

Data Visualization: Telling the Story

SUMMARY OF INNOVATIONS

PEER
TO
PEER
LEARNING

SME
Webinar

The SME Webinar focused on practical design principles to transform complex screening and diagnostic data into compelling narratives. Data visualization is not merely about listing program measures; it is about **storytelling to demonstrate how programs improve lives and encourage life-saving actions, such as cancer screenings**. By moving beyond “the kitchen sink” of raw data, presenters can communicate the true impact of their work to diverse stakeholders.

Key Takeaways

- 1 Purpose-Driven Design:** Start with the “who, what, and why” to define the program’s mission and voice.
- 2 Data as the Bedrock:** High-quality, clean data is essential for building a trustworthy and accurate narrative.
- 3 Audience Centricity:** Visuals must be tailored specifically to the needs and technical expertise of the intended audience.
- 4 Strategic Visualization:** Avoid common pitfalls, like misleading charts or broad averages that obscure important details.
- 5 Technological Integration:** Leverage AI and interactive tools and maintain strict data governance and manual verification.
- 6 Prioritize Cognitive Clarity:** Regardless of prior knowledge, anyone can understand your message and purpose.

Build the Foundation



Who:

Give Data a Human Voice



What:

Narrative Purpose



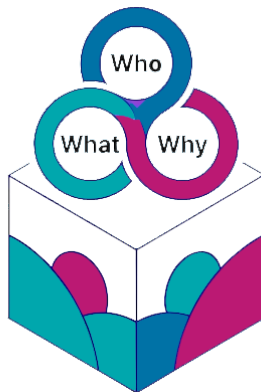
Why:

Define Mission First

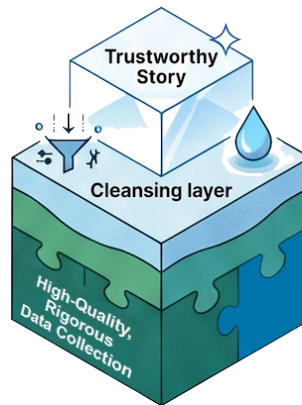
Start with the Core Purpose

Establish a Data Bedrock

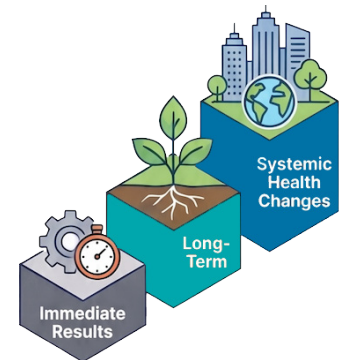
Connect Outcomes to Impact



Define the WHO, WHAT, and WHY to establish your program’s unique narrative voice.



High-quality, rigorous data collection and cleaning are essential for building a trustworthy story.



Map the progression from immediate results to long-term systemic health changes.

Using Artificial Intelligence (AI)

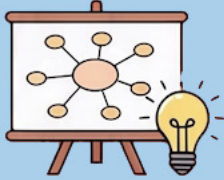
AI can be a powerful tool for generating visually stunning dashboards and story maps.

- Data Governance:** **Warning:** Never input sensitive patient data into public AI systems. Use only publicly available data for these tools.
- Mitigating Hallucinations:** AI can confidently generate false information (hallucinations). Always manually check AI-generated data against the original source.
- Effective Prompting:** Use complete, descriptive prompts. Be specific about what data to use and what the final visual should look like to prevent it from “making things up.”



Strategic Delivery and Design

Different audiences require different levels of detail and visual styles:

Funders (Direct) 	General Public (Engaging) 	Internal Teams (Exploratory) 
Pivot to metric driven funder reports Mediums: Concise one-pagers, formal reports, and success stories. Pro Tip: Create a “kitchen sink” comprehensive report as a foundation, then pare it down for specific funder needs.	Engage with public narratives Requires accessible, engaging, and attention-grabbing narratives. Mediums: Web pages, short videos (reels), and simple infographics. Constraint: You often have only 30 to 90 seconds to capture their attention.	Explore with exploratory internal data Focus on detailed and exploratory information to guide next steps. Tip: Use call-out boxes in presentations to highlight specific, actionable statistics.

Persuasive Narratives

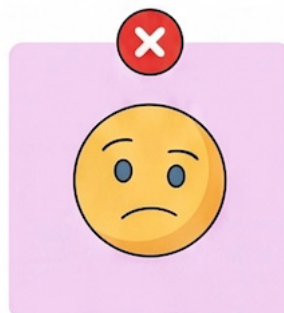
To create a narrative that drives action, one must humanize the data:

- **The Mission** - Clearly identify who is being helped (e.g., populations without insurance) and the ultimate goal, such as finding cancer early to ensure survival.
- **Outcome vs. Impact** - Differentiate between immediate outcomes (e.g., increased knowledge or adherence to screenings) and long-term systemic impacts (e.g., reductions in treatment gaps or early-stage diagnoses).
- **Roadmapping** - Use visual roadmaps and timelines to show how short-term outcomes will eventually lead to the desired long-term impact, even if that change is slow to manifest.

Prioritize Design Excellence

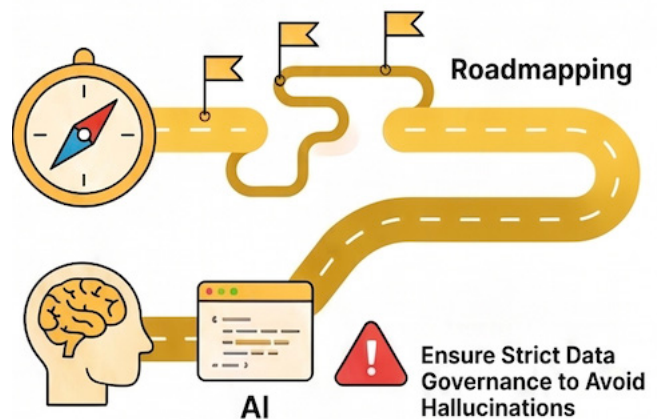


Cognitive Clarity
Maintain cognitive clarity.



Pitfalls
Avoid pitfalls like broad averages that hide gaps.

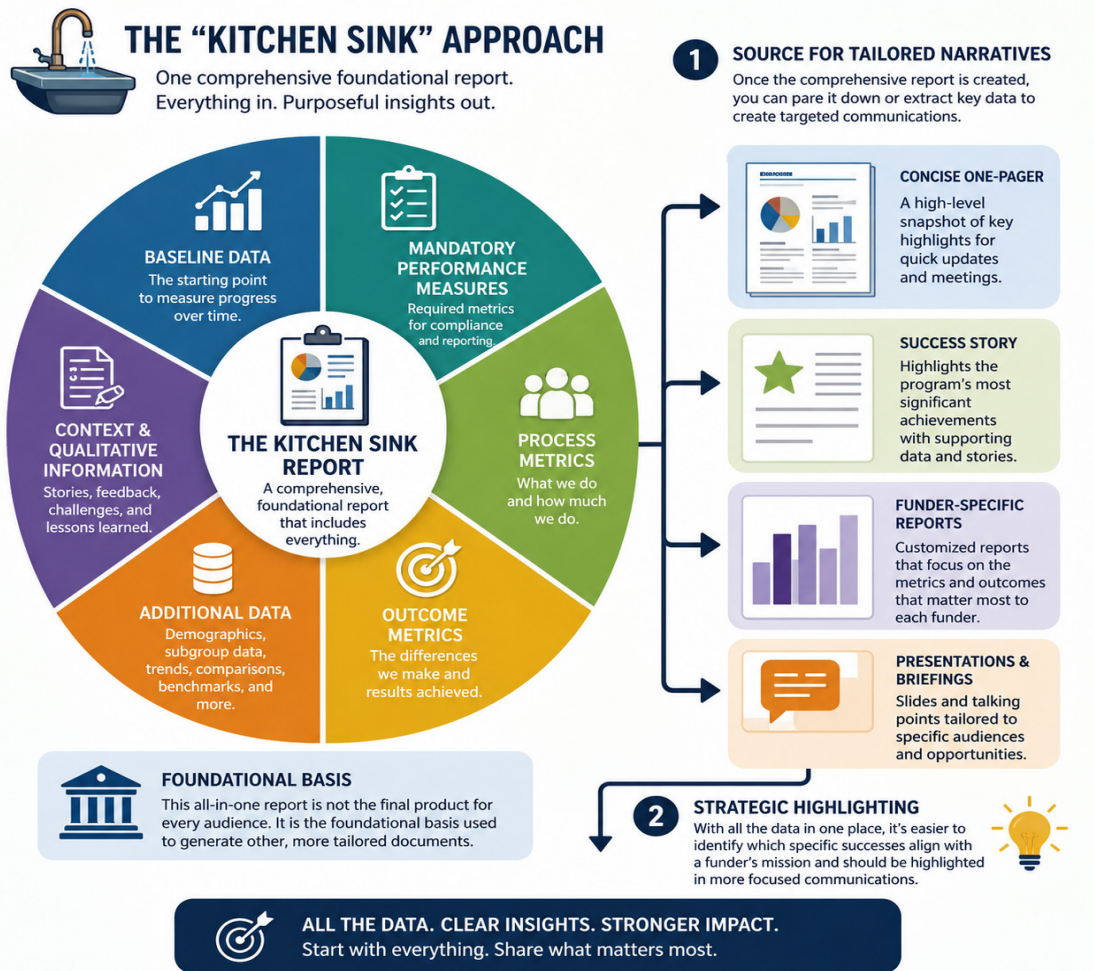
Leverage Strategic Tools



Use roadmapping and AI carefully, ensuring strict data governance to avoid hallucinations.

The Kitchen Sink

The “kitchen sink” approach to reporting refers to the creation of a single, comprehensive foundational report that contains every piece of data and metric related to a program. This approach includes several key components and functions:



Common Design Pitfalls

Effective design requires avoiding distortions that can mislead the viewer.

- **Poor Chart Choices:** Using bar charts for very small movements or failing to order data mathematically (e.g., highest to lowest) makes the visual hard to digest.
- **Hiding Variations:** Using broad averages can accidentally obscure variations within specific populations.
- **False Equivalencies:** Avoid combining unrelated metrics, such as process measures (kits mailed) with outcome measures (screening rates).
- **Small Sample Sizes:** Do not draw massive conclusions from very small population data, as this distorts reality.



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