

Hip Fracture Management

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Hip Fractures: Improving Quality of Care in Michigan With MTQIP

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Disclosures

- Steering committee – “Own the Bone” (recent)
- Board memberships –
 - Michigan Orthopaedic Society
 - Orthopaedic Trauma Association (recent)
- Royalties – Zimmer

Femoral Neck Fractures

- 360,000 annually in USA
 - Will double by 2040
- \$13.7 billion for care of hip fxs
 - 43% of cost of all fx care — Nat'l Osteoporosis Foundation



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Why the Focus on Hip Fractures?

Relatively small advances in management of hip fractures over past 30 years

Some traditional methods of hip fracture management do worse than previously thought

Focus on hip fractures in other countries (Great Britain and Sweden) are proving that lowering costs are possible – outcomes may be better



Hip Fracture Economics

- Hip fracture incidence worldwide increasing from 1.6 million/year in 1990 to 6.3 million/year by 2050
- Disability adjusted life-years lost due to hip fractures ranks in top 10 of all-cause disability globally

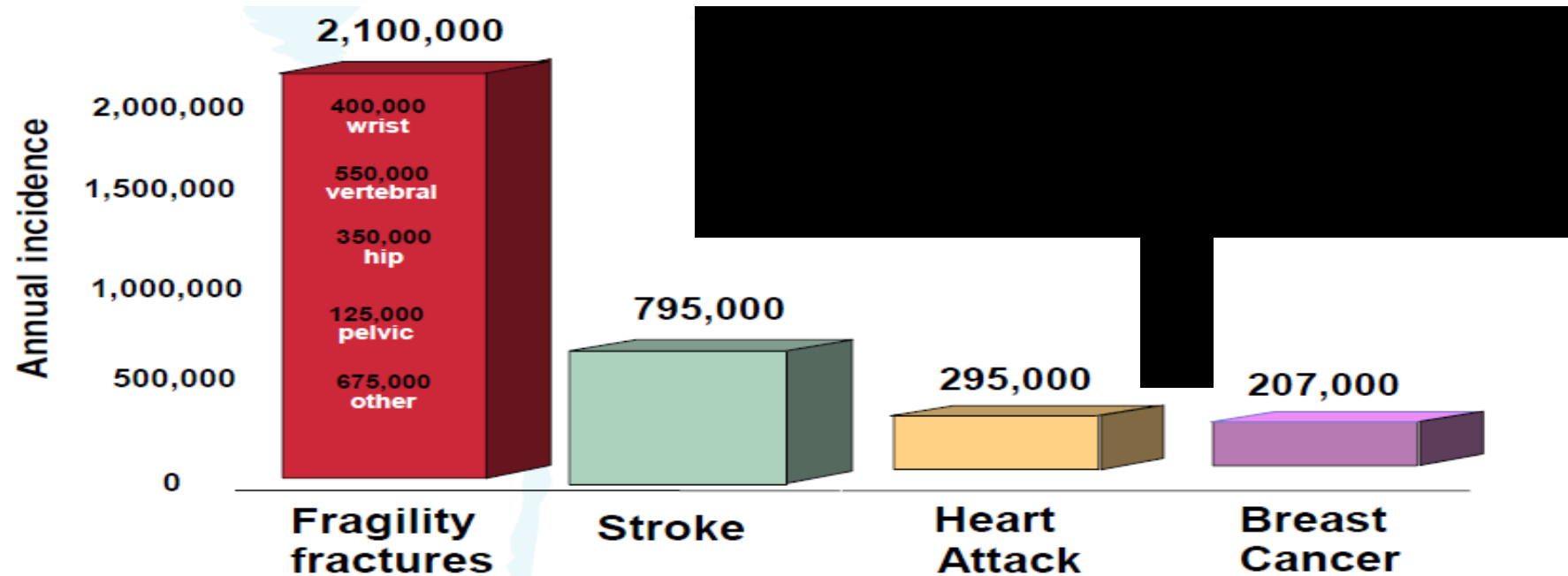


Agenda

- Advances in management of hip fractures
 - Clear trend toward orthopaedic surgeon's responsibility for perioperative as well as operative care of these patients
- Existing Quality Improvement Initiatives
- Initial steps through MTQIP
 - Current state
 - Potential for incremental improvement
 - Outcomes
 - Expenditures

Effects of Our Aging Population

Osteoporosis-Fracture Occurrence vs. Other Diseases



Sources: American Cancer Society . Cancer Facts & Figures 2010. Atlanta: American Cancer Society; 2010.
Heart Disease and Stroke Statistics — 2009 Update, American Heart Association.
JOURNAL OF BONE AND MINERAL RESEARCH
Volume 22, Number 3, 2007
Published online on December 4, 2006; doi: 10.1359/JBMR.061113

Early involvement of orthopaedic surgeons greatly increases likelihood that patients with fragile bone will be assessed and treated

Michigan – How do we compare

- More dedicated bone health programs than any other state

Geriatric Hip Fracture Perioperative Management

Hip Fracture Patients - Orphans



Hip Fracture *PATIENT* Outcome Predictors

Uncontrolled

- Pre-injury physical & cognitive status
- Ability to visit a friend or go shopping
- Presence of home companion

**Surgeon
Controlled!**

- *Postoperative ambulation*
- *Postoperative complications*

(Cedar, Thorngren, Parker, others)

Preoperative Management

the evidence suggests:

- “Tune up” correctable comorbidities
- Operate within 48° ; avoid night surgery

Zuckerman, JBJS(A) '95

Co-Managed Care

Steve Kates

- Co-management
- Early operative clearance
- Early time to OR
- Avoid delirium
 - Minimal narcotics
 - Local block on admission
- Discharge as soon as stable
- Manage post-discharge status



Key Allies

- Emergency Department
- Hospitalists/Geriatricians
- Anesthesia Department
- Critical Care Services
- Bone Health Program
- Hospital Administration

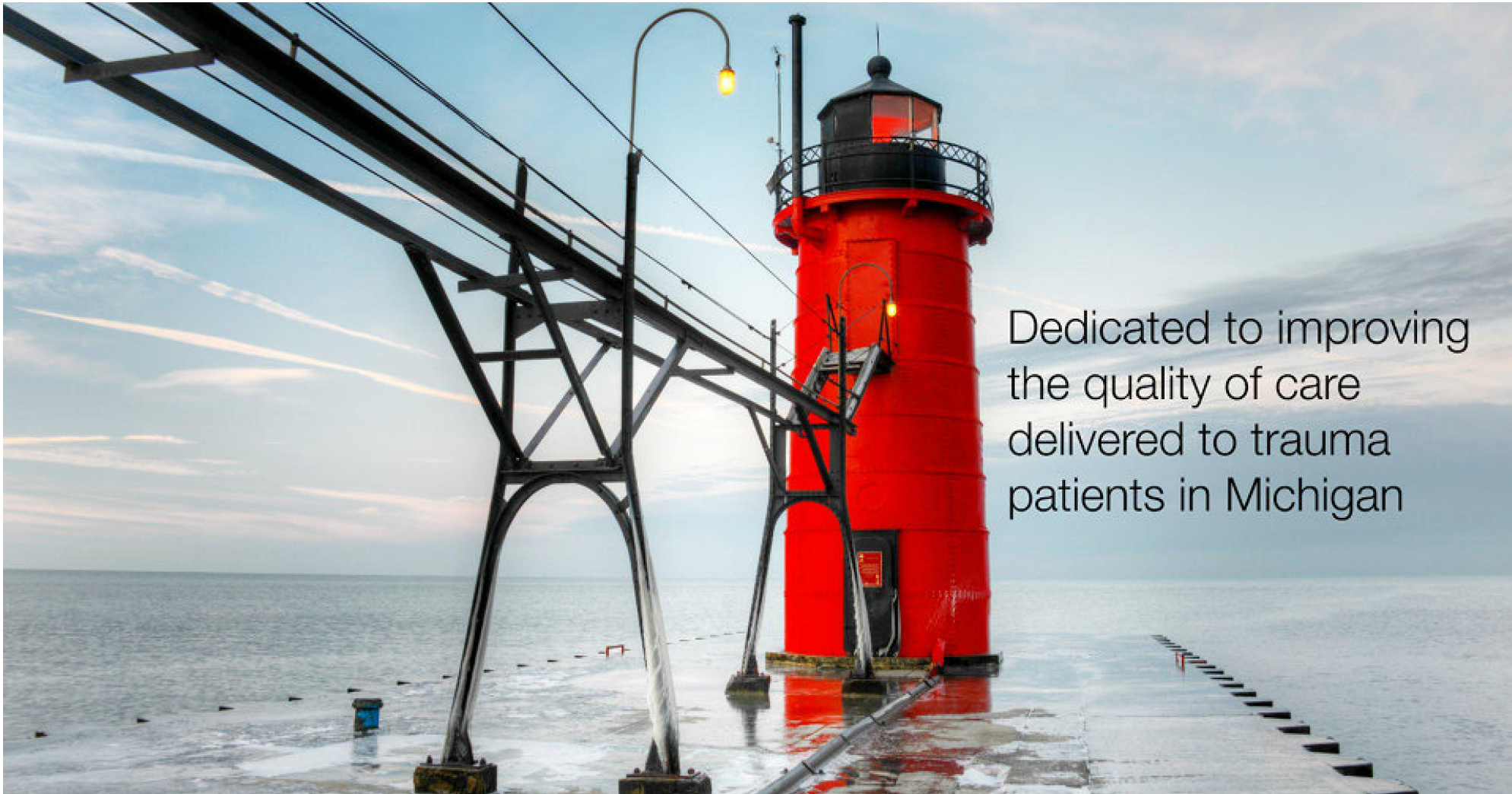


Benefits of Co-Managed Hip Fracture Service

- Improved care for hip fracture patients
- Reduced rates of complications
- Reduced length of stay
 - 1 to 2 day reduction in LOS in first year
- Reduced costs of stay
- Better long term outcomes?



Efforts in Michigan – MTQIP



Dedicated to improving
the quality of care
delivered to trauma
patients in Michigan

MTQIP

Newly Sponsored Orthopaedic Limb 2017

- Friendly and collegial atmosphere
- Non-competitive use of data
- Evidence-based practices
- Use of actionable data to focus on effectiveness of care
- Encourage all members to participate and make a contribution



Nonprofit corporations and independent licensees
of the Blue Cross and Blue Shield Association

MTQIP

- 16,177 patients with hip fractures from 2008 to 2016
- 52 % treated surgically within 24 hours
- 36% treated surgically between 24 to 48 hours
- 12% treated surgically later than 48 hours
- Average length of stay 5.4 days
- All patients treated at all hospitals followed until discharge



Data Collection and Evaluation for Hip Fractures

- Better than what we expected
- Lots of room for improvement
- QI should be directed by physician input and oversight
- Watch carefully



Areas of Interest

- Outcome predictors
 - BMI
 - Residency program
- CMS TJR model match
- Financial potential

Financials

- Financial linkage of patient encounters to cost of treatment is our next area of interest
- Have had difficulty identifying a source willing to share their financial information



Thank You