



# Small TLEF Project – Final Report

Report Completion Date: 2015/05/31

## 1. PROJECT OVERVIEW

### 1.1. General Information

<b>Project Title:</b>	<b>Mass Gathering Medicine Club Initiative</b>		
<b>Principal Investigator:</b>	<b>Dr. Adam Lund</b>		
<b>Project Initiation:</b>	<b>Sept 1 2013</b>	<b>Project Completion:</b>	<b>May 31 2015</b>

### 1.2. Project Summary

The MGM Club consists of medical students and residents interested in volunteering to provide medical care, conducting research, and educating fellow colleagues on events and mass gatherings in BC. We work in conjunction with the MGM Interest Group, composed of an evolving team of professionals from many disciplines who are all working together to study, teach, improve standards, and provide world-class care at events in our communities. The Mass Gathering Medicine Club aims to foster interest in medical students involved in the vast area of pre-hospital and mass gathering medicine through providing opportunities to participate in pre-hospital care, research, and education. Our projects this year revolve around providing invaluable opportunities to medical students to become involved in pre-hospital medicine, to spark interest in this vastly under researched field, and to educate students on relevant pre-hospital medical knowledge and skills beyond the medical teaching curriculum.

### 1.3. Team Members – *(Please fill in the following table and include **students**, undergraduate or graduate, who participated in your project).*

<b>Name</b>	<b>Title/Affiliation</b>	<b>Responsibilities/Roles</b>
Dr. Alvin Keng	Resident Physician	Past Co-Chair
Dr. Jessica McCallum	Resident Physician	Past Co-Chair
Andrew Guy	Medical Student	Past Co-Chair
Daniel Metcalf	Medical Student	Past Co-Chair
Sydney White	Medical Student	Current Co-Chair
Tim Greive-Price	Medical Student	Current Co-Chair

### 1.4. Student Impact – *Please fill in the following table with **past**, **current** and **future** courses that have been or will be impacted by your project, including any courses not included in your original proposal. [Note: Adapt this section to the context of your project as necessary].*

The MGM club initiative provided significant clinical and research-based opportunities to both medical students and residents. The spectrum of students involved and impacted by the initiative has significantly evolved over the past few years. It has grown to include medical students from all four years and all four sites of the distributed undergraduate program. These students have gone on to a wide variety of



residency programs, including Emergency Medicine, Family Medicine, Internal Medicine, and Psychiatry, among others.

## 2. PROJECT EVALUATION

### 2.1. Project Outcomes – Please list the intended outcomes or benefits of the project for students, TAs and/or instructors.

The intended outcomes of the MGM Club Initiative were three-fold:

1. To enhance the **teaching** capacity in MGM at UBC by providing diverse learning opportunities (i.e. didactic, clinical, and research) to students.

We planned to deliver educational sessions throughout the academic year to interested medical students across all four years of study. Our educational sessions intended to cover a wide variety of MGM-related topics, with both didactic and procedural components. These topics would include an introduction to MGM, toxidromes, wound care, basic first aid, athletic taping, IV access and fluid resuscitation, etc.

2. To contribute to the world literature and **research** on MGM.

The MGM club aimed to get students more involved in the research arm of pre-hospital medicine, by providing interested students with the opportunity to become involved with data processing of a large, worldwide online registry of pre-hospital care. Additionally, we aimed to provide opportunities for real-time data entry at MGM events.

3. To contribute positively to MGM events hosted in the **community** and beyond.

The MGM Club hoped to provide numerous opportunities for medical students to volunteer as part of medical teams at mass gathering events. The MGM Club worked alongside the physician Interest Group to organize opportunities for medical students to get involved at a wide variety of events, including Tough Mudder, Vancouver Folk Festival, Scotia Marathon, Vancouver Sun Run, and the Lululemon Seawheeze. This was a way in which students could volunteer and connect with the greater community while developing a better sense of what providing pre-hospital care entailed.

### 2.2. Findings – Briefly describe the methods and findings of your project evaluation effort: to what extent were intended project outcomes achieved or not achieved?

1. To enhance the **teaching** capacity in MGM at UBC by providing diverse learning opportunities (i.e. didactic, clinical, and research) to students.

The MGM initiative ran between four and five educational sessions on a yearly basis. These sessions were available to all students within the MD Undergraduate Program at all four sites of the distributed model. They covered a wide variety of MGM topics and included both didactic and procedural components. The sessions were very well received by the student body and they often had more interest than capacity. They provided a wonderful opportunity for the student body to develop their skills as first responders and improve their aptitude in pre-hospital care. This development translated into increased participation and responsibility at community-based MGM events.

2. To contribute to the world literature and **research** on MGM.

Our initiative was very lucky to have world leaders within the MGM community that live and practice in BC. Through the MGM registry, students were able to contribute to the generation of ongoing research



into this ever-growing field. This research resulted in authorship on several publications and presentations, as noted in section 2.3.

3. To contribute positively to MGM events hosted in the **community** and beyond.

One of the exciting components about the MGM initiative's mandate is the close relationship between the development and acquisition of pre-hospital care skills at our educational sessions and the implementation and practice of those skills in real-life community MGM events. The MGM club was able to arrange for students to volunteer their time at various mass gathering events around the province. These events have included Pemberton Music Festival, Shambhala Music Festival, Tough Mudder, Scotia Half Marathon, BMO Marathon, IronMan Races, Contact Music Festival, and many more. Additionally, we have collaborated with the MGM Clubs at the University of Calgary and the University of Edmonton in identifying appropriate events for learners to attend outside of British Columbia.

**2.3. Dissemination** – *Please provide a list of scholarly activities (e.g. publications, presentations, invited talks, etc.) in which you or anyone from your team have or intend to disseminate the outcomes of this project.*

**Publications:**

Lund A, Turriss SA, Amiri N, Lewis K, Carson M. Mass gathering medicine: Creation of an online event and patient registry. *Prehosp Disaster Med.* 2012;27(6):1-11.

Turriss SA, Lund A, Mui J, Wang P, Lewis K, Gutman S. An organized medical response for the Vancouver International Marathon (2006-2011): When the rubber hits the road. *Current Sports Medicine Reports.* 2014;13(3):147-154.

Lund A, Turriss SA, Wang P, Mui J, Lewis K, Gutman S. An analysis of patient presentations at a two-day mass participation cycling event: The Ride to Conquer Cancer case series, 2010-2012. *Prehosp Disaster Med.* 2014;29(4):429-36.

Guy A, Earle R, Turriss SA, Lund A. Mass-gathering Medicine: educational opportunities. *BCMJ.* 2015;57(7):276-277.

Munn BM, Lund A, Golby R, Turriss SA. Harm reduction and onsite medical services during an annual 5-day electronic dance music event. *Prehosp Disaster Med.* 2016 Feb 2:1-7.

Guy A, Prager R, Turriss SA, Lund A. Improving data quality in mass gatherings health research. *Prehosp Disaster Med.* 2016 (in press)

**Presentations:**

On-site medical response during an annual 5-day electronic dance music event with harm reduction services. Munn MB, Lund A, Golby R, Turriss SA. (UBC Public Health Symposium, Vancouver, BC). Poster

Mass Gathering Health: Improving The Quality And Operationalization Of Field-Collected Data. Prager R, Guy A, Turriss SA, Lund A. (Canadian National Medical Student Research Symposium, Winnipeg). Poster

Medical Response And Outcomes For Shambhala Music Festival, An Annual 5-Day Electronic Dance Music Event With Embedded Harm Reduction Services. Munn MB, Golby R, Lund A, Turriss SA. (WCDEM, Cape Town, SA). Podium

On-site medical response during an annual 5-day electronic dance music event with harm reduction services. Munn MB, Lund A, Golby R, Turriss SA. (UBC Medicine Undergraduate Research Forum, Vancouver, BC). Poster

Mass Gathering Medicine Elective: Education in the Field. Lund A, Paul JE, Guy AS, Earle RK, Lund SJ, Turriss SA. (Multi-Disciplinary Undergraduate Research Conference). Podium



**3. TEACHING PRACTICES** – Please indicate if **your** teaching practices or those of **others** have changed as a result of your project. If so, in what ways?

As the MGM initiative was primarily student-run practice, we are unable to comment on any alteration in teaching practices within the program that resulted from the club's activities. That being said, many faculty members from within medicine and many professionals within the broader health care umbrella generously donated their time and knowledge to our educational sessions.

**4. PROJECT SUSTAINMENT** – Please describe the sustainment strategy for the project components. How will your work be sustained and/or potentially expanded (e.g. over the next five years)?

The TLEF support for the MGM initiative has allowed us to establish a base of sustainable, reusable supplies for our educational sessions. We have purchased reusable IV access pads and catheters for fluid resuscitation and IV access events, established a stockpile of tape and taping supplies for athletic taping and fracture management sessions, and assembled several reusable basic first aid kits for introductory events. These sustainable supplies have supported the club in continuing to put on educational sessions after the TLEF funding expired. Currently, we have put on six sessions through the 2015/2016 academic year, with intentions of hosting six to seven more sessions through the 2016/2017 year. The ongoing activities of the club would not be possible without TLEF support.

Additionally, the TLEF funding has allowed the initiative to develop relationships with numerous individuals and groups involved in pre-hospital care. The funding provided us with the opportunity to put on a wider variety of educational sessions and to include a larger scope of professionals as instructors. By expanding our repertoire of educational sessions, we have been able to attract a larger student interest. This student interest has easily transitioned into greater interest in attending community MGM events. As a result, the club now has a wide network of contacts in the pre-hospital care world and an avid student body interested in Mass Gathering Medicine. This combination of resources available for future educational sessions and connections within the broader mass gathering medicine field provides a sustainable impetus for the future activity and success of the initiative.