Consortium on Law and Values in Health, Environment & the Life Sciences
2013-14 Student Proposal Cover Page

### Applicant Information

<table>
<thead>
<tr>
<th>Applicant name</th>
<th>Email:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alex Roseman, Hannah Thompson, Roma Patel</td>
<td><a href="mailto:Pate0247@umn.edu">Pate0247@umn.edu</a>, <a href="mailto:thom3256@umn.edu">thom3256@umn.edu</a>, <a href="mailto:schut101@umn.edu">schut101@umn.edu</a>, <a href="mailto:frist015@umn.edu">frist015@umn.edu</a>, <a href="mailto:curra071@umn.edu">curra071@umn.edu</a>, <a href="mailto:rosem041@umn.edu">rosem041@umn.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project title:</th>
<th>Twin Cities High Utilizers: A Patient Centered Approach to Address the High Cost of Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree program:</td>
<td>Joint Degree Program; JD, MD, MPH- PHAP</td>
</tr>
<tr>
<td>Faculty advisor name &amp; email:</td>
<td>Stephanie Tucker, MD <a href="mailto:tucke045@umn.edu">tucke045@umn.edu</a></td>
</tr>
<tr>
<td>Dept. Head:</td>
<td>Andy Lee</td>
</tr>
<tr>
<td>Dept. Head’s email:</td>
<td><a href="mailto:Lexx0122@umn.edu">Lexx0122@umn.edu</a></td>
</tr>
<tr>
<td>Dean:</td>
<td>John Finnigan</td>
</tr>
<tr>
<td>Dean’s email:</td>
<td><a href="mailto:Sphdean@umn.edu">Sphdean@umn.edu</a></td>
</tr>
</tbody>
</table>

### How did you hear about this funding opportunity?
- [ ] VIP email
- [ ] The Brief
- [ ] Advisor
- [ ] Dept. email/newsletter
- [ ] OVPR website
- [ ] Other

### Funding

| Total amount of funding requested: | $7,000 |

### Executive summary (maximum 200 words)

The rapidly increasing cost of healthcare, fragmented primary care and need for quality improvement pose significant problems for the U.S. health system and our economy. We are an interdisciplinary team of Public Health, Medical and Law students requesting funds to identify local high health care utilizers to address inadequate medical care and high healthcare costs in Minnesota. The nature of our research involves partnering with local health organizations and using electronic health information to identify patients with complex, unaddressed health issues and a history of frequent encounters with healthcare providers, known as high utilizers. The kind of fragmented primary care that leads to repeat emergency room visits and poor outcomes may be associated with underlying social and economic factors, however very little concrete information exists about high utilizers from the patient’s perspective. Patients have valuable insight, yet medical professionals and healthcare decision makers at large often overlook this insight. We believe addressing issues and developing policy related to inadequate care and increasing costs begins with asking patients about their needs. We will perform a patient-centered needs assessment to define barriers to care for high utilizing patients and present a policy proposal based on our findings.

### Approvals

**Check all appropriate approvals required for your proposal. Approvals must be obtained prior to receipt of funding. If you have applied for approval but have not yet received it, indicate that below.**

<table>
<thead>
<tr>
<th>IRB</th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Application pending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
<td>Application pending Specify: approval and support from Kathleen Watson, Dean of Medical Education</td>
</tr>
</tbody>
</table>

### Checklist

- [x] The proposal is 1000 words or less excluding budget, biographies, references and citations.
The proposal includes a work plan with a specific timeline using months or quarters to identify work to be done and completion dates.

The proposal includes a 1-2 paragraph biography of the applicant and all co-investigators.

The budget form is complete including the funds sought for this project, other pending applications for this project, and the amount/source of matching or other funds.

The applicant’s faculty advisor is copied on the application email. Professional students w/o advisors check NA.

All necessary approvals are pending or received.

TWIN CITIES HIGH UTILIZERS: A PATIENT-CENTERED APPROACH TO ADDRESS THE HIGH COST OF HEALTH CARE

OUR MISSION

We will connect with high utilizers in Minneapolis and understand their needs as well as the barriers they face from the patients’ perspective. We hope to publish our findings and develop meaningful policy proposals to improve patient outcomes and address ineffective resource allocation. Our goal is to use our patients’ experiences to facilitate continuous system-wide improvement to advance the lives of many more high-utilizing patients. We hope to apply our training from this initiative to inform our future careers as leaders in healthcare delivery and policy.

BACKGROUND AND SIGNIFICANCE

Americans spend nearly 18% of our GDP on healthcare, more than any other industrialized nation, yet we do not benefit from noticeably superior care (Mahon, 2012). The widening gap between healthcare spending and lackluster health outcomes demands attention. A disproportionate share of health care spending in the United States is used to provide care to a relatively small group of patients, with one percent of the population accounting for 22% of total healthcare expenditures annually (Cohen et. al., 2012). These patients, with complex, unaddressed health issues and a history of frequent encounters with healthcare providers, are often referred to as “high utilizers” (Mann, 2013).

According to a report from the Minnesota Department of Health, health care spending in our state is expected to more than double over the next decade in the absence of reforms to curb spending growth. Coupled with Minnesota’s rising healthcare expenditures is an expected shortage of between 1,000 and 3,000 primary care providers, and demand for up to 14,000 physicians in all specialties throughout the state (Schoenbaum et. al., 2013). These factors result in a small subset of the population contributing a disproportionate amount to the rising cost of healthcare that cannot be addressed solely by increased physician access due to the expected physician shortage.

While there is some research on high utilizers, most of it comes from the perspective of providers, healthcare organizations, private and public payers. The kind of fragmented primary care that leads to repeat emergency room visits and poor outcomes may be associated with underlying social and economic factors; however, very little concrete information exists about high utilizers from the patient’s perspective. Patients have valuable insight, yet medical professionals and healthcare decision makers at large often overlook this insight. We believe addressing issues and developing policy around inadequate care and increasing costs begins with asking patients about their needs.

METHODS AND TIMELINE
As a team of medical, public health, and law students we hope to bring our backgrounds together to help forge a viable path toward efficient, comprehensive and collaborative primary care services. We plan on partnering with Fairview Medical Center and Hennepin County Health Center (HCMC) to access existing health information to identify high-utilizers. We define a high-utilizer as a patient who has been admitted into a hospital more than 3 times in the past 6 months. We will randomly contact patients who fit this criteria until we have enough patient participants in our study (see Phase II of Timeline). We will exclude inpatient admissions related to pregnancy, oncology, trauma, or surgical procedures for acute conditions; patients greater than 80 years of age or have a dementia diagnosis; or someone declining to participate in our study (Hasselman, 2013).

After identification and obtaining informed consent from these patients, we will conduct a patient-centered needs assessment (interview style survey) and perform qualitative analysis of our results. We expect to find commonalities in gaps of care among our high-utilizing patients. We’ll use the results of our Phase II needs assessment and a literature review to determine which gaps of care we suspect have the biggest impact on our patients’ health and where intervention would lend the greatest cost-benefit. Due to the interdisciplinary nature of our team, we hope to identify these gaps of care from a variety of professional perspectives that will look at social determinants of health and potential interventions that extend beyond the hospital bedside. We will pursue meaningful institutional change through a policy proposal.

**TIMELINE 2014 - 2015**

**Phase I: May-July 2014**

- Recruit volunteer students to serve as project support staff
- Develop needs assessment
- Work with Fairview and HCMC to access electronic medical records (EMR)
- Develop patient consent form
- Finalize IRB process

**Phase II: August-October 2014**

- Identify 20 high utilizers from EMR
- Conduct preliminary patient-centered needs assessment
- Hold discussions with patients to determine if need assessment aligns with patients’ values and priorities
- Survey other stakeholders for perceived usability of need assessment
- Scrutinize the needs assessment’s effectiveness and make relevant changes to improve assessment tool.

**Phase III: October 2014 -January 2015**

- Identify approximately 100 high utilizers
· Perform needs assessment in person
· Qualitative analysis with biostatistician consultation

**Phase IV: February-May 2015**
· Interpret and reflect on results
· Distinguish key barriers high utilizers face
· Prepare findings for publication
· Develop policy proposal
· Present findings to identified parties

**INTERSECTION OF LAW, MEDICINE, PUBLIC HEALTH AND POLICY**

This research will serve as the foundation for continued work toward improving the quality and structure of primary care medicine in Minnesota while striving to reduce costs associated with redundant or fragmented care. We hope to publish our findings as a case-report to the Harvard Medical Student Review and present them to the CEOs of Fairview Medical Center and HCMC to discuss clinical and financial implications of our patients’ stories. Also, we hope to approach state legislators with our results in order to encourage more work around high utilizers. Additionally, we would like to present to our peers in the Academic Health Center, as well as at the Law School’s Joint Degree Program Proseminar to raise awareness of the needs of high utilizers and to garner support for future projects. Ideally, we will have our patient(s) attend both presentations. We will also present our findings as a poster presentation at the Super-Utilizer Post-Conference session at the Jefferson University Population Health Colloquium in 2015.

**BIOGRAPHIES**

Dorothy Curran is a first year student pursuing a Medical Degree. She graduated from the Massachusetts Institute of Technology with a B.S. in Biology. She is the current Associate Operations Chair at the Phillips Neighborhood Clinic, a student-run clinic. She has 3 years experience volunteering as an EMT. She also has researched the cost-effectiveness of various treatment protocols for infants diagnosed with Acute Otitis Media at the Children’s Hospital of Pittsburgh. Curran also has training and field-experience developing a basic needs assessment for a water treatment project for a Slum in Sao Paulo through MIT’s D-lab International Development course.

Dave Schutt received his Bachelor of Science Degree from Gustavus Adolphus College in 2011 with a biology major and studio art minor. He is currently pursuing his Masters in Public Health at the University of Minnesota under the Health Administration and Policy program with a specialty in management. Since 2011, he has worked for Emergency Physicians Professional Association (EPPA) as a medical scribe at various emergency departments throughout the Twin Cities in Minnesota. For the past year, Dave has held an administrative role as a lead scribe and works with numerous hospital administrators to improve and implement changes in charting patient cares. He currently serves as an advisory committee member for the Early Youth Eyecare (E.Y.E.) for the Phillips Eye Institute, a program the screens and is able to provide underprivileged children with glasses.
Elizabeth Kapella is a Masters student in the School of Public Health at the University of Minnesota. She received a Bachelor of Science in Nursing and Bachelor of Arts in French from the University of North Dakota in 2009. She has worked as a Registered Nurse in inpatient psychiatry, inpatient and outpatient dialysis, and school nursing. She has experience caring for high-utilizing patients and brings a nursing perspective to this interdisciplinary group. She also works as a Research Assistant for Project SNAPSHOT in the School of Nursing at the University of Minnesota. Beginning in September 2014, she will be delivering a school-based, healthy weight-management intervention for elementary students and their parents, as well as home visits with study participants.

Hannah Thompson is a first year medical student at the University of Minnesota. She has previous experience volunteering with diverse patient populations in the emergency department's of Bellevue Hospital Center in New York City and at Hennepin County Medical Center in Minneapolis. Additionally, she has worked as a nutrition educator for Ramsey County's Women, Infants, & Children. Her research experience includes working as a research coordinator for the Research Associate Program in the emergency department of Hennepin County Medical Center and, through this experience, she has gained experience working on databases, conducting surveys, consenting, and corresponding with the IRB. Currently, she is the first year Co-Representative for the University of Minnesota's chapter of the Student National Medical Association and volunteers at the medical schools free clinic, Phillips Neighborhood Clinic.

Roma Patel is a third year JDP student at the University of Minnesota Law School and School of Public Health, concentrating on Public Health Administration and Policy. She graduated from Carleton College with a B.A. in English. While in Law School, Roma served as a law clerk for the Attorney General of Maryland in the Health Advocacy Unit. She also worked as a Legal Corporate and Regulatory Affairs intern at UnitedHealth Group and will be a law clerk at Mayo Clinic this summer. Roma serves on the steering committee of Common Grounds, a graduate student led non-profit organization that serves the community through interdisciplinary consulting projects. She also has significant research experience from Duke University School of Medicine and The University of Minnesota Medical School. Her law journal note, “A Public Health Imperative: The Need for Meaningful Change in the Trans-Pacific Partnership’s Intellectual Property Chapter” (the result of research made possible by the Consortium on Law and Values in the Health, Environment and Life Sciences 2013 grant) was accepted for publication in Volume 16.1 of the Minnesota Journal of Law, Science and Technology. She is also the 2014 winner of the Minnesota State Bar Association’s Health Law Writing Competition.

Alex Roseman is a first year Medical Student at the University of Minnesota Medical School. He graduated with honors from Oberlin College with a neuroscience major and a Certificate in Public Health Core Concepts from the University of Minnesota School of Public Health. His research experience includes working as a research assistant in a laboratory investigating novel treatments for schizophrenia at Harvard Medical School for two years culminating in four publications, including one first author publication. He has served as an AmeriCorps VISTA member at NorthPoint Health and Wellness Center in Minneapolis, Minnesota and was a Fall Organizing Fellow for the 2012 Barack Obama Presidential campaign.

REFERENCES

http://www.rwjf.org/content/dam/farm/reports/reports/2013/rwjf407990


