

# 21st International Conference on Emergency Medicine

14 - 19 June 2022 | Hybrid Conference

Melbourne Convention and Exhibition Centre



BETTER  
CARE  
FOR A  
BETTER  
WORLD

## The Geriatric Emergency Department: From Concept to Reality and Beyond

[www.icem2022.com](http://www.icem2022.com)

# Disclosure - No Conflict of Interest

**ICEM**  
**2022**  
14-19 JUNE



Mark Rosenberg, DO, MBA, FACEP, FACOEP-D, FAAHPM

Immediate Past President, American College of Emergency Physicians

Chairman Emeritus, St Joseph's Health, NJ

Associate Professor Emergency Medicine, NYMC

Practice Domains: Geriatrics, Palliative Care, Pain and Addiction Medicine



[www.icem2022.com](http://www.icem2022.com)

# All Innovations Start With a Story



The Phone Rings:

Me: Hello.....

Mom: Mark, something is wrong in my stomach...

Me: What do you mean?

Mom: It's throbbing like a heartbeat... My back hurts

Me: I am going to call 911



# 9 Months Later



Mom discharged for the hospital to rehab and then home

70 years old but very frail

Major medical problem was renal failure

1 year after phone call she is back to part time work

Multiple Emergency Department Visits



Mom is always right!



[www.icem2022.com](http://www.icem2022.com)

Mom is always right!



“Build an Emergency Department for People Like Me”

Old  
Frail  
Weak  
Afraid



# 21st International Conference on Emergency Medicine

14 - 19 June 2022 | Hybrid Conference

Melbourne Convention and Exhibition Centre



## Chapter 1: The Geriatric Emergency Department Concept

The Journey Begins



BETTER  
CARE  
FOR A  
BETTER  
WORLD

# The GED Town Hall



## Participants:

Friends

Family

Neighbors

Community

## Suggestions:

Quiet and Safe

Comfortable Lighting

Pillows and Blankets

Hot Tea





# 21st International Conference on Emergency Medicine

14 - 19 June 2022 | Hybrid Conference

Melbourne Convention and Exhibition Centre



BETTER  
CARE  
FOR A  
BETTER  
WORLD

## What Mom Didn't Know

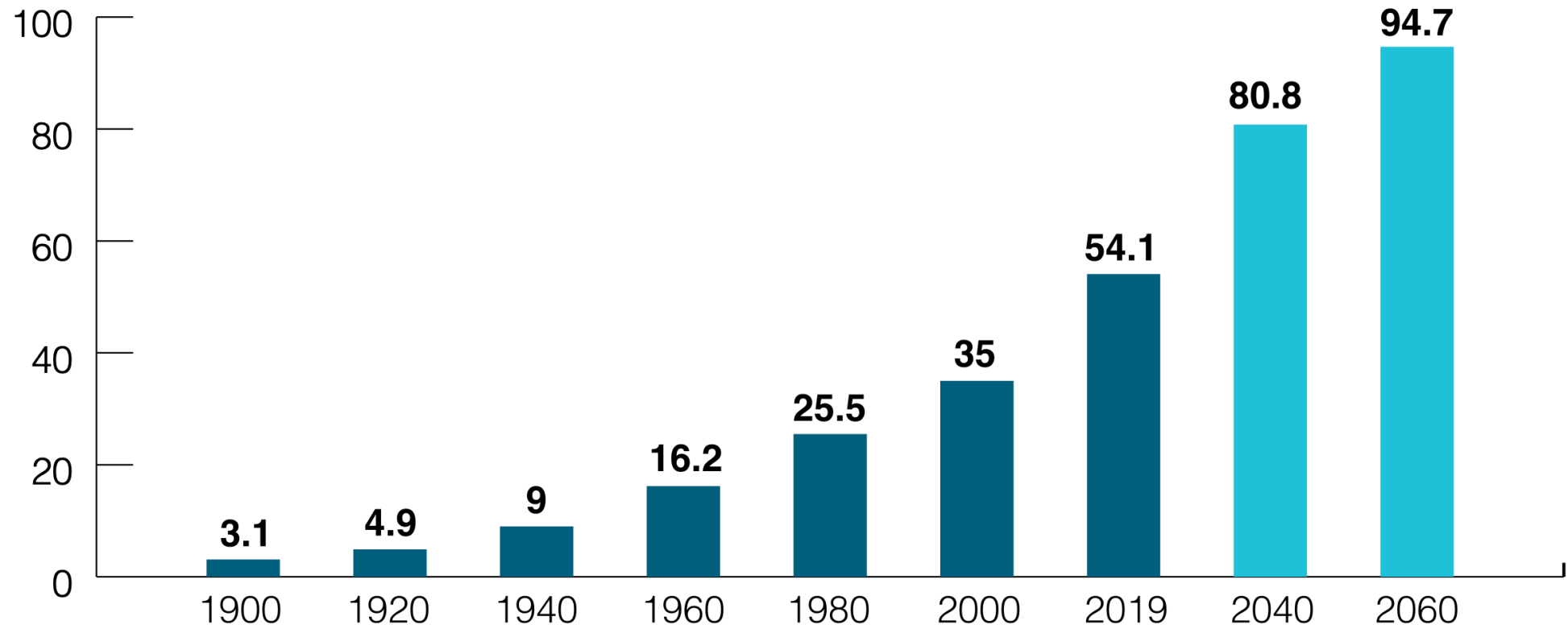
[www.icem2022.com](http://www.icem2022.com)

People age 65 and older represented 16% of the population in the year 2019 but are expected to grow to be 21.6% of the population by 2040.

---

The 85 and older population is projected to more than double from 6.6 million in 2019 to 14.4 million in 2040 (a 118% increase).

### **Number of Persons Age 65 and Older, 1900 - 2060 (numbers in millions)**



# Key Facts



- **Between 2015 and 2050, the proportion of the world's population over 60 years will nearly double from 12% to 22%.**
- **By 2020, the number of people aged 60 years and older will outnumber children younger than 5 years.**
- **In 2050, 80% of older people will be living in low- and middle-income countries.**
- **The pace of population ageing is much faster than in the past.**
- **All countries face major challenges to ensure that their health and social systems are ready to make the most of this demographic shift.**



# Key Facts



**ICEM**  
**2022**  
14-19 JUNE



- **Between 2015 and 2050, the proportion of the world's population over 60 years will nearly double from 12% to 22%.**
- **By 2020, the number of people aged 60 years and older will outnumber children younger than 5 years.**
- **In 2050, 80% of older people will be living in low- and middle-income countries.**
- **The pace of population ageing is much faster than in the past.**
- **All countries face major challenges to ensure that their health and social systems are ready to make the most of this demographic shift.**



# The Geriatric ED Difference

# ED utilization rates for seniors

- 7x more usage of ED services
- 43% of all admissions
- 48% of all Critical Care admissions
- 20% longer length of stay
- 50% more lab
- 50% more radiology
- 400% more social service interventions

CMS 2018 Data Set



# Am I old?

## Healthy

- Feel great
- Exercise daily
- Eat right
- Drink socially
- Very social



## Controlled Health Issues

- MI within past two years
- High BP
- High cholesterol
- Prostate Cancer
- Lymphoma
- Osteoarthritis
- On eight medications
- Countless vitamins
- Contact lenses
- Hearing aids

# 21st International Conference on Emergency Medicine

14 - 19 June 2022 | Hybrid Conference

Melbourne Convention and Exhibition Centre



## Chapter 2: The Geriatric Emergency Department Today

Seniors are not just old adults. They require extra skill, training and expertise in an environment of care that is conducive to enhanced disease management and disease screening.



BETTER  
CARE  
FOR A  
BETTER  
WORLD



# St. Joseph's Regional Medical Center



# St. Joseph's Regional Medical Center





ED40

EXIT



ED40

EXIT

Lighting



Holistic Lighting



Chairs





ED40

EXIT

Mattresses



ED40

EXIT

Non-Glare Flooring





Sound Proofing



# Harp



*Striking a notable difference in Healthcare  
since 2002*



[About](#) [Programs](#) [Harp Therapy](#) [Harps](#) [Store](#) [MindBody](#) [Newsletter](#) [Honor](#) [Resources](#) [Blog](#)

[About Us](#)

[Accreditation](#)

[Our Mission Statement](#)

[Our Vision & Values](#)

[Our Code of Ethics](#)

[Our Oath of Service](#)

[News](#)

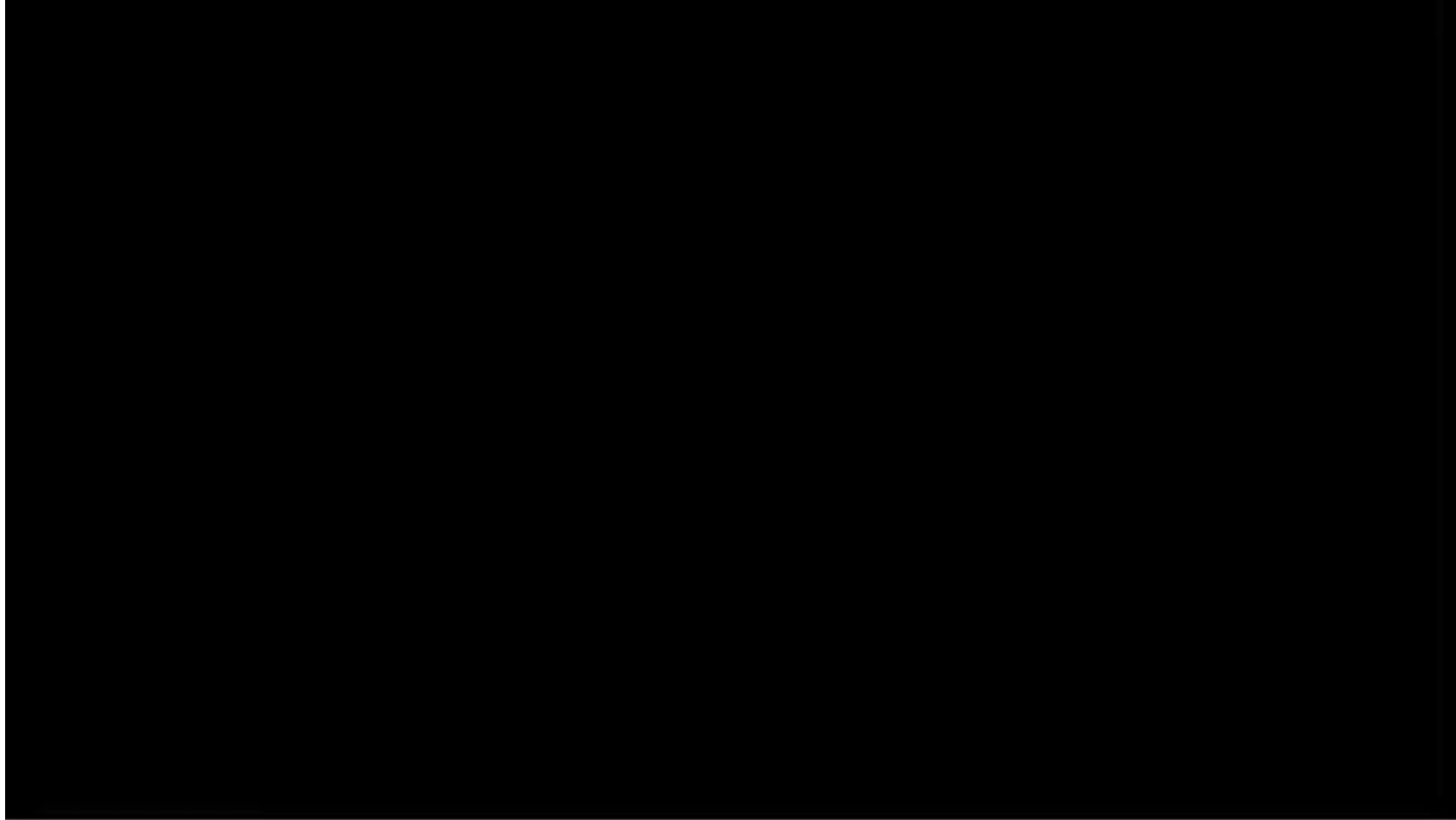
[Articles](#)

## about us

**BEDSIDE HARP®** was founded by [Edie Elkan](#), music teacher for over 40 years and involved in using the harp as a therapeutic instrument since 1994. Understanding the extraordinary healing qualities of the instrument first-hand, she has, since 1999, dedicated herself to bringing harp therapy to healthcare and wellness settings. Her vision was to partner with a major medical facility within which she would set up a program to:

- Play for patients, their loved ones and staff;

# Harp



# The Geriatric Patient Encounter

- Mrs. Smith is a 78 y/o functionally independent senior. She lives alone and daughter lives 2 blocks away.
- This AM, Mrs. Smith hurt her ankle going down the steps. Has difficulty ambulating.

# The Geriatric ED Difference

## **Adult ED**

- H and P
- Order X-Ray

## **Geriatric ED**

- H and P
- Order X-Ray

# The Geriatric ED Difference

## **Adult ED**

- H and P
- Order X-Ray
- Reevaluation
- Discharge

## **Geriatric ED**

- H and P
- Order X-Ray

# The Geriatric ED Difference

## Adult ED

- H and P
- Order X-Ray
- Reevaluation
- Discharge

## Geriatric ED

- H and P
- Order X-Ray
- Seen by GED Team
  - Physical Therapy
  - Social Work
  - Nutrition
  - Geri RN
  - Pharmacy
- Geriatric Screenings
- Discharge Planning
- Transition of Care



# The Geriatric ED Difference

## Adult ED

- H and P
- Order X-Ray
- Reevaluation
- Discharge

## Geriatric ED

- H and P
- Order X-Ray
- Seen by GED Team
  - PT
  - Social Work
  - Nutrition
  - Geri RN
  - Pharmacy
- Geriatric Screenings
- Discharge Planning
- Transition of Care
- Home Assessment

# The Geriatric ED Difference

## Adult ED

- H and P
- Order X-Ray
- Reevaluation
- Discharge

Senior Patients Have a  
Phone Reassessment  
on Day 1,3, and, 7

## Geriatric ED

- H and P
- Order X-Ray
- Seen by GED Team
  - PT
  - Social Work
  - Nutrition
  - Geri RN
  - Pharmacy
- Geriatric Screenings
- Discharge Planning
- Transition of Care
- Home Assessment

# Outcomes

- Increased patient satisfaction
- Higher rate of postdischarge independence
- Fewer return visits
- Lower admission and readmission rate
- Improved screening for inappropriate medications
- Increased patient volume

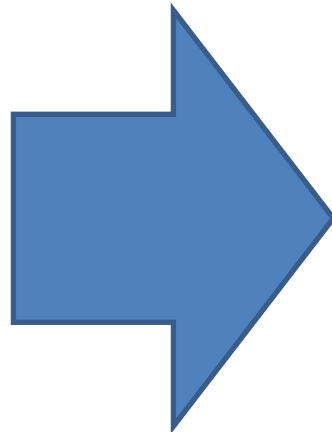
# The GED Guidelines

# The GED Growth 2009-2012

More than 180 Geriatric EDs and growing...

**...finally there is a standard.**

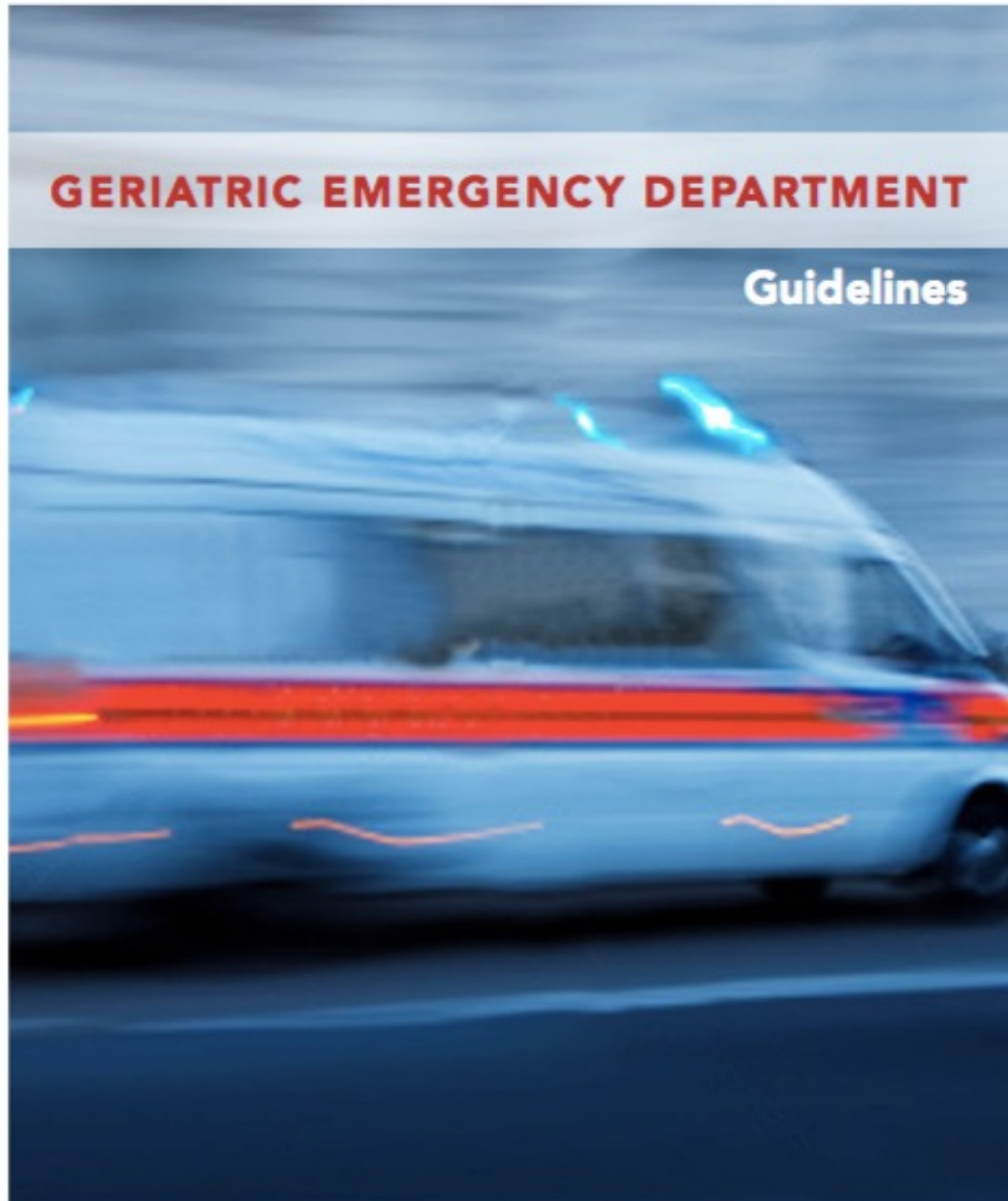
- ACEP
- AGS
- ENA
- SAEM



Geriatric ED Guidelines

# GERIATRIC EMERGENCY DEPARTMENT

## Guidelines



## TABLE OF CONTENTS

1	<b>INTRODUCTION</b>
2	<b>PURPOSE</b>
	Goals
	Benefits
4	<b>STAFFING AND ADMINISTRATION</b>
	Background
	Recommendations
	Geriatric Emergency Department Medical Director
	Geriatric Emergency Department Nurse Manager
	Staff Physicians
	Staff Nurses
	Medical Staff Specialists
	Ancillary Services
6	<b>FOLLOW UP AND TRANSITION OF CARE</b>
	Background
	Recommendations
8	<b>EDUCATION</b>
10	<b>QUALITY IMPROVEMENT</b>
	10 Geriatric Program Quality Improvement Plan
	12 Sample Geriatric ED Quality Assessment Instrument (Dashboard)
13	<b>EQUIPMENT AND SUPPLIES</b>
15	<b>POLICIES, PROCEDURES, AND PROTOCOLS</b>
	Sample Policies & Procedures
	16 <b>The Screening of Geriatric Patients</b>
	17 <b>Guidelines for the Use of Urinary Catheters</b>
	20 <b>Geriatric Medication Management</b>
	26 <b>Geriatric Fall Assessment</b>
	28 <b>Delirium and Dementia</b>
	34 <b>Palliative Care</b>
35	<b>REFERENCES</b>
42	<b>TASK FORCE MEMBERS</b>

## GERIATRIC EMERGENCY DEPARTMENT GUIDELINES TASK FORCE

### **Mark S. Rosenberg, DO, MBA, FACEP**

Chair, ACEP Geriatric Emergency Medicine Section  
(2011-2012)  
Chairman, Department of EM  
Chief, Geriatric Emergency Medicine  
Chief, Palliative Medicine  
St. Joseph's Healthcare System, Paterson, NJ

### **Christopher R. Carpenter, MD, MSc, FACEP**

Chair, ACEP Geriatric Emergency Medicine Section  
(2012-2014)  
Associate Professor of Emergency Medicine  
Director of Evidence Based Medicine  
Washington University in St. Louis School of  
Medicine

### **Marilyn Bromley, RN, BS**

Director, EM Practice Department  
Staff Liaison, Geriatric Emergency Medicine Section  
American College of Emergency Physicians

### **Jeffrey M. Caterino, MD, MPH, FACEP**

Associate Professor of Emergency Medicine and  
Internal Medicine  
Director of Emergency Medicine Clinical Research  
The Ohio State University

### **Audrey Chun, MD**

Associate Professor of Geriatric and Palliative  
Medicine  
Icahn School of Medicine at Mount Sinai

### **Lowell Gerson, PhD**

Professor Emeritus, Department of Emergency  
Medicine  
Northeast Ohio Colleges of Medicine

### **Jason Greenspan, MD, FACEP**

Director of Emergency Services  
Emergent Medical Associates

### **Ula Hwang, MD, FACEP**

Associate Professor of Emergency Medicine Icahn  
School of Medicine at Mount Sinai

### **David P. John, MD, FACEP**

Co-Chair, Emergency Medicine  
Johnson Memorial Medical Center  
Northeast Emergency Medicine Specialists

### **Joelle Lichtman, MA**

Interior Design-Gerontology Certificate  
Certified Aging-in-Place Specialist (CAPS)  
Brooklyn, NY

### **William L. Lyons, MD**

Associate Professor in Internal Medicine and  
Geriatrics  
University of Nebraska Medical Center

### **Betty Mortensen, RN, MS, BSN, FACHE**

Chief Nursing Officer  
Emergency Nurses Association

### **Timothy F. Platts-Mills, MD, MSc**

Assistant Professor of Emergency Medicine  
University of North Carolina at Chapel Hill School  
of Medicine

### **Luna C. Ragsdale, MD, MPH, FACEP**

Clinical Associate  
Duke University School of Medicine  
Wake Forest University School of Medicine

### **Julie Rispoli**

Project Manager, EM Practice Department  
American College of Emergency Physicians

### **David C. Seaberg, MD, CPE, FACEP**

Board Liaison, ACEP Geriatric Emergency Medicine  
Section (2007-2013)  
President, American College of Emergency  
Physicians (2011-2012)

### **Scott T. Wilber, MD, MPH, FACEP**

Associate Professor of Emergency Medicine  
Northeast Ohio Medical University





# Geriatric Emergency Department Accreditation



Welcome Guest, [Log In](#)

[CONTACT GEDA](#)

[MY APPLICATION](#)

[APPLY TODAY](#)

[HOME](#)

[ACCREDITATION LEVELS](#)

[ABOUT THE PROCESS](#)

[FAQS](#)

[OUR TEAM](#)

[NEWS & EVENTS](#)

[VIEW APPLICATION INFO & DUE DATES](#)



## Geriatric Emergency Department Accreditation Program

GEDA was developed by leaders in emergency medicine to ensure that our older patients receive well-coordinated, quality care at the appropriate level at every ED encounter.

[APPLY TODAY! >](#)

[GERIATRIC ED ACCREDITED LIST](#) 

[www.icem2022.com](http://www.icem2022.com)

Criteria for any level of GED accreditation are comprised of the following seven categories:

- a) Staffing
- b) Education
- c) Policies/protocols, guidelines and procedures
- d) Quality improvement
- e) Outcome measures
- f) Equipment and supplies
- g) Physical environment



# GEDs By The Numbers

323 sites accredited in total

22 Gold level, 36 silver, and 265 bronze.

42 states

18 renewals

11 upgraded sites

5 international sites – Spain, Brazil, Canada (2), Thailand

22 health care systems with 6 of those at 100% participation

VA system 31 of 110 sites



Bronze - Level 3



Silver - Level 2



Gold - Level 1

# 21st International Conference on Emergency Medicine

14 - 19 June 2022 | Hybrid Conference

Melbourne Convention and Exhibition Centre



BETTER  
CARE  
FOR A  
BETTER  
WORLD

## Chapter 3: The Geriatric Emergency Department Future

# The Future Is Now

Expand GED and GEDA

Augmented Reality

Virtual Reality

Telemedicine

Hospital at Home

Wearables

Artificial Intelligence Charting



**ICEM**  
**2022**  
14-19 JUNE



Creating a world where all seniors, in all countries, have access to high quality Geriatric Emergency Care

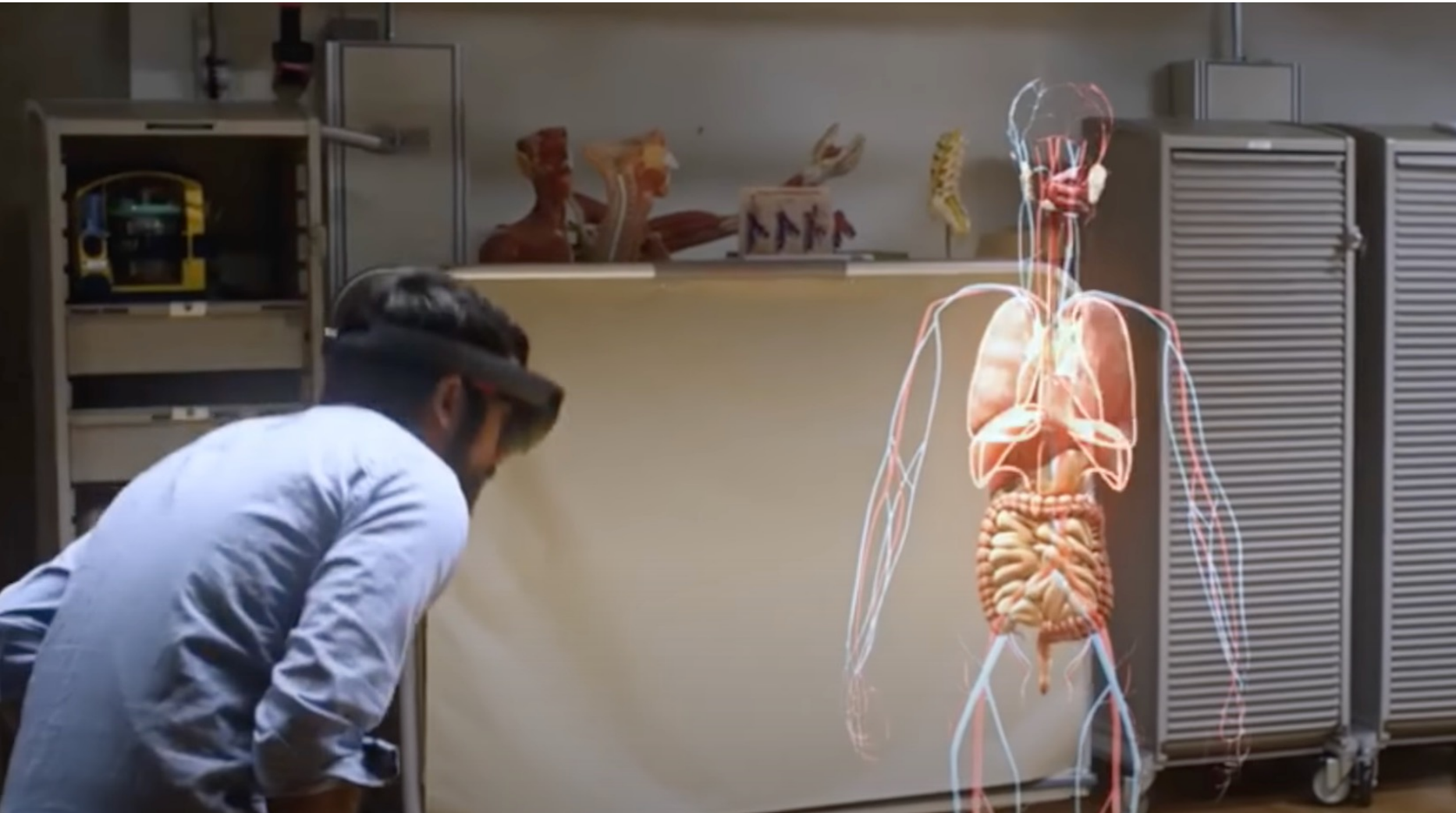
# Augmented Reality

**ICEM**  
**2022**  
14-19 JUNE



[www.icem2022.com](http://www.icem2022.com)

# Augmented Reality



# AR vs VR

**ICEM**  
**2022**  
14-19 JUNE



## AUGMENTED REALITY



## VIRTUAL REALITY





# Benefits of Telemedicine



Telemedicine offers a lot of benefits to both patients as well as healthcare providers.

Immediate access to specialists

Reduced visits to hospitals and healthcare centers

Early detection of diseases

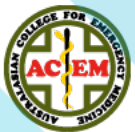
Better treatment management

Improved health outcomes

Timely follow-up of patients

Access to comprehensive patient data

Can be used to expand resources



# Hospital at Home

**ICEM**  
**2022**  
14-19 JUNE



# Artificial Intelligence Charting



Retrieve Medical

[retrievemedical.com](http://retrievemedical.com)



Computed CoMorbidities/Clinical Conditions

- Anemia :
  - Acute
  - Chronic
  - Not otherwise specified
  - Due to blood loss
- Malnutrition :
  - Underweight
  - Mild
  - Moderate
  - Severe
- Lactic Acidosis
- SIRS :
  - SIRS due to noninfectious process
  - Sepsis due to suspected or actual infection

Values are:  
Hemoglobin (Latest): **6.3** on 01/22/2019 10:52  
Hemoglobin (Previous Visit): **8.3** on 12/27/2018 17:00  
Hematocrit (Latest): **21.0** on 01/22/2019 10:52  
Hematocrit (Previous Visit): **24.9** on 12/27/2018 17:00

Determined by the Rule:  
Both Current and Previous Hemoglobin < 14.0  
Both Current and Previous Hematocrit < 42.0



# Artificial Intelligence Charting



Retrieve Medical

retrievemedical.com

**Retrieve Dx** Comorbidities Geriatric ?

← Back ISAR ND RASS ND FRAT ND Cath ND LACE ND Beers ND

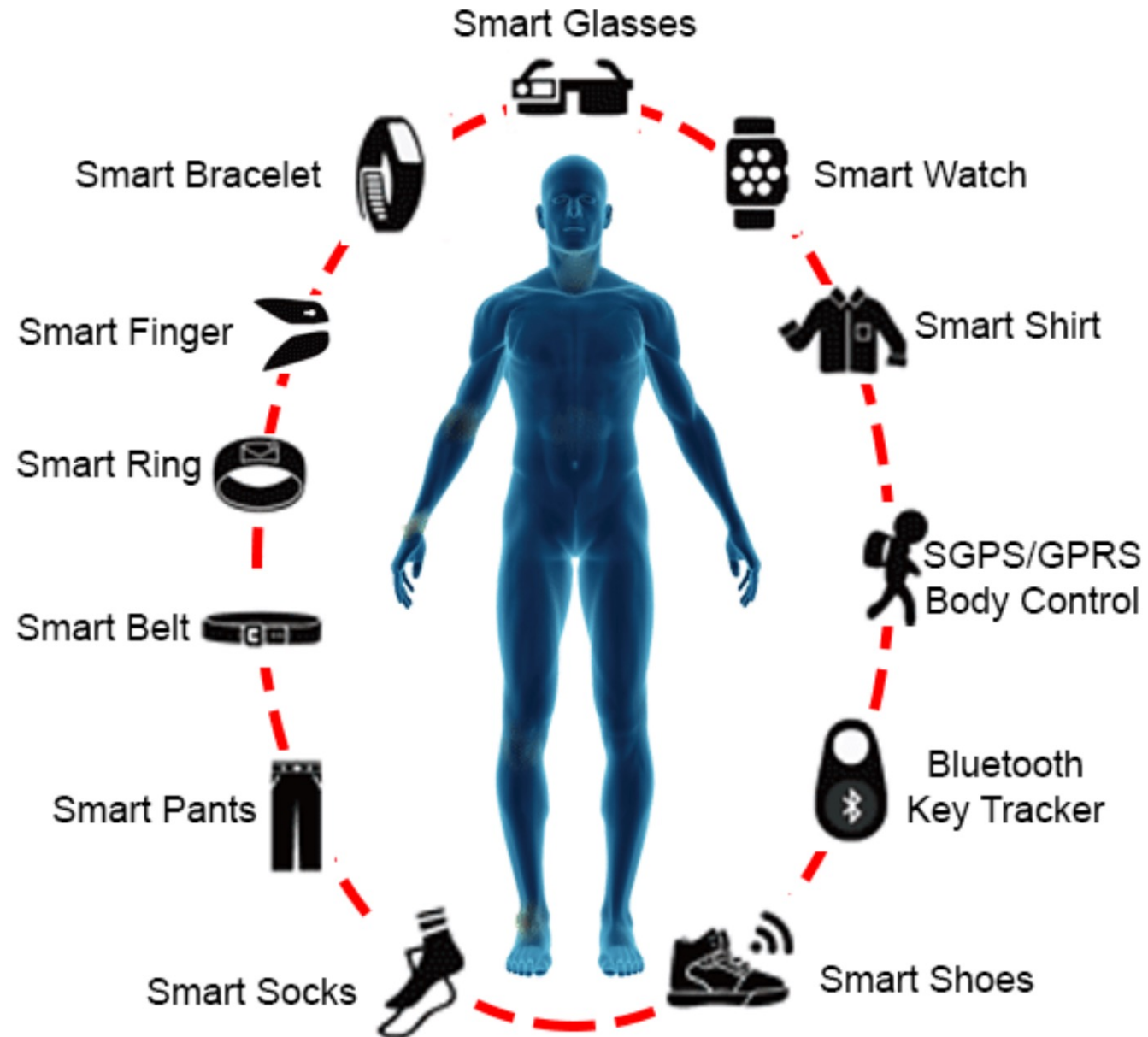
**ISAR**  
Seniors at Risk  
ND

- Before the injury or illness, did you need someone to help you on a regular basis?
- Since the injury or illness, have you needed more help than usual?
- Have you been hospitalized for one or more nights in the past six months?
- In general, do you see well?
- In general, do you have serious problems with your memory?
- Do you take more than 3 medications daily?

Cancel Reset Save



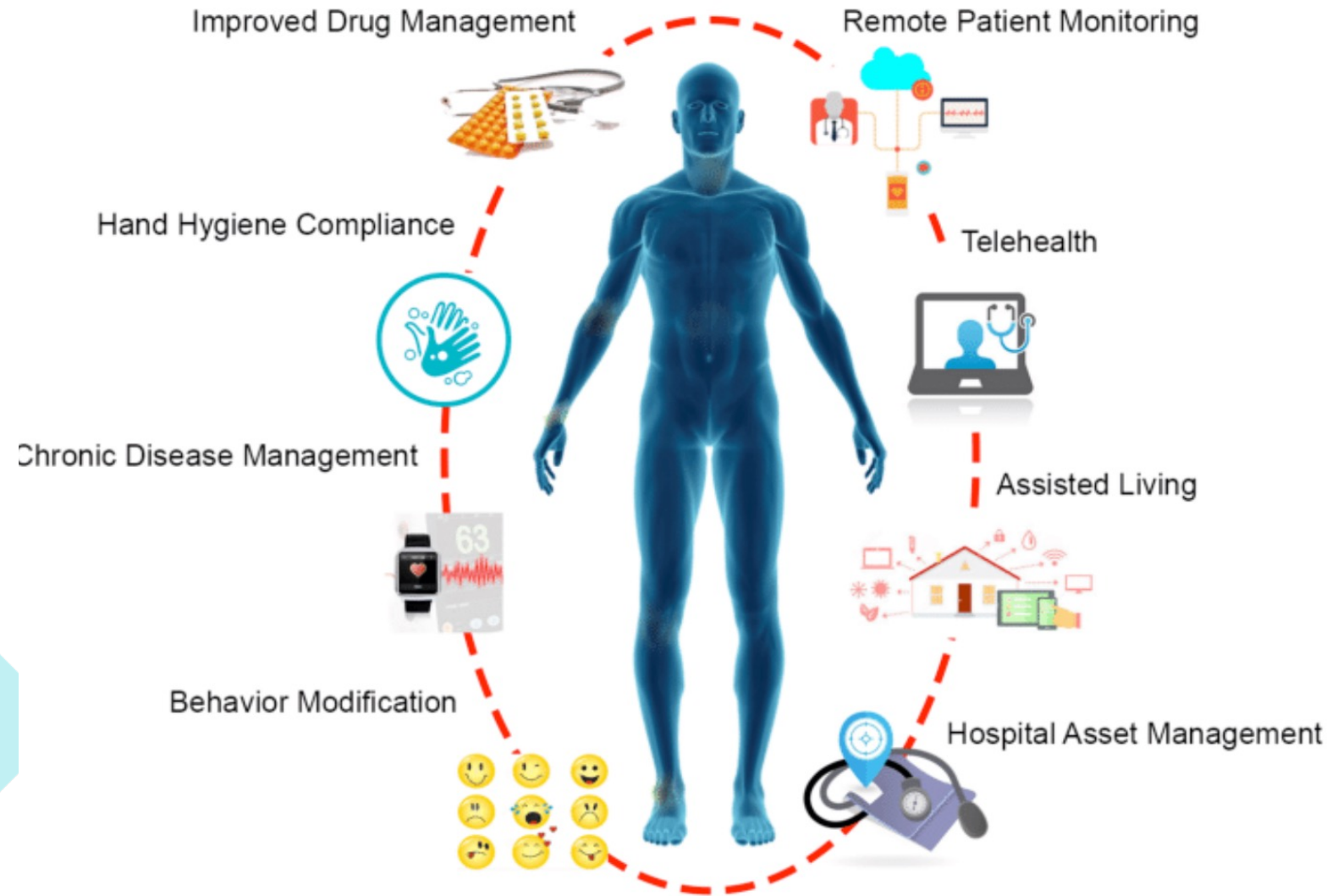
# Wearables



**ICEM**  
**2022**  
14-19 JUNE



# Wearables



# My GED Journey

2002 – Aneurysm

2005 – Dialysis

2007 – The Senior Friendly ED Concept

2009 – Opening of the GED

2014 – The GED Guidelines

2018 – GED Accreditation



This is dedicated to the ones we love





# Questions



THANK YOU