1 BALDWIN STREET,
MONTPELIER, VT 05633-5701

PHONE: (802) 828-2295
FAX: (802) 828-2483

STATE OF VERMONT
JOINT FISCAL OFFICE

MEMORANDUM

To: James Reardon, Commissioner of Finance & Management

From: Nathan Lavery, Fiscal Analyst

Date: November 22, 2011

Subject: JFO #2531, #2532

No Joint Fiscal Committee member has requested that the following items be held for review:

JFO #2531 – $158,000 donation from Vermont Transco (VELCO) to the Vermont Department of Fish & Wildlife. This amount represents the appraised value of a 147.69 acre parcel located in Whitingham, VT and is intended to satisfy a condition set by the Public Service Board. This parcel will provide public access for hunting and other outdoor recreation, as well as wildlife habitat conservation. [*JFO received 10/20/11*]

JFO #2532 – $792,138 grant from the U.S. Centers for Disease Control and Prevention to the Vermont Department of Health. These funds will be used to build the capacity of the Department's Public Health Immunization Program, including enhancing the interoperability of electronic health records with Vermont's Health Immunization Registry. This grant was awarded under the Affordable Care Act (ACA).
[*JFO received 10/20/11*]

The Governor's approval may now be considered final. We ask that you inform the Secretary of Administration and your staff of this action.

cc: Patrick Berry, Commissioner
Harry Chen, Commissioner

1 BALDWIN STREET,
MONTPELIER, VT 05633-5701

PHONE: (802) 828-2295
FAX: (802) 828-2483

STATE OF VERMONT
JOINT FISCAL OFFICE

MEMORANDUM

To: Joint Fiscal Committee Members

From: Nathan Lavery, Fiscal Analyst

Date: October 27, 2011

Subject: Grant Requests

Enclosed please find two (2) items that the Joint Fiscal Office has received from the administration.

JFO #2531 – $158,000 donation from Vermont Transco (VELCO) to the Vermont Department of Fish & Wildlife. This amount represents the appraised value of a 147.69 acre parcel located in Whitingham, VT and is intended to satisfy a condition set by the Public Service Board. This parcel will provide public access for hunting and other outdoor recreation, as well as wildlife habitat conservation.
[*JFO received 10/20/11*]

JFO #2532 – $792,138 grant from the U.S. Centers for Disease Control and Prevention to the Vermont Department of Health. These funds will be used to build the capacity of the Department's Public Health Immunization Program, including enhancing the interoperability of electronic health records with Vermont's Health Immunization Registry. This grant was awarded under the Affordable Care Act (ACA).
[*JFO received 10/20/11*]

Please review the enclosed materials and notify the Joint Fiscal Office (Nathan Lavery at (802) 828-1488; nlavery@leg.state.vt.us) if you have questions or would like an item held for legislative review. Unless we hear from you to the contrary by November 10 we will assume that you agree to consider as final the Governor's acceptance of these requests.

VERMONT

State of Vermont
Department of Finance & Management
109 State Street, Pavilion Building
Montpelier, VT 05620-0401

[phone] 802-828-2376
[fax] 802-828-2428

Agency of Administration

JFO 2532

STATE OF VERMONT
FINANCE & MANAGEMENT GRANT REVIEW FORM

Grant Summary:	This is an Affordable Care Act grant to build the capacity of the State's Public Health Immunization program.				
Date:	10/13/2011				
Department:	AHS-Health Department				
Legal Title of Grant:	Prevention and Public Health Fund (Affordable Care Act)-Capacity Building Assistance to Strengthen Public Health Immunization Infrastructure and Performance				
Federal Catalog #:	93.539				
Grant/Donor Name and Address:	Centers for Disease Control and Prevention, United States Department of Health and Human Services				
Grant Period: From:	9/1/2011	**To:**	8/31/2013		
Grant/Donation	$792,138				

	SFY 1	SFY 2	SFY 3	Total	Comments
Grant Amount:	$344,098	$264,046	$183,994	$792,138	

	# Positions	Explanation/Comments
Position Information:	0	

Additional Comments:	Health has requested that this grant go through the esxpedited ACA process for review.

Department of Finance & Management	LH	(Initial)
Secretary of Administration	10/17/11	(Initial)
Sent To Joint Fiscal Office	10/18/11	**Date** 10/18/11

RECEIVED
OCT 20 2011
JOINT FISCAL OFFICE

VERMONT GRANT ACCEPTANCE REQUEST
Affordable Care Act (Form AA-1-ACA)

Priority Level (check one box): Expedited 14 Days ☒ Normal 30 days ☐

BASIC GRANT INFORMATION

1. Agency:	Agency of Human Services
2. Department:	Health
3. Program:	Health Surveillance
4. Legal Title of Grant:	Prevention and Public Health Fund (Affordable Care Act) - Capacity Building Assistance to Strengthen Public Health Immunization Infrastructure and Performance
5. Federal Catalog #:	93.539

6. Grant/Donor Name and Address:
Centers for Disease Control and Prevention, United States Department of Health and Human Services

7. Grant Period:	**From:**	9/1/2011	**To:**	8/31/2013

8. Purpose of Grant:
Please see summary attached.

9. Impact on existing program if grant is not Accepted:
none

10. BUDGET INFORMATION

	SFY 1	SFY 2	SFY 3	Comments
Expenditures:	**FY** 2012	**FY** 2013	**FY** 2014	
Personal Services	$319,292	$251,644	$183,994	
Operating Expenses	$24,806	$12,402	$0	
Grants	$0	$0	$0	
Total	$344,098	$264,046	$183,994	
Revenues:				
State Funds:	$0	$0	$0	
Cash	$0	$0	$0	
In-Kind	$0	$0	$0	
Federal Funds:	$344,098	$264,046	$183,994	
(Direct Costs)	$303,509	$243,751	$183,994	
(Statewide Indirect)	$2,435	$1,218	$0	
(Departmental Indirect)	$38,154	$19,077	$0	
Other Funds:	$	$	$	
Grant (source)	$	$	$	
Total	$344,098	$264,046	$183,994	

Appropriation No:		**Amount:**	$
	3420010000		$52,230
	3420021000		$291,868
			$
			$
			$
			$
		Total	$344,098

REC'D OCT 1 1 2011

PERSONAL SERVICE INFORMATION

11. Will monies from this grant be used to fund one or more Personal Service Contracts? ☒ Yes ☐ No
If "Yes", appointing authority must initial here to indicate intent to follow current competitive bidding process/policy.

Appointing Authority Name: Dr. Harry Chen Agreed by: _____ (initial)

12. Limited Service Position Information:	**# Positions**	**Title**
Total Positions		

12a. Equipment and space for these positions: ☐ Is presently available. ☐ Can be obtained with available funds.

13. AUTHORIZATION AGENCY/DEPARTMENT

I/we certify that no funds beyond basic application preparation and filing costs have been expended or committed in anticipation of Joint Fiscal Committee approval of this grant, unless previous notification was made on Form AA-1PN (if applicable):

Signature: Date: 9/28/2011

Title: Commissioner of Health

Signature: Patricia Flood okgdg Date: 10/10/11

Title: Deputy Secretary

14. SECRETARY OF ADMINISTRATION

☒ Approved: (Secretary or designee signature) Date: 10/17/11

15. ACTION BY GOVERNOR

☒ Check One Box: Accepted

☐ Rejected

(Governor's signature) Date: 10/17/11

16. DOCUMENTATION REQUIRED

Required GRANT Documentation

- ☐ Request Memo
- ☐ Dept. project approval (if applicable)
- ☐ Notice of Award
- ☐ Grant Agreement
- ☐ Grant Budget
- ☐ Notice of Donation (if any)
- ☐ Grant (Project) Timeline (if applicable)
- ☐ Request for Extension (if applicable)
- ☐ Form AA-1PN attached (if applicable)

End Form AA-1

Request for Grant Acceptance
ACA Immunization
Summary 9/28/2011

The Department of Health has received a grant from the Centers for Disease Control and Prevention (CDC), providing $792,138 over two years, to enhance immunization information exchange between health care and public health systems. This funding is available through the new Prevention and Public Health Fund created by the Affordable Care Act.

This project will provide technical and financial support for the use of Health Level 7 (HL7) standard messaging to enhance interoperability between electronic health records (EHRs) used by Vermont primary care providers and the Vermont Department of Health Immunization Registry (IMR). A key project objective is to collect baseline data for the ongoing analysis of one-way messaging between the EHRs and the IMR. These data collection efforts will allow the Health Department to evaluate the completeness of immunization data in the IMR, the timeliness of data submissions, and the quality of the data entered. Critical to the success of immunization data exchange described in this proposal is Vermont Information Technology Leaders, Inc. (VITL), the organization responsible for expanding the use of secure health information technology in Vermont. Since 2010, the Health Department has collaborated with VITL on a key data exchange project which has been delayed, due in part to a lack of resources. This project would allow VDH to enter into performance based contracting with VITL to ensure required baseline data exchange is implemented.

In addition to supporting the contract with VITL, funds will be used to cover the staff costs for data analysis, systems development and data entry associated with the project, including related travel, training and supply costs. These funds will also cover the cost of a two-year personal services contract for a project manager and a one year personal services contract for technical assistance related to batch data processes in the IMR. This project has been approved by Angela Rouelle, the Chief Information Officer for the Agency of Human Services.

The Health Department is hereby seeking approval to receive $344,098 in new Federal funds in State Fiscal Year 2012. The remainder of the Federal funding under this grant will be included in the Department's future budget requests. We are including a copy of the original grant application, the grant award document from CDC, and the revised line item budget which is the basis for the budget information on the AA-1.

Grantee Name: Vermont (1 H23 IP000544-01)										
[redacted]	[redacted]	[redacted] Program Area [redacted]								
IP11-1107PPHF11 Fiscal Year 2011										
DO NOT FILL IN HIGHLIGHTED CELLS							If different, reference page # and footnote program. Give justification below Summary Approved Budget.			
Category					Requested	Recommended	Difference			
A. PERSONNEL										
1 Public Health Analyst III: $67,954, .5 FTE, 12mos					$33,977	$33,977	$0			
2 Sr Sys Developer: $68,432, .5 FTE for 12 mos					$34,216	$34,216	$0			
3 De-duplication Clerk: $33,280 1 FTE for 12 mos					$33,280	$33,280	$0			
							$0			
							$0			
Personnel Subtotal					$101,473	$101,473	$0			
B. FRINGE							$0			
1 personnel x 40%					$40,589	$40,589	($0)			
							$0			
Fringe Subtotal					$40,589	$40,589	($0)			
Total Personnel and Fringe					**$142,062**	**$142,062**	($0)			
C. CONSULTANT							$0			
						$0	$0			
Total Consultant					**$0**	**$0**	$0			
D. EQUIPMENT					$0	$0	$0			
						$0	$0			
Total Equipment					**$0**	**$0**	$0			
E. SUPPLIES							$0			
General office supplies					$12,450	$12,435	($15)			
						$0	$0			
						$0	$0			
Total Supplies					**$12,450**	**$12,435**	($15)			
F. TRAVEL							$0			
1 In-State					$1,836	$1,836	$0			
2 Out-of-State					$2,776	$2,776	$0			
Total Travel					**$4,612**	**$4,612**	$0			
G. OTHER							$0			
1 Other items					$20,145	$20,145	$0			
						$0	$0			
						$0	$0			
Total Other					**$20,145**	**$20,145**	$0			
H. CONTRACTUAL							$0			
1 Project Manager; $250,000					$250,000	$250,000	$0			
2. Oleen Pinnacle; $70,000					$70,000	$70,000	$0			
3. VITL; $232,000					$320,000	$232,000	($88,000)			
							$0			
Total Contractual					**$640,000**	**$552,000**	($88,000)			
TOTAL DIRECT COSTS					**$819,269**	**$731,254**	($88,015)			
I. INDIRECT COSTS (x 60% of Salaries)					$60,884	$60,884	$0			
							$0			
TOTAL DIRECT AND INDIRECT **COSTS**					**$880,153**	**$792,138**	($88,015)			

[redacted] Grantee Name: Vermont (1 H23 IP000544-01) [redacted]
Summary Approved Budget - Fiscal Year 2011

DO NOT FILL IN HIGHLIGHTED CELLS	
Line Item	**Approved**
A. Personnel	$101,473
B. Fringe	$40,589
C. Consultant	$0
D. Equipment	$0
E. Supplies	$12,435
F. Travel	$4,612
G. Other	$20,145
H. Contractual	$552,000
Total Direct Costs	$731,254
I. Indirect Cost	$60,884
Total Approved Budget *	**$792,138**

*Funding Summary	
Est. Unobligated Funds	$0
Total FY 11 New Funds	$0
Total FY 11 Approved Budget	$0

VERMONT

State of Vermont
Department of Health
Office of the Commissioner
108 Cherry Street - PO Box 70
Burlington, VT 05402-0070
healthvermont.gov

[phone] 802-863-7280
[fax] 802-951-1275
[tdd] 800-464-4343

Agency of Human Services

May 6, 2011

Hector Buitrago
Grants Management Offices
CDC Procurement and Grants Office
2920 Brandywine Road, MS K-14
Atlanta, GA 30341

Reference: Prevention and Public Health Fund: Capacity Building Assistance to Strengthen Public Health Immunization Infrastructure and Performance: CDC-RFA-IP11-1107PPHF11, CFDA Number 93.539

Dear Mr. Buitrago:

Enclosed is the Vermont Department of Health's grant application for the Prevention and Public Health Fund: Capacity Building Assistance to Strengthen Public Health Immunization Infrastructure and Performance funding opportunity.

The Vermont Immunization Program is applying for funding for Part One: Enhancing Immunization Information Systems (IIS), Program Area One: Enhancing Interoperability between Electronic Health Records and Immunization Information Systems (IIS) and the Reception of HL7 Standard Messages into the IIS.

We believe that the funding of this project will allow the Vermont Department of Health to build, assess and optimize the HL7 data exchange between Electronic Health Records and the Vermont Immunization Information System.

If you should have questions regarding this application, please contact Christine Finley at (802) 652-4185. Thank you.

Sincerely,

Harry Chen, MD
Commissioner of Health

Enclosures

VITL

VERMONT INFORMATION TECHNOLOGY LEADERS

May 3, 2011

Christine Finley
Immunization Program Chief
Vermont Department of Health
108 Cherry Street
Burlington, VT 05402

Dear Ms. Finley

On behalf of the Vermont Information Technology Leaders (VITL) I am writing to express my strong support for the Vermont Department of Health's application for funding from the Prevention and Public Health Fund: Capacity Building Assistance to Strengthen Public Health Immunization Infrastructure and Performance. The project goal, to enhance interoperability between electronic health records and the Vermont Immunization Registry using HL7 messaging, is directly aligned with that of VITL. As the designated health information exchange for the state of Vermont and the federally-designated regional extension center for the state of Vermont, VITL is an essential component of Vermont's overall health reform initiative.

VITL is committed to helping public health agencies leverage health information technology and Vermont's health information exchange investments. At the General Assembly's direction, VITL is designated in the Vermont Health Information Technology Plan to operate the exclusive statewide health information exchange network. The program's objectives include supporting of Public Health Initiatives such as the Immunization Registry in addition to facilitating the adoption and meaningful use of Electronic Health Records and fostering health information exchange (HIE) among health care organizations.

We look forward to working with you and your team as we move forward enhancing interoperability between electronic health records and the Vermont Immunization Registry.

Sincerely,

David Cochran, M.D.
President and CEO

144 Main Street, Suite 1, Montpelier, VT 05602
802-223-4100
www.vitl.net

Prevention and Public Health Fund: Capacity Building Assistance to Strengthen Public Health Immunization Infrastructure and Performance
CDC-RFA-IP11-1107PPHF11
CFDA Number 93.539

PART I:
Enhancing Immunization Information Systems (IIS)

Program Area One: Enhancing Interoperability between Electronic Health Records and Immunization Information Systems (IIS) and the Reception of HL7 Standard Messages into the IIS

Vermont Department of Health
Division of Health Surveillance
Immunization Program
108 Cherry Street
Burlington, VT. 05402

May 5. 2011

TABLE OF CONTENTS

PART I: Enhancing Immunization Information Systems (IIS)
Program Area One

Enhancing Interoperability between Electronic Health Records (EHRs) and the Vermont Immunization Registry (IMR) Using Health Level 7 (HL7)[1] Standard Messaging

[1] HL7 specifies a number of flexible standards, guidelines, and methodologies by which various healthcare systems can communicate with each other. Such guidelines or data standards are a set of rules that allow information to be shared and processed in a uniform and consistent manner. These data standards are meant to allow healthcare organizations to easily share clinical information.

BACKGROUND

The Vermont *Blueprint for Health* is a multi-faceted approach to achieving universal health care coverage by improving both the health and health care delivery system for Vermonters. *Blueprint* was initially launched in 2003 and passed into law as part of the 2006 Health Care Affordability Acts (HCAA). The comprehensive reforms established by the legislation focus on three broad areas: improving the health of the population, enhancing access to and the quality of care available, and reducing the per capita cost of the health care. [2] This patient-centered, dynamic delivery system described in the *Blueprint* is built upon the creation of a robust health information infrastructure that is already requiring significant levels of transformation across the health care system. The interoperability of immunization information systems and electronic health records represents one small, but highly significant piece of the broader initiatives occurring in Vermont an across the nation.

Greater interoperability between practice level Electronic Health Records (EHRs) and the Vermont Immunization Registry (IMR) will reduce the need for duplicate data entry, a significant burden on immunization providers and therefore a significant obstacle to the timely reporting of immunization data to the registry. The IMR was recently evaluated by the Vermont Child Health Improvement Program (VCHIP) through a mixed method approach[3]. A goal of the study was to examine variation in utilization of the registry in a sample of primary care practices.

---

[2]. HCAA is comprised of two pieces of legislation:
Act # 191: http://www.leg.state.vt.us/docs/legdoc.cfm?URL=/docs/2006/acts/ACT191.HTM;
Act # 190: http://www.leg.state.vt.us/docs/legdoc.cfm?URL=/docs/2006/acts/ACT190.HTM

[3] In a mixed method approach, the researcher collects, analyzes, and integrates both quantitative and qualitative data for a research study or investigation.

A key finding from the study was that data entry staffing (and related logistics) play a critical role in whether a practice becomes a high volume user of IMR. The time or perceived time to complete data entry is a major barrier to regular use of IMR.[4]

Supporting enhancement of interoperability through the reliable exchange of HL7 standard messaging between EHRs and the IMR will:

- Improve completeness of immunization histories available to health care providers and public health officials.
- Improve the timeliness of immunization data submissions.
- Assist medical practices with demonstrating *meaningful use,* the Centers for Medicare and Medicaid Services (CMS) incentive program that reimburses providers if they're using certified EHR technology in ways that can be measured significantly in quantity and in quality according to established criteria.[5]
- Increase use of endorsed standards for interoperability as defined by the Office of the National Coordinator for Health Information Technology (ONC). Over time, the use of ONC standards will reduce reliance on other electronic formats being used. ONC is the principal Federal entity charged with coordination of nationwide efforts to implement and use the most advanced health information technology and the electronic exchange of health information.

---

[4] Barry, S., & Sheehey, M. (2011). Immunization Registry Evaluation Report: A Mixed Methods Study in Six Primary Care Practices: Executive Summary, p 2. Unpublished manuscript.

[5] Public Law 111-5-A American Recovery and Reinvestment Act of 2009 (ARRA). Title XIII of The ARRA was given a subtitle: Health Information Technology for Economic and Clinical Health Act (HITECH) which authorizes the establishment of programs to improve health care quality, safety, and efficiency through the promotion of health information technology (HIT), including EHRs, secure electronic health information exchange, and uses incentive payments *(meaningful use).*

While the implementation of HL7 data exchange is new to Vermont, the planning and coordination to meet its implementation is not. Successful funding and implementation of this project will allow the Vermont Department of Health (VDH) to build, assess, and optimize this type of interoperability.

1. Vermont Information Technology Leaders (VITL)

Vermont Health Technology Leaders, Inc. (VITL) is a non-profit organization that assists Vermont health care providers with adopting and using health information technology to improve patient care.[6] The organization, which began as a project of the Vermont Association of Hospitals and Health Systems, ultimately became the statutorily established entity to operate the Vermont Health Information Exchange (VHIE).[7] The VHIE, a health information exchange (HIE), unifies the electronic transfer of healthcare information among disparate information systems of various organizations (or jurisdictions) as it also maintains the meaning of the information being exchanged. VITL has a broad group of stakeholders including: health plans, hospitals, physicians, individual health care providers, state government, employers, and consumers. Oversight is provided by a diverse board of directors. The broad range of private and public participants and sponsors allows VITL to function as a public-private partnership. See Section 3, Sustainability Plan.

2. IMR: The Vermont Immunization Registry

The Vermont Immunization Registry (IMR) was developed by and continues to be operated by the VDH. It was first launched in 2004 as the first module within what would become known as

[6] 18 V.S.A., Chapter 219 Health Information Technology § 9352. Vermont information technology leaders.
[7] The "implementation of an integrated electronic health information infrastructure" is specifically mandated by statute. 18 V.S.A., Chapter 219 Health Information Technology § 9351. Health information technology plan.

the Child Health Profile; a statewide, integrated database designed to assist health care providers with the coordination of care for infants and children with special needs. The IMR was designed with stakeholder input from: the Vermont Chapter of the American Academy of Pediatrics, the Vermont Academy of Family Physicians, and Vermont State School Nurse Association.

The IMR was enhanced in 2007 to create a web based application and the number of practices providing pediatric care that entered data into the IMR increased to approximately 64%. In 2008, Vermont passed legislation not only requiring health care providers to report all immunization data; but authorized VDH to use reported data to create an immunization registry. The statute specifically references the use of electronic health record systems and notes VITL's role in establishing data interface for such EHRs.[8] VITL has been working in collaboration with the Vermont Department of Health (VDH) since 2009 to create electronic data exchange that ensures the flow of data from the EMR systems used by the Vermont providers into IMR through the VHIE.

Currently, health care providers submit immunization data to the IMR through the web-based user interface and a small number of providers submit batch data in a flat text file format that is imported on a monthly basis and processed by VDH. This labor intensive process requires matching each flat file against existing records (prior to import), to eliminate duplicate entries. If there is a match (an existing record is identified for a client), the record is updated. If there is no match, a new record is created. Creation of the HIE requires the IMR system and provider EHRs to receive and share data from multiple sources. The use of electronic data transfer for the information exchange into IMR would greatly reduce the burden of repeat data entry tasks and allow for real time flow of information between immunization providers and VDH.

[8] Title 18 Health, Chapter 21, Communicable Diseases, 18 V.S.A. § 1129. Immunization registry

3. Vermont's Experience with EHRs

Prior to VITL serving as the organization charged with the oversight and deployment of HIE in Vermont, VDH worked directly with immunization providers and EHR vendors. The IMR staff responded directly to requests for import specifications from vendors and collected information directly from provider practices using the vendors. However, there was little capacity to pursue the additional coordination, training, and assessment activities required for a large scale roll out. IMR activities at the program level focused on the importation of batch data from EHR vendors and registry staff continued to coordinate with practice management staff for items such as data extractions from respective practice applications.

VDH formalized its relationship with VITL in 2010, through a no-cost contract. The contract specifications stated that VITL would implement HL7 data exchange with the IMR. The application development team at VDH completed modifications to the registry to allow the HL7 message to be imported. Their work included the development of the *Vermont Implementation Guide for HL7 Immunization Messaging,* using CDC guidance on HL7 messaging to create specifications for IMR. [9] See Appendix A.

VITL subcontracted with GE Healthcare for the development of an Enterprise Master Patient Index (EMPI) to facilitate patient level matching within the HIE.[10] VDH agreed to populate the EMPI using all records in the Shared Public Health Information Network eXchange (SPHINX)

[9] Guide for HL7 Messaging Version 2.5.1

[10] EMPI are used by health care organizations to identify, match, merge, de-duplicate, and cleanse patient records to create a master index or unique identifier for each patient as well as maintaining the mapping to the identifiers used across all sources of information (e.g. data from different facilities).

which also included electronic birth record data.[11] VDH then participated in determining the thresholds for patient matches within the EMPI while VITL engaged identified medical practices to assess their readiness to send HL7 messages. Ultimately three large practices were identified for a pilot. VITL built interfaces for the three practices and collaborated with the three vendors involved: Allscripts™, eClinicalWorks™, and the Physician's Computer Company (PCC), a pediatric practice management software provider based in Winooski, Vermont. Several weeks before the project was to go live, VITL replaced GE Healthcare with Medicity and the project was put on temporary hold. To date, an HL7 message has not been transmitted from the respective EHRs to the registry; but HL7 messaging is scheduled to resume in May with a minimum of three to a maximum of twenty practice organizations.

The continued success of the IMR relies on increasing its usefulness as a tool for immunization providers and public health. The use of the registry must not require additional time or staff for its users or it will never become a reliable, time-sensitive database. In a broader context, IMR relies significantly on the foundation of trust and idea exchange that VDH has established with providers and stakeholders. The VDH Immunization Program is committed to maintaining the collaborative relationships with stakeholders and adapting to changing environments while moving forward utilizing new technology.

4. IMR and VITL: Current Status of Interoperability with EHRs

Although VITL is the organization responsible for the implementation of the HIE infrastructure in Vermont, the State of Vermont is responsible for health information technology (IT) policy

[11] VDH used Admission, Discharge and Transfer (ADT) messages for this task. ADT messages are a group of messages that convey patient demographics and/or to healthcare encounter data. ADT messages are widely implemented software applications in hospital settings and meet HL7 standards.

and planning.[12] For the VDH Immunization Program and the IMR to successfully manage sharing of electronic health information between practice EHRs and the immunization registry; the focus must be on one specific portion of the provider community: immunization providers.

5. The Future of IMR and VITL: Interoperability with EHRs through HL7

Funding of this proposal for an enhanced interoperability project will allow VDH to proceed with one-way HL7 messaging between the EHRs used by Vermont immunization providers and the registry, after experiencing significant delays. VDH will be in a position to leverage significant resources to ensure the completion of one-way HL7 data exchange to the IMR by moving beyond a no-cost contract status. Successful HL7 messaging from EHRs to the IMR may also accelerate the timetable to implement the bi-directional exchange of data by creating demand from the providers actively using the data exchange.

VITL is currently scheduled to proceed with their first round of HL7 messaging with the IMR prior to the initiation of the project described in this proposal. Their contractor, Medicity plans to work within a range of three to twenty practice organizations with a scheduled deadline of August 31, 2011 to fulfill prior funding commitments. Each of these practice organizations can represent several practice sites, and a practice site number was not available at this time. VDH feels this first round of messaging only increases the potential level of success for this enhanced project and further increases the number of practice sites engaged with the IMR. Table 1 outlines the breakdown of the tasks and responsibilities between VITL and VDH (for IMR) to proceed with HL7 messaging for this project.

[12] The Division of Health Care Reform in the Department of Vermont Health Access (DVHA) which is responsible for the management of Vermont's publicly funded health insurance. Both DVHA and VDH are departments within the Agency of Human Services (AHS).

TABLE 1: Data Exchange Responsibilities

TASK	VITL	IMR
Prioritizing practices for developing interfaces	x	x
Communicating HL7 specifications to vendors	x	
Building interfaces for sending data	x	
Building interface for Patient Matching	x	
Export Vital Record Data (and all changes) to HIE		x
Patient matching -- automated	x	
Patient matching -- human review		x
Practice training for extracting data from IMR until two way exchange is live		x
IMR practice certification (confidentiality agreement, Vacman pin, etc)		x
Certifying practice for meaningful use	x	
Message meeting HL7 specifications	x	
Practice follow up if message does not meet HL7 specs		x
Import data into IMR		x
Evaluating incoming messages for quality	x	x
Evaluating incoming messages for timeliness		x
Evaluating HL7 import impact on IMR		x
Practice follow up for data quality concerns		x
Working with vendors to build capacity to accept return messages	x	x

The IMR will be modified to accept HL7 messages using the Rhapsody™ Integration Engine, incorporating the Enterprise Master Person Index (EMPI).[13] The program IMR currently uses for data importation (with a flat file format) will be converted to an HL7 message. This changes the process of de-duplication of records from manual to primarily electronic, with a small percentage requiring manual review. The integration process will also simplify matters for the practice site end users by adopting "point and click" technology.[14] As VDH continues to move forward with HIE, developing interfaces between IMR and practice-based EHRs, several challenges have been identified. The table on the following page details these challenges.

[13] In the simplest terms the integration engine provides a way to integrated complex, health related data in a single, unified view. It is important to use a system designed for healthcare services system in use by these areas. The referenced product integrates by translating, mapping, and reconciling otherwise incompatible systems.
[14] Also known as graphical user interface (GUI). For example, Microsoft Windows® is an GUI, allowing the user to interact with the computer with picture rather than language commands.

TABLE 2: Challenges to Interoperability between EHRs and IMR in Vermont

CHALLENGE	PROPOSED APPROACH
Implementation of EMPI within the VITL network has the potential to require manual matching for a large number of patient records each time a site goes live.	VDH will hire a temporary employee to assist with matching patient records.
Inadequate staffing resources to maintain a dynamic list of practices and their software capabilities.	Identify a contractor to support the implementation team to track and manage HL7 messaging status and software.
For this project the provision of HL7 messaging will be one-way (practice-based EHR to the IMR) but immunization providers need access to the most current (updated) data in IMR.	Identify a contractor to train practices to use the IMR reports through the IMR interface until bi-directional HL7 communication becomes a reality at sites.
Providers do not understand that having an interface is only one aspect of successful data exchange. Accurate data exchange also involves changes to practice workflow, monitoring data quality, and periodic updating to reflect new vaccines and other changes.	Project staff will promote best practices for successful data exchange utilizing the recommendations of CDC and the Modeling of Immunization Registry Operations Workgroup (MIROW), part of the American Immunization Registry Association (AIRA).
Monitor timeliness and quality of incoming HL7 messages by practice site.	In-house development of new registry reports for this purpose.
Limited interest of EHR vendors with the bi-directional flow of data.	Outreach to both vendors and practices, including collaboration with stakeholders and building on CDC and other national efforts.
The use of reciprocal messaging has identified potential performance issues with IMR.	Increase IT support for IMR SQL database by 50% for year one of the project.
Data quality issues with individual practices need to be addressed.	Identify contractor to work with individual practices on data quality issues.
Need for additional IMR staffing as the demand for IMR (and related data needs, products, quality assurance) grows.	Increase support for IMR data analyst by 50% for year one of the project.

1. IMPLEMENTATION PLAN

The overall goal of the project is to collect data to serve as a baseline for the ongoing analysis of IMR interoperability with practices EHRs, including assessment of:

- The completeness of immunization histories in IMR,
- The timeliness of immunization data submissions to IMR, and
- The quality of data available to other organizations utilizing IMR.

A. Major project objective, tasks, and activities

To achieve the overall goals of the interoperability project the following objective and activities will be undertaken:

OBJECTIVE 1: Establish the baseline number of provider practice sites with HL7 interface capability for project initiation.

Activities:

1. Utilize existing Master List to establish baseline at project initiation.
2. Perform provider site surveys to validate priority ranking on Master List.
3. Ensure documentation of site survey results for initial benchmarking.
4. Communicate ranking to VITL to compare with their survey results.
5. Lock in ranking for initiation of Objective 2 activities.

Milestones

1. VITL completes initial site survey of practices for immunization interface (contract deliverable & initial benchmark).
2. VDH completes a Master List update after site surveys are completed.

Clarification: The master list has already indicated practice interest in electronic submission to IMR as well as identification of high volume practices and the most widely used EHR vendors to determine a ranking (prior to completion of site survey).

OBJECTIVE 2: Identify sites for implementation of enhanced interoperability with the IMR based on Master List ranking and VITL's technology assessment.

Activities:

1. VITL will identify specific **technical** barriers that will prevent identified practices from implementing HL7 messaging.
2. VDH will identify specific **non-technical** barriers that will prevent identified practices from implementing HL7 messaging.

VITL Milestones:

Completion of technology assessments (by practice) including:

1. EHR capability
2. Technical architecture
3. Network capability
4. Software capability
5. Meets ONC-endorsed standards
6. Completion of required project charter (This required documentation must also be signed by the IT Manager, a key staff member on this project).

VDH Milestones:

Completion of barrier analysis (by practice) including:

1. Assess need for training and commitment to training,

2. Workflow/office procedures (including mapping it out),
3. Staffing/personnel changes or relevant issues,
4. Establish a designated contact person in the practice,
5. Assess readiness for change (considerations such as upcoming practice relocation, expectations of physician, and personnel turnovers).

Clarification: HL7 messaging is one-way for the purposed of this project.

Clarification: VITL has already identified the ONC standard for messaging with IMR; therefore, all participating sites for this project will meet the ONC-endorsed standard for interoperability (HL7 version 2.5.1).

OBJECTIVE 3: Perform final verification and testing prior to productive use (go live) of interface and document the number of practices successfully sending HL7 messages.

Activities:

1. VITL will document the number of practices where the HL7 message is successfully loaded into IMR.

   TARGET: Increase the number from the baseline (0).
2. VDH will inform this process with any issues from the barrier analysis described in Objective 2 above.

Clarification: As noted previously, VITL will proceed with their previously identified round of HL7 messaging with the IMR prior to the initiation of this project (with an established deadline of August, 31, 2011). However, VDH and VITL feel this first round of messaging increases the potential level of success for the enhanced project and will increase the number of practice sites engaged with the IMR.

OBJECTIVE 4: Perform data quality analysis to assess suitability with IMR data standards and to provide data to evaluate the interoperability project.

Activities:

1. Perform second round of provider site surveys to update master list data (benchmarking for comparison with initial results).

   TARGET: Increase number and/or proportion from baseline.

2. VDH will work with practices to increase the timeliness of messages received

   TARGET: Increase number and/or percent received into IMR within one day.

   TARGET: Increase number and/or percent received into IMR within 30 days or less.

3. VDH will work with practices to accurately and efficiently include historical records.

   TARGET: Practice has sent immunization data going back a minimum of two years.

   VDH will utilize a tiered monetary incentive system with practice sites that successfully transmit HL7 messages to the IMR in order to encourage the active use of the data quality standards described in activities 1 – 3 above. Practices will receive awards after a successful initial HL7 message has been received by the IMR and the implementation team has assessed practice data.

Milestones:

1. Sends immunization data at least weekly..... Receives 20% of incentive
2. Sends immunization data daily..... Receives 20% of incentive
3. Sends historical data back at least two years.....Receives 20% of incentive
4. Resolved documented data quality issues ..... Receives 20% of incentive
5. Sends VFC eligibility measure in HL7 message ..... Receives 20% of incentive

Clarification: VDH will add documentation to the master file to reflect practice performance in meeting the milestones during the project period. Within the first six months of the project VDH will assess provider progress and will specify additional targets for activities and milestones where none are currently available

Clarification: VDH anticipates the need to use both the daily and monthly timeliness measures in #3 above to ensure the implementation team can realistically identify and research record matches and perform de-duplication activities after several practices "go live" in close succession. In addition, there are immunization practices that do not administer immunizations every day and therefore will not have daily messaging to evaluate. VDH recognizes the challenges with incentive #5, but hopes to encourage physicians to ask their vendors to include this information to their EHR software.

B. Additional Project Implementation Tasks and Activities

a. The VDH Immunization Program Chief will provide oversight for the Project Management contractor to ensure the overall planning and coordination of the interoperability project.

b. The IT Manager will provide oversight for the VITL contract to ensure the overall planning and coordination of the interoperability project.

c. Both the Immunization Chief and the IT manager will provide oversight to the Implementation Team and Project Management contractor to develop, update, or revise all training materials necessary for the implementation team, project contractors, practice physicians and staff, and vendors. Materials include, but are not limited to: user manuals, training materials, technical specifications, project guides, and reference guides. VDH

and the implementation team will work closely with VITL and their contractors to identify already existing materials that can be utilized for the project.

d. IMR Manager will provide initial guidance for training the Implementation Team until the Project Management Contractor can take over this function.

e. The Immunization Program Chief will actively participate in monthly project teleconference call (or meeting) as well as one in person meeting in Atlanta as convened by CDC (date to be determined). It is anticipated the IMR Manager along with the Program Management contractor and IT Informatics Specialist (once positions are filled) will be the lead on these activities and determine other team members that may need to participate on specific calls and/or meetings.

C. Project Implementation Schedule

TABLE 3: IMPLEMENTATION

OBJECTIVE Number & Page # of objective		YEAR ONE				YEAR TWO			
		Q1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
1	p. 14	Activities 1& 2	Activities 3 - 5 M1 & M2						
2	p. 15	Activities 1& 2 M1 – M6 (VITL) M1 & M2 (VDH)	M3 – M5 (VDH)						
3	p. 16		Activity 1	Activity 1					
4	p. 17			Activity 1 M1	Activities 2 & 3 M2	M3	M4	M5	

Q = Quarter
M = Milestone

D. Evaluation Plan

The goal of the evaluation is to analyze immunization data and patient information collected from the participating practices as part of the interoperability project. Central to this process is the master file data (collected throughout the project) which allows the Implementation Team to determine the overall success of interoperability between the EHR and the registry via HL7 messaging for each practice site in the project.

The EHR-IMR interoperability project will be evaluated by:

1. Comparing the pre- and post-benchmarking data (objectives 1 and 4).
2. Enumerating the number of practices where the HL7 message is successfully loaded into IMR throughout the project period (objective 3).
3. Comparing the number and/or percent of HL7 message received within one day of the project period (increase from zero at project initiation, objective 4).
4. Comparing the number and/or percent of HL7 message received within the IMR 30 days or less (increase from zero at project initiation, objective 4).
5. Enumerating the number of practices submitting historical records from at least two years prior (compared to data collected to date by IMR, see objective 4).
6. VDH recognizes the challenges to seeking Vaccines for Children (VFC) eligibility status (see incentive #5), but is hopeful this information will be included in EHR software over time.

E. Staffing Plan

See Appendix B for *curriculum vitae* or resumes.

Project Manager (Contractor TBD): The position will analyze the business and clinical requirements necessary for both the practices using the EHRs and the vendors providing the software. The Project Manger will work closely with the IMR Manager to ensure the necessary tracking of data outlined in this application and will also work closely with the VITL team concerning the timely completion of the development, building, and testing of the interfaces necessary for the transmission of data.

Public Health Analyst III (Meg Baldor): The public health analyst currently supports the IMR by extracting data for immunization reports and assuring the accuracy of the data. These efforts will initially increase with the interoperability project; but should return to pre-project levels after a year.

Senior Systems Developer (Becky Jo Cyr): This position schedules the work of the IMR developers and provides support for the business analysis services necessary for project upgrades and other improvements to the registry. The interoperability project will require additional time and attention to this aspect of the project and will require the Systems Developer to assist the Project Manager on the business rules. It is anticipated after an initial increase in demand for these services as part of the interoperability project, a decrease will occur.

De-duplication Clerk (Temporary): This newly created temporary position will be necessary to work full time to accommodate the anticipated increase in duplicate records that occur as a result of the data exchange. After a year, the IMR team will be able to maintain the de-duplication process as data quality is improved.

Public Health Informatics Specialist (vacant): This currently funded position will have the primary responsibility to work with the Project Manager and the rest of the Implementation Team. The Information Specialist will work directly with VITL as the integration of the IMR into the VHIE (through HL7 messaging) proceeds. This position will work closely with the Project Manager to meet the goals of the project and will serve as the liaison between the Implementation Team, VITL, and the practices participating in the project.

Systems Developer (Karen Clark): Karen works directly with the IMR to develop the necessary vaccine updates that are integrated into the IMR. This also includes the development of new reports that will be needed for the interoperability project to gauge progress and evaluate outcomes. Karen's position is currently fully funded through the Immunization Program grant.

IMR Program Support (vacant): This position functions to support the IMR including enrolling new providers, handling password matters, updating data, assisting with de-duplication, and other administrative duties as assigned. For the interoperability project this position will assist the IMR Manager with tracking project data. The position is fully funded.

IMR Manager (Bridget Ahrens): Bridget provides expertise in immunization information systems, including development and implementation. Bridget will function as the subject matter expert for IMR throughout the entire interoperability project. She will work closely with the Project Manager and the Informatics Specialist. Bridget will support the implementation team on IMR data quality and data warehouse issues. Bridget's position is fully funded by the Immunization Program grant.

Immunization Program Chief (Chris Finley): As the Immunization Program Chief, Chris sets goals and priorities for the program. Chris will provide the contract oversight for the Project Manger hired for the interoperability project and will work with the entire Implementation Team

to ensure the goals and activities of the project are accomplished in a timely manner. Her position is fully funded through the Immunization Program grant.

IT Manager (Eileen Underwood): Eileen will provide oversight for the VITL contract to ensure the overall planning and coordination of the interoperability project. Eileen's positon is fully funded.

2. VERMONT MASTER LIST OF PROVIDERS

See Appendix C for the complete master list.

Priority ranking were assigned on a scale of 1-5, with 1 being the highest priority. In addition to the rationale column, several other columns denote other factors which were considered in the ranking such as:

- Vendor interest in HL7
- Practice located in a IMR low saturation area
- Batch data is already being sent to IMR
- The practice is an opinion leader
- Difficulties encountered at practice with batch process

3. SUSTAINABILITY PLAN

A major goal of this interoperability project is to establish processes for the ongoing implementation and management of HL7 data exchange between IMR and the EHRs used by the immunization providers in Vermont. These goals harmonize well with Vermont's overall health information technology plans.

The Immunization Program and VFC Grant will continue to support current IMR and IT staffing as reflected in the 2011 CDC budget and in accordance with required program functions as outlined in the Immunization Program Operations Manual (IPOM) including:[15]

- 100% IIS Manager
- 100% Program Support
- 100% Systems Developer
- 25% Public Health Analyst III
- 50% Senior Systems Developer

The Public Health Information Specialist position is 100% funded by the IT program to work across programs to integrate the VHIE.

In order to fulfill its legislative mandate to develop and integrate an electronic health information infrastructure throughout Vermont, VITL has actively identified and leveraged millions in support. During calendar 2010, VITL reported approximately $3.5 million in funding from the following federal and state sources: [16]

- ONC Regional Extension Center Grant (federal)
- ONC Critical Access Hospital Grant (federal)
- Health Resources and Services Administration (HRSA) grant (federal)
- Bi-State FQHC Project (a federal grant from HRSA)
- Vermont Health Information Technology Fund (state)
- VDH contract to support the Blueprint for Health (state)

[15] IPOM Chapter 3 IIS, pages 2 – 6, updated June 11, 2010.
[16] Vermont Information Technology Leaders (VITL), January 2011 Progress Report, p 10. www.vitl.net.

Vermont has created a revenue source to support the advancement of health information technology through the assessment of 0.199 percent of all health care claims paid by commercial Vermont insurers (based upon the insurer's market share).[17] The fund, which is administered by the Department of Vermont Health Access (DVHA) and the Division of Health Care Reform, specifically provides financial support for VITL to build and operate the VHIE, including services to advance technology for primary care provider in Vermont.

4. BUDGET JUSTIFICATION

LINE A. PERSONNEL **$101,473**

Title	Percentage of effort	Salary
Public Health Analyst III (Meg Baldor)	50%	$33,977
Senior Systems Developer (Becky Jo Cyr)	50%	$34,216
De-duplication Clerk (Temporary)	100%	$33,280
Public Health Informatics Specialist (vacant)		
IT Systems Developer (Karen Clark)		
IMR Program Support (vacant)		
IMR Manager (Bridget Ahrens)		
Immunization Program Chief (Chris Finley)		
IT Manager (Eileen Underwood)		

[17] Sec. 18, 8 V.S.A. § 4089k, Act 61 of 2009.

Public Health Analyst III (Meg Baldor)

The public health analyst currently supports the IMR by extracting data for immunization reports and assuring the accuracy of the data. These efforts will initially increase with the interoperability project; but should return to pre-project levels after a year.

Senior Systems Developer (Becky Jo Cyr)

This position schedules the work of the IMR developers and provides support for the business analysis services necessary for project upgrades and other improvements to the registry. The interoperability project will require additional time and attention to this aspect of the project and will require the Systems Developer to assist the Project Manager on the business rules. It is anticipated after an initial increase in demand for these services as part of the interoperability project, a decrease in need will occur after a year.

De-duplication Clerk (Temporary)

This newly created temporary position will be necessary to work full time to accommodate the anticipated increase in duplicate records that occur as a result of the data exchange. After a year, the IMR team will be able to maintain the de-duplication process as data quality is improved.

Public Health Informatics Specialist (vacant)

This currently funded position will have the primary responsibility to work with the Project Manager and the rest of the Implementation Team. The Information Specialist will work directly with VITL as the integration of the IMR into the VHIE (through HL7 messaging) proceeds. This position will work closely with the Project Manager to meet the goals of the project and will serve as the liaison between the Implementation Team, VITL, and the practices participating in the project.

IT Systems Developer (Karen Clark)

Karen works directly with the IMR to develop the necessary vaccine updates that are integrated into the IMR. This also includes the development of new reports that will be needed for the interoperability project to gauge progress and evaluate outcomes.

IMR Program Support (vacant)

This position functions to support the IMR including enrolling new providers, handling password matters, updating data, assisting with de-duplication, and other administrative duties as assigned. For the interoperability project this position will assist the IMR Manager with tracking project data.

IMR Manager (Bridget Ahrens)

Bridget provides expertise in immunization information systems, including development and implementation. Bridget will function as the subject matter expert for IMR throughout the entire interoperability project. She will work closely with the Project Manager and the Informatics Specialist. Bridget will support the implementation team on IMR data quality and data warehouse issues.

Immunization Program Chief (Chris Finley)

As the Immunization Program Chief, Chris sets goals and priorities for the program. Chris will provide the contract oversight for the Project Manger hired for the interoperability project and will work with the entire Implementation Team to ensure the goals and activities of the project are accomplished in a timely manner.

IT Manager (Eileen Underwood)

Eileen_will provide oversight for the VITL contract to ensure the overall planning and coordination of the interoperability project.

LINE B. FRINGE BENEFITS **$40,589**

The actual cost of fringe benefits (not a fringe benefit rate) will be reported as a direct cost of the program. The actual cost of fringe benefits varies from employee to employee based on salary, employee choice of health care plan, and employee election of certain other benefits. The usual, major components of this cost are FICA, retirement, and a portion of the actual costs of the medical, dental and life insurance coverage selected by the employee. The cost of each employee's fringe benefits will be allocated to the program based on hours worked in the program relative to all hours worked by the employee. Based on the current cost of fringe benefits for employees working in this program, we are estimating the cost of these fringe benefits at 40% of salary.

LINE C. TRAVEL **$4,612**

In-state travel	$1,836
Site visits to provider offices (24 trips, 100 miles @$0.51/mile)	$1,224
Professional conferences and meetings (12 trips, 100 miles @ $0.51/mile)	$612
Out-of-state travel	$2,776

CDC hosted Grant Management meeting
Trips: 1, People: 2, Days: 4, Per Diem: $32/day, Nights: 3,
Miles: 20 @ ($0.51/mile), Airfare: $650, Lodging: $150/night,
Other: $150

LINE E. SUPPLIES **$12,450**

Materials	$5000
Development of materials to inform providers of project objectives and maintenance of the project.	
Computer replacement (2 computers @ $1000 computer, $225 monitor)	$2450
Multi-function printer replacement (1 @ $2500)	$2500
General office supplies	$2500

LINE F. CONTRACTUAL **$640,000**

Vermont Information Technology Leaders $320,000

Deliverables include:

- Designing the HIE transition including: Complete data provider gathering for ADT interface, receiving draft ADT& VXU specifications from Medicity, and determine plan for PHINMS
- Prioritizing practices for developing interfaces
- Communicating HL7 specifications to vendors
- Building interfaces for sending data including: Complete ADT interface build in CERT, new HIE built and configured, complete VXU interface build in CERT
- Building interface for Patient Matching
- Patient matching – automated
- Testing of Interface including: CMPI go-live prior to any ADT interfaces, receive sign-off for ADT testing, receiving sign off for VXU testing
- Certifying practice for meaningful use
- Go live with ADT from VDH to VHIE
- Go live with VXU interface from VHIE to VDH
- Go live with first practice sending immunization information to IMR thru VHIE
- Message meeting HL7 specifications
- Evaluating incoming messages for quality
- Working with vendors to build capacity to accept return messages

Project Manager (Contractor TBD) $250,000

The position will analyze the business and clinical requirements necessary for both the practices using the EHRs and the vendors providing the software. The Project Manger will work closely with the IMR Manager to ensure the necessary tracking of data outlined in this application and will also work closely with the VITL team concerning the timely completion of the development, building, and testing, of the interfaces necessary for the transmission of data.

Deliverables include:

1. Work with Immunization Program and IMR Team to develop and maintain training modules for practices and vendors about the HL7 implementation

- Assess training needs for practices, vendors, Implementation Team and IMR team
- Includes coordination with Immunization Program IMR Trainers to ensure practices are able to utilize patient and practice level reporting features of the registry
- May include working to establish web-based training

2. Work with Immunization Program and IMR Team to Evaluate the IIS-EMR Interoperability project including:

- Using parameters outlined in the project goals, objectives, activities, and outcomes, including the data collected in #5 below.
- Assessment/survey of stakeholders to determine the quality, reach, appropriateness, satisfaction, and barriers related to the project
- Documenting the project and evaluation process to accompany annual reporting requirements.

- Attend and participate in telephone conferences, CDC site visits and other required meetings.

3. Manage an incentive program for payments to providers for meeting set program goals.

Oleen Pinnacle $70,000

This contract will provide programmatic and technical support for the Immunization Registry. Activities related to the procurement, validation, data mapping and formatting of batch data. This contract will continue to support the continued batch data file reporting while practices work with EMR vendors to meet specifications for HL7 exchange.

See Appendix D for Supplemental Information for Contract Approval.

LINE H. OTHER **$20,145**

IT Rhapsody Training $8,500

VDH uses Orion's Rhapsody Integration Engine to transform data from one format to another to facilitate electronic information sharing. As providers implement Electronic Health Records (and work to meet the Meaningful Use criteria for Public Health), VDH will receive an increasing amount of data electronically. When the Rhapsody tool was originally acquired in March, 2006, training was provided to IT staff. Because of the increase in the amount of electronic data exchange as well as staff turn over and, it is appropriate to offer the training again.

Project Management Training $8,750

The Information Technology Team Leads coordinate resources (analyzers, programmers, data services, and testers) for IT projects. Formal training will increase their knowledge of project management techniques and allow them to more easily communicate with colleagues.

Software Licenses $2,395

Contribute: Adobe® Contribute® software will be utilized for web publishing and website management. This tool will increase web publishing productivity and allow for broader communication about the EMR/IMR project.

Upgrade current licenses: $1685.30

New licenses: $709.20

Postage $500

Postage for materials to inform providers of project objectives and maintenance of the project.

LINE I. TOTAL DIRECT CHARGES $819,269

LINE J. TOTAL INDIRECT CHARGES $60,884

The Vermont Department of Health uses a Cost Allocation Plan, not an indirect rate. The Vermont Department of Health is a department of the Vermont Agency of Human Services, a public assistance agency, which uses a Cost Allocation Plan in lieu of an indirect rate agreement as authorized by OMB Circular A-87, Attachment D. This Cost Allocation Plan was approved by the US Department of Health and Human Services effective October 1, 1987. A copy of the of the most recent approval letter of to March 15, 2011 are attached, see Appendix D. The Cost Allocation Plan summarizes actual, allowable costs incurred in the operation of the program.

These costs include items which are often shown as direct costs, such as telephone and general office supply expenses, as well as items which are often included in an indirect rate, such as the cost of office space and administrative salaries. These costs are allocated to the program based on the salaries and wages paid in the program. Because these are actual costs, unlike an Indirect Cost Rate, these costs will vary from quarter to quarter and cannot be fixed as a rate. Based on costs allocated to similar programs during recent quarters, we would currently estimate these allocated costs at 60% of the direct salary line item.

LINE K. TOTAL BUDGET **$880,153**

RESOURCE PROGRAMS
Department of Health and Human Services
Centers for Disease Control and Prevention
NATIONAL CENTER FOR IMMUNIZATION AND RESPIRATORY DISEASES

Issue Date: 08/23/2011

Grant Number: 1H23IP000544-01

Principal Investigator(s):
Christine A Finley

Project Title: ENHANCING INTEROPERABILITY BETWEEN ELECTRONIC HEALTH RECORDS AND IMMUNIZATION INF

FINANCIAL OFFICER
VERMONT STATE DEPARTMENT OF HEAL
108 CHERRY STREET PO BOX 70
BURLINGTON, VT 054020070

Budget Period: 09/01/2011 – 08/31/2012
Project Period: 09/01/2011 – 08/31/2013

Dear Business Official:

The Centers for Disease Control and Prevention hereby awards a grant in the amount of $792,138 (see "Award Calculation" in Section I and "Terms and Conditions" in Section III) to VERMONT STATE DEPT OF HEALTH in support of the above referenced project. This award is pursuant to the authority of PHS 317, 42 USC, SEC. 247B and is subject to the requirements of this statute and regulation and of other referenced, incorporated or attached terms and conditions.

Acceptance of this award including the "Terms and Conditions" is acknowledged by the grantee when funds are drawn down or otherwise obtained from the grant payment system.

If you have any questions about this award, please contact the individual(s) referenced in Section IV.

Sincerely yours,

Hector Buitrago
Grants Management Officer
Centers for Disease Control and Prevention

Additional information follows

Award Calculation (U.S. Dollars)

Salaries and Wages	$91,326
Fringe Benefits	$36,530
Supplies	$11,205
Travel Costs	$4,151
Other Costs	$18,131
Consortium/Contractual Cost	$576,000
Federal Direct Costs	$737,343
Federal F&A Costs	$54,795
Approved Budget	$792,138
Federal Share	$792,138
TOTAL FEDERAL AWARD AMOUNT	$792,138
AMOUNT OF THIS ACTION (FEDERAL SHARE)	$792,138

Fiscal Information:

CFDA Number:	93.539
EIN:	1036000274A7
Document Number:	000544IM11

IC	*CAN*	*2011*
IP	939ZMPT	$792,138

SUMMARY TOTALS FOR ALL YEARS		
YR	**THIS AWARD**	**CUMULATIVE TOTALS**
1	$792,138	$792,138

CDC Administrative Data:
PCC: N / **OC**: 4141

SECTION II – PAYMENT/HOTLINE INFORMATION – 1H23IP000544-01

For payment information see Payment Information section in Additional Terms and Conditions.

INSPECTOR GENERAL: The HHS Office Inspector General (OIG) maintains a toll-free number (1-800-HHS-TIPS [1-800-447-8477]) for receiving information concerning fraud, waste or abuse under grants and cooperative agreements. Information also may be submitted by e-mail to hhstips@oig.hhs.gov or by mail to Office of the Inspector General, Department of Health and Human Services, Attn: HOTLINE, 330 Independence Ave., SW, Washington DC 20201. Such reports are treated as sensitive material and submitters may decline to give their names if they choose to remain anonymous. This note replaces the Inspector General contact information cited in previous notice of award.

SECTION III – TERMS AND CONDITIONS – 1H23IP000544-01

This award is based on the application submitted to, and as approved by, CDC on the above-titled project and is subject to the terms and conditions incorporated either directly or by reference in the following:

a. The grant program legislation and program regulation cited in this Notice of Award.
b. The restrictions on the expenditure of federal funds in appropriations acts to the extent those restrictions are pertinent to the award.
c. 45 CFR Part 74 or 45 CFR Part 92 as applicable.
d. The HS Grants Policy Statement, including addenda in effect as of the beginning date of the budget period.
e. This award notice, INCLUDING THE TERMS AND CONDITIONS CITED BELOW.

Treatment of Program Income:
Additional Costs

SECTION IV – IP Special Terms and Conditions – 1H23IP000544-01

TERMS AND CONDITIONS OF THIS AWARD

1. INCORPORATION

Funding Opportunity Announcement Number IP11-1107PPHF11, entitled, Prevention and Public Health Fund; Capacity Building Assistance to Strengthen Public Health Immunization Infrastructure and Performance, and application dated May 6, 2011, is made a part of this Non-Research award. These funds have been awarded as indicated in the attached spreadsheet which is incorporated by reference.

2. APPROVED FUNDING

Funding in the amount of $792,138.00 is approved for the Year 01 budget period, which is the base funding of this award, with a budget start date of: September 1, 2011. All funding for future years will be based on satisfactory programmatic progress and the availability of funds.

Program Area 1 Enhance Interoperability between Electronic Health Records (EHRs) and Immunization Information Systems (IIS) and Reception of HL7 Standard Messages in IIS: $792,138.00

Sub-account Title in the Payment Management System (PMS): IMMUNIZATIONINFRAS11

Note: The sub-account title will assist your organization in identifying the correct account when requesting funds in PMS.

3. INDIRECT COSTS

The rates in this agreement are to be used for remainder of the competitive segment in accordance with 2 CFR 220

The HHS approved cost allocation plan for Vermont Department of Health applies to this grant..

4. REPORTING REQUIREMENTS

FEDERAL INFORMATION SECURITY MANAGEMENT ACT (FISMA)

All information systems, electronic or hard copy which contain federal data need to be protected from unauthorized access. This also applies to information associated with CDC grants. Congress and the OMB have instituted laws, policies and directives that govern the creation and implementation of federal information security practices that pertain specifically to grants and contracts. The current regulations are pursuant to the Federal Information Security Management Act (FISMA), Title III of the E-Government Act of 2002 Pub. L. No. 107-347.

FISMA applies to CDC grantees \only when grantees collect, store, process, transmit or use information on behalf of HHS or any of its component organizations. In all other cases, FISMA is not applicable to recipients of grants, including cooperative agreements. Under FISMA, the grantee retains the original data and intellectual property, and is responsible for the security of this data, subject to all applicable laws protecting security, privacy, and research. If and when information collected by a grantee is provided to HHS, responsibility for the protection of the HHS copy of the information is transferred to HHS and it becomes the agency?s responsibility to protect that information and any derivative copies as required by FISMA. For the full text of the requirements under Federal Information Security Management Act (FISMA), Title III of the E-Government Act of 2002 Pub. L. No. 107-347, please review the following website: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=107_cong_public_laws&docid=f:publ347.107.pdf

5. FEDERAL FUNDING ACCOUNTABILITY and TRANSPARENCY (FFATA)

COMPENSATION INFORMATION, Prime Awardees awarded a federal grant are required to file a FFATA sub-award report by the end of the month following the month in which the prime awardees? awards any sub-grant equal to or greater than $25,000. For instructions of reporting please visit: http://www.fsrs.gov

6. NON-DELINQUENCY on FEDERAL DEBT

The Federal Debt Collection Procedures Act of 1990 (Act), 28 U.S.C. 3201(e), provides that an organization or individual that is indebted to the United States, and has a judgment lien filed against it, is ineligible to receive a Federal grant. CDC cannot award a grant unless the AOR of the applicant organization (or individual in the case of a Kirschstein-NRSA individual fellowship) certifies, by means of his/her signature on the application, that the organization (or individual) is not delinquent in repaying any Federal debt. If the applicant discloses delinquency on a debt owed to the Federal government, CDC may not award the grant until the debt is satisfied or satisfactory arrangements are made with the agency to which the debt is owed. In addition, once the debt is repaid or satisfactory arrangements made, CDC will take that delinquency into account when determining whether the applicant would be a responsible CDC grant recipient.

Anyone who has been judged to be in default on a Federal debt and who has had a judgment lien filed against him or her should not be listed as a participant in an application for a CDC grant until the judgment is paid in full or is otherwise satisfied. No funds may be used for or rebudgeted following an award to pay such an individual. CDC will disallow costs charged to awards that provide funds to individuals in violation of this Act.
These requirements apply to all types of organizations and awards, including foreign grants

7. SUMMARY STATEMENT RESPONSE REQUIREMENT

The objective review summary comments on the strengths and weaknesses of the proposal are provided as part of this award. No response required. Should these terms not be satisfactorily adhered to, it may result in denial of your authority to expend additional funds.

8. ANNUAL FEDERAL FINANCIAL REPORT

Disclaimer: As of February 2011, existing Financial Status Report (FSR) requirements will soon be replaced with the new Federal Financial Reporting (FFR) requirements.

9. MONTHLY PROGRESS REPORT

Will be due 30 days from the date of the Notice of Award and monthly thereafter due November 30, 2011. Reports should contain cumulative data/information. A template will be developed in collaboration with the awardees, but monthly reports should contain, at a minimum, the following:

Project overview
Work Progress during the previous month
Status of Implemented Activities
Difficulties Encountered
Future Activities

10. ANNUAL FEDERAL FINANCIAL REPORT (FFR) (SF 425)

The Annual Federal Financial Report (FFR) is required and must be submitted 90 days after the end of each budget period. The FFR for this budget period is due to the Grants Management Specialist by November 30, 2011. Reporting timeframe is September 1, 2011 ? August 31, 2011. The FFR should only include those funds authorized and disbursed during the timeframe covered by the report. If the FFR is not finalized by the due date, an interim FFR must be submitted, marked NOT FINAL, and an amount of un-liquidated obligations should be annotated to reflect unpaid expenses. Electronic versions of the form can be downloaded into Adobe Acrobat and completed on-line by reviewing: http://www.whitehouse.gov/omb/grants_forms

Failure to submit the required information in a timely manner may adversely affect the future funding of this project. If the information cannot be provided by the due date, you are required to submit a letter explaining the reason and date by which the Grants Officer will receive the information.

NOTE: ASSISTANCE AWARD CLOSEOUT REQUIREMENTS

FINAL FEDERAL FINANCIAL REPORT (FFR) (SF 425) is due 90 days after the end of the project period. An original and two copies are required. At a minimum it should include the following:

-- A statement of progress made toward the achievement of originally stated aims
-- A description of results (positive or negative) considered significant
-- A list of publications resulting from the project, with plans, if any, for further publication.

An original and two copies are required. The FFR should only include those funds authorized and actually expended during the timeframe covered by the report. Handwritten forms will not be accepted. Electronic versions of the form can be downloaded into Adobe Acrobat and completed on-line by visiting: http://www.whitehouse.gov/omb/grants_forms This report must indicate the exact balance of unobligated funds and may not reflect any unliquidated obligations. Should the amount not match with the final expenditures reported to the Health and Human Services Payment Management System (PMS), you will be required to update your reports to PMS accordingly. Remaining unobligated funds will be de-obligated and returned to the U.S. Treasury.

11. PROGRESS REPORT

The Interim Progress Report (IPR) will serve as the non-competing continuation application. IPR reporting timeframe is: September 1, 2011 - March 1, 2012. A due date and specific IPR guidance will be provided at a later date.

The report must contain the following:
- Status/Progress of Current Budget Period Goals and Objectives
- Also include key organizational changes, key staff changes, and an implementation plan for each activity.
- Current Budget Period Financial Progress and amount of estimated unobligated balances.
- New Budget Period Program Proposed Activity Objectives and timelines.
- Ensure Objectives are specific, measurable, appropriate, realistic, and time-phased.
- Measures of Effectiveness.
- Additional requested information.
- Detailed Line-Item Budget and Justification.

Use the SF424 forms: http://www.whitehouse.gov/omb/grants/grants_forms.html
For the Budget details and justification follow the Budget Guidelines at:
http://www.cdc.gov/od/pgo/funding/grantmain.htm

The Final Progress Report and Federal Financial Report are required no later than 90 days after the end of the project period. All manuscripts published as a result of the work supported in part or whole by the cooperative agreement will be submitted with the progress reports. Due Date: November 30, 2013.

An original plus two copies of the reports must be mailed to the Grants Management Specialist for approval by the Grants Management Officer by the due date noted. Ensure the Award and Program Announcement numbers shown above are on the reports. Failure to submit the required information in a timely manner may adversely affect the future funding of this project. If the information cannot be provided by the due date, you are required to submit a letter explaining the reason and date by which the Grants Officer will receive the information.

12. AUDIT REQUIREMENT

An organization that expends $500,000 or more in a year in Federal awards shall have a single or program-specific audit conducted for that year in accordance with the provisions of OMB Circular A-133, Audit of States, Local Governments, and Non-Profit Organizations. The audit must be completed along with a data collection form, and the reporting package shall be submitted within the earlier of 30 days after receipt of the auditor?s report(s), or nine months after the end of the audit period. The audit report must be sent to:

Federal Audit Clearing House
Bureau of the Census
1201 East 10th Street

Should you have questions regarding the submission or processing of your Single Audit Package, contact the Federal Audit Clearinghouse at: (301) 763-1551, (800) 253-0696 or email: govs.fac@census.gov

It is very helpful to CDC managers if the recipient sends a courtesy copy of completed audits and any management letters on a voluntary basis to the following address.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention (CDC)
ATTN: Audit Resolution, Mail Stop E-14
2920 Brandywine Road
Atlanta, GA 30341-4146

The grantee is to ensure that the sub-recipients receiving CDC funds also meet these requirements (if total Federal grant or cooperative agreement funds received exceed $500,000). The grantee must also ensure that appropriate corrective action is taken within six months after receipt of the sub-recipient audit report in instances of non-compliance with Federal law and regulations. The grantee is to consider whether sub-recipient audits necessitate adjustment of the grantee's own accounting records. If a sub-recipient is not required to have a program-specific audit, the Grantee is still required to perform adequate monitoring of sub-recipient activities. The grantee is to require each sub-recipient to permit independent auditors to have access to the sub-recipient's records and financial statements. The grantee should include this requirement in all sub-recipient contracts.

13. SUBGRANT/SUBRECIPIENT AWARDS

Seed Grants/Sub-Grants are not authorized under this program or included in Program authorizing legislature. As a result, the recipient is not permitted to fund seed grants or sub-grants. Recipient must issue proposed funding as a procurement requirement per the organization's established procedures.

14. TRAVEL COST

In accordance with Health and Human Services (HHS) Grants Policy Statement, travel is only allowable for personnel directly charged and approved on the grant/cooperative agreement. There must be a direct benefit imparted on behalf of the traveler as it applies to the approved activities of the Notice of Award. To prevent disallowance of cost, Recipient is responsible for ensuring that only allowable travel reimbursements are applied in accordance with their organization's established travel policies and procedures.

15. FOOD AND MEALS

Costs associated with food or meals are NOT permitted unless included with per diem as a part of official travel.

16. PRIOR APPROVAL

All requests, which require prior approval, must bear the signature of an authorized official of the business office of the grantee organization as well as the principal investigator or program or project director named on this notice of award. The request must be postmarked no later than 120 days prior to the end date of the current budget period and submitted with an original plus two copies. Any requests received that reflect only one signature will be returned to the grantee unprocessed. Additionally, any requests involving funding issues must include an itemized budget and a narrative justification of the request.

Prior approval is required but is not limited to the following types of requests: 1) Use of unobligated funds from prior budget period (Carryover); 2) Lift funding restriction, withholding, or disallowance, 3) Redirection of funds, 4) Change in Contractor /Consultant; 5) Supplemental funds; 6) Response to Technical Review or Summary Statement, 7) Change in Key Personnel, or 8) Liquidation Extensions.

17. CORRESPONDENCE

ALL correspondence (including emails and faxes) regarding this award must be dated, identified with the AWARD NUMBER: 1H23IP000544-01, and include a point of contact (name, phone, fax, and email). All correspondence should be addressed to the Grants Management Specialist listed below and submitted with an original plus two copies.

Constance Jarvis, Grants Management Specialist
U.S. Department of Health and Human Services
Centers for Disease Control and Prevention
Procurement and Grants Office Branch II
2920 Brandywine Road, Mail Stop K14
Atlanta, GA 30341-4146
Telephone: 770-488-2859
Fax: 770-488-2044
Email: abq3@cdc.gov

18. INVENTIONS

Acceptance of grant funds obligates recipients to comply with the standard patent rights clause in 37 CFR 401.14.

19. PUBLICATIONS:

Publications, journal articles, etc. produced under a CDC grant support project must bear an acknowledgment and disclaimer, as appropriate, for example:
This publication (journal article, etc.) was supported by the Cooperative Agreement from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

20. CONFERENCE DISCLAIMER AND USE OF LOGOS

Disclaimer. If a conference is funded by a grant, cooperative agreement, sub-grant and/or a contract the recipient must include the following statement on conference materials, including promotional materials, agenda, and internet sites:

Funding for this conference was made possible (in part) by the Centers for Disease Control and Prevention. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily do not reflect the official policies of the Department of Health and Human Services, nor does the mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.
Logos. Neither the HHS nor the CDC logo may be displayed if such display would cause confusion as to the conference source or give false appearance of Government endorsement. Use of the HHS name or logo is governed by U.S.C. 1320b-10, which prohibits misuse of the HHS name and emblem in written communication. A non-federal entity is unauthorized to use the HHS name or logo governed by U.S.C. 1320b-10. The appropriate use of the HHS logo is subject to review and approval of the Office of the Assistant Secretary for Public Affairs (OASPA). Moreover, the Office of the Inspector General has authority to impose civil monetary penalties for violations (42 C.F.R. Part 1003). Neither the HHS nor the CDC logo can be used on conference materials, under a grant, cooperative agreement, and contract or co-sponsorship agreement without the expressed, written consent of either the Project Officer or the Grants Management Officer. It is the responsibility of the grantee (or recipient of funds under a cooperative agreement) to request consent for use of the logo in sufficient detail to ensure a complete depiction and disclosure of all uses of the Government logos. In all cases for utilization of Government logos, the grantee must ensure written consent is received from the Project Officer and/or the Grants Management Officer.

21. EQUIPMENT AND PRODUCTS

To the greatest extent practicable, all equipment and products purchased with CDC funds should be American-made. CDC defines equipment as tangible non-expendable personal property (including exempt property) charged directly to an award having a useful life of more than one year AND an acquisition cost of $5,000 or more per unit. However, consistent with recipient policy, a lower threshold may be established. Please provide the information to the Grants Management Officer to establish a lower equipment threshold to reflect your organization's policy.

observes provisions of the following sections in the Office of Management and Budget (OMB) Circular A-110 and 45 CFR Part 92:

i. Office of Management and Budget (OMB) Circular A-110, Sections 31 through 37 provides the uniform administrative requirements for grants and agreements with institutions of higher education, hospitals, and other non-profit organizations. For additional information, please review: the following website: http://www.whitehouse.gov/omb/circulars/a110/a110.html

ii. 45 CFR Parts 92.31 and 92.32 provides the uniform administrative requirement for grants and cooperative agreements to state, local and tribal governments. For additional information, please review the following website listed: http://www.access.gpo.gov/nara/cfr/waisidx_03/45cfr92_03.html

22. INSPECTOR GENERAL

For your information, United States Department of Health and Human Services' Inspector General maintains a toll-free telephone number, (800) 368-5779, for receiving information concerning fraud, waste or abuse under grants and cooperative agreements. Such reports are kept confidential, and callers may decline to give their names if they choose to remain anonymous.

23. PROGRAM INCOME

Any program income generated under this cooperative agreement will be used in accordance with the additional cost alternative. The disposition of program income must have written prior approval from the Grants Management Officer.

Additional Costs Alternative--Used for costs that are in addition to the allowable costs of the project for any purposes that further the objectives of the legislation under which the cooperative agreement was made. General program income subject to this alternative shall be reported on lines 10r and 10s, as appropriate, of the FSR (Long Form).

24. KEY PERSONNEL

In accordance with 45 CFR 74.25(c)(2) & (3) CDC recipients shall obtain prior approvals from CDC for (1) change in the project director or principal investigator or other key persons specified in the application or award document, and (2) the absence for more than three months, or a 25 percent reduction in time devoted to the project, by the approved project director or principal investigator.

25. TRAFFICKING IN PERSONS

This award is subject to the requirements of Section 106 (g) of the Trafficking Victims Protection Act of 2000, as amended (22 U.S.C. 7104). For the full text of the award terms and conditions, please review the following website: http://www.cdc.gov/od/pgo/funding/grants/Award_Term_and_Condition_for_Trafficking_in_Persons.shtm

26. ACKNOWLEDGMENT OF FEDERAL SUPPORT

When issuing statements, press releases, requests for proposals, bid solicitations and other documents describing projects or programs funded in whole or in part with Federal money, all awardees receiving Federal funds, including and not limited to State and local governments and recipients of Federal research grants, shall clearly state (1) the percentage of the total costs of the program or project which will be financed with Federal money, (2) the dollar amount of Federal funds for the project or program, and (3) percentage and dollar amount of the total costs of the project or program that will be financed by nongovernmental sources.

27. ANTI-LOBBYING ACT

Anti-Lobbying Act requirements prohibit lobbying Congress with appropriated Federal monies. Specifically, this Act prohibits the use of Federal funds for direct or indirect communications intended or designed to influence a Member of Congress with regard to specific Federal legislation. This prohibition includes the funding and assistance of public grassroots campaigns

intended or designed to influence Members of Congress with regard to specific legislation or appropriation by Congress.
In addition to the restrictions in the Anti-Lobbying Act, CDC interprets the new language in the CDC's Appropriations Act to mean that CDC's funds may not be spent on political action or other activities designed to affect the passage of specific Federal, State, or local legislation intended to restrict or control the purchase or use of firearms.
For the full text of the award terms and conditions, please review the following CDC website:
http://www.cdc.gov/od/pgo/funding/grants/additional_req.shtm#ar13

28. PAYMENT INFORMATION

Sub-Account Title in the Payment Management System (PMS): IMMUNIZATIONINFRAS11

Note: The sub-account title will assist your organization in identifying the correct account when requesting funds in PMS.
Automatic Drawdown (Direct/Advance Payments):
Payment under this award will be made available through the Department of Health and Human Services (HHS) Payment Management System (PMS). PMS will forward instructions for obtaining payments.

a.) PMS correspondence, mailed through the U.S. Postal Service, should be addressed as follows:
Director, Division of Payment Management, OS/ASAM/PSC/FMS/DPM
P.O. Box 6021
Rockville, MD 20852
Phone Number: (877) 614-5533
Email: PMSSupport@psc.gov

Website: http://www.dpm.psc.gov/grant_recipient/shortcuts/shortcuts.aspx?explorer.event=true

Please Note: To obtain the contact information of DPM staff within respective Payment Branches refer to the links listed below:
University and Non-Profit Payment Branch:
http://www.dpm.psc.gov/contacts/dpm_contact_list/univ_nonprofit.aspx?explorer.event=true
Governmental and Tribal Payment Branch:
http://www.dpm.psc.gov/contacts/dpm_contact_list/gov_tribal.aspx?explorer.event=true
Cross Servicing Payment Branch:
http://www.dpm.psc.gov/contacts/dpm_contact_list/cross_servicing.aspx

b.) If a carrier other than the U.S. Postal Service is used, such as United Parcel Service, Federal Express, or other commercial service, the correspondence should be addressed as follows:

US Department of Health and Human Services
PSC/DFO/Division of Payment Management
7700 Wisconsin Avenue, 10th Floor
Bethesda, MD 20814

To expedite your first payment from this award, attach a copy of the Notice of Grant/Cooperative Agreement to your payment request form.

29. ACCEPTANCE OF THE TERMS OF AN AWARD

By drawing or otherwise obtaining funds from the grant payment system, the recipient acknowledges acceptance of the terms and conditions of the award and is obligated to perform in accordance with the requirements of the award. If the recipient cannot accept the terms, the recipient should notify the Grants Management Officer.

30. CERTIFICATION STATEMENT

By drawing down funds, Awardees certifies that proper financial management controls and accounting systems to include personnel policies and procedures have been established to adequately administer Federal awards and funds drawn down are being used in accordance with applicable Federal cost principles, regulations and Budget and Congressional intent of the President.

Driving,? October 1, 2009.

Recipients and sub-recipients of CDC grant funds are prohibited both from texting while driving a Government owned vehicle and/or using Government furnished electronic equipment while driving any vehicle. Texting means reading from or entering data into any handheld or other electronic device, including SMS texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. Driving means operating a motor vehicle on an active roadway with the motor running, including while temporarily stationary due to traffic, a traffic light, and stop sign or otherwise. Driving does not include operating a motor vehicle with or without the motor running when one has pulled over to the side of, or off, an active roadway and has halted in a location where one can safely remain stationary. Grant recipients and sub recipients are responsible for ensuring their employees are aware of this prohibition and adhere to this prohibition.

PROGRAMMATIC AND TECHNICAL CONTACT

Program Area 1

Gary Urquhart
U.S. Department of Health Services
Centers for Disease Control and Prevention
National Center for Immunization and Respiratory Diseases
1600 Clifton Road, NE , MS A19
Atlanta, GA 30333
(T) 404-639-8277
Email: GAU5@cdc.gov

STAFF CONTACTS
Grants Management Specialist: Constance J Palmer
Centers for Disease Control and Prevention
Procurement and Grants Office
Koger Center, Colgate Building
2920 Brandywine Road, Mail Stop K 14
Atlanta, GA 30341
Email: cpalmer@cdc.gov **Phone**: 770-488-2859 **Fax**: 770-488-2777

Grants Management Officer: Hector Buitrago
Centers for Disease Control and Prevention
Procurement and Grants Office
Koger Center, Colgate Building
2920 Brandywine Road, Mail Stop E-09
Atlanta, GA 30341
Email: gmf2@cdc.gov **Phone**: 770-488-2921 **Fax**: 770-488-2777

SPREADSHEET SUMMARY
GRANT NUMBER: 1H23IP000544-01

INSTITUTION: VERMONT DEPARTMENT OF HEALTH

Budget	***Year 1***
Salaries and Wages	$91,326
Fringe Benefits	$36,530
Supplies	$11,205
Travel Costs	$4,151
Other Costs	$18,131
Consortium/Contractual Cost	$576,000
TOTAL FEDERAL DC	$737,343
TOTAL FEDERAL F&A	$54,795
TOTAL COST	$792,138

GRANTS.GOV

Grant Application Package

Opportunity Title:	Prevention and Public Health Fund: Capacity Building As
Offering Agency:	Centers for Disease Control and Prevention
CFDA Number:	93.539
CFDA Description:	Prevention and Public Health Fund (Affordable Care Act)
Opportunity Number:	CDC-RFA-IP11-1107PPHF11
Competition ID:	NCIRD-NR
Opportunity Open Date:	03/30/2011
Opportunity Close Date:	05/09/2011
Agency Contact:	Centers for Disease Control and Prevention (CDC) Procurement and Grants Office (PGO) Technical Information and Management Section (TIMS) E-mail: pgotim@cdc.gov Phone: 770-488-2700

This electronic grants application is intended to be used to apply for the specific Federal funding opportunity referenced here.

If the Federal funding opportunity listed is not the opportunity for which you want to apply, close this application package by clicking on the "Cancel" button at the top of this screen. You will then need to locate the correct Federal funding opportunity, download its application and then apply.

This opportunity is only open to organizations, applicants who are submitting grant applications on behalf of a company, state, local or tribal government, academia, or other type of organization.

*** Application Filing Name:** Vermont Department of Health

Mandatory Documents

Move Form to Complete

Move Form to Delete

Mandatory Documents for Submission

- Budget Narrative Attachment Form
- Project Narrative Attachment Form
- HHS Checklist Form PHS 5161
- Budget Information for Non-Construction Program
- Disclosure of Lobbying Activities (SF-LLL)
- Project Abstract Summary
- Application for Federal Assistance (SF-424)

Optional Documents

Move Form to Submission List

Move Form to Delete

Optional Documents for Submission

- Other Attachments Form

Instructions

1 **Enter a name for the application in the Application Filing Name field.**

- This application can be completed in its entirety offline; however, you will need to login to the Grants.gov website during the submission process.
- You can save your application at any time by clicking the "Save" button at the top of your screen.
- The "Save & Submit" button will not be functional until all required data fields in the application are completed and you clicked on the "Check Package for Errors" button and confirmed all data required data fields are completed.

2 **Open and complete all of the documents listed in the "Mandatory Documents" box. Complete the SF-424 form first.**

- It is recommended that the SF-424 form be the first form completed for the application package. Data entered on the SF-424 will populate data fields in other mandatory and optional forms and the user cannot enter data in these fields.

- The forms listed in the "Mandatory Documents" box and "Optional Documents" may be predefined forms, such as SF-424, forms where a document needs to be attached, such as the Project Narrative or a combination of both. "Mandatory Documents" are required for this application. "Optional Documents" can be used to provide additional support for this application or may be required for specific types of grant activity. Reference the application package instructions for more information regarding "Optional Documents".

- To open and complete a form, simply click on the form's name to select the item and then click on the => button. This will move the document to the appropriate "Documents for Submission" box and the form will be automatically added to your application package. To view the form, scroll down the screen or select the form name and click on the "Open Form" button to begin completing the required data fields. To remove a form/document from the "Documents for Submission" box, click the document name to select it, and then click the <= button. This will return the form/document to the "Mandatory Documents" or "Optional Documents" box.

- All documents listed in the "Mandatory Documents" box must be moved to the "Mandatory Documents for Submission" box. When you open a required form, the fields which must be completed are highlighted in yellow with a red border. Optional fields and completed fields are displayed in white. If you enter invalid or incomplete information in a field, you will receive an error message.

3 **Click the "Save & Submit" button to submit your application to Grants.gov.**

- Once you have properly completed all required documents and attached any required or optional documentation, save the completed application by clicking on the "Save" button.
- Click on the "Check Package for Errors" button to ensure that you have completed all required data fields. Correct any errors or if none are found, save the application package.
- The "Save & Submit" button will become active; click on the "Save & Submit" button to begin the application submission process.
- You will be taken to the applicant login page to enter your Grants.gov username and password. Follow all onscreen instructions for submission.

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424

Version 02

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify)

* 3. Date Received: 05/05/2011

4. Applicant Identifier:

5a. Federal Entity Identifier:

* 5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: Vermont Department of Health

* b. Employer/Taxpayer Identification Number (EIN/TIN): 036000274

* c. Organizational DUNS: 809376155

d. Address:

* Street1: 108 Cherry Street PO Box 70
Street2:
* City: Burlington
County:
* State: VT: Vermont
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 05402-0070

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Ms.
* First Name: Christine
Middle Name:
* Last Name: Finley
Suffix:

Title: Immunization Program Chief

Organizational Affiliation:

* Telephone Number: 802-652-4185
Fax Number:

* Email: christine.finley@ahs.state.vt.us

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424 Version 02

9. Type of Applicant 1: Select Applicant Type:

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Centers for Disease Control and Prevention

11. Catalog of Federal Domestic Assistance Number:

93.539

CFDA Title:

Prevention and Public Health Fund (Affordable Care Act) - Capacity Building Assistance to Strengthen Public Health Immun

*** 12. Funding Opportunity Number:**

CDC-RFA-IP11-1107PPHF11

* Title:

Prevention and Public Health Fund: Capacity Building Assistance to Strengthen Public Health Immunization Infrastructure and Performance

13. Competition Identification Number:

NCIRD-NR

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

*** 15. Descriptive Title of Applicant's Project:**

Enhancing Interoperability between Electronic Health Records and Immunization Information Systems (IIS) and the Reception of HL7 Standard Messages into the IIS

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

* a. Applicant: VT-000

* b. Program/Project: VT-000

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 08/01/2011

* b. End Date: 07/31/2013

18. Estimated Funding ($):

* a. Federal	880,153.00
* b. Applicant	0.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	880,153.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on

☒ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☐ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)**

☐ Yes ☒ No Explanation

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix:

* First Name: Harry

Middle Name:

* Last Name: Chen

Suffix: M.D.

* Title: Commissioner of Health

* Telephone Number: 802-863-7280

Fax Number:

* Email: harry.chen@ahs.state.vt.us

* Signature of Authorized Representative: Harry Chen

* Date Signed: 05/05/2011

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424 Version 02

*** Applicant Federal Debt Delinquency Explanation**

The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.

OMB Number: 0980-0204
Expiration Date: 08/31/2012

Project Abstract Summary

Program Announcement (CFDA)

93.539

Program Announcement (Funding Opportunity Number)

CDC-RFA-IP11-1107PPHF11

Closing Date

05/09/2011

Applicant Name

Vermont Department of Health

Length of Proposed Project

24

Application Control No.

Federal Share Requested (for each year)

Federal Share 1st Year

$ 880,153

Federal Share 2nd Year

$ 0

Federal Share 3rd Year

$ 0

Federal Share 4th Year

$ 0

Federal Share 5th Year

$ 0

Non-Federal Share Requested (for each year)

Non-Federal Share 1st Year

$ 0

Non-Federal Share 2nd Year

$ 0

Non-Federal Share 3rd Year

$ 0

Non-Federal Share 4th Year

$ 0

Non-Federal Share 5th Year

$ 0

Project Title

Enhancing Interoperability between Electronic Health Records and Immunization Information Systems (IIS) and the Reception of HL7 Standard Messages into the IIS

Project Abstract Summary

Project Summary

The Health Information Technology for Economic and Clinical Health (HITECH) Act represents an important opportunity to improve patient care and the health care delivery system through significant investment in health information technology (HIT). The goal of the proposed project is to enhance immunization information exchange between health care and public health systems in order to reduce vaccine preventable disease and provide a foundation for health information infrastructure enhancements.

This proposed project is designed to provide technical and financial support for the use of Health Level 7 (HL7) standard messaging to enhance interoperability between electronic health records (EHRs) used by Vermont primary care providers and the Vermont Department of Health Immunization Registry (IMR). The creation of a convenient, secure, accurate, and timely way to exchange immunization data eliminates the burden of duplicate data entry and improves data quality. Vermont's adoption of HL7 messaging version 2.5.1, the approved American National Standard endorsed by the Office of the National Coordinator for Health Information Technology (ONC), accelerates the standardization necessary for a secure data exchange process.

A key project objective is to collect baseline data for the ongoing analysis of one-way messaging between the EHRs used by primary care practices and the IMR. These data collection efforts will allow the Health Department to evaluate the completeness of immunization data in the IMR, the timeliness of data submissions, and the quality of the data entered. Critical to the success of immunization data exchange described in this proposal is Vermont Information Technology Leaders, Inc. (VITL), the organization responsible for expanding the use of secure health information technology in Vermont. Since 2010, the Health Department has collaborated with VITL on a key data exchange project which has been delayed, due in part to a lack of resources. This project would allow VDH to enter into performance based contracting with VITL to ensure required baseline data exchange is implemented. Successful one-way HL7 messaging from EHRs to the IMR will accelerate implementation of the bi-directional exchange, by creating demand by providers using the data exchange.

Funding of this project will ensure the integration process necessary to transform the exchange of immunization data from a manual to an electronic process. The success of this effort will: improve the completeness of immunization histories available to health care providers and public health officials, greatly improve the timeliness of immunization data submissions, assist medical practices with demonstrating meaningful use, and advance EHR standardization in Vermont.

Estimated number of people to be served as a result of the award of this grant.

625741

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C.1352

Approved by OMB
0348-0046

1. * Type of Federal Action:
- [ ] a. contract
- [x] b. grant
- [ ] c. cooperative agreement
- [ ] d. loan
- [ ] e. loan guarantee
- [ ] f. loan insurance

2. * Status of Federal Action:
- [ ] a. bid/offer/application
- [x] b. initial award
- [ ] c. post-award

3. * Report Type:
- [x] a. initial filing
- [ ] b. material change

4. Name and Address of Reporting Entity:

[x] Prime [ ] SubAwardee

*Name: N/A

*Street 1: N/A Street 2:

*City: N/A State: Zip:

Congressional District, if known:

5. If Reporting Entity in No.4 is Subawardee, Enter Name and Address of Prime:

6. * Federal Department/Agency:

N/A

7. * Federal Program Name/Description:

Prevention and Public Health Fund (Affordable Care Act) - Capacity Building Assistance to Strengthen Public Health Immun

CFDA Number, *if applicable:* 93.539

8. Federal Action Number, *if known:*

9. Award Amount, *if known:*

$

10. a. Name and Address of Lobbying Registrant:

Prefix *First Name: N/A Middle Name

*Last Name: N/A Suffix

*Street 1 Street 2

*City State Zip

b. Individual Performing Services (including address if different from No. 10a)

Prefix *First Name: N/A Middle Name

*Last Name: N/A Suffix

*Street 1 Street 2

*City State Zip

11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

*** Signature:** Harry Chen

***Name:** Prefix *First Name: N/A Middle Name

*Last Name: N/A Suffix

Title: **Telephone No.:** **Date:** 05/05/2011

Authorized for Local Reproduction
Standard Form - LLL (Rev. 7-97)

BUDGET INFORMATION - Non-Construction Programs

OMB Approval No. 4040-0006
Expiration Date 07/30/2010

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Interop		$	$	$ 880,153.00	$	$ 880,153.00
2. N/A				0.00		0.00
3. N/A				0.00		0.00
4. N/A				0.00		0.00
5. Totals		$	$	$ 880,153.00	$	$ 880,153.00

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY (1)	(2)	(3)	(4)	Total (5)
	Interop				
a. Personnel	$ 101,473.00	$	$	$	$ 101,473.00
b. Fringe Benefits	40,589.00				40,589.00
c. Travel	4,612.00				4,612.00
d. Equipment	0.00				
e. Supplies	12,450.00				12,450.00
f. Contractual	640,000.00				640,000.00
g. Construction					
h. Other	20,145.00				20,145.00
i. Total Direct Charges (sum of 6a-6h)	819,269.00				$ 819,269.00
j. Indirect Charges	60,884.00				$ 60,884.00
k. TOTALS (sum of 6i and 6j)	$ 880,153.00	$	$	$	$ 880,153.00
7. Program Income	$ 0.00	$	$	$	$

SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8.	$	$	$	$
9.				
10.				
11.				
12. TOTAL (sum of lines 8-11)	$	$	$	$

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$	$	$	$	$
14. Non-Federal	$				
15. TOTAL (sum of lines 13 and 14)	$	$	$	$	$

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)			
	(b)First	(c) Second	(d) Third	(e) Fourth
16.	$	$	$	$
17.				
18.				
19.				
20. TOTAL (sum of lines 16 - 19)	$	$	$	$

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges:

22. Indirect Charges:

23. Remarks:

PHS-5161-1 (7/00)

CHECKLIST

OMB Approval No. 0920-0428

Public Burden Statement:

Public reporting burden of this collection of information is estimated to average 4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Clearance Officer, 1600 Clifton Road, MS D-24, Atlanta, GA 30333, ATTN: PRA (0920-0428). Do not send the completed form to this address.

NOTE TO APPLICANT:

This form must be completed and submitted with the original of your application. Be sure to complete both sides of this form. Check the appropriate boxes and provide the information requested. This form should be attached as the last age of the signed original of the application. This page is reserved for PHS staff use only.

Type of Application: ☒ NEW ☐ Noncompeting Continuation ☐ Competing Continuation ☐ Supplemental

PART A: The following checklist is provided to assure that proper signatures, assurances, and certifications have been submitted.

	Included	NOT Applicable
1. Proper Signature and Date	☒	
2. Proper Signature and Date on PHS-5161-1 "Certifications" page.	☒	
3. Proper Signature and Date on appropriate "Assurances" page, i.e., SF-424B (Non-Construction Programs) or SF-424D (Construction Programs)	☒	
4. If your organization currently has on file with DHHS the following assurances, please identify which have been filed by indicating the date of such filing on the line provided. (All four have been consolidated into a single form, HHS Form 690)		
☐ Civil Rights Assurance (45 CFR 80)		
☐ Assurance Concerning the Handicapped (45 CFR 84)		
☐ Assurance Concerning Sex Discrimination (45 CFR 86)		
☐ Assurance Concerning Age Discrimination (45 CFR 90 & 45 CFR 91)		
5. Human Subjects Certification, when applicable (45 CFR 46)	☐	☒

PART B: This part is provided to assure that pertinent information has been addressed and included in the application.

	YES	NOT Applicable
1. Has a Public Health System Impact Statement for the proposed program/project been completed and distributed as required?	☐	☒
2. Has the appropriate box been checked on the SF-424 (FACE PAGE) regarding intergovernmental review under E.O. 12372 ? (45 CFR Part 100)	☒	
3. Has the entire proposed project period been identified on the SF-424?	☒	
4. Have biographical sketch(es) with job description(s) been attached, when required?	☒	☐
5. Has the "Budget Information" page, SF-424A (Non-Construction Programs) or SF-424C (Construction Programs), been completed and included?	☒	
6. Has the 12 month detailed budget been provided?	☒	☐
7. Has the budget for the entire proposed project period with sufficient detail been provided?	☒	☐
8. For a Supplemental application, does the detailed budget address only the additional funds requested?	☐	☒
9. For Competing Continuation and Supplemental applications, has a progress report been included?	☐	☒

PART C: In the spaces provided below, please provide the requested information.

Business Official to be notified if an award is to be made

Name: Prefix: Mr. * First Name: Gary Middle Name:

* Last Name: Leach Suffix:

Title:

Organization: Vermont Department of Health

Address: * Street1: 108 Cherry Street PO Box 70

Street 2:

* City: Burlington

* State: VT: Vermont Province:

* Country: USA: UNITED STATES * Zip / Postal Code: 05402

*** Telephone Number:** 802-863-7384

E-mail Address: gary.leach@ahs.state.vt.us

Fax Number:

APPLICANT ORGANIZATION'S 12-DIGIT DHHS EIN (If already assigned)

[ ] - 03-6000274 - [ ]

PART C (Continued): In the spaces provided below, please provide the requested information.

Program Director/Project Director/Principal Investigator designated to direct the proposed project

Name: Prefix: Ms. * First Name: Christine Middle Name:

* Last Name: Finley Suffix:

Title: Immunization Program Chief

Organization: Vermont Department of Health

Address: * Street1: 108 Cherry Street PO Box 70

Street2:

* City: Burlington

* State: VT: Vermont Province:

* Country: USA: UNITED STATES * Zip / Postal Code: 05402

*** Telephone Number:** 802-652-4185

E-mail Address: christine.finley@ahs.state.vt.us

Fax Number:

SOCIAL SECURITY NUMBER

HIGHEST DEGREE EARNED

PART D: A private, nonprofit organization must include evidence of its nonprofit status with the application. Any of the following is acceptable evidence. Check the appropriate box or complete the "Previously Filed" section, whichever is applicable.

- ☐ (a) A reference to the organization's listing in the Internal Revenue Service's (IRS) most recent list of tax-exempt organizations described in section 501(c)(3) of the IRS Code.
- ☐ (b) A copy of a currently valid Internal Revenue Service Tax exemption certificate.
- ☐ (c) A statement from a State taxing body, State Attorney General, or other appropriate State official certifying that the applicant organization has a nonprofit status and that none of the net earnings accrue to any private shareholders or individuals.
- ☐ (d) A certified copy of the organization's certificate of incorporation or similar document if it clearly establishes the nonprofit status of the organization.
- ☐ (e) Any of the above proof for a State or national parent organization, and a statement signed by the parent organization that the applicant organization is a local nonprofit affiliate.

If an applicant has evidence of current nonprofit status on file with an agency of PHS, it will not be necessary to file similar papers again, but the place and date of filing must be indicated.

Previously Filed with: * *(Agency)* on * *(Date)*

INVENTIONS

If this is an application for continued support, include: (1) the report of inventions conceived or reduced to practice required by the terms and conditions of the grant; or (2) a list of inventions already reported, or (3) a negative certification.

EXECUTIVE ORDER 12372

Effective September 30, 1983, Executive Order 12372 (Intergovernmental Review of Federal Programs) directed OMB to abolish OMB Circular A-95 and establish a new process for consulting with State and local elected officials on proposed Federal financial assistance. The Department of Health and Human Services implemented the Executive Order through regulations at 45 CFR Part 100 (Inter-governmental Review of Department of Health and Human Services Programs and Activities). The objectives of the Executive Order are to (1) increase State flexibility to design a consultation process and select the programs it wishes to review, (2) increase the ability of State and local elected officials to influence Federal decisions and (3) compel Federal officials to be responsive to State concerns, or explain the reasons.

The regulations at 45 CFR Part 100 were published in *Federal Register* on June 24, 1983, along with a notice identifying the Department's programs that are subject to the provisions of Executive Order 12372. Information regarding PHS programs subject to Executive Order 12372 is also available from the appropriate awarding office.

States participating in this program establish State Single Points of Contact (SPOCs) to coordinate and manage the review and comment on proposed Federal financial assistance. Applicants should contact the Governor's office for information regarding the SPOC, programs selected for review, and the consultation (review) process designed by their State.

Applicants are to certify on the face page of the SF-424 (attached) whether the request is for a program covered under Executive Order. 12372 and, where appropriate, whether the State has been given an opportunity to comment.

Vermont (H23/IP-122529)
2012 Grant Budget Justification Report
CDC-RFA-IP11-1107PPHF11

Budget Request Overview			
Status:		Description:	Vermont 2012 PPHF Grant Application & Review
Request Modified By:	System	Requested/Last Modified:	2011-04-28 / 2011-04-28
Unique Serial #:	S462	Amendment #:	0
Justification			
Applying for 2012 PPHF Grant Funds			

Budget Summary

Budget Category	Fundin[redacted]		Billing Dev	Billing Imp	Adult	SL Vax	Total
	Inter[redacted]	kS					
Personnel	$101,473	$0	$0	$0	$0	$0	$101,473
Fringe	$40,589	$0	$0	$0	$0	$0	$40,589
Travel	$4,612	$0	$0	$0	$0	$0	$4,612
Equipment	$0	$0	$0	$0	$0	$0	$0
Supplies	$12,450	$0	$0	$0	$0	$0	$12,450
Contractual	$640,000	$0	$0	$0	$0	$0	$640,000
Vaccine	$0	$0	$0	$0	$0	$0	$0
Other	$20,145	$0	$0	$0	$0	$0	$20,145
Indirect	$60,884	$0	$0	$0	$0	$0	$60,884
DA - Personnel	$0	$0	$0	$0	$0	$0	$0
DA - Other	$0	$0	$0	$0	$0	$0	$0
Total:	$880,153	$0	$0	$0	$0	$0	$880,153

Budget Details

Financial Assistance: Personnel			Total Approved			$40,589	$101,473
User Defined ID	Type	Position Title & Name	Annual	% FTE	Months	Fringe	Total
		Public Health Analyst III: (Margaret Baldor)	$67,954	50%	12	$13,591	$47,568
		This is a new line item for $47,568.					
		The public health analyst currently supports the IMR by extracting data for immunization reports and assuring the accuracy of the data. These efforts will initially increase with the interoperability project; but should return to pre-project levels after a year. *Funded by:* Interop - 100.00% ($47,568)					
		Senior Systems Developer: (Becky Jo Cyr)	$68,432	50%	12	$13,686	$47,902
		This is a new line item for $47,902.					
		This position schedules the work of the IMR developers and provides support for the business analysis services necessary for project upgrades and other improvements to the registry. The interoperability project will require additional time and attention to this aspect of the project and will require the Systems Developer to assist the Project Manager on the business rules. It is anticipated after an initial increase in demand for these services as part of the interoperability project, a decrease in need will occur after a year. *Funded by:* Interop - 100.00% ($47,902)					
		De-duplication Clerk: (Vacant)	$33,280	100%	12	$13,312	$46,592
		This is a new line item for $46,592.					
		This newly created temporary position will be necessary to work full time to accommodate the anticipated increase in duplicate records that occur as a result of the data exchange. After a year, the IMR team will be able to maintain the de-duplication process as data quality is improved. *Funded by:* Interop - 100.00% ($46,592)					
		Public Health informatics Specialist: (Vacant)	$0	0%	0	$0	$0
		This is a new line item for $.					
		This currently funded position will have the primary responsibility to work with the Project Manager and the rest of the Implementation Team. The Information Specialist will work directly with VITL as the integration of the IMR into the VHIE (through HL7 messaging) proceeds. This position will work closely with the Project Manager to meet the goals of the project and will serve as the liaison between the Implementation Team, VITL, and the practices participating in the project. *Funded by:* Interop - < 1% ($0)					
		IT Systems Developer: (Karen Clark)	$0	0%	0	$0	$0
		This is a new line item for $.					
		Karen works directly with the IMR to develop the necessary vaccine updates that are integrated into the IMR. This also includes the development of new reports that will be needed for the interoperability project to gauge progress and evaluate outcomes. *Funded by:* Interop - < 1% ($0)					

Financial Assistance: Personnel			Total Approved			$40,589	$101,473
User Defined ID	Type	Position Title & Name	Annual	% FTE	Months	Fringe	Total
		IMR Program Support: (Vacant)	$0	0%	0	$0	$0
		This is a new line item for $.					
		This position functions to support the IMR including enrolling new providers, handling password matters, updating data, assisting with de-duplication, and other administrative duties as assigned. For the interoperability project this position will assist the IMR Manager with tracking project data. *Funded by:* Interop - < 1% ($0)					
		IMR Manager: (Bridget Ahrens)	$0	0%	0	$0	$0
		This is a new line item for $.					
		Bridget provides expertise in immunization information systems, including development and implementation. Bridget will function as the subject matter expert for IMR throughout the entire interoperability project. She will work closely with the Project Manager and the Informatics Specialist. Bridget will support the implementation team on IMR data quality and data warehouse issues. *Funded by:* Interop - < 1% ($0)					
		Immunization Program Chief: (Christine Finley)	$0	0%	0	$0	$0
		This is a new line item for $.					
		As the Immunization Program Chief, Chris sets goals and priorities for the program. Chris will provide the contract oversight for the Project Manger hired for the interoperability project and will work with the entire Implementation Team to ensure the goals and activities of the project are accomplished in a timely manner. *Funded by:* Interop - < 1% ($0)					
		IT Manager: (Eileen Underwood)	$0	0%	0	$0	$0
		This is a new line item for $.					
		Eileen will provide oversight for the VITL contract to ensure the overall planning and coordination of the interoperability project. *Funded by:* Interop - < 1% ($0)					

[redacted]sistance:	Total Approved: [redacted]	$4,612
User Defined ID	Type	Total
[redacted]tate travel		
	(In State, Site visits) Trips: 24, People: 1, Days: 0, Per Diem: $32, Nights: 0, Miles: 100 * $0.510 = $51.00, Airfare: $0.00, Lodging: $0.00, Other: $0.00	$1,224
	This is a new line item for $1,224.	
	Site visits to provider offices, as necessary *Funded by:* Interop - 100.00% ($1,224)	
	(In State, Meetings) Trips: 12, People: 1, Days: 0, Per Diem: $32, Nights: 0, Miles: 100 * $0.510 = $51.00, Airfare: $0.00, Lodging: $0.00, Other: $0.00	$612
	This is a new line item for $612.	
	In state travel to local meetings and professional conferences *Funded by:* Interop - 100.00% ($612)	
[redacted]		
	(Out of State, Atlanta, GA) Trips: 1, People: 2, Days: 4, Per Diem: $32, Nights: 3, Miles: 20 * $0.510 = $10.20, Airfare: $650.00, Lodging: $150.00, Other: $150.00	$2,776
	This is a new line item for $2,776.	
	Required travel to a CDC hosted grant management meeting. *Funded by:* Interop - 100.00% ($2,776)	

Financial Assistance: [redacted]pplies			Total Approved:		$12,450
User Defined ID	Type	Item Requested	How Many	Unit Costs	Total
		Material Development and Production	1000.0	$5.00	$5,000
		This is a new line item for $5,000.			
		Development and production of materials to be used to inform providers of program objectives and maintenance of the project. *Funded by:* Interop - 100.00% ($5,000)			

Financial Assistance: Supplies			Total Approved:		$12,450
User Defined ID	Type	Item Requested	How Many	Unit Costs	Total
		Computer	2.0	$1,225.00	$2,450
		This is a new line item for $2,450.			
		Two new computers will be purchased to replace currently existing computers to rapidly handle larger amounts of data. *Funded by:* Interop - 100.00% ($2,450)			
		Multifunction Printer	1.0	$2,500.00	$2,500
		This is a new line item for $2,500.			
		Printer replacement is needed to rapidly produce more efficient documents through scanning and copying. *Funded by:* Interop - 100.00% ($2,500)			
		General Office Supplies	1.0	$2,500.00	$2,500
		This is a new line item for $2,500.			
		General office supplies are necessary to carry out project deliverables. *Funded by:* Interop - 100.00% ($2,500)			

Financial Assistance: Contractual		Total Approved:			$640,000
User Defined ID	Type	Contract Details	Contract Type	Reporting Method	Total
		Vermont Information Technology Leaders(Selected by: Sole Source) *(Period of Performance: 2011-09-15 - 2013-09-15)*	Other Public Entity	Quarterly Report	$320,000
		This is a new line item for $320,000.			
		Deliverables include: • Designing the HIE transition including: Complete data provider gathering for ADT interface, receiving draft ADT& VXU specifications from Medicity, and determine plan for PHINMS • Prioritizing practices for developing interfaces • Communicating HL7 specifications to vendors • Building interfaces for sending data including: Complete ADT interface build in CERT, new HIE built and configured, complete VXU interface build in CERT • Building interface for Patient Matching • Patient matching – automated • Testing of Interface including: CMPI go-live prior to any ADT interfaces, receive sign-off for ADT testing, receiving sign off for VXU testing • Certifying practice for meaningful use • Go live with ADT from VDH to VHIE • Go live with VXU interface from VHIE to VDH • Go live with first practice sending immunization information to IMR thru VHIE • Message meeting HL7 specifications • Evaluating incoming messages for quality • Working with vendors to build capacity to accept return messages *Funded by:* Interop - 100.00% ($320,000)			

Financial Assistance: Contractual	Total Approved:			$640,000
User Defined ID	Type	Contract Details	Contract Type	Reporting Method	Total
		Project Manager(Selected by: Bid) *(Period of Performance: 2011-09-15 - 2013-09-15)*	Commercial	Quarterly Report	$250,000
		This is a new line item for $250,000.			
		The position will analyze the business and clinical requirements necessary for both the practices using the EHRs and the vendors providing the software. The Project Manger will work closely with the IMR Manager to ensure the necessary tracking of data outlined in this application and will also work closely with the VITL team concerning the timely completion of the development, building, and testing, of the interfaces necessary for the transmission of data. Deliverables include: 1. Work with Immunization Program and IMR Team to develop and maintain training modules for practices and vendors about the HL7 implementation - Assess training needs for practices, vendors, Implementation Team and IMR team - Includes coordination with Immunization Program IMR Trainers to ensure practices are able to utilize patient and practice level reporting features of the registry - May include working to establish web-based training 2. Work with Immunization Program and IMR Team to Evaluate the IIS-EMR Interoperability project including: - Using parameters outlined in the project goals, objectives, activities, and outcomes, including the data collected in #5 below. - Assessment/survey of stakeholders to determine the quality, reach, appropriateness, satisfaction, and barriers related to the project - Documenting the project and evaluation process to accompany annual reporting requirements. - Attend and participate in telephone conferences, CDC site visits and other required meetings. 3. Manage an incentive program for payments to providers for meeting set program goals. *Funded by:* Interop - 100.00% ($250,000)			
		Oleen Pinnacle(Selected by: Sole Source) *(Period of Performance: 2012-01-01 - 2012-12-31)*	Local Health	Quarterly Report	$70,000
		This is a new line item for $70,000.			
		This contract will provide programmatic and technical support for the Immunization Registry. Activities related to the procurement, validation, data mapping and formatting of batch data. This contract will continue to support the continued batch data file reporting while practices work with EMR vendors to meet specifications for HL7 exchange. *Funded by:* Interop - 100.00% ($70,000)			

Financial Assistance: Other		Total Approved [redacted]	[redacted]
User Defined ID	Type	Description	Total
		IT Rhapsody Training	$8,500
		This is a new line item for $8,500.	
		VDH uses Orion's Rhapsody Integration Engine to transform data from one format to another to facilitate electronic information sharing. As providers implement Electronic Health Records (and work to meet the Meaningful Use criteria for Public Health), VDH will receive an increasing amount of data electronically. When the Rhapsody tool was originally acquired in March, 2006, training was provided to IT staff. Because of the increase in the amount of electronic data exchange as well as staff turn over and, it is appropriate to offer the training again. *Funded by:* Interop - 100.00% ($8,500)	
		Project Management Training	$8,750
		This is a new line item for $8,750.	
		The Information Technology Team Leads coordinate resources (analyzers, programmers, data services, and testers) for IT projects. Formal training will increase their knowledge of project management techniques and allow them to more easily communicate with colleagues. *Funded by:* Interop - 100.00% ($8,750)	
		Software Licenses	$2,395
		This is a new line item for $2,395.	
		Contribute: Adobe® Contribute® software will be utilized for web publishing and website management. This tool will increase web publishing productivity and allow for broader communication about the EMR/IMR project. Upgrade current licenses: $1685.30 New licenses: $709.20 *Funded by:* Interop - 100.00% ($2,395)	
		Postage	$500
		This is a new line item for $500.	
		Postage for materials to inform providers of project objectives and maintenance of the project. *Funded by:* Interop - 100.00% ($500)	

Indirect Costs Total Change Requested/Approved:			$60,884
User Defined ID	Type	Indirect Change Description	Total
		Indirect cost for Funding Source Interop	$60,884
		This is a new line item for $60,884.	
		The Vermont Department of Health uses a Cost Allocation Plan, not an indirect rate. The Vermont Department of Health is a department of the Vermont Agency of Human Services, a public assistance agency, which uses a Cost Allocation Plan in lieu of an indirect rate agreement as authorized by OMB Circular A-87, Attachment D. This Cost Allocation Plan was approved by the US Department of Health and Human Services effective October 1, 1987. A copy of the of the most recent approval letter of to March 15, 2011 are attached, see Appendix D. The Cost Allocation Plan summarizes actual, allowable costs incurred in the operation of the program. These costs include items which are often shown as direct costs, such as telephone and general office supply expenses, as well as items which are often included in an indirect rate, such as the cost of office space and administrative salaries. These costs are allocated to the program based on the salaries and wages paid in the program. Because these are actual costs, unlike an Indirect Cost Rate, these costs will vary from quarter to quarter and cannot be fixed as a rate. Based on costs allocated to similar programs during recent quarters, we would currently estimate these allocated costs at 60% of the direct salary line item. *Funded by:* Interop - 100.00% ($60,884)	

Margaret T. Baldor
226 Loomis Hill Road
Waterbury Center, VT 05677
Phone: (802) 951-1222

EDUCATION:

Bachelor of Science, Nursing, University of Vermont (UVM), Burlington, VT, May 2011
(RN anticipated July 2011)

Master of Science, Food Science, Statistical and Quality Improvement focus, UVM, Burlington, VT May 2000

Bachelor of Arts, Economics/Business Administration, UVM, Burlington, VT December 1980

Other Skills: SQL, SAS, SPSS

PROFESSIONAL EXPERIENCE:

Data Analysis ~ Focus on program development, evaluation and quality improvement, 4/2001 to present

Public Health Analyst
Division of Health Surveillance, Vermont Department of Health, Burlington, VT.

Data quality assurance, analytical program support and evaluation provided to a variety of public health programs including Immunization Program and Registry, RealID, Prescription Monitoring System, Patient Safety, Advance Directives, Infectious Epi Early Surveillance, and Hospital-Acquired Infections. *8/2007 – present*

Medicaid Financial Analyst
Office of Medicaid, Department of Vermont Health Access, Williston, VT.

Utilization and financial analysis, predictive modeling and program support for Medicaid's data management and data integrity initiatives. Supported Medical Director and clinical staff in Vermont Care Coordination program development and performance evaluation. *8/2004 - 8/2007*

Special Education Data Manager
Vermont Department of Education, Montpelier, VT

Student performance evaluation and statistical analysis, survey administration and analysis. Data collection/analysis/reporting all special education state and federal data. Data manager for special education three-year continuous quality improvement initiative. Intra-departmental and inter-agency teams and collaboration.
4/2001 – 8/ 2004

Information Technology ~ Focus on system development, programming, training, 1/1985 through 4/2001

Systems Analyst
Blue Cross/Blue Shield of Vermont, Berlin, VT, 1/1998 to 4/2001
Vermont Mutual Insurance, Montpelier, VT, 2/1989 – 6/1990
Liberty Mutual Insurance, Portsmouth, NH, 10/1985 to 8/1988

Sales and Financial Management ~ Focus on Sales, Financial Analysis, Customer Service, Team-Building, 1/1981 – 12/1985

Sales Manager, Executive Management Training Program
Jordan Marsh Company, Newington, NH and Boston, MA, 10/1982 – 10/1985

Financial Management Trainee, Financial Management Training Program
General Electric Company, Headquarters and Large Steam Turbine, Schenectady, NY, 1/1981 – 9/1982

PROFESSIONAL ORGANIZATIONS:

Sigma Theta Tau, Honor Society of Nursing, Member 2009 – present

Vermont State Nurses Association, Member 2007 – present

REFERENCES: Available upon request.

BECKY-JO CYR
4626 River Road
New Haven VT 05472
(802) 453-7211 h or (802) 989-0288 c
cyrsmith@gmavt.net

QUALIFICATIONS

- Substantial project management experience
- Proven track record of managing and communicating with a variety of personalities
- Dedication to projects successful conclusion
- Versatile and flexible, with an ability to move between tasks quickly and efficiently

PROFESSIONAL SKILLS

PROJECT MANAGEMENT

- Assist with the scope of work definitions for department contracts.
- Interact with federal government employees, vendor and program staff to ensure department contracts were implemented correctly.
- Identify the skill sets needed to implement application features and ensure those resources are scheduled appropriately.
- Gather and record user requirements in a variety of project documents.
- Monitor project progress
- Identify risks and develop mitigation plans early in project.
- Ensure the technical needs of the project are obtainable and implemented in a way that fit the user requirements.
- Recognize ways in which the business process may be changed to maximize return on technology investment.
- Track down the sources of errors and suggest possible solutions.

MANAGERIAL AND SUPERVISORY SKILLS

- Supervision of multiple levels and numbers of developers.
- Serve as team leader for development team working on enterprise application.
- Coordinate application development among manage database and application programmers.
- Set yearly performance goals for individuals and write annual evaluations.
- Work with staff to identify areas of new potential and assign projects allowing knowledge and new skills to be acquired.
- Develop and document standards for development staff.
- Mediated discord among co-workers on the team and across other teams.

TECHNICAL SKILLS

- Deploy windows and web applications in .NET framework.
- Locate and resolve .NET framework and IIS security issues.
- Create Crystal Reports across databases.
- Extensive knowledge of the Rational Unified Process.
- Read code written in various languages and determine its purpose.
- Write code in Visual Basic, SQL Server and Visual Basic for Applications.
- Develop Microsoft Access applications.
- Proficient with Microsoft Word, Excel, PowerPoint, Project and Visio.

EMPLOYMENT HISTORY

- Senior System Developer, Vermont Department of Health Burlington, VT, July 2007– present
- System Developer III, Vermont Department of Health Burlington, VT, June 2002 – July 2007
- System Developer II, Vermont Department of Health Burlington, VT, March 2000 – June 2002
- System Developer I, Vermont Department of Health Burlington, VT, September 1998 – March 2000
- Programmer Trainee, Vermont Department of Health Burlington, VT, January 1998 – September 1998
- Childhood Lead Poisoning Prevention Clerk, Vermont Department of Health Burlington, VT, December 1994 - January 1998

EDUCATION

Associates degree in Computer Science and Office Administration
Community College of Vermont, June 1994

REFERENCES:

Furnished upon request

Christine A. Finley

314 Ruby Raymond Rd.
Waterbury Center, VT 05677
e-mail: cafinley1@yahoo.com
Work Phone: (802) 863-7282
Home Phone: (802) 244-8903

Employment

IMMUNIZATION PROGRAM CHIEF — December 2009 - Present
Vermont Department of Health

Oversee all aspects of the Vermont Immunization Program

DEPUTY COMMISSIONER OF PUBLIC HEALTH
Vermont Department of Health — January 2007 – Dec 2009

Provide public health leadership with oversight of key programs. Actively involved with development of public health policy issues, program planning and evaluation and fiscal operations.

DIRECTOR OF FIELD OPERATIONS
Vermont Department of Health — March 2005 – Dec 2006

Provide public health leadership, supervising the 12 district directors responsible for the planning and implementation of local public health. Develop and maintains partnerships with various departments, divisions and program personnel, to foster collaboration among stakeholders.

STERLING COLLEGE
Craftsbury Common, VT — Sept 2004 – May 2005

Provided primary care to a college student one day a week.

FOREIGN SERVICE NURSE PRACTITIONER — Nov 1998 – July 2004
U.S. Department of State — Foreign Service

- Medical Attaché at U.S. Embassies in Yugoslavia, Cameroon and Bulgaria. Overall responsibility for management of Health Unit, provision of primary care to employees and dependents affiliated with the U.S. mission, evaluation of health care, public health risks assessment and mass casualty planning.

PRIIMARY CARE NURSE PRACTITIONER — July 1994 – Nov 1998
Fletcher Allen Health Care — Burlington, VT

- Primary care nurse practitioner in a large internal medicine group practice affiliated with Fletcher Allen Health Care. Responsibilities included ensuring comprehensive medical care through assessment, diagnosis and treatment of acute and chronic medical problems in adult patients. Also conducted research on women's health issues.

COMMUNITY HEALTH NURSING INSTRUCTOR — Aug 1993 – May 1994
University of Vermont — Burlington, VT

- Assumed a one-year position as a team member providing clinical oversight and instruction to fourth year BSN nursing students.

DEPUTY COMMISSIONER OF HEALTH — May 1991 – Aug 1993
Vermont Department of Health — Burlington, VT

- Appointed as deputy to the Commissioner of Health. Oversaw numerous health department programs and coordinated federal grant writing projects.

CANCER PROGRAM CHIEF — June 1989 - July 1993
Vermont Department of Health

- Served a program director and organized the Cancer Coalition which set goals to reduce cancer in Vermont.

HEALTH PLANNING SPECIALIST — June 1988 – May 1989
Vermont Department of Health

- Staff support for the Certificate of Need program

RESEARCH ASSISTANT — July 1987 – May 1988
Johns Hopkins School of Hygiene and Public Health

- Worked on a project to assess methodology for assessment of cancer clusters in the population.

ASSISTANT PROFESSOR OF NURSING — Aug 1984 – May 1987
University of Vermont, School of Nursing

- Taught third-year medical surgical nursing

MARTHA'S VINEYARD HOSPITAL, Oak Bluffs, MA — Summer 1985, 86

UPSTATE MEDICAL CENTER, Syracuse, NY — 1984 - 86

CROUSE-IRVING MEMORIAL HOSPITAL, Syracuse, NY 1986

MEDICAL COLLEGE OF VIRGINIA, Richmond, VA 1981- 1983

- Worked as a medical-surgical RN in a variety of different settings.

Education

JOHNS HOPKINS SCHOOL OF HYGIENE AND PUBLIC HEALTH
Degree: Masters of Public Health
July 1987 – May 1988
Baltimore, Maryland

Education continued:

SYRACUSE UNIVERSITY
Degree: Masters of Science in Nursing
Aug 1982 – May 1984
Syracuse, New York

NIAGARA UNIVERSITY
Degree: Bachelor of Science in Nursing
Aug 1976 – May 1980

Professional Licenses and Certification

Certified Adult Nurse Practitioner, 1984
Registered Nurse, 1980

M. Bridget Ahrens, MPH
48 Lafountain Street
Winooski VT 05404
Phone: (802) 951-4094
Email: bridget.ahrens@ahs.state.vt.us

PROFESSIONAL EXPERIENCE:

Vermont Immunization Registry Manager **July 2004 to present**
Division of Health Surveillance, Vermont Department of Health. Burlington VT. Richard McCoy, Statistics Chief.

Vermont Tobacco Control Program Evaluator **June 2002 to July 2004**

Department of Health, Social, and Economic Research, Research Triangle Institute, Research Triangle Park, NC. Matthew Farrelly, Department Chief.

Project Coordinator **June 1998 to August 2002**

Department of Pediatrics, Dartmouth Medical School, Hanover/Lebanon, NH. James Sargent, MD, Principal Investigator.

Project Coordinator, Research Assistant **October 1993 to June 1998**

Department of Community and Family Medicine, Dartmouth Medical School, Hanover/Lebanon, NH. Marguerite Stevens, Ph.D., Principal Investigator.

EDUCATION:

Masters of Public Health, University of California at Berkeley, Berkeley CA, May 1981.

Bachelor of Science, SUNY at Buffalo, Buffalo NY, May 1980.

CONTINUING EDUCATION:

Certificate, New England Regional Public Health Leadership Institute, University at Albany, [SUNY] Albany NY, July 2006.

Masters of Fine Arts, Vermont College, Montpelier VT, July 1990.

- Area of concentration: Writing.

PRESENTATIONS:

Ahrens MB, Earley SJ, Crandall M, Carroll CM, Reed K. Data Outreach: Helping Practices Help Themselves. National Immunization Conference, March 8, 2007, Kansas City, MO. (Abstract K4-94)

Ahrens, B. The Vermont Immunization Registry: Making Connections for Better Health. VT Statewide Immunization Conference, December 8, 2004.

Ahrens MB, Mann NH, Cook ML, Sayre AE, Burrus BB. Distilling Process Measures from Community Coalitions. Poster Presentation. National Conference on Tobacco or Health, December 10-12, 2003, EVAL-176-236.

PUBLICATIONS:

AIRA Modeling of Immunization Registry Operations Workgroup (eds). Data quality assurance in Immunization Information Systems. Atlanta, GA: American Immunization Registry Association. December, 2007.

AIRA Modeling of Immunization Registry Operations Workgroup (eds). Vaccination level de-duplication in Immunization Information Systems. Atlanta, GA: American Immunization Registry Association. December, 2006.

Dalton MA, Sargent JD, Beach ML, Titus-Ernstoff L, Gibson JJ, Ahrens MB, Tickle JJ, Heatherton TF. Effect of viewing smoking in movies on adolescent smoking initiation: a cohort study. Lancet. 2003 July 26; 362(9380):281-5.

Dalton MA , Tickle JJ , Sargent, JD, Beach ML, Ahrens MB, Heatherton TF. Incidence and Context of Tobacco Use in Popular Movies from 1988 to 1997. Preventive Medicine. 2002 May; 34(5): 516-523.

PROFESSIONAL ORGANIZATIONS:

2007-2010	Board of Directors of American Immunization Registry Association.
2004-Present	Member American Immunization Registry Association.
2001-2003	Member Medical Advisory Board, Women's Breast and Cervical Cancer Screening Program, NH Department of Health and Human Services, Concord, NH.
2000-2004	Member American Public Health Association.
1997-2002	Member of the Institute for the Study of Applied and Professional Ethics, Dartmouth College.
1996-2005	Health Education Consultant, Women's Breast and Cervical Cancer Screening Program, NH Department of Health and Human Services, Concord, NH.

COMMUNITY SERVICE:

2008-present	Justice of the Peace, Winooski, VT.
2005-2007	Library Board, Winooski, VT
2007-2009	Board of Directors, RU12 Community Center, Burlington, VT.

HONORS AND AWARDS:

- Elected to the Board of Directors of American Immunization Registry Association (AIRA) in 2007.
- Nominated for Community Service Award, State of Vermont, 2007.

REFERENCES AVAILABLE UPON REQUEST

Karen Clark
60 Griswold St.
Jericho, VT 05465
(802)899-5075
kmclark210@comcast.net

WORK EXPERIENCE:

State of Vermont, Department of Health, 9/2008 to present: Systems Developer III / Application Team Lead - Currently supervising a team of 3 Systems Developers. Duties include analysis and design documentation team review, code review, software design and development, and project management. Current projects include working with Vermont Information Technology Leaders (VITL) to implement HL7 messaging of immunizations from health care providers to the Vermont Department of Health Immunization Registry.

State of Vermont, Department of Health, 6/2005 to 9/2008: Systems Developer II - 3 years as a web application interface and business object developer. Completed ASP.NET web application interfaces for the Vermont Immunization Registry and the Vital Records Electronic Death Registration System. Converted the Wisconsin Immunization Scheduling Algorithm from Java Enterprise Beans/Oracle to C#.NET/SQL. Additional software experience includes VB, VB.NET, HTML, CSS, JavaScript, AJAX, XML, SQL 2005, IIS 6.0, and IBM Rational Tools.

University of Vermont, Office of Health Promotion Research, 8/2003 to 9/2004: Part time FoxPro 2.6 database programmer for the Vermont Mammography Registry.

KC Software Services, Jericho, VT, 11/2000 to 8/2005: Self employed, sub contract programmer to the United States Coast Guard and Battelle Memorial Institute. Projects included development and maintenance of software used by the United States Coast Guard. Applications include Cutter Configuration Management and New Acquisition Tool using PowerBuilder with Progress Database. Produced a prototype Windows application using VB.NET with SQL 2000 and Infragistics NET tools.

Lane Press, South Burlington, VT, 5/1995 to 11/2000: Successful start up of an "in-house" database-processing department of mail lists for a large magazine printer. Databases are defined, mapped, merged, duplication eliminated, cleaned and processed for address correction and postal presortation. Eliminated the need to out source data processing services. Shortened production turn around from 4 days to 1.5 days. Other job functions included print job estimating and mining marketing databases.

Village Press, Williston, VT, 5/1988 to 11/94: Reorganized a $1,000,000 manufacturing inventory. Implemented software for inventory management. Set all procedures for tracking and reporting material usage. Successfully reduced excess inventory and increased cash flow by creating a "just in time" material procurement process. Two years as a System Administrator. Maintained all security, reporting and software updates. Created a less redundant order entry and tracking process through the use of estimate, job ticket, schedule, inventory and billing software modules.

EDUCATION:

Master of Science, 2009
Computer Science
University of Vermont
Burlington, VT

Member Upsilon Pi Epsilon Honor Society, 3.79 G.P.A.
Graduate Areas of study included Scientific Computing,
Evolutionary Computation, and Complex Systems/Networks.

Bachelor of Science, 1985
Printing Technology
Rochester Institute of Technology
Rochester, NY

Associate of Applied Science, 1983
Graphic Arts Technology
Springfield Technical Community College
Springfield, MA

Appendix F: Required Information for Contract Approval

1. Name of Contractor: Who is the contractor? Identify the name of the proposed contractor and indicate whether the contract is with an institution or organization.

   Vermont Information Technology Leaders (VITL). The proposed contractor is a non-profit organization.

2. Method of Selection: How was the contractor selected? State whether the contract is sole source or competitive bid. If an organization is the sole source for the contract, include an explanation as to why this institution is the only one able to perform contract services.

   The contract will be sole source, as VITL is the only entity to perform the deliverables.

3. Period of Performance: How long is the contract period? Specify the beginning and ending dates of the contract.

   The contract period is for 24 months. The contract period will commence September 15, 2011 and will end on September 15, 2013.

4. Scope of Work: What will the contractor do? Describe in outcome terms, the specific services/tasks to be performed by the contractor as related to the accomplishment of program objectives. Deliverables should be clearly defined.

   Funding of this proposal for an enhanced interoperability project will allow VDH to proceed with one-way HL7 messaging between the EHRs used by Vermont immunization providers and the registry, after experiencing significant delays.

Deliverables include:

- Designing the HIE transition including: Complete data provider gathering for ADT interface, receiving draft ADT& VXU specifications from Medicity, and determine plan for PHINMS
- Prioritizing practices for developing interfaces
- Communicating HL7 specifications to vendors
- Building interfaces for sending data including: Complete ADT interface build in CERT, new HIE built and configured, complete VXU interface build in CERT
- Building interface for Patient Matching
- Patient matching – automated
- Testing of Interface including: CMPI go-live prior to any ADT infterfaces, receive sign-off for ADT testing, receiving sign off for VXU testing
- Certifying practice for meaningful use
- Go live with ADT from VDH to VHIE
- Go live with VXU interface from VHIE to VDH
- Go live with first practice sending immunization information to IMR thru VHIE

- Message meeting HL7 specifications
- Evaluating incoming messages for quality
- Working with vendors to build capacity to accept return messages

5. Method of Accountability: How will the contractor be monitored? Describe how the progress and performance of the contractor will be monitored during and on close of the contract period. Identify who will be responsible for supervising the contract.

   The contract will be overseen by the Vermont Department of Health Information Technology Manager II, Eileen Underwood.

   Contractor will supply monthly and quarterly status reports to both IT and the immunization registry program staff detailing the progress on each contract deliverable. The supervising IT staff member will work closely with the immunization program for review and acceptance of deliverables. Payment will be rendered only for those deliverables deemed acceptable.

6. Itemized Budget and Justification: Provide an itemized budget with appropriate justification. If applicable, include any indirect cost paid under the contract and the indirect cost rate used.

Vermont Information Technology Leaders $320,000
Completion of technology assessments (by practice) including:

1. EHR capability
2. Technical architecture
3. Network capability
4. Software capability
5. Meets ONC-endorsed standards
6. Completion of required project charter (This required documentation must also be signed by the IT Manager, a key staff member on this project).

Appendix F: Required Information for Contract Approval

1. Name of Contractor: Who is the contractor? Identify the name of the proposed contractor and indicate whether the contract is with an institution or organization.

   To be determined.

2. Method of Selection: How was the contractor selected? State whether the contract is sole source or competitive bid. If an organization is the sole source for the contract, include an explanation as to why this institution is the only one able to perform contract services.

   The contractor will be identified through the competitive bid process.

3. Period of Performance: How long is the contract period? Specify the beginning and ending dates of the contract.

   The contract period is for 24 months. The contract period will commence September 15, 2011 and end on September 15, 2013.

4. Scope of Work: What will the contractor do? Describe in outcome terms, the specific services/tasks to be performed by the contractor as related to the accomplishment of program objectives. Deliverables should be clearly defined.

   Contract deliverables will include:

   1. Work with Immunization Program and IMR Team to develop and maintain training modules for practices and vendors about the HL7 implementation

      - Assess training needs for practices, vendors, Implementation Team and IMR team
      - Includes coordination with Immunization Program IMR Trainers to ensure practices are able to utilize patient and practice level reporting features of the registry
      - May include working to establish web-based training

   2. Work with Immunization Program and IMR Team to Evaluate the IIS-EMR Interoperability project including:

      - Using parameters outlined in the project goals, objectives, activities, and outcomes, including the data collected in #5 below.
      - Assessment/survey of stakeholders to determine the quality, reach, appropriateness, satisfaction, and barriers related to the project
      - Documenting the project and evaluation process to accompany annual reporting requirements.
      - Attend and participate in telephone conferences, CDC site visits and other required meetings.

3. Manage an incentive program for payments to providers for meeting set program goals:

    1. Sends immunization data at least weekly..... 20% of incentive
    2. Sends immunization data daily.....20% of incentive
    3. Sends historical data back at least two years.....20% of incentive
    4. Resolved documented data quality issues .....20% of incentive
    5. Sends VFC eligibility measure in HL7 message .....20% of incentive

5. Method of Accountability: How will the contractor be monitored? Describe how the progress and performance of the contractor will be monitored during and on close of the contract period. Identify who will be responsible for supervising the contract.

    The contract will be overseen by the Vermont Department of Health Immunization Program Chief, Christine Finley.

    The selected contractor will supply monthly and quarterly status reports to the Immunization Program Chief detailing the progress on each contract deliverable. The supervising staff member will work closely with the implementation team for review and acceptance of deliverables. Payment will be rendered only for those deliverables deemed acceptable.

6. Itemized Budget and Justification: Provide an itemized budget with appropriate justification. If applicable, include any indirect cost paid under the contract and the indirect cost rate used.

    Proposed cost of project management deliverables: $100,000

    The contractor will analyze the business and clinical requirements necessary for both the practices using the EHRs and the vendors providing the software. The Project Manger will work closely with the IMR Manager to ensure the necessary tracking of data outlined in this application and will also work closely with the VITL team concerning the timely completion of the development, building, and testing of the interfaces necessary for the transmission of data.

    Proposed cost of Incentives for Providers program: $150,000

Appendix F: Required Information for Contract Approval

1. Name of Contractor: Who is the contractor? Identify the name of the proposed contractor and indicate whether the contract is with an institution or organization.

   Oleen/Pinnacle Healthcare Consulting

2. Method of Selection: How was the contractor selected? State whether the contract is sole source or competitive bid. If an organization is the sole source for the contract, include an explanation as to why this institution is the only one able to perform contract services.

   The contract will be an amendment to a currently executed contract with this organization. The organization was selected through the competitive bid process in the Fall of 2010.

3. Period of Performance: How long is the contract period? Specify the beginning and ending dates of the contract.

   The contract period is for 12 months. The contract period will commence January 1, 2012 and end on December 31, 2012.

4. Scope of Work: What will the contractor do? Describe in outcome terms, the specific services/tasks to be performed by the contractor as related to the accomplishment of program objectives. Deliverables should be clearly defined.

   The purpose of this contract is to allow medical practices in VT, who are required by law to report immunizations administered to the VT Immunization Registry, to continue reporting data while they work with their electronic medical record vendors to meet the specifications for HL7 exchange.

   While practices are working with their electronic medical record vendors to create the system extract needed, batch data reporting allows them to continue meeting their reporting requirements and utilize the many tools within the Immunization Registry (like vaccine forecaster, reminder/recall reports) that practices depend upon to help keep their patients up to date for immunizations.

   Batch data is an interim solution to data exchange. Practices are highly motivated to move to HL7

   Contract deliverables to meet the above objective include:

   1.1 Communication of the Data Load Requirements

   The contractor will work with external data providers to request, obtain, and prepare batch data to load into the Immunization Registry. There are currently twelve data sources sending data once a month for import into the IMR. The contractor will continue

to process and map data from current data reporting sources, and initiate data reporting and mapping for 10-20 additional data sources. Data sources may include health insurers, individual medical practices, practice management organizations, or electronic medical record vendors.

The contractor will work directly with new data sources to prepare them for sending compliant batch data files. The contractor shall use the Data Load Requirements document (see Appendix 1) and Data Quality Assessment Standards (see Appendix 2) for incoming files to "certify" new data sources. The IMR Manager will prioritize and direct the work of the contractor to ensure that scheduling and support for high priority organizations is maintained as new organizations are brought into the IMR data import/load process.

1.2 Review and Certify Data for Import

The first time that a health care organization sends a data file, the contractor will conduct a series of tests to "certify" the organization. These tests, which are specified in Appendix 2, Data Quality Assessment Standards, will include determination that the organization can provide the minimum data requirements, and that the data meets "data sensibility" standards. If issues arise, the contractor will notify both the contact person at the data source and the IMR manager, who will determine next steps.

Upon certification of data, the contractor will develop any additional translational mapping necessary to make data match the import rules.

1.3 Process Data for Import / Load to the IMR

The contractor shall process each data file according to the specifications detailed in the Import Third Party Data use case (Appendix 3). The contractor's tasks shall include:

2.3.1 Conduct all mapping (CPT to CVX codes; Provider name or NPI or Federal Tax ID to the numerical identifier the IMR uses to identify the medical practice; etc.).

2.3.2 Maintain a mapping list of VT primary care providers serving adults that associates provider level and organizational level National Provider Identifiers and Federal Tax IDs to a single unique practice identifier.

2.3.3 Produce a file formatted according to the Import Third Party Data use case (Appendix 3).

2.3.4 Send/receive files by secure data transfer that meets the security requirements of the State of Vermont.

The method(s) for mapping and formatting the data file to be sent from the health care organization to the contractor may be proposed by the contractor, but the final product must meet the IMR's data load requirements.

1.4 Other Support – Immunization Schedule Edits

The contractor will also provide technical support by tracking the settings in the Registry's Forecasting Algorithm and testing the changes prior to release of changes on the Production version of the Registry. The Forecasting Algorithm is based on the Wisconsin Registry algorithm, but since Vermont's system is written in another language, we are required to manually review the changes Wisconsin has made and change the settings in our system to reflect those changes. This task does not require any actual programming; it is the utilization of an existing application that contains the tools to make algorithm changes. The contractor will:

1.4.1 Review on a quarterly basis the details of the Wisconsin forecasting algorithm and make note of changes that have been made. Changes are generally anticipated by virtue of new vaccines being released or changes to the American College of Immunization Practices (ACIP) guidelines.

1.4.2 Review the current settings in the IMR Forecaster application and propose changes to the Immunization Registry Manager.

1.4.3 Once changes have been made in the Test application of the Forecaster by VDH staff, the contractor will develop and test cases to assure that the changes work as expected. These tests should include entering fictitious immunization histories into the Test Application that reflect all aspects of the change and comparing the result to the ACIP schedule.

2.1 Specifics and TImetable

The contractor shall be paid for meeting the timeliness goals and for the number of health care organizations and data loads supported. The deliverables are as follows:

2.1 For certified data sources, provide a data file ready for import into the IMR that meets the specifications for third party imports.

2.2 For new (not certified) data sources, provide the results of the pre-load test to the Immunization Registry manager for approval prior to the first load.

2.3 Receive, test, process, and deliver a prepared file from a single organization (e.g., health care practice) to the IMR **within one week** of receiving their data file when said organization is not yet certified.

2.4 Receive, test, process, and deliver a prepared file from a single organization (e.g., health care practice) to the IMR **within 3 business days** of receiving their data file when said organization has been certified.

2.5 Receive, test, process, and deliver a prepared file from a large organization (e.g., health insurer) or umbrella organization (e.g., practice management organization) to the IMR **within three weeks** of receiving their data file when said organization is not yet certified.

2.6 Receive, test, process, and deliver a prepared file from a large organization (e.g., health insurer) or umbrella organization (e.g., practice management organization) to the IMR **within two weeks** of receiving their data file when said organization has been certified.

2.7 Follow-up with data reporting sources and ensure receipt and processing of data files each month (12 months under this contract).

2.8 Deliver all files in a secure manner that meets HIPAA standards and the State of Vermont's security requirements.

2.9 Destroy all copies of patient data at 90 days after final delivery of formatted data set to the IMR for import. The contractor shall provide a written statement (email acceptable) that said data has been destroyed, including date of destruction, method of destruction, and files / source that were destroyed.

2.10 Participate in monthly calls with IMR manager to assess progress on all deliverables, and provide written minutes of these calls.

2.11 On a quarterly basis, deliver an updated electronic mapping document associating the individual and organizational NPI for all VT primary care providers with the unique identifier used at the Immunization Registry to identify the primary care practice.

2.12 On a quarterly basis, the contractor will provide a written summary of the modifications made to the Immunization Registry Forecasting algorithm and any system defects identified during the testing.

5. Method of Accountability: <u>How will the contractor be monitored?</u> Describe how the progress and performance of the contractor will be monitored during and on close of the contract period. Identify who will be responsible for supervising the contract.

6. Itemized Budget and Justification: Provide an itemized budget with appropriate justification. If applicable, include any indirect cost paid under the contract and the indirect cost rate used.

Payment will be made to the contractor according to the following schedule:

Scope of work Items 1.1, 1.2, and 1.4 will be billed at a flat rate of $3,500 per month.

Scope of work item 1.3 will be billed as follows:
Receipt of :
Pre-certified monthly file from small data source (1-3 provider offices) -- $100
Pre-certified monthly file from medium data source (4+ provider offices) -- $125
Pre-certified monthly file from large data source (health insurer) -- $175

Receipt of
First file from new small data source, includes certification (1-3 provider offices) -- $1000
First file from new medium data source, includes certification (4+ provider offices) -- $1125
First file from new large data source, includes certification (health insurer) -- $1750

Receipt of
First file from new small data source*, includes certification (1-3 provider offices) -- $750
First file from new medium data source*, includes certification (4+ provider offices) -- $1000
* when source EMR has been previously mapped

Addition of new facilities to a file from an individual data source will require re-certification of the file (at the lesser amount since the source has been mapped.) At the discretion of the IMR Manager, re-processing of a file due to data source error or at the IMR manager's specific request may be billed a second time.

VERMONT

State of Vermont
Department of Health
108 Cherry Street, PO Box 70
Burlington, VT 05402

[phone] 802-863-7200
[fax] 802-865-7754

MEMORANDUM

To: Jim Giffin, AHS CFO

From: Leo Clark, VDH CFO

Re: Grant Acceptance - Immunization ACA

Date: 9/28/11

The Department of Health has received a grant from the Centers for Disease Control & Prevention, providing $792,138 over two years, to build the capacity of the Department's Public Health Immunization program. The funds were awarded under the Affordable Care Act (ACA).

Please note that this project has been reviewed and approved by Angela Roulle, AHS-CIO.

We are requesting expedited approval to receive these funds. We are enclosing the Grant Acceptance Request (AA1-ACA) and attached summary, a copy of the grant award document, a copy of the grant application, and the revised budget.

We appreciate your support in moving this request forward. Please let me know if you have questions or need additional information. Thank you.