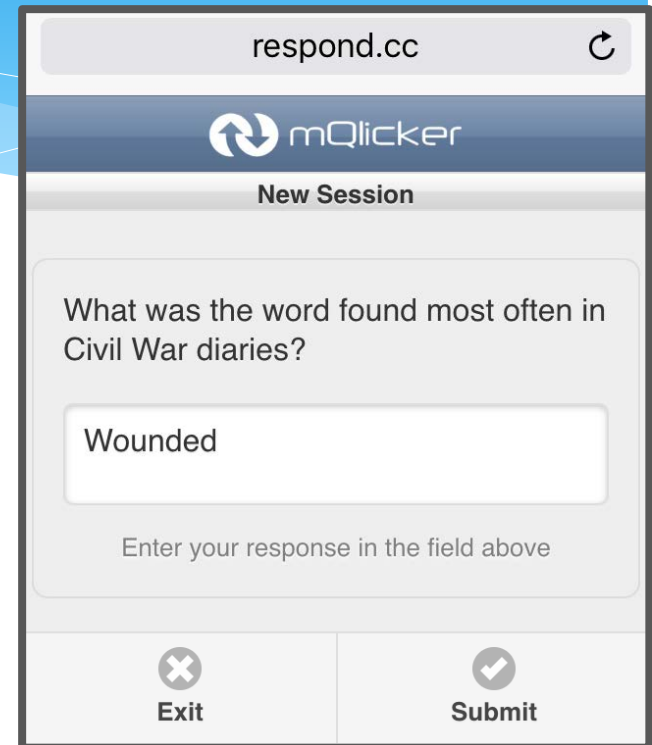


# Interactive Feedback

- \* Open website:  
<http://respond.cc>
- \* Session: 599511
- \* What was the word found most often in Civil War diaries?



The screenshot shows a mobile application interface for mQlicker. At the top, the address bar displays 'respond.cc' with a refresh icon. Below the address bar is a dark blue header with the mQlicker logo and the text 'New Session'. The main content area contains a survey question: 'What was the word found most often in Civil War diaries?'. Below the question is a text input field containing the word 'Wounded'. Underneath the input field is a prompt: 'Enter your response in the field above'. At the bottom of the screen are two buttons: 'Exit' with a close icon and 'Submit' with a checkmark icon.

To enter two words include “-”

**tired-feet**

# Retention on WIC

Impact of Online Education  
And Interactive Texting  
on WIC Retention

Mike Whaley  
PHFE WIC Program  
Irwindale, California

# Smartphone Feedback

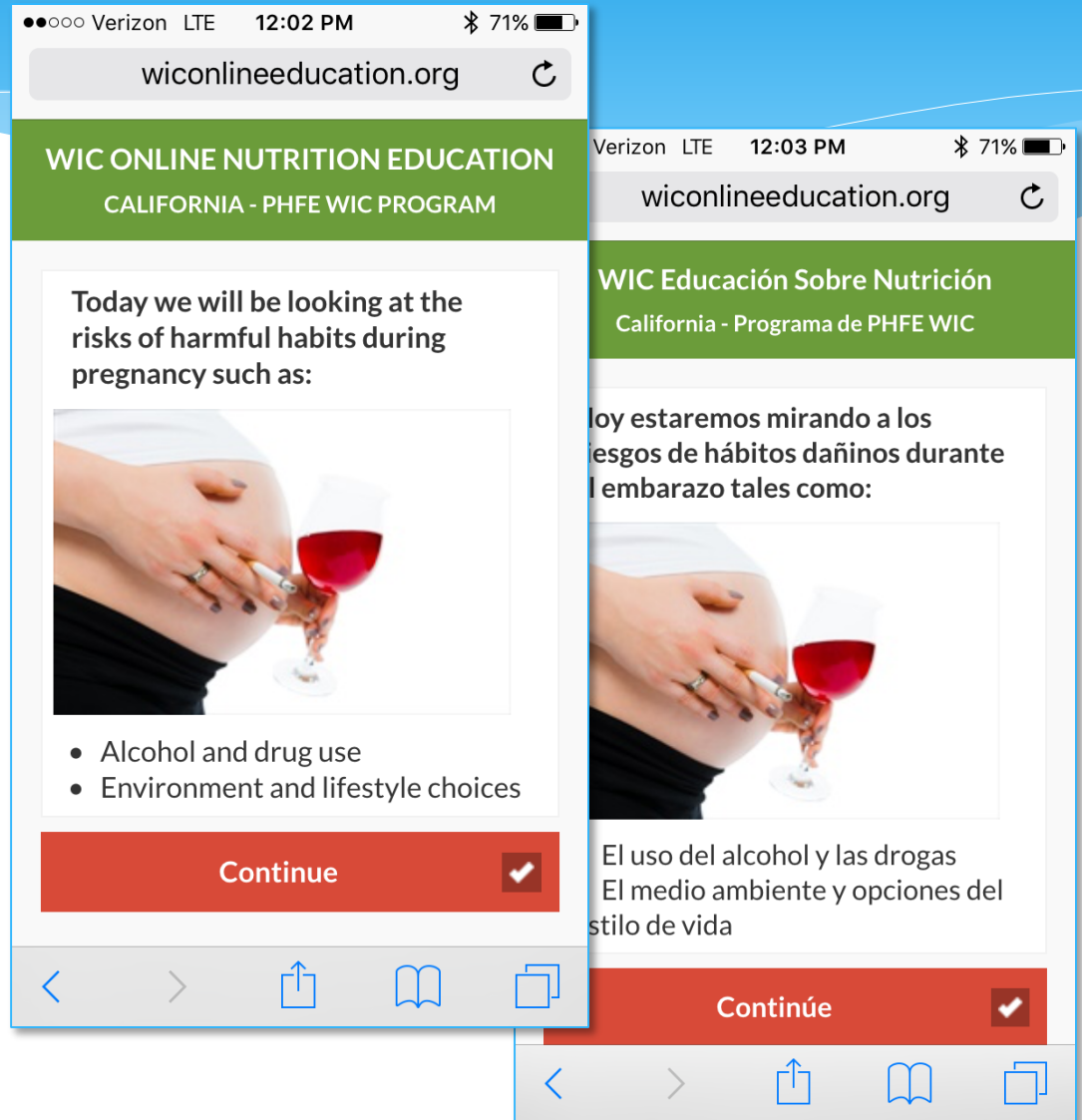
- \* Open website: <http://respond.cc>
- \* You will be given a SESSION #
- \* Answer each question multiple times if you like

# What are we evaluating

- \* We are seeing over 28% of our families per month using **online education**.
- \* 26,000 families per month.
- \* A large investment in custom software and individually designed education modules.
  - \* Is this effort helping?

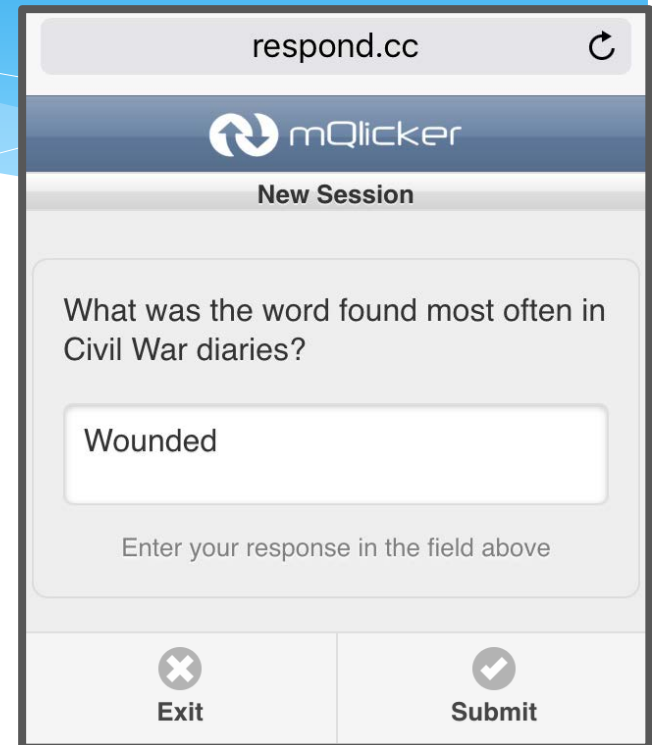
# Online Education

- \* Over 500 different **KINDS** of mobile devices per month
- \* Connected to other PHFE systems like time tracking



# Interactive Feedback

- \* Open website:  
<http://respond.cc>
- \* Session: **350494**
- \* What barriers do your participants have to using online education?



The screenshot shows a mobile application interface for 'mQlicker'. At the top, the address bar displays 'respond.cc'. Below it, the 'mQlicker' logo is visible. The screen is titled 'New Session'. The main content area contains a survey question: 'What was the word found most often in Civil War diaries?'. Below the question is a text input field containing the word 'Wounded'. A prompt below the field says 'Enter your response in the field above'. At the bottom, there are two buttons: 'Exit' with a close icon and 'Submit' with a checkmark icon.

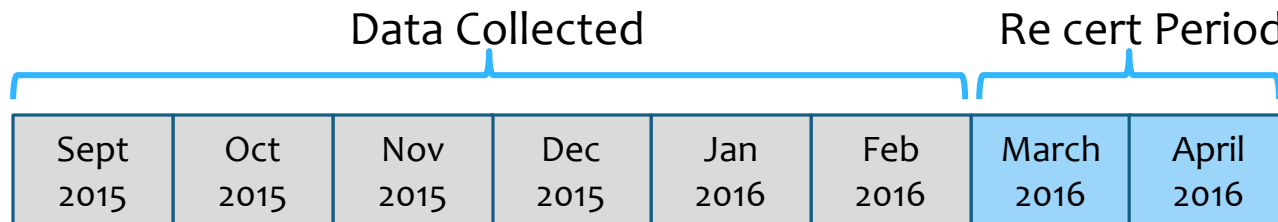
To enter two words include “-”  
**Don't-have-phones**

# To be fair ... Interactive Texting

- \* We are making other significant changes
- \* One is **interactive texting**.
  - \* Bi-directional texting
  - \* Ask them questions in bulk texts
  - \* Quick responses from a team (like phone bank)

# Dataset

- \* Only Children – Not 5 years old, not foster kids
- \* Model Outcome: Did they re-cert? – March & April 2016
- \* Only PHFE WIC participants in Los Angeles area
- \* 49,091 children





# Model – independent variables

- \* Captured WIC demographics in CA WIC MIS system
- \* Online education usage – the six months up to re-cert
- \* Texting system usage -- interactive texting over 6 months

# Methodology

- \* SAS: Data extracted from WIC warehouse (Raptor)
  - \* SQL Server data warehouse
  - \* 250,000 per month (1 million/month)
- \* SAS: Combined with data from online education software
- \* SAS: Combined with data from messaging software
- \* SAS: Proc Logistic for regression analysis
  - \* Categorical yes/no outcome

# Logistic Regression – Impact Story

- \* We will incrementally build the model to show the impacts of each independent variable.

# 1<sup>st</sup> variable: Online Education

- \* 28% of our families take online education each month.
- \* 21% of the families in the model took online education two or more months.
- \* Variable is the number of months they took online ed.
- \* The basic starter model showed the following only using the one Online Education Months variable.

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
OnlineEdMonths	1.546	1.511	1.582

54.6% additional chance for each month taken

# Variable #2: Not alone on WIC


- \* Not alone on WIC is usually a huge impact on retention.
- \* 42% are not alone
- \* Dummy variable showing the child in the model had at least one other person in their family on WIC.

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
OnlineEdMonths	1.505	1.470	1.540
NotAloneOnWIC	1.942	1.860	2.028

was 1.546

# Var #3: Preferred Language

- \* Ethnicity, culture, neighborhood, language
- \* 28% prefer Spanish      67% prefer English

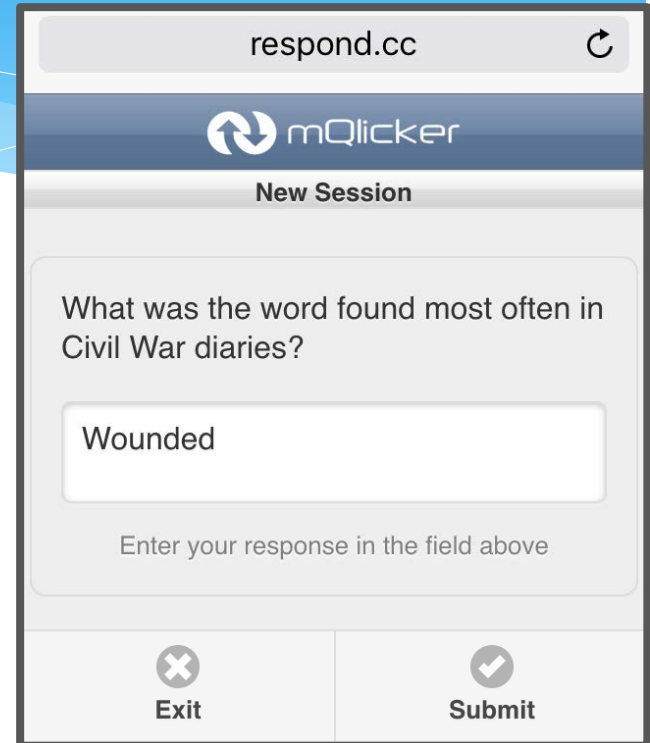
Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
OnlineEdMonths	1.645	1.606	1.686
NotAloneOnWIC	2.093	2.001	2.188
English	0.897	0.817	0.985
Spanish	 3.390	3.058	3.758

was 1.505

All variables significant

# Interactive Feedback

- \* Open website:  
<http://respond.cc>
- \* Session: **741682**
- \* Why are English speakers LESS likely to stay on WIC?



The screenshot shows a mobile app interface for 'mQlicker'. At the top, the address bar displays 'respond.cc'. Below it, the app's logo and name 'mQlicker' are visible. The screen is titled 'New Session'. The main content area contains a survey question: 'What was the word found most often in Civil War diaries?'. Below the question is a text input field containing the word 'Wounded'. A prompt below the field says 'Enter your response in the field above'. At the bottom, there are two buttons: 'Exit' with a close icon and 'Submit' with a checkmark icon.

To enter two words include “-”  
**Have-no-cars**

# The Impact of Income

\* Income - percent of federal poverty level

\* **26%** are less than 50%-FPL      **45%** between 50%-100% FPL

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
OnlineEdMonths	1.644	1.604	1.685
NotAloneOnWIC	2.096	2.004	2.192
<del>English</del>	0.913	0.831	1.003
Spanish	3.389	3.056	3.759
PctFPLlt50	→ 0.920	0.870	0.973
PctFPL51to100	→ 1.059	1.006	1.114

was 1.645

Income does not influence online educations impact on retention

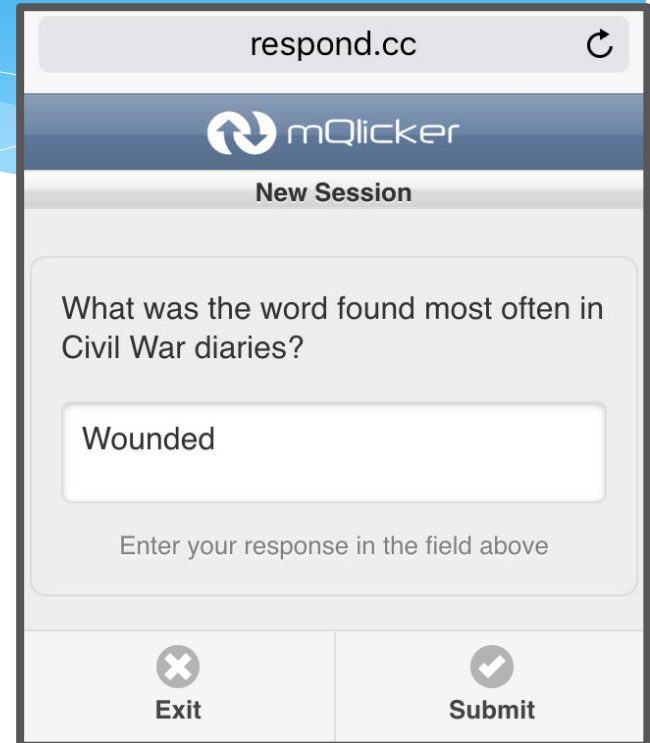


# Interactive Feedback

\* Open website:  
<http://respond.cc>

\* Session: **754311**

\* Why are the lowest  
income LESS likely to  
stay on WIC?



The screenshot shows a mobile application interface for 'mQlicker'. At the top, the address bar displays 'respond.cc' with a refresh icon. Below the address bar is a dark blue header with the 'mQlicker' logo. Underneath the header is a light gray bar with the text 'New Session'. The main content area is a light gray box containing the question: 'What was the word found most often in Civil War diaries?'. Below the question is a text input field with the word 'Wounded' entered. Under the input field is a smaller gray box with the text 'Enter your response in the field above'. At the bottom of the screen are two buttons: 'Exit' with a red 'X' icon and 'Submit' with a green checkmark icon.

To enter two words include “-”  
**no-cars**

# Post High School Education

- \* Schooling level – any college for the family?
- \* 61% had some post high school education.

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
OnlineEdMonths	→ 1.650	1.610	1.691
NotAloneOnWIC	2.096	2.004	2.192
<del>English</del>	0.918	0.836	1.009
Spanish	3.299	2.972	3.661
PctFPLlt50	0.903	0.854	0.956
<del>PctFPL51to100</del>	1.049	0.997	1.104
School12Plus	→ 0.910	0.869	0.953

was 1.644

# Interactive Texting

- \* Texting variables used in model –
  - \* Months Messages SENT
  - \* Months Messages RECEIVED from participant
- \* Experimenting with interactive texting
- \* 27% of the families had interactively texted with us
  - \* Not: STOP or OK or 😊

# Final Model – with Texting

63.1% more likely to re-cert for every month they take online education

\* Texting – Months Messages SENT; Messages RECEIVED

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
OnlineEdMonths	1.631	1.591	1.672
NotAloneOnWIC	2.090	1.998	2.186
English	0.881	0.802	0.969
Spanish	3.129	2.818	3.474
PctFPLlt50	0.894	0.845	0.946
PctFPL51to100	1.053	1.001	1.109
School12Plus	0.909	0.868	0.953
TotalMonthMessages	0.863	0.816	0.912
TextMonthsReceived	1.597	1.525	1.672

was 1.650

Months  
participant  
sends a text  
back to WIC



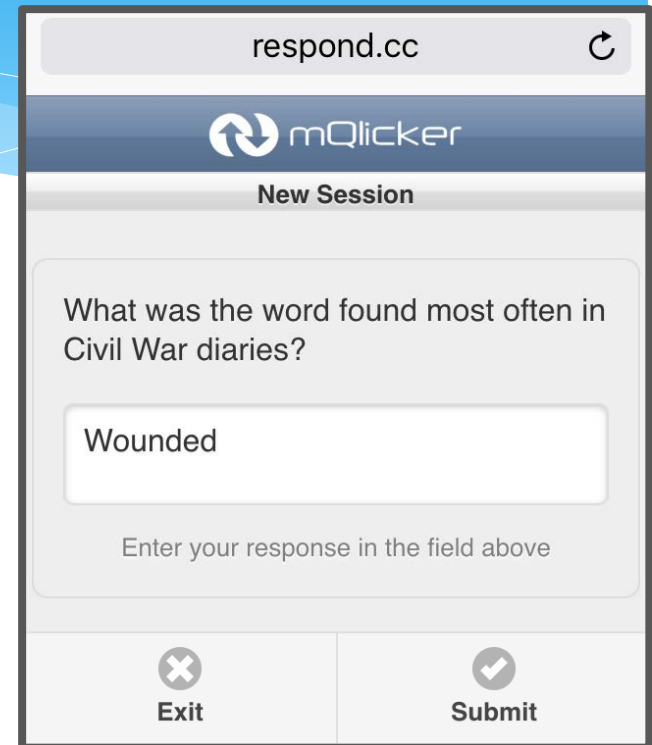
# Interactive Feedback

\* Open website:

<http://respond.cc>

\* Session: 612092

\* Why if someone responds to text msgs are they more likely to stay?



The screenshot shows a mobile browser interface for the website respond.cc. The address bar displays 'respond.cc' with a refresh icon. Below the address bar is a dark blue header with the mQlicker logo. The main content area is titled 'New Session' and contains a question: 'What was the word found most often in Civil War diaries?'. Below the question is a text input field containing the word 'Wounded'. Underneath the input field is a prompt: 'Enter your response in the field above'. At the bottom of the screen are two buttons: 'Exit' with a close icon and 'Submit' with a checkmark icon.

To enter two words include “-”  
**Remember-WIC**

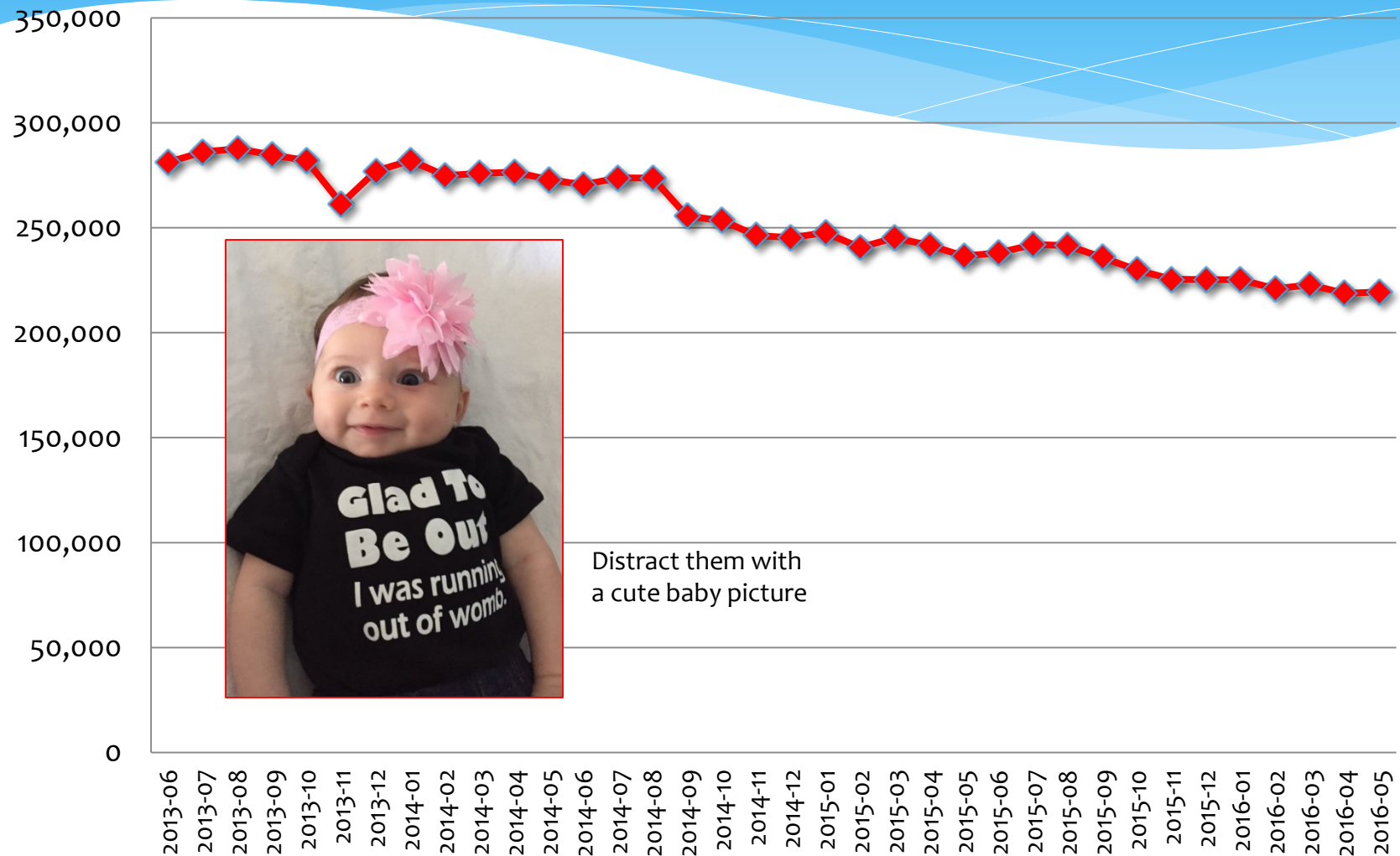
# Caseload History

## Results of Online Ed and Texting



# Caseload History

## Results of Online Ed and Texting





\* 63.1% more likely to re-cert for every month they take online education