Riley and Associates
Protect ND Kids Immunization Project
Vaccine Management and Billing / Claims Management
Final Report
October 7, 2010

1. Introduction

This report will focus on one of two parts of a project that was commissioned by the North Dakota Department of Health at the direction of the North Dakota Legislature. The two parts included:

i. To measure and assess the interest and ability of private pharmacists to provide childhood immunizations in order to assist the Health and Human Services Committee of the North Dakota Legislature determine if enabling legislation should be considered;
ii. To assess the current methods used by Local Public Health Units in providing childhood immunizations, focusing specifically on the issues related to procuring/ managing vaccines and data capture, billing and accounts receivable (claims) management, in order for these Units to improve their financial and administrative performance.

On June 16, 2010, a report of findings related to private pharmacists providing childhood immunizations (number i above) was submitted to the Health and Human Services Subcommittee of the Legislature. A copy of this report is available at http://www.legis.nd.gov/assembly/61-2009/docs/pdf/hh061610appendixt.pdf as an appendix to the Committee meeting of June 16, 2010.

This report will focus on the findings and results of the evaluation of the administrative processes (number ii above) used by local public health units in providing childhood immunizations.

2. Executive Summary

Once again, this report will focus on the findings and results of the evaluation of the administrative processes (number ii above) used by the local public health units in providing childhood immunizations.

Four Local Public Health Units (LPHUs) were recruited to participate in this project to assess the administrative processes and issues associated with providing childhood immunizations. Site visits were conducted with each

APPENDIX L

of the four pilot sites along with visits and/or teleconferences with three other LPHUs who provided additional comments. Results of leadership and staff interviews as well as data collected were used to define the issues, identify causes, explore alternative solutions and assess impact.

At this point, volume and financial information are provided from two of the four sites, (First District Health Unit of Minot, ND and Walsh County Health District of Grafton, ND) representing both large and smaller facilities (data received from the other two sites is not provided in this report because the analysis has not been completed due to difficulties in securing information relevant to these sites). We believe that the information obtained during the site visits is representative of the issues and concerns of all LPHUs participating in the PROtect ND Kids Program.

Site visits were also conducted with Blue Cross Blue Shield of North Dakota (BCBSND) and the University of North Dakota Medical, School of Medicine and Health Sciences (UND). During these visits, discussion focused on processes and systems used by the BCBSND and UND to bill and collect from private pay, commercial payers and member liable portions of BCBSND patients who received childhood immunizations through the LPHUs.

Key Findings and Recommendations

Finding #1

Billing and Accounts Receivable Management for the LPHUs participating in the PROtect ND Kids Program has been provided by the University of North Dakota School of Medicine and Health Sciences. This service began in 2008 and has been an increasing challenge for both the LPHUs as well as UND. The LPHUs feel they do not receive good value, for the cost incurred, to justify continuing to have UND provide this service. Issues involving communication, timeliness in payment, difficulties reconciling claims, confusion among patient/clients and cost have led many LPHUs to desire a different approach to client billing. UND has its concerns about the effectiveness of the relationship and have offered to fully cooperate with any course the LPHUs choose to take. UND's leadership recognizes the PROtect ND Kids Program and the LPHUs have evolved to a level where it may be time to change. One important consideration that UND has stated is that they are not in a position to continue providing this service for a subset of LPHUs should some of them decide to take a different course of action. The economics for UND would not work unless they are processing claims for all LPHUs.

Recommendation #1a

Given the wide range of capabilities and interests of each LPHU in billing and accounts receivable management, we recommend that each LPHU decide how it will bill and collect for services provided under the PROtect ND Kids Program.

Recommendation #1b

The leadership of each pilot LPHU should continue to collaborate with other LPHU leaders, utilizing the quality improvement techniques they are learning as part of this project, to determine how they will each assume responsibility for billing and collecting for services provided under the PROtect ND Kids Program.

Finding #2

Vaccine procurement and management is a time consuming and inefficient administrative issue for the mid size to larger LPHUs who are providing large volumes of childhood immunizations. This challenge is due to federal rules that require all vaccines used for publicly funded immunizations (VFC) must be kept separate from vaccines used to immunize private pay or commercially insured children.

There is no provision under the federal rules that would allow LPHUs to co mingle vaccines, use as demand dictates, and replenish inventories by acquiring vaccines from the appropriate source. The costs incurred by LPHUs associated with procuring and managing separate inventories ranges from $2,500 to $24,000 per year (depending on the size of the LPHU), not including the cost of vaccines that expire before they are used. This variance is primarily driven by the size of the LPHU and the degree of management that goes into ordering and managing inventories used for outreach programs, such as school vaccinations.

A second consideration in the issue involving vaccine procurement and management is the significant cost difference between procuring vaccines off the federal contract and the cost incurred acquiring the same vaccines through private contracts. This issue became a factor during the course of this project when it was discovered that several states are using Universal Vaccine for their childhood immunizations. Under a Universal Vaccine Supply Policy, the state supplies all vaccines to all children, including those with insurance. The VFC program continues to supply vaccines for children who are either Medicaid eligible, American Indian, Uninsured, or Underinsured. Either state funds, other

federal funds (317), or private funds (insurance companies) are used to purchase vaccines off of the federal contract for insured children. With this in mind, a financial analysis of the savings LPHUs could realize by acquiring all vaccines from the federal contracts, coupled with the reduced administrative burden associated with maintaining separate inventories and the loss from expired vaccines, was conducted for two of the four pilot sites (First District and Walsh County). The expected savings ranged between $24,000 and $180,000 per year for the two facilities.

Recommendation #2

Based on the savings to be realized in terms of cost of vaccine and procurement/management of vaccines for LPHUs, we believe a Universal Vaccine Supply Policy is best for LPHUs and should be pursued if further investigation determines that Universal yields a similar impact on private providers and payers.

3. Project Background, Goals/Objectives and Approach

a. Background

In February 2010, William Riley, Ph.D. and Associates was engaged by the North Dakota Department of Health (NDDoH) to conduct an evaluation of select Local Public Health Units' (LPHUs) current business processes and costs to administer the PROtect ND Kids Immunization Program.

b. Goals

Three broad goals were established for this project including:

i. Work with the LPHU's to develop a more efficient business process for the PROtect ND Kids Program that encompasses administering the vaccine as well as the billing and collection system.

ii. Work with the LPHU's to develop a business plan that considers costs and revenues to assure that every child in North Dakota can receive vaccine from any designated provider at all times.

iii. Use this project as an opportunity for the North Dakota Department of Health and local public health units to work together through a quality improvement collaborative whereby leaders from the LPHU pilot sites and Department of Health enhance their skills for collaborative problem solving and decision making.

c. Objectives

Three specific objectives were established for this project including:

i. Analysis of total direct costs for childhood immunizations including procuring and managing vaccines and the business processes used to bill and collect for services. This includes an evaluation of the effectiveness and cost of the current billing system using the North Dakota Blue Cross Blue Shield and University of North Dakota, School of Medicine and Health Sciences as resources in providing this service.

ii. Following the study of the existing vaccine management and billing process and the costs, conduct a collaborative identified by the State Health Department to develop a new service and business process for immunization in the local health units and test the changes using rapid cycle PDCA (Plan, Do, Check & Act). The rapid cycle PDCA will be used in at least two local units that participate in the collaborative.

iii. Based on completion of the first two objectives, establish a billing procedure manual and proposed process that can be made available to all local public health units who provide childhood immunizations.

d. Approach

The evaluation began with visits to the four pilot sites (ranging from small rural to large urban) that were selected by the Immunization Study Steering Committee. This committee included:

- Arvy Smith, Deputy State Health Officer, NDDoH, Bismarck
- Laura Olson, PROtect ND Kids Business Manager, NDDoH, Bismarck
- Molly Sander, Immunization Program Manager, NDDoH, Bismarck
- Kelly Nagel, Public Health Liaison, NDDoH, Bismarck
- Lisa Clute, Executive Officer, First District Health Unit, Minot

The pilot sites were selected based on willingness to participate but also because they represent a cross section of size, complexity, volume of service and location. The pilots included:

- Central Valley Health District, Jamestown
- City-County Health District, Valley City
- First District Health Unit, Minot
- Walsh County Health District, Grafton

Site visits to the four pilot sites were conducted to understand and evaluate each site's current processes related to inventory management, charge capture, billing and claims management. Data was gathered utilizing a list of questions that were developed prior to the site visits. (Please see Attachment G)

The following business processes were included in the evaluation:

- Vaccine Procurement and Inventory Management
- Client/Patient Registration and Charge Capture Process
- Billing and Claims Management

At each LPHU, the clinical and administrative personnel who work with childhood immunizations were included in the interviews. Each visit required approximately four hours which included group interviews (following the questionnaire guide) along with separate breakout meetings to discuss and better understand the process and issues associated with providing and managing childhood immunizations under the PROtect ND Kids Program.

Site visits were also conducted with Blue Cross Blue Shield of North Dakota (BCBSND), the University of North Dakota, School of Medicine and Health Sciences (UND) and the North Dakota Department of Health (NDDOH) to better understand their roles and responsibilities in the administration of the program and to gain further perspective of the issues involved.

Due to a high level of interest and willingness to share, a meeting and teleconference was held with Bismarck Burleigh Public Health and Grand Forks Public Health Department to gain further perspective from sites not participating in the pilot study, but who participate in the PROtect ND Kids Program. In addition, a conference call was held with Traill District Health Unit in Hillsboro to gain a different perspective from an LPHU who is not participating in the PROtect ND Kids Program.

In addition to the information gathered from the site visit interviews, various reports from the Department of Health, Blue Cross/Blue Shield of North Dakota, UND and the LPHUs were reviewed. Finally, in order to analyze comparative data, a universal report was developed to collect cost information associated with providing childhood immunizations related specifically to vaccine procurement and inventory management and billing/claims management (please see Attachments B & C).

Findings from the work with the four pilot sites were shared with the Immunization Study Steering Committee and used as part of a Quality Improvement Collaborative session that was held on September 13, 2010 in Bismarck, ND. The purpose of the Collaborative was to develop an aim statement to guide the future direction for the LPHUs providing childhood immunizations. The meeting also resulted in a set of recommendations to the other LPHUs who provide childhood immunizations specifically related to vaccine procurement / management and billing / accounts receivable management. The meeting was led by William Riley, Ph.D. and included the following participants:

- Terry Dwelle, MD, State Health Officer
- Arvy Smith, Deputy State Health Officer
- Laura Olson, PROtect ND Kids Business Manager
- Molly Sander, Immunization Program Manager
- Kelly Nagel, Public Health Liaison
- Lisa Clute, Executive Officer, First District Health Unit, Minot – Pilot Site
- Robin Iszler, Administrator, Central Valley Health District, Jamestown – Pilot Site
- Theresa Will, Director, City-County Health District, Valley City – Pilot Site
- Wanda Kratochvil, Administrator, Walsh County Health District, Grafton - Pilot Site

4. Major Findings

a. Childhood Immunizations

Volume of Immunizations –Statewide (Please see Attachment A)

As of June 2010, the state of North Dakota has approximately 155,850 children under the age of 19, which is the primary group targeted for childhood immunizations. Approximately 33% of this group, or 52,000 children, are eligible to be immunized through various public funding sources including: Vaccines for Children (VFC). The remaining 67% of the children, approximately 103,900 are covered by commercial insurance or private pay.

Children are categorized into four separate age cohorts

	Number of doses of various vaccines recommended for each age cohort
< 1 year	14
1-2 years	8
3-6 years	6
7-18 years	17

According to information obtained from NDIIS, in 2009, the distribution of doses provided was as follows:

Publicly funded doses (Medicaid, Indian Health, VFC)	105,216	31.7%
Insured doses (BCBSND, other commercial or private pay)	226,797	68.3%
Total Doses	332,013	
Number of doses provided by LPHUs	43,161	13.0%
Total doses provided by private providers	288,852	87.0%

Pilot Sites - Doses

First District Health Unit- Minot – 2009 Doses (Please see Attachment B)

Publicly funded doses (Medicaid, Indian Health, VFC)	1,415	30.3%
Insured doses (BCBSND, other commercial or private pay)	3,242	69.7%
Total Immunizations	4,657	

Walsh County Health District – Grafton – 2009 Doses (Please see Attachment C)

Publicly funded doses (Medicaid, Indian Health, VFC)	280	26.1%
Insured doses (BCBSND, other commercial or private pay)	790	73.9%
Total Immunizations	1,070	

b. Challenges

i. Vaccine Procurement and Management

Vaccine Procurement and Management is a significant concern for the LPHUs. Under the current PROtect ND Kids program, LPHUs must order and manage separate inventories of vaccines so that those provided to children who are insured or private pay receive vaccines purchased through private purchasing contracts, and those who are receiving immunizations through public funding (VFC, Medicaid, etc) receive vaccines acquired through the federal government. Federal rules do not allow co-mingling of vaccines, which would be more efficient and result in less waste when supplies reach their expiration date. This federal requirement adds to the costs associated with ordering from multiple contracts and managing two sets of inventories. In addition, more administrative time is required planning and anticipating volumes of insured versus publicly funded clients to ensure that the right mix of private and public vaccines are on hand to meet demand. While the degree of concern varied, each of the pilot sites noted the challenge and difficulty of maintaining two sets of inventories of basically the same vaccine in order to meet federal requirements.

An analysis of the costs associated with procuring and managing vaccine inventories also varied among the LPHUs. First District documented its personnel costs at approximately $24,000 per year to perform these functions (Please see Attachment B). Walsh County, on the other hand, estimated its personnel costs at approximately $2,870 per year (Please see Attachment C). This large variance is attributed to volume differences as well as the amount of time and resources that are required to plan certain outreach programs. As an example, when school immunizations are going to be provided, the LPHU must reach out to families, in advance, to determine if the child will be covered by private insurance or publicly funded vaccination and, on receipt of that information, order and manage the vaccines from the appropriate source. If providing school vaccinations is a major program provided by an LPHU, it is reasonable to expect that a significant resource will be required to properly procure and manage vaccine inventories.

ii. Billing and Accounts Receivable (Claims) Management

At the time the PROtect ND Kids program began requiring providers to bill for services (private pay, commercial insured, Medicaid, etc.), billing and claims management was an issue for many of the LPHUs who, in some cases, were not equipped to take on this function. This was less of an issue for private providers (physician offices, clinics and hospitals) since this is a normal part of their operations.

The University of North Dakota, School of Medicine and Health Sciences, offered to assist the LPHUs by offering its billing and collection service through its business office. After exploring various options, the LPHUs engaged UND to provide this service. As of today, UND bills and collects for all commercially insured, private pay and the member liable portion of Blue Cross Blue Shield North Dakota clients.

UND receives its billing information through a download from BCBSND which sweeps the North Dakota Immunization Information System weekly for all claims. BCBSND pays those claims for which it is responsible and sends the remaining claims (or portions thereof) to UND for processing. UND withholds $2.00 of each administration fee billed by the LPHUs, for both children and adult patients (including the administration fee on the claims BCBS processes) to cover UND billing expense and uncollectible accounts. In 2009, UND was paid $69,052 for processing 34,526 claims although a significant portion of the claims (actual number not available) were first dollar claims paid by BCBSND which means there was no work performed on the claim by UND.

Another metric to consider is the total dollars billed and collected by UND as compared to the $2 per claim administrative fee paid by the LPHUs. In 2009, UND billed $208,156 in member liable, private pay and other commercial payers. It collected and paid LPHUs $140,103 and retained $69,052, or approximately 33% of revenue received, to cover the cost of the billing/collection service. Please note that the total of the amount paid to LPHUs and the amount UND charged for billing and collections exceeds the amount UND billed to payors. This is likely due to carryovers from one year to the next and the lag time between billing and collections. It is also noted that the direct costs of $2.00 per administration fee billed does not include the work done by LPHU staff to enter data and reconcile accounts as claims are paid by UND.

The percentage of UND's billing cost as compared to total charges varies significantly among the LPHUs. As an example, according to data obtained from UND, in 2009, First District paid $11,614 to process 5,807 claims which produced $33,120 in gross charges (Please see Attachment D). That results in a 35% cost of billing per claim. Please note that data from First District reported fewer claims processed by UND, which has not been reconciled.

Walsh County in Grafton had a more significant cost of billing, (approximating 55% of gross charges) in that it paid UND $1,228 for billing and collections, on 614 claims, on charges of $2,219 during the same period. (Please see Attachment E). The difference between the two LPHUs experience in UND cost per administration fee can be explained by the fact that First District had a larger percentage of clients that were either commercial or BCBSND member liable, which increased their average charge by $2.08 per claim.

As mentioned above, UND stepped in to help the LPHUs by offering a service that is outside of its core business. Not only did it provide the billing and collections, it also paid LPHUs in advance of collections, which improved cash flow for the LPHUs. This has been a valuable service that UND offered to help solve a problem faced by the LPHUs.

Over the last couple years, the relationship between the LPHUs and UND has become less productive. Interviews with the pilot LPHUs as well as UND revealed considerable frustration on both sides. The LPHUs report that service is costly, not timely and difficult to reconcile. Communication between both parties is difficult. On the other hand, the team assigned this responsibility at UND reports the LPHUs do not follow procedures, and lack understanding and cooperation. To improve this situation would require leadership, commitment and significant time to work through the issues and develop new methods for billing, collecting and reporting between the various operating units involved.

An interview with Randy Eken, Associate Dean for Administration and Finance, was held in late August to better understand the history and perspective on the service that UND is providing. It was very clear that Mr. Eiken and UND want what is best for the PROtect ND Kids Program and they are willing to support whatever direction the LPHUs and NDDoH wish to take. Their service was offered in 2007 to help solve a perceived problem for the LPHUs. If it is time to make a change, they will work with the appropriate entities to enable an orderly transition and settlement. The timing on this meeting was fortuitous since the director of service was in the process of announcing her departure from the UND staff, which will occur mid October of this year. Mr. Eiken was just beginning to assess options he might take to continue providing this service to the LPHUs.

In late September, a follow up teleconference was held with Mr. Eken to discuss the interest UND might have in providing billing and collection services to a smaller group of LPHUs should some decide to take the function in house or find a different alternative. Mr. Eken expressed his preference that it should be an all or none proposition. He believes the economics would not work for UND if the service was scaled back. He agrees that the program has evolved to a point that it may be best for the LPHUs to select a different course and reiterated his commitment to cooperating with the LPHUs, BCBSND and NDDoH in transitioning to a new program. He further stated that he would not expect any impact on staff at UND given the myriad of other projects they currently have underway related to patient accounting and electronic health records for their medical school and clinic.

Each of the pilot LPHUs, as well as others who have offered opinions, are prepared to take a different direction with billing and claims management. We analyzed six options for the LPHUs in billing and claims management. They are summarized as follows:

1. Remain with UND

   Advantages

   - Systems are in place between LPHUs, BCBSND & UND
   - Avoid challenge of seeking an alternative
   - New leadership of UND program can be "starting point" to improve working relationship and program effectiveness
   - It is working for some LPHUs; particularly those with low volume of claims
   - Service and working relationship may improve if fewer LPHUs are using service

   Disadvantages

   - Not a core priority of UND
   - Recent frustration between all stakeholders may be too difficult to overcome
   - If some LPHUs leave UND, those remaining with UND may experience an increase in the per unit charge for billing and collections; may become cost prohibitive
   - May be lower cost options available depending on the number of LPHUs who wish to continue outsourcing this function
   - UND is not in a position to continue service if a subset of LPHUs choose to leave

2. Create a statewide single billing and claims management system shared by all LPHUs

   Advantages

   - Would provide a single source of information on a common system
   - Dedicated service that could be tailored to unique needs of North Dakota LPHUs
   - Lower cost versus compared to each LPHU establishing own system

   Disadvantages

   - Meeting the needs of all LPHUs could be difficult since some may require more capabilities than others
   - System interfaces would be challenge given variety of patient information systems currently in use by LPHUs
   - The large geographic area to cover could create communications and logistic challenges that could frustrate the LPHUs
   - This would be a large undertaking for a group who has little history in working on projects of this magnitude. Would require high level of trust among stakeholders as well as decision making and problem solving skills to complete task

- Need to identify cost/funding source to create a centralized system
- May not have adequate lead time to implement given immediate needs of LPHUs

3. Outsource to a new vendor specializing in billing and collections

   Advantages
   - Fresh start
   - Ability to select vendor from variety of proposals
   - Per unit cost may be less – particularly if all LPHUs stay with program

   Disadvantages
   - New system and information flows may need to be created depending on vendor
   - Per unit cost may increase; particularly if some LPHUs opt out of program

4. Each LPHU decide for itself how it will bill and collect for services provided under the PROtect ND Kids Program

   Advantages
   - Allows each LPHU to establish a process that will meet their unique need:
     - Larger LPHUs may have systems and capabilities to do own billing.
     - Smaller facilities may use manual or other approaches for managing low volume of activity
   - Incremental cost to take function in house may be minimal given the resources already required to send information to BCBSND/UND for processing and reconciling information received from UND
   - Option to outsource can be considered for LPHUs who choose not to perform in house billing/collections
   - Creates potential for larger LPHUs to partner with smaller LPHUs who need support in billing/collections
   - Fresh start

   Disadvantages
   - Fragmented billing and collections among LPHUs
   - Duplicate data entry into private billing systems and the NDIIS
   - Difficulty in the future in connecting the NDIIS with different LPHU billing systems

- Reporting may become more disparate in managing statewide program (may not be an issue as NDIIS continues to evolve as the central data source for childhood immunizations)
- Change creates its own set of challenges and frustration particularly for LPHUs without significant experience in billing and collections
- Per unit cost may increase, particularly for smaller LPHUs without existing systems
- Cost to local, county, state and federal grants for purchasing and maintaining multiple billing systems for LPHUs

5. Collaboration between LPHUs – larger LPHUs with system capabilities providing service to smaller LPHUs or all LPHUs uniting around single system

   Advantages

   - Larger LPHUs serve as resource to smaller LPHUs
   - Opportunities to expand collaborative relationship between LPHUs

   Disadvantages

   - Billing and claims management, as a service bureau, is not a core business of LPHUs
   - Potential for creating frustration between LPHUs if service does not meet needs and expectations
   - Still a fragmented system unless everyone unites around one system

6. Collaboration between LPHUs – to establish centralized billing and claims management System

   Advantages

   - Single system – less fragmentation
   - Potential to establish systems platform that could be used to support other LPHU services
   - Opportunities to expand collaborative relationship between LPHUs
   - Create sense of ownership among LPHUs

   Disadvantages

   - Reaching agreement on system may be difficult given preferences of LPHUs
   - Billing and claims management is not a core business of LPHUs; would need to identify lead person(s) who can establish trust among participating LPHUs

- Potential for creating frustration between LPHUs if service does not meet needs and expectations
- Funding for procuring equipment and operating a single system would need to be established along with allocating costs to participating LPHU

c. Cost Impact of Current Program

i. LPHUs

This analysis focused on key metrics associated with the challenges of Vaccine Procurement/Management and Billing/Accounts Receivable Management. These costs could be reduced through changes in processes or vendors which will be discussed in the recommendations section.

In 2009, First District basically broke even with its childhood immunization program while Walsh County (a smaller facility) lost approximately $5,500. The largest line time costs were associated with the purchase of vaccines for private/insured patients and personnel costs associated with inventory management and billing/collections. Section 4e will demonstrate the financial impact of utilizing Universal Vaccine as an alternative.

First District – 2009 Cost Analysis - Please see complete cost report (Please see Attachment B)

Vaccines purchased for private or insured patients	$149,140
Waste/Expired Vaccines expense	$ 7,750
Personnel Cost to order/manage vaccine inventories	$ 23,965
Personnel Cost associated with Billing and Claims Mgmt	$ 31,418
UND Billing/AR Management Service	$ 11,614
2009 Contribution Margin	$ 1,072

Walsh County – 2009 Cost Analysis – Please see complete cost report (Please see Attachment C)

Vaccines purchased for private or insured patients	$ 22,437
Waste/Expired Vaccines expense	$ 200
Personnel Cost to order/manage vaccine inventories	$ 2,870
Personnel Cost associated with Billing and A/R Mgmt	$ 3,175
UND Billing/AR Management Service	$ 1,228
2009 Contribution Margin	($ 5,541)

d. Universal Vaccine as an Alternative

During the course of this project, leaders from the NDDoH raised the possibility of purchasing vaccines under federal contract through the Universal Vaccine Supply Policy. Other states have successfully utilized this program with support from both public and private providers.

The advantages of Universal Vaccine include:

- Lower cost for vaccines (the federal government maintains one of the lowest price schedules for purchasing vaccines)
- Free vaccines to all public and private providers
- Easier to hold school clinics or other mass immunization clinics.
- Smaller providers may be more likely to resume vaccinating.
- Increases access to vaccinations.
- Elimination of the requirement to establish and manage separate inventories of vaccines that are used for private and publicly funded vaccinations
- Reduction in overall administrative costs associated with managing and reporting childhood immunizations
- Continued ability of providers to charge variable administration fees depending on the payer source ($21.90 for initial privately insured immunization and $13.90 for initial publically funded immunization)

The disadvantages to using Universal Vaccine include:

- Elimination of option to mark up the cost of vaccines in order to increase profit or contribution margin for providers. This may be more of an issue for private physicians, clinics and hospitals
- Loss of discounts on other pharmaceuticals for large health systems using Group Purchasing Organizations, which bundle vaccines with other drugs
- Change for Blue Cross Blue Shield of North Dakota and other commercial payers in how they process claims and pay for immunization services
- Change from the current PROtect ND Kids Program which requires providers to revamp processes and procedures

Universal Vaccine was the methodology used for providing childhood immunizations in North Dakota up until 2008 when it was discontinued in favor of segregating publicly funded vaccinations from privately funded vaccinations and requiring providers (LPHUs and private) to charge payers (private pay, commercial, Medicaid, etc) for the service.

e. Projected Cost Impact from Current System to a Universal Vaccine Program – based on 2009 volume

i. LPHUs

Universal Vaccine would improve the financial performance of the pilot LPHUs over the current method of procuring vaccines. The improvement varies by size of LPHU with the larger programs realizing a greater positive impact. For the two pilots analyzed in this study, First District would increase its contribution margin over $75,000 while Walsh would improve by approximately $600 (still a negative contribution margin). In addition to the cost of procuring vaccines under federal contract, the analysis also considered replacing the UND billing service with an in house program. In the case of First District, they project replacing the function by assigning it to existing personnel with no incremental increase in cost. Walsh, however, would need to add capabilities to perform this function or seek other resources which would increase cost.

First District – Projected Cost Analysis - Please see complete cost report (Please see Attachment B)	
Vaccines purchased for private or insured patients	$ 0
Waste/Expired Vaccines expense	$ 0
Personnel Cost to order/manage vaccine inventories	$ 7,870
Personnel Cost associated with Billing and A/R Mgmt	$31,418
Replacing UND Service with in- house program	no incremental cost increase expected
Replacing UND Service with another vendor	First District plans to take function in house
Contribution Margin (based on 2009 experience)	$76,130

Walsh County – Projected Cost Analysis – Please see complete cost report (Please see Attachment C)	
Vaccines purchased for private or insured patients	$ 0
Waste/Expired Vaccines expense	$ 0
Personnel Cost to order/manage vaccine inventories	$ 1,500
Personnel Cost associated with Billing and A/R Mgmt	$12,000
Replacing UND Service with in-house program	included in $12,000 above
Replacing UND Service with another vendor	TBD – Walsh is evaluating options
Contribution Margin (based on 2009 experience)	($4,932)

ii. Commercial Insurance, Blue Cross Blue Shield North Dakota and Private Pay Patients

Universal Vaccine would present a significant savings to BCBSND and other commercial and private pay patients in the cost of vaccines. Attachment F reflects the comparison estimate of annual vaccine costs using private rates versus the federal contract rates associated with Universal Vaccine. In addition, insurers and private patients would save on claims paid to private providers who mark up the cost of vaccines, higher than the private rates, to help defray operating costs in addition to the fee charged for administration of the injection.

Based on July 2009 to June 2010 volumes for each dose of vaccine, it is estimated that commercial insurers, BCBSND and private pay patients would realize a savings of $2,474,000 if the vaccines were purchased from the federal contracts rather than current private contracts to immunize insured and other private pay clients. Again, this does not reflect the savings that would be realized by eliminating the mark up that some providers assign to vaccines which would be prohibited if North Dakota were to adopt Universal Vaccine.

f. Results of September 13, 2010 Quality Improvement Collaborative

On September 13th, the Steering Committee and leaders from the four pilot sites met for an educational experience in Quality/Process Improvement that would enhance skill sets related to collaboration, problem solving and decision making within LPHUs as well as between LPHUs and the NDDoH. Dr. William Riley led this session which was attended by those listed above in Section 3d. Topics covered included:

- Understanding and applying Quality/Process Improvement technique to aid in problem solving/decision making
- Analysis of current issues related to vaccine management and billing/collections for childhood immunizations
- Development and adoption of Aims Statement related to resolving issues related to childhood immunizations
- Discussion of alternative solutions and selection of recommended course of action
- Development of Next Steps

Use of a quality improvement collaborative was intentionally designed into this project for several reasons including:

- LPHU leaders have excellent ideas as a result of their training and experience

- LPHU leaders have the best understanding of their organization and the issues associated with managing it
- The pilot site leaders have a good understanding of all LPHUs and the issues they face
- As participants in the process of identifying better ways to provide childhood immunizations through the LPHUs, there is greater likelihood of acceptance by both the pilots as well as the other LPHUs

After reviewing information, findings from the study were discussed in small and large groups. The participants adopted the recommendations that are provided in the following section of this report. In addition, the LPHU pilot leaders who participated in the collaborative brought these recommendations to a meeting of all LPHU managers on September 14th where they were discussed and supported by those in attendance.

The September 13th collaborative was the first step for the LPHUs to work together with the NDDoH in implementing the recommendation related to billing and collections. Follow up meetings are being scheduled to work with the pilots as they continue to process the approach they will take per the recommendation, as well as to expand the support to other LPHUs.

5. Recommendations

a. Billing and Claims Management

Recommendation

Given the wide range of capabilities and interests of each LPHU in billing and accounts receivable management, it is our recommendation that each facility should decide how it will bill and collect for services provided under the PROtect ND Kids Program.

Rationale

Left to their own decision, the units can explore taking the function "in-house" and utilizing their existing systems or manual methods for billing and collecting, or exploring relationships with other LPHUs who may be able to provide this service through a collaborative relationship. Finally, the option to outsource this service to a professional billing service may be pursued either by individual LPHUs or through a collaborative effort pursued by a group of LPHUs seeking this alternative.

The NDDoH should continue to work with the LPHUs in a collaborative effort to help facilitate this recommendation. At the same time, several respected LPHU leaders are in a strong position to help guide all LPHUs to implement this recommendation. This will include encouraging some of the larger LPHUs to be a resource to others in determining if and how they might work together to in billing and collections.

b. Universal Vaccine

Recommendation

Based on the savings to be realized in terms of cost of vaccine and procurement/management of vaccines for LPHUs, we believe a Universal Vaccine Supply Policy is best for LPHUs and should be pursued if further investigation determines that Universal yields a similar impact on private providers and payers.

Rationale

It is our opinion that the benefits clearly favor Universal Vaccine including:

- Lower cost in procuring vaccines from federal contracts will save approximately$2.4 million in the first year
- Free vaccines available to public and private providers
- Elimination of the requirement to establish and manage separate inventories of vaccines that are used for private and publicly funded vaccinations which is a significant savings for some of the larger LPHUs
- Reduction in overall administrative costs associated with managing and reporting childhood immunizations
- Continued ability of providers to charge variable administration fees depending on the payer source ($21.90 for initial privately insured immunization and $13.90 for publically insured initial immunization)

6. Next Steps

a. Review by Health and Human Service Committee of ND Legislature – October 7, 2010
   i. Determine when final decision will be made and what additional information will be needed to make decision
      1. Determine impact on BCBSND and other commercial payers
      2. Determine impact on private providers

b. Continued work on LPHU billing and collections issues – Continued use of LPHU/NDDoH Leadership Collaborative Process
    i. Preparing for departure of current UND key contact
        1. Flu shot season
        2. Other Childhood Immunizations
        3. Reconciling history
    ii. Adoption of Steering Committee recommendation to LPHU administrators that each facility will assume responsibility for billing and collections

c. If Legislature pursues adoption of Universal Vaccine:
    i. Establish LPHU Implementation Plan - to be developed with LPHU leadership and NDDoH
        1. Transitioning to Universal Vaccine
        2. Implement new billing and collections process
    ii. Engaging cooperation from insurers
    iii. Engaging cooperation from private providers

d. If Legislature chooses not to adopt Universal Vaccine:
    i. Continuing under current model of PROtect ND Kids
        - Enhance, where possible, Vaccine Procurement and Management within federal requirements related to maintaining separate inventories for private versus publicly funding immunizations
        - Quality improvement on billing and collections process will still be necessary and will continue to be worked on by the LPHUs.

ND Children by Age Groups and Insurance Status							
Budget - Estimated Populations							
July 2009 - June 2010							
	Population Type	<1 Total	1 - 2 Total	3 - 6 Total	7 - 18 Total	Total	Percent
	Medicaid (ND Medicaid Data - American Indians)	2,443	4,308	6,525	11,051	24,327	15.61%
	American Indians (CDC Data)	943	2,090	3,678	9,458	16,169	10.38%
	Underinsured (VFC) (CDC Data)	140	272	492	2,441	3,345	2.15%
	Underinsured (Delegated Authority) (NDIIS Data)	130	136	129	459	854	0.55%
	Uninsured (CDC Data)	425	824	1,490	4,514	7,253	4.65%
	Insured (commercial/private pay)	5,051	10,068	19,702	69,074	103,895	66.67%
	Total Population						
Annual Cohort Number of Children							
(Total Population/Number of Category Yrs.)		9,132	17,698	32,016	96,997	155,843	
		<1	1 - 2	3 - 6	7 - 18		
	Funding Type (Per Total Population)	**Total**	**Total**	**Total**	**Total**	**Total**	
	VFC	4,081	7,630	12,314	27,923	51,948	33.33%
	Insured	5,051	10,068	19,702	69,074	103,895	66.67%
	Vaccination Rate 100%	**9,132**	**17,698**	**32,016**	**96,997**	**155,843**	

Source: NDDoH

AT' 'MENT B

PROtect ND Kids Immunization Program
Comparative Analysis
First District Health, Minot

	2009 Actual		Universal Vaccine Alternative		
Volume and Billing	**# of Claims**	**Billings $**	**# of Doses**	**Admin Fee per Immun.**	**Billings $**
Billed Direct from LPHU - as reported by LPHU					
Medicaid	1,011	$ 21,488	1,597	$ 13.90	$ 22,204
Private Pay	0	$ -			
Other Payers	0	$ -			
Billed to BCBSND - as reported by LPHU	2,657	$ 203,812	4,198	$ 21.90	$ 91,938
Sent to UND by BCBSND for Processing - as reported by LPHU					
BCBSND Member Liable	150	$ 10,225	237	$ 21.90	$ 5,190
Private Pay	311	$ 20,181	491	$ 21.90	$ 10,761
Other Payers	0	$ -			
Total	4,129	$ 255,706	6,524		$ 130,093
Less Write Offs - as reported by LPHU					
Medicaid		$ 3,389			
BCBS/ND		$ 7,362			
		$ 10,751			
Net Billings		$ 244,955			$ 130,093
Revenue Received - as reported by LPHU					
From LPHU Direct Billing					
Medicaid		$ 18,099			
Private Pay		$ -			
Other Payers		$ -			
From BCBSND Direct		$ 196,448			
From UND - (Member Liable/other payers)		$ 21,325	First District expects to receive 95% of this revenue		
Total		$ 235,872			$ 123,588
Expenses					
Vaccines					
Private Supply		$ 149,140			$ -
Wasted Vaccine (private vaccine only)		$ 7,750			$ -
317 & VFC					$ -
Sub Total Vaccines		$ 156,890			$ -
Personnel					
Vaccine Procure and Mgmt		$ 23,965			$ 7,870
Data Entry		$ 10,913			$ 8,170 (this only accounts for NDIIS entry - not PHClinic
Billing / AR Mgmt		$ 31,418			$ 31,418
Sub Total Personnel		$ 66,296			$ 47,458
Billing and A/R Mgmt					
UND Service - **as reported by UND- 5,807 claims**		$ 11,614			
Other Contract Billing Service					
		$ 11,614			$ -
Other Expenses					
		$ -			$ -
Total LPHU Expenses		**$ 234,800**			**$ 47,458**
Contribution Margin for LPHU		**$ 1,072**			**$ 76,130**

ATTACHMENT C

PROtect ND Immunization Program
Comparative Analysis
Walsh County

		2009 Actual		Universal Vaccine Alternative		
Volume and Billing		**# of Claims**	**Billings $**	**# of Doses**	**Admin Fee per Immunization**	**Billings $**
Billed Direct from LPHU						
Medicaid		280	$ 6,087	438	$ 13.90	$ 6,088
Private Pay	Self Pay/Migrant Health	176	$ 4,331	139	$ 13.90	$ 1,932
Other Payers						
Billed to BCBSND		579	$ 28,538	1,320	$ 21.85	$ 28,842
Sent to UND by BCBSND for Processing						
BCBSND Member Liable			$		$ 21.90	$ -
Private Pay	Migrant Health				$ 21.90	$ -
Other Payers		35	$		$ 21.90	$ -
	Total	1,070	$ 38,956	1,897		$ 36,862
Less Write Offs						
Medicaid		None	$ -			
BCBSND		None	$ -			
			$ -			
Net Billings			$ 38,956			
Revenue Received						
From LPHU Direct Billing						
Medicaid			$ 6,087			
Private Pay			$ 4,331			
Other Payers	Self Pay/Migrant Health		$ 11,378			
From BCBSND Direct			$ 28,538	Walsh County anticipates it will receive 95% of this revenue given sliding reimbursement for multiple doses and other adjustments		
From UND - (Member Liable/other payers)			$ 576			
	Total	0	$ 50,909		95%	$ 35,018
Expenses						
Vaccines						
Private Supply			$ 22,437			
Wasted Vaccines (private only)			$ 200			
317 & VFC			$ -			
Sub Total Vaccines			$ 22,637			$ -
Personnel						
Vaccine Procure and Mgmt			$ 2,870			$ 1,500
Data Entry - NDIIS only NOT PH Clinic			$ 26,450			$ 26,450
Billing / AR Mgmt			$ 3,175			$ 12,000
Sub Total Personnel			$ 32,495			$ 39,950
Billing and A/R Mgmt						
UND Service - **As reported by UND**			$ 1,228			
Other Contract Billing Service						
			$ 1,228			$ -
Other Expenses						
			$ -			$ -
Total Expenses			$ 56,360			$ 39,950
Contribution Margin for LPHU			$ (5,451)			$ (4,932)

ProtectND
Payment Notice - First District (Fund 20909-8275) Year To Date Summary

(Last Revised 3/9/10)

Month	Year	UND Admin Fee $2 Note #1 UND	Note #2 BCBS	Total	Note #3 Total Services Submitted Through UND	Admin $2 Fee Deduction	Credit Card Fees	Insurance Adjustment	BCBS Secondary Adjustment	Amount To Be Paid To LPHU From UND	Actual Amount Paid To LPHU From UND	Actual Payment Date	Monthly Report Total	Prior Adj & Fees
March	2008			0		$0.00				$0.00				
April	2008	7	81	88	$1,034.92	($176.00)				$858.92	$858.92	5/29/2008	$858.92	
May	2008	17	116	133	$1,243.19	($266.00)				$977.19	$977.19	6/27/2008	$977.19	
June	2008	45	198	243	$2,374.22	($486.00)		($321.04)		$1,567.18	$1,567.18	7/31/2008	$1,567.18	
July	2008	21	323	344	$905.56	($688.00)				$217.56	$217.56	9/5/2008	$217.56	
August	2008	136	529	665	$5,985.63	($1,330.00)		$48.33		$4,703.96	$4,703.96	10/15/2008	$4,703.96	
September	2008	1	288	289	$5,671.60	($578.00)		($0.77)		$5,092.83	$5,092.83	11/28/2008	$5,092.83	
October	2008	23	578	601	$10,541.31	($1,202.00)			($126.56)	$9,212.75	$9,212.75	2/18/2009	$9,212.75	
November	2008	69	1,460	1,529	$4,712.06	($3,058.00)				$1,654.06	$1,654.06	2/18/2009	$1,654.06	
December	2008	23	743	766	$2,199.30	($1,532.00)				$667.30	$667.30	2/20/2009	$667.30	
January	2009	42	258	300	$774.65	($600.00)			$126.56	$301.21	$301.21	3/16/2009	$301.21	
February	2009	21	128	149	$355.16	($298.00)				$57.16	$57.16	4/1/2009	$57.16	
March	2009	45	259	304	$4,561.00	($608.00)				$3,953.00	$3,953.00	5/7/2009	$3,953.00	
April	2009		251	251	($892.69)	($502.00)	($6.56)			($1,401.25)			($1,401.25)	
May	2009	33	186	219	$7,995.28	($438.00)	($9.16)	($73.73)		$7,474.39	$6,073.14	7/7/2009	$6,073.14	($1,401.25)
June	2009	38	298	336	$3,290.79	($672.00)		($55.80)		$2,562.99	$2,562.99	8/6/2009	$2,562.99	
July	2009		180	180	$1,808.87	($360.00)		($22.83)		$1,426.04	$1,426.04	8/31/2009	$1,426.04	
August	2009	131	422	553	$4,971.61	($1,106.00)		($32.04)		$3,833.57	$3,833.57	10/5/2009	$3,833.57	
September	2009	34	468	502	$2,725.93	($1,004.00)		($31.10)		$1,690.83	$1,690.83	11/5/2009	$1,690.83	
October	2009	12	737	749	($351.69)	($1,498.00)	($20.68)			($1,870.37)			($1,870.37)	
November	2009	29	782	811	$2,282.55	($1,622.00)		($4.87)		$655.68			($1,214.69)	($1,870.37)
December	2009	114	1,339	1,453	$5,598.93	($2,906.00)		($50.27)		$2,642.66	$1,427.97	2/17/2010	$1,427.97	($1,214.69)
January	2010	30	975	1,005	$2,321.64	($2,010.00)		($77.53)		$234.11	Voucher to be paid		$234.11	
February	2010			0		$0.00				$0.00				
March	2010			0		$0.00				$0.00				
April	2010			0		$0.00				$0.00				
May	2010			0		$0.00				$0.00				
June	2010			0		$0.00				$0.00				
Totals		871	10,599	11,470	$70,109.82	($22,940.00)	($36.40)	($621.65)	$0.00	$46,511.77	$46,277.66		$42,025.46	($4,486.31)
										UND Payments Pending To LPHU	$234.11		$46,511.77	
													$0.00	Check Cell- Amount to be paid
													$0.00	Check Cell- Amount pending

Note #1: Commercial claims only through UND
Note #2: BCBS claims
Note #3: Commercial claims and BCBS member liable services processed through UND

2009 Subtotals

499	5308	5807	$33,120.39	($11,614.00)	$21,325.91	$21,325.91	
9%	91%			-35%	64%		
		$ 5.70					

Source: University of North Dakota, School of Medicine and Health Sciences

ProtectND

Payment Notice - Walsh County (Fund 20927-8275) Year To Date Summary

(Last Revised 3/9/10)

Month	Year	UND Admin Fee $2 Note #1 UND	UND Admin Fee $2 Note #2 BCBS	UND Admin Fee $2 Total	Note #3 Total Services Submitted Through UND	Admin $2 Fee Deduction	Credit Card Fees	Insurance Adjustment	BCBS Secondary Adjustment	Amount To Be Paid To LPHU From UND	Actual Amount Paid To LPHU From UND	Actual Payment Date	Monthly Report Total	Prior Adj & Fees
March	2008			0		$0.00				$0.00				
April	2008	2	17	19	$451.17	($38.00)				$413.17	$413.17	5/29/2008	$413.17	
May	2008		11	11	$0.00	($22.00)				($22.00)			($22.00)	
June	2008	9	71	80	$693.30	($160.00)				$533.30	$511.30	8/4/2008	$511.30	($22.00)
July	2008		87	87	$0.00	($174.00)				($174.00)			($174.00)	
August	2008	2	44	46	$167.00	($92.00)				$75.00			($99.00)	($174.00)
September	2008		43	43	$912.08	($86.00)				$826.08	$727.08	11/28/2008	$727.08	($99.00)
October	2008		255	255	$121.26	($510.00)				($388.74)			($388.74)	
November	2008	1	86	87	$236.05	($174.00)				$62.05			($326.69)	($388.74)
December	2008		52	52	$114.80	($104.00)				$10.80			($315.89)	($326.69)
January	2009	0	17	17	$0.00	($34.00)				($34.00)			($349.89)	($315.89)
February	2009	1	24	25	($261.14)	($50.00)				($311.14)			($661.03)	($349.89)
March	2009	5	26	31	$341.25	($62.00)				$279.25			($381.78)	($661.03)
April	2009		27	27	($9.00)	($54.00)				($63.00)			($444.78)	($381.78)
May	2009		19	19	$167.69	($38.00)	($2.96)			$126.73			($318.05)	($444.78)
June	2009	6	28	34	$485.02	($68.00)				$417.02	$98.97	8/6/2009	$98.97	($318.05)
July	2009		27	27	$31.94	($54.00)				($22.06)			($22.06)	
August	2009	12	39	51	$699.60	($102.00)				$597.60	$575.54	11/6/2009	$575.54	($22.06)
September	2009	3	66	69	$41.70	($138.00)				($96.30)			($96.30)	
October	2009	4	128	132	$79.88	($264.00)				($184.12)			($280.42)	($96.30)
November	2009		114	114	$146.66	($228.00)				($81.34)			($361.76)	($280.42)
December	2009	4	64	68	$496.28	($136.00)				$360.28			($1.48)	($361.76)
January	2010	3	28	31	$57.15	($62.00)		($10.48)		($15.33)			($16.81)	($1.48)
February	2010			0		$0.00				$0.00				
March	2010			0		$0.00				$0.00				
April	2010			0		$0.00				$0.00				
May	2010			0		$0.00				$0.00				
June	2010			0		$0.00				$0.00				
Totals		52	1,273	1,325	$4,972.69	($2,650.00)	($2.96)	($10.48)	$0.00	$2,309.25	$2,326.06		($1,934.62)	($4,243.87)
						-53%								
										UND Payments Pending To LPHU	($16.81)		$2,309.25	

Note #1: Commercial claims only through UND
Note #2: BCBS claims
Note #3: Commercial claims and BCBS member liable services processed through UND

$0.00 Check Cell- Amount to be paid
$0.00 Check Cell- Amount pending

2009 Subtotals

35	579	614	$2,219.88	($1,228.00)		$988.92	$674.51
6%	94%						
		$ 3.62				45%	

Source: University of North Dakota, School of Medicine and Health Sciences

ATTACHMENT F

Doses Administered to Insured Children July 2009 - June 2010 (NDIIS Data)*Using Federal Pricing											
Vaccine	Cost/Dose	<1	Cost <1	1-2	Cost 1-2	3-6	Cost 3-6	7-18	Cost 7-18	Total Doses	Total Cost (Federal)
Hepatitis B	$10.25	15633	$160,238.25	221	$2,265.25	108	$1,107.00	141	$1,445.25	16103	$165,055.75
DTaP	$14.25	244	$3,477.00	1958	$27,901.50	734	$10,459.50	0	$0.00	2936	$41,838.00
Pentacel	$50.70	14060	$712,842.00	3302	$167,411.40	134	$6,793.80	0	$0.00	17496	$887,047.20
Pediarix	$49.75	1175	$58,456.25	70	$3,482.50	20	$995.00	0	$0.00	1265	$62,933.75
Hib	$11.51	997	$11,475.47	4185	$48,169.35	798	$9,184.98	0	$0.00	5980	$68,829.80
IPV	$11.74	187	$2,195.38	61	$716.14	652	$7,654.48	114	$1,338.36	1014	$11,904.36
Prevnar	$91.75	15404	$1,413,317.00	6597	$605,274.75	888	$81,474.00	0	$0.00	22889	$2,100,065.75
Rotavirus	$59.18	14250	$843,315.00	12	$710.16	0	$0.00	0	$0.00	14262	$844,025.16
MMR	$18.64	54	$1,006.56	4922	$91,746.08	4510	$84,066.40	243	$4,529.52	9729	$181,348.56
Varicella	$67.08	57	$3,823.56	4908	$329,228.64	4446	$298,237.68	3890	$260,941.20	13301	$892,231.08
MMRV	$85.72	0	$0.00	27	$2,314.44	273	$23,401.56	3	$257.16	303	$25,973.16
Kinrix	$32.75	0	$0.00	0	$0.00	4125	$135,093.75	18	$589.50	4143	$135,683.25
Hepatitis A	$13.25	78	$1,033.50	9252	$122,589.00	1778	$23,558.50	7306	$96,804.50	18414	$243,985.50
Tdap	$28.54	0	$0.00	0	$0.00	0	$0.00	7672	$218,958.88	7672	$218,958.88
MCV	$79.75	0	$0.00	0	$0.00	0	$0.00	8058	$642,625.50	8058	$642,625.50
HPV	$108.72	0	$0.00	0	$0.00	0	$0.00	5804	$631,010.88	5804	$631,010.88
Influenza (Cost Varies by Age)		6000	$63,840.00	9000	$95,760.00	11000	$90,970.00	24000	$376,800.00	50000	$627,370.00
Estimated Total		68139	$3,275,019.97	44515	$1,497,569.21	29466	$772,996.65	57249	$2,235,300.75	199369	$7,780,886.58

Doses Administered to Insured Children in 2009 (BCBSND Data) Using Private Pricing											
Vaccine	Cost/Dose	<1	Cost <1	1-2	Cost 1-2	3-6	Cost 3-6	7-18	Cost 7-18	Total Doses	Total Cost (Private)
Hepatitis B	$21.37	15,633	$334,077.21	221	$4,722.77	108	$2,307.96	141	$3,013.17	16103	$344,121.11
DTaP	$20.96	244	$5,114.24	1,958	$41,039.68	734	$15,384.64	0	$0.00	2936	$61,538.56
Pentacel	$75.33	14,060	$1,059,139.80	3,302	$248,739.66	134	$10,094.22	0	$0.00	17496	$1,317,973.68
Pediarix	$70.72	1,175	$83,096.00	70	$4,950.40	20	$1,414.40	0	$0.00	1265	$89,460.80
Hib	$22.77	997	$22,701.69	4,185	$95,292.45	798	$18,170.46	0	$0.00	5980	$136,164.60
IPV	$24.71	187	$4,620.77	61	$1,507.31	652	$16,110.92	114	$2,816.94	1014	$25,055.94
Prevnar	$108.75	15,404	$1,675,185.00	6,597	$717,423.75	888	$96,570.00	0	$0.00	22889	$2,489,178.75
Rotavirus	$69.59	14,250	$991,657.50	12	$835.08	0	$0.00	0	$0.00	14262	$992,492.58
MMR	$48.31	54	$2,608.74	4,922	$237,781.82	4,510	$217,878.10	243	$11,739.33	9729	$470,007.99
Varicella	$67.08	57	$3,823.56	4,908	$329,228.64	4,446	$298,237.68	3,890	$260,941.20	13301	$892,231.08
MMRV	$128.90	0	$0.00	27	$3,480.30	273	$35,189.70	3	$386.70	303	$39,056.70
Kinrix	$48.00	0	$0.00	0	$0.00	4,125	$198,000.00	18	$864.00	4143	$198,864.00
Hepatitis A	$28.74	78	$2,241.95	9,252	$265,930.24	1,778	$51,105.05	7,306	$209,996.36	18414	$529,273.60
Tdap	$37.43	0	$0.00	0	$0.00	0	$0.00	7,672	$287,162.96	7672	$287,162.96
MCV	$103.41	0	$0.00	0	$0.00	0	$0.00	8,058	$833,277.78	8058	$833,277.78
HPV	$130.27	0	$0.00	0	$0.00	0	$0.00	5,804	$756,087.08	5804	$756,087.08
Influenza (Cost Varies by Age)		6,000	$78,960.00	9,000	$118,440.00	11,000	$122,870.00	24,000	$472,800.00	50000	$793,070.00
Estimated Total		68139	$4,263,226.46	44515	$2,069,372.10	29466	$1,083,333.13	57249	$2,839,085.52	199369	$10,255,017.21

Estimated Cost Savings	$2,474,130.63

BCBSND Share (Federal)*	78.40%		$6,100,219.08
Other Insured Share (Federal)	21.60%		$1,680,674.50

317 Vaccine Allocation			$1,517,192.00
Insurance/ State Need (Federal)			$6,263,694.58
State or Non-BCBSND Need (Federal)			$163,479.50

317 Vaccine Allocation			$1,517,192.00
Adult Program Cost			
Insurance/ State Need (Federal)			$6,263,694.58
State or Non-BCBSND Need (Federal)			$163,479.50

Notes:
MMRV was in shortage in 2009 and 2010
HPV was approved for men in late 2009
Flu Doses Administered is an Estimate (Not Actual)
*NDIIS LPHU Billing Data

Source: NDDoH

ATTACHMENT G

Charge Capture Process Questionnaire

1. How do you receive the vaccines?
   - ☐ Pharmacist on staff that places the order
   - ☐ State provides certain types of vaccines
   - ☐ Other
2. What is your vaccination inventory?
   - ☐ Provide a list of vaccines
   - ☐ Do you get single or combo vaccines?
   - ☐ Other
3. How do patients receive immunizations?
   - ☐ Scheduled appointments
   - ☐ Walk-in's
   - ☐ Immunization clinics
   - ☐ Other
4. How does a patient get registered?
   - ☐ What demographics are collected at time of service?
   - ☐ Is there a standardized form used to gather the patient demographics?
   - ☐ Do all patients go through the registration process?
   - ☐ For patients with insurance, do you get a copy of the patient's insurance card?
   - ☐ Who registers the patient?
5. Do you have orders from the primary care physicians?
   - ☐ If yes, is there communication back to the physician that the immunization was administered?
   - ☐ If no, is there any follow up with the primary physician?
6. What is the clinical decision making process to determine if the patient is medically eligible to receive the immunization?
7. How do you document or record immunizations?
   - ☐ Paper
   - ☐ Electronic
   - ☐ Other

8. What is documented?
    - ☐ Time
    - ☐ Date
    - ☐ Route of administration
    - ☐ Site
    - ☐ Lot number
    - ☐ Person who administered it
9. What type of form do you use to capture immunizations?
10. Is there a record of administered vaccinations provided to the parents or legal guardian?
11. What is your process when vaccinations require a series of vaccinations?
12. What type of education is provided to parents regarding side effects etc? When is it done?
    - ☐ During immunization or clinic visit
    - ☐ Prior to clinic visit
    - ☐ Other
13. What is your coding, billing and reporting process? Who is doing the coding, billing and reporting? When is it done?
14. Is there a different process depending on payer type?
    - ☐ Medicaid
    - ☐ Private Insurance (commercial insurance)
    - ☐ Un-insured
    - ☐ Under-insured
    - ☐ American Indian
    - ☐ Other
15. Do you feel your process is complete and efficient? If no, what do you see as the biggest issues / problems in the process?
16. Where are payments sent?
17. Do you reconcile locally? Is this a part of your A/R management process?