

# IHQC - Fundamentals in Quality Improvement

## Webinar 2: Using Data to Tell Your Improvement Story

### *Using GoToWebinar*

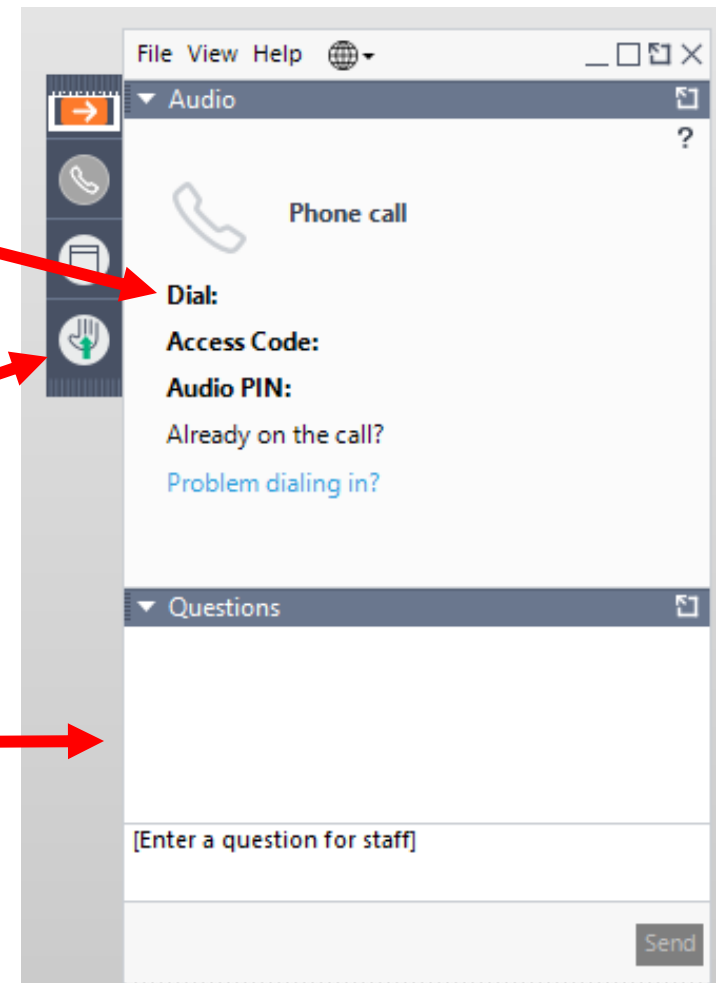
#### Accessing Audio:

1. Dial In Using the Dial #;
2. Dial the Access Code
3. Dial your unique audio Pin followed by #

#### Raise Your Hand

#### Questions?

- Use the Questions Box to type a question/response to IHQC Staff or the Presenter.





# Fundamentals in QI

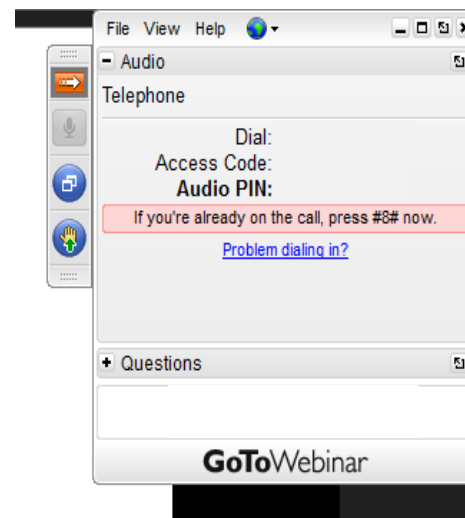
## Webinar # 2: Using Data to Tell Your Improvement Story

Wednesday, November 28<sup>th</sup>, 2018  
Webinar Recording will be available on  
[www.IHQC.org](http://www.IHQC.org)



## Questions About Your Project? Content from past workshops or webinars?

*Type them into the Questions Box and we'll address them during and at the end of the webinar*



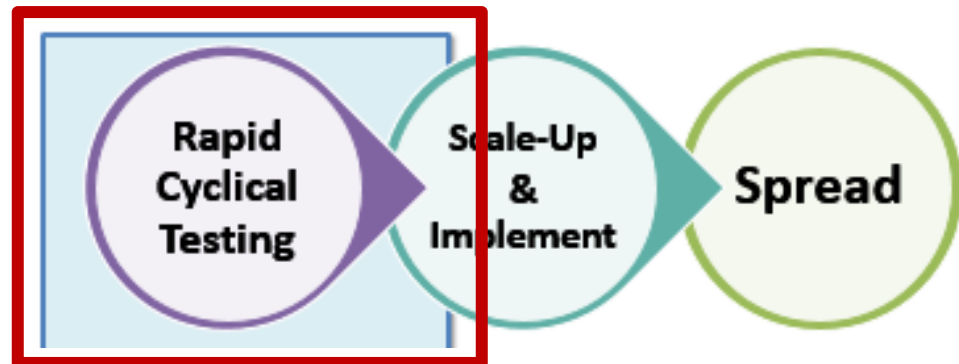
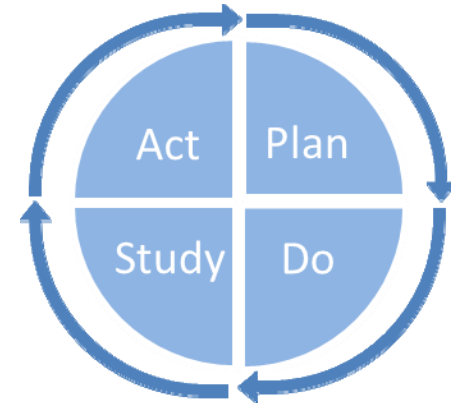
# Today's Agenda

- Review of Webinar 1
- Data to Action
- Displaying Data to Communicate
- Pre-Work for Final In-Person Session on December 14<sup>th</sup>
- Next Steps

# Review: Webinar 1 on November 14

## Project Updates & Building on your PDSAs

- Project Updates and Themes
  - Refining AIM statements
  - Measures and Data Collection
  - PDSA Planning
- Building on PDSAs
  - PDSA Checklist
  - PDSA Measures



Recording accessible at your cohort page on [IHQC.org](https://www.ihqc.org)

# Project Data You've Collected

- Outcome Measure
  - Diabetes care gaps like foot exams and retinal screenings
  - Cycle Time
  - Referrals
- Process Measures

***How do we get from Data to Action?***

# The Path from Data To Action

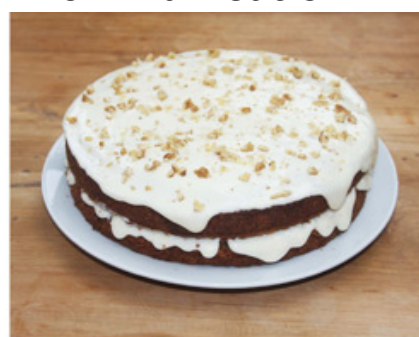
Data



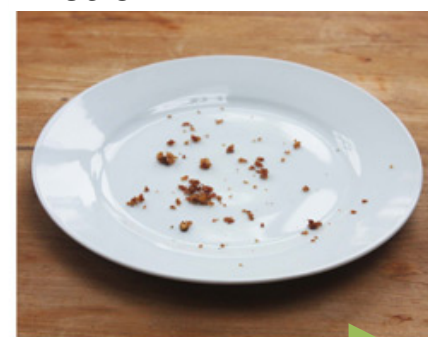
Information



Communication



Action



EpicGr am

Data	Information	Communication	Action
Information lives as data <b>elements</b> in IT systems, tracking logs, or patient charts	Chart audits or, if using disease registry or EHR, run IT reports regularly.  <b>Synthesize</b> data and put into tables or excel files.	<b>Display</b> data in the form of run charts or bar graphs. Share in staff meetings, hallways, staff lounges, or in emails	Staff see the data and are <b>driven to action</b> (e.g., adopt new checklist or protocol, join a team, change clinic workflow)

# Can I have your attention please?

Attention Span: 9 Seconds



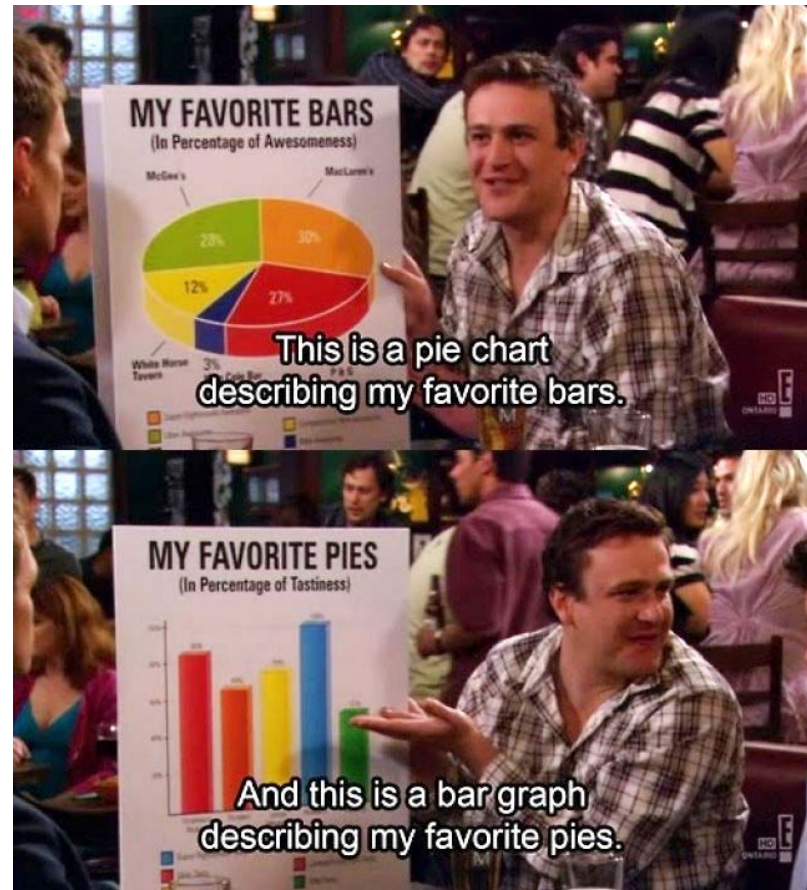
Attention Span: 8.25 seconds



Source: *Kevin McSpadden, Time Magazine*. You Now Have a Shorter Attention Span Than a Goldfish. May 2015

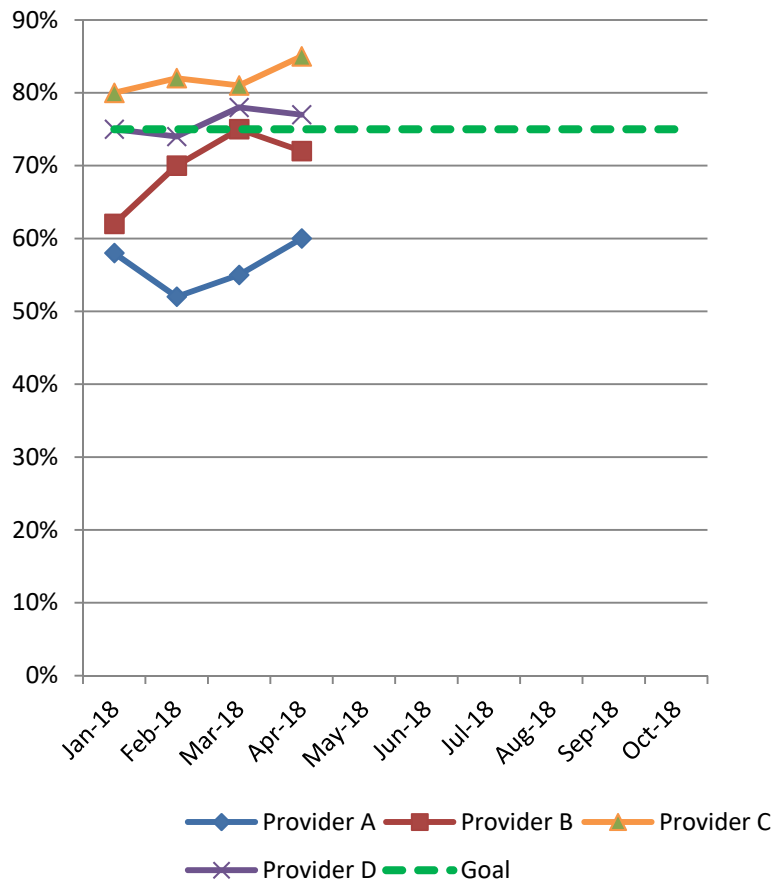
# 7-Second Rule for your Charts and Graphs

*If it takes more than 7 seconds for the audience to figure out what the graph is trying to tell them, you'll lose their attention*

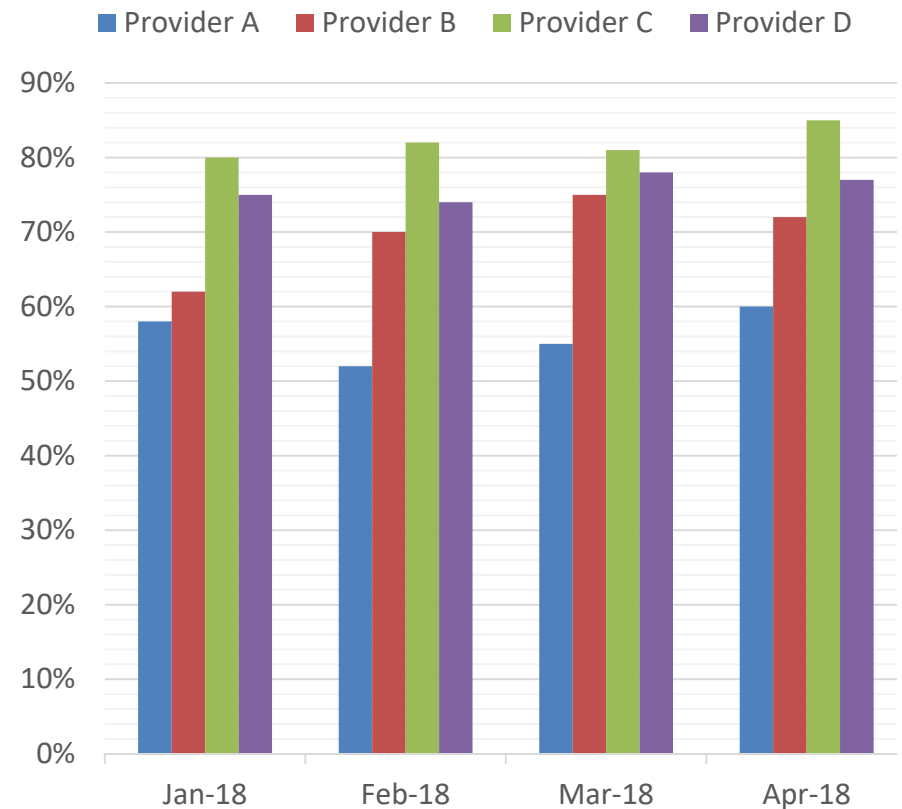


# Using Data to Share Our Project Updates

## Continuity of Care

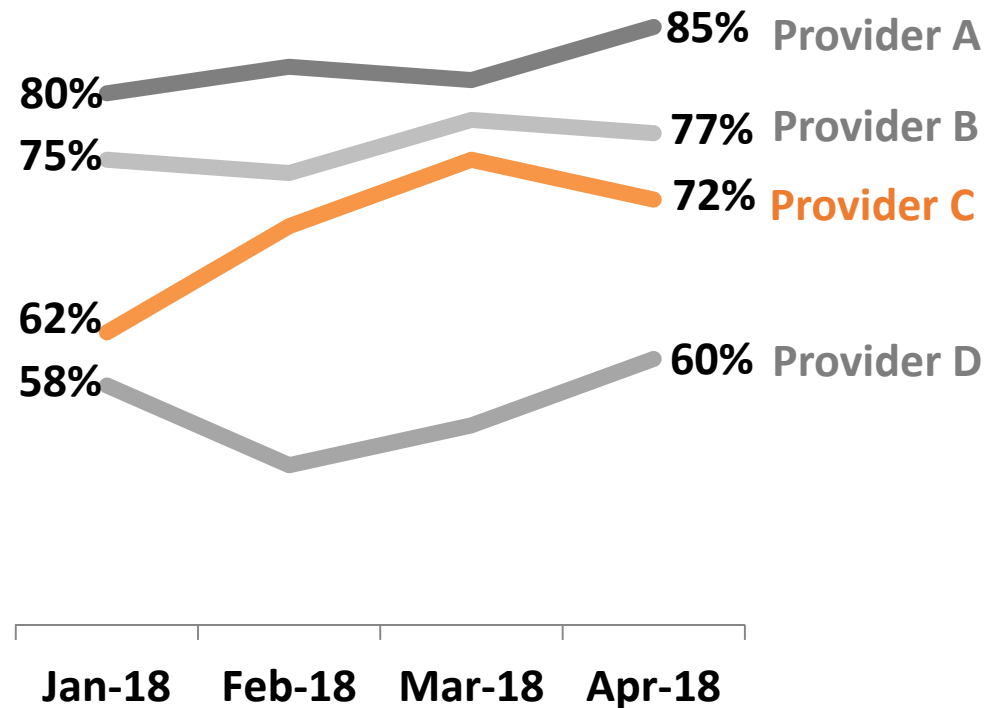


## Continuity of Care



# Piloting changes to scheduling policies with **Provider C** have helped improve *Continuity of Care*

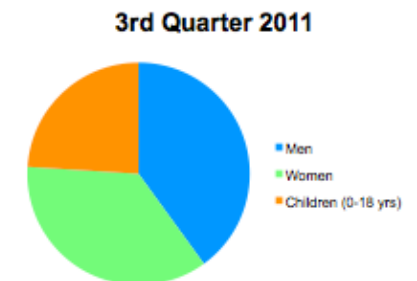
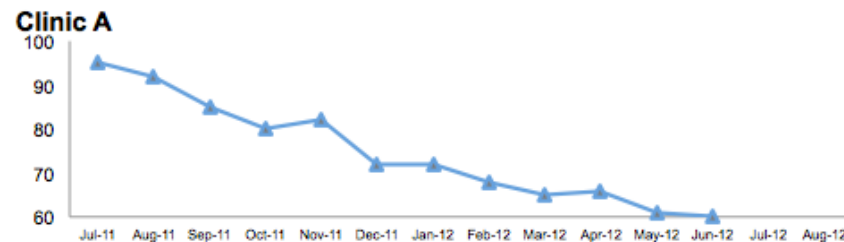
*% of patients seen by assigned provider*



# Part 1: Select the Right Data Display Type

- **Tables** – present volumes of information in concise, comparable way
- **Run Charts** – present sequence of data over time, highlights patterns, demonstrates progress toward a goal
- **Bar Graphs, Pie Charts** – provide a snapshot

	Sept.	Oct.	Nov.
No Show Rate	27%	26%	16%
Cycle Time (min.)	65	68	85
3 <sup>rd</sup> Next Avail. Appt. (Days)	14	11	12



# Telling Your Story - Displaying The Data

**Tables** - present volumes of information in concise, comparable way

	Feb.	Mar.	Apr.
No Show Rate	27%	26%	16%
Cycle Time (min.)	65	68	85
3 <sup>rd</sup> Next Avail. Appt. (Days)	14	11	12

# Telling Your Story - Displaying The Data

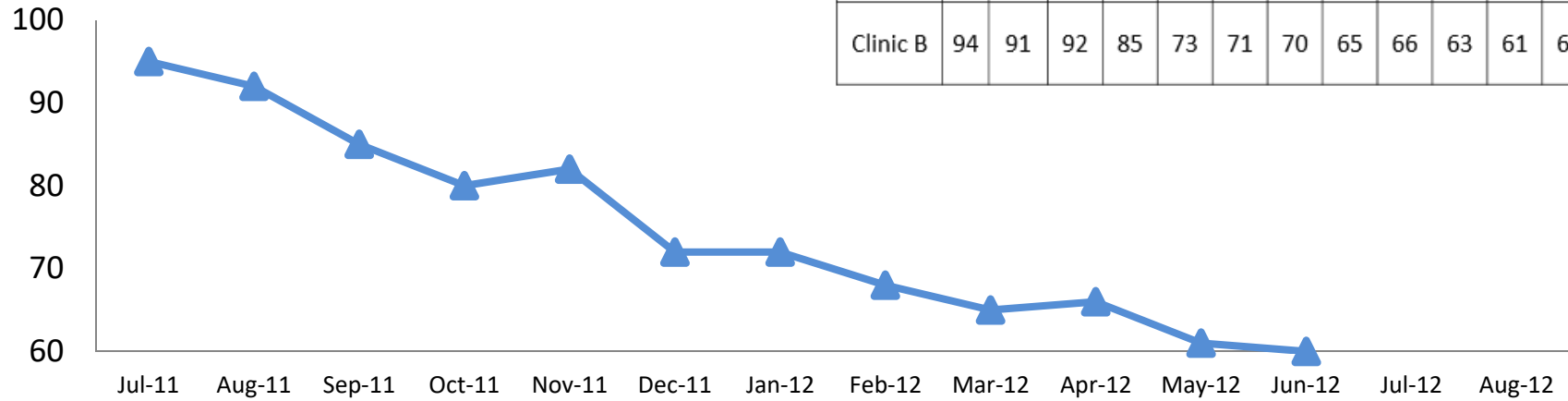
But a table with a lot of data can be confusing

<b><i>Cycle Time</i></b>	<b>Jul-14</b>	<b>Aug-14</b>	<b>Sep-14</b>	<b>Oct-14</b>	<b>Nov-14</b>	<b>Dec-14</b>	<b>Jan-15</b>	<b>Feb-15</b>	<b>Mar-15</b>	<b>Apr-15</b>	<b>May-15</b>	<b>Jun-15</b>
Clinic A	94	91	85	81	86	78	73	71	68	65	62	60
Clinic B	94	91	92	85	73	71	70	65	66	63	61	60

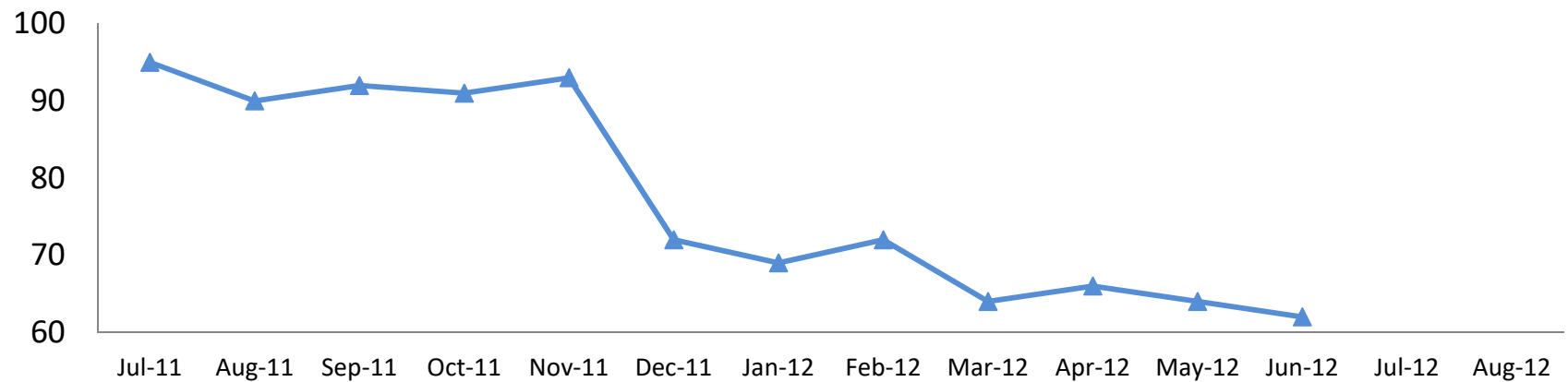
# Telling Your Story - Displaying The Data

Cycle Time	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15
Clinic A	94	91	85	81	86	78	73	71	68	65	62	60
Clinic B	94	91	92	85	73	71	70	65	66	63	61	60

**Clinic A**



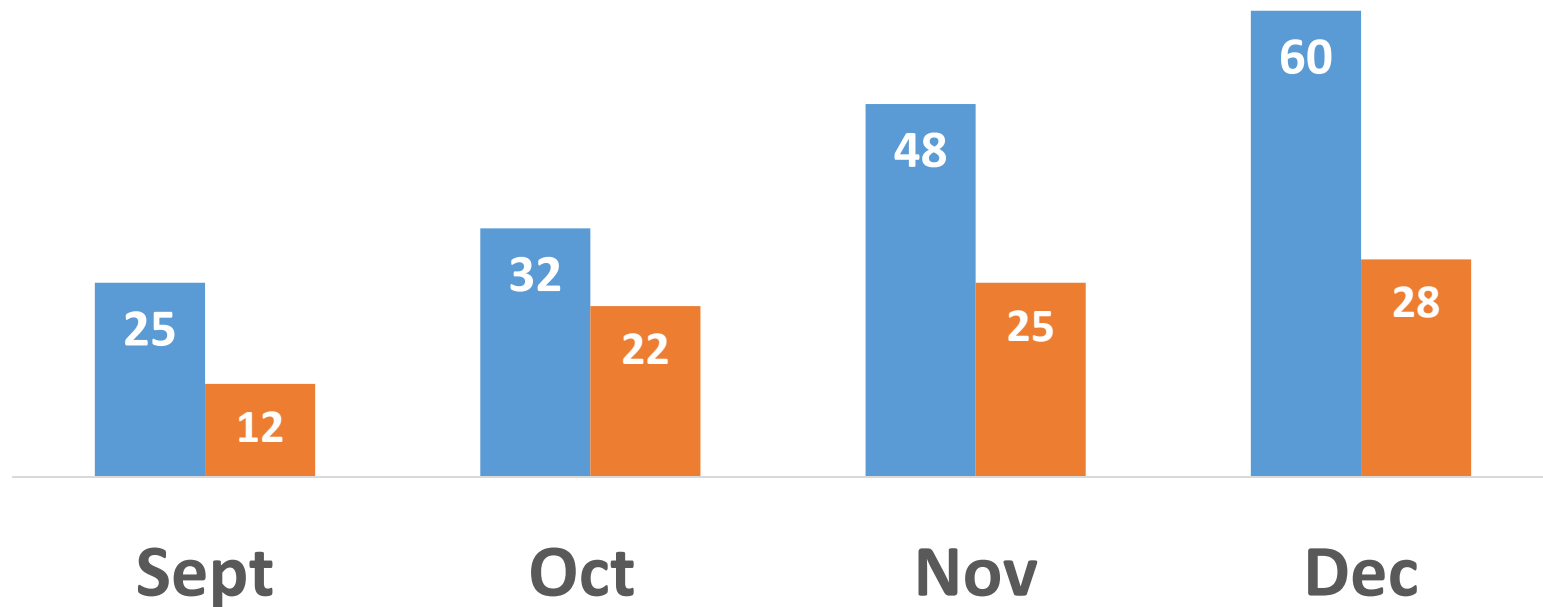
**Clinic B**



# Telling Your Story - Displaying The Data

## *Bar Charts*

- # of Db Foot Exams Completed During Month
- # of Db Referrals for Retinal Screening



# Part 1: Select the Right Data Display Type

- 1. Tables:** Good for limited amount of data points, but because we read tables to decipher information, could take audience time to read/decipher.
- 2. Run Charts:** Easier to quickly identify patterns, trends, sharp changes. Great for your displaying data for your Outcomes and Process Measures.
- 3. Bar Graphs:** Useful for data that is categorical. Great for patient surveys, sharing data on different measures in the same display.

## Part 2: How will you share your data?

- Project Updates to management or leadership
- Improvement team meetings
- Conversations in the hallways with impacted staff
- Morning Huddles
- Newsletters/emails
- Visual Boards or Posters in break room

*Display the data to meet the audiences' needs and to drive action (to motivate and to inform change)*

## Displaying Data Goal: Tell your Project Story and Drive Viewer to some thought or action

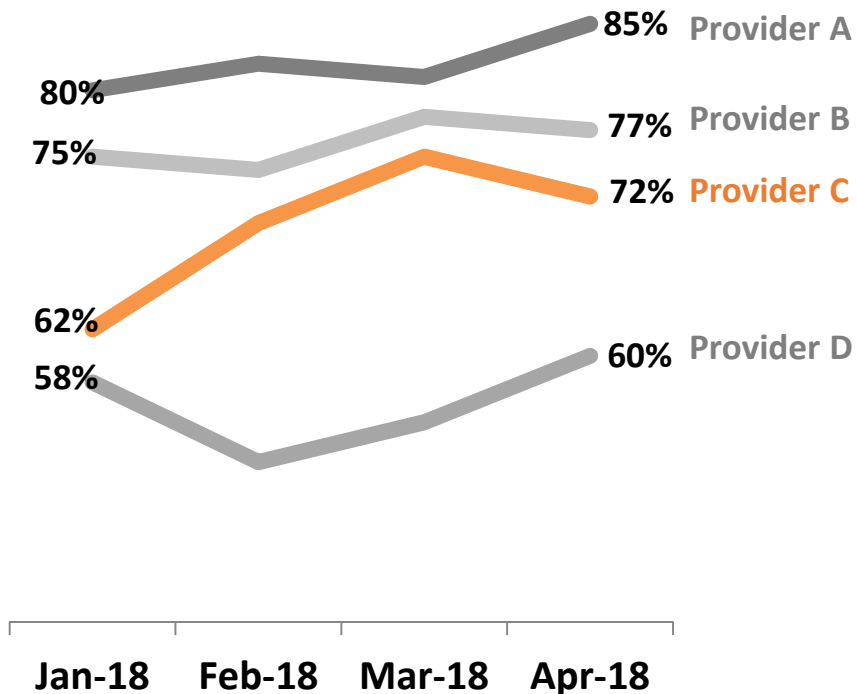
- Who is your Audience?
- What “aha” moments do you want them to have?
- What do they need to know?

### *How do you do this?*

- Emphasize (through color, comparisons, bold text)
- Annotate (use text to highlight your key points)

## Piloting changes to scheduling policies with **Provider C** have helped improve *Continuity of Care*

*% of patients seen by assigned provider*



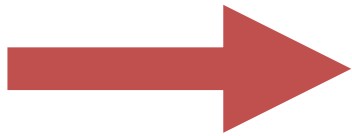
Start with a **C**lear sentence that's the key take away from the graph.

The **C**ontent of the graph comes after the key message

Use **C**olor to emphasize points

**C**lutter-free – not a lot of numbers, colors, grid lines, or other distractions

# Tell Your Project Story with Short Annotations



Use arrows or word balloons to draw attention the audience's attention and tell your project story.

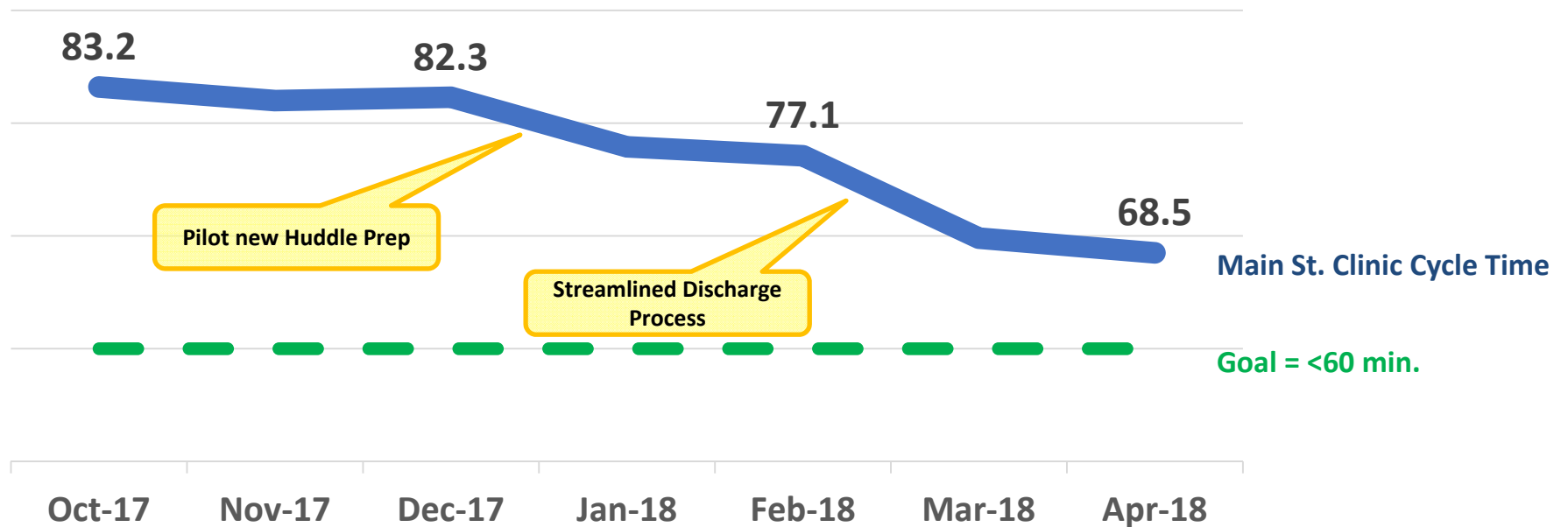


Helps explain trends in the data, why data is improving, why things slowed down or got worse for a month or two

# Annotating Run Charts

**New huddle and discharge processes helping Main St. Clinic decrease Cycle Time by 14 minutes**

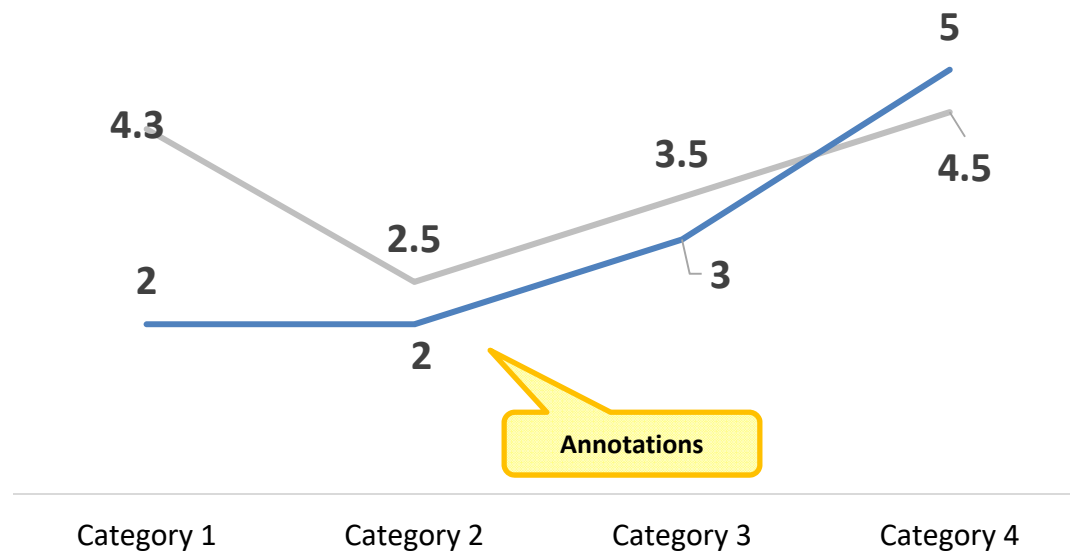
*Cycle Time (sign-in to check-out) in minutes*



# Cheat Sheet

## Tailored Take-Away Message for the Audience

What the Chart below is showing



### Formatting Tips

- Try to make text horizontal
- Use labels sparingly
- Make sure proportions are accurate
- For bar charts, try to put data in order (smaller to larger or larger to smaller)
- Intentional (and minimal) color scheme – use color to draw attention or highlight patterns
- If you need to have gridlines, make sure they are muted (light gray color)
- Remove Border Lines

# Displaying Data References

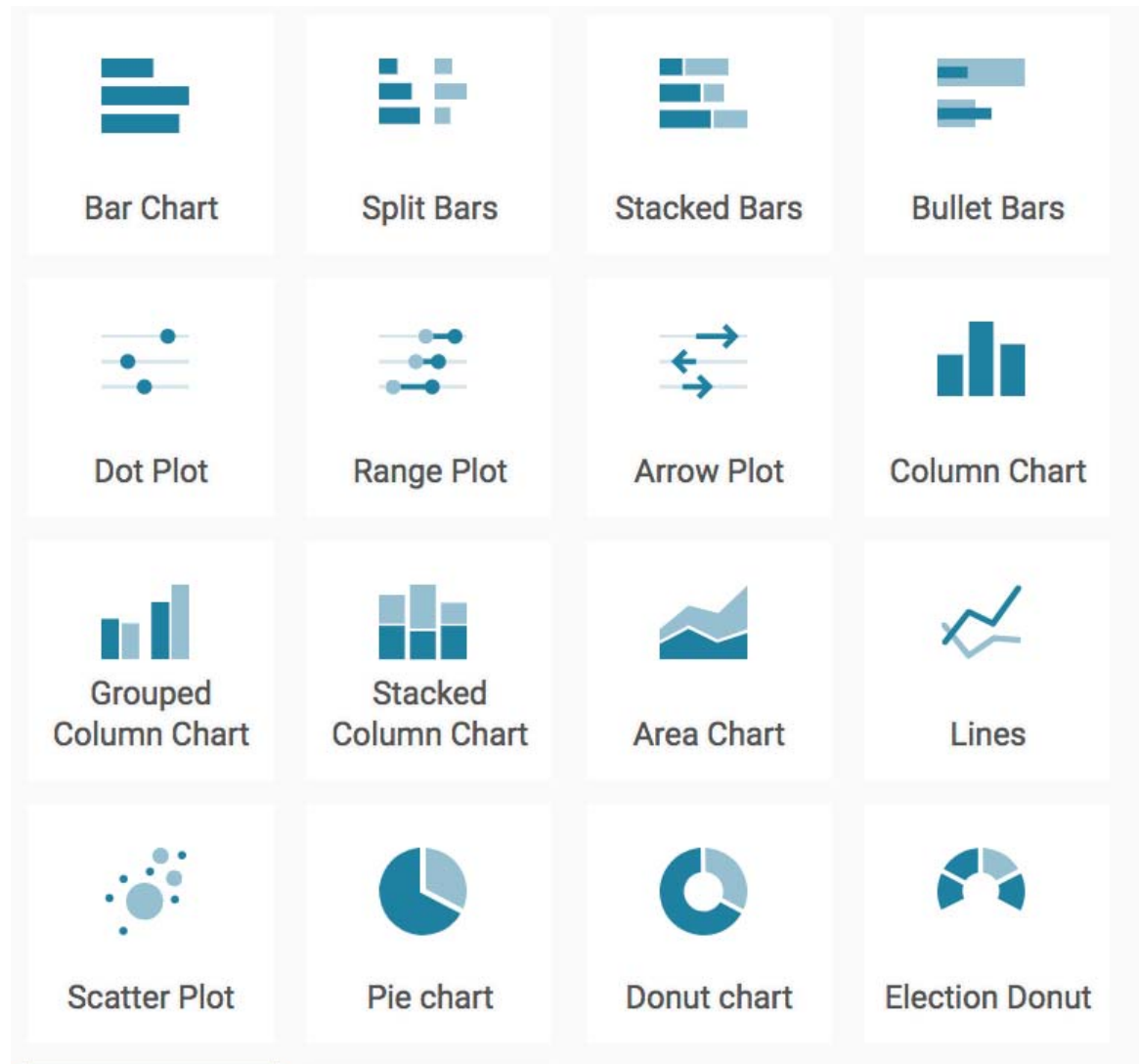
## Data Visualization Tools

- Data Wrapper: Online data visualization tool  
[www.datawrapper.de/](http://www.datawrapper.de/)
- Tableau (Public Version) -  
[public.tableau.com](http://public.tableau.com)
- Google Docs:  
[developers.google.com/chart/interactive/docs/](http://developers.google.com/chart/interactive/docs/)
- Data Journalism Handbook:  
[datajournalismhandbook.org/1.0/en/understanding\\_data\\_7.html](http://datajournalismhandbook.org/1.0/en/understanding_data_7.html)

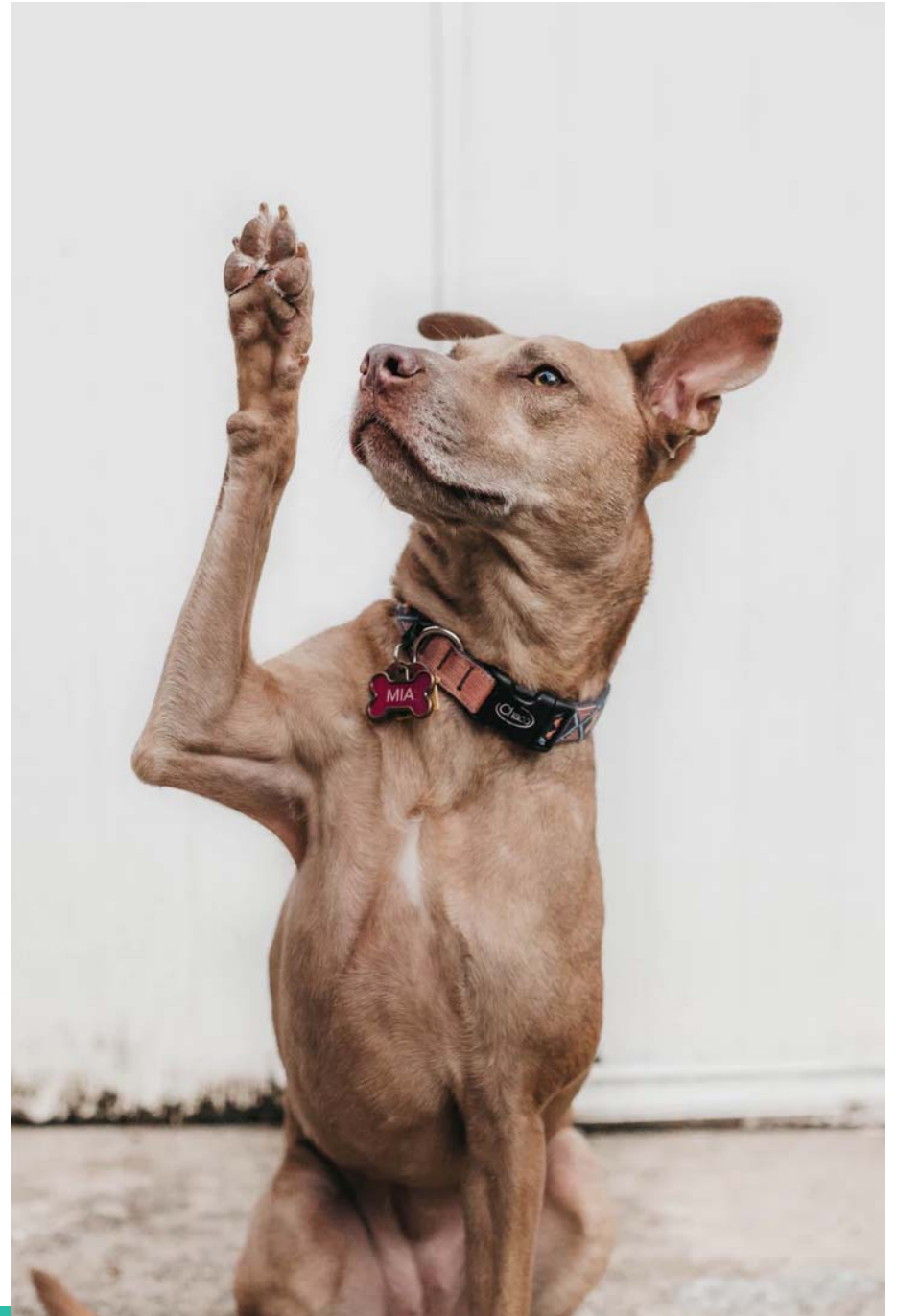
## Inspiration for Data Displays

- Kaiser Family Foundation
- CHCF
- New York Times
- FiveThirtyEight.com and Vox.com
- Storytelling With Data  
[www.storytellingwithdata.com](http://www.storytellingwithdata.com) (Blog by Cole Nussabumer with tips, tools and resources for improving how you display data and charts)

[www.datawrapper.de/](http://www.datawrapper.de/)



# Other Questions/ Challenges?



# Pre-Work for December 14<sup>th</sup>

# Project Storyboards



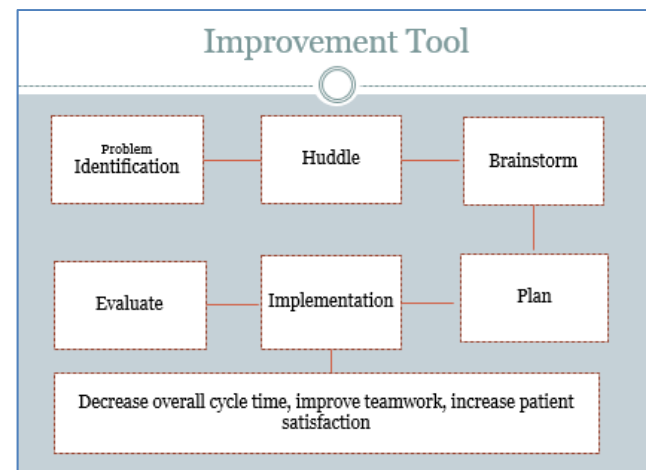
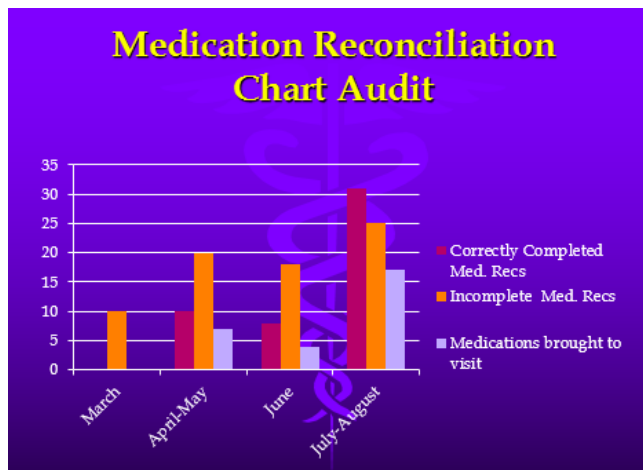
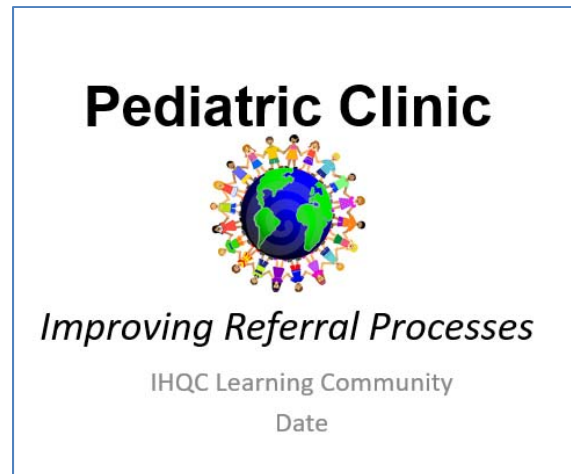
# Storyboard Presentations

1. Describe the IHQC project –
  - *Briefly summarize your project, including Aim Statement, goals, and timelines*
2. Your Project Measures and Results
  - **Incorporate a data display** (e.g., summary table and/or run chart)
  - Describe quantitative and qualitative results
3. Changes We Made That Resulted In Improvement

# Storyboard Presentations

4. Describe key learning(s) from your IHQC Project experience
  - *What was most interesting/surprising to you?*
5. Our Work Has Identified The Following Challenges and Barriers . . .
  - *Describe some of the challenges and barriers*
  - *How are you addressing them?*
6. What's Next for Our Team
  - *Describe the key activities being planned for the next 30-60 days*

# Personalize Your Storyboard



# Cohort Login Page



Username

losangeles2018

Password

\*\*\*\*\*

LOGIN

**Username:**

fundamentals2018

**Password:**

quality

# Next Steps

- **Homework – submit storyboard slides to IHQC by Wednesday, December 12<sup>th</sup>.**

*Template on IHQC.org*

*IHQC will print slides and bring poster boards for your team to assemble during breakfast on December 14<sup>th</sup>*

- **Closing Fundamentals in QI Workshop: Dec 14 at the California Endowment (same room as the kickoff session)**

- *Communications, Change Management, Accelerating Change, Implementation Considerations*
- ***Storyboard Presentations (3-5 minutes)***

# IHQC Staff Contact Info:

- Bridget Hogan Cole, MPH - [bcole@IHQC.org](mailto:bcole@IHQC.org)
- Chris Hunt, MPH – [chunt@IHQC.org](mailto:chunt@IHQC.org)
- Teresa Hofer, MPH – [thofer@IHQC.org](mailto:thofer@IHQC.org)
- Sharon Lau – [slau@IHQC.org](mailto:slau@IHQC.org)

[www.IHQC.org](http://www.IHQC.org)