CAMPAIGN Update

A global effort to improve care for patients with severe sepsis and septic shock

May-June 2007

Campaign Update is the official newsletter of the Surviving Sepsis Campaign. The Surviving Sepsis Campaign is a partnership of the European Society of Intensive Care Medicine, the International Sepsis Forum and the Society of Critical Care Medicine. This bi-monthly communiqué focuses on topics related to local, regional and national SSC activities. Feedback and content suggestions may be sent to campaignupdate@survivingsepsis.org.

Bringing SSC to More Than 40 Institutions in Latin America

The Surviving Sepsis Campaign (SSC) has achieved significant accomplishments in South America, beginning with the program of the Latin American Sepsis Insitute (ILAS) based in Sao Paulo under the leadership of Eliezer Silva. Success is now spreading to Argentina and Chile with direction from the critical care leadership of those countries. In Brazil, the SSC was launched in May 2005 with more than 40 insitutions now trained to apply the sepsis bundles, as well as to collect quality indicator data. (See box.)

Some of these institutions have already noticed a reduction in sepsis-related mortality. Considering only Brazilian patients, about 900 patients with severe sepsis are in the database. The 6-hour and 24-hour bundle adherence rates are 9% and 20%, respectively. The mortality rate is 58%.

In parallel, the ILAS has launched the SSC in several South American countries, including Argentina, Uruguay, Colombia, and Ecuador. Recently the ILAS has received the first data from Argentina--about 100 patients from 5 institutions. Separately, some institutions, mainly from Chile, have sent data directly to the global database.

In addition, the ILAS has established partnerships with some state governments in

(continued on page 4)

Implementation process of the SSC in each institution is organized as follows:

- a 90-minute meeting detailing the implementation process. Managers and department heads are invited. The main aim is to involve every institutional representative who could participate in the process. Besides clinical and bureaucratic processes, we have also discussed financial impact of the SSC implementation;
- a 120-minute meeting detailing the clinical and operational steps to implement sepsis bundles. Also, a case manager is trained to collect data appropriately;
- a member of the ILAS became a contact person between the institution and the ILAS. The registered institution receives a report periodically with its data in comparison with national data.

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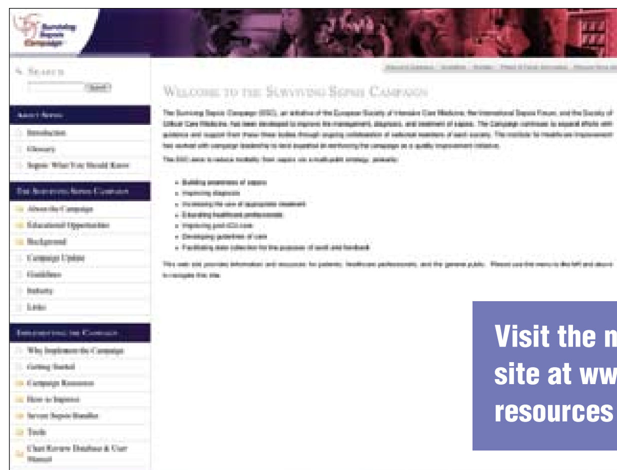

Visit the new Surviving Sepsis Campaign Web site at www.survivingsepsis.org for more resources and information about the Campaign

In This Issue

2 *Leadership Perspective: Nurses' Role in SSC*

3 *In the Literature*

3 *SSC in Italy*

4 *Resources for Campaign Participants*

Being Part of a Golden Age for Critical Care – Surviving Sepsis Campaign fits right in

By Maurene A Harvey, RN, MPH, FCCM

The month of May is significant when you have been a critical care nurse for 40 years. May is national *Critical Care Awareness Month*. The first week in May is national *Nurse Appreciation Week*. When I reflect on the changes that have occurred since our formative years in the sixties, I believe this could be the beginning of a golden age for critical care.

In the 1990s, we realized that critical care in the United States was too often unsafe, chaotic, disorganized, and reactive. There was a high degree of variability in care based on style instead of evidence and care was provided by individuals more than by teams. Today, several forces are coming together to allow critical care practitioners to deliver the care we have always wanted to give:

- Safety and quality are not just buzz words.
- The relationship between increased quality, improved outcomes, and decreased costs is well understood.
- The state of the art becomes the standard of care more quickly.
- Strategies to create and support effective ICU teams are being developed.

It is understood that nurses are key to making all of the above happen. The Surviving Sepsis Campaign exists in this receptive environment and has been influenced by these forces.

Safety and Quality–Several recent studies have made practitioners, as well as purchasers and consumers, more aware of how unsafe hospital environments can be. As a consequence, JCAHO, IHI, The Leapfrog Group, AHRQ and others are not only promoting patient safety, but giving us tools that help us measure and improve it. The Surviving Sepsis Campaign offers critical care teams guidelines and tools that can improve outcomes for patients with sepsis, the most common cause of death in the ICU.

Quality, Outcomes, and Costs–A substantial body of literature demonstrates that the best way to reduce costs and improve outcomes is to improve the quality of care. One of the reasons administrators and purchasers have supported quality improvement initiatives is the need to control and reduce the cost of care. The Surviving Sepsis Campaign is currently collecting data on the impact of sepsis bundles on patient outcomes. Cost savings is one of the outcomes that can be determined by using the tools provided.

Evidence-based Practice–A decade ago, frustration was building over the fact that it typically took 10 to 20 years for important advances to make it from the literature to the patient. Today, researchers are working with practitioners and administrators to bring evidence to the bedside much more quickly. Change is even being driven from the top down by national, state, and system- wide initiatives. The Surviving Sepsis Campaign has taken advantage of these trends. Experts in analyzing systems and changing institution culture have been involved in the formation of the sepsis bundles and tools.

ICU Teams–Providing high quality care for the complex needs of ICU patients requires a team of dedicated expert nurses, physicians, respiratory therapists, and pharmacists. With the growing shortage of people in these fields, the hospitals that will succeed are those that can attract, train, and retain adequate numbers of bedside team members. Leaders at unit, facility, state, national, and international levels are working to create top notch teams and systems. The Surviving Sepsis Campaign understands the importance of each individual and of the team. Educational efforts are being directed at each of the professions involved and at teams.

Nursing's Pivotal Role–Dozens of studies have shown nursing presence and expertise positively affect patient safety, outcomes, and cost of care. Nurses spend more time with ICU patients and their families than other care team members. Consequently, they have observed weaknesses in our care delivery system, witnessed errors, seen many opportunities for process improvement and cost reduction, and are motivated to increase the quality of care their patients receive. They often take on a problem and become the champion who works to institute solutions.

The Surviving Sepsis Campaign's success is dependent on nurses. Nurses are instrumental in implementing the strategies known to prevent infection and, therefore, sepsis. Without nurses, septic patients would not be identified as quickly, and interventions would be delayed. Nurses are responsible for implementing most of the interventions in the sepsis bundles and for monitoring the patient's response. In many units, nurses are also responsible for collecting and reporting data used to evaluate their sepsis protocols and the sepsis bundles. Without data collection, the impact on outcomes cannot be evaluated nor processes improved.

The Surviving Sepsis Campaign is occurring in what should be a golden era for critical care. We would like to take advantage of national *Critical Care Awareness Month* and *Nurse Appreciation Week* to thank critical care practitioners for all that they do. You are a precious, valuable and scarce resource. Do not allow anything to distract you from your quest for the best critical care has to offer your patients.

Maurene A Harvey, RN, MPH, FCCM
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Glenbrook, NV, USA
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In the Literature

Giuliano KK. **Physiological monitoring for critically ill patients: testing a predictive model for the early detection of sepsis.** *Am J Crit Care* 2007; 16:122-130

The results of this article support the use of some of the guidelines of the Surviving Sepsis Campaign. It does, however, call into question the clinical usefulness of hypothermia as an early predictor of sepsis.

Barletta JF, Thomas WL, Slot MG, et al. **Compliance with guidelines for treating sepsis.** *Am J Health-Syst Pharm* 2007; 64:133-134

Compliance with antibiotic recommendations can be improved, but deficiencies are more related to operational issues after the antibiotic is prescribed. A 24-hour satellite pharmacy improves time to antibiotic administration.

McMillian TR, Hyzy RC. **Bringing quality improvement into the intensive care unit.** *Crit Care Med* 2007; 35:S59-S65.

The quality revolution is having a significant effect in the critical care unit and is likely to be facilitated by the transition to the electronic medical record. We have long recognized this as a potential valuable asset to an SSC program.

Shorr AF, Micek ST, Jackson WL, et al. **Economic implications of an evidence-based sepsis protocol: Can we improve outcomes and lower costs?** *Crit Care Med* 2007; 35:1257-1262

Use of a sepsis protocol can result not only in improved mortality rates, but also in substantial savings for institutions and third party payers.

Nguyen HB, Corbett SW, Steele R, et al. **Implementation of a bundle of quality indicators for the early management of severe sepsis and septic shock is associated with decreased mortality.** *Crit Care Med* 2007; 35:1105-1112

Implementation of a severe sepsis bundle using quality improvement feedback to modify physician behavior in the emergency department setting is feasible and associated with decreased in-hospital mortality.

CALENDAR

2007

October 7-10
ESICM 20th Annual Congress
SSC Educational Session
Wednesday, October 10, 2007
11:10 am – noon
Berlin, Germany

2008

February 2-6, 2008
SCCM 37th Annual Congress
SSC Educational Session
TBD
Honolulu, Hawaii

Send us your SSC meeting information and we will include it in future issues of *Campaign Update*. Send submissions to campaignupdate@survivingsepsis.org.

SSC in Italy: Challenges Met

Establishing the Italian Chapter for Surviving Sepsis Campaign faced challenges with implementation on a national basis. Since their publication in 2004, *The Surviving Sepsis Campaign Guidelines for Management of Severe Sepsis and Septic Shock* were discussed all over Italy. In the same months, data from an important local epidemiologic study were released. Both the SSC publication and the local epidemiologic data highlighted the issues around sepsis. Many healthcare professionals became involved in different projects to document new data on the incidence, prevalence, and management of sepsis. Clinicians in Italy then became involved in a hot debate on the accuracy and relevance of circulating data on incidence and prevalence of sepsis.

The Italian Chapter for the Surviving Sepsis Campaign began in 2006 in Rome with the formation of the Italian user group. The meeting was attended by nearly 50 Italian physicians, all motivated to implement change in the care of the patient with severe sepsis.

Italy, like many other countries across Europe, experienced difficulties in what appeared at first to be a simple task. The Italian user group, led by Professor Massimo Antonelli, Professor of Anaesthesiology and Critical Care Medicine, Catholic University in Rome, identified a major problem which was also beginning to surface in other countries. To gain full implementation, the SSC materials needed to be translated into Italian. Professor Antonelli worked closely with the SSC to develop the translation of the database into Italian. This led to the launch of a more international database which could be translated into 7 different languages.

International debate surrounding the SSC cast a shadow of doubt in the minds of some Italian physicians, causing more delay. September 2006 was planned as the official start-up for the Italian SSC Chapter. The participants familiarized themselves with the software and put in place an implementation plan. This was the date to start the patient recruitment and data collection. More than 20 hospitals are now registered as active SSC users and plan to send their data to the global SSC database in the near future.

This process has been a challenge for the entire group. Some physicians realized that their departments were not ready for the systematic data collection and basic implementation plans had to be put in place, while some other physicians had already implemented similar tools to the SSC database.

The beginning of 2007 brought new leadership for the Italian SSC user group as Roberto Fumagalli, Professor of Anaesthesiology and Critical Care Medicine, University Milano Bicocca, took on the head role as Massimo Antonelli, the former leader of the Italian Chapter and tenacious supporter of the SSC, has become editor of *Intensive Care Medicine*. The Italian group now has new challenges as it looks forward to participating with the SSC and implementing change in the management of severe sepsis in Italian hospitals.

CAMPAIGN

at-a-Glance

Asia
China

Europe
Denmark—*Lone Poulsen*
England—*Jane Eddleston*
Germany—*Konrad Reinhart*
Ireland—*Jeanne Moriarty, Brian McCloskey*
Italy—*Roberto Fumagalli*
Netherlands—*Arthur Van Zanten, Dave Tjan*
Poland—*Andrzej Kubler*
Portugal—*Antonio Cameiro*
Scotland—*Simon Mackenzie, Louie Plenderleith*
Spain—*Antonio Artigas*
Sweden—*Hans Hjelmqvist*
Wales—*Mark Smithies*

Latin America
Brazil—*Eliezer Silva*
Chile

North America
Alabama—*Moustaffa Hassan*
Arizona—*Donald Maxwell*
California (Southern)—*Herbert Rogove*
California (Sutter)—*John Mesic*
Colorado—*Ron Rains*
Connecticut—*Dawn Martin*
Florida—*Edgar Jimenez*
Georgia—*Kenneth Kalassian*
Illinois—*Nathan Lidsky, John Butler, Michael Ries, Jay Cowen*
Iowa—*James Boddicker, Jill Morgan*
Kansas—*Steve Simpson*
Maryland/Washington, DC—*Gabriel Hauser*
Michigan—*Joseph Bander*
Minnesota—*Henry Mann*
New Jersey—*R. Phillip Dellinger*
New York (NYHHC)—*Karen Scott Collins*
North Carolina—*C. Diane Byrum*
Puerto Rico—*Gloria Rodriguez*
Texas (Memorial-Hermann)—*James Heisler*
Virginia—*William Brock*

SSC Resources

Updated Website Goes Live

Among the tools and resources the Surviving Sepsis Campaign provides to participants, the Web site is the most readily available to all. Following the initial launch with a rudimentary site that borrowed generously from the International Sepsis Forum's materials that define sepsis and updates with material from the Institute for Healthcare Improvement that emphasize the quality improvement focus of the Campaign, the new site has debuted with a new look and clearly delineated areas for the public, about the Campaign, and Campaign implementation tools. Take a look at www.survivingsepsis.org

In addition to the Web site, additional resources for Campaign participants include:

Implementing the Surviving Sepsis Campaign–This spiral-bound manual was made available to participants at regional training sessions, network formation meetings, and to ICU directors and ED directors in North America and Europe. A new edition will be available with the revised guidelines late in 2007. The current edition is also available on the Web site.

Email list–The Campaign maintains an electronic mailing list at sepsisgroups@lists.sepsisgroups.org for Campaign participants to share information with each other and post questions, comments, and concerns. Members of the SSC leadership respond to the list with expert opinions when appropriate.

User group meetings–Campaign participants who have been collecting data for inclusion in the global database have attended meetings in North America and Europe to share concerns and expertise with each other and to learn about upcoming plans for the Campaign. Watch the Calendar in each issue of *Campaign Update* for future meeting dates and locations.

Educational programs–SSC steering committee members participate regularly in programs at ESICM, SCCM, and other professional organization meetings. Watch the Calendar for future educational sessions.

ILAS Bringing SSC to More Than 40 Institutions

(*continued from page 1*)

Brazil. These partnerships aim to launch SSC in public hospital networks. Some months ago, the ILAS organized a 10-hour immersion course for Minas Gerais Hospital Network on sepsis, detailing every recommendation proposed by the Surviving Sepsis Campaign. We also developed a specific training program concerning data collection and concepts related to quality care improvement. Other activities developed by ILAS in Brazil include:

- a meeting every 6 months with all registered institutions to discuss operational issues and opportunities to improve quality care;
- an annual International Sepsis Symposium (a partnership with Federal University of Sao Paulo);
- a comprehensive sepsis manual.

Finally, the ILAS, in partnership with AMIB (Brazilian Society of Critical Care) and AMB (Brazilian Society of Medicine), has been organizing national guidelines for severe sepsis and septic shock. This an official document to be available to all physicians in Brazil, as well as to guide the reimbursement process from insurance companies.

The process of the SSC implementation has not been without challenges in some institutions for several reasons, including lack of compliance with the process after the training, cultural barriers related to changes, and financial constraints. Nevertheless, ILAS has made a strong start and continues to add charts to the database regularly.

Campaign Update is a publication of the Surviving Sepsis Campaign. Comments or suggestions should be sent to campaignupdate@survivingsepsis.org.

SSC Industry Support Policy: The SSC leadership adopted the policy document titled *Surviving Sepsis Campaign Implementation and the Appropriate Role of Industry* in February 2006. This policy is intended to clarify and delineate official SSC implementation activities from those initiated by third parties, including, but not limited to, the pharmaceutical and medical device industries. A copy of the policy is available at www.survivingsepsis.org.