Request for Proposals for Enhancement of Nursing Educational Capacity Projects

**Project Title:**

**Educational Capacity Assessment for a Regional Simulation Center**

**Project Director:** Nancy Hooge, RN, BSN, MS
Clinical Nurse Educator
Sheridan Memorial Hospital *primary applicant

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**Employer Partner:** Sheridan Memorial Hospital
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**Educational Partner:** Sheridan College
Judith McDowell, RN, MS
Department of Nursing Director
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**Project Description:** The purpose of this grant is four-fold: 1. Gather information through the use of structured information gathering sessions in regional communities. 2. Build on existing simulation curriculum at the local hospital and community college to develop a regional simulation center capable of serving as a training facility for nurses, allied health professionals and emergency responders. 3. Ascertain the distance regional health care providers can reasonably travel and the fees facilities are willing to pay for specialized workforce enhancement education close to home. 4. Identify potential for building on simulation to create innovative programs such as rural nurse residency that can be modeled for other communities and education/employer partnerships.

**Perceived Problem to be addressed by the Project:** In rural Wyoming the continued need for maintaining highly-educated and qualified nursing staff remains constant and is forecasted to grow. The Wyoming Department of Employment reported “that in 2014, 3,307 more registered nurses will be needed in Wyoming compared to 2006, which represents a 103.9% increase” (source: Wyoming Department of Employment (2008). Nurses in Demand: Statement of the Problem. Casper, WY: Author). Nurses employed in rural areas must be highly educated generalists to care for the many patient populations they encounter and specializing is difficult. With the nursing workforce aging, the
experienced rural staff nurse may soon be exiting the workplace leaving a potential gap in knowledge and experience in patient care areas. Critical, yet limited, training programs are even more pressured to deliver meaningful and effective high-level courses for staff. High-fidelity manikins in a simulated patient environment of suspended reality enhance continuing education programs and provide state-of-the art training to reinforce skill sets, build new skills, develop cross-training capabilities and keep pace with the changes in the industry. A program of enhanced simulation will help reduce the high rate of attrition of first-year nurses and will provide a higher level of confidence for nursing professionals, enabling them to function more effectively in their profession.

Accessibility of continuing educational training opportunities using high-fidelity training manikins for nurses and other care personnel in rural hospitals in northeast Wyoming is limited. Rural hospitals face budget restrictions and cannot keep pace with innovation. They are challenged by the high cost of simulation equipment, limited instructional capabilities of nurse educators, distance to communities that offer simulation, budget restrictions, and the variety of patient conditions to be captured with simulation. A large number of expert level nurses are anticipated to retire in the very near future and new graduates are likely to fill those positions. Preparing new graduates for the realistic challenges the acute care environment presents can be daunting. In rural acute care facilities high risk events happen in low volumes, which means
student exposure to critical patient events during practicum experiences is very limited. Simulation, in a safe, controlled, environment of suspended reality as an enhancement to clinical practicum and a means of honing acute critical thinking processes and psychomotor skills, is necessary to maintain well-rounded, confident, competent nurses.

Health care professionals in Wyoming’s rural communities need to collaborate to develop innovative programs for effective use of limited resources to make simulation training possible for all rural health care professionals to help meet the demands of the changing healthcare environment in the state. This grant will help gather the information necessary to create a work plan for the use of simulation as a means to enhance education for regional health care professionals, which will be the basis for three business plans: 1) a one-year plan (concentrating on hospital nursing skills enhancement) to incorporate simulation to its maximum potential for college education programs at Sheridan College and for hospital nursing staff in Sheridan (sole community hospital and VA hospital), Buffalo, Gillette, Powell, Lovell, Cody, Worland, Thermopolis, Sundance, and Newcastle; 2) the efficacy of a three-year plan to expand the core education model to create a rural nurse residency program; and 3) a five-year plan to expand education opportunities to include other healthcare disciplines such as emergency providers, long-term care facilities, ancillary services, first responders and physicians.
A statement of the partnerships goal for educational capacity enhancement:

Sheridan Memorial Hospital and the Sheridan College have had a long-standing, successful working relationship. The hospital is the main provider of practicum opportunities for student nurses in their 2-year program, and the nursing graduates are a continuous source of nursing staff candidates for the hospital. In 2010 a building was gifted to the college for which the college has received funding to create a workforce development training facility to respond to the workforce training needs of local industry. A portion of this building has been designated to be a high-fidelity simulation training center to meet the specific needs for nurse education. In December 2010, renovations will be completed and the existing simulation equipment at both the hospital and the college will be relocated to this space. The college and hospital will collaborate through dual use of the facility. Through a HRSA grant application submitted in April 2010, Sheridan College is seeking funding to purchase additional high-fidelity simulation equipment such as a birthing simulator, a pediatric patient, an upgrade to a current sim man, a fully wireless sim man and the technological capabilities to video/audio record simulated events for skill building, professional development and team training. Should the HRSA grant not be awarded to the college, other grant opportunities will be sought until the technological needs of the facility are met.
Through this capacity grant, Sheridan Memorial Hospital and Sheridan College will assess the potential opportunities for the simulation center to meet training needs of surrounding area hospitals and healthcare agencies. Sheridan Memorial Hospital, as the primary applicant, will supply the clinical nurse educator to travel to area communities and facilitate information gathering sessions in each community that will assess simulation training potential (See Survey Instrument Attachment A). This educator will compile data and generate a qualitative summary report of findings that will serve as the basis for hospital and college administrators to collaborate on a means by which the one-year, three-year, and five-year business plans can be developed relative to the future of the joint venture. A contractor for this purpose is not feasible due to cost.

**Plan for proposed nursing educational capacity enhancement project:**

The project director will develop a survey instrument and travel to communities within a 200-mile radius of Sheridan, WY to facilitate sessions and gather information concerning current and future health care training needs in each community, their potential commitment to use such a facility for staff education and training, and efficacy of a future nurse rural residency program. Processes and forms will be documented to provide a model for replication or adaptation in other Wyoming settings.
### Time Table for Implementing the Project (May 1, 2010 to June 30, 2011):

<table>
<thead>
<tr>
<th>TIME FRAME</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Award &amp; Grant Setup</td>
<td></td>
<td></td>
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<tr>
<td>Present Project in Ed. Capacity Summit</td>
<td></td>
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<tr>
<td>Initial contact with regional health care agencies to set a travel schedule</td>
<td></td>
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<tr>
<td>Travel to communities and facilitate information gathering sessions</td>
<td></td>
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<tr>
<td>Compile data from sessions and follow-up contacts to clarify information and develop summary of findings.</td>
<td></td>
<td></td>
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<tr>
<td>Business plan development by college and hospital administration</td>
<td></td>
<td></td>
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<tr>
<td>Report of findings to Education Summit</td>
<td></td>
<td></td>
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<tr>
<td>Return follow-up to communities to share findings &amp; plans</td>
<td></td>
<td></td>
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<tr>
<td>Project Assessment &amp; Evaluation</td>
<td></td>
<td></td>
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<tr>
<td>Project Final Report</td>
<td></td>
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Project will be implemented upon receipt of the grant (May 1, 2010) and begin with the building of a survey instrument (May/June). Primary applicant will present the project to the Educational Capacity Summit May 24 & 25, 2010 in Casper, Wyoming. Initial contact of those in the region will occur (July/August) to establish date/time for community meetings, which will occur in September and October 2010.

Using a survey instrument that is the same in all communities, the facilitator will collect data relative to training services needed in the community, whether staff would potentially travel to Sheridan, how many staff would take advantage of...
the training, reasonable rates that would be paid for the training, programs that could be added to grow the training center to meet the needs of the region.

The facilitator will contact other training facilities to ascertain pricing structures currently used and this will be the basis for a range that will be presented as options to the community care providers. Data will be compiled November 2010 through February 2011, along with follow-up phone calls for verification and clarification as needed. Any further feedback gained would be compiled with original data. Summary of findings would be completed by February 2011. March through May 2011 business plans will be developed based on findings. Presentation of findings will occur at the second Educational Capacity Summit in May 2011 (location TBA). Project completion, assessment and evaluation will occur in June 2011, with a final report submitted thereafter, along with product processes and forms for replication in other communities.

**Budget**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salaries/Wages:</strong> Nurse Educator (200 hours @ $40)</td>
<td>$8,000.00</td>
</tr>
<tr>
<td><strong>Travel:</strong></td>
<td></td>
</tr>
<tr>
<td>Cost to attend conferences: 2010 and 2011</td>
<td>852.00</td>
</tr>
<tr>
<td>Mileage to communities to facilitate information gathering</td>
<td>1,162.00</td>
</tr>
<tr>
<td><strong>Materials/Supplies:</strong></td>
<td></td>
</tr>
<tr>
<td>Cost of materials &amp; supplies will be absorbed by the applicant</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>TOTAL PROJECTED BUDGET</strong></td>
<td>$10,014.00</td>
</tr>
<tr>
<td><strong>TOTAL GRANT REQUEST</strong></td>
<td>$10,000.00</td>
</tr>
</tbody>
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**Budget Justification:**

$8,000.00 -- Salaries/Wages for Nurse Educator: 200 hours @ $40/hr. -- Planning, setting up and facilitating focus groups/one-on-ones, analyzing data and compiling report and business plan, travel time. (Note: Due to cost limitations, hiring a contractor for this purpose is not feasible.)

**Travel:**

<table>
<thead>
<tr>
<th>Location</th>
<th>R/T Mileage</th>
<th>Cost @ $.50/mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gillette</td>
<td>206</td>
<td>$103.00</td>
</tr>
<tr>
<td>Newcastle</td>
<td>360</td>
<td>$180.00</td>
</tr>
<tr>
<td>Sundance</td>
<td>330</td>
<td>$165.00</td>
</tr>
<tr>
<td>Thermopolis</td>
<td>316</td>
<td>$158.00</td>
</tr>
<tr>
<td>Buffalo</td>
<td>70</td>
<td>$35.00</td>
</tr>
<tr>
<td>Worland</td>
<td>250</td>
<td>$125.00</td>
</tr>
<tr>
<td>Powell</td>
<td>246</td>
<td>$123.00</td>
</tr>
<tr>
<td>Lovell</td>
<td>202</td>
<td>$101.00</td>
</tr>
<tr>
<td>Cody</td>
<td>294</td>
<td>$147.00</td>
</tr>
<tr>
<td>Sheridan Area</td>
<td>50</td>
<td>$25.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2324</strong></td>
<td><strong>$1,162.00</strong></td>
</tr>
</tbody>
</table>

Travel to communities to facilitate information gathering will be limited to mileage only. Applicant will absorb the cost of meals and any related lodging.
Anticipated Outcomes:

1. Interview health care providers within a 200-mile radius to establish:
   a. a reasonable operating service area and potential clientele to provide students for the “regional” simulation training center;
   b. existing pricing structures used by other simulation centers to serve as a range of fees to charge for services.
   c. the number of students that can be expected annually at the “regional” simulation training center;

2. Determine expansion potential:
   a. efficacy of potential for a rural nurse residency program;
   b. viability of expanding to include other professions beyond nursing, such as first-responders, long-term care providers, physicians, ancillary service providers, private clinicians, county health staff, and mine emergency responders
   c. a reasonable timeframe for growth to meet maximum potential of the facility.

3. Determine programs and certifications that could be offered through future expansion.
   a. Based on feedback, establish a list of possible certifications that would be “need to have” and “nice to have” available through the simulation center.
4. Prepare business plans:

   a. One-year plan (concentrating on hospital nursing skills enhancement) to incorporate simulation to its maximum potential for college education programs at Sheridan College and for hospital nursing staff in Sheridan (sole community hospital and VA hospital), Buffalo, Gillette, Powell, Lovell, Cody, Worland, Thermopolis, Sundance, and Newcastle;

   b. Efficacy of a three-year plan to expand the core education model to create a rural nurse residency program;

   c. Five-year plan to expand education opportunities to include other healthcare disciplines such as emergency providers, long-term care facilities, ancillary services, first responders and physicians.

Potential Approaches to Evaluation of the Project in collaboration with the WCNHCP:

1. Survey Instrument: The assistance of the WCNHCP would be sought for the review and revision of this tool in order for the evaluation of the findings to be easily collected and compiled for meaningful analysis.
2. **Evaluation**: The WCNHCP would be accessed for assistance for the overall structure of the evaluation phase, targeting the specific needs of this educational capacity grant.

3. **Mentorship on behalf of the WCNHCP** would be sought for overall guidance and feedback to the primary applicant.
Attachment A: Draft Needs Assessment Tool

Agency Name:_______________________________________________________________

Contact Person:______________________________________ Title:___________________

Address:______________________________________ Phone:_______________________

Email:______________________________________ Web Address:____________________

Health Disciplines in the Agency: (Circle all that apply):

MD  NP  PA  RN  RT  CNA  MA  EMT-B  EMT-I  EMT-P  Other:____________

Certification Courses needed by your agency:

__ACLS  __TNCC  __FHM

__PALS  __ENPC  __Stable

__NRP  __BLS  __PEARS

List Other:_____________________________________________________________________

Other educational programs needed by your agency:

Has this agency utilized simulation in the past?  __Yes   __No

If yes, how:

Distance currently traveling for certification education:______________
Are you willing to travel to Sheridan, WY for certification and simulation training?

__Yes  __No

If no, why?

Price you are currently paying per participant for certifications & simulation training:

_____ACLS     _____TNCC     _____FHM

_____PALS     _____ENPC     _____Stable

_____NRP     _____BLS     _____PEARS

List Other:____________________________________________________________________

Perceived benefits to your organization of a specialty education center in north central WY.

Perceived limitations you see in having a specialty education center in north central WY.