#### 2017 Full Submission

**Title:** Identifying Key Virtues among Health Professions that are Vital for Patient Care

Principal Investigator: Walter T. Lee

Email: walter.lee@duke.edu

School/Department: Duke University School of Medicine

#### Other Collaborators:

- Joe Doty/Orthopedics
- Midge Bowers / Nursing
- Jamie Fox / Pediatrics
- Bill Hargett / Medicine
- Alex Limkakeng/ Emergency Medicine
- David Stratka / Resident / OHNS

**Focused Question:** Primary: What are the shared and unique virtues and character strengths vital for patient care in the fields of Surgery, Nursing, Medicine, and allied health professions. Secondary: What are the shared and unique virtues and character strengths vital for patient care between trainees and faculty.

**Background:** The development and practice of virtues is vital to all who are involved in the care of patients. These virtues include wisdom, compassion, integrity, honesty, and critical thinking. Virtues have been part of the origins of medicine and carried forward implicitly during the applicant selection process as well as explicitly in professionalism oaths such as the Hippocratic Oath and Nightingale Pledge[1, 2].

In recent years, there has been an emphasis on Professional Identity Formation (PIF) and inquiry into how this formation occurs over one's professional lifetime[3, 4]. PIF emphasizes that it is much more than knowing facts and data, but rather becoming the person and professional we wish to become. Thus, at the core of PIF are virtues and character strengths that are an expression of who we are and what we do[5-7].

Within the medical field, there are many commentaries and books extol the vital importance of virtues in caring for patients[8-10]. However there is a paucity of academic research in how particular virtues can be prioritized and developed. The paucity of academic research in this vital area may be due to the subjective nature of virtues. It is a challenge to rigorously measure a qualitative value such as virtue. Despite this difficulty, there remains a need for examining virtue and its importance in professional development of those involved with patient care.

Q-sort methodology was developed as a means to study individuals' viewpoints and subjectivity.. Q-sort was recognized over 20 years ago as a valid and robust method to assess medical education perspectives and attitudes[11]. For example, Q-sort has been used to determine the leadership values

deemed most essential by academic medical center deans[12]. Q-sort involves having individuals rank their opinions in columns making up a grid that looks like an inverted pyramid. The right side of the grid represents the strongest agreement with the question being considered while the left side represents the least agreement. Q-sort analysis then determines if there are patterns or factors that can account for shared viewpoints or opinions among the respondents. Having a defined group in which one attempts to identify shared patterns of opinions is important for data analysis.

The objectives of this project are to 1) Identify the essential virtues that are vital to patient care and 2) Develop a deeper and broader understanding of these essential virtues at Duke University Medical Center. We will perform a Q-sort analysis among different health professions and fields. We hypothesize that we can identify common and unique virtues and character strengths among different health professions. Furthermore, recognizing the process of professional development, we hypothesize that there are key virtues and character strengths that will be either shared or unique between trainees and faculty. Having a deeper understanding of virtues that are at the core of PIF would enable tailored education and bring a deeper and more fulfilling purpose to these careers[4].

It is important to recognize that all virtues are important in some way to the care provided to patients and their families. However, particular virtues may have differing importance among varied specialities and fields (e.g. surgery and nursing). Furthermore, particular virtues may be emphasized during different times in professional formation (trainee versus faculty). Identifying the most vital ones both shared and unique would enable several important opportunities for development. First, it would enable each specialty to identify core virtues that it needs to transmit to its trainees.. Second, it would enable teaching and education on those shared virtues that are not unique to one speciality or field across the health system. Third, it would allow educators to tailor their teaching to the trainees in their specialty, or other specialties. For example, an educator teaching to a specialty that emphasizes teamwork might create team-based cases versus individual projects. We believe an emphasis on virtues can be a Duke Health distinctive trait that enables greater empathy, education, and retention of staff resulting in improved patient care.

# **Specific Aims:**

- -Using Q method, identify the shared and unique virtues that are vital in patient care among different specialties fields as well as learners and faculty. This will be accomplished through an online Q-sort exercise in which participants rank a number of virtues in order of importance.
- -Dissiminate and develop a deeper and broader understanding of these shared and unique virtues among the different specialites and fields. This will be accomplished through both in-person seminars and on-line video modules with each of the participating specialties and fields.

# Methods:

Phase 1: Q-sort Ranking and Analysis (Nov-Jan)

The Q-sort methodology involves three steps. The first step is developing a set of statements for participants to rank order. Our set of virtues was adapted from seminal work from Christopher Peterson and Martin Seligman, who classify 24 specific strengths under six broad virtues that consistently emerge across history and culture[13].

The second step is identifying potential subjects and administering the Q-sort survey. The research team includes representatives from the following groups that will administer the survey to both faculty and residents: Otolaryngology-Head and Neck Surgery, Emergency Medicine, Pediatrics, Nursing, Medicine and Orthopedics. We will also include allied health fields such as speech pathology, audiology, and physical therapy. Based on prior work in the School of Medicine, the research team has already developed the program used for this proposal. The Q-sort online exercise currently takes about 10 minutes to complete and needs to be done in one sitting.

The third step involves analysis and interpretation. Factor analysis based on the Q-sort will be used to correlate participants' Q-sort results and determine which individuals cluster together. Iterative analyses and consensus among the research team will decide the best-fit factor analysis as identified by distinct groups. This factor analysis will be compared both intra-profession and inter-profession and between faculty and learners.

## Phase 2: Development of enduring materials (Feb-April)

The research team will collaborate on the creation of stand alone informational videos that will focus on each virtue that has been identified, both shared and unique. This will result in a creation of virtue-based on-line reference library available to all within the Duke University Medical Center. Each of theses videos will have a feedback survey to assess its impact on achieving the educational aim of a deeper and broader understanding of each of the virtues.

## Phase 3: Disemmination and discussion expounding of results (May-October)

Working with the co-investigators on the team and their respective departments/schools, we will identify a time to present to the different groups within medicine, surgery, nursing and allied health fields. The information shared will be done in an in-person seminar and would leave time for interaction and questions. These seminars will be recorded and edited and added to the virtue-based on-line reference library.

The in-person seminars will be focused on how the identified virtues can help us all, no matter what position or professional stage, in the Duke mission of caring for our patients, their loved ones and each other.

We will also plan to send a final survey to all Q-sort participants to assess their feedback on the impact the project has made on their professional development and daily work life. A Likert scale will be used for subjective assessment.

Further plans for dissemination will includes submition to the Annual American Society for Bioethics and Humanities (ASBH) meeting in October 2018. The purpose of ASBH is to promote the exchange of ideas and foster multi-disciplinary, inter-disciplinary, and inter-professional scholarship, research, teaching, policy development, professional development, and collegiality among people engaged academic bioethics and the health-related humanities. We plan to submit this work for publication in Academic Medicine.

If funded, this work can immediately begin under the IRB exempt protocol (2/26/15): Pro00059628: Core Virtues in Healthcare.

**IRB status:** Approved – PRO00059628

Challenges: Recruitment for Q-sort assessment

Using Q-sort analysis, neither a large sample size nor large number of respondents is needed for meaningful results. We have representatives from each specialty to encourage participation and will send repeated invitations during Phase 1.

#### Meeting time attendance

Members of the study team will immediately identify a time during phase 3 to present the study results to their respective areas. As this is in Phase 3 (May-October), we will be able to schedule well in advance to maximize attendance. Funds will also be used for refreshments/food as applicable to encourage attendance.

# **Budget Template:**

PI Effort	\$2500	2% efforts to include direct oversight of all aspects of the project including Q-sort exercise, data analysis, online virtue based videos and in-person seminars
Consult costs:	\$4646.00	Bill Hargett Q sort data analysis (\$100/hour) Amy Walker admin asst (2%) @ 1846, Media recording & editing @ 10 hours @ 80/hr. Includes six hour recording session and four hours editing.
Equipment:		
Supplies:	\$1684	Food for in-person sessions (9 session

		averaging \$187/session)
Computer		
Travel:	\$1000	Meeting support
Total Requested:	\$9830	

#### **Works Cited:**

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