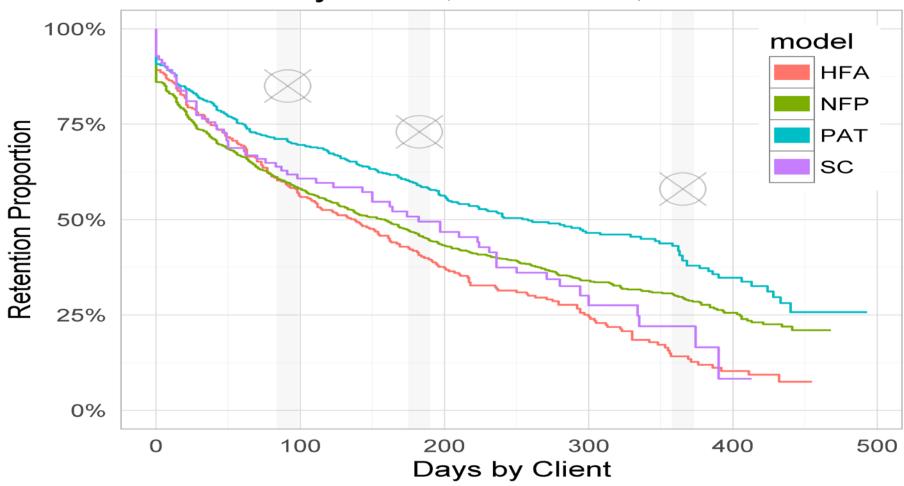
# Oklahoma Home Visiting Learning Collaborative

Lemonade for Life and Short-Term Retention

Presentation at the 2019 Collaborative Science of Home Visiting Meeting hosted by the Home Visiting Applied Research Collaborative (HARC)

David Bard, Ph.D.
Biomedical and Behavioral Methodology core
Center on Child Abuse and Neglect
Department of Pediatrics
University of Oklahoma Health Sciences Center

#### Retention by Model, Oklahoma, 2015 Referrals



# Learning Collaborative Description

- Collaborative LIAs
  - Oklahoma and Tulsa county agencies
  - 2 NFP (Children 1<sup>st</sup>) programs
  - 4 SafeCare programs
  - 6 PAT programs
- LIAs guided to create own Change Theory Diagrams & SMART Aims and then develop PDSAs using measures defined to address specific goals
  - Outcome measure
    - Weekly Measure
    - Optional longer-term measure- usually tied to SMART Aim
  - Process measure
  - Disruptor Measure
- All LIAs chose Engagement/Intense Early Engagement as their Key Drivers

#### Smart Aim: Family Engagement

#### **Primary Drivers**

#### **Primary Driver 1:**

Competent and skilled workforce to support enrollment and retention

#### **Primary Driver 2:**

Comprehensive data tracking system

#### **Primary Driver 3:**

Prompt and appropriate enrollment of eligible families

#### **Primary Driver 4:**

Intense early engagement (i.e., during first 3 months)

#### **Primary Driver 5:**

Active involvement of families in home visiting program

#### **HV CollN Changes/Interventions**

- 1. Support to develop interpersonal relationships and adult attachment
- **2.** Clear policy and protocols for enrollment and for intense early engagement and retention for current and new home visitors
- 3. Observation by supervisor of home visits
- **4.** Focused supervision on key points in home visitor (HV)-client relationship (i.e., enrollment, intense early engagement, ongoing retention)
- **5.** Materials available to facilitate engagement with families
- 1. Initial and ongoing training for HVs on policies and procedures for data tracking and management
- 2. Process for reviewing and using improvement data (e.g., weekly team meeting)

#### **External Sources**

- **1.** Outreach and education to referral sources for eligibility of families to home visiting (e.g., access criteria, identifying "goodness of fit")
- **2.** Outreach to home visiting clients to "refer" a friend to home visiting services
- **3.** Streamlined process from referral source to home visiting program (i.e., warm handoff for families) Internal Processes
- **4.** Policy and protocol (with guidelines) for assessing and determining eligibility of families

#### **Internal Processes**

- **1.** Policy and protocol (with guidelines) for assessing and determining eligibility of families
- 2. Standardized and welcoming intake process
- 3. Protocol in place for process steps, from assessment to first home visit
- 4. Completed family checklists on the family's wants and needs for home visiting
- 1. Program flexibility in time and location of service delivery to meet family preferences
- ${\bf 2.}$  Process for early linkage of families to other community supports and services that includes assisting

families with reducing barriers and following up on effectiveness of referral  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 

- 3. Focus group/follow-up surveys with families that are both in and leaving the program
- **4.** Check-in at 3 months ("How is home visiting going for you?")
- **5.** Communication strategies that enhance HV-family relationships
- **6.** Protocol for addressing missed visits
- **1.** Process for family to meet other team members to increase connection with program staff
- 2. Parents included as members of policy council
- 3. Parents included as members of QI teams
- **4.** Parent-led support groups (e.g., father involvement)
- **5.** Program flexibility in time and location of service delivery to meet family preferences
- **6.** Reliability on the part of home visitors to schedule and keep visits (not rescheduling/cancelling frequently)
- **7.** HV information routinely gathered from families about their needs, personal goals, and expectations of the program; services then provided based on this input

#### **OUHSC/KU Additions**

- **1.** To reduce in-office time, enlist support staff for assembly of packets, new parent educators shadow notation practices
- **2.** Praise and other small rewards (extended leave) for top performances and goal attainees
- **1.** Climate of performance transparency , track scheduled & completed visits and circulate weekly
- **1.** Supervisor monitors, reminds, and directs new referrals for pending graduation slots
- 2. Parent educators track and provide feedback on lagtime between enrollment and first visit
- **3.** Coach referral sources on program eligibility and brief elevator pitch; plant/embed reminders into sources' daily routine (e.g., C1 eligibility screen appears on patient checklist, short referral form in all clinics, etc.)
- **4.** Flag eligible WIC clients, who are hard to reach, in the system so they can be approached at next WIC visit.
- **5.** Plant a reminder into source's daily routine (e.g., client checklist) with your office phone number

#### Lemonade for Life

- 1. Introduce Brain Builders and Amazing Brain
- 2. Fill out ACEs checklist for clients periodically
- **3.** If all boxes are checked on the ACE checklist, introduce ACE questionnaire and appropriate facilitative discussion tools and strategies (referrals, Hope Map, My Lemonade Stand)
- 1. Suggest appt times that are geographically clustered
- 2. Text message absent clients; wait 15 minutes for return
- **3.** Build rapport and bond with client in the first 10 minutes by asking open-ended questions
- **4.** Issues and topics to be addressed at the next visit are recorded at the time of each visit and referred to when prepping for the next visit.
- **5.** Promote and hold graduation ceremonies with food and mementos

Overview of Common Measures:

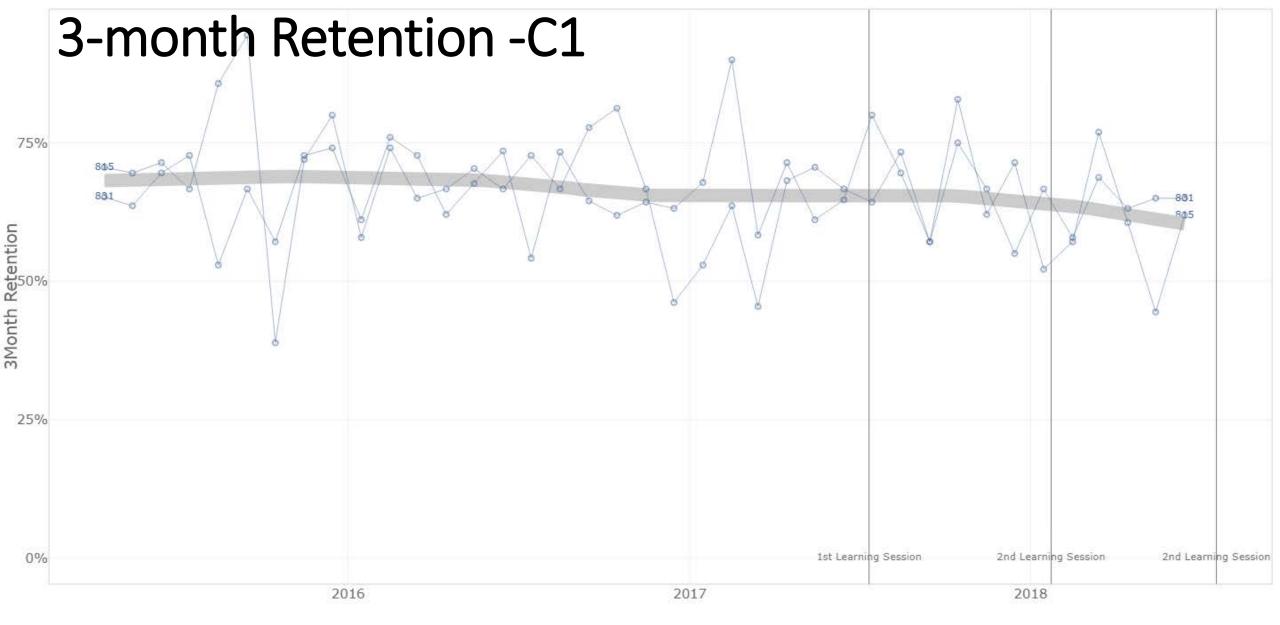
### 3-month Retention

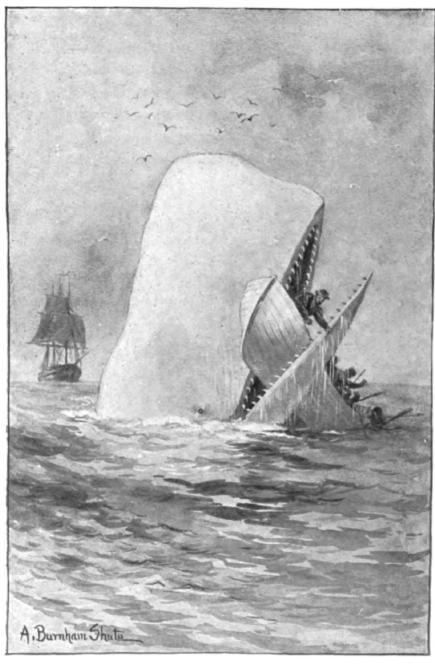
<u>PAT</u>: During the 6 months of this PDSA, the value decreased from 62% to 55%. During the same stretch in 2017, it was around 73%.

C1: held constant at 64%. Last year was 66%.

SafeCare: held constant at 63% this year. Last year was 65%.

Overview of Common Measures:



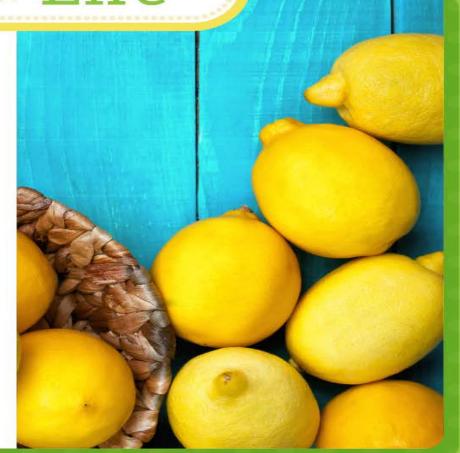


"Both jaws, like enormous shears, bit the craft completely in twain."



### Lemonade FOR Life

Driver 4
Intensive Early Engagement
Lemonade for Life



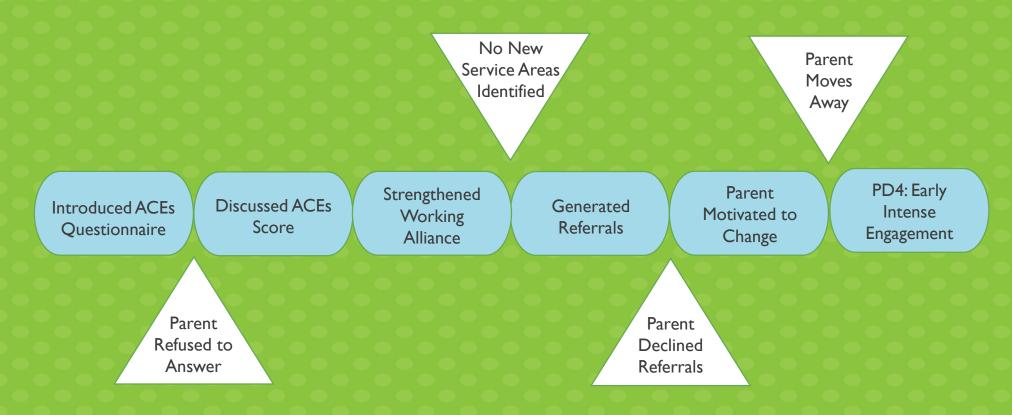
# Using ACEs with families deepens the relationship

- Checklist to determine when is the right time
- Become comfortable with discomfort





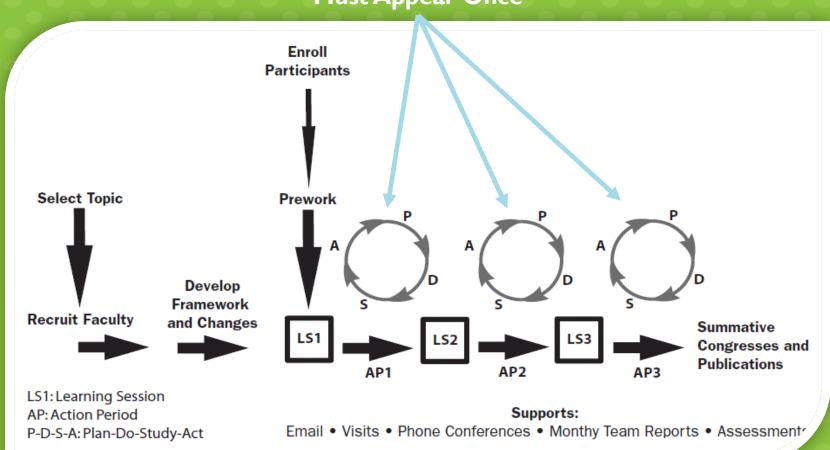
# Change Theory Diagram LfL Example







#### **Must Appear Once**







#### Lemonade FOR Life

Αp

ce

# Oklahoma HV Learning Collaborative Cycle #2 PDSA Summary

Tulsa Children First Program
Brain Builder Video



### Children First, Tulsa



- Location Tulsa County and Lower I/3 Osage County
- Brief history Began as Pilot Program in 1997. Launched state wide in 1998 serving Ist time pregnant mothers and their babies. Began using CQI within our own health department agency in 2012. Children First-Tulsa partnered with Ok State Office & OPM in 2012 to provide CQI training statewide. We completed our first Story Board for C-I in 2013.
- HV Model Nurse Family Partnership
- Provider Counts During the project there were: 2 MIECHV Nurses, 12 non-MIECHV Nurses, 2 Supervisors, I Program Manager, 2 clerical personnel. Staff separations during the project = I MIECHV RN 5/17/18, I FT RN 4/30/18
- Completed Home Visits per year 5,380 serving 479 Clients with an average rate of 448 completed home visits per month.

### Round 1 Recap – Lessons Learned – Brain Builders Video



- Great way to start conversation about
  - Parenting
  - Discipline
  - ACEs
  - Energizes conversation about parenting
    - Incentive to prioritize better parenting techniques
    - "Parents clearly see and comprehend connections between their past and how they are parenting today"



### **Brain Builders Video**



Key Driver Selection-Intense Family Engagement/Intervention-Brain Builder Video 1x during Prenatal Phase Visit 1 – 6.

Why this intervention-Discover if early client attrition is addressable using the Brain Builder video for engagement. Client attrition is the greatest during this early prenatal phase of our program.

Start Date - 2/5/2018 End Date - 6/29/2018

Smart Aim- Providers trained in LFL will decrease current client attrition rate of 34% by 5% by June 29, 2018 by showing the Brain Builder Video to prenatal clients within the first 6 completed prenatal home visits.

#### Measures



**Outcome**: Attrition

*Instructions*: Attrition is defined as those clients who exited the program within 60 days of their first visit unless they complete the program

Denominator: Count of new clients for the week. Only new clients in weeks that are at least 60 days removed from the current report week are included.

Numerator: Count of clients who exit the program within 60 days of their first home visit

**Process**: Proportion of pregnancy clients who were shown the Brain Builder video within the first 6 visits *Denominator*: Count of new clients for the week

Numerator: Count of new clients who were shown the Brain Builder video within their first 6 visits

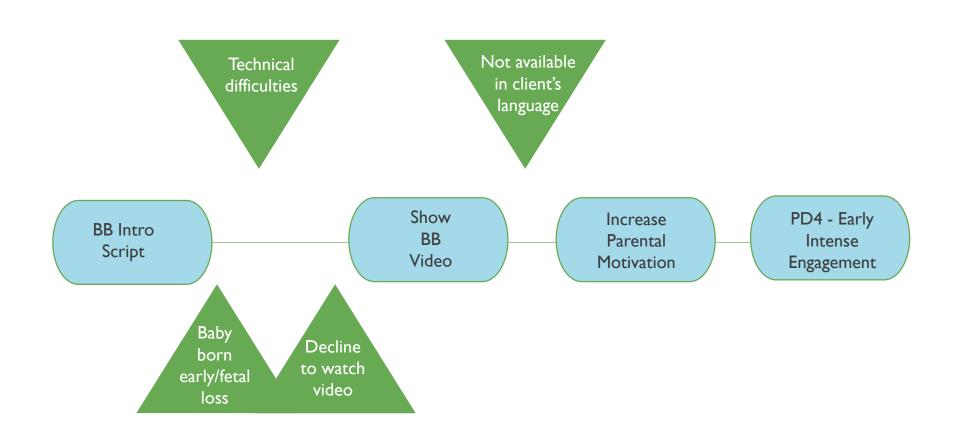
**Disruptor-Early Exit**: Proportion of clients who leave services before they see the Brain Builder Video *Denominator*: Count of new clients for the week.

Numerator: Count of clients who exit the program before seeing the Brain Builder Video

**Disruptor-Language**: Proportion of clients who have seen the Brain Builder by Primary Language Denominator: Count clients speaking English, English & Spanish equally, Spanish and Other language. Numerator: Count of clients speaking the language who have seen the video

# **Change Theory Diagram**







#### **PLAN**



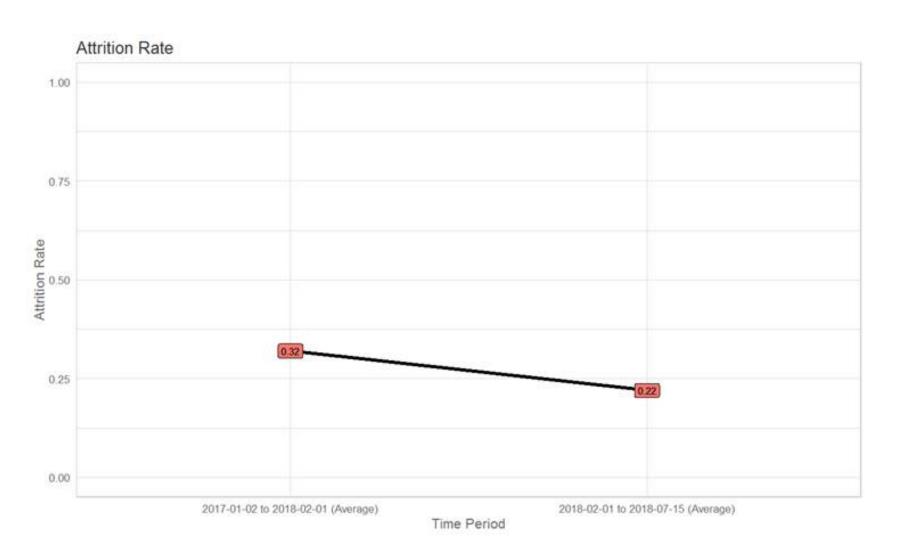
- Initial Phase began 2/5/2018 implemented by 6 Nurse Home Visitors trained in L4L. Ramp up began 4/6/2018 with the remaining 8 nurses after receiving L4L training
- Target Population- Prenatal Clients
- What Provide Script to introduce the Video, then show Brain Builders Video
- Where During a Home Visit with the client
- When Prenatal Completed Home Visit 1st 6th

#### DO

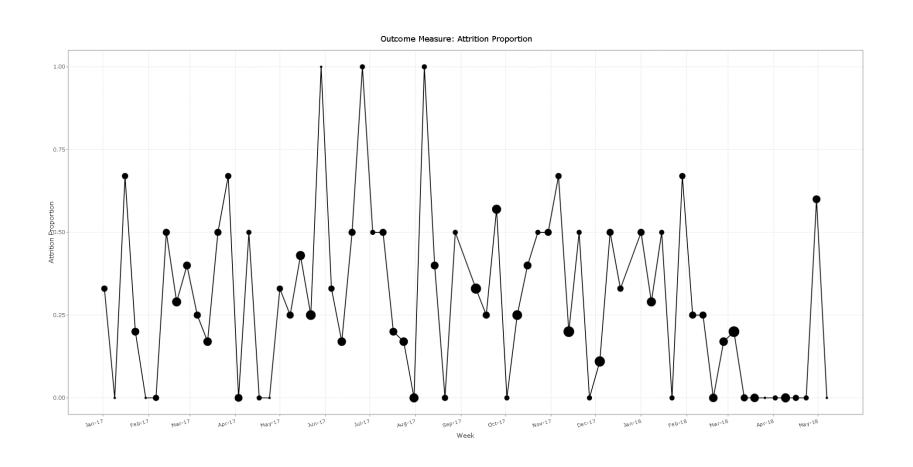


- Create a Nurse Script to introduce the Brain Builder Video including translation to Spanish by a bi-lingual nurse home visitor on the team
- All Nurses to watch Brain Builder Video and study Brain Builder Video Script to use when introducing prenatal clients to the video
- Download Brain Builder on laptops and mobile device and test for accessibilty
- Instruct nurses to show the video between the 1st and 6th prenatal home visit
- Weblet created on clients dashboard in ETO for the BBV encounter documentation as outlined for this project
- Adaptations made along the way
  - Initial project included showing the video during the first home visit. Adapted quickly to visit I-6 as the Ist visit is geared to data gathering, introducing the program and establishing the relationship. Nurses felt there was not enough time or relationship established at the intake visit.
  - Initially wanted to include Burmese speaking clients, however English & Spanish speaking clients were used for this study due to
    unavailability of the BBV in other languages and possible cultural considerations. Burmese clients speaking English were included.
- Ramp Up 4/6/2018 included adding the remainder of the 8 nurses trained in L4L to the project. No changes
  were made in the approach. Reviewed data entry guidelines.

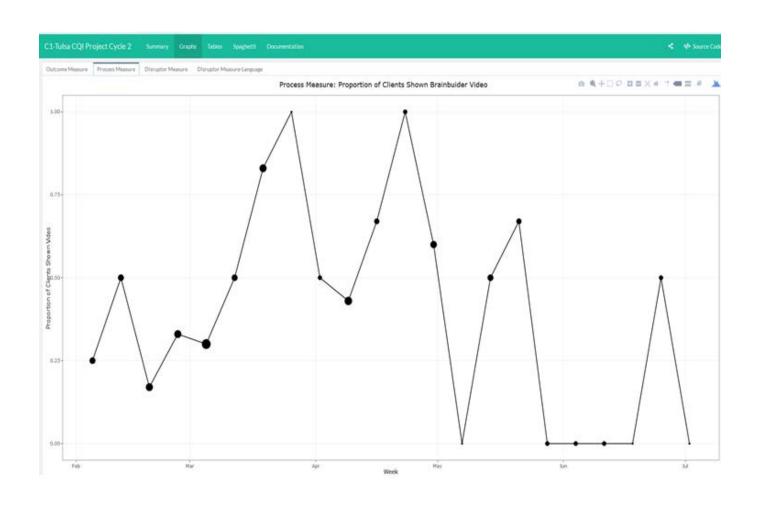
# STUDY: SMART Aim Outcome Measure 2-Month Attrition



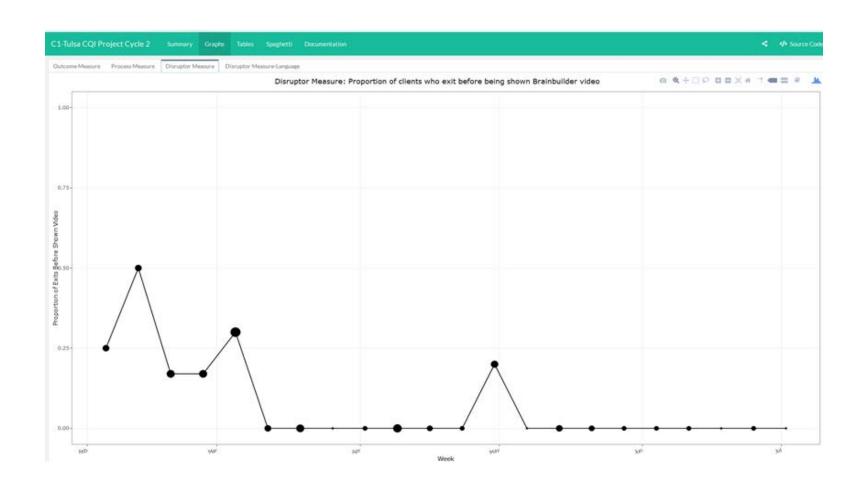
# STUDY: Weekly Outcome Measure



### STUDY: Process Measure



# STUDY: Disruptor Measure



## STUDY: Measures Interpretation

#### Outcome

 We experienced positive changes following implementation. Attrition rate dropped from 0.32 (during 2017 and Jan 2018) to 0.22 (from Feb 2018 thru Jun 2018). This decline in attrition reached statistical significance (p < 0.01) and exceeded the identified target goal in the Smart Aim.

#### Process

Process measure suggested adherence to the planned implementation. Of the 75
prenatal enrollments during this time frame, the BBV was shown to 39 prenatal
clients during this time that met the criteria.

#### Disruptor

- No technological issues occurred.
- No client declined to view the video.
- Language barriers and possible cultural considerations were a disruptor
- Some clients who met the study criteria were not shown the video if their home visitor had not yet been trained in L4L

### **ACT**

- Will Adopt intervention Team identifies BBV promoted discussion with their client about brain development, impact of trauma, further interest in positive parenting and helped parents identify new ways to raise their children successfully.
- C-1 mothers often expressed during the visit a new understanding of trauma and the impact on their own lives, their ability to parent, the impact of toxic stress on a child's brain development with a new found interest to provide nurturing experiences.
- Several nurses identified using the ACE successfully after showing the BBV to open discussion about their own trauma history. Adding the ACE questionnaire to the process seems a logical step for the next intervention.

# Lessons Learned + Caveats

"It isn't what we don't know that gives us trouble, it's what we know that ain't so."

Will Rogers

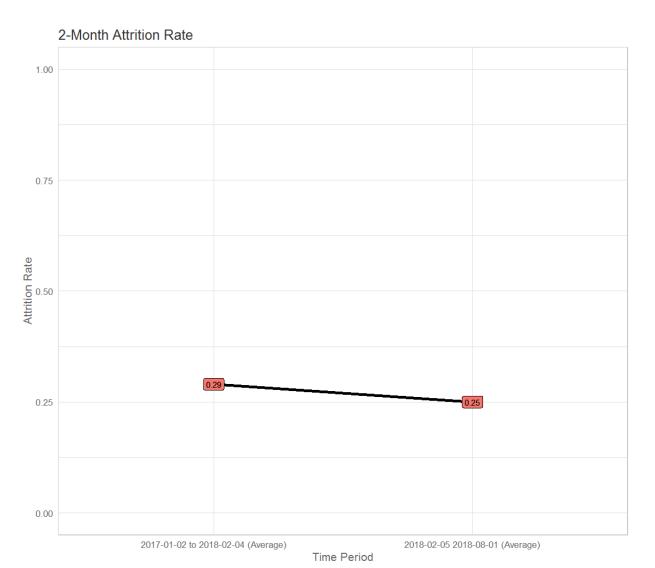
# Importance of Measure Clarity and Consensus



# STUDY: SMART Aim Outcome Measure As of 7-15-2018



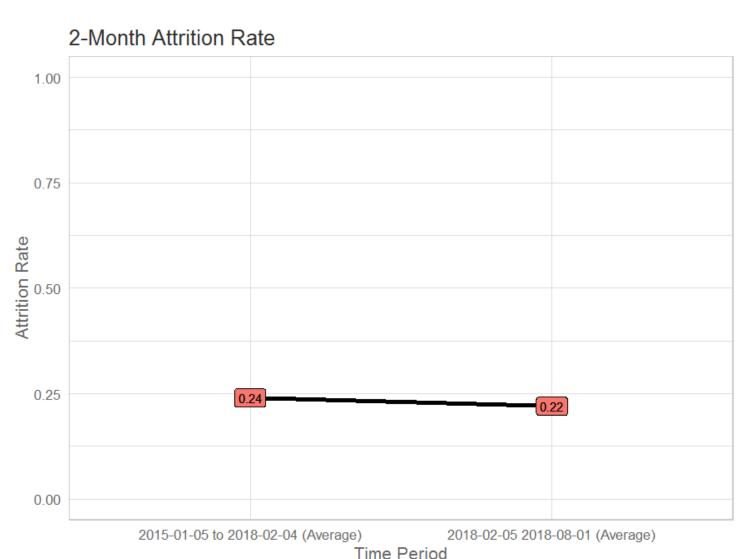
# STUDY: SMART Aim Outcome Measure As of today, using completed visits only, and beyond pregnancy



# Importance of Implementation Science

"Active ingredients" and Effect Heterogeneity

# Oklahoma County C1: Cycle #2 PDSA



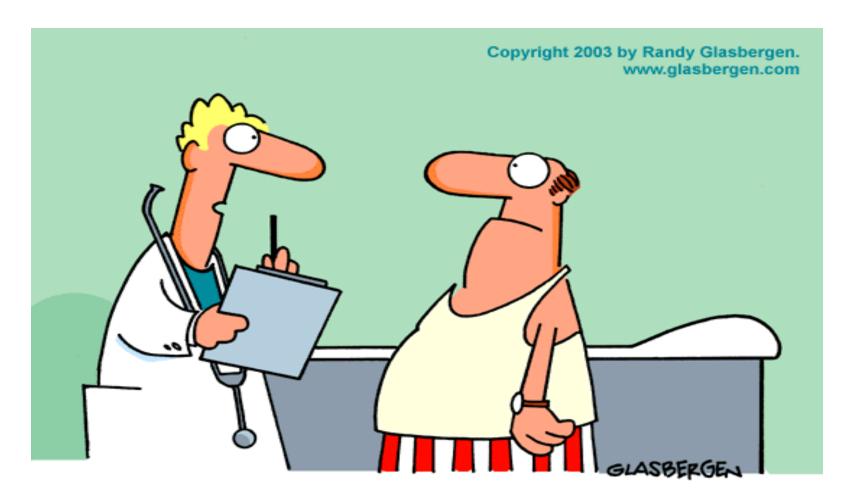
### "Best Practices Research"

- Find sites with highest performance
  - Probably different for different steps
- Figure out what they are doing differently
  - Requires in-depth interviews and observation
  - May also require talking to lower performers
  - Identify both principles, techniques, and scripts
- Combine best methods for steps into a unified best method
- Teach/spread the method to others

# What Do Exemplars Know?

- Principles
- Techniques
- Scripts

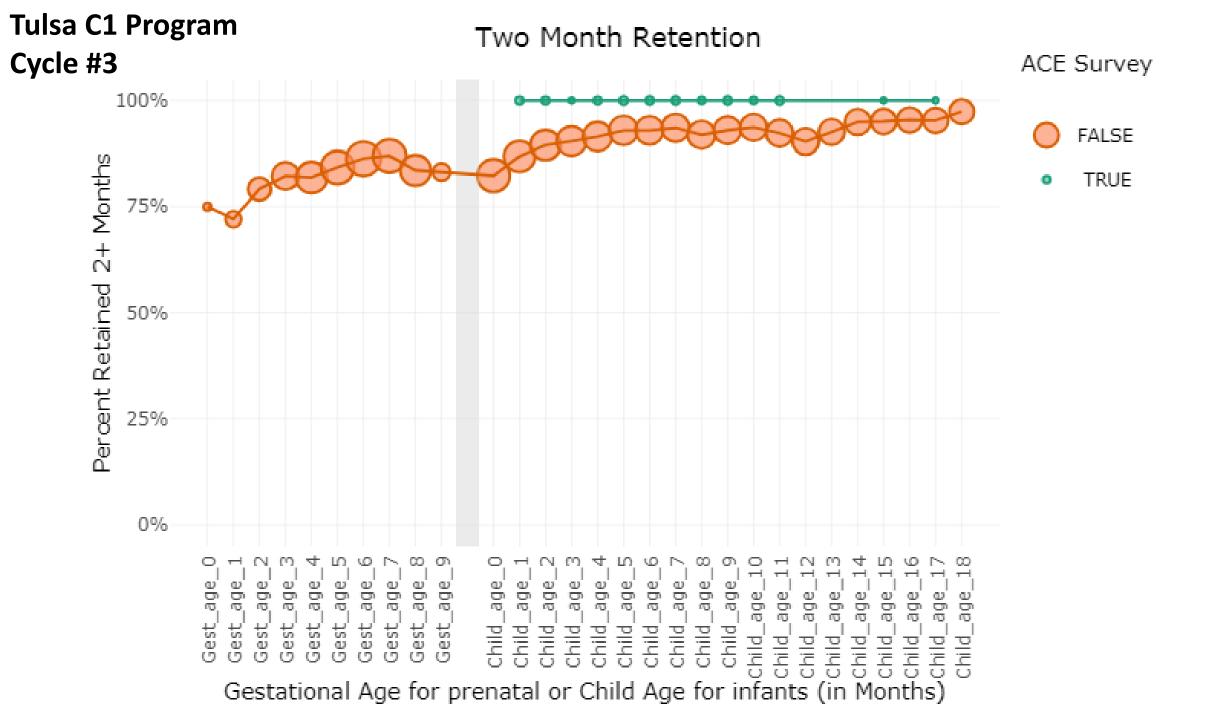
# Scripts

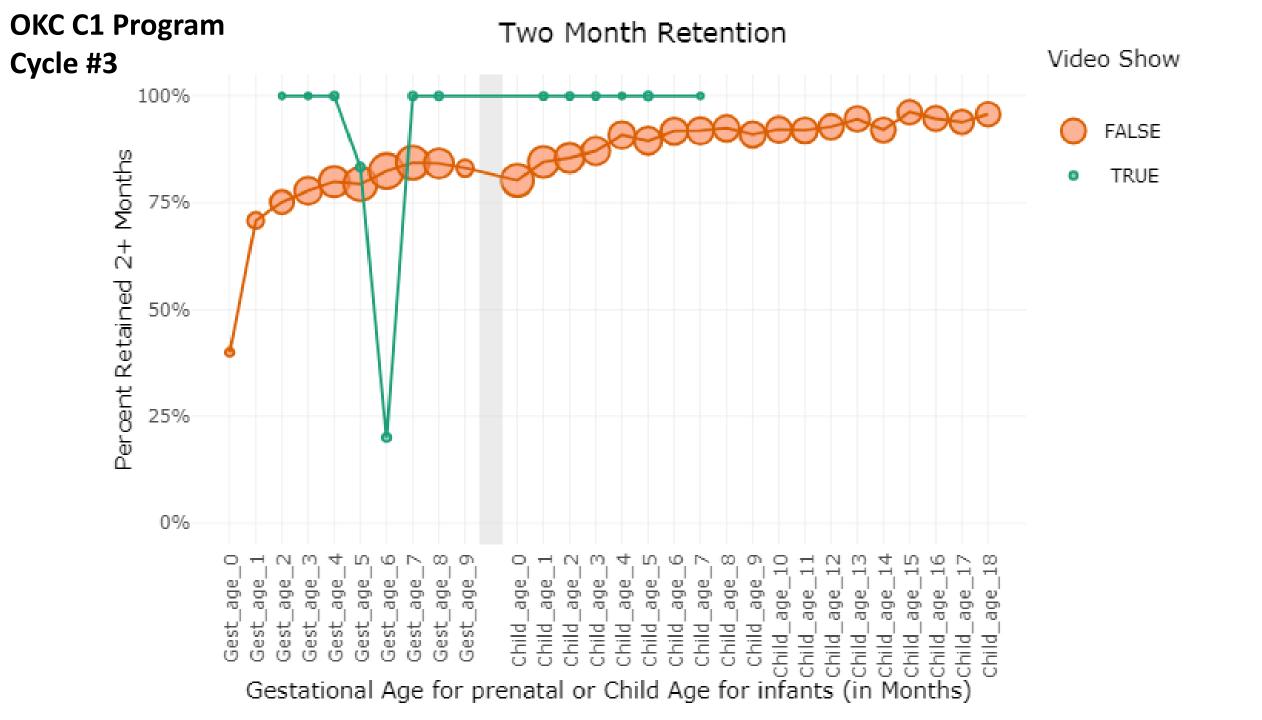


"What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?"

## Scripts

- "Ohh! Dr. Stewart will be so upset with both of us."
- "Colon cancer is a stupid way to die."
- "It's time for your pneumonia shot."





# Thank you



#### **Funding information**

2017-2019: *Maternal, Infant and Early Childhood Home Visiting (MIECHV) Innovation Grant Program*. Grant funded by the Health Resources and Services Administration (HRSA). UH4MC30745.



Achievement & Assessment Institute

The University of Kansas

Center for Public Partnerships & Research

Please direct feedback and questions to <u>David-Bard@ouhsc.edu</u> (methods and analysis) <u>Jcounts@ku.edu</u> (LfL program)



Health Resources & Services Administration