Applying Human Factors in Health Care: Leveraging Multidisciplinary Approaches to Improve Patient Safety

OCTOBER 1-3, 2008

Phillips Hall, Siebens Building
Mayo Clinic
Rochester, Minnesota

Register Today!

Mayo School of Continuing Medical Education in cooperation with Mayo Continuing Nursing Education
Dear Colleague,

Improving patient safety has become a top priority for health care institutions worldwide. In 1999, it was estimated that as many as 98,000 patients are harmed by preventable human error in the health care setting. While the increased focus on human error has led to improvement, we can continue to progress. The complex challenge to improve safety can not truly be addressed without a new perspective and a collaborative multidisciplinary effort from all aspects of the system of care.

We would like to invite you to join us for the upcoming Mayo Clinic Applying Human Factors in Health Care: Leveraging Multidisciplinary Approaches to Improve Patient Safety, the third annual meeting. Health care institutions are striving for improvement, and this conference will provide practical tools to improve patient safety and integrate human factors into practice at your institution. Leading experts from all disciplines and specialties will provide their insights on improving health care through the application of human factors principles.

The Mayo Clinic Applying Human Factors in Health Care: Leveraging Multidisciplinary Approaches to Improve Patient Safety course will provide the latest information for physicians, nurses, administrators, quality personnel, and any other health care professionals interested in improving care for our patients.

Please join us in Rochester October 1-3 for a premier education opportunity on the application of human factors in health care.

Sincerely,
Thoralf M. Sundt, MD
Laurence Torsher, MD
Sarah Henrickson, MA

Program Highlights

- Human-system interaction and the application of patient safety principles within the complexities of contemporary health care
- Case studies from successful projects at various institutions
- Technical how-to for integrating human factors principles into practice
- Collaborative problem solving leveraging a multidisciplinary approach
- Workshops to highlight application of human factors within specific clinical settings
- Technical how-to for investigating human error and developing solutions
- Creating a safety of culture

Course Description

Improving patient safety continues to be a top priority in health care worldwide. An important tool to accomplish this goal is Human Factors science, the study of how humans perform physically and psychologically within their work environments. The aim of the third annual Applying Human Factors in Health Care conference is the application of human factors principles in specific care settings, including the operating room, the emergency room, and the inpatient and outpatient setting.

This goal can best be accomplished through an integrated multifunctional team approach. Accordingly, the target audience for this conference is health care teams including physicians, nurses, administrators, and safety, quality, and human factors professionals.

Join us in building a learning community as we explore solutions to common challenges in patient safety.
Course Learning Objectives

Upon conclusion of this program, participants should be able to:

• Explain the principles of Human Factors, citing specific cognitive, interpersonal, physical, and system factors that can affect human performance.
• Integrate Human Factors principles and analysis techniques into practice.
• Evaluate the impact Human Factors have in current clinical processes and environments.
• Integrate Human Factors analysis into the examination of potential practice and process improvements.

Attendance at this Mayo course does not indicate nor guarantee competence or proficiency in the performance of any procedures, which may be discussed or taught in this course.

Poster Session

As part of the course, a poster/storyboard session is scheduled to present patient safety and quality projects. If you or a member of your team has a research project or pertinent safety information to share, submit a 500-word abstract or proposal to humanfactors@mayo.edu no later than August 29, 2008. All primary authors will be notified by September 5, 2008 if the submission is selected for the poster session. Details regarding poster set up will also be provided.

Abstracts chosen for presentation will be printed in the course syllabus. The poster session will be held on Thursday, October 2, 2008 starting at 4:30 p.m. Poster presenters are expected to attend the course and pay the registration fee.

For more information, please send email to humanfactors@mayo.edu.

CREDIT

College of Medicine, Mayo Clinic is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

College of Medicine, Mayo Clinic designates this educational activity for a maximum of 16 AMA PRA Category 1 Credit(s)™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Mayo Continuing Nursing Education is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center’s Commission on Accreditation.

Participants can earn up to 16 accredited nursing contact hours.

A certificate of attendance will be provided to other health care professionals for requesting credits in accordance with state nursing boards, specialty societies, or other professional associations.

Human Factors Karaoke

Got a challenge you think could benefit from some human factors input? This year, the course will feature a ‘Human Factors Karaoke’ session – facilitated case discussions by attendees and faculty designed to foster sharing of best practice and challenge the limits of current systems. This session is designed to foster maturation of our learning community and to engage the group in collective problem solving. Attendees are encouraged, but not required, to bring their own cases to share. Be prepared to give a three sentence description of your case, challenges, or experience at the open microphone.
Welcome Reception

Wednesday, October 1
Attendees and their guest(s) are cordially invited to join the course faculty for the Welcome Reception. This casual reception with light hors d’ouvres welcomes you to Rochester and offers you the perfect opportunity to make connections with existing and new colleagues. Pre-registration is requested.

Post-Course Conference Simulation Center Lab

Friday, October 3
This post-conference is designed specifically for cardiothoracic surgical participants interested in learning more about extra-corporeal circulation and perfusion-related issues. This session will expose participants, through simulation, to challenging events in the cardiothoracic operating room, and enable them to learn skills of pump management, teamwork and communication, and error management. A working knowledge of cardiopulmonary bypass techniques is required. NOTE: There is limited registration for the post-course conference. Please email Jeffrey Riley, CCP for more information at riley.jeffrey@mayo.edu.

There is no AMA PRA Category 1 credit provided for the post-course conference.

Registration

To register online, visit http://www.mayo.edu/cme/oct2008.html#2008R972, or complete the attached registration form and return by mail or fax. The registration fee includes tuition, course syllabus, continental breakfasts, and break refreshments. Although it is not Mayo School of CME policy to limit the number of registrants for a course, conference room facilities may necessitate closing of enrollment; therefore, early registration is advised. A letter of confirmation will be sent upon receipt of payment and completed registration form. Please present the confirmation letter when checking in at the course registration desk.

Cancellation Policy

If you cancel your participation in the course, your registration fee, less a $75 administrative fee, will be refunded when written notification is received by Mayo School of CME before September 17, 2008 (fax: 507-284-0532). No refunds will be made after September 17, 2008.

Mayo School of CME reserves the right to cancel or postpone any course due to unforeseen circumstances. In the unlikely event Mayo School of CME must cancel or postpone this course, Mayo School of CME will refund the registration fee, but is not responsible for any related costs, charges, or expenses to participants, including fees assessed by airline/travel/lodging agencies.

Travel

Rochester, Minnesota, is a friendly city that greets thousands of visitors from around the world each year. The city is serviced by an airport with multiple flights daily from Chicago and Minneapolis via American or Northwest Airlines. Access to and from the airport is provided by taxi, shuttle service, and rental car. The airport is located approximately 10 miles from the Mayo Clinic campus.

Note to Travelers: Several cities in the United States are named Rochester. When you make airline reservations and check your baggage, be sure that your destination is Rochester, Minnesota (RST) and that your baggage has been properly tagged.
Lodging Accommodations

Guest rooms have been reserved for attendees and their guests with special course rates. In order to receive the special rate, reservations must be made before the room block is filled or before the expiration date of September 9, 2008, whichever comes first. Reservations made after this date are subject to space and rate availability at the hotel. Please indicate that you are a participant of the Mayo Clinic course on Applying Human Factors in Health Care.

The hotels listed are connected by skyway and pedestrian subway to conference facilities, downtown shops, and restaurants. You may also wish to visit the Rochester Convention and Visitors Bureau website (www.rochestercvb.org) for additional accommodation options.

Hilton Garden Inn
225 South Broadway
800-445-8667 or 507-285-1234
$96 single/double

Kahler Grand Hotel
20 Second Avenue SW
800-533-1655 or 507-282-2581
$92 single/double

Radisson Plaza Hotel
150 South Broadway
800-333-3333 or 507-281-8000
$104 single/double

Rochester Marriott Hotel
101 First Avenue SW
877-623-7775 or 507-280-6000
$135 single/double

Parking

Parking is available in hotel, city, and Mayo patient/visitor ramps. The cost for parking is not included in the registration fee. Parking is not validated by Mayo Clinic for this course.

Faculty

Course Directors
Thoralf M. Sundt III, MD
Laurence C. Torsher, MD
Sarah E. Henrickson, MA

Guest Faculty
Jamie Dickey, PhD
Director, Interdisciplinary Education Executive Coach
Oregon Health & Science University

Terry Fairbanks, MD, MS, FACEP
University of Rochester, NY

Jill Garrett, RN
Memorial Hospital System
Blair Marshall, MD
Georgetown University Hospital
Julie Morath, RN, MS
Children’s Hospital of Minneapolis
John Reiling, MBA, MHA
Safe by Design, LLC
J. Bryan Sexton, PhD
The Johns Hopkins University School of Medicine
Bruce Spiess, MD
Virginia Commonwealth University
Kathleen Sutcliffe, PhD
University of Michigan, Ross School of Business
Ross Ungerleider, MD
Oregon Health & Science University
Douglas Wiegmann, PhD
University of Wisconsin, Madison
Laurie Wolf, MS, CPE
Barnes-Jewish Hospital

Mayo Faculty
Jacqueline Arnold, MSN, RN
Dennis Manning, MD
David Martin, MD, PhD
Jeffrey Riley, CCP
Lori Scanlan-Hanson, MS, RN
Nicola Schiebel, MD
Thomas Suther, MS
Steven Swensen, MD

Planning Committee
Jacqueline J. Arnold, MSN, RN
Leslie S. Redinger, M Ed
Thomas W. Suther, MS
Diane Wottreng, BS
### Program Schedule

#### Wednesday, October 1, 2008

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:30</td>
<td>Registration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phillips Hall,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Siebens Building</td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td>Welcome</td>
<td></td>
</tr>
<tr>
<td>12:10</td>
<td>Leading Transformational Change in Your Organization</td>
<td>Steven Swensen, MD</td>
</tr>
<tr>
<td>12:25</td>
<td>Course Outline/ Objectives</td>
<td>Sarah Henrickson, MA</td>
</tr>
<tr>
<td>12:30</td>
<td>The Science of What Makes Us Human: Basics of Cognition and Human Factors</td>
<td>Sarah Henrickson, MA Douglas Wiegmann, PhD</td>
</tr>
<tr>
<td>1:00</td>
<td>Chaos, Normal Errors and Systems Thinking</td>
<td>Dennis Manning, MD</td>
</tr>
<tr>
<td>1:30</td>
<td>Discussion</td>
<td></td>
</tr>
<tr>
<td>1:50</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>2:10</td>
<td>Principles of Teamwork and Crew Resource Management</td>
<td>Jacqueline Arnold, MSN Laurence Torsher, MD</td>
</tr>
<tr>
<td>2:40</td>
<td>Human-Human Interaction: Human Influences on Patient Safety</td>
<td>Ross Ungerleider, MD Jamie Dickey, PhD</td>
</tr>
<tr>
<td>3:10</td>
<td>Creating a Safe Culture: The View from the Sharp End</td>
<td>Thoralf M. Sundt, MD</td>
</tr>
<tr>
<td>4:00</td>
<td>Human Factors Karaoke: Collaborative Problem Solving</td>
<td>Blair Marshall, MD Jill Garrett, RN</td>
</tr>
<tr>
<td>5:00</td>
<td>Welcome Reception</td>
<td>Marriott Ballroom Foyer</td>
</tr>
</tbody>
</table>

#### Thursday, October 2, 2008

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30</td>
<td>Continental Breakfast</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phillips Hall,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Siebens Building</td>
<td></td>
</tr>
<tr>
<td>8:00</td>
<td>Welcome</td>
<td>Sarah Henrickson, MA</td>
</tr>
<tr>
<td>8:10</td>
<td>Characteristics of High Reliability Organizations and How to Get There</td>
<td>Kathleen Sutcliffe, PhD</td>
</tr>
<tr>
<td>8:40</td>
<td>Building Your ‘Tool-Kit’: Human Factors Methods and How to Use Them</td>
<td>Thomas Suther, MS</td>
</tr>
<tr>
<td>9:10</td>
<td>Discussion</td>
<td></td>
</tr>
<tr>
<td>9:30</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>9:50</td>
<td>Human-System Interaction: Organizational Influences on Patient Safety</td>
<td>J. Bryan Sexton, PhD</td>
</tr>
<tr>
<td>10:20</td>
<td>Integrating Human Factors into Design of Systems to Improve Patient Safety</td>
<td>Terry Fairbanks, MD</td>
</tr>
<tr>
<td>10:50</td>
<td>Discussion</td>
<td></td>
</tr>
<tr>
<td>11:10</td>
<td>Break</td>
<td></td>
</tr>
</tbody>
</table>
11:30 a.m.  **Who is Responsible: Collective Responsibility and System Analysis**  
*J. Bryan Sexton, PhD*

12:00 p.m.  **Discussion**

12:30 p.m.  **Lunch** – Marriott Hotel Courtyard

1:30 p.m.  **Concurrent Workshops**  
(Select one workshop for the afternoon. Pre-registration is not required)

**Operating Room Workshop**  
Phillips Hall, 1st Floor, Siebens Building  
Thoralf M, Sundt, MD  
Sarah Henrickson, MA  
Jeffery Riley, CCP  
Laurence Torsher, MD  
Bruce Spiess, MD

**Topics:**  
- Communication - Preoperative Briefing  
- Design of Cardiopulmonary Bypass Pump  
- Teamwork in the OR - Surgical Flow Disruptions  
- Information exchange in the OR

**Emergency Department Workshop**  
Leighton Auditorium, 2nd Floor Siebens Building  
Nichola Schiebel, MD  
Lori Scanlan-Hanson, RN

**Topics:**  
- Teamwork  
- Fatigue  
- Decision making  
- Devices

**Inpatient & Outpatient Workshop**  
Conference Room 405, 5th Floor, Siebens Building  
(Seating is limited to 70 people; arrive early)  
Dennis Manning, MD

**Topics:**  
- Doccurhea and doccumania: Twin Enemies of Precision, Concision, Synthesis, and Situation Awareness  
- Evidence Based Medicine and Human Factors Culture  
- Play it Again, Sam! Why our first intervention usually flops…  
- Improving patient safety at the bedside

4:30 p.m.  **Poster Session**  
Leighton Auditorium Foyer  
Refreshments will be provided.
Program Schedule

Friday, October 3, 2008

7:30 a.m.  Continental Breakfast
Phillips Hall, Siebens Building

Session Focus:
Make It Work: Applying Human Factors in Health Care

8:00 a.m.  Welcome
Sarah Henrickson, MA

8:10 a.m.  Taking the Pulse: Error Reporting System Design
David Martin, MD, PhD

8:40 a.m.  Incident Analysis and Human Error Investigation Techniques
Douglas Wiegmann, PhD

9:10 a.m.  Discussion

9:30 a.m.  Break

9:50 a.m.  Implementing HF in Your Organization: Barnes Jewish Hospital
Laurie Wolf, MS, CPE

10:20 a.m.  Implementing HF in Your Organization: St. Joseph’s Hospital
John Reiling, MBA, MHA

10:50 a.m.  Getting to the Tipping Point
Julie Morath, RN, MS

11:30 a.m.  Panel Discussion
David Martin, Laurie Wolf, Tom Suther, John Reiling, and Julie Morath

12:00 p.m.  Adjourn

Post-Course Conference
Cardiothoracic Resident Perfusion Training Simulation Center

This post-conference course is for cardiothoracic surgical and anesthesia residents. It is designed to provide residents with both an orientation to extra-corporeal circulation, and experience with perfusion techniques through simulation based training. This course will educate residents regarding perfusion-related issues to improve performance on the board exam.

Contact Jeffrey Riley, CCP at riley.jeffrey@mayo.edu or Harold Burkhart, MD at burkhart.harold@mayo.edu for more information. Space is limited.

October 3 - Day 1

1:00 p.m.  Multidisciplinary Simulation Center
1st Floor, Stabile Building

5:30 p.m.  Adjourn

October 4 - Day 2

8:00 a.m. to 5:00 p.m.
Human Factors in Health Care: Practical Applications to Improve Patient Safety

October 1-3, 2008, Mayo Clinic, Phillips Hall, Siebens Building, Rochester, MN

Register online at http://www.mayo.edu/cme/oct2008.html#2008R972

Or

Mail form and payment to:
Mayo School of Continuing Medical Education
Plummer 2-60
200 First Street SW
Rochester, MN 55905

Phone 800-323-2688 or 507-284-2509
FAX 507-284-0532
E-mail cme@mayo.edu
Web site www.mayo.edu/cme

Contact Information

Registar Name – first name, middle name or initial, and last name
Degree – select all that apply
MD  DO  PhD  PA  NP
Other - specify

Institution Name
Medical Specialty

Preferred Mailing Address – select one
Work/Business  Home

Work/Business Address – street address

City
State or Province
ZIP or Postal Code
Country

Home Address – street address

City
State or Province
ZIP or Postal Code
Country

E-mail Address
FAX – include all country and city/area codes as needed along with complete phone number

FAX Location – select one
Work/Business  Home

If you have special assistance needs or dietary restrictions, describe here:

Registration

Type of credit you are interested in receiving: [ ] AMA PRA Category 1 Credit(s)™

Yes, I will attend: [ ] Welcome Session, October 1  [ ] Poster Session, October 2

Post-Course Conference:
Perfusion Training Simulation Center Lab (non-Mayo participants only): $200 $ ________

Registration Fee:
Physician/Scientist: $475 $ ________
Society Members (AmSect, SCA, STS, etc.): $425 $ ________
Residents, Nurses, Students, Others: $360 $ ________

Payment Information

[ ] Check is enclosed in the amount shown at right – make checks payable to Mayo Clinic

Credit Card – select one
Account Number
Exp Date – mm/yy

Name of Cardholder – as it appears on the card
Signature of Cardholder – required

X
Applying Human Factors in Health Care: Leveraging Multidisciplinary Approaches to Improve Patient Safety

October 1-3, 2008
Phillips Hall,
Siebens Building
Mayo Clinic
Rochester, MN

If you already received a copy of this brochure, please give this brochure to an interested colleague.