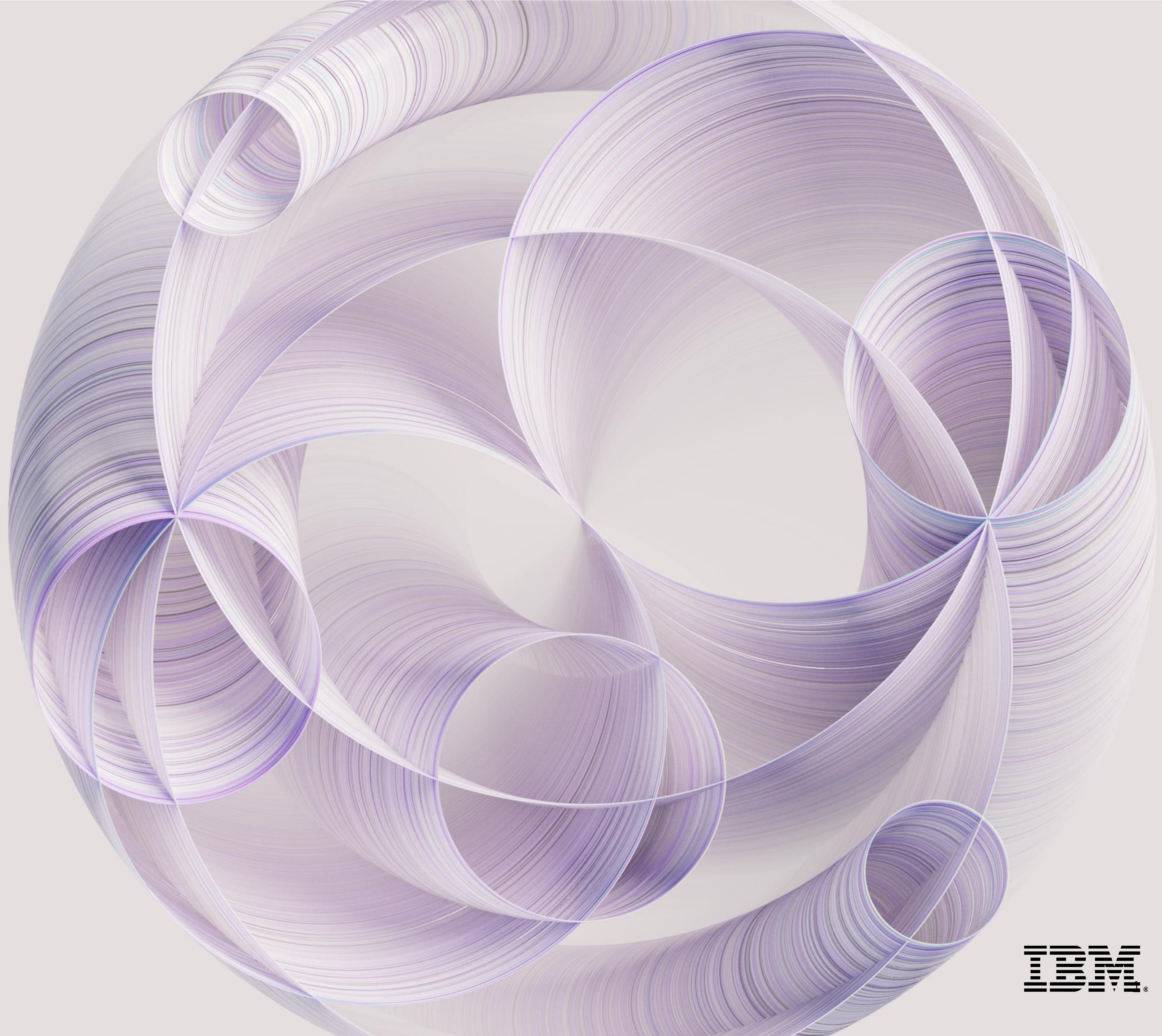# Storytelling with Data

Module 3

Your course facilitators and DOH advisors

Sunaina Menawat
Associate Partner
HHS and Public Health
State & Local Government
IBM Consulting

Mark Freeman
Chief Data Scientist
State & Local Government
IBM Consulting

Zeyno Nixon, PhD, MPH, MA (she/her)
Manager, Data Visualization Section
Center for Data Science

Alexandria Matos (she/her/ella)
Informatics and Advanced Analytics Supervisor
Prevention and Community Health Division

Francoise Pickart (she/her)
Data Democratization Manager
Center for Data Science
Office of Health + Science

Chess Claire (they/he)
Data Product Owner
Environmental Public Health

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.
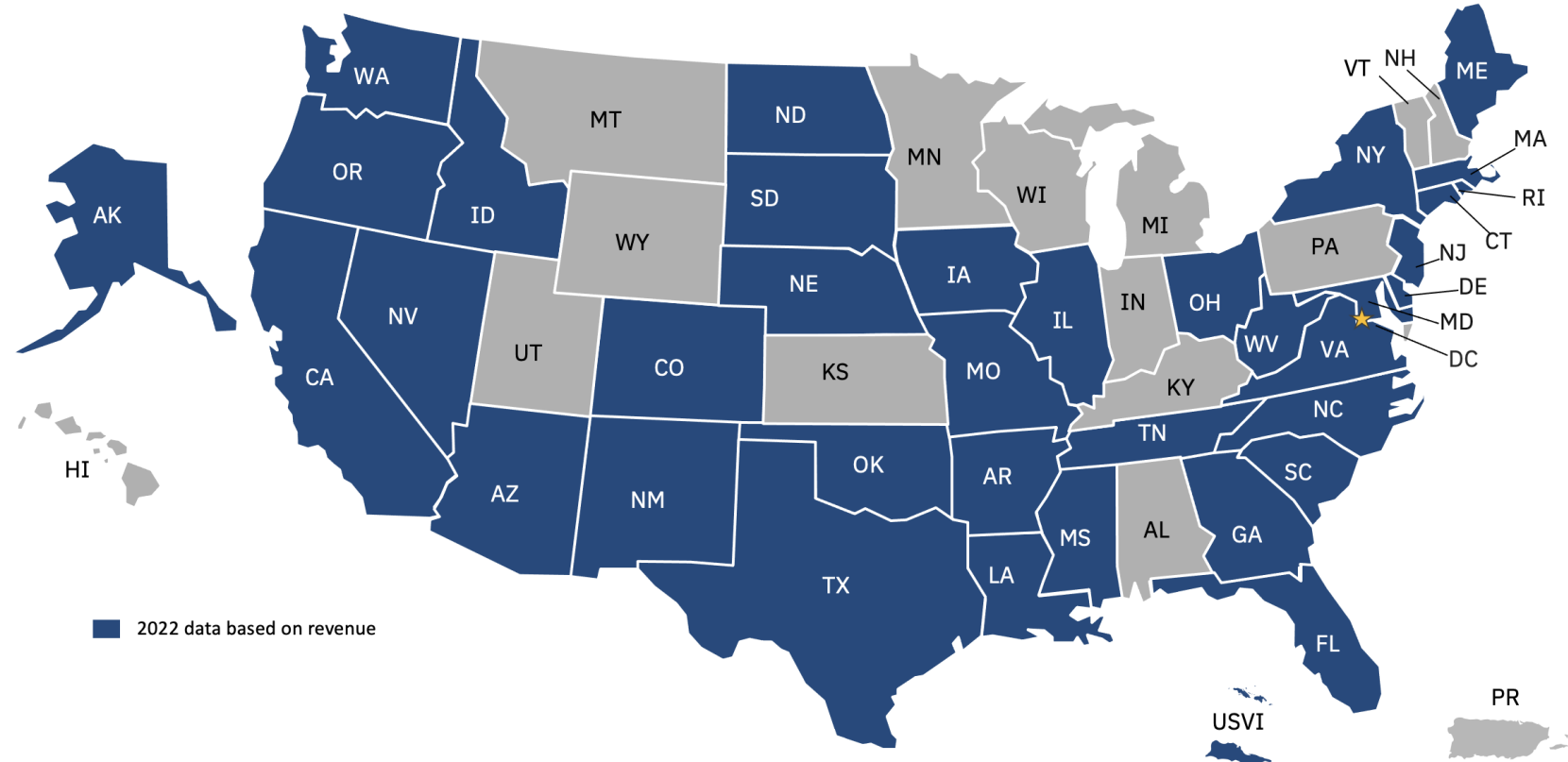
Consulting &
Delivery Expertise

Technical Expertise

Public Health
Expertise
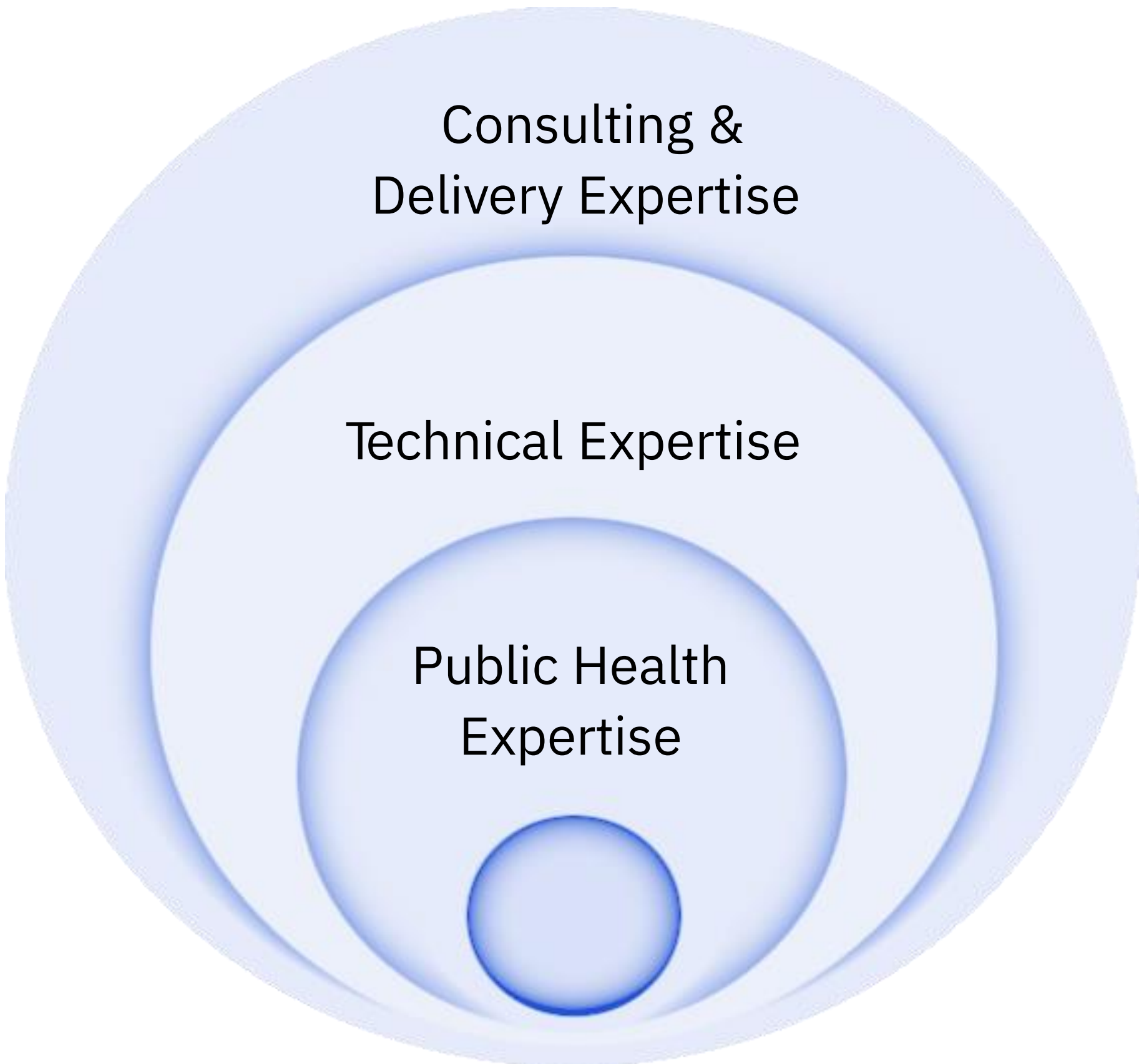
Key Skills

- 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

WA, MT, ND, MN, WI, VT, NH, ME, AK, OR, ID, SD, MI, NY, MA, RI, WY, PA, NJ, CT, NV, NE, IA, IN, OH, DE, MD, DC, CA, UT, CO, KS, MO, IL, WV, VA, KY, HI, AZ, NM, OK, AR, TN, NC, MS, AL, GA, SC, TX, LA, FL, USVI, PR

2022 data based on revenue

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

IBM.

Washington State Department of HEALTH

Equitable public health data storytelling is guided by do-no-harm principles

01	Critically examine your data

02	Use people-first language

03	Label people, not skin color

04	Labels and their hierarchy have meaning

05	Consider missing groups

06	Use color with awareness and care

07	Consider impact of icons and shapes

08	Connect with those central to your research

09	Reflect lived experiences

10	Understand your audience's needs

IBM

Source: https://www.urban.org/projects/do-no-harm-project

Washington State Department of HEALTH

This Storytelling with Data Training series will teach you how to go ...

From Here

COVID-19 Update for the United States

Early Indicators

Test Positivity ›
% Test Positivity
9.3%
(February 4 to February 10, 2024)

Trend in % Test Positivity
-0.6% in most recent week

Dec 23, 2023   Feb 10, 2024

Emergency Department Visits ›
% Diagnosed as COVID-19
1.8%
(February 4 to February 10, 2024)

Trend in % Emergency Department Visits
-5.3% in most recent week

Dec 23, 2023   Feb 10, 2024

Severity Indicators

Hospitalizations ›
Hospital Admissions
21,373
(February 4 to February 10, 2024)

Trend in Hospital Admissions
+0.8% in most recent week

Dec 23, 2023   Feb 10, 2024

Deaths ›
% of All Deaths in U.S. Due to COVID-19
2.7%
(February 4 to February 10, 2024)

Trend in % COVID-19 Deaths
-6.9% in most recent week

Dec 23, 2023   Feb 10, 2024

These early indicators represent a portion of national COVID-19 tests and emergency department visits. Wastewater information also provides early indicators of spread.

Total Hospitalizations
6,816,249

Total Deaths
1,178,527

CDC | Test Positivity data through: February 10, 2024; Emergency Department Visit data through: February 10, 2024; Hospitalization data through: February 10, 2024; Death data through: February 10, 2024.
Posted: February 20, 2024 3:17 PM ET

To There

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

Reported COVID-19 New Hospital Admissions Rate per 100,000 Population in the Past Week, by County - United States

Today's Date: **March 5, 2024**

What should I do if I live in a HIGH-RISK county?
(click here for guidance)

What should I do if I live in a MEDIUM-RISK county?
(click here for guidance)

What should I do if I live in a LOW-RISK county?
(click here for guidance)

© Mapbox © OSM

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

WEEK 1: MODULE 1

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

LAST WEEK: MODULE 2

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

TODAY: MODULE 3

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

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?

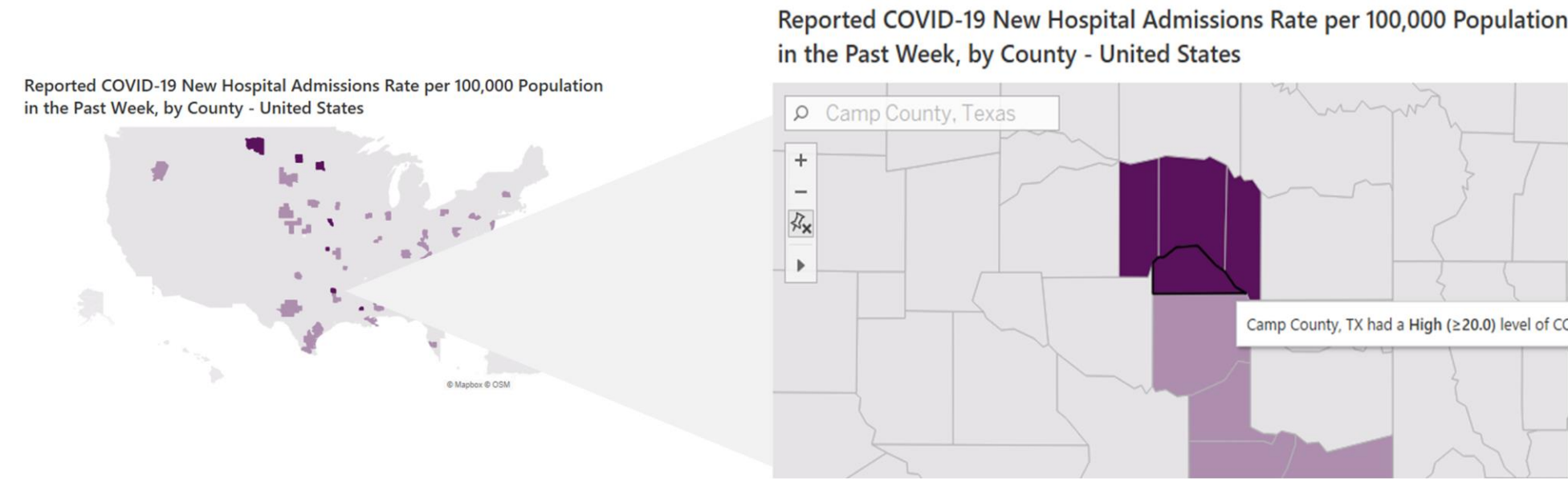# In Module 1, we created a data story narrative for the CDC

Our COVID-19 Storyboard

COVID-19 risk level in <Community> is <Low, Medium, High>.

Map of US County risk levels color-coded to highlight risk.

Tailored list of recommended actions based on level of risk.

US Counties at Medium or Higher risk in comparison to prior week.

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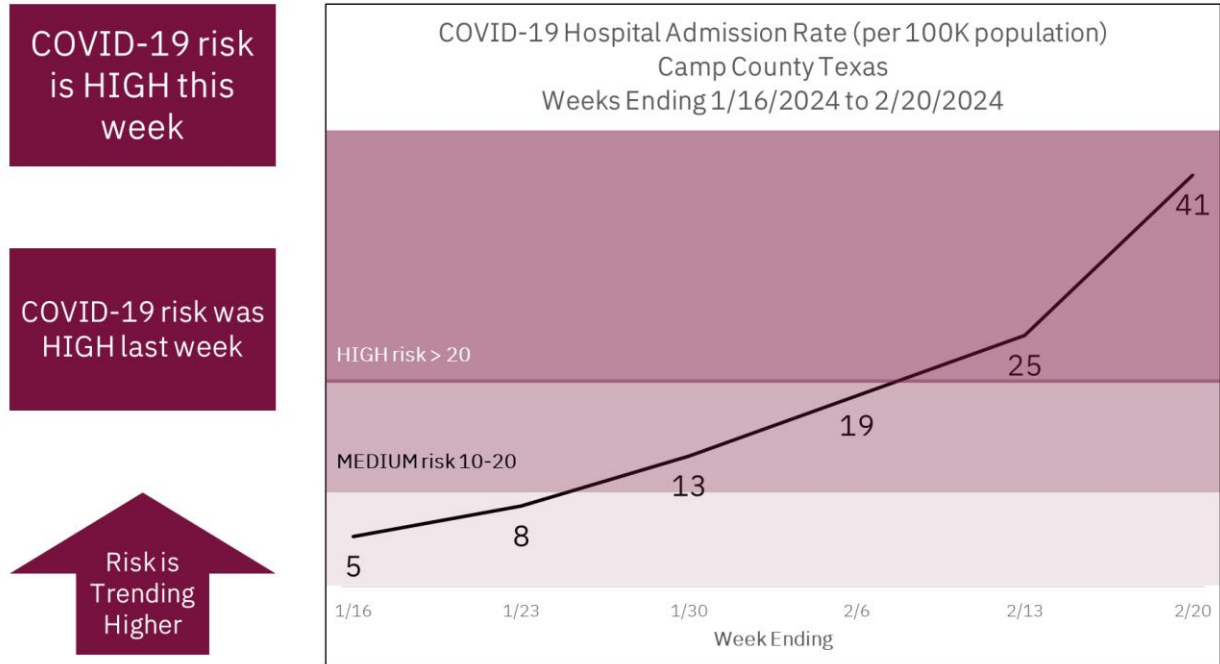
2. **RISING POINT:** A cluster of counties in East Texas are at HIGH risk of COVID-19 illness.

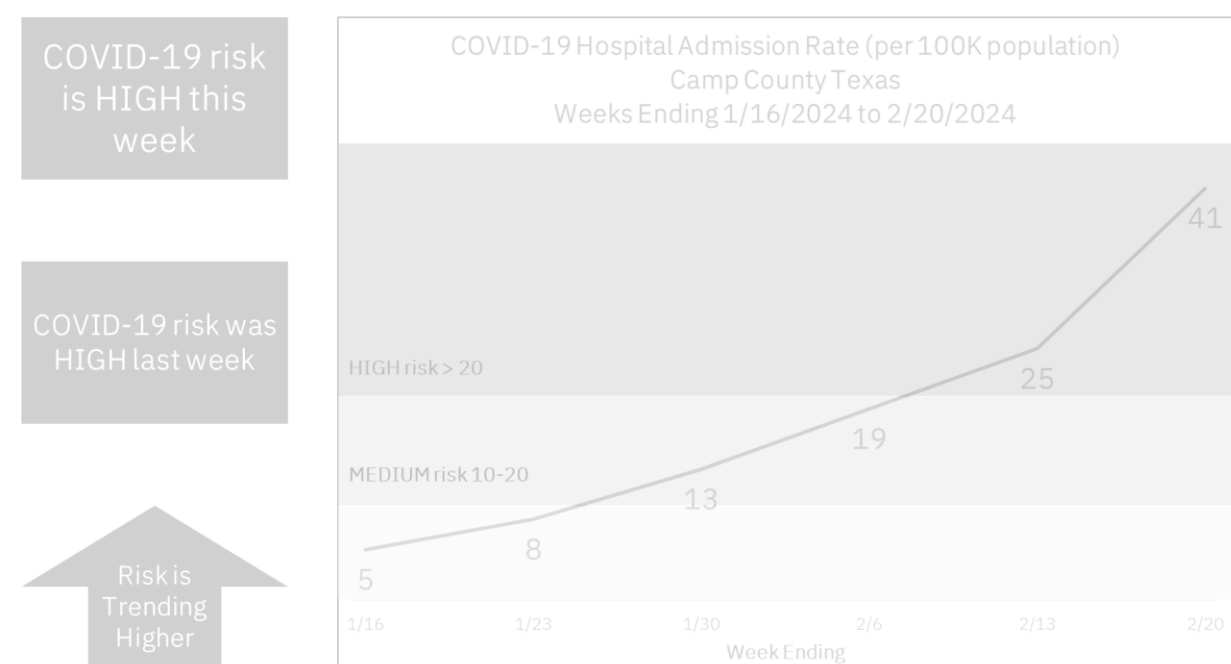3. **AHA MOMENT:** Camp County Texas is at HIGH risk of COVID-19 illness.

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

Module 2: Recap

• Align data to storyline

• Align visuals to storyline

• Craft call to action

• Draft your data story

• Get feedback

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

In Module 2, we created a complete data story for the CDC

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

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

Reported COVID-19 New Hospital Admissions Rate per 100,000 Population in the Past Week, by County - United States

© Mapbox © OSM

Reported COVID-19 New Hospital Admissions Rate per 100,000 Population in the Past Week, by County - United States

Camp County, Texas

Camp County, TX had a **High** (≥20.0) level of CO

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

COVID-19 Hospital Admission Rate (per 100K population)
Camp County Texas
Weeks Ending 1/16/2024 to 2/20/2024

HIGH risk > 20

MEDIUM risk 10-20

41
25
19
13
8
5

1/16 1/23 1/30 2/6 2/13 2/20
Week Ending

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

COVID-19 Hospital Admission Rate (per 100K population)
Camp County Texas
Weeks Ending 1/16/2024 to 2/20/2024

HIGH risk > 20

MEDIUM risk 10-20

41
25
19
13
8
5

1/16 1/23 1/30 2/6 2/13 2/20
Week Ending

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.

Module 3: Deliver your story and incorporate ongoing feedback

How should we share this story with our audience?

Please share your thoughts in the chat

Module 3: Deliver your story and incorporate ongoing feedback

3.1 Methods to Deliver Your Story

3.2 Mobile Content

3.3 Dashboards
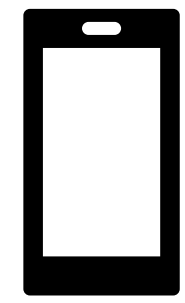
3.4 Presentations

3.5 Methods to Obtain Audience Feedback

3.6 Incorporating Feedback

3.7 Bonus Tips!

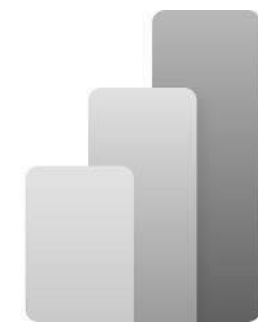3.8 Course Recap

IBM

3.1 A few common methods to deliver your data story

Mobile Content

The most common method for general purpose data storytelling to large external audiences (e.g., concerned citizens).

Advantages:
- Highly scalable to large audiences
- Aligns with how the public receives on-demand information
- Enables audience-adaptive data stories

Disadvantages:
- Often difficult to incorporate compelling narrative
- Limited flexibility to customize data stories
- High development cost

Dashboards

Another common delivery method for general purpose data storytelling to large external audiences (e.g., concerned citizens).

Advantages:
- Highly scalable to large audiences
- Data stories can be delivered interactively to accommodate the needs of multiple audiences
- Stories can update automatically with new data

Disadvantages:
- Often difficult to incorporate compelling narrative
- Limited flexibility to customize data stories
- High development cost
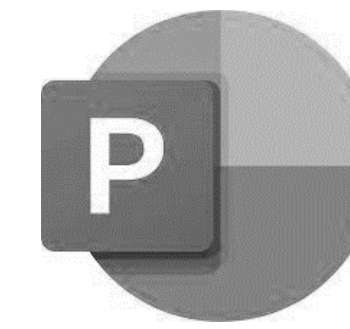
Presentations

The most common delivery method for internal audiences and targeted external audiences (e.g., community groups).

Advantages:
- Low production cost
- Enables highly customizable combinations of narrative, data, and visualizations
- Easily adaptable to the needs of different audiences

Disadvantages:
- Not scalable to larger audiences
- Content is not generally interactive
- Stories need to be updated (semi)manually

Share your thoughts in the chat:
- What other methods are there to delivery data stories?
- What are advantages and disadvantages of these methods?

Washington State Department of HEALTH

3.2 Common methods to deliver your data story: Mobile Content

Use best practice mobile application design principles to reach your audience where they are most online.

1. **Adapt to Less Real Estate:** Adjust your dashboard design to fit within the confines of a smart phone interface. Don't simply replicate your web design on mobile.

2. **Simpler Visualizations:** Complexity that works well on a web-based dashboard will not be usable in a mobile app.

3. **Touch-based Interactivity:** Mobile users will touch (instead of click) interactive elements. So interactive elements need to be big enough to be usable with a touch.

4. **Copy Successful Designs:** Mimic the design of widely used mobile apps that your users will already know how to use.
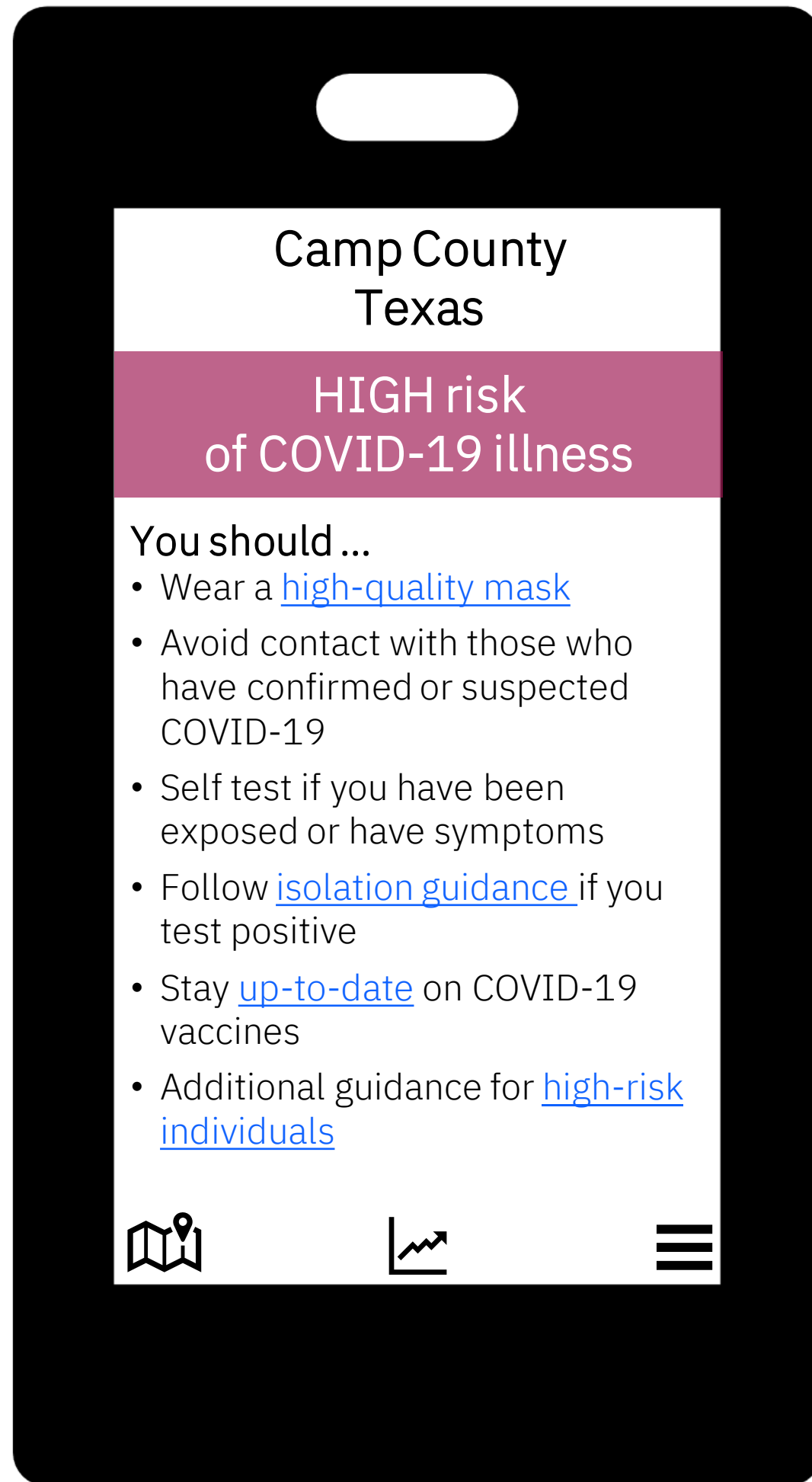
Hours per Day Online US Adults

■ Mobile App   ■ Web Site

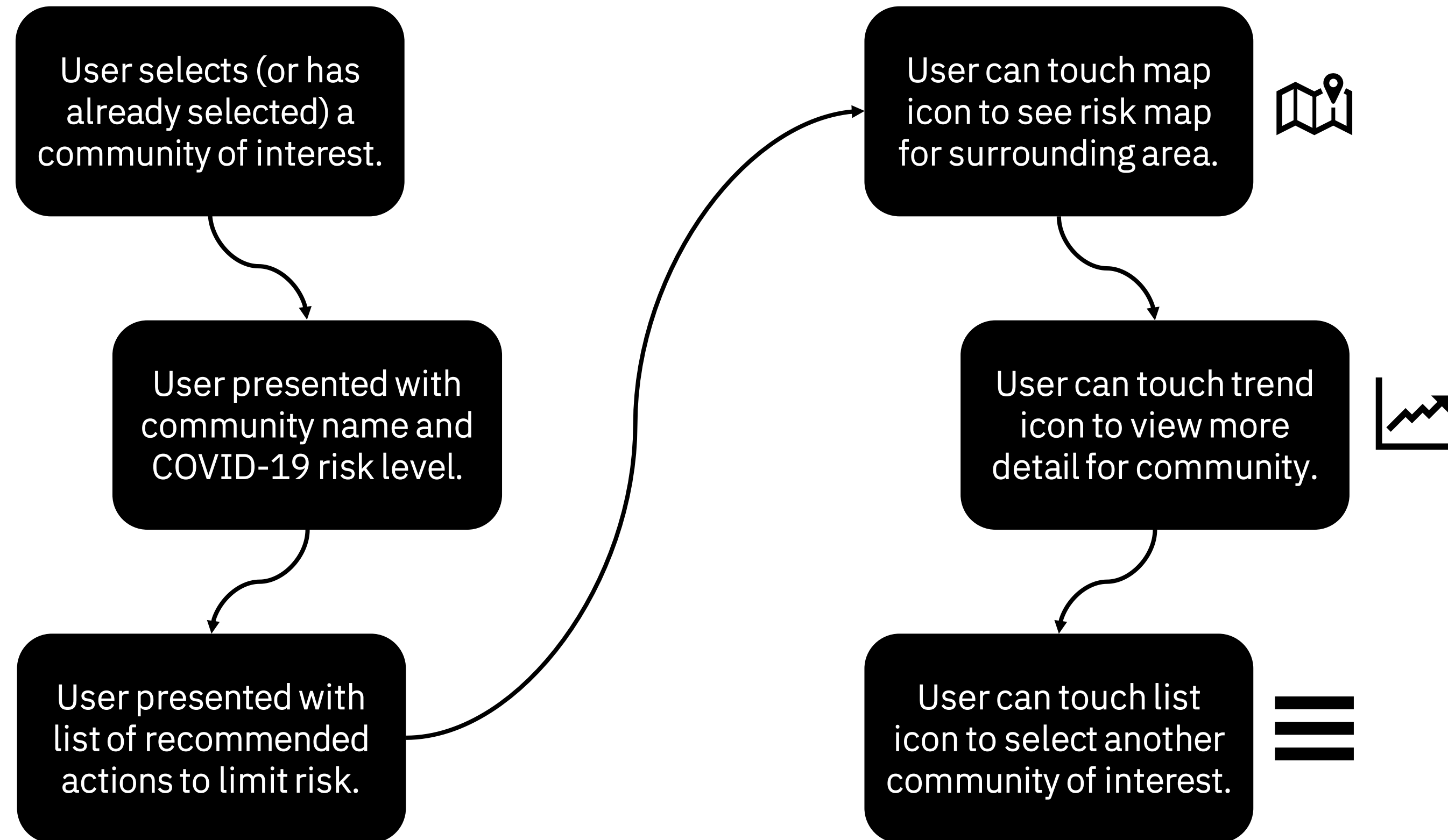2.8 — 0.4 — 2018

3.8 — 0.4 — 2022
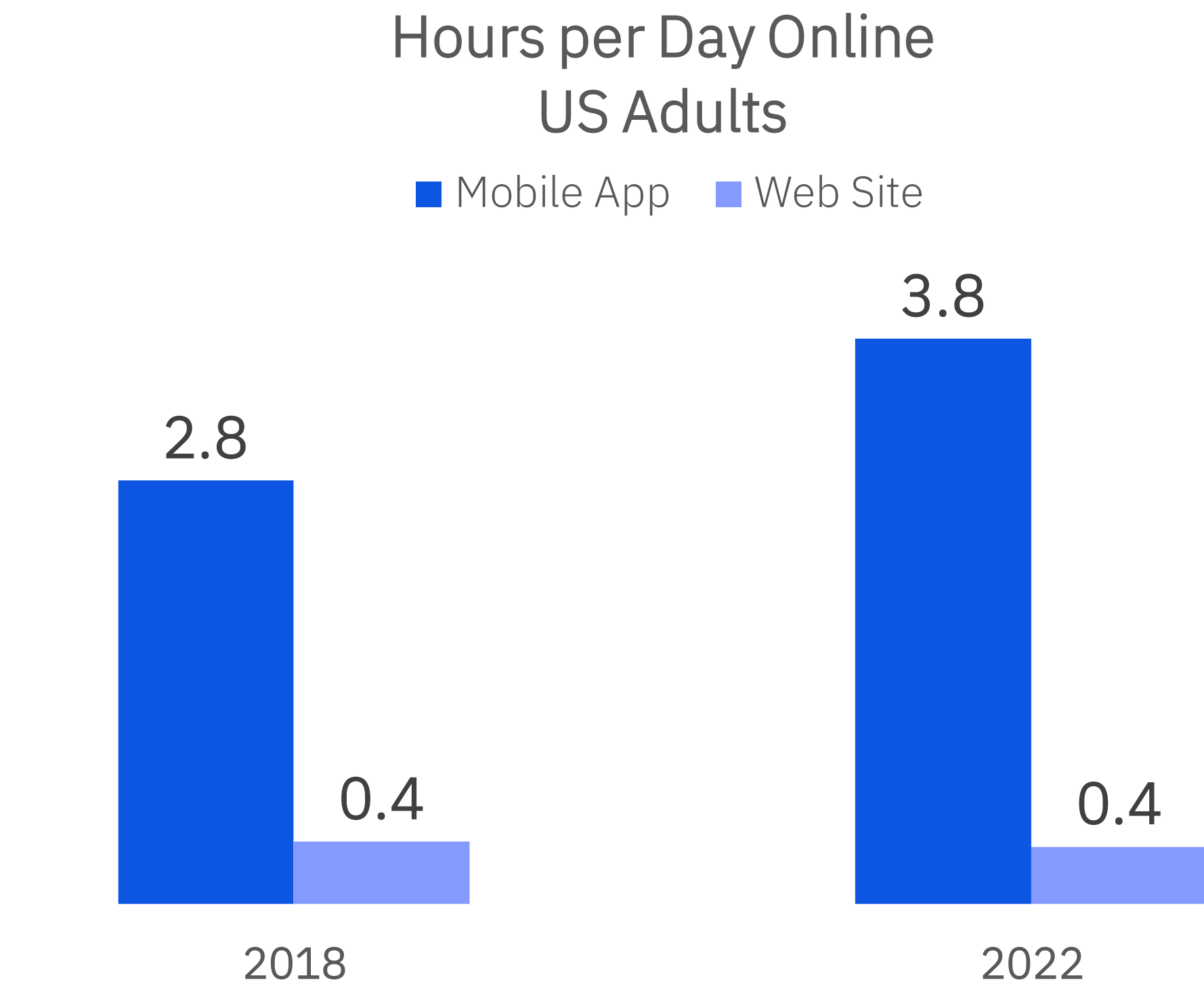
SOURCE: eMarketer.com

Share your thoughts in the chat:
- What do you think about using apps to share data stories?
- Do you think it's any better than sharing a web dashboard?

Washington State Department of HEALTH

13

3.2 Mobile App Example: Mimicking the Weather App

Camp County Texas

HIGH risk of COVID-19 illness

You should …
- Wear a high-quality mask
- Avoid contact with those who have confirmed or suspected COVID-19
- Self test if you have been exposed or have symptoms
- Follow isolation guidance if you test positive
- Stay up-to-date on COVID-19 vaccines
- Additional guidance for high-risk individuals

Mobile App User Story

User selects (or has already selected) a community of interest.

User presented with community name and COVID-19 risk level.

User presented with list of recommended actions to limit risk.

User can touch map icon to see risk map for surrounding area.

User can touch trend icon to view more detail for community.

User can touch list icon to select another community of interest.

3.2 Mobile App Example: Touching the List Icon

User can touch list icon to select another community of interest.

≡

Camp County Texas
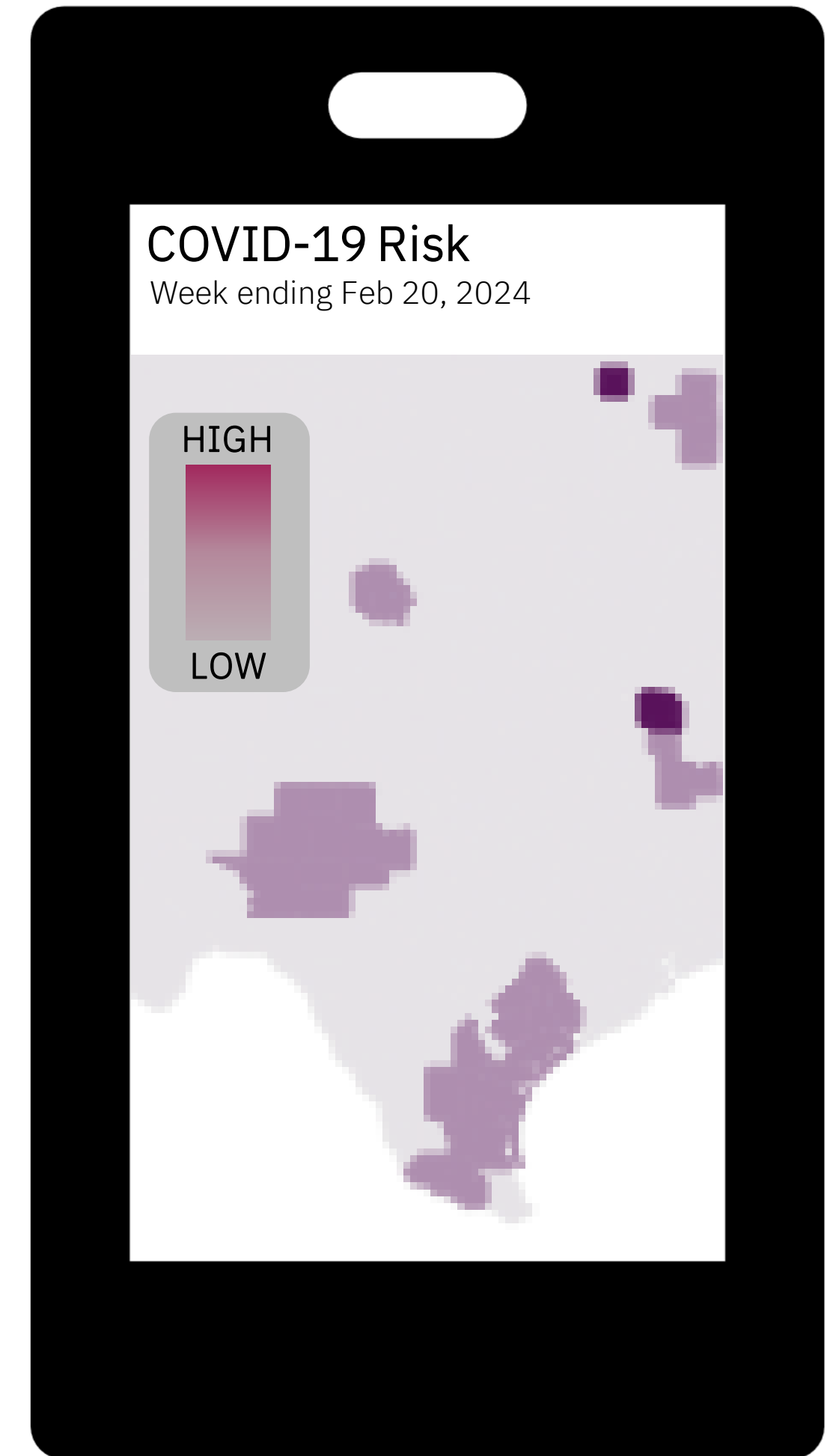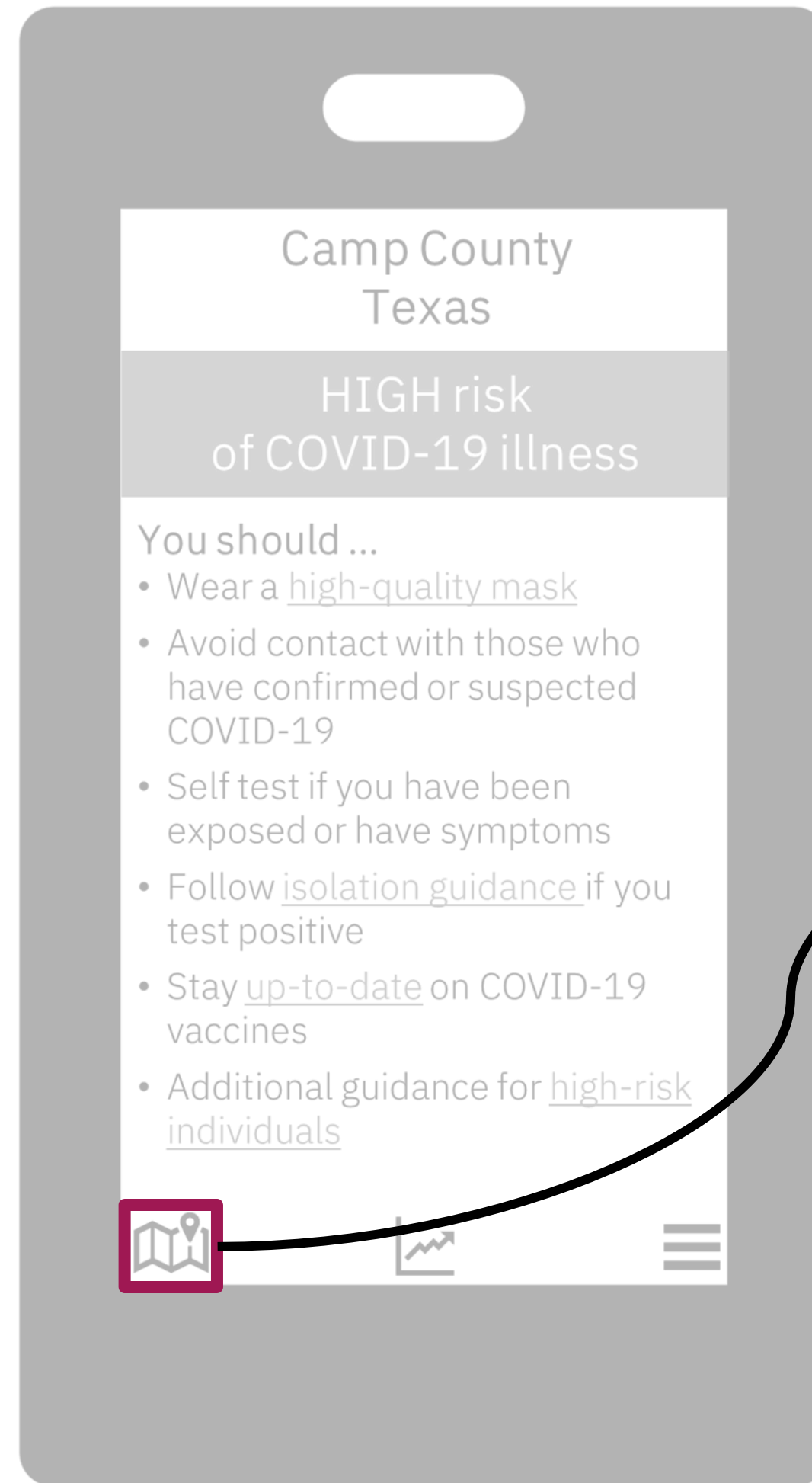
HIGH risk of COVID-19 illness

You should ...
- Wear a high-quality mask
- Avoid contact with those who have confirmed or suspected COVID-19
- Self test if you have been exposed or have symptoms
- Follow isolation guidance if you test positive
- Stay up-to-date on COVID-19 vaccines
- Additional guidance for high-risk individuals

COVID-19 Risk
Week ending Feb 20, 2024
Search for a community

Camp County Texas
HIGH

Tyler County Texas
LOW

Upshur County Texas
MEDIUM

Dallas County Texas
LOW

Denver County Colorado
LOW

Share your thoughts in the chat:
- What mobile app do you use to obtain data and insights?
- What do you like about them? What do you wish was better?

Washington State Department of
HEALTH

3.2 Mobile App Example: Touching the Map Icon

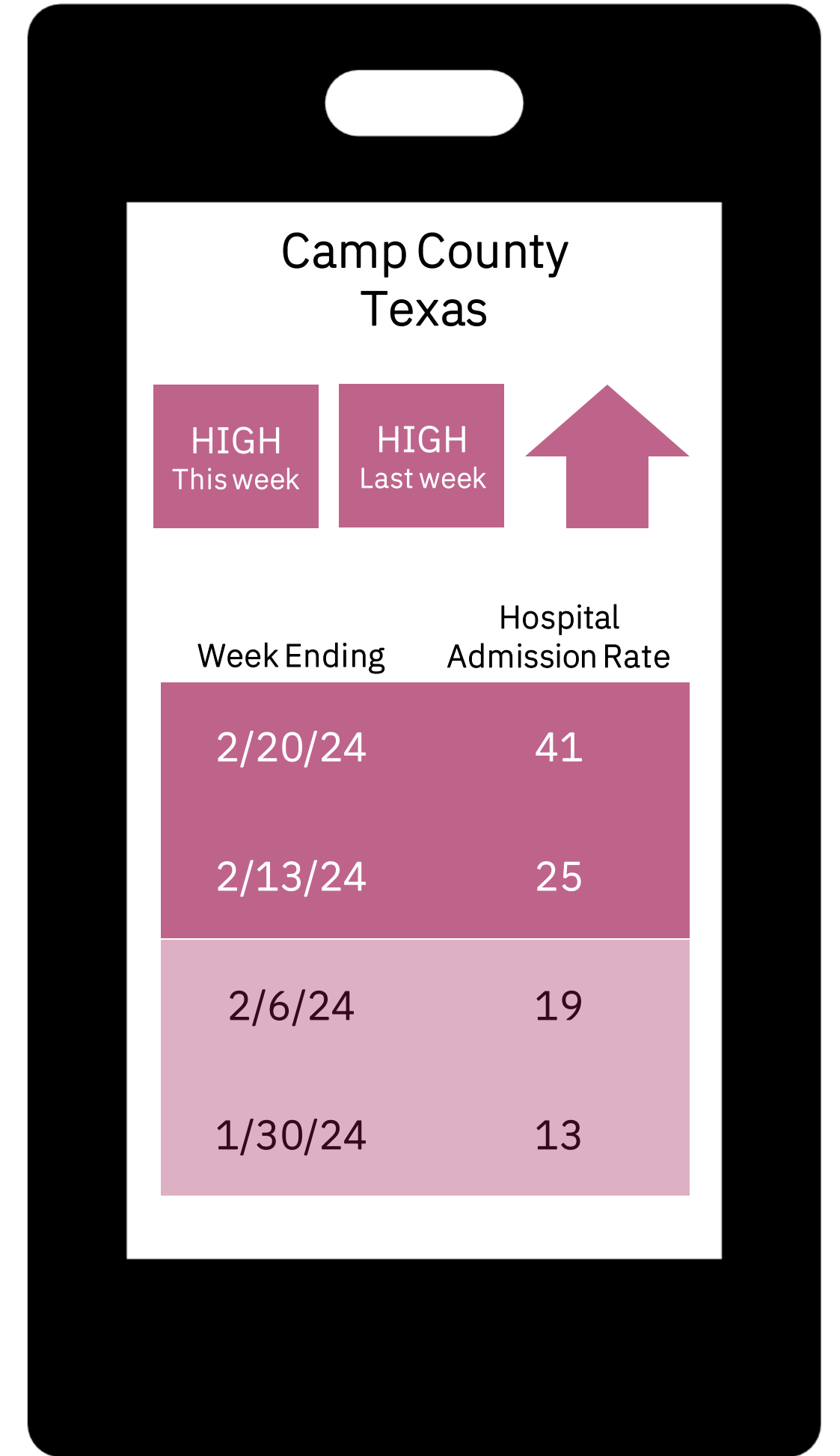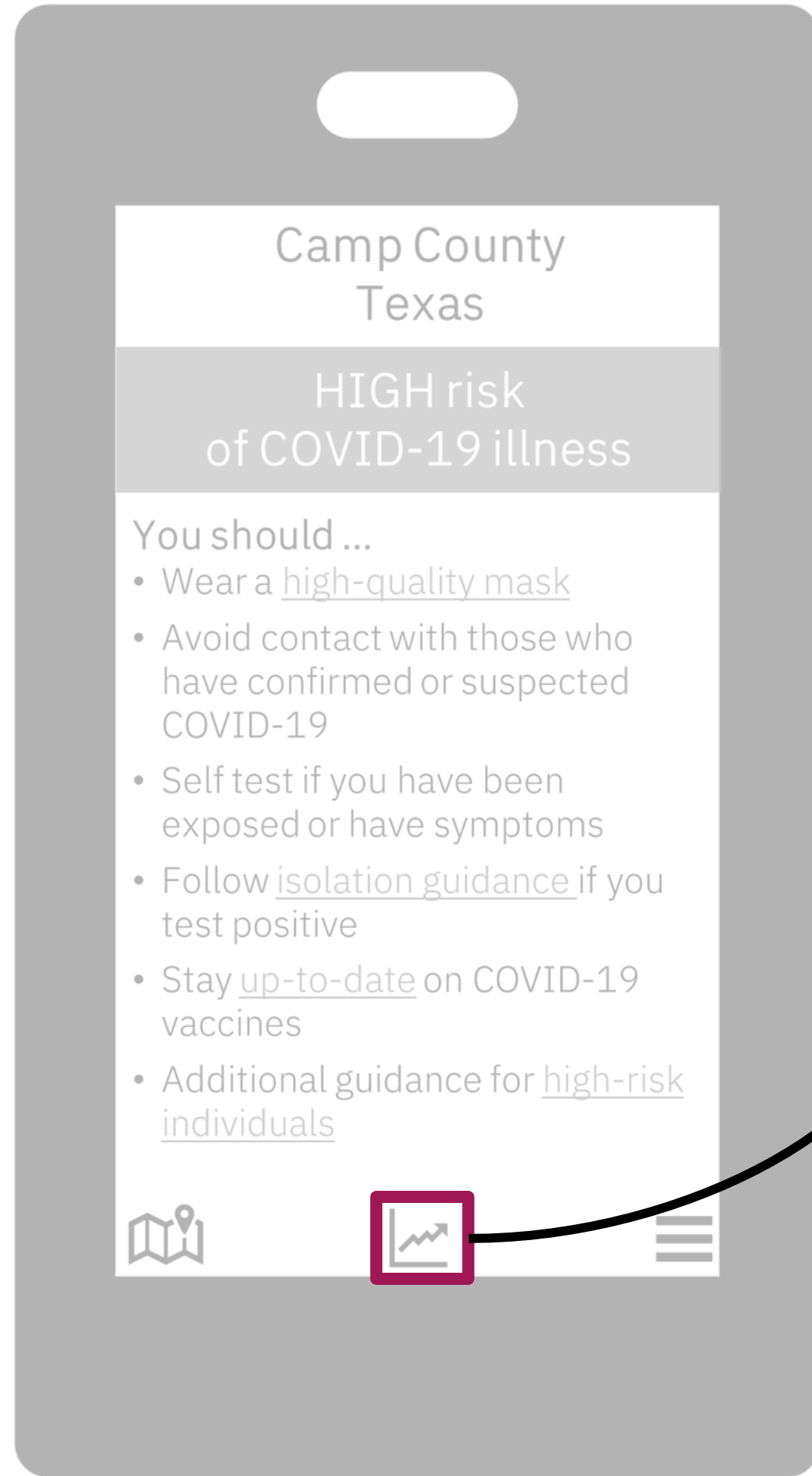User can touch map icon to see risk map for surrounding area.

Camp County
Texas

HIGH risk
of COVID-19 illness

You should ...
• Wear a high-quality mask
• Avoid contact with those who have confirmed or suspected COVID-19
• Self test if you have been exposed or have symptoms
• Follow isolation guidance if you test positive
• Stay up-to-date on COVID-19 vaccines
• Additional guidance for high-risk individuals

COVID-19 Risk
Week ending Feb 20, 2024

HIGH

LOW

3.2 Mobile App Example: Touching the Trend Icon

User can touch trend icon to see more detail for community.

Camp County Texas

HIGH risk of COVID-19 illness

You should ...
- Wear a high-quality mask
- Avoid contact with those who have confirmed or suspected COVID-19
- Self test if you have been exposed or have symptoms
- Follow isolation guidance if you test positive
- Stay up-to-date on COVID-19 vaccines
- Additional guidance for high-risk individuals

Camp County Texas

HIGH This week | HIGH Last week

Week Ending	Hospital Admission Rate
2/20/24	41
2/13/24	25
2/6/24	19
1/30/24	13

3.3 Common methods to deliver your data story: Dashboards

Use best practice dashboard design principles to tell a compelling data story to a wide audience.

1. **The 5 Second Rule:** Tell the data story on the dashboard landing page. Tell the story so that the user can get the main idea within 5 seconds.

2. **Inverted Pyramid:** Lead with the most important information on top followed by less important information on the bottom.

3. **Keep it Simple:** Keep your data and visualizations focused on the data story narrative. Don't overload the dashboard with data and visuals not key to your data story.

4. **The Right Visuals:** Use simple-to-understand fit-for-purpose data visualizations so that users can quickly grasp intended insights.

5. **One Click Away:** If you use links to supporting details, keep all that additional information one click away from the dashboard landing page.

"A dashboard is a visual display of the most important information needed to achieve one or more objectives; consolidated and arranged on a single screen so the information can be monitored at a glance."

Stephen Few
Information Dashboard Design: The Effective Visual Communication Of Data
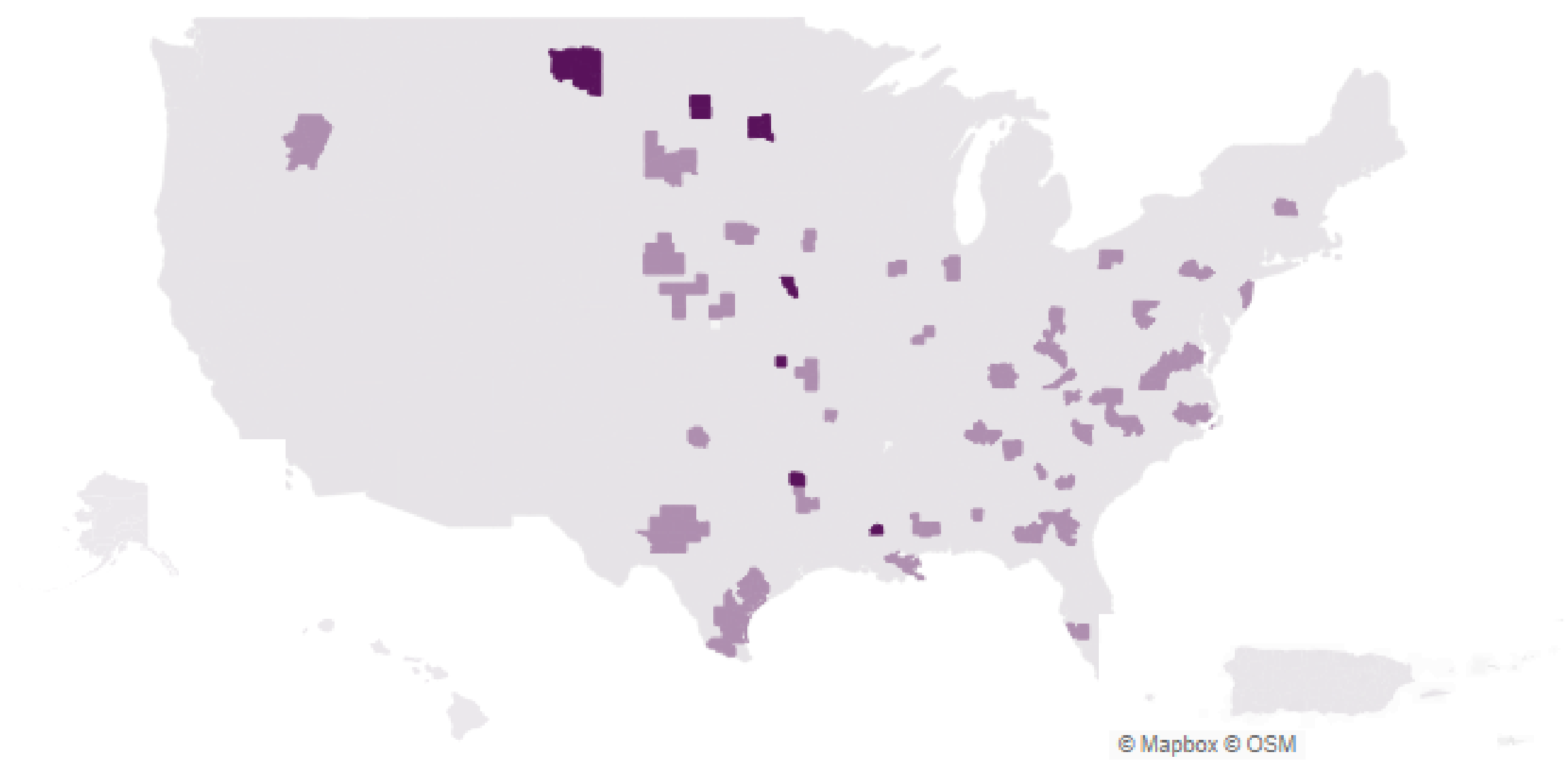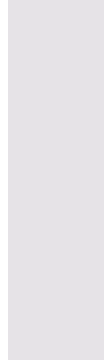
3.3 Dashboard Example: Landing Page

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

Reported COVID-19 New Hospital Admissions Rate per 100,000 Population in the Past Week, by County - United States
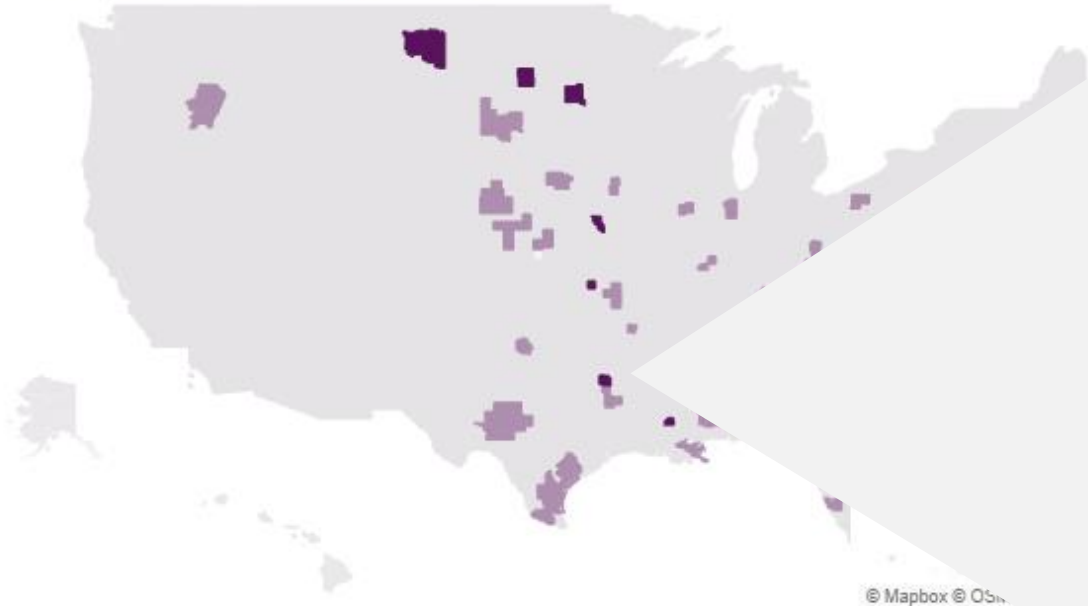
Today's Date: **March 5, 2024**

What should I do if I live in a HIGH-RISK county?
(click here for guidance)

What should I do if I live in a MEDIUM-RISK county?
(click here for guidance)

What should I do if I live in a LOW-RISK county?
(click here for guidance)

© Mapbox © OSM

You can add links to technical notes or additional information (e.g., wastewater trends) at the bottom of your landing page.

3.3 Dashboard Example: One-Click Away County Detail

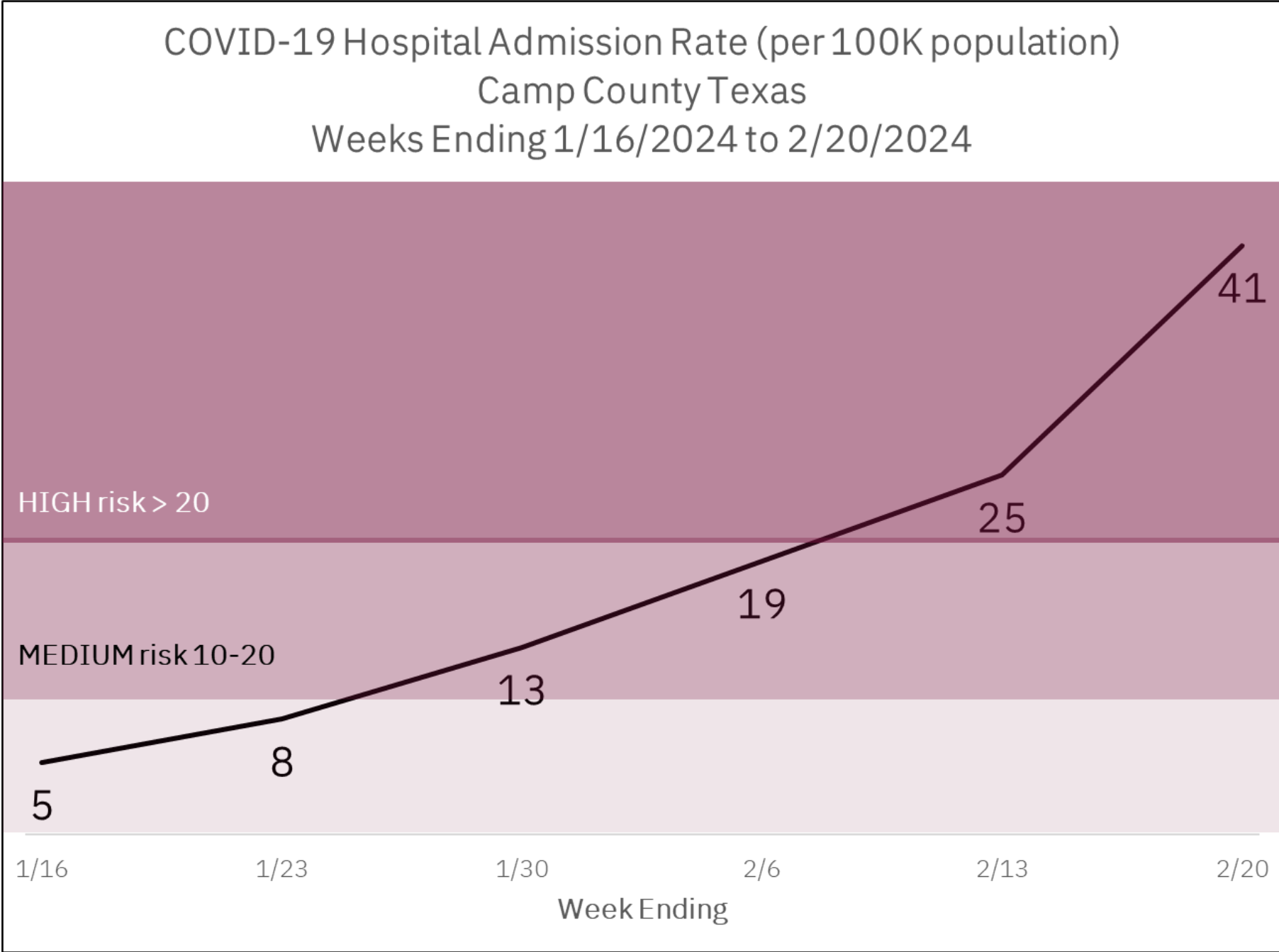Reported COVID-19 New Hospital Admissions Rate per 100,000 Population in the Past Week, by County - United States

© Mapbox © OS...

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

COVID-19 Hospital Admission Rate (per 100K population)
Camp County Texas
Weeks Ending 1/16/2024 to 2/20/2024

HIGH risk > 20

MEDIUM risk 10-20

41

25

19

13

8

5

| 1/16 | 1/23 | 1/30 | 2/6 | 2/13 | 2/20 |

Week Ending

3.4 Methods to deliver your data story: Presentations

Keep your presentation focused on the story line and the key insights your audience needs for improved knowledge and informed action.

Maintain **focus** on the story line. Don't get sidetracked into adjacent story lines.

Maintain **pace** so you deliver your story in the allotted time. Write a narrative and practice delivery and timing.

Maintain **agility** so you can adjust your story-telling to match the verbal and non-verbal feedback received from your audience.

"When we're at the point of communicating our analysis to our audience, we want to have a specific thing you want to explain, a specific story you want to tell.

Concentrate on the information your audience needs to know."

Cole Nussbaumer Knaflic
Storytelling With Data

Share your thoughts in the chat:
- What do you do to practice a data story presentation?
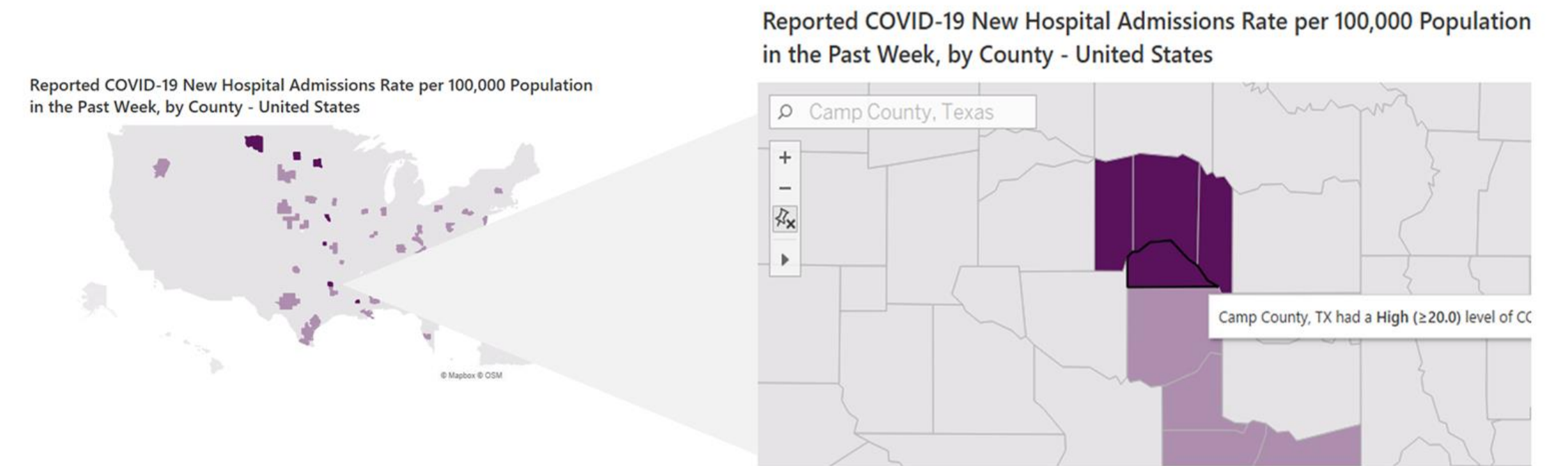- What practice methods work best for you?

3.4 Presentation Example

COVID-19 health risks are HIGH or MEDIUM in 402 US counties. More counties are at elevated risk this week compared to last week.
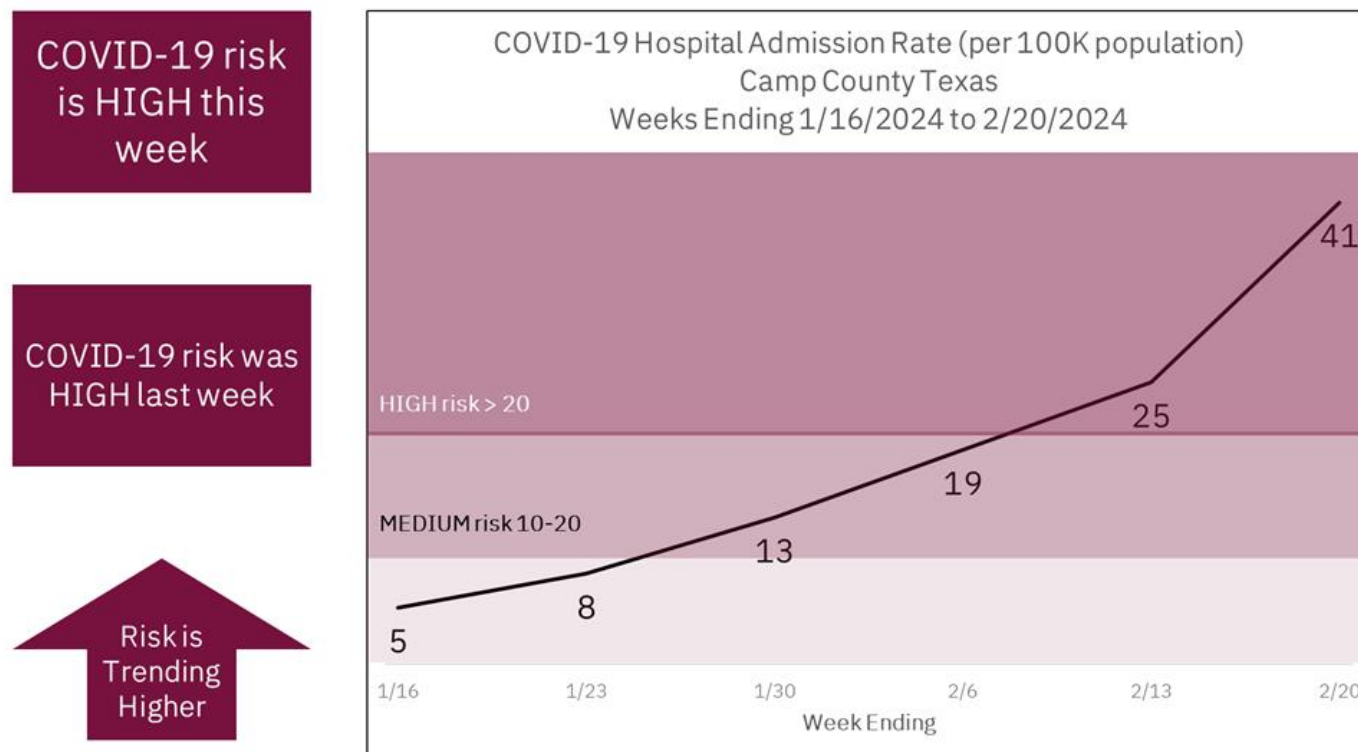
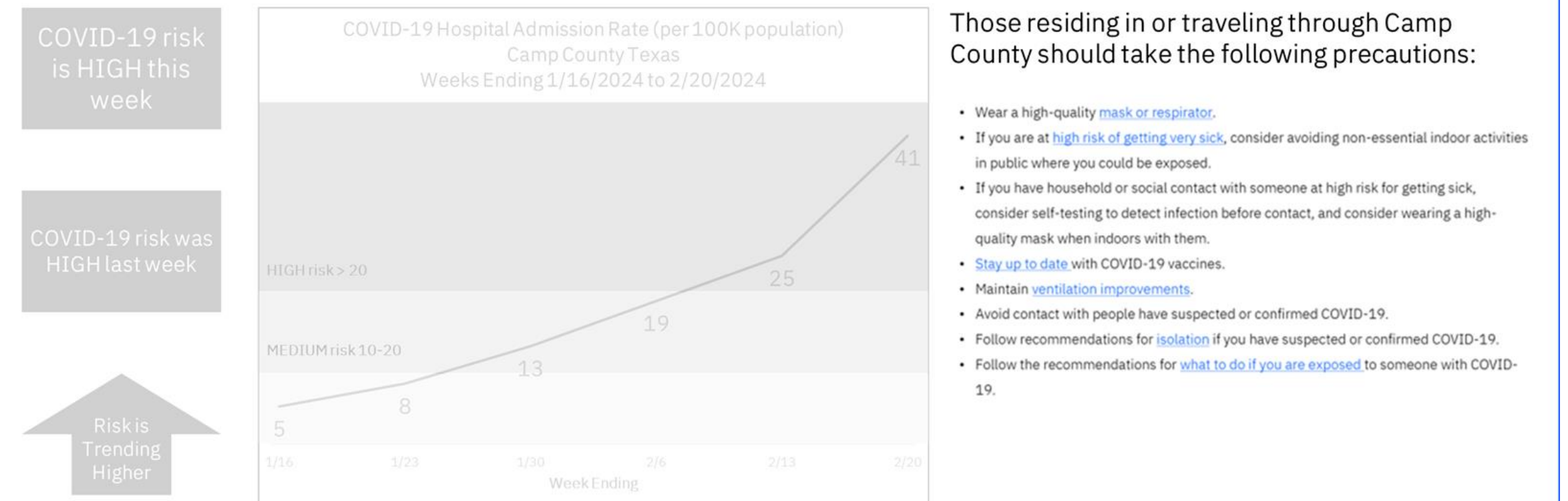|		
HIGH RISK: 20 or more COVID-19 hospital admissions per capita	32 counties	+1% since last week
MEDIUM RISK: Between 10-20 COVID-19 hospital admissions per capita	370 counties	+3% since last week
LOW RISK: 10 or fewer COVID-19 hospital admissions per capita	2,820 counties	-3% since last week

Data through February 20, 2024

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

Reported COVID-19 New Hospital Admissions Rate per 100,000 Population in the Past Week, by County - United States

Reported COVID-19 New Hospital Admissions Rate per 100,000 Population in the Past Week, by County - United States

Camp County, Texas

Camp County, TX had a **High** (≥20.0) level of CC

© Mapbox © OSM

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

COVID-19 Hospital Admission Rate (per 100K population)
Camp County Texas
Weeks Ending 1/16/2024 to 2/20/2024

HIGH risk > 20

MEDIUM risk 10-20

5   8   13   19   25   41

1/16   1/23   1/30   2/6   2/13   2/20
Week Ending

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

COVID-19 Hospital Admission Rate (per 100K population)
Camp County Texas
Weeks Ending 1/16/2024 to 2/20/2024

HIGH risk > 20

MEDIUM risk 10-20

5   8   13   19   25   41

1/16   1/23   1/30   2/6   2/13   2/20
Week Ending

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.

You can use technical notes or an appendix to include presentation slides as backup for answering related questions (e.g., "what about wastewater?")

3.5 Incorporate ongoing feedback in your data stories

Feedback is an ongoing cycle of improvement; it does not happen just once.

While you should consider all feedback – you don't have to incorporate all feedback.

3.5 A few common methods to obtain audience feedback

A/B Testing

A/B testing is used to conduct experiments on two or more versions of a data story delivered over the web or through an app. Users are randomly assigned alternative versions and user behavior is tracked to identify the version that best achieves the desired outcome. Several free (or low cost) open-source tools are available to support A/B testing of your data stories.

Web Analytics

Data stories delivered over the web can take advantage of native tools (e.g., Google Analytics) that track audience behavior as they interact with your online data story. These "web analytics" include several metrics that you can use to understand if your story is reaching your audience and if they are engaging with the story to obtain actionable insights.
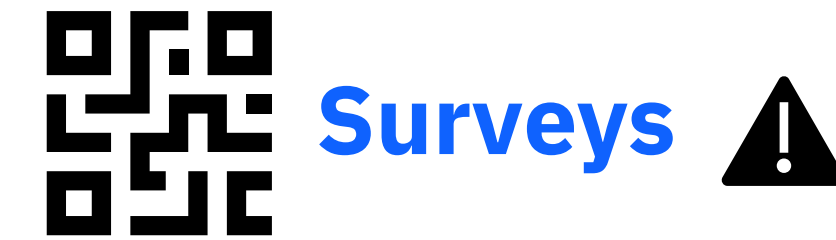
Surveys ⚠

Low-cost tools (e.g., Survey Monkey) are widely available to create and deploy surveys. You can create a simple survey and provide your audience a link or QR code embedded in your data stories. This feedback can help you iteratively improve your data story based on specific audience feedback.

Share your thoughts in the chat:
- What other DOH resources can be used to obtain audience feedback?
- What are advantages and disadvantages of these methods?
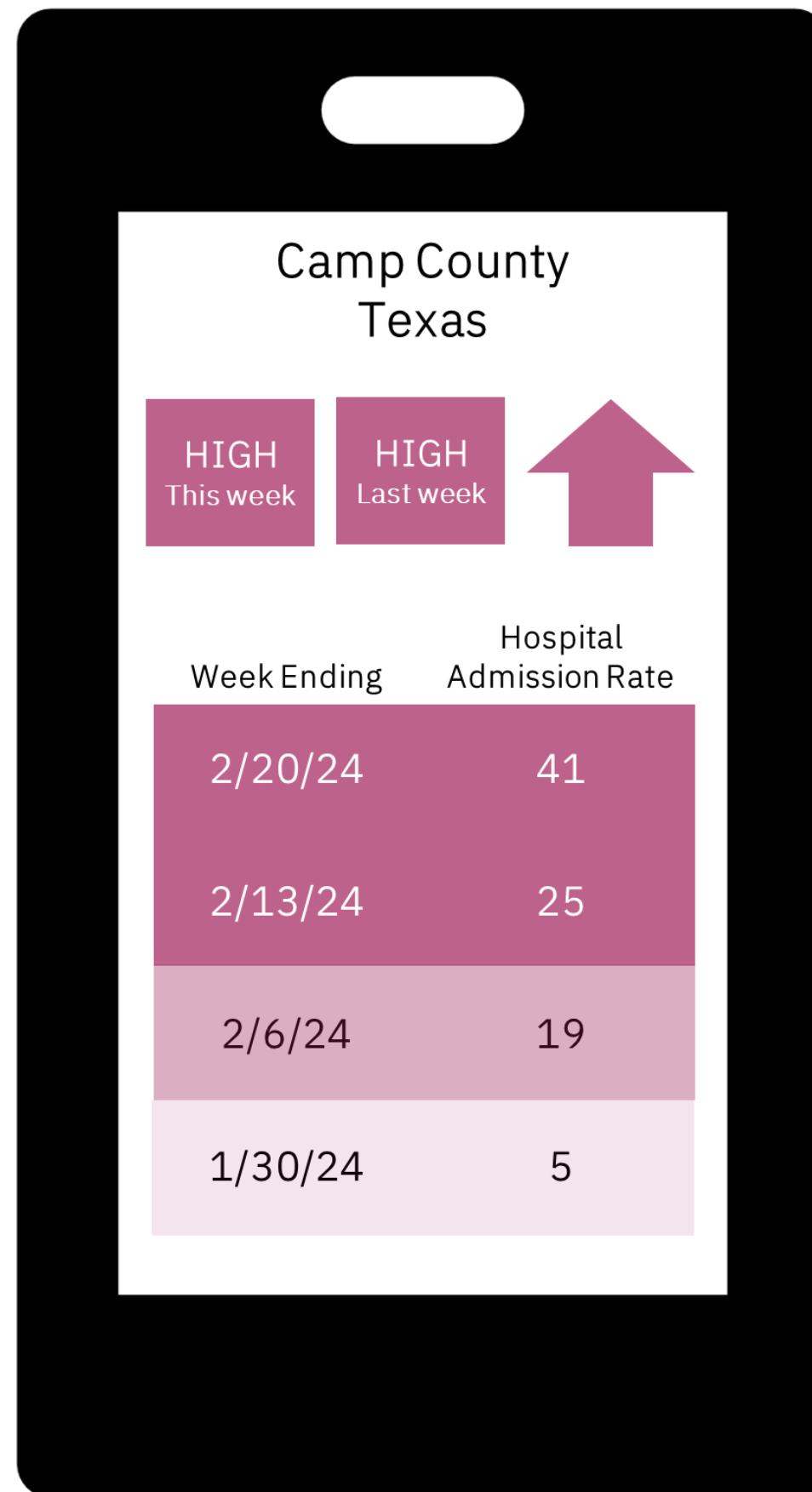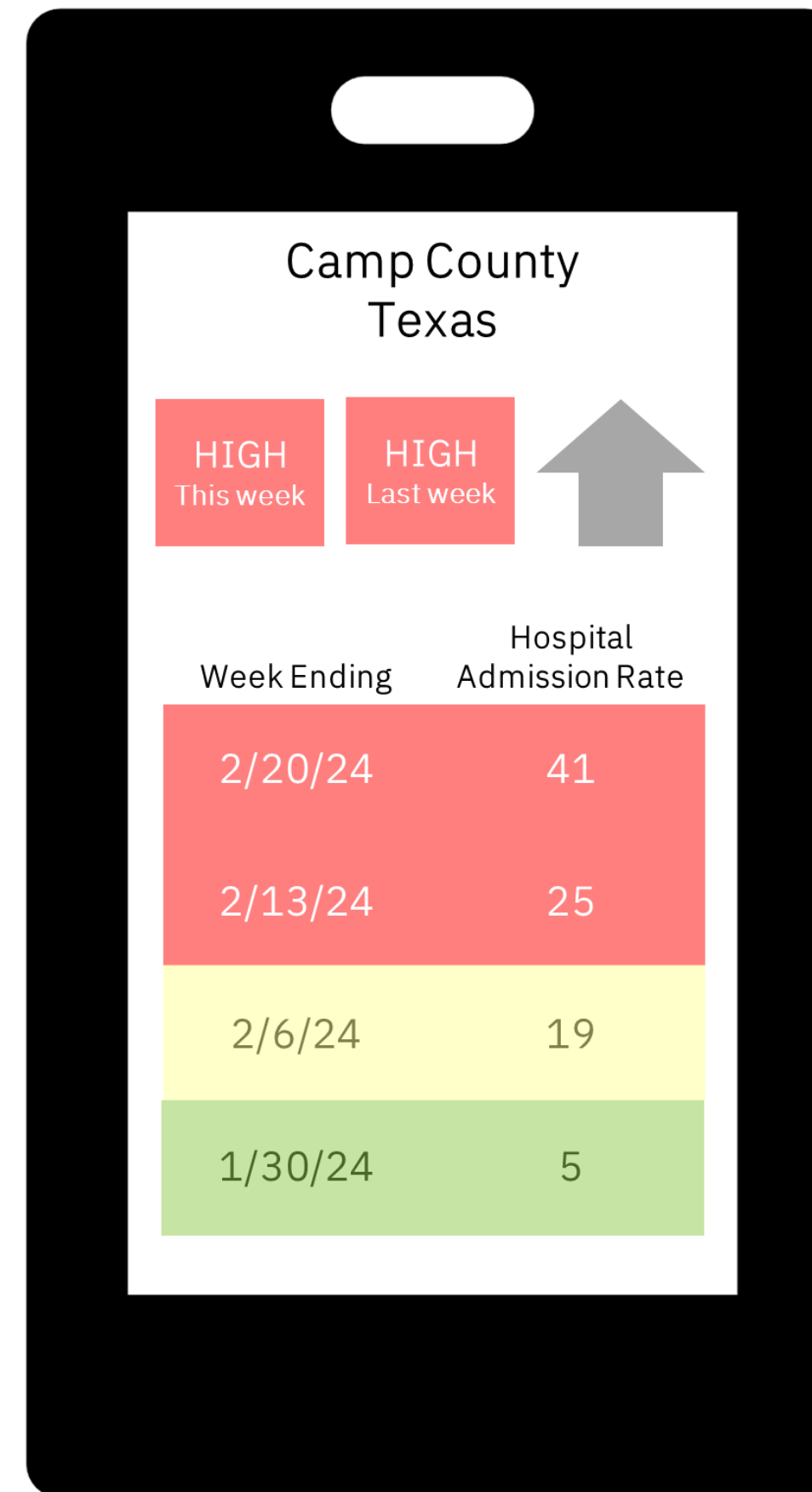
Washington State Department of HEALTH

3.5 Methods to obtain audience feedback: A/B Testing

*Test alternative presentation formats to see what works best for most of your audience.*

OPTION A

Camp County Texas

| HIGH This week | HIGH Last week | ↑ |

Week Ending	Hospital Admission Rate
2/20/24	41
2/13/24	25
2/6/24	19
1/30/24	5

OPTION B

Camp County Texas

| HIGH This week | HIGH Last week | ↑ |

Week Ending	Hospital Admission Rate
2/20/24	41
2/13/24	25
2/6/24	19
1/30/24	5

What color scheme do you prefer: Option A or Option B? What makes your preferred option better than the other? Please share your thoughts in the chat.

3.5 Methods to obtain audience feedback: Web Analytics

Look at key usage metrics to assess your data stories delivered over the web.

The new CDC COVID-19 dashboard
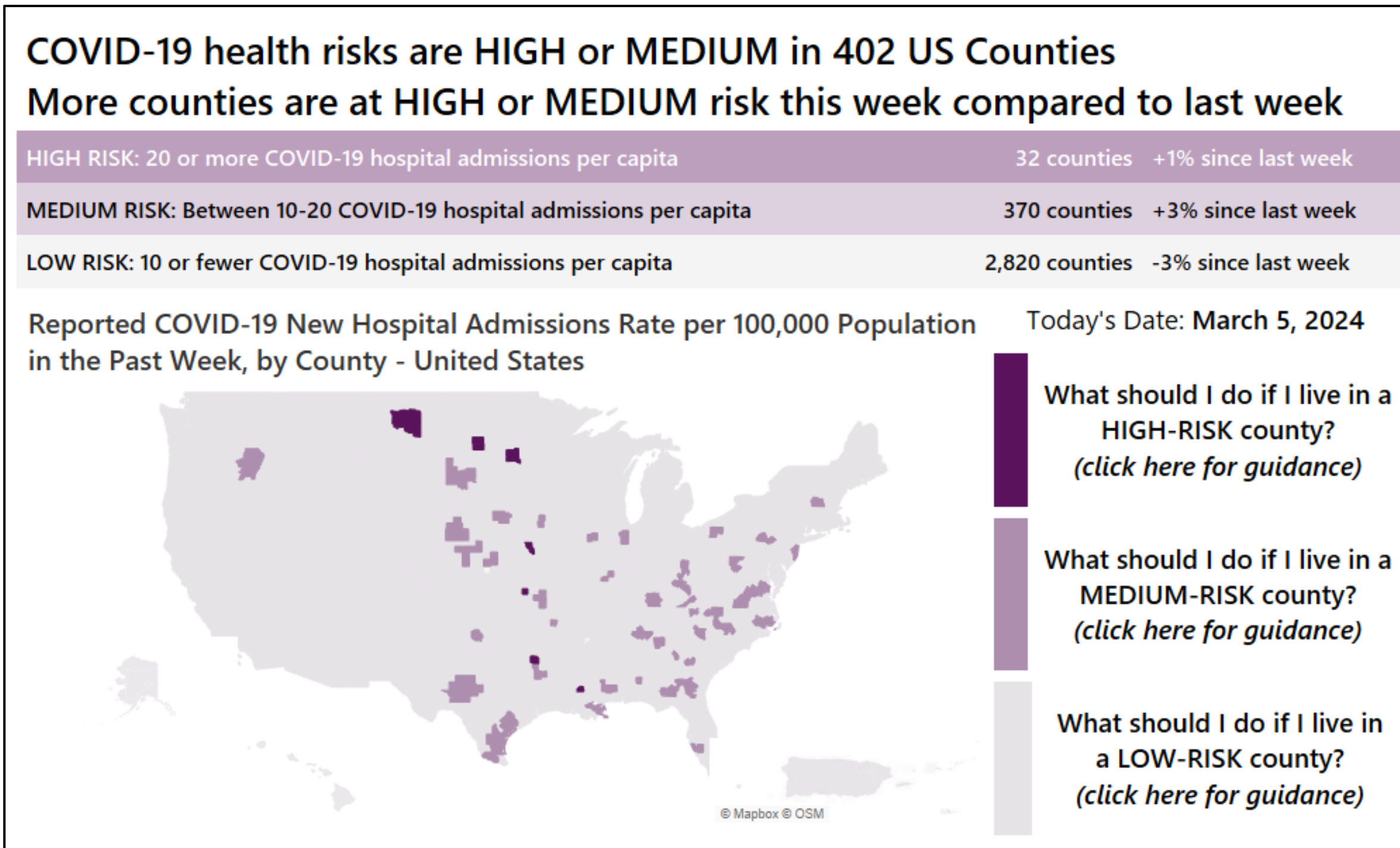
Web Analytics Metrics

1. **Pageviews:** tracks number of times a web page is viewed by the audience. Useful for determining if your data story is reaching your audience.

2. **New Visitors:** tracks number of unique visitors accessing a web page for the first time. Useful for determining if your data story has a growing audience.

3. **Return Visitors:** tracks number of unique visitors returning to a web page. Return visits can be an indicator that the data story is providing useful insights to your audience.

4. **Traffic Sources:** tracks the origin of visitors to your web page: what page were they visiting before they landed on your page? Tracking sources can provide insight into best ways to promote your data story and extend it's reach.

5. **Click-Through Rate:** tracks how often visitors are following links to additional information linked on your web page. Click-through rate can help you determine if your audience is accessing the call to action (or recommended healthy behaviors) in your data story.

6. **Bounce Rate:** tracks how often visitors are exiting your web page without accessing additional linked information. A high bounce rate can indicate audience confusion with your data story.

Share your thoughts in the chat:
- What might be the most useful metrics to track for the new CDC dashboard?
- What metrics would be least useful? Why are they less helpful than others?

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

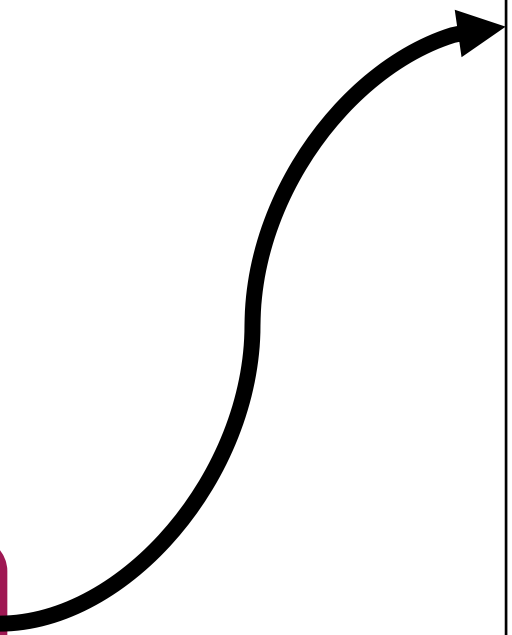A cluster of counties in East Texas are at HIGH risk of COVID-19 illness.

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

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

Please scan this QR code to provide feedback on this presentation.
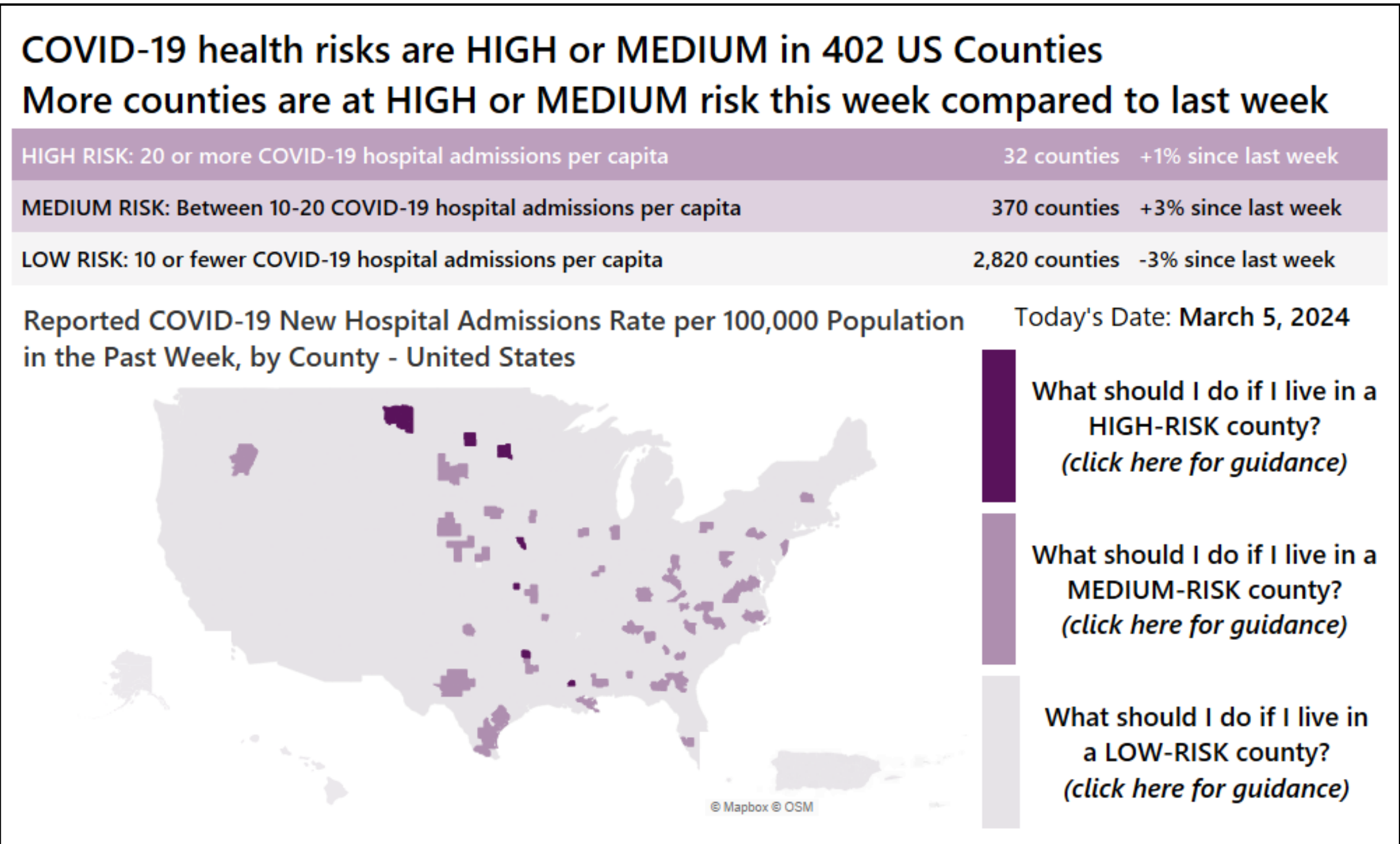
1. Please rate this presentation on a scale of 1 to 5 (5 being best).

☆ ☆ ☆ ☆ ☆

2. What did you like best about this presentation?

3. What did you like least about this presentation?

Share your thoughts in the chat:
- What other questions might you ask in a feedback survey?
- What do we need to consider when developing surveys?

Washington State Department of HEALTH

3.5 Methods to obtain audience feedback: Dashboard Surveys

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

Reported COVID-19 New Hospital Admissions Rate per 100,000 Population in the Past Week, by County - United States

Today's Date: **March 5, 2024**

What should I do if I live in a HIGH-RISK county?
(click here for guidance)

What should I do if I live in a MEDIUM-RISK county?
(click here for guidance)

What should I do if I live in a LOW-RISK county?
(click here for guidance)

© Mapbox © OSM

👍 Please share your feedback so we can improve this dashboard.

1. Please rate this dashboard on a scale of 1 to 5 (5 being best).
☆ ☆ ☆ ☆ ☆
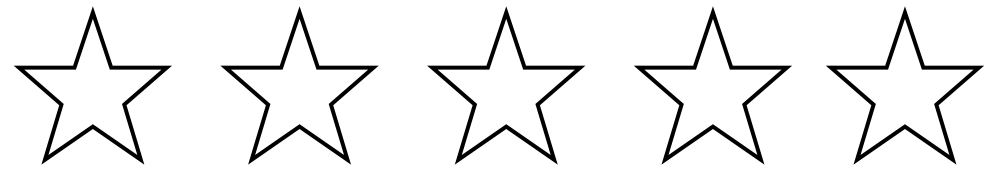
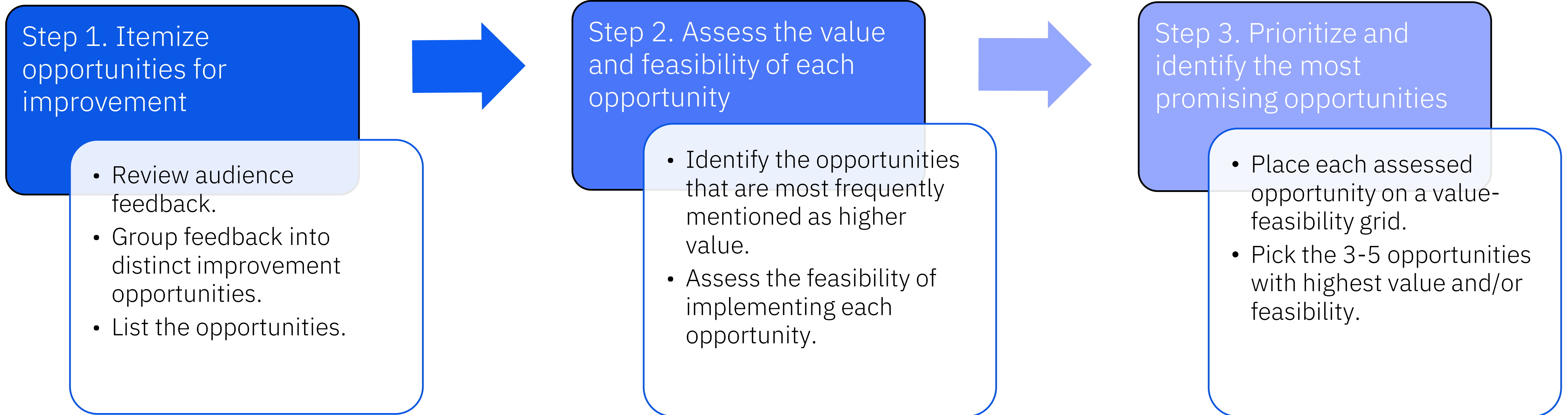2. What did you like best about this dashboard?

3. What did you like least about this dashboard?

Washington State Department of HEALTH

3.6 Incorporating feedback for continuous improvement

Analyze audience feedback to identify opportunities for improvement. Focus effort on the most promising opportunities.
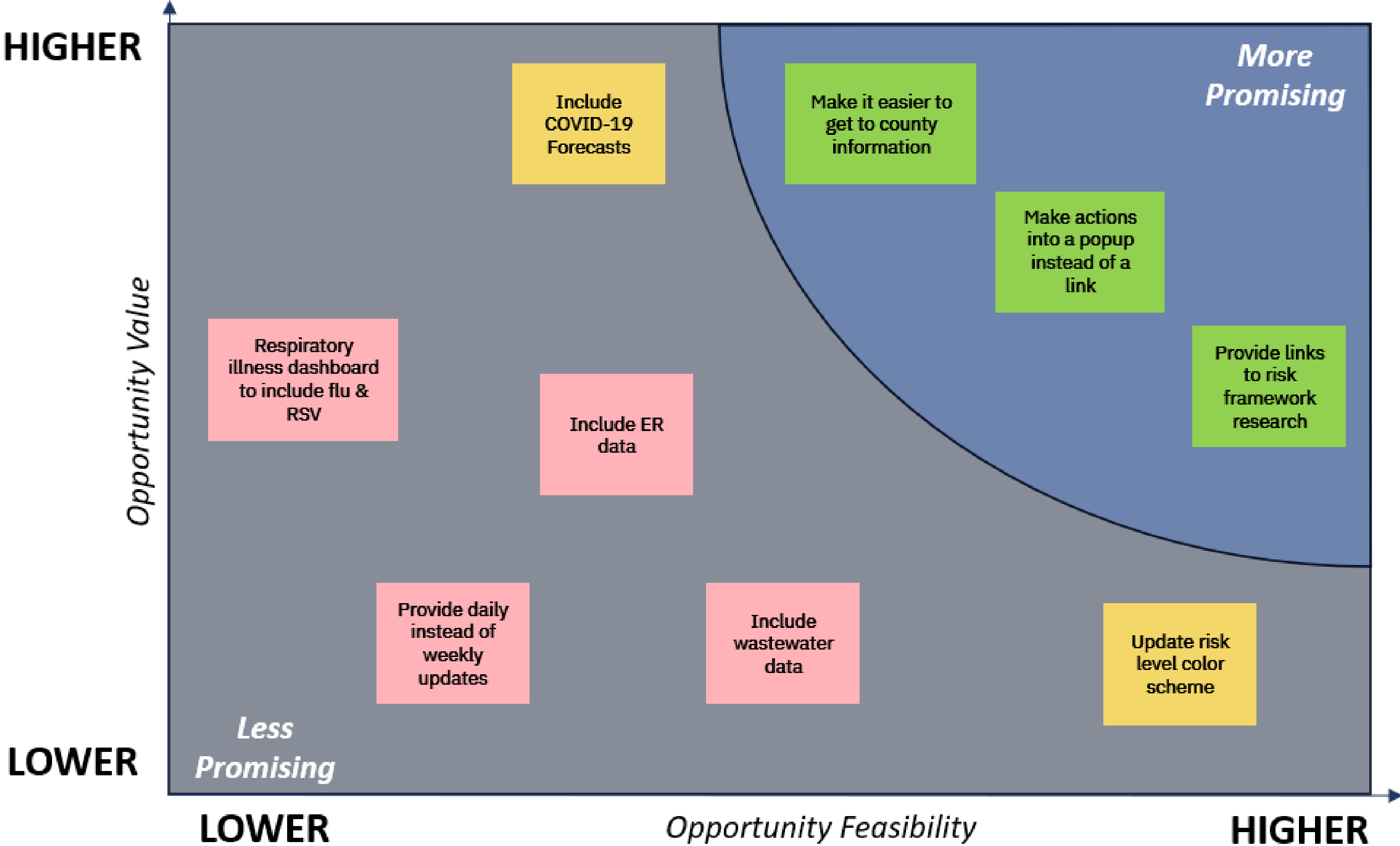
Step 1. Itemize opportunities for improvement

- Review audience feedback.
- Group feedback into distinct improvement opportunities.
- List the opportunities.

Step 2. Assess the value and feasibility of each opportunity

- Identify the opportunities that are most frequently mentioned as higher value.
- Assess the feasibility of implementing each opportunity.

Step 3. Prioritize and identify the most promising opportunities

- Place each assessed opportunity on a value-feasibility grid.
- Pick the 3-5 opportunities with highest value and/or feasibility.

3.6 Continuous improvement: Example value-feasibility grid

Pursue these opportunities NOW:
- Make it easier to get to county information
- Make actions into a popup instead of a link
- Provide links to risk framework research

Pursue these opportunities NEXT:
- Include COVID-19 forecasts
- Update risk level color scheme

Pursue these opportunities LATER:
- Respiratory illness dashboard
- Include ER data
- Provide daily instead of weekly updates
- Include wastewater data

HIGHER

More Promising

Include COVID-19 Forecasts

Make it easier to get to county information

Make actions into a popup instead of a link

Opportunity Value

Respiratory illness dashboard to include flu & RSV

Include ER data

Provide links to risk framework research

Provide daily instead of weekly updates

Include wastewater data

Update risk level color scheme

Less Promising

LOWER

LOWER   *Opportunity Feasibility*   HIGHER

3.7 Bonus Tips! There is an **Infodemic**.

Information Overload

Knowledge Void

Rapidly Spreading

Decision Fatigue

Preys on Emotion

3.7 Bonus Tips! **What can Science do better?**

- Avoid jargon and remember foundations of knowledge – plain talk!

- Incentivize and prioritize effective communication skills.

- Fight for accurate representation by the media.

- Demonstrate that its okay not to have all the answers.

3.7 Bonus Tips!

Uncertainty will always exist. Don't let it stop you, and tell the truth.

"All scientific work is incomplete – whether it be observational or experimental. All scientific work is liable to be upset or modified by advancing knowledge. That does not confer upon us a freedom to ignore the knowledge we already have, to postpone action that appears to demand at a given time."

-Sir Bradford Hill, English epidemiologist who pioneered the modern clinical trial and made the connection between the cigarette and lung cancer.

3.7 Storytelling with Data is about...

- Humanizing science

- Engaging across disciplines

- Firsthand accounts provide a personal perspective

- Illustrate how science works and how discoveries are made

3.8 Course Recap

In MODULE 1 you learned …

- Different methods of audience engagement
- How to create a persona to describe your audience
- How to use needs statements to define the main idea of your story
- How to use a storyboard to create compelling storylines

In MODULE 2 you learned …

- How to align data with your storyline
- How to align visualizations with your storyline
- How to combine narrative, data, and visuals to create a compelling draft data story
- You learned how to get feedback to improve your draft data story

In MODULE 3 you learned …

- Different methods for delivering your data story
- Different methods for obtaining audience feedback
- How to incorporate audience feedback into continuous improvement of your data story

Thank you for participating in this training series on Storytelling With Data. Please share your thoughts about the course in the chat.

A survey will be emailed to you to provide feedback on this training. Please complete the survey so we can make this training better for future participants.