

CQPI

To rise to the challenge of the international quality revolution, the Center for Quality and Productivity Improvement (CQPI), a research center, was founded in October of 1985. Since its inception, CQPI has been at the forefront in the development of new techniques for improving the quality of products and processes.

Today, CQPI's Systems Engineering Initiative for Patient Safety (SEIPS) is the foremost leader in a comprehensive application of Human Factors and Systems Engineering to the patient safety challenge. CQPI/SEIPS is the recipient of multiple Federal, foundation, and industry supported research projects for patient safety, quality of healthcare processes, quality of working life and human factors approaches for improved technology implementation. The various project teams on these studies are multidisciplinary, including investigators and partners in Human Factors and Systems Engineering, Nursing, Medicine and Pharmacy.

Statement of Need

This short course is designed to provide an understanding of human factors and systems engineering and how this approach to patient safety can improve performance, prevent harm when error does occur, help systems recover from error, and mitigate further harm.

Intended Audience

This educational activity is designed for all physicians, nurses, physician assistants, pharmacists, engineers, patient safety officers, and other professionals interested in human factors engineering and patient safety.

Specific Learning Objectives

At the conclusion of this activity, participants should be able to:

- Identify the objectives of human factors engineering
- Promote the use of human factors engineering to minimize patient related error
- Recognize the difference between micro and macro human factors engineering approaches
- Summarize what a system is, and what are the implications for its design
- Target and evaluate medical device design and usability issues for patient safety
- Identify cognitive ergonomics issues, such as information processing and human error
- Understand organizational issues related to patient safety (e.g. transitions of care, communication, teamwork, process analysis)
- Ability to assess the physical environment for patient safety associated issues
- Give examples of physical environment issues and patient safety
- Improve situational awareness
- Improve workload management
- Identify human characteristics, capabilities and limitations
- Recognize interfaces between job, person and environment
- Attain skills in the HFE method of usability testing and how it fits into healthcare information technology
- Understand how HFE can help HIT implementation
- Assess the impact of HIT on patient care processes

Schedule

SEIPS PART I Basic Human Factors (HF)

Monday 8-14-06

7:30-8:30am	Breakfast and Registration	
8:30-9:00am	Overview and Course Objectives	Dr. Pascale Carayon
9:00-10:00am	Overview of Human Factors Engineering and Patient Safety	Dr. Kerm Henriksen
10:00-10:15am	<i>Break</i>	
10:15am-12:00pm	What is Human Factors Engineering, What is an Error and What is a System-1	Dr. Ben-Tzion Karsh
12:00-1:00pm	<i>Lunch</i>	
1:00-2:45pm	What is Human Factors Engineering, What is an Error and What is a System-2	Dr. Ben-Tzion Karsh
2:45-3:00pm	<i>Break</i>	
3:00-5:00pm	The Physical Environment and Ergonomics	Dr. Carla J. Alvarado
5:00-6:30pm	<i>Reception</i>	Attendees and Faculty

Tuesday 8-15-06

7:30-8:30am	Breakfast and Conversation	
8:30-10:30am	Technology Design and Usability	Dr. John W. Gosbee
10:30-10:45am	<i>Break</i>	
10:45am-12:00pm	Technology Design and Usability	Dr. John W. Gosbee
12:00-1:00pm	<i>Lunch</i>	
1:00-2:45pm	Cognitive Ergonomics	Dr. Pascale Carayon
2:45-3:00pm	<i>Break</i>	
3:00-5:00pm	Job and Organizational Issues	Dr. Robert L. Wears Dr. Pascale Carayon

Wednesday 8-16-06

7:30-8:30am	Breakfast and Conversation	
8:30-10:00am	Case Studies and Applications	Attendees and Faculty
10:00-10:15am	<i>Break</i>	
10:15-11:30am	Role of Healthcare Provider	Dr. Robert L. Wears
11:30am-12:00pm	Wrap-up and Evaluations	Faculty
12:00pm	<i>Lunch</i>	

SEIPS PART II HIT

Wednesday 8-16-06

12:00-1:00pm	Lunch and Registration	
1:00-1:30pm	Overview and Course Objectives	Dr. Pascale Carayon
1:30-2:30pm	Overview of Human Factors Engineering and Healthcare Information Technology	Dr. Patricia Flatley Brennan
2:30-4:00pm	HIT - The Good, The Bad, and The Ugly... How Human Factors Engineering Can Help	Dr. Robert L. Wears
4:00-4:15pm	<i>Break</i>	
4:15-5:30pm	Human Factors Engineering Principles of HIT Design	Dr. Ann Schoofs Hundt
5:30-6:30pm	<i>Reception</i>	Attendees and Faculty

Thursday 8-17-06

7:30-8:30am	Breakfast and Conversation	
8:30-10:30am	Usability of Healthcare Information Technology - Practical Experience	Dr. Ann Schoofs Hundt
10:30-10:45am	<i>Break</i>	
10:45am-12:00pm	Usability of CPOE technology	Mr. Stephen V. Douglas
12:00-1:00pm	<i>Lunch</i>	
1:00-2:45pm	Impact of HIT on Patient Care Processes and Tasks	Dr. Pascale Carayon, Dr. Carla J. Alvarado
2:45-3:00pm	<i>Break</i>	
3:00-5:00pm	Impact of HIT on Patient Care Processes and Tasks	Dr. Pascale Carayon

Friday 8-18-06

7:30-8:30am	Breakfast and Conversation	
8:30-10:00am	Human Factors of Implementing HIT	Dr. Ben-Tzion Karsh
10:00-10:15am	<i>Break</i>	
10:15-11:30am	Human Factors of Implementing HIT <i>Box Lunch available</i>	Dr. Ben-Tzion Karsh
11:30am-2:00pm	HFE and HIT - A Provider's Conversion Experience	Dr. Matthew C. Scanlon
2:00-2:30pm	Wrap-up and Evaluations	Faculty

Faculty



Pascale Carayon, PhD
Director CQPI, Procter & Gamble Bascom Professor in Total Quality, Industrial and Systems Engineering, University of Wisconsin-Madison, Madison, WI



Carla J. Alvarado, PhD, CIC
Research Scientist, CQPI and SEIPS Short Course Coordinator, University of Wisconsin-Madison, Madison, WI



Patricia Flatley Brennan, RN, PhD, FAAN, Moehlman Bascom Professor School of Nursing and Industrial and Systems Engineering, University of Wisconsin-Madison, Madison, WI



Stephen V. Douglas, RN-C, MSN, MS, Assistant Researcher, CQPI, University of Wisconsin-Madison, Madison, WI



John W. Gosbee, MD, MS
Human Factors Engineering and Health Care Consultant, Ann Arbor, MI



Kerm Henriksen, PhD
Senior Staff Fellow, Agency for Healthcare Research and Quality (AHRQ), Rockville, MD



Ann Schoofs Hundt, PhD
Research Scientist, CQPI, University of Wisconsin-Madison, Madison, WI



Ben-Tzion Karsh, PhD
Assistant Professor, Industrial and Systems Engineering, University of Wisconsin-Madison, Madison, WI



Robert L. Wears, MD
Professor, Emergency Medicine and Director of Medical Informatics, University of Florida College of Medicine, Jacksonville, FL



Matthew C. Scanlon, MD
Associate Medical Director of The Pediatric Intensive Care Unit and Assistant Professor of Pediatrics, Medical College of Wisconsin, Milwaukee, WI

General Information

Dates: August 14-18, 2006

Place: The Pyle Center
702 Langdon Street
Madison, WI 53706

Phone: 608/262-1122

Fax: 608/262-8516

Conference Housing

Blocks of rooms are reserved at the following hotels. Please call or write to the hotels directly to reserve your accommodation. Be sure to reference the short course CQPI/SEIPS to receive the special room rate.

DoubleTree® Hotel – Madison

25 West Johnson Street, Madison, WI 53703
www.doubletree.hilton.com
Phone: 608/251-5511 Fax: 608/251-4824
Rates: \$109.00 single/\$109.00 double
Reservations must be made prior to July 14, 2006

The Campus Inn

601 Langdon Street, Madison, WI 53703
Phone: 608/257-4391 or 800/589-6285
Fax: 608/257-2832
www.thecampusinn.com
Rates: \$115.00 single/\$130.00 double
Reservations must be made prior to July 14, 2006

Conference Fees

- \$1,500 **Part I only** - First Registrant from an Organization
- \$1,000 **Part I only** - Each Additional Registrant from the Same Organization
- \$1,500 **Part II only** - First Registrant from an Organization
- \$1,000 **Part II only** - Each Additional Registrant from the Same Organization
- \$1,250 **Part II only** - 2004 & 2005 Part I Short Course Attendees
- \$2,200 **Part I and Part II** - First Registrant from an Organization
- \$2,000 **Part I and Part II** - Each Additional Registrant from the Same Organization

Accreditation Statement

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the University of Wisconsin School of Medicine and Public Health and the University of Wisconsin-Madison, Center for Quality and Productivity Improvement (CQPI). The University of Wisconsin School of Medicine and Public Health is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Credit Designation Statement

The University of Wisconsin School of Medicine and Public Health designates this educational activity for a maximum of 34.25 *AMA PRA Category 1 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Continuing Education Units

The University of Wisconsin-Madison, as a member of the University Continuing Education Association (UCEA), authorizes this program for 3.425 continuing education units (CEUs) or 34.25 hours.

Policy on Faculty and Sponsor

Disclosure As a sponsor accredited by the ACCME, it is the policy of the University of Wisconsin School of Medicine and Public Health to require the disclosure of the existence of any significant financial interest or any other relationship a faculty member or a sponsor has with either the commercial supporter(s) of this activity or the manufacturer(s) of any commercial product(s) discussed in an educational presentation. Detailed disclosure will be made in the course handout materials.

The conference fee includes the cost of tuition, materials, an opening reception, breakfasts, refreshment breaks, lunches, and a nonrefundable registration fee of \$50. Should you cancel your registration up to 72 hours prior to the conference; you will be refunded the entire conference fee except the \$50 nonrefundable portion. No refunds will be made after that time.

Four Easy Ways To Register

By Mail: Return your completed registration form and payment (Step 5 registration form)

By Phone: 608/262-1397.
Please call and give your billing information or pay by MasterCard, VISA, or American Express

By Fax: 1-800/741-7416
(in Madison Fax 265-3163)

On Line: www.cme.wisc.edu

Confirmations

All registrations are confirmed in writing. If you do not receive a confirmation, please call 608/262-1397.

Conference Attire

Since meeting room temperatures and personal comfort levels vary, it is recommended that you bring a sweater or jacket.

For Further Information

Dr. Carla J. Alvarado,
CQPI, 575 WAREF, 610 Walnut Street, Madison, WI 53726; telephone 608/263-2678 or 608/263-2520; calvarado@cqpi.engr.wisc.edu

Terese Bailey
Office of Continuing Professional Development in Medicine and Public Health,
2701 International Lane, #208, Madison, WI 53704; 608/240-2141; tmbailey@wisc.edu

Registration Form

#4029 ame-cqpi

SEIPS Short Course on Human Factors Engineering and Patient Safety

▪ Part I and Part II

Part I: August 14-16, 2006 ▪ Part II: August 16-18, 2006

Please complete Steps 1-5 below in BLOCK letters

Step 1. Participant Information:

Name _____
First MI Last

Professional Degree (for credit & name badge) _____

Company Name _____

Dept. Name or Mail Code _____

Work Address _____

City, State, Zip _____

Day Phone _____

FAX _____

E-mail _____

I request vegetarian options for my meals

Step 2. Confirmation:

Work Address (as provided in Step 1) - or - Home Address

Home Address _____

City, State, Zip _____

Step 3. Registration Fees:

- \$1,500 Part I only - First Registrant from an Organization
- \$1,000 Part I only - Each Additional Registrant from the Same Organization
- \$1,500 Part II only - First Registrant from an Organization
- \$1,000 Part II only - Each Additional Registrant from the Same Organization
- \$1,250 Part II only - 2004 & 2005 Short Course Attendees
- \$2,200 Part I and Part II - First Registrant from an Organization
- \$2,000 Part I and Part II - Each Additional Registrant from the Same Organization

TOTAL FEE REMITTED:

____ PO or check enclosed (payable to University of Wisconsin)

____ Please bill my company

____ Credit Card: MasterCard; VISA; American Express

Cardholder's Name _____

Card Number _____

Expiration Date _____

Step 4. Where did you learn about this short course? *Check all that apply*

Colleague Brochure Advertisement Internet Other _____

Step 5. Please return your payment with this form to:

Kathy Kneebone, The Pyle Center, 702 Langdon Street, Madison, WI 53706
or Fax 1-800/741-7416 (in Madison Fax 265-3163).

Quotes from past course attendees:

"Great course! Very valuable for the work I do. Thank you for all you did to get a Human Factors and Patient Safety course up and going."

"Excellent program...I received practical tools I can use immediately back at my hospital."

"The SEIPS model is a very helpful framework for thinking and problem solving, not only in patient safety but in all aspects of healthcare."

"I cannot wait for next year's SEIPS course Part II! The faculty makes me want to learn more and more about Human Factors and a systems approach to my patient care practices."

The University of Wisconsin provides equal opportunities in employment and programming, including Title IX requirement. The University of Wisconsin School of Medicine and Public Health fully complies with the legal requirements of the ADA and the rules and regulations thereof. If any participant in this educational activity is in need of accommodations, please notify Dr. Carla J. Alvarado in order to receive service. Please call 608/263-2678.

**Systems Engineering Initiative for
Patient Safety (SEIPS) Short Course
on Human Factors Engineering and
Patient Safety ▪ Part I and Part II**

Please Route to:

- PATIENT SAFETY OFFICER
- QUALITY IMPROVEMENT
- RISK MANAGEMENT
- MEDICAL INFORMATICS/IT

THE UNIVERSITY OF WISCONSIN-MADISON



August 14–18, 2006
Pyle Center, University of Wisconsin–Madison ▪ Madison, WI

Systems Engineering Initiative for Patient Safety (SEIPS)
**SEIPS Short Course on Human Factors
Engineering and Patient Safety
Part I and Part II on HIT (New 2006)**

**This two-part, five-day course for professionals presents nationally recognized speakers
discussing a variety of Patient Safety topics and Human Factors Engineering (HFE) including:**

Part I: The Basics of HFE & Patient Safety

- Human Factors Engineering
- Sociotechnical Systems and Macroergonomic
- Design of the Physical Environment and Ergonomics
- Cognitive ergonomics
- And more...

Part II: HFE & Healthcare Information Technology (HIT)

- Usability of HIT
- Impact of HIT on Patient Care Processes
- Human Factors of Implementing HIT
- And more...

www.fpm.wisc.edu/seips