

An Ounce of Prevention Part 1

Quality Improvement Summit 2015

CTICC

21st September 2015

Monday Morning.....

“We think we’re losing about one acute rehab patient a month from pulmonary embolism”

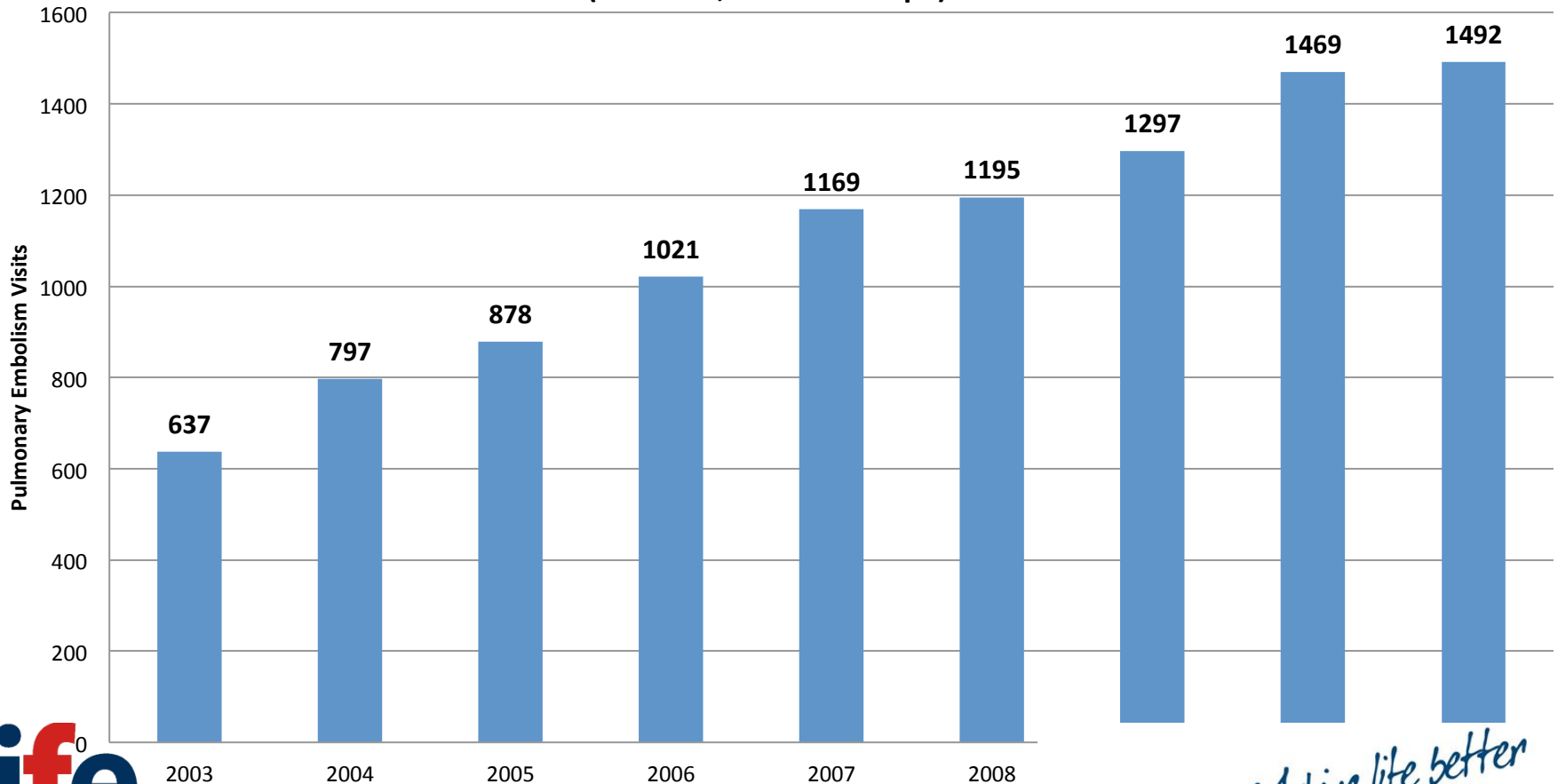


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A Growing Problem

Pulmonary Embolism Visits to LHC - 2003-2011

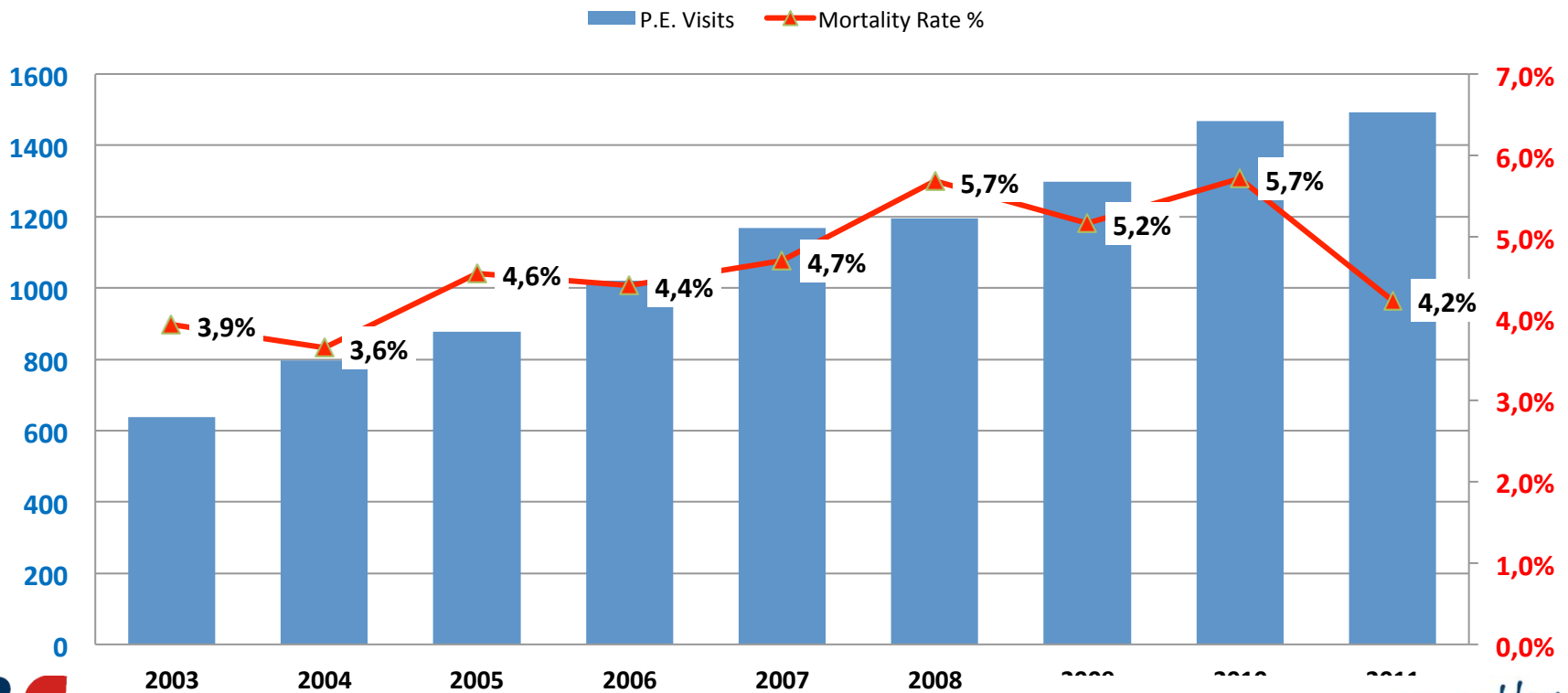
(N = 9955; CAGR - 8.3%pa)



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With A Mortality Rate To Match

Pulmonary Embolism Mortality Rate: 2003-2011 (MR - 4.8%)



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“Houston, we got a problem...”



- Reviewed Guidelines – Local and International
- Spoke to Experts
- Consulted Widely
- Went to Paris for Wisdom
- Produced a Tool supported by Guidelines.

**VENOUS THROMBO-EMBOLISM
RISK ASSESSMENT DOCUMENT**

Patient name: _____

Visit Number: _____

OR PLACE STICKER HERE

BASELINE RISK FACTORS		PREDISPOSING RISK FACTORS	
Medical:		Morbidities:	
Stroke	5	History of DVT or embolism	3
Heart Attack	3	Active cancer or cancer therapy	2
Heart failure (Congestive)	3	Obesity	1
Infection on IV antibiotics	3	Varicose veins	1
Central Venous Access	2	Inflammatory bowel disease	1
Surgical:		Age (years)	
Surgery of pelvis/hips/legs	5	>75	3
Fracture of pelvis/hips/legs	5	60-75	2
Multiple trauma	5	41-59	1
Spinal cord injury	5		
Plaster cast upper or lower limb	2	Gender Related:	
Any surgery > 45 mins	2	Contraceptive containing Oestrogen	1
Any surgery < 45 mins	1	HRT containing Oestrogen	1
		Pregnancy <4 weeks post-partum	1
Both:			
Patient in bed > 72 hours	2		
SUM OF BASELINE RISK FACTORS		SUM OF PREDISPOSING RISK FACTORS	
		TOTAL RISK FACTOR SCORE (RFS)	

Risk Factor Score (RFS)	Risk Factor Level	Low	Moderate	High	Ext. High
Risk Factor Score (RFS) 1	Low	Risk Factor Score (RFS) 2		Moderate	
Risk Factor Score (RFS) 3 - 4	High	Risk Factor Score (RFS) 5 / 5+		Extremely High	

RELATIVE CONTRA-INDICATIONS TO ANTI COAGULATION Y/N: Consider Risk of bleeding vs. benefit of Rx			
Uncontrolled Systolic Hypertension		Use of anti-coagulants	
Acute haemorrhagic stroke		Low platelets	
Active bleeding		Acquired or inherited bleeding disorder	

RFS Score Identified and Relative Contra-indications Considered	Y	N	Date:	
Doctor Notified:	Y	N		
Signature:			Designation:	

The VTE Tool

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Assess For Risk of VTE: **Nursing**

BASELINE RISK FACTORS		PREDISPOSING RISK FACTORS	
Medical:		Morbidities:	
Stroke	5	History of DVT or embolism	3
Heart Attack	3	Active cancer or cancer therapy	2
Heart failure (Congestive)	3	Immune-compromised	2
Infection on IV antibiotics	3	Obesity	1
Central Venous Access	2	Varicose veins	1
		Inflammatory bowel disease	1
Surgical:		Age (years)	
Surgery of pelvis/hips/legs	5	>75	3
Fracture of pelvis/hips/legs	5	60-75	2
Multiple trauma	5	41-59	1
Spinal cord injury	5		
Plaster cast upper or lower limb	2	Gender / Lifestyle Related:	
Any surgery > 45 mins	2	Contraceptive containing Oestrogen	1
Any surgery < 45 mins	1	HRT containing Oestrogen	1
		Pregnancy <4 weeks post-partum	1
Both:		Smoking / Drinking	1
Patient in bed > 72 hours	2		
SUM OF BASELINE RISK FACTORS		SUM OF PREDISPOSING RISK FACTORS	
		TOTAL RISK FACTOR SCORE (RFS)	

Risk Factor Score (RFS)	Risk Factor Level	Low	Moderate	High	Ext. High
Risk Factor Score (RFS) 1	Low	Risk Factor Score (RFS) 2		Moderate	
Risk Factor Score (RFS) 3 - 4	High	Risk Factor Score (1			

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Please, **Nurse**, Inform The Doctor

RFS Score Identified and Relative Contra-indications Considered		Y	N	Date:	
Doctor Notified:		Y	N		
Signature:		Designation:			

Consider The Risks of Bleeding: **Doctor**

RELATIVE CONTRA-INDICATIONS TO ANTI COAGULATION Y/N: Consider Risk of bleeding vs. benefit of Rx			
Uncontrolled Systolic Hypertension		Use of anti-coagulants	
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VTE Prophylaxis and Prevention Programme Rollout

- Resentment: **“Another form to fill....”**

What Is VTE Risk Assessment Worth?

A Case Study (1)

- 33 yr old mother of two admitted for elective C/section delivery of 3rd baby (reason: previous C/section for big baby).
- Had attended antenatal classes (initial Hb 11.4g/dl)
- (Pt was 1.66m tall, Wt – 110kg, BMI – 40).
- C/section successful took \pm 1 hr. Patient lost \pm 450ml
- Pt to ward (Dr *later* heard she mobilised poorly)
- Day 3 – Patient discharged home.
- Day 7 – Dr removed clips, inspected wound. No probs.

What Is VTE Risk Assessment Worth?

A Case Study (2)

- **Day 10:** Patient presented in A&E Unit:
 - Chest pain + Difficulty with breathing
 - Pale and dropping oxygen saturations
 - Investigations: ECG – Right heart strain; Raised D-Dimer and Pro-BNP; Hb – 8g/dl
 - Diagnosis: **Pulmonary Embolism**
 - Admitted: ICU – 4 Days + Ward – 2 Days.
 - Husband complained.
 - First Finding: **No VTE Risk Assessment Form Found**

Comparing Costs 1: Time

VTE Risk Assessment Done

- Assessing **Nurse (Ward)**: 15 – 20 minutes
- Prescribing **Doctor** : 10 – 15 minutes
- Dispensing **Pharmacist** : 30 minutes
- **TOTAL TIME: ± 1-1.5 Hours**

Readmission With P/E

- A&E, ICU & Medical Ward Staff (144 HOURS)
- Hospital Manager - ± 10 Hrs
- Snr Executive: ± 1 hr
- Medical Advisor: ± 8 HRS
- **TOTAL TIME: > 160 Hrs**

Comparing Costs 2: Money and More

Prevention Failure Costs

- GP and A&E Fees
- Hospital Bill: >R50,000.00.
- Pain and stress for the patient.
- Emotional trauma for spouse with 10 day old baby.

All For Want of?

- **15-20 Min of A Nurse's Time.**

A Promise To Learn, A Commitment To Act

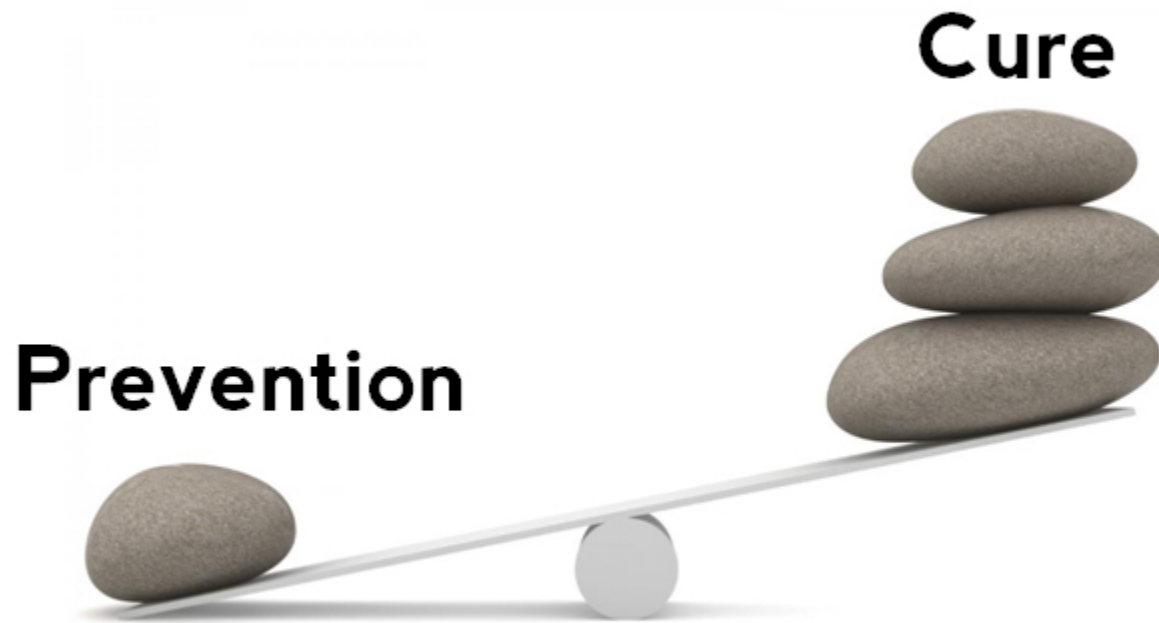
The Learning

- Unused Tools Are Useless (Think change management?)
- Trust, but Verify (Measure)
- (Maybe a third lesson?)

Commitment To Act

Come to
QI SUMMIT 2016
For
Part 2

“An Ounce of Prevention Is Worth A Pound of Cure.” – Benjamin Franklin



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Than Q