

Centralized Immunization Recall in a Large Urban Area

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Background

- Immunization reminder/recall has been shown to improve vaccination coverage rates.
- It is unclear the extent to which immunization reminder/recall may be successful using a centralized approach, targeting all children (i.e., those immunized in public AND private settings) from a local health department.
- Little is known about whether the content and format of recall notices influences the success of recall efforts.

Objective

- To assess the effectiveness of immunization recall for overdue vaccinations in a large urban area with historically low vaccination rates that:
- 1) uses a centralized approach based on high-functioning statewide immunization information system; and
- 2) incorporates the format and content preferences of parents.

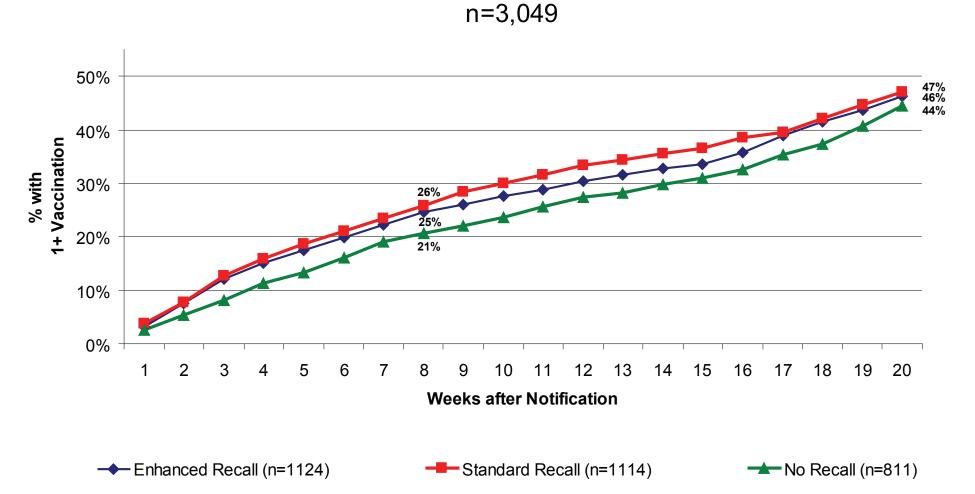
Methods

- Parent focus groups were conducted in Detroit and surrounding Wayne County, Michigan, to identify preferences regarding recall notice content and format. Responses were synthesized into an enhanced recall notice.
- 19-month-old children were randomized into three groups (standard recall, enhanced recall, no recall) in four cycles (June 2008, September 2008, January 2009, June 2009).
- Recall notifications were generated using the Michigan Care Improvement Registry (MCIR). Notices for eligible children were delivered by USPS first class mail.
- □ Children determined to be deceased were excluded as well as those with invalid, incomplete, or a US Postal Service (USPS) change of address outside of Michigan.
- Outcomes were assessed following notification using MCIR and Medicaid claims including:
- time until 1st vaccination dose: and
- time until up to date status; children overdue for only the Hib booster dose were considered up to date, given a vaccine shortage and revised recommendations

Results

- A total of 6,265 19-month children were identified; MCIR notification could not be generated for 1,180 (19%); 29 (0.5%) children were deceased and an additional 714 (11%) were determined to have an invalid or incomplete address or a USPS change of address outside of Michigan.
- Among the 4,342 eligible children, 30% were determined to be up-to-date at 19 months of age.
- The remaining 3,049 children were eligible for mailed recall notices; 1,114 (37%) were mailed standard recall notices, 1,124 (37%) were mailed enhanced recall notices, and 811 (27%) had no recall.
- The proportion receiving ≥1 vaccination dose (Figure 1) at eight weeks following notification, was marginally higher among both recall groups (26%, 25%) versus those not notified (21%).
- At age 2 years, 47% of the standard recall group had received at least 1 vaccination, compared to 46% among the enhanced notification group and 44% among those not notified.

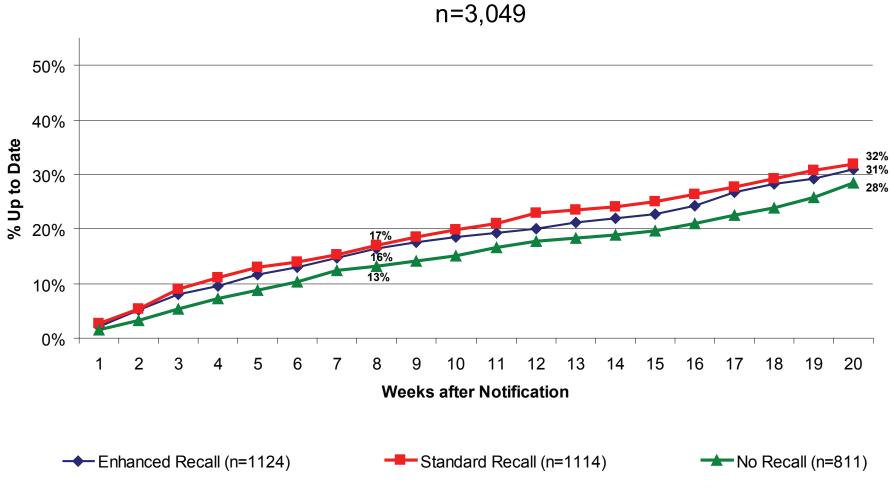
Figure 1: Vaccine Administration by Recall Notification



Results (cont.)

- The proportion up to date (Figure 2) at eight weeks following notification was somewhat higher among the recall groups (17%, 16%) compared to the no recall group (13%).
- At age 2 years, 32% of the standard recall group were up to date, compared to 31% among the enhanced notification group and 28% among the no recall group.

Figure 2: Up to Date Status by Recall Notification



Conclusion

- □ Vaccination delays are common among children in large urban centers.
- Recall notifications were associated with a modest increase in vaccination among 19-month children in a large urban center.
- However, incorporating parent preferences into the format of the recall notice did not influence recall success.