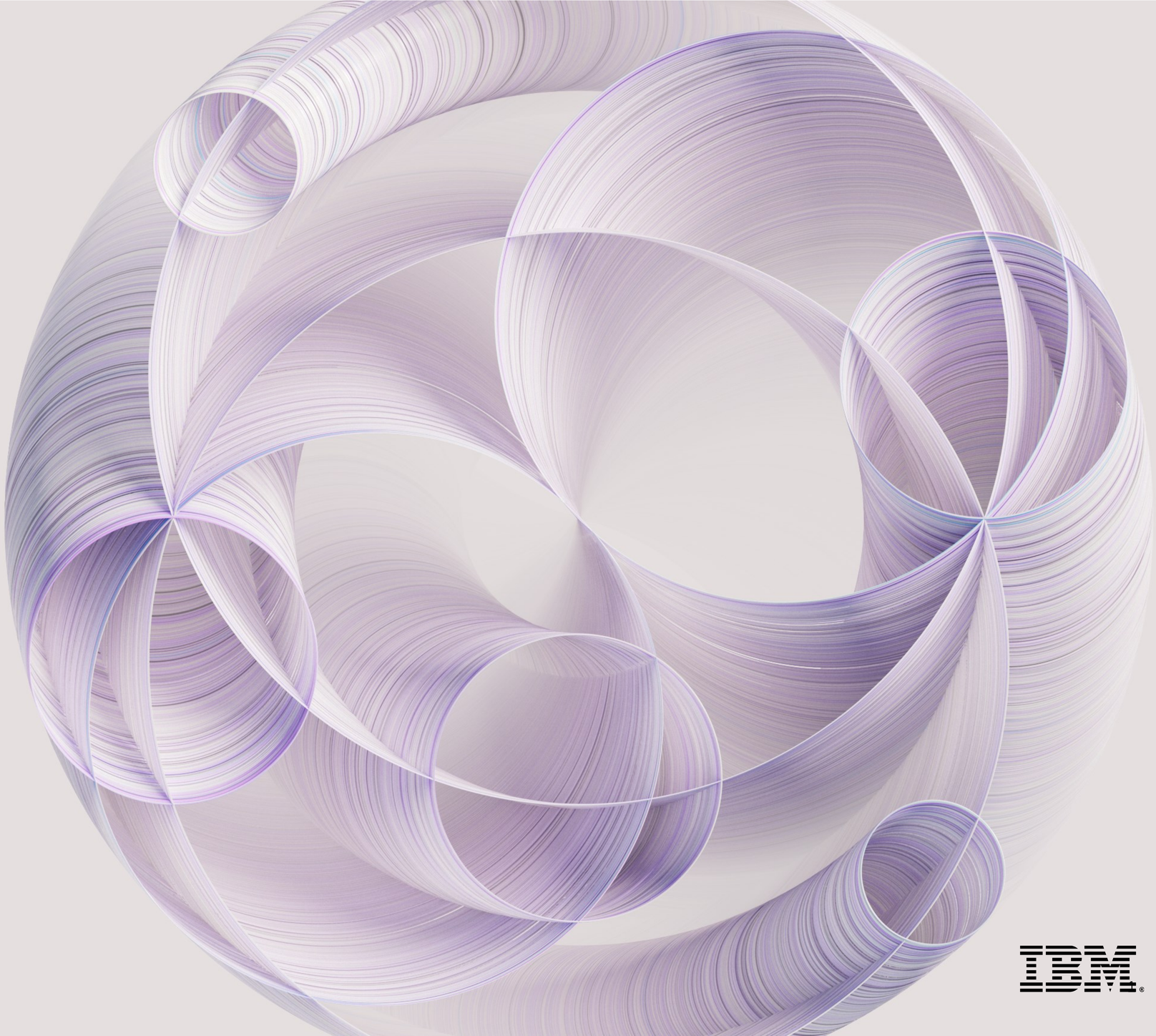
Storytelling with Data

Module 2



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IBM

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Center for Data Science
Office of Health + Science

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Environmental Public Health

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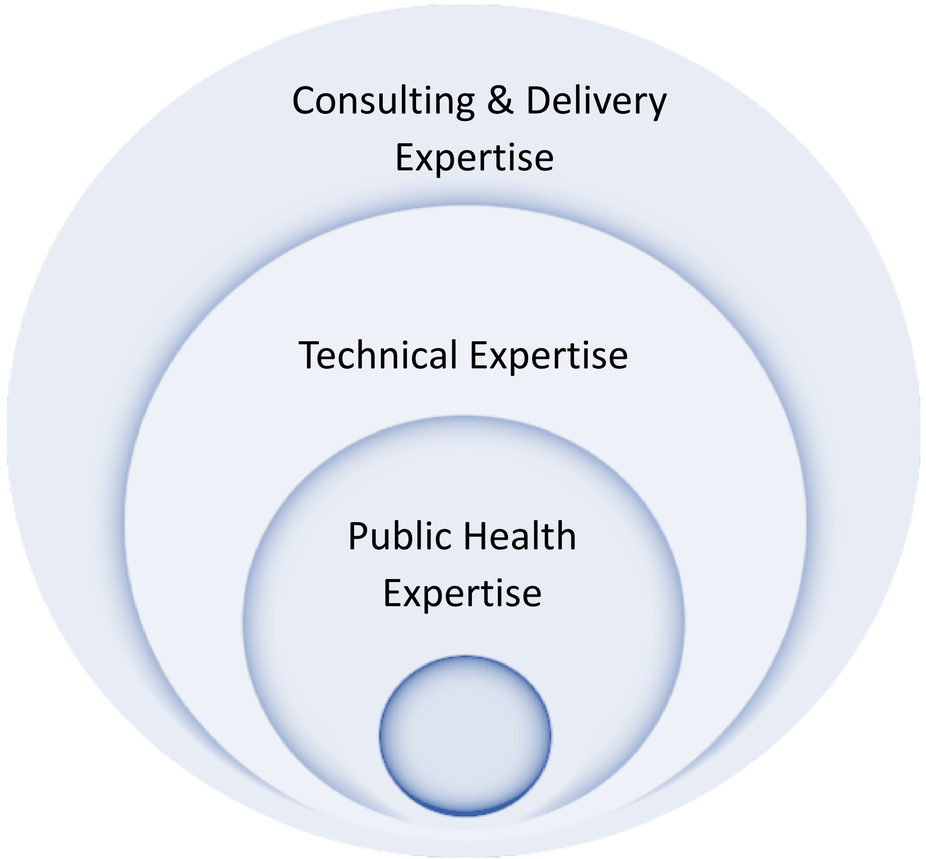
We’re from the IBM Consulting Public Health Group.

IBM has served public health agencies since 2003, and health and human services agencies for over 45 years.



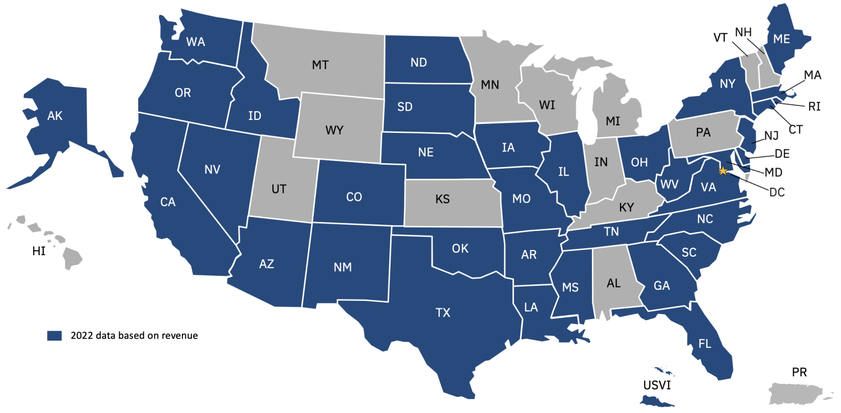
Key Skills

- Applied Epidemiologists
- Immunization Specialists
- Informaticians
- Data Scientists
- Biostatisticians
- MD, DrPH, MPH, MS

Areas of Focus

- Infectious Disease
- Immunology
- Community Based Healthcare
- Electronic Health Records
- WIC
- Medicaid Data Warehousing and Program Integrity
- Child Support
- Child Welfare
- Whole Person Care

Select Partners & Clients



Contracts Include:

- **Enterprise Data Warehousing (EDW)/Decision Support Systems (DSS)**
- **Program Integrity/Fraud, Waste, and Abuse Detection**
- **Maintenance and Operations**
- **Application Modernization**
- **COTS Product Implementations**
- **Business Process Transformation**
- **Case Management**
- **Analytic Consulting**
- **Data Integration**
- **Enterprise Strategy / Technology Assessment**

CSTE

AIRA AMERICAN IMMUNIZATION REGISTRY ASSOCIATION

APHA AMERICAN PUBLIC HEALTH ASSOCIATION *For science. For action. For health.*

VA | U.S. Department of Veterans Affairs

astho™

CDC

FDA

Module 1: Recap

- Identify with your audience
  - Personas
  - Needs statements

- Craft a compelling storyline
  - Four parts of the story
    - Hook
    - Rising Moments
    - AHA Moment
    - Call to Action

Share your thoughts in the chat:
- Do you have any questions?
- What were your experiences with the practice activities?

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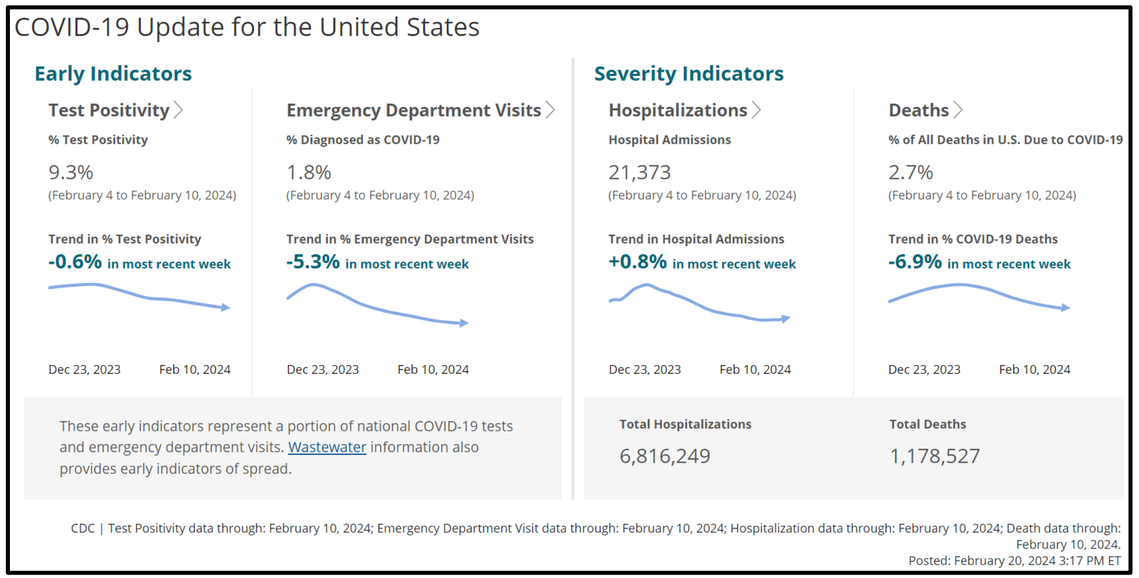
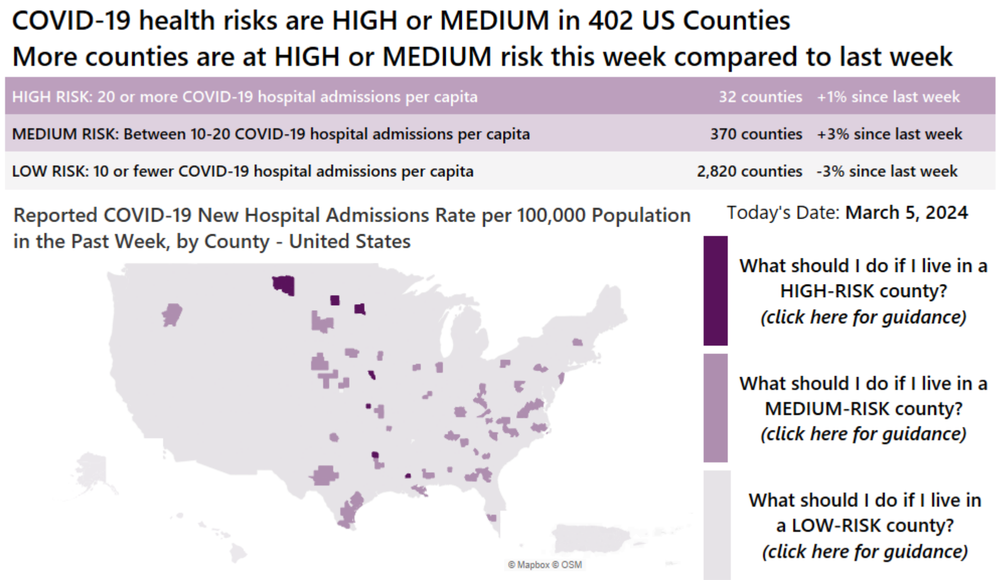
This webinar will teach you how to go …

From Here



To There



We will teach you storytelling best practices in three sessions or modules

LAST WEEK: MODULE 1

Module 1 will show you how to:
- Identify with your audience
- Craft a compelling storyline

TODAY: MODULE 2

Module 2 will show you how to:
- Draft a data story
- Get feedback and finalize your story

NEXT WEEK: MODULE 3

Module 3 will show you how to:
- Choose methods to deliver your story
- Incorporate ongoing feedback

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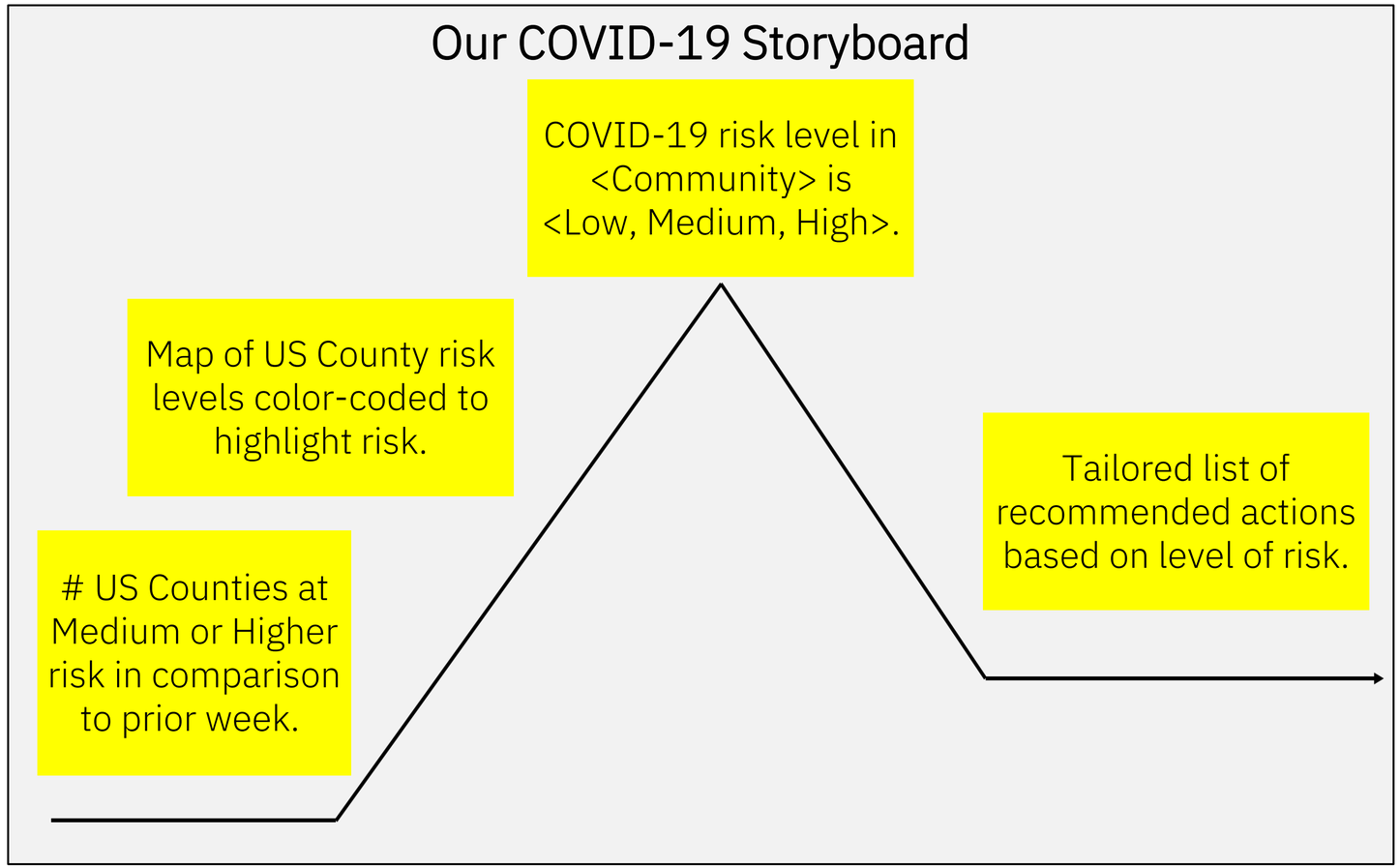
Last week we created a data story narrative for the CDC



An Example Storyline Using the Storyboard

1. **HOOK:** COVID-19 risks are MEDIUM or HIGH in 402 US counties. More counties are at elevated risk this week compared to last week.
2. **RISING POINT:** A cluster of counties in East Texas are at HIGH risk of COVID-19 illness.
3. **AHA MOMENT:** Camp County Texas is at HIGH risk of COVID-19 illness.
4. **CALL TO ACTION:** Residents of Camp County Texas should take the following actions to protect themselves and others from COVID-19 illness …

We have crafted a great storyboard – what else do we need for an effective story?

Please share your thoughts in the chat

Module 2: Crafting your data story

2.1 Align data to your storyboard and storyline

2.2 Align visualizations to your storyboard and storyline

2.3 Craft your call to action

2.4 Draft your data story

2.5 Get feedback on your draft

2.6 Hands on practice

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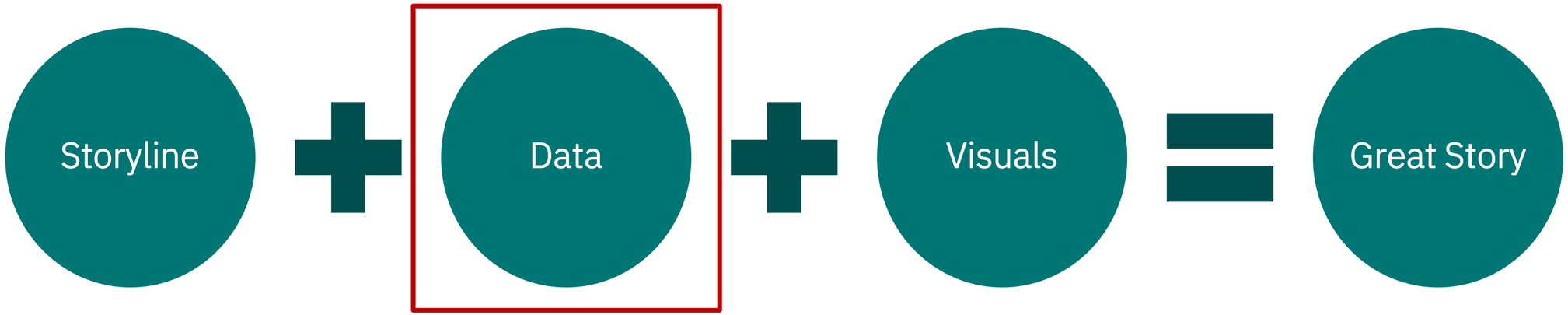
2.1 Align data to your storyboard and storyline



References: Brent Dyles, Effective Storytelling and Catherine Cote Data Storytelling: How to Tell a Story with Data (hbs.edu)

2.1 The CDC has provided us with some COVID-19 data

Data Dictionary: United States COVID-19 Hospitalizations by County

Data Column/Field	Description
County	Name of the county included in the hospital service area (HSA) reporting data
State	Name of the state or territory where the county is located
New Hospital Admissions	Total new hospital admissions for the HSA in the past week
New Hospital Admission Rate	Total new hospital admissions per 100K population for the HSA in the past week
Risk Level This Week	Hospital admission level this week: LOW (<10 per 100K), MED (10 to 20), HIGH (>20)
Risk Level Last Week	Hospital admission level last week: LOW (<10 per 100K), MED (10 to 20), HIGH (>20)
Change in Admissions	Percent change in New Hospital Admissions compared to prior week
Capacity Utilization	Percent of staffed inpatient beds occupied by COVID-19 patients
Change in Capacity Utilization	Absolute change in Capacity Utilization compared to prior week
ICU Capacity Utilization	Percent of staffed intensive care unit (ICU) beds occupied by COVID-19 patients
Change in ICU Capacity Utilization	Absolute change in ICU Capacity Utilization compared to prior week

Share your thoughts in the chat:
- What fields of data look most relevant to our storyline?
- What fields of data look least relevant to our storyline?

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2.1 Align data to your storyline: Process

Step 1. Identify data for your HOOK

- Review the hook from your storyline.
- Review your data sources.
- Identify the data that is relevant to your HOOK.
- Document in the Data Alignment Template.

Step 2. Identify data for your RISING POINTS

- Review the rising points from your storyline.
- Review your data sources.
- Identify the data that is relevant to your RISING POINTS.
- Document in the Data Alignment Template.

Step 3. Identify data for your AHA MOMENT

- Review the AHA moment for your storyline.
- Review your data sources.
- Identify the data that is relevant to your AHA MOMENT.
- Document in the Data Alignment Template.

2.1 Align data to your storyline
Step 1: Identify data for the HOOK

HOOK from the storyline we have prepared for the CDC:
COVID-19 risks are MEDIUM or HIGH in <#> US counties. <More, Fewer> counties are at elevated risk this week compared to last week.

From the data source provided by the CDC:

Data Column/Field	Description
County	Name of the county included in the hospital service area (HSA) reporting data
State	Name of the state or territory where the county is located
New Hospital Admissions	Total new hospital admissions for the HSA in the past week
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Change in ICU Capacity Utilization	Absolute change in ICU Capacity Utilization compared to prior week

Share your thoughts in the chat:

- What are some data fields that could be used to support the HOOK?
- What is the rationale for using those fields?

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2.1 Align data to your storyline
Step 1: Identify data for the HOOK

HOOK from the storyline we have prepared for the CDC:
COVID-19 risks are MEDIUM or HIGH in <#> US counties. <More, Fewer> counties are at elevated risk this week compared to last week.

From the data source provided by the CDC:

Data Column/Field	Description
County	Name of the county included in the hospital service area (HSA) reporting data
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Change in ICU Capacity Utilization	Absolute change in ICU Capacity Utilization compared to prior week

- Our HOOK requires us to count counties that are in MEDIUM or HIGH COVID-19 risk levels.
- “Risk Level This Week” is the most relevant data for this part of our HOOK.
- Our HOOK also requires a comparison of risk levels this week compared to last week.
- “Risk Level Last Week” is the data that will enable us to calculate if more or fewer (or the same number) of counties are at elevated risk.

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2.1 Align data to your storyline
Step 1: Data Alignment Template

Storyline	Data Fields We Will Need	Why We Will Need Them
HOOK: COVID-19 risks are MEDIUM or HIGH in <#> US counties. <More, Fewer> counties are at elevated risk this week compared to last week.	• Risk Level This Week • Risk Level Last Week	• Risk Level This Week enables us to count number of counties at MEDIUM or HIGH risk. • Risk Level Last Week enables us to calculate if more or fewer counties are at elevated risk.
RISING POINT: Map of US County risk levels color-coded to highlight risk. For example, enabling identification of higher-risk clusters.		
AHA MOMENT: COVID-19 risk level in <Community> is <Low, Medium, High>. For example, COVID-19 risk level in White County, Arkansas is HIGH.		

2.1 Align data to your storyline
Step 2: Identify data for the RISING POINTS

RISING POINTS from the storyline we have prepared for the CDC:
Map of US County risk levels color-coded to highlight risk. For example, enabling identification of higher-risk clusters.

From the data source provided by the CDC:

Data Column/Field	Description
County	Name of the county included in the hospital service area (HSA) reporting data
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Share your thoughts in the chat:

- What are some data fields that could be used to support the RISING POINTS?
- What is the rationale for using those fields?

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2.1 Align data to your storyline
Step 2: Identify data for the RISING POINTS

RISING POINTS from the storyline we have prepared for the CDC:

Map of US County risk levels color-coded to highlight risk. For example, enabling identification of higher-risk clusters.

From the data source provided by the CDC:

Data Column/Field	Description
County	Name of the county included in the hospital service area (HSA) reporting data
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- Our RISING POINTS requires us to display all US counties on a map.
- To accurately geo-code each county for mapping we will need both the County and State fields.
- Our RISING POINTS also requires us to color code each county map element by risk level.
- “Risk Level This Week” is the data that will enable us to implement the required color coding on the map.

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2.1 Align data to your storyline
Step 2: Data Alignment Template

Storyline	Data Fields We Will Need	Why We Will Need Them
HOOK: COVID-19 risks are MEDIUM or HIGH in <#> US counties. <More, Fewer> counties are at elevated risk this week compared to last week.	• Risk Level This Week • Risk Level Last Week	• Risk Level This Week enables us to count number of counties at MEDIUM or HIGH risk. • Risk Level Last Week enables us to calculate if more or fewer counties are at elevated risk.
RISING POINT: Map of US County risk levels color-coded to highlight risk. For example, enabling identification of higher-risk clusters.	• County • State • Risk Level This Week	• County and State are needed for geo-coding to enable mapping. • Risk Level This Week is needed to enable color coding on the map.
AHA MOMENT: COVID-19 risk level in <Community> is <Low, Medium, High>. For example, COVID-19 risk level in White County, Arkansas is HIGH.		

2.1 Align data to your storyline
Step 3: Identify data for the AHA MOMENT

AHA MOMENT from the storyline we have prepared for the CDC:
COVID-19 risk level in <Community> is <Low, Medium, High>. For example, COVID-19 risk level in White County, Arkansas is HIGH.

From the data source provided by the CDC:

Data Column/Field	Description
County	Name of the county included in the hospital service area (HSA) reporting data
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ICU Capacity Utilization	Percent of staffed intensive care unit (ICU) beds occupied by COVID-19 patients
Change in ICU Capacity Utilization	Absolute change in ICU Capacity Utilization compared to prior week

Share your thoughts in the chat:

- What are some data fields that could be used to support the AHA MOMENT?
- What is the rationale for using those fields?

2.1 Align data to your storyline
Step 3: Identify data for the AHA MOMENT

AHA MOMENT from the storyline we have prepared for the CDC:

COVID-19 risk level in <Community> is <Low, Medium, High>. For example, COVID-19 risk level in White County, Arkansas is HIGH.

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Data Column/Field	Description
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Change in ICU Capacity Utilization	Absolute change in ICU Capacity Utilization compared to prior week

- Our AHA MOMENT requires us to identify a specific community and its risk level.
- We will need County, State and Risk Level This week to provide supporting data for the AHA MOMENT (shaded in darker orange).
- We might also want to provide additional context to the AHA. For example, showing risk this week vs. last week and trends in admission rates.
- To enable additional context, we can choose New Hospital Admission Rate and Risk Level Last Week (shaded in lighter orange).

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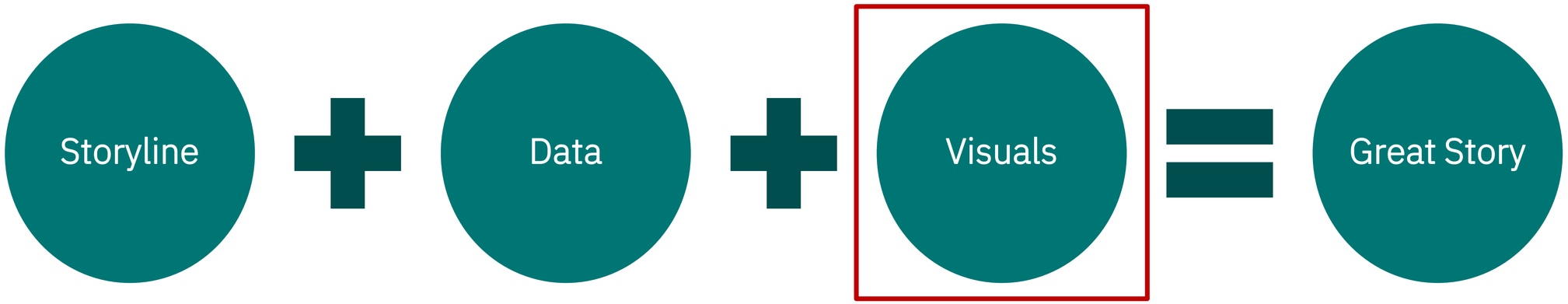
2.1 Align data to your storyline
Completed Data Alignment Template

Storyline	Data Fields We Will Need	Why We Will Need Them
HOOK: COVID-19 risks are MEDIUM or HIGH in <#> US counties. <More, Fewer> counties are at elevated risk this week compared to last week.	• Risk Level This Week • Risk Level Last Week	• Risk Level This Week enables us to count number of counties at MEDIUM or HIGH risk. • Risk Level Last Week enables us to calculate if more or fewer counties are at elevated risk.
RISING POINT: Map of US County risk levels color-coded to highlight risk. For example, enabling identification of higher-risk clusters.	• County • State • Risk Level This Week	• County and State are needed for geo-coding to enable mapping. • Risk Level This Week is needed to enable color coding on the map.
AHA MOMENT: COVID-19 risk level in <Community> is <Low, Medium, High>. For example, COVID-19 risk level in White County, Arkansas is HIGH.	• County • State • Risk Level This Week • Risk Level Last Week • New Hospital Admission Rate	• County, State and Risk Level This Week are needed to provide the AHA data point. • Risk Level Last Week and New Hospital Admission Rate may be useful to provide additional context.

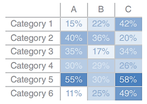
2.2 Align data visuals to your story



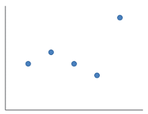
References: Brent Dyles, Effective Storytelling and Catherine Cote Data Storytelling: How to Tell a Story with Data (hbs.edu)

2.2 Align data visuals to your story: Choose the right type of visualization

Choose the right visualization to match your message and data type, prioritizing ease of interpretation for your audience.



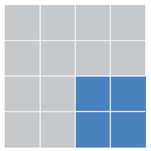
Tables (or heatmaps) are good for a mixed audience that will look for particular row(s) of data most applicable to their concerns



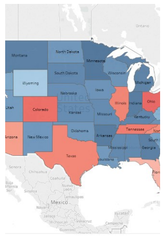
Scatterplots are good for showing relationships between different variables

Line graphs are good for displaying continuous variables and trends

Bar graphs are good for displaying values across different categories



Area graphs are good for showing data values with very different magnitudes or scales



Maps are good for displaying geospatial data and can be used to compare geography and other variables

Visualizations to (Generally) Avoid

- **Pie charts** (or doughnut charts) are almost always inferior to a horizontal bar (or shares) charts
- **3D charts** should always be avoided unless you are trying to look at relationships between three variables
- **Two-axis charts** (2 y-axes) are almost always inferior to just labeling data values or splitting apart into two (vertically stacked) single axis charts

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2.2 Align data visuals to your story: Simplify by removing noise

Remove visual elements that are not adding informative value to your story, making it easier for your audience to interpret your visualizations.

- **Remove chart borders**
  unless they are needed to separate two charts on same page
- **Remove chart guidelines**
  unless there are too many data points for effective value labels
- **Remove data point markers**
  unless you are using them to highlight specific data points
- **Clean up axis labels**
  so they are not displaying unnecessary precision (decimal points) and use display units (e.g., thousands) to improve clarity
- **Label data directly**
  by using series labels in place of a legend and data labels instead of gridlines
- **Leverage consistent color**
  to harmonize series colors with associated elements describing the series

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2.2 Align data visuals to your story: Focus attention

Use text, size, color and position to focus your audience's attention on key insights and the proper order of your story.

Size

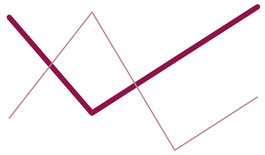
- Signifies importance

This is more important than That

Text

- Use words wisely!
- Makes visuals more accessible
- Use text to label, introduce, explain, reinforce, highlight, recommend and tell a story

Titles introduce the graph

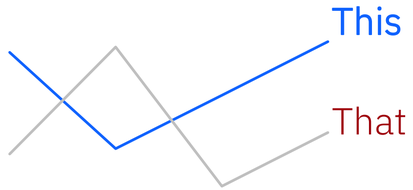


Labels explain what the graph is describing

Color

- Grabs the audience's attention
- Use colors moderately; too many colors can be distracting
- Use consistently
- Design with the colorblind in mind
- Be thoughtful of the tone color conveys

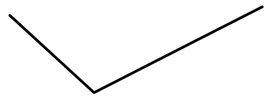
This is more important than That



Position

- Human tendency to start at top left of slide/visuals and move in a left to right direction
- Most important goes in the top left

Most important



Least Important

2.2 Align data visuals to your story: Process

Step 1. Identify visuals for your HOOK

- Review and analyze the data identified for the HOOK
- Choose and format visuals to enable your audience to most easily engage with your story.

Step 2. Identify visuals for your RISING POINTS

- Review and analyze the data identified for the RISING POINTS
- Choose and format visuals to enable your audience to most easily continue engaging with your story.

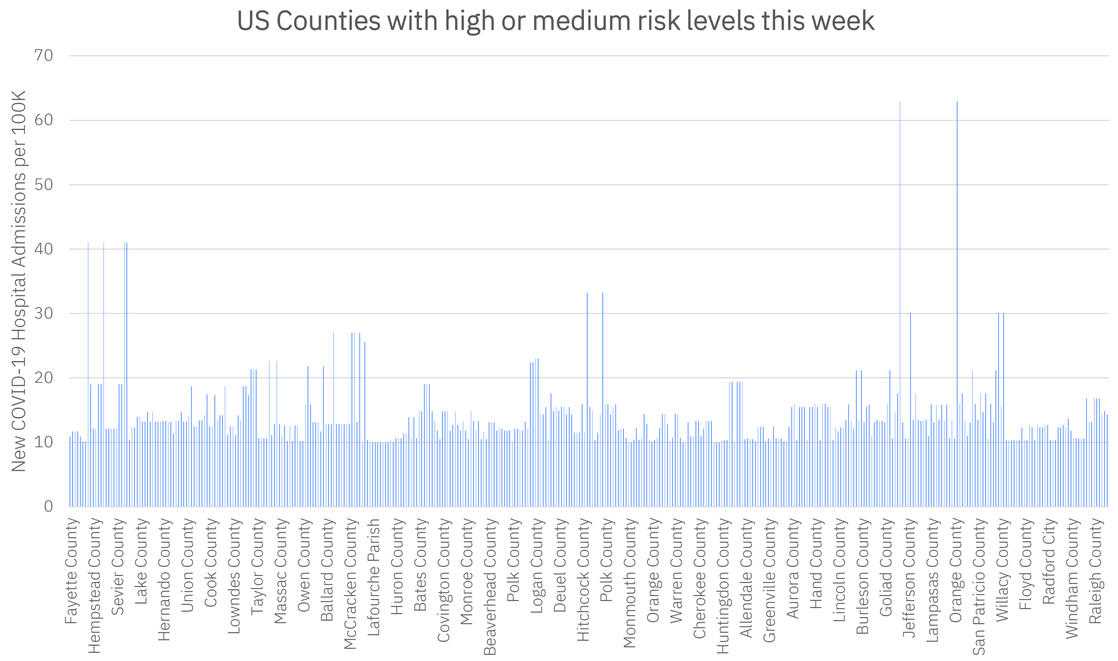
Step 3. Identify visuals for your AHA MOMENT

- Review and analyze the data identified for the AHA MOMENT
- Choose and format visuals to enable your audience to most easily obtain the key insight they need.

2.2 Align visuals to the storyline
Step 1: align visual to HOOK

HOOK: COVID-19 risks are MEDIUM or HIGH in 402 US counties. More counties are at elevated risk this week compared to last week.

From here …



Share your thoughts in the chat:
- How is the To There version better than the From Here version?
- How could we further improve the To There version?

To there …

Use text to make the HOOK obvious and easily digestible. This is better than the generic chart title on the left.

Use position to show HIGH risk first, helping audience to consume more important information first.

COVID-19 health risks are HIGH or MEDIUM in 402 US Counties
More counties are at HIGH or MEDIUM risk this week compared to last week

HIGH RISK: 20 or more COVID-19 hospital admissions per capita	32 counties	+1% since last week
MEDIUM RISK: Between 10-20 COVID-19 hospital admissions per capita	370 counties	+3% since last week
LOW RISK: 10 or fewer COVID-19 hospital admissions per capita	2,820 counties	-3% since last week

Use a data table to present just three numbers directly aligned to risk levels. Better than the chart showing each individual county hospital admission rate, requiring audience to translate from rate to risk level.

Use color to make it easier to see different levels of risk. Consider if the data is **categorical (use different colors)** or **sequential (use a color ramp)** when choosing your colors.

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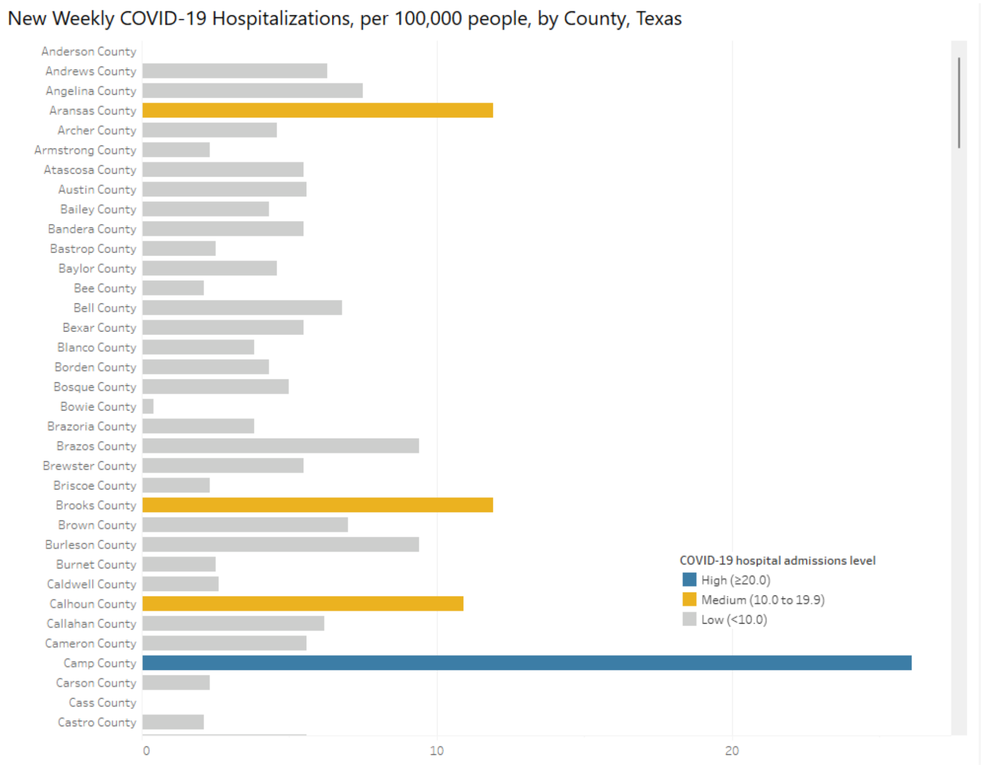
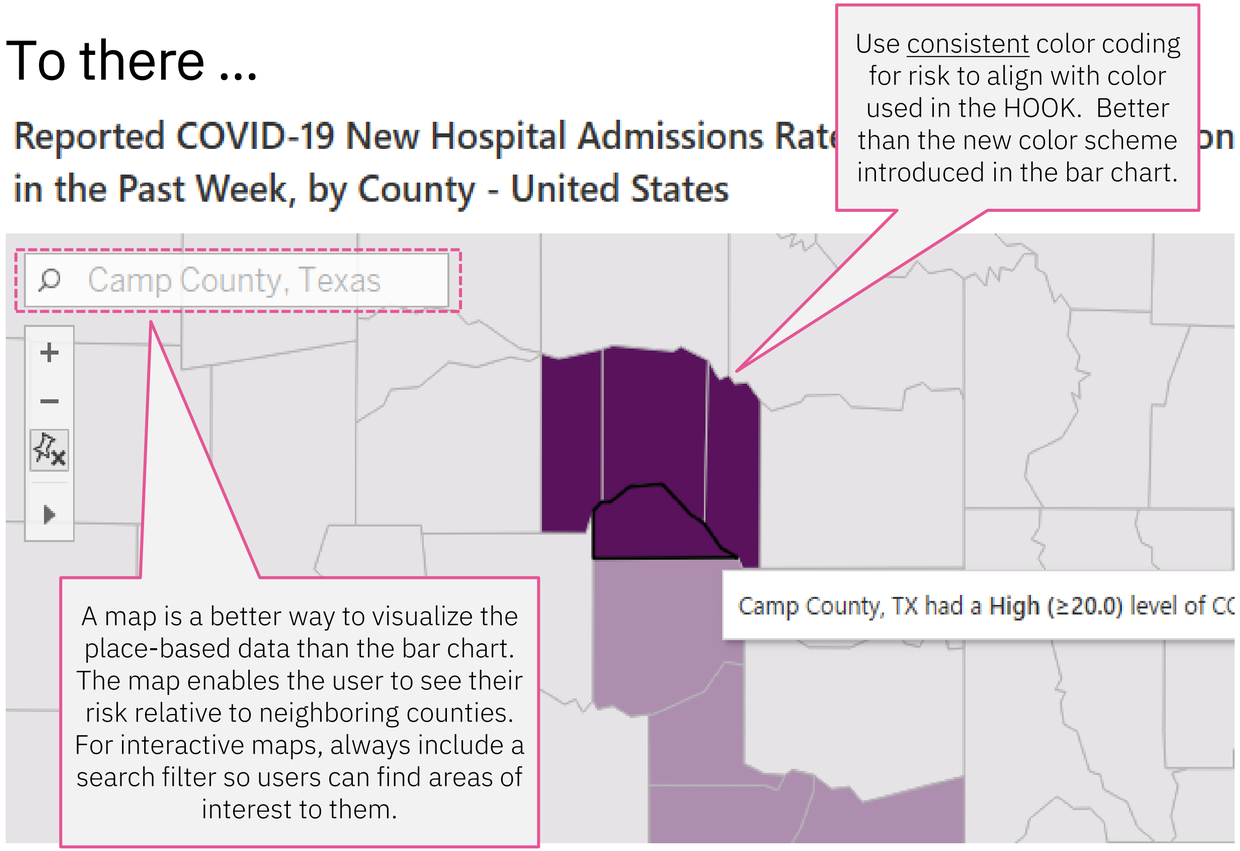
2.2 Align visuals to the storyline
Step 2: align visual to RISING POINTS

RISING POINT: A cluster of counties in East Texas are at elevated risk of COVID-19 illness.

From here …



To there …



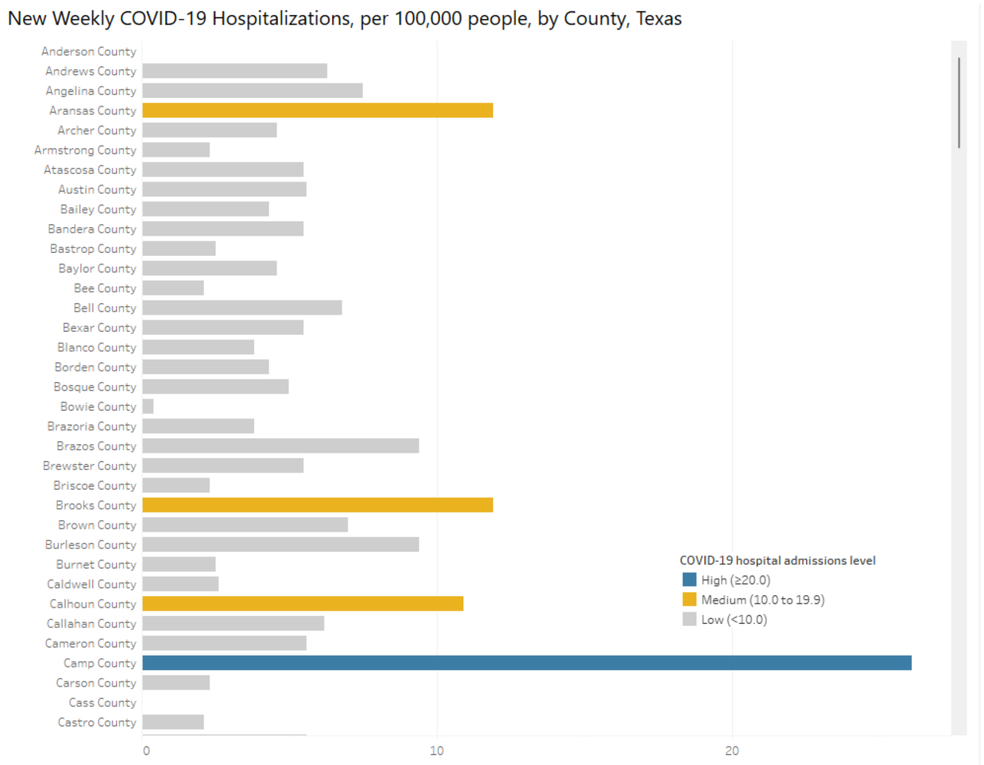
Share your thoughts in the chat:
- How is the To There version better than the From Here version?
- How could we further improve the To There version?

2.2 Align visuals to the storyline
Step 2: align visual to RISING POINTS

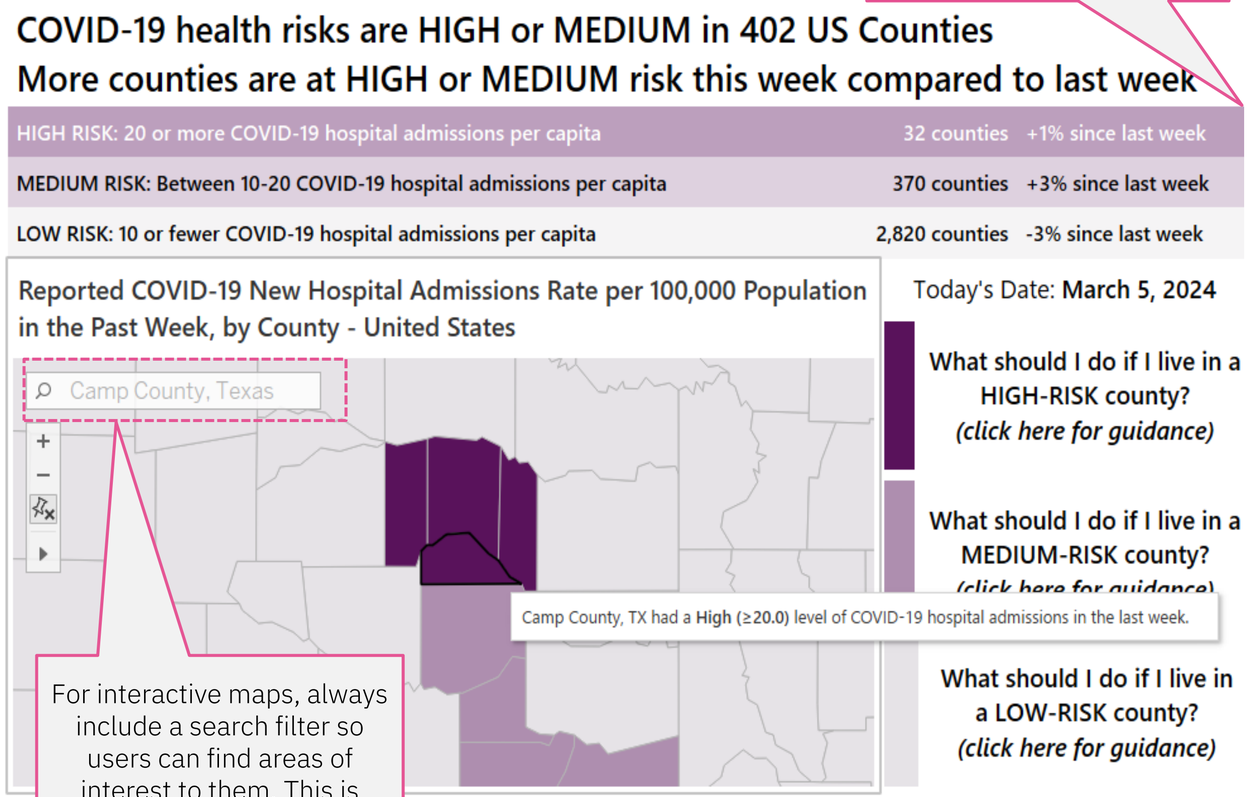
RISING POINT: A cluster of counties in East Texas are at elevated risk of COVID-19 illness.

Use consistent color coding appropriate to the data (sequential for continuous data). Better than the new color scheme introduced in the bar chart.

From here …



To there …



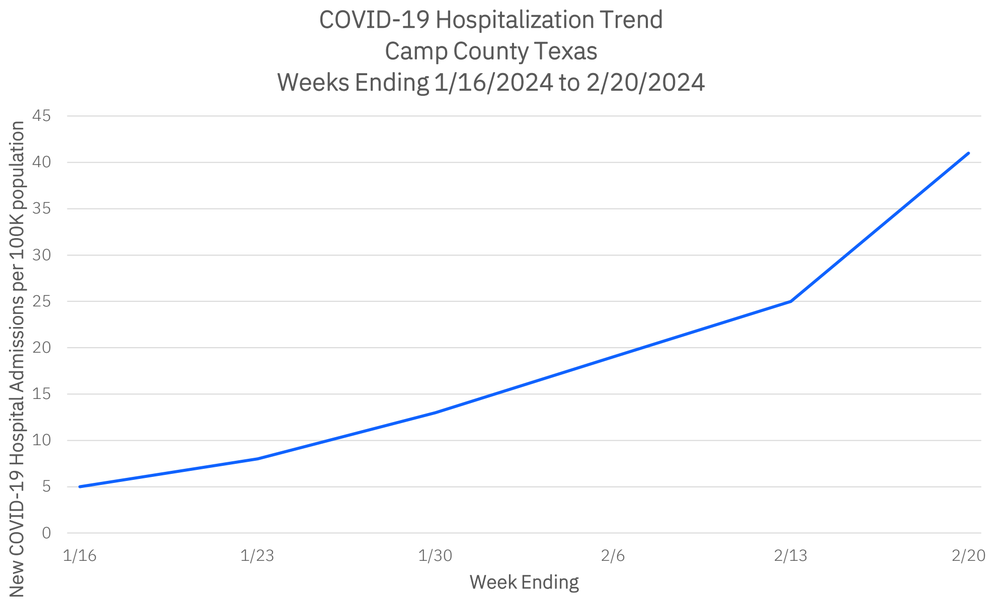
For interactive maps, always include a search filter so users can find areas of interest to them. This is easier than searching a bar chart and allows the user to see their risk relative to neighboring counties

Share your thoughts in the chat:
- How is the To There version better than the From Here version?
- How could we further improve the To There version?

2.2 Align visuals to the storyline
Step 3: align visual to AHA MOMENT

AHA MOMENT: Camp County Texas is at HIGH risk of COVID-19 illness.

From here …



To there …

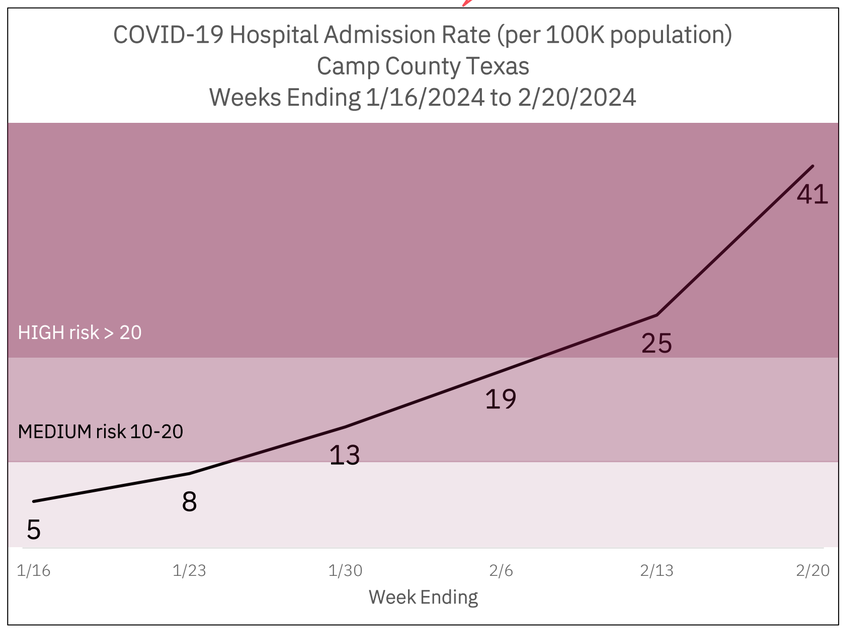
Use text, position and size to make the AHA clear and emphasized. Better than the line chart which requires audience to infer risk based on rate.

Simplify line chart by removing unnecessary elements and enhancing it to make relationship between rate and risk obvious.

COVID-19 risk is HIGH this week

COVID-19 risk was HIGH last week

Risk is Trending Higher



Share your thoughts in the chat:
- How is the To There version better than the From Here version?
- How could we further improve the To There version?

2.3 Craft your call to action

CALL TO ACTION: Residents of Camp County Texas should take the following actions to protect themselves and others from COVID-19 illness …

From here …

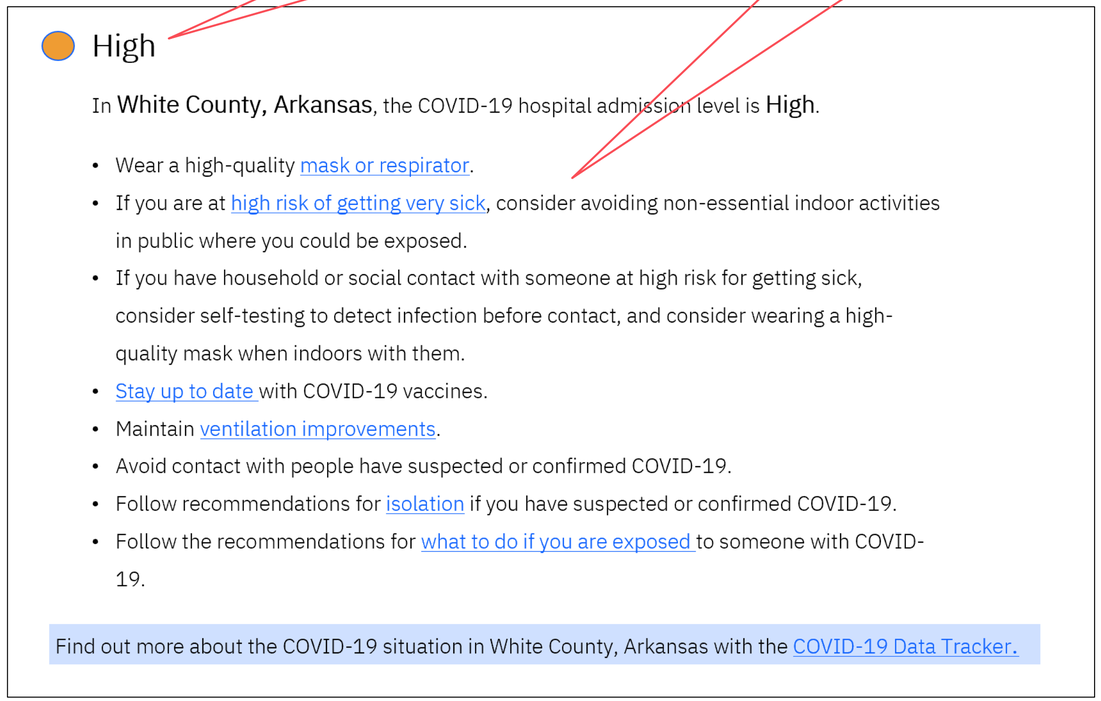
For recommendations, search the CDC website for any of these topics:

- Getting tested
- Isolating yourself
- Avoiding contact with others
- When to seek treatment
- How to seek treatment
- Increasing ventilation in your home and office
- Washing your hands
- Staying at home
- Wearing masks
- Social distancing
- Cleaning and disinfecting
- Safety precautions when using sprayers, foggers, misters or vaporizers
- Finding free masks
- Types of Masks and Respirators
- Symptoms
- Difference between the flu and COVID-19
- Clean surfaces
- Avoid touching your eyes, nose and mouth
- Limit in-home services and visitors
- Stock up on your regular medication

To there …

The CALL TO ACTION is tied to the AHA. Better than a generic list of items unrelated to risk.

Tailored list of recommendations with helpful links to additional information.



Share your thoughts in the chat:

- How is the To There version better than the From Here version?
- How could we further improve the To There version?

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2.4 Draft your data story

Assemble your storyline, data and visuals into a compelling data story.

References: Brent Dyles, Effective Storytelling and Catherine Cote Data Storytelling: How to Tell a Story with Data (hbs.edu)

2.4 Draft your data story: Process

Step 1. Create the story for your HOOK

- Your storyline narrative for the hook becomes a slide headline or section header.
- Assemble your data and visuals to support the HOOK.

Step 2. Create the story for your RISING MOMENTS

- Your storyline narrative for the rising moments becomes the headline or section header.
- Assemble your data and visuals to support the RISING POINTS.

Step 3. Create the story for your AHA MOMENT

- Your storyline narrative for the AHA moment becomes a slide headline or section header.
- Assemble your data and visuals to support the AHA MOMENT.

Step 4. Create the story for your CALL TO ACTION

- Your storyline narrative for the call to action becomes a slide headline or section header.
- Assemble supporting information for your CALL to ACTION.

2.4 Draft your data story:
Step 1: create story for the HOOK

COVID-19 health risks are HIGH or MEDIUM in 402 US counties.
More counties are at elevated risk this week compared to last week.

HIGH RISK: 20 or more COVID-19 hospital admissions per capita	32 counties	+1% since last week
MEDIUM RISK: Between 10-20 COVID-19 hospital admissions per capita	370 counties	+3% since last week
LOW RISK: 10 or fewer COVID-19 hospital admissions per capita	2,820 counties	-3% since last week

Data through February 20, 2024

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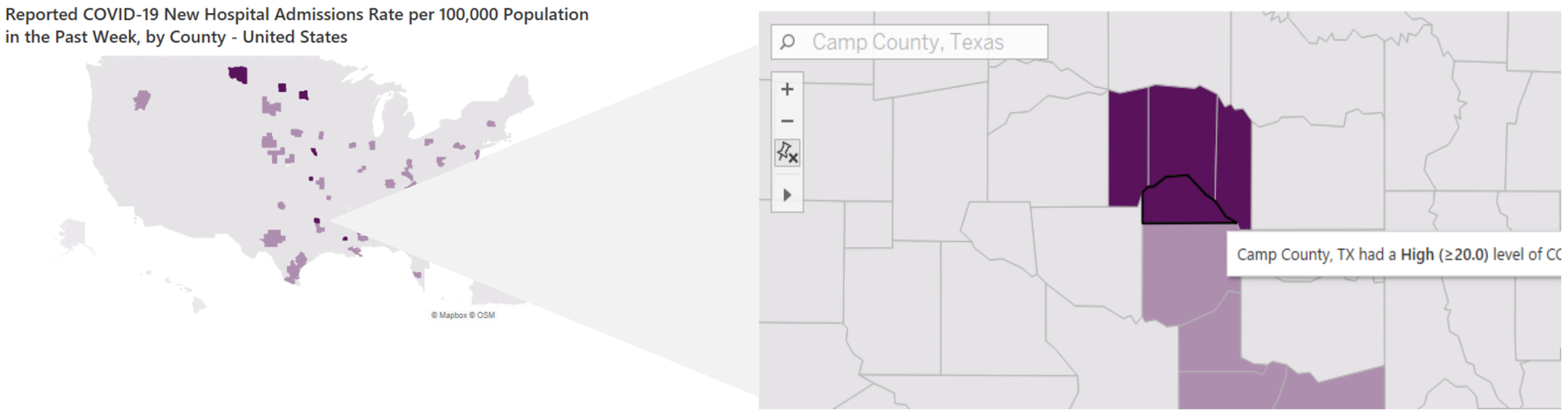
2.4 Draft your data story:
Step 2: create story for the RISING MOMENTS

A cluster of counties in East Texas are at HIGH risk of COVID-19 illness.



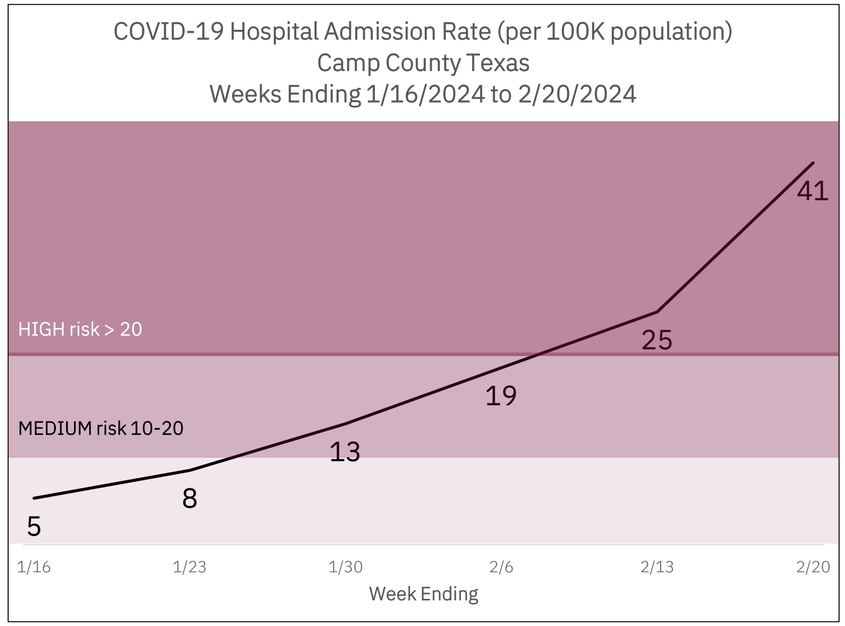
2.4 Draft your data story:
Step 3: create story for the AHA MOMENT

Camp County Texas is at HIGH risk of COVID-19 illness.

COVID-19 risk is HIGH this week

COVID-19 risk was HIGH last week

Risk is Trending Higher



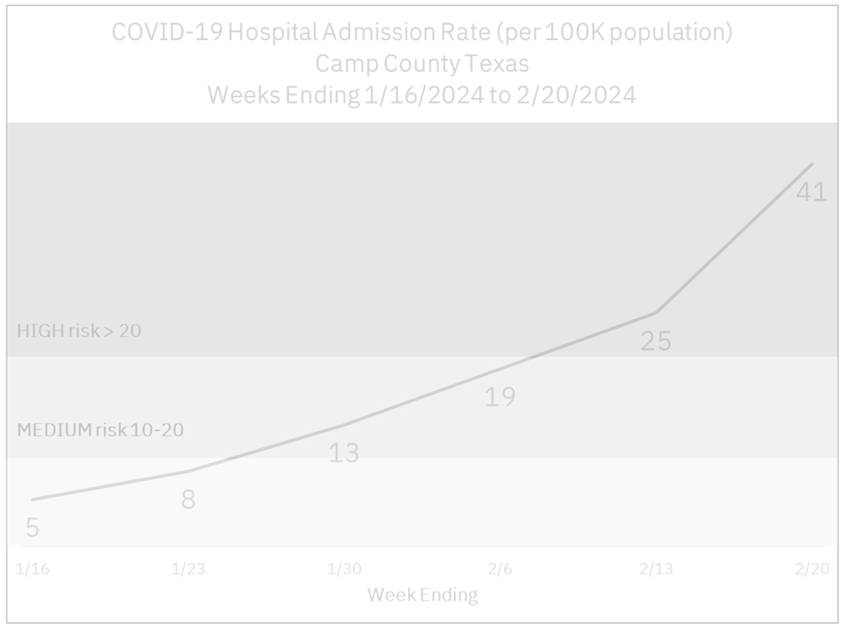
2.4 Draft your data story:
Step 4: create story for the CALL TO ACTION

Camp County Texas is at HIGH risk of COVID-19 illness.

COVID-19 risk is HIGH this week

COVID-19 risk was HIGH last week

Risk is Trending Higher



Those residing in or traveling through Camp County should take the following precautions:

- Wear a high-quality mask or respirator.
- If you are at high risk of getting very sick, consider avoiding non-essential indoor activities in public where you could be exposed.
- If you have household or social contact with someone at high risk for getting sick, consider self-testing to detect infection before contact, and consider wearing a high-quality mask when indoors with them.
- Stay up to date with COVID-19 vaccines.
- Maintain ventilation improvements.
- Avoid contact with people have suspected or confirmed COVID-19.
- Follow recommendations for isolation if you have suspected or confirmed COVID-19.
- Follow the recommendations for what to do if you are exposed to someone with COVID-19.

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2.4 Draft your data story: Pulling it all together

HOOK

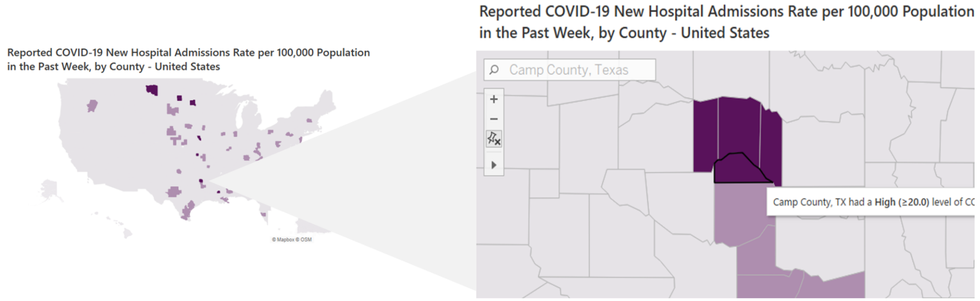
COVID-19 health risks are HIGH or MEDIUM in 402 US counties. More counties are at elevated risk this week compared to last week.

HIGH RISK: 20 or more COVID-19 hospital admissions per capita	32 counties	+1% since last week
MEDIUM RISK: Between 10-20 COVID-19 hospital admissions per capita	370 counties	+3% since last week
LOW RISK: 10 or fewer COVID-19 hospital admissions per capita	2,820 counties	-3% since last week

Data through February 20, 2024

RISING POINTS

A cluster of counties in East Texas are at HIGH risk of COVID-19 illness.



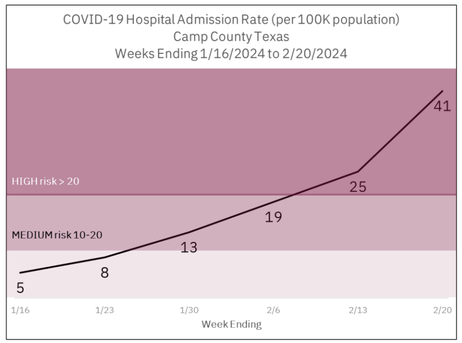
AHA MOMENT

Camp County Texas is at HIGH risk of COVID-19 illness.

COVID-19 risk is HIGH this week

COVID-19 risk was HIGH last week

Risk is Trending Higher



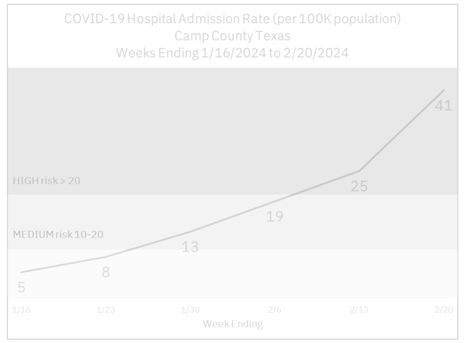
CALL TO ACTION

Camp County Texas is at HIGH risk of COVID-19 illness.

COVID-19 risk is HIGH this week

COVID-19 risk was HIGH last week

Risk is Trending Higher



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- Wear a high-quality mask or respirator.
- If you are at high risk of getting very sick, consider avoiding non-essential indoor activities in public where you could be exposed.
- If you have household or social contact with someone at high risk for getting sick, consider self-testing to detect infection before contact, and consider wearing a high-quality mask when indoors with them.
- Stay up to date with COVID-19 vaccines.
- Maintain ventilation improvements.
- Avoid contact with people have suspected or confirmed COVID-19.
- Follow recommendations for isolation if you have suspected or confirmed COVID-19.
- Follow the recommendations for what to do if you are exposed to someone with COVID-19.

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2.5 Getting Feedback

Feedback is a gift. If the audience does not understand the story, if they missed the “AHA moment”, or if they don’t feel excited about the story, **then we need to find out why and make changes**.

2.5 Getting Feedback: Process

Step 1. Identify representatives to ask for feedback

- Who can represent the concerned residents.
- Are there others who need to be included e.g. SMEs, Communication office, etc.?
- Enter potential candidates in template.

Step 2. Obtain feedback from representatives

- What questions can we ask to get information we need from them?
- What can we ask them to ensure we get the feedback we need?
- Enter questions in the template to gather their feedback.

Step 3. Update draft story

- Review each piece of feedback.
- Does it really improve on the story?
- Is the feedback representative of the larger group – or was it important to a few?

2.5 Getting feedback:
Step 1: Identify representatives to ask for feedback

You should **ALWAYS** gather feedback. Getting feedback from your intended audience is a great place to start. It does not hurt to ask other stakeholders as well.

Asking yourself the following questions will help identify other people to get feedback from.

- Does your story or insights need to be validated by a SME?
- Is there a communications member assigned to your program?
- Has your supervisor already reviewed the presentation?
- Will media be present?
- Is it a high-profile issue?

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2.5 Getting feedback:
Step 2: Obtain feedback from representatives

Get feedback to understand if your story aligns to what the intended audience needs.

Key questions to ask when **asking for** feedback

1. **What are you focusing on?** Ensure your reviewer is focusing on elements that are most important to the story.
2. **What do you see and observe?** Ensure your reviewer is interpreting your slides and visualizations as intended.
3. **What questions do you have?** If your slides and visualization raise critical questions, add notes to remember to answer questions before they are asked.

Tips when **receiving** feedback

- Embrace discomfort
- Listen with intent
- Reward the candor in a way that is specific and sincere

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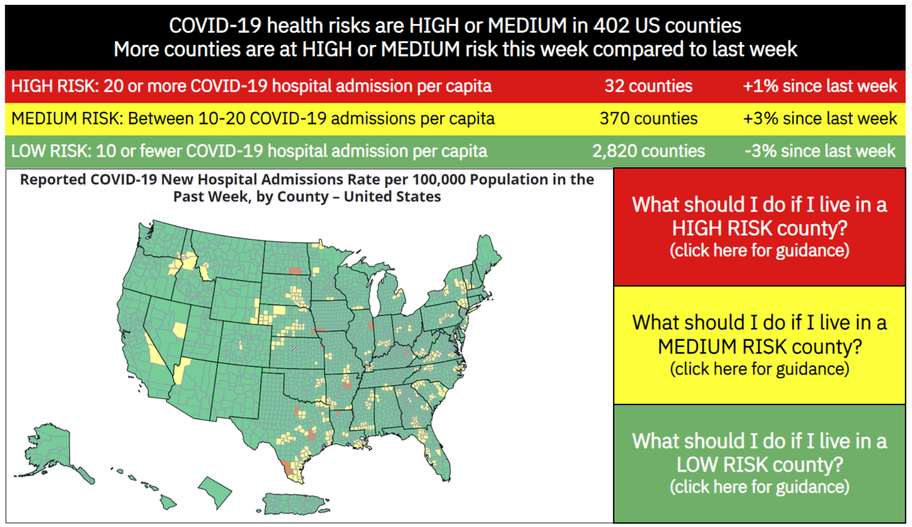
2.5 Getting feedback:
Step 3: Update story based on feedback

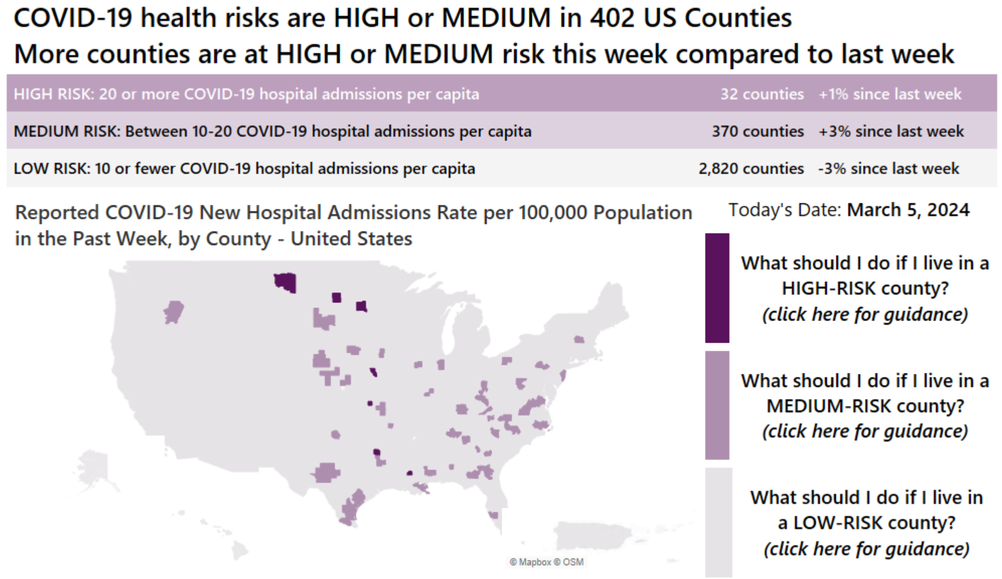
Draft CDC Dashboard



Feedback

- The colors are too bright and distracting, little white space. Hard to focus on hot spots.
- Use DOH Color Palette to create a sequential color ramp that is accessible and uses color to communicate increased risk
- Use plain language in everything (No “Week 15”)

Final Visualization



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Module 2: Drafting your story and getting feedback

You learned about incorporating data into your story

You learned about incorporating effective data visualization into your story

You learned about combining narrative, data, and visuals to create a compelling draft story

You learned how to get feedback to improve your story

You learned how to finalize your story

Module 3 Preview: next week you will learn how to best deliver your story and incorporate ongoing feedback

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Module 2 Additional resources

Here are links to additional resources if you want to explore these topics further.

Data Sources and Data Quality

- 15 Open Datasets for Healthcare (opendatascience.com)
- Resources for Health Care Quality Measurement | Agency for Healthcare Research and Quality (ahrq.gov)
- A data quality framework from the World Health Organization

Visualizations

- WA DOH Visual Style Guide
- WA DOH Data Visualization Resources
- How To Display Data In Presentations The Right Way (duarte.com)
- A Data Storyteller's Guide To Avoiding Clutter (effectivedatastorytelling.com)
- Urban Institute Data Visualization Style Guide
- Tableau Iron Viz Competition

Storyboard to story

- The importance of storyboarding - how I used storyboarding to write a best selling book — (storytelling with data)
- Build a Narrative on a Storyboard | Hands-On Data Visualization (handsondataviz.org)

Clear communications

- Do no harm guide (urban org)
- Plain Language (plainlanguage.gov)

Have Fun

VAST Challenge

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2.6 Module 2: Hands on practice activities

You will now have a chance to practice what you have learned. There are three scenarios that you can choose from. Each scenario has a template that you will fill out as you go through the steps of creating a persona, creating a needs statement and ultimately creating a storyboard. The first two also have sample data and a sample answer.

Here are the three scenarios and the links to get you the documents.

1. Prebuilt cancer scenario
    1. Activity template
    2. Sample answer

2. Prebuilt opioid overdose scenario
    1. Activity template
    2. Sample answer

3. Choose your own data and scenario
    1. Activity template

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