Interactive Feedback

* Open website: http://respond.cc

* Session: 599511

* What was the word found most often in Civil War diaries?

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?

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)
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
We will incrementally build the model to show the impacts of each independent variable.
1st 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.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Point Estimate</th>
<th>95% Wald Confidence Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OnlineEdMonths</td>
<td>1.546</td>
<td>1.511 1.582</td>
</tr>
</tbody>
</table>

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.

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</thead>
<tbody>
<tr>
<td>OnlineEdMonths</td>
<td>1.505</td>
<td>1.470 1.540</td>
</tr>
<tr>
<td>NotAloneOnWIC</td>
<td><strong>1.942</strong></td>
<td>1.860 2.028</td>
</tr>
</tbody>
</table>

The odds ratio for Not alone on WIC was 1.546.
Var #3: Preferred Language

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

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<tr>
<td>OnlineEdMonths</td>
<td>1.645</td>
<td>1.606 1.686</td>
</tr>
<tr>
<td>NotAloneOnWIC</td>
<td>2.093</td>
<td>2.001 2.188</td>
</tr>
<tr>
<td>English</td>
<td>0.897</td>
<td>0.817 0.985</td>
</tr>
<tr>
<td>Spanish</td>
<td>3.390</td>
<td>3.058 3.758</td>
</tr>
</tbody>
</table>

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?

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

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<td>OnlineEdMonths</td>
<td>1.644</td>
<td>1.604 1.685</td>
</tr>
<tr>
<td>NotAloneOnWIC</td>
<td>2.096</td>
<td>2.004 2.192</td>
</tr>
<tr>
<td>English</td>
<td>0.913</td>
<td>0.831 1.003</td>
</tr>
<tr>
<td>Spanish</td>
<td>3.389</td>
<td>3.056 3.759</td>
</tr>
<tr>
<td>PctFPLlt50</td>
<td>0.920</td>
<td>0.870 0.973</td>
</tr>
<tr>
<td>PctFPL51to100</td>
<td>1.059</td>
<td>1.006 1.114</td>
</tr>
</tbody>
</table>

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?

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.

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<td>1.610 - 1.691</td>
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<tr>
<td>NotAloneOnWIC</td>
<td>2.096</td>
<td>2.004 - 2.192</td>
</tr>
<tr>
<td>English</td>
<td>0.918</td>
<td>0.836 - 1.009</td>
</tr>
<tr>
<td>Spanish</td>
<td>3.299</td>
<td>2.972 - 3.661</td>
</tr>
<tr>
<td>PctFPLlt50</td>
<td>0.903</td>
<td>0.854 - 0.956</td>
</tr>
<tr>
<td>PctFPL51to100</td>
<td>1.049</td>
<td>0.997 - 1.104</td>
</tr>
<tr>
<td>School12Plus</td>
<td>0.910</td>
<td>0.869 - 0.953</td>
</tr>
</tbody>
</table>

The odds ratio for OnlineEdMonths 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

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</thead>
<tbody>
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<td>OnlineEdMonths</td>
<td>1.631</td>
<td>1.591 1.672</td>
</tr>
<tr>
<td>NotAloneOnWIC</td>
<td>2.090</td>
<td>1.998 2.186</td>
</tr>
<tr>
<td>English</td>
<td>0.881</td>
<td>0.802 0.969</td>
</tr>
<tr>
<td>Spanish</td>
<td>3.129</td>
<td>2.818 3.474</td>
</tr>
<tr>
<td>PctFPLlt50</td>
<td>0.894</td>
<td>0.845 0.946</td>
</tr>
<tr>
<td>PctFPL51to100</td>
<td>1.053</td>
<td>1.001 1.109</td>
</tr>
<tr>
<td>School12Plus</td>
<td>0.909</td>
<td>0.868 0.953</td>
</tr>
<tr>
<td>TotalMonthMessages</td>
<td>0.863</td>
<td>0.816 0.912</td>
</tr>
<tr>
<td>TextMonthsReceived</td>
<td>1.597</td>
<td>1.525 1.672</td>
</tr>
</tbody>
</table>

Months participant sends a text back to WIC

was 1.650
Interactive Feedback

* Open website: http://respond.cc

* Session: 612092

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

To enter two words include “-” Remember-WIC
Distract them with a cute baby picture
Caseload History
Results of Online Ed and Texting

Distract them with a cute baby picture
63.1% more likely to re-cert for every month they take online education