



The Basics

- Why is trauma in the elderly a problem?
 - They are everywhere
 - They tend to fall over and crash their cars
 - They break easily
 - Old age often means bad outcomes
 - If you don't treat them differently they die

Left Right

This is the brake pedal gas pedal

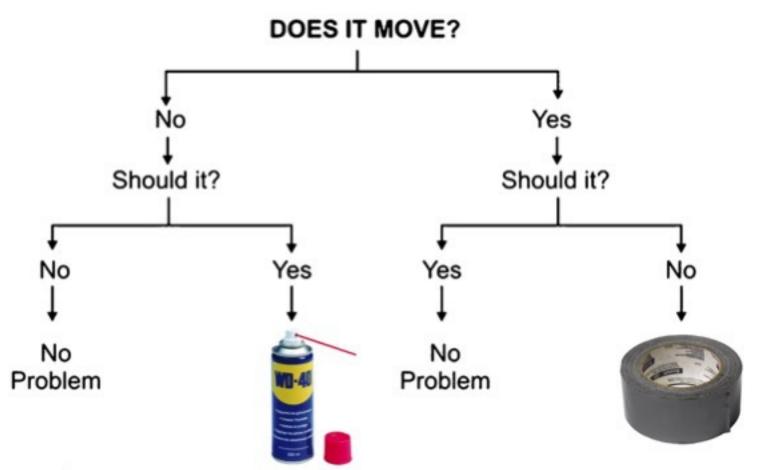
Reminder for elderly drivers...

DAVE GRANILIND OMETIMENT DIMY NOW



What challenges?

Engineering Flowchart



The Challenges



- The increasing incidence
- The aim
 - Modern Day Hippocratic oath
- Geriatric triad of death
 - Primary prevention
- The two F's
 - Frailty
 - Futility
- The "do gooders"
- Assembling the perfect team



John Hunter Hospital

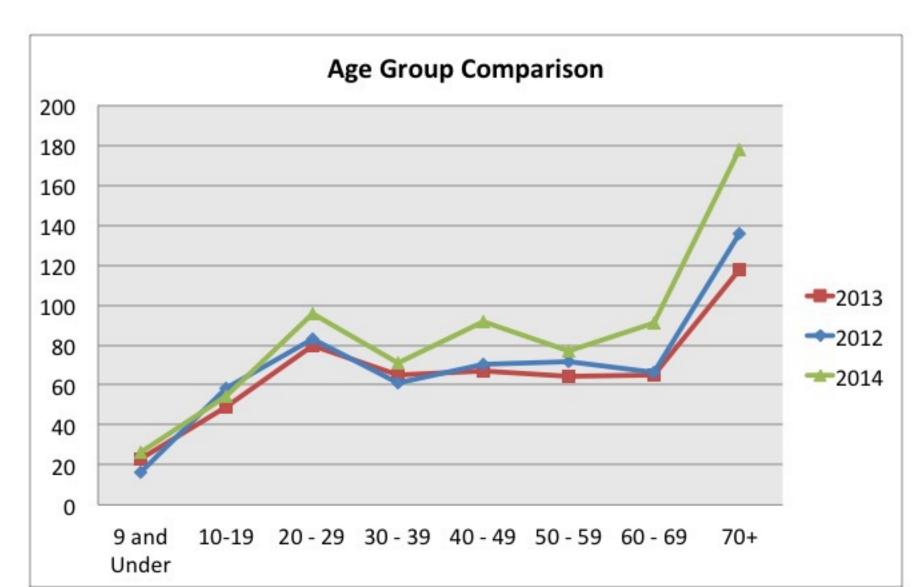
- Newcastle NSW Outside Sydney
- Only combined Adult and Paediatric Trauma Centre in NSW
- We see the largest number of severely injured in the state
- In 2014 there were 685 patients with an ISS >12







John Hunter Data

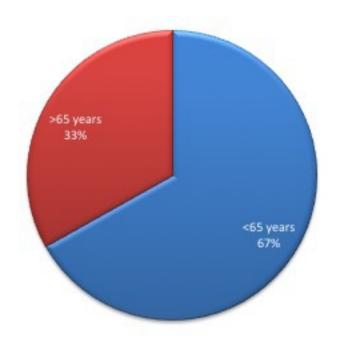


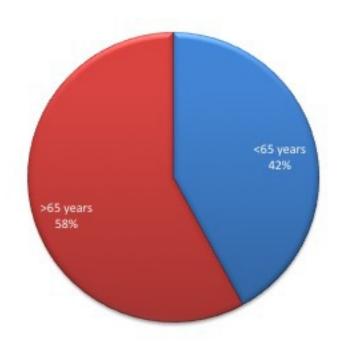


John Hunter Data

Presentations ISS>12

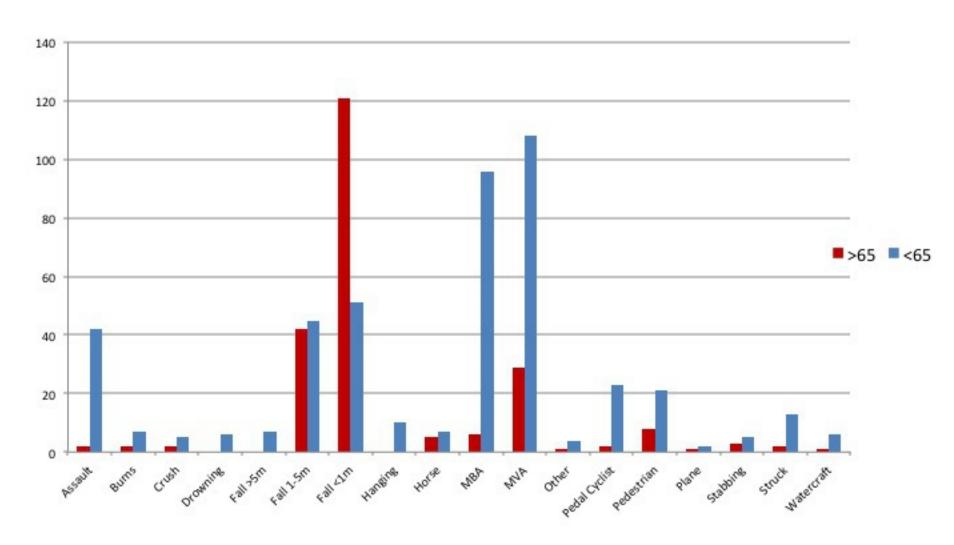
Mortality ISS > 12





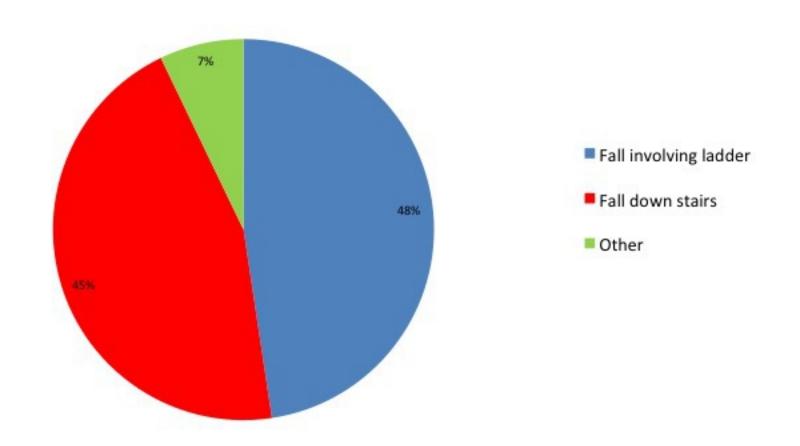


Mechanisms





Fall 1-5 m (>65yrs)







NSW Institute of Trauma and Injury Management

Major Trauma in NSW, 2013

A report from the NSW Trauma Registry

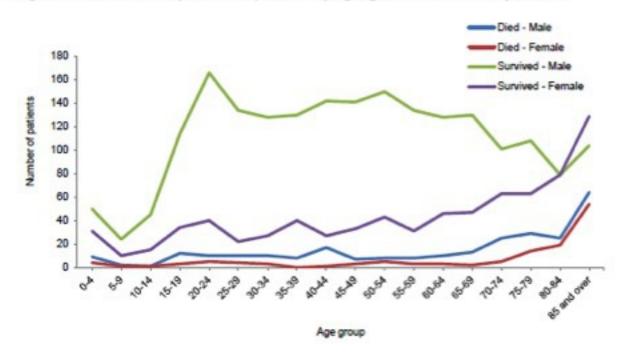




Mortality in NSW ISS >15

Males have a significantly higher number of major trauma injuries with survival (88.2%, n=2,008) compared to females (85.7%, n=780), except in the 85 and over group (Figure 1). Overall, males are 2.5 times more likely to be injured than females.

Figure 1: Number of major trauma patients by age, gender and mortality (n=3,186)

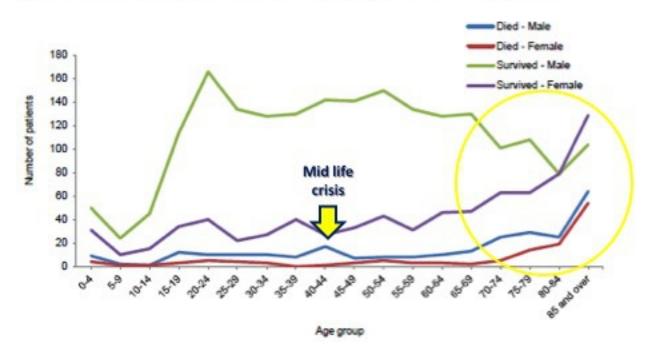




Mortality in NSW ISS >15

Males have a significantly higher number of major trauma injuries with survival (88.2%, n=2,008) compared to females (85.7%, n=780), except in the 85 and over group (Figure 1). Overall, males are 2.5 times more likely to be injured than females.

Figure 1: Number of major trauma patients by age, gender and mortality (n=3,186)





The aim of the game

The modern day Hippocratic Oath:

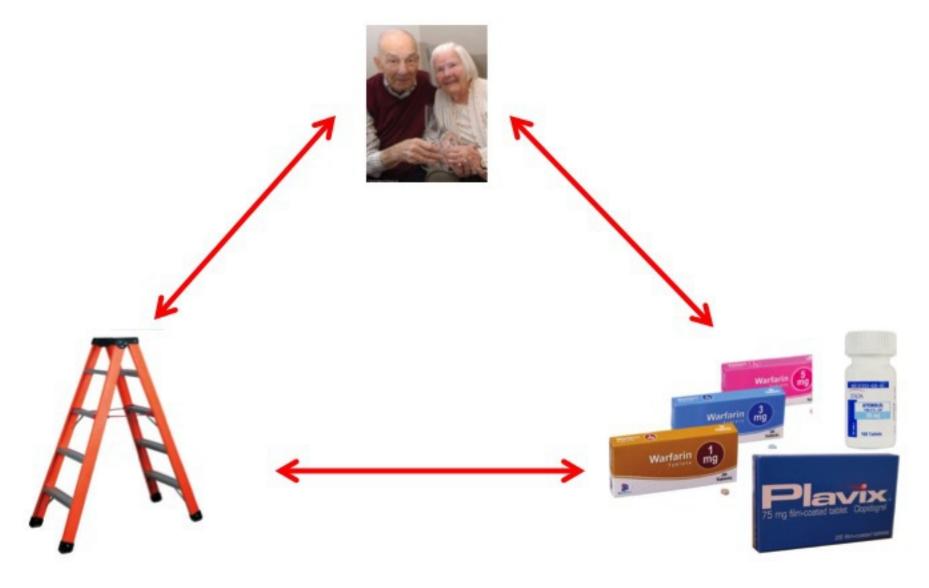
'I will apply, for the benefit of the sick, all measures which are required, avoiding those twin traps of overtreatment and therapeutic nihilism'



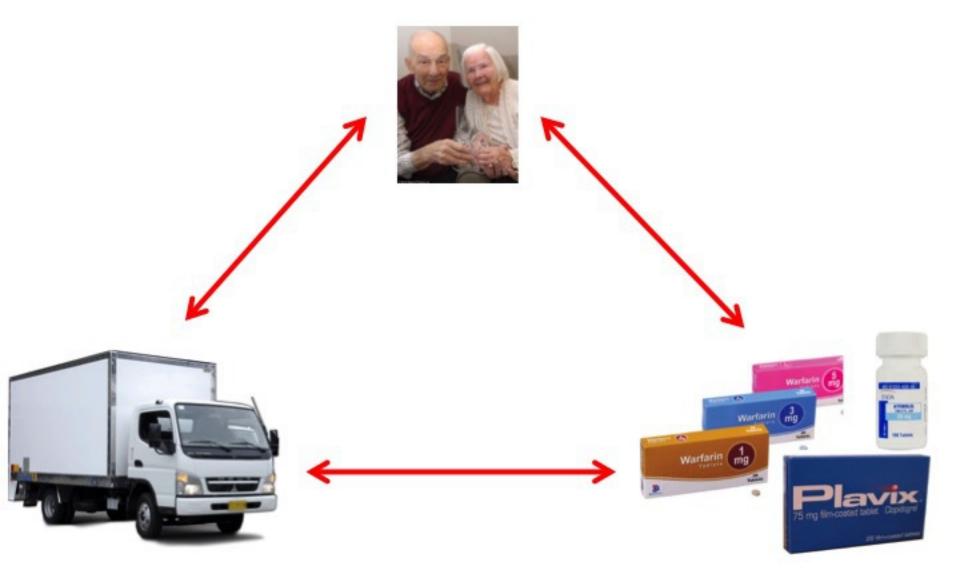
An ounce of prevention is worth a pound of cure

Benjamin Franklin

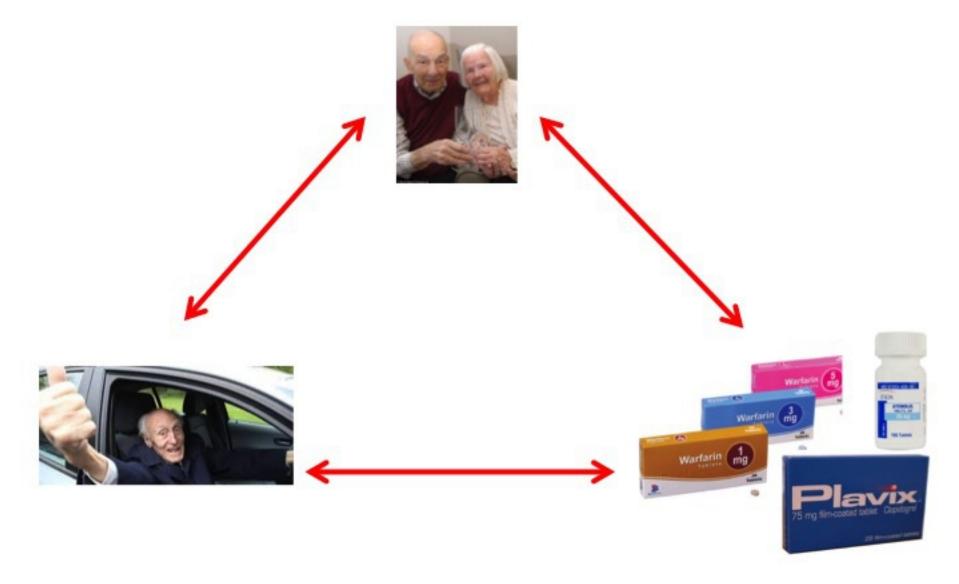




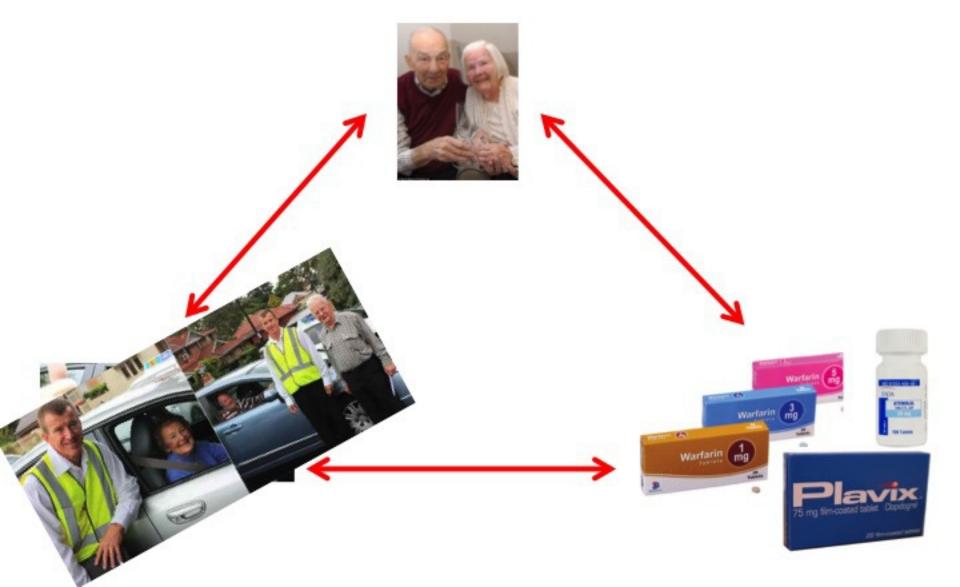








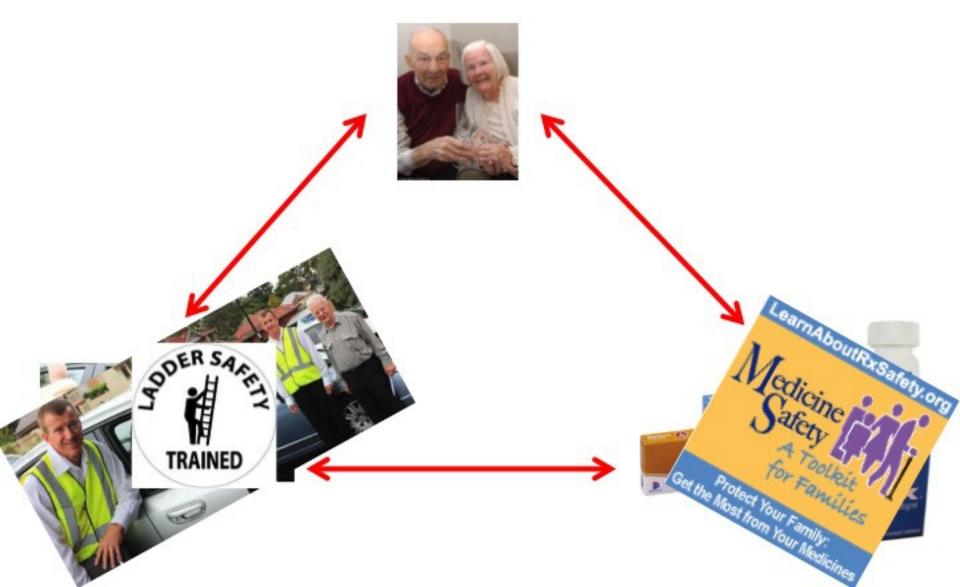














Community Campaigns



ARE YOU WITH HR

68124C

Australian Posters

john hunter trauma service

Frailty

- Linda Fried John Hopkins Baltimore
- Defined frailty phenotype as having 3 or more of the following:
 - Unintentional weight loss
 - Self reported exhaustion
 - Weakness (grip strength)
 - Slow walking speed and
 - Low physical activity

john hunter trauma service

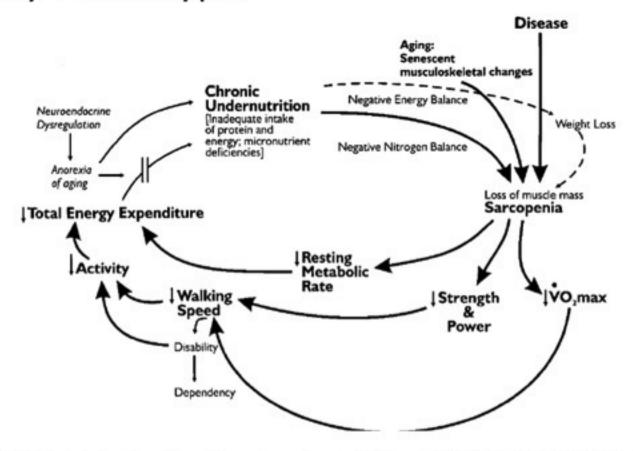
Frailty

- Frailty puts patients at risk of major adverse health outcomes
- Increases their risk of falls
 trauma
- Contributes to:
 - Hospitalisation
 - Morbidity and
 - Mortality



Frailty

Frailty Phenotype

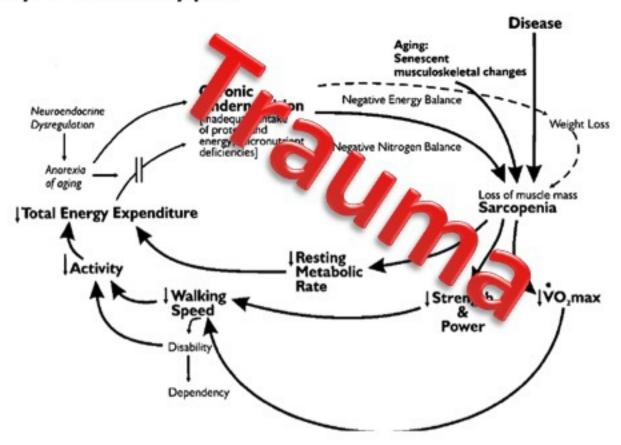


Fried LP et al;' Frailty in older adults: evidence for a phenotype', J Gerontol A Biol Sci Med Sci, 2001 Mar 56(3)



Frailty

Frailty Phenotype





Frailty and Trauma

- Frailty Index 50 data points
 - Predict in hospital complications
 - Adverse discharge disposition



- Superior to age & ISS in predicting above
- Trauma specific frailty index 15 data points
 - Independent predictor of unfavorable d/c dispostion

Validating Trauma-Specific Frailty Index for Geriatric Trauma Patients: A Prospective Analysis



Bellal Joseph, MD, FACS, Viraj Pandit, MD, Bardiya Zangbar, MD, Narong Kulvatunyou, MD, FACS, Andrew Tang, MD, FACS, Terence O'Keeffe, MBChB, FACS, Donald J Green, MD, FACS, Gary Vercruysse, MD, FACS, Mindy J Fain, MD, Randall S Friese, MD, FACS, Peter Rhee, MD, FACS



Futility

- Dr Peter Saul Ethicists and Intensivists
- Futility is like pornography, it's difficult to describe but you know it when you see it...





Futility

- Dr Peter Saul Ethicist and Intensivist
- Futility is like pornography, it's difficult to describe but you know it when you see it.
- 4 step approach
 - Individualization
 - Medical consensus
 - Including "Person Responsible"
 - Resolution options



NSW⊕HEALTH



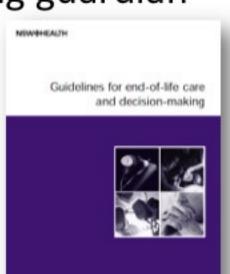
Guidelines for end-of-life care and decision-making







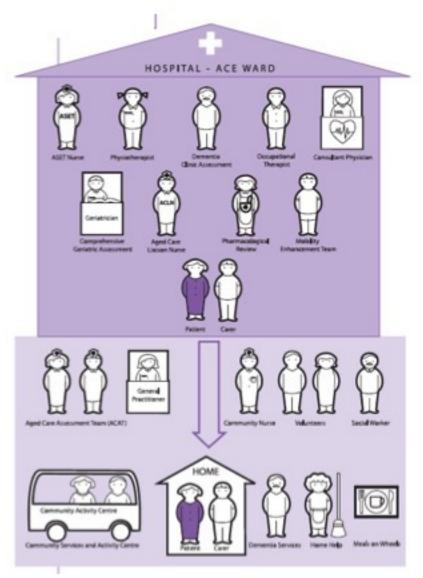
- Developing an advanced care plan
- Discussing preferences
- Formalising appointment of enduring guardian
- Writing an advance care directive





ASET

- Aged Care Services in Emergency Teams
- Skills
- Knowledge
- Service links
- Follow up
- Safety

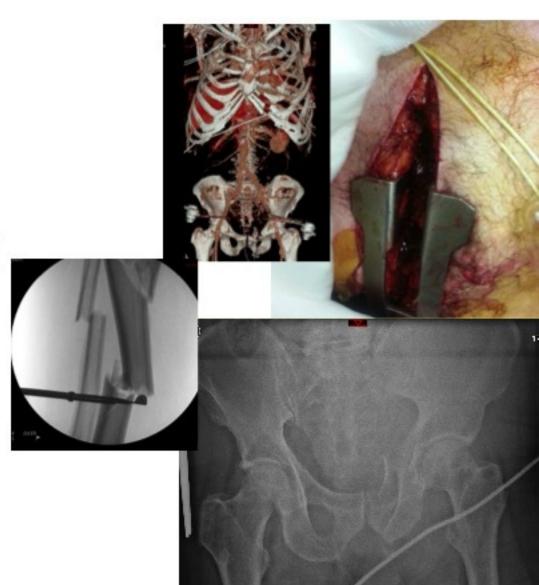




The do 'gooders'

Mechanism:

- 75 yr old male
- Walking the dog
- 5min from hospital
- Arrested





The Perfect Team





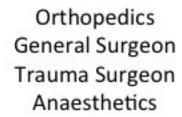














Getting the balance right

Weighing up the information

- Frailty
- Futility
- Do gooders
- + Consensus
- + A clear plan
- + The right team
- = The best outcome





Thank You!

