

Can Data Help Us Improve Further and Faster?

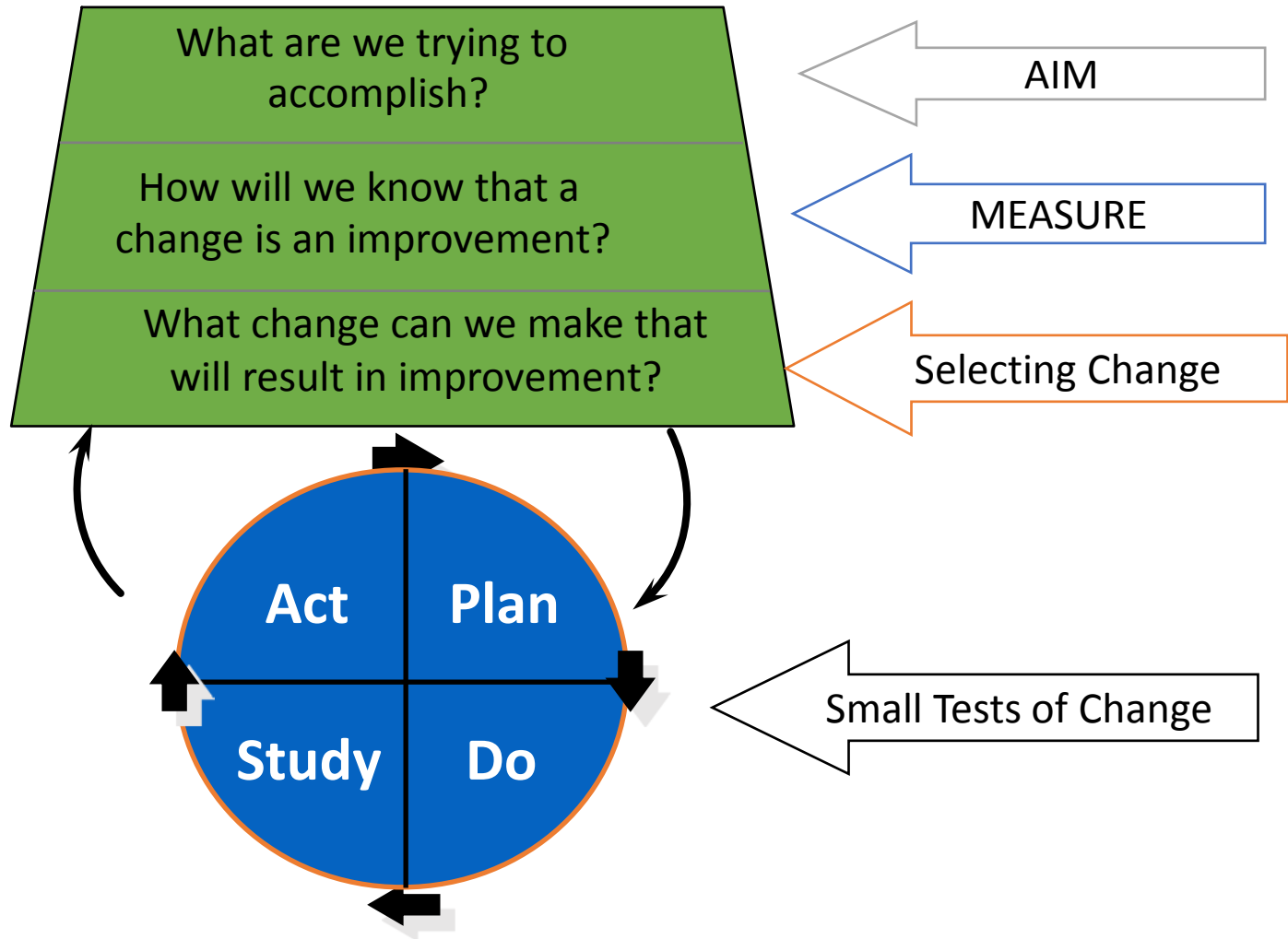
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National Improvement Advisor,
Cynosure Health



“In God we trust; all others must bring data.”

W. Edwards Deming

Model For Improvement



The PDSA Cycle



Our Question?



ADAPT
ADOPT
ABANDON

ADAPT

ADOPT

ABANDON

Why Measure?

- How else will you know that the change(s) you made resulted in improvement?

Improvement

- Used for learning

Reporting

- Used to judge

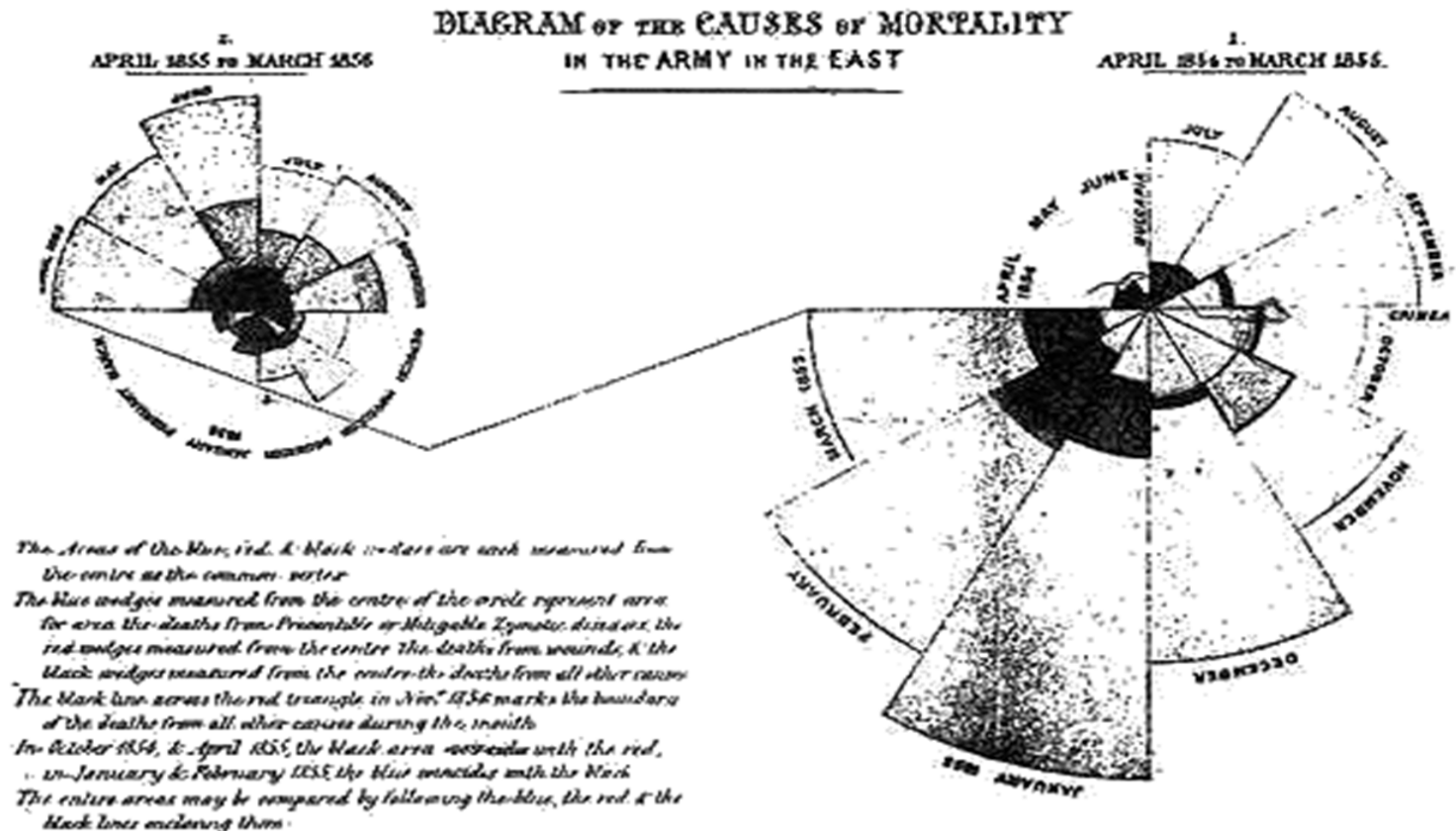
Florence Nightingale, Data for Improvement



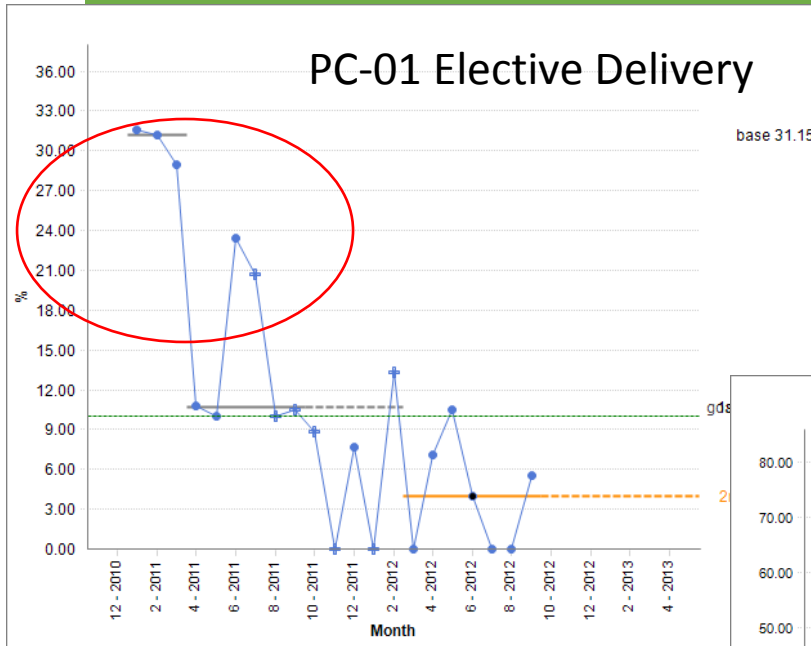
Nightingale's theories, published in 'Notes on Nursing' (**1860**), were hugely influential and her concerns for **sanitation, military health** and **hospital planning** established practices which are still in existence today. She died on 13 August 1910.

Make Data Visible

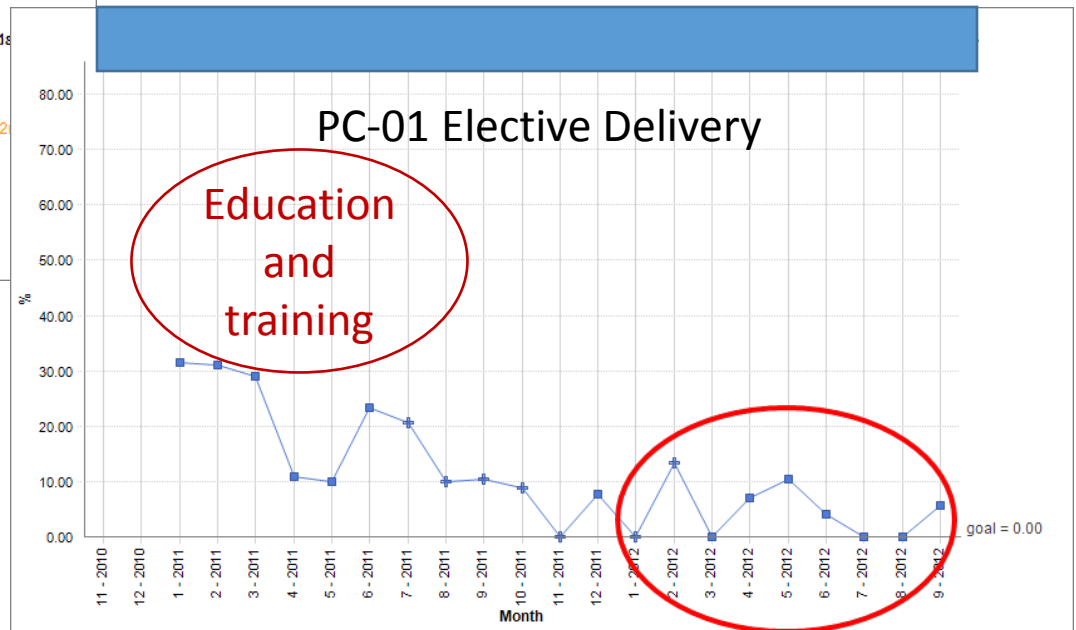
Nightingale took her statistical data and represented them graphically.



What data is visible on your unit?

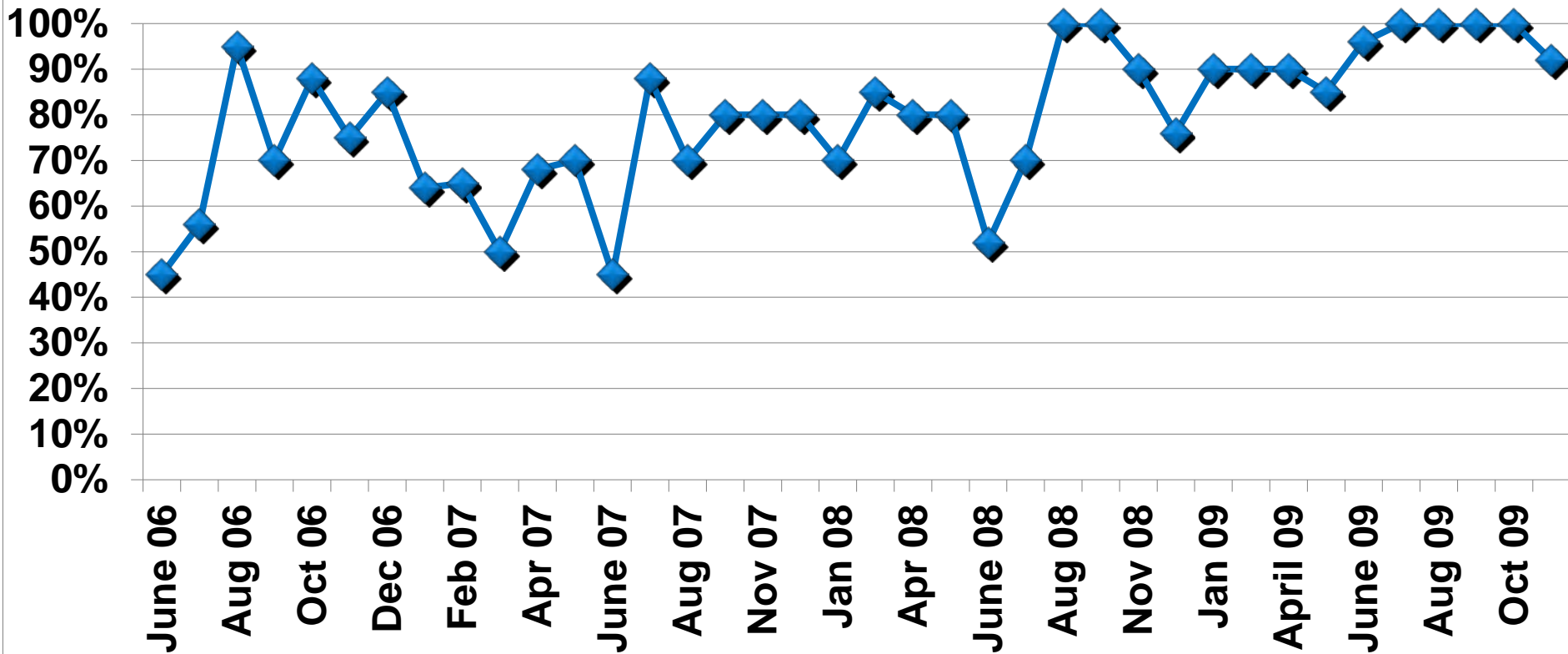


What story
does your
data tell?



Does your data look like this?

Induction Bundle - Gest Age \geq 39wks



Or like this?



In August, **4** infants were electively delivered prior to 39 weeks gestation and were transferred to NICU/SCN.

In August, **4** infants were electively separated from their Mom's and developed breast-feeding issues, had a longer LOS, had hyperbilirubinemia, etc.....





Reduce Obstetrical Adverse Events

Fairbanks Memorial Hospital, Fairbanks, Alaska



Date: 2-6-13

Self Assessment Score (1-5) = 5

Aim Statement

Aim:
Reduce the early elective delivery rate for <39 week gestation to <3% by December, 2013.

Why is this project important?:
Babies delivered prior to fetal maturity can face lifelong complications.

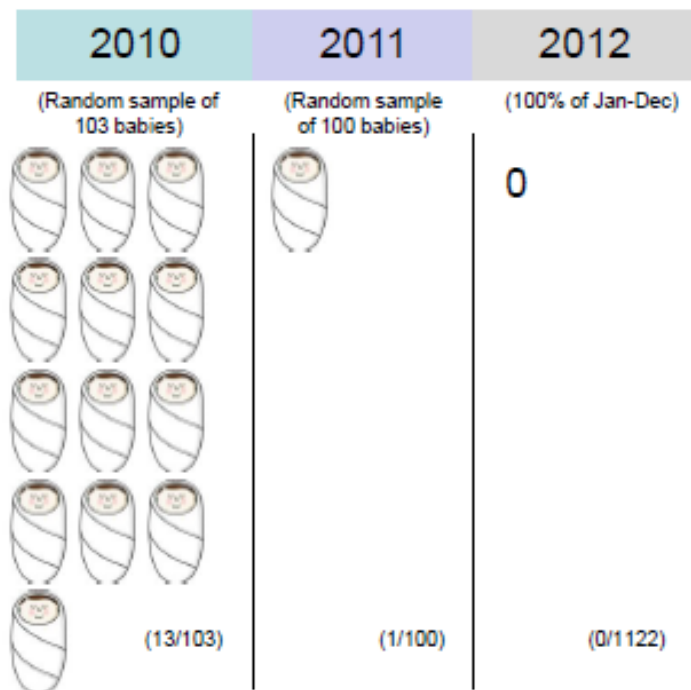
Changes being Tested, Implemented or Spread

Implemented:

1. ACOG Voluntary Review (Jan 2011)
2. Dept of OB <39 Week initiative (2011)
Includes schedulers and nurses empowerment to ask for the gestational age.
3. Banner implemented policy prohibiting deliveries of babies prior to 39-weeks gestation unless determined medically necessary. (Aug 2012)

Run Charts

How many babies were electively delivered prior to 39 weeks?



Lessons Learned

- Requires strong support by Department of OB Chair to stand firm on policy
- Having clear guidelines on criteria for exceptions clarifies understanding and provides for accountability
- Full team approach is important – from physicians, to nurses, to schedulers.

Recommendations and Next Steps

- Continue to monitor compliance with policy

Team Members

Sponsor: Gena Edmiston - CNO
Co-leads: Dr. Hogenson, - Chair Jackie Collins - RN Dir. Shawna MacMillan - RN Mgr.
Facilitators: Jen Gul – Quality Specialist (PI)

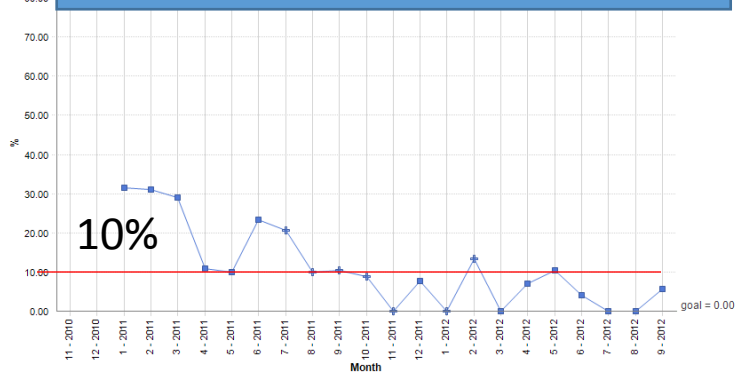
Monthly Rate of Early Elective Deliveries

Days since last known EED = 440 (data through Dec-2012)

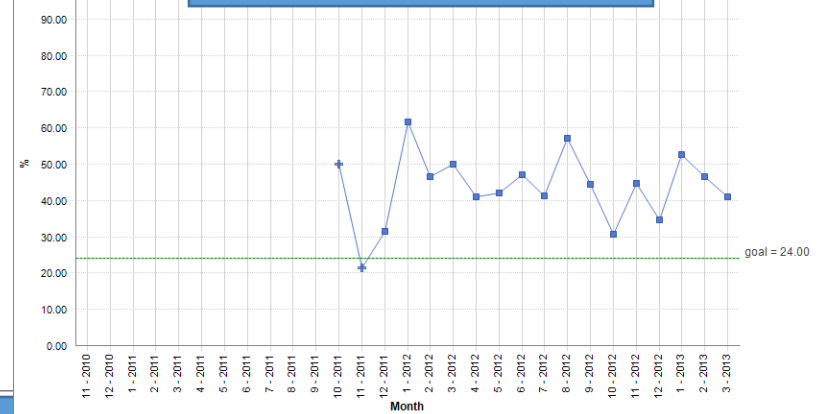


The story from the patient view...a “family of measures”

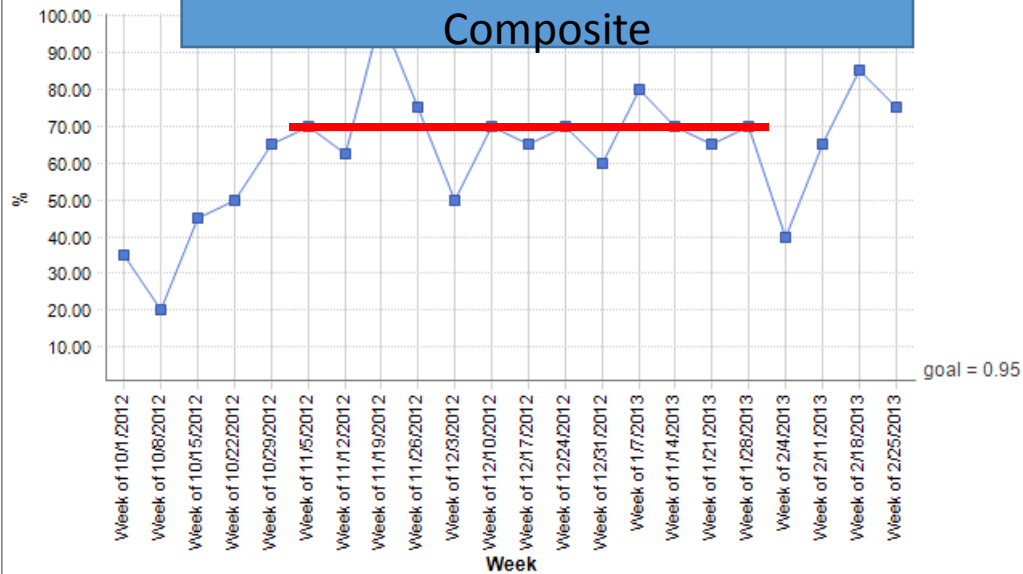
PC- 01 Elective Delivery



PC-02 Cesarean Rate



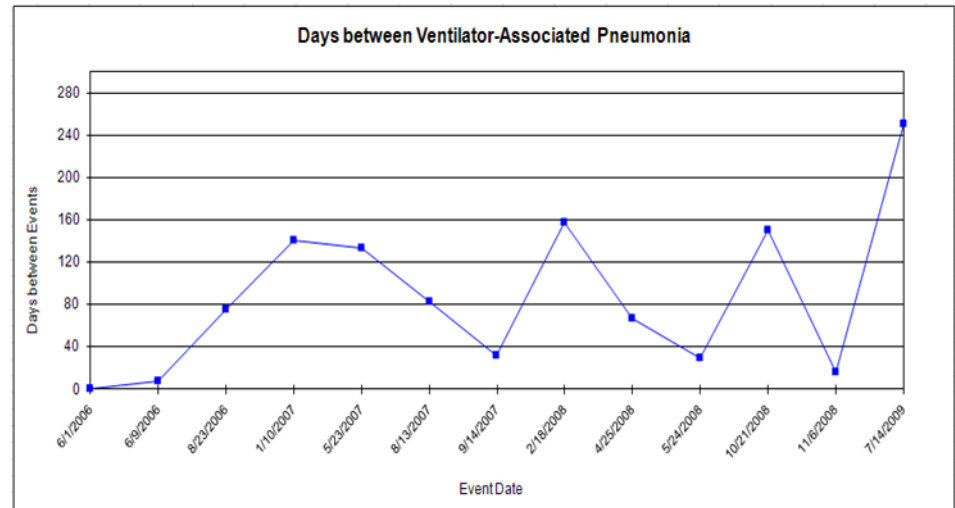
Elective Induction Bundle Composite



Are These Data?



- Yes! This is an example of data used for tracking “Days Between.”
- “Days Between” are great for measuring and tracking progress on rare events, and is often used in CAHs.



Source: Valley Medical Center, Arizona
(active HEN participant)

Data Display Tips

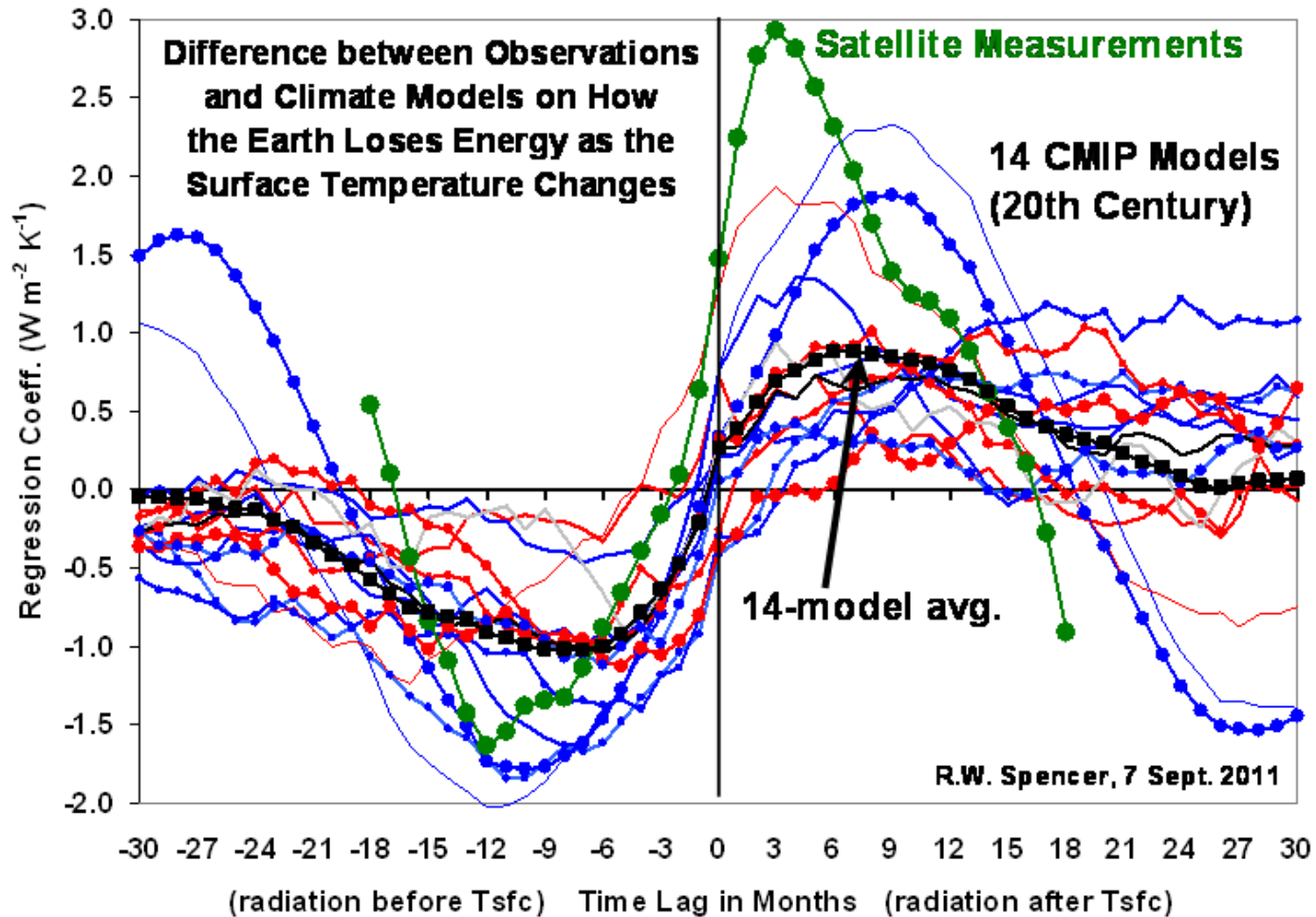
Mary B	46	SF
John J	57	SSF
Frank K	89	Val
George R	90	Sac
Sue T	38	SR



Data Display Tips

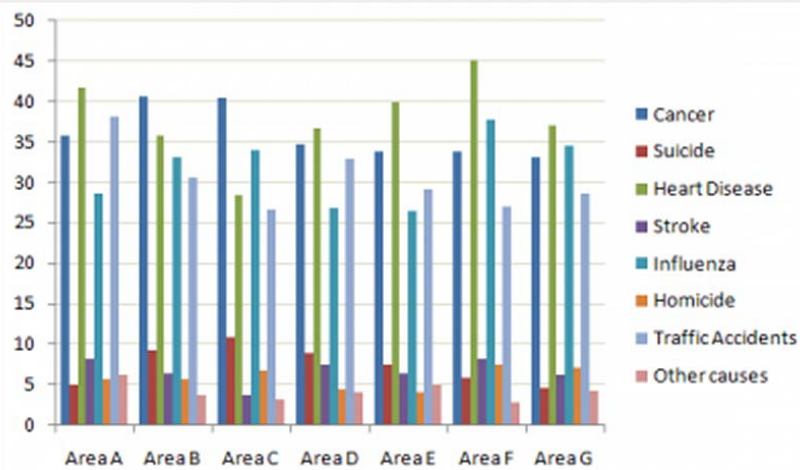
- Simplify
- Display Honestly
- Provide Context
- Customize Your Display

Simplify Your Display

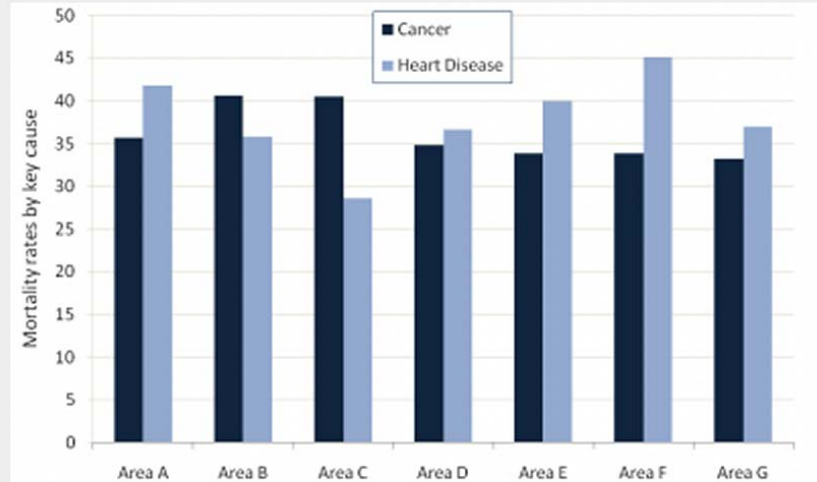


Simplify Your Display

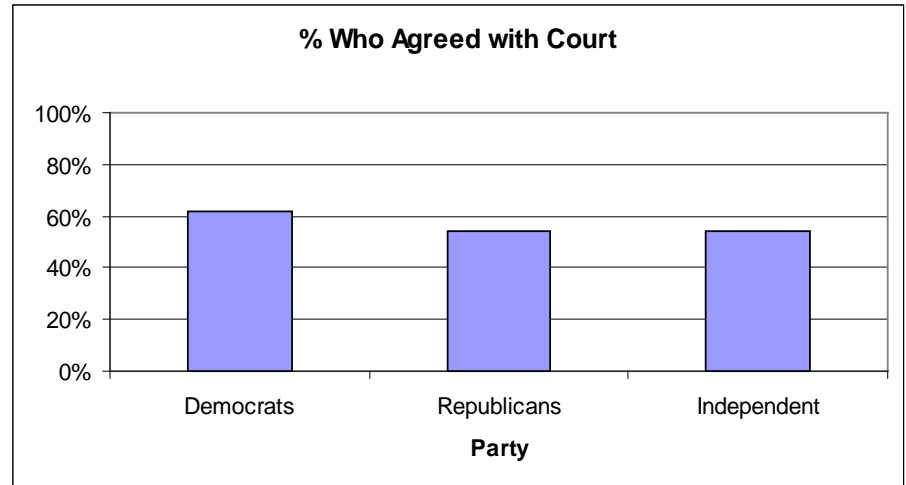
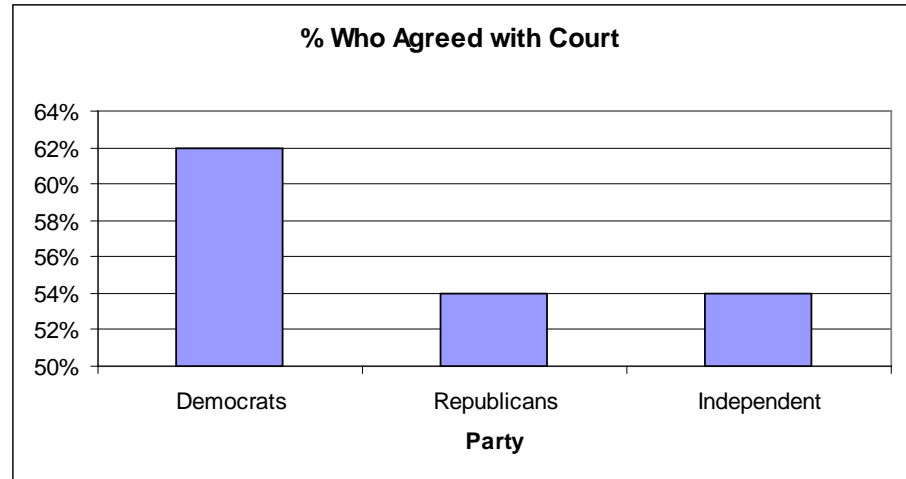
Before



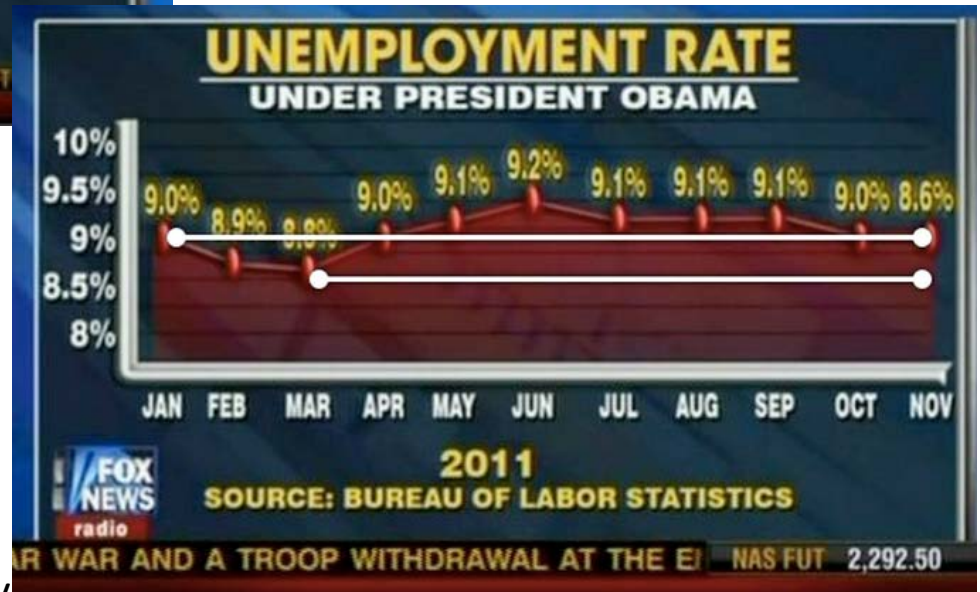
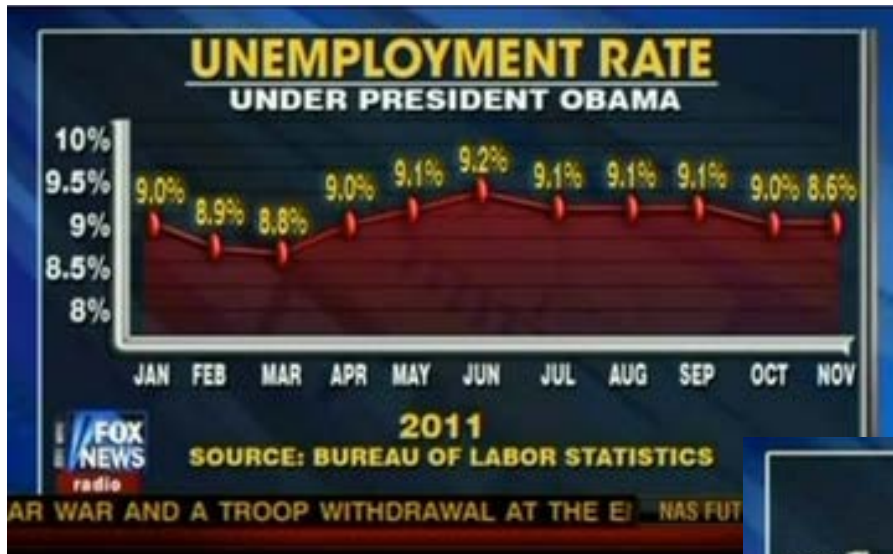
After



Display Honestly



Display Honestly



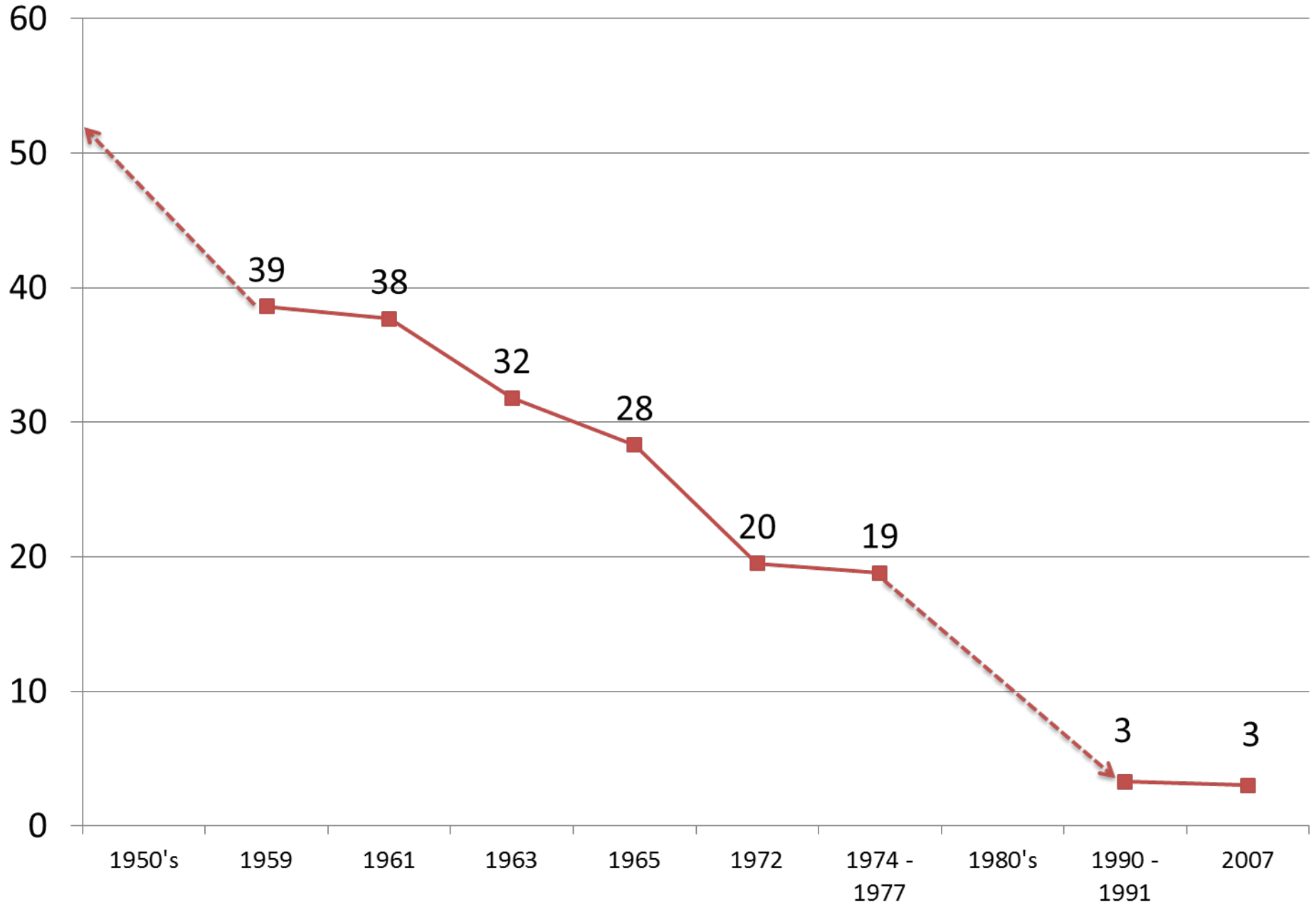
source:
<http://simplypresentation.wordpress.com/>

Provide Context

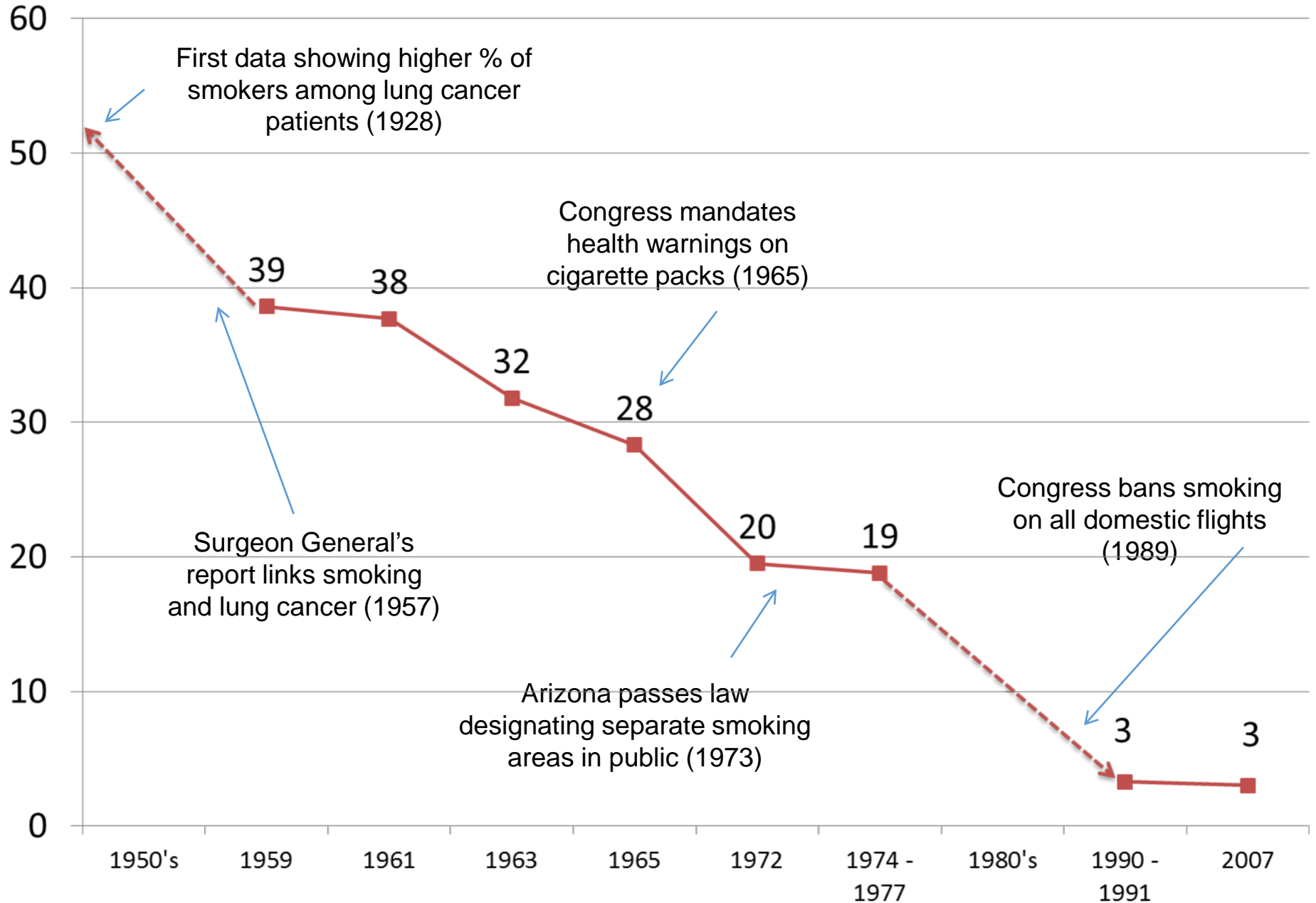


source: <https://www.facebook.com/EngledowArtPhotography>

% of Physicians that Smoke



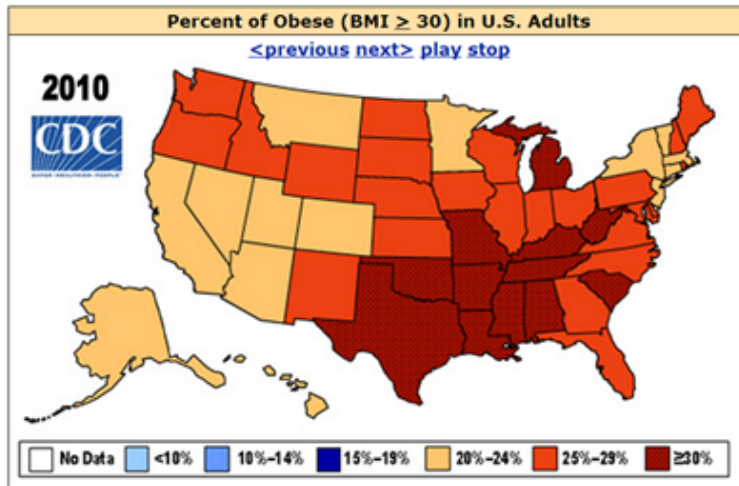
% of Physicians that Smoke



Customize Your Message



Obesity Rates by State (2010)



2010 State Obesity Rates							
State	%	State	%	State	%	State	%
Alabama	32.2	Illinois	28.2	Montana	23.0	Rhode Island	25.5
Alaska	24.5	Indiana	29.6	Nebraska	26.9	South Carolina	31.5
Arizona	24.3	Iowa	28.4	Nevada	22.4	South Dakota	27.3
Arkansas	30.1	Kansas	29.4	New Hampshire	25.0	Tennessee	30.8
California	24.0	Kentucky	31.3	New Jersey	23.8	Texas	31.0
Colorado	21.0	Louisiana	31.0	New Mexico	25.1	Utah	22.5
Connecticut	22.5	Maine	26.8	New York	23.9	Vermont	23.2
Delaware	28.0	Maryland	27.1	North Carolina	27.8	Virginia	26.0
District of Columbia	22.2	Massachusetts	23.0	North Dakota	27.2	Washington	25.5
Florida	26.6	Michigan	30.9	Ohio	29.2	West Virginia	32.5
Georgia	29.6	Minnesota	24.8	Oklahoma	30.4	Wisconsin	26.3
Hawaii	22.7	Mississippi	34.0	Oregon	26.8	Wyoming	25.1
Idaho	26.5	Missouri	30.5	Pennsylvania	28.6		

source:

<http://www.cdc.gov/obesity/data/adult.html>

- Which data display do you prefer?
- Who in your hospital would prefer the graphic display; who would prefer the table?
- Could you combine both?

Where to Tell Your Story



Advice

- Consider how much interpretation is left to your audience
- Don't be afraid to try out several tactics
- Focus on curiosity, what will happen next

The Four Myths of Engagement

1. Showing the Evidence is Sufficient

2. Everyone Engages at the Same Time

3. The Same Message Works with Everyone

4. Every Intervention is Equally Easy/Hard to Implement

The Four Rules of Engagement

1. Connect to
the Core

2. Engage the
Engaged

3. Customize
Communication

4. Align and
Segment

Rule # 1: Connect to the Core

Non-Engaging Methods

- Sharing medical literature passively
- Doing something just because TJC says you must
- Creating and disseminating a policy

Engaging Methods

- Describing how a project fits into the bigger picture (realistic future state)
- Aligning the project with professional identity
- Show how staff work has impacted the project

Rule # 2: Engage the Engaged

Non-Engaging Methods

- Starting with an entire department
- Getting “buy-in”
- Trying to convince a laggard first
- Utilizing an early adopter who has little credibility

Engaging Methods

- Seeking champions who are opinion leaders (may not have a formal title)
- Starting small on a project with a few key participants
- Spread after early adopters work out most of the bugs
- Use early adopter peers as spokesperson for spread

Rule # 3: Customize Communication

Non-Engaging Methods

- Don't worry about the messenger
- Assume only people with a title can communicate
- Use only e-mail to “get the word out”
- Using the same speech and arguments for change to everyone

Engaging Methods

- Choose the messenger wisely
- Adapt your message to the stage of implementation and the readiness of your audience
- Simplify your message

Rule # 4: Segment & Align

Non-Engaging Methods

- Trying an intervention on the hardest group of patients
- Developing a rigid work plan based on prior experience
- Running multiple simultaneous projects with the same strategy

Engaging Methods

- Rolling out a project where it is most likely to be successful
- Developing an organizational goal with all levels participating
- Adapt implementation approaches to the specifics and challenges of each intervention