

RECOMMENDATIONS FOR
IMPROVING COMPLIANCE WITH
THE DTAP # 4 IMMUNIZATION

Relevant Factors Affecting
DTaP # 4
Timely Administration

Personal and Family Factors

Personal and Family Factors

- A recipient's educational level
- Life experiences and beliefs,
- Attitudes and values,
- Decisions based on vaccine risk according to
 - how they perceive the risk of disease
 - the ability to control those risks
 - the preference for one type of risk over another.

Personal and Family Factors

- The principal motivation for getting vaccinated was fear of the disease
- Negative effects mentioned by anti-vaccination groups, such as the impact on the immune system, were uncommon
- Trust is a key component of information exchange at every level.

Personal and Family Factors

- The most critical issue is providing mechanisms by which families come in contact with the health care system
- Strongest compliance: The Medical Home
- Best safety net: Public Health Clinics
- Coordination between the two is critical

Personal and Family Factors

- Access to immunization is influenced by the nature of the health care facility and service available
- Publicly funded healthcare facilities with large numbers of walk-in acute care cases may be more likely to overlook immunization needs than Pediatricians or Family Practice physicians with whom the family or patient has an established relationship.

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Health Education

Health Education

- The effectiveness of information provided to the public depends upon
 - The quantity of information provided
 - The clarity of the information
 - The source of the information
- Presented in a form that is readily understood by the lay public

Health Education

- Vaccine information must be relevant and accurate
 - Potential risks with and without vaccine
 - Effectiveness
 - Any contraindications
 - Any associated risks
 - The procedures required for successful completion

Health Education

- Information should come from publicly recognized authoritative sources
 - Community leaders
 - Popular figures (e.g. football stars)
 - Religious leaders
 - Health professionals

Health Education

- Family and friends are important sources of health care information
 - Inform communities
 - Educate families

Health Education

Focused on parents and families
who may not be motivated

- Low educational level of either parent
- Large family size
- Low SES
- Minority
- Young parental age
- Single parent status
- Lack of prenatal care
- Late start with immunization

Health Education

- Mass media campaigns have been shown to be highly effective
- Using such techniques, in excess of 99% of target group has been reached during the Polio Eradication Initiative of the 1990s.

Health Education

- Educational programs in schools may have limited effectiveness
- Require a high community participation in the education effort

Health Education

- Public Service Announcements
 - Radio,
 - TV, and
 - Print media

Health Education

- Concise, easily understood public service announcements using
 - National public figures that have reputations for sincerity and credibility
 - Well-known and authoritative local representatives of the target population and
 - Typical or representative members of the target population with whom the members of the target population can identify.

Relevant Factors Affecting
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Physician Education

Physician Education

- The most common errors that occurred in physician offices were missed opportunities for
 - **Invalid administration of the fourth DTP/DTaP dose**
 - **Administration of the fourth dose <6 months after the third** caused the vast majority of invalid DTP/DTaP immunizations
 - **Late third DTP/DTaP immunization** was associated with invalid fourth DTP/DTaP immunization
 - The fourth Hib immunization
 - Superfluous administration of polio vaccine

Physician Education

- Causes that contribute to immunization errors
 - Poor patient record tracking and availability
 - Insufficient provider knowledge regarding
 - Vaccine contraindications
 - Immunization status
 - Having >1 provider administering immunizations
 - The complexity of current immunization guidelines

Relevant Factors Affecting
DTaP # 4
Timely Administration

The High Cost Of Immunization
To The Consumer Is Likely To Be
A Major Barrier

The High Cost Of Immunization To The Consumer Is Likely To Be A Major Barrier

- Ways of lowering the cost include
 - The provision of private or public health insurance coverage
 - Government or publicly sponsored programs
 - Universal Vaccine Programs

The High Cost Of Immunization To The Consumer Is Likely To Be A Major Barrier

- Ways of lowering the cost include
 - Collaborative efforts by employers and government
 - Public foundations and government
 - International/national/regional collaboration
 - Pharmaceutical / government collaborations

The High Cost Of Immunization To The Consumer Is Likely To Be A Major Barrier

- The benefits that accrue to employers from such collaborative efforts include
 - Reduced manpower losses due to sick leave
 - Public relations benefits
 - Free advertising
 - Institutional good will
 - Tax benefits

The High Cost Of Immunization To The Consumer Is Likely To Be A Major Barrier

- Benefits to government include
 - Shared costs
 - Utilization of commercial infrastructures for implementation

Summary of Recommendations

Summary of Recommendations

- A Three-Pronged approach involving the
 - Public Health Department
 - Medical Societies in the State of Texas
 - Pharmaceutical Companies providing the immunizations
 - Commercial insurance companies
 - CHIPS program
 - Medicaid program

Summary of Recommendations

- Prong I
 - An intensive advertising program targeting the weakest links in the population

Summary of Recommendations

■ Prong II

■ Education

■ Physicians caring for children

- Mandatory Immunization CME similar to the state requirement for Ethics education
- Requirement of proficiency for renewal of licensure
- Inclusion as a voluntary presentation at hospital staff meeting at least once a year
- Inclusion in state society meetings

Summary of Recommendations

- Prong II

- Education

- Public Health and School Nurses

- Mandatory CEUs similar to that required for physicians
- Requirement of proficiency for renewal of licensure

Summary of Recommendations

- Prong II

- Education

- Provision of an optimized, simplified Public Health Department approved

Immunization Schedule

Summary of Recommendations

Immunization Schedule

Birth	Hep B # 1, State Screening Test
3-7 Days	Well Child Visit Jaundice evaluation
2 Weeks	State Screening Test
1 Month	Well Child Visit
2 Months	Well Child Visit DTaP # 1, IPV # 1, Hib # 1, PCV-7 # 1, HEP B #2
4 Months	Well Child Visit DTaP # 2, IPV # 2, Hib # 2, PCV-7 # 2
6 Months	Well Child Visit DTaP # 3, Hib # 3, PCV-7 # 3, HEP B #3

Summary of Recommendations

Immunization Schedule

9 Months *Well Child Visit*
Anemia Test (CBC)

12 Months *Well Child Visit*
IPV #3, MMR&V #1, HEP A #1, TB test

15 Months *Well Child Visit*
DTaP # 4, Hib # 4, PCV-7 # 4, Anemia Test (CBC)

18 Months *Well Child Visit*
HEP A #2

2 Years *Well Child Visit*

3 Years *Well Child Visit*

Blood Pressure and on all subsequent visits

Summary of Recommendations

Immunization Schedule

4 Years

Well Child Visit

DTaP # 4, Hib # 4, MMR&V #2,
Vision and Hearing Screening

5 Years

Well Child Visit

Anemia Test (CBC), Urine Test

6-20 Years

Well Child Visit every year

10-11 Years **Tdap Booster, Menactra**

15 Years **HPV vaccine, TB Test**

Abbreviations: **DTaP**-Diphtheria, Tetanus, Pertussis; **IPV**-Polio; **Hib**-Hemophilus Influenza type b; **PCV7**-Pneumococcus; **HEP B**-Hepatitis B; **HEP A**-Hepatitis A; **MMR&V**-Measles, Mumps, Rubella & Varicella; **TB**-Tuberculosis; **Tdap**-Adolescent Tetanus, Diphtheria, Pertussis; **Menactra**-Meningococcal Meningitis. **HPV**= Human papilloma virus

Summary of Recommendations

- Managed Care Health Plan Data Show Use of a Combination Vaccine Increased On-Time Immunization Rates in Infants
- Data from a New Analysis Presented at the 18th Academy of Managed Care Pharmacy Meeting
- Friday April 7, 2006
- Diphtheria and Tetanus Toxoids and Acellular Pertussis Adsorbed, Hepatitis B and Inactivated Poliovirus Vaccine Combined

Summary of Recommendations

Cumulative days undervaccinated with antigens contained in PEDIARIX¹



Summary of Recommendations

■ Prong III

- Government/Private Corporation/Physician/Pharmaceutical Company/Insurance Company consortium creating a Universal Immunization Program for Texas

Summary of Recommendations

■ Prong III

- CMS approved a proposal from West Virginia that allows the state to introduce wellness incentives in its Medicaid program.
- *Reprinted from the May 15, 2006, issue of [MANAGED CARE WEEK](#).*

Summary of Recommendations

■ Prong III

■ **Wellness incentives in its Medicaid program.**

- Healthy Rewards Accounts for individual Medicaid beneficiaries.
- Enrollees will be asked to sign a "personal responsibility contract" that will detail the steps a beneficiary will take to improve his or her health
- Those who follow the contract's guidelines will receive credits in their account
 - used for medical and pharmacy co-payments,
- while those who do not sign the contract or meet its goals will have benefits reduced

Summary of Recommendations

- Prong I
 - Intensive advertising
- Prong II
 - Education
- Prong III
 - Consortium creating a Universal Immunization Program for Texas