

# FCCS Makes the

## FCCS WORLDWIDE

**170** FCCS volunteers lending their expertise to the program

**50,000** FCCS-trained healthcare workers worldwide

**826** FCCS-trained healthcare workers trained through grant-funded courses

**4,700** FCCS instructors trained worldwide in 40 countries

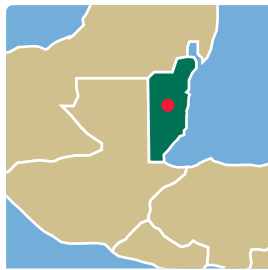
**72** FCCS instructors trained in grant-support courses

Learn more at [www.sccm.org/fccs](http://www.sccm.org/fccs)

The Fundamental Critical Care Support (FCCS) program was honored with an Associations Make a Better World Award honorable mention from American Society of Association Executives (ASAE) & The Center for Association Leadership. The Society of Critical Care Medicine (SCCM) was recognized as an outstanding association engaging in compelling programs and activities that benefit communities abroad. The Society was given a nod in the U.S./Developed Nation category for its volunteerism and resource utilization within the FCCS program, due in part to the strong impact of grant-funded courses held throughout the world.

Grant-sponsored FCCS courses extend knowledge of critical care into areas where hospital resources may be limited and expert critical care providers are few.

Rather than importing critical care professionals from other countries to care for patients in these areas, FCCS aims to educate local healthcare providers. In addition to personal professional cognitive gains and practice improvements, grant-



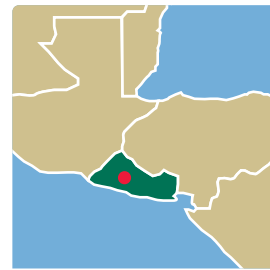
### Belize Belmopan, Belize

**The state of healthcare:** Belize is a relatively young country of approximately 300,000, located on the Caribbean coast of Central America. In the early 1980s, as Belize secured its independence from Great Britain, the country saw a marked effort to improve its infrastructure, including the state of its healthcare system. Today, the country boasts a system of well-run primary and secondary care facilities, but the need for tertiary care is

increasing with the growing population. While Belize has implemented a public medicine program, it is the most sparsely populated nation in all of Central America, so access for rural citizens is limited.

**The critical care challenges:** The capital of Belize, Belmopan, is home to the country's only government referral facility, Karl Heusner Memorial Hospital, which since 2002 has housed the only public intensive care unit (ICU). More than 95% of the critical care population treated there is low income. Two private ICUs also located in the capital city are usually reserved for those with health insurance. Opening an ICU in the government hospital marked a great accomplishment, as the critical care unit implemented a multi-professional team focused on improving care and patient safety. However, the lack of a trained workforce compels Belize to rely on experts from other countries. The entire country is home to only two certified intensivists, while nurses and first responders have no access to critical care training. Most of the country's respiratory therapists come from Guatemala so, while they do have critical care training, Belize would prefer to start establishing home-grown professionals. Karl Heusner Memorial Hospital has only two mechanical ventilators.

**The role of FCCS:** A grant-sponsored FCCS course in January 2009 was attended by 35 students, most of whom were Belize natives or long-term practitioners in the country, providing a boost in training a future generation of critical care educators. Importantly, while most participants were doctors and nurses from the government hospital, one physician participant hailed from the Belize army. Two participants were paramedics from the ambulatory system, where advance critical care training is crucial because of the constant need to transport patients from outlying hospitals to the country's only public ICU. Also, five participating physicians were trained as FCCS instructors. In a country that is just gaining access to ICU equipment and attempting to cultivate a unified critical care program, FCCS was essential in ensuring that everyone could return to the ICU with similar levels of knowledge and confidence. As FCCS course director, Jorge L. Hidalgo, MD, FCCM, also played an instrumental role in the success of the Belize and El Salvador courses.



### El Salvador San Salvador, El Salvador

**The state of healthcare:** Most of the healthcare resources within El Salvador are centralized at its capital of San Salvador; rural citizens have very limited access to healthcare and must travel miles to obtain services. Access to private hospitals usually is limited to the insured, while 80% of the population – including the poorest citizens – turn to the public facilities. A social security hospital also is available to service government workers and

others who pay into a general social security healthcare fund. While immunizations, prenatal care and educational material are readily available at the public hospital, strained resources, workforce shortages, and aging infrastructure make surgeries, chronic care management and other complicated procedures challenging. The country's healthcare system is gradually recovering from strains brought on by a civil war that dominated the region from 1980 to 1992.

**The critical care challenges:** Landslides, earthquakes, tropical storms and hurricanes plague El Salvador, one of the most disaster-prone countries in the world. Emergency response personnel, especially those functioning outside the capital city, lack specialized training, equipment and supplies. This has resulted in increased death and injury during emergency responses. Even within the capital, the widely used referral center – Hospital Nacional Rosales – lacks a single physician or nurse specialized in emergency medicine, though they do have formally trained intensivists. Hospitals do not have the equipment to perform procedures some countries would consider common, such as noninvasive ventilation or peritoneal dialysis; there are no long-term dialysis centers or catheterization laboratories. "They have a lot of critical care patients with chronic diseases. Anyone with renal failure is in the hospital getting dialysis for a very emergent complication," said course director Janice Zimmerman, MD, FCCM. "Many present with strokes from uncontrolled hypertension."

**The role of FCCS:** Two courses were held in El Salvador in May 2009, each attracting eager intensivists, nurses and physicians from the public and social security hospitals. The nonprofit Glasswing International, a group focused on addressing complex social challenges within Central America by cultivating strategic alliances among volunteers, businesses and healthcare organizations, was instrumental in organizing and funding these courses, in addition to the SCCM grant. "FCCS sought to bring a quality and consistency to the critical care arena in the country," said Zimmerman. Students responded positively, expressing the value of learning "an organized approach to managing and evaluating patients." Four physicians were certified as FCCS instructors, and they will play a vital role in disseminating the lessons learned to rural hospitals, particularly emergency personnel, as course organizers put special emphasis on disaster management and triage. Much attention was given to topics related to complications from diabetes, hypertension and renal failure, some of the most challenging and common patient problems in the region.

# World a Better Place



sponsored FCCS courses are used to prepare local healthcare providers to become FCCS course instructors, thus creating a sustainable program for improving care throughout the region.

FCCS has core elements that address universal needs of critically ill patients; through a combination of didactic sessions and hands-on skill stations, students are afforded personal interaction with expert providers. The course director has the ability to tailor FCCS to specific audience needs through addition of content and/or skill stations. In this way, FCCS adapts best practice guidelines to the available regional healthcare resources.

In resource-limited countries, FCCS often marks the first time that an on-site concentrated critical care course has been presented to relevant staff. Throughout the world – regardless of a hospital's resources, challenges or size – healthcare personnel can benefit from improving skills and knowledge. Students gain from it, patients require it, and the FCCS course delivers it.

## DONATE TO SCCM TODAY

Your donation to SCCM helps fund these vitally important FCCS courses. Donations also foster guideline development and research grants. All contributions will support SCCM's vision, mission and activities. For more information on funding options, visit [www.sccm.org/donate](http://www.sccm.org/donate).

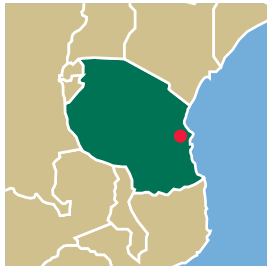
### Tanzania

#### Dar es Salaam, Tanzania

**The state of healthcare:** Healthcare in Tanzania has improved significantly in the past decade as the political and social climate has stabilized. However, economic woes remain, causing hurdles to the country's gradual progress. The economic struggles within the healthcare system have caused many skilled workers to leave the country in search of better opportunities. Having once been a British colony, many well-educated healthcare workers often take advantage of their ties to Great Britain or leave for better-funded facilities in South Africa or neighboring Middle Eastern countries, such as the United Arab Emirates. These pressing "brain drain" issues play a role in perpetuating poverty and limited healthcare access – the average life expectancy in Tanzania is only 51.

**The critical care challenges:** While economic issues have an impact on healthcare, many resources are allotted to HIV/AIDS and malaria efforts, leaving other sectors of healthcare, especially critical care, to struggle for attention and funds. Intensive care is a relatively new concept, and the country is just starting to invest in it. While mechanical ventilators are available, few understand how to manage them effectively and properly. While nurses are establishing a role in the intensive care unit (ICU), few have formal training in even basic critical care concepts. The culture of the ICU – particularly elements related to the importance of immediate and timely management and the importance of the multiprofessional team – is still developing.

**The role of FCCS:** When the first FCCS course was held in March 2008, it served as an introduction to the field for many of the students, as the ICU facility at Aga Khan Hospital in Dar es Salaam was less than a year old. The hospital's full-time nurse manager, Dilshad Pirani, RN, helped bring FCCS to the country to build a critical care workforce and establish a knowledge base. "FCCS and our efforts as a team facilitated and supported the efforts already underway to improve critical care services," said course coordinator Noormahal Kabani, MD. When the first 136 FCCS students graduated, the director of hospital services and social welfare from the Ministry of Health attended, raising the profile of critical care and its importance within government circles. A year later, through the dedicated efforts of the country's budding critical care professionals, the ICU staff at Aga Khan Hospital now are well-versed in operating the mechanical ventilators in the adult and pediatric units and are collecting data that show improved mortality rates. The ICU boasts two full-time intensivists – Tahir Saeed, MD, MBBS, MCPS, and Ajaz Samad, MD, one of Tanzania's first intensivists. It also employs four full-time residents and about 16 full-time nurses. "SCCM has been a great inspiration to all of us working in the ICU," Saeed said. "In fact, we have adopted and modified some of the guidelines and protocols from the Society. All this has been accomplished through grassroots efforts. Without medical professionals of this caliber, no ICU can flourish, regardless of how many resources it possesses." Muhammad Jaffar, MD, FCCM, also contributed to the success of this FCCS course as course consultant.



### India

#### Ahmadabad, India

**The state of healthcare:** India's population is second only to China, and its diverse and segmented demographics present challenges related to political and social organization. These challenges have spilled into the healthcare arena, as the capabilities and resources of hospitals vary greatly depending on location. As demand for services grows and as technological advances become a priority, a market-driven healthcare environment has produced rapid change. While the country still faces issues related to water sanitation, malnutrition and infection control, this new climate of swift progress is putting added pressures on India's workforce to meet patient demand in an efficient manner that meets high quality expectations. The added costs associated with this growth also are a challenge.

**The critical care challenges:** Medical schools in India have no formal critical care curriculum. Intensive care units (ICUs) are scattered throughout India and the definitions and understanding of what a critical care facility entails varies widely. The nurses' role in the ICU is undefined and – because only two schools in the country train respiratory care therapists – such professionals are in very short supply. Despite these challenges, some hospitals – especially privately owned facilities – have access to modern technology, such as ventilators and monitoring equipment, in an effort to meet the increasing care demands. Teaching ICU professionals how to operate this equipment properly and efficiently is a key component of improving care.

**The role of FCCS:** The 2008 FCCS course held at the privately owned Krishna Hospital attracted 35 regional physicians who practiced in a variety of ICU environments. All attendees demonstrated varying levels of critical care knowledge and hailed from facilities with different resources, priorities and challenges – the group was indicative of the hurdles presented by the critical care system within India. For many, FCCS was their first exposure to an organized and unified critical care curriculum. Course director Jagdip Shah, MD, MBA, stressed the importance of the skill stations and the simulator when dealing with an audience who is used to turning to textbooks and the Internet for information on ventilation management, diagnostic tests and airway management. "The hands-on experience offers students a chance to think about the experience and ask more in-depth questions," Shah explained. "This was a great opportunity to give something back to my community. The time is right for FCCS to make inroads with the willing workforce of this country and spread this valuable knowledge." Four of the FCCS participants went on to become instructors, ensuring these vital lessons will pave the way for more consistent training among the critical care workforce in India.

