



ALLIANCE FOR INNOVATION
ON MATERNAL HEALTH

2022 AIM Data Support Community of Learning

Tuesday, June 7, 2022, 1:00PM-2:30PM, EST

Welcome

- You are **muted** upon entry to the call
- **You will have the ability to unmute** yourself during Q&A times
- We encourage participants to remain muted in an effort to reduce background noise
- If you are experiencing technical difficulties, please chat an AIM staff member or email aimdatasupport@acog.org

This presentation will be recorded

Both Slides and Presentations will be available and sent via email.

Agenda

Time	Topic	Facilitator/Speaker
1:00PM-1:10PM	Welcome and Introductions	Inderveer Saini
1:10PM-2:00PM	Presentation: QI Visualizations Best Practices	<i>Ana Lòpez-De Fede</i> <i>Sarah Gareau</i> (University of South Carolina Institute for Families in Society)
2:00PM-2:15PM	Group Discussion and Q&A Session	All
2:15PM-2:20PM	Report-Outs: Nebraska	Sydney Carraher
2:20PM-2:25PM	Report-Outs: Alabama	Elizabeth Lemanski Blunck
2:25PM-2:30PM	Upcoming Data COL Updates & Closing	Inderveer Saini

AIM National Data Team



Inderveer Saini
AIM Data Specialist



Isabel Taylor
AIM Data Program Supervisor

David Laflamme
AIM Epidemiology Consultant

Please reach out to us with any questions related to the AIM Data Support COL at aimdatasupport@acog.org.



University of South Carolina Institute for Families in Society



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Senior Research Associate



AIM DATA SUPPORT
COMMUNITY OF LEARNING SESSION 6

QI Visualization Best Practices

Sarah Gareau, DrPH

Senior Research Associate

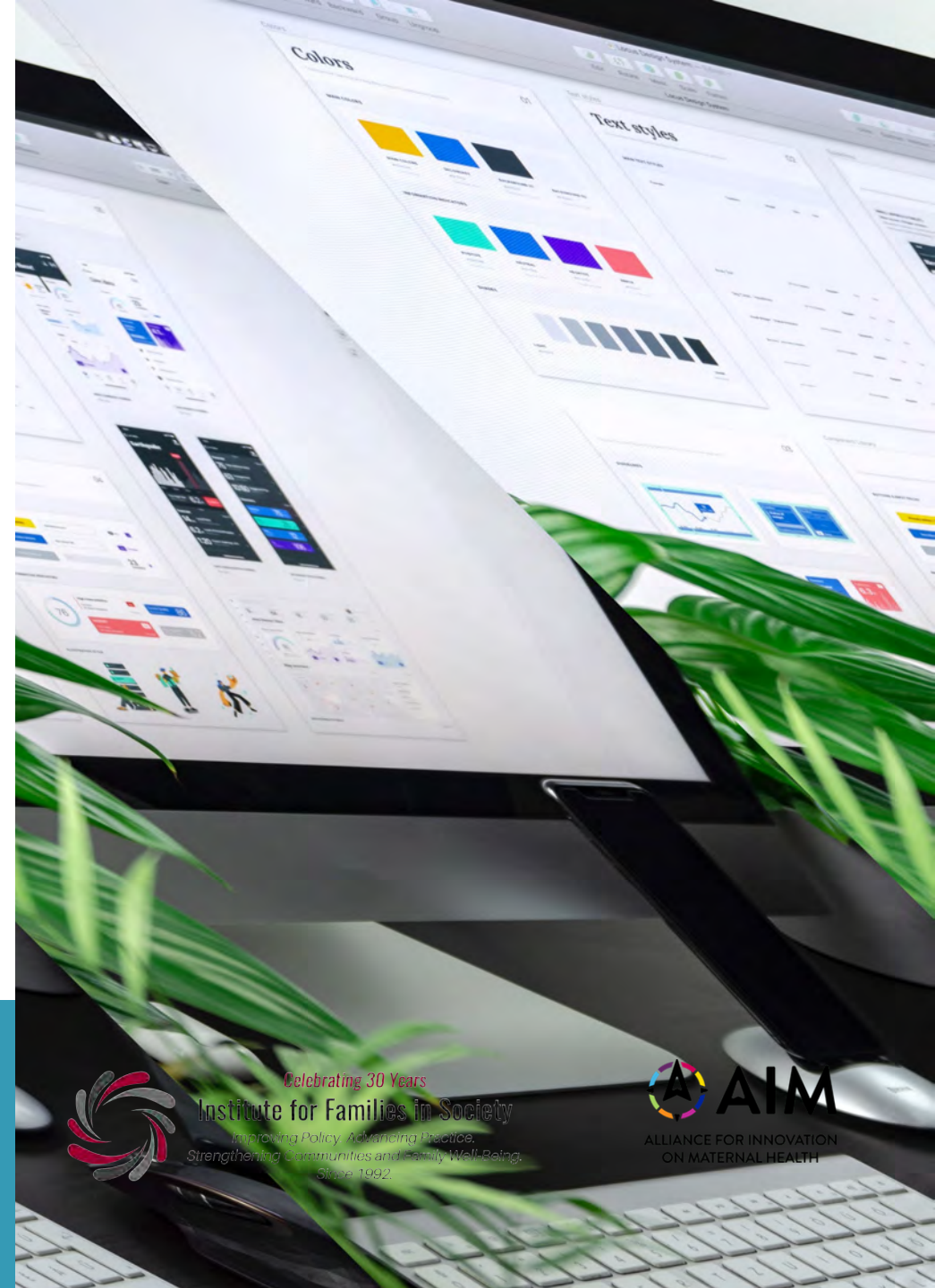
MCH & Equity Projects Team Lead

Ana Lòpez-De Fede, PhD

Research Professor and Associate Director

June 7, 2022

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Acknowledgements

This work would not have been possible without the contributions of the following UofSC IFS staff:

- **MCH Team** – Hoa Nguyen, Murthy Kotagiri, Robert Chen, Sabrina Karim for their content and data analytics expertise.
- **GIS/Data Visualization Team** – Becky Wilkerson, Courtney Baskin, Rachel Passer, and Angela Kneece for their support in providing geographical context.

Image Source:
[Balázs Kétyi](#) on [Unsplash](#)

SUGGESTED CITATION:

Gareau, S. & Lòpez-DeFede, A(June 2022). *QI Visualization Best Practices*. Presented at the June 2022 AIM Data Support Community of Learning Session 6.

DISCLAIMER:

The views and opinions expressed in this presentation are those of the authors and do not necessarily reflect the official policy or position of any agency or organization.

Data Sources Disclosure



DISCLOSURE

In accordance with guidelines established by HIPAA and related data use agreements between agencies, the data behind the visualizations and products presented within this presentation are not publicly available.

Access to this data for research or other purposes is handled under other mechanisms, i.e., South Carolina Department of Health and Human Services (SCDHHS) or Revenue and Fiscal Affairs (RFA).

All-payer
UB-04
(IP & ED)

SC Revenue
and Fiscal
Affairs Office—
Health and
Demographics

Birth records

SC Department
of Health and
Environmental Control—
Division of Biostatistics
Vital Statistics

Medicaid
recipient,
claims, and
provider
licensing
information

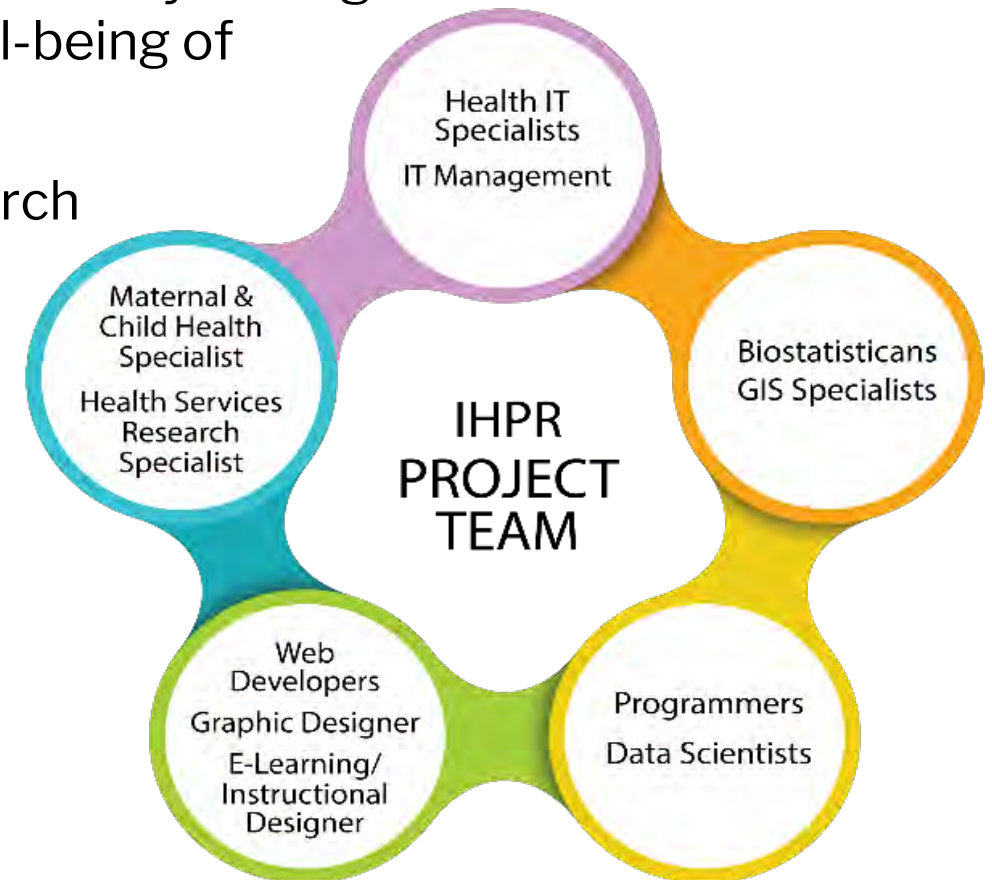
SC Department
of Health &
Human Services;
SC Licensing

Geospatial
contextual
data

Centers for
Disease Control
and Prevention
and U.S. Census
Bureau

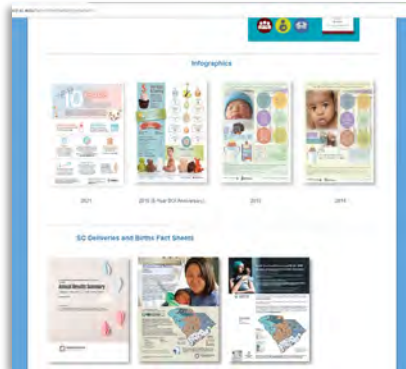
About IFS

- The University of South Carolina (UofSC) Institute for Families in Society (IFS) is a non-partisan, non-governmental institute established 30 years ago to conduct research focused on the health and well-being of families and communities.
- The Division of Integrated Health and Policy Research (IHPR) within IFS is an interdisciplinary team with expertise in health services, translational rapid-cycle evaluation and policy research with an emphasis on public insurance and communities of opportunity.



About IFS

- As the fourth oldest University-Medicaid partnership in the nation, our work also **involves extensive use of GIS and visualizations to help inform data-driven decisions in collaboration with several state and federal agencies, organizations, and private foundations.**



See our MCH data visualizations @
schealthviz.sc.edu/boi-information-products



About This Presentation: Learning Objectives

1. Critique a visualization using data visualization best practices.
2. Identify at least 5 pre-attentive attributes in the context of data visualization.
3. Discuss at least 3 data visualization best practices.



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Image Source: [Brett Jordan](#) on [Unsplash](#)

Contents



ELEMENTS OF
EFFECTIVE
VISUALIZATIONS



MAPS:
BEST
PRACTICES



CHARTS:
BEST
PRACTICES



INTERACTIVE
CHARTS



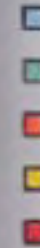
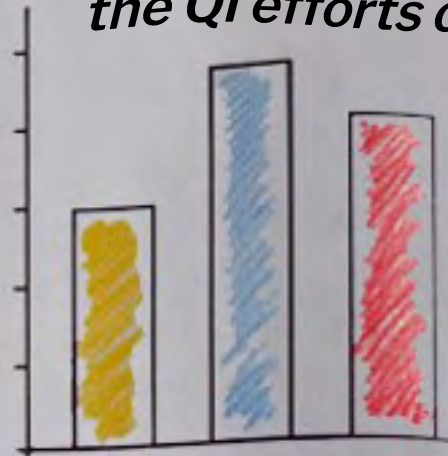
NEXT
STEPS

Elements of Effective Visualizations



Note—

This section broadly addresses elements of effective data visualization and is followed by specific examples that align with the QI efforts of AIM.





Discussion of Prework Reflections

- What is data visualization?
 - Process of representing information using visual means, such as a chart/graph, diagram, map, or picture
- Two types: exploratory and explanatory
 - Exploratory: making sense of your data by visualizing trends and relationships that may be hidden by summary statistics
 - Explanatory: process of telling a story which communicates what is important in the data

In the chat, please enter a number indicating your prior experience creating QI data visualizations:

1 (no experience)
to
5 (advanced data viz creator).



Discussion of Prework Reflections Cont.

Five pre-attentive attributes in the context of data visualization:

- Know the data.
- Determine your purpose.
- Choose a chart type.
- Decide on a visualization tool.
- Refine your visualization.

Learn more from the
University at Buffalo
University Library Data
Visualization Guide:
<https://research.lib.buffalo.edu/dataviz/home>

Visualization considerations: audience, communication, design, accessibility, & technology



Audience

The first step in effective data visualization is to identify who you're visualizing the data for, i.e., the target audience.

- Who will be looking at the data? What are their needs?
- Resist the temptation to create a visualization that meets the needs of every stakeholder.
- What decision do I want the user to make and under what circumstance?
 - The visualization should contain actionable and meaningful content.

The goal of every visualization is to encourage users to explore the data to identify and ask new questions that can, in turn, ultimately drive practice, policy, and programmatic changes.



Communication

- What data do you have and what visual can be created from those data? It's important to select the right type of visual that best expresses the information included in the data. Give data visualization and the data itself equal priority.

From Institute for Healthcare Improvement (IHI):

- What do the data say (*description*)?
 - What story are the data trying to tell (*exploration*)?
 - How should the data be summarized (*tabulation*)?
 - Can the data be used to intrigue or motivate (*invitation*)?
- Engage your audience using color and visualization consistency (see design tips).
- Try to make the visualization inclusive (see accessibility considerations).

Learn more:

<http://www.ihl.org/resources/Pages/ImprovementStories/Improvingthevisualdisplayofdata.aspx>



Design Tips

- If you have access to a graphic designer:
 - Finalize content in advance to reduce iterations.
 - Ensure that software is compatible across teams.
- Consider the delivery method from the start (press, PDF, online) as these have different graphic requirements.
- Simplify your type. Limit to two fonts or a font family.
- Establish a color palette. If you need help, there are tools such as Pigment by Shape Factory, Adobe Color, Paletton, or Coolers.





Design Tips (cont.)

- Don't be afraid of white space.
- Leave out irrelevant details.
- Consider hierarchy. Prioritize elements by importance.
- Keep design elements aligned to one another.
- Incorporate icons.
- Use lines to call attention or as separators.
- Use consistent fonts, style, and imagery across a single product.

Learn more: <https://www.shillingtoneducation.com/blog/graphic-design-tips/>





Accessibility Considerations

Include **alternative (“alt”) text** when visualizations are used to describe the image.

- Be specific and succinct.
- Do not start with “image of” or “picture of”, but describe the type of image (e.g., headshot).
- Use keywords sparingly.
- Describe text that is part of an image.
- Don’t describe what’s already described on a page from a caption or heading.
- Alt text is not needed for decorative images that do not help the user understand the page better.

Alt Text

How would you describe this object and its context to someone who is blind or low vision?

- The subject(s) in detail
- The setting
- The actions or interactions
- Other relevant information

(1-2 detailed sentences recommended)

This grey and white image shows the Alt Text menu, which asks the user to describe the object and its context. It includes a white box with the description of this image.

☐ Mark as decorative ⓘ

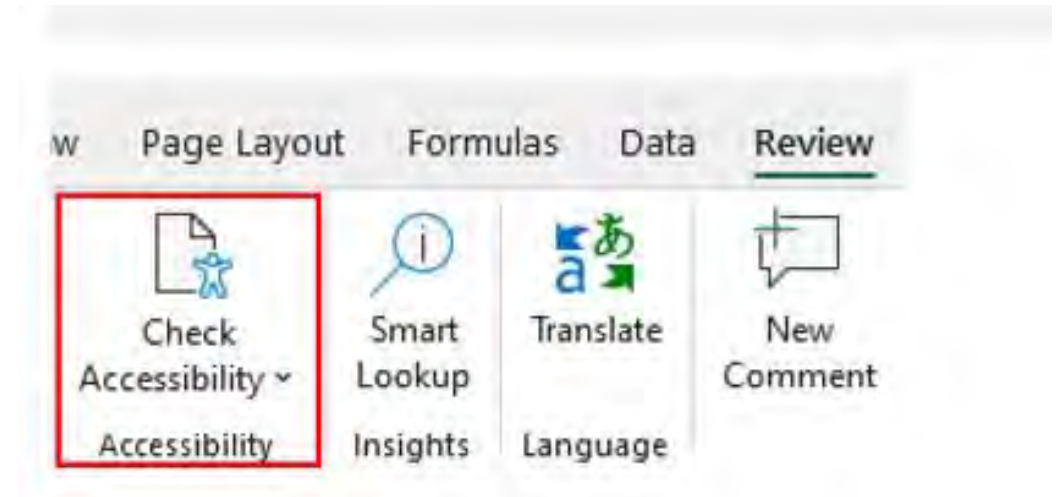
Learn more:

<https://supercooldesign.co.uk/blog/how-to-write-good-alt-text>
<https://blog.hubspot.com/marketing/image-alt-text>



Accessibility Considerations (cont.)

- Use sans serif fonts (size 20 or greater for presentation text).
- Use color contrast (white text on dark background or dark text on light background).
- Use plain language.
- Check for accessibility using Microsoft's Accessibility Checker.



Universal design extends the idea of accessibility to everyone. Instead of designing a visualization for typical users and then multiple iterations for users with disabilities, this best practice focuses on delivering design that's accessible to everyone.



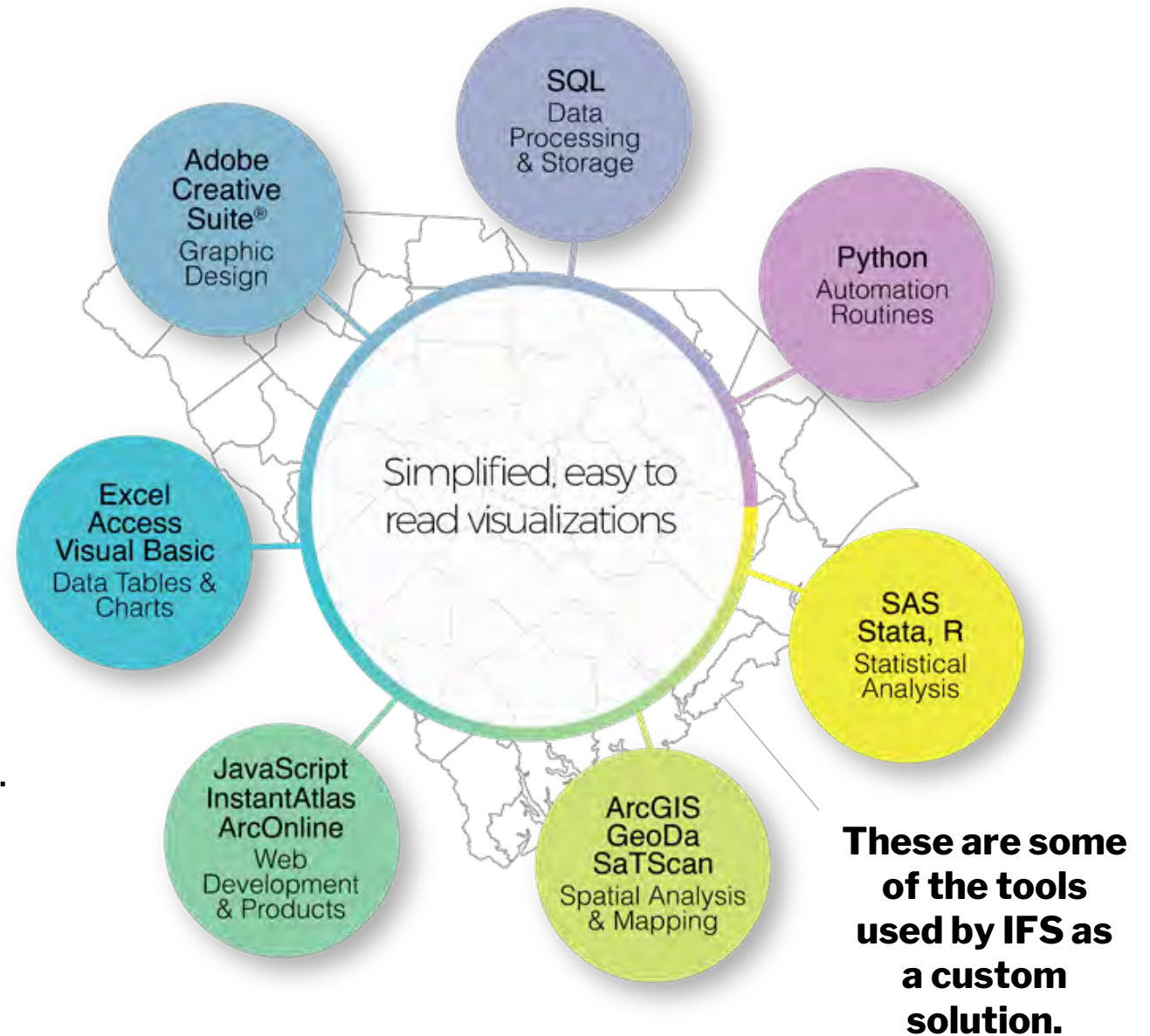
Technology Tools

Commonly used data viz tools:

- Tableau
- SAP Analytics
- Zoho Analytics
- Google Charts
- Visual.ly
- RawGraphs
- Domo
- Excel
- Sisense
- Plotly
- Data Wrapper (free)
- Highcharts
- FusionCharts
- Microsoft Power BI
- Qlik
- And the list goes on...



Learn pros and cons of some of these [here](#).





Choosing a Tech Tool

- Flexibility vs. ease of use
- Cost to get started
- How audience will access
- Balance between functionality and needs
 - Visual analytics vs. data storytelling/explanation
 - Independent visualizations vs applications/dashboards
 - Broad data platforms vs. focused visualization tools
 - Extra features like animation, dynamic data, streaming support

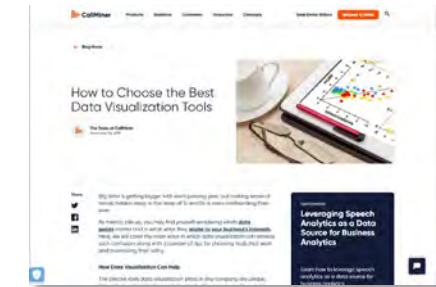


This [website](#) will walk you through some functionality considerations.



Choosing a Tech Tool (cont.)

- Can it intermingle multiple data sources?
- Consider your team's expertise
- Ease of integration
- Time to deployment
- Technical assistance provided
- Data preparation required
- Security and HIPAA (particularly important for QI)

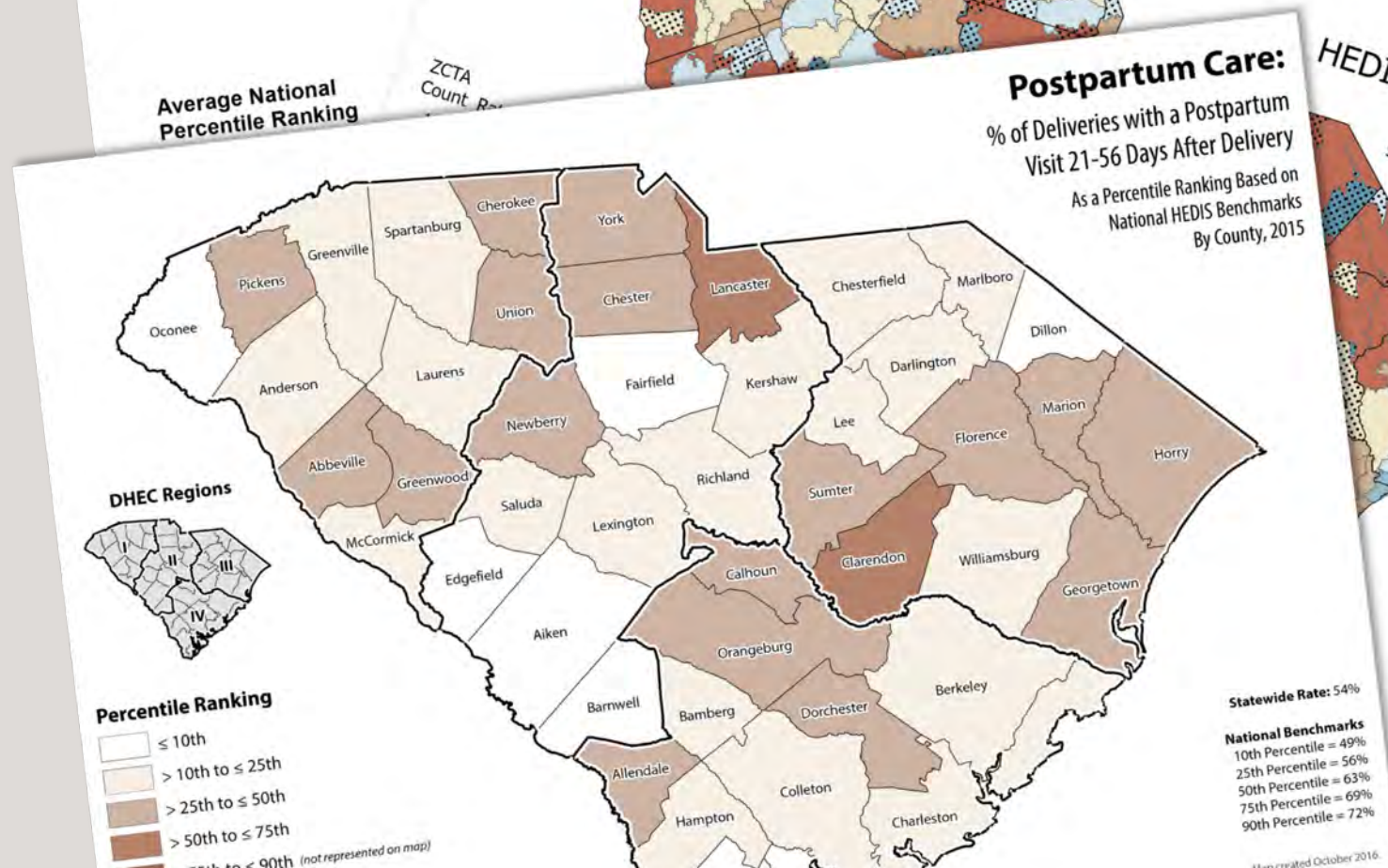
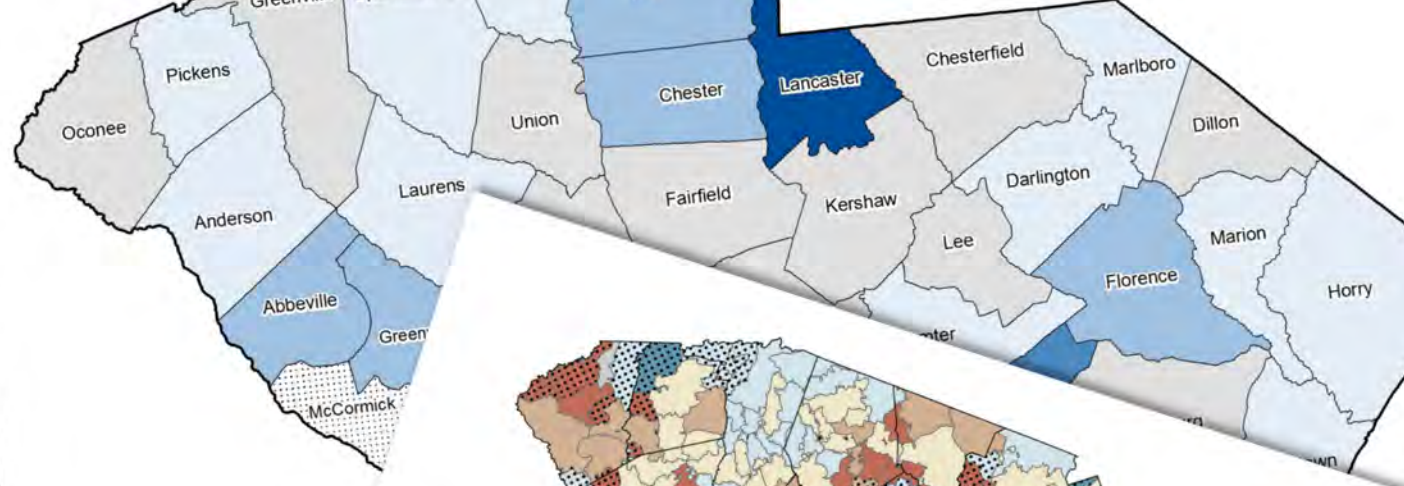


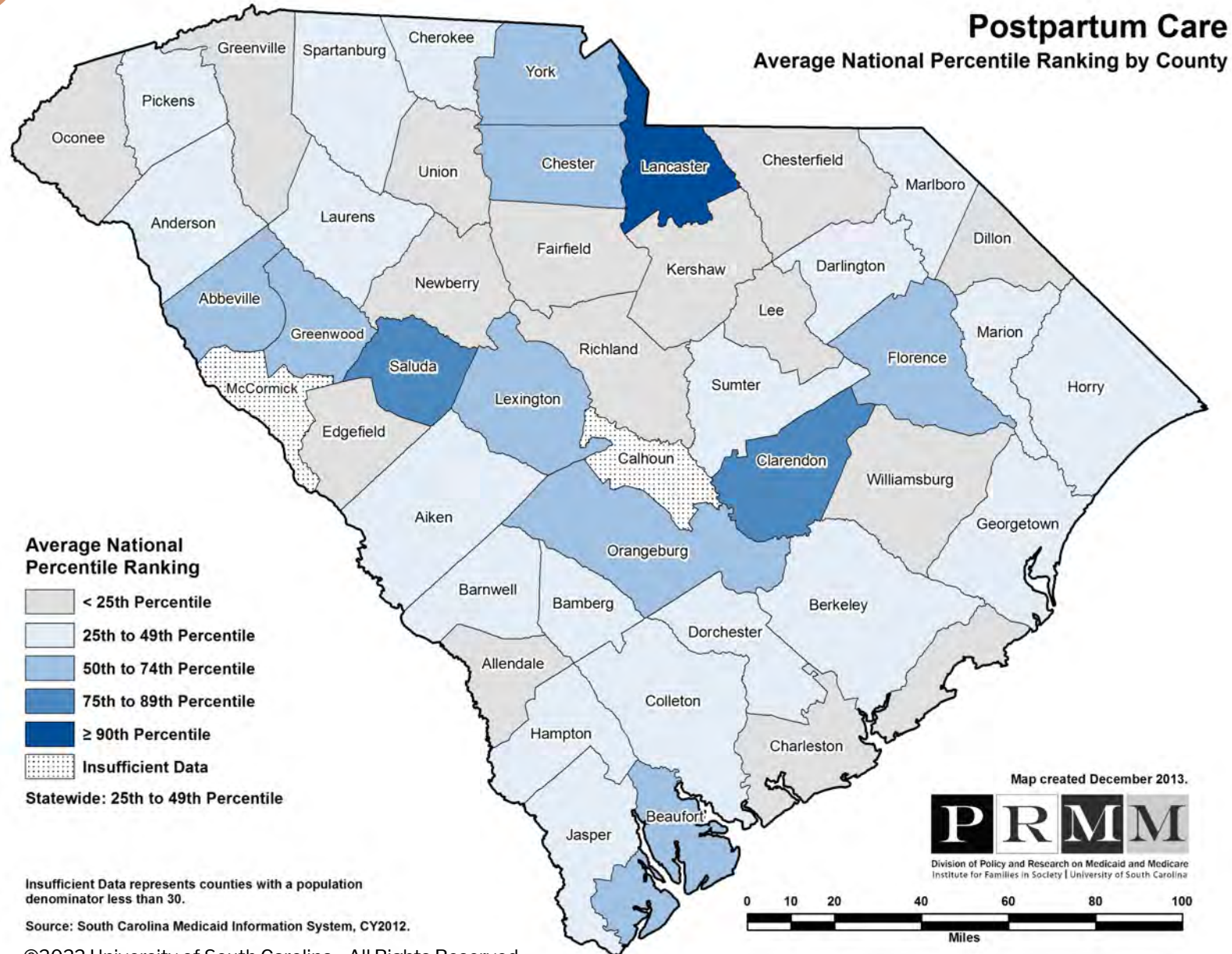
Learn more about choosing tools [here](#).

Maps: Best Practices



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TAKEAWAY: MAP 1

County-level, mapped by benchmark percentile, darkest color = best performing area, worst-performing area using a color that's not part of the blue ramp.

The conclusion that should be taken from this map is uncertain, but the takeaway is that rural counties had the best national benchmarks for postpartum care.

The only indications that this map is about Medicaid are the source citation and the organization's logo.

The statewide rate is just a range. This map is not terrible, but compared to newer versions, it is less informative.



MAPPING BEST PRACTICES

Postpartum Care:

% of Deliveries with a Postpartum
Visit 21-56 Days After Delivery

As a Percentile Ranking Based on
National HEDIS Benchmarks
By County, 2015

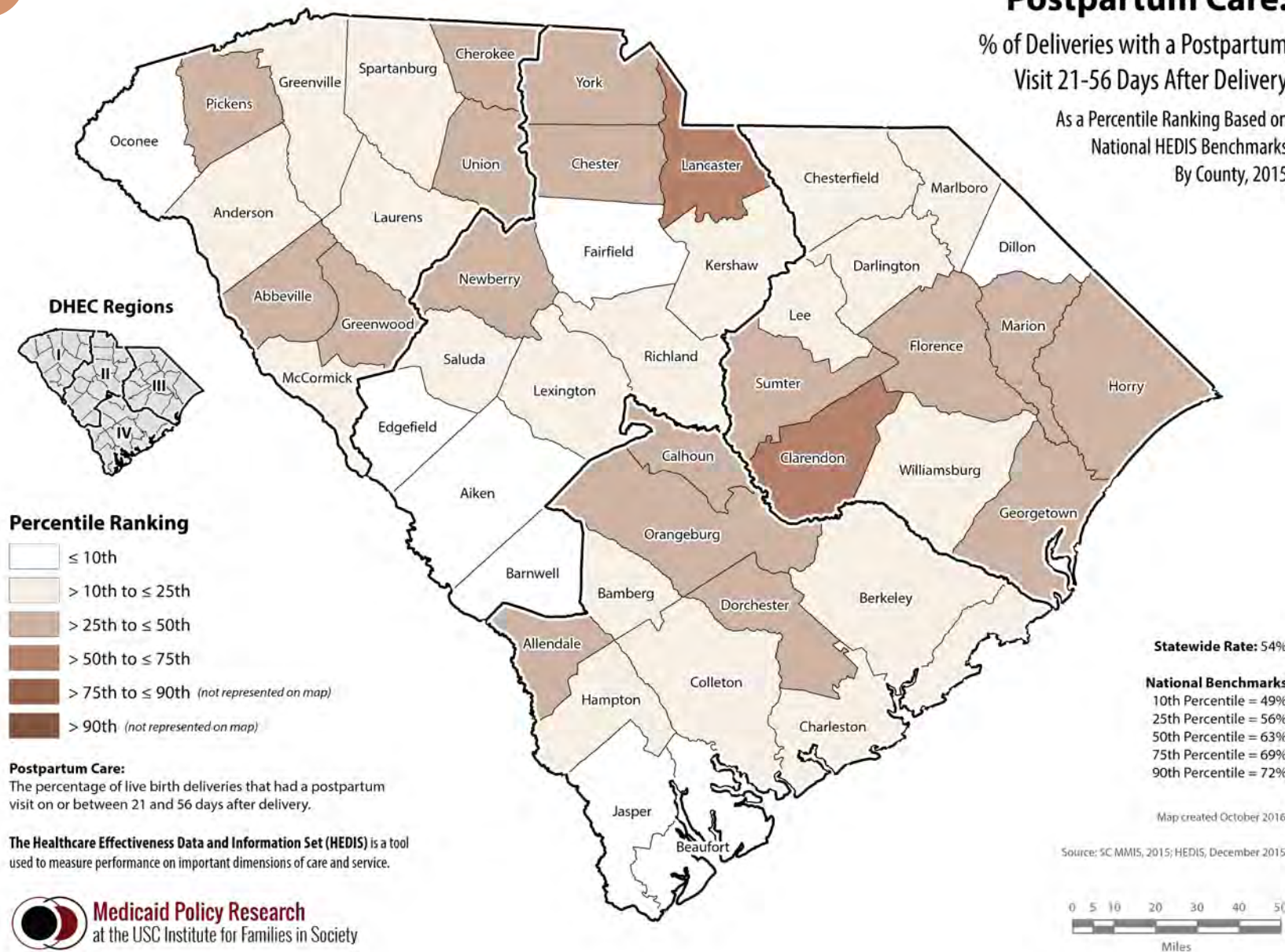


TAKEAWAY: MAP 2

County-level, mapped by
benchmark percentile with a
custom color ramp developed.

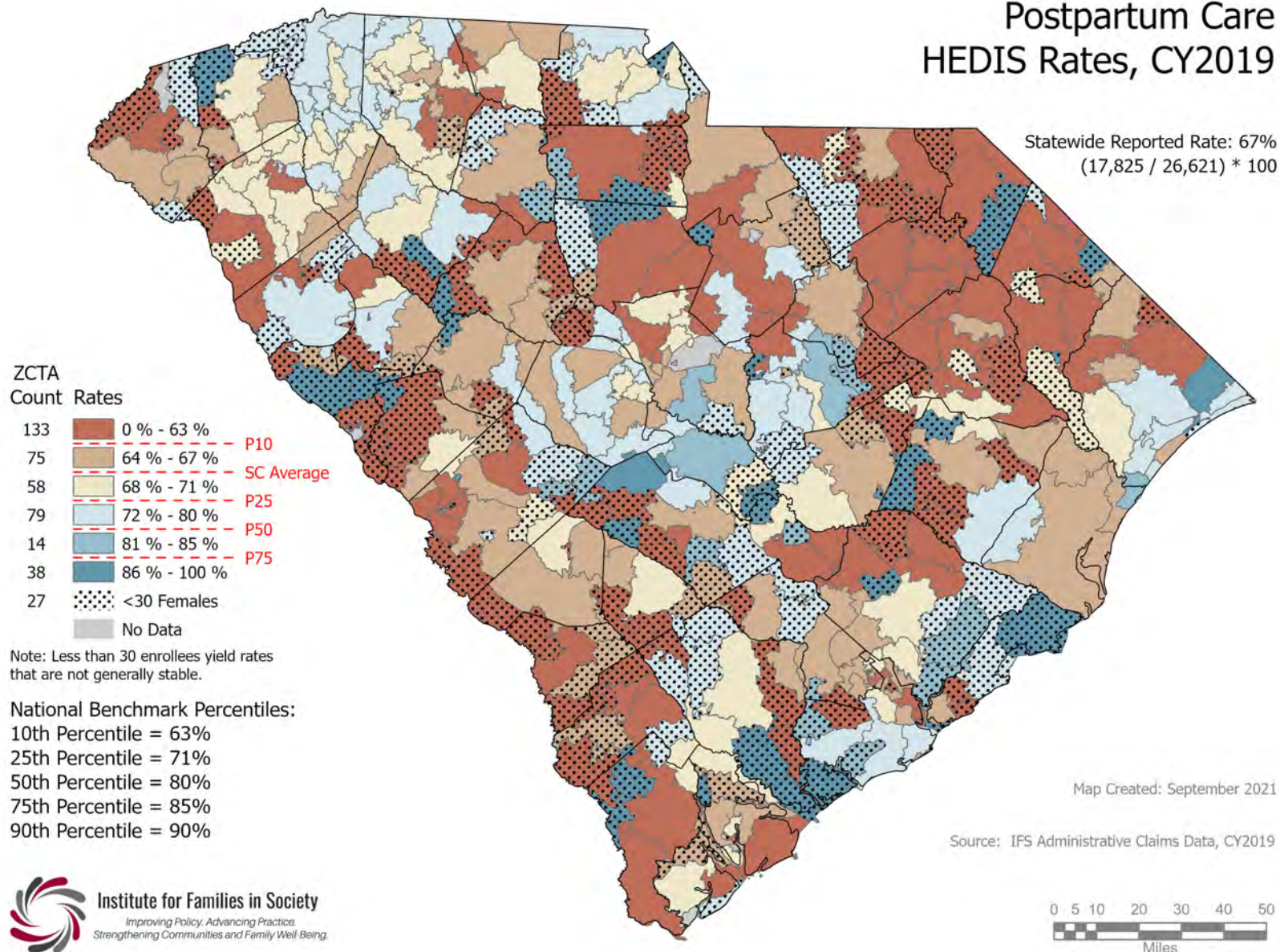
The regional context was
added but unclear why.

More contextual information
was provided like the statewide
rate, the definition of HEDIS,
and the definition of
postpartum care.





Postpartum Care HEDIS Rates, CY2019



TAKEAWAY: MAP 3

ZCTA level, mapped by benchmark percentile and statewide rate.

Statewide numerator and denominator are included as well.

A divergent color ramp was used to illustrate that higher rates are a positive outcome whereas lower rates are a poorer outcome.

It is easier to draw clearer conclusions regarding the patterns on the map and what they mean for postpartum care with a more effective color ramp and a smaller area unit of analysis.



MAPPING BEST PRACTICES

Chronic Conditions Among Hospitalized Mothers By ZCTA, 2019



TAKEAWAY: MAP 4

This draft map shows the pattern of chronic conditions. Yet, there is a bit too much going on with the vibrant colors and the maternity care deserts overlaid.

The title is also not clear.

Statewide

Chronic Conditions, 2019 = **11,361**

All Deliveries, 2019 = **48,381**

% Chronic Condition Deliveries = **23.5%**

% Chronic Condition Deliveries

0 - 16.2%

16.3 - 24.1%

24.2 - 30.8%

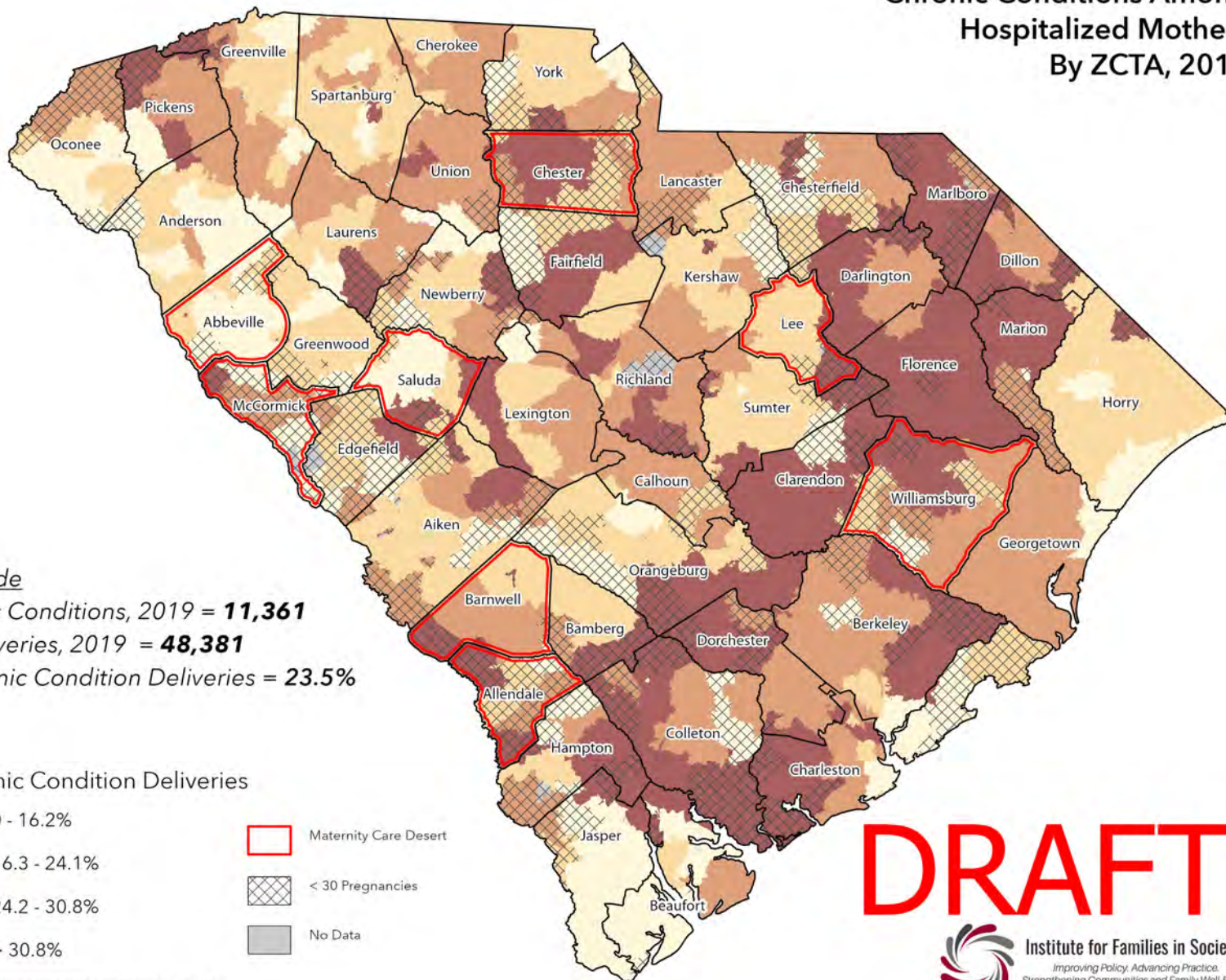
> 30.8%

Maternity Care Desert

< 30 Pregnancies

No Data

Classes represent rank-ordered quartiles.



DRAFT



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MAPPING BEST PRACTICES

Chronic Conditions Among Hospitalized Mothers By ZCTA, CY19 Delivery Patients w/ CY18 Prenatal & CY20 Postpartum Claims



TAKEAWAY: MAP 5

The final map removes the maternity care deserts, the color ramp was changed to suit the report and not overshadow other report components, and the title provided a clearer explanation of what was mapped (improved dissemination of complex data).

Statewide

Chronic Conditions, 2019 = **11,361**

All Deliveries, 2019 = **48,381**

% Chronic Condition Deliveries = **23.5%**

% Chronic Condition Deliveries

0 - 16.2%

16.3 - 24.1%

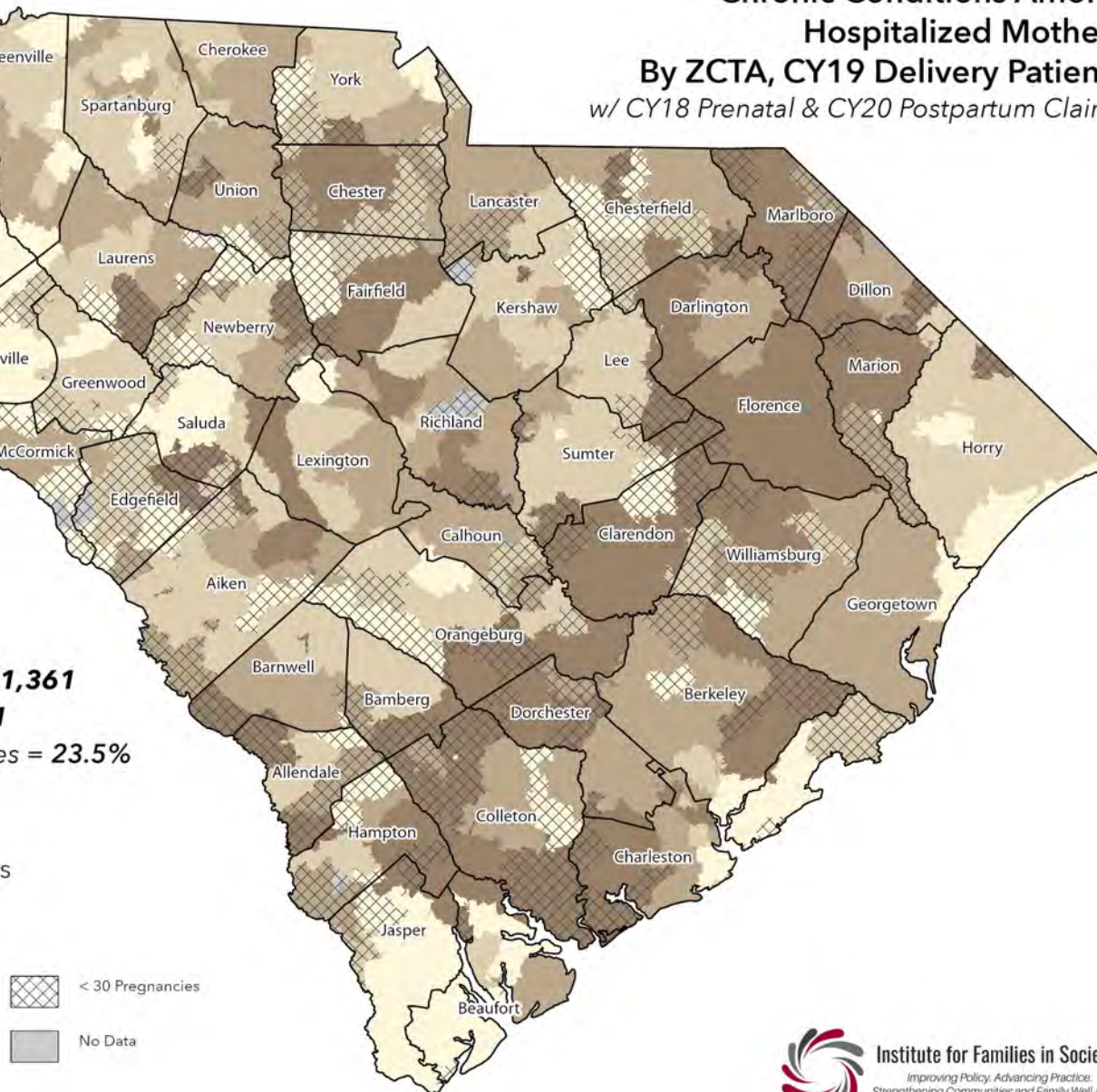
24.2 - 30.8%

> 30.8%

< 30 Pregnancies

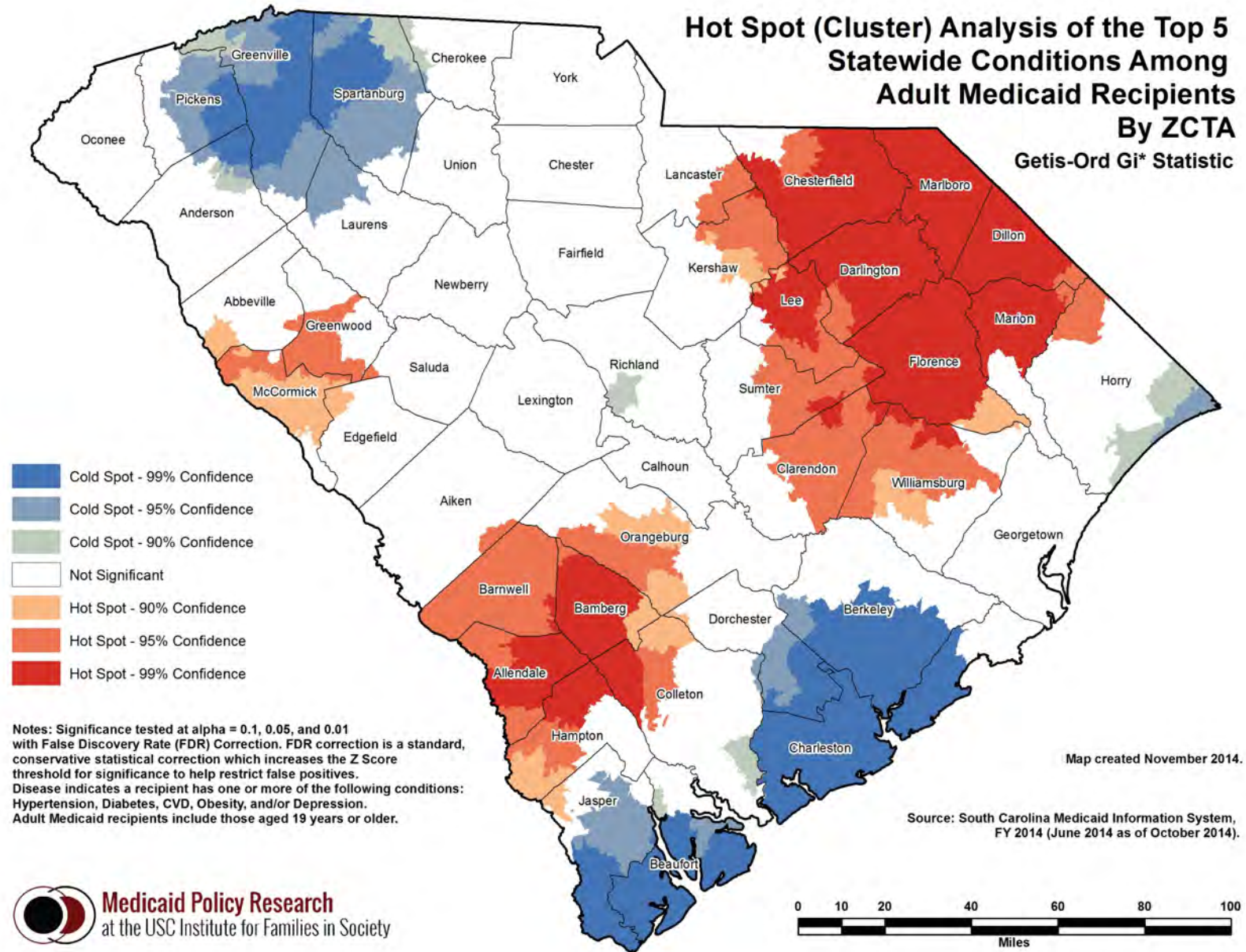
No Data

Classes represent rank-ordered quartiles.





MAPPING BEST PRACTICES



TAKEAWAY: MAP 6

In this map, to see finer levels of detail, we began using interpolated point data, instead of using an area unit like ZCTA.

We also made improvements in design with clearer information in notes/legend, and improved fonts and colors.

We also moved to use the Optimized Hotspot analysis tool instead of the original tool, which sped up running a hotspot analysis and allowed more room for trying new approaches.

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Charts: Best Practices



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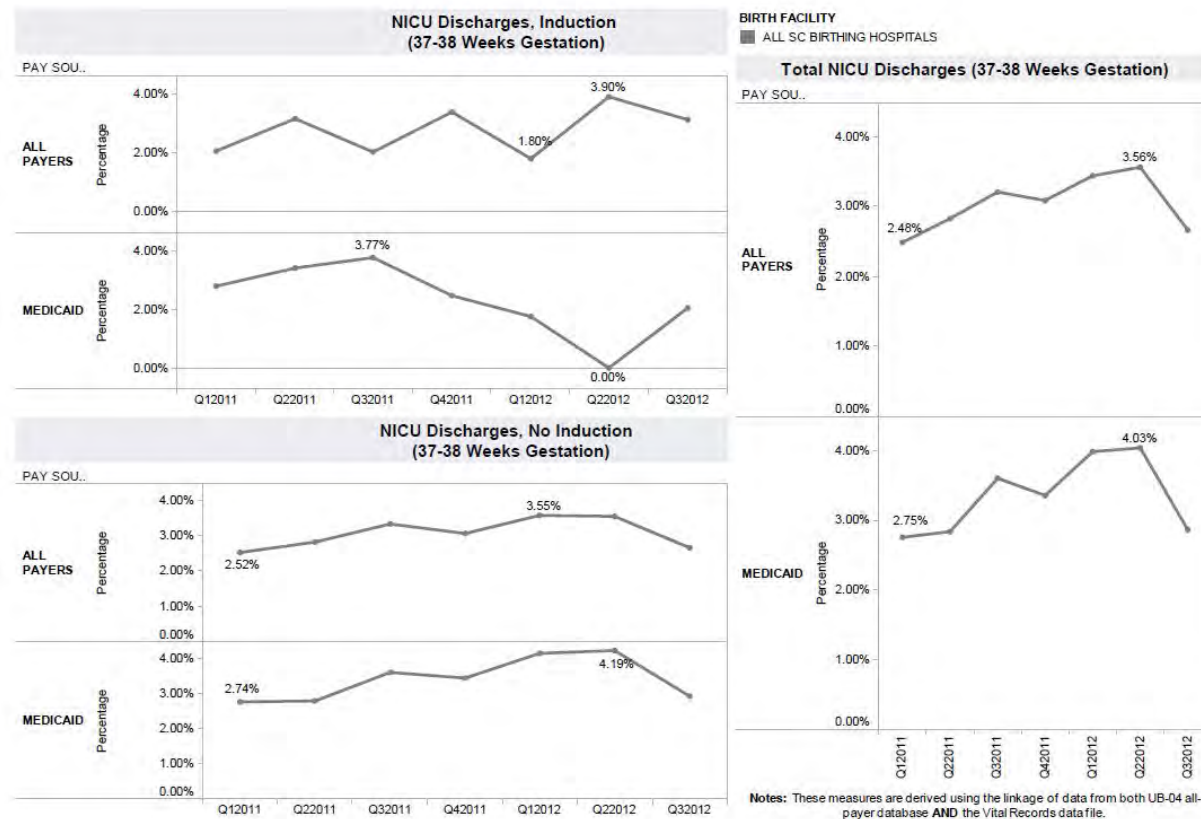
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For a step-by-step guide for choosing standard and less common charts, see the [Appendix](#).



Diversify Chart Type



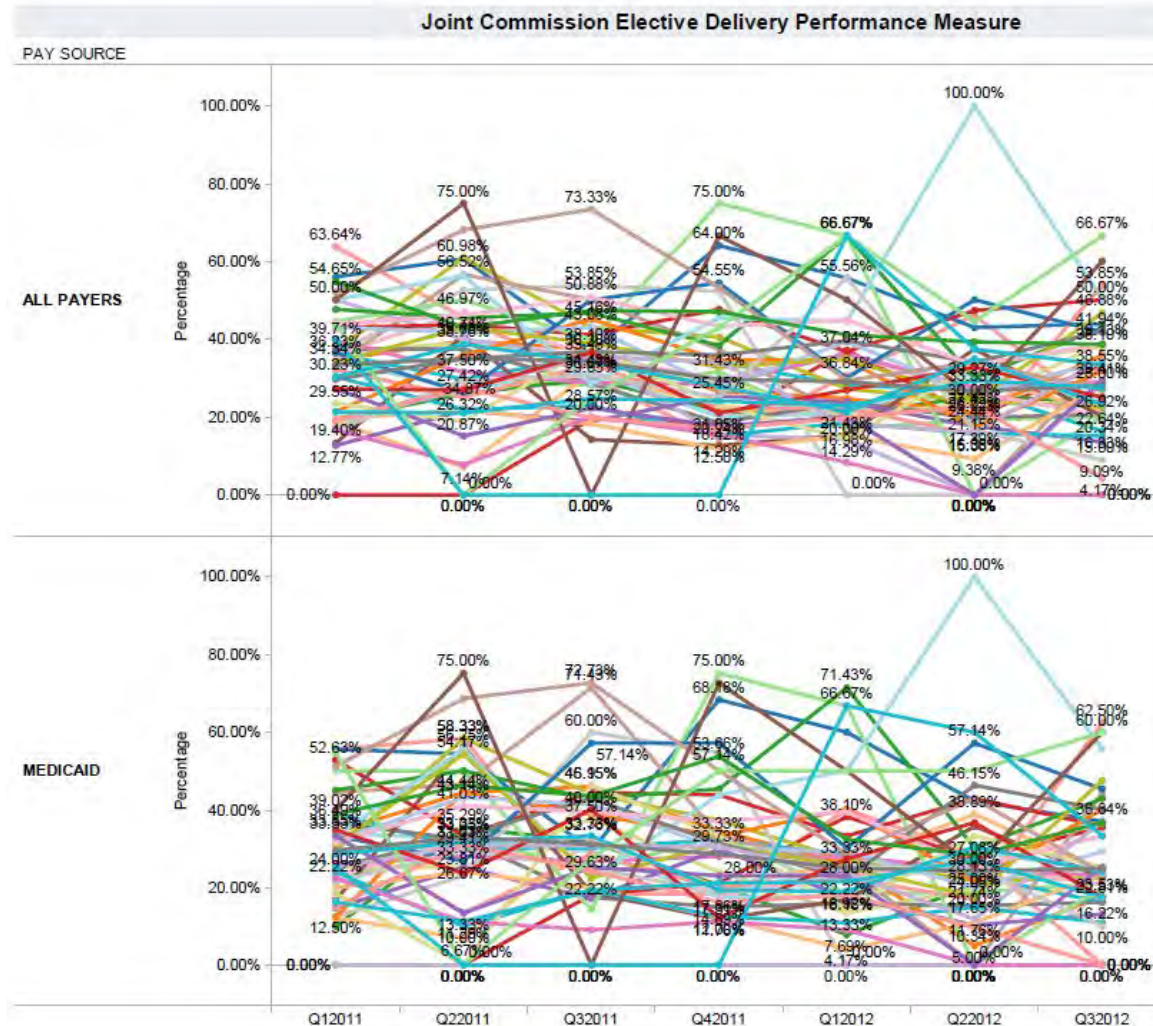
BEST PRACTICE TAKEAWAY

Multiple crowded charts, especially of the same type, make it difficult for the user to understand the key takeaway.

Instead, use different modalities: text, icons, charts, and images.



Hospital Comparison Chart



Notes: This measure is derived using the linkage of data from both UB-04 all-payer database AND the Vital Records data file. Even with the UB-04 billing data, SC Office of Research and Statistics (ORS) cannot exclude for active labor, spontaneous rupture of membrane, clinical trials, and prior uterine surgery.



BEST PRACTICE TAKEAWAY

When trying to compare hospitals use tables, quartiles, scatter plots, box plots, or simple level comparisons. The message is completely lost when every hospital is on the same chart.

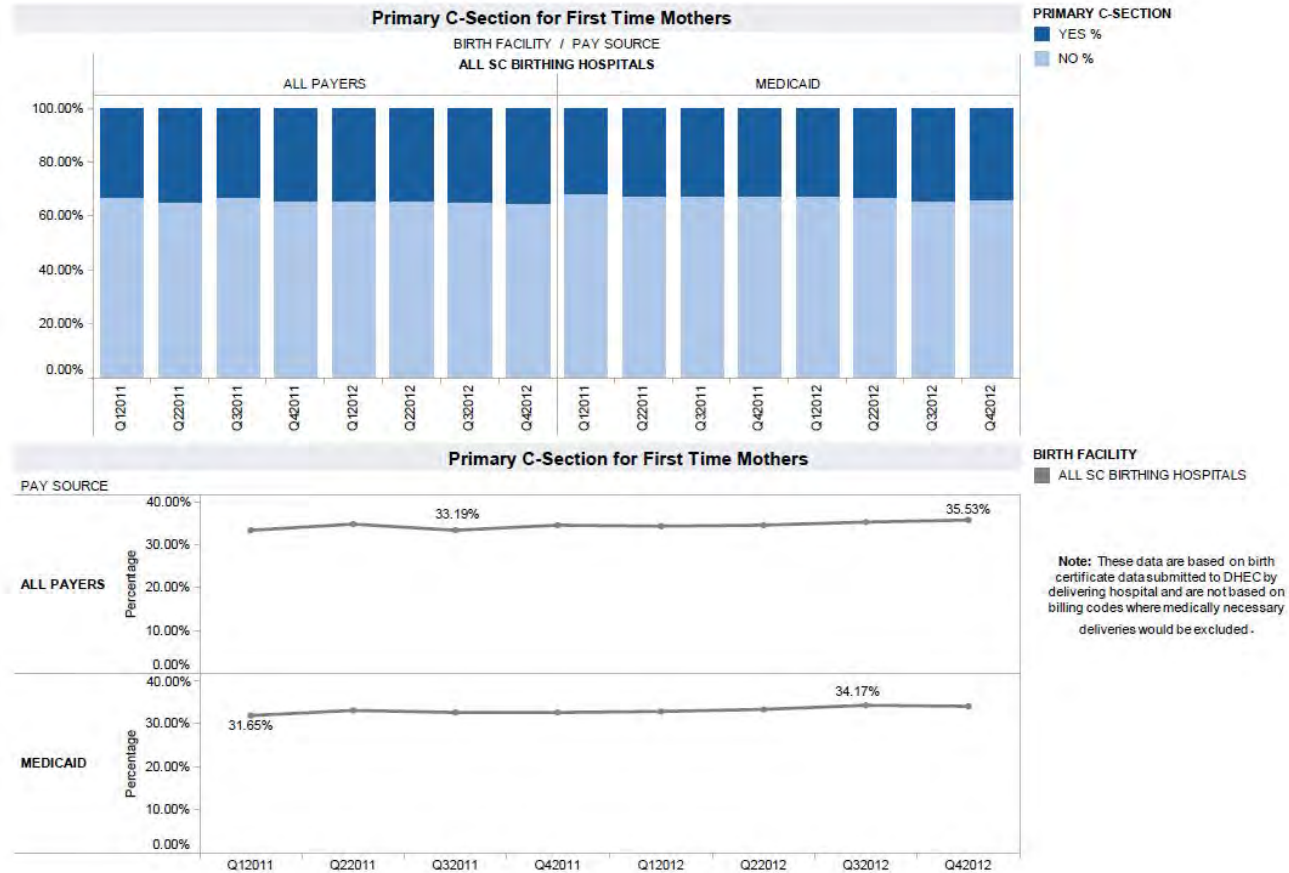


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Presenting Trends



BEST PRACTICE TAKEAWAY

Quarterly trends are best presented when there is some variability in the rates (i.e., an obvious trend). Use of relative change or arrow icons may be an alternative.

In this example, payer source would be best presented as a pie chart given it's a 2-category characteristic.



Example: Maternal health quality trends

Measure	2018- 2020 Trend
Early Elective Deliveries & Inductions (TJC, PC-01)	
Primary C-Section (TJC, PC-02)	
Severe Maternal Morbidity	Mixed result: CA Trend test not significant, but adjusted Chi-square test was. 

Note: 3-year trend analysis was conducted using the Cochran–Armitage and adjusted Chi-square tests.

Arrows that are filled denote statistical significance at $P < .05$.



TAKEAWAY

Early elective deliveries were trending down. More data are needed to see whether this reflects the impact of the pandemic which stopped elective procedures.

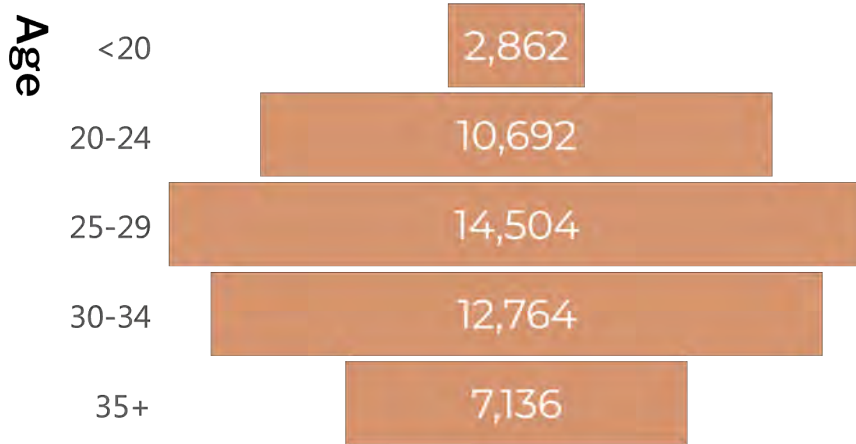
Renewed focus on supporting vaginal birth may be needed.

The rate of severe maternal morbidity in CY20 was 1.67%, a decrease from 1.82% in CY18 (8% relative improvement). This may correspond with the state's engagement in AIM.

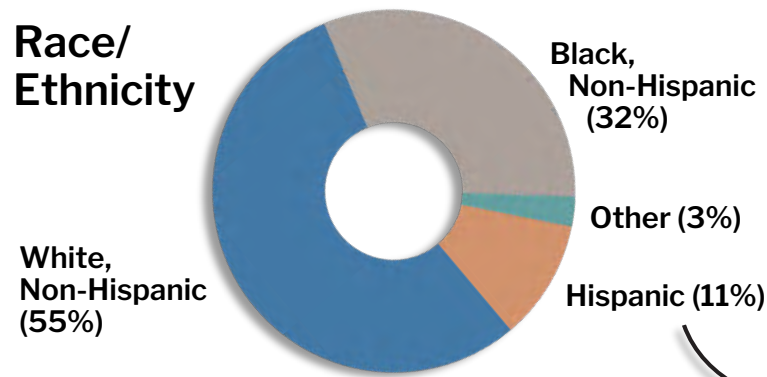


Example: CY2020 Maternal Demographics Snapshot

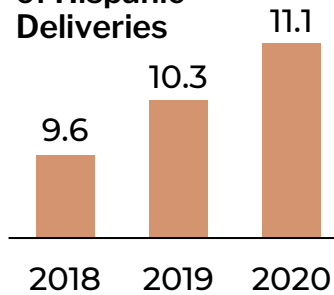
NOTE: Percentages may not total to 100% due to rounding.



Race/Ethnicity



Growth in % of Hispanic Deliveries



Residence: Urban vs. Rural



Disease Profile Summary

 BEHAVIORAL HEALTH ONLY 16%	 CHRONIC ONLY 17%	 BOTH 8%	 NONE 59%
---	---	---	--

% With

	Mental Health Conditions	23%
	Substance Abuse	13%
	Obesity	17%
	Cardiovascular Disease	10%
	Hypertension	8%
	Diabetes	3%

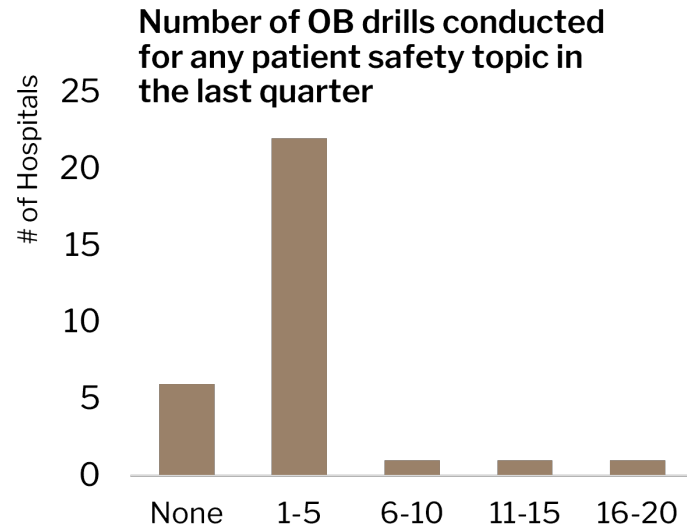
Defined by pre-12 months, delivery, and available postpartum ED visits & inpatient stays. Pregnancy-specific conditions are not included in these definitions.



Example: Obstetric Hemorrhage AIM Patient Safety Bundle Survey

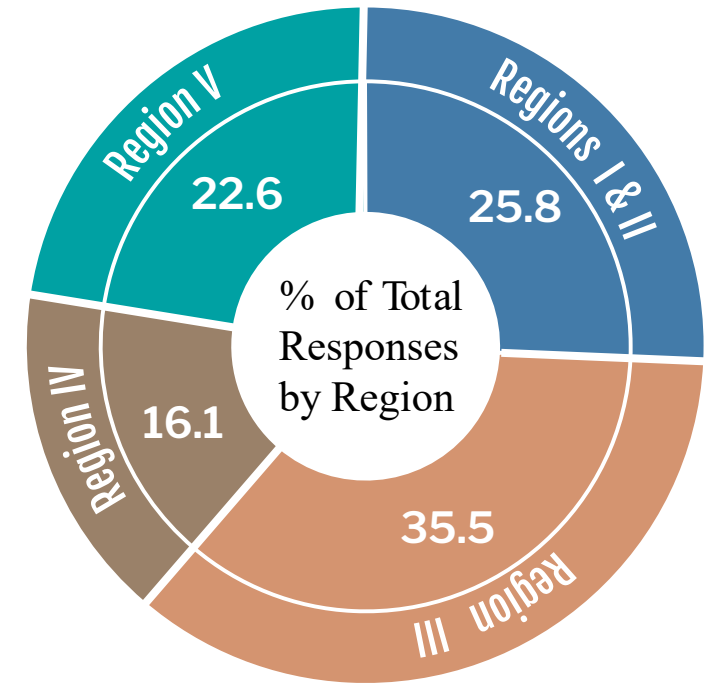
1 in 5

respondents said their hospital **did not** develop OB specific resources and protocols to support patients, family and staff through major OB complications



30%

of respondents were unsure what cumulative proportion of OB physicians and midwives completed an education program on Obstetric Hemorrhage within the last two years



Of the 7 hospitals that **did not** respond, 14% were Perinatal Level I, 57% were Perinatal Level II, and 29% were Perinatal Levels III/IV.

Regions IV & V had the lowest response rates with 71% and 70%, respectively.

Interactive Charts



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Geospatial Environmental Scan[©]

Uses Adobe Acrobat to create mapping layers that users can turn off and on.





SC Birth Outcomes Initiative Data Portal

Movement from the Adobe platform to a web-based GeoScan®, to simple online dashboards on SC Healthviz, to our more complex interactive portal.

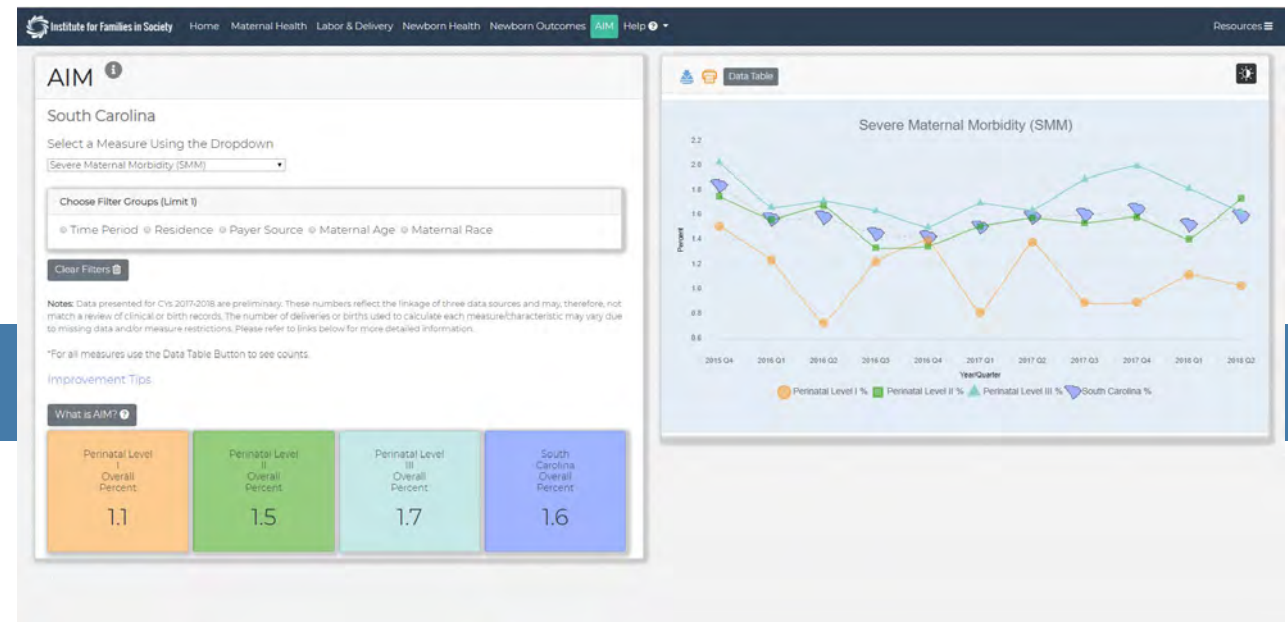
To view data through March 2021,
visit <https://boi.ifsreports.com>.





AIM TAB

- Trends over time for select AIM measures
- The hospital's overall percent
- Average of birthing facilities with the same perinatal level
- Average of all hospitals in the state

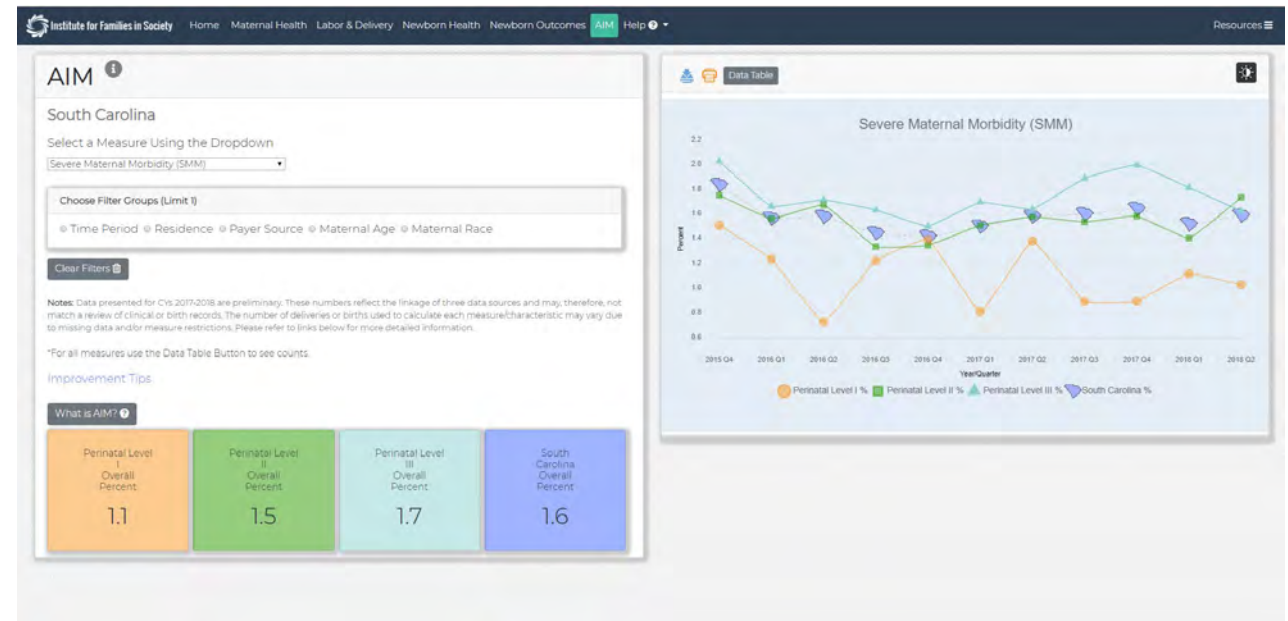




AIM TAB (cont.)

Measures are selected via dropdown box

- Data can be filtered by:
 - Mother's race
 - Age Group
 - Payer Source
 - Rural/Urban
(based on Mother's Zip Code)
- Information about AIM is also available on this tab.





Accessibility Considerations for Web Design

- Design web tools for use with only keyboard commands
- Text scalability for users with vision impairment or difficulty reading
- Add semantic markup elements to HTML to help identify meaning and context, allow search engines and assistive technologies to find relevant content quickly.
- Make sure to put labels outside form fields as they are often missed due to greyscale coloring.
- If you receive federal funding, your dashboard should follow federal ICT accessibility 508 standards and 255 guidelines. <https://www.access-board.gov/ict/>

Resources to Help Improve Your Accessible Graphic Design:

Equal Web:
<https://www.equalweb.com/>

Stark:
<https://www.getstark.co/>

The A11Y Project:
<https://a11yproject.com/>

Learn more:
<https://blog.hubspot.com/website/accessible-graphic-design>



Next Steps



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NEXT STEPS

Next Steps

Office hours: **Friday June 10th at 3pm**

Peruse best-practice examples from:

[The Data Visualisation Catalogue](#)

[The Data Viz Project](#)

[From Data to Viz](#)



Opportunities for Additional Low-Cost Training

- Free web courses from ESRI Academy:
<https://www.esri.com/training/catalog/5e8f3919e5fd2c111c84cfac/esri-free-web-courses-/>
- Canva courses: <https://www.canva.com/learn/>
- Tableau learning journey: <https://www.tableau.com/learn/start-your-journey>
- InDesign tutorials: <https://helpx.adobe.com/indesign/tutorials.html>
- Google Analytics Academy introduction:
<https://analytics.google.com/analytics/academy/course/10>
- Free SAS Visual Analytics training:
<https://support.sas.com/training/us/paths/va.html>



Opportunities for Additional Low-Cost Training (cont.)

- TedEd the beauty of data visualization: <https://youtu.be/5Zg-C8AAIGg>
- Storytelling with Data free PDF: <http://www.bdbanalytics.ir/media/1123/storytelling-with-data-cole-nussbaumer-knaflic.pdf>
- Data storytelling tips to improve your charts and graphs: <https://youtu.be/4pymfPHQ6SA>
- Learn Python seaborn with free trainings on Kaggle: <https://www.kaggle.com/learn/data-visualization>
- Udemy is an online learning platform with free courses. They have fee courses on several data visualization software programs, including Tableau, EXCEL, R, Tableau, and PowerBI: <https://www.udemy.com/>

CONTACT



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**Institute for Families
in Society**

Celebrating 30 Years

*Strengthening Families & Communities
Since 1992*

Appendix: Guide for Choosing Charts



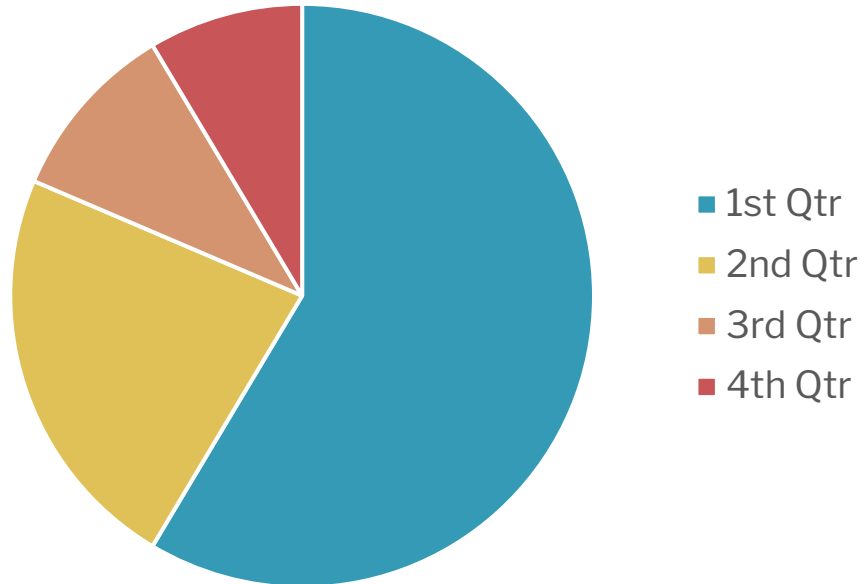
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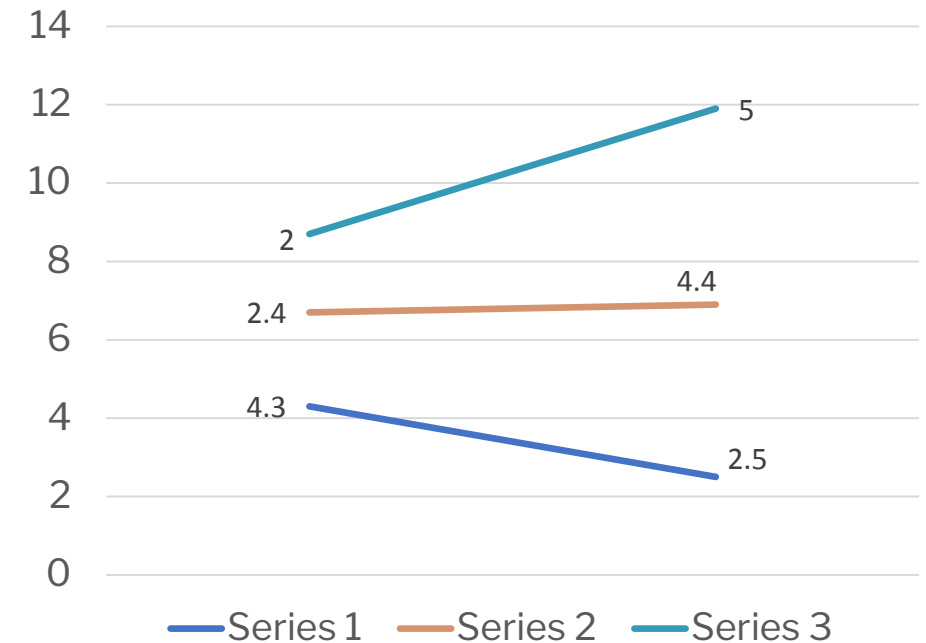


When to Use Standard Chart Options

Categorical data: bar chart (>5 categories) or pie chart (<5 categories)



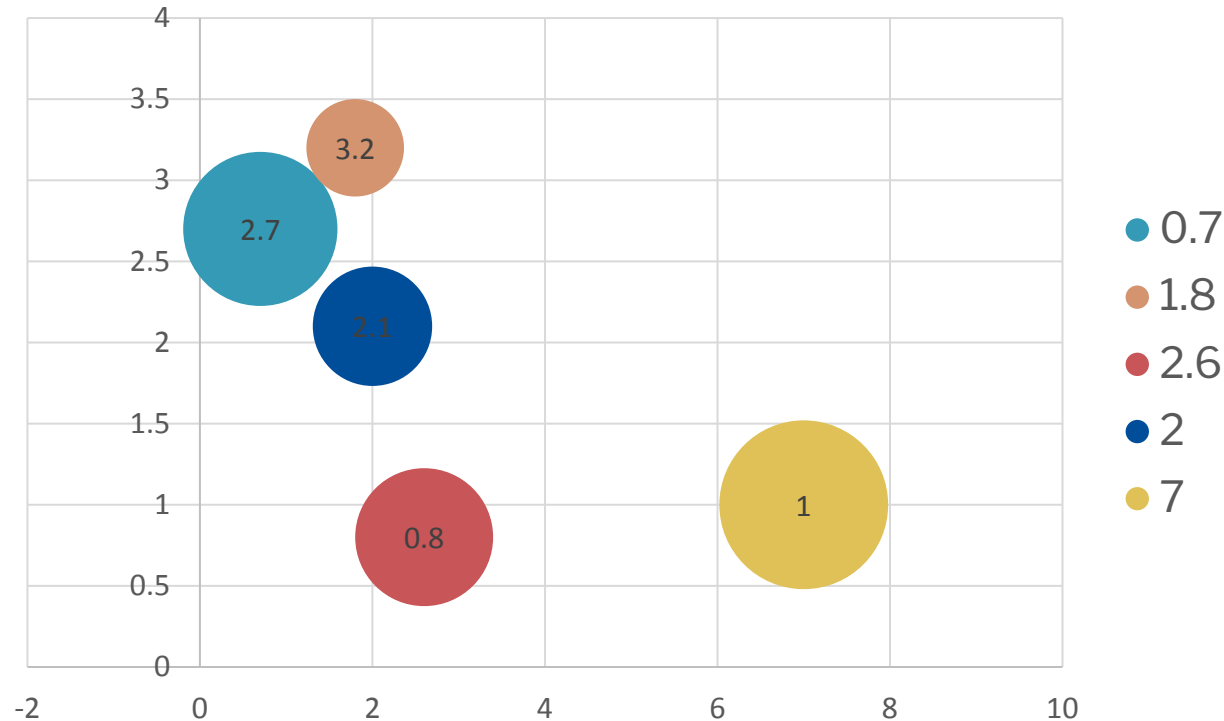
Continuous data: line chart





When to Use Standard Chart Options

Relationship between values: line chart, scatter plot, or bubble chart



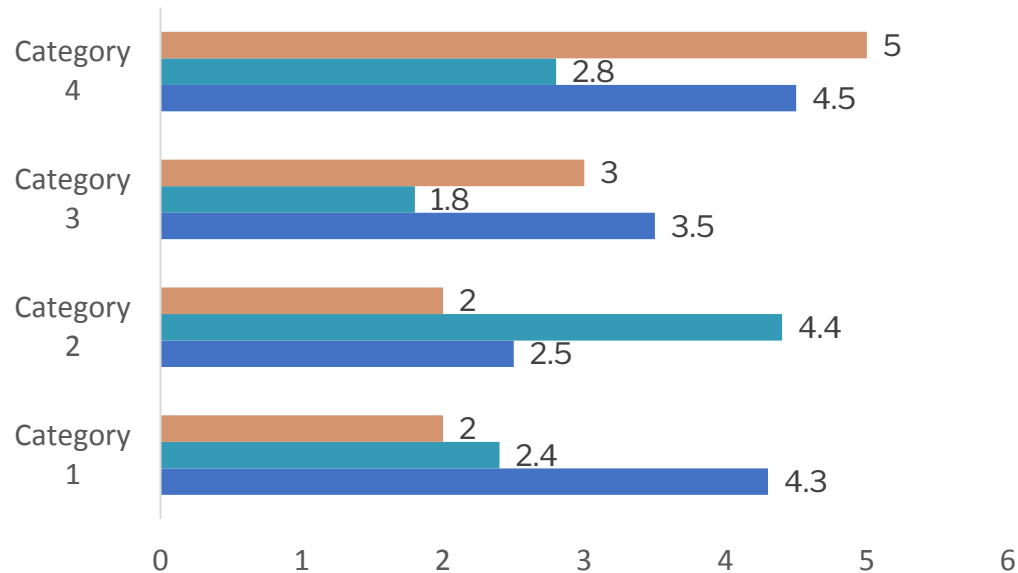
Learn more:

<https://towardsdatascience.com/data-visualization-101-how-to-choose-a-chart-type-9b8830e558d6>

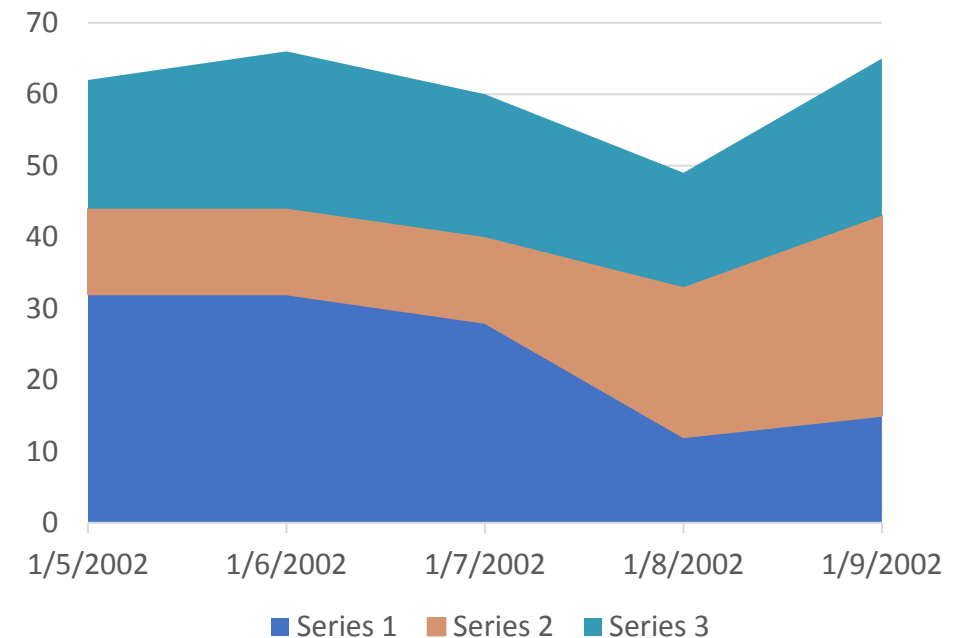


When to Use Standard Chart Options (Cont.)

Compare values: pie chart (relative comparison) or bar chart (for precise comparisons)



Compare volumes: area chart or bubble chart



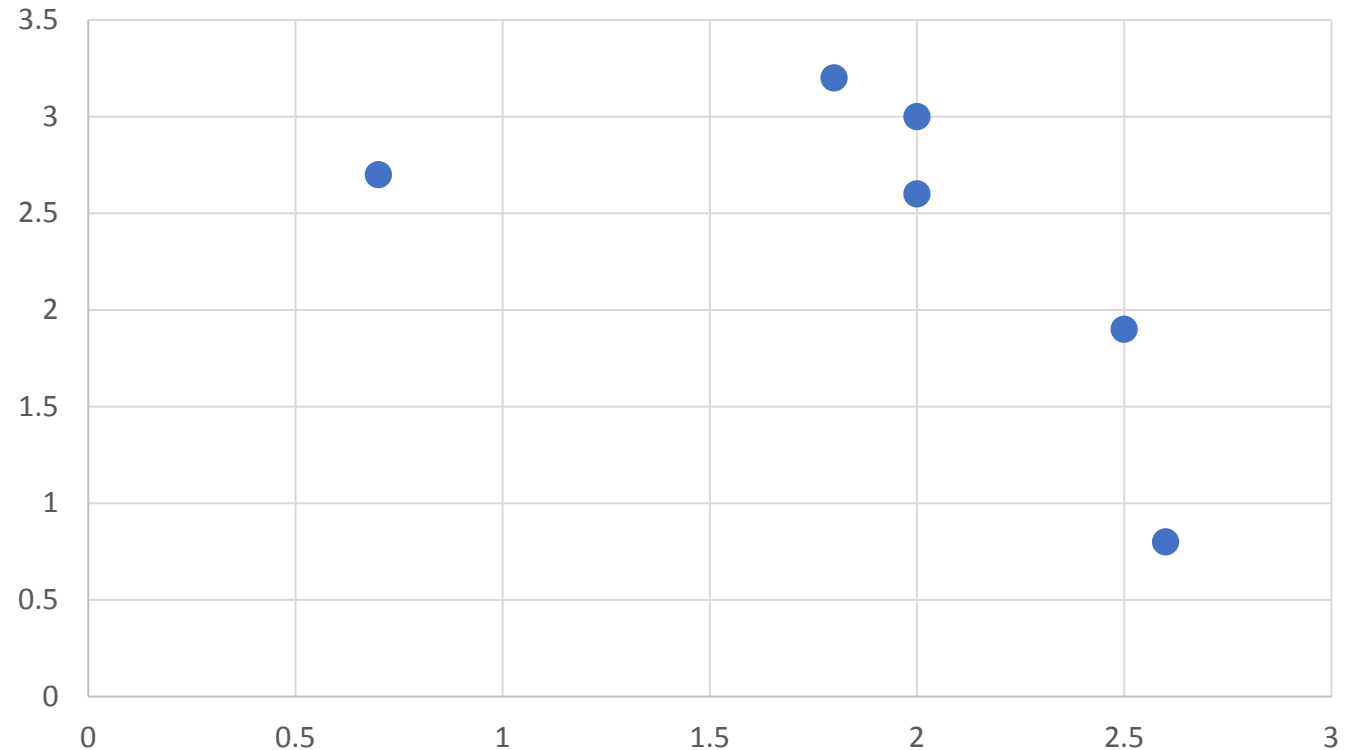


When To Use Standard Chart Options (Cont.)

Trends or patterns: line chart, bar chart, or scatter plot

Learn more:

<https://towardsdatascience.com/data-visualization-101-how-to-choose-a-chart-type-9b8830e558d6>





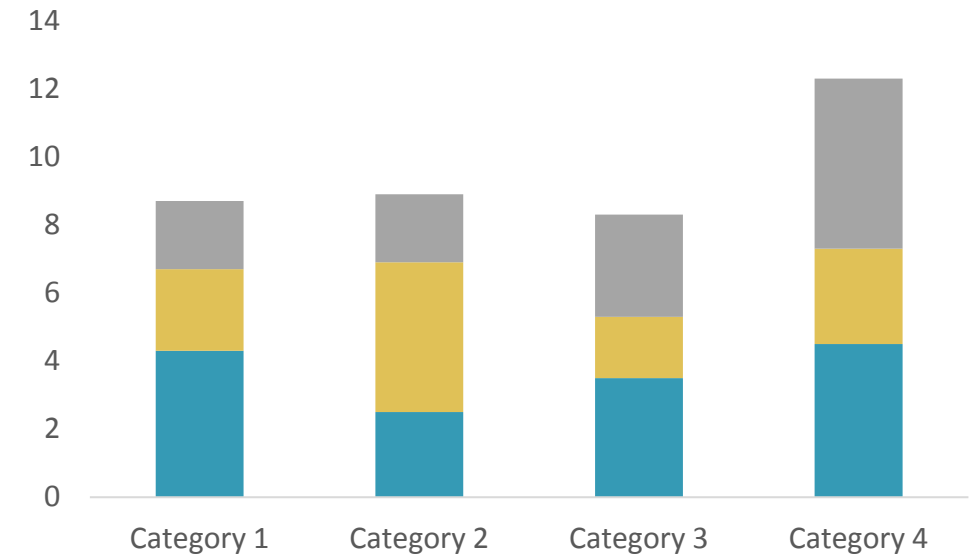
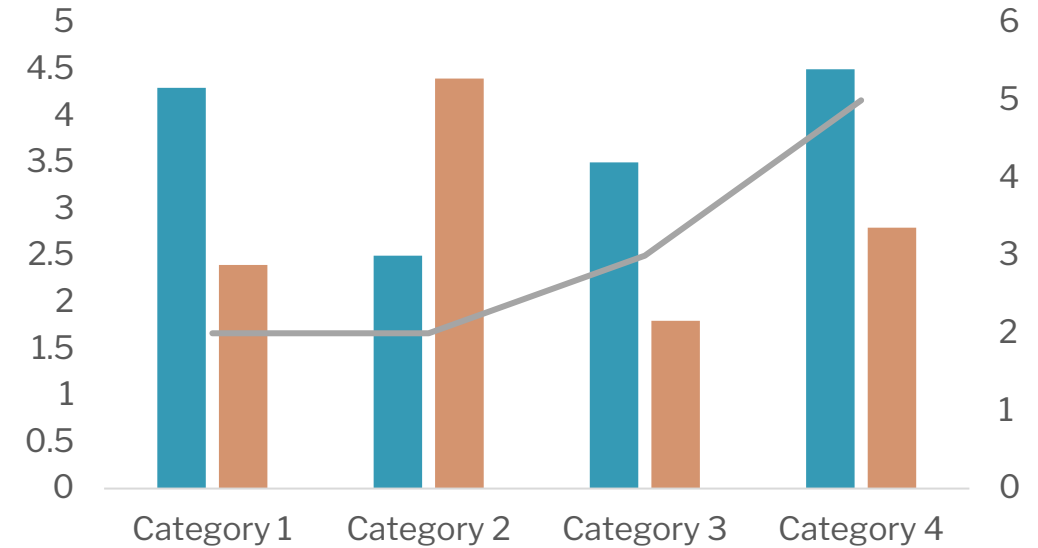
Less Commonly Used Charts

Dual axis chart:

used for three dataset sets (one continuous and another categorical) to visualize correlation or lack of (e.g., SMM rates and investment \$ in maternity bundles over time)

Stacked bar graph:

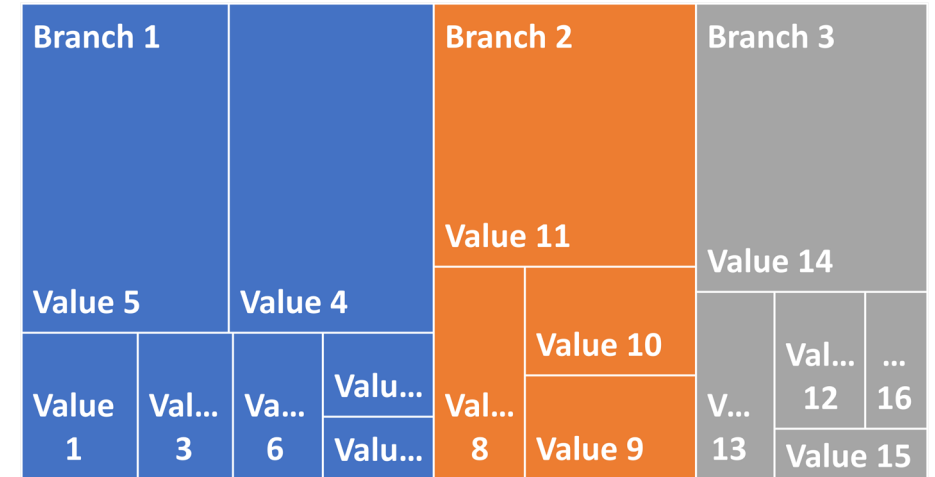
used to compare many different items and show the composition of each (helpful for demographic comparisons across time)



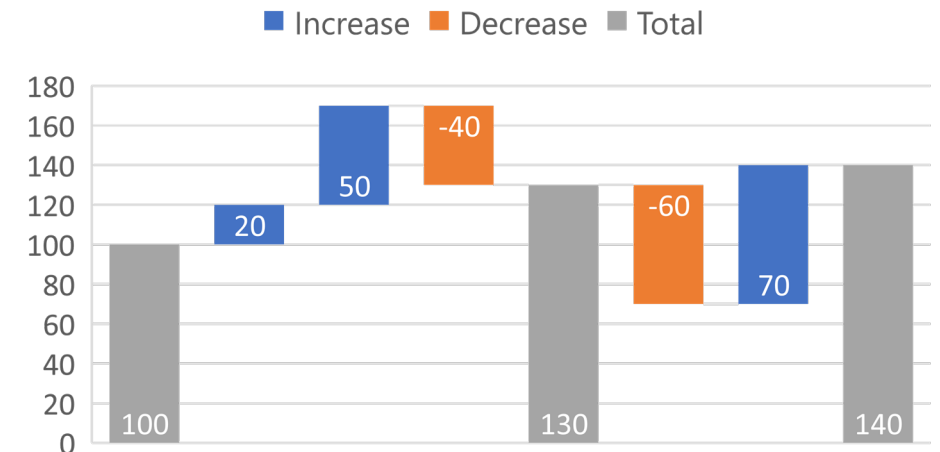


Less Commonly Used Charts

Mekko chart – compare values, measure each, and show how data is distributed (e.g., show U.S. health insurance coverage by type by N millions)



Waterfall chart – shows how initial values are affected by intermediate values (e.g., how overall hospital revenue is influenced by different departments)

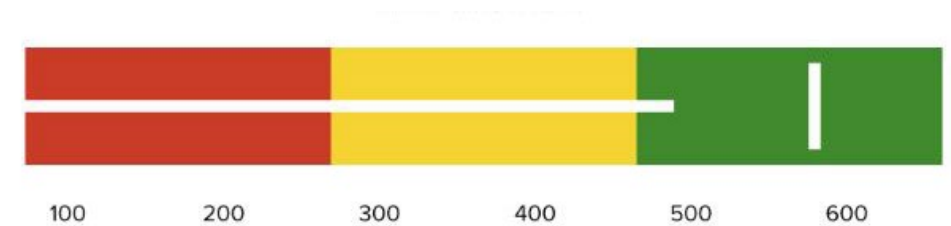
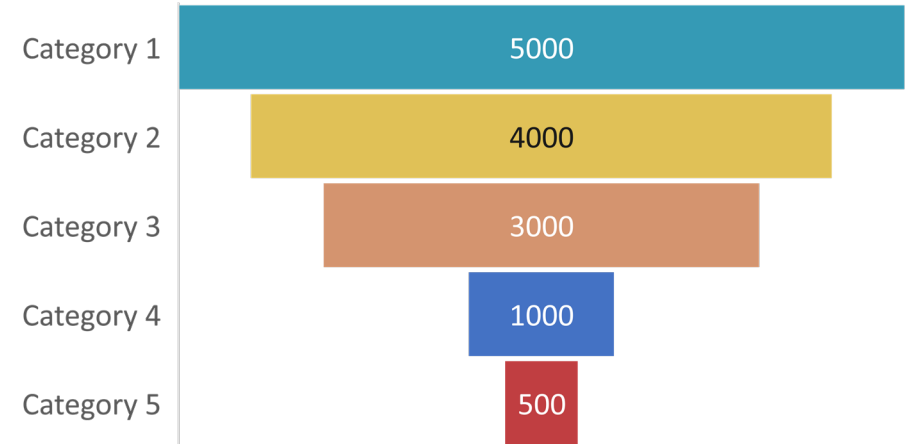




Less Commonly Used Charts

Funnel chart – shows a series of steps and the completion rate for each (e.g., track bundle implementation process)

Bullet graph – reveals progress towards a goal (e.g., monitoring hospital progress on KPI compared to national benchmark target)



Learn more:

<https://blog.hubspot.com/marketing/types-of-graphs-for-data-visualization>



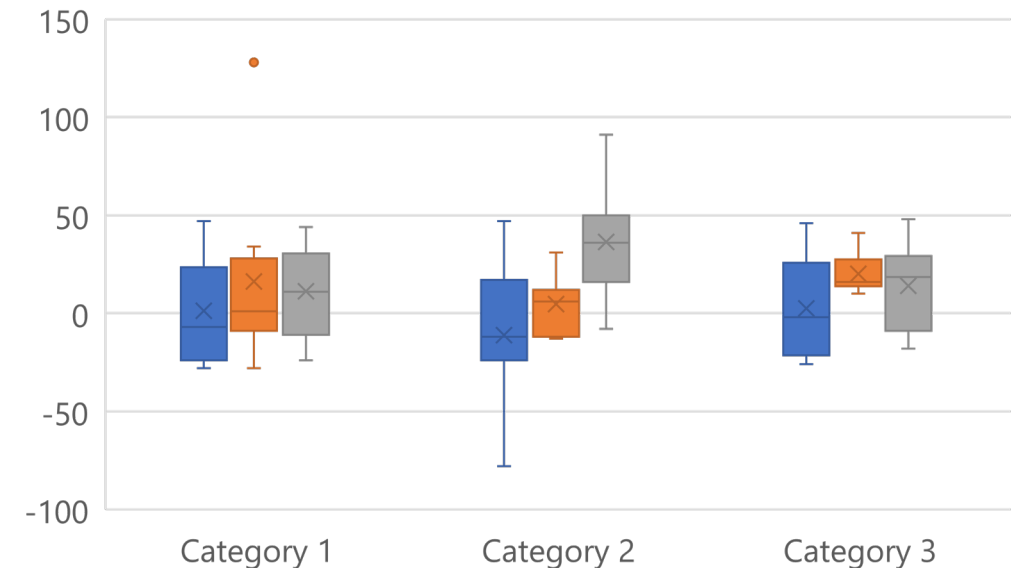
Less Commonly Used Charts

Heat map – shows the relationship between two items and rating information (high to low). The rating is displayed using varying colors or saturation (e.g., SMM rates by characteristic).

Box plot – ideal for comparing distributions between the center, spread, and overall range (e.g., range of SMM rates for each maternal level of care).

Learn more: <https://blog.hubspot.com/marketing/types-of-graphs-for-data-visualization>

Highest Degree vs. Class Identification



Report-Outs: Nebraska

-Sydney Carraher



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Nebraska Perinatal Quality Improvement Collaborative

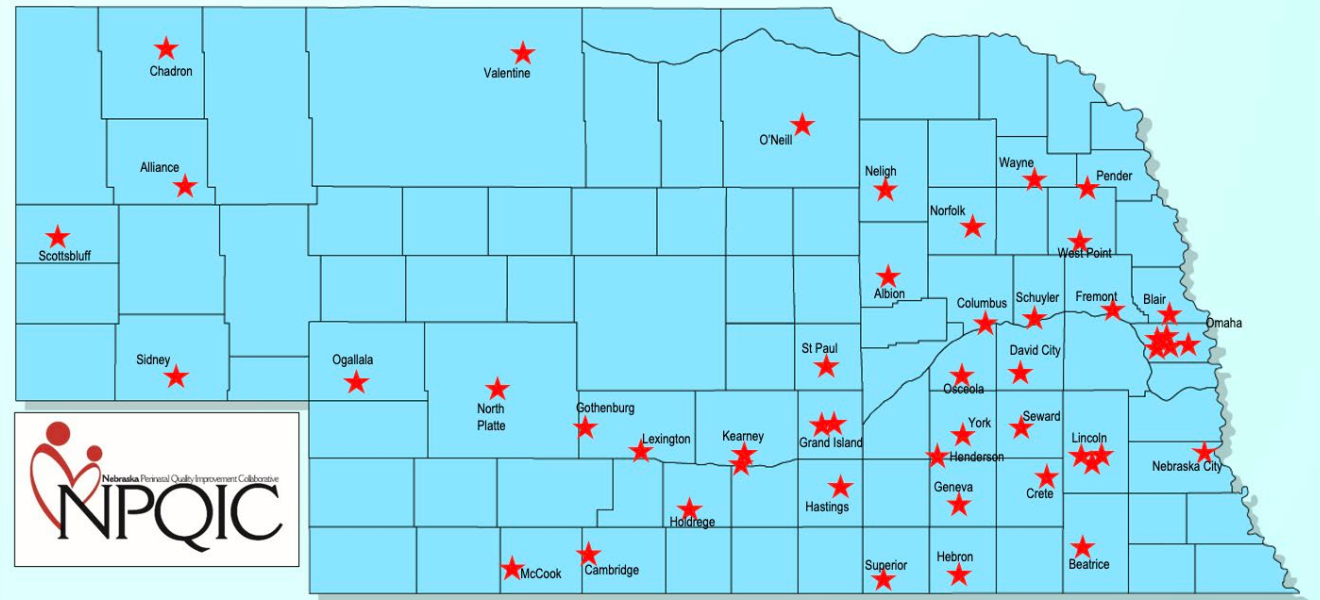
Report Out # 2

Sydney Carraher, MSN, NNP-BC
Program Administrator
June 7th, 2022



Nebraska Birthing Facilities

- Total of 48
 - 30 critical access
 - 17 non-critical access
 - 1 birth center
- All members of PQC
 - 27 AIM HTN Initiative
 - 1 interested

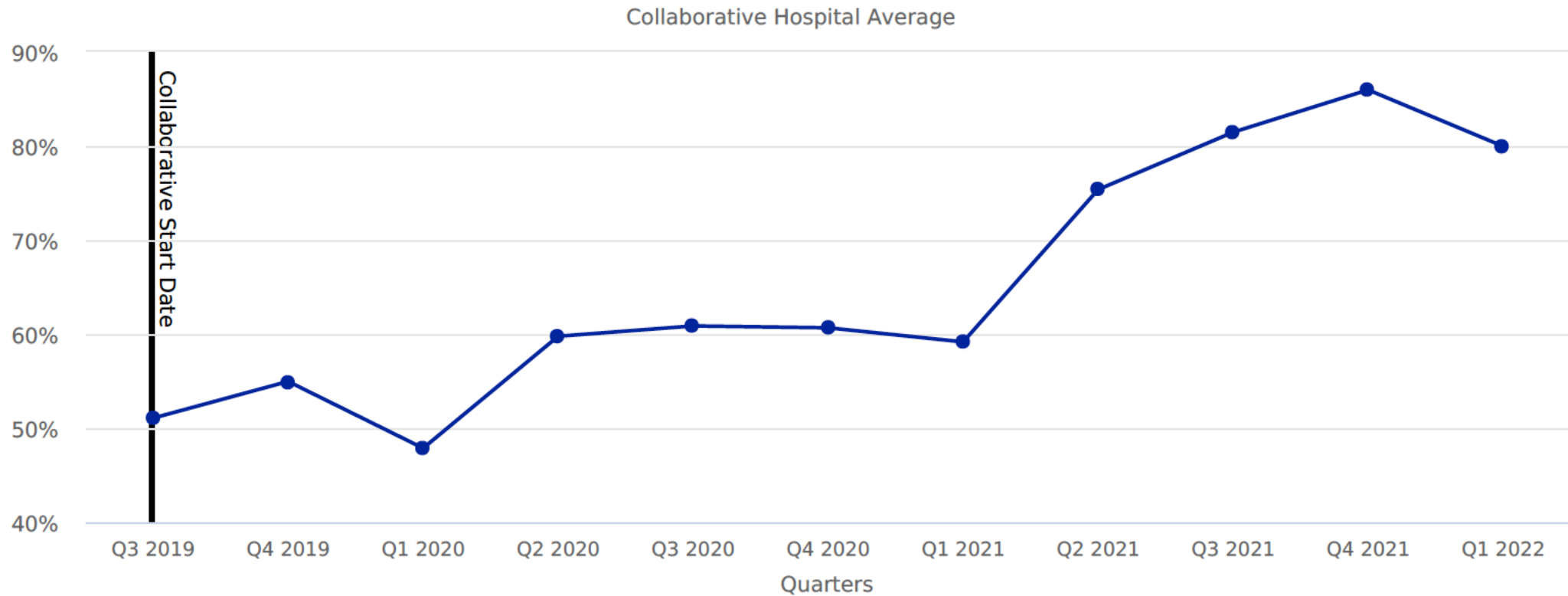


May 2022

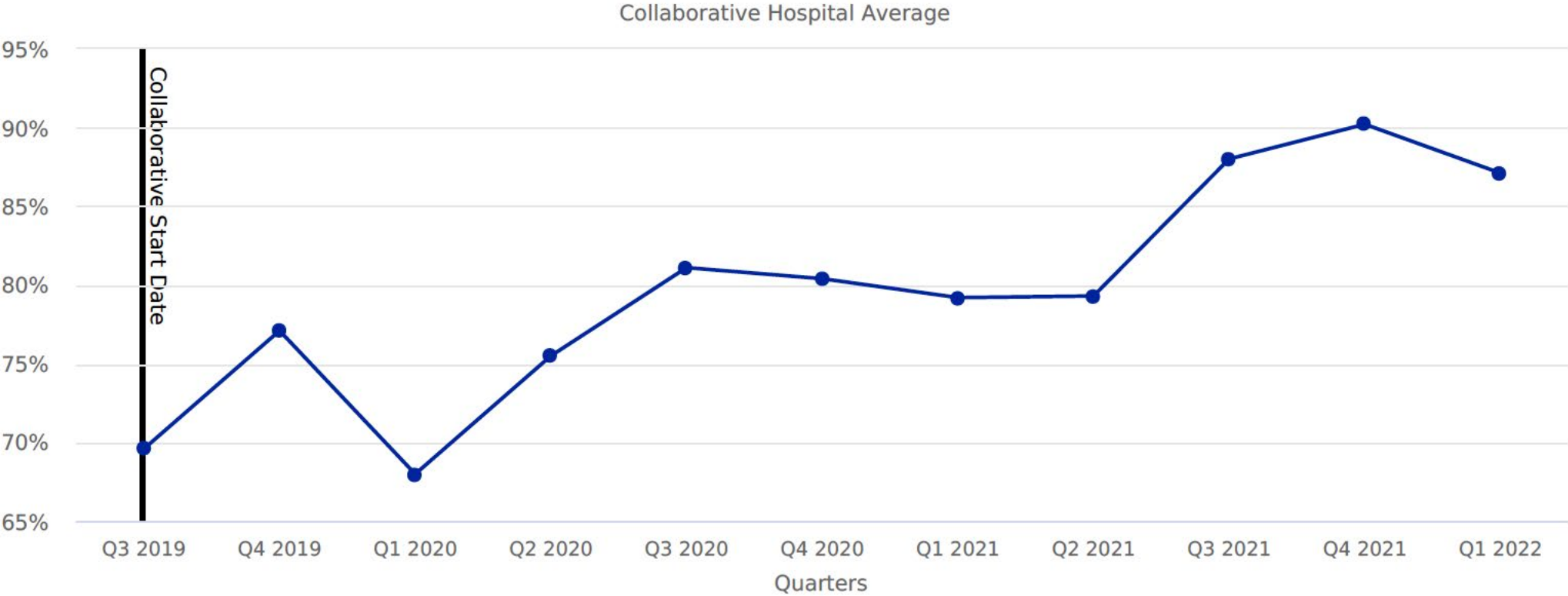
Updates

- AIM Bundle: Severe Hypertension in Pregnancy
 - 84% of data entry by participating hospitals for 2021
 - Improvement in Provider and Nurse Education
 - Continue to work on Timely Treatment
 - Quarterly coaching calls

Provider Education



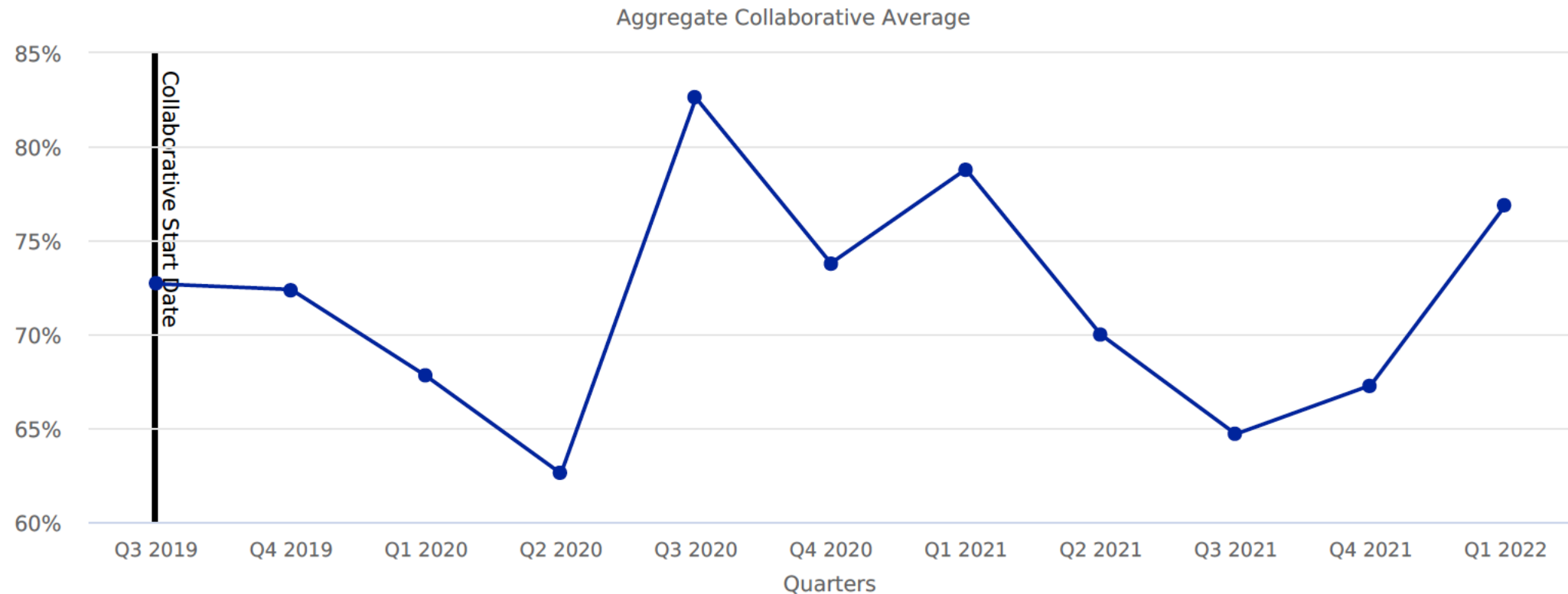
Nurse Education



Timely Treatment

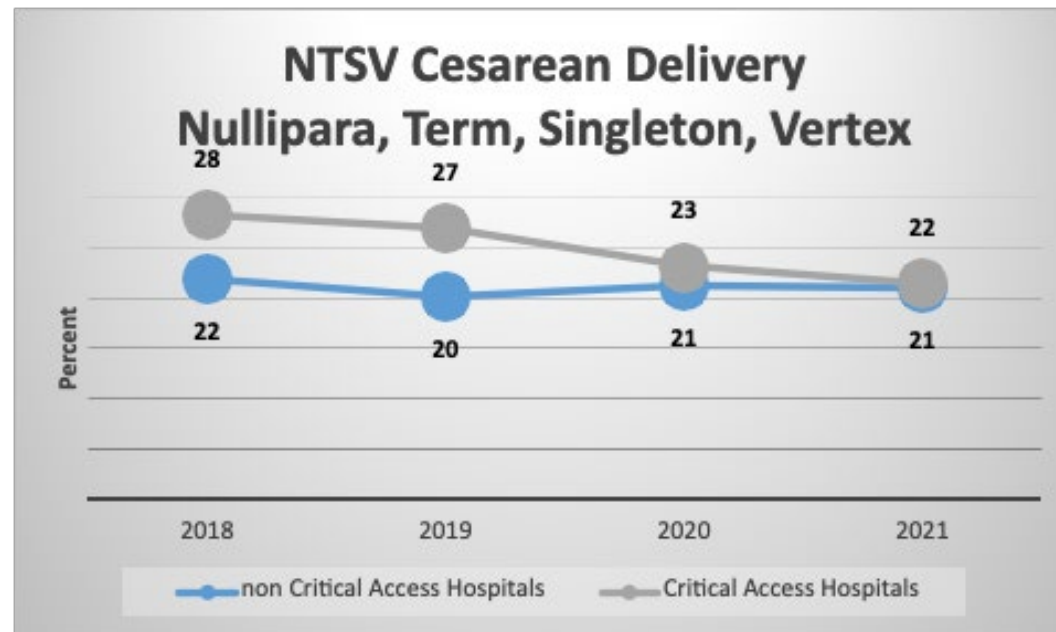
Timely Treatment of Severe HTN

Among pregnant and postpartum people with acute onset severe hypertension, those who were treated within 1 hour.



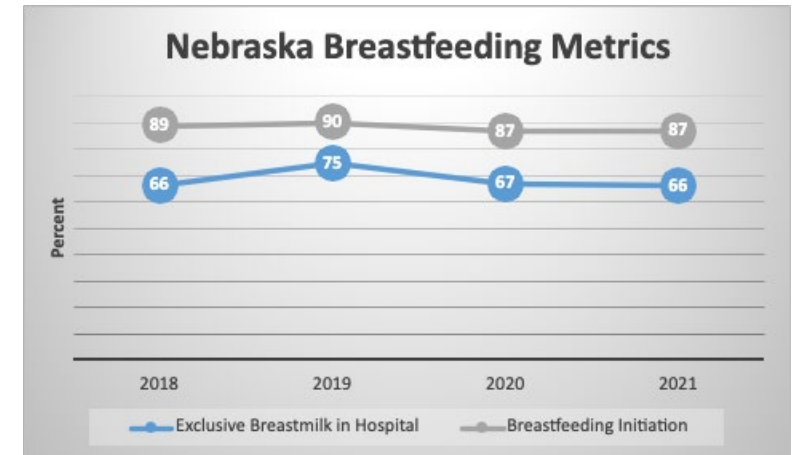
Initiative Updates

- Nulliparous, Term, Singleton, Vertex (NTSV) Cesarean Birth Rate



Initiative Updates

- Exclusive Breastmilk and Breastfeeding Initiation Rates
- Perinatal Depression Referrals
 - Average wait time 14-21 days
 - Increase in social work and behavioral health referrals as a result of increased screening practices.



New/Upcoming Improvement Initiatives

- Prematurity
 - Tobacco cessation in women of childbearing age
 - Partner with NE Tobacco Quitline
 - Monitor referrals
- Pilot SMM Reviews
 - 4 pilot hospitals
 - Trialing tools to abstract cases
 - Refining SMM review committee structure
 - Goal: Develop recommendations for the NE legislature on the feasibility of SMM reviews
- Neonatal Opioid Exposure in Rural NE
 - Data on opioid prescriptions during pregnancy
 - Identify rural areas with highest opioid exposures during pregnancy
 - Target education to priority counties

Current Challenges

- Delays in getting SMM data
 - NE Hospital Association using new vendor
 - Expected July 2022
- Ability to get disaggregated data
 - Expected in second half of 2022
 - Race/Ethnicity, Payor
- Data abstraction and analysis
- Timeliness of data entry and engagement of some hospitals
- How to integrate lived experience

Questions?

Report-Outs: Alabama

- Elizabeth L Blunck



ALLIANCE FOR INNOVATION
ON MATERNAL HEALTH



Alabama Perinatal Quality Collaborative

AIM Data Support Community of Learning
June 2022 Report Out

Challenges

- Newer PQC with limited staff
- Data portal
 - Difficult to use
 - Required significant data cleaning
 - Data visualization available but not user-friendly



Solution: Grow the team

- Data support from University of Alabama at Birmingham Applied Evaluation and Assessment Collaborative
 - Anne Brisendine, DrPH
 - Elizabeth Blunck, MPH



Solution: Improve data systems

- Create a new data portal and visualization system



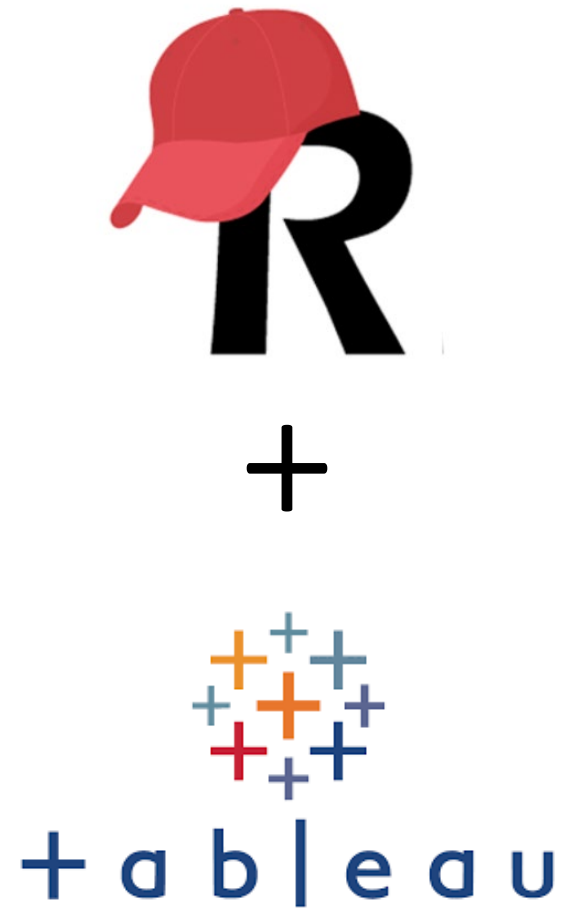
Our Research

- Met with several PQCs using different data management and visualization systems
 - Alaska
 - Florida
 - Illinois
 - Massachusetts



Our Decision

- REDcap survey with individualized hospital links
- Tableau dashboard with hospital log-in



ALPQC NOWS Initiative Data Dashboard

Main Hospital



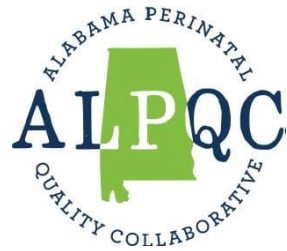
Click on any measure to take a more detailed look.

Measure		All Initiative Hospitals	Main Hospital
Obstetrical Data	Medication for Opioid Use Disorder	66%	58%
	Receiving or Referred to Addiction Services	75%	50%
	Narcan Counseling Documented	53%	60%
Neonatal Data	Evidence of Opioid Withdrawal	23%	35%
	Consistent use of Non-Pharmacologic Bundle	86%	70%
	Pharmacologic Treatment	48%	48%
	Days of Pharmacologic Treatment	18 days	14 days
	Length of Stay	12 days	11 days
	Collaborative Discharge Plan Completed	78%	85%
	Age at Transfer	10 days	9 days
	Readmission within 10 days of Discharge	15%	7%

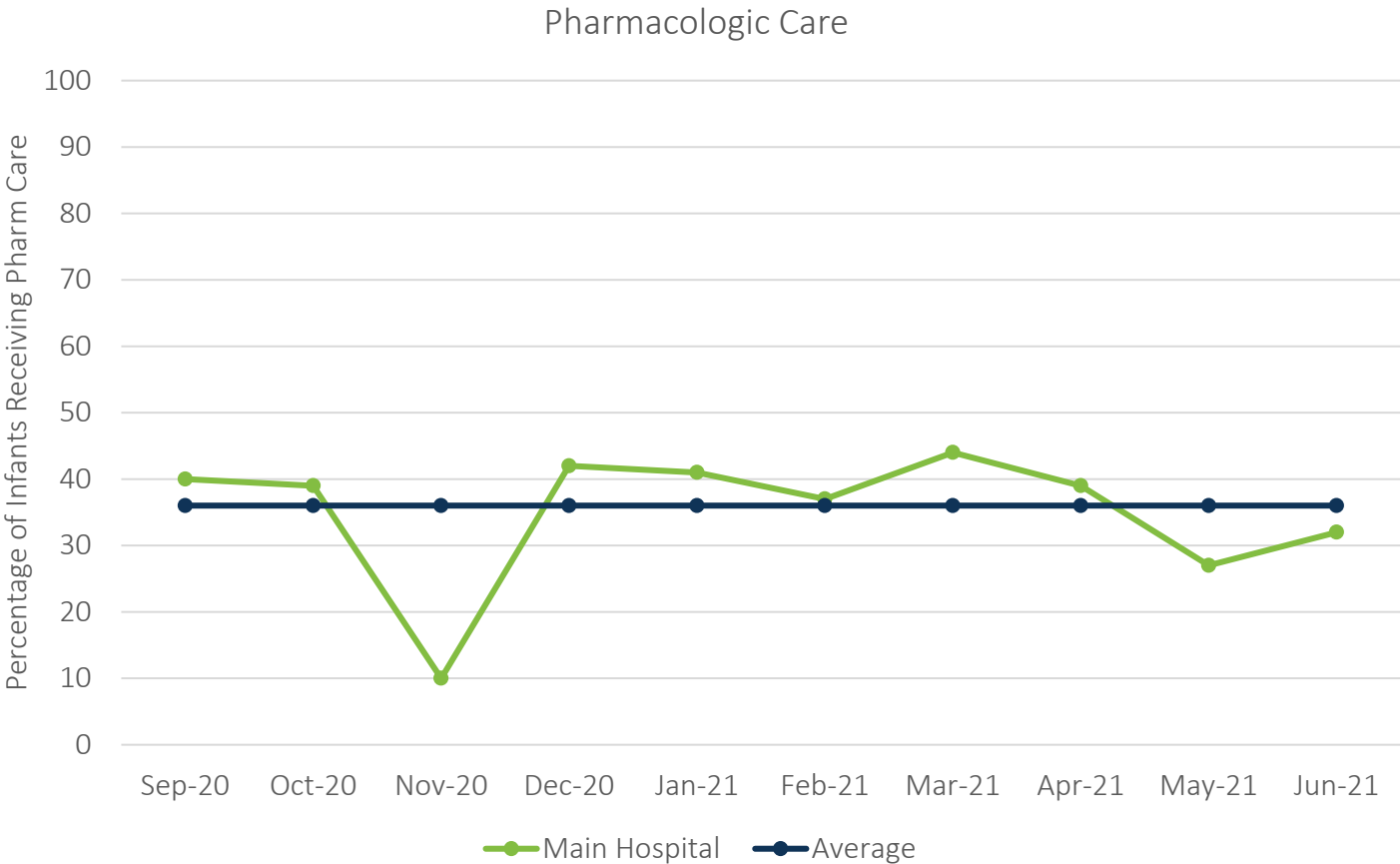
Structural Measures	Status
1. Implemented staff education for reducing stigma related to Opioid Exposed Newborns (OEN)	In Place
2. Implemented educational practices for staff scoring OEN	In Place
3. Implemented standardized non-pharmacologic guidelines for OEN	In Place
4. Implemented standardized practices for when to transfer infants with NOWS to higher level of care	In Place
5. Implemented standardized pharmacologic guidelines for infants with NOWS	In Progress
6. Implemented standardized protocols for Collaborative Discharge Plan for mothers and infants	Not Started

ALPQC NOWS Initiative Data Dashboard

Main Hospital



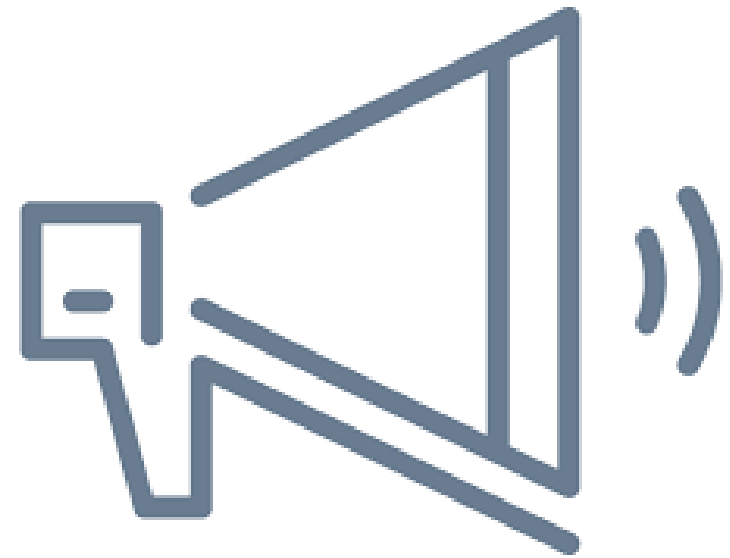
 The goal is to **decrease** the percentage of infants receiving pharmacological care.



- Race/Ethnicity
- ☐ NH Black
 - ☐ NH White
 - ☐ Hispanic
 - ☐ Other
 - ☐ NH Asian
 - ☐ NH AIAN
- Level of Care
- ☐ 1
 - ☐ 2
 - ☐ 3

We would love your feedback!

- Is there anything you wish you knew before creating your data management system?
- Is there anything we may not be considering that we need to?



Upcoming Data COL Events and Due Dates



ALLIANCE FOR INNOVATION
ON MATERNAL HEALTH

Office Hours with Ana and Sarah

- For one-on-one technical assistance, please signup for office hours.
 - **Share your questions in advance.**
- **Date and Time:** June 10, 2022 @ 3:00PM-4:30PM (EST)
- **Registration closes:** June 09, 2022 @12:00PM (EST)

Registration Link: <https://us02web.zoom.us/meeting/register/tZEtfuitpzMuHdME1MF150YEaLgwe5q0kyNb>

Upcoming Educational Offerings

Topic	Education Offering Data and Time	Guest Speaker/Faculty member
Monitoring & Reporting Data from QI Initiatives	Session: July 08, 2022 (3:00PM-4:30PM) (EST) Office Hour: July 15, 2022 (3:00PM-4:30PM) (EST)	<i>Brant Oliver, PhD, MS, MPH, FNP-BC, PMHNP-BC</i> <i>Daisy Goodman, DNP, MPH, CARN-AP, APRN, CNM</i> (The Dartmouth Institute for Health Policy and Clinical Practice)

The registration links for all the upcoming sessions and office hours has been posted on the [AIM Data Resources Webpage](#).

Any Questions?

aimdatasupport@acog.org

After the meeting ends, please take a moment to fill out a brief survey to share your experience.