SCCM’S MISSION ON DISPLAY

The Society of Critical Care Medicine (SCCM) continues to respond to the COVID-19 pandemic. The world has a front-row view of critical care professionals living out the Society's mission to secure the highest-quality care for all critically ill and injured patients. As SCCM members persevere and adapt in the face of the health crisis of a lifetime, SCCM's mission has never been so vital. SCCM provided continuing education and support every step of the way to its members and to the broader health community, many of whom also were called to action during the pandemic.

SCCM WAS FOUNDED IN 1971 WITH A VISION

A world in which all critically ill and injured persons receive care from a present, integrated team of dedicated trained intensivists and critical care specialists—this is SCCM's vision. The multiprofessional team—not limited by titles, specialties or organ systems—employ knowledge, technology, and compassion to provide timely, effective, safe, efficient, and equitable patient-centered care. The multiprofessional team has a singular focus—improving the care and outcomes of the sickest and most fragile of patients.

SCCM's mission is to secure the highest quality care for all critically ill and injured patients.

The 2021 Annual Report provides a summary of SCCM's activities in the past fiscal year, from October 2020 through September 2021. It was quite a year.
SCCM LEADERSHIP

The 2021 SCCM Council

President: Greg S. Martin, MD, MSc, FCCM
President-elect: Sandra L. Kane-Gill, PharmD, MS, FCCM
Secretary: Vinay M. Nadkarni, MD, FCCM
Treasurer: Lauren Sorce, PhD, RN, CPNP-AC/PC, FCCM
Past President: Lewis J. Kaplan, MD, FCCM

Sheila A. Alexander, BSN, PhD, RN, FCCM
Marie R. Baldisseri, MD, MPH, FCCM
Jeffrey F. Barletta, BS, PharmD, FCCM
Cherylee W.J. Chang, MD, FCCM
Jose L. Diaz-Gomez, MD, FCCM

Amy L. Dzierba, BCCCP, PharmD
Laura E. Evans, MD, MS, FCCM
Anthony T. Gerlach, PharmD, FCCM
Kyle J. Gunnerson, MD, FCCM
M. Michele Moss, MD, FCCM

Thomas A. Nakagawa, MD, FCCM
Pauline K. Park, MD, FCCM
Jose L. Pascual, MD, PhD, FACS
Gloria M. Rodriguez-Vega, MD, MCCM
Samuel A. Tisherman, MD, FCCM

Honorary Members

Julie Winkle, MD, FCCM
William E. Dager, BCPS, PharmD, MCCM
David S. Shapiro, MD, MHCM, FCCM

Specialties

- Pharmacy: 5
- Pediatrics: 3
- Emergency Medicine: 2
- Anesthesiology: 1
- Surgery: 5
- Internal Medicine: 4
- Nursing: 2
- Neuroscience: 1

Practices

- Academic: 17
- Community: 5
- Government: 1
MESSAGE FROM THE PRESIDENT
Greg S. Martin, MD, MSc, FCCM
2021 SCCM President

As the Society marks its 50th anniversary, it continues to reach new heights and deliver greater impact than ever before. At a time indelibly marked by COVID-19, SCCM’s robust foundation of talent, experience, longevity, and financial stewardship spanning a global footprint has accelerated the Society toward its vision—a world in which all critically ill and injured persons receive care from a present, integrated team of dedicated and fully trained intensivists and critical care specialists.

Since its founding in 1971, SCCM has embraced its mission to secure the highest-quality care for all critically ill and injured patients through education, service, advocacy, and research. As the premier multiprofessional organization dedicated to the practice of critical care medicine, SCCM team members blend their knowledge, skills, technology, and compassion to provide patient- and family-centered care to millions of people admitted to hospital intensive care units (ICUs) around the world. Together, we ensure this care is timely, effective, safe, efficient, and equitable.

The continuing COVID-19 pandemic has created new and unique problems for patients, for healthcare professionals, for health systems, and for government agencies. SCCM rose to the challenge in every domain, spawning new educational programs and building bridges with new collaborators.

SCCM’s COVID-19 Rapid Resource Center provided essential information and resources to intensivists and nonintensivists worldwide, while SCCM members authored timely guidelines for patient management with the Surviving Sepsis Campaign and the U.S. National Institutes of Health. SCCM expanded its education and training activities through new partnerships with government agencies such as the Centers for Disease Control and Prevention (CDC), the U.S. Food and Drug Administration (FDA), USAID, the Federal Emergency Management Agency (FEMA), and the U.S. Department of Health and Human Services (HHS) Assistant Secretary for Preparedness and Response (ASPR). SCCM also strengthened its collaborations with other healthcare associations in infectious disease, emergency medicine, cardiovascular disease, and more.

Beyond education, SCCM deepened its commitments to research; to health equity, diversity and inclusion; and to professional well-being as core principles of the Society. The SCCM-Weil Research Trust and Discovery, the Critical Care Research Network, have supported investigators at all stages. Their research has culminated in high-impact publications that have advanced patient care in our field. SCCM’s core values include delivery of high-value, equitable care through a commitment to diversity and inclusivity in all aspects of critical care. The COVID-19 pandemic has exposed the fragile nature of the critical care workforce, for which SCCM has redoubled efforts to deliver both individual and institutional approaches to increase resilience and enhance well-being for all critical care professionals.

SCCM and its members have been central to all aspects of COVID-19 since the start of the global pandemic. Together, we have provided life-saving care for patients with COVID-19 while building new platforms to share education and research findings. The past year has been a significant and momentous one for the world and for the Society. The commitment of our global community—member volunteers, talented SCCM staff, and philanthropic donors—make all the Society’s remarkable successes possible.

SCCM Presidential Address: A New Era of Critical Care

I am so grateful for the honor to serve each and every one of you, whether you are a long-time member of our Society, a new member in training, or have not yet joined. I am a physician who specializes in—wait for it—critical care medicine, as well as pulmonology. I grew up in Kansas, the heartland of our country, and I now work at Emory University in Atlanta, Georgia. I am the first physician in my family, and perhaps like many of you, I was drawn to critical care medicine because of a personal experience with critical illness."
SCCM is dedicated to supporting its members and the healthcare community during the pandemic, not only with clinical and emergency response resources but also with education and tools to support well-being and mental health.

SCCM’s COVID-19 Rapid Resource Center offers more than 25 items related to well-being. Top resources include recordings from two well-attended webcasts, Managing Moral Distress During a Pandemic and Best Practices for Managing Staff Shortages. One of the most-read blogs of 2021 was “How to Maintain Wellness in the COVID-19 Era,” which is updated regularly with new information, including mental health support resources tailored to clinicians. SCCM also supported a letter to U.S. Congress leadership advocating for mental health resources for frontline healthcare workers during the pandemic and beyond.

Since the pandemic began, SCCM has worked to ensure that clinicians are recognized and receive the support they need on all fronts, from mental health to personal protective equipment (PPE) and reimbursement.

In early 2021, the Centers for Medicare and Medicaid Services (CMS) proposed changes to the Medicare Physician Fee Schedule for 2022. SCCM, along with other medical specialty societies, responded to CMS’s proposal, especially concerning rule changes surrounding critical care. When CMS released the final Medicare Physicians Fee Schedule for 2022, the rules establish payment, coverage, and compliance policy for physicians and other Medicare Part B providers starting January 1, 2022.

In September 2021, SCCM released an official statement opposing the spread of misinformation about COVID-19 prevention and treatment. The Society also signed on to many statements and official letters conveying the importance of equitable allocation of PPE and other vital supplies, including:

- Joint CCSC Statement: Distribution of Personal Protective Equipment and Allocation of Resources
  - November 16, 2020

- Joint CCSC Statement to the U.S. Congress and the Trump Administration
  - April 2, 2020

- Council of Medical Specialty Societies (CMSS) Statement on Personal Protective Equipment
  - April 2, 2020
SCCM IS THE ONLY ASSOCIATION THAT REPRESENTS ALL MEMBERS OF THE CRITICAL CARE TEAM

Members by Profession

- 64% PHYSICIANS
- 5% PHYSICIAN ASSISTANTS
- 12% NURSES
- 12% PHARMACISTS
- 8% OTHERS (Respiratory Care Therapists, Physical Therapists, Dietitians, Veterinarians)

Membership Types

- 64% PROFESSIONAL MEMBERS
- 17% ASSOCIATE MEMBERS
- 19% SELECT MEMBERS

What Are Member Types?

To meet the individual needs of a very diverse membership, in 2018 SCCM began offering a membership structure that allows members to choose the type that best fits their current needs. Learn more about member types and benefits at sccm.org/join.

Age*

*Based on self-reported demographic data. 65% of SCCM members report demographic data.

- 45 MEDIAN AGE
- 47 AVERAGE AGE

32% 23 - 38 (MILLENIALS)
37% 39 - 54 (GENERATION X)
29% 55 - 73 (BABY BOOMERS)

SCCM’s 16,000 MEMBERS represent more than 100 countries worldwide.

95% of members are based in North America

“SCCM really embodies the spirit of multidisciplinary inclusion with members from various backgrounds. Truly a melting pot of ideas for the collective goal of taking care of critically ill patients.”

Mourad H. Serussi, MD, MS, member since 2014

To stay abreast of the newest information, particularly in this year, members rely on SCCM to provide the latest education, connect them with thought leaders and nurture them throughout their careers, which is of vital importance as the field rapidly evolves.
HOW MEMBERS COLLABORATE

ENGAGEMENT OPPORTUNITIES

SCCM provides a variety of engagement opportunities to help members network and learn and to assist them with career advancement.

SCCM relies on its Creative Community, the more than 1800 members who volunteer for committees, task forces, and other groups to generate the cutting-edge education and activities on which our members rely. SCCM owes a debt of gratitude to these dedicated professionals who help advance the mission of the organization.

KNOWLEDGE EDUCATION GROUPS

Knowledge education groups (KEGs) were introduced in 2019 to help members connect based on shared interests.

KEGs have been so successful that new interest-based groups are being added all the time!

<table>
<thead>
<tr>
<th>Data Science</th>
<th>Choosing Wisely</th>
<th>Women in Critical Care</th>
<th>Obstetric Critical Care</th>
<th>Burnout</th>
<th>Palliative Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethics</td>
<td>Geriatric</td>
<td>Global Outreach</td>
<td>Tele-Critical Care</td>
<td>Billing and Documentation</td>
<td></td>
</tr>
</tbody>
</table>
**SCCM Connect**
A new and improved SCCM Connect launched in April 2021, offering members new ways to stay connected with each other and with their sections, chapters, and committees! SCCM Connect is also where members can join KEGs.

**New!** SCCM Connect now offers an exclusive members-only forum.

**Discussions!** More than 500 active discussions have been started on SCCM Connect since its launch.

**Member Directory.** Members can build their network and connect with peers who share similar interests and challenges.

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**Sections**
Specialty sections connect members of similar professions and disciplines. Members make the most of their membership by joining up to three specialty sections!

<table>
<thead>
<tr>
<th>Section</th>
<th>Number of Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anesthesiology</td>
<td>1,540</td>
</tr>
<tr>
<td>Clinical Pharmacology and Pharmacy</td>
<td>2,320</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>2,070</td>
</tr>
<tr>
<td>Industry and Technology</td>
<td>540</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>3,161</td>
</tr>
<tr>
<td>In-Training</td>
<td>985</td>
</tr>
<tr>
<td>Neuroscience</td>
<td>1,575</td>
</tr>
<tr>
<td>Nursing</td>
<td>1,090</td>
</tr>
<tr>
<td>Osteopathy</td>
<td>225</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>1,900</td>
</tr>
<tr>
<td>Physician Assistant</td>
<td>390</td>
</tr>
<tr>
<td>Research</td>
<td>1,905</td>
</tr>
<tr>
<td>Respiratory Care</td>
<td>1,820</td>
</tr>
<tr>
<td>Surgery</td>
<td>2,285</td>
</tr>
<tr>
<td>Uniformed Services</td>
<td>325</td>
</tr>
</tbody>
</table>

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**Chapters**
Nearly 4,600 critical care professionals throughout the United States join SCCM chapters to connect with peers in their region!

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Number of Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltimore</td>
<td>180</td>
</tr>
<tr>
<td>Carolinas/Virginia</td>
<td>450</td>
</tr>
<tr>
<td>Delaware NEWI</td>
<td>33</td>
</tr>
<tr>
<td>Florida</td>
<td>375</td>
</tr>
<tr>
<td>Michigan NEWI</td>
<td>170</td>
</tr>
<tr>
<td>Midwest</td>
<td>300</td>
</tr>
<tr>
<td>New Jersey</td>
<td>135</td>
</tr>
<tr>
<td>New Mexico</td>
<td>50</td>
</tr>
<tr>
<td>North Central</td>
<td>130</td>
</tr>
<tr>
<td>Northeast</td>
<td>500</td>
</tr>
<tr>
<td>Northern California</td>
<td>185</td>
</tr>
<tr>
<td>Ohio</td>
<td>355</td>
</tr>
<tr>
<td>Oregon</td>
<td>115</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>360</td>
</tr>
<tr>
<td>Southeast</td>
<td>465</td>
</tr>
<tr>
<td>Southern California</td>
<td>200</td>
</tr>
<tr>
<td>Texas</td>
<td>600</td>
</tr>
</tbody>
</table>

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Many specialty sections launched Twitter accounts in 2021, providing new opportunities to stay connected!
GETTING VITAL INFORMATION TO MEMBERS

SCCM supports its members with a diverse offering of materials to keep them updated about advancements in the field and SCCM’s activities.

SCCM.org
The SCCM website is a primary hub of activity for the organization, providing information and access to everything SCCM has to offer.

In FY2020, the SCCM website broke records in terms of traffic, as the medical community (critical care and non-ICU clinicians alike), the media, and the public flocked to SCCM as a trusted source of information about the COVID-19 pandemic.

In FY2021, the website underwent a major redesign. More than 1,000 users provided feedback through a series of online surveys, one-on-one interviews, focus groups, and real-time user navigation sessions.

The result was a more intuitive navigation, and the website broke records again with more than 613,000 visits, an 11% increase from the previous year.

<table>
<thead>
<tr>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>399,000 home page visitors</td>
<td>553,000 home page visitors</td>
<td>613,000 home page visitors</td>
</tr>
<tr>
<td>542,000 total visitors</td>
<td>2 million total visitors</td>
<td>1.4 million total visitors</td>
</tr>
</tbody>
</table>

Critical Connections
The critical care profession’s only newsmagazine delves into cutting-edge topics useful for the entire multiprofessional team. Written by and for critical care professionals, it provides updates on SCCM activities and programs.

In 2020, Critical Connections moved from a bimonthly publication to quarterly and is now published both online and in print. The move to quarterly allows for more online-first material published as blogs, ensuring the availability of fresh and relevant content as soon as possible, a rapid-cycle process that was especially vital during the COVID-19 response.
GETTING VITAL INFORMATION TO MEMBERS
COMMUNICATIONS VEHICLES

Social Media
SCCM maintains a robust social media outreach strategy that includes a group of engagement ambassadors dedicated to helping spread the word about the organization’s mission.

SCCM’s Engagement Ambassador Program grew to more than 114 participants by October 2021, helping bolster the organization’s presence as a trusted source in the social media landscape.

<table>
<thead>
<tr>
<th></th>
<th>Facebook @SCCM1</th>
<th>Twitter @SCCM</th>
<th>Instagram @SCCMcriticalcare</th>
<th>LinkedIn /society-of-critical-care-medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Followers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2019</td>
<td>75,159</td>
<td>25,513</td>
<td>2,231</td>
<td>9,344</td>
</tr>
<tr>
<td>FY2020</td>
<td>81,209</td>
<td>35,877</td>
<td>9,067</td>
<td>20,210</td>
</tr>
<tr>
<td>FY2021</td>
<td>82,640</td>
<td>42,300</td>
<td>13,300</td>
<td>33,350</td>
</tr>
<tr>
<td><strong>Impressions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2019</td>
<td>6,430,723</td>
<td>2,365,610</td>
<td>339,633</td>
<td>128,219</td>
</tr>
<tr>
<td>FY2020</td>
<td>7,556,263</td>
<td>3,891,709</td>
<td>1,357,086</td>
<td>891,903</td>
</tr>
<tr>
<td>FY2021</td>
<td>11,505,327</td>
<td>5,786,271</td>
<td>2,329,065</td>
<td>1,366,235</td>
</tr>
<tr>
<td><strong>Engagements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2019</td>
<td>189,115</td>
<td>46,264</td>
<td>5,382</td>
<td>6,076</td>
</tr>
<tr>
<td>FY2020</td>
<td>302,231</td>
<td>119,008</td>
<td>19,896</td>
<td>49,617</td>
</tr>
<tr>
<td>FY2021</td>
<td>180,190</td>
<td>123,081</td>
<td>25,865</td>
<td>67,291</td>
</tr>
</tbody>
</table>

SCCM Digital Newsletters
SCCM’s digital newsletters are delivered weekly to members’ inboxes. Each month features a digital newsletter with a focus: News and Updates, Promotions and Events, and Select Member exclusives! SCCM delivered more than 36 digital newsletters in FY 2021!

The Critical Pulse eNewsletter was launched in September 2021, delivering Select and Professional SCCM members brief summaries of impactful new research findings.

Critical Connections Blog
The blog highlights the best and most relevant literature from a variety of academic journals, encouraging discussion around studies and research.

Top Blogs
- Ethical Considerations for a COVID-19 Vaccine Mandate (June 2021)
- Updated Guidelines on Management of Clostridioides difficile Infection in Adults (August 2021)
- Remembering a Founder: Ake Grenvik, MD, PhD, MCCM (September 2021)
- Concise Critical Appraisal: ARREST Trial: ECMO Versus Advanced Cardiac Life Support (December 2020)
ADVANCING CRITICAL CARE THROUGH RESEARCH

SCCM successfully expanded its research activities, buoyed by significant extramural funding. SCCM supports a wealth of research-focused activities through Discovery, the Critical Care Research Network. Discovery provides access to a clinical informatics team, HIPAA-compliant registries, and grant opportunities.

**Discovery**

Launched in January 2017, Discovery fosters collaborative research to improve outcomes for critically ill and injured patients and seeks to incorporate findings into practice using SCCM’s broad base of programs.

**Discovery Grant Recipients**

**2021 Recipient**
Paul E. Wischmeyer, MD, EDIC, FCCM
Duke University School of Medicine

*Topic: REMotely Monitored, Mobile-Health High-Intensity Interval Training After Critical Care (REMM-HIIT)*

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**Clinical Investigators Meetings**

Each year, Discovery holds three clinical investigator meetings, including one during the Critical Care Congress. More than 300 attendees participated in these clinical investigators meetings, each held virtually due to the pandemic.

Each fall meeting includes guests from the National Institutes of Health and other funding agencies to discuss their programs and give clinical researchers special insights.

**Discovery Overview**

- More than 70,000 patients enrolled in studies
- 81 proposals
- 31 endorsed Discovery projects
- 6 Discovery programs
- 3 grant proposals in review for which Discovery serves as the data coordinating center and/or clinical coordinating center
- 9 grant-funded manuscripts published

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**GRANTS**

**SCCM-Weil Research Grant**

Created in 2015 to fund research grants and named for the Society’s founder and first president, Dr. Max Harry Weil, the SCCM-Weil Research Trust is SCCM’s commitment to being part of the discovery and innovation necessary to foster advances in ICU care. In FY 2020, the Society increased the distribution of $50,000 SCCM-Weil Research Grants from two to three possible recipients.

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**2021 SCCM-Weil Research Grant Recipients**

**Jana Krystofova Mike, MD, PhD**
University of California, San Francisco
*Topic: The Role of ARG-1 in Microglia During Efferocytosis After Neonatal Brain Hypoxia-Ischemia*

**Zhan Liang, PhD, RN**
University of Miami
*Topic: Move to Music Video Intervention: A Music and Video Guided Exercise Intervention for ICU Survivors*
RESPONDING TO THE COVID-19 PANDEMIC

SCCM secured several new funding opportunities and grant partnerships this year, further establishing Discovery and SCCM as trusted leaders in critical care research. These opportunities are directly supporting COVID-19 research and response and helping clinicians prepare for future infectious disease outbreaks.

VIRUS

Discovery's Viral Infection and Respiratory Illness Universal Study (VIRUS) COVID-19 Registry is a multi-institutional collaboration led by members of SCCM, Mayo Clinic Rochester, and Boston University. SCCM is the clinical coordinating center in collaboration with Mayo Clinic as the data coordinating center for this multicenter cross-sectional observational study and registry of all eligible adult and pediatric patients admitted to a hospital with COVID-19. The Gordon and Betty Moore Foundation supported this registry with a one-year grant enabling development of a near-real-time dashboard of critically ill COVID-19 patents to optimize situational awareness, user engagement, and global knowledge sharing. The Moore Foundation grant also supports an electronic health record-based automated collection of standardized data elements for pandemic critical care needs prototyping in 24 hospitals participating in the Discovery VIRUS COVID-19 Registry. The registry was further funded by Janssen R&D LLC to expand its automation work and expansion of the registry to include additional international sites. As part of Discovery, this global study fosters collaborative research to promote the advancement of science in the field to improve outcomes for critically ill and injured patients and will exponentially increase research in the critical care field. VIRUS's findings will be disseminated and may be implemented into practice.

ClinicalTrials.gov Identifier: NCT04323787

CURE ID

VIRUS Registry sites are participating in the SCCM and CURE Drug Repurposing Collaboratory (CDRC) program on CURE ID: Aggregating and Analyzing COVID-19 Treatments from EHRs & Registries Globally. This program is funded through a grant received by the FDA from the U.S. Department of Health and Human Services' Office of the Assistant Secretary of Planning and Evaluation (ASPE) Patient-Centered Outcomes Research Trust Fund (OS-PCORTF). SCCM is one of the consortium partners along with other academic medical institutions. The program will crowdsource the global medical community for their experience using repurposed drugs to treat infectious diseases such as COVID-19 with no adequate approved therapies to help identify treatments that are promising and can be investigated further. The goal is to build a de-identified, readily available database using the CURE ID platform and the Discovery VIRUS COVID-19 Registry to support drug repurposing research for COVID-19 and other challenging infectious diseases and to generate hypotheses that can be confirmed in clinical trials.

Learn more and find recent publications from these projects at sccm.org/discovery.
**STOP-VIRUS**

As the spread of COVID-19 slows, SCCM will draw from experiences gained over the past year to provide education and training that will more fully prepare healthcare professionals for future infectious disease emergencies and other disaster situations. Activities include collaboration with cross-specialty organizations to develop free online education addressing patient management during infectious disease outbreaks and natural disasters across the continuum of care. SCCM will continue to disseminate information and education related to COVID-19 and other infectious disease outbreaks to its members and across medical organizations of varying subspecialties, disciplines, and professions, aligning efforts when possible. SCCM is developing a free online wellness/moral distress toolkit featuring guidance and best practices and will target issues unique to clinicians working in the ICU setting. SCCM will educate and prepare healthcare professionals to respond to infectious disease outbreaks and other disasters using Fundamental Critical Care Support: Crisis Management.

**DISTRESS**

The Geneva Foundation, as part of the Medical Technology Enterprise Consortium (MTEC) agreement, funded the Disaster Telemedicine Response System (DISTRESS), which performs periodic mock drills and simulations to ensure system reliability. SCCM enabled the national coordination of mock trials and drills, utilizing existing infrastructure for conducting national trials and maintained vast databases of clinical information. SCCM recruited, maintained, and vetted the database using critical care volunteers through its virtual command center. DISTRESS aligns with SCCM's vision of a world in which all critically ill and injured persons receive care from a present integrated team of dedicated trained intensivists and critical care specialists. The project engages multiprofessional teams' knowledge, technology, and compassion to provide timely, effective, safe, efficient, and equitable patient-centered care.
CDC Collaboration to Improve Clinical Outcomes

SCCM is collaborating with the CDC and partnering organizations to develop and disseminate free and accessible education and training related to the prevention and control of emerging and reemerging infectious disease threats. *ICU Clinical Outcomes During Emerging and Reemerging Infectious Disease Threats* accomplished several key milestones during the fiscal year.

COVID-19 Rapid Resource Center

Established in April 2020, SCCM’s COVID-19 Rapid Resource Center is an online portal for the latest resources and education related to the pandemic. The site has grown to nearly 1000 items, including microlearning, podcasts, and webcast recordings. The site also includes materials from the Centers for Disease Control and Prevention and the Infectious Diseases Society of America relevant to the critical care clinician.
SCCM JOURNALS

SCCM’s primary dissemination tools for research are its world-renowned journals, Critical Care Medicine (CCM) and Pediatric Critical Care Medicine (PCCM) and the open-access journal Critical Care Explorations (CCE). These trusted journals became a hub for late-breaking research related to COVID-19, achieving record-breaking submissions and adapting to publish articles online first in rapid cycle.

The three journals have published more than 300 COVID-19 related articles since the start of the pandemic.

The year saw unprecedented social media exposure thanks to the commitment of its social media editors and ambassadors and visual abstract editors!

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
<th>Acceptance Rate</th>
<th>Facebook Followers</th>
<th>Twitter Followers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Care Medicine</td>
<td>7.598 (2020)</td>
<td>17%</td>
<td>@criticalcaremedicine 13,000</td>
<td>@CritCareMed 43,500</td>
</tr>
<tr>
<td>Pediatric Critical Care Medicine</td>
<td>3.624 (2020)</td>
<td>37%</td>
<td>@PedCritCareMed 14,880</td>
<td>@PedCritCareMed 12,700</td>
</tr>
<tr>
<td>Critical Care Explorations</td>
<td>N/A</td>
<td>40%</td>
<td>@CritCareExplore 700</td>
<td>@CritCareExplore 5,400</td>
</tr>
</tbody>
</table>
50th Anniversary Series in Critical Care Medicine

As part of SCCM’s 50th anniversary celebration, CCM Editor-In-Chief Timothy G. Buchman, MD, PhD, MCCM, invited articles about advances in the field of critical care field as well as predictions about the future. Each article covers a subspecialty of the field. These were published throughout 2021 in Critical Care Medicine.

New PCCM Editor Announced

Pediatric Critical Care Medicine (PCCM), the official journal of SCCM and the World Federation of Pediatric Intensive and Critical Care Societies (WFPICCS), ushered in new leadership. In October 2020, Robert C. Tasker, MA, MBBS, MD, FRCP, FRCPCH, was named editor-in-chief of PCCM. Dr. Tasker took over for Patrick M. Kochanek, MD, MCCM.

The announcement came after a lengthy selection process headed by both SCCM and WFPICCS. Dr. Tasker was selected based on his extensive editorial expertise and international experience. Prior to his appointment, he served as a senior associate editor for PCCM as well as associate editor. He has more than 20 years of experience as an editorial associate for other academic medical journals, including Intensive Care Medicine, Archives of Disease in Childhood, Critical Care, and Current Opinion in Pediatrics.

“My leadership of PCCM is guided by a strategy and principles that I call the 5 Rs: Read, Rigor, Responsive, Relevant, and Reach,” Dr. Tasker said. “I promote commentary that helps readers think and reflect (read), focus on new methodologies and analytic tools required for research (rigor), seek out content that offers innovative solutions and contributes to shared experiences of pediatric critical care practitioners (relevant), expedite information on new approaches or material (responsive), and focus on expanding our reach to low- and middle-income countries (reach).”

A longtime member of SCCM, starting after a pediatric critical care fellowship education at Johns Hopkins Hospital, Dr. Tasker served as an author on the Surviving Sepsis Campaign International Guidelines for the Management of Septic Shock and Sepsis-Associated Organ Dysfunction in Children, the first comprehensive recommendations of their kind, published in the February 2020 issue of PCCM.

Did you know? Members of the SCCM Pediatrics Section receive a complimentary subscription to PCCM. They also receive monthly videos directly from Dr. Tasker where he highlights the must-read articles from each issue.

Similar videos are delivered for CCE and CCM by leaders with their respective editorial boards. These video summaries are a member benefit meant to help the busy professional stay up to date.
NEVER MORE IMPORTANT: FUNDAMENTALS OF CRITICAL CARE

SCCM’s Fundamentals training has long provided courses geared toward future intensivists and those not trained in critical care. These courses—especially Fundamental Critical Care Support (FCCS), which is aimed at managing critically ill and injured patients for the first 24 hours or until appropriate critical care consultation can be arranged—were understandably in high demand during the COVID-19 pandemic.

Since 2012, there has been a 36% increase in the number of FCCS courses taught. These programs have trained over a quarter million healthcare professionals, developing worldwide critical care rescue skills.

Fundamentals training is hosted by institutions and are typically offered in two formats—one that includes in-person didactic sessions and skill stations, and an online version in which the didactic sessions are performed online before the in-person skill stations. Both options call for in-person gatherings, which have been hard to accomplish during the pandemic, but the Society continues to see demand for these courses, and some are making plans to return to in-person learning. Fundamentals are also offered as self-directed, online-only courses.

<table>
<thead>
<tr>
<th></th>
<th>2019 Courses</th>
<th>2019 Trained</th>
<th>2020 Courses</th>
<th>2020 Trained</th>
<th>2021 Courses</th>
<th>2021 Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamental Critical Care Support</td>
<td>516</td>
<td>11,034</td>
<td>514</td>
<td>10,622</td>
<td>386</td>
<td>6,412</td>
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<tr>
<td>Pediatric Fundamental Critical Care Support</td>
<td>135</td>
<td>2,574</td>
<td>140</td>
<td>2,675</td>
<td>75</td>
<td>1,094</td>
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<tr>
<td>Fundamental Critical Care Support: Obstetrics</td>
<td>2</td>
<td>36</td>
<td>20</td>
<td>565</td>
<td>8</td>
<td>118</td>
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<tr>
<td>Fundamental Disaster Management</td>
<td>14</td>
<td>224</td>
<td>10</td>
<td>157</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Fundamental Critical Care Support: Resource Limited</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>6</td>
<td>95</td>
</tr>
<tr>
<td>Totals</td>
<td>667</td>
<td>13,868</td>
<td>664</td>
<td>14,019</td>
<td>477</td>
<td>7,734</td>
</tr>
</tbody>
</table>

Since the start of the pandemic, SCCM has been offering the web-based education Critical Care for the Non-ICU Clinician. This free resource includes relevant lessons from the Fundamentals programs with lessons translated into Spanish, Portuguese, and Japanese. More than half a million non-ICU clinicians worldwide have learned from this program to prepare for patient surges.
KEY PARTNERSHIPS ALLOW FOR MAJOR GROWTH IN FUNDAMENTALS

The Society formed new partnerships and strengthened existing relationships with several government agencies and organizations to train clinicians worldwide, greatly expanding the reach of the Fundamentals program.

Through its collaboration with the Centers for Disease Control and Prevention, SCCM has provided Fundamentals training clinicians who serve patients in underserved and low-resource areas.
USAID leads international development and humanitarian efforts to save lives, reduce poverty, strengthen democratic governance, and help people progress beyond assistance.

In spring 2021, SCCM began to collaborate with USAID to implement FCCS training to clinicians in targeted countries that received mechanical ventilators from the U.S. government. Many places receiving the FCCS training had no prior exposure to FCCS or even SCCM. This collaboration helps extend SCCM’s mission to needed countries! Courses were conducted in English, Spanish, and Portuguese. Participants accessed lectures online and attended either virtual or local in-person skill stations.

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>STUDENTS TRAINED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>30</td>
</tr>
<tr>
<td>Bhutan</td>
<td>317</td>
</tr>
<tr>
<td>Ecuador</td>
<td>450</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>12</td>
</tr>
<tr>
<td>Maldives</td>
<td>10</td>
</tr>
<tr>
<td>Mongolia</td>
<td>39</td>
</tr>
<tr>
<td>Mozambique</td>
<td>34</td>
</tr>
<tr>
<td>Nigeria</td>
<td>120</td>
</tr>
<tr>
<td>Panama</td>
<td>200</td>
</tr>
<tr>
<td>Paraguay</td>
<td>880</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total Learners</strong></td>
<td><strong>2,104 ... and growing!</strong></td>
</tr>
</tbody>
</table>
The Edwards Lifesciences Foundation supports programs designed to treat underserved people to reduce heart valve disease; strengthen the communities where Edwards Lifesciences employees live and work; promote employee volunteerism; and address programs that meet other vital community or patient needs, including education and awareness campaigns, research, and direct care for underserved patients.

In November 2020, SCCM received a $250,000 grant from the Edwards Lifesciences Foundation to support their Every Heartbeat Matters initiative. The grant allowed SCCM to hold 21 free training courses in underserved areas of the United States and around the world.

In June 2021, SCCM received another $250,000 grant from the Foundation to train 1,785 learners in India to address the current humanitarian crisis there brought on by increasing COVID-19 cases. SCCM was able to expand access to critical care training for non-ICU clinicians to address the current crisis and prepare the workforce for future surges.

### COUNTRIES

| Brazil      | Arkansas |
| Bhutan      | Maine    |
| China       | Oregon   |
| El Salvador | Wisconsin|
| Ghana       | Arizona  |
| India       | Washington|
| Mexico      | Puerto Rico |
| Pakistan    |          |
| Sri Lanka   |          |
| Sudan       |          |
| Uganda      |          |
| Haiti       |          |
| Venezuela   |          |

### U.S. STATES AND TERRITORIES

| Brazil      | Arkansas |
| Bhutan      | Maine    |
| China       | Oregon   |
| El Salvador | Wisconsin|
| Ghana       | Arizona  |
| India       | Washington|
| Mexico      | Puerto Rico |

| Countries  | 10+ |
| Learners   | 1,784+ |
As the pandemic continued into 2021 and vaccines became more widely available, SCCM responded by offering more flexible learning options that would meet learners’ needs and preferences. The annual Congress became fully virtual, and the summer events all moved online. Clinicians quickly adapted to the new formats and attendance was robust.

**Smart courses** allow learners to engage in course content at their own pace through self-directed learning online with the option to attend an in-person experience.

**Smart events** offer in-person and online learning options with the flexibility to decide any time.

**Review and Assessment**

SCCM helps critical care professionals expand and fill in knowledge gaps in preparation for certification through various adult and pediatric review and assessment activities, which offer more than 1,200 questions for both adult and pediatric.

The Multiprofessional Critical Care Review adult and pediatric courses had been traditionally held in person each summer in the Chicago area as well as internationally in places such as United Arab Emirates, Saudi Arabia, Korea, Japan, China, and Spain. In summer 2021, the course was offered for the first time as a smart course, offering access to the self-directed course and textbook with an option to attend in person. Unfortunately, the planned in-person offering in July was canceled out of an abundance of caution as the delta variant spread throughout the United States.

Registrants were still able to take advantage of the self-directed offering. Ultimately, SCCM’s adult and pediatric review and assessment programs were accessed by more than 2,400 individuals in FY2021.

**Multiprofessional Critical Care Review: Adult** also launched as one of the latest hosted course opportunities from SCCM.

**Looking Ahead:** The smart course model for Review and Assessment courses will continue with more in-person offerings throughout the United States organized by local SCCM chapters.
Critical Care Ultrasound

Focused ultrasound examinations are a vital extension of critical care assessment, so competency is a must. SCCM offers four ultrasound courses to hone clinicians’ ultrasound skills.

- Critical Care Ultrasound: Adult
- Critical Care Ultrasound: Pediatric and Neonatal
- Advanced Critical Care Ultrasound: Adult
- Critical Care Ultrasound: Adult, Español

Like the review and assessment program, these ultrasound skills courses were traditionally held in person in summer in the Chicago area and during the Critical Care Congress. The courses were offered as smart courses for the first time in 2021. Registrants get instant access to self-directed learning modules and may attend an in-person skill station at various locations. They have two years to attend this optional offering.

Again, the planned in-person skill stations scheduled to be held in July in Chicago were canceled out of an abundance of caution as the delta variant spread throughout the country. Luckily, new skills activities are being planned throughout the year, including during the 2021 Critical Care Congress, delivering on the promise to provide flexible learning opportunities.

Critical Care Ultrasound also launched as one of the latest hosted course opportunities from SCCM.

Critical Care Echocardiography Review Course

SCCM offered its echocardiography review course as a smart event experience with flexible learning options. The in-person option was held successfully in Rosemont, Illinois, marking the first in-person course with infection mitigation practices in place. The virtual option was released in December 2021 as a self-directed course.

Critical Impact

SCCM released a series of complimentary courses focused on COVID-19 funded in part by a cooperative agreement with the Centers for Disease Control and Prevention (grant number 1 NU50CK000566-01-00).

Critical Impact includes three installments:

- Critical Impact: Clinical Practice
- Critical Impact: Infrastructure and Workforce
- Critical Impact: Ethics and Supply Chain
NEW HOSTED COURSES

SCCM expanded its hosted course model to include new offerings. Hosted courses allow institutions and other groups to license SCCM’s standardized, trusted and high-quality education and training opportunities.

Best of SCCM
The new Best of SCCM Congress program features more than 25 hours of cutting-edge adult and pediatric content from SCCM’s annual Congress. It is among the newest hosted course opportunities from SCCM, with the first licensed offering held in Taipei in December 2021. The hybrid conference was held in partnership between SCCM, the Taiwan Society of Emergency and Critical Care Medicine, and the Taiwan Society of Critical Care Medicine.

ICU Liberation
Learn and apply evidence-based patient management strategies using the ICU Liberation Bundle (A-F). Designed for the entire multiprofessional ICU team.

Critical Care Ultrasound
Bring the realistic training needed to perform and interpret point-of-care ultrasound. Available courses include Critical Care Ultrasound: Adult, Critical Care Ultrasound: Pediatric and Neonatal, and Advanced Critical Care Ultrasound: Adult.

Current Concepts
Obtain the latest critical care information with Current Concept courses, available in adult and pediatric.

Multiprofessional Critical Care Review: Adult
Available for the international critical care community, this hosted course offers extensive coverage of core concepts in adult critical care.

Additional Programs and Initiatives

The LEAD program, focused on providing education around nonclinical topics such as management, staff retention and finances launched successfully with strong interest in the initial offerings, including the program’s July 2021 inaugural webcast, The Science Behind Building a High-Performing Team.

SCCM launched a new learning management system in August 2021 offering a new and improved learning experience for online learners. The launch of the new platform is a first step toward a new LearnICU experience, one that provides a hub for all online educational resources.
The 50th Critical Care Congress was a celebration of the organization’s golden anniversary as well as a testament to its ability to adapt by holding its first all-virtual annual meeting. The virtual Critical Care Congress, themed A New Era of Critical Care, was held January 31 through February 12, 2021, expanding the traditional five days of learning over two weeks, based on member feedback. Congress registration was strong and beat projections, with many taking advantage of the virtual format during the pandemic.

**Top Sessions**
- Surviving Sepsis 2071
- Response to Emerging Infectious Threats: Learning From Influenza, Ebola, and COVID-19
- Feeling for a Pulse: Methods of Assessing ROSC and Hemodynamics
- Late-Breaking Studies Affecting Patient Outcomes
- The New ABCs of Refractory Shock: Angiotensin II, Vitamin B12, Methylene Blue, and Vitamin C

*Top sessions and more are available On Demand!* Other Congress On Demand products released in FY2021 included Pediatric Sessions On Demand, Master Classes On Demand and the full Congress On Demand.

**Attendee Profile**
- 59% Physicians
- 2% Physician Assistants
- 9% Nurses
- 17% Pharmacists
- 5% Industry
- 10% Others
  (Dietitians, Respiratory and Physical Therapists, Researchers, Students, Veterinarians, Government, Hospital Administrators)

**Critical Care Congress Registration**
- Exhibitors: 5,533
- Professional Attendees: 994
- Virtual Event: 3,834
- San Diego 2019: 5,156
- Orlando 2020: 68

**Social Media Engagement**
- Year | Tweets | Users | Impressions | Avg. Tweets per Participant
- 2019 #CCC48 | 25,109 | 3,149 | 78M | 7.97
- 2020 #CCC49 | 30,183 | 3,506 | 118M | 9.00
- 2021 #CCC50 | 16,136 | 2,602 | 98M | 6.00

**Abstracts**
- Year | Submitted | Accepted | Acceptance Rate
- 2019 | 2,122 | 1,802 | 84%
- 2020 | 2,561 | 1,790 | 77%
- 2021* | 1,675 | 1,319 | 70%

* Virtual Only

Looking Ahead: Look for a new hashtag at the 2022 Critical Care Congress! Follow #SCCM2022.
CELEBRATING SCCM’S 50TH ANNIVERSARY

Throughout the year, members shared their favorite memories from the past 50 years!

In addition, SCCM sent thousands of 50th Anniversary Kits to ICU directors and others throughout the United States. The kits included adult and pediatric flipbooks highlighting bedside tools and algorithms from SCCM’s top programs, including FCCS, FCCS: Obstetrics, Ultrasound, and the Surviving Sepsis Campaign. A social media campaign celebrated the anniversary throughout the year with #ThrowBackThursday photos, past presidents’ messages, and invitations to share special memories. The CCM journal ran a series of 50th anniversary articles, and the SCCM history book added a chapter summarizing accomplishments of the past decade.
CONGRATULATIONS TO SCCM’S 2021 AWARD AND GRANT RECIPIENTS!

Each year, members of the Society of Critical Care Medicine (SCCM) are honored for their achievements with awards for excellence in their field.

In 2021, for the first time, the Asmund D. Laerdal Memorial Lecture Award, the American College of Critical Care Medicine’s (ACCM) Distinguished Investigator Award, and the SCCM Lifetime Achievement Award were bestowed on women. All awards were presented virtually during SCCM’s 50th Critical Care Congress in February 2021.

The Society also offered several special awards to recognize excellence during the pandemic. A COVID-19 ICU Design Citation Award recognized design and construction of a COVID-19 critical care unit that expanded ICU bed capacity and ensured patient and staff safety. The Founders Special Recognition Award commended extraordinary service to SCCM.

ACCM Distinguished Investigator Award
Lena M. Napolitano, MD, MCCM

Asmund S. Laerdal Memorial Lecture Award
Christa A. Schorr, RN, MSN, DNP, FCCM

Barry A. Shapiro Memorial Award for Excellence in Critical Care Management
Benjamin S. Bassin, MD

Chapters Alliance Excellence Award
Carolinas/Virginias Chapter

Distinguished Service Award
Heatherlee Bailey, MD, FCCM

Distinguished Service Award
Timothy G. Buchman, MD, PhD, MCCM

Distinguished Service Award
Patrick M. Kochanek, MD, MCCM

Distinguished Service Award
Stephen M. Pastores, MD, FCCM

Distinguished Service Award
Antoinette Spevetz, MD, FCCM
Dr. Joseph and Rae Brown Award
Marilia I. Diaz Correa, RN, MSN, FCCM

Drs. Vidyasagar and Nagamani Dharma-puri Award for Excellence in Pediatric Critical Care Medicine
Martha A.Q. Curley, RN, PhD

Grenvik Family Award for Ethics
David Y. Hwang, MD, FCCM

Founders Special Recognition Award
Neil A. Halpern, MD, MCCM

Founders Special Recognition Award
Deborah L. Birx, MD

Founders Special Recognition Award
Anthony S. Fauci, MD

Founders Special Recognition Award
ADM Brett P. Giroir, MD

Lifetime Achievement Award
Deborah J. Cook, MD

Norma J. Shoemaker Award for Nursing Excellence
Karin Reuter-Rice, PhD, CPNP-AC, FCCM

Safar Global Partner Award
Leandro Braz de Carvalho, MD

Safar Global Partner Award
Ahmed Reda Taha, MD, FCCM

Safar Global Partner Award
Sujanthy S. Rajaram, MD, MPH, FCCM
Shubin-Weil Master Clinician/Teacher: Excellence in Bedside Teaching Award
Ashok P. Sarnaik, MD, FCCM

In-Training Research Award
Alison Novak, PharmD
#45 Pharmacokinetic Evaluation of Cefazolin in the Cerebral Spinal Fluid of Critically Ill Patients

Young Investigator Research Award
Sara A. Atyia, PharmD, BCACP
#900 Evaluation of Dexmedetomidine Dosing in Obese Critically Ill Patients

Gold Medal Research Award
Matthew Norris, MD
#12 Utility of Testing for Respiratory Viral Co-Infections With SARS-CoV-2 at Time of Initial Diagnosis

Silver Medal Research Award
Raina M. Paul, MD
#32 Improving Pediatric Sepsis Outcomes for All Children Together (IPSO FACTO): Interim Results

Bronze Medal Research Award
Benjamin E. Zusman, MD
#1 CSF Sur1 Is Associated With ICP and Outcome After Pediatric TBI: An Exploratory Study in Cool Kids

Innovation in Education Award
Integrated Module of Pediatric Acute Care Training (IMPACT)
Pediatric Intensive Care
Advanced Pediatrics Centre, PGIMER Chandigarh India National Health Mission, Madhya Pradesh, India, and UNICEF, Madhya Pradesh, India

COVID-19 ICU Design Citation Award
Holy Name Medical Center COVID-19 ICU
Steven L. Mosser, Executive Vice President, Operations

ICU Design Citation Award
Unit: MUSC Shawn Jenkins Children's Hospital
Pediatric Critical Care
Architect: Perkins&Will in association with McMillan Pazdan Smith Architecture

Family-Centered Care Innovation Award
C.A.P.E. and Home Ventilation Program
Boston Children's Hospital Division of Critical Care Medicine
WEBCASTS AND PODCASTS
Webcasts took on new importance in the pandemic climate. SCCM offers two monthly Journal Club webcasts, one focused on pharmacy topics and the other on hot topics from Critical Care Medicine. These enjoy regular attendance and robust discussion each month.

SCCM now offers new sponsorship and advertising opportunities for webcasts and podcasts! Visit sccm.org/sponsorship for details!

SCCM also offered more than 65 webcasts based on the needs of the critical care community. More than 5,553 learners attended these virtual events live and thousands more watched recordings after the event.

Top 5 COVID-19 Webcasts:

1. A Review of Acute Respiratory Distress Syndrome and COVID-19
   - Attendees: 480
   - Recording views: 116,350

   - Attendees: 385
   - Recording views: 53,530

3. Infection Control from the ED to ICU: Triage to Transport
   - Attendees: 304
   - Recording views: 52,772

   - Attendees: 299
   - Recording views: 49,579

5. COVID-19 Vaccine Update
   - Attendees: 633
   - Recording views: 47,766

SCCM’s podcasts, offering a wide selection of in-depth interviews, including those with authors from Critical Care Medicine, Critical Care Explorations, and Pediatric Critical Care Medicine, continues to reach a wide audience. SCCM released 21 podcasts in FY 2021, which reached nearly 350,000 listeners.

Top Podcasts:

1. Hypertonic Saline in Children with Raised Intracranial Pressure
   - Release Date: January 22, 2021
   - Listeners: 30,493

2. Patient-Ventilator Dyssynchronies and Their Mechanisms
   - Release Date: May 17, 2021
   - Listeners: 27,978

3. Optimal Bundle of Management for Cardiac Arrest
   - Release Date: December 10, 2020
   - Listeners: 25,715

4. Choosing Wisely for Critical Care: The Next Five
   - Release Date: April 7, 2021
   - Listeners: 25,455

5. Citrate and Continuous Renal Replacement Therapy
   - Release Date: March 10, 2021
   - Listeners: 24,481

Looking Ahead: Be on the lookout for a podcast rebrand!
The Society of Critical Care Medicine Podcast will offer the same great interviews with a new look.
IMPROVING CARE THROUGH QUALITY IMPROVEMENT

SCCM also successfully expanded its quality activities, also buoyed by significant extramural funding.

HELPING PATIENTS GET BACK TO LIFE: ICU LIBERATION

Committed to improving outcomes after patients leave the ICU, SCCM developed the ICU Liberation Bundle (A-F), which improves overall patient care, increases nurse confidence in screening, prevents and addresses delirium, enhances interprofessional communication during rounds and helps patients function better after they are discharged.

Attending to patients’ ongoing physical, social and neurologic needs is vital and more important than ever with the many thousands of people being released from the ICU following treatment for COVID-19. But the pandemic made implementing the bundle challenging. SCCM adapted quickly, releasing educational materials developed in rapid cycle to help clinicians implement or continue to implement the ICU Liberation Bundle.

In 2020, SCCM launched the ICU Liberation hosted course. This two-day training features flexible learning options with presentations offered in-person or online. Simulation skill stations are offered to provide realistic training. While the course’s growth was slowed due to the pandemic, six sites hosted the ICU Liberation course in FY2021, including one held by the Northern California Chapter. Interest continues to grow in the United States and globally.
ICU Liberation has seen several other major milestones in its development as the premiere course aimed at improving outcomes and changing culture in the ICU.

**February 2020**
Epic and Cerner’s inclusion of the bundle in their electronic health record software puts these evidence-based practices at the fingertips of physicians, nurses, and other clinicians.

The two-day ICU Liberation hosted course at the 49th Critical Care Congress, focusing on training the trainers for the licensed course. The two-day course included expert-developed didactic lectures and hands-on skill stations to ensure a well-rounded learning experience.

**June 2020**
SCCM COVID-19 Rapid Resource Center included guidance on implementing or continuing implementation of the bundle during the pandemic.

**September 2020**
An Epic-hosted webcast was held highlighting the ICU Liberation bundle build. Over 600 registrants attended.

**October 2020**
The National Institutes of Health (NIH) COVID-19 guidelines incorporated the ICU Liberation Bundle (A-F).

**November 2020**
The ICU Liberation hosted course launched, allowing institutions to license the course and provide uniform patient management training to their clinicians.

**March 2021**
The ICU Liberation Implementation Toolkit was released, which included guidance to assist clinicians with implementation of the ICU Liberation Bundle.

**September 2021**
A Cerner-hosted webcast was held highlighting the ICU Liberation bundle build. Over 100 registrants attended.

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**Looking Ahead**
Guidelines for management of pediatric pain, agitation, neuromuscular blockade, immobility and sedation will be released in winter 2022. These guidelines will provide additional guidance for implementing the ICU Liberation Campaign in a pediatric setting.

Inclusion of the Pediatric ICU Liberation Bundle (A-F) into Epic and Cerner will be coming in early 2022.

Look for tools to implement the ICU Liberation Bundle (A-F) included in the upcoming Point of Care App from SCCM.
CHOOSING WISELY

In March 2021, SCCM published new Choosing Wisely for Critical Care recommendations, identifying best practices to avoid waste and promote value while providing critical care. The recommendations, released in collaboration with the American Board of Internal Medicine's (ABIM) Choosing Wisely Campaign, are in addition to the first five Choosing Wisely Campaign items released in 2015. The SCCM Quality and Safety Committee is charged with maintenance and suggestions for additions annually.

1. Don’t retain catheters and drains in place without a clear indication.
Patients in intensive care units typically require insertion of catheters and drains for fluid and medication delivery, pressure and flow monitoring, and fluid and gas evacuation. The majority of hospital-acquired infections and unintended safety events are associated with such devices. Daily assessment of need for invasive devices should be an essential element of critical care workflow, to reduce time of exposure by identifying the earliest opportunity for their discontinuation.

2. Don’t delay progress toward liberation from mechanical ventilation.
Although mechanical ventilation is frequently lifesaving, it is also associated with numerous complications. Discontinuation of mechanical ventilation support is frequently the rate-limiting step in ICU discharge. Current guidelines recommend removing patients from mechanical ventilation support as soon possible, utilizing mechanical ventilation liberation and sedation interruption protocols in concert with structured multidisciplinary rounds.

3. Don’t continue antibiotic therapy without evidence of need.
In addition to employing microbe-directed therapy, a core principle of antibiotic stewardship is limiting antimicrobial therapy to the shortest effective duration. As a general rule, antimicrobials should be discontinued when the condition for which they were prescribed has been adequately treated, as one strategy to ensure access to effective antimicrobials at a time when increased antimicrobial resistance represents a global health care challenge.

4. Don’t delay mobilizing ICU patients.
Patients can develop significant muscle weakness and atrophy (including the diaphragm) during their ICU stay due to immobilization. However, multidisciplinary facilitated early mobilization has been shown to be safe in the ICU setting. Numerous patient-centered, clinically meaningful outcomes are supported by early mobilization of critically ill patients.

5. Don’t provide care that is discordant with the patient’s goals and values.
The condition of ICU patients is often uncertain and dynamic, which generates stress for ICU families and the care staff. Accordingly, eliciting and documenting desired care preferences helps ensure the provision of goal-concordant care. Patients, families, and providers may participate as partners in shared decision-making to ensure that goals and values align with care that is offered and provided.
Sponsored by SCCM and supported by the CDC, the STOP-VIRUS Learning Collaborative launched in April 2021 as a six-month program. The goal of the STOP-VIRUS program was to foster a multisite learning system of U.S. hospitals currently participating in the VIRUS Registry to improve the processes of care delivered to patients with COVID-19. Using the principles of the Mayo CERTAIN program, the program focused on the following curriculum topics:

- Approach to Respiratory Failure in the COVID-19 Patient
- ICU Liberation Bundle (A-F): Implementation and Challenges
- Infectious Complications and Management of COVID-19
- Cardiovascular Complications: Venous Thromboembolism, Myocarditis, and Shock
- Shared Decision-Making and End-of-Life Care
- Fluids, Electrolytes, and Acute Kidney Injury

Participating sites engaged in quality improvement (QI) projects related to the curriculum topics. The STOP-VIRUS program concluded in September 2021 and published 11 learning modules to the SCCM STOP-VIRUS website. QI projects are ongoing through mid-2022, and several manuscripts are under development to highlight this work.

**STOP-VIRUS Learning Modules**

- COVID-19: Lessons from the Frontline
- Supporting Our Community: Well-Being, Moral Distress, and Burnout
- Challenges and Some of the Potential Solutions to Delivering Patient- and Family-Centered Care
- Managing Health Disparities in the Setting of Triage Decisions
- COVID-19-Associated Acute Kidney Injury
- Multisystem Inflammatory Syndrome in Children
- VTE and COVID-19: Anti-Xa Monitoring in VTE Prophylaxis: Is There a Role?
- COVID-19 Persistent and Recurrent Symptoms
- Treatments of Moderate and Severe COVID-19 Pneumonia
The Surviving Sepsis Campaign, a joint initiative with the European Society of Intensive Care Medicine, released "2021 International Guidelines for the Management of Sepsis and Septic Shock" in October 2021. These guidelines, published in Critical Care Medicine, provide guidance for clinicians caring for adult patients. Resources related to the guideline are available on the Surviving Sepsis Campaign website at survivingsepsis.org and include infographics, podcasts, webcasts, teaching slides, and summary videos to provide more detail and guidance for guidelines users.

In addition to guidelines for sepsis and septic shock, an update to the 2019 Surviving Sepsis Campaign COVID-19 guideline was published, "Surviving Sepsis Campaign Guidelines on the Management of Adults With Coronavirus Disease 2019 (COVID-19) in the ICU: First Update," published in Critical Care Medicine in March 2021, was released with an accompanying translation in Chinese.

**Pediatric Sepsis Definitions**

SCCM commissioned an international task force to develop definitions for pediatric sepsis. Several members of the taskforce applied for and received an award from the National Institutes of Health to fund data procurement and analysis across several international databases to assist with the development of the definitions.

A systematic review of relevant literature was approved for publication. The task force will continue its ongoing work into 2022 to contextualize definitions that may apply in variable resourced settings.
DONORS ARE VITAL

SCCM’s fundraising outreach includes donations from patients, family foundations, corporations, members, and others. The Society is grateful for this support.

Since 1990, SCCM has responded to more than 45 emergencies in the United States and worldwide, including terror attacks, hurricanes, earthquakes, and the COVID-19 pandemic. SCCM’s responses are varied and tailored to the needs of those affected.

In FY2021, SCCM responded to a number of disaster relief efforts funded through generous donations.

Trained more than 500,000 non-ICU clinicians to meet ICU patient surges

Provided free access to materials on crisis management to people impacted by Hurricane Ida

Deployed more than 1000 volunteer clinicians to areas experiencing extreme shortages of ICU clinicians

Funded free Fundamentals training classes for more than 800 learners in 15 underserved countries and seven U.S. states

Funded a tele-critical care platform to provide enhanced ICU capacity of disaster health services in affected communities in Haiti
Notably, SCCM forged a partnership with the humanitarian aid organization Direct Relief to organize donations of equipment and medications to hospitals hard-hit by COVID-19. This collaboration led to:

- **1,416** personal air-purifying respirators (PAPR) for Arizona, Florida and Texas
- **181,000** units of essential pharmaceuticals for Arizona, Florida, New York, South Dakota, Louisiana and Texas
- **140** oxygen concentrators and ventilators for New York City and south Texas
- **4,800** N95 masks for El Paso, Texas
- **300** fingertip pulse oximeters for El Paso, Texas

### New Direct Relief Collaborations This Year

- 200 portable oxygen concentrators to SOMITI Belo Horizonte in Minas Gerais, Brazil
- More than 10,000 oxygen concentrators and other requested medical supplies to India. Oxygen concentrators are among the most critical items needed to treat patients with severe COVID-19, who often arrive at hospitals with extreme hypoxemia
- PPE, diagnostic supplies, IV fluids, personal care items, and essential medications during Haiti earthquake relief

“Direct Relief is deeply grateful for the guidance and expertise of the Society of Critical Care Medicine. We are honored to collaborate with SCCM to distribute these kits to hospitals in areas that are hardest hit. The medications included can help to address some of the secondary complications associated with COVID-19 and fill a gap as drug shortages are being reported across the United States.”

Thomas Tighe, Direct Relief President and CEO

SCCM appreciates those who supported these vital causes. SCCM can accept tax-deductible donations of cash, securities, and other assets to support its work. SCCM also launched a planned giving program this fiscal year.
THANK YOU TO DONORS WHO PROVIDED GIFTS OF $250 OR MORE

$25,000+
Weil Family Foundation

$10,000-$24,999
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Jerry J. Zimmerman, MD, PhD, FCCM

$5,000-$9,999
Jeffrey P. Burns, MD, MPH
Fresenius Kabi USA LLC
Keith Killu, MD, FCCM
Pauline K. Park, MD, FCCM
PhaseBio Pharmaceuticals

$1,000-$4,999
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Mary J. Reed, MD, FCCM
Ellen S. Tenenbaum, MD
Ann E. Thompson, MD, MPCPM, MCCM
David H. Young, MD, BS, FCCM

$250-$999
Angelinka Alford
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Liza M. Weavind, MD, MBBC, FCCM
Julie Winkle, MD, FACEP, FCCM
RETAINING FINANCIAL STRENGTH

Financial Reports

SCCM enjoyed one of its best years on record with net program income of $1.4M, plus investment revenue of $6.5M. This increased organizational net assets to $46M, which will provide support as we look to 2022, which may prove challenging.

This strong result was primarily due to support from government, private foundation, and industry for the Society's COVID-19 response activities. The Society and its members responded to the pandemic quickly and effectively. The ability to adapt and pivot successfully in times of crisis while remaining committed to the mission was crucial.

Since its inception, SCCM has grown both programmatically and financially. The SCCM Council and staff leadership employ a conservative financial approach, putting aside resources into several reserve funds to support new program development and provide for emergency reserves should the need arise. Reserve funds grew to $33.6 million at the end of FY2021.

Over the past six years, the Society has received more than $12M in grant support from private foundations and government agencies to support initiatives such as COVID-19 Response, ICU Liberation, Surviving Sepsis Campaign, Fundamentals training, and patient and family care. The Society has an approved indirect cost rate of 36% from the Department of Health and Human Services, which is used to substantiate claims for indirect costs under grants and contracts awarded by the federal government, government agencies, and private foundations.

The SCCM Council will continue to invest in many new endeavors including technology platform upgrades, research program expansion, implementation of new diversity, equity and inclusion initiatives, and renovation of SCCM headquarters to support staff and volunteers in a more modern environment. Membership remains stable at approximately 16,000.

Audited financial statements are available for public inspection by contacting SCCM's Chief Financial Officer at bschramm@sccm.org or +1 847 827-6869.
SCCM enjoyed a strong year of financial performance in FY2021 with an overall net revenue of $7,866,125.

SCCM’s Commitment to Diversity, Equity, and Inclusion
SCCM, from its founding in 1970, dedicated itself to welcoming a diverse group of professionals all interested in improving care of the critically ill and injured. Early efforts focused on professional diversity and ensuring that the multiprofessional team was represented within SCCM and the SCCM leadership. To that end, physicians of all types, as well as nurses, pharmacists, respiratory therapists, and others had equal access to all programs and to all levels of leadership. All statutory members, regardless of training pathway, were full voting members, and seats on the SCCM Council (board of directors) were allocated to these professions to ensure representation.

Diversity Statement
SCCM values and seeks diversity and inclusive practices within the critical care profession and within the SCCM organization. SCCM promotes involvement, innovation, and expanded access to leadership opportunities that maximize engagement across diverse populations. SCCM will provide leadership and will commit time and resources to accomplish this objective, focusing particularly on increasing participation of underrepresented groups. Securing the highest-quality care for all critically ill and injured patients is SCCM’s goal.

Embedding Diversity, Equity, and Inclusion in SCCM
SCCM broadened its focus in 2017 with the creation of the Diversity, Equity, and Inclusion (DEI) Committee, moving from a more singular focus on multiprofessional representation to active involvement in ensuring that all programs, policies, and leadership align with the lived experiences of our diverse membership including but not limited to age, ethnicity, ability, gender, sexual orientation, gender identity, geographic location, language, and practice setting.

To assist in this effort, the Society broadened its demographic data collection activities to better understand the diversity of its membership and to use these data to ensure that a highly diverse group of volunteers leads the development of SCCM programs and policies. The diverse nature of every SCCM workgroup and leadership can be ascertained by a glance at the management dashboard. The dashboard is used during the appointment and election process to ensure a diversified volunteer workforce, who make all SCCM programs and activities possible. Filling key positions with diverse leaders further demonstrates SCCM’s commitment to inclusion and encourages further diversity in our ranks.
### Creative Community Diversity in Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 &amp; YOUNGER</td>
<td>0.5%</td>
</tr>
<tr>
<td>20-30 YEARS</td>
<td>6%</td>
</tr>
<tr>
<td>31-40 YEARS</td>
<td>31%</td>
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<tr>
<td>41-50 YEARS</td>
<td>24%</td>
</tr>
<tr>
<td>51-60 YEARS</td>
<td>18%</td>
</tr>
<tr>
<td>61-70 YEARS</td>
<td>15%</td>
</tr>
<tr>
<td>71-80 YEARS</td>
<td>4.5%</td>
</tr>
<tr>
<td>OVER 80 YEARS</td>
<td>1%</td>
</tr>
</tbody>
</table>

During 2020, SCCM updated and made more transparent its Standards of Professional Conduct to include specific statements related to the DEI initiatives and also to clarify how SCCM manages professional misconduct allegations. The revised standards now include these specific statements, among others:

- Cultivating and promoting a harassment-free environment
- Ensuring an environment of inclusivity

In 2021, SCCM joined with the Council of Medical Specialty Societies and the Accreditation Council for Graduate Medical Education in the ACGME Equity Matters project. This is a new initiative that introduces a framework for continuous learning and process improvement in the areas of diversity, equity, inclusion, and antiracism practices. The initiative aims to drive change within graduate medical education by increasing physician workforce diversity and building safe and inclusive learning environments while promoting health equity by addressing racial disparities in healthcare and overall population health.

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Help SCCM better under the diversity of its members! Visit [sccm.org/profile](http://sccm.org/profile) and ensure your member profile, including demographic information, is complete!
Health equity means ensuring that everyone can achieve their best health outcomes. Unfortunately, many social and environmental factors can limit access to optimal healthcare, particularly critical care. While SCCM has a long-standing commitment to providing low-cost education and free journal access to under-resourced and underserved communities, beginning in 2020 this work was expanded to include providing cash funding in conjunction with free training to help these healthcare centers improve their care of critically ill patients. SCCM chapters are also reaching out to clinicians in underserved communities to engage with them in education, training, and improvement. With the help of foundation and government partners, SCCM has committed $600,000 to support this program during the past year. SCCM also launched FCCS: Resource Limited, which combines expert-developed lectures with hands-on skill stations to prepare healthcare professionals for the unique challenges faced when resources are limited. Additionally, SCCM’s online journal, Critical Care Explorations, waives fees for authors in limited-resourced countries.

SCCM also coordinates volunteer leaders to go to sites with the greatest need to lead training and to enhance the provision of care, as it did with hospitals of the U.S. Indian Health Service in 2020. Further, SCCM has distributed pallets of needed medical supplies such as ventilators, personal protective equipment, and pharmaceuticals typically used in the ICU, valued at over $10.5M to hospitals both in the United States and globally. The Society has also organized and funded research to better understand barriers to implementation of best practices in under- and low-resourced locations. The lessons learned from this research will assist the Society in developing clinical practice guidance and educational programming that can be used to improve care in these settings.

The Society uses its connections with institutions including those with federal health agencies to bring health equity issues to the forefront. For example, in March 2021, SCCM discussed with the U.S. Food and Drug Administration our long-standing concerns regarding the accuracy of pulse oximetry across the spectrum of patient populations, particularly among those with darker skin color. We remain committed to working with our broad network of partner organizations to address issues of health equity related to care of the critically ill.
2021 was a pivotal year for SCCM and its members. Critical care clinicians persevered through some of the most challenging times ever seen and stayed true to the mission—providing the highest-quality care for all critically ill and injured patients. SCCM is dedicated to ensuring that this message continues to be heard, its members are supported, vital programs are implemented or strengthened, and research continues to provide valuable insights that will impact the future of critical care.
Thank you for continuing on this journey with us.

Society of Critical Care Medicine
The Intensive Care Professionals

Learn more at sccm.org