Semi-Final Round Submission Requirements

a. (i)

Name of Winning individual/team lead:	Sheridan Heinrichs
Company Name:	Graduated Backboard, Inc.
Product/Service Name:	Emergency Response Backboard with integrated scale and software
Company Address:	2919 Seavy Drive
City/State/Zip:	North Pole, Alaska, 99705
Place of Incorporation (if applicable):	n/a
Product/Service Website (if applicable):	n/a
Telephone of winning individual:	435-640-1988
his/her email address:	sheridan.heinrichs@gmail.com

(ii)

Host orgs legal name:	Alaska SCORE Chapter
Street address, city, state, zip:	308 Tanana Loop Rd., Fairbanks, AK 99775
Best contact number & email:	907-474-6641; kdodge@alaska.edu

(iii)

A concise two sentence description of the product or service (Note: this description may be used in promotional or information materials in connection with InnovateHer):

The Graduated Backboard, a fully patented medical device, is an emergency response backboard with an integrated scale, software, wireless technology, and vital sign import/outports. The device can acquire an individual's accurate weight, calculate weight-based measurements, (ie. medication dosage, amount of electricity for a defibrillator) run vital signs, convey the information via wireless technology to any smart device programmed to receive it; thereby improving patient outcomes and providing more accurate and timely information to first responders and medical providers.

GRADUATED BACKBOARD

The Alaska SCORE Chapter is pleased to recommend *Graduated Backboard* to you for consideration in the SBA *InnovateHER* competition. *Graduated Backboard* is a fully patented smart Emergency Management Services (EMS) backboard that determines the accurate weight of a patient, effectively calculates weight-based measurements, and conveys the information via wireless technology to any smart device programmed to receive it. This improves patient outcomes, by providing more timely and accurate information to first responders and medical providers, while reducing risk of further injury to patients and medical providers.

Background

There are three notable circumstances that led the applicant, Ms. Heinrichs, to develop this device. The first, occurred a number of years ago when, Ms. Heinrichs, then 9 months pregnant, was struck by a sixty pound piece of wood which badly crushed her foot. Because of the accident, Ms. Heinrichs was unable to stand. In order for her medical care providers to get her accurate weight, she spent much time being balanced by nurses, so they could calculate dosages for anesthesia, medication and effectively track the weight of her baby through the remainder of her pregnancy. This seemed like an avoidable risk, to both patient and the nurses involved, yet there was no alternative available.

Ms. Heinrichs has been a lactation counselor for over ten years. In providing this service, the actual weight of the baby is quite important for gauging health and growth. However, in the absence of an accurate portable scale, many lactation counselors, and other home health providers, forgo accuracy and settle for a reasonable guess. The *Graduated Backboard* comes in both adult and pediatric sizes to easily resolve this issue.

Finally, Ms. Heinrich's husband, John, is a Fire Captain and advanced Emergency Medical Technician. John and his fellow EMS providers are frustrated when they have to roll out of bed in the middle of the night, drive quickly to an accident or incident, immediately evaluate a patient, determine dosage and treatment - all without the very basic and critical information: a patient's weight. They are further frustrated when they must manually gather and call-in vital information to the ambulance or hospital; adding further delays and risk of errors. It was while John and his crew were sitting around the table complaining about the stress and risk of making life saving/endangering action without this information that this product was born.

The product

The *Graduated Backboard* is a patented apparatus, system, and method for weighing an individual on a backboard. It includes an electronic device to display the determined weight of an individual patient and a module to communicate the weight to an electronic device remote from the backboard. The *Graduated Backboard* can determine medication dosages based on the weight of the individual. Compatible with other smart peripheral devices, it can communicate to a defibrillator configured to receive the weight and calculate the amount of electrical energy that the defibrillator should deliver to the individual or child. The *Graduated Backboard* has input/output ports to receive sensor data, it can obtain and communicate baseline vitals that help stabilize the patient for transportation. In the clinic, the *Graduated Backboard* can weigh people that have lost limbs, or other injuries or disabilities that make it difficult to get a standing weight, while reducing risk of further injury to patients and to the medical providers assisting them.

Has a measurable impact on the lives of women and families (30%)

This device can be used to weigh babies in their homes, in clinical and emergency settings with ease. It can help any woman, and her family, that needs to be weighed but can't stand due to illness or injury. Examples include: pregnant women that are unable stand on a scale, any person that is hurt and needing immediate treatment prior to or during transport, wounded female soldiers or spouses that have lost limbs and aren't able

to stand on a traditional scale. The *Graduated Backboard* can be used by nurses, to obtain weights of larger patients without risking their own physical health, which in turn reduces lost work time. A portable, lightweight scale will profoundly affect the medical field in many positive ways.

Has the potential for commercialization (40%)

Ms. Heinrichs is currently in discussions with well-known and respected medical design firm HLB, who is excited by the prospects this product provides. She is actively researching and creating marketing materials, in preparation for seeking seed money, angel investors, and venture capitalists. She is confident that once commercialized, the product will be highly successful, as backboards currently utilized in the medical field - become passé and are replaced with this intelligent and effective device.

Ms. Heinrichs has interviewed numerous professionals who work in both EMS and clinical situations and they unanimously agree that there is a need for a portable, lightweight scale/backboard that allows a patient to be weighed; can measure other vital signs and communicate with devices in ambulances and hospitals; all of which can be critical in emergency medical situations.

Fills a need in the marketplace (30%)

Currently there is no device available on the market to effectively obtain accurate patient weight for EMS providers. This device will profoundly impact the ability of EMS and medical professionals to treat people in emergencies and other medical situations, without risking further injury to patients or themselves. The *Graduated Backboard* has the potential to be a portable emergency response device that can be utilized in emergency and clinical settings to ensure that (1) precious time isn't wasted in saving/improving lives (2) the risk of further injury to patients and providers is minimized, and (3) patients aren't put in embarrassing positions of having people balance them on a scale.

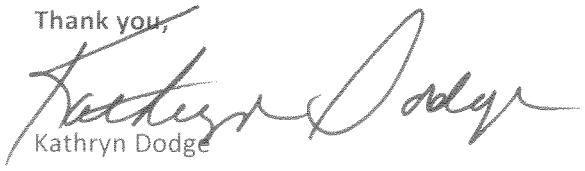
The *Graduated Backboard* allows access to information that is currently guesstimated in order to make critical, life-impacting decisions. It allows Emergency Medical Technicians to get an accurate weight, sync with complementary apparatus and convey vital signs such as blood pressure, respiration, CO2, O2 saturation, etc., via wireless technology to an ambulance, hospital, clinic, other medical professionals, etc.

In clinical settings, the *Graduated Backboard* will enable nurses and other medical support professionals to more safely and effectively obtain patient weight without risking further injury to the patient or themselves. The *Graduated Backboard* will allow individuals in an emergency situation, with disabilities and/ or difficulty standing, such as wounded warriors, or a very pregnant woman with a foot injury, to be weighed with dignity instead of trying to figure out how to balance their bodies on a standing scale.

Summary

In summary, this patented invention is one of those "duh" types of a product that, once envisioned, leaves one wondering, "When can I get one, and why aren't they here now?" This device is in the process of being designed for manufacture and has the potential to replace a majority of the existing non-intelligent backboards in the field, ambulances, clinics, schools, and hospitals around the world. It will clearly help women and their families as they are weighed accurately, quickly, and with dignity during times of emergency and/or need. We urge you to support the advancement of this game-changing/life-saving technology, by recommending this product as a finalist in the *InnovateHER* competition.

Thank you,



Kathryn Dodge