

**A. Cover Sheet**

ASET Grant Application

Northwest Medical Center

David Bullock, Director of Information Services  
Ron Patrick, CFO

November 9, 2012

Amount requested: \$39,960.26

## **B. Grant Application**

1. The Project Description and Partner Relationship/Collaborative Structure shall include:  
**o Brief organizational descriptions, including current use of health information exchange among partners (whether on paper, by phone or fax, or electronically).**

Northwest Medical Center (NMC), located in Tucson, AZ, is a 300-bed facility that offers a full-scope of inpatient and outpatient services, including Cardiology, Orthopedics, Minimally Invasive Surgery, Neurology, Pediatric and Adult Urgent Care and The Women's Center for Obstetrics, Gynecology, Oncology and Diagnostics. NMC is accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

NMC currently utilizes Healthcare Management Systems (HMS) software for its integrated clinical and financial IT solutions and employs McKesson's Horizon Clinicals® solutions to support patients' electronic health record (EHR). Horizon Clinicals® Release 10.3.1 has been certified under the Drummond Group's Electronic Health Records Office of the National Coordinator Authorized Testing and Certification Body (ONC-ATCB) program and is compliant in accordance with the criteria adopted by the Secretary of Health and Human Services. In locations not linked to NMC's network of servers, NMC providers utilize McKesson's Horizon Physician Portal to access patients' EHR remotely. Currently, paper, phone and fax processes are utilized to exchange health information among other hospitals and healthcare providers, including the dissemination of lab and image reports, transcription reports and discharge summaries.

### **o Geographic area and demographics of population(s) served.**

NMC serves the City of Tucson community, including the towns of Marana, Green Valley, Sahuarita, Oro Valley, and unincorporated Pima County. NMC primarily serves the northwest side of Tucson but also cares for populations south of Tucson in Green Valley and Sahuarita, reaching approximately 160,187 households. The zip codes served include: Primary Service Area: 85653 (Marana), 85704, 85705, 85718, 85741, 85742, 85743 (Tucson) and Secondary Service Area: 85614 (Green Valley), 85706, 85737, 85739, 85745, 85755 (Tucson). Although 65-70% of NMC's patients come from these zip codes, patients reside all over southern Arizona and Pima County.

**Demographics:** The median household income in NMC's combined service area is \$49,636 (2011 data). The median age in the combined service area is 41.5 years of age. Further breaking down the age groups:

- 18% of the population is between the ages of newborn and 14 years of age
- 13.5% of the population is between the ages of 15-24
- 11.7% of the population is between the ages of 25-34
- 11.2% of the population is between the ages of 35-44
- 13.1% of the population is between the ages of 45-54
- 13.7% of the population is between the ages of 55-64
- 18.8% of the population is over the age of 65

In 2011, NMC provided \$22,847,858 of charity care, self-pay and courtesy discounts to uninsured and underinsured patients in our community. (*Source: ESRI Business Information Solutions*)

**o Description of issue/business process that health information exchange will assist with improving.**

NMC will improve the quality and efficiency of healthcare overall in Arizona by exchanging appropriate and secure electronic health information utilizing Arizona's Health Information Exchange program (HIE). As a result, the HIE will enhance the coordination of care across unaffiliated organizations, improve healthcare, reduce redundancy of testing, and thus it will result in lower health care costs. Joining the HIE and sharing patient health information will allow NMC and other provider organizations to provide the most efficient healthcare of individuals and effectively manage the health of Arizona's populations.

NMC strives to keep patients within network, but transfers occur between NMC and other organizations. Access to a shared HIE would facilitate a smooth transfer and would improve the flow of communication between facilities resulting in better patient care.

NMC owns four urgent care clinics located from Marana to Green Valley. Within the network of these urgent care clinics, on average 120 transfers occur per month, moving to a higher level of care. Approximately a third of these transfers go to facilities that are not in the NMC Healthcare network. In addition, approximately 21% of our discharges from acute care have follow-up care at a rehabilitation, skilled nursing, hospice or home health facility that are outside NMC's network of services.

Ease of accessible patient information in the acute care records will make ongoing and continuing care seamless, resulting in better care for the patient.

By participating in the HIE, NMC will improve the transition and coordination of care by exchanging critical information including discreet lab data, radiology reports, discharge summary information and other key health information.

The health information exchange will allow collaboration with other providers in our community to coordinate and provide timely patient healthcare information.

**o Describe how the HIE grant funds will enable to you meet your business objectives.**

This grant will assist NMC by funding the costs associated with the implementation and functional use of HIE, including the "One Time" HIE Onboarding Connection Fee, interfaces between EHR and HIE, and other costs incurred to facilitate seamless electronic transfer of patient health information across different provider networks and unaffiliated organizations.

The mission of NMC is to provide the communities with high quality, cost effective, and safe healthcare. Aligning with NMC's mission, it is the objective of NMC to participate in a statewide HIE to improve quality and coordination of care among the populations served. Participation with Health Information Network of Arizona (HINAZ) will achieve these objectives.

For example, regardless of an individual's insurance coverage or ability to pay, a patient seen in NMC's ED who transfers to UMC for a higher level of care could have their lab results immediately available to UMC physicians via the HIE. Having a patient's current health information readily accessible as the patient arrives at the other facility will allow providers to be more proactive in delivering efficient care and improve patient's time to treatment by eliminating duplicate lab tests and other diagnostic procedures.

**o Describe how the project will serve the needs of the underserved and low income populations you care for.**

Utilizing the Arizona HIE will enhance NMC’s efforts to provide better care for Arizonans, especially the underserved and low-income populations by enabling providers to receive and share structured lab and image reports, transcription reports, and discharge summaries to facilitate transitions across other Arizona providers’ networks and unaffiliated organizations.

Specifically, NMC’s pregnancy outreach programs, provided through the Lazos de Familia and Healthy Beginnings clinics, serve a demographic that is approximately 92% AHCCCS-eligible, FES, or self-pay. Approximately 900 women a year are seen at these clinics, with over 1400 indigent nursery admits per year. Approximately 78% of them are Spanish/English speaking.

**o Name of organization that will serve as the fiscal agent on this project.**

Northwest Medical Center

**o Name and resume of individual who will serve as project lead. Ron Patrick, CFO**

**2. Project Work Plan– work may not extend beyond June 30, 2013**

**The work plan may be in narrative or table/spreadsheet form, or both, and should include:** o Milestones and expectations for the project.

**HINAZ Project Plan and Resources**

Item	Hrs	Due Date	Resource	Cost/hour	Total Cost
Kick Off Project					
				\$	\$
Finalize Plan	2	1/10/2013	Project Manager	48.04	96.08
				\$	\$
Confirm Resources	1	1/10/2013	Project Manager	48.04	48.04
				\$	\$
Kick off project	2	1/10/2013	Project Manager	48.04	96.08
				\$	\$
Routine calls	16	4/30/2013	Project Manager	48.04	768.64
				\$	\$
Tracking budget	3	4/30/2013	Project Manager	48.04	144.12
<b>Implement Interface hardware, software, and establish connectivity</b>		<b>1/20/2013</b>		<b>Milestone</b>	
				\$	\$
Sent/Received VPN set up	2	1/15/2013	Network Analyst	42.71	85.42
				\$	\$
Connectivity Test	1	01/20/13	Network Analyst	42.71	42.71
<b>Develop Results Interface</b>		<b>2/25/2013</b>		<b>Milestone</b>	
				\$	\$
Data Volume Projections	2	1/25/2013	Clinical Analyst	31.60	63.20
				\$	\$
Review and revise HL7 Specs	10	1/25/2013	Interface Analyst	75.00	750.00
				\$	\$
Test Data Feeds	15	2/10/2013	Interface Analyst	75.00	1,125.00
				\$	\$
Test Acknowledgements	1	2/15/2013	Interface Analyst	75.00	75.00
				\$	\$
Error Detection and Reporting	12	2/15/2013	Interface Analyst	75.00	900.00
				\$	\$
QA Data	6	2/20/2013	Clinical Analyst	\$	\$

				31.60	189.60
				\$	\$
Lab codes	6	2/25/2013	Clinical Analyst	31.60	189.60
<b>Data Translation and Data Building</b>		<b>3/15/2013</b>		<b>Milestone</b>	
				\$	\$
ADT Bulk Load	5	3/1/2013	Interface Analyst	75.00	375.00
				\$	\$
Build Physician Address book	4	2/25/2013	Clinical Analyst	31.60	126.40
				\$	\$
Review Processing and Testing	4	3/1/2013	Interface Analyst	75.00	300.00
				\$	\$
Review Data Maps	8	3/1/2013	Interface Analyst	75.00	600.00
				\$	\$
Display Test Data and QA	12	3/10/2013	Interface Analyst	75.00	900.00
				\$	\$
Signoff	4	3/15/2013	Project Manager	48.04	192.16
<b>Physician and Staff Training</b>		<b>4/15/2013</b>		<b>Milestone</b>	
				\$	\$
Prepare training material	2	3/15/2013	Clinical Analyst	31.60	63.20
				\$	\$
Schedule and Train	40	4/15/2013	Clinical Analyst	35.00	1,400.00
<b>Production Processing and Testing</b>		<b>4/15/2013</b>		<b>Milestone</b>	
				\$	\$
Production QA Review	16	3/31/2013	Interface Analyst	75.00	1,200.00
				\$	\$
Check MPI Map and Merge	6	3/31/2013	Interface Analyst	75.00	450.00
				\$	\$
Check ADT Update and MPI	2	3/31/2013	Interface Analyst	75.00	150.00
				\$	\$
Check Physician Address Book	2	3/31/2013	Clinical Analyst	31.60	63.20
				\$	\$
Go live Support	6	4/15/2013	Project Manager	48.04	288.24
<b>Project Close out</b>		<b>4/30/2013</b>		<b>Milestone</b>	
				\$	\$
Project Close out	4	4/30/2013	Project Manager	48.04	192.16
				\$	\$
	194				10,873.85
<b>Additional Cost</b>	<b>Hrs/ Wk</b>	<b>Total weeks for project</b>		<b>Hourly rate</b>	<b>Total Additional Cost</b>
<b>Administrative Cost</b>	5	12		86.40	5,184.00
				\$	\$
<b>Total Internal Cost</b>					16,057.85

**o Time-specific objectives to achieve each stated outcome/goal.** See HINAz Project Plan (#2 above)

**o Communications plan to ensure all stakeholders are kept informed of project goals and progress, and are engaged.**

Audience	Communication Vehicle	Message	Date	Responsible Party
Internal/External			11/26/12	KC to draft
NMC Physicians (employed and independent); Board of Trustees	Blast fax/email	NMC has applied for a grant to enable us to share patient information across a variety of entities thereby increasing the level of care for patients.		Send from Veronica Knudson
NMC Physicians (employed and independent); Board of Trustees	Blast fax/email	Update stakeholders with approval or rejection of grant for NMC by ASET	TBD	KC to draft; Veronica Knudson to send
NMC Physicians (employed and independent); Board of Trustees	Blast fax/email and physician newsletter	If approved for grant, periodically update stakeholders in progress of project	TBD	KC to draft; Veronica Knudson to send
NMC Physicians (employed and independent); Board of Trustees	Blast fax/email and physician newsletter	Announce completion of project to stakeholders and describe any next steps	TBD	KC to draft; Veronica Knudson to send

**o Plans for staff training for implementation, continuous evaluation, system operation and maintenance, and technical support resources.** None necessary

**o Names, titles and organizations of the primary project team members and their roles in the project.**

David Bullock, Director of Information Services at NMC

**o Description of the source of any in-kind technical support, internal and/or external, for the project.** See HINAZ Project Plan (#2 above)

**3. Line Item Budget– All reasonable costs for completing project are eligible. Insert a line-item budget into the narrative or attach as a separate document.**

(Line-item budget embedded above, HINAZ Project Plan #2 above)

**o Financial and/or In-kind match. Include the amounts and sources of financial or in-kind resources used for the required 50% match. It is not necessary to have a match for each line item; however, the total match must equal at least one half of the total grant dollars requested. Numbers covered in spreadsheet: See HINAZ Project Plan (#2 above)**

**o In-kind match should be expressed in dollars, and can include, but is not limited to, staff time (value of salaries and fringe) spent by collaborating organizations on the project (for example, staff time spent in planning, governance, or IT support), communications and mileage costs related to planning or governance meetings, and equipment needed to enable health information exchange. See Budget Narrative (#4 below)**

4. The Budget Narrative shall provide information on how each of the line items shown in the budget was calculated and how it aligns with the overall strategy (not to exceed one paragraph per line item).

HINAz contribution to set up and participate in the statewide health information network include set up cost of \$26,800 and subscription costs of \$17,688.00 for a total of \$44,488.00. Internal costs to set up networking connections, implement interfaces, train users manage and administer the project total \$16,057.85. The total cost of the project is \$60,545.85 and the grant request is for \$39,960.26.

o Salary and Fringe. For any positions proposed to be funded from this project, provide the position title, the amount of salary and fringe benefits paid for by the grant, and percent of time on the project. Include a brief description of the activities of each position as it relates to the project. The budget form need only reflect the totals for salaries and fringe. See HINAz Project Plan (#2 above)

HINAz Set up charges Paid by NMC	
Position Costs	SW&B
Clinical Analyst	\$ 31.60
Network Analyst	\$ 42.71
Project Manager	\$ 48.04
Interface Analyst	\$ 75.00
Administrative Cost	\$ 86.40

o Travel. Include a description of the proposed travel as it relates to the completion of the project. Provide the estimated number of miles planned for project activities as well as the rate of reimbursement per mile to be paid from project funds (not to exceed the current rate established by the Internal Revenue Service). Please reference Arizona's travel policy website: [http://www.gao.az.gov/publications/SAAM/Supp I trvrates-012308.pdf](http://www.gao.az.gov/publications/SAAM/Supp_I_trvrates-012308.pdf) NA

Personal Vehicle Mileage Reimbursement: 44.5 cents per mile effective 11/15/06

o Equipment. Include a description and projected costs of any proposed equipment as it relates to the completion of the project. This may include hardware and/or interfaces. NA

o Software. Include a description and projected costs of any proposed software. NA

o Supplies. Include a description of any supplies needed for the project. NA

o Consultants/Contracted services. Provide the name of contractors, the services to be provided and projected costs. Include brief background information about contractors, including how their previous experience relates to the project. If known, provide the name of contractor chosen and include a description of the availability of contractors for the services and/or products required and the method for choosing a contractor. Only in terms of HINAz as the external group and the contractor(s) they may use – none anticipated. NMC's standards for participation attached, Participation Agreement attached.

o Other. If it is necessary to include expenditures in the "Other" category, include a detailed description of the proposed expenditures as they relate to the project.

o In-kind match. Matching Funds Requirement. **Grant applications must identify matching funds equal to 50 percent of the award from ASET. For example, if the grantee requests \$50,000 in funding from ASET, the grantee must secure \$25,000 in matching funds to support the project. In-kind contributions will be considered matching funds for this grant program. Matching funds may come from internal sources, project partners, or other funding sources, including but not limited to, other grants or commercial loans. Federal government funds will not be considered acceptable matching funds. – See Budget Narrative**

**Summary Cost: Implementation of HINAz**

<b>Description</b>	<b>Cost</b>
Cost paid to HINAz	\$ 44,488.00
Internal Cost	\$ 16,057.85
Total Cost	\$ 60,545.85
Grant Request	\$ 39,960.26
Matching Fund	\$ 20,585.59

**HINAz Set up charges Paid by NMC**

<b>Facility</b>	<b>Edge Server and Interface set up</b>	<b>Subscription Cost</b>	<b>Total Cost</b>
NMC - Tucson	\$26,800.00	\$17,688.00	\$44,488.00

5. Letter of Support is not needed since Northwest Medical Center is applying as a single organization.