



SMALL HOSPITAL IMPROVEMENT PROGRAM GRANT REPORT

Funding period: September 1, 2008-August 31, 2009
Fund number: 6 H3HRH00035-07-02
Facility: Center for Rural Health, University of North Dakota,
 School of Medicine and Health Sciences
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I. GRANT EXPENDITURES

1. Dollar amount of grant award:

\$305,140.00 (original award) +
 \$21,185.00 (approved carry-forward)
 Total award: \$326,325.00
 Total unspent: \$ 13,296.90

2. Identify the dollar amount and percentage of total grant expenditures by hospital applicants in your state for:

a. PPS activities	\$ 5,900	2%
b. HIPAA activities	\$110,624	37%
c. QI - Reducing medical errors and supporting QI activities	\$180,862	61%
TOTAL Hospital Expenditures	\$297,386	100%

Describe (if any) significant differences between the total dollar amount and percentage of total grant expenditures budgeted for PPS, HIPAA and QI in the SORH grant application and the actual dollar amount and the percentage of total grant expenditures as noted in #2 above.

2008-2009 Application Projection

a. PPS activities	\$ 12,000	4%
b. HIPAA activities	\$ 77,135	25%
c. Reducing medical errors and supporting QI activities	\$216,895	71%
	\$306,030	100%

There was a difference of 2% between projected and actual funds used for PPS activities; a difference of 12% between projected and actual funds used for HIPAA activities; and a difference of 10% between projected and actual funds used for QI activities.

Eight hospitals contacted the program office during the SHIP year and requested slight adjustments to their budget due to changes in administration and needs, and due to the increased funding available part way into the fiscal year. Each request was reviewed, approved and documented by the ND Program Coordinator. All changes were within the acceptable scope allowed by the program.

Unspent SHIP Funds

Four of 34 hospitals ended the fiscal year with outstanding balances totaling \$12,049.57.

1. *Richardton Health Center, Richardton, ND.*
2. *Tioga Medical Center, Tioga, ND.*
3. *St. Luke's Hospital, Crosby, ND.*
4. *Mercy Hospital of Valley City, Valley City, ND.*

II. ACTIVITIES

a. Implementation of PPS

One hospital used funds to cover costs associated with the prospective payment system.

- Funds were used to complete an interim cost report and a financial analysis. Consultants from North Dakota based Eide Bailly were used. An evaluation of the interim period was conducted to secure Medicare funding and model different cost report/licensure scenarios for the future.

b. HIPAA Compliance

Twenty hospitals used funds to pay for costs associated with HIPAA compliance.

The use of funds falls into three categories:

- 1) equipment;
- 2) education/training; and
- 3) software.

Examples of each follow. The exact number of equipment purchases is not included as some reports are specific and others are more general.

Equipment

- Printers were purchased by facilities to print patient information and stored in private area away from common patient areas to ensure privacy.
- Server security system purchased to ensure security of patient information.
- Dictation system purchased for patient record dictation – provides for improved confidentiality and security of patient information. Funds were also used to purchase a computer for offsite transcription.
- Purchase of laptop computers for providers to be able to view PACS images in hospital.
- Computer equipment was purchased to complete the computerized radiography system and common registration. The insurance card readers were purchased and will be used to ensure correct information is obtained from each patient encounter. The network printer was purchased and is in place for use with the common/electronic registration system.
- Upgrade current computer network to address security.
- Reception and clinic nursing areas are good distance from each other - in order to facilitate the process of alerting nursing staff to patients waiting in the reception area facility instilled a laser printer with multi-tray capabilities. The reception area is able to print the multiple forms needed for the patient visit and alert nursing privately and efficiently that a patient is waiting.
- As facility moves away from paper charting to an electronic format the need for access to computers increases. Doctors and nurses find themselves waiting in line to access patient data; seven computers were purchased and placed in the clinical care areas.
- Purchased laptop computers to be used with transitioning into electronic medical record.
- Purchased computers, printers, flat screens and insurance card scanners for new admission system and electronic medical record.

Education and Training

- Computer purchases were made for the purposes of maintaining access to online education and testing related to patient safety and compliance.
- Contracted professional services to review policies and procedures and implement recommendations for train staff.
- HIPAA training and travel funds for the HIPAA Privacy and Security officers. Upgrades to systems to ensure HIPAA privacy.
- Training on electronic records.
- Consultant hired to review revised policies and procedures, education and ongoing support.
- Allowed for four individuals to attend a Healthland (software company) conference showcasing their current system.
- Annual education on HIPAA. Used funds towards the purchase of a "Privacy, Security, and You" video for employee training.

Software

- Software purchased to allow for electronic signature feature in electronic health record.
- Installation of new security complainant server, components, and software for the hospital system. Increased security for PACS images.
- Tech support for installation of software and components.
- Yearly anti-virus renewal.
- Increased server memory to address growing computer usage in the facility.
- Maintenance support for HIPAA software.
- Server and accompanying software purchased to better secure network and provide for implementation of EMR not only for HIPAA but improve quality of care through the EMR. The implementation of this has met with some small difficulties due to IT staffing but we are very near completion of this and it will meet the intended goal of better security and quality our facility.

c. Reduce medical errors and support quality improvement (QI) efforts

Twenty-seven hospitals used funds to pay for costs associated with the reduction of medical errors and quality improvement.

The use of funds falls into three categories:

- 1) training/education,
- 2) equipment, and
- 3) software.

Training and Education

- Employee compliance continuing education.
- Participation in various activities to include the ND CAH Quality Network, statewide infection control meetings, the Altru-CAH network (tertiary), quality improvement meetings on the healthcare safety portal, and the ND Healthcare (Hospital) Association convention.
- Conference registration for six critical staff positions including: Director of Nursing, Registered Nurses, Licensed Practical Nurse and the Administrator to attend the ND Long Term Care Association Convention, where quality improvement was a significant topic covered.
- Employee compliance education that is mandatory.

- Education for staff ACLS for staff nurses, business office training travel, workshop and meetings.
- Attending webinars allows the staff and management to acquire the tools to lead the organization through the continuous improvement needed to maintain standards in rural hospitals. The webinars were provided by the ND Healthcare Association.
- Providing staff nurses the opportunity to attend trauma courses in ND to assure appropriate quality care to trauma victims in rural ND. Facility maintains the standard that all RN's working in the ER will be trauma certified. This certification is completed in Minot with travel expenses. The ability to maintain this level of training for staff nurses improves the overall care for trauma patients.
- Travel expenses were provided to the risk manager to attend the spring conference for RMPSI.
- Healthland Annual Conference tuition and travel costs for our pharmacist, HIS Director, Business Office Director, and Acute RN. By being able to send staff to this conference it greatly enhances the understanding and use of our computer system.
- Respiratory therapist to annual conference. Find the national conference material very valuable to staff and consequently the quality of care of patients.
- Board members education related to small facility issues including quality of care issues.
- Infection control training.

Equipment

- (1) Purchase computer for physician in clinic in order to access daily schedule; access segmental pressure results for interpretation to comply with quality standards of results in patient charts within 48 hours. (2) Purchase computer for team leader office in acute care setting to access software programs for the ND State Trauma Registry as well as internet sites such as the state's quality improvement organization to access quality improvement information as well as utilization review information such as access to forms for Notices of Non Coverage. (3) Purchase 1 additional computer for acute nursing station so medical staff can access radiology images via the PACS system. (4) Purchase 3 new dictaphones for use by the medical staff to use to dictate patient information for timely transcription so records can be on charts in a timely manner to provide continuity of patient care. (5) Purchased a replacement Duplex ID card scanner and label printer. This is to provide reception/nursing with the ability to obtain the correct patient information including insurance information to bill the correct information and assure patients of privacy. (6) Purchase an industrial portable phone for the emergency room. This phone has the ability to cover a range the entire square footage of the hospital and clinic. The ER nurse carries the phone with her at all times and can be reached for all patient care questions or needs.
- Purchased several items to assist with falls program (alarms, ID bands, mattresses, floor pads, etc.), educational materials regarding evidence-based practices to improve patient outcomes. Although not completed yet we have a project to be completed this month that will improve patient transfer to the tub so that fall risks to patients are reduced and potential for employee accidents are reduced.
- The use of the Fiberoptic Laryngoscope has made it possible to care for patients who are more difficult to intubate. Frequently this is related to the patients increase body mass index, trauma or cardiac arrest situations. This piece of equipment has been utilized and had positive patient outcomes.
- Purchase of a Planar Dome E2 Single head system (DX2 card, standard glass) diagnostic image viewing monitor. This includes a three-year service contract (Silver Premium Service). This digital equipment will be used for viewing images US and MRI and is needed because it provides images with maximum clarity, allowing our physicians to make accurate diagnostic decisions. The black and white monitor gives a brighter image, allowing it to be used in a regular room

setting rather than a darkened room. From the Planar website: Dome 2 MP grayscale displays offer a cost effective imaging solution ideal for use in CT, MR, CR, and US. The Dome E2 offers open architecture support for faster display performance and allows for seamless integration of future enhancements. With a flexible architecture that provides users the ability to gain access to state of the art graphics standards that are available today, the Dome E2 is an ideal choice for a distributed PACS environment. Dome CXtra software provides the Dome E2 with continuous automatic calibration and ensures DICOM conformance.

- Purchased unit dose packaging products from Health Care Logistics and Wasp barcoding label software. These products allow facility to unit dose package medications that are received in bulk. Those items that are packaged at the facility are then labeled with barcodes in addition to the name of the medication (using tall man lettering) strength, expiration date and the date packaged.
- Purchased the Wasp Labeling System for Unit Dose Packaging. This Unit Dose System will allow placement of medication in unit dose packaging with a computer-generated label that includes a bar code and adjustable font sizing for TALL MAN lettering. The Unit Dose System will also permit the use of long names and compounds in addition to dosage, expiration date and manufacturer. This system integrates technology into Pharmacy Department, preventing errors and therefore improving patient safety. It also leads toward full EMR.
- It is the intention of the hospital to continue improving its technology by purchasing bar code software to use in pharmacy department as well, nicely complementing a Unit Dose Packaging system. This was a wonderful additional to the development of an electronic medical record.
- Purchased a glidescope. Before this purchase medical staff was using a manual scope for the intubation of patients. This new scope has a video screen that allows users to more safely and quickly secure an airway on a patient.
- Installation of a PAC'S system to add in the migration to an electronic health record.
- Implemented an electronic medical record and used funds to purchase additional information technology equipment to equip staff with the right tools to make the EMR work as efficiently and effectively as possible without having to compromise quality patient care. Purchased scanners so patient information could be scanned into the patient record to help in providing quality patient care; purchased thermal label printers (barcode) printers which had the patient's identifying information to help eliminate errors in exchange of patient information for lab, radiology, pharmacy, and health information services. This equipment was necessary to improve the quality of the record implementation and patient care during the EMR implementation and continuing after the implementation.
- Purchased two new cordless bar code scanner kits for pharmacy and respiratory therapy departments for properly dispensing drugs to the right patients.
- PDAs with the most recent operating system have been purchased and are in use. They allow medical staff to dictate into hand held units which will provide a timely dictation method. The PDAs are providing a more stable environment to connect to the digital transcription system and at the same time not restricting the medical staff to one location of the facility. These have proved to improve the quality and efficiency of medical dictation and medical records system.
- Purchased a Unit Medi dose Medication system that utilizes a unit dosage system and individual medication cards to reduce meds error in swing bed patients.

Software

- Purchased Physician Practice Documentation for electronic health record. This application provides healthcare practitioners the ability to electronically document patient encounters within

their offices and clinics, automating the tasks associated with charting patient exams and assessments.

- Acquired software to assist with internal processes and communication.
- Purchased software to standardize patient care instruction and provided training for staff to be versed new appropriate instructions. These were done to improve quality in patient care instruction.
- Participation in the Healthcare Safety Zone provided by Clarity Group through the ND CAH QI Network allows the health system to input and track patient and visitor occurrences in order to track and monitor all patient safety activities. This system also provides notification of an incident to those responsible for follow-up.
- Tracking trauma patients throughout the state has allowed improved care. The Trauma Registry program allows quality improvement studies relating to trauma patients. The State Trauma System can then evaluate the facility and suggest improvements to the current system of trauma care.
- Annual renewal of the tracking software for the Risk Management and Patient Safety Institute. This company provides the facility with liability insurance. This software provides the method of tracking serious events to assure appropriate follow-up.
- Purchase of MAXXTRAX software license for tracking med errors and safety issues and purchase of computers has been valuable for both HIPAA needs as shown above and for QI tracking. The new computers have been valuable for both HIPAA and QI needs and are being used for patient information and education. The new equipment is installed as part of our internal network allowing us to align ourselves with the current trend of transparency in quality reporting and planning toward electronic medical records.
- Purchased "Milliman Care Guideline" coding software that can be used throughout the patient care areas and attend quality of care events. This web-based software will be used to determine accurate coding levels in an acute care setting, as well as swing bed setting. It will be used to determine observation versus acute care status, provide more accurate and timely provider coding levels in the emergency room and subsequent transfers to another level of care, prepare appropriate discharge criteria, and improve the patient care capture. In addition, it will prepare the facility for any future RAC audits, which are designed to detect over and under coding charts. Staff to be trained are nursing coordinators/supervisors, swing bed coordinator, and health information staff. Quality training including annual offsite education to maintain current approach to the performance improvement opportunities.
- Installation of new computers and software for electronic medical record. Goal is to reduce medical errors by using a software tracking system that identified medical errors and safety issues. Helps with identifying educational needs and process improvements.

III. GOALS

Describe your SHIP Program goals and how these were, or were not, accomplished.

Goal One: To administer and manage the funds allocated to the University of North Dakota (as the State Office of Rural Health) through the SHIP grant. UND is the fiscal agent for the grant. Subcontracts will be developed between the university and the hospitals.

Measurement of Goal: The success of this goal will be measured by completing the process of distributing all subcontracts within 4-8 weeks of receiving the Notice of Grant Award (NGA).

OUTCOME: The University of North Dakota developed subcontracts between itself and each of the 34 SHIP hospitals. The program coordinator notified the hospitals of the award one week after receiving the NGA with an explanation of the total available amount and how to proceed. Signed subcontracts with each hospital were in place within 8 weeks of receiving the NGA.

Goal Two: To provide and track SHIP related technical assistance to the hospitals.

Staff of the Center for Rural Health are dedicated and passionate about their work with rural hospitals. Strong relationships have been built over the years. Through a strong communication plan and supportive outreach we are able to respond as needed to requests. Over the past six months the Center for Rural Health has developed an activity tracking system that is web-based and easy to use. All staff are required to use this. Activities specific to SHIP are entered and tracked. The 2008-2009 grant cycle will provide a one year time frame to use this system and track accordingly. Reports by program, staff, types of assistance and many other options are possible.

Measurement of Goal: Use of an activity tracking system to run reports on level of assistance provided through the SHIP grant. Use of data to quantify need, use and opportunities for change. Share data with the federal Office of Rural Health Policy in outcome report. Look for other uses where this data might be helpful to the administration of the program and grant recipients.

OUTCOME: The UND Center for Rural Health has fully implemented a web-based tracking system. All staff involved with the SHIP utilized the system throughout the fiscal year to track its activity such as technical assistance with hospitals, requested hospital changes, management activities and more. Outputs of the system are attached in the appendices and highlight where 142 separate activities were provided to North Dakota's 34 SHIP facilities in 33 of the state's 53 counties.

Goal Three: Support the full development of the ND CAH QI Network

The Program Coordinator will work closely with SHIP facilities to develop a statewide quality improvement network. Areas of focus over the first year include supporting the development of the network, improving CAH readiness for state surveys and complying with Medicare Conditions of Participation, heart failure discharge instructions, pneumonia vaccinations, 5 Million Lives Campaign (MRSA infection), sharing of resources and providing educational opportunities, and network management and evaluation.

Measurement of Goal: Tracking of network development activities with a workplan that outlines all activities, initiatives, measures and timeline. Anticipated outcomes include:

development of a statewide CAH network that focuses on quality improvement (to start); specific action items include development of a communication plan, mentoring program, core areas of technical assistance developed and provided, educational opportunities provided, increased knowledge and comfort with quality improvement initiatives, reduced duplication of data collection efforts, improved stakeholder relationships, and increased consistency/collaboration amongst critical access hospitals.

OUTCOME: North Dakota's critical access hospitals have fully developed a statewide quality improvement network where all CAHs (N=36 as of 2009) are members. The ND Medicare Rural Hospital Flexibility Program has provided the bulk of the financial support however the majority of hospitals individually have used portions of their SHIP funding toward quality-related initiatives that have strengthened the collaboration of this network. The Network also wrote and received a one year HRSA Network Development Planning grant and is in the process of finalizing a strategic plan for 2010-2012 which will include a communication and sustainability plan.

2. Describe any problems that occurred and how they were resolved

The administration of the SHIP grant went smoothly with no problems to report. Consistent staffing from prior years was in place as were the majority of hospital administrators.

3. Provide recommendations on how the SHIP program could be more effective.

North Dakota's hospitals are very satisfied with the SHIP grant and are appreciative of the program's assistance. Comments from their progress reports are as follows:

1. None – we praise the work of this program and hope it continues for many years to come.
2. None it is simple to use and my usual recommendation is to receive more money for other expenditures through this grant.
3. I have no recommendations for SHIP other than to state that given the benefits we receive from this program it would be wonderful if the amount awarded was increased. Many times the SHIP funding means the difference between implementing a needed improvement and not. Thanks for this wonderful program.
4. I have no recommendations for the SHIP Grant Program. This program has worked very well to allow Presentation Medical Center the opportunity to identify equipment, supplies and services that has allowed us to expand our QI activities, as in this care. I believe this program works well. Thank you!

5. Continue this program; it is very necessary to maintain critical access in rural North Dakota. It would be helpful to offer an educational session on the use of these dollars and the methods to obtain funding to assist new leaders in ND.
6. Like the program. Simple to apply with SHIP funds as an additional financial resource to support current and future needs.
7. Keep up the good work.
8. The SHIP grant program has really made a difference in allowing us to purchase items needed or incur expenses which we may not have purchased without the availability of the SHIP funds. Because of needs that are facility specific, it is not always conducive to be able to join a consortium; however, continue encouraging consortium participation---if facilities can join forces it is more economical. With the requirements of a meaningful EHR, there is more potential for consortium efforts as facilities strive to work together in sharing patient records. Overall no suggestion for improvement, but feel it is important the program continues.
9. I don't have any specific recommendations for the SHIP grant program except that it is difficult to keep all of the different programs straight between years of applications and the past years grant that we are working on. I don't know if there is anything that can make this a little more simple to deal with.
10. None - it's a wonderful program for our facility and enables us to improve our facility. Thank you.

11.

IV. ADMINISTRATION

Provide the length of time it took to complete the process of granting all awards to the hospitals and any difficulties you experienced.

a. Length of time to complete making all awards:

The NGA was received August 27, 2008 and hospitals were notified immediately via e-mail on September 2nd of the amount and that the grant contracts would be forthcoming. Award letters and subcontracts were sent to each of the 34 hospitals on October 27, 2008. A second letter was emailed February 9, 2009 notifying hospitals that carry-forward funds were available. A contract amendment was sent to each hospital immediately.

Explanation:

We did not experience difficulties in relation to this process.

b. Describe what was done with any funds “released” by hospitals to SORH.

The University of North Dakota, Grants and Contracts office, does not allow North Dakota SHIP recipients to release their funding to the North Dakota SORH as they interpret this as a conflict of interest due to the SORH being housed within the same department as the SHIP grant. The University of North Dakota will not allow recipients to pool and release their funding to the ND CAH Quality Network because it is housed within the university system and again see this as a conflict of interest. Many calls have occurred over the past two years between the university and HRSA grant officers. Although HRSA officers have approved such release of funding the university explains that its regulations override federal interpretations.

Having worked through the aforementioned process the program coordinator will approach this opportunity in a different way. Hospitals are allowed to pool and release their SHIP funds to an external legal entity for which they wish to contract and the university will allow the ND SHIP to issue such a subcontract on behalf of hospitals. Hospitals have always been encouraged to pool their funding and many continue to resist only in terms of formalizing the administration of funding. They would prefer to work together, which all of the 36 eligible SHIP facilities do in one way or another, but to handle their finances separately. There are many who already have negotiated group purchase prices on supplies, software and hardware.

V. SHIP Hospital Networks/Systems/Consortiums

1. Describe any new SHIP consortiums, systems or networks that formed during the grant year and what they did with grant funds.

None to report.

2. Describe any significant differences between what existing SHIP hospital consortiums, systems or networks planned to do with grant funds and what was accomplished.

Not applicable.