A Conceptual Model of Acute Unscheduled Care

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Objectives

• Describe a novel conceptual model of acute, unscheduled care

• Goals of the model
  – Help patients, providers, administrators, policymakers, and payers understand the trajectory of an acute episode
  – Develop solutions to address challenges

• Provide Recommendations
The Acute Care System

- Many settings
  - EDs, hospitals, urgent care clinics, retail clinics, doctor’s offices, freestanding EDs, and telemedicine.
- Purposes of the acute care system
  - Treat life-threatening conditions
  - Respond to disasters
  - Diagnose and treat conditions that require urgent treatment
  - Treat exacerbations of chronic disease
  - Serve as the safety net
The Acute Care System

• Many recent changes in acute care
  – New payment models with the ACA
  – New transformation of primary care
  – Growth in alternatives (telemedicine, urgent care, retail clinics)
The Acute Care System

• The State of the “System”
  – Many parts are patient-centered
    • 24/7 service, EMTALA
    • Poison centers
    • PCMH
The Acute Care System

• The State of the “System”
  – Problems / Results
    • High costs
    • Poor communication
    • Lack of decision-support
    • Long waiting times
    • Fragmentation and uncoordinated care
    • Cost quality & access are highly variable
An Episode of Acute Care

• Trajectory from illness or injury to recovery, chronic condition, or death.

• How people get sick, the decisions they make decisions to seek care, the care that is delivered, how care transitions between settings, and ultimately, outcomes.
Methods

• Comprehensive environmental scan of acute care utilization literature.
• Stakeholder perceptions of the acute care system through online focus groups and two technical expert panels.
• Perceptions analyzed through naturalistic research techniques including concept mapping and thematic coding.
• Creating a conceptual model of an episode of acute, unscheduled care.
Conceptual Model of Acute, Unscheduled Care in the United States

**Social & Individual Determinants of Health**
- Socio-environmental
  - Poverty
  - Education
  - Access to healthy food
  - Local environment (e.g., violence, pollution, disasters, weather, geography)
- Individual
  - Chronic conditions
  - Mental health
  - Demographics
  - Occupation
  - Health behavior
  - Health literacy
- Public Health
  - Prevention (e.g., vaccination, care management, screening tests)
  - Disaster planning
  - Health education/promotion
  - Public health law

**Care Decision Making**
- Community Resources
  - Provider, service, and facility availability (e.g., appointment availability, waiting times)
  - Public transportation
- Individual Resources
  - Condition-specific knowledge
  - Connection with providers
  - Financial resources
  - Health insurance
  - Health system understanding

**Care Delivery**
- Episode of Settings
  - EMS / paramedicine
  - Emergency departments and specialized centers
  - Urgent care / retail clinics / mobile health clinics
  - Physician offices / clinics
  - Telemedicine
- Individual & Community Care
  - Self-care (e.g., medications, first aid)
  - Internet searches
  - Social networks
  - Bystander help
  - Family/community caregivers (e.g., community health workers, school nurses)

**Outcomes**
- Individual Health
  - Survival
  - Patient experience
  - Right diagnosis/right treatment/right time/right provider/right setting
  - Quality-of-life
  - Ability to function
  - Symptom relief
  - Return to work/school
- Value
  - Healthcare Costs
    - Personal costs (i.e., out-of-pocket)
    - Payor / insurer costs
    - Facility costs to deliver services
  - Community Health
    - Condition-specific outcomes
    - Overall morbidity and mortality/premature death
    - Workforce productivity
    - Health equity

**System Feedback and Improvement**
- *Acute Illness/Injury* - The likelihood of a person experiencing an acute illness or injury is determined by social and individual health determinants, public health measures, and socio-environmental factors. Acute illness/injury includes debilitating medical illness (e.g., influenza, pneumonia, or myocardial infarction), acute injuries (e.g., hip fracture), exacerbations of chronic diseases (e.g., heart failure exacerbation), acute mental illnesses (e.g., severe depression or psychosis), and/or effects of substance abuse (e.g., intoxication).
- *Setting Choice* - Setting choice is determined by both individual and community resources (e.g., provider and facility availability when patients are ill/injured), personal preferences (e.g., convenience of the setting), and the condition-specific needs (e.g., resources needed to diagnose and treat the patient). Setting choice can be determined by the individual experiencing the acute illness/injury, family, friends, and EMS.
- *Care Transitions* - Care transitions refers to the movement of a patient's care and information between different health care settings (e.g., episodic to longitudinal) and home (e.g., self care and management). Also includes the provision of a care plan to patients, patients' understanding of the care plan, and mechanisms to communicate the care plan across settings.
- *Quality* - Healthcare quality including the following Institute of Medicine domains: safety, effectiveness, patient-centeredness, timeliness, efficiency and equity, (IOM). Healthcare quality results from the care that was delivered and impacts healthcare outcomes.
- *Value* - Value is defined as achieving the best possible individual and community outcomes per cost outcome (e.g., health dollar spent).
Recommendations

• Patients, Families, and Communities
  – Engage in Health Behaviors and Manage Chronic Conditions
  – Improve Health Literacy
  – Actively Engage In Understanding the Healthcare System
  – Improve Information Quality and Flow
Recommendations

• Individual and Institutional Providers
  – Ensure evidence-based prevention
  – Actively educate and engage patients and families in their health
  – Improve access to acute care when patients get sick and injured
  – Guide care-seeking decisions in real time
  – Adhere to evidence-based guidelines, work to develop standardized care pathways, and actively coordinate care
  – Ensure the free flow of health information
  – Continuously improve care and quality
Recommendations

• Policymakers and payers
  – Enact laws to enhance prevention and reduce disparities and ensure evidence-based prevention is a priority by monitoring and incentivizing high value care
  – Align incentives of providers to meet patients’ acute care needs
  – Align incentives of patients to ensure cost-efficient system use
  – Enhance quality measurement
  – Reward best practices