

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, Pharmacy and Health Services Research.

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 and Scope of Practice

This educational activity is designed for Physicians, Physician assistants, Nurses, Information technologists, Research scientists, Quality improvement specialists, Pharmacists, CEOs, Middle and upper management, Engineers, Risk management professionals, Infection control professionals, 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 (HFE)
- Understand the use of HFE to improve patient safety
- Describe the characteristics of a system and the implications for system design
- Identify human characteristics, capabilities and limitations
- Recognize challenges to the application of HFE and patient safety
- Evaluate medical device design and usability issues for patient safety
- Identify cognitive ergonomics issues, such as information processing and human error
- Recognize organizational issues related to patient safety (e.g., transitions of care, communication, resilience)
- Understand the role of the physical environment in patient safety
- Evaluate the impact of health IT on workflow and patient care processes
- Utilize HFE principles for implementing health IT
- Understand the role of care provider and patient trust with health IT
- Evaluate the physical environment and layout for optimal health IT use

SEIPS Part I - The Basics of HFE and Patient Safety			
	Time	Topic	
Monday, July 16	7:00-8:00 am	Breakfast and Registration	
	8:00 am-5:30 pm (breaks & lunch included)	<ul style="list-style-type: none"> • Overview and Course Objectives • Introduction to Human Factors Engineering and Sociotechnical Systems • Human Factors Engineering in Healthcare – Practical Applications • The Physical Environment • Introduction to the Case Study 	
	5:30-6:30 pm	Reception	
Tuesday, July 17	7:00-8:00 am	Breakfast and Conversation	
	8:00 am-5:00 pm (breaks & lunch included)	<ul style="list-style-type: none"> • Cognitive Ergonomics • Usability Principles and Methods • Technology Design and Usability • Case Study Analysis 	
	5:00-6:00 pm	Research Poster Session	
Wednesday, July 18	7:00-8:00 am	Breakfast and Conversation	
	8:00 am-1:00 pm (break and lunch included)	<ul style="list-style-type: none"> • Organizational Design and Resilience • Team Activity and Poster Session • Wrap-up and Evaluation 	
	SEIPS Part II - HFE and Health Information Technology		
	12:00-1:00 pm	Lunch and Registration	
Thursday, July 19	1:00-5:30 pm (break included)	<ul style="list-style-type: none"> • Overview and Course Objectives • Human Factors of Health IT in Practice • Human Factors Design of Health IT 	
	5:30-6:30 pm	Reception	
	7:00-8:00 am	Breakfast and Conversation	
Friday, July 20	8:00 am-5:30 pm (breaks and lunch included)	<ul style="list-style-type: none"> • Workstation Design and Layout • Workflow Analysis for Health IT • Healthcare Professionals' Interaction with Health IT 	
	7:00-8:00 am	Breakfast and Conversation	
Friday, July 20	8:00 am-2:30 pm (breaks and lunch included)	<ul style="list-style-type: none"> • Human Factors of Health IT Implementation • Trust and Health IT • A Provider's Conversion Experience • Wrap-up and Evaluation 	

Faculty



Pascale Carayon, PhD
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Bascom Professor in Total Quality
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Yan Xiao, PhD
Director of Patient Safety
Research
Baylor Health Care System
Dallas, TX

General Information

Dates: July 16-20, 2012

Place: Lowell Center
610 Langdon Street
Madison, WI 53703

Phone: 608/256-2621

Fax: 608/262-5445

Conference Housing

Blocks of rooms are reserved at the following hotels. Please call or write to the hotels directly to reserve your accommodation. For further details, please visit http://cqpi.engr.wisc.edu/shortcourse_accommodation

DoubleTree® Hotel – Madison

525 West Johnson Street, Madison, WI 53703

Phone: 608/251-5511 or 800.222.8733

www.doubletreemadison.com

Rates: \$129

Reservation link: http://doubletree.hilton.com/en/dt/groups/personalized/M/MSNDTDT-SEP-20120715/index.jhtml?WT.mc_id=POG

Reservations must be made prior to June 18, 2012.

The Edgewater Hotel

666 Wisconsin Avenue, Madison, WI 53703

phone: 800.922.5512

www.theedgewater.com

Rates: \$140

Reservations must be made prior to June 16, 2012.

Please reference I4.

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
- \$1,300 **Part II only** - Past 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

The conference fee includes the cost of tuition, materials, two receptions, 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.

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.

Four Easy Ways To Register

On Line: Go to www.ocpd.wisc.edu; click on "Course Catalog" near the bottom of the left column; scroll down the list of educational activities until you see the date of 07/16/2012; and select "SEIPS Short Course on Human Factors Engineering and Patient Safety; Part I on Basics of HFE and Patient Safety and Part II on HFE and Health IT."

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)

For Further Information

Teresa N. Thuemling

CQPI, 3124 ECB, 1550 Engineering Drive
Madison, WI 53706; phone: 608/890-0265 or
608/263-2520; <http://cqpi.engr.wisc.edu>;
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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 live activity for a maximum of 37.50 *AMA PRA Category 1 Credit(s)*™. Physicians should claim only the 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 3.75 continuing education units (CEUs) or 37.50 hours.

Policy on Disclosure

It is the policy of the University of Wisconsin School of Medicine and Public Health that the faculty, authors, planners, and other persons who may influence content of this CME activity disclose all relevant financial relationships with commercial interests in order to allow CME staff to identify and resolve any potential conflicts of interest. Faculty must also disclose any planned discussion of unlabeled/unapproved uses of drugs or devices during their presentation(s). Detailed disclosures will be made in the activity handout materials.

Elements of Competence

This CME activity has been designed to change learner competence and focuses on the American Board of Medical Specialties area of systems-based practice.

Registration Form

#9012 ame-cqpi

SEIPS Short Course on Human Factors Engineering and Patient Safety

▪ Part I on the Basics of HFE and Patient Safety and Part II on HFE and Health IT

Part I: July 16-18, 2012 Part II: July 18-20, 2012

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 (required) _____

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

\$1,300 Part II only - Past 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

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 _____

*Effective January 1, 2012,
we will no longer accept
credit card payment on the
day of the activity.*

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:

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

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 Teresa N. Thuemling in order to receive service. Please call 608/890-0265.

Quotes from past course attendees:

"Once again your focus on participant experience was exemplary! Thank you. Discussions of examples were very rich and helpful."

"Thanks again for the exceptional experience. The class is really life/mind changing as evidenced by coming back to a potential event and my first thought was not, who messed up, rather I wonder what else was going on, how many lines were running etc, etc!"

"Thanks for all these materials, and thanks again for the wonderful course - I very much enjoyed it. So yes, the course has changed the way I look at things..."

"Thanks again for the great effort you put to organize an excellent course."

"Thank you so much for the wonderful experience! The class has opened my eyes and re-charged my batteries."

"Awesome course! Top-notch organization and instruction. Thank you for a successful and valuable week of learning!"

"This is a tremendous short course. The instruction and resources you provided us are tremendously helpful."

"What a great experience. I felt as though I had returned to college! The beautiful university setting, the outstanding professors...great course!"

Systems Engineering Initiative for Patient Safety (SEIPS) Short Course on Human Factors Engineering and Patient Safety ■ Part I on Basics of HFE and Patient Safety and Part II on HFE and Health IT

Please Route to:

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

THE UNIVERSITY OF WISCONSIN-MADISON



July 16-20, 2012 ■ Lowell Center, University of Wisconsin-Madison

**Systems Engineering Initiative for Patient Safety (SEIPS)
SEIPS Short Course on Human Factors
Engineering and Patient Safety
Part I on Basics of HFE and Patient Safety and
Part II on HFE and Health IT**

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

Part I: The Basics of HFE & Patient Safety

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

Part II: HFE & Health Information Technology

- Human Factors Design of Health IT
- Usability of Health IT
- Workflow Analysis of Health IT
- Human Factors of Implementing Health IT
- And more...

For short course schedule and registration information go to: http://cqi.engr.wisc.edu/shortcourse_home