Making data count

Communicating data effectively to increase awareness of oral health needs and outcomes

Jacob Strategies

ASTDD's Peer Support Discussion Group
Wednesday, September 14, 2022

The role of data

"The data are not the story. The story is the story. Treat the data as evidence to support your messages."

— The Ariel Group

Be strategic in how you present data

1. Be selective and strategic

- Less is more

- Choose the **best 3 data points** for a fact sheet, testimony or other non-formal communication

- Use only the data your audience needs to know
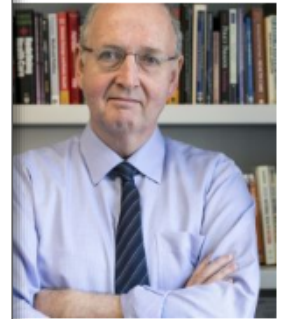
2. Round percentages up or down

Use **whole numbers** unless there is a good reason for using decimal points

THE MILBANK QUARTERLY

Might Oral Health Be the Next Big Thing?

December 2016 | John E. McDonough | Op-Ed

Recent and surprising integration boosters include large insurers such as UnitedHealth, Aetna, Cigna, and United Concordia/Highmark, each with studies showing that dental coverage for those with chronic diseases such as diabetes and congestive heart failure can pay for itself in reduced medical costs. Avalere found that medical costs were 29.8% lower for diabetics, 19.8% for those with heart disease, and 37.8% for stroke victims when patients had access to periodontal treatment. Though some suggest insurer conflict of interest here (most market and sell dental coverage), this is a compelling development.

has improved markedly over 60 years, many millions are left behind and hurting. Societal improvements in science, technology, education, hygiene, community water fluoridation, and school-based services have not been broadly shared.[2] Today, 130 million Americans, primarily adults, have no dental coverage. Many Americans with coverage find today's health insurance cost-sharing requirements a prohibitive barrier to care. Medicare provides no dental coverage for 70% of its enrollees; 40% of them did not visit a dentist

TxOHC
TEXAS ORAL HEALTH COALITION

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3. Consider using ratios

- Consider using **ratios** instead of percentages.

- Citing 24% of children doesn't sound like much, but citing **1 in 4 kids** puts this in a different, helpful perspective.

4. Put data in a powerful context

USA TODAY

Visualizing the spread of the coronavirus

The coronavirus COVID-19 has multiplied more rapidly than any infectious disease in recent memory—more than 64,000 cases in the first 25 days alone. This makes it difficult to grasp the scale of the outbreak. Here's how the mounting number of cases have matched crowd sizes in familiar American venues.

By Feb. 8, the number of cases could fill all seats of Fenway Park in Boston (**37,731**).

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By Feb. 8

Matthew Jacob
@mattindctweets

1 in 4 U.S. adults travels at least 30 mins to get dental care. And 1 in 20 adults must travel over 1 hour to reach a #dental clinic. One in 20 may not sound like much, but that number = all adults in Arizona & Massachusetts! More details: bit.ly/2VbFWAi #oralhealth

7,731).

5. Give the data "a bottom line"

NPR

☰ NEWS   ✈ ARTS & LIFE   ♪ MUSIC   🎧 SHOWS & PODCASTS   🔍 SEARCH

RESEARCH NEWS

Research Supports Claims That Teeth Worsen Without Fluoridated Water

January 1, 2019 · 4:58 AM ET

RACHEL MARTIN, HOST:

A little more than a decade ago, the city of Juneau, Alaska, became one of many American cities that stopped adding fluoride to its tap water. At the time, science predicted more cavities. That prediction has now proven true. From member station KTOO, Jeremy Hsieh reports.

JEREMY HSIEH, BYLINE: Jennifer Meyer is a public health researcher with a new study in the journal BMC Oral Health. She talks about tooth decay and cavities the way dentists do. She calls them caries. And after studying what happened in Juneau to children under 6, this is her takeaway.

*(**Source:** National Public Radio story by Jeremy Hsieh, posted on January 1, 2019 at 4:58 AM ET; story referred to the following study: J. Meyer et al, "Consequences of community water fluoridation cessation for Medicaid-eligible children and adolescents in Juneau, Alaska." BMC Oral Health, 2018, 18:215.)*

5. Give the data "a bottom line"
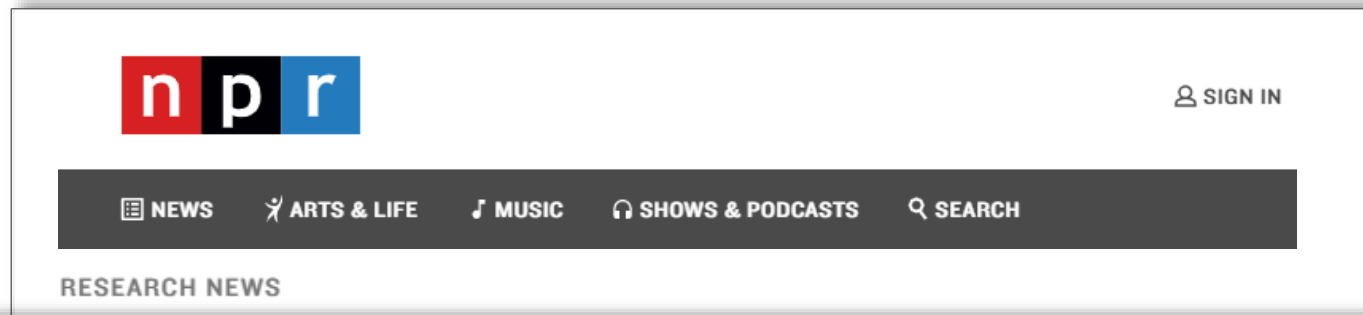
JENNIFER MEYER: By taking the fluoride out of the water supply, the tradeoff for that is children are going to experience one additional caries procedure per year at a ballpark of $300 more per child.

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6. **Choose data that are relevant**

- Your audience wants to see itself in your data.

- Whenever possible, **break out the data** to reveal the health status of specific subgroups of the population.

- This is especially important when you are speaking to marginalized audiences.

7. Turn your data into a story

A story is made up of a series of events. Sharing data in **sequences** can help an audience understand what kind of change occurred.
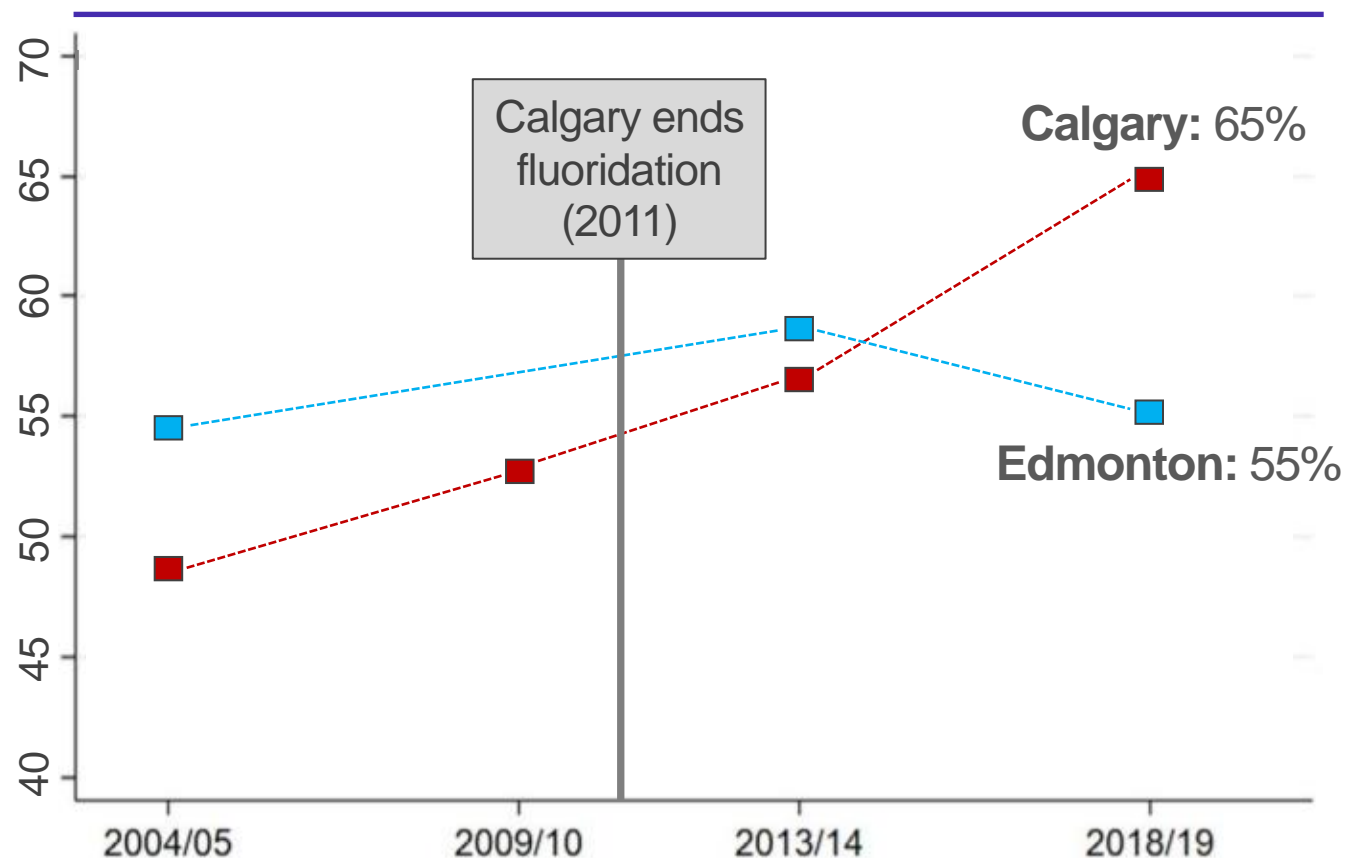
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Instead of this:

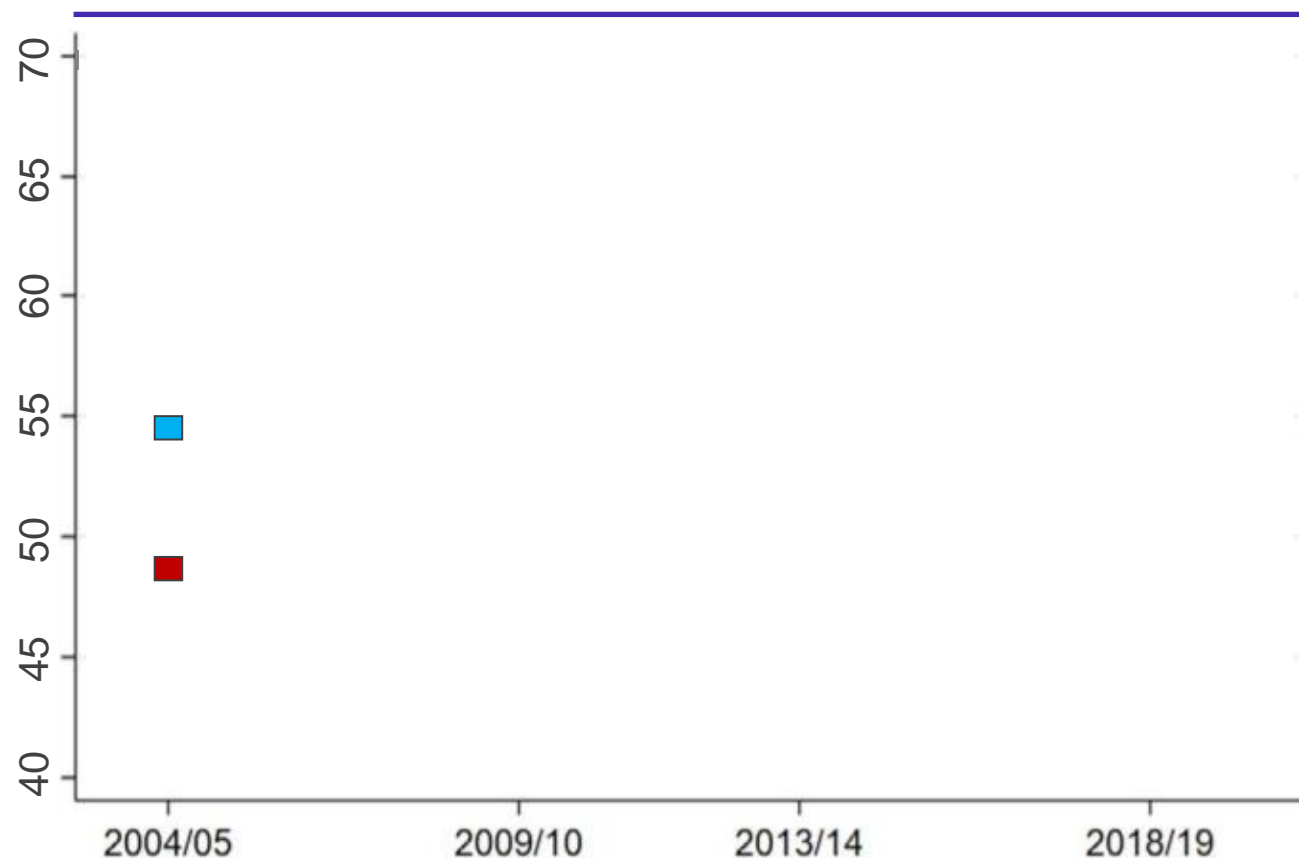**% of 2nd grade children who had experienced at least one cavity**

■ Calgary children

■ Edmonton children

The impact of ending water fluoridation

Calgary ends fluoridation (2011)

Calgary: 65%

Edmonton: 55%

2004/05   2009/10   2013/14   2018/19

7. Turn your data into a story

Start here…

% of 2nd grade children who had experienced at least one cavity

■ Calgary children

■ Edmonton children

The impact of ending water fluoridation

*(**Source:** McLaren, et al. "Fluoridation cessation and children's dental caries: A 7-year follow-up evaluation of Grade 2 schoolchildren in Calgary and Edmonton, Canada," Journal of Community Dentistry and Oral Epidemiology, published online in July 2021.)*
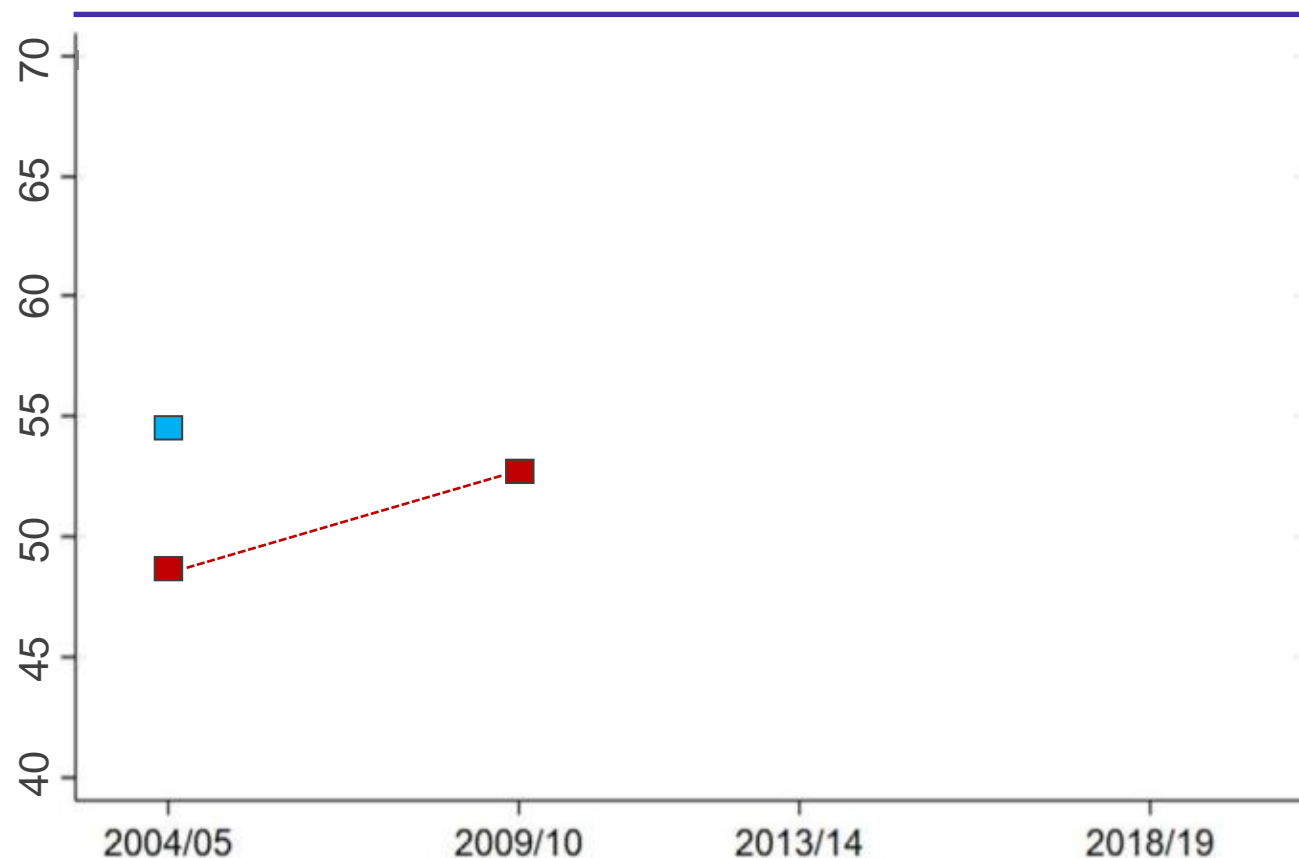
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…and tell a story:

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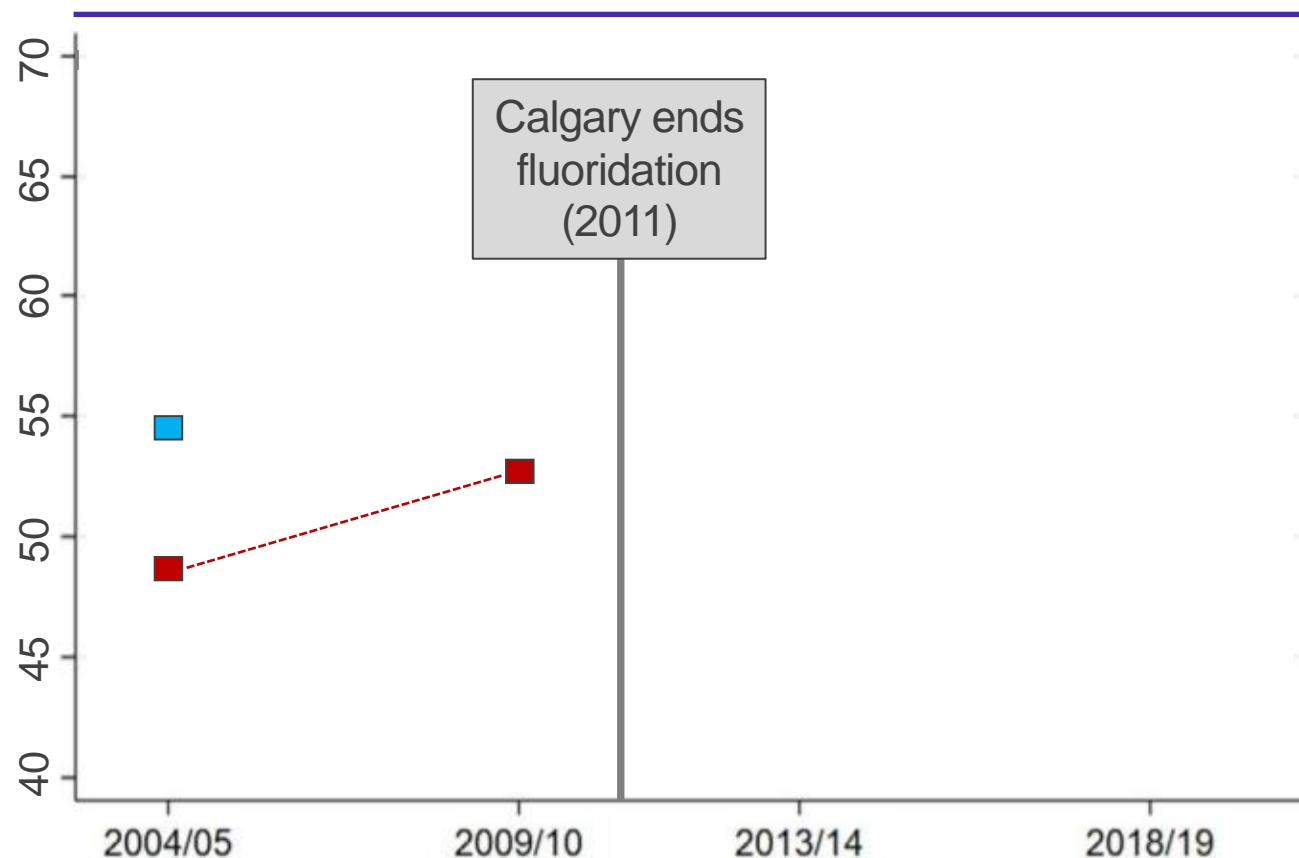
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- 🟦 Edmonton children

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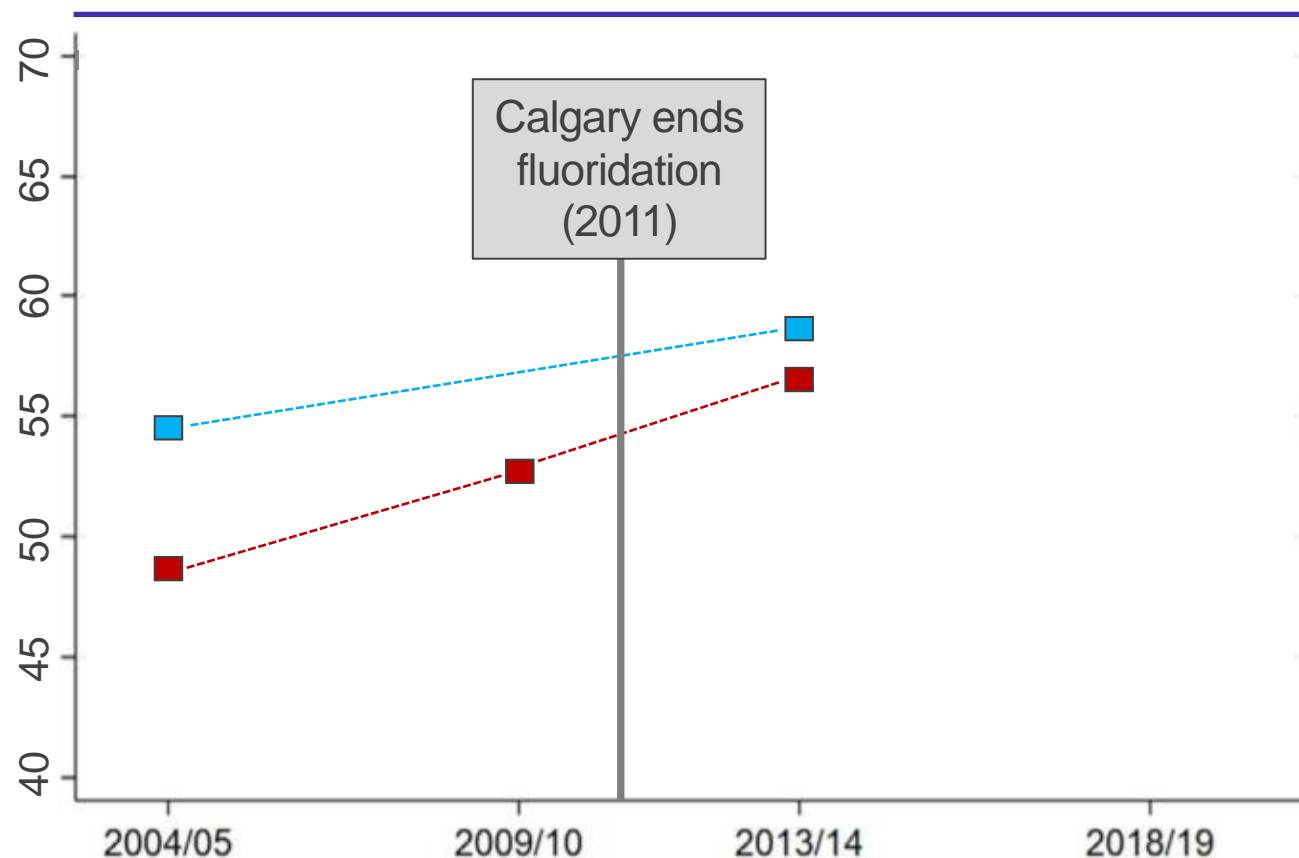
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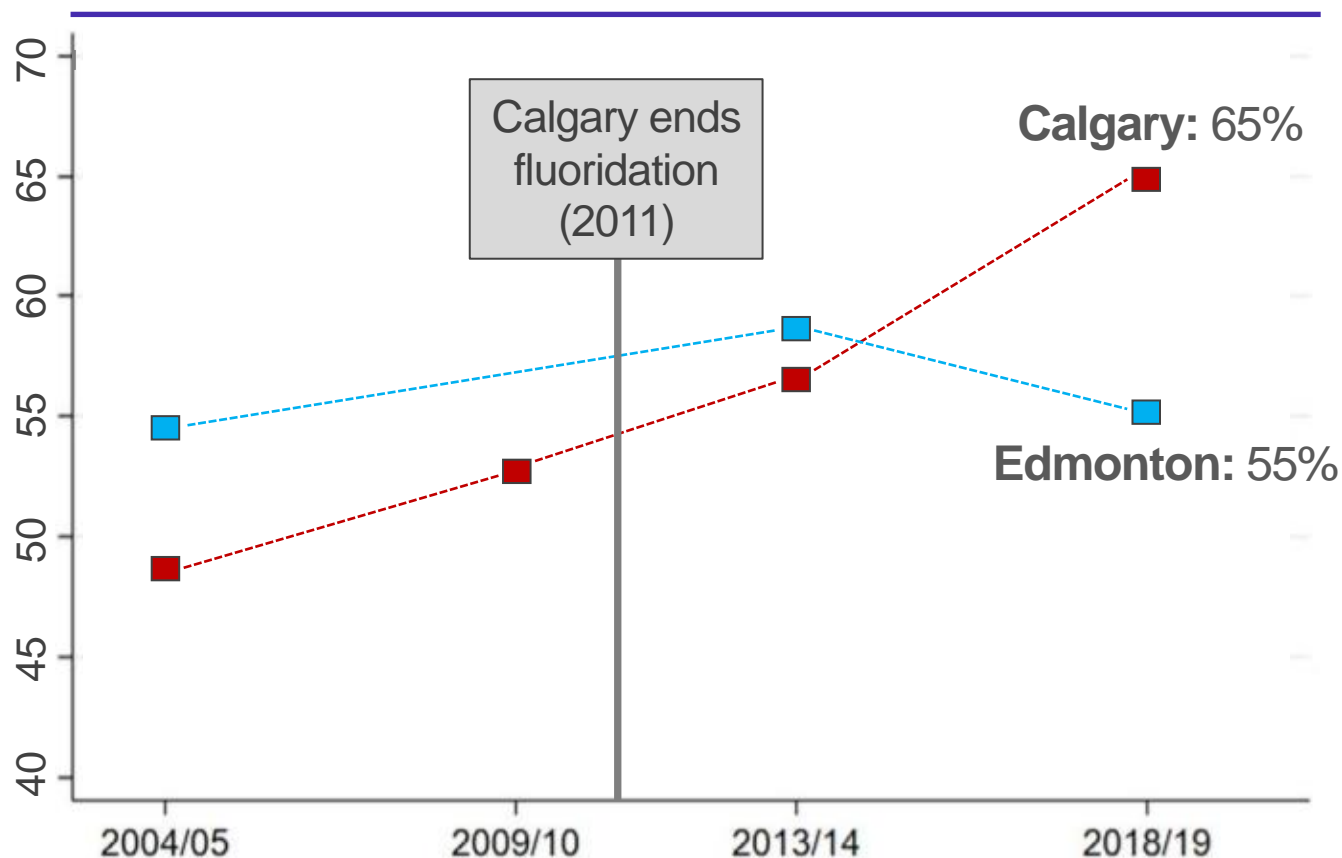
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Some final thoughts about data

Consider the audience's literacy level

Medical and
dental providers

Health
journalists

Policymakers

The Public

Higher Health Literacy   Moderate Health Literacy   Lower Health Literacy

Put yourself in their shoes

"I think the big issue is we often forget how hard it is to be a consumer of data."

— Dr. Stephanie Evergreen, author of
Presenting Data Effectively

The power of data

Data can help oral health advocates secure policy change.

WINDSOR STAR

Council votes 8-3 to resume fluoridating water

Citing a 51 per cent rise in serious tooth decay among kids over five years, city council voted 8-3 Monday to resume fluoridating the water supply. It reverses an 8-3 vote that went the other way in 2013, when council ordered a stop to fluoridation.

"A 51 per cent increase in the quantity and severity of dental hygiene in the last five years is more than alarming to me," Coun. Jo-Anne Gignac said as she seconded a motion by Coun. Rino Bortolin to bring back fluoride.

"It's not the silver bullet, I recognize it. It's not going to eliminate dental problems but it's going to go a heck of a long way."

Helpful resources

Making Data Talk
National Cancer Institute (NIH)

NACCHO Tip Sheet – Presenting Data
https://bit.ly/NACCHOdata

CDC's Health Literacy Training
https://www.cdc.gov/healthliteracy/gettraining.html
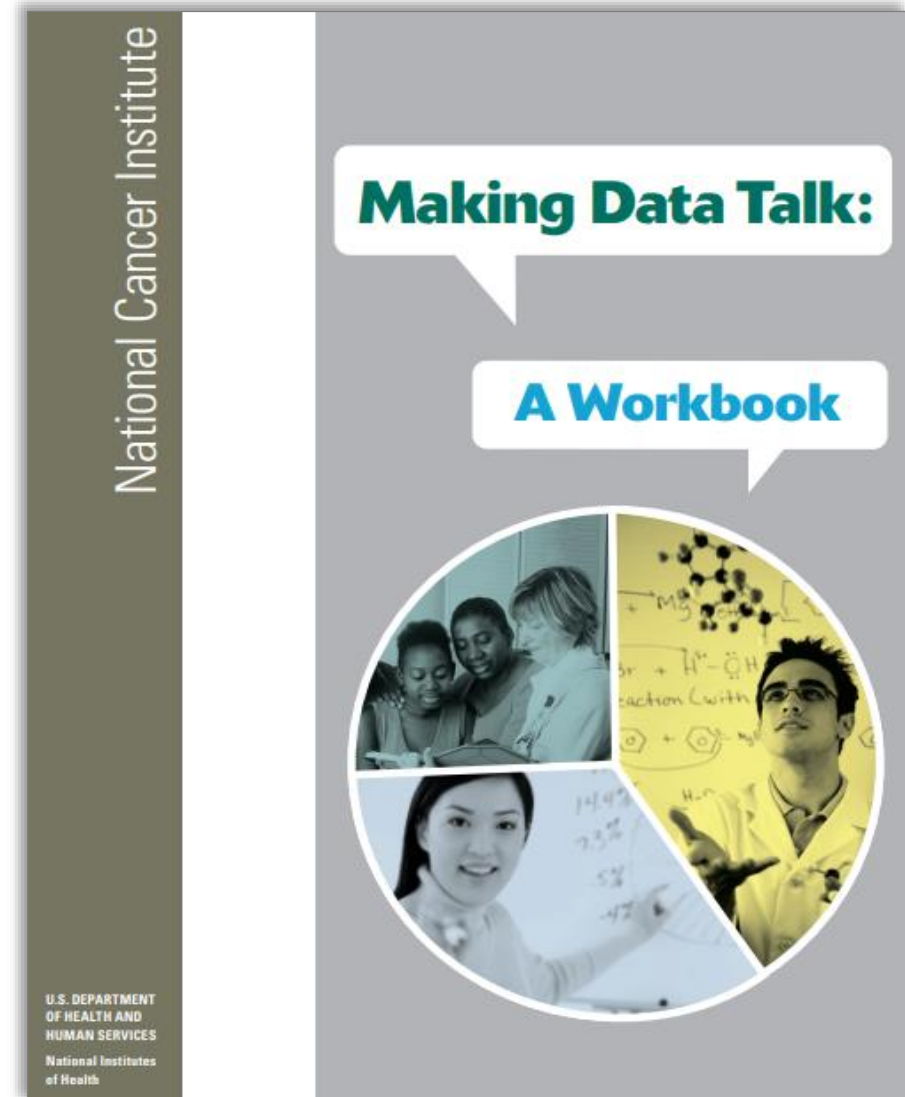
Thanks for your time and attention!