

# Costing in an ABF environment

## What is it and why we really, really need it

Mark O'Connor  
Management Accountant  
Healthcare Pricing Office  
ABF Education Event  
Galway 25<sup>th</sup> May 2016

# 2 levels of Costing in HPO

## ▶ Specialty Costing

- ▶ Allocate financial costs/service use to specialty
- ▶ Fixed Excel format
- ▶ Done by finance person
- ▶ Used by HPO
  - Block/ABF split
  - Full set of costs for price setting
- ▶ Used by hospitals??

## ▶ Patient Level Costing

- ▶ Allocate financial costs/service use to patient
- ▶ PPM2 – Power Health Solutions
- ▶ Done by finance person with large input from ICT
- ▶ Used by HPO
  - To set relativities between DRGs
- ▶ Used by hospitals??

# Conventional finance

► Budget €€€

► Actual €€€



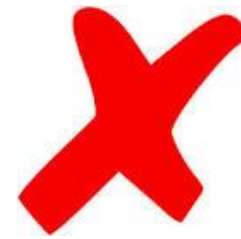
**Annual crisis about the difference between the two amounts**

# €100 – Where's the VFM?

► Cost €101



► Cost €99



# Who's good – Who's bad

	Hospital 1	Hospital 2
<b>Budget</b>	<b>€100,000,000</b>	<b>€100,000,000</b>
<b>Expenditure</b>	<b>€101,000,000</b>	<b>€99,000,000</b>
<b>Variance</b>	<b>-€1,000,000</b>	<b>€1,000,000</b>
<b>Patients</b>	<b>10,000</b>	<b>20,000</b>
<b>Cost per patient</b>	<b>€10,100</b>	<b>€4,950</b>
<b>Hospital specialty</b>	<b>Heart transplant</b>	<b>Tonsillectomy</b>
<b>Weighted units</b>	<b>50,000</b>	<b>15,000</b>
<b>Casemix Index</b>	<b>5.00</b>	<b>0.75</b>
<b>Cost per Weighted Unit</b>	<b>€2,020</b>	<b>€6,600</b>

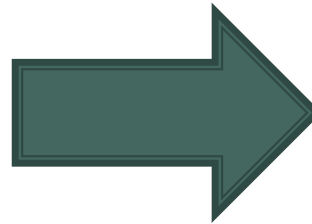
# Where are we without costing?

Total hospital cost	€200m
Total attendances	200,000
Average patient cost	€1,000

200,000 patients – not one of them cost exactly €1,000



# Change focus



# Prof. Keith Willett CBE

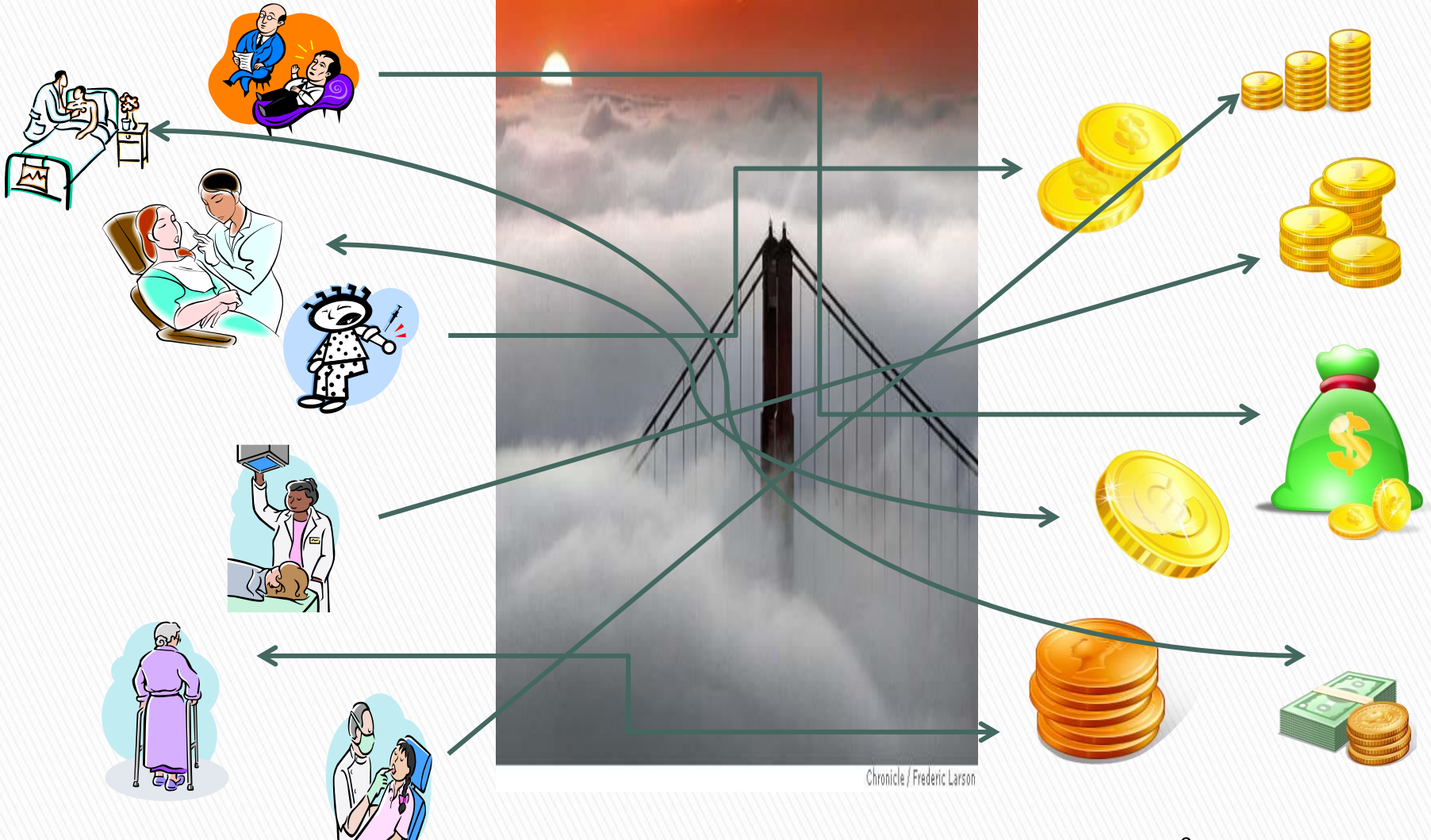
National Director for Acute Episodes of Care  
NHS England

- ▶ “The vast majority of how much is spent is at the patient – doctor interface”
- ▶ “It is possible to change professional behaviour, i.e. change the spend at the patient–clinician interface to both improve quality of care and reduce cost, which is what we all need ... value”
- ▶ IHPA Conference 2015
- ▶ Patient level costing will show how the decisions made at this interface impact on cost



Patients / clients

€€€€€€€€€€€€



Chronicle / Frederic Larson

Clinical  
information

PLC

Financial  
information

# Unifies

Administrative  
information

Data

# Typical Hospital General Ledger

Cost centre --->	Specialty	ED	Ward	ICU	Labs	Radiology	Theatre	Physio	Procedure room	Overheads	Total
Cost element	€000	€000	€000	€000	€000	€000	€000	€000	€000	€000	€000
Medical pay	300	500		300	450	400					1,950
Nursing pay		2,000	2,500	4,000			2,250		300		11,050
Paramedical pay					1,000	900		750	150		2,800
Admin pay		150	35	75	100	100	75	50		1,000	1,585
<b>TOTAL PAY</b>	<b>300</b>	<b>2,650</b>	<b>2,535</b>	<b>4,375</b>	<b>1,550</b>	<b>1,400</b>	<b>2,325</b>	<b>800</b>	<b>450</b>	<b>1,000</b>	<b>17,385</b>
Drugs		100	250	600					50		1,000
M&SS		50	75	150	25	75		150	50		575
Lab supplies					1,500						1,500
Radiology supplies						1,500					1,500
Heat power light										2,000	2,000
Office expenses		25	15	20	100	150		25		1,500	1,835
<b>TOTAL NON PAY</b>	<b>0</b>	<b>175</b>	<b>340</b>	<b>770</b>	<b>1,625</b>	<b>1,725</b>	<b>0</b>	<b>175</b>	<b>100</b>	<b>3,500</b>	<b>8,410</b>
<b>TOTAL GROSS COST</b>	<b>300</b>	<b>2,825</b>	<b>2,875</b>	<b>5,145</b>	<b>3,175</b>	<b>3,125</b>	<b>2,325</b>	<b>975</b>	<b>550</b>	<b>4,500</b>	<b>25,795</b>

- ▶ Cost centres matching physical locations
- ▶ Budget holders in these physical locations responsible for managing their expenditure versus budget

# Patients are different

	ED	OPD	Ward	ICU	Labs	Radio logy	Theat re	Physi o	Proce dure Room	Over head s
Car crash multiple trauma										
Stroke without complications										
Heart transplant										
Hip replacement										
Colonoscopy										
GP referral										
Leg fracture										
Fracture OPD Clinic										

# Acute hospitals = Black holes



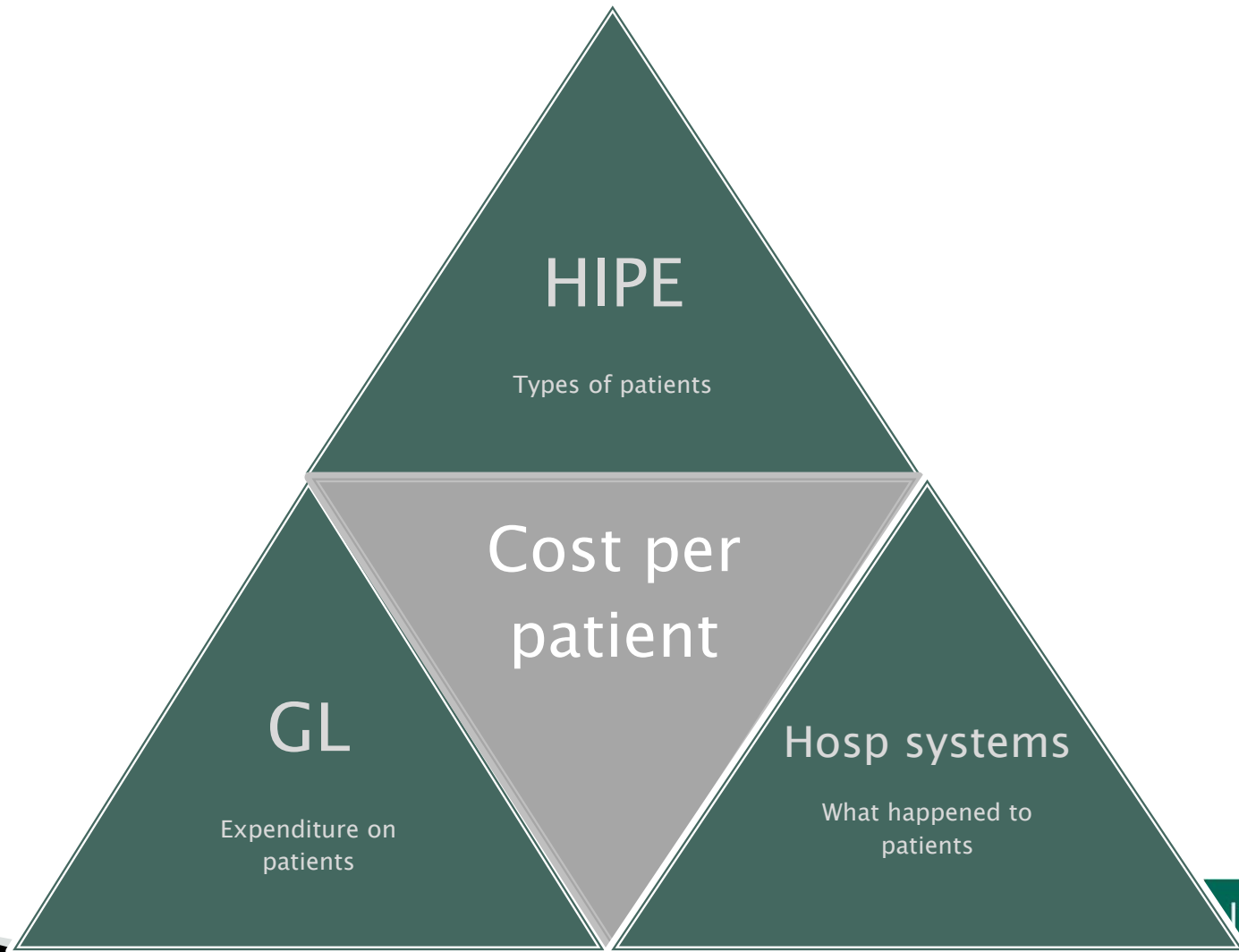
# #NOT!!!

Every acute hospital is a huge data warehouse

- ▶ HIPE Data
- ▶ Outpatient system
- ▶ ED system
- ▶ Ward transfer file
- ▶ Radiology system
- ▶ Lab system
- ▶ Theatre system/logs
- ▶ Paramedical services
- ▶ HR data
- ▶ Financial GL system
- ▶ Materials management systems
- ▶ Floor area
- ▶ Asset logs
- ▶ Anecdotal knowledge held by staff



# PLC connects this data



# PLC evolution – then

- ▶ First study in 2010 based on 2008 data
- ▶ Hospitals compiling files and sending them to Power Health Solutions
  - Poor quality – many iterations
  - Lack of engagement/ownership by hospitals
  - Low priority – lack of IT support
  - Results not used in hospitals



# HPO – Irish PLC used for Irish weights

- ▶ PLC implemented in selected Irish hospitals
  - Cover all types of Irish patients
  - All national centres : Cardiac, Neurosurgery, Burn, Liver, Renal
  - Standalone specialist Paediatric, Maternity, Orthopaedic hospitals
  - Attempted in hospitals that had good information systems
- ▶ Moved from Australian DRG to Irish DRG weights

# PLC evolution – now

- ▶ Move from external PLC consultant carrying out studies to local hospital implementation
- ▶ Commitment required to meeting deadlines and dedicated ICT support
- ▶ Hospitals responsible for own data compiling and processing and run own reports
- ▶ Extensive training for hospital and HPO staff
- ▶ HPO to take over PHS role
  - Develop and maintain standards
  - Interrogate and audit results
  - Use results to set accurate prices







# Mind The Gap



DEFICITS

- ▶ Labs and x-ray
  - Need a weighting system – Full body MRI costs more than a Chest X-Ray
  - Labs – tests v sets
- ▶ Nursing intensity
  - Need accurate weighting to reflect greater intensity of nursing for sicker patients
- ▶ Theatre procedures
  - Need accurate recording of times
- ▶ Paramedical areas
  - Patchy information
  - If no info we use HIPE to verify if there was a Paramed referral

# More Gaps



## DEFICITS

- ▶ Out patients
  - Need accurate recording of patients per the IOCS (classification system)
  - Accurate recording of time on IPMS to allow division of Medical and Nursing input
- ▶ Emergency department
  - Don't have a patient classification
  - Patient weightings based on triage and disposition are very old
- ▶ Research – PLC could make you famous!

# Averages are bad for costing

- ▶ Radiology costs                      €10m
- ▶ Radiology tests                      500,000
- ▶ Average cost                      €20 each
  
- ▶ But Chest X-Ray is cheaper than Full Body MRI
  - We need tests weighted to reflect cost
  - National weights
  - Costing study give a cost per test
  - Professional opinion
  
- ▶ Granularity = good for both costs + activity

# Prosthesis as an example

- ▶ Costs generally reported under 'Medical & surgical supplies'
  - All patients and DRGs use M&SS
  - Few patients and few DRGs use Prosthesis

M&SS	€10m		€8m	
Prosthesis				€2m
All coded patients	20000		20000	
Say only 10 DRGs				
Cardiology DRGs	€1m		€0.8m	€2m
Dermatology DRGs	€1m		€0.8m	
Endocrinology DRGs	€1m		€0.8m	
ENT DRGs	€1m		€0.8m	
Maternity DRGs	€1m		€0.8m	
Gastro DRGs	€1m		€0.8m	
Orthopaedic DRGs	€1m		€0.8m	
DRG 8	€1m		€0.8m	
DRG 9	€1m		€0.8m	
DRG 10	€1m		€0.8m	

- ▶ Lack of cost granularity means that

1. Cheaper patients will be over costed and over funded to some degree
2. Patients using expensive prosthesis items will be under costed and under funded by a significant amount

# PLC in the future



Itemised patient  
cost

Individual patient  
value

Why are they different

Why do similar groups of patients have different  
cost/value

Are there issues with my costing/coding – what are they

Prof. Keith Willett

BENCHMARKING

# PPM reports

## ► Reconciliation

- Between PLC and Financial Statements & Ledger
- Between PLC and Specialty Costs – Block/ABF split

## ► Integrity checks

- Does patient have medical/nursing salaries
- Has prosthetic code on HIPE but no prosthetic cost in PLC
- Surgical DRG with no theatre cost

## ► Results reports

- Top 20 DRGs
- Admitted encounters > €20,000 (and <€300)
- Total/average costs by patient type/admission source/consultant

## ► Endless angles from which to analyse costs



# Patient Costing Users Group

- ▶ Meets once a month
- ▶ Membership – Hospital Finance (20), Data Analyst (7); ABF Accountant (5) & HPO PLC Implementation staff
- ▶ An open forum for
  - Project updates (keeping momentum)
  - Shared issues and experiences
  - Information gaps and solutions
- ▶ PLC is possible and (increasingly) worthwhile

# If Bundee Aki did PLC ???!



- ▶ Pick up the PLC ball and run
- ▶ Identify the gaps
- ▶ Break through the barriers
- ▶ Play regularly – quarterly/monthly
- ▶ Bring teammates into play
  - Clinicians
  - Service managers
  - Finance – GL
  - HIPE colleagues
- ▶ Bring exciting change

# The Future

- ▶ Drop the 'F' word

▶ AB **F**  to AB **M** 

- ▶ And start using our valuable coding, costing and service data not just to measure hospitals but to manage them too

# Pick up the PLC ball and run

