**Request for Proposal** 

Northern Maine Community College Installation of *Nursing and Allied Health* Mannequin Simulators And Related Equipment

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### Section 1 - Background Information

Northern Maine Community College (NMCC) currently enrolls approximately 200 students into the Nursing & Allied Health Programs which include Medical Assisting, Medical Coding, Career Studies, Nursing, Community Paramedicine and Emergency Medical Services. In healthcare education, there is a revolution taking place in the form of implementing high-fidelity simulation laboratories. Case studies, films, and role playing are all examples of low-fidelity methods. Moderate-fidelity simulations offer more realism but lack many cues necessary for complete immersion of the participants. A manikin with breath sounds but no rise and fall of the chest is an example of a moderate-fidelity simulator. High-fidelity simulations provide students with the more advanced cues necessary to suspend disbelief during dynamic, immersive, hands-on scenarios. High-fidelity computerized simulation manikins are extremely realistic – they are anatomically accurate, they breathe, they have a heartbeat and pulse, they verbalize and they can die during a simulated scenario. A library of clinical scenarios are programmed into the system with a set of symptoms that students must assess, diagnose, plan treatment, implement treatment and evaluate the outcome. As NMCC continues to promote active learning in the nursing and allied health programs, there is a demand to improve the teaching methods of low-fidelity simulation skills such as intramuscular injections to implement teaching with medium to high fidelity simulation technology.

Utilization of human patient simulation with medium to high fidelity patient simulators allows the student to develop, refine and apply their knowledge and skills in a realistic clinical scenario. This interactive learning experience is designed to meet their educational needs. This provides the student the opportunity to perform high risk skills of low frequency scenarios without fear of harm to a live patient. The use of simulation as a teaching strategy can contribute to patient safety and optimize outcomes of care, providing the student with opportunities to experience scenarios and intervene in clinical situation within a safe, supervised setting without posing any risk to a patient.

Currently the nursing and allied health departments utilize static manikins to teach low-fidelity skills. By integrating medium-high fidelity simulation, there is a need to update the current skills lab to more accurate and up-to-date equipment so that the training of the future healthcare professionals directly lines up with current healthcare practice standards.

## Section 2 – General Information

Northern Maine Community College invites qualified vendors to submit proposals for the purchase and installation of nursing simulator equipment. The equipment will be based upon the functionality and best fit for NMCC. The simulation center will have three rooms of monitored simulation with the goal to collaboratively work with the static skills lab as well. The center needs the capacity to debrief in a separate classroom. Management of the simulation will occur in a separate control room.

The Nursing and Allied Health Department at Northern Maine Community College currently faces two large challenges in delivering high-fidelity, high-quality simulation education. The first challenge deals with the age of the equipment, while the second challenge highlights the lack of technology in the current program, specifically the current simulation modules do not offer the realistic breadth of experience needed to adequately expose our students to various care environments. The current age of equipment is approximately 14 years and is far past the serviceable age range. Meanwhile the current technology revolves around the lack of maternal/newborn care examples which is desperately needed for our student's success given the lack of clinical sites.

Each vendor who intends to submit a proposal in response to this RFP shall submit an "Intent to Respond" via e-mail to Julie Clark at jaclark@nmcc.edu on or before February 12, 2018 11am. The Intent to Respond shall include the vendor name, the name of a contact person and that person's e-mail address.

The college reserves the right to reject any or all bids. This RFP shall be referenced in, and considered part of, any final contract. See attached Notice to Bidders.

#### NOTICE TO VENDORS AND BIDDERS: STANDARD TERMS AND CONDITIONS APPLICABLE TO ALL MCCS CONTRACTS

The following standard contracting terms and conditions are incorporated and shall become a part of any final contract that will be awarded by any college or other operating unit of the Maine Community College System (collectively "MCCS"). These terms and conditions derive from the public nature and limited resources of the MCCS. <u>MCCS DOES NOT AGREE TO</u>:

- 1. Provide any defense, hold harmless or indemnity;
- 2. Waive any statutory or constitutional immunity;
- 3. Apply the law of a state other than Maine;
- 4. Procure types or amounts of insurance beyond those MCCS already maintains or waive any rights of subrogation;
- 5. Add any entity as an additional insured to MCCS policies of insurance;
- 6. Pay attorneys' fees, costs, expenses or liquidated damages;
- 7. Promise confidentiality in a manner contrary to Maine's Freedom of Access Act;
- 8. Permit an entity to change unilaterally any term or condition once the contract is signed; and
- 9. Automatic renewals for term(s) greater than month-to-month.

By submitting a response to a Request for Proposal, bid or other offer to do business with MCCS, <u>YOUR</u> <u>ENTITY UNDERSTANDS AND AGREES THAT</u>:

- 1. The above standard terms and conditions are thereby incorporated into any agreement entered into between MCCS and your entity; that such terms and condition shall control in the event of any conflict with such agreement; and that your entity will not propose or demand any contrary terms;
- 2. The above standard terms and conditions will govern the interpretation of such agreement notwithstanding the expression of any other term and/or condition to the contrary;
- 3. Your entity will not propose to any college or other operating unit of the MCCS any contractual documents of any kind that are not in at least 11-point font and completely contained in one Word or PDF document, and that any references to terms and conditions, privacy policies or any other conditions referenced outside of the contract will not apply; and
- 4. Your entity will identify at the time of submission which, if any, portion or your submitted materials are entitled to "trade secret" exemption from disclosure under Maine's Freedom of Access Act; that failure to so identify will authorize MCCS to conclude that no portions are so exempt; and that your entity will defend, indemnify and hold harmless MCCS in any and all legal actions that seek to compel MCCS to disclose under Maine's Freedom of Access Act some or all of your submitted materials and/or contract, if any, executed between MCCS and your entity.

### **Section 4 - Review and Selection Process**

Award will be made to the vendor who submits the overall proposal that is judged to provide the best value to Northern Maine Community College.

NMCC has appointed a selection committee for this RFP to evaluate proposals, and to award a contract to the vendor which they determine best meets its needs. NMCC reserves the right to reject any or all bids, to waive or not waive informalities or irregularities in bids or bidding procedures, and to accept or further negotiate cost, terms, or conditions of any bid determined by NMCC to be in the best interests of NMCC even though not the lowest bid.

The proposals will be evaluated on a qualitative basis; factors which may affect the decision include the vendor's completeness and timeliness in its response to NMCC, the results of discussions with references, and interviews with personnel to be assigned to NMCC.

Vendors shall deliver and install all equipment within 6 weeks from award notification. Preference may be given to vendors that can complete delivery and installation in a shorter time frame after receiving award. Availability of proposed equipment may be used in the evaluation of the proposal. The vendor must include a realistic delivery schedule in terms of weeks following contract award.

NMCC will select up to 3 finalists to appear before the selection committee for an oral presentation and equipment demonstration. It is anticipated that the demonstrations/presentations will be made during the week of March 19<sup>th</sup>, 2018. The College intends to notify the selected vendors on or before March 12, 2018.

### Section 5 – Proposals

- A. Due Date: Proposals must be submitted and received no later than 2:00pm on <u>Friday</u>, <u>March 2, 2018</u>. Late proposals will not be considered.
- B. Number of copies Proposer shall submit eight (8) complete sets of proposal and one (1) electronic copy of the proposal (labeled and encased), complete with all supporting documentation, in a sealed envelope.
- C. Questions concerning this RFP must be sent via email to jaclark@nmcc.edu, and courtesy copied to nabuck@nmcc.edu. The subject of the e-mail should clearly state "Question RE Simulator RFP". All questions and responses will be posted on the College website at http://www.nmcc.edu/about-nmcc/news-info/rfps/. It is the College's intent to respond to all questions within 2 business days. It will be the vendors' responsibility to check this site for updates. Deadline for questions is February 26, 2018, at 4:00pm.
- D. The proposal cannot be more than twenty pages in length, excluding cover, cover page and table of contents.
- E. The following must accompany all proposals in this sequence:

Cover Page Table of Contents Proposal Certificate of Insurance

F. Proposals must be submitted in a sealed envelope

clearly marked "RFP-Simulation Center Mannequins" and addressed to: Northern Maine Community College Attn: Julie Clark 33 Edgemont Drive Presque Isle, ME 04769

- G. It is the sole responsibility of the respondent to deliver his/her proposal to the above address on or before the closing hour and date shown above. Faxed, emailed, conditional, and submissions sent after the deadline above will not be considered. Failure of the US Mail or a delivery service to deliver a response by the above deadline for receipt shall not constitute an extension to the deadline. All materials received in response to this RFP become the property of NMCC upon receipt in the NMCC Business Office.
- H. Current Equipment on campus Below is a list of the equipment that is currently located on the campus: One (1) Meti-Man
  One (1) Noelle
  One (1) PediSim

## Section 6 – RFP Evaluation Criteria and Description

NMCC has established a review committee that will evaluate and select the vendor to be recommended to the College President for award of a contract to provide the equipment, installation, and training services from the responses to criteria outlined in the RFP.

The review will consist of a point formula to score proposals. The evaluators can assign a maximum of one hundred (100) points for each respondent's written response. Based on the total calculated score, the respondent will be ranked highest to lowest with a 100 total score being the highest.

## A. Company Qualifications (maximum 10 points)

- Describe the organization, size and structure; whether the company is local, regional, or national; the location of the office which will facilitate the sale of the equipment; the number of professional staff employed at that office and the location of any support personnel assigned to this project.
- 2. Indicate the number and type of non-profit and government clients served. If your clients include colleges and universities or are located in the state of Maine, please state that information. Provide client names that can be contacted as references.
- 3. Provide a minimum of four (4) references from previous clients for whom services Have been performed over the last five (5) years. Provide the reference's current contact name and telephone number.

4. Consideration will be given to, but not limited to, professional registrations, years of experience, experience with State of Maine Higher Education Facilities and other experience/qualifications that may be relevant to the proposed project.

#### B. Training (maximum 30 points)

- 1. Identify the availability and any limitations to the training of the NMCC Nursing and Allied Health Staff by the vendor.
- 2. Identify each location of the training.
- 3. Please note if the training can be moved to the NMCC Campus and if an additional cost is required for this ability.
- 4. Identify all costs associated with the training on:
  - \* initial group training sessions
  - \* new employee training sessions
  - \* any refresher training sessions

# C. Fidelity needs for simulation and nursing skills (maximum 35 points)

- 1. Fidelity (also known as realism/authenticity) believability, or the degree to which a simulated experience approaches reality; as fidelity increases, realism increases. The level of fidelity is determined by the environment, the tools and resources used, and many factors associated with the participants. Fidelity can involve a variety of dimensions, including (a) physical factors such as environment, equipment, and related tools; (b) psychological factors such as emotions, beliefs, and self-awareness of participants; (c) social factors such as participant and instructor motivation and goals; (d) culture of the group; and (e) degree of openness and trust, as well as participants' modes thinking.
- Have the option to purchase standard equipment for the simulation room that would include debriefing computer, debriefing software with applicable server and/or storage, in-room patient monitor, two (2) PTZ HD Cameras, microphone, and ability to integrate with simulator.
- 3. Any additional alternative room equipment may be submitted to improve the simulation and debriefing management, operations and debriefing. Any and all primary, alternative and optional additional secondary room specifications are subject to approval by NMCC.
- 4. All vendors should address the maintenance and warranties of their products in this section.
- 5. Base level service plans should be three (3) years of service including shipping to and from college, preventative maintenance, software updates, and phone technical support. Any additional alternative or optional service plans may cover up to five (5) years, for onsite repairs and onsite maintenance.

## 6. Medical Surgical Simulator/Mannequin – 1

Please address how your company will address each of these needs:

- a. Primary Needs
  - Wireless and tetherless mobility for care in motion training
  - Vital Signs (blood pressure, pulse, heart rate, temperature, pulse oximetry)
  - Lung sounds (wheezes, rhonchi, rhales, diminished, crackles)
  - Dynamic airway and lung compliance (ventilator management)
  - Gastrointestinal sounds (hyperactive, hypoactive, normal, absent)
  - Neurological assessment (eyes open and close, pupils constrict/dilate, )
  - Suctioning/Cleaning a tracheostomy (ability to insert trach cannula and remove for cleaning)

- Cardiac monitoring (12-lead ECG, AED, heart rate, blood pressure, pulse oximetry, capnometers)
- Intravenous insertion (ability to administer medications and also to show blood return)
- Skin assessment (cyanosis)
- Central line care (ability to insert central line to perform central line care)
- Wound and ostomy care (ability to change out parts for a 'wound')
- Nasogastric tube placements (nasal insertion)
- Indwelling and straight catheter care for male/female (urethra opening)
- Mobility: positioning, traction (ability to move limbs)
- b. Additional optional secondary needs:
  - Fluid balance (monitor input of IV fluids and output of urine)

# 7. Advanced Female Patient Simulator/Mannequin – 2

- a. Primary Needs
  - Wireless and tetherless mobility for care in motion training
  - Vital Signs (blood pressure, pulse, heart rate, temperature, pulse oximetry)
  - Lung sounds (wheezes, rhonchi, rhales, diminished, crackles)
  - Breathing (control rate and depth of respiration, lung sounds in all quadrants)
  - Gastrointestinal (bowel sounds in all quadrants, NG/OG intubation and feeding; colostomy/ileostomy/stoma care)
  - Neurological assessment (adjust rate eyes open and close, pupils constrict/dilate, seizure activity, programmed speech responses)
  - Airway (oral or nasal endotracheal intubation/suctioning, difficult airway with swelling, tongue edema; intubation depth sensor)
  - Suctioning/Cleaning a tracheostomy (ability to insert trach cannula and remove for cleaning)
  - Cardiac monitoring (normal & abnormal heart sounds; 12-lead ECG, heart rate, blood pressure, pulse oximetry with oximeter; visible cyanosis; bilateral pulses carotid/radial/brachial/femoral/popliteal/pedal)
  - Male/Female catheterization
  - Decubitus ulcers/ulcerated foot
  - Breast Examination: (interchangeable breasts which include fibrocystic breast disease, mastitis, benign tumor, giant sarcoma, retracted nipple)
  - Gynecology Examination: (normal/abnormal cervices, anteverted uterus with interchangeable ovaries; 7 week pregnant uterus/cervix; 12 week pregnant uterus/cervix; 20 week pregnant uterus/cervix)

- b. Additional optional secondary needs:
  - Fluid balance (monitor input of IV fluids and output of urine)
  - Mobility: Positioning, traction (ability to move limbs)

# 8. Pediatric Simulator/Mannequin – 1

- a. Primary Needs:
  - Wireless and tetherless mobility for care in motion training
  - Vital Signs (blood pressure, pulse, heart rate, temperature, pulse oximetry)
  - Lung sounds (wheezes, rhonchi, rhales, diminished, crackles)
  - Breathing (control rate and depth of respiration, lung sounds in all quadrants)
  - Gastrointestinal (bowel sounds in all quadrants, NG/OG intubation and feeding; colostomy/ileostomy/stoma care)
  - Neurological assessment (adjust rate eyes open and close, pupils constrict/dilate)
  - Airway (oral or nasal intubation; ET tube or LMA; multiple airway sounds, lung compliance for chest rise)
  - Cardiac monitoring (normal & abnormal heart sounds; 12-lead ECG, heart rate, blood pressure, pulse oximetry with oximeter; visible cyanosis; bilateral pulses – carotid/radial/brachial)
  - Male/Female catheterization
- b. Additional Optional Secondary Needs:
  - Fluid balance: (monitor input of IV fluids and output of urine)
  - Mobility: positioning, traction (ability to move limbs)
  - Nasogastric tube placement (nasal insertion)
  - Intravenous insertion and care (ability to administer medications and also to show blood return)

## 9. Full-Term Newborn Simulator/Mannequin – 1

- a. Primary Needs:
  - Lifelike appearance and physiology.
  - Wireless, tetherless, and battery powered.
  - Vital signs: blood pressure, pulse, heart rate, temperature, pulse oximetry.
  - Soft, supple skin; Realistic articulation.
  - Lung sounds (wheezes, rhonchi, rhales, diminished, crackles)
  - Breathing (spontaneous breathing; variable respiration rates; control rate and depth of respiration, lung sounds in all quadrants)
  - Gastrointestinal (bowel sounds in all quadrants)

- Neurological assessment (adjust rate eyes open and close, pupils constrict/dilate)
- Airway (head tilt, chin life, jaw thrust; realistic orotracheal and nasotracheal airway, visible vocal cords; programmable crying/grunting sounds, intubation (ETT, LMA, fiberoptic)
- Cardiac monitoring (normal & abnormal heart sounds; 12-lead ECG, heart rate, blood pressure, pulse oximetry with oximeter; virtual pacing/defibrillation)
- Bilateral IV arms/ IV access of lower leg; Umbilical vein and arteries
- Male/Female catheterization
- Navel insert after cord detachment
- Programmable muscle tone (active, reduced, limp).
- b. Additional Optional Secondary Needs:
  - Fluid balance: (monitor input of IV fluids and output of urine)
  - Mobility: positioning, traction (ability to move limbs)

## 10. Newborn Skills Trainer/Mannequin – 3

- a. Primary Needs:
  - Full term newborn; smooth full body skin; articulated limb joints with full range of motion; detachable umbilical cord; palpable lumbar landmarks; flexible spine
  - Anatomically accurate oral cavity and airway; endotracheal intubation; suctioning
  - Visible chest rise with assisted ventilation; chest tube insertion
  - Realistic chest compression and recoil
  - Fontanelle, umbilical, brachial and femoral pulses
  - IV cannulation, umbilical artery catheterization, and IO infusion
  - Patent esophagus; gastric suctioning; stoma care; urinary catheterization
  - Interchangeable male & female genitalia.

## 11. Childbirth Simulator – 2

- a. Primary Needs:
  - Simulation of normal and abnormal vaginal delivery scenarios (including complete/frank/footling breech)
  - Simulation of cesarean delivery
  - Demonstration of placenta previa
  - Life-size pelvic cavity with major anatomic landmarks
  - Episiotomy variations
  - Baby with placenta and umbilical cord attached

### D. Costs (maximum 15 points)

- 1. Provide a clear and detailed pricing proposal; price quote should include <u>any</u> possible third-party fees for the installation of the equipment, warranties, training as well as shipping and handling costs.
- 2. Pricing should include the cost of equipment, installation of equipment, integration with simulators, training on system, and license/viewing information.

3. Alternate: Provide purchasing credit to NMCC for the removal of current simulators and equipment detailed in Section 8. The credit would be used by the college to deduct from the total cost.

### D. Warranty & Support (maximum 5 points)

- 1. Provide clear and detailed information of the standard manufacturer warranty
- 2. Detail extended warranty options and all related fees and costs associated
- 3. Detail technical and mechanical support services and options including all related fees and costs associated
- 4. Comprehensive list of maintenance options and related fees including, but not limited to complete strip down and assessment annually of mannequins and software.
- E. Responsiveness and completeness of the written proposal as detailed in this RFP. (maximum 2 points)

#### F. Lead time (maximum 3 points)

- 1. Vendors shall deliver and install all equipment within 6 weeks from award notification
- 2. Preference may be given to vendors that can deliver and install all equipment before specified deadline.

# **Evaluation Criteria Summary Chart**

Factor	Max Points
Company Qualifications	10
Training Services Included	30
Fidelity of Proposed Equipment	35
Cost	15
Warranty & Warranty Options	5
Proposal Quality, Detail and Organization	2
Lead Time	3

Detailed below is the scoring criteria that will be used to assess finalists that are selected to present their proposals and perform equipment demonstrations to the Mannequin Simulator selection committee. Each vendor can earn a maximum of 200 points. One hundred (100) points from the initial evaluation. An additional 100 points will be assigned by the selection committee according to the following:

Factor	Max Points
Organization & Clarity of presentation/presenter	10
Technology	30
Preparedness & subject knowledge	10
Functionality of equipment demonstrated	30
Variety of equipment demonstrated	20

# Section 7 – Timeline Summary

The solicitation schedule, which may be subject to change, is as follows:

Any changes to this schedule will be made know via a written addendum.

Date & Time	Activity, Location
February 7, 2018	RFP Advertised and Distributed
February 26, 2018 at 4pm	Deadline for Questions
March 2, 2018 at 2pm	Proposals Due & Public Bid Opening
March 12, 2018	Finalist Notification
Week of March 19, 2018	Tentative Date of Presentations
April 2, 2018	Award Approval

### Section 8 – Alternate

- As an alternate proposal item vendors are invited to propose a credit value for the following mannequins:
  - One (1) Meti-Man by CAE Healthcare Industries Serial #: ECS1320
  - One (1) PediSim by CAE Healthcare Industries Serial #: 76064765
  - One (1) Noelle by Guamard Serial #: 11309810