

# Causes of Avoidable Hospitalization in Home Health Preliminary Results from a Field Study

Michael P. Silver, MPH  
VP Strategy & Development  
*HealthInsight*

[msilver@healthinsight.org](mailto:msilver@healthinsight.org)

[www.healthinsight.org](http://www.healthinsight.org)

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*“... people who really give us information about anything are those who tell us its causes.”*

*—Aristotle*

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# Overview

- Introduce probabilistic risk assessment (PRA) as a systems and process analysis tool
- Describe the application of PRA in a clinical setting
- Review preliminary findings from system-based review of unplanned hospitalizations from the home health setting

# AHRQ, Proactive Risk Management

- Ambulatory care, transitions in care
- Model risks
  - FMEA
  - ST-PRA
  - RCA
  - (Sensemaking)
- Risk modeling only (no intervention)

# Home Health Applications

- In the US:
  - 1.4 million home health patients
  - 7 million episodes yearly
- At-risk population, e.g.,
  - post-acute care or post-surgical clinical needs
  - diminished capacity for self-care
  - elderly and frail status
  - multiple chronic medical conditions
- Safety and reliability of care processes is not known (with any precision – few studies)
  - 11% of all episodes end with hospitalization, 28% in the Medicare population
  - hospitalization (ACH) target of large, continuing CMS effort
  - *preventable* or *avoidable* hospitalizations in home health not identified

# Why study home health?

Potential impact currently (and expanding role for home health in the future)

- Some performance-shaping factors
  - coordination: hospital discharge
  - range of services
  - care environment
  - coordination: within agency, between providers
  - Unpaid, untrained caregivers (self care)
  - staff training challenges
  - distributed activities – difficult to manage, supervise, ...

# Study Goals

- Develop ST-PRA risk model for unplanned hospitalization from the home health setting
- Identify potential latent conditions that contribute to avoidable unplanned hospitalizations
- Evaluate proactive risk management as sensemaking facilitator
- Develop risk-based recommendations for systems and process improvement

*(not charged, under this study, with implementing changes or demonstrating improvement)*

# ACH as an outcome

- Health care resource utilization option?
  - Necessary? Discretionary? “Defensive”?
  - Regulatory influences?
- Inevitable given patient’s condition?
  - Was home health right for this patient?
- Necessary, but avoidable, preventable?
  - Process failures?

# ACH Event Tree development

- Collaboration between:
  - Home health providers, hospital discharge planners, other health care providers
  - Home health researchers and consultants
  - Delmarva, a CMS national support contractor
  - *HealthInsight*
  - Colleagues from across the country
- Goals:
  - Assist home health providers to identify manageable causes of ACH
  - Develop ACH cause classification framework

# ACH types

- Branch A: Hospitalization necessary and unavoidable
- Branch B: Hospitalization necessary but avoidable
  - B1: Inappropriate home health admission
  - B2: Preventable deterioration in patients' condition
- Branch C: Hospitalization unnecessary
  - C1: Admissions via ED
  - C2: Direct admits

# Event tree overview

Key features – process failure types:

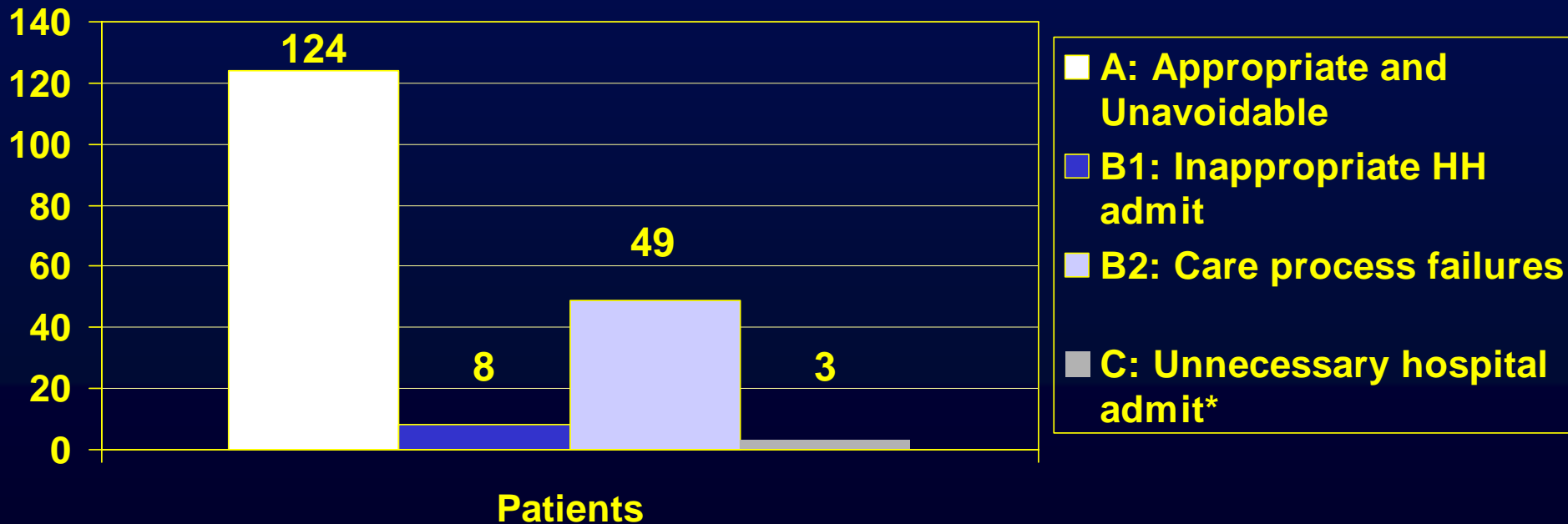
- Care plan development
- Plan implementation/execution
- Communications
  - Physicians
  - Within agency
  - Patient
  - Family/unpaid caregivers
- Cross checks (capture opportunities)
- Problem detection

# Case review using ACH Event Tree: Methods

- Involve care team
- Conduct review as early as possible
- Data elements
  - Hospitalization risk at intake
  - ACH type
    - A: Necessary and unavoidable
    - B1: Inappropriate HHA admit
    - B2/B3: Avoidable condition deterioration
    - C: Unnecessary admission
  - Critical process failures (initiating and capture)

# Preliminary Results (1)

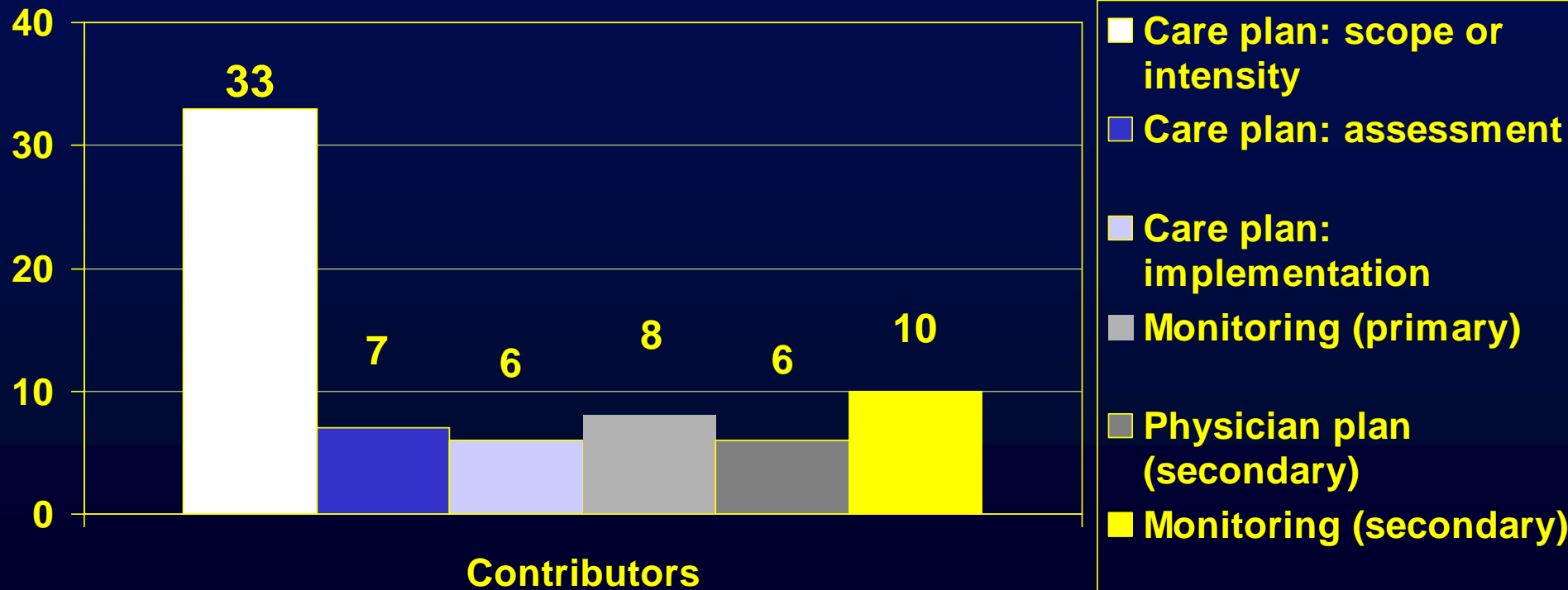
15 site visits, 184 reviews, 30+ hrs focus groups

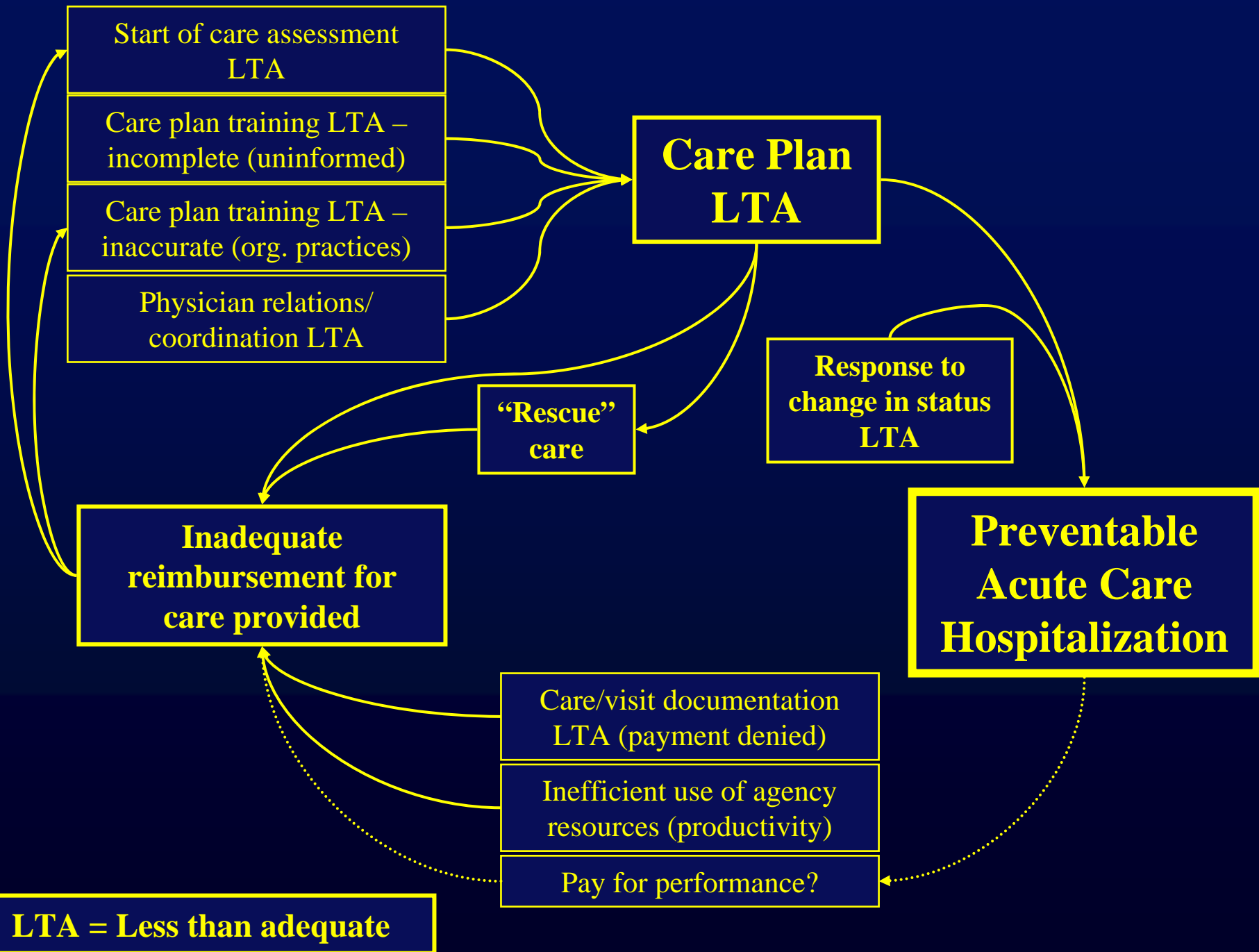


# Preliminary Results (2)

## Care Process Failures Detail

(49 patients, categories not mutually exclusive)





# Next Steps? Implications?

- Why the underutilization of skilled home health services?
  - (Fear of) denied claims as a contributor?
- Assessing management practices, training
- What didn't we talk about?
- Might there be other health care professionals uninformed about home care?
- What is the impact of this dialogue with home health agencies?