Quantitative Survey
Methodology

- To further investigate qualitative findings (focus groups) with a quantifiable, representative sample
- To test a range of communications messages (based on qualitative findings) to determine which resonate best with target parents
- To use these results to inform and optimize communication messages for upcoming communications programs
- 500-interview telephone study; August 19 - 25, 2009
  - Respondents geographically dispersed
    - Northeast, North Central, South, West
  - Respondents had children 6 months through 18 years of age living in household
Summary of Learnings

- Many hypotheses from qualitative research were supported by quantitative findings
- Some surprises regarding important concerns and vaccine perceptions
- A cluster of key messages resonate with mothers who vaccinate both regularly and inconsistently
- H1N1 continues to impact the influenza “landscape”
Quantitative Survey Findings:

*Influenza Knowledge and Attitudes*
As discovered in qualitative research, mothers don’t think seasonal flu is as serious as H1N1 or other vaccine-preventable diseases. However, certainly viewed as more serious than the common cold.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Extremely</th>
<th>Somewhat</th>
<th>Not very</th>
<th>Not at all</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polio</td>
<td>77%</td>
<td>14%</td>
<td>4%</td>
<td>5%</td>
<td>1%</td>
</tr>
<tr>
<td>H1N1</td>
<td>39%</td>
<td>46%</td>
<td>11%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Measles</td>
<td>35%</td>
<td>50%</td>
<td>9%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Chickenpox</td>
<td>11%</td>
<td>51%</td>
<td>31%</td>
<td>8%</td>
<td>0</td>
</tr>
<tr>
<td>Seasonal flu</td>
<td>9%</td>
<td>54%</td>
<td>31%</td>
<td>6%</td>
<td>0</td>
</tr>
<tr>
<td>Common cold</td>
<td>0</td>
<td>20%</td>
<td>57%</td>
<td>22%</td>
<td>0</td>
</tr>
</tbody>
</table>
Seasonal Flu “Packs a Punch” on Family Functioning

- 82% of mothers said seasonal influenza in one of their children would have “some” or “substantial” impact on their family/household
  - Impact believed to be similar to stomach virus and strep throat
  - However, impact of H1N1 perceived to be greater

<table>
<thead>
<tr>
<th></th>
<th>Substantial</th>
<th>Some</th>
<th>Hardly any</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1N1</td>
<td>52</td>
<td>41</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Seasonal flu</td>
<td>15</td>
<td>67</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Stomach virus</td>
<td>14</td>
<td>60</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>Strep throat</td>
<td>13</td>
<td>61</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>Ear infection</td>
<td>5</td>
<td>42</td>
<td>34</td>
<td>19</td>
</tr>
<tr>
<td>Common cold</td>
<td>2</td>
<td>34</td>
<td>41</td>
<td>23</td>
</tr>
</tbody>
</table>
In contrast to qualitative findings, a large majority of participants (91%) cited “the whole family getting sick” as a significant concern associated with a child in the family contracting seasonal flu.
Similar to findings from qualitative research, mothers were mixed in their reactions to H1N1.

Respondents were nearly evenly split as to whether H1N1 had heightened their concern about the seriousness of seasonal flu:
- 48% more concerned now
- 50% said H1N1 had no effect on seasonal flu perception

Mothers who are now more concerned about seasonal flu (due to H1N1 publicity) are evenly split among three reasons why:
- Ease of transmission
- Elevated risk for children
- Risk of death in children
Despite the media frenzy over H1N1, nearly 40% of mothers believe seasonal influenza is at least as serious as H1N1
- But 41% believe H1N1 would be more serious
- 15% believe severity of influenza (both H1N1 and seasonal) would vary among their children - mainly due to underlying health conditions
Quantitative Survey Findings:

*Influenza Vaccine Knowledge and Attitudes*
Over 2/3 of mothers think the seasonal influenza vaccine is SAFE and IMPORTANT FOR KEEPING HEALTHY

- Safety perceptions somewhat higher than qualitative research indicated
- A somewhat lower percentage (57%) believe the vaccine is effective
- Moms’ perceptions of vaccine SAFETY and EFFICACY seem to go hand in hand

**Rating Seasonal Flu Vaccine**

- Safety of the vaccine: 23% Excellent, 47% Good, 70% Total
- Importance to keeping healthy: 29% Excellent, 38% Good, 67% Total
- Effectiveness: 16% Excellent, 41% Good, 57% Total
Multiple Reasons Cited for Not Vaccinating Children Annually

- 35% vaccinate all/some of their children for seasonal flu annually
- 40% never vaccinated their children for flu
- 25% vaccinate their children occasionally -- in some years but not in others
  - Mothers cite multiple reasons for not vaccinating their children annually
  - Confirms hypotheses re: importance of “magical thinking” & “free choice”
  - Vaccine safety concerns are down on list

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your child was healthy and didn’t need it</td>
<td>63%</td>
</tr>
<tr>
<td>Other ways to avoid influenza just as effective</td>
<td>57%</td>
</tr>
<tr>
<td>Pediatrician left it up to you</td>
<td>52%</td>
</tr>
<tr>
<td>You’re not sure the vaccine works</td>
<td>43%</td>
</tr>
<tr>
<td>The vaccine isn’t required for school</td>
<td>42%</td>
</tr>
<tr>
<td>Pediatrician doesn’t push the vaccine</td>
<td>41%</td>
</tr>
<tr>
<td>Your child never gets influenza</td>
<td>36%</td>
</tr>
<tr>
<td>Not serious enough to vaccinate against</td>
<td>34%</td>
</tr>
<tr>
<td>The vaccine can cause the flu</td>
<td>33%</td>
</tr>
<tr>
<td>You’re not sure the vaccine is safe</td>
<td>30%</td>
</tr>
<tr>
<td>Inconvenient to get to a place that gives it</td>
<td>14%</td>
</tr>
</tbody>
</table>
“Magical thinking” (seen in qualitative research) or an overall belief that the vaccine is not necessary account for the most common reasons mothers don’t vaccinate their children annually for influenza.

Other reasons cluster around “concerns about the vaccine” and “pediatrician didn’t recommend.”

**Most Important Reason All Children Have Not Been Vaccinated Annually for Seasonal Influenza**

- Your child was healthy and didn’t need it: 18%
- Other ways to avoid influenza just as effective: 14%
- You’re not sure the vaccine works: 11%
- Pediatrician doesn’t push the vaccine: 9%
- Pediatrician left it up to you: 8%
- You’re not sure the vaccine is safe: 7%
- Your child never gets influenza: 6%
- Inconvenient to get to a place that gives it: 6%
- Not serious enough to vaccinate against: 5%
- The vaccine can cause the flu: 5%
- The vaccine isn’t required for school: 2%
- Other: 5%
- Don’t know: 3%

Pediatrician didn’t recommend: 17%

Unnecessary: 45%

Concerns about the vaccine: 23%
Nearly 1/2 say they will seek seasonal and H1N1 vaccination for their children this fall; 1/4 will seek neither; 1 in 10 say the answer varies for their children
- Mothers of younger children more likely to seek both vaccines (51% for 6 mos. to 5 yrs; 47% for 6 - 11 years; 39% for 12 - 18 years)

Interest in H1N1 and seasonal flu vaccines appears to be running similar
- 55% indicate interest in vaccinating for H1N1; 53% for seasonal flu vaccination

Plan to Vaccinate Children this Fall if H1N1 and Seasonal Influenza Vaccines are Available

*Don't know* 4%
*Would vaccinate for both* 9%
*Would vaccinate for H1N1 only* 7%
*Would vaccinate against seasonal influenza only* 24%
*Would vaccinate against neither* 10%
*Answer would vary among your children* 46%
Quantitative Survey Findings
Messaging, Analysis & Insights
Top Messages Resonate among All Mothers Despite Vaccination Habits

Message Rank (highest to lowest influence)

<table>
<thead>
<tr>
<th>Message</th>
<th>Mothers who don’t regularly have their children vaccinated n = 350</th>
<th>Mothers who regularly have their children vaccinated n = 150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy kids die from the flu.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Vaccinate early to protect against two deadly diseases; seasonal/H1N1.</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>A pediatric death from flu is as tragic as from any other cause.</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Now you know- flu can kill. Vaccinate to protect your kids.</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Know your flu facts. Do all you can to protect your children.</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Flu is hard on body and disruptive to families; vaccination is easy.</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>The choice is yours.</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Vaccination is an opportunity to protect your kids; make a wise choice.</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Children are great spreaders of flu; protect yours with vaccination.</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Seasonal vaccine is time tested - 100 million Americans get it annually.</td>
<td>10</td>
<td>3</td>
</tr>
</tbody>
</table>
MOTHERS...

- Believe influenza is not as serious as other VPDs, but is on par with other common contagious ailments; more serious than common cold
- Are concerned with ability of flu to cause discomfort for child(ren)
- Frequently exhibit “magical thinking” that leads them to deem influenza vaccination “unnecessary”
  - “Healthy kids don’t need the vaccine.”
  - “There are other ways to avoid the flu.”
- Often vaccinate randomly — only in some years
- Enjoy exercising sense of control doctors have given them to decide whether to vaccinate for influenza, a freedom they lack with required vaccines
- Have been influenced by H1N1 publicity
New Learnings and Insights Were Acquired

MOTHERS...

- Seem highly concerned with influenza’s level of contagion/potential to spread rapidly through the family
- Seem more confident in seasonal flu vaccine safety/efficacy than indicated by qualitative findings
  - Are more likely to question seasonal flu vaccine efficacy than safety though there’s room for improvement on both fronts
  - Do not seem overly concerned that vaccine causes influenza
- Whose “flu consciousness” has been raised by H1N1 are fearing not only the “flu/death” link -- but enhanced contagion and vulnerability of children as well
- Often perceive H1N1 as more severe than seasonal flu, though their intention to vaccinate for H1N1 is not necessarily greater
- Cite a range of reasons for not vaccinating their children for seasonal flu
- Whose children are younger, and who live in certain areas, may be more likely to vaccinate for both seasonal and H1N1 influenza
- Seem to have a “family vaccination plan” -- vaccinate either all -- or none -- of their children vs. different regimens for different kids