

# 69958GPmeeting\_01

## Poster Presentation

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# THE EFFECTS OF THE F.Y. 2012 FREE VACCINATION POLICY CHANGE FOR EAST TENNESSEE VACCINATION UPTAKE

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## Background

- The reduction in stimulus funds available for the purchase of vaccines led the State of Tennessee Department of Health to promulgate new rules for vaccination that became effective October 1, 2011.
- The new rules limited the provision of free vaccines required by the State of Tennessee for entry into school, pre-school, or daycare by local health departments (LHDs) based on age and Vaccines for Children (VFC) eligibility.
- Variations in vaccination funding have impacted vaccination rates in the past.<sup>1</sup>
- The purpose of study is to determine the effects of these new rules on vaccinations programs at LHDs in East Tennessee.

Table 1: Summary of the vaccination rules effective October 1, 2011

Number of Vaccines with Significant Effects		
Age Group	KCHD	ETR
Younger	8 vaccines	4 vaccines
Older	6 vaccines	1 vaccine

## Data Collection

- Using data in the Patient Tracking and Billing Management Information System (PTBMIS) at the Knox County Health Department (KCHD) and the East Tennessee Region (ETR) of the Tennessee Department of Health, monthly childhood immunization uptake in age groups 0-5 and 6-18 was measured from one year before to one year after the change.

## Methods

- Mann-Whitney U tests were used as the test statistic for each age group to compare the monthly number of vaccinations during the 21 months prior to the policy change to the monthly number during the year following the policy change.

## Results

- Our analysis revealed a generally downward trend already occurring before the implementation of the policy change of FY 2012. Statistically significant findings are found for individual vaccines in the two age groups as in the summary of p-values (p<0.05). However, we cannot state that the policy was responsible for all of the significance found.

## Conclusions

- The policy change, effective October 1, 2011, limited the children who could get State-required vaccinations for free at health departments in Tennessee to VFC-eligible children. The expected result is a significant post-policy change in the younger age group. Our analysis indicates that a downward trend in vaccination uptake was already in place prior to the policy change. While we did find some statistically significant effects of the policy on individual vaccination uptake, we cannot completely attribute these findings to the policy change. Further study of this downward trend is warranted.

Graph 1: Variation of Mean Vaccines Before and After Policy Change

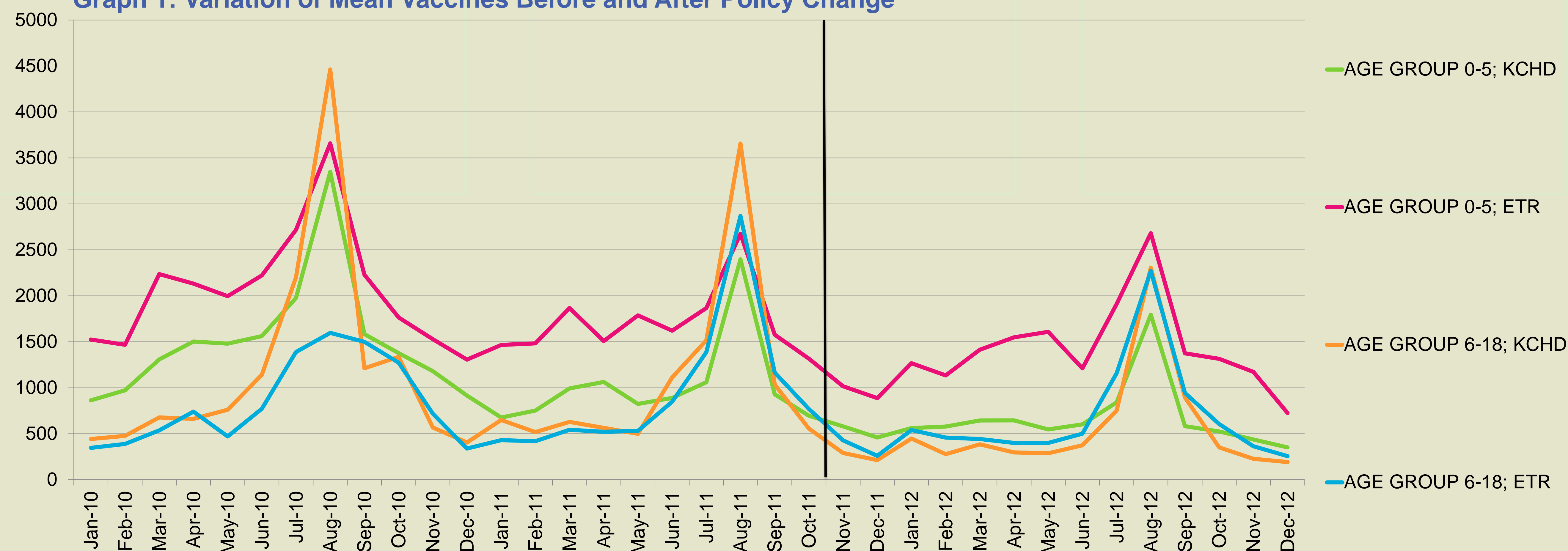


Table 2: Summary of p-values

Summary of p-values	KCHD, Age	ETR, Age	KCHD, Age	ETR, Age
	0-5	0-5	6-18	6-18
VARICELLA	0.028	0.544	0.119	0.563
HEPATITIS A+B	0.015	0.014	0.004	0.043
HEPATITIS B	0.002	0.006	0.016	0.816
POLIO	0.015	0.298	0.010	0.488
MENINGOCOCCUS	n/a*	n/a	0.024	0.106
MMR	0.028	0.507	0.043	0.840
PNEUMOCOCCUS	0.000	0.000	n/a	n/a
DTAP+POLIO+HEPB	0.001	0.057	0.030	0.273
HIB+HEPB	0.000	0.001	n/a	n/a
TOTAL	0.001	0.043	0.013	0.248

\*n/a – insufficient data

Table 3: Vaccination rules under new policy

Age Group/ VFC Eligibility	Policy
Birth through 18 years; VFC eligible	<ul style="list-style-type: none"> <li>Any VFC eligible child can get all of the vaccines recommended for them at any health department.</li> <li>The administration fee will be adjusted based on ability to pay.</li> </ul>
Birth through age 6 years; Not VFC eligible	<ul style="list-style-type: none"> <li>All recommended vaccines should be provided by a healthcare provider who can bill their insurance.</li> <li>However, if they do come to a health department, they will be given any vaccines they need.</li> </ul>
Age 7 through 18 years; Not VFC eligible	<ul style="list-style-type: none"> <li>School-required vaccines should be provided by a healthcare provider who can bill their insurance.</li> <li>Health departments will give these children any vaccines they need to meet Tennessee school entry requirements and get an immunization certificate for school.</li> <li>Post-exposure vaccines will be given to prevent illness</li> </ul>
19 years and older; Not VFC eligible; Vaccines provided under limited circumstances	<ul style="list-style-type: none"> <li>MMR and Varicella: Uninsured adults who need them to meet state college entry requirements.</li> <li>Locally purchased vaccine may be available to those with insurance who are unable to locate vaccine elsewhere, but there is a charge for both the vaccine and administration.</li> <li>Hib: One dose may be given to a patient without a spleen or following a bone marrow transplant, if referred by their physician (and unable to obtain it elsewhere).</li> <li>TDaP: Uninsured adults who are close contacts (household or caregiver) of a pregnant woman or an infant under 1 year old or who need tetanus vaccine after an injury.</li> <li>Other: Uninsured adults who are treated in health department primary care clinics and have certain medical conditions may be given certain vaccines needed for their medical conditions</li> </ul>

### Vaccines for Children (VFC) Eligibility

- Age < 19 years AND
- Uninsured or
  - Covered by TennCare (even if they also have coverage by another insurance), or
  - American Indian or Alaskan Native (“Native American”) ethnicity, or
  - “Underinsured” (the child has private insurance, but benefits do not include vaccines).<sup>2</sup>

### Sources:

- Johnson K, Sardell A, Richards B. Federal Immunization Policy and Funding: A History of Responding to Crises. *American Journal of Preventive Medicine*. 2000;19(3 Supplement):99-112.
- State of Tennessee. Free, Federal Vaccines in Tennessee Health Departments: Who is Eligible? In: Department of Health Immunization Program, ed2011.
- Cover Tennessee. CoverKids. n/d; [http://www.covertennessee.gov/web/cover\\_kids.html](http://www.covertennessee.gov/web/cover_kids.html). Accessed August 14, 2013.