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The Lancet Commission on Global Surgery makes progress in first year of work: An update

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The global burden of conditions requiring surgical care, such as injuries, congenital anomalies, cancer, and complications from childbirth, is large and continues to grow. Recent estimates indicate that a limited number of surgical conditions represent 18 percent of the global burden of disease.[1] Nonetheless, marked disparities in access to surgical and anesthesia care persist worldwide. Billions of people have no access to basic surgical services, resulting in heavy human and economic toll.[2-5] Despite this growing need, surgery has typically been a low priority on the global public health agenda. It has been viewed as too expensive, too complicated, and less integral to health than other areas of medicine.

Recent changes in the public health landscape, however, have led to a growing appreciation of the importance of surgery in realizing widespread improvements in health on a global scale. An evolving epidemiologic transition in which noncommunicable diseases (NCDs) and injuries are emerging as new leading causes of global death and disability, and mounting research documenting the feasibility and cost-effectiveness of surgical care delivery, have opened the eyes of many people.[6,7] In addition, evidence that surgery is a necessary treatment modality across all disease categories and a shift in global health goals toward prioritization of equity and provision of universal health coverage (UHC) are causing more people to realize "that surgery is an indivisible, indispensable part of health care."[8-10]

In recognition of the potential benefits of increasing surgery's role in global health, *The Lancet* Commission on Global Surgery (LCoGS) was launched in January 2014.11 The initial LCoGS aims are to help facilitate recognition of the essential role of surgery not only to a properly functioning health care system but to the health of populations across the life course, to define the current state of surgical care delivery around the world, and to develop recommendations to improve the status of global surgical care.[11] This article—an update to an article published in the February 2014 issue of the ***Bulletin***—provides a current overview of the commission and its accomplishments over the last

year.[12]

The Lancet commissions

The Lancet's dedication to global health emerged in 2003 when it published a series of articles on child survival.[13] Since then, *The Lancet* has published additional series and has formed multiple commissions focused on various global health topics, including investing in health, medical education, cancer care, and climate change. The purpose of these commissions is to guide and ignite policy change and to generate widespread and longstanding improvement for frequently neglected global health issues. The commissions' work typically begins with the publication of a report in *The Lancet*, written by a multidisciplinary group of experts from around the world. The commissions' efforts are then sustained through advocacy efforts and the publication of subsequent reports.

LCoGS

Global surgery is a field that aims to improve health and health equity for all people who are affected by surgical conditions or have a need for surgical care, with a particular focus on underserved populations in countries of all income levels, as well as populations in crisis, such as those experiencing conflict, displacement, and disaster.[14] In early 2013 a small group of surgeons dedicated to global surgery initiated discussions with *The Lancet* regarding the critical need for improvements in global surgical care delivery. *The Lancet* recognized this need, and plans to form a commission on global surgery began.

The strategy behind this initiative was to bring together a group of experts in health care financing, economics, and policy; look at the current picture of surgical care in low- and middle-income countries; and formulate recommendations for improving the delivery of surgical services around the world.

LCoGS is composed of three chairs, 22 commissioners, and numerous advisors and research assistants.[15] The chairs are John G. Meara, MD, DMD, MBA, FACS, Boston Children's Hospital and Harvard Medical School, MA, (co-author of this article); Andy Leather, MB, BS, FRCS, King's College London, U.K.; and Lars Hagander, MD, PhD, MPH, Lund University, Sweden. The commissioners, from 14 countries, have broad experience spanning surgical, anesthetic, obstetric, and oncologic care delivery through private, public, and non-governmental organizations (NGOs); health care policy, financing, economics, and research; and health and governmental systems.

The commissioners met three times in 2014 to discuss how to improve the state of global surgery and to develop the commission report. The first meeting took place in Boston in January 2014, with more than 100 participants from 18 countries.[16] The purpose of this meeting was to introduce the commission process, determine areas of focus for subsequent work, and initiate discussions on key issues.

The second meeting took place in June in Freetown, Sierra Leone, with participants from 28 countries.[17] Commissioners and participants discussed the results of deliberations and research conducted in the preceding five months and issued preliminary decisions on the key messages and recommendations for the commission report. The final commissioner meeting was in November in Dubai, U.A.E.[18] Peer-review comments on the report were discussed and responses determined.

In addition to the three primary commissioner meetings, numerous regional meetings took place in

2014.[19] The purpose of these meetings was to generate discussions with additional participants from around the world to guide the commission's process and report content. Regional meetings convened in Cartagena, Colombia; São Paulo, Brazil; Chhattisgarh, India; and Singapore. (See Figure 1 for a chart of the commission's work and timeline.)

Figure 1. Commission Process

Activity	2013				2014												2015				
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Core team planning session I in London																					
Skype planning discussions with core team and commissioners																					
Skype planning discussions with additional global surgery and global health and development experts																					
Core team planning session II in London																					
Formation of working groups																					
Announcement of commission with introductory comment[11] and launch of website, Twitter, and Facebook accounts																					
Core team planning session III in Boston																					
First meeting of commissioners																					
Call for comments and advice from community																					
Additional working group meetings and development of report outline, primary research papers and teaching cases																					
Second meeting of the commissioners																					
Development of draft report, internal peer review process																					
Report submission I to The Lancet, external peer review																					
Third meeting of the commissioners, report revision																					
Report submission II to The Lancet																					
Report revision, report submission III to The Lancet, report formally accepted for publication																					
Bellagio implementation meeting																					
Publication of report and first round of accompanying research papers and teaching cases																					
London launch																					
Initiation of advocacy efforts																					
Boston launch																					

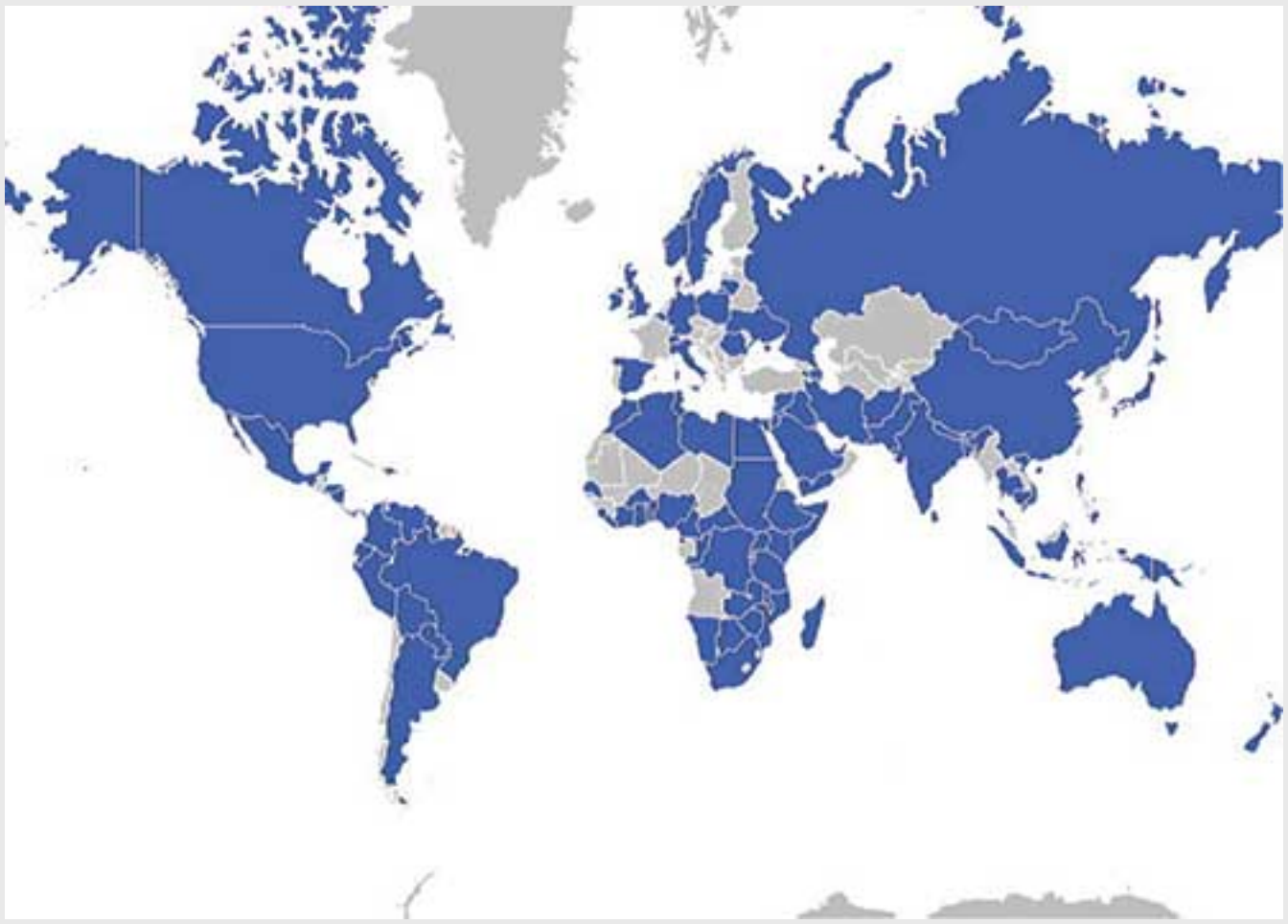
The initial commission output will be a 32,000-word report published in *The Lancet* at the end of April (the executive summary of which will be published in the June issue of the *Bulletin*). This report will coincide with the first LCoGS launch in London, April 27 and 28, during which time the main findings and recommendations of the commission will be discussed in a public and interactive

format. The report will be accompanied by a group of supporting primary research papers, in addition to a collection of global surgery teaching cases illustrating successful and unsuccessful methods of surgical care delivery.[20] Publication of this initial body of work will mark the start of a long-term advocacy effort by the commission and supporting groups to improve global surgical care delivery.

Much of LCoGS's success hinges on the global community's widespread input into and involvement in its efforts. Therefore, in addition to the meetings described previously, LCoGS has worked extensively to engage as many stakeholders as possible, including various ministries of health; global health and development organizations, including the World Bank, the World Health Organization (WHO), and USAID; funders; surgical colleges; and patients and providers, regarding the status of global surgery and how to improve it. Multiple quantitative and qualitative surveys were conducted online, in-person, and via Skype or telephone to further elicit opinions on areas of global surgery importance. In addition, numerous research groups and individuals were asked to develop stand-alone global surgery publications and teaching cases for publication alongside the LCoGS report.

These engagement efforts yielded collaborations from more than 110 countries in 2014 (see Figure 2).

Figure 2. Global community engagement with LCoGS



A total of 25 commissioners, advisors, researchers, and collaborators from more than 110 countries (indicated in blue on map) contributed to LCoGS's work in 2014.

Building on prior efforts

LCoGS is not the first organized effort to advocate for surgery as a vital component of the global public health agenda. On the contrary—its work would not be possible without the efforts of many groups and individuals. For example, NGOs and humanitarian groups, such as Médecins Sans

Frontières (MSF), which began its first surgical work in the Chad-Libya war, have demonstrated the feasibility of and need for provision of surgical services in remote and low-resource settings through direct care delivery.[21] Global health leaders such as Halfdan T. Mahler, MD, former director-general of the WHO, have argued for surgery's role in facilitating a comprehensive picture of health care, stating that "surgery clearly has an important role to play in primary health care and in the services supporting it."[22] The WHO has initiated or supported several efforts to strengthen global surgical care delivery, such as those of the Global Initiative for Emergency and Essential Surgical Care. The Bellagio Essential Surgery Group was formed in 2007 to advocate for improved access to surgical care within sub-Saharan Africa, generating some of the most widely-referenced global surgery reports to date.[23,24] Many additional groups, such as The Alliance for Surgery and Anesthesia Presence, the American College of Surgeons (ACS) Operation Giving Back program (OGB), and both the second and third editions of Disease Control Priorities, have worked tirelessly on a number of global surgery efforts in the areas of education, research, advocacy and policy.[25,26] These are just a few of many examples of past and current global surgery work. LCoGS hopes to augment these efforts in order to facilitate the development, implementation, and evaluation of surgical policy and to promote the delivery of surgical services worldwide.

The ACS and global surgery

Alongside the groups discussed previously, the ACS has long demonstrated a commitment to leadership, education, and participation in global surgery. In the midst of a growing interest among surgeons and residents in global surgery work, the ACS has taken the initiative to provide a gateway for surgeons in different stages of their careers to get involved in global surgery efforts around the world.[27] Programs such as OGB provide U.S. surgeons with the opportunity to connect with their international counterparts to coordinate volunteer efforts and address the surgical needs of underserved populations. The ACS/Pfizer Surgical Volunteerism and Humanitarian Awards are given annually to recognize ACS members who have demonstrated dedication to giving back to underserved populations and to society.

In addition, the ACS offers a number of scholarships for international surgeons, providing opportunities to support clinical, teaching, education, and research activities. A significant contribution of the ACS to medical education around the world has been the development of the Advanced Trauma Life Support® (ATLS®) course. Since its introduction in 1978, ATLS has trained more than 1 million health care professionals in emergency and trauma care. The ACS is a strong advocate for global surgery advancement and stands at the front line of bringing surgical care to people most in need.

A political environment in transition

The current political environment is poised for change. Attention is transitioning from the United Nations' Millennium Development Goals—a set of eight goals to advance global health and development with target end dates of 2015—to the new and somewhat broader post-2015 Sustainable Development Goals (SDGs), Universal Health Coverage (UHC), and challenging commitments to equity and the end poverty.[28,29] The only health-related SDG is to "ensure healthy lives and promote well-being for all at all ages."[29] The World Bank and WHO have targeted 80 percent coverage of essential health care services by 2030 as a measure of UHC.9 The World Bank also aims to end extreme poverty by 2030.[30] None of these goals is attainable without including surgery as an integral component of a functional health care system. Focus on these goals, therefore, creates an unprecedented occasion to recognize the necessity of universal access to

safe, affordable, surgical and anesthesia care in realizing widespread improvements in global health.

Looking forward

As noted previously, the commission report and first round of supporting research and teaching cases will be published in April in conjunction with the first launch in London, April 27 and 28.[31] This will be followed by the first North American launch in Boston, May 6 and 7.[32] These events will provide opportunities for discussion of LCoGS' work and findings, offer attendees a chance to deliberate ways to improve global surgical care delivery, and strategize solutions for how surgical organizations such as the ACS can work together, as World Bank president Jim Yong Kim, MD, PhD, stated in his address at the inaugural commission meeting, "to build a shared vision and strategy for global equity in essential surgical care."[10]

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